

## NU - NH DIVISION PROPOSED GAS RATE DESIGN

|    |           | (A)                                      | (B)                 | (C)                | (D)                      | (E)                | (F)             | (G)               | (H)              | (I)             | (J)              | (K)             | (L)              |
|----|-----------|------------------------------------------|---------------------|--------------------|--------------------------|--------------------|-----------------|-------------------|------------------|-----------------|------------------|-----------------|------------------|
|    |           |                                          |                     | Existing           | Weather Normalized Sales |                    |                 | Existing Blocking |                  | Winter          |                  | Summer          |                  |
|    |           | CURRENT RATES<br>(excl Special Contract) | Annual<br>Customers | Customer<br>Charge | Winter<br>(Therms)       | Summer<br>(Therms) | Total<br>Therms | Winter<br>Therms  | Summer<br>Therms | First<br>Therms | Second<br>Therms | First<br>Therms | Second<br>Therms |
| 7  | R-5       | Residential, Heating                     | 231,691             | \$9.50             | 12,231,639               | 2,976,428          | 15,208,067      | 50                | 50               | 4,971,511       | 7,260,128        | 2,624,516       | 351,912          |
| 8  | R-10      | Residential Heating, Low Income          | 11,451              | \$9.50             | 482,863                  | 127,396            | 610,259         | 50                | 50               | 242,049         | 240,814          | 117,711         | 9,685            |
| 9  |           | Total Heating                            | 243,142             |                    | 12,714,502               | 3,103,824          | 15,818,326      |                   |                  | 5,213,560       | 7,500,942        | 2,742,227       | 361,597          |
|    |           |                                          |                     |                    | 80.38%                   | 19.62%             | 100.00%         |                   |                  | 41.00%          | 59.00%           | 88.35%          | 11.65%           |
| 12 | R-6       | Residential, Non-Heating                 | 19,446              | \$9.50             | 228,127                  | 122,103            | 350,230         | 10                | 10               | 70,726          | 157,401          | 69,727          | 52,377           |
| 13 | R-11      | Residential Non-Heating, Low Income      | 391                 | \$9.50             | 9,831                    | 2,267              | 12,099          | 10                | 10               | 1,901           | 7,930            | 1,390           | 877              |
| 14 |           | Total Non-Heating                        | 19,837              |                    | 237,958                  | 124,371            | 362,329         |                   |                  | 72,627          | 165,332          | 71,117          | 53,253           |
|    |           |                                          |                     |                    | 65.67%                   | 34.33%             | 100.00%         |                   |                  | 30.52%          | 69.48%           | 57.18%          | 42.82%           |
| 17 | G-40/T-40 | Low Annual, High Winter Use              | 52,989              | \$18.70            | 7,240,981                | 1,269,665          | 8,510,647       | 75                | 75               | 1,588,347       | 5,652,635        | 667,433         | 602,233          |
|    |           |                                          |                     |                    | 85.08%                   | 14.92%             | 100.00%         |                   |                  | 21.94%          | 78.06%           | 52.57%          | 47.43%           |
| 19 | G-50/T-50 | Low Annual, Low Winter Use               | 11,628              | \$18.70            | 1,312,559                | 898,756            | 2,211,315       | 75                | 75               | 260,414         | 1,052,146        | 245,933         | 652,823          |
|    |           |                                          |                     |                    | 59.36%                   | 40.64%             | 100.00%         |                   |                  | 19.84%          | 80.16%           | 27.36%          | 72.64%           |
| 21 |           | Total Low Annual Use                     | 64,617              |                    | 8,553,541                | 2,168,421          | 10,721,962      |                   |                  | 1,848,761       | 6,704,780        | 913,366         | 1,255,056        |
| 24 | G-41/T-41 | Medium Annual, High Winter Use           | 6,512               | \$60.30            | 8,613,259                | 2,171,995          | 10,785,254      |                   |                  | 8,613,259       |                  | 2,171,995       |                  |
|    |           |                                          |                     |                    | 79.86%                   | 20.14%             | 100.00%         |                   |                  | 100.00%         |                  | 100.00%         |                  |
| 26 | G-51/T-51 | Medium Annual, Low Winter Use            | 2,811               | \$60.30            | 2,252,319                | 1,607,240          | 3,859,559       | 1,300             | 1,000            | 1,434,978       | 817,341          | 1,089,046       | 518,194          |
|    |           |                                          |                     |                    | 58.36%                   | 41.64%             | 100.00%         |                   |                  | 63.71%          | 36.29%           | 67.76%          | 32.24%           |
| 28 |           | Total Medium Annual Use                  | 9,322               |                    | 10,865,578               | 3,779,236          | 14,644,814      |                   |                  | 10,048,238      | 817,341          | 3,261,042       | 518,194          |
| 31 | G-42/T-42 | High Annual, High Winter Use             | 361                 | \$254.00           | 3,971,085                | 1,492,247          | 5,463,332       |                   |                  | 3,971,085       |                  | 1,492,247       |                  |
|    |           |                                          |                     |                    | 72.69%                   | 27.31%             | 100.00%         |                   |                  | 100.00%         |                  | 100.00%         |                  |
| 33 | G-52/T-52 | High Annual, Low Winter Use              | 324                 | \$254.00           | 6,918,700                | 4,471,728          | 11,390,428      |                   |                  | 6,918,700       |                  | 4,471,728       |                  |
|    |           |                                          |                     |                    | 60.74%                   | 39.26%             | 100.00%         |                   |                  | 100.00%         |                  | 100.00%         |                  |
| 35 |           | Total Large Annual Use                   | 685                 |                    | 10,889,785               | 5,963,975          | 16,853,759      |                   |                  | 10,889,785      |                  | 5,963,976       |                  |
| 38 |           | Total                                    | 337,603             |                    | 43,261,365               | 15,139,825         | 58,401,190      |                   |                  | 28,072,970      | 15,188,394       | 12,951,727      | 2,188,101        |
|    |           |                                          |                     |                    | 74.08%                   | 25.92%             | 100.00%         |                   |                  | 64.89%          | 35.11%           | 85.55%          | 14.45%           |

Notes:

Therm Percentage Seasonal to Annual Total

Therm Block Percentages to Seasonal Total

NU - NH DIVISION PROPOSED GAS RATE DESIGN

|    | (A)                                                                                                  | (M)                             | (N)      | (O)      | (P)      | (Q)                              | (R)      | (S)                       | (T)         | (U)       | (V)                         | (W)          |
|----|------------------------------------------------------------------------------------------------------|---------------------------------|----------|----------|----------|----------------------------------|----------|---------------------------|-------------|-----------|-----------------------------|--------------|
|    |                                                                                                      | Existing Dist Charges Per Therm |          |          |          | Marginal Cost of Service Results |          |                           |             |           |                             |              |
|    |                                                                                                      | Winter                          |          | Summer   |          | Existing                         | Existing | Equalized                 | Revenue     | Percent   | Proposed                    | Shortfall \$ |
|    | CURRENT RATES                                                                                        | First                           | Second   | First    | Second   | Revenues                         | ROR      | ROR                       | Increase    | Increase  | Increases                   | Allocation   |
|    | (excl Special Contract)                                                                              |                                 |          |          |          |                                  |          | 7.24% Rev Reg             | to Equalize | Equal ROR | Capped @                    | To Equal ROR |
|    |                                                                                                      |                                 |          |          |          |                                  |          |                           |             |           | 19.11%                      |              |
| 7  | R-5 Residential, Heating                                                                             | \$0.4102                        | \$0.2990 | \$0.4102 | \$0.2990 | \$7,593,268                      |          |                           |             |           |                             |              |
| 8  | R-10 Residential Heating, Low Income                                                                 | \$0.4102                        | \$0.2990 | \$0.4102 | \$0.2990 | \$331,280                        |          |                           |             |           |                             |              |
| 9  | Total Heating                                                                                        | \$0.4102                        | \$0.2990 | \$0.4102 | \$0.2990 | \$7,924,548                      |          | \$10,010,118              | \$2,085,570 | 26.32%    | \$1,514,049                 |              |
| 12 | R-6 Residential, Non-Heating                                                                         | \$0.4067                        | \$0.3082 | \$0.4067 | \$0.3082 | \$306,530                        |          |                           |             |           |                             |              |
| 13 | R-11 Residential Non-Heating, Low Income                                                             | \$0.4067                        | \$0.3082 | \$0.4067 | \$0.3082 | \$7,768                          |          |                           |             |           |                             |              |
| 14 | Total Non-Heating                                                                                    | \$0.4067                        | \$0.3082 | \$0.4067 | \$0.3082 | \$314,298                        |          | \$692,558                 | \$378,260   | 120.35%   | \$60,049                    |              |
| 17 | G-40/T-40 Low Annual, High Winter Use                                                                | \$0.3077                        | \$0.2007 | \$0.3077 | \$0.2007 | \$2,940,545                      |          | \$4,391,495               | \$1,450,951 | 49.34%    | \$561,815                   |              |
| 19 | G-50/T-50 Low Annual, Low Winter Use                                                                 | \$0.3018                        | \$0.1969 | \$0.3018 | \$0.1969 | \$705,987                        |          | \$865,862                 | \$159,875   | 22.65%    | \$134,885                   |              |
| 21 | Total Low Annual Use                                                                                 |                                 |          |          |          | \$3,646,531                      |          | \$5,257,357               | \$1,610,826 |           | \$696,700                   |              |
| 24 | G-41/T-41 Medium Annual, High Winter Use                                                             | \$0.1942                        |          | \$0.1124 |          | \$2,309,483                      |          | \$1,993,722               | (\$315,761) | -13.67%   | (\$315,761)                 | \$908,499    |
| 26 | G-51/T-51 Medium Annual, Low Winter Use                                                              | \$0.1862                        | \$0.1467 | \$0.1112 | \$0.0780 | \$718,100                        |          | \$578,432                 | (\$139,668) | -19.45%   | (\$139,668)                 | \$263,580    |
| 28 | Total Medium Annual Use                                                                              |                                 |          |          |          | \$3,027,583                      |          | \$2,572,153               | (\$455,429) |           | (\$455,429)                 | \$1,172,079  |
| 31 | G-42/T-42 High Annual, High Winter Use                                                               | \$0.1725                        |          | \$0.0964 |          | \$920,550                        |          | \$640,158                 | (\$280,392) | -30.46%   | (\$280,392)                 | \$291,707    |
| 33 | G-52/T-52 High Annual, Low Winter Use                                                                | \$0.1262                        |          | \$0.0653 |          | \$1,247,355                      |          | \$746,294                 | (\$501,061) | -40.17%   | (\$501,061)                 | \$340,071    |
| 35 | Total Large Annual Use                                                                               |                                 |          |          |          | \$2,167,905                      |          | \$1,386,452               | (\$781,453) |           | (\$781,453)                 | \$631,778    |
| 38 | Total                                                                                                |                                 |          |          |          | \$17,080,865                     |          | \$19,918,638              | \$2,837,773 | 16.61%    | \$1,033,915                 | \$1,803,857  |
| 41 |                                                                                                      |                                 |          |          |          |                                  |          |                           | 115% cap    | 1.15      | \$1,803,857                 |              |
| 42 |                                                                                                      |                                 |          |          |          |                                  |          | Capped Incr. on Base \$\$ |             | 19.11%    | \$ Rev shortfall due to cap |              |
| 43 | Notes:                                                                                               |                                 |          |          |          |                                  |          |                           |             |           |                             |              |
| 44 | (1) Column (Q) includes a booked to billed adjustment shown on Page 3 of 8, Column (AF), Source file |                                 |          |          |          |                                  |          |                           |             |           |                             |              |
| 45 | (2) Column (AF) Source file Northern NH Gas accuracy 2010 for Discount Calculation.xls, Annual sheet |                                 |          |          |          |                                  |          |                           |             |           |                             |              |

NU - NH DIVISION PROPOSED GAS RATE DESIGN

|              | (A)                                                                             | (X)                   | (Y)                                      | (Z)                             | (AA)                               | (AB)                                                      | (AC)                                                                  | (AD)   | (AE) | (AF)                               |
|--------------|---------------------------------------------------------------------------------|-----------------------|------------------------------------------|---------------------------------|------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------|--------|------|------------------------------------|
|              | <b>CURRENT RATES</b><br>(excl Special Contract)                                 | <u>Class Increase</u> | <u>Class % Increase to Total Dollars</u> | <u>Target Rev Req for Class</u> | <u>Final Base Percent Increase</u> | <u>Adjustment to Class Increases to Reach 10% Minimum</u> | <u>Embedded COS Results Using Marginal Revenues Proposed Existing</u> |        |      | <u>Booked to Billed Adjustment</u> |
| 7 R-5        | Residential, Heating                                                            |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      | \$313                              |
| 8 R-10       | Residential Heating, Low Income                                                 |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      | \$19                               |
| 9            | Total Heating                                                                   | \$1,514,049           | 53.35%                                   | \$9,438,597                     | 19.11%                             |                                                           | 10.15%                                                                | 6.73%  |      |                                    |
| 12 R-6       | Residential, Non-Heating                                                        |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      | \$17                               |
| 13 R-11      | Residential Non-Heating, Low Income                                             |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      | -\$1                               |
| 14           | Total Non-Heating                                                               | \$60,049              | 2.12%                                    | \$374,348                       | 19.11%                             |                                                           | 2.39%                                                                 | -0.16% |      |                                    |
| 17 G-40/T-40 | Low Annual, High Winter Use                                                     | \$561,815             | 19.80%                                   | \$3,502,359                     | 19.11%                             |                                                           | 4.63%                                                                 | 2.24%  |      | \$200                              |
| 19 G-50/T-50 | Low Annual, Low Winter Use                                                      | \$134,885             | 4.75%                                    | \$840,871                       | 19.11%                             |                                                           | 6.29%                                                                 | 3.66%  |      | \$22                               |
| 21           | Total Low Annual Use                                                            | \$696,700             | 24.55%                                   | \$4,343,231                     |                                    |                                                           |                                                                       |        |      |                                    |
| 24 G-41/T-41 | Medium Annual, High Winter Use                                                  | \$258,272             | 9.10%                                    | \$2,567,755                     | 11.18%                             | -\$334,466                                                | 7.22%                                                                 | 5.73%  |      | \$1                                |
| 26 G-51/T-51 | Medium Annual, Low Winter Use                                                   | \$91,911              | 3.24%                                    | \$810,011                       | 12.80%                             | -\$32,000                                                 | 6.36%                                                                 | 4.88%  |      | \$0                                |
| 28           | Total Medium Annual Use                                                         | \$350,184             | 12.34%                                   | \$3,377,767                     |                                    |                                                           |                                                                       |        |      |                                    |
| 31 G-42/T-42 | High Annual, High Winter Use                                                    | \$92,055              | 3.24%                                    | \$1,012,605                     | 10.00%                             | \$80,740                                                  | 7.23%                                                                 | 5.92%  |      | \$0                                |
| 33 G-52/T-52 | High Annual, Low Winter Use                                                     | \$124,736             | 4.40%                                    | \$1,372,091                     | 10.00%                             | \$285,726                                                 | 3.74%                                                                 | 2.76%  |      | \$0                                |
| 35           | Total Large Annual Use                                                          | \$216,791             | 7.64%                                    | \$2,384,696                     |                                    |                                                           |                                                                       |        |      |                                    |
| 38           | Total                                                                           | \$2,837,773           | 100.00%                                  | \$19,918,638                    | 16.61%                             | \$0                                                       | 7.25%                                                                 | 4.86%  |      | \$572                              |
| 40           |                                                                                 | \$2,837,773           |                                          |                                 |                                    |                                                           |                                                                       |        |      |                                    |
| 41           | Notes:                                                                          |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      |                                    |
| 42           | (1) Column (X) = Page 2 of 8 Columns (V) + Page 2 of 8 Column (W) + Column (AB) |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      |                                    |
| 43           | (2) Column (Z) = Page 2 of 8 Column (Q) + Column (X)                            |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      |                                    |
| 44           | (3) Column (AA) = Column (X) / Page 2 of 8 Column (Q)                           |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      |                                    |
| 45           | (4) Column (AB) Class Revenue Adjustment to 10% Increase                        |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      |                                    |
| 46           | (5) Column (AC) Reference Accounting Workpapers - Rate Design                   |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      |                                    |
| 47           | (6) Column (AD) Reference PMN-1G-2 and 3, Pages 1 and 2, Line 21                |                       |                                          |                                 |                                    |                                                           |                                                                       |        |      |                                    |

NU - NH DIVISION PROPOSED GAS RATE DESIGN

|    |           | (A)                                                 | (B)       | (C)      | (D)                    | (E)      | (F)      | (G)                             | (H)      | (I)      | (J)      | (K)                | (L)      |
|----|-----------|-----------------------------------------------------|-----------|----------|------------------------|----------|----------|---------------------------------|----------|----------|----------|--------------------|----------|
| 48 |           | Marginal Cost Study                                 |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 49 |           | CURRENT & PROPOSED RATES<br>(excl Special Contract) |           | Existing | @ Company              | Proposed | Proposed | Existing Dist Charges Per Therm |          |          |          |                    |          |
| 50 |           |                                                     | Annual    | Customer | ROR                    | Customer | Cust Chg | Winter                          |          | Summer   |          | Block Differential |          |
| 51 |           |                                                     | Customers | Charge   | Cust \$ <sup>(1)</sup> | Charges  | Increase | First                           | Second   | First    | Second   | Winter             | Summer   |
| 52 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 53 | R-5       | Residential, Heating                                | 231,691   | \$9.50   |                        | \$13.12  | 38.11%   | \$0.4102                        | \$0.2990 | \$0.4102 | \$0.2990 | \$0.1112           | \$0.1112 |
| 54 | R-10      | Residential Heating, Low Income                     | 11,451    | \$9.50   |                        | \$13.12  | 38.11%   | \$0.4102                        | \$0.2990 | \$0.4102 | \$0.2990 | \$0.1112           | \$0.1112 |
| 55 |           | Total Heating                                       | 243,142   |          | \$33.95                | \$13.12  |          | \$0.4102                        | \$0.2990 | \$0.4102 | \$0.2990 |                    |          |
| 56 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 57 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 58 | R-6       | Residential, Non-Heating                            | 19,446    | \$9.50   |                        | \$13.12  | 38.11%   | \$0.4067                        | \$0.3082 | \$0.4067 | \$0.3082 | \$0.0985           | \$0.0985 |
| 59 | R-11      | Residential Non-Heating, Low Income                 | 391       | \$9.50   |                        | \$13.12  | 38.11%   | \$0.4067                        | \$0.3082 | \$0.4067 | \$0.3082 | \$0.0985           | \$0.0985 |
| 60 |           | Total Non-Heating                                   | 19,837    |          | \$33.61                | \$13.12  |          | \$0.4067                        | \$0.3082 | \$0.4067 | \$0.3082 |                    |          |
| 61 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 62 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 63 | G-40/T-40 | Low Annual, High Winter Use                         | 52,989    | \$18.70  | \$63.40                | \$30.00  | 60.43%   | \$0.3077                        | \$0.2007 | \$0.3077 | \$0.2007 | \$0.1070           | \$0.1070 |
| 64 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 65 | G-50/T-50 | Low Annual, Low Winter Use                          | 11,628    | \$18.70  | \$63.47                | \$30.00  | 60.43%   | \$0.3018                        | \$0.1969 | \$0.3018 | \$0.1969 | \$0.1049           | \$0.1049 |
| 66 |           | Total Low Annual Use                                | 64,617    |          |                        |          |          |                                 |          |          |          |                    |          |
| 67 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 68 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 69 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 70 | G-41/T-41 | Medium Annual, High Winter Use                      | 6,512     | \$60.30  | \$128.83               | \$90.00  | 49.25%   | \$0.1942                        |          | \$0.1124 |          |                    |          |
| 71 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 72 | G-51/T-51 | Medium Annual, Low Winter Use                       | 2,811     | \$60.30  | \$128.66               | \$90.00  | 49.25%   | \$0.1862                        | \$0.1467 | \$0.1112 | \$0.0780 | \$0.0395           | \$0.0332 |
| 73 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 74 |           | Total Medium Annual Use                             | 9,322     |          |                        |          |          |                                 |          |          |          |                    |          |
| 75 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 76 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 77 | G-42/T-42 | High Annual, High Winter Use                        | 361       | \$254.00 | \$389.84               | \$300.00 | 18.11%   | \$0.1725                        |          | \$0.0964 |          |                    |          |
| 78 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 79 | G-52/T-52 | High Annual, Low Winter Use                         | 324       | \$254.00 | \$395.10               | \$300.00 | 18.11%   | \$0.1262                        |          | \$0.0653 |          |                    |          |
| 80 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 81 |           | Total Large Annual Use                              | 685       |          |                        |          |          |                                 |          |          |          |                    |          |
| 82 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 83 |           |                                                     |           |          |                        |          |          |                                 |          |          |          |                    |          |
| 84 |           | Total                                               | 337,603   |          |                        |          |          |                                 |          |          |          |                    |          |

Note:  
 (1) Schedule PMN-2G-2, Page 1 of 2, Lines 6 and 9

NU - NH DIVISION PROPOSED GAS RATE DESIGN

|    | (A)                                      | (M)                                                                          | (N)           | (O)          | (P)           | (Q)                | (R)           | (S) | (T)         | (U) | (V) | (W) |
|----|------------------------------------------|------------------------------------------------------------------------------|---------------|--------------|---------------|--------------------|---------------|-----|-------------|-----|-----|-----|
| 48 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 49 | <b>CURRENT &amp; PROPOSED RATES</b>      | <b>Proposed Charges</b>                                                      |               |              |               |                    |               |     |             |     |     |     |
| 50 | (excl Special Contract)                  | Winter                                                                       |               | Summer       |               | Block Differential |               |     | Average     |     |     |     |
| 51 |                                          | <u>First</u>                                                                 | <u>Second</u> | <u>First</u> | <u>Second</u> | <u>Winter</u>      | <u>Summer</u> |     | <u>Rate</u> |     |     |     |
| 52 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 53 | R-5 Residential, Heating                 | \$0.4213                                                                     | \$0.3658      | \$0.4213     | \$0.4213      | \$0.0555           | \$0.0000      |     |             |     |     |     |
| 54 | R-10 Residential Heating, Low Income     | \$0.4213                                                                     | \$0.3658      | \$0.4213     | \$0.4213      | \$0.0555           | \$0.0000      |     |             |     |     |     |
| 55 | Total Heating                            | \$0.4213                                                                     | \$0.3658      | \$0.4213     | \$0.4213      |                    |               |     | \$0.3950    |     |     |     |
| 56 |                                          | 2.7%                                                                         | 22.3%         | 2.7%         | 40.9%         |                    |               |     |             |     |     |     |
| 57 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 58 | R-6 Residential, Non-Heating             | \$0.3149                                                                     | \$0.3149      | \$0.3149     | \$0.3149      | \$0.0000           | \$0.0000      |     |             |     |     |     |
| 59 | R-11 Residential Non-Heating, Low Income | \$0.3149                                                                     | \$0.3149      | \$0.3149     | \$0.3149      | \$0.0000           | \$0.0000      |     |             |     |     |     |
| 60 | Total Non-Heating                        | \$0.3149                                                                     | \$0.3149      | \$0.3149     | \$0.3149      |                    |               |     | \$0.3149    |     |     |     |
| 61 |                                          | -22.6%                                                                       | 2.2%          | -22.6%       | 2.2%          |                    |               |     |             |     |     |     |
| 62 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 63 | G-40/T-40 Low Annual, High Winter Use    | \$0.2580                                                                     | \$0.2126      | \$0.2580     | \$0.2126      | \$0.0454           | \$0.0454      |     | \$0.2243    |     |     |     |
| 64 |                                          | -16.2%                                                                       | 5.9%          | -16.2%       | 5.9%          |                    |               |     |             |     |     |     |
| 65 | G-50/T-50 Low Annual, Low Winter Use     | \$0.2580                                                                     | \$0.2126      | \$0.2580     | \$0.2126      | \$0.0454           | \$0.0454      |     |             |     |     |     |
| 66 |                                          | -14.5%                                                                       | 8.0%          | -14.5%       | 8.0%          |                    |               |     |             |     |     |     |
| 67 | Total Low Annual Use                     |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 68 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 69 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 70 | G-41/T-41 Medium Annual, High Winter Use | \$0.1926                                                                     |               | \$0.1487     |               |                    |               |     | \$0.1837    |     |     |     |
| 71 |                                          | -0.8%                                                                        |               | 32.3%        |               |                    |               |     |             |     |     |     |
| 72 | G-51/T-51 Medium Annual, Low Winter Use  | \$0.1766                                                                     | \$0.1416      | \$0.1266     | \$0.0966      | \$0.0350           | \$0.0300      |     | \$0.1443    |     |     |     |
| 73 |                                          | -5.2%                                                                        | -3.5%         | 13.8%        | 23.8%         |                    |               |     |             |     |     |     |
| 74 | Total Medium Annual Use                  |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 75 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 76 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 77 | G-42/T-42 High Annual, High Winter Use   | \$0.1847                                                                     |               | \$0.1146     |               |                    |               |     | \$0.1655    |     |     |     |
| 78 |                                          | 7.1%                                                                         |               | 18.9%        |               |                    |               |     |             |     |     |     |
| 79 | G-52/T-52 High Annual, Low Winter Use    | \$0.1414                                                                     |               | \$0.0663     |               |                    |               |     | \$0.1119    |     |     |     |
| 80 |                                          | 12.0%                                                                        |               | 1.5%         |               |                    |               |     |             |     |     |     |
| 81 | Total Large Annual Use                   |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 82 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 83 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 84 | Total                                    |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 85 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 86 |                                          | Note:                                                                        |               |              |               |                    |               |     |             |     |     |     |
| 87 |                                          | Block Percentages are Proposed Increase to Existing Charges from Page 2 of 8 |               |              |               |                    |               |     |             |     |     |     |
| 88 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |
| 89 |                                          |                                                                              |               |              |               |                    |               |     |             |     |     |     |

NU - NH DIVISION PROPOSED GAS RATE DESIGN

|    | (A)                                                                                   | (X)                              | (Y)                  | (Z)                 | (AA)                 | (AB)                | (AC)              | (AD)         | (AE)                | (AF)            |
|----|---------------------------------------------------------------------------------------|----------------------------------|----------------------|---------------------|----------------------|---------------------|-------------------|--------------|---------------------|-----------------|
| 48 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 49 | <b>CURRENT &amp; PROPOSED RATES</b>                                                   | <b>Proposed Revenue Recovery</b> |                      |                     |                      |                     |                   | <b>Total</b> |                     | <b>Variance</b> |
| 50 | (excl Special Contract)                                                               | <b>Customer</b>                  | <b>Winter Therms</b> |                     | <b>Summer Therms</b> |                     | <b>Revenues</b>   |              | <b>Class Target</b> | <b>due to</b>   |
| 51 |                                                                                       | <b>Charges</b>                   | <b>First Block</b>   | <b>Second Block</b> | <b>First Block</b>   | <b>Second Block</b> | <b>@ Proposed</b> |              | <b>Rev Req</b>      | <b>Rounding</b> |
| 52 |                                                                                       |                                  |                      |                     |                      |                     | <b>Rates</b>      |              |                     |                 |
| 53 | R-5 Residential, Heating                                                              | \$3,039,786                      | 2,094,498            | \$2,655,755         | 1,105,709            | \$148,260           | \$9,044,008       |              |                     |                 |
| 54 | R-10 Residential Heating, Low Income                                                  | \$150,242                        | 101,975              | \$88,090            | 49,591               | \$4,080             | \$393,979         |              |                     |                 |
| 55 | Total Heating                                                                         | \$3,190,028                      | \$2,196,473          | \$2,743,845         | \$1,155,300          | \$152,341           | \$9,437,987       | \$9,438,597  |                     | -\$610          |
| 56 |                                                                                       | 33.80%                           | 23.27%               | 29.07%              | 12.24%               | 1.61%               | 100.00%           |              |                     |                 |
| 57 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 58 | R-6 Residential, Non-Heating                                                          | \$255,132                        | 22,272               | \$49,566            | 21,957               | \$16,493            | \$365,419         |              |                     |                 |
| 59 | R-11 Residential Non-Heating, Low Income                                              | \$5,132                          | 599                  | \$2,497             | 438                  | \$276               | \$8,942           |              |                     |                 |
| 60 | Total Non-Heating                                                                     | \$260,264                        | \$22,870             | \$52,063            | \$22,395             | \$16,770            | \$374,362         | \$374,348    |                     | \$14            |
| 61 |                                                                                       | 69.52%                           | 6.11%                | 13.91%              | 5.98%                | 4.48%               | 100.00%           |              |                     |                 |
| 62 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 63 | G-40/T-40 Low Annual, High Winter Use                                                 | \$1,589,662                      | 409,793              | \$1,201,750         | 172,198              | \$128,035           | \$3,501,437       |              |                     |                 |
| 64 |                                                                                       | 45.40%                           | 11.70%               | 34.32%              | 4.92%                | 3.66%               | 100.00%           |              |                     |                 |
| 65 | G-50/T-50 Low Annual, Low Winter Use                                                  | \$348,836                        | 67,187               | \$223,686           | 63,451               | \$138,790           | \$841,950         |              |                     |                 |
| 66 |                                                                                       | 41.43%                           | 7.98%                | 26.57%              | 7.54%                | 16.48%              | 100.00%           |              |                     |                 |
| 67 | Total Low Annual Use                                                                  | \$1,938,498                      | 476,980              | \$1,425,436         | 235,648              | \$266,825           | \$4,343,388       | \$4,343,231  |                     | \$157           |
| 68 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 69 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 70 | G-41/T-41 Medium Annual, High Winter Use                                              | \$586,052                        | 1,658,914            |                     | 322,976              |                     | \$2,567,941       | \$2,567,755  |                     | \$186           |
| 71 |                                                                                       | 22.82%                           | 64.60%               |                     | 12.58%               |                     | 100.00%           |              |                     |                 |
| 72 | G-51/T-51 Medium Annual, Low Winter Use                                               | \$252,958                        | 253,417              | \$115,735           | 137,873              | \$50,058            | \$810,041         | \$810,011    |                     | \$30            |
| 73 |                                                                                       | 31.23%                           | 31.28%               | 14.29%              | 17.02%               | 6.18%               | 100.00%           |              |                     |                 |
| 74 | Total Medium Annual Use                                                               | \$839,009                        | \$1,912,331          | \$115,735           | \$460,849            | \$50,058            | \$3,377,982       |              |                     |                 |
| 75 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 76 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 77 | G-42/T-42 High Annual, High Winter Use                                                | \$108,290                        | \$733,459            |                     | \$171,012            |                     | \$1,012,761       | \$1,012,605  |                     | \$156           |
| 78 |                                                                                       | 10.69%                           | 72.42%               |                     | 16.89%               |                     | 100.00%           |              |                     |                 |
| 79 | G-52/T-52 High Annual, Low Winter Use                                                 | \$97,100                         | \$978,304            |                     | \$296,476            |                     | \$1,371,880       | \$1,372,091  |                     | -\$211          |
| 80 |                                                                                       | 7.08%                            | 71.31%               |                     | 21.61%               |                     | 100.00%           |              |                     |                 |
| 81 | Total Large Annual Use                                                                | \$205,390                        | \$1,711,764          |                     | \$467,487            |                     | \$2,384,641       |              |                     |                 |
| 82 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 83 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 84 | Total                                                                                 | \$6,433,190                      | \$6,320,418          | \$4,337,079         | \$2,341,679          | \$485,993           | \$19,918,359      | \$19,918,638 |                     | -\$279          |
| 85 |                                                                                       | 32.30%                           | 31.73%               | 21.77%              | 11.76%               | 2.44%               | 100.00%           |              |                     |                 |
| 86 | Note:                                                                                 |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 87 | Revenue Recovery by Proposed Rate Components as a Percent of Total Proposed Revenues. |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 88 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |
| 89 |                                                                                       |                                  |                      |                     |                      |                     |                   |              |                     |                 |

## NU - NH DIVISION PROPOSED GAS RATE DESIGN

|     | (A)                                                 | (B)                 | (C)                            | (D)                                       | (E)                             | (F)                              | (G)                                                             | (H)                 | (I)                    | (J)                                                           | (K)                 | (L)                    |
|-----|-----------------------------------------------------|---------------------|--------------------------------|-------------------------------------------|---------------------------------|----------------------------------|-----------------------------------------------------------------|---------------------|------------------------|---------------------------------------------------------------|---------------------|------------------------|
|     | CURRENT & PROPOSED RATES<br>(excl Special Contract) | Annual<br>Customers | Existing<br>Customer<br>Charge | Cost Study<br>@ Company<br>ROR<br>Cust \$ | Proposed<br>Customer<br>Charges | Proposed<br>Cust Chg<br>Increase | Accounting Cost of Service Results<br>@ 7.24% Equalized ROR (1) |                     |                        | Marginal Cost of Service Results<br>@ 7.24% Equalized ROR (2) |                     |                        |
|     |                                                     |                     |                                |                                           |                                 |                                  | Revenue<br>Total \$                                             | Percent<br>Increase | Customer<br>\$/Mo/Cust | Revenue<br>Total \$                                           | Percent<br>Increase | Customer<br>\$/Mo/Cust |
| 95  | R-5 Residential, Heating                            | 231,691             | \$9.50                         |                                           | \$13.12                         | 38.11%                           |                                                                 |                     |                        |                                                               |                     |                        |
| 96  | R-10 Residential Heating, Low Income                | 11,451              | \$9.50                         |                                           | \$13.12                         | 38.11%                           |                                                                 |                     |                        |                                                               |                     |                        |
| 97  | Total Heating                                       | 243,142             |                                | \$33.95                                   |                                 |                                  | \$8,200,920                                                     | 3.49%               | \$21.11                | \$10,010,118                                                  | 26.32%              | \$33.95                |
| 98  |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 99  | R-6 Residential, Non-Heating                        | 19,446              | \$9.50                         |                                           | \$13.12                         | 38.11%                           |                                                                 |                     |                        |                                                               |                     |                        |
| 100 | R-11 Residential Non-Heating, Low Income            | 391                 | \$9.50                         |                                           | \$13.12                         | 38.11%                           |                                                                 |                     |                        |                                                               |                     |                        |
| 101 | Total Non-Heating                                   | 19,837              |                                | \$33.61                                   |                                 |                                  | \$485,700                                                       | 54.53%              | \$21.30                | \$692,558                                                     | 120.35%             | \$33.61                |
| 102 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 103 | G-40/T-40 Low Annual, High Winter Use               | 52,989              | \$18.70                        | \$63.40                                   | \$30.00                         | 60.43%                           | \$4,088,102                                                     | 39.03%              | \$46.40                | \$4,391,495                                                   | 49.34%              | \$63.40                |
| 104 | G-50/T-50 Low Annual, Low Winter Use                | 11,628              | \$18.70                        | \$63.47                                   | \$30.00                         | 60.43%                           | \$887,727                                                       | 25.74%              | \$46.35                | \$865,862                                                     | 22.65%              | \$63.47                |
| 105 | Total Low Annual Use                                | 64,617              |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 106 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 107 | G-41/T-41 Medium Annual, High Winter Use            | 6,512               | \$60.30                        | \$128.83                                  | \$90.00                         | 49.25%                           | \$2,570,972                                                     | 11.32%              | \$90.01                | \$1,993,722                                                   | -13.67%             | \$128.83               |
| 108 | G-51/T-51 Medium Annual, Low Winter Use             | 2,811               | \$60.30                        | \$128.66                                  | \$90.00                         | 49.25%                           | \$857,346                                                       | 19.39%              | \$90.97                | \$578,432                                                     | -19.45%             | \$128.66               |
| 109 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 110 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 111 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 112 | Proposed Revenue Recovery                           |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 113 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 114 | Total Medium Annual Use                             | 9,322               |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 115 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 116 | G-42/T-42 High Annual, High Winter Use              | 361                 | \$254.00                       | \$389.84                                  | \$300.00                        | 18.11%                           | \$1,013,372                                                     | 10.08%              | \$197.54               | \$640,158                                                     | -30.46%             | \$389.84               |
| 117 | G-52/T-52 High Annual, Low Winter Use               | 324                 | \$254.00                       | \$395.10                                  | \$300.00                        | 18.11%                           | \$1,814,499                                                     | 45.47%              | \$142.22               | \$746,294                                                     | -40.17%             | \$395.10               |
| 118 | Total Large Annual Use                              | 685                 |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 119 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 120 | Total                                               | 337,603             |                                |                                           |                                 |                                  | \$19,918,638                                                    | 16.61%              |                        | \$19,918,638                                                  | 16.61%              |                        |
| 121 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 122 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 123 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 124 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 125 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |
| 126 |                                                     |                     |                                |                                           |                                 |                                  |                                                                 |                     |                        |                                                               |                     |                        |

## Notes:

(1) Accounting Cost - Schedule PMN-1G-6, Pages 5 and 6 of 8, Lines 19 and 21.

(2) Marginal Cost - Schedule PMN-2G-2, Table 14, Page 1 of 2, Lines 6 and 9.

NU - NH DIVISION PROPOSED GAS RATE DESIGN

|     | (A)                                      | (M) | (N)       | (O)       | (P)       | (Q)      | (R)       | (S)       | (T)    | (U)    | (V)    | (W)    |
|-----|------------------------------------------|-----|-----------|-----------|-----------|----------|-----------|-----------|--------|--------|--------|--------|
| 90  |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 91  | <b>CURRENT &amp; PROPOSED RATES</b>      |     |           |           |           |          |           |           |        |        |        |        |
| 92  | (excl Special Contract)                  |     |           |           |           |          |           |           |        |        |        |        |
| 93  |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 94  |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 95  | R-5 Residential, Heating                 |     |           |           |           |          |           |           |        |        |        |        |
| 96  | R-10 Residential Heating, Low Income     |     |           |           |           |          |           |           |        |        |        |        |
| 97  | Total Heating                            |     |           |           |           |          |           |           |        |        |        |        |
| 98  |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 99  | R-6 Residential, Non-Heating             |     |           |           |           |          |           |           |        |        |        |        |
| 100 | R-11 Residential Non-Heating, Low Income |     |           |           |           |          |           |           |        |        |        |        |
| 101 | Total Non-Heating                        |     |           |           |           |          |           |           |        |        |        |        |
| 102 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 103 | G-40/T-40 Low Annual, High Winter Use    |     |           |           |           |          |           |           |        |        |        |        |
| 104 | G-50/T-50 Low Annual, Low Winter Use     |     |           |           |           |          |           |           |        |        |        |        |
| 105 | Total Low Annual Use                     |     |           |           |           |          |           |           |        |        |        |        |
| 106 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 107 | G-41/T-41 Medium Annual, High Winter Use |     |           |           |           |          |           |           |        |        |        |        |
| 108 | G-51/T-51 Medium Annual, Low Winter Use  |     | 1,434,978 | 817,341   | 1,089,046 | 518,194  | 3,859,559 |           |        |        |        |        |
| 109 |                                          |     | 0.08      | 0.045     | 0.03      |          |           |           |        |        |        |        |
| 110 |                                          |     | \$114,798 | \$36,780  | \$32,671  |          | \$184,250 | \$557,054 |        |        |        |        |
| 111 |                                          |     | 0.1766    | 0.1416    | 0.1266    | 0.0966   |           | \$372,804 | 0.0350 | 0.0300 | 0.0500 | 0.0450 |
| 112 | Proposed Revenue Recovery                |     | \$253,417 | \$115,735 | \$137,873 | \$50,058 | \$557,083 |           |        |        |        |        |
| 113 |                                          |     |           |           |           |          | \$557,083 |           |        |        |        |        |
| 114 | Total Medium Annual Use                  |     |           |           |           |          |           |           |        |        |        |        |
| 115 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 116 | G-42/T-42 High Annual, High Winter Use   |     |           |           |           |          |           |           |        |        |        |        |
| 117 | G-52/T-52 High Annual, Low Winter Use    |     |           |           |           |          |           |           |        |        |        |        |
| 118 | Total Large Annual Use                   |     |           |           |           |          |           |           |        |        |        |        |
| 119 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 120 | Total                                    |     |           |           |           |          |           |           |        |        |        |        |
| 121 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 122 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 123 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 124 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 125 |                                          |     |           |           |           |          |           |           |        |        |        |        |
| 126 |                                          |     |           |           |           |          |           |           |        |        |        |        |



Table - 1  
Northern Utilities- New Hampshire  
Marginal Cost Study

Page 1 of 3

**Production Investment Summary-Modified Peaker**

| Line No. | Description                                |                 | Company Total        |
|----------|--------------------------------------------|-----------------|----------------------|
|          | (1)                                        |                 | (2)                  |
|          | COST FOR REINFORCEMENT                     |                 |                      |
| 1        |                                            |                 |                      |
| 2        | Current Cost of Capacity Expansion         | {1}             | \$0.00               |
| 3        |                                            |                 |                      |
| 4        |                                            |                 |                      |
| 5        |                                            |                 |                      |
| 6        | First Year of Capacity Shortfall           | {2}             | 2027                 |
| 7        |                                            |                 |                      |
| 8        |                                            |                 |                      |
| 9        | Base year of study                         |                 | 2010                 |
| 10       |                                            |                 |                      |
| 11       |                                            |                 |                      |
| 12       | Years Before Additions                     | (6)-(9)         | 17                   |
| 13       |                                            |                 |                      |
| 14       | After Tax Cost of Capital                  | {3}             | 6.29%                |
| 15       | Inflation Rate                             | {6}             | 2.30%                |
| 16       |                                            |                 | 3.99%                |
| 17       |                                            |                 |                      |
| 18       |                                            |                 |                      |
| 19       | Present Worth of Capacity Cost             |                 |                      |
| 20       | $(2)*[1+(15)]^{(12)}/[1+(14)]^{(12)}$      | {4}             | \$0.00               |
| 21       |                                            |                 |                      |
| 22       | Percentage Related to Transportation       | {5}             | 0.0%                 |
| 23       |                                            |                 |                      |
| 24       | <b>Transportation Related Investment</b>   | $(20)*(22)$     | <b><u>\$0.00</u></b> |
| 25       |                                            |                 |                      |
| 26       | <b>Gas Supply Related Plant Investment</b> | $(20)*[1-(22)]$ | <b><u>\$0.00</u></b> |

NOTES:

- 1 Source: Table - 1, page 2.
- 2 Source: Prior Study
- 3 Source: Table - 8, page 1.
- 4 Cost in today's dollars sufficient to purchase the designated unit in the first year of capacity shortfall allowing for interest and price escalation.
- 5 Source: Table - 1, page 3.
- 6 Inflation Net of Technical Progress

Table - 1  
Northern Utilities- New Hampshire  
Marginal Cost Study

Page 2 of 3

**Development of Marginal Production Plant Investment**

| Line No. | Description                                                    | Costs                |
|----------|----------------------------------------------------------------|----------------------|
|          | (1)                                                            | (2)                  |
| 1        | CONSTRUCTION OF PROPANE PROJECT ALTERNATIVE FACILITY           |                      |
| 2        |                                                                |                      |
| 3        | Addition of a New Facility: {1}                                |                      |
| 4        | Storage Tanks                                                  |                      |
| 5        | Refrigeration Systems                                          |                      |
| 6        | Delivery Systems                                               |                      |
| 7        | Air Deliver Systems                                            |                      |
| 8        | Air Metering & Regulating (M&R) Station                        |                      |
| 9        | Pipeline Connection to Project                                 |                      |
| 10       | Pipeline Connection from Project                               |                      |
| 11       | Land Costs                                                     |                      |
| 12       | Indirect Costs                                                 | 0                    |
| 13       | Total Direct Costs                                             | \$0                  |
| 14       | KeySpan Overhead                                               | 0                    |
| 15       | Total Capital Costs                                            | \$0                  |
| 16       | O&M Costs                                                      | 0                    |
| 17       | Total Project Costs                                            | \$0                  |
| 18       | Price escalation {2} 2.3% 2 years                              | 4.7%                 |
| 19       |                                                                |                      |
| 20       | Cost of Facility (17)*[1+(18)]                                 | \$0                  |
| 21       |                                                                |                      |
| 22       | Total Project Capacity {1}                                     | 25,200               |
| 23       |                                                                |                      |
| 24       | Unit Cost of Expansion (20)/(22)                               | \$0.00               |
| 25       |                                                                |                      |
| 26       | Estimated Reserves for Supplemental Capacity {3}               | 0%                   |
| 27       |                                                                |                      |
| 28       | <b>Adj Cost of Production Capacity, \$/Therm</b> (24)*[1+(26)] | <b><u>\$0.00</u></b> |
| 29       |                                                                |                      |
| 30       | Percent Transportation-related {4}                             | 0.0%                 |
| 31       |                                                                |                      |
| 32       | Distribution related (28)*(30)                                 | \$0.00               |
| 33       | Production related (28)-(32)                                   | \$0.00               |

NOTES:

- 1
- 2
- 3

Table - 1  
Northern Utilities- New Hampshire  
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**Development of Distribution-related Production Plant Investment**

| Line No. | Plant Name                                                  | Location | Type | Rating, mscfg | Heat Rate | Hours per Day | Design Day Therms |
|----------|-------------------------------------------------------------|----------|------|---------------|-----------|---------------|-------------------|
|          | (1)                                                         | (2)      | (3)  | (4)           | (5)       | (6)           | (7)               |
| 1        | Capacity of Down Stream Assets                              |          |      | {1}           |           |               |                   |
| 2        |                                                             |          |      |               |           |               |                   |
| 3        |                                                             |          |      | #DIV/0!       | -         | -             | -                 |
| 5        |                                                             |          |      | #DIV/0!       | -         | -             | -                 |
| 6        |                                                             |          |      | #DIV/0!       | -         | -             | -                 |
| 7        |                                                             |          |      | #DIV/0!       | -         | -             | -                 |
| 8        |                                                             |          |      | #DIV/0!       | -         | -             | -                 |
| 9        |                                                             |          |      | #DIV/0!       | -         | -             | -                 |
| 10       | Total                                                       |          |      | #DIV/0!       | #DIV/0!   |               | 0                 |
| 11       |                                                             |          |      |               |           |               |                   |
| 12       | Production Requirements in lieu of Distribution investments |          |      |               |           |               |                   |
| 13       | Output Required for Pressure Support                        |          |      |               |           |               |                   |
| 14       |                                                             |          |      |               |           |               |                   |
| 15       |                                                             |          |      | {2}           |           |               |                   |
| 16       |                                                             |          |      |               | 0         | 0             | 0                 |
| 17       |                                                             | Total    |      | 0             |           |               | 0                 |
| 18       |                                                             |          |      |               |           |               |                   |
| 19       |                                                             |          |      |               |           |               |                   |
| 20       | Production Allocated to Pressure Support Function           |          |      |               | (17)/(10) | 0.0%          |                   |
| 21       |                                                             |          |      |               |           |               |                   |
| 22       | Production Allocated to Supply Function                     |          |      |               | 100%-(20) | 100.0%        |                   |

NOTES:

- 1 Source: Company Distribution Engineering personnel.
- 2

Table - 2  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Summary of Estimates for Distribution Capacity Cost**

| Line No. | Description                                                          | Quantity                          |
|----------|----------------------------------------------------------------------|-----------------------------------|
|          | (1)                                                                  | (2)                               |
| 1        |                                                                      |                                   |
| 2        | <b>PROSPECTIVE ADDITIONS</b>                                         |                                   |
| 3        | REINFORCEMENT (From Stoner Analysis) {1}                             |                                   |
| 4        | Estimate of upgrades                                                 |                                   |
| 5        | to existing facilities.                                              | \$2,213,750                       |
| 6        | Estimated Additional Load, Therm/Design Day                          | 107,977                           |
| 7        | Average Cost for Upgrades (5)/(6)                                    | \$20.50                           |
| 8        | Trended Cost for Upgrades {1}                                        | \$20.50                           |
| 9        |                                                                      |                                   |
| 10       | <b>NEW MAIN EXTENSIONS</b>                                           |                                   |
| 11       | Unit Cost for New Main Extensions {2}                                | \$71.96                           |
| 12       |                                                                      |                                   |
| 13       | <b>UNIT COSTS</b>                                                    |                                   |
| 14       | Unit Costs per Design Day Therm for Prospective Additions (8) + (11) | <u>\$92.46</u>                    |
| 15       |                                                                      |                                   |
| 16       | <b><u>ALTERNATE ANALYSES</u></b>                                     |                                   |
| 17       | A - HISTORICAL INVESTMENTS {3}                                       |                                   |
| 18       | CAPACITY INCREMENT - 1988 to 2010                                    |                                   |
| 19       | 2010 Design Day Sendout                                              | 569,539                           |
| 20       | 1996 Design Day Sendout                                              | 519,260                           |
| 21       | Increase in Design Day Sendout (22)-(21)                             | 50,279                            |
| 22       |                                                                      |                                   |
| 23       | <b>PLANT INVESTMENTS</b>                                             |                                   |
| 24       | Investments to Increase Capacity, Current \$'s                       |                                   |
| 25       | Total Investment 1989 2010                                           | 22,050,296                        |
| 26       |                                                                      |                                   |
| 27       | <b>UNIT COST</b>                                                     |                                   |
| 28       | Avg Unit Cost for Historical Investments (27)/(23)                   | <u>\$438.56</u>                   |
| 29       |                                                                      |                                   |
| 30       |                                                                      |                                   |
| 31       | B - TRENDING COST APPROXIMATION {4}                                  |                                   |
| 32       | Trended Cost Approximation (Slope of                                 |                                   |
| 33       | Regression Line)                                                     | <u>\$91.70</u>                    |
| 34       |                                                                      |                                   |
| 35       | For purposes of further study, assume long run marginal              |                                   |
| 36       | costs will be estimated by prospective additions, line (14).         | <u>\$92.46</u> /Design Day Therms |

NOTES:

- Source: Table - 2, Page 4.
- Source: Table - 2, Page 5.
- Source: Cost data from Table - 2, Page 2.
- Source: Table - 2, Page 6.

Table - 2  
Northern Utilities- New Hampshire

Historical Plant Investment Data - Capacity-Related

| Line No. | Description                        | 1987       | 1988        | 1989        | 1990        | 1991        | 1992        | 1993        | 1994        | 1995        | 1996        | 1997        | 1998        |
|----------|------------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|          | DISTRIBUTION INVESTMENT            | (1)        | (2)         | (3)         | (4)         | (5)         | (6)         | (7)         | (8)         | (9)         | (10)        | (11)        | (12)        |
|          | PLANT BALANCES                     |            |             |             |             |             |             |             |             |             |             |             |             |
| 1        | 375- Distribution Structures       | \$0        | \$1,907,261 | \$1,946,802 | \$1,970,765 | \$1,977,191 | \$2,011,929 | \$2,078,973 | \$2,092,137 | \$2,100,422 | \$2,172,031 | \$2,203,295 | \$2,257,157 |
| 2        | 376- Mains                         | 9,396,338  | 10,797,337  | 12,353,883  | 15,264,009  | 19,514,509  | 22,527,044  | 24,376,933  | 27,050,294  | 30,884,264  | 36,225,118  | 37,568,970  | 39,178,319  |
| 3        | 378- Distribution M&R Equip        | 295,732    | 345,623     | 421,515     | 544,570     | 587,436     | 672,030     | 736,918     | 857,679     | 938,019     | 1,051,946   | 1,137,147   | 1,195,858   |
| 4        | 382- Meter Installations           | 1,408,166  | 1,548,984   | 1,797,248   | 2,190,979   | 2,582,968   | 2,860,471   | 3,138,624   | 3,531,975   | 3,855,111   | 4,161,512   | 4,583,446   | 4,996,024   |
| 5        | 383- Dist House Regulators         | 0          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 6        | 386- Dist. Wtr Htr & Conv. Brn     | 156,516    | 207,275     | 378,308     | 653,700     | 1,048,110   | 1,342,183   | 1,657,512   | 1,865,584   | 1,953,335   | 2,139,929   | 3,359,028   | 3,377,491   |
| 7        | Net Capacity-related               |            |             |             |             |             |             |             |             |             |             |             |             |
| 8        | Distribution Plant                 |            |             |             |             |             |             |             |             |             |             |             |             |
| 9        | Balances Sum (1) thru (6)          | 11,256,752 | 14,806,481  | 16,897,757  | 20,624,023  | 25,710,215  | 29,413,657  | 31,988,960  | 35,397,669  | 39,731,151  | 45,750,536  | 48,851,887  | 51,004,849  |
| 10       |                                    |            |             |             |             |             |             |             |             |             |             |             |             |
| 11       | Net Plant Additions {2}            |            | 3,549,728   | 2,091,276   | 3,726,267   | 5,086,192   | 3,703,442   | 2,575,303   | 3,408,709   | 4,333,482   | 6,019,386   | 3,101,350   | 2,152,962   |
| 12       |                                    |            |             |             |             |             |             |             |             |             |             |             |             |
| 13       |                                    |            |             |             |             |             |             |             |             |             |             |             |             |
| 14       | Handy-Whitman - Jan 1 {3}          | 247        | 261         | 277         | 283         | 294         | 296         | 307         | 313         | 319         | 325         | 333         | 341         |
| 15       | Index - Mains - Jul 1 {3}          | 247        | 261         | 280         | 289         | 299         | 302         | 310         | 315         | 322         | 330         | 337         | 344         |
| 16       | Wtd. Avg. Annual Index             | 250.50     | 265.00      | 280.00      | 288.75      | 297.00      | 301.75      | 310.00      | 315.50      | 322.00      | 329.50      | 337.00      | 343.75      |
| 17       | (14i)/4+(15i)/2+(14j)/4            |            |             |             |             |             |             |             |             |             |             |             |             |
| 18       |                                    |            |             |             |             |             |             |             |             |             |             |             |             |
| 19       | Current Cost of Additions          |            |             |             |             |             |             |             |             |             |             |             |             |
| 20       | (11)*(16)/Current Index            | \$0        | \$6,724,391 | \$3,749,359 | \$6,478,219 | \$8,596,863 | \$6,161,153 | \$4,170,329 | \$5,423,684 | \$6,755,925 | \$9,170,657 | \$4,619,816 | \$3,144,107 |
| 21       |                                    |            |             |             |             |             |             |             |             |             |             |             |             |
| 22       | Cumulative Net Additions           | 0          | 6,724,391   | 10,473,750  | 16,951,969  | 25,548,832  | 31,709,985  | 35,880,314  | 41,303,997  | 48,059,922  | 57,230,579  | 61,850,395  | 64,994,502  |
| 23       |                                    |            |             |             |             |             |             |             |             |             |             |             |             |
| 24       | Correction Factor for Replm'ts {2} | 21.0%      |             |             |             |             |             |             |             |             |             |             |             |
| 25       |                                    |            |             |             |             |             |             |             |             |             |             |             |             |
| 26       | Cum Growth Related Invest          | 0          | 1,412,125   | 2,199,492   | 3,559,921   | 5,365,266   | 6,659,111   | 7,534,882   | 8,673,858   | 10,092,605  | 12,018,447  | 12,988,610  | 13,648,874  |

NOTES:

- 1 Source: Annual Reports
- 2 Source: Table 2 page 5
- 3 Hand-Whitman for Plastic Mains

Table - 2  
Northern Utilities- New Hampshire  
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Historical Plant Investment Data - Capacity-Related

| Line No. | Description                        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 2006        | 2007        | 2008        | 2009        | 2010        |
|----------|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|          | DISTRIBUTION INVESTMENT            | (13)        | (14)        | (15)        | (16)        | (17)        | (18)        | (19)        | (20)        | (21)        | (22)        |             |             |
|          | PLANT BALANCES                     |             |             |             |             |             |             |             |             |             |             |             |             |
| 1        | 375- Distribution Structures       | \$2,259,457 | \$2,259,457 | \$2,235,888 | \$2,250,950 | \$2,250,950 | \$2,295,667 | \$2,295,667 | \$2,332,194 | \$2,332,194 | \$2,332,194 | \$2,334,042 | \$2,820,320 |
| 2        | 376- Mains                         | 40,532,171  | 42,573,536  | 43,946,403  | 45,608,517  | 47,288,473  | 49,392,846  | 50,531,680  | 54,591,098  | 57,186,366  | 59,131,775  | 59,604,088  | 65,458,022  |
| 3        | 378- Distribution M&R Equip        | 1,262,572   | 1,397,118   | 1,449,677   | 1,467,946   | 1,553,479   | 1,611,260   | 1,636,689   | 1,744,560   | 1,770,112   | 1,770,112   | 1,770,570   | 1,787,578   |
| 4        | 382- Meter Installations           | 5,445,660   | 5,767,414   | 6,202,545   | 6,771,415   | 7,315,947   | 7,771,080   | 8,360,751   | 9,196,256   | 9,814,274   | 10,622,593  | 10,703,831  | 12,313,745  |
| 5        | 383- Dist House Regulators         | 6,776       | 10,520      | 43,097      | 86,332      | 118,546     | 158,413     | 185,195     | 185,195     | 185,195     | 185,195     | 185,195     | 222,731     |
| 6        | 386- Dist. Wtr Htr & Conv. Brn     | 3,425,650   | 3,520,935   | 3,497,800   | 3,538,176   | 3,589,462   | 3,052,832   | 2,868,870   | 2,307,938   | 2,362,713   | 2,444,161   | 2,447,385   | 2,523,018   |
| 7        | Net Capacity-related               |             |             |             |             |             |             |             |             |             |             |             |             |
| 8        | Distribution Plant                 |             |             |             |             |             |             |             |             |             |             |             |             |
| 9        | Balances Sum (1) thru (6)          | 52,932,285  | 55,528,980  | 57,375,410  | 59,723,337  | 62,116,857  | 64,282,099  | 65,878,851  | 70,357,241  | 73,650,854  | 76,486,030  | 77,045,113  | 85,125,415  |
| 10       |                                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 11       | Net Plant Additions {2}            | 1,927,436   | 2,596,695   | 1,846,430   | 2,347,927   | 2,393,520   | 2,165,242   | 1,596,753   | 4,478,390   | 3,293,613   | 2,835,176   | 559,083     | 8,080,302   |
| 12       |                                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 13       |                                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 14       | Handy-Whitman - Jan 1 {3}          | 346         | 354         | 364         | 369         | 376         | 389         | 411         | 433         | 460         | 480         | 514         | 502         |
| 15       | Index - Mains - Jul 1 {3}          | 351         | 357         | 367         | 376         | 379         | 394         | 421         | 440         | 465         | 486         | 516         | 502         |
| 16       | Wtd. Avg. Annual Index             | 350.50      | 358.00      | 366.75      | 374.25      | 380.75      | 397.00      | 421.50      | 443.25      | 467.50      | 491.50      | 512.00      | 502.00      |
| 17       | (14i)/4+(15i)/2+(14i)/4            |             |             |             |             |             |             |             |             |             |             |             |             |
| 18       |                                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 19       | Current Cost of Additions          |             |             |             |             |             |             |             |             |             |             |             |             |
| 20       | (11)*(16)/Current Index            | \$2,760,551 | \$3,641,176 | \$2,527,356 | \$3,149,390 | \$3,155,738 | \$2,737,913 | \$1,901,708 | \$5,071,972 | \$3,536,671 | \$2,895,744 | \$548,163   | \$8,080,302 |
| 21       |                                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 22       | Cumulative Net Additions           | 67,755,053  | 71,396,229  | 73,923,585  | 77,072,975  | 80,228,713  | 82,966,625  | 84,868,333  | 89,940,305  | 93,476,976  | 96,372,721  | 96,920,884  | 105,001,186 |
| 23       |                                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 24       | Correction Factor for Replm'ts {2} |             |             |             |             |             |             |             |             |             |             |             |             |
| 25       |                                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 26       | Cum Growth Related Invest          | 14,228,591  | 14,993,240  | 15,523,986  | 16,185,359  | 16,848,065  | 17,423,028  | 17,822,388  | 18,887,504  | 19,630,207  | 20,238,314  | 20,353,429  | 22,050,296  |

NOTES:

- 1 Source: Annual Reports
- 2 Source: Table 2 page 5
- 3 Hand-Whitman for Plastic Mains

Table - 2  
Northern Utilities- New Hampshire  
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**Development of Capacity Related Investment - Distribution Reinforcement**

| Line No. | Year                                | Peak Vol                  | Reinf Cost Current \$ | Reinf Cost Constant \$                          | Cumulative Total |
|----------|-------------------------------------|---------------------------|-----------------------|-------------------------------------------------|------------------|
|          | (1)                                 | (2)                       |                       | (3)                                             | (4)              |
| 1        | INVESTMENT FOR REINFORCEMENT        | {1}{3}                    |                       |                                                 |                  |
| 2        | 2011                                | 553,465                   |                       | 1,935,000                                       | 1,935,000        |
| 3        | 2012                                | 564,534                   |                       | 0                                               | 1,935,000        |
| 4        | 2013                                | 575,825                   |                       | 0                                               | 1,935,000        |
| 5        | 2014                                | 587,341                   |                       | 0                                               | 1,935,000        |
| 6        | 2015                                | 599,088                   |                       | 0                                               | 1,935,000        |
| 7        | 2016                                | 611,070                   |                       | 300,000                                         | 2,235,000        |
| 8        | 2017                                | 623,291                   |                       | 0                                               | 2,235,000        |
| 9        | 2018                                | 635,757                   |                       | 0                                               | 2,235,000        |
| 10       | 2019                                | 648,472                   |                       | 1,913,750                                       | 4,148,750        |
| 11       | 2020                                | 661,442                   |                       | 0                                               | 4,148,750        |
| 12       |                                     |                           |                       |                                                 |                  |
| 13       |                                     |                           |                       |                                                 |                  |
| 14       | Total Reinforcement Cost            | 107,977                   |                       | \$2,213,750                                     |                  |
| 15       |                                     |                           |                       |                                                 |                  |
| 16       |                                     |                           |                       |                                                 |                  |
| 17       | <b>REGRESSION RESULTS</b>           |                           |                       | <u>Cum Invest Col. (4) vs Peak Vol Col. (2)</u> |                  |
| 18       | Slope                               |                           |                       | 22.84550                                        |                  |
| 19       | Y Intercept                         |                           |                       | (11,451,504.46)                                 |                  |
| 20       | Coefficient of Determination (RSQR) |                           |                       | 66.42%                                          |                  |
| 21       | t-value                             |                           |                       | 3.7                                             |                  |
| 22       |                                     |                           |                       |                                                 |                  |
| 23       | Regression Estimate                 | (18)                      |                       | \$22.8455                                       |                  |
| 24       |                                     |                           |                       |                                                 |                  |
| 25       | Incremental Average Cost            | (14), col. (3) / col. (2) |                       | \$20.50                                         |                  |
| 26       |                                     |                           |                       |                                                 |                  |
| 27       | UNIT COSTS FOR REINFORCEMENT        |                           |                       |                                                 |                  |
| 28       | \$'s per Design Day Therms          | {3}                       |                       | <u>\$20.50</u>                                  |                  |

NOTES:

- 1 Baseline forecast used to develop marginal distribution investment taken from engineer's estimates.
- 2 Results of Stoner model which identifies pressure problems on design hours. Areas with identified pressure deficiencies are reinforced, based on engineer's assessment of needed improvements. All such cost estimates based on test year costs.
- 3 Regression results are insufficiently robust to support the estimate of marginal costs. The incremental average cost was used for Marginal Cost.

Table - 2  
Northern Utilities- New Hampshire  
Marginal Cost Study

Attachment PMN-2G-2  
Table-2  
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Development of Distribution Main Extension Investment

| Line No. | Year                                | Installed Footage | Cumulative Footage | Cost      | Cost per Foot  | Cost Index | Costs in 2010 \$'s | Costs Per Foot | Cum Investm't | Design Day Demand |
|----------|-------------------------------------|-------------------|--------------------|-----------|----------------|------------|--------------------|----------------|---------------|-------------------|
|          |                                     | (1)               | (2)                | (3)       | (4)            | (5)        | (6)                | (7)            | (8)           | (9)               |
|          |                                     | {1}               |                    | {2}       | (3)/(1)        | {3}        | (3)*(5)            | (6)/(1)        |               |                   |
| 1        | 1988                                | 16,390            |                    | 240,170   |                |            |                    |                |               |                   |
| 2        | 1989                                | 11,838            | 11,838             | 247,615   | \$20.92        | 1.793      | 443,939            | \$37.50        | 443,939       | 0                 |
| 3        | 1990                                | 22,623            | 34,461             | 501,905   | \$22.19        | 1.739      | 872,576            | \$38.57        | 1,316,515     | 0                 |
| 4        | 1991                                | 26,544            | 61,005             | 727,250   | \$27.40        | 1.690      | 1,229,223          | \$46.31        | 2,545,738     | 0                 |
| 5        | 1992                                | 23,224            | 84,229             | 459,663   | \$19.79        | 1.664      | 764,709            | \$32.93        | 3,310,446     | 0                 |
| 6        | 1993                                | 10,953            | 95,182             | 338,540   | \$30.91        | 1.619      | 548,216            | \$50.05        | 3,858,662     | 0                 |
| 7        | 1994                                | 18,744            | 113,926            | 472,382   | \$25.20        | 1.591      | 751,619            | \$40.10        | 4,610,281     | 0                 |
| 8        | 1995                                | 19,362            | 133,288            | 661,359   | \$34.16        | 1.559      | 1,031,063          | \$53.25        | 5,641,344     | 0                 |
| 9        | 1996                                | 20,071            | 153,359            | 722,482   | \$36.00        | 1.524      | 1,100,716          | \$54.84        | 6,742,060     | 519,260           |
| 10       | 1997                                | 13,226            | 166,585            | 486,009   | \$36.75        | 1.490      | 723,965            | \$54.74        | 7,466,025     | 534,600           |
| 11       | 1998                                | 10,551            | 177,136            | 303,980   | \$28.81        | 1.460      | 443,921            | \$42.07        | 7,909,947     | 541,340           |
| 12       | 1999                                | 14,155            | 191,291            | 402,888   | \$28.46        | 1.432      | 577,033            | \$40.77        | 8,486,979     | 525,529           |
| 13       | 2000                                | 12,205            | 203,495            | 338,004   | \$27.69        | 1.402      | 473,960            | \$38.83        | 8,960,939     | 520,249           |
| 14       | 2001                                | 8,858             | 212,353            | 317,408   | \$35.83        | 1.369      | 434,461            | \$49.05        | 9,395,400     | 517,753           |
| 15       | 2002                                | 5,178             | 217,531            | 276,364   | \$53.38        | 1.341      | 370,701            | \$71.60        | 9,766,101     | 528,031           |
| 16       | 2003                                | 5,719             | 223,250            | 226,109   | \$39.54        | 1.318      | 298,114            | \$52.13        | 10,064,215    | 538,347           |
| 17       | 2004                                | 10,312            | 233,561            | 373,000   | \$36.17        | 1.264      | 471,652            | \$45.74        | 10,535,867    | 567,560           |
| 18       | 2005                                | 8,709             | 242,271            | 379,781   | \$43.61        | 1.191      | 452,314            | \$51.94        | 10,988,181    | 545,734           |
| 19       | 2006                                | 12,310            | 254,580            | 594,114   | \$48.26        | 1.133      | 672,860            | \$54.66        | 11,661,041    | 512,792           |
| 20       | 2007                                | 6,682             | 261,262            | 372,119   | \$55.69        | 1.074      | 399,580            | \$59.80        | 12,060,621    | 571,784           |
| 21       | 2008                                | 8,611             | 269,873            | 483,155   | \$56.11        | 1.021      | 493,477            | \$57.31        | 12,554,097    | 582,530           |
| 22       | 2009                                | 3,211             | 273,085            | 316,309   | \$98.49        | 0.980      | 310,131            | \$96.57        | 12,864,228    | 565,572           |
| 23       | 2010                                | 4,149             | 277,234            | 257,645   | \$62.10        | 1.000      | 257,645            | \$62.10        | 13,121,874    | 569,539           |
| 24       |                                     |                   |                    |           |                |            |                    |                |               |                   |
| 25       | Totals                              | 293,624           |                    | 9,498,249 | \$32.35        |            | 13,121,874         | \$44.69        |               |                   |
| 26       |                                     |                   |                    |           |                |            |                    |                |               |                   |
| 27       | REGRESSION RESULTS                  |                   |                    |           |                |            |                    |                |               |                   |
| 28       |                                     |                   |                    |           |                |            |                    |                |               |                   |
| 29       | Slope                               |                   |                    |           |                |            |                    |                |               |                   |
| 30       | Y Intercept                         |                   |                    |           |                |            |                    |                |               |                   |
| 31       | Coefficient of Determination (RSQR) |                   |                    |           |                |            |                    |                |               |                   |
| 32       | t Statistic                         |                   |                    |           |                |            |                    |                |               |                   |
| 33       |                                     |                   |                    |           |                |            |                    |                |               |                   |
| 34       |                                     |                   |                    |           |                |            |                    |                |               |                   |
| 35       | Trended Cost Per Design Day Therms  |                   |                    |           |                |            |                    |                |               |                   |
| 36       |                                     |                   |                    |           |                |            |                    |                |               |                   |
| 37       | MARGINAL COST ESTIMATES             |                   |                    |           |                |            |                    |                |               |                   |
| 38       |                                     |                   |                    |           |                |            |                    |                |               |                   |
| 39       | Trended Cost Per Design Day Therms  |                   | (27)*(28)          |           | \$59.55        |            |                    |                |               |                   |
| 40       |                                     |                   |                    |           |                |            |                    |                |               |                   |
| 41       | Average Cost Per Design Day Therms  |                   |                    |           |                |            |                    |                |               |                   |
| 42       | 1996-2010                           |                   |                    |           | \$126.89       |            |                    |                |               |                   |
| 43       | 2001-2010                           |                   |                    |           | \$71.96        |            |                    |                |               |                   |
| 44       | 2005-2010                           |                   |                    |           | \$89.63        |            |                    |                |               |                   |
| 45       | Marginal Cost for Main Additions    |                   |                    | {4}       | <u>\$71.96</u> |            |                    |                |               |                   |

NOTES:

- Source: Total annual new footage installed less footage retired from accounting records.
- Source: Plant accounting records.
- Source: Handy Whitman Index of Plastic Mains
- Regression results are insufficiently robust to support the estimate of marginal costs. Since 2009 and 2010 installed footage is peculiar a 10 year average was utilized instead of a recent 5 year average cost.



Table - 2  
Northern Utilities- New Hampshire  
Marginal Cost Study

Attachment PMN-2G-2  
Table-2  
Page 11 of 6

**Regression Analysis of Distribution Capacity Costs**

| Line No. | Year                                 | Total Mains Investment (2010 \$) | Mains Investment for Growth (2010 \$) | Ratio   | Total Capacity Related Net Distribution Investment | Growth Related Distribution Investment     | Cumulative Investment | Design Day Sendout |
|----------|--------------------------------------|----------------------------------|---------------------------------------|---------|----------------------------------------------------|--------------------------------------------|-----------------------|--------------------|
|          |                                      | (1)                              | (2)                                   | (3)     | (4)                                                | (5)                                        | (6)                   | (7)                |
|          |                                      | {1}                              | {2}                                   | (2)/(1) | {3} {4}                                            | (3)*(4)                                    |                       |                    |
| 1        | 1989                                 | 2,790,664                        | 443,939                               | 16%     | 3,749,359                                          | 596,448                                    | 596,448               | 0                  |
| 2        | 1990                                 | 5,059,336                        | 872,576                               | 17%     | 6,478,219                                          | 1,117,289                                  | 1,713,737             | 0                  |
| 3        | 1991                                 | 7,184,348                        | 1,229,223                             | 17%     | 8,596,863                                          | 1,470,901                                  | 3,184,637             | 0                  |
| 4        | 1992                                 | 5,011,739                        | 764,709                               | 15%     | 6,161,153                                          | 940,090                                    | 4,124,728             | 0                  |
| 5        | 1993                                 | 3,126,749                        | 548,216                               | 18%     | 4,170,329                                          | 731,188                                    | 4,855,915             | 0                  |
| 6        | 1994                                 | 4,253,653                        | 751,619                               | 18%     | 5,423,684                                          | 958,363                                    | 5,814,278             | 0                  |
| 7        | 1995                                 | 5,977,182                        | 1,031,063                             | 17%     | 6,755,925                                          | 1,165,395                                  | 6,979,674             | 0                  |
| 8        | 1996                                 | 8,136,900                        | 1,100,716                             | 14%     | 9,170,657                                          | 1,240,557                                  | 8,220,231             | 519,260            |
| 9        | 1997                                 | 2,001,821                        | 723,965                               | 36%     | 4,619,816                                          | 1,670,772                                  | 9,891,003             | 534,600            |
| 10       | 1998                                 | 2,350,235                        | 443,921                               | 19%     | 3,144,107                                          | 593,871                                    | 10,484,874            | 541,340            |
| 11       | 1999                                 | 1,939,040                        | 577,033                               | 30%     | 2,760,551                                          | 821,503                                    | 11,306,377            | 525,529            |
| 12       | 2000                                 | 2,862,472                        | 473,960                               | 17%     | 3,641,176                                          | 602,896                                    | 11,909,273            | 520,249            |
| 13       | 2001                                 | 1,879,153                        | 434,461                               | 23%     | 2,527,356                                          | 584,326                                    | 12,493,598            | 517,753            |
| 14       | 2002                                 | 2,275,068                        | 370,701                               | 16%     | 3,149,390                                          | 513,164                                    | 13,006,762            | 528,031            |
| 15       | 2003                                 | 2,214,938                        | 298,114                               | 13%     | 3,155,738                                          | 424,739                                    | 13,431,501            | 538,347            |
| 16       | 2004                                 | 2,660,946                        | 471,652                               | 18%     | 2,737,913                                          | 485,294                                    | 13,916,795            | 567,560            |
| 17       | 2005                                 | 1,356,333                        | 452,314                               | 33%     | 1,901,708                                          | 634,187                                    | 14,550,982            | 545,734            |
| 18       | 2006                                 | 4,597,468                        | 672,860                               | 15%     | 5,071,972                                          | 742,305                                    | 15,293,287            | 512,792            |
| 19       | 2007                                 | 2,786,791                        | 399,580                               | 14%     | 3,536,671                                          | 507,100                                    | 15,800,387            | 571,784            |
| 20       | 2008                                 | 1,986,969                        | 493,477                               | 25%     | 2,895,744                                          | 719,177                                    | 16,519,564            | 582,530            |
| 21       | 2009                                 | 463,089                          | 310,131                               | 67%     | 548,163                                            | 367,106                                    | 16,886,670            | 565,572            |
| 22       | 2010                                 | 5,853,934                        | 257,645                               | 4%      | 8,080,302                                          | 355,633                                    | 17,242,303            | 569,539            |
| 23       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 24       | Correction Factor for Replacements   | {4}                              |                                       | 21.0%   |                                                    |                                            |                       |                    |
| 25       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 26       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 27       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 28       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 29       | REGRESSION RESULTS                   |                                  |                                       |         |                                                    | Investment col. (6) vs Design Day col. (7) |                       |                    |
| 30       | Slope =                              |                                  |                                       |         |                                                    | \$78.73288                                 |                       |                    |
| 31       | Y Intercept =                        |                                  |                                       |         |                                                    | (\$29,332,064.2)                           |                       |                    |
| 32       | Coefficient of Determination (RSQR)  |                                  |                                       |         |                                                    | 45.04%                                     |                       |                    |
| 33       | t Probability                        |                                  |                                       |         |                                                    | 3.3                                        |                       |                    |
| 34       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 35       | MARGINAL COST ESTIMATES              |                                  |                                       |         |                                                    |                                            |                       |                    |
| 36       | Trended Cost Per Design Day Therms   |                                  |                                       |         |                                                    | \$78.73                                    |                       |                    |
| 37       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 38       | Average Cost Per Design Day Therms   |                                  |                                       |         |                                                    |                                            |                       |                    |
| 39       | 1996-2010                            |                                  |                                       |         |                                                    | \$179.44                                   |                       |                    |
| 40       | 2001-2010                            |                                  |                                       |         |                                                    | \$91.70                                    |                       |                    |
| 41       | 2005-2010                            |                                  |                                       |         |                                                    | \$113.06                                   |                       |                    |
| 42       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 43       |                                      |                                  |                                       |         |                                                    |                                            |                       |                    |
| 44       | Marginal cost estimate (29)*(35) {5} |                                  |                                       |         | <u>\$91.70</u>                                     |                                            |                       |                    |

NOTES:

- Source: Successive Differences in Table 2, page 2, line 3 adjusted by Handy Whitman Index
- Source: Table 2, Page 5
- Source: Table - 2, Pages 2 & 3.
- Based on the average of the ratios (mains extension investments over mains total investment)
- This estimate is provided for comparison purposes only. Refer to pages 4 & 5 of this table for the development of a more accurate estimate, eliminating the error associated with estimating replacements.

Table - 3  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Services and Meters Investment**

| Line No. | Description                           | ----- Residential ----- |                       | ----- Small C&I ----- |                       | ----- Medium C&I ----- |                       | ----- Large C&I -----  |                        |
|----------|---------------------------------------|-------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|------------------------|------------------------|
|          |                                       | ResNonHt&LI<br>R-6&R-11 | ResHt&LI<br>R-5&R-10  | SmHiW<br>G-40         | SmLoW<br>G-50         | MdHiW<br>G-41          | MdLoW<br>G-51         | LgHiW<br>G-42          | LgLoW<br>G-52          |
|          |                                       | (1)                     | (2)                   | (4)                   | (5)                   | (6)                    | (7)                   | (8)                    | (9)                    |
| 1        | <b>SERVICE COSTS</b>                  |                         |                       |                       |                       |                        |                       |                        |                        |
| 2        |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 3        |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 4        | Representative Cost {1}               | \$4,137                 | \$4,137               | \$5,045               | \$5,045               | \$7,424                | \$7,424               | \$34,416               | \$34,416               |
| 5        |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 6        |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 7        |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 8        | Services per Customer {2}             | 0.73                    | 0.73                  | 0.73                  | 0.73                  | 1.00                   | 1.00                  | 1.00                   | 1.00                   |
| 9        |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 10       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 11       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 12       | <b>Average Service Cost per Cust.</b> | <b><u>\$3,035</u></b>   | <b><u>\$3,035</u></b> | <b><u>\$3,702</u></b> | <b><u>\$3,702</u></b> | <b><u>\$7,424</u></b>  | <b><u>\$7,424</u></b> | <b><u>\$34,416</u></b> | <b><u>\$34,416</u></b> |
| 13       | (4)*(8)                               |                         |                       |                       |                       |                        |                       |                        |                        |
| 14       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 15       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 16       | <b>METER COSTS</b>                    |                         |                       |                       |                       |                        |                       |                        |                        |
| 17       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 18       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 19       | Current Unit Cost for Metering {3}    | \$459                   | \$459                 | \$3,089               | \$3,089               | \$6,746                | \$6,746               | \$12,000               | \$12,000               |
| 20       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 21       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 22       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 23       | Customer Count {4}                    |                         |                       |                       |                       |                        |                       |                        |                        |
| 24       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 25       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 26       | Meters per Customer                   | 1.00                    | 1.00                  | 1.00                  | 1.00                  | 1.00                   | 1.00                  | 1.00                   | 1.00                   |
| 27       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 28       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 29       |                                       |                         |                       |                       |                       |                        |                       |                        |                        |
| 30       | <b>Avg Metering Cost per Cust.</b>    | <b><u>\$461</u></b>     | <b><u>\$461</u></b>   | <b><u>\$3,101</u></b> | <b><u>\$3,101</u></b> | <b><u>\$6,772</u></b>  | <b><u>\$6,772</u></b> | <b><u>\$12,046</u></b> | <b><u>\$12,046</u></b> |
| 31       | (19)*(26)                             |                         |                       |                       |                       |                        |                       |                        |                        |

NOTES:

- Source: Typical service costs as estimated by the Engineering Department as 2010 costs including overhead loading.
- Source: Services per Meter computed by assigning one service to each medium and large C&I customer and computing the ratio of remaining services to the total of residential and small C&I customers.
- Source: Replacement Cost New Analysis including an allowance for spare meters.

Table - 4  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Summary of Marginal Commodity Costs**

| Line<br>No. | Description                      | ----- Residential ----- |                      | ----- Small C&I ----- |               | ----- Medium C&I ----- |               | ----- Large C&I ----- |               | Total<br>Company |
|-------------|----------------------------------|-------------------------|----------------------|-----------------------|---------------|------------------------|---------------|-----------------------|---------------|------------------|
|             |                                  | ResNonHt&LI<br>R-6&R-11 | ResHt&LI<br>R-5&R-10 | SmHiW<br>G-40         | SmLoW<br>G-50 | MdHiW<br>G-41          | MdLoW<br>G-51 | LgHiW<br>G-42         | LgLoW<br>G-52 |                  |
|             | LOAD WEIGHTED MARGINAL COMMODITY | (1)                     | (2)                  | (3)                   | (5)           | (6)                    | (7)           | (8)                   | (9)           | (10)             |

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**MARGINAL COMMODITY COSTS NOT COMPUTED FOR DISTRIBUTION MARGINAL COST STUDY**

Table - 4  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Development of Capacity Related Production Expense**

| Line No. | Year                                                  | Total Capacity Related Expenses | Cost Index | Expense 2010 Dollars | Design Day Sendout, Therm | Average Cost per Design Day Therm |
|----------|-------------------------------------------------------|---------------------------------|------------|----------------------|---------------------------|-----------------------------------|
|          | (1)                                                   | (2)                             | (3)        | (4)                  | (5)                       | (6)                               |
|          |                                                       | {1}                             |            |                      |                           |                                   |
| 1        |                                                       |                                 |            |                      |                           |                                   |
| 2        |                                                       |                                 |            |                      |                           |                                   |
| 3        |                                                       |                                 |            |                      |                           |                                   |
| 4        |                                                       |                                 |            |                      |                           |                                   |
| 5        |                                                       |                                 |            |                      |                           |                                   |
| 6        |                                                       |                                 |            |                      |                           |                                   |
| 7        |                                                       |                                 |            |                      |                           |                                   |
| 8        |                                                       |                                 |            |                      |                           |                                   |
| 9        | 1997                                                  | 63,064                          | 1.3086     | 82,528               | 519,260                   | 0.16                              |
| 10       | 1998                                                  | 54,851                          | 1.2940     | 70,979               | 534,600                   | 0.13                              |
| 11       | 1999                                                  | 52,127                          | 1.2753     | 66,476               | 541,340                   | 0.12                              |
| 12       | 2000                                                  | 23,619                          | 1.2483     | 29,483               | 525,529                   | 0.06                              |
| 13       | 2001                                                  | 20,574                          | 1.2207     | 25,114               | 520,249                   | 0.05                              |
| 14       | 2002                                                  | 17,212                          | 1.2012     | 20,675               | 517,753                   | 0.04                              |
| 15       | 2003                                                  | 20,754                          | 1.1759     | 24,404               | 528,031                   | 0.05                              |
| 16       | 2004                                                  | 28,986                          | 1.1435     | 33,144               | 538,347                   | 0.06                              |
| 17       | 2005                                                  | 21,038                          | 1.1065     | 23,279               | 567,560                   | 0.04                              |
| 18       | 2006                                                  | 29,043                          | 1.0716     | 31,123               | 545,734                   | 0.06                              |
| 19       | 2007                                                  | 27,962                          | 1.0410     | 29,108               | 512,792                   | 0.06                              |
| 20       | 2008                                                  | 20,111                          | 1.0187     | 20,487               | 571,784                   | 0.04                              |
| 21       | 2009                                                  | 5                               | 1.0095     | 5                    | 582,530                   | 0.00                              |
| 22       | 2010                                                  | 6,964                           | 1.0000     | 6,964                | 565,572                   | 0.01                              |
| 23       |                                                       |                                 |            |                      |                           |                                   |
| 24       | <b>REGRESSION RESULTS</b>                             |                                 |            |                      | Expense (4)               | Avg Cost (6)                      |
| 25       |                                                       |                                 |            |                      | vs Demand (5)             | vs Year (1)                       |
| 26       | Slope =                                               |                                 |            |                      | -0.48443                  | -0.00897                          |
| 27       | Y Intercept =                                         |                                 |            |                      | 295100.6159               | 18.0370                           |
| 28       | Coefficient of Determination (R**2)                   |                                 |            |                      | 21.38%                    | 68.97%                            |
| 29       | t Value                                               |                                 |            |                      | (1.8)                     | (5.2)                             |
| 30       |                                                       |                                 |            |                      |                           |                                   |
| 31       | <b>MARGINAL COST ESTIMATES</b>                        |                                 |            |                      |                           |                                   |
| 32       | Trended Cost Per Design Day Therms                    |                                 |            |                      | (\$0.48)                  |                                   |
| 33       | Time Series Predicted Avg Cost (2008*slope)+intercept |                                 |            |                      |                           | (\$0.01)                          |
| 34       |                                                       |                                 |            |                      |                           |                                   |
| 35       | Average Cost Per Design Day Therms                    |                                 |            |                      |                           |                                   |
| 36       | 1996-2010                                             |                                 |            |                      |                           | \$0.06                            |
| 37       | 2001-2010                                             |                                 |            |                      |                           | \$0.04                            |
| 38       | 2005-2010                                             |                                 |            |                      |                           | \$0.03                            |
| 39       | Current Average Cost per Design Day Therms            |                                 |            |                      |                           | \$0.01                            |
| 40       |                                                       |                                 |            |                      |                           |                                   |
| 41       | Assumed Marginal Cost                                 |                                 |            | (35)                 |                           | \$0.03                            |
| 42       |                                                       |                                 |            |                      |                           |                                   |
| 43       |                                                       |                                 |            |                      |                           |                                   |
| 44       | Percentage Related to Transportation                  |                                 |            |                      | {2}                       | 0.0%                              |
| 45       | Transportation Related Investment                     |                                 |            |                      | (39)*(42)                 | <u>\$0.00</u>                     |
| 46       | Gas Supply Related Investment                         |                                 |            |                      | (39)*[1-(42)]             | <u>\$0.03</u>                     |

NOTES:

- Source: Booked maintenance and other expenses for Manufactured Gas.
- Source: Table - 1, page 3.

Table - 5  
Northern Utilities- New Hampshire  
Marginal Cost Study

Development of Capacity Related Expense - T & D

| Line No. | Year                                                      | Capacity Related Expenses | Cost Index | Expense 2010 Dollars | Design Day Sendout | Avg Cost Per Des'n Day Therm |
|----------|-----------------------------------------------------------|---------------------------|------------|----------------------|--------------------|------------------------------|
|          | (1)                                                       | (2)                       | (3)        | (4)                  | (5)                | (6)                          |
|          |                                                           | {1} {4}                   | {2}        |                      |                    |                              |
| 1        |                                                           |                           |            |                      |                    |                              |
| 2        |                                                           |                           |            |                      |                    |                              |
| 3        |                                                           |                           |            |                      |                    |                              |
| 4        |                                                           |                           |            |                      |                    |                              |
| 5        |                                                           |                           |            |                      |                    |                              |
| 6        |                                                           |                           |            |                      |                    |                              |
| 7        |                                                           |                           |            |                      |                    |                              |
| 8        | 1996                                                      | 760,781                   | 1.3318     | 1,013,176            | 519,260            | 1.95                         |
| 9        | 1997                                                      | 457,448                   | 1.3086     | 598,638              | 534,600            | 1.12                         |
| 10       | 1998                                                      | 442,526                   | 1.2940     | 572,644              | 541,340            | 1.06                         |
| 11       | 1999                                                      | 677,886                   | 1.2753     | 864,490              | 525,529            | 1.64                         |
| 12       | 2000                                                      | 806,519                   | 1.2483     | 1,006,741            | 520,249            | 1.94                         |
| 13       | 2001                                                      | 738,972                   | 1.2207     | 902,045              | 517,753            | 1.74                         |
| 14       | 2002                                                      | 613,748                   | 1.2012     | 737,252              | 528,031            | 1.40                         |
| 15       | 2003                                                      | 737,781                   | 1.1759     | 867,570              | 538,347            | 1.61                         |
| 16       | 2004                                                      | 612,561                   | 1.1435     | 700,439              | 567,560            | 1.23                         |
| 17       | 2005                                                      | 576,831                   | 1.1065     | 638,286              | 545,734            | 1.17                         |
| 18       | 2006                                                      | 609,676                   | 1.0716     | 653,347              | 512,792            | 1.27                         |
| 19       | 2007                                                      | 590,679                   | 1.0410     | 614,895              | 571,784            | 1.08                         |
| 20       | 2008                                                      | 764,750                   | 1.0187     | 779,071              | 582,530            | 1.34                         |
| 21       | 2009                                                      | 1,402,178                 | 1.0095     | 1,415,474            | 565,572            | 2.50                         |
| 22       | 2010                                                      | 1,319,234                 | 1.0000     | 1,319,234            | 569,539            | 2.32                         |
| 23       |                                                           |                           |            |                      |                    |                              |
| 24       | <b>REGRESSION RESULTS</b>                                 |                           |            |                      | Expense (4)        | Avg Cost (6)                 |
| 25       |                                                           |                           |            |                      | vs Demand (5)      | vs Year (1)                  |
| 26       | Slope =                                                   |                           |            |                      | 1.67150            | 0.02396                      |
| 27       | Y Intercept =                                             |                           |            |                      | -61585.4936        | -46.4425                     |
| 28       | Coefficient of Determination (RSQR)                       |                           |            |                      | 2.3%               | 5.6%                         |
| 29       | t Statistic                                               |                           |            |                      | 0.55               | 0.87                         |
| 30       |                                                           |                           |            |                      |                    |                              |
| 31       | <b>MARGINAL COST ESTIMATES</b>                            |                           |            |                      |                    |                              |
| 32       | Trended Cost Per Design Day Therms                        |                           |            |                      | \$1.67             |                              |
| 33       | Time Series Predicted Avg Cost = 2008 * Slope + Intercept |                           |            |                      |                    | \$1.77                       |
| 34       |                                                           |                           |            |                      |                    |                              |
| 35       | Average Cost Per Design Day Therms                        |                           |            |                      |                    |                              |
| 36       | 1996-2010                                                 |                           |            |                      |                    | \$1.56                       |
| 37       | 2001-2010                                                 |                           |            |                      |                    | \$1.57                       |
| 38       | 2005-2010                                                 |                           |            |                      |                    | \$1.62                       |
| 39       | Current Average Cost per Design Day Therms                |                           |            |                      |                    | \$2.32                       |
| 40       |                                                           |                           |            |                      |                    |                              |
| 41       | <b>Assumed Marginal Cost</b>                              |                           | {3}        |                      | {34}               | <b><u>\$1.62</u></b>         |

NOTES:

- Source: Table - 5, Page 2.
- Source: GDP Implicit Price Deflator.
- Average costs per DD Therm appear to be relatively stable over time. However since, 2007 Costs appear to be rising. So a recent 5 year average incremental cost was used.
- Acquisition in 2008/2009 resulted in significant accounting changes causing a large increase in accounting expenses. The data from 2009 and 2010 is representative of Northern's operations, and the large increase will continue to be present on a going forward basis.

Table - 5  
Northern Utilities- New Hampshire  
Marginal Cost Study

Operations Expense Data - T&D

| Line No.                                               | Acct No. | Description                                    | 1994             | 1995       | 1996       | 1997       | 1998       | 1999       | 2000       | 2001       |           |
|--------------------------------------------------------|----------|------------------------------------------------|------------------|------------|------------|------------|------------|------------|------------|------------|-----------|
|                                                        |          | (1)                                            | (2)              | (3)        | (4)        | (5)        | (6)        | (7)        | (8)        | (9)        | (10)      |
| TRANS & DIST EXPENSE                                   |          |                                                |                  |            |            |            |            |            |            |            |           |
| 1                                                      | 850      | Operation Supervision and Eng.                 | {2}              | 0          | 0          | 0          | 0          | 0          | 0          | 188,593    | 170,002   |
| 2                                                      | 851      | System Control and Load Disp.                  | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 2,487     |
| 3                                                      | 852      | Communication System Exp.                      | {3}              | 0          | 0          | 0          | 0          | 0          | 0          | 10,757     | 17,793    |
| 4                                                      | 856      | Mains Expenses                                 | {3}              | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         |
| 5                                                      | 857      | Meas. and Reg. Station Exp.                    | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 42,830     | 53,918    |
| 6                                                      | 863      | Maint. Of Mains                                | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 2,043     |
| 7                                                      |          | Total Transmission                             |                  | 0          | 0          | 0          | 0          | 0          | 0          | 242,180    | 246,244   |
| 8                                                      |          |                                                |                  |            |            |            |            |            |            |            |           |
| OPERATIONS EXPENSE                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| 10                                                     | 870      | Operation Supervision and Eng                  | {2}              | 0          | 0          | 870,955    | 648,480    | 754,097    | 678,706    | 0          | 0         |
| 11                                                     | 874      | Mains and Services Expenses                    | {3}              | 0          | 0          | 0          | 0          | 0          | 0          | 434,731    | 412,373   |
| 12                                                     | 875      | Measuring and Reg. Station Exp.-Gen.           | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         |
| 13                                                     | 876      | Measuring and Reg. Station Exp. - Ind.         | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         |
| 14                                                     | 877      | Meas. & Reg. Station Exp.-City Gate            | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 83,805     | 88,895    |
| 15                                                     | 878      | Meter and House Regulator Exp.                 | customer         | 0          | 0          | 407,945    | 429,494    | 434,752    | 376,374    | 381,417    | 364,462   |
| 16                                                     | 879      | Customer Installations Exp.                    | customer         | 0          | 0          | 25,581     | 69,794     | 166,355    | 73,746     | 591,125    | 535,694   |
| 17                                                     | 880      | Other Expenses                                 | {2}              | 0          | 0          | 0          | 0          | 0          | 0          | (416,495)  | (399,888) |
| 18                                                     | 881      | Rents                                          | {2}              | 0          | 0          | 0          | 0          | 0          | 0          | 1,747      | 1,928     |
| 19                                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| 20                                                     |          | Marginal Oper Exp                              | Sum(10-18)       | 0          | 0          | 1,304,481  | 1,147,768  | 1,355,204  | 1,128,826  | 1,076,331  | 1,003,465 |
| 21                                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| MAINTENANCE EXPENSE                                    |          |                                                |                  |            |            |            |            |            |            |            |           |
| 23                                                     | 885      | Maintenance Supervision and Engineering        | {2}              | 0          | 0          | 0          | 0          | 0          | 0          | 563        | 0         |
| 24                                                     | 886      | Maint.of Structures and Improvements           | capacity         | 0          | 0          | 15,729     | 17,355     | 19,089     | 21,047     | 21,407     | 32,541    |
| 25                                                     | 887      | Maintenance of Mains                           | capacity         | 0          | 0          | 377,670    | 243,851    | 226,720    | 379,282    | 283,709    | 205,860   |
| 26                                                     | 889      | Maint. of Meas. and Reg. Sta. Equip.-Gen.      | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 29,433     | 37,182    |
| 27                                                     | 890      | Maint. of Meas. and Reg. Sta. Equip.-Ind.      | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         |
| 28                                                     | 891      | Maint. of Meas. and Reg. Sta. Equip.-City Gate | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         |
| 29                                                     | 892      | Maintenance of Services                        | customer         | 0          | 0          | 94,173     | 79,118     | 60,743     | 107,983    | 118,231    | 137,131   |
| 30                                                     | 893      | Maintenance of Meters and House Reg.           | customer         | 0          | 0          | 11,535     | 23,539     | 34,628     | 20,487     | 12,875     | 3,719     |
| 31                                                     | 894      | Maintenance of Other Equipment                 | {2}              | 0          | 0          | 0          | 0          | 0          | 0          | 312,407    | 266,739   |
| 32                                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| 33                                                     |          | Marginal Maint Exp                             | Sum(23-31)       | 0          | 0          | 499,107    | 363,863    | 341,180    | 528,799    | 778,625    | 683,171   |
| 34                                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| 35                                                     |          | MARGINAL T & D Exp & Superintendence           | (20)+(33)        | 0          | 0          | 1,803,588  | 1,511,631  | 1,696,384  | 1,657,625  | 2,097,136  | 1,932,880 |
| 36                                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| 37                                                     |          | {2}                                            | 0                | 0          | 870,955    | 648,480    | 754,097    | 678,706    | 86,815     | 38,781     |           |
| 38                                                     |          | {3}                                            | 0                | 0          | 0          | 0          | 0          | 0          | 445,488    | 430,166    |           |
| 39                                                     |          | Capacity                                       | 0                | 0          | 393,399    | 261,206    | 245,809    | 400,329    | 461,184    | 422,926    |           |
| 40                                                     |          | Customer                                       | 0                | 0          | 539,234    | 601,945    | 696,478    | 578,590    | 1,103,649  | 1,041,006  |           |
| 41                                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| Allocation of Dist Lines to Customer Component         |          |                                                |                  |            |            |            |            |            |            |            |           |
| 43                                                     |          | Services Investment                            |                  | 13,093,569 | 14,215,570 | 15,343,058 | 16,395,084 | 17,316,520 | 18,225,158 | 19,031,262 |           |
| 44                                                     |          | Mains Investment                               |                  | 30,884,264 | 36,225,118 | 37,568,970 | 39,178,319 | 40,532,171 | 42,573,536 | 43,946,403 |           |
| 45                                                     |          | Services/(Services+Mains)                      | (30)/[(30)+(31)] | 29.77%     | 28.18%     | 29.00%     | 29.50%     | 29.93%     | 29.98%     | 29.98%     |           |
| 46                                                     |          | Customer-related Dist Lines Expense            | (32)*(4)         | 0          | 0          | 0          | 0          | 0          | 133,541    | 128,948    |           |
| 47                                                     |          | Capacity-related Dist Lines Expense            |                  | 0          | 0          | 0          | 0          | 0          | 311,948    | 301,219    |           |
| Customer Related Allocation of Superintendence Expense |          |                                                |                  |            |            |            |            |            |            |            |           |
| 49                                                     |          | Customer %                                     |                  |            | 57.82%     | 69.74%     | 73.91%     | 59.10%     | 61.54%     | 61.77%     |           |
| 50                                                     |          | Customer Super & Other                         |                  |            | 503,573    | 452,238    | 557,380    | 401,149    | 53,428     | 23,955     |           |
| 51                                                     |          | Capacity %                                     |                  |            | 42.18%     | 30.26%     | 26.09%     | 40.90%     | 38.46%     | 38.23%     |           |
| 52                                                     |          | Capacity Superintendence & Other               |                  |            | 367,382    | 196,242    | 196,717    | 277,557    | 33,388     | 14,827     |           |
| 53                                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| 54                                                     |          | Total Customer - Related                       |                  |            | 1,042,807  | 1,054,183  | 1,253,858  | 979,739    | 1,290,617  | 1,193,908  |           |
| 55                                                     |          |                                                |                  |            |            |            |            |            |            |            |           |
| 56                                                     |          | Total Capacity - Related Expenses              |                  |            | 760,781    | 457,448    | 442,526    | 677,886    | 806,519    | 738,972    |           |
| 57                                                     |          | Non-Marginal                                   |                  |            | 0          | 0          | 0          | 0          | 0          | 0          |           |

NOTES:

- Source: Annual Reports
- Costs in this account are joint between customer and capacity components. Individual component costs are computed by allocating on remaining expenses.
- Costs in these accounts are joint between customer & capacity components. Individual component costs are computed by allocating nonplant investment in mains and services.

Table - 5  
Northern Utilities- New Hampshire  
Marginal Cost Study

Operations Expense Data - T&D

| Line No.             | Acct No.                             | Description                                            | 2002             | 2003       | 2004       | 2005       | 2006       | 2007       | 2008       | 2009       | 2010       |            |
|----------------------|--------------------------------------|--------------------------------------------------------|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                      |                                      | (1)                                                    | (2)              | (11)       | (12)       | (13)       | (14)       | (15)       | (16)       | (17)       | (18)       | (19)       |
| TRANS & DIST EXPENSE |                                      | {1}                                                    |                  |            |            |            |            |            |            |            |            |            |
| 1                    | 850                                  | Operation Supervision and Eng.                         | {2}              | 177,162    | 227,097    | 212,621    | 236,483    | 255,882    | 248,821    | 307,171    | 0          | 0          |
| 2                    | 851                                  | System Control and Load Disp.                          | capacity         | 184        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 3                    | 852                                  | Communication System Exp.                              | {3}              | 19,335     | 16,199     | 16,898     | 10,702     | 12,104     | 13,632     | 26,943     | 20,261     | 30,680     |
| 4                    | 856                                  | Mains Expenses                                         | {3}              | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 395        | 3          |
| 5                    | 857                                  | Meas. and Reg. Station Exp.                            | capacity         | 26,935     | 39,238     | 41,226     | 42,983     | 39,233     | 35,709     | 41,266     | 0          | 821        |
| 6                    | 863                                  | Maint. Of Mains                                        | capacity         | 22         | 340        | 0          | 547        | 0          | 0          | 0          | 67         | 0          |
| 7                    |                                      | Total Transmission                                     |                  | 223,639    | 282,874    | 270,745    | 290,716    | 307,219    | 298,161    | 375,380    | 20,724     | 31,504     |
| 8                    |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 9                    |                                      | OPERATIONS EXPENSE                                     |                  |            |            |            |            |            |            |            |            |            |
| 10                   | 870                                  | Operation Supervision and Eng                          | {2}              | 0          | 0          | 0          | 0          | 0          | 0          | 155,548    | 64,421     | 30,859     |
| 11                   | 874                                  | Mains and Services Expenses                            | {3}              | 418,784    | 409,564    | 410,614    | 402,560    | 441,251    | 456,114    | 489,191    | 512,608    | 562,176    |
| 12                   | 875                                  | Measuring and Reg. Station Exp.-Gen.                   | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 3,766      | 160,482    | 152,142    |
| 13                   | 876                                  | Measuring and Reg. Station Exp. - Ind.                 | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 14                   | 877                                  | Meas. & Reg. Station Exp.-City Gate                    | capacity         | 79,121     | 81,127     | 75,260     | 78,488     | 67,653     | 74,184     | 58,111     | 0          | 0          |
| 15                   | 878                                  | Meter and House Regulator Exp.                         | customer         | 365,756    | 430,472    | 424,806    | 466,131    | 560,865    | 560,268    | 546,903    | 817,734    | 804,803    |
| 16                   | 879                                  | Customer Installations Exp.                            | customer         | 361,310    | 332,784    | 419,791    | 347,791    | 309,904    | 300,100    | 311,003    | 108,556    | 39,486     |
| 17                   | 880                                  | Other Expenses                                         | {2}              | (496,264)  | (453,877)  | (568,926)  | (563,836)  | (563,928)  | (541,638)  | (557,208)  | 783,922    | 711,532    |
| 18                   | 881                                  | Rents                                                  | {2}              | 1,046      | 1,852      | 1,063      | 2,080      | 2,289      | 2,283      | 2,821      | 0          | 0          |
| 19                   |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 20                   | Marginal Oper Exp                    |                                                        | Sum(10-18)       | 729,754    | 801,922    | 762,608    | 733,214    | 818,035    | 851,311    | 1,010,135  | 2,447,724  | 2,300,999  |
| 21                   |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 22                   |                                      | MAINTENANCE EXPENSE                                    |                  |            |            |            |            |            |            |            |            |            |
| 23                   | 885                                  | Maintenance Supervision and Engineering                | {2}              | 0          | 0          | 0          | 0          | 0          | 0          | 7,628      | 111,800    | 68,440     |
| 24                   | 886                                  | Maint.of Structures and Improvements                   | capacity         | 20,411     | 28,250     | 23,106     | 38,069     | 39,649     | 33,298     | 37,351     | 8,234      | 5,588      |
| 25                   | 887                                  | Maintenance of Mains                                   | capacity         | 216,906    | 298,390    | 253,869    | 221,887    | 182,359    | 192,097    | 249,701    | 284,070    | 257,655    |
| 26                   | 889                                  | Maint. of Meas. and Reg. Sta. Equip.-Gen.              | capacity         | 20,697     | 25,662     | 24,821     | 23,419     | 69,957     | 27,549     | 35,649     | 31,393     | 20,567     |
| 27                   | 890                                  | Maint. of Meas. and Reg. Sta. Equip.-Ind.              | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 4,289      | (526)      |
| 28                   | 891                                  | Maint. of Meas. and Reg. Sta. Equip.-City Gate         | capacity         | 0          | 0          | 0          | 0          | 0          | 0          | 4,109      | 28,801     | 28,896     |
| 29                   | 892                                  | Maintenance of Services                                | customer         | 103,593    | 79,878     | 91,727     | 75,714     | 85,714     | 105,441    | 104,878    | 42,538     | 71,698     |
| 30                   | 893                                  | Maintenance of Meters and House Reg.                   | customer         | 5,460      | 27,656     | 43,674     | 57,077     | 70,242     | 62,231     | 28,066     | 33,576     | 103,807    |
| 31                   | 894                                  | Maintenance of Other Equipment                         | {2}              | 178,107    | 148,373    | 87,894     | 25,585     | 26,056     | 18,635     | 18,889     | 218,606    | 225,249    |
| 32                   |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 33                   | Marginal Maint Exp                   |                                                        | Sum(23-31)       | 545,175    | 608,210    | 525,092    | 441,752    | 473,976    | 439,250    | 486,271    | 763,307    | 781,373    |
| 34                   |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 35                   | MARGINAL T & D Exp & Superintendence |                                                        | (20)+(33)        | 1,498,568  | 1,693,005  | 1,558,446  | 1,465,681  | 1,599,230  | 1,588,723  | 1,871,786  | 3,231,754  | 3,113,876  |
| 36                   |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 37                   |                                      |                                                        | {2}              | (139,948)  | (76,555)   | (267,347)  | (299,688)  | (279,700)  | (271,899)  | (65,151)   | 1,178,748  | 1,036,080  |
| 38                   |                                      |                                                        | {3}              | 438,119    | 425,763    | 427,512    | 413,262    | 453,355    | 469,745    | 516,134    | 533,265    | 592,860    |
| 39                   |                                      |                                                        | Capacity         | 364,277    | 473,007    | 418,284    | 405,394    | 398,851    | 362,836    | 429,952    | 517,336    | 465,143    |
| 40                   |                                      |                                                        | Customer         | 836,120    | 870,790    | 979,998    | 946,713    | 1,026,725  | 1,028,040  | 990,850    | 1,002,405  | 1,019,794  |
| 41                   |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 42                   |                                      | Allocation of Dist Lines to Customer Component         |                  |            |            |            |            |            |            |            |            |            |
| 43                   |                                      | Services Investment                                    |                  | 20,121,536 | 20,957,811 | 21,950,166 | 22,501,256 | 23,747,433 | 24,504,110 | 25,310,140 | 25,924,573 | 31,874,279 |
| 44                   |                                      | Mains Investment                                       |                  | 45,608,517 | 47,288,473 | 49,392,846 | 50,531,680 | 54,591,098 | 57,186,366 | 59,131,775 | 59,604,088 | 65,458,022 |
| 45                   |                                      | Services/(Services+Mains)                              | (30)/([30)+(31)] | 29.98%     | 29.98%     | 29.98%     | 29.98%     | 29.98%     | 29.98%     | 29.98%     | 29.98%     | 29.98%     |
| 46                   |                                      | Customer-related Dist Lines Expense                    | (32)*(4)         | 131,332    | 127,628    | 128,152    | 123,880    | 135,899    | 140,812    | 154,718    | 159,853    | 177,717    |
| 47                   |                                      | Capacity-related Dist Lines Expense                    |                  | 306,788    | 298,135    | 299,360    | 289,382    | 317,456    | 328,933    | 361,417    | 373,413    | 415,143    |
| 48                   |                                      | Customer Related Allocation of Superintendence Expense |                  |            |            |            |            |            |            |            |            |            |
| 49                   |                                      | Customer %                                             |                  | 59.04%     | 56.42%     | 60.69%     | 60.64%     | 61.88%     | 62.82%     | 59.14%     | 56.61%     | 57.63%     |
| 50                   |                                      | Customer Super & Other                                 |                  | (82,632)   | (43,194)   | (162,264)  | (181,743)  | (173,070)  | (170,809)  | (38,532)   | 667,319    | 597,131    |
| 51                   |                                      | Capacity %                                             |                  | 40.96%     | 43.58%     | 39.31%     | 39.36%     | 38.12%     | 37.18%     | 40.86%     | 43.39%     | 42.37%     |
| 52                   |                                      | Capacity Superintendence & Other                       |                  | (57,317)   | (33,361)   | (105,083)  | (117,945)  | (106,630)  | (101,091)  | (26,619)   | 511,430    | 438,949    |
| 53                   |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 54                   |                                      | Total Customer - Related                               |                  | 884,820    | 955,224    | 945,886    | 888,850    | 989,554    | 998,044    | 1,107,035  | 1,829,576  | 1,794,642  |
| 55                   |                                      |                                                        |                  |            |            |            |            |            |            |            |            |            |
| 56                   |                                      | Total Capacity - Related Expenses                      |                  | 613,748    | 737,781    | 612,561    | 576,831    | 609,676    | 590,679    | 764,750    | 1,402,178  | 1,319,234  |
| 57                   |                                      | Non-Marginal                                           |                  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |

NOTES:

- Source: Annual Reports
- Costs in this account are joint between customer and capacity components. In
- Costs in these accounts are joint between customer & capacity components. In allocating nonplant investment in mains and services.

Table - 6  
Northern Utilities- New Hampshire  
Marginal Cost Study

Development of Customer-Related Plant Expense

| Line No. | Year                                | Services and Meters Expenses | Mains Customer Related Expenses | Total Customer Related Expenses | Cost Index | Expense 2010 Dollars | Annual Customers | Average Cost per Customer |
|----------|-------------------------------------|------------------------------|---------------------------------|---------------------------------|------------|----------------------|------------------|---------------------------|
|          | (1)                                 | (2)<br>{1} {4}               | (3)                             | (4)<br>(2)+(3)                  | (5)<br>{2} | (6)<br>(4)*(5)       | (7)              | (8)<br>(6)/(7)            |
| 1        | 1989                                |                              |                                 |                                 |            |                      |                  |                           |
| 2        | 1990                                |                              |                                 |                                 |            |                      |                  |                           |
| 3        | 1991                                |                              |                                 |                                 |            |                      |                  |                           |
| 4        | 1992                                |                              |                                 |                                 |            |                      |                  |                           |
| 5        | 1993                                |                              |                                 |                                 |            |                      |                  |                           |
| 6        | 1994                                |                              |                                 |                                 |            |                      |                  |                           |
| 7        | 1995                                |                              |                                 |                                 |            |                      |                  |                           |
| 8        | 1996                                | 1,042,807                    | 0                               | 1,042,807                       | 1.3318     | 1,388,765            | 21,885           | \$63.46                   |
| 9        | 1997                                | 1,054,183                    | 0                               | 1,054,183                       | 1.3086     | 1,379,552            | 22,490           | \$61.34                   |
| 10       | 1998                                | 1,253,858                    | 0                               | 1,253,858                       | 1.2940     | 1,622,536            | 23,307           | \$69.62                   |
| 11       | 1999                                | 979,739                      | 0                               | 979,739                         | 1.2753     | 1,249,435            | 23,622           | \$52.89                   |
| 12       | 2000                                | 1,290,617                    | 0                               | 1,290,617                       | 1.2483     | 1,611,019            | 25,564           | \$63.02                   |
| 13       | 2001                                | 1,193,908                    | 0                               | 1,193,908                       | 1.2207     | 1,457,375            | 25,952           | \$56.16                   |
| 14       | 2002                                | 884,820                      | 0                               | 884,820                         | 1.2012     | 1,062,871            | 26,439           | \$40.20                   |
| 15       | 2003                                | 955,224                      | 0                               | 955,224                         | 1.1759     | 1,123,265            | 26,843           | \$41.85                   |
| 16       | 2004                                | 945,886                      | 0                               | 945,886                         | 1.1435     | 1,081,583            | 26,676           | \$40.55                   |
| 17       | 2005                                | 888,850                      | 0                               | 888,850                         | 1.1065     | 983,547              | 27,172           | \$36.20                   |
| 18       | 2006                                | 989,554                      | 0                               | 989,554                         | 1.0716     | 1,060,436            | 27,510           | \$38.55                   |
| 19       | 2007                                | 998,044                      | 0                               | 998,044                         | 1.0410     | 1,038,960            | 27,626           | \$37.61                   |
| 20       | 2008                                | 1,107,035                    | 0                               | 1,107,035                       | 1.0187     | 1,127,766            | 27,925           | \$40.39                   |
| 21       | 2009                                | 1,829,576                    | 0                               | 1,829,576                       | 1.0095     | 1,846,925            | 28,276           | \$65.32                   |
| 22       | 2010                                | 1,794,642                    | 0                               | 1,794,642                       | 1.0000     | 1,794,642            | 28,134           | \$63.79                   |
| 23       |                                     |                              |                                 |                                 |            |                      |                  |                           |
| 24       |                                     |                              |                                 | Expense (6)                     |            | Unit Cost (8)        |                  |                           |
| 25       | REGRESSION RESULTS                  |                              |                                 | vs Customers (7)                |            | vs Year (1)          |                  |                           |
| 26       | Slope =                             |                              |                                 | -17.53996                       |            | -1.05032             |                  |                           |
| 27       | Y Intercept =                       |                              |                                 | 1777273.3923                    |            | 2155.1873            |                  |                           |
| 28       | Coefficient of Determination (RSQR) |                              |                                 | 1.7%                            |            | 14.5%                |                  |                           |
| 29       | t Value                             |                              |                                 | -0.47                           |            | -1.49                |                  |                           |
| 30       |                                     |                              |                                 |                                 |            |                      |                  |                           |
| 31       | MARGINAL COST ESTIMATES             |                              |                                 |                                 |            |                      |                  |                           |
| 32       | Trended Cost Per Customer           |                              |                                 | (\$17.54)                       |            | 44.04                |                  |                           |
| 33       |                                     |                              |                                 |                                 |            |                      |                  |                           |
| 34       | Average Cost Per Customer:          |                              |                                 |                                 |            |                      |                  |                           |
| 35       | 1989-2010                           |                              |                                 |                                 |            | \$50.92              |                  |                           |
| 36       | 2001-2010                           |                              |                                 |                                 |            | \$46.15              |                  |                           |
| 37       | 2005-2010                           |                              |                                 |                                 |            | \$47.12              |                  |                           |
| 38       | Current Average Cost per Customer   |                              |                                 |                                 |            | \$63.79              |                  |                           |
| 39       | Time Series Test Year Prediction    |                              |                                 |                                 |            | \$41.94              |                  |                           |
| 40       |                                     |                              |                                 |                                 |            |                      |                  |                           |
| 41       | Assumed Marginal Cost {3}           |                              |                                 |                                 |            | <u>\$47.12</u>       |                  |                           |

NOTES:

- Source: Table - 5, Page 2.
- Source: GDP Implicit Price Deflator.
- Regression results for time series are not sufficiently robust for marginal cost estimate.  
Recently average costs have trended higher so I employed near-term average marginal cost estimate as most representative.
- Increases in 2008-2010 are from an accounting change and will be expected to continue on a going forward basis.



Table - 6  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Class Weighted Customer Plant Related Expense**

| ----- Customer Weightings ----- |                       |                     |                               | ----- Customer Weightings ----- |                          |                                   |                         |
|---------------------------------|-----------------------|---------------------|-------------------------------|---------------------------------|--------------------------|-----------------------------------|-------------------------|
| Line No.                        | Customer Groups       | Number of Customers | Service & Meter Cost Assigned | Total Cost                      | Relative Weight Per Cust | System Avg Marginal Cost per Cust | Marginal Costs Per Cust |
|                                 | (1)                   | (2)<br>{1}          | (3)<br>{2}                    | (4)=(3)*(2)                     | (5)=(3)/avg(3)<br>{3}    | (6)<br>{4}                        | (7)=(5)*(6)             |
| 1                               | ResNonHt              | 1,653               | \$3,496                       | 5,778,985                       | 0.775                    | \$47.12                           | <b>\$36.51</b>          |
| 2                               | ResHt                 | 20,262              | 3,496                         | 70,832,353                      | 0.775                    | \$47.12                           | <b>\$36.51</b>          |
| 3                               | SmLoS                 | 4,416               | 6,802                         | 30,037,893                      | 1.508                    | \$47.12                           | <b>\$71.05</b>          |
| 4                               | SmHiS                 | 969                 | 6,802                         | 6,591,534                       | 1.508                    | \$47.12                           | <b>\$71.05</b>          |
| 5                               | MdLoS                 | 543                 | 14,196                        | 7,703,226                       | 3.147                    | \$47.12                           | <b>\$148.27</b>         |
| 6                               | MdHiS                 | 234                 | 14,196                        | 3,324,947                       | 3.147                    | \$47.12                           | <b>\$148.27</b>         |
| 7                               | LgLoS                 | 30                  | 46,462                        | 1,397,595                       | 10.299                   | \$47.12                           | <b>\$485.29</b>         |
| 8                               | LgHiS                 | 27                  | 46,462                        | 1,253,176                       | 10.299                   | \$47.12                           | <b>\$485.29</b>         |
| 9                               |                       |                     |                               |                                 |                          |                                   |                         |
| 10                              |                       |                     |                               |                                 |                          |                                   |                         |
| 11                              |                       |                     |                               |                                 |                          |                                   |                         |
| 12                              |                       |                     |                               |                                 |                          |                                   |                         |
| 13                              |                       |                     |                               |                                 |                          |                                   |                         |
| 14                              | Total                 | 28,134              | 141,912                       | 126,919,710                     | 1.000                    | \$47.12                           | <b>\$47.12</b>          |
| 15                              |                       |                     |                               |                                 |                          |                                   |                         |
| 16                              | Avg Cost per cust     |                     | \$4,511.32                    |                                 |                          |                                   |                         |
| 17                              | (4) Total / (2) Total |                     |                               |                                 |                          |                                   |                         |

NOTES:

- 1 Source: Sales and Demand Model.
- 2 Source: Meters plus services investment from Table - 3 , page 1.
- 3 Relative weights based on average cost per customer, and service and meter cost assigned.
- 4 Source: Table 6, Page 1.

Table - 6  
Northern Utilities- New Hampshire  
Marginal Cost Study

Development of Customer Accounting & Marketing Expense

| Line No. | Year                                                      | Customer Accounting Expenses (Excl. Uncoll) | Marketing Services Expenses 911-916 | Total Customer Related Expenses | Cost Index | Expense in 2010 Dollars | Annual Customers | Average Cost per Customer |
|----------|-----------------------------------------------------------|---------------------------------------------|-------------------------------------|---------------------------------|------------|-------------------------|------------------|---------------------------|
|          | (1)                                                       | (2)                                         | (3)                                 | (4)                             | (5)        | (6)                     | (7)              | (8)                       |
|          |                                                           | {1}                                         | {1}                                 | (2)+(3)                         | {2}        | (4)*(5)                 |                  | (6)/(7)                   |
| 1        | 1989                                                      |                                             |                                     |                                 |            |                         |                  |                           |
| 2        | 1990                                                      |                                             |                                     |                                 |            |                         |                  |                           |
| 3        | 1991                                                      |                                             |                                     |                                 |            |                         |                  |                           |
| 4        | 1992                                                      |                                             |                                     |                                 |            |                         |                  |                           |
| 5        | 1993                                                      |                                             |                                     |                                 |            |                         |                  |                           |
| 6        | 1994                                                      |                                             |                                     |                                 |            |                         |                  |                           |
| 7        | 1995                                                      |                                             |                                     |                                 |            |                         |                  |                           |
| 8        | 1996                                                      | 1,222,490                                   | 672,083                             | 1,894,573                       | 1.3318     | 2,523,111               | 21,885           | 115.29                    |
| 9        | 1997                                                      | 978,181                                     | 883,078                             | 1,861,259                       | 1.3086     | 2,435,730               | 22,490           | 108.30                    |
| 10       | 1998                                                      | 560,965                                     | 438,631                             | 999,596                         | 1.2940     | 1,293,512               | 23,307           | 55.50                     |
| 11       | 1999                                                      | 602,857                                     | 585,758                             | 1,188,615                       | 1.2753     | 1,515,809               | 23,622           | 64.17                     |
| 12       | 2000                                                      | 540,036                                     | 471,626                             | 1,011,662                       | 1.2483     | 1,262,811               | 25,564           | 49.40                     |
| 13       | 2001                                                      | 581,715                                     | 515,751                             | 1,097,466                       | 1.2207     | 1,339,650               | 25,952           | 51.62                     |
| 14       | 2002                                                      | 618,924                                     | 846,724                             | 1,465,648                       | 1.2012     | 1,760,579               | 26,439           | 66.59                     |
| 15       | 2003                                                      | 441,107                                     | 773,860                             | 1,214,966                       | 1.1759     | 1,428,701               | 26,843           | 53.22                     |
| 16       | 2004                                                      | 288,736                                     | 667,404                             | 956,139                         | 1.1435     | 1,093,308               | 26,676           | 40.98                     |
| 17       | 2005                                                      | 340,161                                     | 473,121                             | 813,282                         | 1.1065     | 899,928                 | 27,172           | 33.12                     |
| 18       | 2006                                                      | 273,863                                     | 534,380                             | 808,243                         | 1.0716     | 866,138                 | 27,510           | 31.48                     |
| 19       | 2007                                                      | 254,478                                     | 612,788                             | 867,266                         | 1.0410     | 902,821                 | 27,626           | 32.68                     |
| 20       | 2008                                                      | 384,374                                     | 453,970                             | 838,345                         | 1.0187     | 854,044                 | 27,925           | 30.58                     |
| 21       | 2009                                                      | 1,620,497                                   | 0                                   | 1,620,497                       | 1.0095     | 1,635,864               | 28,276           | 57.85                     |
| 22       | 2010                                                      | 2,152,066                                   | 0                                   | 2,152,066                       | 1.0000     | 2,152,066               | 28,134           | 76.49                     |
| 23       |                                                           |                                             |                                     |                                 |            |                         |                  |                           |
| 24       | REGRESSION RESULTS                                        |                                             |                                     |                                 |            | Expense (5)             |                  | Unit Cost (8)             |
| 25       |                                                           |                                             |                                     |                                 |            | vs Customers (6)        |                  | vs Year (1)               |
| 26       | Slope =                                                   |                                             |                                     |                                 |            | -146.32198              |                  | -3.36122                  |
| 27       | Y Intercept =                                             |                                             |                                     |                                 |            | 5262990.9223            |                  | 6790.34798                |
| 28       | Coefficient of Determination (RSQR)                       |                                             |                                     |                                 |            | 32.0%                   |                  | 33.60%                    |
| 29       | t Probability                                             |                                             |                                     |                                 |            | -2.47                   |                  | -2.56                     |
| 30       |                                                           |                                             |                                     |                                 |            |                         |                  |                           |
| 31       | MARGINAL COST ESTIMATES                                   |                                             |                                     |                                 |            |                         |                  |                           |
| 32       | Trended Cost Per Customer                                 |                                             |                                     |                                 |            | (\$146.32)              |                  |                           |
| 33       | Time Series predicted Average Cost (2010)*slope+intercept |                                             |                                     |                                 |            |                         |                  | \$34.29                   |
| 34       |                                                           |                                             |                                     |                                 |            |                         |                  |                           |
| 35       | Average Cost Per Customer:                                |                                             |                                     |                                 |            |                         |                  |                           |
| 36       | 1989-2010                                                 |                                             |                                     |                                 |            | \$56.40                 |                  |                           |
| 37       | 2001-2010                                                 |                                             |                                     |                                 |            | \$47.45                 |                  |                           |
| 38       | 2005-2010                                                 |                                             |                                     |                                 |            | \$43.87                 |                  |                           |
| 39       | Current Average Cost per Customer                         |                                             |                                     |                                 |            | \$76.49                 |                  |                           |
| 40       | Average Cost Per Customer 2008-2010:                      |                                             |                                     |                                 |            | \$55.04                 |                  |                           |
| 41       |                                                           |                                             |                                     |                                 |            |                         |                  |                           |
| 42       | Assumed Marginal Cost                                     |                                             |                                     | {3}                             |            | <u>\$43.87</u>          |                  |                           |

NOTES:

1 Source: Cost data from Annual Reports, ACCTS 901-910 excluding Uncollectible Accounts Expense in Account 904.

2 Source: GDP Implicit Price Deflator.

3 Regression results for time series are insufficiently robust for marginal cost, but confirm an inclining trend.

Therefore, the current average cost over near term will be used to estimate the Marginal Cost.

Table - 6  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Class Weighted Customer Accounting & Marketing Expense**

| Line No. | Customer Groups | Number of Customers | Allocated Customer Accounting | Average Costs Per Cust | Relative Weight Per Cust | Company Avg Cost per Cust | Marginal Costs Per Cust |
|----------|-----------------|---------------------|-------------------------------|------------------------|--------------------------|---------------------------|-------------------------|
|          | (1)             | (2)                 | (3)                           | (4)=<br>(3)/(2)        | (5)=(4)/avg(4)           | (6)                       | (7)=<br>(5)*(6)         |
|          |                 |                     | {1} {2}                       |                        | {3}                      | {4}                       |                         |
| 1        | ResNonHt        | 1,653               | \$121,485                     | \$73.49                | 0.961                    | \$43.87                   | \$42.15                 |
| 2        | ResHt           | 20,262              | \$1,486,150                   | \$73.35                | 0.959                    | \$43.87                   | \$42.07                 |
| 3        | SmLoS           | 4,416               | \$360,948                     | \$81.74                | 1.069                    | \$43.87                   | \$46.88                 |
| 4        | SmHiS           | 969                 | \$79,802                      | \$82.36                | 1.077                    | \$43.87                   | \$47.23                 |
| 5        | MdLoS           | 543                 | \$64,540                      | \$118.94               | 1.555                    | \$43.87                   | \$68.21                 |
| 6        | MdHiS           | 234                 | \$27,689                      | \$118.22               | 1.545                    | \$43.87                   | \$67.80                 |
| 7        | LgLoS           | 30                  | \$5,050                       | \$167.87               | 2.195                    | \$43.87                   | \$96.28                 |
| 8        | LgHiS           | 27                  | \$6,403                       | \$237.37               | 3.103                    | \$43.87                   | \$136.14                |
| 9        |                 |                     |                               |                        |                          |                           |                         |
| 10       |                 |                     |                               |                        |                          |                           |                         |
| 11       |                 |                     |                               |                        |                          |                           |                         |
| 12       |                 |                     |                               |                        |                          |                           |                         |
| 13       |                 |                     |                               |                        |                          |                           |                         |
| 14       | Total           | 28,134              | 2,152,066                     | \$76.49                | 1.744                    | \$43.87                   | \$43.87                 |

NOTES:

- 1 Total taken from Table 6, Page 3, column 4.
- 2 Accts 902, 903 allocated by ACOS, and 908 & 909 by customers.
- 3 Relative weights based on column 4.
- 4 Source: Table 6, Page 3.

Table - 6  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Class Weighted Uncollectible Accounts Expense**

| Line No. | Customer Groups | Acct. 904 |     | Total Normalized Revenues | Write-off Percentage |
|----------|-----------------|-----------|-----|---------------------------|----------------------|
| (1)      | (2)             | (3)       | (4) | (5)                       | (6)                  |
|          |                 | {1}       |     | {2}                       | (6)=(4)/(5)          |
| 1        | ResNonHt        | \$4,096   |     | \$506,169                 | 0.81%                |
| 2        | ResHt           | \$159,331 |     | \$8,599,677               | 1.85%                |
| 3        | SmLoS           | \$7,083   |     | \$4,289,787               | 0.17%                |
| 4        | SmHiS           | \$1,909   |     | \$931,201                 | 0.21%                |
| 5        | MdLoS           | \$5,436   |     | \$2,724,275               | 0.20%                |
| 6        | MdHiS           | \$1,001   |     | \$906,734                 | 0.11%                |
| 7        | LgLoS           | \$92      |     | \$1,078,110               | 0.01%                |
| 8        | LgHiS           | \$0       |     | \$1,932,912               | 0.00%                |
| 9        |                 |           |     |                           |                      |
| 10       |                 |           |     |                           |                      |
| 11       |                 |           |     |                           |                      |
| 12       |                 |           |     |                           |                      |
| 13       |                 |           |     |                           |                      |
| 14       | Total           | \$178,947 |     | \$20,968,864              | 0.85%                |
| 15       |                 |           |     |                           |                      |

Adjusted Pro forma writeoff rate

0.85%

NOTES:

- 1 Total account 904 less Gas Costs.
- 2 Total normalized delivery revenues. Provided by ACOS Study.

Table - 7  
Northern Utilities- New Hampshire  
Marginal Cost Study

Attachment PMN-2G-2  
Table-7  
Page 2 of 2

Development of A & G Loading Factors

| Line No. | Description                                                                      | 1996        | 1997        | 1998        | 1999        | 2000        | 2001        | 2002       | 2003        | 2004       | 2005        | 2006        | 2007        | 2008        | 2009        | 2010        |
|----------|----------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1        | <b><u>Nonplant Related Expenses</u></b>                                          |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 2        | 920 Salary                                                                       | 377,195     | 564,700     | 350,345     | 346,351     | 536,249     | 411,410     | 511,776    | 147,472     | 55,658     | 92,274      | 206,331     | 211,213     | (37,353)    | 13,488      | 29,106      |
| 3        | 921 Office Supplies                                                              | 474,724     | 417,796     | 474,381     | 366,115     | 406,798     | 219,748     | 536,028    | 491,618     | 422,080    | 394,120     | 221,377     | 295,388     | 262,722     | 276,238     | 293,391     |
| 4        | 922 Admin Exp - Transf (Credit)                                                  | (2,735,969) | (2,350,559) | (1,334,118) | (1,093,635) | (1,328,173) | (1,112,188) | (869,552)  | (848,848)   | (843,265)  | (796,476)   | (1,113,567) | (1,113,137) | (907,934)   | 0           | 0           |
| 5        | 923 Outside Services                                                             | 2,994,222   | 2,493,162   | 3,164,747   | 3,004,239   | 3,637,219   | 3,702,888   | 3,647,580  | 3,037,300   | 3,881,628  | 3,564,501   | 4,034,655   | 4,645,578   | 3,711,622   | 1,066,578   | 2,160,518   |
| 6        | 926 Pension                                                                      | 843,461     | 956,655     | 762,195     | 1,065,461   | 783,982     | 693,074     | 1,139,598  | 1,372,359   | 1,376,018  | 1,213,675   | 1,484,008   | 1,190,594   | 930,259     | 1,128,809   | 1,050,249   |
| 7        | 927 Franchise Requirements                                                       | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           | 0          | 0           | 0           | 0           | 0           | 0           | 0           |
| 8        | 928 Regulatory Exp                                                               | 60,779      | 80,360      | 94,232      | 79,230      | 92,600      | 65,340      | 103,798    | 42,498      | 165,512    | 250,414     | 289,961     | 191,533     | 242,391     | 368,611     | 111,270     |
| 9        | 930 Misc                                                                         | 166,028     | 600,256     | 780,242     | 699,324     | 354,694     | 315,897     | 166,096    | 45,420      | 596,972    | 494,334     | 588,530     | 602,033     | 467,986     | 61,078      | 79,439      |
| 10       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 11       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 12       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 13       | Total Non-Plant                                                                  | 2,180,440   | 2,762,370   | 4,292,024   | 4,467,085   | 4,483,369   | 4,296,169   | 5,235,324  | 4,287,818   | 5,654,602  | 5,212,843   | 5,711,296   | 6,023,201   | 4,669,694   | 2,914,802   | 3,723,972   |
| 14       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 15       | <b><u>Plant Related Expenses</u></b>                                             |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 16       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 17       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 18       | 924 Property Ins                                                                 | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           | 0          | 0           | 0           | 49,034      | 47,135      | 13,255      | 8,015       |
| 19       | 925 Injury & Damages                                                             | 179,576     | 247,527     | 197,850     | 98,199      | 203,433     | 142,471     | 108,826    | 751,284     | (283,904)  | 556,078     | 432,130     | 297,661     | 358,054     | 215,233     | 328,719     |
| 20       | 929 Duplicate Charges                                                            | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           | 0          | 0           | 0           | 0           | 0           | 0           | 0           |
| 21       | 931 Rents                                                                        | 0           | 0           | 0           | 0           | 0           | 0           | 0          | (18,000)    | (15,285)   | (18,837)    | (19,478)    | (19,478)    | 354         | 36,875      | 12,961      |
| 22       | 932 Gen Plt Maint                                                                | 0           | 0           | 0           | 0           | 0           | 0           | 0          | 0           | 0          | 0           | 0           | 0           | 0           | 0           | 0           |
| 23       | 935 Maint. Of General Plant                                                      | 77,712      | 61,873      | 51,480      | 56,457      | 51,627      | 54,025      | 49,652     | 652,561     | 549,338    | 662,682     | 572,079     | 556,794     | 358,185     | 42,396      | 129,841     |
| 24       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 25       | Total Plant Related Expenses                                                     | \$257,288   | \$309,400   | \$249,330   | \$154,656   | \$255,060   | \$196,496   | \$158,478  | \$1,385,845 | \$250,149  | \$1,199,923 | \$984,731   | \$884,012   | \$763,729   | \$307,760   | \$479,536   |
| 26       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 27       | Total Allocable O&M (Total O&M less non-labor production costs and A&G expenses) | 3,908,662   | 3,989,118   | 3,087,130   | 3,372,440   | 3,258,611   | 3,132,725   | 3,334,653  | 3,320,476   | 2,890,000  | 2,587,997   | 2,758,835   | 2,895,945   | 2,994,655   | 5,966,163   | 6,136,291   |
| 28       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 29       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 30       | A & G Loading Factor Nonplant Rel Exp                                            |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 31       | Line (13)/(25)                                                                   | 55.78%      | 69.25%      | 139.03%     | 132.46%     | 137.59%     | 137.14%     | 157.00%    | 129.13%     | 195.66%    | 201.42%     | 207.02%     | 207.99%     | 155.93%     | 48.86%      | 60.69%      |
| 32       | Average 2009 - 2010 = 54.77%                                                     |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 33       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 34       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 35       | Total Gross Plant \$                                                             | 63,624,556  | 68,271,573  | 71,823,646  | 74,905,563  | 78,585,950  | 80,881,339  | 84,400,533 | 89,451,213  | 92,538,749 | 94,753,557  | 100,650,010 | 104,956,224 | 108,799,813 | 110,983,542 | 126,627,083 |
| 36       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 37       |                                                                                  |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 38       | A & G Loading Factor Plant Rel Exp                                               |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |
| 39       | Line (22)/(32)                                                                   | 0.40%       | 0.45%       | 0.35%       | 0.21%       | 0.32%       | 0.24%       | 0.19%      | 1.55%       | 0.27%      | 1.27%       | 0.98%       | 0.84%       | 0.70%       | 0.28%       | 0.38%       |
| 40       | Average 2009 - 2010 = 0.33%                                                      |             |             |             |             |             |             |            |             |            |             |             |             |             |             |             |

NOTES:

- Source: Annual Reports

Table - 7  
Northern Utilities- New Hampshire  
Marginal Cost Study

Development of Miscellaneous Loading Factors

| Line No. | Description                                          | 1996       | 1997       | 1998       | 1999       | 2000       | 2001       | 2002       | 2003       | 2004       | 2005       | 2006        | 2007        | 2008        | 2009        | 2010        |
|----------|------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|
| 1        | <b>Materials and Supplies and Prepayments Loader</b> |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 2        | Materials and Supplies                               | 501,725    | 592,798    | 670,629    | 674,451    | 774,134    | 497,805    | 455,452    | 460,284    | 667,900    | 806,875    | 791,806     | 871,400     | 1,648,857   | 738,076     | 778,820     |
| 3        |                                                      |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 4        | Prepayments                                          | 1,988,580  | 1,798,306  | 2,098,238  | 2,359,041  | 2,148,760  | 2,100,142  | 14,643     | 493,514    | 620,302    | 563,007    | 386,167     | 320,941     | 528,546     | 542,134     | 633,521     |
| 5        |                                                      |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 6        | Total Utility Plant                                  | 63,624,556 | 68,271,573 | 71,823,646 | 74,905,563 | 78,585,950 | 80,881,339 | 84,400,533 | 89,451,213 | 92,538,749 | 94,753,557 | 100,650,010 | 104,956,224 | 108,799,813 | 110,983,542 | 126,627,083 |
| 7        |                                                      |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 8        | Non-Fuel Loader (2-3+4-5)/(6)                        | {1}        | 3.91%      | 3.50%      | 3.86%      | 4.05%      | 3.72%      | 3.21%      | 0.56%      | 1.07%      | 1.39%      | 1.45%       | 1.17%       | 1.14%       | 2.00%       | 1.15%       |
| 9        | Average 2009 - 2010 = 1.13%                          |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 10       |                                                      |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 11       |                                                      |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 12       |                                                      |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 13       | <b>General Plant Loading Factor</b>                  |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 14       | Total General Plant                                  | 2,102,512  | 2,362,936  | 2,555,764  | 2,620,695  | 2,675,448  | 2,281,051  | 2,310,365  | 4,077,153  | 3,976,035  | 3,984,419  | 4,113,313   | 4,158,083   | 4,280,158   | 5,290,372   | 6,121,350   |
| 15       | Total Utility Plant                                  | 63,624,556 | 68,271,573 | 71,823,646 | 74,905,563 | 78,585,950 | 80,881,339 | 84,400,533 | 89,451,213 | 92,538,749 | 94,753,557 | 100,650,010 | 104,956,224 | 108,799,813 | 110,983,542 | 126,627,083 |
| 16       |                                                      |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |
| 17       | Gen Plant Factor (14)/(15-14)                        | {1}        | 3.42%      | 3.59%      | 3.69%      | 3.63%      | 3.52%      | 2.90%      | 2.81%      | 4.78%      | 4.49%      | 4.39%       | 4.26%       | 4.13%       | 4.10%       | 5.01%       |
| 18       | Average 2009 - 2010 = 5.04%                          |            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |

Table - 8  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Summary of Levelized Fixed Charge Rates**

| Line No. | Description                          | Engineer's Fixed Charge Rate | Economist's Fixed Charge Rate |
|----------|--------------------------------------|------------------------------|-------------------------------|
|          | (1)                                  | (2)                          | (3)                           |
| 1        | FIXED CHARGE RATE RESULTS            |                              |                               |
| 2        |                                      |                              | Over                          |
| 3        | Levelized Cost for: {1}              |                              | Book Life                     |
| 4        | Production Plant                     |                              |                               |
| 5        | Mains (Cap-related Dist)             | 9.75%                        | 7.17%                         |
| 6        | Services Investment                  | 9.57%                        | 6.92%                         |
| 7        | Meters Investment                    | 10.98%                       | 8.46%                         |
| 8        |                                      |                              |                               |
| 9        |                                      |                              |                               |
| 10       | INCREMENTAL COST OF CAPITAL {2}      |                              |                               |
| 11       | Debt                                 | 5.73%                        | 59.75%                        |
| 12       | Preferred                            | 0.00%                        | 0.00%                         |
| 13       | Common                               | 10.50%                       | 40.25%                        |
| 14       | Other                                | 0.00%                        | 0.00%                         |
| 15       | Weighted Cost of Incremental Capital |                              | 7.65%                         |
| 16       |                                      |                              |                               |
| 17       |                                      |                              |                               |
| 18       | After Tax Cost of New Capital {3}    |                              | 6.29%                         |
| 19       | Incremental Tax Rate {4}             |                              | 39.61%                        |
| 20       | Tax Effected Cost of Capital {5}     |                              | 10.42%                        |
| 21       | Property Tax Rate {6}                |                              | 1.28%                         |
| 22       | Gross Receipts Tax Rate              |                              | 0.00%                         |
| 23       | Inflation Rate {7}                   |                              | 2.30%                         |
| 24       | Property Tax Escalation Rate {8}     |                              | 2.80%                         |
| 25       | Commodity Escalation Rate {9}        |                              | 0.00%                         |

NOTES:

- Source: Table - 8, pages 3, 4, 5, & 6.
- Weighted average current cost of raising capital in 2010.
- Wtd Cost of Capital (15) less tax savings on debt interest.
- Incremental tax rate assumed to be 34% Federal and 8.5% State tax which results in a combined effective rate of 39.61%.
- Tax effected cost of capital, (15) plus tax component on return.
- Weighted average provided by excel file.
- Inflation rate less technical progress of .5%
- Inflation rate estimated for the forward looking five year period.
- Annual Commodity price escalation factor provided by EIA

Table - 8  
Northern Utilities- New Hampshire  
Marginal Cost Study  
**LEVELIZED FIXED CHARGE ANALYSIS Rev. 4.0.0**  
**INPUT DATA**

| LINE NO. | VARIABLE             | Peaking Plant | Capacity - Related Distribution | Services | Meters  |
|----------|----------------------|---------------|---------------------------------|----------|---------|
| 1        | Plant Data           |               | 41                              | 45       | 32      |
| 2        |                      |               |                                 |          |         |
| 3        | CAPITALIZED COST     | \$1,000       | \$1,000                         | \$1,000  | \$1,000 |
| 4        | BOOK LIFE            |               | 41                              | 45       | 32      |
| 5        | SALVAGE VALUE        |               | -24%                            | -75%     | -8%     |
| 6        | MACRS LIFE           | 20            | 20                              | 20       | 20      |
| 7        |                      |               |                                 |          |         |
| 8        |                      |               |                                 |          |         |
| 9        | Capital Structure    |               |                                 |          |         |
| 10       |                      |               |                                 |          |         |
| 11       | DEBT RATIO           | 59.75%        | 59.75%                          | 59.75%   | 59.75%  |
| 12       | PREFERRED RATIO      | 0.00%         | 0.00%                           | 0.00%    | 0.00%   |
| 13       | COMMON RATIO         | 40.25%        | 40.25%                          | 40.25%   | 40.25%  |
| 14       | OTHER _____          | 0.00%         | 0.00%                           | 0.00%    | 0.00%   |
| 15       |                      |               |                                 |          |         |
| 16       | Cost of Capital      |               |                                 |          |         |
| 17       |                      |               |                                 |          |         |
| 18       | DEBT COST            | 5.73%         | 5.73%                           | 5.73%    | 5.73%   |
| 19       | PREFERRED COST       | 0.00%         | 0.00%                           | 0.00%    | 0.00%   |
| 20       | COMMON COST          | 10.50%        | 10.50%                          | 10.50%   | 10.50%  |
| 21       | OTHER                | 0.00%         | 0.00%                           | 0.00%    | 0.00%   |
| 22       | WTD COST OF CAPITAL  | 7.65%         | 7.65%                           | 7.65%    | 7.65%   |
| 23       | AFTER TAX COST / CAP | 6.29%         | 6.29%                           | 6.29%    | 6.29%   |
| 24       |                      |               |                                 |          |         |
| 25       | Tax Data             |               |                                 |          |         |
| 26       |                      |               |                                 |          |         |
| 27       | TAX RATE             | 39.61%        | 39.61%                          | 39.61%   | 39.61%  |
| 28       | ITC RATE             | 0.00%         | 0.00%                           | 0.00%    | 0.00%   |
| 29       | REVENUE TAX RATE     | 0.00%         | 0.00%                           | 0.00%    | 0.00%   |
| 30       | PROPERTY TAX RATE    | 1.28%         | 1.28%                           | 1.28%    | 1.28%   |
| 31       | PROPERTY INSURANCE   | 0.00%         | 0.00%                           | 0.00%    | 0.00%   |
| 32       | PROPERTY TAX BASIS   | 2             | 2                               | 2        | 2       |
| 33       | 1 = Original Cost    |               |                                 |          |         |
| 34       | 2 = Depreciated Bal  |               |                                 |          |         |
| 35       |                      |               |                                 |          |         |
| 36       | Misc. Data           |               |                                 |          |         |
| 37       |                      |               |                                 |          |         |
| 38       | INFLATION RATE       | 2.30%         | 2.30%                           | 2.30%    | 2.30%   |
| 39       | PROP TAX ESC RATE    | 2.80%         | 2.80%                           | 2.80%    | 2.80%   |
| 40       | RETURN BASIS         | 2             | 2                               | 2        | 2       |
| 41       | 1 = Begin of Year    |               |                                 |          |         |
| 42       | 2 = Avg Begin & End  |               |                                 |          |         |
| 43       | 3 = End of Year      |               |                                 |          |         |



Table - 8  
Northern Utilities- New Hampshire  
Marginal Cost Study  
**LEVELIZED FIXED CHARGE ANALYSIS Rev. 4.0.0**  
**Peaker Plant**  
NOT USED

| LINE<br>NO. | ITEM                | -- Current Dollars --<br>(Engineer's FCR) |                                     |  | -- Constant Dollars --<br>(Economist's FCR) |                                     |
|-------------|---------------------|-------------------------------------------|-------------------------------------|--|---------------------------------------------|-------------------------------------|
|             |                     | CURRENT<br>LEVELIZED<br>DOLLARS           | PERCENT OF<br>CAPITAL<br>INVESTMENT |  | CONSTANT<br>LEVELIZED<br>DOLLARS            | PERCENT OF<br>CAPITAL<br>INVESTMENT |
| 1           | INTEREST ON DEBT    | #DIV/0!                                   | #DIV/0!                             |  | #DIV/0!                                     | #DIV/0!                             |
| 2           | RETURN ON PREF      | #DIV/0!                                   | #DIV/0!                             |  | #DIV/0!                                     | #DIV/0!                             |
| 3           | RETURN ON COMMON    | <u>#DIV/0!</u>                            | <u>#DIV/0!</u>                      |  | <u>#DIV/0!</u>                              | <u>#DIV/0!</u>                      |
| 4           |                     |                                           |                                     |  |                                             |                                     |
| 5           | RETURN              | #DIV/0!                                   | #DIV/0!                             |  | #DIV/0!                                     | #DIV/0!                             |
| 6           |                     |                                           |                                     |  |                                             |                                     |
| 7           | DEPRECIATION        | #DIV/0!                                   | #DIV/0!                             |  | #DIV/0!                                     | #DIV/0!                             |
| 8           |                     |                                           |                                     |  |                                             |                                     |
| 9           | INCOME TAX          | #DIV/0!                                   | #DIV/0!                             |  | #DIV/0!                                     | #DIV/0!                             |
| 10          | DEFERRED TAXES      | <u>#DIV/0!</u>                            | <u>#DIV/0!</u>                      |  | <u>#DIV/0!</u>                              | <u>#DIV/0!</u>                      |
| 11          |                     |                                           |                                     |  |                                             |                                     |
| 12          | INCOME TAX          | #DIV/0!                                   | #DIV/0!                             |  | #DIV/0!                                     | #DIV/0!                             |
| 13          |                     |                                           |                                     |  |                                             |                                     |
| 14          | REVENUE TAX         | #DIV/0!                                   | #DIV/0!                             |  | #DIV/0!                                     | #DIV/0!                             |
| 15          | PROPERTY TAX        | #DIV/0!                                   | #DIV/0!                             |  | #DIV/0!                                     | #DIV/0!                             |
| 16          | PROPERTY INSURANCE  | <u>#DIV/0!</u>                            | <u>#DIV/0!</u>                      |  | <u>#DIV/0!</u>                              | <u>#DIV/0!</u>                      |
| 17          |                     |                                           |                                     |  |                                             |                                     |
| 18          | OTHER               | <u>#DIV/0!</u>                            | <u>#DIV/0!</u>                      |  | <u>#DIV/0!</u>                              | <u>#DIV/0!</u>                      |
| 19          |                     |                                           |                                     |  |                                             |                                     |
| 20          |                     |                                           |                                     |  |                                             |                                     |
| 21          | TOTAL REVENUE REQ'D | <b>#DIV/0!</b>                            | <b>#DIV/0!</b>                      |  | <b>#DIV/0!</b>                              | <b>#DIV/0!</b>                      |

Table - 8  
Northern Utilities- New Hampshire  
Marginal Cost Study  
LEVELIZED FIXED CHARGE ANALYSIS Rev. 4.0.0  
Capacity Related Distribution

| LINE<br>NO. | ITEM                | -- Current Dollars --<br>(Engineer's FCR) |                                     |  | -- Constant Dollars --<br>(Economist's FCR) |                                     |
|-------------|---------------------|-------------------------------------------|-------------------------------------|--|---------------------------------------------|-------------------------------------|
|             |                     | CURRENT<br>LEVELIZED<br>DOLLARS           | PERCENT OF<br>CAPITAL<br>INVESTMENT |  | CONSTANT<br>LEVELIZED<br>DOLLARS            | PERCENT OF<br>CAPITAL<br>INVESTMENT |
| 1           | INTEREST ON DEBT    | \$18.77                                   | 1.88%                               |  | \$13.81                                     | 1.38%                               |
| 2           | RETURN ON PREF      | \$0.00                                    | 0.00%                               |  | \$0.00                                      | 0.00%                               |
| 3           | RETURN ON COMMON    | <u>\$23.18</u>                            | <u>2.32%</u>                        |  | <u>\$17.05</u>                              | <u>1.71%</u>                        |
| 4           |                     |                                           |                                     |  |                                             |                                     |
| 5           | RETURN              | \$41.95                                   | 4.19%                               |  | \$30.86                                     | 3.09%                               |
| 6           |                     |                                           |                                     |  |                                             |                                     |
| 7           | DEPRECIATION        | \$30.15                                   | 3.01%                               |  | \$22.18                                     | 2.22%                               |
| 8           |                     |                                           |                                     |  |                                             |                                     |
| 9           | INCOME TAX          | \$11.08                                   | 1.11%                               |  | \$8.15                                      | 0.81%                               |
| 10          | DEFERRED TAXES      | <u>\$4.13</u>                             | <u>0.41%</u>                        |  | <u>\$3.04</u>                               | <u>0.30%</u>                        |
| 11          |                     |                                           |                                     |  |                                             |                                     |
| 12          | INCOME TAX          | \$15.20                                   | 1.52%                               |  | \$11.18                                     | 1.12%                               |
| 13          |                     |                                           |                                     |  |                                             |                                     |
| 14          | REVENUE TAX         | \$0.00                                    | 0.00%                               |  | \$0.00                                      | 0.00%                               |
| 15          | PROPERTY TAX        | \$10.16                                   | 1.02%                               |  | \$7.47                                      | 0.75%                               |
| 16          | PROPERTY INSURANCE  | <u>\$0.00</u>                             | <u>0.00%</u>                        |  | <u>\$0.00</u>                               | <u>0.00%</u>                        |
| 17          |                     |                                           |                                     |  |                                             |                                     |
| 18          | OTHER               | <u>\$10.16</u>                            | <u>1.02%</u>                        |  | <u>\$7.47</u>                               | <u>0.75%</u>                        |
| 19          |                     |                                           |                                     |  |                                             |                                     |
| 20          |                     |                                           |                                     |  |                                             |                                     |
| 21          | TOTAL REVENUE REQ'D | <b>\$97.46</b>                            | <b>9.75%</b>                        |  | <b>\$71.69</b>                              | <b>7.17%</b>                        |
| 22          |                     |                                           |                                     |  |                                             |                                     |

Table - 8  
Northern Utilities- New Hampshire  
Marginal Cost Study  
**LEVELIZED FIXED CHARGE ANALYSIS Rev. 4.0.0**  
**Services Investment**

| LINE<br>NO. | ITEM                | -- Current Dollars --<br>(Engineer's FCR) |                                     |  | -- Constant Dollars --<br>(Economist's FCR) |                                     |
|-------------|---------------------|-------------------------------------------|-------------------------------------|--|---------------------------------------------|-------------------------------------|
|             |                     | CURRENT<br>LEVELIZED<br>DOLLARS           | PERCENT OF<br>CAPITAL<br>INVESTMENT |  | CONSTANT<br>LEVELIZED<br>DOLLARS            | PERCENT OF<br>CAPITAL<br>INVESTMENT |
| 1           | INTEREST ON DEBT    | \$15.91                                   | 1.59%                               |  | \$11.50                                     | 1.15%                               |
| 2           | RETURN ON PREF      | \$0.00                                    | 0.00%                               |  | \$0.00                                      | 0.00%                               |
| 3           | RETURN ON COMMON    | <u>\$19.65</u>                            | <u>1.96%</u>                        |  | <u>\$14.20</u>                              | <u>1.42%</u>                        |
| 4           |                     |                                           |                                     |  |                                             |                                     |
| 5           | RETURN              | \$35.55                                   | 3.56%                               |  | \$25.70                                     | 2.57%                               |
| 6           |                     |                                           |                                     |  |                                             |                                     |
| 7           | DEPRECIATION        | \$38.89                                   | 3.89%                               |  | \$28.11                                     | 2.81%                               |
| 8           |                     |                                           |                                     |  |                                             |                                     |
| 9           | INCOME TAX          | \$11.80                                   | 1.18%                               |  | \$8.53                                      | 0.85%                               |
| 10          | DEFERRED TAXES      | <u>\$1.08</u>                             | <u>0.11%</u>                        |  | <u>\$0.78</u>                               | <u>0.08%</u>                        |
| 11          |                     |                                           |                                     |  |                                             |                                     |
| 12          | INCOME TAX          | \$12.89                                   | 1.29%                               |  | \$9.31                                      | 0.93%                               |
| 13          |                     |                                           |                                     |  |                                             |                                     |
| 14          | REVENUE TAX         | \$0.00                                    | 0.00%                               |  | \$0.00                                      | 0.00%                               |
| 15          | PROPERTY TAX        | \$8.36                                    | 0.84%                               |  | \$6.04                                      | 0.60%                               |
| 16          | PROPERTY INSURANCE  | <u>\$0.00</u>                             | <u>0.00%</u>                        |  | <u>\$0.00</u>                               | <u>0.00%</u>                        |
| 17          |                     |                                           |                                     |  |                                             |                                     |
| 18          | OTHER               | <u>\$8.36</u>                             | <u>0.84%</u>                        |  | <u>\$6.04</u>                               | <u>0.60%</u>                        |
| 19          |                     |                                           |                                     |  |                                             |                                     |
| 20          |                     |                                           |                                     |  |                                             |                                     |
| 21          | TOTAL REVENUE REQ'D | <b>\$95.68</b>                            | <b>9.57%</b>                        |  | <b>\$69.16</b>                              | <b>6.92%</b>                        |
| 22          |                     |                                           |                                     |  |                                             |                                     |

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Northern Utilities- New Hampshire  
Marginal Cost Study  
**LEVELIZED FIXED CHARGE ANALYSIS Rev. 4.0.0**  
**Metering Equipment**

| LINE<br>NO. | ITEM                | -- Current Dollars --<br>(Engineer's FCR) |                                     |  | -- Constant Dollars --<br>(Economist's FCR) |                                     |
|-------------|---------------------|-------------------------------------------|-------------------------------------|--|---------------------------------------------|-------------------------------------|
|             |                     | CURRENT<br>LEVELIZED<br>DOLLARS           | PERCENT OF<br>CAPITAL<br>INVESTMENT |  | CONSTANT<br>LEVELIZED<br>DOLLARS            | PERCENT OF<br>CAPITAL<br>INVESTMENT |
| 1           | INTEREST ON DEBT    | \$19.39                                   | 1.94%                               |  | \$14.95                                     | 1.50%                               |
| 2           | RETURN ON PREF      | \$0.00                                    | 0.00%                               |  | \$0.00                                      | 0.00%                               |
| 3           | RETURN ON COMMON    | <u>\$23.95</u>                            | <u>2.40%</u>                        |  | <u>\$18.46</u>                              | <u>1.85%</u>                        |
| 4           |                     |                                           |                                     |  |                                             |                                     |
| 5           | RETURN              | \$43.34                                   | 4.33%                               |  | \$33.41                                     | 3.34%                               |
| 6           |                     |                                           |                                     |  |                                             |                                     |
| 7           | DEPRECIATION        | \$33.68                                   | 3.37%                               |  | \$25.97                                     | 2.60%                               |
| 8           |                     |                                           |                                     |  |                                             |                                     |
| 9           | INCOME TAX          | \$12.09                                   | 1.21%                               |  | \$9.32                                      | 0.93%                               |
| 10          | DEFERRED TAXES      | <u>\$3.62</u>                             | <u>0.36%</u>                        |  | <u>\$2.79</u>                               | <u>0.28%</u>                        |
| 11          |                     |                                           |                                     |  |                                             |                                     |
| 12          | INCOME TAX          | \$15.71                                   | 1.57%                               |  | \$12.11                                     | 1.21%                               |
| 13          |                     |                                           |                                     |  |                                             |                                     |
| 14          | REVENUE TAX         | \$0.00                                    | 0.00%                               |  | \$0.00                                      | 0.00%                               |
| 15          | PROPERTY TAX        | \$17.03                                   | 1.70%                               |  | \$13.13                                     | 1.31%                               |
| 16          | PROPERTY INSURANCE  | <u>\$0.00</u>                             | <u>0.00%</u>                        |  | <u>\$0.00</u>                               | <u>0.00%</u>                        |
| 17          |                     |                                           |                                     |  |                                             |                                     |
| 18          | OTHER               | <u>\$17.03</u>                            | <u>1.70%</u>                        |  | <u>\$13.13</u>                              | <u>1.31%</u>                        |
| 19          |                     |                                           |                                     |  |                                             |                                     |
| 20          |                     |                                           |                                     |  |                                             |                                     |
| 21          | TOTAL REVENUE REQ'D | <b>\$109.77</b>                           | <b>10.98%</b>                       |  | <b>\$84.62</b>                              | <b>8.46%</b>                        |
| 22          |                     |                                           |                                     |  |                                             |                                     |

Table - 8  
Northern Utilities- New Hampshire  
Development of Revenue Requirements Stream

**Peaker Plant**  
NOT USED

Attachment PMN-2G-2  
Table-8  
Page 11 of 11

| Year No. | Rate Base | Interest On Debt | Return On Preferred | Return On Common | Tax Deprec'N | Book Deprec'N | Deferred Tax | Taxable Income | Inc Tax Payable | Revenue Tax | Property Tax | Property Insurance | ANNUAL Revenue Req'm'Ts | % of Original Investm'T | Present Worth Of Rev Req'Mt |
|----------|-----------|------------------|---------------------|------------------|--------------|---------------|--------------|----------------|-----------------|-------------|--------------|--------------------|-------------------------|-------------------------|-----------------------------|
| (1)      | (2)       | (3)              | (4)                 | (5)              | (6)          | (7)           | (8)          | (9)            | (10)            | (11)        | (12)         | (13)               | (14)                    | (15)                    | (16)                        |
|          | 1,000.00  |                  |                     |                  |              |               |              |                |                 |             |              |                    |                         |                         |                             |
| 1        | 992.57    | 33.97            | 0.00                | 41.95            | 37.50        | 0.00          | 14.85        | 31.96          | 12.66           | 0.00        | 0.00         | 0.00               | 103.43                  | 10.34%                  | 97.31                       |
| 2        | 970.85    | 33.22            | 0.00                | 41.03            | 72.19        | 0.00          | 28.59        | (4.24)         | (1.68)          | 0.00        | 0.00         | 0.00               | 101.17                  | 10.12%                  | 89.54                       |
| 3        | 943.33    | 32.28            | 0.00                | 39.87            | 66.77        | 0.00          | 26.45        | (0.76)         | (0.30)          | 0.00        | 0.00         | 0.00               | 98.30                   | 9.83%                   | 81.85                       |
| 4        | 917.87    | 31.41            | 0.00                | 38.79            | 61.77        | 0.00          | 24.47        | 2.47           | 0.98            | 0.00        | 0.00         | 0.00               | 95.65                   | 9.56%                   | 74.93                       |
| 5        | 894.32    | 30.60            | 0.00                | 37.80            | 57.13        | 0.00          | 22.63        | 5.45           | 2.16            | 0.00        | 0.00         | 0.00               | 93.19                   | 9.32%                   | 68.68                       |
| 6        | 872.54    | 29.86            | 0.00                | 36.88            | 52.85        | 0.00          | 20.93        | 8.21           | 3.25            | 0.00        | 0.00         | 0.00               | 90.92                   | 9.09%                   | 63.04                       |
| 7        | 852.39    | 29.17            | 0.00                | 36.02            | 48.88        | 0.00          | 19.36        | 10.77          | 4.27            | 0.00        | 0.00         | 0.00               | 88.82                   | 8.88%                   | 57.94                       |
| 8        | 833.76    | 28.53            | 0.00                | 35.24            | 45.22        | 0.00          | 17.91        | 13.13          | 5.20            | 0.00        | 0.00         | 0.00               | 86.88                   | 8.69%                   | 53.32                       |
| 9        | 815.96    | 27.92            | 0.00                | 34.48            | 44.62        | 0.00          | 17.67        | 12.49          | 4.95            | 0.00        | 0.00         | 0.00               | 85.03                   | 8.50%                   | 49.09                       |
| 10       | 798.29    | 27.32            | 0.00                | 33.74            | 44.62        | 0.00          | 17.67        | 11.25          | 4.46            | 0.00        | 0.00         | 0.00               | 83.18                   | 8.32%                   | 45.19                       |
| 11       | 780.62    | 26.71            | 0.00                | 32.99            | 44.62        | 0.00          | 17.67        | 10.01          | 3.97            | 0.00        | 0.00         | 0.00               | 81.34                   | 8.13%                   | 41.57                       |
| 12       | 762.95    | 26.11            | 0.00                | 32.24            | 44.62        | 0.00          | 17.67        | 8.78           | 3.48            | 0.00        | 0.00         | 0.00               | 79.50                   | 7.95%                   | 38.22                       |
| 13       | 745.28    | 25.50            | 0.00                | 31.50            | 44.62        | 0.00          | 17.67        | 7.54           | 2.99            | 0.00        | 0.00         | 0.00               | 77.66                   | 7.77%                   | 35.13                       |
| 14       | 727.60    | 24.90            | 0.00                | 30.75            | 44.62        | 0.00          | 17.67        | 6.30           | 2.50            | 0.00        | 0.00         | 0.00               | 75.82                   | 7.58%                   | 32.26                       |
| 15       | 709.93    | 24.29            | 0.00                | 30.00            | 44.62        | 0.00          | 17.67        | 5.07           | 2.01            | 0.00        | 0.00         | 0.00               | 73.98                   | 7.40%                   | 29.62                       |
| 16       | 692.26    | 23.69            | 0.00                | 29.26            | 44.62        | 0.00          | 17.67        | 3.83           | 1.52            | 0.00        | 0.00         | 0.00               | 72.14                   | 7.21%                   | 27.17                       |
| 17       | 674.59    | 23.09            | 0.00                | 28.51            | 44.62        | 0.00          | 17.67        | 2.59           | 1.03            | 0.00        | 0.00         | 0.00               | 70.29                   | 7.03%                   | 24.91                       |
| 18       | 656.92    | 22.48            | 0.00                | 27.76            | 44.62        | 0.00          | 17.67        | 1.36           | 0.54            | 0.00        | 0.00         | 0.00               | 68.45                   | 6.85%                   | 22.82                       |
| 19       | 639.24    | 21.88            | 0.00                | 27.02            | 44.62        | 0.00          | 17.67        | 0.12           | 0.05            | 0.00        | 0.00         | 0.00               | 66.61                   | 6.66%                   | 20.89                       |
| 20       | 621.57    | 21.27            | 0.00                | 26.27            | 44.62        | 0.00          | 17.67        | (1.12)         | (0.44)          | 0.00        | 0.00         | 0.00               | 64.77                   | 6.48%                   | 19.11                       |
| 21       | 608.32    | 20.82            | 0.00                | 25.71            | 22.31        | 0.00          | 8.84         | 20.26          | 8.03            | 0.00        | 0.00         | 0.00               | 63.39                   | 6.34%                   | 17.60                       |
| 22       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 16.43                       |
| 23       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 15.46                       |
| 24       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 14.55                       |
| 25       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 13.69                       |
| 26       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 12.87                       |
| 27       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 12.11                       |
| 28       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 11.40                       |
| 29       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 10.72                       |
| 30       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 10.09                       |
| 31       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 9.49                        |
| 32       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 8.93                        |
| 33       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 8.40                        |
| 34       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 7.90                        |
| 35       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 7.43                        |
| 36       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 6.99                        |
| 37       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 6.58                        |
| 38       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 6.19                        |
| 39       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 5.82                        |
| 40       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 5.48                        |
| 41       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 5.15                        |
| 42       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 4.85                        |
| 43       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 4.56                        |
| 44       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 4.29                        |
| 45       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 4.04                        |
| 46       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 3.80                        |
| 47       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 3.57                        |
| 48       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 3.36                        |
| 49       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 3.16                        |
| 50       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 2.98                        |
| 51       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 2.80                        |
| 52       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 2.63                        |
| 53       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 2.48                        |
| 54       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 2.33                        |
| 55       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 2.19                        |
| 56       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 2.06                        |
| 57       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.94                        |
| 58       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.83                        |
| 59       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.72                        |
| 60       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.62                        |
| 61       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.52                        |
| 62       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.43                        |
| 63       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.35                        |
| 64       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.27                        |
| 65       | 603.90    | 20.67            | 0.00                | 25.52            | 0.00         | 0.00          | 0.00         | 42.26          | 16.74           | 0.00        | 0.00         | 0.00               | 62.93                   | 6.29%                   | 1.19                        |

|                   |            |         |            |            |         |          |            |          |         |         |         |            |         |
|-------------------|------------|---------|------------|------------|---------|----------|------------|----------|---------|---------|---------|------------|---------|
| TOTAL             | \$1,474.33 | \$0.00  | \$1,820.79 | \$1,000.00 | \$0.00  | \$396.10 | \$2,015.05 | \$798.16 | \$0.00  | \$0.00  | \$0.00  | \$4,489.38 | 1,249   |
| PRESENT WORTH     | \$410.13   | \$0.00  | \$506.51   | \$573.66   | \$0.00  | \$227.23 | \$265.07   | \$104.99 | \$0.00  | \$0.00  | \$0.00  | \$1,248.86 | 124.89% |
| LEVELIZED PAYMENT | #DIV/0!    | #DIV/0! | #DIV/0!    | #DIV/0!    | #DIV/0! | #DIV/0!  | #DIV/0!    | #DIV/0!  | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0!    | #DIV/0! |

Table - 8  
Northern Utilities- New Hampshire  
Development of Revenue Requirements Stream

Capacity Related Distribution

Attachment PMN-2G-2  
Table-8  
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| Year No. | Rate Base | Interest On Debt | Return On Preferred | Return On Common | Tax Deprec'N | Book Deprec'N | Deferred Tax | Taxable Income | Inc Tax Payable | Revenue Tax | Property Tax | Property Insurance | ANNUAL Revenue Req'm'Ts | % of Original Investm'T | Present Worth Of Rev Req'Mt |
|----------|-----------|------------------|---------------------|------------------|--------------|---------------|--------------|----------------|-----------------|-------------|--------------|--------------------|-------------------------|-------------------------|-----------------------------|
| (1)      | (2)       | (3)              | (4)                 | (5)              | (6)          | (7)           | (8)          | (9)            | (10)            | (11)        | (12)         | (13)               | (14)                    | (15)                    | (16)                        |
|          | 1,000.00  |                  |                     |                  |              |               |              |                |                 |             |              |                    |                         |                         |                             |
| 1        | 983.47    | 33.66            | 0.00                | 41.56            | 37.50        | 30.15         | 2.91         | 61.47          | 24.35           | 0.00        | 12.76        | 0.00               | 145.39                  | 14.54%                  | 136.78                      |
| 2        | 943.54    | 32.29            | 0.00                | 39.88            | 72.19        | 30.15         | 16.65        | 23.99          | 9.50            | 0.00        | 12.72        | 0.00               | 141.19                  | 14.12%                  | 124.97                      |
| 3        | 897.81    | 30.72            | 0.00                | 37.94            | 66.77        | 30.15         | 14.51        | 26.21          | 10.38           | 0.00        | 12.67        | 0.00               | 136.38                  | 13.64%                  | 113.56                      |
| 4        | 854.15    | 29.23            | 0.00                | 36.10            | 61.77        | 30.15         | 12.52        | 28.16          | 11.15           | 0.00        | 12.61        | 0.00               | 131.76                  | 13.18%                  | 103.22                      |
| 5        | 812.39    | 27.80            | 0.00                | 34.33            | 57.13        | 30.15         | 10.69        | 29.87          | 11.83           | 0.00        | 12.53        | 0.00               | 127.33                  | 12.73%                  | 93.85                       |
| 6        | 772.40    | 26.43            | 0.00                | 32.64            | 52.85        | 30.15         | 8.99         | 31.36          | 12.42           | 0.00        | 12.44        | 0.00               | 123.08                  | 12.31%                  | 85.34                       |
| 7        | 734.05    | 25.12            | 0.00                | 31.02            | 48.88        | 30.15         | 7.42         | 32.63          | 12.93           | 0.00        | 12.34        | 0.00               | 118.97                  | 11.90%                  | 77.61                       |
| 8        | 697.21    | 23.86            | 0.00                | 29.47            | 45.22        | 30.15         | 5.97         | 33.72          | 13.36           | 0.00        | 12.21        | 0.00               | 115.01                  | 11.50%                  | 70.59                       |
| 9        | 661.21    | 22.63            | 0.00                | 27.94            | 44.62        | 30.15         | 5.73         | 31.81          | 12.60           | 0.00        | 12.08        | 0.00               | 111.12                  | 11.11%                  | 64.16                       |
| 10       | 625.33    | 21.40            | 0.00                | 26.43            | 44.62        | 30.15         | 5.73         | 29.30          | 11.60           | 0.00        | 11.92        | 0.00               | 107.23                  | 10.72%                  | 58.25                       |
| 11       | 589.45    | 20.17            | 0.00                | 24.91            | 44.62        | 30.15         | 5.73         | 26.78          | 10.61           | 0.00        | 11.75        | 0.00               | 103.32                  | 10.33%                  | 52.80                       |
| 12       | 553.57    | 18.94            | 0.00                | 23.40            | 44.62        | 30.15         | 5.73         | 24.27          | 9.61            | 0.00        | 11.56        | 0.00               | 99.39                   | 9.94%                   | 47.78                       |
| 13       | 517.69    | 17.72            | 0.00                | 21.88            | 44.62        | 30.15         | 5.73         | 21.76          | 8.62            | 0.00        | 11.34        | 0.00               | 95.44                   | 9.54%                   | 43.17                       |
| 14       | 481.81    | 16.49            | 0.00                | 20.36            | 44.62        | 30.15         | 5.73         | 19.25          | 7.63            | 0.00        | 11.11        | 0.00               | 91.47                   | 9.15%                   | 38.92                       |
| 15       | 445.93    | 15.26            | 0.00                | 18.85            | 44.62        | 30.15         | 5.73         | 16.74          | 6.63            | 0.00        | 10.85        | 0.00               | 87.47                   | 8.75%                   | 35.02                       |
| 16       | 410.06    | 14.03            | 0.00                | 17.33            | 44.62        | 30.15         | 5.73         | 14.23          | 5.64            | 0.00        | 10.58        | 0.00               | 83.45                   | 8.35%                   | 31.43                       |
| 17       | 374.18    | 12.80            | 0.00                | 15.81            | 44.62        | 30.15         | 5.73         | 11.72          | 4.64            | 0.00        | 10.27        | 0.00               | 79.41                   | 7.94%                   | 28.14                       |
| 18       | 338.30    | 11.58            | 0.00                | 14.30            | 44.62        | 30.15         | 5.73         | 9.21           | 3.65            | 0.00        | 9.95         | 0.00               | 75.35                   | 7.53%                   | 25.12                       |
| 19       | 302.42    | 10.35            | 0.00                | 12.78            | 44.62        | 30.15         | 5.73         | 6.70           | 2.65            | 0.00        | 9.59         | 0.00               | 71.25                   | 7.13%                   | 22.35                       |
| 20       | 266.54    | 9.12             | 0.00                | 11.26            | 44.62        | 30.15         | 5.73         | 4.19           | 1.66            | 0.00        | 9.21         | 0.00               | 67.13                   | 6.71%                   | 19.81                       |
| 21       | 235.08    | 8.04             | 0.00                | 9.94             | 22.31        | 30.15         | (3.11)       | 24.29          | 9.62            | 0.00        | 8.80         | 0.00               | 63.45                   | 6.34%                   | 17.61                       |
| 22       | 212.45    | 7.27             | 0.00                | 8.98             | 0.00         | 30.15         | (11.94)      | 45.02          | 17.83           | 0.00        | 8.36         | 0.00               | 60.65                   | 6.06%                   | 15.84                       |
| 23       | 194.25    | 6.65             | 0.00                | 8.21             | 0.00         | 30.15         | (11.94)      | 43.74          | 17.33           | 0.00        | 7.89         | 0.00               | 58.28                   | 5.83%                   | 14.32                       |
| 24       | 176.04    | 6.02             | 0.00                | 7.44             | 0.00         | 30.15         | (11.94)      | 42.47          | 16.82           | 0.00        | 7.38         | 0.00               | 55.88                   | 5.59%                   | 12.92                       |
| 25       | 157.83    | 5.40             | 0.00                | 6.67             | 0.00         | 30.15         | (11.94)      | 41.19          | 16.32           | 0.00        | 6.84         | 0.00               | 53.44                   | 5.34%                   | 11.62                       |
| 26       | 139.63    | 4.78             | 0.00                | 5.90             | 0.00         | 30.15         | (11.94)      | 39.92          | 15.81           | 0.00        | 6.27         | 0.00               | 50.97                   | 5.10%                   | 10.43                       |
| 27       | 121.42    | 4.16             | 0.00                | 5.13             | 0.00         | 30.15         | (11.94)      | 38.65          | 15.31           | 0.00        | 5.65         | 0.00               | 48.46                   | 4.85%                   | 9.33                        |
| 28       | 103.21    | 3.53             | 0.00                | 4.36             | 0.00         | 30.15         | (11.94)      | 37.37          | 14.80           | 0.00        | 5.00         | 0.00               | 45.91                   | 4.59%                   | 8.31                        |
| 29       | 85.01     | 2.91             | 0.00                | 3.59             | 0.00         | 30.15         | (11.94)      | 36.10          | 14.30           | 0.00        | 4.31         | 0.00               | 43.32                   | 4.33%                   | 7.38                        |
| 30       | 66.80     | 2.29             | 0.00                | 2.82             | 0.00         | 30.15         | (11.94)      | 34.82          | 13.79           | 0.00        | 3.57         | 0.00               | 40.68                   | 4.07%                   | 6.52                        |
| 31       | 48.59     | 1.66             | 0.00                | 2.05             | 0.00         | 30.15         | (11.94)      | 33.55          | 13.29           | 0.00        | 2.79         | 0.00               | 38.00                   | 3.80%                   | 5.73                        |
| 32       | 30.39     | 1.04             | 0.00                | 1.28             | 0.00         | 30.15         | (11.94)      | 32.28          | 12.78           | 0.00        | 1.96         | 0.00               | 35.28                   | 3.53%                   | 5.00                        |
| 33       | 12.18     | 0.42             | 0.00                | 0.51             | 0.00         | 30.15         | (11.94)      | 31.00          | 12.28           | 0.00        | 1.09         | 0.00               | 32.51                   | 3.25%                   | 4.34                        |
| 34       | (6.03)    | (0.21)           | 0.00                | (0.25)           | 0.00         | 30.15         | (11.94)      | 29.73          | 11.77           | 0.00        | 0.16         | 0.00               | 29.68                   | 2.97%                   | 3.73                        |
| 35       | (24.23)   | (0.83)           | 0.00                | (1.02)           | 0.00         | 30.15         | (11.94)      | 28.45          | 11.27           | 0.00        | 0.00         | 0.00               | 27.62                   | 2.76%                   | 3.26                        |
| 36       | (42.44)   | (1.45)           | 0.00                | (1.79)           | 0.00         | 30.15         | (11.94)      | 27.18          | 10.77           | 0.00        | 0.00         | 0.00               | 25.73                   | 2.57%                   | 2.86                        |
| 37       | (60.65)   | (2.08)           | 0.00                | (2.56)           | 0.00         | 30.15         | (11.94)      | 25.90          | 10.26           | 0.00        | 0.00         | 0.00               | 23.83                   | 2.38%                   | 2.49                        |
| 38       | (78.85)   | (2.70)           | 0.00                | (3.33)           | 0.00         | 30.15         | (11.94)      | 24.63          | 9.76            | 0.00        | 0.00         | 0.00               | 21.93                   | 2.19%                   | 2.16                        |
| 39       | (97.06)   | (3.32)           | 0.00                | (4.10)           | 0.00         | 30.15         | (11.94)      | 23.36          | 9.25            | 0.00        | 0.00         | 0.00               | 20.03                   | 2.00%                   | 1.85                        |
| 40       | (115.27)  | (3.94)           | 0.00                | (4.87)           | 0.00         | 30.15         | (11.94)      | 22.08          | 8.75            | 0.00        | 0.00         | 0.00               | 18.14                   | 1.81%                   | 1.58                        |
| 41       | (133.48)  | (4.57)           | 0.00                | (5.64)           | 0.00         | 30.15         | (11.94)      | 20.81          | 8.24            | 0.00        | 0.00         | 0.00               | 16.24                   | 1.62%                   | 1.33                        |
| 42       | 46.76     | 1.60             | 0.00                | 1.98             | 236.10       | 0.00          | 93.52        | (232.82)       | (92.22)         | 0.00        | 0.00         | 0.00               | 4.87                    | 0.49%                   | 0.38                        |
| 43       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 44       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 45       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 46       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 47       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 48       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 49       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 50       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 51       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 52       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 53       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 54       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 55       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 56       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 57       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 58       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 59       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 60       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 61       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 62       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 63       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 64       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |
| 65       | 0.00      | 0.00             | 0.00                | 0.00             | 0.00         | 0.00          | 0.00         | 0.00           | 0.00            | 0.00        | 0.00         | 0.00               | 0.00                    | 0.00%                   | 0.00                        |

|                   |          |        |          |            |            |          |          |          |        |          |        |            |         |
|-------------------|----------|--------|----------|------------|------------|----------|----------|----------|--------|----------|--------|------------|---------|
| TOTAL             | \$456.27 | \$0.00 | \$563.49 | \$1,236.10 | \$1,236.10 | (\$0.00) | \$933.09 | \$369.60 | \$0.00 | \$300.58 | \$0.00 | \$2,926.04 | 1,422   |
| PRESENT WORTH     | \$273.83 | \$0.00 | \$338.18 | \$591.86   | \$439.85   | \$60.21  | \$407.98 | \$161.60 | \$0.00 | \$148.19 | \$0.00 | \$1,421.86 | 142.19% |
| LEVELIZED PAYMENT | \$18.77  | \$0.00 | \$23.18  | \$40.57    | \$30.15    | \$4.13   | \$27.96  | \$11.08  | \$0.00 | \$10.16  | \$0.00 | \$97.46    | 9.75%   |

Table - 8  
Northern Utilities- New Hampshire  
Development of Revenue Requirements Stream

Services Investment

Attachment PMN-2G-2  
Table-8  
Page 11 of 11

| Year No. | Rate Base | Interest On Debt | Return On Preferred | Return On Common | Tax Deprec'N | Book Deprec'N | Deferred Tax | Taxable Income | Inc Tax Payable | Revenue Tax | Property Tax | Property Insurance | ANNUAL Revenue Req'm'Ts | % of Original Investm'T | Present Worth Of Rev Req'Mt |
|----------|-----------|------------------|---------------------|------------------|--------------|---------------|--------------|----------------|-----------------|-------------|--------------|--------------------|-------------------------|-------------------------|-----------------------------|
| (1)      | (2)       | (3)              | (4)                 | (5)              | (6)          | (7)           | (8)          | (9)            | (10)            | (11)        | (12)         | (13)               | (14)                    | (15)                    | (16)                        |
|          | 1,000.00  |                  |                     |                  |              |               |              |                |                 |             |              |                    |                         |                         |                             |
| 1        | 980.83    | 33.56            | 0.00                | 41.45            | 37.50        | 38.89         | (0.55)       | 70.03          | 27.74           | 0.00        | 12.76        | 0.00               | 153.85                  | 15.39%                  | 144.75                      |
| 2        | 935.62    | 32.02            | 0.00                | 39.54            | 72.19        | 38.89         | 13.19        | 32.18          | 12.75           | 0.00        | 12.61        | 0.00               | 148.99                  | 14.90%                  | 131.87                      |
| 3        | 884.62    | 30.27            | 0.00                | 37.39            | 66.77        | 38.89         | 11.05        | 34.02          | 13.48           | 0.00        | 12.44        | 0.00               | 143.50                  | 14.35%                  | 119.50                      |
| 4        | 835.67    | 28.60            | 0.00                | 35.32            | 61.77        | 38.89         | 9.06         | 35.61          | 14.10           | 0.00        | 12.24        | 0.00               | 138.21                  | 13.82%                  | 108.28                      |
| 5        | 788.64    | 26.99            | 0.00                | 33.33            | 57.13        | 38.89         | 7.23         | 36.95          | 14.63           | 0.00        | 12.03        | 0.00               | 133.10                  | 13.31%                  | 98.10                       |
| 6        | 743.37    | 25.44            | 0.00                | 31.42            | 52.85        | 38.89         | 5.53         | 38.06          | 15.08           | 0.00        | 11.80        | 0.00               | 128.15                  | 12.82%                  | 88.86                       |
| 7        | 699.74    | 23.95            | 0.00                | 29.57            | 48.88        | 38.89         | 3.96         | 38.97          | 15.44           | 0.00        | 11.55        | 0.00               | 123.35                  | 12.33%                  | 80.47                       |
| 8        | 657.62    | 22.50            | 0.00                | 27.79            | 45.22        | 38.89         | 2.51         | 39.69          | 15.72           | 0.00        | 11.27        | 0.00               | 118.68                  | 11.87%                  | 72.84                       |
| 9        | 616.34    | 21.09            | 0.00                | 26.05            | 44.62        | 38.89         | 2.27         | 37.41          | 14.82           | 0.00        | 10.96        | 0.00               | 114.08                  | 11.41%                  | 65.87                       |
| 10       | 575.19    | 19.68            | 0.00                | 24.31            | 44.62        | 38.89         | 2.27         | 34.53          | 13.68           | 0.00        | 10.63        | 0.00               | 109.46                  | 10.95%                  | 59.46                       |
| 11       | 534.03    | 18.27            | 0.00                | 22.57            | 44.62        | 38.89         | 2.27         | 31.65          | 12.54           | 0.00        | 10.28        | 0.00               | 104.81                  | 10.48%                  | 53.56                       |
| 12       | 492.87    | 16.87            | 0.00                | 20.83            | 44.62        | 38.89         | 2.27         | 28.77          | 11.39           | 0.00        | 9.89         | 0.00               | 100.14                  | 10.01%                  | 48.15                       |
| 13       | 451.71    | 15.46            | 0.00                | 19.09            | 44.62        | 38.89         | 2.27         | 25.89          | 10.25           | 0.00        | 9.48         | 0.00               | 95.44                   | 9.54%                   | 43.17                       |
| 14       | 410.56    | 14.05            | 0.00                | 17.35            | 44.62        | 38.89         | 2.27         | 23.01          | 9.11            | 0.00        | 9.03         | 0.00               | 90.70                   | 9.07%                   | 38.60                       |
| 15       | 369.40    | 12.64            | 0.00                | 15.61            | 44.62        | 38.89         | 2.27         | 20.13          | 7.97            | 0.00        | 8.56         | 0.00               | 85.94                   | 8.59%                   | 34.41                       |
| 16       | 328.24    | 11.23            | 0.00                | 13.87            | 44.62        | 38.89         | 2.27         | 17.24          | 6.83            | 0.00        | 8.05         | 0.00               | 81.14                   | 8.11%                   | 30.56                       |
| 17       | 287.09    | 9.82             | 0.00                | 12.13            | 44.62        | 38.89         | 2.27         | 14.36          | 5.69            | 0.00        | 7.50         | 0.00               | 76.30                   | 7.63%                   | 27.04                       |
| 18       | 245.93    | 8.42             | 0.00                | 10.39            | 44.62        | 38.89         | 2.27         | 11.48          | 4.55            | 0.00        | 6.91         | 0.00               | 71.43                   | 7.14%                   | 23.81                       |
| 19       | 204.77    | 7.01             | 0.00                | 8.65             | 44.62        | 38.89         | 2.27         | 8.60           | 3.41            | 0.00        | 6.29         | 0.00               | 66.52                   | 6.65%                   | 20.86                       |
| 20       | 163.61    | 5.60             | 0.00                | 6.91             | 44.62        | 38.89         | 2.27         | 5.72           | 2.27            | 0.00        | 5.63         | 0.00               | 61.57                   | 6.16%                   | 18.17                       |
| 21       | 126.88    | 4.34             | 0.00                | 5.36             | 22.31        | 38.89         | (6.57)       | 25.46          | 10.08           | 0.00        | 4.93         | 0.00               | 57.04                   | 5.70%                   | 15.83                       |
| 22       | 98.97     | 3.39             | 0.00                | 4.18             | 0.00         | 38.89         | (15.40)      | 45.82          | 18.15           | 0.00        | 4.18         | 0.00               | 53.38                   | 5.34%                   | 13.94                       |
| 23       | 75.49     | 2.58             | 0.00                | 3.19             | 0.00         | 38.89         | (15.40)      | 44.17          | 17.50           | 0.00        | 3.38         | 0.00               | 50.14                   | 5.01%                   | 12.32                       |
| 24       | 52.00     | 1.78             | 0.00                | 2.20             | 0.00         | 38.89         | (15.40)      | 42.53          | 16.85           | 0.00        | 2.54         | 0.00               | 46.85                   | 4.68%                   | 10.83                       |
| 25       | 28.52     | 0.98             | 0.00                | 1.21             | 0.00         | 38.89         | (15.40)      | 40.88          | 16.19           | 0.00        | 1.65         | 0.00               | 43.51                   | 4.35%                   | 9.46                        |
| 26       | 5.03      | 0.17             | 0.00                | 0.21             | 0.00         | 38.89         | (15.40)      | 39.24          | 15.54           | 0.00        | 0.71         | 0.00               | 40.12                   | 4.01%                   | 8.21                        |
| 27       | (18.45)   | (0.63)           | 0.00                | (0.78)           | 0.00         | 38.89         | (15.40)      | 37.60          | 14.89           | 0.00        | 0.00         | 0.00               | 36.97                   | 3.70%                   | 7.12                        |
| 28       | (41.94)   | (1.44)           | 0.00                | (1.77)           | 0.00         | 38.89         | (15.40)      | 35.95          | 14.24           | 0.00        | 0.00         | 0.00               | 34.52                   | 3.45%                   | 6.25                        |
| 29       | (65.42)   | (2.24)           | 0.00                | (2.76)           | 0.00         | 38.89         | (15.40)      | 34.31          | 13.59           | 0.00        | 0.00         | 0.00               | 32.07                   | 3.21%                   | 5.46                        |
| 30       | (88.91)   | (3.04)           | 0.00                | (3.76)           | 0.00         | 38.89         | (15.40)      | 32.67          | 12.94           | 0.00        | 0.00         | 0.00               | 29.62                   | 2.96%                   | 4.75                        |
| 31       | (112.39)  | (3.85)           | 0.00                | (4.75)           | 0.00         | 38.89         | (15.40)      | 31.02          | 12.29           | 0.00        | 0.00         | 0.00               | 27.18                   | 2.72%                   | 4.10                        |
| 32       | (135.88)  | (4.65)           | 0.00                | (5.74)           | 0.00         | 38.89         | (15.40)      | 29.38          | 11.64           | 0.00        | 0.00         | 0.00               | 24.73                   | 2.47%                   | 3.51                        |
| 33       | (159.36)  | (5.45)           | 0.00                | (6.74)           | 0.00         | 38.89         | (15.40)      | 27.74          | 10.99           | 0.00        | 0.00         | 0.00               | 22.28                   | 2.23%                   | 2.97                        |
| 34       | (182.85)  | (6.26)           | 0.00                | (7.73)           | 0.00         | 38.89         | (15.40)      | 26.09          | 10.34           | 0.00        | 0.00         | 0.00               | 19.84                   | 1.98%                   | 2.49                        |
| 35       | (206.33)  | (7.06)           | 0.00                | (8.72)           | 0.00         | 38.89         | (15.40)      | 24.45          | 9.68            | 0.00        | 0.00         | 0.00               | 17.39                   | 1.74%                   | 2.05                        |
| 36       | (229.82)  | (7.86)           | 0.00                | (9.71)           | 0.00         | 38.89         | (15.40)      | 22.81          | 9.03            | 0.00        | 0.00         | 0.00               | 14.94                   | 1.49%                   | 1.66                        |
| 37       | (253.30)  | (8.67)           | 0.00                | (10.71)          | 0.00         | 38.89         | (15.40)      | 21.16          | 8.38            | 0.00        | 0.00         | 0.00               | 12.49                   | 1.25%                   | 1.31                        |
| 38       | (276.79)  | (9.47)           | 0.00                | (11.70)          | 0.00         | 38.89         | (15.40)      | 19.52          | 7.73            | 0.00        | 0.00         | 0.00               | 10.05                   | 1.00%                   | 0.99                        |
| 39       | (300.27)  | (10.28)          | 0.00                | (12.69)          | 0.00         | 38.89         | (15.40)      | 17.88          | 7.08            | 0.00        | 0.00         | 0.00               | 7.60                    | 0.76%                   | 0.70                        |
| 40       | (323.76)  | (11.08)          | 0.00                | (13.68)          | 0.00         | 38.89         | (15.40)      | 16.23          | 6.43            | 0.00        | 0.00         | 0.00               | 5.15                    | 0.52%                   | 0.45                        |
| 41       | (347.24)  | (11.88)          | 0.00                | (14.68)          | 0.00         | 38.89         | (15.40)      | 14.59          | 5.78            | 0.00        | 0.00         | 0.00               | 2.71                    | 0.27%                   | 0.22                        |
| 42       | (370.73)  | (12.69)          | 0.00                | (15.67)          | 0.00         | 38.89         | (15.40)      | 12.94          | 5.13            | 0.00        | 0.00         | 0.00               | 0.26                    | 0.03%                   | 0.02                        |
| 43       | (394.21)  | (13.49)          | 0.00                | (16.66)          | 0.00         | 38.89         | (15.40)      | 11.30          | 4.48            | 0.00        | 0.00         | 0.00               | (2.19)                  | -0.22%                  | (0.16)                      |
| 44       | (417.70)  | (14.29)          | 0.00                | (17.65)          | 0.00         | 38.89         | (15.40)      | 9.66           | 3.83            | 0.00        | 0.00         | 0.00               | (4.64)                  | -0.46%                  | (0.32)                      |
| 45       | (441.18)  | (15.10)          | 0.00                | (18.65)          | 0.00         | 38.89         | (15.40)      | 8.01           | 3.17            | 0.00        | 0.00         | 0.00               | (7.08)                  | -0.71%                  | (0.45)                      |
| 46       | 148.54    | 5.08             | 0.00                | 6.28             | 750.00       | 0.00          | 297.08       | (739.60)       | (292.96)        | 0.00        | 0.00         | 0.00               | 15.48                   | 1.55%                   | 0.93                        |
| 47       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 48       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 49       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 50       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 51       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 52       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 53       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 54       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 55       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 56       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 57       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 58       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 59       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 60       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 61       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 62       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 63       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 64       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 65       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |

|                   |  |          |        |          |            |            |          |          |          |        |          |        |            |         |       |
|-------------------|--|----------|--------|----------|------------|------------|----------|----------|----------|--------|----------|--------|------------|---------|-------|
| TOTAL             |  | \$252.37 | \$0.00 | \$311.68 | \$1,750.00 | \$1,750.00 | (\$0.00) | \$516.10 | \$204.43 | \$0.00 | \$217.30 | \$0.00 | \$2,735.78 |         | 1,423 |
| PRESENT WORTH     |  | \$236.56 | \$0.00 | \$292.15 | \$618.94   | \$578.33   | \$16.09  | \$443.16 | \$175.54 | \$0.00 | \$124.29 | \$0.00 | \$1,422.95 | 142.29% |       |
| LEVELIZED PAYMENT |  | \$15.91  | \$0.00 | \$19.65  | \$41.62    | \$38.89    | \$1.08   | \$29.80  | \$11.80  | \$0.00 | \$8.36   | \$0.00 | \$95.68    | 9.57%   |       |

Table - 8  
Northern Utilities- New Hampshire  
Development of Revenue Requirements Stream

Metering Equipment

Attachment PMN-2G-2  
Table-8  
Page 11 of 11

| Year No. | Rate Base | Interest On Debt | Return On Preferred | Return On Common | Tax Deprec'N | Book Deprec'N | Deferred Tax | Taxable Income | Inc Tax Payable | Revenue Tax | Property Tax | Property Insurance | ANNUAL Revenue Req'm'Ts | % of Original Investm'T | Present Worth Of Rev Req'Mt |
|----------|-----------|------------------|---------------------|------------------|--------------|---------------|--------------|----------------|-----------------|-------------|--------------|--------------------|-------------------------|-------------------------|-----------------------------|
| (1)      | (2)       | (3)              | (4)                 | (5)              | (6)          | (7)           | (8)          | (9)            | (10)            | (11)        | (12)         | (13)               | (14)                    | (15)                    | (16)                        |
|          | 1,000.00  |                  |                     |                  |              |               |              |                |                 |             |              |                    |                         |                         |                             |
| 1        | 982.40    | 33.62            | 0.00                | 41.52            | 37.50        | 33.68         | 1.51         | 64.93          | 25.72           | 0.00        | 12.76        | 0.00               | 148.81                  | 14.88%                  | 140.00                      |
| 2        | 940.34    | 32.18            | 0.00                | 39.74            | 72.19        | 33.68         | 15.25        | 27.30          | 10.81           | 0.00        | 12.68        | 0.00               | 144.34                  | 14.43%                  | 127.76                      |
| 3        | 892.48    | 30.54            | 0.00                | 37.72            | 66.77        | 33.68         | 13.11        | 29.37          | 11.63           | 0.00        | 13.03        | 0.00               | 139.71                  | 13.97%                  | 116.34                      |
| 4        | 846.68    | 28.97            | 0.00                | 35.78            | 61.77        | 33.68         | 11.12        | 31.17          | 12.35           | 0.00        | 13.40        | 0.00               | 135.30                  | 13.53%                  | 106.00                      |
| 5        | 802.79    | 27.47            | 0.00                | 33.93            | 57.13        | 33.68         | 9.29         | 32.73          | 12.96           | 0.00        | 13.77        | 0.00               | 131.11                  | 13.11%                  | 96.63                       |
| 6        | 760.67    | 26.03            | 0.00                | 32.15            | 52.85        | 33.68         | 7.59         | 34.07          | 13.49           | 0.00        | 14.16        | 0.00               | 127.10                  | 12.71%                  | 88.13                       |
| 7        | 720.18    | 24.65            | 0.00                | 30.44            | 48.88        | 33.68         | 6.02         | 35.20          | 13.94           | 0.00        | 14.55        | 0.00               | 123.28                  | 12.33%                  | 80.42                       |
| 8        | 681.20    | 23.31            | 0.00                | 28.79            | 45.22        | 33.68         | 4.57         | 36.14          | 14.31           | 0.00        | 14.96        | 0.00               | 119.63                  | 11.96%                  | 73.42                       |
| 9        | 643.07    | 22.01            | 0.00                | 27.18            | 44.62        | 33.68         | 4.33         | 34.07          | 13.50           | 0.00        | 15.38        | 0.00               | 116.07                  | 11.61%                  | 67.02                       |
| 10       | 605.06    | 20.71            | 0.00                | 25.57            | 44.62        | 33.68         | 4.33         | 31.41          | 12.44           | 0.00        | 15.81        | 0.00               | 112.54                  | 11.25%                  | 61.13                       |
| 11       | 567.04    | 19.40            | 0.00                | 23.96            | 44.62        | 33.68         | 4.33         | 28.75          | 11.39           | 0.00        | 16.25        | 0.00               | 109.02                  | 10.90%                  | 55.71                       |
| 12       | 529.03    | 18.10            | 0.00                | 22.36            | 44.62        | 33.68         | 4.33         | 26.09          | 10.33           | 0.00        | 16.71        | 0.00               | 105.52                  | 10.55%                  | 50.73                       |
| 13       | 491.02    | 16.80            | 0.00                | 20.75            | 44.62        | 33.68         | 4.33         | 23.43          | 9.28            | 0.00        | 17.17        | 0.00               | 102.02                  | 10.20%                  | 46.15                       |
| 14       | 453.00    | 15.50            | 0.00                | 19.15            | 44.62        | 33.68         | 4.33         | 20.77          | 8.23            | 0.00        | 17.66        | 0.00               | 98.54                   | 9.85%                   | 41.93                       |
| 15       | 414.99    | 14.20            | 0.00                | 17.54            | 44.62        | 33.68         | 4.33         | 18.11          | 7.17            | 0.00        | 18.15        | 0.00               | 95.08                   | 9.51%                   | 38.06                       |
| 16       | 376.98    | 12.90            | 0.00                | 15.93            | 44.62        | 33.68         | 4.33         | 15.45          | 6.12            | 0.00        | 18.66        | 0.00               | 91.62                   | 9.16%                   | 34.51                       |
| 17       | 338.96    | 11.60            | 0.00                | 14.33            | 44.62        | 33.68         | 4.33         | 12.79          | 5.07            | 0.00        | 19.18        | 0.00               | 88.18                   | 8.82%                   | 31.25                       |
| 18       | 300.95    | 10.30            | 0.00                | 12.72            | 44.62        | 33.68         | 4.33         | 10.13          | 4.01            | 0.00        | 19.72        | 0.00               | 84.76                   | 8.48%                   | 28.26                       |
| 19       | 262.94    | 9.00             | 0.00                | 11.11            | 44.62        | 33.68         | 4.33         | 7.47           | 2.96            | 0.00        | 20.27        | 0.00               | 81.35                   | 8.14%                   | 25.51                       |
| 20       | 224.93    | 7.70             | 0.00                | 9.51             | 44.62        | 33.68         | 4.33         | 4.81           | 1.90            | 0.00        | 20.84        | 0.00               | 77.96                   | 7.80%                   | 23.00                       |
| 21       | 191.33    | 6.55             | 0.00                | 8.09             | 22.31        | 33.68         | (4.51)       | 24.76          | 9.81            | 0.00        | 21.42        | 0.00               | 75.04                   | 7.50%                   | 20.83                       |
| 22       | 166.57    | 5.70             | 0.00                | 7.04             | 0.00         | 33.68         | (13.34)      | 45.34          | 17.96           | 0.00        | 22.02        | 0.00               | 73.06                   | 7.31%                   | 19.08                       |
| 23       | 146.23    | 5.00             | 0.00                | 6.18             | 0.00         | 33.68         | (13.34)      | 43.92          | 17.40           | 0.00        | 22.64        | 0.00               | 71.56                   | 7.16%                   | 17.58                       |
| 24       | 125.89    | 4.31             | 0.00                | 5.32             | 0.00         | 33.68         | (13.34)      | 42.49          | 16.83           | 0.00        | 23.27        | 0.00               | 70.07                   | 7.01%                   | 16.20                       |
| 25       | 105.55    | 3.61             | 0.00                | 4.46             | 0.00         | 33.68         | (13.34)      | 41.07          | 16.27           | 0.00        | 23.92        | 0.00               | 68.60                   | 6.86%                   | 14.92                       |
| 26       | 85.21     | 2.92             | 0.00                | 3.60             | 0.00         | 33.68         | (13.34)      | 39.65          | 15.70           | 0.00        | 24.59        | 0.00               | 67.15                   | 6.72%                   | 13.74                       |
| 27       | 64.87     | 2.22             | 0.00                | 2.74             | 0.00         | 33.68         | (13.34)      | 38.22          | 15.14           | 0.00        | 25.28        | 0.00               | 65.72                   | 6.57%                   | 12.65                       |
| 28       | 44.53     | 1.52             | 0.00                | 1.88             | 0.00         | 33.68         | (13.34)      | 36.80          | 14.58           | 0.00        | 25.99        | 0.00               | 64.31                   | 6.43%                   | 11.65                       |
| 29       | 24.19     | 0.83             | 0.00                | 1.02             | 0.00         | 33.68         | (13.34)      | 35.38          | 14.01           | 0.00        | 26.72        | 0.00               | 62.92                   | 6.29%                   | 10.72                       |
| 30       | 3.85      | 0.13             | 0.00                | 0.16             | 0.00         | 33.68         | (13.34)      | 33.95          | 13.45           | 0.00        | 27.46        | 0.00               | 61.55                   | 6.15%                   | 9.86                        |
| 31       | (16.49)   | (0.56)           | 0.00                | (0.70)           | 0.00         | 33.68         | (13.34)      | 32.53          | 12.88           | 0.00        | 28.23        | 0.00               | 60.20                   | 6.02%                   | 9.08                        |
| 32       | (36.84)   | (1.26)           | 0.00                | (1.56)           | 0.00         | 33.68         | (13.34)      | 31.10          | 12.32           | 0.00        | 29.02        | 0.00               | 58.87                   | 5.89%                   | 8.35                        |
| 33       | 15.42     | 0.53             | 0.00                | 0.65             | 77.84        | 0.00          | 30.83        | (76.76)        | (30.40)         | 0.00        | 0.00         | 0.00               | 1.61                    | 0.16%                   | 0.21                        |
| 34       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 35       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 36       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 37       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 38       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 39       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 40       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 41       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 42       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 43       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 44       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 45       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 46       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 47       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 48       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 49       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 50       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 51       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 52       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 53       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 54       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 55       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 56       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 57       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 58       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 59       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 60       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 61       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 62       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 63       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 64       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |
| 65       | (0.00)    | (0.00)           | 0.00                | (0.00)           | 0.00         | 0.00          | 0.00         | (0.00)         | (0.00)          | 0.00        | 0.00         | 0.00               | (0.00)                  | 0.00%                   | (0.00)                      |

|                   |          |        |          |            |            |          |          |          |        |          |        |            |         |
|-------------------|----------|--------|----------|------------|------------|----------|----------|----------|--------|----------|--------|------------|---------|
| TOTAL             | \$436.49 | \$0.00 | \$539.06 | \$1,077.84 | \$1,077.84 | (\$0.00) | \$892.63 | \$353.57 | \$0.00 | \$625.66 | \$0.00 | \$3,032.61 | 1,497   |
| PRESENT WORTH     | \$264.46 | \$0.00 | \$326.60 | \$584.05   | \$459.32   | \$49.41  | \$416.09 | \$164.81 | \$0.00 | \$232.23 | \$0.00 | \$1,496.83 | 149.68% |
| LEVELIZED PAYMENT | \$19.39  | \$0.00 | \$23.95  | \$42.83    | \$33.68    | \$3.62   | \$30.51  | \$12.09  | \$0.00 | \$17.03  | \$0.00 | \$109.77   | 10.98%  |



Table - 8  
Northern Utilities- New Hampshire  
Marginal Cost Study

**Development of Weighted Plant Book Lives and Salvage**

| Line No. | Description                                               | 2010 Plant Balance | Average Service Life | Net Salvage Value |
|----------|-----------------------------------------------------------|--------------------|----------------------|-------------------|
|          | (1)                                                       | (2)<br>{1}         | (3)<br>{2}           | (4)<br>{2}        |
| 1        |                                                           |                    |                      |                   |
| 2        |                                                           |                    |                      |                   |
| 3        |                                                           |                    |                      |                   |
| 4        |                                                           |                    |                      |                   |
| 5        | <b>DISTRIBUTION INVESTMENT (excluding Customer Equip)</b> |                    |                      |                   |
| 6        |                                                           |                    |                      |                   |
| 7        |                                                           |                    |                      |                   |
| 8        | 375-Distribution Structures                               | 2,820,320          | 60                   | -5%               |
| 9        | 376-Mains                                                 | 65,458,022         | 41                   | -25%              |
| 10       | 378-Distribution M&R Station Equip.                       | 1,787,578          | 30                   | -5%               |
| 11       | 383-Dist. House Regulators                                | 222,731            | 35                   | 0%                |
| 12       | 386-Dist Water Htrs & Conv. Burners                       | 0                  | 10                   | 0%                |
| 13       |                                                           |                    |                      |                   |
| 14       | Total Distribution Capacity-Related                       | \$70,288,652       | 41                   | -24%              |
| 15       |                                                           |                    |                      |                   |
| 16       |                                                           |                    |                      |                   |
| 17       |                                                           |                    |                      |                   |
| 18       |                                                           |                    |                      |                   |
| 19       |                                                           |                    |                      |                   |
| 20       | 380-Services                                              | 31,874,279         | 45                   | -75%              |
| 21       |                                                           |                    |                      |                   |
| 22       | 381-Meters                                                | 3,506,040          | 30                   | 0                 |
| 23       | 382-Meter Installations                                   | 12,313,745         | 33                   | -10%              |
| 24       | Meters                                                    | 15,819,785         | 32                   | -8%               |
| 25       |                                                           |                    |                      |                   |
| 26       |                                                           |                    |                      |                   |
| 27       |                                                           |                    |                      |                   |
| 28       |                                                           |                    |                      |                   |
| 29       |                                                           |                    |                      |                   |
| 30       |                                                           |                    |                      |                   |

NOTES:

- 1 Test Year Plant balances taken from 2011 Depreciation report.
- 2 Service lives and salvage values based on 2011 depreciation study.

Table - 9  
Northern Utilities- New Hampshire  
Marginal Cost Study

Summary of Marginal Capacity Costs

| Line No.                  | Description                                |                      | ---- PRODUCTION ----<br>Supply<br>Related | Transp.<br>Related | -----TRANS & DIST-----<br>Mains<br>Reinforce | Mains<br>Extension | Total<br>Dist  | Total<br>Prod &<br>Dist |
|---------------------------|--------------------------------------------|----------------------|-------------------------------------------|--------------------|----------------------------------------------|--------------------|----------------|-------------------------|
|                           |                                            |                      | (1)                                       | (2)                | (3)                                          | (4)                | (5)            | (6)                     |
| <b>PLANT INVESTMENT</b>   |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 1                         | Long-Run Unit Costs - \$/Design Day Therms | {1}                  | \$0.00                                    | \$0.00             | \$20.50                                      | \$71.96            | \$92.46        | \$92.46                 |
| 2                         | General Plant Loading Factor               |                      | 5.04%                                     | 5.04%              | 5.04%                                        | 5.04%              |                |                         |
| 3                         | Unit Costs + Loading Factor                | (1)+(1)*(2)          | 0.00                                      | 0.00               | 21.54                                        | 75.59              | \$97.12        | \$97.12                 |
| 4                         |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 5                         | Fixed Charge Rate                          |                      | 0.00%                                     | 0.00%              | 7.17%                                        | 7.17%              |                |                         |
| 6                         | A & G Exp Plant-Related Loading Factor     |                      | 0.33%                                     | 0.33%              | 0.33%                                        | 0.33%              |                |                         |
| 7                         | Total Rate                                 | (5)+(6)              | 0.33%                                     | 0.33%              | 7.50%                                        | 7.50%              |                |                         |
| 8                         |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 9                         | Annualized Cost                            | (3)*(7)              | \$0.00                                    | \$0.00             | \$1.61                                       | \$5.67             | \$7.28         | \$7.28                  |
| 10                        |                                            |                      |                                           |                    |                                              |                    |                |                         |
| <b>OPERATING EXPENSES</b> |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 12                        | Production capacity costs                  | {2}                  | \$0.03                                    | \$0.00             |                                              |                    |                | \$0.03                  |
| 13                        | Distribution capacity costs                | {3}                  |                                           |                    | \$0.00                                       | \$1.62             | \$1.62         | \$1.62                  |
| 14                        | A&G Exp Non-Plant Loading Factor           |                      | 54.77%                                    | 54.77%             | 54.77%                                       | 54.77%             |                |                         |
| 15                        | Total O&M Expense                          | [(12)+(13)]*[1+(14)] | \$0.05                                    | \$0.00             | \$0.00                                       | \$2.51             | \$2.51         | \$2.56                  |
| 16                        |                                            |                      |                                           |                    |                                              |                    |                |                         |
| <b>WORKING CAPITAL</b>    |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 18                        | Materials & Supplies + Prepayments Rate    | {4}                  | 1.13%                                     | 1.13%              | 1.13%                                        | 1.13%              |                |                         |
| 19                        | M&S Cost                                   | (3)*(17)             | 0.00                                      | 0.00               | 0.24                                         | 0.86               | \$1.10         | \$1.10                  |
| 20                        | Working Cash O&M Allowance                 | {5} [(9)+(15)]*1.26% | 0.00                                      | 0.00               | 0.02                                         | 0.10               | \$0.12         | \$0.12                  |
| 21                        | Total Working Capital                      | (19)+(20)            | \$0.00                                    | \$0.00             | \$0.26                                       | \$0.96             | \$1.22         | \$1.23                  |
| 22                        |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 23                        | Working Capital Rev. Req'd                 | {6} (21)*10.42%      | \$0.00                                    | \$0.00             | \$0.03                                       | \$0.10             | \$0.13         | \$0.13                  |
| 24                        |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 25                        | System Seasonal Capacity Related Cost      | {9}                  |                                           |                    |                                              |                    |                |                         |
| 26                        | \$/Design Day Therms                       | (9)+(15)+(23)        | \$0.00                                    | \$0.00             | \$1.64                                       | \$8.27             | \$9.91         | \$9.91                  |
| 27                        |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 28                        | Loss Factor                                | {7}                  | 0.005                                     | 0.005              | 0.005                                        | 0.005              | 0.005          | 0.005                   |
| 29                        | Inflation Adjustment                       | {8}                  | 4.26%                                     | 4.26%              | 4.26%                                        | 4.26%              | 4.26%          | 4.26%                   |
| 30                        |                                            |                      |                                           |                    |                                              |                    |                |                         |
| 31                        | Seasonal Capacity Cost                     | (26)*[1+(28)]/(29)   | <u>\$0.00</u>                             | <u>\$0.00</u>      | <u>\$1.72</u>                                | <u>\$8.67</u>      | <u>\$10.39</u> | <u>\$10.39</u>          |

NOTES:

- 1 Sources: Production taken from Table - 1, Page 1. Distribution taken from Table - 2, page 1.
- 2 Source: Table - 4, page 2.
- 3 Source: Table - 5, page 1.
- 4 Source: Table - 7, page 2.
- 5 Working cash computed on the basis of 45 days.
- 6 Revenue requirement for working cash computed as the after tax cost of capital, i.e debt costs plus equity costs increased by taxes equals 10.42%.
- 7 Source File: NUI Loss Analysis.xls
- 8 Inflation adjustment to restate marginal costs to rate year dollars  
(1+.023)^((10/31/2012-12/31/2010)/365)-1
- 9 Supply capacity costs set to zero since they are not applicable to delivery marginal costs

Table - 10  
Northern Utilities- New Hampshire  
Marginal Cost Study

Summary of Marginal Commodity Costs

| Line<br>No. | Description      | ----- Residential ----- |          | ----- Small C&I ----- |       | ----- Medium C&I ----- |       | ----- Large C&I ----- |       |
|-------------|------------------|-------------------------|----------|-----------------------|-------|------------------------|-------|-----------------------|-------|
|             |                  | ResNonHt&LI             | ResHt&LI | SmHiW                 | SmLoW | MdHiW                  | MdLoW | LgHiW                 | LgLoW |
|             |                  | R-6&R-11                | R-5&R-10 | G-40                  | G-50  | G-41                   | G-51  | G-42                  | G-52  |
|             | PLANT INVESTMENT |                         |          |                       |       |                        |       |                       |       |
| 1           |                  |                         |          |                       |       |                        |       |                       |       |
| 2           |                  |                         |          |                       |       |                        |       |                       |       |
| 3           |                  |                         |          |                       |       |                        |       |                       |       |
| 4           |                  |                         |          |                       |       |                        |       |                       |       |
| 5           |                  |                         |          |                       |       |                        |       |                       |       |
| 6           |                  |                         |          |                       |       |                        |       |                       |       |
| 7           |                  |                         |          |                       |       |                        |       |                       |       |
| 8           |                  |                         |          |                       |       |                        |       |                       |       |
| 9           |                  |                         |          |                       |       |                        |       |                       |       |
| 10          |                  |                         |          |                       |       |                        |       |                       |       |
| 11          |                  |                         |          |                       |       |                        |       |                       |       |
| 12          |                  |                         |          |                       |       |                        |       |                       |       |
| 13          |                  |                         |          |                       |       |                        |       |                       |       |
| 14          |                  |                         |          |                       |       |                        |       |                       |       |
| 15          |                  |                         |          |                       |       |                        |       |                       |       |
| 16          |                  |                         |          |                       |       |                        |       |                       |       |
| 17          |                  |                         |          |                       |       |                        |       |                       |       |
| 18          |                  |                         |          |                       |       |                        |       |                       |       |
| 19          |                  |                         |          |                       |       |                        |       |                       |       |
| 20          |                  |                         |          |                       |       |                        |       |                       |       |
| 21          |                  |                         |          |                       |       |                        |       |                       |       |
| 22          |                  |                         |          |                       |       |                        |       |                       |       |

MARGINAL COMMODITY COSTS NOT COMPUTED FOR DISTRIBUTION MARGINAL COST STUDY

Table - 11  
Northern Utilities- New Hampshire  
Marginal Cost Study

Summary of Marginal Customer Costs

| Line No.                             | Description                                      | ----- Residential ----- |                      | ----- Small C&I ----- |                 | ----- Medium C&I ----- |                   | ----- Large C&I ----- |                   |
|--------------------------------------|--------------------------------------------------|-------------------------|----------------------|-----------------------|-----------------|------------------------|-------------------|-----------------------|-------------------|
|                                      |                                                  | ResNonHt&LI<br>R-6&R-11 | ResHt&LI<br>R-5&R-10 | SmHiW<br>G-40         | SmLoW<br>G-50   | MdHiW<br>G-41          | MdLoW<br>G-51     | LgHiW<br>G-42         | LgLoW<br>G-52     |
|                                      | (1)                                              | (2)                     | (3)                  | (4)                   | (5)             | (6)                    | (7)               | (8)                   | (9)               |
| <b>PLANT INVESTMENT</b>              |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 1                                    | Meters and Regulators {1}                        | \$460.51                | \$460.51             | \$3,100.96            | \$3,100.96      | \$6,771.92             | \$6,771.92        | \$12,046.10           | \$12,046.10       |
| 2                                    | General Plant Loading Factor {2}                 | 5.04%                   | 5.04%                | 5.04%                 | 5.04%           | 5.04%                  | 5.04%             | 5.04%                 | 5.04%             |
| 3                                    | Unit Costs + Loading Factor (1)+(1)*(2)          | 483.73                  | 483.73               | 3,257.33              | 3,257.33        | 7,113.40               | 7,113.40          | 12,653.53             | 12,653.53         |
| 4                                    | Fixed Charge Rate {3}                            | 8.46%                   | 8.46%                | 8.46%                 | 8.46%           | 8.46%                  | 8.46%             | 8.46%                 | 8.46%             |
| 5                                    | Meters Carrying Costs (3)*(4)                    | 40.93                   | 40.93                | 275.63                | 275.63          | 601.92                 | 601.92            | 1,070.71              | 1,070.71          |
| 6                                    | Services {1}                                     | 3,035.34                | 3,035.34             | 3,701.52              | 3,701.52        | 7,423.90               | 7,423.90          | 34,415.64             | 34,415.64         |
| 7                                    | General Plant Loading Factor {2}                 | 5.04%                   | 5.04%                | 5.04%                 | 5.04%           | 5.04%                  | 5.04%             | 5.04%                 | 5.04%             |
| 8                                    | Unit Costs + Loading Factor (6)+(6)*(7)          | 3,188.40                | 3,188.40             | 3,888.17              | 3,888.17        | 7,798.25               | 7,798.25          | 36,151.07             | 36,151.07         |
| 9                                    | Fixed Charge Rate {3}                            | 6.92%                   | 6.92%                | 6.92%                 | 6.92%           | 6.92%                  | 6.92%             | 6.92%                 | 6.92%             |
| 10                                   | Services Carrying Costs (8)*(9)                  | 220.52                  | 220.52               | 268.92                | 268.92          | 539.36                 | 539.36            | 2,500.37              | 2,500.37          |
| 11                                   |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 12                                   | Total Plant Carrying Costs (5)+(10)              | \$261.46                | \$261.46             | \$544.55              | \$544.55        | \$1,141.28             | \$1,141.28        | \$3,571.08            | \$3,571.08        |
| 13                                   |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 14                                   | A & G Exp Plant-Related Loading Factor {4}       | 0.33%                   | 0.33%                | 0.33%                 | 0.33%           | 0.33%                  | 0.33%             | 0.33%                 | 0.33%             |
| 15                                   |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 16                                   | Annualized Cost (100%+(14))*(12)                 | \$262.31                | \$262.31             | \$546.34              | \$546.34        | \$1,145.03             | \$1,145.03        | \$3,582.80            | \$3,582.80        |
| 17                                   |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 18                                   |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| <b>OPERATING EXPENSES</b>            |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 20                                   | Plant Related O&M \$/Customer {5}                | \$36.51                 | \$36.51              | \$71.05               | \$71.05         | \$148.27               | \$148.27          | \$485.29              | \$485.29          |
| 21                                   | Customer Acctg & Mktg Expenses {6}               | \$42.15                 | \$42.07              | \$46.88               | \$47.23         | \$68.21                | \$67.80           | \$96.28               | \$136.14          |
| 22                                   | A&G Exp Non-Plant Loading Factor {4}             | 54.77%                  | 54.77%               | 54.77%                | 54.77%          | 54.77%                 | 54.77%            | 54.77%                | 54.77%            |
| 23                                   | Total O&M Expense (20+21+(20+21)*22)             | \$121.75                | \$121.62             | \$182.53              | \$183.07        | \$335.06               | \$334.42          | \$900.10              | \$961.80          |
| 24                                   |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| <b>WORKING CAPITAL - \$/Customer</b> |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 26                                   | Materials & Supplies + Prepayments Rate {3}      | 1.13%                   | 1.13%                | 1.13%                 | 1.13%           | 1.13%                  | 1.13%             | 1.13%                 | 1.13%             |
| 27                                   | M&S Cost [(3)+(8)]*(26)                          | 41.66                   | 41.66                | 81.06                 | 81.06           | 169.16                 | 169.16            | 553.66                | 553.66            |
| 28                                   | Working Cash O&M Allowance {7} [(16)+(34)]*1.26% | 4.82                    | 4.82                 | 9.15                  | 9.16            | 18.58                  | 18.57             | 56.27                 | 57.05             |
| 29                                   | Total Working Capital (27)+(28)                  | \$46.48                 | \$46.48              | \$90.21               | \$90.22         | \$187.74               | \$187.73          | \$609.93              | \$610.70          |
| 30                                   | {8}                                              |                         |                      |                       |                 |                        |                   |                       |                   |
| 31                                   | Working Capital Rev. Requirement (29)* 10.42%    | \$4.84                  | \$4.84               | \$9.40                | \$9.40          | \$19.56                | \$19.56           | \$63.56               | \$63.64           |
| 32                                   |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 33                                   | Annual Customer Related Cost                     | \$388.90                | \$388.78             | \$738.26              | \$738.81        | \$1,499.65             | \$1,499.01        | \$4,546.46            | \$4,608.23        |
| 34                                   | \$/Customer (16)+(23)+(31)                       |                         |                      |                       |                 |                        |                   |                       |                   |
| 35                                   | Inflation Adjustment {9}                         | 4.26%                   | 4.26%                | 4.26%                 | 4.26%           | 4.26%                  | 4.26%             | 4.26%                 | 4.26%             |
| 36                                   |                                                  |                         |                      |                       |                 |                        |                   |                       |                   |
| 37                                   | Annual Customer Related Cost (33)*[1+(35)]       | <u>\$405.48</u>         | <u>\$405.35</u>      | <u>\$769.73</u>       | <u>\$770.30</u> | <u>\$1,563.57</u>      | <u>\$1,562.91</u> | <u>\$4,740.25</u>     | <u>\$4,804.65</u> |

NOTES:

- Meter investment from Table - 3, Page 1.
- Source: Table - 7, page 2.
- Source: Table - 8, page 1.
- Source: Table - 7, page 1.
- Source: Table - 6, page 2.
- Source: Table - 6, page 4.
- Working cash computed on the basis of 4.58 days net lag.
- Revenue requirement for working cash computed as tax rate divided by 1 minus tax rate multiplied by the cost of equity all added to the cost of capital.
- Source: Price escalation to mid-point of rate year.

Table - 12  
Northern Utilities- New Hampshire  
Marginal Cost Study  
Summary of Marginal Cost Estimates

| Line No. | Description                                               | ResNonHt&LI<br>R-6&R-11 | ResHt&LI<br>R-5&R-10 | Small C&I<br>SmHiW<br>G-40 | Small C&I<br>SmLoW<br>G-50 | Medium C&I<br>MdHiW<br>G-41 | Medium C&I<br>MdLoW<br>G-51 | Large C&I<br>LgHiW<br>G-42 | Large C&I<br>LgLoW<br>G-52 | Total Company       |
|----------|-----------------------------------------------------------|-------------------------|----------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|---------------------|
| (1)      |                                                           | (2)                     | (3)                  | (4)                        | (5)                        | (6)                         | (7)                         | (8)                        | (9)                        | (10)                |
| 1        | <b>UNCOLLECTIBLE FACTOR</b>                               | 0.81%                   | 1.85%                | 0.17%                      | 0.21%                      | 0.20%                       | 0.11%                       | 0.01%                      | 0.00%                      |                     |
| 2        |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 3        | <b>CUSTOMER CHARGE \$'s per month</b>                     |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 4        | Customer Charge w/o Uncollectibles (1)                    | \$33.79                 | \$33.78              | \$64.14                    | \$64.19                    | \$130.30                    | \$130.24                    | \$395.02                   | \$400.39                   |                     |
| 5        | Adjustment for Uncollectibles (1)*(4)                     | 0.27                    | 0.63                 | 0.11                       | 0.13                       | 0.26                        | 0.14                        | 0.03                       | 0.00                       |                     |
| 6        | Customer Charge Incl. Uncollectibles (4)+(5)              | \$34.06                 | \$34.40              | \$64.25                    | \$64.32                    | \$130.56                    | \$130.39                    | \$395.05                   | \$400.39                   |                     |
| 7        |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 8        | <b>WINTER CHARGES</b>                                     |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 9        | Gas Supply Demand Charge, Design Day (3)                  | \$0.00                  | \$0.00               | \$0.00                     | \$0.00                     | \$0.00                      | \$0.00                      | \$0.00                     | \$0.00                     |                     |
| 10       | Delivery Demand Charge - Pressure Support (2)             | 0.00                    | 0.00                 | 0.00                       | 0.00                       | 0.00                        | 0.00                        | 0.00                       | 0.00                       |                     |
| 11       | Delivery Demand Charge - Reinforcements (2)               | 1.72                    | 1.72                 | 1.72                       | 1.72                       | 1.72                        | 1.72                        | 1.72                       | 1.72                       |                     |
| 12       | Delivery Demand Charge - Main Extensions (2)              | 8.67                    | 8.67                 | 8.67                       | 8.67                       | 8.67                        | 8.67                        | 8.67                       | 8.67                       |                     |
| 13       | Adjustment for Uncollectibles [(9)+(10)+(11)+(12)]*(1)    | \$0.08                  | \$0.19               | \$0.02                     | \$0.02                     | \$0.02                      | \$0.01                      | \$0.00                     | \$0.00                     |                     |
| 14       | Winter Charges Incl. Uncollectibles (13)+(14)             | \$10.47                 | \$10.58              | \$10.41                    | \$10.41                    | \$10.41                     | \$10.40                     | \$10.39                    | \$10.39                    |                     |
| 15       |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 16       | Supply Commodity Charge \$'s per Therms (3)               | \$0.00                  | \$0.00               | \$0.00                     | \$0.00                     | \$0.00                      | \$0.00                      | \$0.00                     | \$0.00                     |                     |
| 17       | Adjustment for Uncollectibles (1)*(16)                    | 0.00                    | 0.00                 | 0.00                       | 0.00                       | 0.00                        | 0.00                        | 0.00                       | 0.00                       |                     |
| 18       | Supply Commodity Charge Incl. Uncollectibles (17)+(18)    | \$0.00                  | \$0.00               | \$0.00                     | \$0.00                     | \$0.00                      | \$0.00                      | \$0.00                     | \$0.00                     |                     |
| 19       |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 20       | <b>SUMMER CHARGES</b>                                     |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 21       | Demand Charge \$'s per Design Day Therm (2)               | \$0.00                  | \$0.00               | \$0.00                     | \$0.00                     | \$0.00                      | \$0.00                      | \$0.00                     | \$0.00                     |                     |
| 22       | Delivery Demand Charge (2)                                | 0.00                    | 0.00                 | 0.00                       | 0.00                       | 0.00                        | 0.00                        | 0.00                       | 0.00                       |                     |
| 23       | Adjustment for Uncollectibles [(21)+(22)]*(1)             | 0.00                    | 0.00                 | 0.00                       | 0.00                       | 0.00                        | 0.00                        | 0.00                       | 0.00                       |                     |
| 24       | Summer Charges Incl. Uncollectibles                       | \$0.00                  | \$0.00               | \$0.00                     | \$0.00                     | \$0.00                      | \$0.00                      | \$0.00                     | \$0.00                     |                     |
| 25       |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 26       | Commodity Charge \$'s per Therms (3)                      | \$0.00                  | \$0.000              | \$0.000                    | \$0.000                    | \$0.000                     | \$0.000                     | \$0.000                    | \$0.000                    |                     |
| 27       | Adjustment for Uncollectibles (1)*(26)                    | \$0.00                  | \$0.00               | \$0.00                     | \$0.00                     | \$0.00                      | \$0.00                      | \$0.00                     | \$0.00                     |                     |
| 28       | Commodity Charge Incl. Uncollectibles (26)+(27)           | \$0.00                  | \$0.00               | \$0.00                     | \$0.00                     | \$0.00                      | \$0.00                      | \$0.00                     | \$0.00                     |                     |
| 29       |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 30       | <b>CALENDAR MONTH BILLING DETERMINANTS (2010)</b>         |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 31       | Customers                                                 | 1,653                   | 20,262               | 4,416                      | 969                        | 543                         | 234                         | 30                         | 27                         | 28,134              |
| 32       | Design Day Therms -Sales & Transp                         | 2,492                   | 168,098              | 100,487                    | 12,439                     | 112,415                     | 21,124                      | 48,711                     | 60,320                     | 526,087             |
| 33       | Winter Therms -Sales & Transp                             | 242,651                 | 12,947,562           | 7,326,994                  | 1,351,750                  | 8,741,511                   | 2,312,830                   | 3,926,891                  | 6,934,231                  | 43,784,420          |
| 34       | Summer Therms -Sales & Transp                             | 118,757                 | 2,871,684            | 1,183,653                  | 859,566                    | 2,043,743                   | 1,546,729                   | 1,536,441                  | 4,456,197                  | 14,616,770          |
| 35       |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 36       | <b>REVENUES RESULTING FROM FULL MARGINAL COST PRICING</b> |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 37       | Total Customer Related (6)*(31)*12 Mos.                   | \$675,723               | \$8,365,272          | \$3,404,535                | \$747,944                  | \$850,151                   | \$366,468                   | \$142,601                  | \$129,592                  | 14,682,286          |
| 38       |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 39       | <b>Winter</b>                                             |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 40       | Winter Supply Capacity Cost (1+(1))*(9)*(32)              | \$0                     | \$0                  | \$0                        | \$0                        | \$0                         | \$0                         | \$0                        | \$0                        | \$0                 |
| 41       | Winter Delivery Pressure Support (1+(1))*(10)*(32)        | 0                       | 0                    | 0                          | 0                          | 0                           | 0                           | 0                          | 0                          | 0                   |
| 42       | Winter Delivery Reinforcements (1+(1))*(11)*(32)          | 4,323                   | 294,607              | 173,195                    | 21,449                     | 193,820                     | 36,388                      | 83,826                     | 103,794                    | 911,401             |
| 43       | Winter Delivery Main Ext. (1+(1))*(12)*(32)               | 21,778                  | 1,484,169            | 872,521                    | 108,054                    | 976,425                     | 183,315                     | 422,296                    | 522,893                    | 4,591,451           |
| 44       | Winter Supply Commodity (1+(1))*(16)*(33)                 | 0                       | 0                    | 0                          | 0                          | 0                           | 0                           | 0                          | 0                          | 0                   |
| 45       | Total Winter (40)+(41)+(42)+(43)+(44)                     | \$26,101                | \$1,778,776          | \$1,045,716                | \$129,503                  | \$1,170,245                 | \$219,703                   | \$506,122                  | \$626,687                  | \$5,502,852         |
| 46       |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 47       | <b>Summer</b>                                             |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 48       | Summer Supply Demand (1+(1))*(21)*(32)                    | \$0                     | \$0                  | \$0                        | \$0                        | \$0                         | \$0                         | \$0                        | \$0                        | \$0                 |
| 49       | Delivery Demand Charge (1+(1))*(22)*(34)                  | 0                       | 0                    | 0                          | 0                          | 0                           | 0                           | 0                          | 0                          | 0                   |
| 50       | Summer Supply Commodity (1+(1))*(26)*(34)                 | 0                       | 0                    | 0                          | 0                          | 0                           | 0                           | 0                          | 0                          | 0                   |
| 51       | Total Summer                                              | \$0                     | \$0                  | \$0                        | \$0                        | \$0                         | \$0                         | \$0                        | \$0                        | \$0                 |
| 52       |                                                           |                         |                      |                            |                            |                             |                             |                            |                            |                     |
| 53       | Customer Subtotal (37)                                    | 675,723                 | 8,365,272            | 3,404,535                  | 747,944                    | 850,151                     | 366,468                     | 142,601                    | 129,592                    | \$14,682,286        |
| 54       | Supply Subtotal (40)+(44)+(48)+(50)                       | 0                       | 0                    | 0                          | 0                          | 0                           | 0                           | 0                          | 0                          | 0                   |
| 55       | Delivery Subtotal (41)+(42)+(43)+(49)                     | 26,101                  | 1,778,776            | 1,045,716                  | 129,503                    | 1,170,245                   | 219,703                     | 506,122                    | 626,687                    | 5,502,852           |
| 56       | <b>Total Marginal Annual Cost</b>                         | <b>\$701,824</b>        | <b>\$10,144,047</b>  | <b>\$4,450,251</b>         | <b>\$877,446</b>           | <b>\$2,020,396</b>          | <b>\$586,171</b>            | <b>\$648,723</b>           | <b>\$756,279</b>           | <b>\$20,185,138</b> |

NOTES:

- Source: Table 11, page 1, line (37)/12
- Source: Table - 9, page 1.
- Source: Table - 10, page 1. "These values are zeroed out sc production capacity costs that are recovered through the Cost of Gas Factor are excluded from delivery marginal costs.

Table - 13  
Northern Utilities- New Hampshire  
Marginal Cost Study

Marginal Unit Costs per Therms

| Line No. | Description                                                                                     | ----- Residential ----- |            | ----- Small C&I ----- |           | ----- Medium C&I ----- |           | ----- Large C&I ----- |            |
|----------|-------------------------------------------------------------------------------------------------|-------------------------|------------|-----------------------|-----------|------------------------|-----------|-----------------------|------------|
|          |                                                                                                 | ResNonHt&Ll             | ResHt&Ll   | SmHiW                 | SmLoW     | MdHiW                  | MdLoW     | LgHiW                 | LgLoW      |
|          |                                                                                                 | R-6&R-11                | R-5&R-10   | G-40                  | G-50      | G-41                   | G-51      | G-42                  | G-52       |
|          | (1)                                                                                             | (2)                     | (3)        | (4)                   | (5)       | (6)                    | (7)       | (8)                   | (9)        |
| 1        | CUSTOMER CHARGE                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 2        | Customer Charge (w/ Uncoll) \$'s per Month                                                      | \$34.063                | \$34.405   | \$64.250              | \$64.323  | \$130.558              | \$130.386 | \$395.054             | \$400.388  |
| 3        |                                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 4        |                                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 5        | WINTER CHARGES {1}                                                                              |                         |            |                       |           |                        |           |                       |            |
| 6        | Winter Supply Capacity Cost                                                                     | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 7        | Winter Delivery Pressure Support                                                                | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 8        | Winter Delivery Reinforcements                                                                  | \$0.0178                | \$0.0228   | \$0.0236              | \$0.0159  | \$0.0222               | \$0.0157  | \$0.0213              | \$0.0150   |
| 9        | Winter Delivery Main Ext.                                                                       | \$0.0898                | \$0.1146   | \$0.1191              | \$0.0799  | \$0.1117               | \$0.0793  | \$0.1075              | \$0.0754   |
| 10       | Winter Supply Commodity                                                                         | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 11       |                                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 12       |                                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 13       | SUMMER CHARGES {1}                                                                              |                         |            |                       |           |                        |           |                       |            |
| 14       | Supply Demand Charge                                                                            | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 15       | Delivery Demand Charge                                                                          | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 16       | Commodity Charge \$'s per Therms                                                                | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 17       |                                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 18       | <b>TOTAL CHARGES</b>                                                                            |                         |            |                       |           |                        |           |                       |            |
| 19       | <u>Supply Costs</u>                                                                             |                         |            |                       |           |                        |           |                       |            |
| 20       | Customer                                                                                        | \$0.00                  | \$0.00     | \$0.00                | \$0.00    | \$0.00                 | \$0.00    | \$0.00                | \$0.00     |
| 21       | Winter, \$/Therm                                                                                | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 22       | Summer, \$/Therm                                                                                | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 23       | Annual Avg, \$/Therm                                                                            | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 24       |                                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 25       | <u>Delivery</u>                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 26       | Customer (2)                                                                                    | \$34.06                 | \$34.40    | \$64.25               | \$64.32   | \$130.56               | \$130.39  | \$395.05              | \$400.39   |
| 27       | Winter, \$/Therm (7)+(8)+(9)                                                                    | \$0.1076                | \$0.1374   | \$0.1427              | \$0.0958  | \$0.1339               | \$0.0950  | \$0.1289              | \$0.0904   |
| 28       | Summer, \$/Therm (15)                                                                           | \$0.0000                | \$0.0000   | \$0.0000              | \$0.0000  | \$0.0000               | \$0.0000  | \$0.0000              | \$0.0000   |
| 29       | Annual Avg, \$/Therm                                                                            | \$0.0722                | \$0.1124   | \$0.1229              | \$0.0586  | \$0.1085               | \$0.0569  | \$0.0926              | \$0.0550   |
| 30       |                                                                                                 |                         |            |                       |           |                        |           |                       |            |
| 31       | TEST YEAR CALENDAR MONTH BILLING DETERMINANTS - SALES and TRANSPORTATION LOADS (All Firm Loads) |                         |            |                       |           |                        |           |                       |            |
| 32       | Customers                                                                                       | 1,653                   | 20,262     | 4,416                 | 969       | 543                    | 234       | 30                    | 27         |
| 33       | Design Day Therms                                                                               | 2,492                   | 168,098    | 100,487               | 12,439    | 112,415                | 21,124    | 48,711                | 60,320     |
| 34       | Winter Therms                                                                                   | 242,651                 | 12,947,562 | 7,326,994             | 1,351,750 | 8,741,511              | 2,312,830 | 3,926,891             | 6,934,231  |
| 35       | Summer Therms                                                                                   | 118,757                 | 2,871,684  | 1,183,653             | 859,566   | 2,043,743              | 1,546,729 | 1,536,441             | 4,456,197  |
| 36       | Total Annual Therms                                                                             | 361,408                 | 15,819,246 | 8,510,647             | 2,211,315 | 10,785,254             | 3,859,559 | 5,463,332             | 11,390,428 |

NOTES:

- Source: Table - 12 revenues divided by billing month normalized determinants.

Table - 14  
Northern Utilities- New Hampshire  
Marginal Cost Study

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Derivation of Marginal Prices Equi-Portionately Constrained by Embedded Costs

| Line No. | Description                                   | ----- Residential -----<br>ResNonHt&LI<br>R-6&R-11 | ResHt&LI<br>R-5&R-10 | ----- Small C&I -----<br>SmHiW<br>G-40 | SmLoW<br>G-50   | ----- Medium C&I -----<br>MdHiW<br>G-41 | MdLoW<br>G-51   | ----- Large C&I -----<br>LgHiW<br>G-42 | LgLoW<br>G-52   | Total<br>Company |
|----------|-----------------------------------------------|----------------------------------------------------|----------------------|----------------------------------------|-----------------|-----------------------------------------|-----------------|----------------------------------------|-----------------|------------------|
|          | (1)                                           | (2)                                                | (3)                  | (4)                                    | (5)             | (6)                                     | (7)             | (8)                                    | (9)             | (10)             |
| 1        | Estimated Delivery Revenue Req'm'ts           | {1}                                                |                      |                                        |                 |                                         |                 |                                        |                 | \$19,918,638     |
| 2        | Total Marginal Annual Revenue Requirements    | {2}                                                | 701,824              | 10,144,047                             | 4,450,251       | 877,446                                 | 2,020,396       | 586,171                                | 648,723         | 20,185,138       |
| 3        | Difference                                    | (1) - (2)                                          |                      |                                        |                 |                                         |                 |                                        |                 | (266,500)        |
| 4        | % Difference                                  | (3)/(2)                                            |                      |                                        |                 |                                         |                 |                                        |                 | -1.32%           |
| 5        | Equi-proportional Adjustment                  | (2) x (4)                                          | (9,266)              | (133,930)                              | (58,756)        | (11,585)                                | (26,675)        | (7,739)                                | (8,565)         | (266,500)        |
| 6        | Marginal Cost Constrained to Allowed Revenues | (2) + (5)                                          | 692,558              | 10,010,118                             | 4,391,495       | 865,862                                 | 1,993,722       | 578,432                                | 640,158         | 19,918,638       |
| 7        |                                               |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 8        | Marginal Unit Prices                          | Unit Costs from                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 9        | Customer                                      | Table 14 X                                         | \$33.61              | \$33.95                                | \$63.40         | \$63.47                                 | \$128.83        | \$128.66                               | \$389.84        | \$395.10         |
| 10       |                                               | [1+ (4)]                                           |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 11       | WINTER CHARGES                                |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 12       | Winter Supply Capacity Cost                   | \$0.0000                                           | \$0.0000             | \$0.0000                               | \$0.0000        | \$0.0000                                | \$0.0000        | \$0.0000                               | \$0.0000        |                  |
| 13       | Winter Delivery Pressure Support              | \$0.0000                                           | \$0.0000             | \$0.0000                               | \$0.0000        | \$0.0000                                | \$0.0000        | \$0.0000                               | \$0.0000        |                  |
| 14       | Winter Delivery Reinforcements                | \$0.0176                                           | \$0.0225             | \$0.0233                               | \$0.0157        | \$0.0219                                | \$0.0155        | \$0.0211                               | \$0.0148        |                  |
| 15       | Winter Delivery Main Ext.                     | \$0.0886                                           | \$0.1131             | \$0.1175                               | \$0.0789        | \$0.1102                                | \$0.0782        | \$0.1061                               | \$0.0744        |                  |
| 16       | Winter Supply Commodity                       | <u>\$0.0000</u>                                    | <u>\$0.0000</u>      | <u>\$0.0000</u>                        | <u>\$0.0000</u> | <u>\$0.0000</u>                         | <u>\$0.0000</u> | <u>\$0.0000</u>                        | <u>\$0.0000</u> |                  |
| 17       |                                               | \$0.1061                                           | \$0.1356             | \$0.1408                               | \$0.0945        | \$0.1321                                | \$0.0937        | \$0.1272                               | \$0.0892        |                  |
| 18       |                                               |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 19       | SUMMER CHARGES                                |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 20       | Supply Demand Charge                          | \$0.0000                                           | \$0.0000             | \$0.0000                               | \$0.0000        | \$0.0000                                | \$0.0000        | \$0.0000                               | \$0.0000        |                  |
| 21       | Delivery Demand Charge                        | \$0.0000                                           | \$0.0000             | \$0.0000                               | \$0.0000        | \$0.0000                                | \$0.0000        | \$0.0000                               | \$0.0000        |                  |
| 22       | Commodity Charge \$'s per Therms              | <u>\$0.0000</u>                                    | <u>\$0.0000</u>      | <u>\$0.0000</u>                        | <u>\$0.0000</u> | <u>\$0.0000</u>                         | <u>\$0.0000</u> | <u>\$0.0000</u>                        | <u>\$0.0000</u> |                  |
| 23       |                                               | \$0.0000                                           | \$0.0000             | \$0.0000                               | \$0.0000        | \$0.0000                                | \$0.0000        | \$0.0000                               | \$0.0000        |                  |
| 24       | TOTAL CHARGES                                 |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 25       | <u>Supply Costs</u>                           |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 26       | Customer                                      | \$0.00                                             | \$0.00               | \$0.00                                 | \$0.00          | \$0.00                                  | \$0.00          | \$0.00                                 | \$0.00          |                  |
| 27       | Winter, \$/Therm                              | \$0.0000                                           | \$0.0000             | \$0.0000                               | \$0.0000        | \$0.0000                                | \$0.0000        | \$0.0000                               | \$0.0000        |                  |
| 28       | Summer, \$/Therm                              | <u>\$0.0000</u>                                    | <u>\$0.0000</u>      | <u>\$0.0000</u>                        | <u>\$0.0000</u> | <u>\$0.0000</u>                         | <u>\$0.0000</u> | <u>\$0.0000</u>                        | <u>\$0.0000</u> |                  |
| 29       | Annual Avg, \$/Therm                          | \$0.0000                                           | \$0.0000             | \$0.0000                               | \$0.0000        | \$0.0000                                | \$0.0000        | \$0.0000                               | \$0.0000        |                  |
| 30       |                                               |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 31       |                                               |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 32       | <u>Delivery</u>                               |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 33       | Customer Charges                              | \$33.61                                            | \$33.95              | \$63.40                                | \$63.47         | \$128.83                                | \$128.66        | \$389.84                               | \$395.10        |                  |
| 34       | Winter, \$/Therm                              | \$0.1061                                           | \$0.1356             | \$0.1408                               | \$0.0945        | \$0.1321                                | \$0.0937        | \$0.1272                               | \$0.0892        |                  |
| 35       | Summer, \$/Therm                              | <u>\$0.0000</u>                                    | <u>\$0.0000</u>      | <u>\$0.0000</u>                        | <u>\$0.0000</u> | <u>\$0.0000</u>                         | <u>\$0.0000</u> | <u>\$0.0000</u>                        | <u>\$0.0000</u> |                  |
| 36       | Annual Avg, \$/Therm                          | \$0.0713                                           | \$0.1110             | \$0.1212                               | \$0.0578        | \$0.1071                                | \$0.0562        | \$0.0914                               | \$0.0543        |                  |
| 37       | or                                            |                                                    |                      |                                        |                 |                                         |                 |                                        |                 |                  |
| 38       | Facilities Charge, \$/Month                   | (6) / Annual bills \$                              | \$ 34.91             | \$ 41.17                               | \$ 82.88        | \$ 74.46                                | \$ 306.18       | \$ 205.80                              | \$ 1,773.46     | \$ 2,305.75      |

Table - 14  
Northern Utilities- New Hampshire  
Marginal Cost Study

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**Derivation of Marginal Prices Inverse Elasticity Constrained by Embedded Costs**

| Line No. | Description                                                |                     | ----- Residential -----<br>ResNonHt&LI<br>R-6&R-11 | ResHt&LI<br>R-5&R-10 | ----- Small C&I -----<br>SmHiW<br>G-40 | SmLoW<br>G-50 | ----- Medium C&I -----<br>MdHiW<br>G-41 | MdLoW<br>G-51 | ----- Large C&I -----<br>LgHiW<br>G-42 | LgLoW<br>G-52 | Total<br>Company |
|----------|------------------------------------------------------------|---------------------|----------------------------------------------------|----------------------|----------------------------------------|---------------|-----------------------------------------|---------------|----------------------------------------|---------------|------------------|
|          | (1)                                                        |                     | (2)                                                | (3)                  | (4)                                    | (5)           | (6)                                     | (7)           | (8)                                    | (9)           | (10)             |
|          | MARGINAL COSTS                                             |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 1        | Marginal Customer Related Costs                            | {2}                 | \$675,723                                          | \$8,365,272          | \$3,404,535                            | \$747,944     | \$850,151                               | \$366,468     | \$142,601                              | \$129,592     | \$14,682,286     |
| 2        | Total Marginal Annual Revenue Requirements                 | {2}                 | 701,824                                            | 10,144,047           | 4,450,251                              | 877,446       | 2,020,396                               | 586,171       | 648,723                                | 756,279       | \$20,185,138     |
| 3        | Non-Customer Costs                                         | (2)-(1)             | \$26,101                                           | \$8,365,272          | \$3,404,535                            | \$747,944     | \$850,151                               | \$366,468     | \$142,601                              | \$129,592     | \$14,032,665     |
| 4        |                                                            |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 5        | RECONCILIATION                                             |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 6        | Total Estimated Delivery Revenue Requirements              |                     |                                                    |                      |                                        |               |                                         |               |                                        |               | 19,918,638       |
| 7        | Customer Cost Adjusted to Meet Rev Req'd                   | (6)-(3)             |                                                    |                      |                                        |               |                                         |               |                                        |               | 5,885,973        |
| 8        | Constrained Customer Revenues                              | (1)*(7)/(1)         | 270,890                                            | 3,353,549            | 1,364,842                              | 299,843       | 340,817                                 | 146,913       | 57,167                                 | 51,952        |                  |
| 9        |                                                            |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 10       | CUSTOMER CHARGE (If allowed to be negative)                |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 11       | Average Number of Monthly Bills                            |                     | 1,653                                              | 20,262               | 4,416                                  | 969           | 543                                     | 234           | 30                                     | 27            | 28,134           |
| 12       | Customer Charge (w/ Uncoll) \$'s per Month                 | (8)/(11)/12         | \$13.66                                            | \$13.79              | \$25.76                                | \$25.79       | \$52.34                                 | \$52.27       | \$158.37                               | \$160.51      | \$17.43          |
| 13       |                                                            |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 14       | CUSTOMER CHARGE (If constrained to be non-negative)        |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 15       | Customer Charge (w/ Uncoll) \$'s per Month                 |                     | \$13.66                                            | \$13.79              | \$25.76                                | \$25.79       | \$52.34                                 | \$52.27       | \$158.37                               | \$160.51      | \$17.43          |
| 16       | Customer-Related Revenue                                   | (11)*(15)*12 Months | \$270,890                                          | \$3,353,549          | \$1,364,842                            | \$299,843     | \$340,817                               | \$146,913     | \$57,167                               | \$51,952      | \$5,885,973      |
| 17       | Adjmt to Winter Demand Charge                              | (8)-(16) {4}        | \$0.00                                             | \$0.00               | \$0.00                                 | \$0.00        | \$0.00                                  | \$0.00        | \$0.00                                 | \$0.00        | \$0.00           |
| 18       | Adjmt to Winter Demand Chrg, \$/Therms                     |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 19       |                                                            |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 20       | WINTER CHARGES (Adjusted for Non-negative Customer Charge) |                     |                                                    |                      |                                        |               |                                         |               |                                        |               |                  |
| 21       | Winter Billing Units                                       |                     | 242,651                                            | 12,947,562           | 7,326,994                              | 1,351,750     | 8,741,511                               | 2,312,830     | 3,926,891                              | 6,934,231     | 43,784,420       |
| 22       | Marginal Winter Demand Charge Revenues (Unadjusted)        |                     | 0                                                  | 0                    | 0                                      | 0             | 0                                       | 0             | 0                                      | 0             | 0                |
| 23       | Adjusted Winter Demand Revenue                             | (33)+(37)           | 0                                                  | 0                    | 0                                      | 0             | 0                                       | 0             | 0                                      | 0             | 0                |
| 24       | Adjusted Winter Demand Rate                                | (38)/(36)           | \$0.000                                            | \$0.000              | \$0.000                                | \$0.000       | \$0.000                                 | \$0.000       | \$0.000                                | \$0.000       | \$0.000          |
|          | Commodity Charge                                           | (18)                | \$0.000                                            | \$0.000              | \$0.000                                | \$0.000       | \$0.000                                 | \$0.000       | \$0.000                                | \$0.000       | \$0.000          |
|          | Total Winter                                               | (39)+(40)           | \$0.000                                            | \$0.000              | \$0.000                                | \$0.000       | \$0.000                                 | \$0.000       | \$0.000                                | \$0.000       | \$0.000          |

NOTES:

- Source: Company's Accounting Cost Study
- Source: Table - 12.
- Source: Table - 13.
- Assumes the Demand Charge is the second least elastic component of rates.



NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                  | ALLOC | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|-------|------------------|-------------------------------------------|-----------------------------------------------|
| SUMMARY OF RESULTS-1             |       |                  |                                           |                                               |
| RATE BASE                        |       |                  |                                           |                                               |
| 1 GAS PLANT IN SERVICE           |       | 131,165,787      | 51,166,854                                | 2,751,180                                     |
| 2 LESS: DEPREC & AMORT RES       |       | 48,958,719       | 19,848,006                                | 1,097,562                                     |
| 3 NET UTILITY PLANT IN SERVICE   |       | 82,207,068       | 31,318,848                                | 1,653,618                                     |
| ADD:                             |       |                  |                                           |                                               |
| 4 WORKING CASH REQUIREMENT       |       | 183,098          | 75,662                                    | 4,333                                         |
| 5 MATERIALS & SUPPLIES           |       | 820,863          | 313,297                                   | 16,894                                        |
| 6 PREPAYMENTS                    |       | 219,278          | 83,301                                    | 4,264                                         |
| DEDUCT:                          |       |                  |                                           |                                               |
| 7 CUSTOMER DEP, ADV & UNCLAIMED  |       | 996,418          | 534,634                                   | 27,098                                        |
| 8 DEFERRED TAXES                 |       | 12,871,497       | 5,018,489                                 | 270,667                                       |
| 9 RATE BASE                      |       | 69,562,392       | 26,237,984                                | 1,381,343                                     |
| DEVELOPMENT OF RETURN            |       |                  |                                           |                                               |
| 10 SALES OF GAS TO ULTIMATE CUST |       | 61,195,976       | 27,837,046                                | 756,372                                       |
| 11 OTHER OPERATING REVENUES      |       | 1,164,539        | 419,698                                   | 17,556                                        |
| 12 TOTAL GAS OPERATING REVENUES  |       | 62,360,515       | 28,256,744                                | 773,927                                       |
| LESS:                            |       |                  |                                           |                                               |
| 13 PURCHASED GAS COSTS           |       | 42,188,892       | 19,193,325                                | 427,977                                       |
| 14 OTHER OPER & MAINT EXPENSE    |       | 9,334,281        | 3,966,669                                 | 223,737                                       |
| 15 DEPRECIATION EXPENSE          |       | 4,329,077        | 1,788,650                                 | 104,457                                       |
| 16 OTHER TAXES                   |       | 2,393,765        | 935,787                                   | 50,508                                        |
| 17 INCOME TAXES                  |       | 715,084          | 594,391                                   | (31,064)                                      |
| 18 INTEREST ON CUSTOMER DEPOSITS |       | 19,313           | 11,589                                    | 581                                           |
| 19 TOTAL OPERATING EXPENSE       |       | 58,980,410       | 26,490,410                                | 776,196                                       |
| 20 OPERATING INCOME              |       | 3,380,105        | 1,766,334                                 | (2,269)                                       |
| 21 RATE OF RETURN                |       | 4.86%            | 6.73%                                     | -0.16%                                        |
| 22 RELATIVE RATE OF RETURN       |       | 1.000            | 1.385                                     | -0.034                                        |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                       | ALLOC                         | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-----------------------|-------------------------------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| SUMMARY OF RESULTS-1  |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| RATE BASE             |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                     | GAS PLANT IN SERVICE          | 25,963,141                          | 5,510,766                          | 18,589,005                           | 5,954,438                           | 7,635,842                           | 13,594,562                         |
| 2                     | LESS: DEPREC & AMORT RES      | 9,747,801                           | 2,031,570                          | 6,719,554                            | 2,126,772                           | 2,685,753                           | 4,701,700                          |
| 3                     | NET UTILITY PLANT IN SERVICE  | 16,215,340                          | 3,479,195                          | 11,869,451                           | 3,827,666                           | 4,950,089                           | 8,892,861                          |
| ADD:                  |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                     | WORKING CASH REQUIREMENT      | 37,845                              | 8,068                              | 24,151                               | 7,904                               | 9,146                               | 15,990                             |
| 5                     | MATERIALS & SUPPLIES          | 161,786                             | 35,104                             | 117,387                              | 38,357                              | 49,277                              | 88,762                             |
| 6                     | PREPAYMENTS                   | 42,049                              | 8,766                              | 32,257                               | 10,068                              | 13,839                              | 24,733                             |
| DEDUCT:               |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 7                     | CUSTOMER DEP, ADV & UNCLAIMED | 156,865                             | 78,424                             | 52,588                               | 43,754                              | 57,621                              | 45,435                             |
| 8                     | DEFERRED TAXES                | 2,551,723                           | 541,856                            | 1,822,975                            | 584,396                             | 748,499                             | 1,332,891                          |
| 9                     | RATE BASE                     | 13,748,432                          | 2,910,853                          | 10,167,682                           | 3,255,845                           | 4,216,232                           | 7,644,020                          |
| DEVELOPMENT OF RETURN |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                    | SALES OF GAS TO ULTIMATE CUST | 12,450,012                          | 2,619,516                          | 10,468,737                           | 3,343,823                           | 2,178,127                           | 1,542,342                          |
| 11                    | OTHER OPERATING REVENUES      | 207,282                             | 46,289                             | 185,152                              | 60,579                              | 80,285                              | 147,698                            |
| 12                    | TOTAL GAS OPERATING REVENUES  | 12,657,294                          | 2,665,805                          | 10,653,889                           | 3,404,402                           | 2,258,412                           | 1,690,040                          |
| LESS:                 |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                    | PURCHASED GAS COSTS           | 9,139,524                           | 1,843,323                          | 7,794,983                            | 2,517,366                           | 1,143,887                           | 128,508                            |
| 14                    | OTHER OPER & MAINT EXPENSE    | 1,971,439                           | 422,038                            | 1,206,576                            | 399,362                             | 422,041                             | 722,419                            |
| 15                    | DEPRECIATION EXPENSE          | 855,274                             | 184,019                            | 568,930                              | 185,914                             | 231,713                             | 410,120                            |
| 16                    | OTHER TAXES                   | 475,034                             | 100,970                            | 338,194                              | 108,566                             | 138,396                             | 246,309                            |
| 17                    | INCOME TAXES                  | (94,512)                            | 7,103                              | 161,970                              | 33,597                              | 71,878                              | (28,281)                           |
| 18                    | INTEREST ON CUSTOMER DEPOSITS | 2,984                               | 1,924                              | 167                                  | 832                                 | 1,044                               | 192                                |
| 19                    | TOTAL OPERATING EXPENSE       | 12,349,743                          | 2,559,377                          | 10,070,819                           | 3,245,638                           | 2,008,959                           | 1,479,267                          |
| 20                    | OPERATING INCOME              | 307,551                             | 106,428                            | 583,070                              | 158,764                             | 249,453                             | 210,774                            |
| 21                    | RATE OF RETURN                | 2.24%                               | 3.66%                              | 5.73%                                | 4.88%                               | 5.92%                               | 2.76%                              |
| 22                    | RELATIVE RATE OF RETURN       | 0.460                               | 0.752                              | 1.180                                | 1.004                               | 1.218                               | 0.567                              |

|                            |                                | ALLOC  | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------|--------------------------------|--------|------------------|-------------------------------------------|-----------------------------------------------|
| DEVELOPMENT OF RATE BASE-2 |                                |        |                  |                                           |                                               |
| GAS PLANT IN SERVICE       |                                |        |                  |                                           |                                               |
| INTANGIBLE PLANT           |                                |        |                  |                                           |                                               |
| 1                          | 303-MISC INTNGBLE PLANT - 8 YR | LABOR  | 1,757,809        | 706,480                                   | 39,983                                        |
| 2                          | 303-MISC INTNGBLE PLANT - 5 YR | LABOR  | 538,217          | 216,314                                   | 12,242                                        |
| 3                          | 303-MISC INTNG PLT - AMORT ADJ | LABOR  | 29,333           | 11,789                                    | 667                                           |
| 4                          | TOTAL INTANGIBLE PLANT         |        | 2,325,358        | 934,584                                   | 52,892                                        |
| PRODUCTION PLANT           |                                |        |                  |                                           |                                               |
| 5                          | 304-LAND                       | DEMLPG | 52,494           | 24,893                                    | 299                                           |
| 6                          | 305-STRUCTURES                 | DEMLPG | 169,854          | 80,545                                    | 969                                           |
| 7                          | 310-LAND & LAND RIGHTS         | DEMLPG | 0                | 0                                         | 0                                             |
| 8                          | 311-LPG GAS EQUIPMENT          | DEMLPG | 862,270          | 408,888                                   | 4,918                                         |
| 9                          | 320-OTHER EQUIPMENT            | DEMLPG | 34,055           | 16,149                                    | 194                                           |
| 10                         | 321-LNG EQUIPMENT              | DEMLPG | 27,657           | 13,115                                    | 158                                           |
| 11                         | TOTAL PRODUCTION PLANT         |        | 1,146,330        | 543,590                                   | 6,538                                         |
| OTHER STORAGE PLANT        |                                |        |                  |                                           |                                               |
| 12                         | 360-LAND                       | DEMLNG | 28,358           | 13,447                                    | 162                                           |
| 13                         | 361-STRUCTURES & IMPROVE       | DEMLPG | 182,976          | 86,767                                    | 1,044                                         |
| 14                         | 362-GAS HOLDERS                | DEMLPG | 1,533,321        | 727,101                                   | 8,745                                         |
| 15                         | 363-PURIFICATION EQUIPMENT     | DEMLPG | 42,469           | 20,139                                    | 242                                           |
| 16                         | TOTAL OTHER STORAGE PLANT      |        | 1,787,124        | 847,455                                   | 10,193                                        |

|                            |                                |        | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|----------------------------|--------------------------------|--------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVELOPMENT OF RATE BASE-2 |                                |        | ALLOC                               |                                    |                                      |                                     |                                     |                                    |
| GAS PLANT IN SERVICE       |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| INTANGIBLE PLANT           |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                          | 303-MISC INTNGBLE PLANT - 8 YR | LABOR  | 360,519                             | 77,998                             | 238,161                              | 78,741                              | 92,365                              | 163,560                            |
| 2                          | 303-MISC INTNGBLE PLANT - 5 YR | LABOR  | 110,386                             | 23,882                             | 72,922                               | 24,110                              | 28,281                              | 50,080                             |
| 3                          | 303-MISC INTNG PLT - AMORT ADJ | LABOR  | 6,016                               | 1,302                              | 3,974                                | 1,314                               | 1,541                               | 2,729                              |
| 4                          | TOTAL INTANGIBLE PLANT         |        | 476,921                             | 103,182                            | 315,057                              | 104,165                             | 122,188                             | 216,369                            |
| PRODUCTION PLANT           |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 5                          | 304-LAND                       | DEMLPG | 13,756                              | 688                                | 10,233                               | 1,135                               | 1,429                               | 61                                 |
| 6                          | 305-STRUCTURES                 | DEMLPG | 44,510                              | 2,225                              | 33,112                               | 3,672                               | 4,623                               | 199                                |
| 7                          | 310-LAND & LAND RIGHTS         | DEMLPG | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 8                          | 311-LPG GAS EQUIPMENT          | DEMLPG | 225,959                             | 11,294                             | 168,093                              | 18,641                              | 23,466                              | 1,009                              |
| 9                          | 320-OTHER EQUIPMENT            | DEMLPG | 8,924                               | 446                                | 6,639                                | 736                                 | 927                                 | 40                                 |
| 10                         | 321-LNG EQUIPMENT              | DEMLPG | 7,247                               | 362                                | 5,391                                | 598                                 | 753                                 | 32                                 |
| 11                         | TOTAL PRODUCTION PLANT         |        | 300,397                             | 15,015                             | 223,469                              | 24,782                              | 31,197                              | 1,342                              |
| OTHER STORAGE PLANT        |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                         | 360-LAND                       | DEMLNG | 7,431                               | 371                                | 5,528                                | 613                                 | 772                                 | 33                                 |
| 13                         | 361-STRUCTURES & IMPROVE       | DEMLPG | 47,949                              | 2,397                              | 35,670                               | 3,956                               | 4,980                               | 214                                |
| 14                         | 362-GAS HOLDERS                | DEMLPG | 401,808                             | 20,084                             | 298,910                              | 33,149                              | 41,729                              | 1,795                              |
| 15                         | 363-PURIFICATION EQUIPMENT     | DEMLPG | 11,129                              | 556                                | 8,279                                | 918                                 | 1,156                               | 50                                 |
| 16                         | TOTAL OTHER STORAGE PLANT      |        | 468,318                             | 23,408                             | 348,387                              | 38,636                              | 48,636                              | 2,092                              |

|                                  |                               | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|-------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-3 |                               |          |                  |                                           |                                               |
| DISTRIBUTION PLANT               |                               |          |                  |                                           |                                               |
| 1                                | 374.4-LAND RIGHTS             | DISTR    | 89,111           | 25,325                                    | 515                                           |
| 2                                | 374.5-RIGHT OF WAY            | DISTR    | 17,911           | 5,090                                     | 104                                           |
| 3                                | 375-STRUCTURES & IMPROVE      | DISTR    | 2,820,320        | 801,527                                   | 16,308                                        |
| 4                                | 376-MAINS                     | DISTR    | 65,443,047       | 18,598,715                                | 378,415                                       |
| 5                                | 378-MEAS & REG STATION EQ     | DISTR    | 1,787,578        | 508,024                                   | 10,336                                        |
| 6                                | 380-SERVICES                  | CUST380  | 31,874,279       | 20,802,676                                | 1,690,343                                     |
| 7                                | 381-METERS                    | CUST3813 | 3,506,040        | 998,722                                   | 81,152                                        |
| 8                                | 382-METER INSTALLATION        | CUST3813 | 12,313,745       | 3,507,664                                 | 285,019                                       |
| 9                                | 383-HOUSE REGULATORS          | CUST3813 | 222,731          | 63,447                                    | 5,155                                         |
| 10                               | 386-CONV BURNERS & WAT HEATER | CUST386  | 2,523,018        | 717,034                                   | 14,589                                        |
| 11                               | TOTAL DISTRIBUTION PLANT      |          | 120,597,781      | 46,028,224                                | 2,481,936                                     |
| GENERAL & COMMON PLANT           |                               |          |                  |                                           |                                               |
| 12                               | 389.1-LAND                    | LABOR    | 232,947          | 93,624                                    | 5,299                                         |
| 13                               | 391-OFFICE EQUIPMENT          | LABOR    | 602,092          | 241,987                                   | 13,695                                        |
| 14                               | 392-TRANSPORTATION EQUIP      | LABOR    | 22,974           | 9,233                                     | 523                                           |
| 15                               | 393-STORES EQUIPMENT          | DISTRPLT | 31,520           | 12,030                                    | 649                                           |
| 16                               | 394-TOOLS, SHOP & GARAGE EQ   | DISTRPLT | 874,077          | 333,607                                   | 17,989                                        |
| 17                               | 396-POWER OPERATED EQUIP      | DISTRPLT | 75,266           | 28,727                                    | 1,549                                         |
| 18                               | 397-COMMUNICATION EQUIP       | LABOR    | 1,030,686        | 414,242                                   | 23,444                                        |
| 19                               | 397-COMM EQ METSCAN - TELEMET | CUST397M | 112,656          | 0                                         | 0                                             |
| 20                               | 397-COMM EQUIP - ITRON        | CUST397I | 2,326,975        | 1,679,553                                 | 136,474                                       |
| 21                               | TOT GENERAL & COMMON PLT      |          | 5,309,194        | 2,813,002                                 | 199,620                                       |
| 22                               | TOTAL GAS PLANT IN SERVICE    |          | 131,165,787      | 51,166,854                                | 2,751,180                                     |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                 |                               |          | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|---------------------------------|-------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVELOPMENT OF RATE BASE CONT-3 |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| DISTRIBUTION PLANT              |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                               | 374.4-LAND RIGHTS             | DISTR    | 14,142                              | 3,025                              | 17,252                               | 5,239                               | 8,205                               | 15,407                             |
| 2                               | 374.5-RIGHT OF WAY            | DISTR    | 2,842                               | 608                                | 3,467                                | 1,053                               | 1,649                               | 3,097                              |
| 3                               | 375-STRUCTURES & IMPROVE      | DISTR    | 447,590                             | 95,747                             | 546,007                              | 165,827                             | 259,693                             | 487,622                            |
| 4                               | 376-MAINS                     | DISTR    | 10,385,933                          | 2,221,718                          | 12,669,621                           | 3,847,858                           | 6,025,951                           | 11,314,836                         |
| 5                               | 378-MEAS & REG STATION EQ     | DISTR    | 283,692                             | 60,686                             | 346,071                              | 105,104                             | 164,599                             | 309,065                            |
| 6                               | 380-SERVICES                  | CUST380  | 5,528,345                           | 1,215,496                          | 1,370,796                            | 587,932                             | 363,584                             | 315,107                            |
| 7                               | 381-METERS                    | CUST3813 | 1,465,573                           | 322,230                            | 394,322                              | 169,124                             | 40,134                              | 34,783                             |
| 8                               | 382-METER INSTALLATION        | CUST3813 | 5,147,317                           | 1,131,721                          | 1,384,918                            | 593,989                             | 140,956                             | 122,162                            |
| 9                               | 383-HOUSE REGULATORS          | CUST3813 | 93,105                              | 20,471                             | 25,050                               | 10,744                              | 2,550                               | 2,210                              |
| 10                              | 386-CONV BURNERS & WAT HEATER | CUST386  | 400,408                             | 85,654                             | 488,450                              | 148,346                             | 232,318                             | 436,219                            |
| 11                              | TOTAL DISTRIBUTION PLANT      |          | 23,768,947                          | 5,157,355                          | 17,245,956                           | 5,635,217                           | 7,239,639                           | 13,040,506                         |
| GENERAL & COMMON PLANT          |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                              | 389.1-LAND                    | LABOR    | 47,776                              | 10,336                             | 31,561                               | 10,435                              | 12,240                              | 21,675                             |
| 13                              | 391-OFFICE EQUIPMENT          | LABOR    | 123,487                             | 26,716                             | 81,576                               | 26,971                              | 31,637                              | 56,023                             |
| 14                              | 392-TRANSPORTATION EQUIP      | LABOR    | 4,712                               | 1,019                              | 3,113                                | 1,029                               | 1,207                               | 2,138                              |
| 15                              | 393-STORES EQUIPMENT          | DISTRPLT | 6,212                               | 1,348                              | 4,507                                | 1,473                               | 1,892                               | 3,408                              |
| 16                              | 394-TOOLS, SHOP & GARAGE EQ   | DISTRPLT | 172,274                             | 37,380                             | 124,996                              | 40,843                              | 52,472                              | 94,516                             |
| 17                              | 396-POWER OPERATED EQUIP      | DISTRPLT | 14,834                              | 3,219                              | 10,763                               | 3,517                               | 4,518                               | 8,139                              |
| 18                              | 397-COMMUNICATION EQUIP       | LABOR    | 211,389                             | 45,734                             | 139,645                              | 46,170                              | 54,158                              | 95,903                             |
| 19                              | 397-COMM EQ METSCAN - TELEMET | CUST397M | 1,942                               | 5,827                              | 15,539                               | 1,942                               | 34,962                              | 52,444                             |
| 20                              | 397-COMM EQUIP - ITRON        | CUST397I | 365,930                             | 80,226                             | 44,434                               | 19,258                              | 1,094                               | 7                                  |
| 21                              | TOT GENERAL & COMMON PLT      |          | 948,558                             | 211,806                            | 456,135                              | 151,638                             | 194,182                             | 334,252                            |
| 22                              | TOTAL GAS PLANT IN SERVICE    |          | 25,963,141                          | 5,510,766                          | 18,589,005                           | 5,954,438                           | 7,635,842                           | 13,594,562                         |

|                                     |                                | ALLOC  | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|-------------------------------------|--------------------------------|--------|------------------|-------------------------------------------|-----------------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-4    |                                |        |                  |                                           |                                               |
| DEPRECIATION & AMORTIZATION RESERVE |                                |        |                  |                                           |                                               |
| INTANGIBLE PLANT RESERVE            |                                |        |                  |                                           |                                               |
| 1                                   | 303-MISC INTNGBLE PLANT - 8 YR | PLT303 | 226,668          | 91,100                                    | 5,156                                         |
| 2                                   | 303-MISC INTNGBLE PLANT - 5 YR | PLT303 | 37,261           | 14,976                                    | 848                                           |
| 3                                   | 303-MISC INTNGBLE PLANT - 3 YR | PLT303 | 0                | 0                                         | 0                                             |
| 4                                   | TOT INTANGIBLE PLT RESERVE     |        | 263,930          | 106,076                                   | 6,003                                         |
| PRODUCTION PLANT RESERVE            |                                |        |                  |                                           |                                               |
| 5                                   | 305-STRUCTURES                 | PLT305 | 93,495           | 44,336                                    | 533                                           |
| 7                                   | 311-LPG GAS EQUIPMENT          | PLT311 | 671,661          | 318,502                                   | 3,831                                         |
| 8                                   | 320-OTHER EQUIPMENT            | PLT320 | 21,585           | 10,236                                    | 123                                           |
| 9                                   | 321-LNG EQUIPMENT              | PLT321 | 28,803           | 13,659                                    | 164                                           |
| 10                                  | TOTAL PRODUCTION RESERVE       |        | 815,545          | 386,732                                   | 4,652                                         |
| OTHER STORAGE PLANT                 |                                |        |                  |                                           |                                               |
| 11                                  | 361-STRUCTURES & IMPROVE       | PLT361 | 44,954           | 21,317                                    | 256                                           |
| 12                                  | 362-GAS HOLDERS                | PLT362 | 1,108,556        | 525,677                                   | 6,323                                         |
| 13                                  | 363-PURIFICATION EQUIPMENT     | PLT363 | 47,452           | 22,502                                    | 271                                           |
| 14                                  | TOTAL OTHER STORAGE PLANT      |        | 1,200,962        | 569,496                                   | 6,850                                         |

|                                     |                                | ALLOC  | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-------------------------------------|--------------------------------|--------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-4    |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| DEPRECIATION & AMORTIZATION RESERVE |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| INTANGIBLE PLANT RESERVE            |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                   | 303-MISC INTNGBLE PLANT - 8 YR | PLT303 | 46,489                              | 10,058                             | 30,711                               | 10,154                              | 11,910                              | 21,091                             |
| 2                                   | 303-MISC INTNGBLE PLANT - 5 YR | PLT303 | 7,642                               | 1,653                              | 5,048                                | 1,669                               | 1,958                               | 3,467                              |
| 3                                   | 303-MISC INTNGBLE PLANT - 3 YR | PLT303 | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 4                                   | TOT INTANGIBLE PLT RESERVE     |        | 54,131                              | 11,711                             | 35,759                               | 11,823                              | 13,868                              | 24,558                             |
| PRODUCTION PLANT RESERVE            |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 5                                   | 305-STRUCTURES                 | PLT305 | 24,501                              | 1,225                              | 18,226                               | 2,021                               | 2,544                               | 109                                |
| 7                                   | 311-LPG GAS EQUIPMENT          | PLT311 | 176,010                             | 8,798                              | 130,936                              | 14,521                              | 18,279                              | 786                                |
| 8                                   | 320-OTHER EQUIPMENT            | PLT320 | 5,656                               | 283                                | 4,208                                | 467                                 | 587                                 | 25                                 |
| 9                                   | 321-LNG EQUIPMENT              | PLT321 | 7,548                               | 377                                | 5,615                                | 623                                 | 784                                 | 34                                 |
| 10                                  | TOTAL PRODUCTION RESERVE       |        | 213,714                             | 10,682                             | 158,985                              | 17,631                              | 22,195                              | 955                                |
| OTHER STORAGE PLANT                 |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                                  | 361-STRUCTURES & IMPROVE       | PLT361 | 11,780                              | 589                                | 8,763                                | 972                                 | 1,223                               | 53                                 |
| 12                                  | 362-GAS HOLDERS                | PLT362 | 290,498                             | 14,520                             | 216,105                              | 23,966                              | 30,169                              | 1,298                              |
| 13                                  | 363-PURIFICATION EQUIPMENT     | PLT363 | 12,435                              | 622                                | 9,250                                | 1,026                               | 1,291                               | 56                                 |
| 14                                  | TOTAL OTHER STORAGE PLANT      |        | 314,713                             | 15,730                             | 234,119                              | 25,964                              | 32,684                              | 1,406                              |



|                                  |                                | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|--------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-5 |                                |         |                  |                                           |                                               |
|                                  | DISTRIBUTION PLANT RESERVE     |         |                  |                                           |                                               |
| 1                                | 375-STRUCTURES & IMPROVE       | PLT375  | 728,698          | 207,094                                   | 4,214                                         |
| 2                                | 376-MAINS                      | PLT376  | 21,331,867       | 6,062,452                                 | 123,348                                       |
| 3                                | 378-MEAS & REG STATION EQ      | PLT378  | 1,019,359        | 289,699                                   | 5,894                                         |
| 4                                | 380-SERVICES                   | PLT380  | 13,670,062       | 8,921,735                                 | 724,945                                       |
| 5                                | 381-METERS                     | PLT381  | 1,743,494        | 496,647                                   | 40,356                                        |
| 6                                | 382-METER INSTALLATION         | PLT382  | 4,016,684        | 1,144,183                                 | 92,972                                        |
| 7                                | 383-HOUSE REGULATORS           | PLT383  | 53,587           | 15,265                                    | 1,240                                         |
| 8                                | 386-CONV BURNERS & WAT HEATER  | PLT386  | 1,960,990        | 557,307                                   | 11,339                                        |
| 9                                | TOTAL DISTRIBUTION PLANT       |         | 44,524,741       | 17,694,382                                | 1,004,308                                     |
| GENERAL & COMMON PLT RESERVE     |                                |         |                  |                                           |                                               |
| 10                               | 391-OFFICE EQUIPMENT           | PLT391  | 433,041          | 174,043                                   | 9,850                                         |
| 11                               | 392-TRANSPORTATION EQUIP       | PLT392  | 47,597           | 19,130                                    | 1,083                                         |
| 12                               | 393-STORES EQUIPMENT           | PLT393  | 36,157           | 13,800                                    | 744                                           |
| 13                               | 394-TOOLS, SHOP & GARAGE EQ    | PLT394  | 406,405          | 155,112                                   | 8,364                                         |
| 14                               | 396-POWER OPERATED EQUIP       | PLT396  | 45,268           | 17,277                                    | 932                                           |
| 15                               | 397-COMMUNICATION EQUIP        | PLT397  | 517,998          | 208,188                                   | 11,782                                        |
| 16                               | 397-COMM EQ METSCAN - TELEMET  | PLT397M | 57,442           | 0                                         | 0                                             |
| 17                               | 397-COMM EQUIP - ITRON         | PLT397I | 801,841          | 578,749                                   | 47,027                                        |
| 18                               | TOTAL GENERAL PLT RESERVE      |         | 2,345,748        | 1,166,298                                 | 79,781                                        |
| 19                               | RESERVE VARIANCE ADJ & BLDG OH | PLANT   | (192,206)        | (74,978)                                  | (4,031)                                       |
| 20                               | TOTAL DEPRECIATION RESERVE     |         | 48,958,719       | 19,848,006                                | 1,097,562                                     |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                  |                                |         | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|----------------------------------|--------------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-5 |                                |         |                                     |                                    |                                      |                                     |                                     |                                    |
| DISTRIBUTION PLANT RESERVE       |                                |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                | 375-STRUCTURES & IMPROVE       | PLT375  | 115,646                             | 24,738                             | 141,074                              | 42,845                              | 67,098                              | 125,989                            |
| 2                                | 376-MAINS                      | PLT376  | 3,385,407                           | 724,193                            | 4,129,800                            | 1,254,251                           | 1,964,224                           | 3,688,193                          |
| 3                                | 378-MEAS & REG STATION EQ      | PLT378  | 161,774                             | 34,606                             | 197,346                              | 59,935                              | 93,862                              | 176,243                            |
| 4                                | 380-SERVICES                   | PLT380  | 2,370,966                           | 521,295                            | 587,899                              | 252,149                             | 155,932                             | 135,141                            |
| 5                                | 381-METERS                     | PLT381  | 728,805                             | 160,239                            | 196,090                              | 84,102                              | 19,958                              | 17,297                             |
| 6                                | 382-METER INSTALLATION         | PLT382  | 1,679,030                           | 369,162                            | 451,754                              | 193,756                             | 45,979                              | 39,849                             |
| 7                                | 383-HOUSE REGULATORS           | PLT383  | 22,400                              | 4,925                              | 6,027                                | 2,585                               | 613                                 | 532                                |
| 8                                | 386-CONV BURNERS & WAT HEATER  | PLT386  | 311,213                             | 66,573                             | 379,643                              | 115,300                             | 180,567                             | 339,047                            |
| 9                                | TOTAL DISTRIBUTION PLANT       |         | 8,775,240                           | 1,905,732                          | 6,089,632                            | 2,004,925                           | 2,528,233                           | 4,522,290                          |
| GENERAL & COMMON PLT RESERVE     |                                |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                               | 391-OFFICE EQUIPMENT           | PLT391  | 88,815                              | 19,215                             | 58,672                               | 19,398                              | 22,754                              | 40,293                             |
| 11                               | 392-TRANSPORTATION EQUIP       | PLT392  | 9,762                               | 2,112                              | 6,449                                | 2,132                               | 2,501                               | 4,429                              |
| 12                               | 393-STORES EQUIPMENT           | PLT393  | 7,126                               | 1,546                              | 5,171                                | 1,690                               | 2,171                               | 3,910                              |
| 13                               | 394-TOOLS, SHOP & GARAGE EQ    | PLT394  | 80,100                              | 17,380                             | 58,118                               | 18,990                              | 24,397                              | 43,945                             |
| 14                               | 396-POWER OPERATED EQUIP       | PLT396  | 8,922                               | 1,936                              | 6,473                                | 2,115                               | 2,717                               | 4,895                              |
| 15                               | 397-COMMUNICATION EQUIP        | PLT397  | 106,239                             | 22,985                             | 70,182                               | 23,204                              | 27,219                              | 48,198                             |
| 16                               | 397-COMM EQ METSCAN - TELEMET  | PLT397M | 990                                 | 2,971                              | 7,923                                | 990                                 | 17,827                              | 26,740                             |
| 17                               | 397-COMM EQUIP - ITRON         | PLT397I | 126,094                             | 27,645                             | 15,311                               | 6,636                               | 377                                 | 2                                  |
| 18                               | TOTAL GENERAL PLT RESERVE      |         | 428,048                             | 95,790                             | 228,299                              | 75,156                              | 99,963                              | 172,413                            |
| 19                               | RESERVE VARIANCE ADJ & BLDG OH | PLANT   | (38,046)                            | (8,075)                            | (27,240)                             | (8,725)                             | (11,189)                            | (19,921)                           |
| 20                               | TOTAL DEPRECIATION RESERVE     |         | 9,747,801                           | 2,031,570                          | 6,719,554                            | 2,126,772                           | 2,685,753                           | 4,701,700                          |

|                                  | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-6 |          |                  |                                           |                                               |
| ADDITIONS TO NET PLANT           |          |                  |                                           |                                               |
| WORKING CAPITAL REQUIREMENTS     |          |                  |                                           |                                               |
| CASH WORKING CAPITAL REQ         |          |                  |                                           |                                               |
| 1 PURCHASED GAS                  |          | 0                | 0                                         | 0                                             |
| 2 OTHER O&M                      | REVCLAIM | 183,098          | 75,662                                    | 4,333                                         |
| 3 TOTAL CASH WORKING CAP         |          | 183,098          | 75,662                                    | 4,333                                         |
| MATERIALS & SUPPLIES             |          |                  |                                           |                                               |
| 4 RENTAL EQUIP REPAIR PARTS      | PLT386   | 0                | 0                                         | 0                                             |
| 5 OTHER                          | DISTRPLT | 820,863          | 313,297                                   | 16,894                                        |
| 6 TOTAL MATERIALS & SUPPLIES     |          | 820,863          | 313,297                                   | 16,894                                        |
| 7 TOTAL WORKING CAPITAL          |          | 1,003,961        | 388,958                                   | 21,227                                        |
| PREPAYMENTS                      |          |                  |                                           |                                               |
| 8 PREPAYMENTS - OTHER            | PLANT    | 408,637          | 159,406                                   | 8,571                                         |
| 9 PREPAYMENTS - PENSION          | EXP926   | 177,633          | 71,393                                    | 4,040                                         |
| 10 PREPAYMENTS - OPEB            | EXP926   | (366,993)        | (147,498)                                 | (8,348)                                       |
| 11 TOTAL PREPAYMENTS             |          | 219,278          | 83,301                                    | 4,264                                         |
| 12 TOTAL ADDITIONS TO NET PLT    |          | 1,223,239        | 472,259                                   | 25,491                                        |

|                                  | ALLOC                      | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|----------------------------------|----------------------------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-6 |                            |                                     |                                    |                                      |                                     |                                     |                                    |
| ADDITIONS TO NET PLANT           |                            |                                     |                                    |                                      |                                     |                                     |                                    |
| WORKING CAPITAL REQUIREMENTS     |                            |                                     |                                    |                                      |                                     |                                     |                                    |
| CASH WORKING CAPITAL REQ         |                            |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                | PURCHASED GAS              | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 2                                | OTHER O&M                  | REVCLAIM                            | 37,845                             | 8,068                                | 24,151                              | 7,904                               | 9,146                              |
| 3                                | TOTAL CASH WORKING CAP     |                                     | 37,845                             | 8,068                                | 24,151                              | 7,904                               | 9,146                              |
| MATERIALS & SUPPLIES             |                            |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                                | RENTAL EQUIP REPAIR PARTS  | PLT386                              | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 5                                | OTHER                      | DISTRPLT                            | 161,786                            | 35,104                               | 117,387                             | 38,357                              | 49,277                             |
| 6                                | TOTAL MATERIALS & SUPPLIES |                                     | 161,786                            | 35,104                               | 117,387                             | 38,357                              | 49,277                             |
| 7                                | TOTAL WORKING CAPITAL      |                                     | 199,631                            | 43,173                               | 141,537                             | 46,261                              | 58,423                             |
| PREPAYMENTS                      |                            |                                     |                                    |                                      |                                     |                                     |                                    |
| 8                                | PREPAYMENTS - OTHER        | PLANT                               | 80,886                             | 17,168                               | 57,913                              | 18,551                              | 23,789                             |
| 9                                | PREPAYMENTS - PENSION      | EXP926                              | 36,432                             | 7,882                                | 24,067                              | 7,957                               | 9,334                              |
| 10                               | PREPAYMENTS - OPEB         | EXP926                              | (75,269)                           | (16,284)                             | (49,723)                            | (16,440)                            | (19,284)                           |
| 11                               | TOTAL PREPAYMENTS          |                                     | 42,049                             | 8,766                                | 32,257                              | 10,068                              | 13,839                             |
| 12                               | TOTAL ADDITIONS TO NET PLT |                                     | 241,680                            | 51,939                               | 173,794                             | 56,329                              | 72,262                             |
|                                  |                            |                                     |                                    |                                      |                                     |                                     | 129,485                            |

|                                  | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-7 |          |                  |                                           |                                               |
| DEDUCTIONS TO NET PLANT          |          |                  |                                           |                                               |
| 1 CUSTOMER DEPOSITS              | CUSTDEP  | 672,184          | 403,360                                   | 20,205                                        |
| 2 CUSTOMER ADVANCES              | PLT37680 | 324,234          | 131,274                                   | 6,893                                         |
| 3 UNCLAIMED FUNDS                | PLANT    | 0                | 0                                         | 0                                             |
| ACCUM DEFERRED INCOME TAX        |          |                  |                                           |                                               |
| 4 ACCEL DEP & AMORT & SETT ADJ   | PLANT    | 12,418,878       | 4,844,517                                 | 260,484                                       |
| 5 FAS 87 / 106                   | EXP926   | 241,753          | 97,163                                    | 5,499                                         |
| 6 SFAS 109 ACCT FOR INCOME TAXES | REVCLAIM | 0                | 0                                         | 0                                             |
| 7 BAD DEBT                       | EXP904   | (23,037)         | (15,815)                                  | (381)                                         |
| 8 PREPAID PROPERTY TAXES         | PLANT    | 118,210          | 46,113                                    | 2,479                                         |
| 9 DEFERRED RATE CASE COSTS       | REVCLAIM | 60,841           | 25,141                                    | 1,440                                         |
| 10 REMEDIATION                   | PSPLT    | 0                | 0                                         | 0                                             |
| 11 UNAMORT ITC (ACCT 255)        | PLANT    | 71,077           | 27,727                                    | 1,491                                         |
| 12 ACCUM NON-CURRENT             | PLANT    | (13,780)         | (5,375)                                   | (289)                                         |
| 13 INSURANCE CLAIM               | EXP9245  | (2,445)          | (982)                                     | (55)                                          |
| 14 OTHER                         | PLANT    | 0                | 0                                         | 0                                             |
| 15 TOTAL ACCUM DEF INCOME TAX    |          | 12,871,497       | 5,018,489                                 | 270,667                                       |
| 16 TOTAL DEDUCTIONS TO NET PLT   |          | 13,867,915       | 5,553,123                                 | 297,765                                       |
| 17 TOTAL RATE BASE               |          | 69,562,392       | 26,237,984                                | 1,381,343                                     |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                  | ALLOC                          | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|----------------------------------|--------------------------------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVELOPMENT OF RATE BASE CON'T-7 |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| DEDUCTIONS TO NET PLANT          |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                | CUSTOMER DEPOSITS              | CUSTDEP                             | 103,843                            | 66,972                               | 5,809                               | 28,975                              | 6,687                              |
| 2                                | CUSTOMER ADVANCES              | PLT37680                            | 53,022                             | 11,452                               | 46,779                              | 14,779                              | 38,748                             |
| 3                                | UNCLAIMED FUNDS                | PLANT                               | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| ACCUM DEFERRED INCOME TAX        |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                                | ACCEL DEP & AMORT & SETT ADJ   | PLANT                               | 2,458,210                          | 521,764                              | 1,760,021                           | 563,771                             | 1,287,144                          |
| 5                                | FAS 87 / 106                   | EXP926                              | 49,583                             | 10,727                               | 32,755                              | 10,829                              | 22,495                             |
| 6                                | SFAS 109 ACCT FOR INCOME TAXES | REVCLAIM                            | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 7                                | BAD DEBT                       | EXP904                              | (2,884)                            | (581)                                | (2,367)                             | (688)                               | (22)                               |
| 8                                | PREPAID PROPERTY TAXES         | PLANT                               | 23,399                             | 4,966                                | 16,753                              | 5,366                               | 12,252                             |
| 9                                | DEFERRED RATE CASE COSTS       | REVCLAIM                            | 12,575                             | 2,681                                | 8,025                               | 2,626                               | 5,313                              |
| 10                               | REMEDATION                     | PSPLT                               | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 11                               | UNAMORT ITC (ACCT 255)         | PLANT                               | 14,069                             | 2,986                                | 10,073                              | 3,227                               | 7,367                              |
| 12                               | ACCUM NON-CURRENT              | PLANT                               | (2,728)                            | (579)                                | (1,953)                             | (626)                               | (1,428)                            |
| 13                               | INSURANCE CLAIM                | EXP9245                             | (501)                              | (108)                                | (332)                               | (110)                               | (228)                              |
| 14                               | OTHER                          | PLANT                               | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 15                               | TOTAL ACCUM DEF INCOME TAX     |                                     | 2,551,723                          | 541,856                              | 1,822,975                           | 584,396                             | 1,332,891                          |
| 16                               | TOTAL DEDUCTIONS TO NET PLT    |                                     | 2,708,588                          | 620,280                              | 1,875,563                           | 628,150                             | 1,378,326                          |
| 17                               | TOTAL RATE BASE                |                                     | 13,748,432                         | 2,910,853                            | 10,167,682                          | 3,255,845                           | 7,644,020                          |

| REVENUES-8                       |                                  | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|----------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| GAS OPERATING REVENUES           |                                  |          |                  |                                           |                                               |
| 1                                | TOTAL FIRM SALES OF GAS          |          | 60,243,868       | 27,566,460                                | 750,866                                       |
| 2                                | SPECIAL CONTRACT REVENUES        | DISTR    | 952,108          | 270,586                                   | 5,505                                         |
| 3                                | TOTAL REVENUE SALES OF GAS       |          | 61,195,976       | 27,837,046                                | 756,372                                       |
| OTHER OPERATING REVENUES         |                                  |          |                  |                                           |                                               |
| 487-LATE PAYMENT CHARGES         |                                  |          |                  |                                           |                                               |
| 4                                | RESIDENTIAL HEATING - R-5 & R-10 | C488RH   | 73,976           | 73,976                                    | 0                                             |
| 5                                | RESIDENTIAL NON-HTG- R-6 & R-11  | C488RNH  | 3,706            | 0                                         | 3,706                                         |
| 6                                | C&I SMALL - LLF G40              | C488G40  | 19,045           | 0                                         | 0                                             |
| 7                                | C&I SMALL - HLF G50              | C488G50  | 5,314            | 0                                         | 0                                             |
| 8                                | C&I MEDIUM - LLF G41             | C488G41  | 12,283           | 0                                         | 0                                             |
| 9                                | C&I MEDIUM - HLF G51             | C488G51  | 6,663            | 0                                         | 0                                             |
| 10                               | C&I LARGE - LLF G42              | C488G42  | 1,065            | 0                                         | 0                                             |
| 11                               | C&I LARGE - HLF G52              | C488G52  | 1,226            | 0                                         | 0                                             |
| 12                               | TOTAL ACCOUNT 487                |          | 123,279          | 73,976                                    | 3,706                                         |
| 488-MISC SERVICE REVENUE         |                                  |          |                  |                                           |                                               |
| 13                               | RENTAL REVENUE                   | PLANT    | 2,106            | 821                                       | 44                                            |
| 14                               | RECONNECT FEE                    | CUST488R | 88,295           | 65,533                                    | 5,347                                         |
| 15                               | POOL ADMINISTRATION              | CUSTTRAN | 999              | 0                                         | 0                                             |
| 16                               | 3RD PARTY BILLING                | CUSTTRAN | 6,947            | 0                                         | 0                                             |
| 17                               | CUSTOMER TELEMETERING            | PLT397M  | 7,288            | 0                                         | 0                                             |
| 18                               | WATER HEAT & CONVER BURN REV     | PLT386   | 752,074          | 213,737                                   | 4,349                                         |
| 19                               | UNH REVENUE                      | PLT381   | 62,389           | 17,772                                    | 1,444                                         |
| 20                               | TOTAL ACCOUNT 488                |          | 920,096          | 297,863                                   | 11,184                                        |
| 495-ACCR REV - NON DIST BAD DEBT |                                  |          |                  |                                           |                                               |
|                                  |                                  | EXP904   | 0                | 0                                         | 0                                             |
| OTHER REVENUES                   |                                  |          |                  |                                           |                                               |
| 21                               | RENTAL INCOME - GRANITE          | GENPLT   | 6,168            | 2,436                                     | 136                                           |
| 22                               | RENTAL INCOME - USOURCE          | GENPLT   | 33,084           | 13,068                                    | 728                                           |
| 23                               | RENTAL INCOME - USC              | GENPLT   | 81,912           | 32,354                                    | 1,803                                         |
| 24                               | TOTAL OTHER REVENUES             |          | 121,164          | 47,859                                    | 2,666                                         |
| 25                               | TOTAL OTHER OPERATING REV        |          | 1,164,539        | 419,698                                   | 17,556                                        |
| 26                               | TOTAL GAS OPERATING REVENUE      |          | 62,360,515       | 28,256,744                                | 773,927                                       |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                  |                                  | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|----------------------------------|----------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| REVENUES-8                       |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| GAS OPERATING REVENUES           |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                | TOTAL FIRM SALES OF GAS          |          | 12,298,911                          | 2,587,193                          | 10,284,411                           | 3,287,842                           | 2,090,458                           | 1,377,726                          |
| 2                                | SPECIAL CONTRACT REVENUES        | DISTR    | 151,101                             | 32,323                             | 184,326                              | 55,981                              | 87,669                              | 164,616                            |
| 3                                | TOTAL REVENUE SALES OF GAS       |          | 12,450,012                          | 2,619,516                          | 10,468,737                           | 3,343,823                           | 2,178,127                           | 1,542,342                          |
| OTHER OPERATING REVENUES         |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 487-LATE PAYMENT CHARGES         |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                                | RESIDENTIAL HEATING - R-5 & R-10 | C488RH   | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 5                                | RESIDENTIAL NON-HTG- R-6 & R-11  | C488RNH  | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 6                                | C&I SMALL - LLF G40              | C488G40  | 19,045                              | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 7                                | C&I SMALL - HLF G50              | C488G50  | 0                                   | 5,314                              | 0                                    | 0                                   | 0                                   | 0                                  |
| 8                                | C&I MEDIUM - LLF G41             | C488G41  | 0                                   | 0                                  | 12,283                               | 0                                   | 0                                   | 0                                  |
| 9                                | C&I MEDIUM - HLF G51             | C488G51  | 0                                   | 0                                  | 0                                    | 6,663                               | 0                                   | 0                                  |
| 10                               | C&I LARGE - LLF G42              | C488G42  | 0                                   | 0                                  | 0                                    | 0                                   | 1,065                               | 0                                  |
| 11                               | C&I LARGE - HLF G52              | C488G52  | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 1,226                              |
| 12                               | TOTAL ACCOUNT 487                |          | 19,045                              | 5,314                              | 12,283                               | 6,663                               | 1,065                               | 1,226                              |
| 488-MISC SERVICE REVENUE         |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                               | RENTAL REVENUE                   | PLANT    | 417                                 | 88                                 | 298                                  | 96                                  | 123                                 | 218                                |
| 14                               | RECONNECT FEE                    | CUST488R | 14,282                              | 3,134                              | 0                                    | 0                                   | 0                                   | 0                                  |
| 15                               | POOL ADMINISTRATION              | CUSTTRAN | 435                                 | 101                                | 279                                  | 120                                 | 24                                  | 39                                 |
| 16                               | 3RD PARTY BILLING                | CUSTTRAN | 3,025                               | 699                                | 1,943                                | 837                                 | 170                                 | 274                                |
| 17                               | CUSTOMER TELEMETERING            | PLT397M  | 126                                 | 377                                | 1,005                                | 126                                 | 2,262                               | 3,392                              |
| 18                               | WATER HEAT & CONVER BURN REV     | PLT386   | 119,355                             | 25,532                             | 145,600                              | 44,220                              | 69,250                              | 130,030                            |
| 19                               | UNH REVENUE                      | PLT381   | 26,079                              | 5,734                              | 7,017                                | 3,010                               | 714                                 | 619                                |
| 20                               | TOTAL ACCOUNT 488                |          | 163,718                             | 35,665                             | 156,142                              | 48,408                              | 72,543                              | 134,573                            |
| 495-ACCR REV - NON DIST BAD DEBT |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
|                                  |                                  | EXP904   | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| OTHER REVENUES                   |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 21                               | RENTAL INCOME - GRANITE          | GENPLT   | 1,248                               | 270                                | 852                                  | 280                                 | 340                                 | 606                                |
| 22                               | RENTAL INCOME - USOURCE          | GENPLT   | 6,695                               | 1,450                              | 4,567                                | 1,504                               | 1,823                               | 3,249                              |
| 23                               | RENTAL INCOME - USC              | GENPLT   | 16,576                              | 3,590                              | 11,309                               | 3,723                               | 4,514                               | 8,044                              |
| 24                               | TOTAL OTHER REVENUES             |          | 24,519                              | 5,310                              | 16,728                               | 5,508                               | 6,677                               | 11,899                             |
| 25                               | TOTAL OTHER OPERATING REV        |          | 207,282                             | 46,289                             | 185,152                              | 60,579                              | 80,285                              | 147,698                            |
| 26                               | TOTAL GAS OPERATING REVENUE      |          | 12,657,294                          | 2,665,805                          | 10,653,889                           | 3,404,402                           | 2,258,412                           | 1,690,040                          |



|                                                       |                               | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|-------------------------------------------------------|-------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| OPER & MAINT EXPENSE-9                                |                               |          |                  |                                           |                                               |
| OPERATION & MAINTENANCE EXPENSE                       |                               |          |                  |                                           |                                               |
| LIQUEFIED PROPANE GAS PRODUCTION<br>OPERATION EXPENSE |                               |          |                  |                                           |                                               |
| 1                                                     | 710-SUPERVISION               | TLABPO   | 972              | 461                                       | 6                                             |
| 2                                                     | 717-PROPANE EXPENSES          | DEMLPG   | 5,517            | 2,616                                     | 31                                            |
| 3                                                     | 718-DISPATCHING PRODUCTION    | GASCOSTS | 0                | 0                                         | 0                                             |
| 4                                                     | 723-FUEL LPG GAS PROCESS      | DEMLPG   | 4,781            | 2,267                                     | 27                                            |
| 5                                                     | 728-LIQUID PETROLEUM GAS      | EGAS     | 0                | 0                                         | 0                                             |
| 6                                                     | 735-MISCELLANEOUS             | DEMLPG   | 19,818           | 9,398                                     | 113                                           |
| 7                                                     | 736-RENTS                     | DEMLPG   | 0                | 0                                         | 0                                             |
| 8                                                     | TOTAL OPERATION EXPENSE       |          | 31,089           | 14,742                                    | 177                                           |
| MAINTENANCE                                           |                               |          |                  |                                           |                                               |
| 9                                                     | 740-SUPERVISION               | TLABPM   | 972              | 461                                       | 6                                             |
| 10                                                    | 741-MAINTENANCE OF PLANT      | DEMLPG   | 2,407            | 1,141                                     | 14                                            |
| 11                                                    | 742-MAINT OF EQUIPMENT        | DEMLPG   | 8,277            | 3,925                                     | 47                                            |
| 12                                                    | 769-MAINT OF SCADA PRODUCTION | DEMLPG   | 657              | 312                                       | 4                                             |
| 13                                                    | TOTAL MAINTENANCE EXPENSE     |          | 12,314           | 5,839                                     | 70                                            |
| 14                                                    | TOTAL MANUF GAS PROD EXP      |          | 43,403           | 20,581                                    | 248                                           |

|                                                       |                               | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-------------------------------------------------------|-------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| OPER & MAINT EXPENSE-9                                |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| OPERATION & MAINTENANCE EXPENSE                       |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| LIQUEFIED PROPANE GAS PRODUCTION<br>OPERATION EXPENSE |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                                     | 710-SUPERVISION               | TLABPO   | 255                                 | 13                                 | 189                                  | 21                                  | 26                                  | 1                                  |
| 2                                                     | 717-PROPANE EXPENSES          | DEMLPG   | 1,446                               | 72                                 | 1,076                                | 119                                 | 150                                 | 6                                  |
| 3                                                     | 718-DISPATCHING PRODUCTION    | GASCOSTS | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 4                                                     | 723-FUEL LPG GAS PROCESS      | DEMLPG   | 1,253                               | 63                                 | 932                                  | 103                                 | 130                                 | 6                                  |
| 5                                                     | 728-LIQUID PETROLEUM GAS      | EGAS     | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 6                                                     | 735-MISCELLANEOUS             | DEMLPG   | 5,193                               | 260                                | 3,863                                | 428                                 | 539                                 | 23                                 |
| 7                                                     | 736-RENTS                     | DEMLPG   | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 8                                                     | TOTAL OPERATION EXPENSE       |          | 8,147                               | 407                                | 6,061                                | 672                                 | 846                                 | 36                                 |
| MAINTENANCE                                           |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                                                     | 740-SUPERVISION               | TLABPM   | 255                                 | 13                                 | 189                                  | 21                                  | 26                                  | 1                                  |
| 10                                                    | 741-MAINTENANCE OF PLANT      | DEMLPG   | 631                                 | 32                                 | 469                                  | 52                                  | 66                                  | 3                                  |
| 11                                                    | 742-MAINT OF EQUIPMENT        | DEMLPG   | 2,169                               | 108                                | 1,614                                | 179                                 | 225                                 | 10                                 |
| 12                                                    | 769-MAINT OF SCADA PRODUCTION | DEMLPG   | 172                                 | 9                                  | 128                                  | 14                                  | 18                                  | 1                                  |
| 13                                                    | TOTAL MAINTENANCE EXPENSE     |          | 3,227                               | 161                                | 2,400                                | 266                                 | 335                                 | 14                                 |
| 14                                                    | TOTAL MANUF GAS PROD EXP      |          | 11,374                              | 568                                | 8,461                                | 938                                 | 1,181                               | 51                                 |

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NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

**NH Gas Cost of Service Workpapers**  
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|                               |                                | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|-------------------------------|--------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| OPER & MAINT EXPENSE CONT-10  |                                |          |                  |                                           |                                               |
| PURCHASED GAS SUPPLY EXPENSES |                                |          |                  |                                           |                                               |
| PURCHASED GAS SUPPLY          |                                |          |                  |                                           |                                               |
| 804 PURCHASED GAS COSTS       |                                |          |                  |                                           |                                               |
| 1                             | TOTAL DIRECT GAS COSTS         | EGAS     | 42,184,110       | 19,191,057                                | 427,950                                       |
| 2                             | TOTAL DIRECT GAS COSTS         |          | 42,184,110       | 19,191,057                                | 427,950                                       |
| 3                             | 813-OTHER GAS SUPPLY EXP       | GASCOSTS | 125,576          | 57,129                                    | 1,274                                         |
| 4                             | 813-OTH GAS SUPP EXP-DEL SERV  | DISTR    | 65,073           | 18,493                                    | 376                                           |
| 5                             | TOTAL GAS SUPPLY EXPENSE       |          | 42,374,759       | 19,266,680                                | 429,600                                       |
| 6                             | TOTAL PRODUCTION EXPENSE       |          | 42,418,162       | 19,287,261                                | 429,847                                       |
| TRANSMISSION EXPENSES         |                                |          |                  |                                           |                                               |
| 7                             | 852-COMMUNICATION SYSTEM EXP   | DISTR    | 30,680           | 8,719                                     | 177                                           |
| 8                             | 856-MAINS EXPENSE              | DISTR    | 3                | 1                                         | 0                                             |
| 9                             | 857-T&D OPER MEAS & REGUL STNQ | DISTR    | 821              | 233                                       | 5                                             |
| 10                            | TOTAL TRANSMISSION EXPENSES    |          | 31,504           | 8,953                                     | 182                                           |

|                               |                                | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-------------------------------|--------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| OPER & MAINT EXPENSE CONT-10  |                                |          |                                     |                                    |                                      |                                     |                                     |                                    |
| PURCHASED GAS SUPPLY EXPENSES |                                |          |                                     |                                    |                                      |                                     |                                     |                                    |
| PURCHASED GAS SUPPLY          |                                |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 804 PURCHASED GAS COSTS       |                                |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                             | TOTAL DIRECT GAS COSTS         | EGAS     | 9,138,272                           | 1,843,260                          | 7,794,050                            | 2,517,263                           | 1,143,756                           | 128,502                            |
| 2                             | TOTAL DIRECT GAS COSTS         |          | 9,138,272                           | 1,843,260                          | 7,794,050                            | 2,517,263                           | 1,143,756                           | 128,502                            |
| 3                             | 813-OTHER GAS SUPPLY EXP       | GASCOSTS | 27,203                              | 5,487                              | 23,202                               | 7,494                               | 3,405                               | 383                                |
| 4                             | 813-OTH GAS SUPP EXP-DEL SERV  | DISTR    | 10,327                              | 2,209                              | 12,598                               | 3,826                               | 5,992                               | 11,251                             |
| 5                             | TOTAL GAS SUPPLY EXPENSE       |          | 9,175,802                           | 1,850,956                          | 7,829,850                            | 2,528,582                           | 1,153,153                           | 140,135                            |
| 6                             | TOTAL PRODUCTION EXPENSE       |          | 9,187,176                           | 1,851,525                          | 7,838,311                            | 2,529,520                           | 1,154,334                           | 140,186                            |
| TRANSMISSION EXPENSES         |                                |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 7                             | 852-COMMUNICATION SYSTEM EXP   | DISTR    | 4,869                               | 1,042                              | 5,940                                | 1,804                               | 2,825                               | 5,304                              |
| 8                             | 856-MAINS EXPENSE              | DISTR    | 1                                   | 0                                  | 1                                    | 0                                   | 0                                   | 1                                  |
| 9                             | 857-T&D OPER MEAS & REGUL STNQ | DISTR    | 130                                 | 28                                 | 159                                  | 48                                  | 76                                  | 142                                |
| 10                            | TOTAL TRANSMISSION EXPENSES    |          | 5,000                               | 1,070                              | 6,099                                | 1,852                               | 2,901                               | 5,447                              |

| OPER & MAINT EXPENSE CONT-11 |                               | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------|-------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| DISTRIBUTION EXPENSES        |                               |          |                  |                                           |                                               |
| OPERATION EXPENSE            |                               |          |                  |                                           |                                               |
| 1                            | 870-SUPER & ENGINEERING       | TLABDO   | 30,859           | 10,207                                    | 489                                           |
| 2                            | 851-SYS CONTROL & LOAD DISTR  | DISTR    | 0                | 0                                         | 0                                             |
| 3                            | 851-SYS CNTRL & LD GAS SUPPLY | GASCOSTS | 0                | 0                                         | 0                                             |
| 4                            | 857-MEAS & REG STA EQUIP      | PLT378   | 0                | 0                                         | 0                                             |
| 5                            | 874-MAINS & SERVICE EXPENSE   | PLT37680 | 562,176          | 227,611                                   | 11,951                                        |
| 6                            | 875-REGULAT STATION EXPENSE   | PLT378   | 152,142          | 43,238                                    | 880                                           |
| 7                            | 878-METER & HOUSE REG EXP     | PLT3813  | 804,803          | 229,254                                   | 18,628                                        |
| 8                            | 879-CUSTOMER INSTALL EXP      | PLT3803  | 39,486           | 20,909                                    | 1,699                                         |
| 9                            | 880-OTHER EXPENSES            | EXP8519  | 17,078           | 5,709                                     | 363                                           |
| 10                           | 880-USC-GAS DISTR - DELIVERY  | DISTR    | 515,868          | 146,608                                   | 2,983                                         |
| 11                           | 880-USC-GAS DISTR - SUPPLY    | GASCOSTS | 174,174          | 79,238                                    | 1,767                                         |
| 12                           | 882-METERING SYS GAS TRAINING | PLT381   | 4,413            | 1,257                                     | 102                                           |
| 13                           | TOTAL OPERATION EXPENSE       |          | 2,300,999        | 764,031                                   | 38,862                                        |
| MAINTENANCE                  |                               |          |                  |                                           |                                               |
| 14                           | 885-SUPERVISION               | TLABDM   | 68,440           | 23,796                                    | 928                                           |
| 15                           | 886-MAINT STRUCT & IMPROVE    | PLT375   | 5,588            | 1,588                                     | 32                                            |
| 16                           | 887-MAINTENANCE OF MAINS      | PLT376   | 257,655          | 73,225                                    | 1,490                                         |
| 17                           | 889-MT OF MEAS & REG STA EQ   | PLT378   | 20,567           | 5,845                                     | 119                                           |
| 18                           | 890-MT OF REG EQ (INDUST)     | PLT378   | (526)            | (149)                                     | (3)                                           |
| 19                           | 891-MT OF REG EQ (CITY GATE)  | PLT378   | 15,280           | 4,343                                     | 88                                            |
| 20                           | 891-MAIN DISTRI SCADA         | E880USC  | 13,616           | 4,456                                     | 94                                            |
| 21                           | 892-MAINTENANCE OF SERVICES   | PLT380   | 71,698           | 46,793                                    | 3,802                                         |
| 22                           | 893-MAINT METER & HOUSE REG   | PLT3813  | 103,807          | 29,570                                    | 2,403                                         |
| 23                           | 894-T&D MAINT SYSTEM EQUIP    | DISTR    | 1,327            | 377                                       | 8                                             |
| 24                           | 894-MNT WAT HTERS & CONV BURN | PLT386   | 222,510          | 63,237                                    | 1,287                                         |
| 25                           | 894-MAINT OF RENTED CONV BURN | PLT386   | 1,412            | 401                                       | 8                                             |
| 26                           | TOTAL MAINTENANCE EXPENSE     |          | 781,373          | 253,482                                   | 10,255                                        |
| 27                           | 586-INTERVAL DATA             | DISTR    | 172              | 49                                        | 1                                             |
| 28                           | TOTAL DISTRIBUTION EXPENSES   |          | 3,082,544        | 1,017,562                                 | 49,119                                        |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                              |                               | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------|-------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| OPER & MAINT EXPENSE CONT-11 |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| DISTRIBUTION EXPENSES        |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| OPERATION EXPENSE            |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                            | 870-SUPER & ENGINEERING       | TLABDO   | 7,551                               | 1,636                              | 4,747                                | 1,600                               | 1,695                               | 2,933                              |
| 2                            | 851-SYS CONTROL & LOAD DISTR  | DISTR    | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 3                            | 851-SYS CNTRL & LD GAS SUPPLY | GASCOSTS | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 4                            | 857-MEAS & REG STA EQUIP      | PLT378   | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 5                            | 874-MAINS & SERVICE EXPENSE   | PLT37680 | 91,933                              | 19,856                             | 81,108                               | 25,624                              | 36,911                              | 67,183                             |
| 6                            | 875-REGULAT STATION EXPENSE   | PLT378   | 24,145                              | 5,165                              | 29,454                               | 8,946                               | 14,009                              | 26,305                             |
| 7                            | 878-METER & HOUSE REG EXP     | PLT3813  | 336,419                             | 73,967                             | 90,516                               | 38,822                              | 9,213                               | 7,984                              |
| 8                            | 879-CUSTOMER INSTALL EXP      | PLT3803  | 10,082                              | 2,217                              | 2,616                                | 1,122                               | 451                                 | 391                                |
| 9                            | 880-OTHER EXPENSES            | EXP8519  | 5,068                               | 1,109                              | 2,232                                | 816                                 | 664                                 | 1,116                              |
| 10                           | 880-USC-GAS DISTR - DELIVERY  | DISTR    | 81,869                              | 17,513                             | 99,871                               | 30,331                              | 47,501                              | 89,191                             |
| 11                           | 880-USC-GAS DISTR - SUPPLY    | GASCOSTS | 37,731                              | 7,611                              | 32,181                               | 10,394                              | 4,722                               | 531                                |
| 12                           | 882-METERING SYS GAS TRAINING | PLT381   | 1,845                               | 406                                | 496                                  | 213                                 | 51                                  | 44                                 |
| 13                           | TOTAL OPERATION EXPENSE       |          | 596,643                             | 129,479                            | 343,221                              | 117,868                             | 115,216                             | 195,678                            |
| MAINTENANCE                  |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                           | 885-SUPERVISION               | TLABDM   | 11,110                              | 2,384                              | 11,562                               | 3,577                               | 5,310                               | 9,773                              |
| 15                           | 886-MAINT STRUCT & IMPROVE    | PLT375   | 887                                 | 190                                | 1,082                                | 329                                 | 515                                 | 966                                |
| 16                           | 887-MAINTENANCE OF MAINS      | PLT376   | 40,890                              | 8,747                              | 49,881                               | 15,149                              | 23,725                              | 44,547                             |
| 17                           | 889-MT OF MEAS & REG STA EQ   | PLT378   | 3,264                               | 698                                | 3,982                                | 1,209                               | 1,894                               | 3,556                              |
| 18                           | 890-MT OF REG EQ (INDUST)     | PLT378   | (83)                                | (18)                               | (102)                                | (31)                                | (48)                                | (91)                               |
| 19                           | 891-MT OF REG EQ (CITY GATE)  | PLT378   | 2,425                               | 519                                | 2,958                                | 898                                 | 1,407                               | 2,642                              |
| 20                           | 891-MAIN DISTRI SCADA         | E880USC  | 2,360                               | 496                                | 2,606                                | 804                                 | 1,030                               | 1,770                              |
| 21                           | 892-MAINTENANCE OF SERVICES   | PLT380   | 12,435                              | 2,734                              | 3,083                                | 1,322                               | 818                                 | 709                                |
| 22                           | 893-MAINT METER & HOUSE REG   | PLT3813  | 43,393                              | 9,541                              | 11,675                               | 5,007                               | 1,188                               | 1,030                              |
| 23                           | 894-T&D MAINT SYSTEM EQUIP    | DISTR    | 211                                 | 45                                 | 257                                  | 78                                  | 122                                 | 229                                |
| 24                           | 894-MNT WAT HTERS & CONV BURN | PLT386   | 35,313                              | 7,554                              | 43,077                               | 13,083                              | 20,489                              | 38,471                             |
| 25                           | 894-MAINT OF RENTED CONV BURN | PLT386   | 224                                 | 48                                 | 273                                  | 83                                  | 130                                 | 244                                |
| 26                           | TOTAL MAINTENANCE EXPENSE     |          | 152,428                             | 32,937                             | 130,335                              | 41,509                              | 56,579                              | 103,847                            |
| 27                           | 586-INTERVAL DATA             | DISTR    | 27                                  | 6                                  | 33                                   | 10                                  | 16                                  | 30                                 |
| 28                           | TOTAL DISTRIBUTION EXPENSES   |          | 749,098                             | 162,423                            | 473,590                              | 159,387                             | 171,811                             | 299,555                            |

| OPER & MAINT EXPENSE CONT-12 |                                  | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------|----------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| CUSTOMER ACCOUNT             |                                  |         |                  |                                           |                                               |
| 1                            | 901-SUPERVISION                  | TLABCA  | 0                | 0                                         | 0                                             |
| 2                            | 902-METER READING EXPENSE        | CUST902 | 124,019          | 87,709                                    | 7,127                                         |
| 3                            | 903-CUST RECORDS & COLLECT       | CUST903 | 1,112,845        | 739,311                                   | 60,582                                        |
| 904-UNCOLLECTIBLE ACCTS      |                                  |         |                  |                                           |                                               |
| 4                            | RESIDENTIAL HEATING - R-5 & R-10 | C904RH  | 159,331          | 159,331                                   | 0                                             |
| 5                            | RESIDENTIAL NON-HTG- R-6 & R-11  | C904RNH | 4,096            | 0                                         | 4,096                                         |
| 6                            | C&I SMALL - LLF G40              | C904G40 | 7,083            | 0                                         | 0                                             |
| 7                            | C&I SMALL - HLF G50              | C904G50 | 1,909            | 0                                         | 0                                             |
| 8                            | C&I MEDIUM - LLF G41             | C904G41 | 5,436            | 0                                         | 0                                             |
| 9                            | C&I MEDIUM - HLF G51             | C904G51 | 1,001            | 0                                         | 0                                             |
| 10                           | C&I LARGE - LLF G42              | C904G42 | 92               | 0                                         | 0                                             |
| 11                           | C&I LARGE - HLF G52              | C904G52 | 0                | 0                                         | 0                                             |
| 12                           | CGA BAD DEBT EXPENSE             | E904GAS | 160,113          | 73,434                                    | 1,509                                         |
| 13                           | BAD DEBT EXP ADJ DELIVERY        | EXP904B | 4,662            | 4,151                                     | 107                                           |
| 14                           | BAD DEBT EXP ADJ COST OF GAS     | E904GAS | 4,172            | 1,913                                     | 39                                            |
| 15                           | TOTAL ACCOUNT 904                |         | 347,894          | 238,830                                   | 5,751                                         |
| 16                           | TOTAL CUSTOMER ACCTS EXP         |         | 1,584,758        | 1,065,849                                 | 73,459                                        |
| CUSTOMER SERVICES & INFO EXP |                                  |         |                  |                                           |                                               |
| 17                           | 907-CUST SERV & INFO SUPRV       | TLABSE  | 0                | 0                                         | 0                                             |
| 18                           | 909-INFO & INSTRUCT ADVERTISING  | CUST908 | 2,357            | 1,168                                     | 77                                            |
| 19                           | TOT CUST SERV & INFO EXP         |         | 2,357            | 1,168                                     | 77                                            |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                              |                                         | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------|-----------------------------------------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| OPER & MAINT EXPENSE CONT-12 |                                         |                                     |                                    |                                      |                                     |                                     |                                    |
| CUSTOMER ACCOUNT             |                                         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                            | 901-SUPERVISION TLABCA                  | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 2                            | 902-METER READING EXPENSE CUST902       | 19,153                              | 4,319                              | 2,665                                | 1,049                               | 833                                 | 1,165                              |
| 3                            | 903-CUST RECORDS & COLLECT CUST903      | 198,150                             | 43,961                             | 44,223                               | 19,021                              | 3,238                               | 4,361                              |
| 904-UNCOLLECTIBLE ACCTS      |                                         |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                            | RESIDENTIAL HEATING - R-5 & R-10 C904RH | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 5                            | RESIDENTIAL NON-HTG- R-6 & R-11 C904RNH | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 6                            | C&I SMALL - LLF G40 C904G40             | 7,083                               | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 7                            | C&I SMALL - HLF G50 C904G50             | 0                                   | 1,909                              | 0                                    | 0                                   | 0                                   | 0                                  |
| 8                            | C&I MEDIUM - LLF G41 C904G41            | 0                                   | 0                                  | 5,436                                | 0                                   | 0                                   | 0                                  |
| 9                            | C&I MEDIUM - HLF G51 C904G51            | 0                                   | 0                                  | 0                                    | 1,001                               | 0                                   | 0                                  |
| 10                           | C&I LARGE - LLF G42 C904G42             | 0                                   | 0                                  | 0                                    | 0                                   | 92                                  | 0                                  |
| 11                           | C&I LARGE - HLF G52 C904G52             | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 12                           | CGA BAD DEBT EXPENSE E904GAS            | 35,362                              | 6,642                              | 29,405                               | 9,126                               | 4,307                               | 327                                |
| 13                           | BAD DEBT EXP ADJ DELIVERY EXP904B       | 185                                 | 50                                 | 142                                  | 26                                  | 2                                   | 0                                  |
| 14                           | BAD DEBT EXP ADJ COST OF GAS E904GAS    | 921                                 | 173                                | 766                                  | 238                                 | 112                                 | 9                                  |
| 15                           | TOTAL ACCOUNT 904                       | 43,550                              | 8,774                              | 35,749                               | 10,391                              | 4,514                               | 336                                |
| 16                           | TOTAL CUSTOMER ACCTS EXP                | 260,852                             | 57,054                             | 82,637                               | 30,460                              | 8,585                               | 5,861                              |
| CUSTOMER SERVICES & INFO EXP |                                         |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                           | 907-CUST SERV & INFO SUPRV TLABSE       | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 18                           | 909-INFO & INSTRUCT ADVERTISING CUST908 | 357                                 | 85                                 | 240                                  | 88                                  | 112                                 | 231                                |
| 19                           | TOT CUST SERV & INFO EXP                | 357                                 | 85                                 | 240                                  | 88                                  | 112                                 | 231                                |



| OPER & MAINT EXPENSE CONT-13     |                                 | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|---------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| ADMINISTRATIVE & GENERAL EXPENSE |                                 |          |                  |                                           |                                               |
| 1                                | 920-ADMIN & GENERAL SALARY      | LABOR    | 29,106           | 11,698                                    | 662                                           |
| 2                                | 921-OFFICE SUPPLIES & EXP       | LABOR    | 206,996          | 83,194                                    | 4,708                                         |
| 3                                | 923-OUTSIDE SERV EMPLOYED       | LABOR    | 238,816          | 95,982                                    | 5,432                                         |
| 4                                | 923-OUTSIDE SERV PEN & PBOP     | LABOR    | (391,541)        | (157,364)                                 | (8,906)                                       |
| 5                                | 923-OUTSIDE SERV UNITIL         | LABOR    | 2,271,469        | 912,925                                   | 51,666                                        |
| 6                                | 924-PROPERTY INSURANCE          | PLANT    | 8,015            | 3,127                                     | 168                                           |
| 7                                | 925-INJURIES & DAMAGES          | LABOR    | 262,313          | 105,426                                   | 5,967                                         |
| 8                                | PROPERTY & LIABILITY INSUR ADJ  | EXP9245  | 34,364           | 13,799                                    | 780                                           |
| 9                                | 926-EMPLOYED PENSION & BENF     | LABOR    | 1,050,249        | 422,105                                   | 23,889                                        |
| 10                               | PENSION PBOP & 401K ADJ         | LABOR    | 287,359          | 115,492                                   | 6,536                                         |
| 11                               | MEDICAL & DENTAL ADJUSTMENT     | LABOR    | 32,631           | 13,115                                    | 742                                           |
| 12                               | OTHER ADJUSTMENT ACCT 926       | LABOR    | 0                | 0                                         | 0                                             |
| 13                               | 928-REGULATORY COMM EXPENSE     | REVCLAIM | 111,270          | 45,980                                    | 2,633                                         |
| 14                               | SETTLEMENT ADJUSTMENTS          | TOTAG    | (77,470)         | (31,265)                                  | (1,737)                                       |
| 15                               | GAS SUPPLY LEGAL COSTS ACCT 923 | GASCOSTS | 15,000           | 6,824                                     | 152                                           |
| 16                               | 930-MISC GEN EXP & EEI ADJ      | LABOR    | 70,664           | 28,401                                    | 1,607                                         |
| 17                               | 930-SAFETY AWARENESS PROG ADJ   | LABOR    | 1,461            | 587                                       | 33                                            |
| 18                               | 931-RENTS                       | LABOR    | 12,961           | 5,209                                     | 295                                           |
| 19                               | TOTAL OPERATION EXPENSE         |          | 4,163,663        | 1,675,235                                 | 94,628                                        |
| MAINTENANCE                      |                                 |          |                  |                                           |                                               |
| 20                               | 932-ERC COSTS                   | PSPLT    | 74,917           | 35,526                                    | 427                                           |
| 21                               | 932 & 935-MAINT OF GENERAL PLT  | GENPLT   | 21,214           | 8,379                                     | 467                                           |
| 22                               | TOTAL ADMIN & GEN EXPENSE       |          | 4,259,794        | 1,719,140                                 | 95,522                                        |
| 23                               | WAGE ADJ & INCENTIVE COMP       | OMLAB    | 163,290          | 68,079                                    | 3,976                                         |
| 24                               | UNION BONUS                     | OMLAB    | (19,236)         | (8,020)                                   | (468)                                         |
| 25                               | TOTAL GAS O & M EXPENSE         |          | 51,523,173       | 23,159,993                                | 651,714                                       |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                  |                                 | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|----------------------------------|---------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| OPER & MAINT EXPENSE CONT-13     |                                 |          |                                     |                                    |                                      |                                     |                                     |                                    |
| ADMINISTRATIVE & GENERAL EXPENSE |                                 |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                | 920-ADMIN & GENERAL SALARY      | LABOR    | 5,969                               | 1,291                              | 3,943                                | 1,304                               | 1,529                               | 2,708                              |
| 2                                | 921-OFFICE SUPPLIES & EXP       | LABOR    | 42,454                              | 9,185                              | 28,045                               | 9,272                               | 10,877                              | 19,260                             |
| 3                                | 923-OUTSIDE SERV EMPLOYED       | LABOR    | 48,980                              | 10,597                             | 32,357                               | 10,698                              | 12,549                              | 22,221                             |
| 4                                | 923-OUTSIDE SERV PEN & PBOP     | LABOR    | (80,303)                            | (17,374)                           | (53,049)                             | (17,539)                            | (20,574)                            | (36,432)                           |
| 5                                | 923-OUTSIDE SERV UNITIL         | LABOR    | 465,869                             | 100,791                            | 307,756                              | 101,751                             | 119,356                             | 211,355                            |
| 6                                | 924-PROPERTY INSURANCE          | PLANT    | 1,587                               | 337                                | 1,136                                | 364                                 | 467                                 | 831                                |
| 7                                | 925-INJURIES & DAMAGES          | LABOR    | 53,799                              | 11,639                             | 35,540                               | 11,750                              | 13,783                              | 24,408                             |
| 8                                | PROPERTY & LIABILITY INSUR ADJ  | EXP9245  | 7,041                               | 1,522                              | 4,662                                | 1,540                               | 1,811                               | 3,208                              |
| 9                                | 926-EMPLOYED PENSION & BENF     | LABOR    | 215,402                             | 46,602                             | 142,296                              | 47,046                              | 55,186                              | 97,723                             |
| 10                               | PENSION PBOP & 401K ADJ         | LABOR    | 58,936                              | 12,751                             | 38,934                               | 12,872                              | 15,100                              | 26,738                             |
| 11                               | MEDICAL & DENTAL ADJUSTMENT     | LABOR    | 6,692                               | 1,448                              | 4,421                                | 1,462                               | 1,715                               | 3,036                              |
| 12                               | OTHER ADJUSTMENT ACCT 926       | LABOR    | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 13                               | 928-REGULATORY COMM EXPENSE     | REVCLAIM | 22,998                              | 4,903                              | 14,677                               | 4,803                               | 5,558                               | 9,717                              |
| 14                               | SETTLEMENT ADJUSTMENTS          | TOTAG    | (15,969)                            | (3,394)                            | (10,584)                             | (3,440)                             | (4,027)                             | (7,054)                            |
| 15                               | GAS SUPPLY LEGAL COSTS ACCT 923 | GASCOSTS | 3,249                               | 655                                | 2,771                                | 895                                 | 407                                 | 46                                 |
| 16                               | 930-MISC GEN EXP & EEI ADJ      | LABOR    | 14,493                              | 3,136                              | 9,574                                | 3,165                               | 3,713                               | 6,575                              |
| 17                               | 930-SAFETY AWARENESS PROG ADJ   | LABOR    | 300                                 | 65                                 | 198                                  | 65                                  | 77                                  | 136                                |
| 18                               | 931-RENTS                       | LABOR    | 2,658                               | 575                                | 1,756                                | 581                                 | 681                                 | 1,206                              |
| 19                               | TOTAL OPERATION EXPENSE         |          | 854,155                             | 184,730                            | 564,433                              | 186,590                             | 218,208                             | 385,683                            |
| MAINTENANCE                      |                                 |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 20                               | 932-ERC COSTS                   | PSPLT    | 19,632                              | 981                                | 14,605                               | 1,620                               | 2,039                               | 88                                 |
| 21                               | 932 & 935-MAINT OF GENERAL PLT  | GENPLT   | 4,293                               | 930                                | 2,929                                | 964                                 | 1,169                               | 2,083                              |
| 22                               | TOTAL ADMIN & GEN EXPENSE       |          | 878,080                             | 186,641                            | 581,967                              | 189,174                             | 221,416                             | 387,854                            |
| 23                               | WAGE ADJ & INCENTIVE COMP       | OMLAB    | 34,459                              | 7,440                              | 21,213                               | 7,081                               | 7,674                               | 13,367                             |
| 24                               | UNION BONUS                     | OMLAB    | (4,059)                             | (876)                              | (2,499)                              | (834)                               | (904)                               | (1,575)                            |
| 25                               | TOTAL GAS O & M EXPENSE         |          | 11,110,963                          | 2,265,361                          | 9,001,558                            | 2,916,728                           | 1,565,928                           | 850,927                            |

|                                        | ALLOC | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------------|-------|------------------|-------------------------------------------|-----------------------------------------------|
| DEPRECIATION & AMORTIZATION-14         |       |                  |                                           |                                               |
| DEPRECIATION & AMORTIZATION EXPENSE    |       |                  |                                           |                                               |
| AMORTIZATION EXPENSE                   |       |                  |                                           |                                               |
| 1 INTANGIBLE AMORTIZATION PLT303       |       | 0                | 0                                         | 0                                             |
| 2 TRANSITION & TRANSACTION AMORT PLANT |       | 0                | 0                                         | 0                                             |
| 3 COMPUTER SOFT & SETTLS ADJ LABOR     |       | 168,814          | 67,848                                    | 3,840                                         |
| 4 OTHER AMORTIZATIONS PLANT            |       | 156,712          | 61,132                                    | 3,287                                         |
| 5 FAS 109 NET REG ASSET AMORT REVCLAIM |       | 106,680          | 44,083                                    | 2,525                                         |
| 6 AMORT INVESTMENT TAX CREDIT PLANT    |       | (12,840)         | (5,009)                                   | (269)                                         |
| 7 GRANITE RATE CASE COSTS ADJ REVCLAIM |       | 0                | 0                                         | 0                                             |
| 8 TOTAL AMORTIZATION EXPENSE           |       | 419,366          | 168,055                                   | 9,382                                         |
| DEPRECIATION EXPENSE                   |       |                  |                                           |                                               |
| PRODUCTION PLANT EXP                   |       |                  |                                           |                                               |
| 9 305-STRUCTURES PLT305                |       | 1,063            | 504                                       | 6                                             |
| 10 311-LPG GAS EQUIPMENT PLT311        |       | 9,348            | 4,433                                     | 53                                            |
| 11 361-STRUCTURES & IMPROVE PLT361     |       | 4,001            | 1,897                                     | 23                                            |
| 12 362-GAS HOLDERS PLT362              |       | 34,380           | 16,303                                    | 196                                           |
| 13 TOTAL PRODUCTION PLANT              |       | 48,791           | 23,137                                    | 278                                           |

|                                     | ALLOC                                | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-------------------------------------|--------------------------------------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEPRECIATION & AMORTIZATION-14      |                                      |                                     |                                    |                                      |                                     |                                     |                                    |
| DEPRECIATION & AMORTIZATION EXPENSE |                                      |                                     |                                    |                                      |                                     |                                     |                                    |
| AMORTIZATION EXPENSE                |                                      |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                   | INTANGIBLE AMORTIZATION PLT303       | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 2                                   | TRANSITION & TRANSACTION AMORT PLANT | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 3                                   | COMPUTER SOFT & SETTLS ADJ LABOR     | 34,623                              | 7,491                              | 22,872                               | 7,562                               | 8,870                               | 15,708                             |
| 4                                   | OTHER AMORTIZATIONS PLANT            | 31,020                              | 6,584                              | 22,209                               | 7,114                               | 9,123                               | 16,242                             |
| 5                                   | FAS 109 NET REG ASSET AMORT REVCLAIM | 22,050                              | 4,701                              | 14,071                               | 4,605                               | 5,329                               | 9,316                              |
| 6                                   | AMORT INVESTMENT TAX CREDIT PLANT    | (2,542)                             | (539)                              | (1,820)                              | (583)                               | (747)                               | (1,331)                            |
| 7                                   | GRANITE RATE CASE COSTS ADJ REVCLAIM | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 8                                   | TOTAL AMORTIZATION EXPENSE           | 85,151                              | 18,236                             | 57,333                               | 18,699                              | 22,575                              | 39,935                             |
| DEPRECIATION EXPENSE                |                                      |                                     |                                    |                                      |                                     |                                     |                                    |
| PRODUCTION PLANT EXP                |                                      |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                                   | 305-STRUCTURES PLT305                | 279                                 | 14                                 | 207                                  | 23                                  | 29                                  | 1                                  |
| 10                                  | 311-LPG GAS EQUIPMENT PLT311         | 2,450                               | 122                                | 1,822                                | 202                                 | 254                                 | 11                                 |
| 11                                  | 361-STRUCTURES & IMPROVE PLT361      | 1,048                               | 52                                 | 780                                  | 86                                  | 109                                 | 5                                  |
| 12                                  | 362-GAS HOLDERS PLT362               | 9,009                               | 450                                | 6,702                                | 743                                 | 936                                 | 40                                 |
| 13                                  | TOTAL PRODUCTION PLANT               | 12,786                              | 639                                | 9,511                                | 1,055                               | 1,328                               | 57                                 |

|    |                                |         | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----|--------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
|    | DEPRECIATION & AMORTIZATION-15 | ALLOC   |                  |                                           |                                               |
|    | DISTRIBUTION EXPENSE           |         |                  |                                           |                                               |
| 1  | 375-STRUCTURES & IMPROVE       | PLT375  | 20,218           | 5,746                                     | 117                                           |
| 2  | 376-MAINS                      | PLT376  | 1,909,817        | 542,764                                   | 11,043                                        |
| 3  | 378.2-MEAS & REG STATION EQ    | PLT378  | 44,655           | 12,691                                    | 258                                           |
| 4  | 380-SERVICES                   | PLT380  | 1,176,056        | 767,550                                   | 62,368                                        |
| 5  | 381-METERS                     | PLT381  | 78,904           | 22,476                                    | 1,826                                         |
| 6  | 382-METER INSTALLATION         | PLT382  | 415,788          | 118,440                                   | 9,624                                         |
| 7  | 383-HOUSE REGULATORS           | PLT383  | 6,605            | 1,881                                     | 153                                           |
| 8  | 386-OTHER PROP CUST PREM       | PLT386  | 88,323           | 25,101                                    | 511                                           |
| 9  | TOTAL DISTRIBUTION PLANT       |         | 3,740,366        | 1,496,650                                 | 85,900                                        |
|    | GENERAL & COMMON PLANT EXP     |         |                  |                                           |                                               |
| 10 | 391-OFFICE EQUIPMENT           | PLT391  | 38,334           | 15,407                                    | 872                                           |
| 11 | 393-STORES EQUIPMENT           | PLT393  | 0                | 0                                         | 0                                             |
| 12 | 394-TOOLS, SHOP & GARAGE EQ    | PLT394  | 36,384           | 13,887                                    | 749                                           |
| 13 | 396-POWER OPERATED EQUIP       | PLT396  | 4,459            | 1,702                                     | 92                                            |
| 14 | 397-COMMUNICATION EQUIP        | PLT397  | 81,140           | 32,611                                    | 1,846                                         |
| 15 | 397-COMM EQ METSCAN - TELEMET  | PLT397M | 7,918            | 0                                         | 0                                             |
| 16 | 397-COMM EQUIP - ITRON         | PLT397I | 168,239          | 121,431                                   | 9,867                                         |
| 17 | BLDG OVERHEAD CLEARING         | LABOR   | 0                | 0                                         | 0                                             |
| 18 | TOTAL GEN & COMMON EXP         |         | 336,473          | 185,037                                   | 13,425                                        |
| 19 | ADJ BLDG OH & RESERVE VARIANCE | PLANT   | (215,919)        | (84,228)                                  | (4,529)                                       |
| 20 | TOTAL DEPR & AMORT EXPENSE     |         | 4,329,077        | 1,788,650                                 | 104,457                                       |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                |                                |         | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|--------------------------------|--------------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEPRECIATION & AMORTIZATION-15 |                                |         |                                     |                                    |                                      |                                     |                                     |                                    |
| DISTRIBUTION EXPENSE           |                                |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                              | 375-STRUCTURES & IMPROVE       | PLT375  | 3,209                               | 686                                | 3,914                                | 1,189                               | 1,862                               | 3,496                              |
| 2                              | 376-MAINS                      | PLT376  | 303,092                             | 64,836                             | 369,736                              | 112,292                             | 175,855                             | 330,200                            |
| 3                              | 378.2-MEAS & REG STATION EQ    | PLT378  | 7,087                               | 1,516                              | 8,645                                | 2,626                               | 4,112                               | 7,721                              |
| 4                              | 380-SERVICES                   | PLT380  | 203,978                             | 44,848                             | 50,578                               | 21,693                              | 13,415                              | 11,626                             |
| 5                              | 381-METERS                     | PLT381  | 32,983                              | 7,252                              | 8,874                                | 3,806                               | 903                                 | 783                                |
| 6                              | 382-METER INSTALLATION         | PLT382  | 173,805                             | 38,214                             | 46,763                               | 20,057                              | 4,760                               | 4,125                              |
| 7                              | 383-HOUSE REGULATORS           | PLT383  | 2,761                               | 607                                | 743                                  | 319                                 | 76                                  | 66                                 |
| 8                              | 386-OTHER PROP CUST PREM       | PLT386  | 14,017                              | 2,998                              | 17,099                               | 5,193                               | 8,133                               | 15,271                             |
| 9                              | TOTAL DISTRIBUTION PLANT       |         | 740,931                             | 160,957                            | 506,353                              | 167,173                             | 209,114                             | 373,286                            |
| GENERAL & COMMON PLANT EXP     |                                |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                             | 391-OFFICE EQUIPMENT           | PLT391  | 7,862                               | 1,701                              | 5,194                                | 1,717                               | 2,014                               | 3,567                              |
| 11                             | 393-STORES EQUIPMENT           | PLT393  | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 12                             | 394-TOOLS, SHOP & GARAGE EQ    | PLT394  | 7,171                               | 1,556                              | 5,203                                | 1,700                               | 2,184                               | 3,934                              |
| 13                             | 396-POWER OPERATED EQUIP       | PLT396  | 879                                 | 191                                | 638                                  | 208                                 | 268                                 | 482                                |
| 14                             | 397-COMMUNICATION EQUIP        | PLT397  | 16,641                              | 3,600                              | 10,993                               | 3,635                               | 4,264                               | 7,550                              |
| 15                             | 397-COMM EQ METSCAN - TELEMET  | PLT397M | 137                                 | 410                                | 1,092                                | 137                                 | 2,457                               | 3,686                              |
| 16                             | 397-COMM EQUIP - ITRON         | PLT397I | 26,457                              | 5,800                              | 3,213                                | 1,392                               | 79                                  | 0                                  |
| 17                             | BLDG OVERHEAD CLEARING         | LABOR   | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 18                             | TOTAL GEN & COMMON EXP         |         | 59,146                              | 13,258                             | 26,332                               | 8,789                               | 11,266                              | 19,220                             |
| 19                             | ADJ BLDG OH & RESERVE VARIANCE | PLANT   | (42,739)                            | (9,072)                            | (30,600)                             | (9,802)                             | (12,570)                            | (22,379)                           |
| 20                             | TOTAL DEPR & AMORT EXPENSE     |         | 855,274                             | 184,019                            | 568,930                              | 185,914                             | 231,713                             | 410,120                            |

|                                  |                               | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|-------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| STATE & FED TAXES & OTHER EXP-16 |                               |         |                  |                                           |                                               |
| TAXES OTHER THAN INCOME          |                               |         |                  |                                           |                                               |
| FEDERAL TAXES                    |                               |         |                  |                                           |                                               |
| 1                                | UNEMPLOYMENT                  | LABOR   | 2,320            | 932                                       | 53                                            |
| 2                                | FICA                          | LABOR   | 222,428          | 89,396                                    | 5,059                                         |
| 3                                | FICA ADJUSTMENT               | LABOR   | 0                | 0                                         | 0                                             |
| 4                                | TOTAL FEDERAL TAXES           |         | 224,748          | 90,328                                    | 5,112                                         |
| STATE TAXES                      |                               |         |                  |                                           |                                               |
| 5                                | UNEMPLOYMENT                  | LABOR   | 3,531            | 1,419                                     | 80                                            |
| 6                                | PROPERTY TAX                  | PLANT   | 1,490,429        | 581,406                                   | 31,262                                        |
| 7                                | PROPERTY TAX CAPITALIZED      | PLANT   | 0                | 0                                         | 0                                             |
| 8                                | PROPERTY TAX ADJUST           | PLANT   | 734,338          | 286,460                                   | 15,403                                        |
| 9                                | TOTAL STATE TAXES             |         | 2,228,298        | 869,285                                   | 46,744                                        |
| 10                               | PAYROLL TAXES CAPITALIZED     | LABOR   | (70,447)         | (28,313)                                  | (1,602)                                       |
| 11                               | PAYROLL TAXES ADJUSTMENT      | LABOR   | 11,139           | 4,477                                     | 253                                           |
| 12                               | TAXES - OTHER                 | PLANT   | 26               | 10                                        | 1                                             |
| 13                               | TOTAL TAXES OTHER THAN INC    |         | 2,393,765        | 935,787                                   | 50,508                                        |
| 14                               | TOTAL INCOME TAX EXPENSE      |         | 715,084          | 594,391                                   | (31,064)                                      |
| 15                               | INTEREST ON CUSTOMER DEPOSITS | CUSTDEP | 19,313           | 11,589                                    | 581                                           |
| 16                               | TOTAL EXPENSES                |         | 58,980,410       | 26,490,410                                | 776,196                                       |

|                                  |                               | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|----------------------------------|-------------------------------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| STATE & FED TAXES & OTHER EXP-16 |                               | ALLOC                               |                                    |                                      |                                     |                                     |                                    |
| TAXES OTHER THAN INCOME          |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| FEDERAL TAXES                    |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                | UNEMPLOYMENT                  | LABOR                               | 476                                | 103                                  | 314                                 | 104                                 | 216                                |
| 2                                | FICA                          | LABOR                               | 45,619                             | 9,870                                | 30,136                              | 9,964                               | 20,696                             |
| 3                                | FICA ADJUSTMENT               | LABOR                               | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 4                                | TOTAL FEDERAL TAXES           |                                     | 46,095                             | 9,973                                | 30,451                              | 10,068                              | 20,912                             |
| STATE TAXES                      |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 5                                | UNEMPLOYMENT                  | LABOR                               | 724                                | 157                                  | 478                                 | 158                                 | 329                                |
| 6                                | PROPERTY TAX                  | PLANT                               | 295,018                            | 62,619                               | 211,226                             | 67,660                              | 154,474                            |
| 7                                | PROPERTY TAX CAPITALIZED      | PLANT                               | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 8                                | PROPERTY TAX ADJUST           | PLANT                               | 145,356                            | 30,852                               | 104,071                             | 33,336                              | 76,110                             |
| 9                                | TOTAL STATE TAXES             |                                     | 441,098                            | 93,627                               | 315,776                             | 101,154                             | 230,913                            |
| 10                               | PAYROLL TAXES CAPITALIZED     | LABOR                               | (14,448)                           | (3,126)                              | (9,545)                             | (3,156)                             | (6,555)                            |
| 11                               | PAYROLL TAXES ADJUSTMENT      | LABOR                               | 2,285                              | 494                                  | 1,509                               | 499                                 | 1,036                              |
| 12                               | TAXES - OTHER                 | PLANT                               | 5                                  | 1                                    | 4                                   | 2                                   | 3                                  |
| 13                               | TOTAL TAXES OTHER THAN INC    |                                     | 475,034                            | 100,970                              | 338,194                             | 108,566                             | 246,309                            |
| 14                               | TOTAL INCOME TAX EXPENSE      |                                     | (94,512)                           | 7,103                                | 161,970                             | 33,597                              | (28,281)                           |
| 15                               | INTEREST ON CUSTOMER DEPOSITS | CUSTDEP                             | 2,984                              | 1,924                                | 167                                 | 832                                 | 192                                |
| 16                               | TOTAL EXPENSES                |                                     | 12,349,743                         | 2,559,377                            | 10,070,819                          | 3,245,638                           | 1,479,267                          |



| INCOME TAXES-17              |                               | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------|-------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| FEDERAL & STATE TAX CALCULAT |                               |          |                  |                                           |                                               |
| 1                            | OPERATING REVENUES            |          | 62,360,515       | 28,256,744                                | 773,927                                       |
| OPERATING EXPENSES           |                               |          |                  |                                           |                                               |
| 2                            | OPERATION & MAINTENANCE EXP   |          | 51,523,173       | 23,159,993                                | 651,714                                       |
| 3                            | DEPRECIATION & AMORTIZATION   |          | 4,329,077        | 1,788,650                                 | 104,457                                       |
| 4                            | TAXES OTHER THAN INCOME       |          | 2,393,765        | 935,787                                   | 50,508                                        |
| 5                            | INTEREST ON CUSTOMER DEPOSITS |          | 19,313           | 11,589                                    | 581                                           |
| 6                            | PLUS: OTHER                   | PLANT    | 0                | 0                                         | 0                                             |
| 7                            | OPERATING INC BEFORE FED TAX  |          | 4,095,189        | 2,360,725                                 | (33,333)                                      |
| LESS:                        |                               |          |                  |                                           |                                               |
| 8                            | INTEREST EXPENSE              |          | 2,379,034        | 897,339                                   | 47,242                                        |
| 9                            | OTHER ADJ                     | PLANT    | 0                | 0                                         | 0                                             |
| 10                           | NET OPERATING INC BEFORE TXS  |          | 1,716,155        | 1,463,386                                 | (80,575)                                      |
| PERMANENT ITEMS              |                               |          |                  |                                           |                                               |
| 11                           | DRUG SUBSIDIES                | LABOR    | (7,244)          | (2,911)                                   | (165)                                         |
| 12                           | PENALTIES                     | REVCLAIM | 2,000            | 826                                       | 47                                            |
| 13                           | STATE REGUL ASSET AMORT       | REVCLAIM | 106,680          | 44,083                                    | 2,525                                         |
| 14                           | UNALLOWABLE MEALS             | REVCLAIM | 955              | 395                                       | 23                                            |
| 15                           | TOTAL PERMANENT ITEMS         |          | 102,391          | 42,393                                    | 2,430                                         |
| TEMPORARY DIFFERENCES        |                               |          |                  |                                           |                                               |
| 16                           | ACCRUED REVENUE               | REVCLAIM | (4,037,699)      | (1,668,498)                               | (95,551)                                      |
| 17                           | BAD DEBT                      | EXP904   | (43,341)         | (29,754)                                  | (716)                                         |
| 18                           | DEFERRED RATE CASE            | REVCLAIM | 197,852          | 81,758                                    | 4,682                                         |
| 19                           | INSURANCE CLAIM RESERVE       | EXP9245  | (51,826)         | (20,811)                                  | (1,176)                                       |
| 20                           | FASB 87-PENSIONS              | LABOR    | (747,608)        | (300,471)                                 | (17,005)                                      |
| 21                           | PREPAID PROPERTY TAXES        | PLANT    | (102,382)        | (39,939)                                  | (2,147)                                       |
| 22                           | REMEDATION                    | PSPLT    | 148,644          | 70,487                                    | 848                                           |
| 23                           | PBOP SFAS 106                 | LABOR    | 144,141          | 57,932                                    | 3,279                                         |
| 24                           | TRANSACTION COSTS             | PLANT    | 1,938,266        | 756,104                                   | 40,655                                        |
| 25                           | TRANSITION COSTS              | PLANT    | (370,879)        | (144,677)                                 | (7,779)                                       |
| 26                           | UTILITY PLANT DIFFERENCES     | PLANT    | (4,086,096)      | (1,593,957)                               | (85,705)                                      |
| 27                           | TOTAL TEMPORARY DIFF          |          | (7,010,928)      | (2,831,826)                               | (160,617)                                     |
| INVESTMENT TAX CREDIT AMORT  |                               |          |                  |                                           |                                               |
| 28                           | UNAMORTIZED ITC               | PLANT    | (12,840)         | (5,009)                                   | (269)                                         |
| FEDERAL AND STATE TAX DIFF   |                               |          |                  |                                           |                                               |
| 29                           | TAX DEPRECIATION              | PLANT    | 470,221          | 183,430                                   | 9,863                                         |
| 30                           | STATE TAXABLE BASE INCOME     |          | (4,735,001)      | (1,147,626)                               | (229,168)                                     |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                              |                               | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------|-------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INCOME TAXES-17              |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| FEDERAL & STATE TAX CALCULAT |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                            | OPERATING REVENUES            |          | 12,657,294                          | 2,665,805                          | 10,653,889                           | 3,404,402                           | 2,258,412                           | 1,690,040                          |
| OPERATING EXPENSES           |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 2                            | OPERATION & MAINTENANCE EXP   |          | 11,110,963                          | 2,265,361                          | 9,001,558                            | 2,916,728                           | 1,565,928                           | 850,927                            |
| 3                            | DEPRECIATION & AMORTIZATION   |          | 855,274                             | 184,019                            | 568,930                              | 185,914                             | 231,713                             | 410,120                            |
| 4                            | TAXES OTHER THAN INCOME       |          | 475,034                             | 100,970                            | 338,194                              | 108,566                             | 138,396                             | 246,309                            |
| 5                            | INTEREST ON CUSTOMER DEPOSITS |          | 2,984                               | 1,924                              | 167                                  | 832                                 | 1,044                               | 192                                |
| 6                            | PLUS: OTHER                   | PLANT    | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 7                            | OPERATING INC BEFORE FED TAX  |          | 213,039                             | 113,531                            | 745,040                              | 192,362                             | 321,332                             | 182,493                            |
| LESS:                        |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 8                            | INTEREST EXPENSE              |          | 470,196                             | 99,551                             | 347,735                              | 111,350                             | 144,195                             | 261,425                            |
| 9                            | OTHER ADJ                     | PLANT    | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 10                           | NET OPERATING INC BEFORE TXS  |          | (257,157)                           | 13,980                             | 397,305                              | 81,012                              | 177,137                             | (78,933)                           |
| PERMANENT ITEMS              |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                           | DRUG SUBSIDIES                | LABOR    | (1,486)                             | (321)                              | (981)                                | (324)                               | (381)                               | (674)                              |
| 12                           | PENALTIES                     | REVCLAIM | 413                                 | 88                                 | 264                                  | 86                                  | 100                                 | 175                                |
| 13                           | STATE REGUL ASSET AMORT       | REVCLAIM | 22,050                              | 4,701                              | 14,071                               | 4,605                               | 5,329                               | 9,316                              |
| 14                           | UNALLOWABLE MEALS             | REVCLAIM | 197                                 | 42                                 | 126                                  | 41                                  | 48                                  | 83                                 |
| 15                           | TOTAL PERMANENT ITEMS         |          | 21,175                              | 4,510                              | 13,479                               | 4,408                               | 5,096                               | 8,900                              |
| TEMPORARY DIFFERENCES        |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                           | ACCRUED REVENUE               | REVCLAIM | (834,553)                           | (177,925)                          | (532,574)                            | (174,304)                           | (201,689)                           | (352,605)                          |
| 17                           | BAD DEBT                      | EXP904   | (5,426)                             | (1,093)                            | (4,454)                              | (1,294)                             | (562)                               | (42)                               |
| 18                           | DEFERRED RATE CASE            | REVCLAIM | 40,894                              | 8,719                              | 26,097                               | 8,541                               | 9,883                               | 17,278                             |
| 19                           | INSURANCE CLAIM RESERVE       | EXP9245  | (10,618)                            | (2,296)                            | (7,031)                              | (2,322)                             | (2,732)                             | (4,839)                            |
| 20                           | FASB 87-PENSIONS              | LABOR    | (153,331)                           | (33,173)                           | (101,292)                            | (33,489)                            | (39,284)                            | (69,563)                           |
| 21                           | PREPAID PROPERTY TAXES        | PLANT    | (20,266)                            | (4,301)                            | (14,510)                             | (4,648)                             | (5,960)                             | (10,611)                           |
| 22                           | REMEDATION                    | PSPLT    | 38,952                              | 1,947                              | 28,977                               | 3,214                               | 4,045                               | 174                                |
| 23                           | PBOP SFAS 106                 | LABOR    | 29,563                              | 6,396                              | 19,529                               | 6,457                               | 7,574                               | 13,412                             |
| 24                           | TRANSACTION COSTS             | PLANT    | 383,663                             | 81,434                             | 274,694                              | 87,990                              | 112,837                             | 200,890                            |
| 25                           | TRANSITION COSTS              | PLANT    | (73,412)                            | (15,582)                           | (52,562)                             | (16,837)                            | (21,591)                            | (38,439)                           |
| 26                           | UTILITY PLANT DIFFERENCES     | PLANT    | (808,808)                           | (171,672)                          | (579,087)                            | (185,494)                           | (237,873)                           | (423,500)                          |
| 27                           | TOTAL TEMPORARY DIFF          |          | (1,413,341)                         | (307,548)                          | (942,212)                            | (312,186)                           | (375,352)                           | (667,845)                          |
| INVESTMENT TAX CREDIT AMORT  |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 28                           | UNAMORTIZED ITC               | PLANT    | (2,542)                             | (539)                              | (1,820)                              | (583)                               | (747)                               | (1,331)                            |
| FEDERAL AND STATE TAX DIFF   |                               |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 29                           | TAX DEPRECIATION              | PLANT    | 93,076                              | 19,756                             | 66,640                               | 21,346                              | 27,374                              | 48,736                             |
| 30                           | STATE TAXABLE BASE INCOME     |          | (1,558,789)                         | (269,842)                          | (466,607)                            | (206,003)                           | (166,493)                           | (690,473)                          |

|                                            |                                    | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|--------------------------------------------|------------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| INCOME TAXES CON'T-18                      |                                    |          |                  |                                           |                                               |
| 1                                          | STATE TAXABLE BASE INCOME          |          | (4,735,001)      | (1,147,626)                               | (229,168)                                     |
| 2                                          | STATE INCOME TAX @ 8.50%           |          | (402,475)        | (97,548)                                  | (19,479)                                      |
| 3                                          | STATE BUS ENTERPRISE TAX CREDIT    | REVCLAIM | (966)            | (399)                                     | (23)                                          |
| 4                                          | STATE BUSINESS ENTERPRISE TAX      | REVCLAIM | 1,932            | 798                                       | 46                                            |
| 5                                          | TOTAL STATE TAX EXPENSE            |          | (401,509)        | (97,149)                                  | (19,456)                                      |
| 6                                          | FED TAX INC BEF FED & STA TAX DIFF |          | (4,333,492)      | (1,050,477)                               | (209,712)                                     |
| 7                                          | LESS: FEDERAL AND STATE TAX DIFF   |          | 470,221          | 183,430                                   | 9,863                                         |
| 8                                          | FEDERAL TAXABLE INCOME BASE        |          | (4,803,713)      | (1,233,907)                               | (219,575)                                     |
| 9                                          | FEDERAL INCOME TAX @ 34.00%        |          | (1,633,262)      | (419,528)                                 | (74,655)                                      |
| TOT DEF FEDERAL & STATE INC TAX            |                                    |          |                  |                                           |                                               |
| 10                                         | ACCELERATED DEPRECIATION           | PLANT    | 1,592,120        | 621,075                                   | 33,394                                        |
| 11                                         | PBOP                               | LABOR    | (57,093)         | (22,946)                                  | (1,299)                                       |
| 12                                         | PENSION                            | LABOR    | 296,127          | 119,016                                   | 6,736                                         |
| 13                                         | BAD DEBTS EXPENSE                  | EXP904   | 17,169           | 11,786                                    | 284                                           |
| 14                                         | ACCRUED REVENUE                    | REVCLAIM | 1,599,333        | 660,892                                   | 37,848                                        |
| 15                                         | PREPAID PROPERTY TAXES             | PLANT    | 40,552           | 15,819                                    | 851                                           |
| 16                                         | DEFERRED RATE CASE                 | REVCLAIM | (78,369)         | (32,384)                                  | (1,855)                                       |
| 17                                         | REMEDIATION                        | PSPLT    | (58,878)         | (27,920)                                  | (336)                                         |
| 18                                         | TRANSITION COSTS                   | PLANT    | 146,905          | 57,307                                    | 3,081                                         |
| 19                                         | TRANSACTION COSTS                  | PLANT    | (767,747)        | (299,493)                                 | (16,103)                                      |
| 20                                         | INSURANCE CLAIM RESERVE            | EXP9245  | 20,528           | 8,243                                     | 466                                           |
| 21                                         | TOTAL DEFERRED INCOME TAXES        |          | 2,750,647        | 1,111,395                                 | 63,067                                        |
| 22                                         | TAX ADJ LOBBYING & PENALTIES       | REVCLAIM | (792)            | (327)                                     | (19)                                          |
| 23                                         | TOTAL INCOME TAX EXPENSE           |          | 715,084          | 594,391                                   | (31,064)                                      |
| 24                                         | NET INCOME AFTER TAX               |          | 3,380,105        | 1,766,334                                 | (2,269)                                       |
| EFFECTIVE STATE TAX RATE 8.50%             |                                    |          |                  |                                           |                                               |
| FEDERAL TAX RATE - CURRENT 34.00%          |                                    |          |                  |                                           |                                               |
| 1 - INCREMENTAL TAX RATE 0.60390           |                                    |          |                  |                                           |                                               |
| INCREMENTAL TAX RATE 0.39610               |                                    |          |                  |                                           |                                               |
| EFFECTIVE INCREMENTAL FEDERAL RATE 0.31110 |                                    |          |                  |                                           |                                               |
| FACTOR FOR TAXABLE BASIS 1.65590           |                                    |          |                  |                                           |                                               |
| INTEREST EXPENSE PERCENTAGE 3.4200%        |                                    |          |                  |                                           |                                               |
| PURCH GAS WORKING CAPITAL % 0.0000%        |                                    |          |                  |                                           |                                               |
| OTHER O&M WORKING CAPITAL % 0.7454%        |                                    |          |                  |                                           |                                               |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                 |                                    | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|---------------------------------|------------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INCOME TAXES CONT-18            |                                    |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                               | STATE TAXABLE BASE INCOME          |          | (1,558,789)                         | (269,842)                          | (466,607)                            | (206,003)                           | (166,493)                           | (690,473)                          |
| 2                               | STATE INCOME TAX @ 8.50%           |          | (132,497)                           | (22,937)                           | (39,662)                             | (17,510)                            | (14,152)                            | (58,690)                           |
| 3                               | STATE BUS ENTERPRISE TAX CREDIT    | REVCLAIM | (200)                               | (43)                               | (127)                                | (42)                                | (48)                                | (84)                               |
| 4                               | STATE BUSINESS ENTERPRISE TAX      | REVCLAIM | 399                                 | 85                                 | 255                                  | 83                                  | 97                                  | 169                                |
| 5                               | TOTAL STATE TAX EXPENSE            |          | (132,297)                           | (22,894)                           | (39,534)                             | (17,469)                            | (14,104)                            | (58,606)                           |
| 6                               | FED TAX INC BEF FED & STA TAX DIFF |          | (1,426,492)                         | (246,948)                          | (427,073)                            | (188,534)                           | (152,389)                           | (631,867)                          |
| 7                               | LESS: FEDERAL AND STATE TAX DIFF   |          | 93,076                              | 19,756                             | 66,640                               | 21,346                              | 27,374                              | 48,736                             |
| 8                               | FEDERAL TAXABLE INCOME BASE        |          | (1,519,568)                         | (266,704)                          | (493,713)                            | (209,881)                           | (179,763)                           | (680,603)                          |
| 9                               | FEDERAL INCOME TAX @ 34.00%        |          | (516,653)                           | (90,679)                           | (167,862)                            | (71,359)                            | (61,120)                            | (231,405)                          |
| TOT DEF FEDERAL & STATE INC TAX |                                    |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                              | ACCELERATED DEPRECIATION           | PLANT    | 315,146                             | 66,891                             | 225,638                              | 72,276                              | 92,686                              | 165,014                            |
| 11                              | PBOP                               | LABOR    | (11,710)                            | (2,533)                            | (7,735)                              | (2,557)                             | (3,000)                             | (5,312)                            |
| 12                              | PENSION                            | LABOR    | 60,734                              | 13,140                             | 40,122                               | 13,265                              | 15,560                              | 27,554                             |
| 13                              | BAD DEBTS EXPENSE                  | EXP904   | 2,149                               | 433                                | 1,764                                | 513                                 | 223                                 | 17                                 |
| 14                              | ACCRUED REVENUE                    | REVCLAIM | 330,566                             | 70,476                             | 210,953                              | 69,042                              | 79,889                              | 139,667                            |
| 15                              | PREPAID PROPERTY TAXES             | PLANT    | 8,027                               | 1,704                              | 5,747                                | 1,841                               | 2,361                               | 4,203                              |
| 16                              | DEFERRED RATE CASE                 | REVCLAIM | (16,198)                            | (3,453)                            | (10,337)                             | (3,383)                             | (3,915)                             | (6,844)                            |
| 17                              | REMEDIATION                        | PSPLT    | (15,429)                            | (771)                              | (11,478)                             | (1,273)                             | (1,602)                             | (69)                               |
| 18                              | TRANSITION COSTS                   | PLANT    | 29,079                              | 6,172                              | 20,820                               | 6,669                               | 8,552                               | 15,226                             |
| 19                              | TRANSACTION COSTS                  | PLANT    | (151,969)                           | (32,256)                           | (108,806)                            | (34,853)                            | (44,695)                            | (79,572)                           |
| 20                              | INSURANCE CLAIM RESERVE            | EXP9245  | 4,206                               | 909                                | 2,785                                | 920                                 | 1,082                               | 1,917                              |
| 21                              | TOTAL DEFERRED INCOME TAXES        |          | 554,602                             | 120,711                            | 369,471                              | 122,459                             | 147,141                             | 261,799                            |
| 22                              | TAX ADJ LOBBYING & PENALTIES       | REVCLAIM | (164)                               | (35)                               | (104)                                | (34)                                | (40)                                | (69)                               |
| 23                              | TOTAL INCOME TAX EXPENSE           |          | (94,512)                            | 7,103                              | 161,970                              | 33,597                              | 71,878                              | (28,281)                           |
| 24                              | NET INCOME AFTER TAX               |          | 307,551                             | 106,428                            | 583,070                              | 158,764                             | 249,453                             | 210,774                            |

EFFECTIVE STATE TAX RATE  
FEDERAL TAX RATE - CURRENT  
1 - INCREMENTAL TAX RATE  
INCREMENTAL TAX RATE  
EFFECTIVE INCREMENTAL FEDERAL RATE  
FACTOR FOR TAXABLE BASIS  
INTEREST EXPENSE PERCENTAGE  
PURCH GAS WORKING CAPITAL %  
OTHER O&M WORKING CAPITAL %

|                                               | ALLOC | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|-----------------------------------------------|-------|------------------|-------------------------------------------|-----------------------------------------------|
| DEVELOPMENT OF LABOR ALLOC-19                 |       |                  |                                           |                                               |
| DEVELOPMENT OF LABOR ALLOCATOR                |       |                  |                                           |                                               |
| 1 163 - STORES EXPENSE UNDISTRIBUTED DISTRPLT |       | 14,198           | 5,419                                     | 292                                           |
| LPG & LNG GAS PRODUCTION<br>OPERATION         |       |                  |                                           |                                               |
| 2 710-SUPERVISION LABPO                       |       | (30)             | (14)                                      | (0)                                           |
| 3 717-PROPANE EXPENSES EXP717                 |       | 1,231            | 584                                       | 7                                             |
| 4 718-DISPATCHING PRODUCTION EXP718           |       | 0                | 0                                         | 0                                             |
| 5 735-MISCELLANEOUS EXP735                    |       | 17,924           | 8,500                                     | 102                                           |
| 6 TOTAL OPERATION LABOR                       |       | 19,125           | 9,069                                     | 109                                           |
| MAINTENANCE                                   |       |                  |                                           |                                               |
| 7 740-SUPERVISION LABPM                       |       | (30)             | (14)                                      | (0)                                           |
| 8 741-MAINTENANCE OF PLANT EXP741             |       | 1,849            | 877                                       | 11                                            |
| 9 742-MAINTENANCE OF EQUIP EXP742             |       | 5,164            | 2,449                                     | 29                                            |
| 10 743-GAS SYSTEM PROD TRAINING EXP743        |       | 0                | 0                                         | 0                                             |
| 11 TOTAL MAINTENANCE LABOR                    |       | 6,983            | 3,311                                     | 40                                            |
| 12 TOT MANUFACTURED GAS LABOR                 |       | 26,108           | 12,380                                    | 149                                           |
| GAS SUPPLY LABOR                              |       |                  |                                           |                                               |
| 13 813-OTHER GAS SUPPLY EXP EXP813            |       | 99,379           | 39,420                                    | 860                                           |
| 14 TOTAL GAS SUPPLY LABOR                     |       | 99,379           | 39,420                                    | 860                                           |
| 15 TOTAL PRODUCTION LABOR                     |       | 125,487          | 51,800                                    | 1,009                                         |

|                                    |                                             | ALLOC  | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------------|---------------------------------------------|--------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVELOPMENT OF LABOR ALLOC-19      |                                             |        |                                     |                                    |                                      |                                     |                                     |                                    |
| DEVELOPMENT OF LABOR ALLOCATOR     |                                             |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                  | 163 - STORES EXPENSE UNDISTRIBUTED DISTRPLT |        | 2,798                               | 607                                | 2,030                                | 663                                 | 852                                 | 1,535                              |
| LPG & LNG GAS PRODUCTION OPERATION |                                             |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 2                                  | 710-SUPERVISION                             | LABPO  | (8)                                 | (0)                                | (6)                                  | (1)                                 | (1)                                 | (0)                                |
| 3                                  | 717-PROPANE EXPENSES                        | EXP717 | 323                                 | 16                                 | 240                                  | 27                                  | 33                                  | 1                                  |
| 4                                  | 718-DISPATCHING PRODUCTION                  | EXP718 | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 5                                  | 735-MISCELLANEOUS                           | EXP735 | 4,697                               | 235                                | 3,494                                | 388                                 | 488                                 | 21                                 |
| 6                                  | TOTAL OPERATION LABOR                       |        | 5,012                               | 251                                | 3,728                                | 413                                 | 520                                 | 22                                 |
| MAINTENANCE                        |                                             |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 7                                  | 740-SUPERVISION                             | LABPM  | (8)                                 | (0)                                | (6)                                  | (1)                                 | (1)                                 | (0)                                |
| 8                                  | 741-MAINTENANCE OF PLANT                    | EXP741 | 484                                 | 24                                 | 360                                  | 40                                  | 50                                  | 2                                  |
| 9                                  | 742-MAINTENANCE OF EQUIP                    | EXP742 | 1,353                               | 68                                 | 1,007                                | 112                                 | 141                                 | 6                                  |
| 10                                 | 743-GAS SYSTEM PROD TRAINING                | EXP743 | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 11                                 | TOTAL MAINTENANCE LABOR                     |        | 1,830                               | 91                                 | 1,361                                | 151                                 | 190                                 | 8                                  |
| 12                                 | TOT MANUFACTURED GAS LABOR                  |        | 6,842                               | 342                                | 5,090                                | 564                                 | 711                                 | 31                                 |
| GAS SUPPLY LABOR                   |                                             |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                                 | 813-OTHER GAS SUPPLY EXP                    | EXP813 | 19,563                              | 4,012                              | 18,661                               | 5,901                               | 4,898                               | 6,064                              |
| 14                                 | TOTAL GAS SUPPLY LABOR                      |        | 19,563                              | 4,012                              | 18,661                               | 5,901                               | 4,898                               | 6,064                              |
| 15                                 | TOTAL PRODUCTION LABOR                      |        | 26,405                              | 4,354                              | 23,751                               | 6,465                               | 5,609                               | 6,095                              |

| DEVEL OF LABOR ALLOC CON'T-20                  |                               | ALLOC  | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------------------------|-------------------------------|--------|------------------|-------------------------------------------|-----------------------------------------------|
| TRANSMISSION & DISTRIBUTION LABOR<br>OPERATION |                               |        |                  |                                           |                                               |
| 1                                              | 870-SUPER & ENGINEERING       | LABDO  | 58,046           | 19,200                                    | 921                                           |
| 2                                              | 851-SYSTEM CONTROL & DISP     | EXP851 | 0                | 0                                         | 0                                             |
| 3                                              | 857-MEAS & REG STATION EXP    | PLT378 | 499              | 142                                       | 3                                             |
| 4                                              | 874-MAINS & SERVICE EXPENSE   | EXP874 | 342,937          | 138,847                                   | 7,290                                         |
| 5                                              | 875-GAS SYSTEM T&D TRAINING   | EXP875 | 150,214          | 42,690                                    | 869                                           |
| 6                                              | 878-METER & HOUSE REG EXP     | EXP878 | 372,145          | 106,008                                   | 8,614                                         |
| 7                                              | 879-CUSTOMER INSTALL EXP      | EXP879 | 281              | 149                                       | 12                                            |
| 8                                              | 880-OTHER EXPENSE             | EXP880 | 356,884          | 116,866                                   | 2,581                                         |
| 9                                              | 882-METERING SYS GAS TRAINING | EXP882 | 4,074            | 1,160                                     | 94                                            |
| 10                                             | TOTAL OPERATION LABOR         |        | 1,285,080        | 425,062                                   | 20,383                                        |
| MAINTENANCE                                    |                               |        |                  |                                           |                                               |
| 11                                             | 885-SUPERVISION               | LABDM  | 60,591           | 21,067                                    | 821                                           |
| 12                                             | 886-MAINT STRUCT & IMPROVE    | EXP886 | 1,188            | 338                                       | 7                                             |
| 13                                             | 887-MAINTENANCE OF MAINS      | EXP887 | 58,041           | 16,495                                    | 336                                           |
| 14                                             | 889-MT OF MEAS & REG STA EQ   | EXP889 | 17,089           | 4,857                                     | 99                                            |
| 15                                             | 890-MT OF REG EQ (INDUST)     | EXP890 | (610)            | (173)                                     | (4)                                           |
| 16                                             | 891-MT OF REG EQ (CITY GATE)  | EXP891 | 20,564           | 6,262                                     | 130                                           |
| 17                                             | 892-MAINTENANCE OF SERVICES   | EXP892 | 18,727           | 12,222                                    | 993                                           |
| 18                                             | 893-MAINT METER & HOUSE REG   | EXP893 | 0                | 0                                         | 0                                             |
| 19                                             | 894-MAINT OF OTHER EQUIP      | EXP894 | 244              | 69                                        | 1                                             |
| 20                                             | TOTAL MAINTENANCE LABOR       |        | 175,834          | 61,136                                    | 2,383                                         |
| 21                                             | TOTAL DISTRIB & TRANS LABOR   |        | 1,460,914        | 486,198                                   | 22,766                                        |
| CUSTOMER ACCOUNTS LABOR                        |                               |        |                  |                                           |                                               |
| 22                                             | 901-SUPERVISION               | LABCA  | 0                | 0                                         | 0                                             |
| 23                                             | 902-METER READING EXPENSE     | EXP902 | 112,196          | 79,348                                    | 6,447                                         |
| 24                                             | 903-CUST RECORDS & COLLECT    | EXP903 | 403,576          | 268,113                                   | 21,970                                        |
| 25                                             | TOTAL CUSTOMER ACCTS LABOR    |        | 515,773          | 347,461                                   | 28,418                                        |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                             |                               | ALLOC  | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|---------------------------------------------|-------------------------------|--------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVEL OF LABOR ALLOC CONT-20                |                               |        |                                     |                                    |                                      |                                     |                                     |                                    |
| TRANSMISSION & DISTRIBUTION LABOR OPERATION |                               |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                           | 870-SUPER & ENGINEERING       | LABDO  | 14,204                              | 3,078                              | 8,929                                | 3,009                               | 3,188                               | 5,517                              |
| 2                                           | 851-SYSTEM CONTROL & DISP     | EXP851 | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 3                                           | 857-MEAS & REG STATION EXP    | PLT378 | 79                                  | 17                                 | 97                                   | 29                                  | 46                                  | 86                                 |
| 4                                           | 874-MAINS & SERVICE EXPENSE   | EXP874 | 56,080                              | 12,112                             | 49,477                               | 15,631                              | 22,516                              | 40,983                             |
| 5                                           | 875-GAS SYSTEM T&D TRAINING   | EXP875 | 23,839                              | 5,100                              | 29,081                               | 8,832                               | 13,832                              | 25,971                             |
| 6                                           | 878-METER & HOUSE REG EXP     | EXP878 | 155,562                             | 34,203                             | 41,855                               | 17,952                              | 4,260                               | 3,692                              |
| 7                                           | 879-CUSTOMER INSTALL EXP      | EXP879 | 72                                  | 16                                 | 19                                   | 8                                   | 3                                   | 3                                  |
| 8                                           | 880-OTHER EXPENSE             | EXP880 | 62,920                              | 13,240                             | 67,773                               | 20,966                              | 26,692                              | 45,846                             |
| 9                                           | 882-METERING SYS GAS TRAINING | EXP882 | 1,703                               | 374                                | 458                                  | 197                                 | 47                                  | 40                                 |
| 10                                          | TOTAL OPERATION LABOR         |        | 314,460                             | 68,139                             | 197,689                              | 66,624                              | 70,584                              | 122,139                            |
| MAINTENANCE                                 |                               |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                                          | 885-SUPERVISION               | LABDM  | 9,836                               | 2,111                              | 10,236                               | 3,166                               | 4,701                               | 8,653                              |
| 12                                          | 886-MAINT STRUCT & IMPROVE    | EXP886 | 189                                 | 40                                 | 230                                  | 70                                  | 109                                 | 205                                |
| 13                                          | 887-MAINTENANCE OF MAINS      | EXP887 | 9,211                               | 1,970                              | 11,237                               | 3,413                               | 5,344                               | 10,035                             |
| 14                                          | 889-MT OF MEAS & REG STA EQ   | EXP889 | 2,712                               | 580                                | 3,308                                | 1,005                               | 1,574                               | 2,955                              |
| 15                                          | 890-MT OF REG EQ (INDUST)     | EXP890 | (97)                                | (21)                               | (118)                                | (36)                                | (56)                                | (105)                              |
| 16                                          | 891-MT OF REG EQ (CITY GATE)  | EXP891 | 3,405                               | 722                                | 3,959                                | 1,211                               | 1,735                               | 3,140                              |
| 17                                          | 892-MAINTENANCE OF SERVICES   | EXP892 | 3,248                               | 714                                | 805                                  | 345                                 | 214                                 | 185                                |
| 18                                          | 893-MAINT METER & HOUSE REG   | EXP893 | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 19                                          | 894-MAINT OF OTHER EQUIP      | EXP894 | 39                                  | 8                                  | 47                                   | 14                                  | 22                                  | 42                                 |
| 20                                          | TOTAL MAINTENANCE LABOR       |        | 28,542                              | 6,125                              | 29,705                               | 9,189                               | 13,643                              | 25,109                             |
| 21                                          | TOTAL DISTRIB & TRANS LABOR   |        | 343,002                             | 74,265                             | 227,394                              | 75,813                              | 84,227                              | 147,248                            |
| CUSTOMER ACCOUNTS LABOR                     |                               |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 22                                          | 901-SUPERVISION               | LABCA  | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 23                                          | 902-METER READING EXPENSE     | EXP902 | 17,327                              | 3,907                              | 2,411                                | 949                                 | 754                                 | 1,054                              |
| 24                                          | 903-CUST RECORDS & COLLECT    | EXP903 | 71,860                              | 15,943                             | 16,037                               | 6,898                               | 1,174                               | 1,581                              |
| 25                                          | TOTAL CUSTOMER ACCTS LABOR    |        | 89,186                              | 19,850                             | 18,449                               | 7,847                               | 1,928                               | 2,635                              |



| DEVEL OF LABOR ALLOC CONT-21                      |                             | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|---------------------------------------------------|-----------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| CUSTOMER SERVICES & INFO EXP                      |                             |          |                  |                                           |                                               |
| 1                                                 | 907-CUST SERV & INFO SUPRV  | LABSE    | 0                | 0                                         | 0                                             |
| 2                                                 | 908-CUST ASSISTANCE EXP     | EXP908   | 125,636          | 62,257                                    | 4,080                                         |
| 3                                                 | TOT CUST SERV & INFO EXP    |          | 125,636          | 62,257                                    | 4,080                                         |
| ADMINISTRATIVE & GENERAL LABOR<br>OPERATION LABOR |                             |          |                  |                                           |                                               |
| 4                                                 | 920-ADMIN & GENERAL SALARY  | EXP920   | 8,340            | 3,352                                     | 190                                           |
| 5                                                 | 921-OFFICE SUPPLIES & EXP   | EXP921   | 20,260           | 8,142                                     | 461                                           |
| 6                                                 | 923-OUTSIDE SERV EMPLOYED   | EXP923   | 1,196,197        | 480,763                                   | 27,209                                        |
| 7                                                 | 925-INJURIES & DAMAGES      | EXP925   | 0                | 0                                         | 0                                             |
| 8                                                 | 926-EMPLOYED PENSION & BENF | EXP926   | 115              | 46                                        | 3                                             |
| 9                                                 | 930-MISCELLANEOUS GEN EXP   | EXP930   | 0                | 0                                         | 0                                             |
| 10                                                | TOTAL OPERATION EXPENSE     |          | 1,224,912        | 492,304                                   | 27,862                                        |
| MAINTENANCE                                       |                             |          |                  |                                           |                                               |
| 11                                                | 935-MAINT OF GENERAL PLT    | EXP935   | 0                | 0                                         | 0                                             |
| 12                                                | TOTAL ADMIN & GEN LABOR     |          | 1,224,912        | 492,304                                   | 27,862                                        |
| 13                                                | TOTAL GAS O & M LABOR       |          | 3,466,919        | 1,445,439                                 | 84,427                                        |
| 14                                                | CONSTRUCTION LABOR          | DISTRPLT | 2,571,421        | 981,427                                   | 52,921                                        |
| 15                                                | OTHER LABOR                 | LABOR    | 0                | 0                                         | 0                                             |
| 16                                                | SUM OF ALLOCATED LABOR EXP  |          | 6,038,340        | 2,426,866                                 | 137,347                                       |

NORTHERN - NEW HAMPSHIRE  
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|                                |                             | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|--------------------------------|-----------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEVEL OF LABOR ALLOC CONT-21   |                             |          |                                     |                                    |                                      |                                     |                                     |                                    |
| CUSTOMER SERVICES & INFO EXP   |                             |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                              | 907-CUST SERV & INFO SUPRV  | LABSE    | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 2                              | 908-CUST ASSISTANCE EXP     | EXP908   | 19,014                              | 4,542                              | 12,813                               | 4,674                               | 5,944                               | 12,312                             |
| 3                              | TOT CUST SERV & INFO EXP    |          | 19,014                              | 4,542                              | 12,813                               | 4,674                               | 5,944                               | 12,312                             |
| ADMINISTRATIVE & GENERAL LABOR |                             |          |                                     |                                    |                                      |                                     |                                     |                                    |
| OPERATION LABOR                |                             |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                              | 920-ADMIN & GENERAL SALARY  | EXP920   | 1,711                               | 370                                | 1,130                                | 374                                 | 438                                 | 776                                |
| 5                              | 921-OFFICE SUPPLIES & EXP   | EXP921   | 4,155                               | 899                                | 2,745                                | 908                                 | 1,065                               | 1,885                              |
| 6                              | 923-OUTSIDE SERV EMPLOYED   | EXP923   | 245,335                             | 53,078                             | 162,070                              | 53,584                              | 62,855                              | 111,303                            |
| 7                              | 925-INJURIES & DAMAGES      | EXP925   | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 8                              | 926-EMPLOYED PENSION & BENF | EXP926   | 24                                  | 5                                  | 16                                   | 5                                   | 6                                   | 11                                 |
| 9                              | 930-MISCELLANEOUS GEN EXP   | EXP930   | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 10                             | TOTAL OPERATION EXPENSE     |          | 251,224                             | 54,352                             | 165,960                              | 54,870                              | 64,364                              | 113,975                            |
| MAINTENANCE                    |                             |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                             | 935-MAINT OF GENERAL PLT    | EXP935   | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 12                             | TOTAL ADMIN & GEN LABOR     |          | 251,224                             | 54,352                             | 165,960                              | 54,870                              | 64,364                              | 113,975                            |
| 13                             | TOTAL GAS O & M LABOR       |          | 731,630                             | 157,970                            | 450,397                              | 150,333                             | 162,924                             | 283,800                            |
| 14                             | CONSTRUCTION LABOR          | DISTRPLT | 506,808                             | 109,967                            | 367,723                              | 120,156                             | 154,366                             | 278,053                            |
| 15                             | OTHER LABOR                 | LABOR    | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 16                             | SUM OF ALLOCATED LABOR EXP  |          | 1,238,438                           | 267,937                            | 818,120                              | 270,488                             | 317,289                             | 561,854                            |

|                                  | ALLOC | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------------|-------|------------------|-------------------------------------------|-----------------------------------------------|
| REVENUE REQUIREMENTS-22          |       |                  |                                           |                                               |
| PRESENT RATES                    |       |                  |                                           |                                               |
| 1 RATE BASE                      |       | 69,562,392       | 26,237,984                                | 1,381,343                                     |
| 2 NET OPER INC (PRESENT RATES)   |       | 3,380,105        | 1,766,334                                 | (2,269)                                       |
| 3 RATE OF RETURN (PRES RATES)    |       | 4.86%            | 6.73%                                     | -0.16%                                        |
| 4 RELATIVE RATE OF RETURN        |       | 1.000            | 1.385                                     | -0.034                                        |
| 5 SALES REVENUE (PRE RATES)      |       | 60,243,868       | 27,566,460                                | 750,866                                       |
| 6 ANNUAL BOOKED CCF SALES        |       | 58,401,190       | 15,819,246                                | 361,408                                       |
| 7 SALE REV \$/CCF (PRE RATES)    |       | \$1.0316         | \$1.7426                                  | \$2.0776                                      |
| CLAIMED RATE OF RETURN           |       |                  |                                           |                                               |
| 8 CLAIMED RATE OF RETURN         |       | 7.24%            | 7.24%                                     | 7.24%                                         |
| 9 RETURN REQ FOR CLAIMED ROR     |       | 5,036,317        | 1,899,630                                 | 100,009                                       |
| 10 SALES REVENUE REQ CLAIMED ROR |       | 62,986,395       | 27,787,185                                | 920,229                                       |
| 11 REVENUE DEFICIENCY SALES REV  |       | 2,742,527        | 220,725                                   | 169,363                                       |
| 12 PERCENT INCREASE REQUIRED     |       | 4.55%            | 0.80%                                     | 22.56%                                        |
| 13 ANNUAL BOOKED CCF SALES       |       | 58,401,190       | 15,819,246                                | 361,408                                       |
| 14 SALES REV REQUIRED \$/CCF     |       | \$1.0785         | \$1.7565                                  | \$2.5462                                      |
| 15 REVENUE DEFICIENCY \$/CCF     |       | \$0.0470         | \$0.0140                                  | \$0.4686                                      |
| PROPOSED REVENUES                |       |                  |                                           |                                               |
| 16 PROPOSED SALES REVENUES       |       | 62,986,395       | 27,787,185                                | 920,229                                       |
| 17 REVENUE DEFICIENCY SALES REV  |       | 2,742,527        | 220,725                                   | 169,363                                       |
| 18 PERCENT INCREASE PROPOSED     |       | 4.55%            | 0.80%                                     | 22.56%                                        |
| 19 PROPOSED RATE OF RETURN       |       | 7.24%            | 7.24%                                     | 7.24%                                         |
| 20 RETURN REQ FOR PROPOSED REV   |       | 5,036,317        | 1,899,630                                 | 100,009                                       |
| 21 ANNUAL BOOKED CCF SALES       |       | 58,401,190       | 15,819,246                                | 361,408                                       |
| 22 SALES REV REQUIRED \$/CCF     |       | \$1.0785         | \$1.7565                                  | \$2.5462                                      |
| 23 REVENUE DEFICIENCY \$/CCF     |       | \$0.0470         | \$0.0140                                  | \$0.4686                                      |

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|                         | ALLOC                         | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-------------------------|-------------------------------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| REVENUE REQUIREMENTS-22 |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| PRESENT RATES           |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                       | RATE BASE                     | 13,748,432                          | 2,910,853                          | 10,167,682                           | 3,255,845                           | 4,216,232                           | 7,644,020                          |
| 2                       | NET OPER INC (PRESENT RATES)  | 307,551                             | 106,428                            | 583,070                              | 158,764                             | 249,453                             | 210,774                            |
| 3                       | RATE OF RETURN (PRES RATES)   | 2.24%                               | 3.66%                              | 5.73%                                | 4.88%                               | 5.92%                               | 2.76%                              |
| 4                       | RELATIVE RATE OF RETURN       | 0.460                               | 0.752                              | 1.180                                | 1.004                               | 1.218                               | 0.567                              |
| 5                       | SALES REVENUE (PRE RATES)     | 12,298,911                          | 2,587,193                          | 10,284,411                           | 3,287,842                           | 2,090,458                           | 1,377,726                          |
| 6                       | ANNUAL BOOKED CCF SALES       | 8,510,647                           | 2,211,315                          | 10,785,254                           | 3,859,559                           | 5,463,332                           | 11,390,428                         |
| 7                       | SALE REV \$/CCF (PRE RATES)   | \$1.4451                            | \$1.1700                           | \$0.9536                             | \$0.8519                            | \$0.3826                            | \$0.1210                           |
| CLAIMED RATE OF RETURN  |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 8                       | CLAIMED RATE OF RETURN        | 7.24%                               | 7.24%                              | 7.24%                                | 7.24%                               | 7.24%                               | 7.24%                              |
| 9                       | RETURN REQ FOR CLAIMED ROR    | 995,386                             | 210,746                            | 736,140                              | 235,723                             | 305,255                             | 553,427                            |
| 10                      | SALES REVENUE REQ CLAIMED ROR | 13,437,900                          | 2,759,933                          | 10,537,881                           | 3,415,279                           | 2,182,860                           | 1,945,127                          |
| 11                      | REVENUE DEFICIENCY SALES REV  | 1,138,989                           | 172,740                            | 253,470                              | 127,436                             | 92,402                              | 567,401                            |
| 12                      | PERCENT INCREASE REQUIRED     | 9.26%                               | 6.68%                              | 2.46%                                | 3.88%                               | 4.42%                               | 41.18%                             |
| 13                      | ANNUAL BOOKED CCF SALES       | 8,510,647                           | 2,211,315                          | 10,785,254                           | 3,859,559                           | 5,463,332                           | 11,390,428                         |
| 14                      | SALES REV REQUIRED \$/CCF     | \$1.5790                            | \$1.2481                           | \$0.9771                             | \$0.8849                            | \$0.3995                            | \$0.1708                           |
| 15                      | REVENUE DEFICIENCY \$/CCF     | \$0.1338                            | \$0.0781                           | \$0.0235                             | \$0.0330                            | \$0.0169                            | \$0.0498                           |
| PROPOSED REVENUES       |                               |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                      | PROPOSED SALES REVENUES       | 13,437,900                          | 2,759,933                          | 10,537,881                           | 3,415,279                           | 2,182,860                           | 1,945,127                          |
| 17                      | REVENUE DEFICIENCY SALES REV  | 1,138,989                           | 172,740                            | 253,470                              | 127,436                             | 92,402                              | 567,401                            |
| 18                      | PERCENT INCREASE PROPOSED     | 9.26%                               | 6.68%                              | 2.46%                                | 3.88%                               | 4.42%                               | 41.18%                             |
| 19                      | PROPOSED RATE OF RETURN       | 7.24%                               | 7.24%                              | 7.24%                                | 7.24%                               | 7.24%                               | 7.24%                              |
| 20                      | RETURN REQ FOR PROPOSED REV   | 995,386                             | 210,746                            | 736,140                              | 235,723                             | 305,255                             | 553,427                            |
| 21                      | ANNUAL BOOKED CCF SALES       | 8,510,647                           | 2,211,315                          | 10,785,254                           | 3,859,559                           | 5,463,332                           | 11,390,428                         |
| 22                      | SALES REV REQUIRED \$/CCF     | \$1.5790                            | \$1.2481                           | \$0.9771                             | \$0.8849                            | \$0.3995                            | \$0.1708                           |
| 23                      | REVENUE DEFICIENCY \$/CCF     | \$0.1338                            | \$0.0781                           | \$0.0235                             | \$0.0330                            | \$0.0169                            | \$0.0498                           |

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NORTHERN - NEW HAMPSHIRE  
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**NH Gas Cost of Service Workpapers**  
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| ALLOCATION FACTOR TABLE-23 |                                | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|----------------------------|--------------------------------|------------------|-------------------------------------------|-----------------------------------------------|
| DEMAND RELATED             |                                |                  |                                           |                                               |
| 1                          | PRODUCTION ALLOCATORS          |                  |                                           |                                               |
| 2                          | DES DAY REMANNG DEMNDS - SALES | 332,382          | 157,615                                   | 1,896                                         |
| 3                          | LPG PROD ALLOC-PROD            | 332,382          | 157,615                                   | 1,896                                         |
| 4                          | LNG PROD ALLOC-PROD            | 332,382          | 157,615                                   | 1,896                                         |
| 5                          | LPG & LNG PROD ALLOC-DISTR     | 332,382          | 157,615                                   | 1,896                                         |
| 6                          | LPG PRODUCTION DEMAND          | DEMLPG           |                                           |                                               |
| 7                          | LNG PRODUCTION DEMAND          | DEMLNG           |                                           |                                               |
| 8                          |                                |                  |                                           |                                               |
| 9                          |                                |                  |                                           |                                               |
| 10                         |                                |                  |                                           |                                               |
| 11                         |                                |                  |                                           |                                               |
| 12                         |                                |                  |                                           |                                               |
| 13                         |                                |                  |                                           |                                               |
| 14                         |                                |                  |                                           |                                               |
| 15                         |                                |                  |                                           |                                               |
| 16                         |                                |                  |                                           |                                               |
| 17                         |                                |                  |                                           |                                               |
| 18                         |                                |                  |                                           |                                               |
| DISTRIBUTION ALLOCATORS    |                                |                  |                                           |                                               |
| 1                          | DISTRIBUTION ALLOCATOR         | DISTR            | 100.0000%                                 | 28.4197%                                      |
| 2                          |                                |                  |                                           | 0.5782%                                       |
| 3                          |                                |                  |                                           |                                               |
| 4                          |                                |                  |                                           |                                               |
| 5                          |                                |                  |                                           |                                               |
| 6                          |                                |                  |                                           |                                               |
| 7                          |                                |                  |                                           |                                               |
| 8                          |                                |                  |                                           |                                               |
| 9                          |                                |                  |                                           |                                               |
| 10                         |                                |                  |                                           |                                               |
| 11                         |                                |                  |                                           |                                               |
| 12                         |                                |                  |                                           |                                               |
| 13                         |                                |                  |                                           |                                               |
| 14                         |                                |                  |                                           |                                               |
| 15                         |                                |                  |                                           |                                               |
| 16                         |                                |                  |                                           |                                               |
| 17                         |                                |                  |                                           |                                               |
| 18                         |                                |                  |                                           |                                               |
| 19                         |                                |                  |                                           |                                               |
| 20                         |                                |                  |                                           |                                               |

| ALLOCATION FACTOR TABLE-23 |                                | ALLOC  | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|----------------------------|--------------------------------|--------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| DEMAND RELATED             |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                          | PRODUCTION ALLOCATORS          |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 2                          | DES DAY REMANNG DEMNDS - SALES |        | 87,101                              | 4,354                              | 64,795                               | 7,186                               | 9,046                               | 389                                |
| 3                          | LPG PROD ALLOC-PROD            |        | 87,101                              | 4,354                              | 64,795                               | 7,186                               | 9,046                               | 389                                |
| 4                          | LNG PROD ALLOC-PROD            |        | 87,101                              | 4,354                              | 64,795                               | 7,186                               | 9,046                               | 389                                |
| 5                          | LPG & LNG PROD ALLOC-DISTR     |        | 87,101                              | 4,354                              | 64,795                               | 7,186                               | 9,046                               | 389                                |
| 6                          | LPG PRODUCTION DEMAND          | DEMLPG |                                     |                                    |                                      |                                     |                                     |                                    |
| 7                          | LNG PRODUCTION DEMAND          | DEMLNG |                                     |                                    |                                      |                                     |                                     |                                    |
| 8                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 15                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| DISTRIBUTION ALLOCATORS    |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                          | DISTRIBUTION ALLOCATOR         | DISTR  | 15.8702%                            | 3.3949%                            | 19.3598%                             | 5.8797%                             | 9.2079%                             | 17.2896%                           |
| 2                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 3                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 5                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 6                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 7                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 8                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                          |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 15                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 19                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |
| 20                         |                                |        |                                     |                                    |                                      |                                     |                                     |                                    |

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| ALLOCATION FACTOR TABLE CONT-24 |                               | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|---------------------------------|-------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| COMMODITY RELATED               |                               |         |                  |                                           |                                               |
| 1                               | ANNUAL FIRM CCF SALES SENDOUT |         | 34,950,275       | 15,898,740                                | 363,224                                       |
| 2                               | ANNUAL FIRM CCF THROUGHPUT    |         | 58,694,663       | 15,898,740                                | 363,224                                       |
| 3                               | DIRECT GAS COST ALLOCATOR     | EGAS    | 42,184,110       | 19,191,057                                | 427,950                                       |
| 4                               | CGA BAD DEBT ALLOCATOR        | E904GAS | 160,113          | 73,434                                    | 1,509                                         |
| 5                               |                               |         |                  |                                           |                                               |
| 6                               |                               |         |                  |                                           |                                               |
| 7                               |                               |         |                  |                                           |                                               |
| 8                               |                               |         |                  |                                           |                                               |
| 9                               |                               |         |                  |                                           |                                               |
| 10                              |                               |         |                  |                                           |                                               |
| 11                              |                               |         |                  |                                           |                                               |
| 12                              |                               |         |                  |                                           |                                               |
| 13                              |                               |         |                  |                                           |                                               |
| 14                              |                               |         |                  |                                           |                                               |
| 15                              |                               |         |                  |                                           |                                               |
| 16                              |                               |         |                  |                                           |                                               |
| 17                              |                               |         |                  |                                           |                                               |
| 18                              |                               |         |                  |                                           |                                               |
| 19                              |                               |         |                  |                                           |                                               |
| 20                              |                               |         |                  |                                           |                                               |
| 21                              |                               |         |                  |                                           |                                               |
| 22                              |                               |         |                  |                                           |                                               |
| 23                              |                               |         |                  |                                           |                                               |
| 24                              |                               |         |                  |                                           |                                               |
| 25                              |                               |         |                  |                                           |                                               |
| 26                              |                               |         |                  |                                           |                                               |
| 27                              |                               |         |                  |                                           |                                               |
| 28                              |                               |         |                  |                                           |                                               |
| 29                              |                               |         |                  |                                           |                                               |
| 30                              |                               |         |                  |                                           |                                               |
| 31                              |                               |         |                  |                                           |                                               |
| 32                              |                               |         |                  |                                           |                                               |
| 33                              |                               |         |                  |                                           |                                               |
| 34                              |                               |         |                  |                                           |                                               |
| 35                              |                               |         |                  |                                           |                                               |

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| ALLOCATION FACTOR TABLE CONT-24 |                               | ALLOC   | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|---------------------------------|-------------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| COMMODITY RELATED               |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                               | ANNUAL FIRM CCF SALES SENDOUT |         | 7,314,430                           | 1,690,445                          | 6,345,371                            | 2,289,891                           | 955,222                             | 92,952                             |
| 2                               | ANNUAL FIRM CCF THROUGHPUT    |         | 8,553,414                           | 2,222,427                          | 10,839,452                           | 3,878,954                           | 5,490,786                           | 11,447,666                         |
| 3                               | DIRECT GAS COST ALLOCATOR     | EGAS    | 9,138,272                           | 1,843,260                          | 7,794,050                            | 2,517,263                           | 1,143,756                           | 128,502                            |
| 4                               | CGA BAD DEBT ALLOCATOR        | E904GAS | 35,362                              | 6,642                              | 29,405                               | 9,126                               | 4,307                               | 327                                |

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| ALLOCATION FACTOR TABLE CONT-25 |                                  | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|---------------------------------|----------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| CUSTOMER RELATED                |                                  |          |                  |                                           |                                               |
| 1                               | ACCT 380-SERVICES                | CUST380  | 31,874,280       | 20,802,677                                | 1,690,343                                     |
| 2                               | ACCT 381-383 METERS,MET INST,REG | CUST3813 | 16,042,516       | 4,569,833                                 | 371,326                                       |
| 3                               | ACCT 386-OTHER PROP CUST PREM    | CUST386  | 100.0000%        | 28.4197%                                  | 0.5782%                                       |
| 4                               | ACCT 397-COMM EQ METSCAN - TELM  | CUST397M | 696              | 0                                         | 0                                             |
| 5                               | ACCT 397-COMM EQUIP - ITRON      | CUST397I | 338,201          | 244,105                                   | 19,835                                        |
| 6                               | CUSTOMER DEPOSITS                | CUSTDEP  | 116,138          | 69,691                                    | 3,491                                         |
| 7                               | CUSTOMERS TRANSPORTSTION         | CUSTTRAN | 7,838            | 0                                         | 0                                             |
| 8                               | ACCT 902-METER READ EXP          | CUST902  | 345,161          | 244,105                                   | 19,835                                        |
| 9                               | ACCT 903-CUST RECORDS & COLL     | CUST903  | 399,056          | 265,110                                   | 21,724                                        |
| 10                              | ACCT 488 RECONNECT FEE           | CUST488R | 327,596          | 243,142                                   | 19,837                                        |
| 11                              | ACCT 908-CUST ASSISTANCE EXP     | CUST908  | 100.0000%        | 49.5537%                                  | 3.2474%                                       |
| 12                              | ACCT 909-INFO & INSTR ADVERT     | CUST909  | 100.0000%        | 49.5537%                                  | 3.2474%                                       |
| 13                              |                                  |          |                  |                                           |                                               |
| 14                              |                                  |          |                  |                                           |                                               |
| 15                              |                                  |          |                  |                                           |                                               |
| 16                              |                                  |          |                  |                                           |                                               |
| 17                              |                                  |          |                  |                                           |                                               |
| 18                              | ANNUAL NO SALES CUSTOMERS        |          | 329,765          | 243,142                                   | 19,837                                        |
| 19                              | ANNUAL NO OF TRANS CUSTOMERS     |          | 7,838            | 0                                         | 0                                             |
| 20                              | ANNUAL NUMBER GAS BILLS          |          | 367,705          | 265,110                                   | 21,724                                        |
| 21                              |                                  |          |                  |                                           |                                               |
| 22                              | ANNUAL NO METER EXCL DAILY MET   |          | 338,201          | 244,105                                   | 19,835                                        |
| 23                              | ANNUAL NO METERS DAILY METERED   |          | 696              | 0                                         | 0                                             |
| 24                              |                                  |          |                  |                                           |                                               |
| 25                              | TOTAL SALES & TRANSP CUSTOMERS   |          | 337,603          | 243,142                                   | 19,837                                        |
| 26                              |                                  |          |                  |                                           |                                               |
| 27                              | NUMBER OF SERVICES               |          | 20,865           | 14,866                                    | 1,208                                         |
| 28                              |                                  |          |                  |                                           |                                               |
| 29                              |                                  |          |                  |                                           |                                               |
| 30                              |                                  |          |                  |                                           |                                               |
| 31                              |                                  |          |                  |                                           |                                               |
| 32                              |                                  |          |                  |                                           |                                               |
| 33                              |                                  |          |                  |                                           |                                               |
| 34                              |                                  |          |                  |                                           |                                               |
| 35                              |                                  |          |                  |                                           |                                               |

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| ALLOCATION FACTOR TABLE CONT-25 |                                  | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|---------------------------------|----------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| CUSTOMER RELATED                |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                               | ACCT 380-SERVICES                | CUST380  | 5,528,345                           | 1,215,496                          | 1,370,796                            | 587,932                             | 363,584                             | 315,107                            |
| 2                               | ACCT 381-383 METERS,MET INST,REG | CUST3813 | 6,705,995                           | 1,474,421                          | 1,804,291                            | 773,857                             | 183,639                             | 159,154                            |
| 3                               | ACCT 386-OTHER PROP CUST PREM    | CUST386  | 15.8702%                            | 3.3949%                            | 19.3598%                             | 5.8797%                             | 9.2079%                             | 17.2896%                           |
| 4                               | ACCT 397-COMM EQ METSCAN - TELM  | CUST397M | 12                                  | 36                                 | 96                                   | 12                                  | 216                                 | 324                                |
| 5                               | ACCT 397-COMM EQUIP - ITRON      | CUST397I | 53,184                              | 11,660                             | 6,458                                | 2,799                               | 159                                 | 1                                  |
| 6                               | CUSTOMER DEPOSITS                | CUSTDEP  | 17,942                              | 11,571                             | 1,004                                | 5,006                               | 6,277                               | 1,155                              |
| 7                               | CUSTOMERS TRANSPORTSTION         | CUSTTRAN | 3,412                               | 789                                | 2,192                                | 945                                 | 191                                 | 309                                |
| 8                               | ACCT 902-METER READ EXP          | CUST902  | 53,304                              | 12,020                             | 7,418                                | 2,919                               | 2,319                               | 3,241                              |
| 9                               | ACCT 903-CUST RECORDS & COLL     | CUST903  | 71,055                              | 15,764                             | 15,858                               | 6,821                               | 1,161                               | 1,564                              |
| 10                              | ACCT 488 RECONNECT FEE           | CUST488R | 52,989                              | 11,628                             | 0                                    | 0                                   | 0                                   | 0                                  |
| 11                              | ACCT 908-CUST ASSISTANCE EXP     | CUST908  | 15.1341%                            | 3.6153%                            | 10.1982%                             | 3.7206%                             | 4.7309%                             | 9.7998%                            |
| 12                              | ACCT 909-INFO & INSTR ADVERT     | CUST909  | 15.1341%                            | 3.6153%                            | 10.1982%                             | 3.7206%                             | 4.7309%                             | 9.7998%                            |
| 13                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 15                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                              | ANNUAL NO SALES CUSTOMERS        |          | 49,576                              | 10,839                             | 4,320                                | 1,866                               | 170                                 | 15                                 |
| 19                              | ANNUAL NO OF TRANS CUSTOMERS     |          | 3,412                               | 789                                | 2,192                                | 945                                 | 191                                 | 309                                |
| 20                              | ANNUAL NUMBER GAS BILLS          |          | 57,405                              | 12,608                             | 7,091                                | 3,042                               | 396                                 | 329                                |
| 21                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 22                              | ANNUAL NO METER EXCL DAILY MET   |          | 53,184                              | 11,660                             | 6,458                                | 2,799                               | 159                                 | 1                                  |
| 23                              | ANNUAL NO METERS DAILY METERED   |          | 12                                  | 36                                 | 96                                   | 12                                  | 216                                 | 324                                |
| 24                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 25                              | TOTAL SALES & TRANSP CUSTOMERS   |          | 52,989                              | 11,628                             | 6,512                                | 2,811                               | 361                                 | 324                                |
| 26                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 27                              | NUMBER OF SERVICES               |          | 3,240                               | 712                                | 546                                  | 234                                 | 31                                  | 27                                 |
| 28                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 29                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 30                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 31                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 32                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 33                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 34                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 35                              |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |

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| ALLOCATION FACTOR TABLE CONT-26                |                               | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------------------------|-------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| EXTERNALLY DEVELOPED<br>UNCOLLECTIBLE ACCOUNTS |                               |         |                  |                                           |                                               |
| 1                                              | RESID NON HTG RATE R-6 & R-11 | C904RNH | 4,096            | 0                                         | 4,096                                         |
| 2                                              | RESID HEATING RATE R-5 & R-10 | C904RH  | 159,331          | 159,331                                   | 0                                             |
| 3                                              | LOW LF SMALL RATE G40 & T40   | C904G40 | 7,083            | 0                                         | 0                                             |
| 4                                              | LOW LF MEDIUM RATE G41 & T41  | C904G41 | 5,436            | 0                                         | 0                                             |
| 5                                              | LOW LF LARGE RATE G42 & T42   | C904G42 | 92               | 0                                         | 0                                             |
| 6                                              | HIGH LF SMALL RATE G50 & T50  | C904G50 | 1,909            | 0                                         | 0                                             |
| 7                                              | HIGH LF MEDIUM RATE G51 & T51 | C904G51 | 1,001            | 0                                         | 0                                             |
| 8                                              | HIGH LF LARGE RATE G52 & T52  | C904G52 | 0                | 0                                         | 0                                             |
|                                                |                               |         | 178,947          |                                           |                                               |
| INTERNALLY DEVELOPED<br>LATE PAYMENT CHARGES   |                               |         |                  |                                           |                                               |
| 9                                              | RESID NON HTG RATE R-6 & R-11 | C488RNH | 920,229          | 0                                         | 920,229                                       |
| 10                                             | RESID HEATING RATE R-5 & R-10 | C488RH  | 27,787,185       | 27,787,185                                | 0                                             |
| 11                                             | LOW LF SMALL RATE G40 & T40   | C488G40 | 13,437,900       | 0                                         | 0                                             |
| 12                                             | LOW LF MEDIUM RATE G41 & T41  | C488G41 | 10,537,881       | 0                                         | 0                                             |
| 13                                             | LOW LF LARGE RATE G42 & T42   | C488G42 | 2,182,860        | 0                                         | 0                                             |
| 14                                             | HIGH LF SMALL RATE G50 & T50  | C488G50 | 2,759,933        | 0                                         | 0                                             |
| 15                                             | HIGH LF MEDIUM RATE G51 & T51 | C488G51 | 3,415,279        | 0                                         | 0                                             |
| 16                                             | HIGH LF LARGE RATE G52 & T52  | C488G51 | 1,945,127        | 0                                         | 0                                             |
| 17                                             |                               |         | 62,986,395       |                                           |                                               |
| 18                                             |                               |         |                  |                                           |                                               |
| 19                                             |                               |         |                  |                                           |                                               |
| 20                                             |                               |         |                  |                                           |                                               |
| 21                                             |                               |         |                  |                                           |                                               |
| 22                                             |                               |         |                  |                                           |                                               |
| 23                                             |                               |         |                  |                                           |                                               |
| 24                                             |                               |         |                  |                                           |                                               |
| 25                                             |                               |         |                  |                                           |                                               |
| 26                                             |                               |         |                  |                                           |                                               |
| 27                                             |                               |         |                  |                                           |                                               |
| 28                                             |                               |         |                  |                                           |                                               |
| 29                                             |                               |         |                  |                                           |                                               |

| ALLOCATION FACTOR TABLE CONT-26 | ALLOC | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|---------------------------------|-------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
|---------------------------------|-------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|

EXTERNALLY DEVELOPED  
UNCOLLECTIBLE ACCOUNTS

|   |                               |         |       |       |       |       |   |
|---|-------------------------------|---------|-------|-------|-------|-------|---|
| 1 | RESID NON HTG RATE R-6 & R-11 | C904RNH | 0     | 0     | 0     | 0     | 0 |
| 2 | RESID HEATING RATE R-5 & R-10 | C904RH  | 0     | 0     | 0     | 0     | 0 |
| 3 | LOW LF SMALL RATE G40 & T40   | C904G40 | 7,083 | 0     | 0     | 0     | 0 |
| 4 | LOW LF MEDIUM RATE G41 & T41  | C904G41 | 0     | 0     | 5,436 | 0     | 0 |
| 5 | LOW LF LARGE RATE G42 & T42   | C904G42 | 0     | 0     | 0     | 92    | 0 |
| 6 | HIGH LF SMALL RATE G50 & T50  | C904G50 | 0     | 1,909 | 0     | 0     | 0 |
| 7 | HIGH LF MEDIUM RATE G51 & T51 | C904G51 | 0     | 0     | 0     | 1,001 | 0 |
| 8 | HIGH LF LARGE RATE G52 & T52  | C904G52 | 0     | 0     | 0     | 0     | 0 |

INTERNALLY DEVELOPED  
LATE PAYMENT CHARGES

|    |                               |         |            |           |            |           |           |
|----|-------------------------------|---------|------------|-----------|------------|-----------|-----------|
| 9  | RESID NON HTG RATE R-6 & R-11 | C488RNH | 0          | 0         | 0          | 0         | 0         |
| 10 | RESID HEATING RATE R-5 & R-10 | C488RH  | 0          | 0         | 0          | 0         | 0         |
| 11 | LOW LF SMALL RATE G40 & T40   | C488G40 | 13,437,900 | 0         | 0          | 0         | 0         |
| 12 | LOW LF MEDIUM RATE G41 & T41  | C488G41 | 0          | 0         | 10,537,881 | 0         | 0         |
| 13 | LOW LF LARGE RATE G42 & T42   | C488G42 | 0          | 0         | 0          | 2,182,860 | 0         |
| 14 | HIGH LF SMALL RATE G50 & T50  | C488G50 | 0          | 2,759,933 | 0          | 0         | 0         |
| 15 | HIGH LF MEDIUM RATE G51 & T51 | C488G51 | 0          | 0         | 0          | 3,415,279 | 0         |
| 16 | HIGH LF LARGE RATE G52 & T52  | C488G51 | 0          | 0         | 0          | 0         | 1,945,127 |

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|                                     |          | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|-------------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| INTERNALLY DEVELOPED-27             | ALLOC    |                  |                                           |                                               |
| 1 TOTAL GAS PLANT IN SERVICE        | PLANT    | 131,165,787      | 51,166,854                                | 2,751,180                                     |
| 2 SUM OF ALLOCATED LABOR EXP        | LABOR    | 6,038,340        | 2,426,866                                 | 137,347                                       |
| 3 ACCT 305-STRUCTURES & IMPROVE     | PLT305   | 169,854          | 80,545                                    | 969                                           |
| 4 ACCT 311-LP GAS EQUIP             | PLT311   | 862,270          | 408,888                                   | 4,918                                         |
| 5 ACCT 320-OTHER EQUIPMENT          | PLT320   | 34,055           | 16,149                                    | 194                                           |
| 6 ACCT 380-SERVICES                 | PLT380   | 31,874,279       | 20,802,676                                | 1,690,343                                     |
| 7 ACCT 381-METERS                   | PLT381   | 3,506,040        | 998,722                                   | 81,152                                        |
| 8 ACCT 382-METER INSTALLATION       | PLT382   | 12,313,745       | 3,507,664                                 | 285,019                                       |
| 9 ACCT 386-OTHER PROP CUST PREM     | PLT386   | 2,523,018        | 717,034                                   | 14,589                                        |
| 10 ACCT 383-HOUSE REGULATORS        | PLT383   | 222,731          | 63,447                                    | 5,155                                         |
| 11 ACCT 396-POWER OPERATED EQUIP    | PLT396   | 75,266           | 28,727                                    | 1,549                                         |
| 12 ACCT 391-OFFICE FURN & EQUIP     | PLT391   | 602,092          | 241,987                                   | 13,695                                        |
| 13 ACCT 392-TRANSPORTATION EQUIP    | PLT392   | 22,974           | 9,233                                     | 523                                           |
| 14 ACCT 393-STORES EQUIPMENT        | PLT393   | 31,520           | 12,030                                    | 649                                           |
| 15 ACCT 394-TOOLS, SHOP & GAR EQ    | PLT394   | 874,077          | 333,607                                   | 17,989                                        |
| 16 ACCT 397-COMMUNICATION EQUIP     | PLT397   | 1,030,686        | 414,242                                   | 23,444                                        |
| 17 ACCT 376 MAINS & 380 SERVICES    | PLT37680 | 97,317,326       | 39,401,392                                | 2,068,758                                     |
| 18 TOTAL DISTRIBUTION PLANT         | DISTRPLT | 120,597,781      | 46,028,224                                | 2,481,936                                     |
| 19 TOTAL GAS COSTS                  | GASCOSTS | 42,184,110       | 19,191,057                                | 427,950                                       |
| 20 ACCT 381 - 383 METER & HSE REGUL | PLT3813  | 16,042,516       | 4,569,833                                 | 371,326                                       |
| 21 ACCT 851-879 DIST OPER EXP       | EXP8519  | 1,558,608        | 521,012                                   | 33,158                                        |
| 22 REV CLAIMED ROR LESS GAS COSTS   | REVCLAIM | 20,802,285       | 8,596,128                                 | 492,280                                       |
| 23 TOTAL GENERAL PLt EXCL 397M      | GENPLT   | 2,869,562        | 1,133,449                                 | 63,146                                        |
| 24 TOTAL GAS O & M LABOR            | OMLAB    | 3,466,919        | 1,445,439                                 | 84,427                                        |
| 25 TOTAL PROD & STORAGE PLANT       | PSPLT    | 2,933,454        | 1,391,044                                 | 16,731                                        |
| 26 TOTAL ADMIN & GEN EXPENSE        | TOTAG    | 4,259,794        | 1,719,140                                 | 95,522                                        |
| 27                                  |          |                  |                                           |                                               |
| 28                                  |          |                  |                                           |                                               |
| 29                                  |          |                  |                                           |                                               |
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NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                                     | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-------------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INTERNALLY DEVELOPED-27             |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1 TOTAL GAS PLANT IN SERVICE        | PLANT    | 25,963,141                          | 5,510,766                          | 18,589,005                           | 5,954,438                           | 7,635,842                           | 13,594,562                         |
| 2 SUM OF ALLOCATED LABOR EXP        | LABOR    | 1,238,438                           | 267,937                            | 818,120                              | 270,488                             | 317,289                             | 561,854                            |
| 3 ACCT 305-STRUCTURES & IMPROVE     | PLT305   | 44,510                              | 2,225                              | 33,112                               | 3,672                               | 4,623                               | 199                                |
| 4 ACCT 311-LP GAS EQUIP             | PLT311   | 225,959                             | 11,294                             | 168,093                              | 18,641                              | 23,466                              | 1,009                              |
| 5 ACCT 320-OTHER EQUIPMENT          | PLT320   | 8,924                               | 446                                | 6,639                                | 736                                 | 927                                 | 40                                 |
| 6 ACCT 380-SERVICES                 | PLT380   | 5,528,345                           | 1,215,496                          | 1,370,796                            | 587,932                             | 363,584                             | 315,107                            |
| 7 ACCT 381-METERS                   | PLT381   | 1,465,573                           | 322,230                            | 394,322                              | 169,124                             | 40,134                              | 34,783                             |
| 8 ACCT 382-METER INSTALLATION       | PLT382   | 5,147,317                           | 1,131,721                          | 1,384,918                            | 593,989                             | 140,956                             | 122,162                            |
| 9 ACCT 386-OTHER PROP CUST PREM     | PLT386   | 400,408                             | 85,654                             | 488,450                              | 148,346                             | 232,318                             | 436,219                            |
| 10 ACCT 383-HOUSE REGULATORS        | PLT383   | 93,105                              | 20,471                             | 25,050                               | 10,744                              | 2,550                               | 2,210                              |
| 11 ACCT 396-POWER OPERATED EQUIP    | PLT396   | 14,834                              | 3,219                              | 10,763                               | 3,517                               | 4,518                               | 8,139                              |
| 12 ACCT 391-OFFICE FURN & EQUIP     | PLT391   | 123,487                             | 26,716                             | 81,576                               | 26,971                              | 31,637                              | 56,023                             |
| 13 ACCT 392-TRANSPORTATION EQUIP    | PLT392   | 4,712                               | 1,019                              | 3,113                                | 1,029                               | 1,207                               | 2,138                              |
| 14 ACCT 393-STORES EQUIPMENT        | PLT393   | 6,212                               | 1,348                              | 4,507                                | 1,473                               | 1,892                               | 3,408                              |
| 15 ACCT 394-TOOLS, SHOP & GAR EQ    | PLT394   | 172,274                             | 37,380                             | 124,996                              | 40,843                              | 52,472                              | 94,516                             |
| 16 ACCT 397-COMMUNICATION EQUIP     | PLT397   | 211,389                             | 45,734                             | 139,645                              | 46,170                              | 54,158                              | 95,903                             |
| 17 ACCT 376 MAINS & 380 SERVICES    | PLT37680 | 15,914,278                          | 3,437,214                          | 14,040,417                           | 4,435,790                           | 6,389,536                           | 11,629,942                         |
| 18 TOTAL DISTRIBUTION PLANT         | DISTRPLT | 23,768,947                          | 5,157,355                          | 17,245,956                           | 5,635,217                           | 7,239,639                           | 13,040,506                         |
| 19 TOTAL GAS COSTS                  | GASCOSTS | 9,138,272                           | 1,843,260                          | 7,794,050                            | 2,517,263                           | 1,143,756                           | 128,502                            |
| 20 ACCT 381 - 383 METER & HSE REGUL | PLT3813  | 6,705,995                           | 1,474,421                          | 1,804,291                            | 773,857                             | 183,639                             | 159,154                            |
| 21 ACCT 851-879 DIST OPER EXP       | EXP8519  | 462,579                             | 101,205                            | 203,694                              | 74,514                              | 60,583                              | 101,863                            |
| 22 REV CLAIMED ROR LESS GAS COSTS   | REVCLAIM | 4,299,628                           | 916,673                            | 2,743,831                            | 898,016                             | 1,039,104                           | 1,816,625                          |
| 23 TOTAL GENERAL PLt EXCL 397M      | GENPLT   | 580,685                             | 125,753                            | 396,163                              | 130,438                             | 158,126                             | 281,802                            |
| 24 TOTAL GAS O & M LABOR            | OMLAB    | 731,630                             | 157,970                            | 450,397                              | 150,333                             | 162,924                             | 283,800                            |
| 25 TOTAL PROD & STORAGE PLANT       | PSPLT    | 768,715                             | 38,423                             | 571,856                              | 63,418                              | 79,833                              | 3,434                              |
| 26 TOTAL ADMIN & GEN EXPENSE        | TOTAG    | 878,080                             | 186,641                            | 581,967                              | 189,174                             | 221,416                             | 387,854                            |

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| INTERNALLY DEVELOPED CONT-28 |                                    | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------|------------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| 1                            | ACCT 717-PROPANE EXPENSES          | EXP717  | 5,517            | 2,616                                     | 31                                            |
| 2                            | ACCT 718-DISPATCHING PROD          | EXP718  | 0                | 0                                         | 0                                             |
| 3                            | ACCT 735-MISCELLANEOUS             | EXP735  | 19,818           | 9,398                                     | 113                                           |
| 4                            | ACCT 741-MAINTENANCE OF PLANT      | EXP741  | 2,407            | 1,141                                     | 14                                            |
| 5                            | ACCT 742-MAINTENANCE OF EQUIP      | EXP742  | 8,277            | 3,925                                     | 47                                            |
| 6                            | ACCT 743-GAS SYS PROD TRAINING     | EXP743  | 657              | 312                                       | 4                                             |
| 7                            | ACCT 813-OTHER GAS SUPPLY EXP      | EXP813  | 190,649          | 75,623                                    | 1,650                                         |
| 8                            | ACCT 851-SYSTEM CONTROL & DISP     | EXP851  | 0                | 0                                         | 0                                             |
| 9                            | ACCT 857-MEAS & REG STATION EXP    | EXP857  | 0                | 0                                         | 0                                             |
| 10                           | ACCT 874-MAINS & SERVICE EXP       | EXP874  | 562,176          | 227,611                                   | 11,951                                        |
| 11                           | ACCT 875-GAS SYSTEM T&D TRAINING   | EXP875  | 152,142          | 43,238                                    | 880                                           |
| 12                           | ACCT 878-METER & HOUSE REG EXP     | EXP878  | 804,803          | 229,254                                   | 18,628                                        |
| 13                           | ACCT 879-CUSTOMER INSTALL EXP      | EXP879  | 39,486           | 20,909                                    | 1,699                                         |
| 14                           | ACCT 880-OTHER EXPENSE             | EXP880  | 707,119          | 231,555                                   | 5,113                                         |
| 15                           | ACCT 882-METERING SYS GAS TRAINING | EXP882  | 4,413            | 1,257                                     | 102                                           |
| 16                           | ACCT 887-MAINTENANCE OF MAINS      | EXP887  | 257,655          | 73,225                                    | 1,490                                         |
| 17                           | ACCT 889-MT OF M & R STA EQ        | EXP889  | 20,567           | 5,845                                     | 119                                           |
| 18                           | ACCT 890-MT OF REG EQ (INDUST)     | EXP890  | (526)            | (149)                                     | (3)                                           |
| 19                           | ACCT 891-MT OF REG EQ (CITY GATE)  | EXP891  | 28,896           | 8,799                                     | 182                                           |
| 20                           | ACCT 892-MAINTENANCE OF SERV       | EXP892  | 71,698           | 46,793                                    | 3,802                                         |
| 21                           | ACCT 893-MAINT MET & HOUSE REG     | EXP893  | 103,807          | 29,570                                    | 2,403                                         |
| 22                           | ACCT 902-METER READING EXP         | EXP902  | 124,019          | 87,709                                    | 7,127                                         |
| 23                           | ACCT 903-CUST RECORDS & COLL       | EXP903  | 1,112,845        | 739,311                                   | 60,582                                        |
| 24                           | ACCT 908-CUST ASSISTANCE EXP       | EXP908  | 2,357            | 1,168                                     | 77                                            |
| 25                           | ACCT 904-UNCOLLECTIBLE ACCTS       | EXP904  | 347,894          | 238,830                                   | 5,751                                         |
| 26                           | ACCT 904-UNCOLL ACCTS EXP BASE     | EXP904B | 178,947          | 159,331                                   | 4,096                                         |
| 27                           | ACCT 920-ADMIN & GEN SALARY        | EXP920  | 29,106           | 11,698                                    | 662                                           |
| 28                           | ACCT 923-OUTSIDE SERV EMPLOYED     | EXP923  | 2,118,743        | 851,543                                   | 48,193                                        |
| 29                           | ACCT 930-MISC GEN EXP              | EXP930  | 72,126           | 28,988                                    | 1,641                                         |
| 30                           | ACCT 935-MAINT OF GENERAL PLT      | EXP935  | 21,214           | 8,379                                     | 467                                           |
| 31                           | GAS PROD LABOR ACCTS 717-735       | LABPO   | 19,155           | 9,083                                     | 109                                           |
| 32                           | GAS PROD LABOR ACCTS 741-743       | LABPM   | 7,013            | 3,325                                     | 40                                            |
| 33                           | DIST LABOR OPER ACCT 851 - 882     | LABDO   | 1,227,034        | 405,863                                   | 19,462                                        |
| 34                           | DIST LABOR MAINT ACCT 886 - 894    | LABDM   | 115,243          | 40,069                                    | 1,562                                         |
| 35                           | CUST ACCTS LABOR ACCT 902 - 903    | LABCA   | 515,773          | 347,461                                   | 28,418                                        |
| 36                           | CUST SERV & INFO LABOR ACCT 908    | LABSE   | 125,636          | 62,257                                    | 4,080                                         |
| 37                           | ACCT 880-ENERGY MGT & CONTROL      | E880USC | 690,042          | 225,846                                   | 4,750                                         |
| 38                           |                                    |         |                  |                                           |                                               |
| 39                           |                                    |         |                  |                                           |                                               |
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NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                              |                                    | ALLOC   | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------|------------------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INTERNALLY DEVELOPED CONT-28 |                                    |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                            | ACCT 717-PROPANE EXPENSES          | EXP717  | 1,446                               | 72                                 | 1,076                                | 119                                 | 150                                 | 6                                  |
| 2                            | ACCT 718-DISPATCHING PROD          | EXP718  | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 3                            | ACCT 735-MISCELLANEOUS             | EXP735  | 5,193                               | 260                                | 3,863                                | 428                                 | 539                                 | 23                                 |
| 4                            | ACCT 741-MAINTENANCE OF PLANT      | EXP741  | 631                                 | 32                                 | 469                                  | 52                                  | 66                                  | 3                                  |
| 5                            | ACCT 742-MAINTENANCE OF EQUIP      | EXP742  | 2,169                               | 108                                | 1,614                                | 179                                 | 225                                 | 10                                 |
| 6                            | ACCT 743-GAS SYS PROD TRAINING     | EXP743  | 172                                 | 9                                  | 128                                  | 14                                  | 18                                  | 1                                  |
| 7                            | ACCT 813-OTHER GAS SUPPLY EXP      | EXP813  | 37,531                              | 7,696                              | 35,800                               | 11,320                              | 9,397                               | 11,633                             |
| 8                            | ACCT 851-SYSTEM CONTROL & DISP     | EXP851  | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 9                            | ACCT 857-MEAS & REG STATION EXP    | EXP857  | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 10                           | ACCT 874-MAINS & SERVICE EXP       | EXP874  | 91,933                              | 19,856                             | 81,108                               | 25,624                              | 36,911                              | 67,183                             |
| 11                           | ACCT 875-GAS SYSTEM T&D TRAINING   | EXP875  | 24,145                              | 5,165                              | 29,454                               | 8,946                               | 14,009                              | 26,305                             |
| 12                           | ACCT 878-METER & HOUSE REG EXP     | EXP878  | 336,419                             | 73,967                             | 90,516                               | 38,822                              | 9,213                               | 7,984                              |
| 13                           | ACCT 879-CUSTOMER INSTALL EXP      | EXP879  | 10,082                              | 2,217                              | 2,616                                | 1,122                               | 451                                 | 391                                |
| 14                           | ACCT 880-OTHER EXPENSE             | EXP880  | 124,669                             | 26,233                             | 134,283                              | 41,541                              | 52,887                              | 90,838                             |
| 15                           | ACCT 882-METERING SYS GAS TRAINING | EXP882  | 1,845                               | 406                                | 496                                  | 213                                 | 51                                  | 44                                 |
| 16                           | ACCT 887-MAINTENANCE OF MAINS      | EXP887  | 40,890                              | 8,747                              | 49,881                               | 15,149                              | 23,725                              | 44,547                             |
| 17                           | ACCT 889-MT OF M & R STA EQ        | EXP889  | 3,264                               | 698                                | 3,982                                | 1,209                               | 1,894                               | 3,556                              |
| 18                           | ACCT 890-MT OF REG EQ (INDUST)     | EXP890  | (83)                                | (18)                               | (102)                                | (31)                                | (48)                                | (91)                               |
| 19                           | ACCT 891-MT OF REG EQ (CITY GATE)  | EXP891  | 4,785                               | 1,014                              | 5,564                                | 1,702                               | 2,437                               | 4,412                              |
| 20                           | ACCT 892-MAINTENANCE OF SERV       | EXP892  | 12,435                              | 2,734                              | 3,083                                | 1,322                               | 818                                 | 709                                |
| 21                           | ACCT 893-MAINT MET & HOUSE REG     | EXP893  | 43,393                              | 9,541                              | 11,675                               | 5,007                               | 1,188                               | 1,030                              |
| 22                           | ACCT 902-METER READING EXP         | EXP902  | 19,153                              | 4,319                              | 2,665                                | 1,049                               | 833                                 | 1,165                              |
| 23                           | ACCT 903-CUST RECORDS & COLL       | EXP903  | 198,150                             | 43,961                             | 44,223                               | 19,021                              | 3,238                               | 4,361                              |
| 24                           | ACCT 908-CUST ASSISTANCE EXP       | EXP908  | 357                                 | 85                                 | 240                                  | 88                                  | 112                                 | 231                                |
| 25                           | ACCT 904-UNCOLLECTIBLE ACCTS       | EXP904  | 43,550                              | 8,774                              | 35,749                               | 10,391                              | 4,514                               | 336                                |
| 26                           | ACCT 904-UNCOLL ACCTS EXP BASE     | EXP904B | 7,083                               | 1,909                              | 5,436                                | 1,001                               | 92                                  | 0                                  |
| 27                           | ACCT 920-ADMIN & GEN SALARY        | EXP920  | 5,969                               | 1,291                              | 3,943                                | 1,304                               | 1,529                               | 2,708                              |
| 28                           | ACCT 923-OUTSIDE SERV EMPLOYED     | EXP923  | 434,545                             | 94,014                             | 287,064                              | 94,909                              | 111,331                             | 197,144                            |
| 29                           | ACCT 930-MISC GEN EXP              | EXP930  | 14,793                              | 3,200                              | 9,772                                | 3,231                               | 3,790                               | 6,711                              |
| 30                           | ACCT 935-MAINT OF GENERAL PLT      | EXP935  | 4,293                               | 930                                | 2,929                                | 964                                 | 1,169                               | 2,083                              |
| 31                           | GAS PROD LABOR ACCTS 717-735       | LABPO   | 5,020                               | 251                                | 3,734                                | 414                                 | 521                                 | 22                                 |
| 32                           | GAS PROD LABOR ACCTS 741-743       | LABPM   | 1,838                               | 92                                 | 1,367                                | 152                                 | 191                                 | 8                                  |
| 33                           | DIST LABOR OPER ACCT 851 - 882     | LABDO   | 300,256                             | 65,062                             | 188,760                              | 63,615                              | 67,396                              | 116,622                            |
| 34                           | DIST LABOR MAINT ACCT 886 - 894    | LABDM   | 18,707                              | 4,015                              | 19,469                               | 6,022                               | 8,942                               | 16,457                             |
| 35                           | CUST ACCTS LABOR ACCT 902 - 903    | LABCA   | 89,186                              | 19,850                             | 18,449                               | 7,847                               | 1,928                               | 2,635                              |
| 36                           | CUST SERV & INFO LABOR ACCT 908    | LABSE   | 19,014                              | 4,542                              | 12,813                               | 4,674                               | 5,944                               | 12,312                             |
| 37                           | ACCT 880-ENERGY MGT & CONTROL      | E880USC | 119,600                             | 25,124                             | 132,052                              | 40,725                              | 52,223                              | 89,722                             |
| 38                           |                                    |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 39                           |                                    |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 40                           |                                    |         |                                     |                                    |                                      |                                     |                                     |                                    |



| INTERNALLY DEVELOPED CONT-29 |                                     | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------|-------------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| 1                            | TOTAL GAS PROD OPER LABOR           | TLABPO  | 19,125           | 9,069                                     | 109                                           |
| 2                            | TOTAL GAS PROD MAINT LABOR          | TLABPM  | 6,983            | 3,311                                     | 40                                            |
| 3                            | TOTAL DISTR OPER LABOR              | TLABDO  | 1,285,080        | 425,062                                   | 20,383                                        |
| 4                            | TOTAL DISTR MAINT LABOR             | TLABDM  | 175,834          | 61,136                                    | 2,383                                         |
| 5                            | TOTAL CUST ACCTS LABOR              | TLABCA  | 515,773          | 347,461                                   | 28,418                                        |
| 6                            | CUSTOMER SERVICE & INFO LABOR       | TLABSE  | 125,636          | 62,257                                    | 4,080                                         |
| 7                            | ACCT 886-MAINT STRUCT & IMPROV      | EXP886  | 5,588            | 1,588                                     | 32                                            |
| 8                            | ACCT 894-MAINT OF OTHER EQUIP       | EXP894  | 225,249          | 64,015                                    | 1,302                                         |
| 9                            | ACCT 921-OFFICE SUPPLIES & EXP      | EXP921  | 206,996          | 83,194                                    | 4,708                                         |
| 10                           | ACCT 926-EMPLOY PENSION & BENF      | EXP926  | 1,370,238        | 550,712                                   | 31,167                                        |
| 11                           | ACCT 380-383-SERV,METRS & REGUL     | PLT3803 | 47,916,795       | 25,372,509                                | 2,061,669                                     |
| 12                           | ACCT 925-INJURIES & DAMAGES         | EXP925  | 262,313          | 105,426                                   | 5,967                                         |
| 13                           | ACCT 924 & 925 PROP & LIABILITY INS | EXP9245 | 270,328          | 108,553                                   | 6,135                                         |
| 14                           | ACCT 303-MISC INTANGIBLE PLT        | PLT303  | 2,325,358        | 934,584                                   | 52,892                                        |
| 15                           | ACCT 321-LNG EQUIPMENT              | PLT321  | 27,657           | 13,115                                    | 158                                           |
| 16                           | ACCT 361-STRUCTURES & IMPROVE       | PLT361  | 182,976          | 86,767                                    | 1,044                                         |
| 17                           | ACCT 362-GAS HOLDERS                | PLT362  | 1,533,321        | 727,101                                   | 8,745                                         |
| 18                           | ACCT 363-PURIFICATION EQUIPMENT     | PLT363  | 42,469           | 20,139                                    | 242                                           |
| 19                           | ACCT 375-STRUCTURES & IMPROVE       | PLT375  | 2,820,320        | 801,527                                   | 16,308                                        |
| 20                           | ACCT 376-MAINS                      | PLT376  | 65,443,047       | 18,598,715                                | 378,415                                       |
| 21                           | ACCT 378-MEAS & REG STATION EQ      | PLT378  | 1,787,578        | 508,024                                   | 10,336                                        |
| 22                           | ACCT 397-COMM EQ METSCAN - TEL      | PLT397M | 112,656          | 0                                         | 0                                             |
| 23                           | ACCT 397-COMM EQUIP - ITRON         | PLT397I | 2,326,975        | 1,679,553                                 | 136,474                                       |
| 24                           |                                     |         |                  |                                           |                                               |
| 25                           |                                     |         |                  |                                           |                                               |
| 26                           |                                     |         |                  |                                           |                                               |
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NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                              |                                     | ALLOC   | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------|-------------------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INTERNALLY DEVELOPED CONT-29 |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                            | TOTAL GAS PROD OPER LABOR           | TLABPO  | 5,012                               | 251                                | 3,728                                | 413                                 | 520                                 | 22                                 |
| 2                            | TOTAL GAS PROD MAINT LABOR          | TLABPM  | 1,830                               | 91                                 | 1,361                                | 151                                 | 190                                 | 8                                  |
| 3                            | TOTAL DISTR OPER LABOR              | TLABDO  | 314,460                             | 68,139                             | 197,689                              | 66,624                              | 70,584                              | 122,139                            |
| 4                            | TOTAL DISTR MAINT LABOR             | TLABDM  | 28,542                              | 6,125                              | 29,705                               | 9,189                               | 13,643                              | 25,109                             |
| 5                            | TOTAL CUST ACCTS LABOR              | TLABCA  | 89,186                              | 19,850                             | 18,449                               | 7,847                               | 1,928                               | 2,635                              |
| 6                            | CUSTOMER SERVICE & INFO LABOR       | TLABSE  | 19,014                              | 4,542                              | 12,813                               | 4,674                               | 5,944                               | 12,312                             |
| 7                            | ACCT 886-MAINT STRUCT & IMPROV      | EXP886  | 887                                 | 190                                | 1,082                                | 329                                 | 515                                 | 966                                |
| 8                            | ACCT 894-MAINT OF OTHER EQUIP       | EXP894  | 35,747                              | 7,647                              | 43,608                               | 13,244                              | 20,741                              | 38,945                             |
| 9                            | ACCT 921-OFFICE SUPPLIES & EXP      | EXP921  | 42,454                              | 9,185                              | 28,045                               | 9,272                               | 10,877                              | 19,260                             |
| 10                           | ACCT 926-EMPLOY PENSION & BENF      | EXP926  | 281,030                             | 60,801                             | 185,650                              | 61,380                              | 72,000                              | 127,498                            |
| 11                           | ACCT 380-383-SERV,METRS & REGUL     | PLT3803 | 12,234,340                          | 2,689,917                          | 3,175,087                            | 1,361,789                           | 547,224                             | 474,260                            |
| 12                           | ACCT 925-INJURIES & DAMAGES         | EXP925  | 53,799                              | 11,639                             | 35,540                               | 11,750                              | 13,783                              | 24,408                             |
| 13                           | ACCT 924 & 925 PROP & LIABILITY INS | EXP9245 | 55,386                              | 11,976                             | 36,676                               | 12,114                              | 14,250                              | 25,238                             |
| 14                           | ACCT 303-MISC INTANGIBLE PLT        | PLT303  | 476,921                             | 103,182                            | 315,057                              | 104,165                             | 122,188                             | 216,369                            |
| 15                           | ACCT 321-LNG EQUIPMENT              | PLT321  | 7,247                               | 362                                | 5,391                                | 598                                 | 753                                 | 32                                 |
| 16                           | ACCT 361-STRUCTURES & IMPROVE       | PLT361  | 47,949                              | 2,397                              | 35,670                               | 3,956                               | 4,980                               | 214                                |
| 17                           | ACCT 362-GAS HOLDERS                | PLT362  | 401,808                             | 20,084                             | 298,910                              | 33,149                              | 41,729                              | 1,795                              |
| 18                           | ACCT 363-PURIFICATION EQUIPMENT     | PLT363  | 11,129                              | 556                                | 8,279                                | 918                                 | 1,156                               | 50                                 |
| 19                           | ACCT 375-STRUCTURES & IMPROVE       | PLT375  | 447,590                             | 95,747                             | 546,007                              | 165,827                             | 259,693                             | 487,622                            |
| 20                           | ACCT 376-MAINS                      | PLT376  | 10,385,933                          | 2,221,718                          | 12,669,621                           | 3,847,858                           | 6,025,951                           | 11,314,836                         |
| 21                           | ACCT 378-MEAS & REG STATION EQ      | PLT378  | 283,692                             | 60,686                             | 346,071                              | 105,104                             | 164,599                             | 309,065                            |
| 22                           | ACCT 397-COMM EQ METSCAN - TEL      | PLT397M | 1,942                               | 5,827                              | 15,539                               | 1,942                               | 34,962                              | 52,444                             |
| 23                           | ACCT 397-COMM EQUIP - ITRON         | PLT397I | 365,930                             | 80,226                             | 44,434                               | 19,258                              | 1,094                               | 7                                  |
| 24                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 25                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 26                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 27                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 28                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 29                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 30                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 31                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 32                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 33                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 34                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 35                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 36                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 37                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 38                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 39                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 40                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |

|                                   | ALLOC | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|-----------------------------------|-------|------------------|-------------------------------------------|-----------------------------------------------|
| INTERNALLY DEVELOPED CONT-30      |       |                  |                                           |                                               |
| -----                             |       |                  |                                           |                                               |
| REVENUES FROM GAS SALES           |       |                  |                                           |                                               |
| 1 REVENUES FIRM SALES OF GAS      |       | 60,243,868       | 27,566,460                                | 750,866                                       |
| 2 WEATHER ADJ NET REVENUES        |       | 511,509          | 250,789                                   | 3,304                                         |
| 3 CGA REVENUES                    |       | 42,184,110       | 19,191,057                                | 427,950                                       |
| 4 BASE REVENUE SALES              |       | 12,852,076       | 7,475,009                                 | 308,660                                       |
| 5 BASE REVENUE EXTERNAL SUPPLY    |       | 3,516,532        | 335                                       | 0                                             |
| 6 PRODUCTION REVENUES             |       | 814,608          | 375,172                                   | 7,406                                         |
| 7 CGA BAD DEBT CHARGES            |       | 160,113          | 73,434                                    | 1,509                                         |
| 8 LOW INCOME DISCOUNT             |       | 200,748          | 198,749                                   | 1,998                                         |
| 9 CGA BAD DEBT CHARGES FROM INCR  |       | 4,172            | 1,913                                     | 39                                            |
| 10                                |       |                  |                                           |                                               |
| 11                                |       |                  |                                           |                                               |
| 12                                |       |                  |                                           |                                               |
| REVENUE REQUIREMENT INPUTS        |       |                  |                                           |                                               |
| -----                             |       |                  |                                           |                                               |
| 1 CLAIMED RATE OF RETURN          |       | 7.240%           | 7.240%                                    | 7.240%                                        |
| 2 ANNUAL BOOKED CCF SALES & TRANS |       | 58,401,190       | 15,819,246                                | 361,408                                       |
| 3 PROPOSED SALES REVENUES         |       | 62,986,395       | 27,787,185                                | 920,229                                       |
| 4 TOTAL ANNUAL CUSTOMERS          |       | 337,603          | 243,142                                   | 19,837                                        |
| 5                                 |       |                  |                                           |                                               |

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|                                   | ALLOC | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-----------------------------------|-------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INTERNALLY DEVELOPED CONT-30      |       |                                     |                                    |                                      |                                     |                                     |                                    |
| -----                             |       |                                     |                                    |                                      |                                     |                                     |                                    |
| REVENUES FROM GAS SALES           |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 1 REVENUES FIRM SALES OF GAS      |       | 12,298,911                          | 2,587,193                          | 10,284,411                           | 3,287,842                           | 2,090,458                           | 1,377,726                          |
| 2 WEATHER ADJ NET REVENUES        |       | 94,366                              | 8,985                              | 89,471                               | 7,417                               | 29,886                              | 27,290                             |
| 3 CGA REVENUES                    |       | 9,138,272                           | 1,843,260                          | 7,794,050                            | 2,517,263                           | 1,143,756                           | 128,502                            |
| 4 BASE REVENUE SALES              |       | 2,524,741                           | 577,351                            | 1,336,052                            | 435,898                             | 181,837                             | 12,526                             |
| 5 BASE REVENUE EXTERNAL SUPPLY    |       | 321,437                             | 119,650                            | 883,959                              | 274,785                             | 708,827                             | 1,207,539                          |
| 6 PRODUCTION REVENUES             |       | 183,812                             | 31,131                             | 150,707                              | 43,116                              | 21,732                              | 1,533                              |
| 7 CGA BAD DEBT CHARGES            |       | 35,362                              | 6,642                              | 29,405                               | 9,126                               | 4,307                               | 327                                |
| 8 LOW INCOME DISCOUNT             |       | 0                                   | 0                                  | 0                                    | 0                                   | 0                                   | 0                                  |
| 9 CGA BAD DEBT CHARGES FROM INCR  |       | 921                                 | 173                                | 766                                  | 238                                 | 112                                 | 9                                  |
| 10                                |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                                |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                                |       |                                     |                                    |                                      |                                     |                                     |                                    |
| REVENUE REQUIREMENT INPUTS        |       |                                     |                                    |                                      |                                     |                                     |                                    |
| -----                             |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 1 CLAIMED RATE OF RETURN          |       | 7.240%                              | 7.240%                             | 7.240%                               | 7.240%                              | 7.240%                              | 7.240%                             |
| 2 ANNUAL BOOKED CCF SALES & TRANS |       | 8,510,647                           | 2,211,315                          | 10,785,254                           | 3,859,559                           | 5,463,332                           | 11,390,428                         |
| 3 PROPOSED SALES REVENUES         |       | 13,437,900                          | 2,759,933                          | 10,537,881                           | 3,415,279                           | 2,182,860                           | 1,945,127                          |
| 4 TOTAL ANNUAL CUSTOMERS          |       | 52,989                              | 11,628                             | 6,512                                | 2,811                               | 361                                 | 324                                |
| 5                                 |       |                                     |                                    |                                      |                                     |                                     |                                    |

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| RATIO TABLE-31   |                                | ALLOC  | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------|--------------------------------|--------|------------------|-------------------------------------------|-----------------------------------------------|
| CAPACITY RELATED |                                |        |                  |                                           |                                               |
| 1                | -----                          |        |                  |                                           |                                               |
| 2                | PRODUCTION ALLOCATORS          |        |                  |                                           |                                               |
| 3                | DES DAY REMANNG DEMNDS - SALES |        | 1.00000          | 0.47420                                   | 0.00570                                       |
| 4                | LPG PROD ALLOC-PROD            |        | 1.00000          | 0.47420                                   | 0.00570                                       |
| 5                | LNG PROD ALLOC-PROD            |        | 1.00000          | 0.47420                                   | 0.00570                                       |
| 6                | LPG & LNG PROD ALLOC-DISTR     |        | 1.00000          | 0.47420                                   | 0.00570                                       |
| 7                | LPG PRODUCTION DEMAND          | DEMLPG | 1.00000          | 0.47420                                   | 0.00570                                       |
| 8                | LNG PRODUCTION DEMAND          | DEMLNG | 1.00000          | 0.47420                                   | 0.00570                                       |
| 9                |                                |        |                  |                                           |                                               |
| 10               |                                |        |                  |                                           |                                               |
| 11               |                                |        |                  |                                           |                                               |
| 12               |                                |        |                  |                                           |                                               |
| 13               |                                |        |                  |                                           |                                               |
| 14               |                                |        |                  |                                           |                                               |
| 15               |                                |        |                  |                                           |                                               |
| 16               |                                |        |                  |                                           |                                               |
| 17               |                                |        |                  |                                           |                                               |
| 18               | DISTRIBUTION ALLOCATORS        |        |                  |                                           |                                               |
| 1                | -----                          |        |                  |                                           |                                               |
| 2                | DISTRIBUTION ALLOCATOR         | DISTR  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 3                |                                |        |                  |                                           |                                               |
| 4                |                                |        |                  |                                           |                                               |
| 5                |                                |        |                  |                                           |                                               |
| 6                |                                |        |                  |                                           |                                               |
| 7                |                                |        |                  |                                           |                                               |
| 8                |                                |        |                  |                                           |                                               |
| 9                |                                |        |                  |                                           |                                               |
| 10               |                                |        |                  |                                           |                                               |
| 11               |                                |        |                  |                                           |                                               |
| 12               |                                |        |                  |                                           |                                               |
| 13               |                                |        |                  |                                           |                                               |
| 14               |                                |        |                  |                                           |                                               |
| 15               |                                |        |                  |                                           |                                               |
| 16               |                                |        |                  |                                           |                                               |
| 17               |                                |        |                  |                                           |                                               |
| 18               |                                |        |                  |                                           |                                               |
| 19               |                                |        |                  |                                           |                                               |
| 20               |                                |        |                  |                                           |                                               |

|                         |                                | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-------------------------|--------------------------------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| RATIO TABLE-31          |                                | ALLOC                               |                                    |                                      |                                     |                                     |                                    |
| CAPACITY RELATED        |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                       | PRODUCTION ALLOCATORS          |                                     |                                    |                                      |                                     |                                     |                                    |
| 2                       | DES DAY REMANNG DEMNDS - SALES | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 3                       | LPG PROD ALLOC-PROD            | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 4                       | LNG PROD ALLOC-PROD            | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 5                       | LPG & LNG PROD ALLOC-DISTR     | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 6                       | LPG PRODUCTION DEMAND          | DEMLPG                              | 0.26205                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 7                       | LNG PRODUCTION DEMAND          | DEMLNG                              | 0.26205                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 8                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 15                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| DISTRIBUTION ALLOCATORS |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                       | DISTRIBUTION ALLOCATOR         | DISTR                               | 0.15870                            | 0.03395                              | 0.19360                             | 0.05880                             | 0.09208                            |
| 2                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 3                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 5                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 6                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 7                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 8                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                       |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 15                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 19                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |
| 20                      |                                |                                     |                                    |                                      |                                     |                                     |                                    |

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| RATIO TABLE CONT-32 |                            | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|---------------------|----------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| COMMODITY RELATED   |                            |         |                  |                                           |                                               |
| 1                   | ANNUAL FIRM MCF SENDOUT    |         | 1.00000          | 0.45490                                   | 0.01039                                       |
| 2                   | ANNUAL FIRM CCF THROUGHPUT |         | 1.00000          | 0.27087                                   | 0.00619                                       |
| 3                   | DIRECT GAS COST ALLOCATOR  | EGAS    | 1.00000          | 0.45494                                   | 0.01014                                       |
| 4                   | CGA BAD DEBT ALLOCATOR     | E904GAS | 1.00000          | 0.45864                                   | 0.00942                                       |
| 5                   |                            |         |                  |                                           |                                               |
| 6                   |                            |         |                  |                                           |                                               |
| 7                   |                            |         |                  |                                           |                                               |
| 8                   |                            |         |                  |                                           |                                               |
| 9                   |                            |         |                  |                                           |                                               |
| 10                  |                            |         |                  |                                           |                                               |
| 11                  |                            |         |                  |                                           |                                               |
| 12                  |                            |         |                  |                                           |                                               |
| 13                  |                            |         |                  |                                           |                                               |
| 14                  |                            |         |                  |                                           |                                               |
| 15                  |                            |         |                  |                                           |                                               |
| 16                  |                            |         |                  |                                           |                                               |
| 17                  |                            |         |                  |                                           |                                               |
| 18                  |                            |         |                  |                                           |                                               |
| 19                  |                            |         |                  |                                           |                                               |
| 20                  |                            |         |                  |                                           |                                               |
| 21                  |                            |         |                  |                                           |                                               |
| 22                  |                            |         |                  |                                           |                                               |
| 23                  |                            |         |                  |                                           |                                               |
| 24                  |                            |         |                  |                                           |                                               |
| 25                  |                            |         |                  |                                           |                                               |
| 26                  |                            |         |                  |                                           |                                               |
| 27                  |                            |         |                  |                                           |                                               |
| 28                  |                            |         |                  |                                           |                                               |
| 29                  |                            |         |                  |                                           |                                               |
| 30                  |                            |         |                  |                                           |                                               |
| 31                  |                            |         |                  |                                           |                                               |
| 32                  |                            |         |                  |                                           |                                               |
| 33                  |                            |         |                  |                                           |                                               |
| 34                  |                            |         |                  |                                           |                                               |
| 35                  |                            |         |                  |                                           |                                               |

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|                     |                            | ALLOC   | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|---------------------|----------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| RATIO TABLE CONT-32 |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| COMMODITY RELATED   |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                   | ANNUAL FIRM MCF SENDOUT    |         | 0.20928                             | 0.04837                            | 0.18155                              | 0.06552                             | 0.02733                             | 0.00266                            |
| 2                   | ANNUAL FIRM CCF THROUGHPUT |         | 0.14573                             | 0.03786                            | 0.18468                              | 0.06609                             | 0.09355                             | 0.19504                            |
| 3                   | DIRECT GAS COST ALLOCATOR  | EGAS    | 0.21663                             | 0.04370                            | 0.18476                              | 0.05967                             | 0.02711                             | 0.00305                            |
| 4                   | CGA BAD DEBT ALLOCATOR     | E904GAS | 0.22085                             | 0.04148                            | 0.18365                              | 0.05700                             | 0.02690                             | 0.00204                            |
| 5                   |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 6                   |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 7                   |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 8                   |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                   |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 15                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 19                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 20                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 21                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 22                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 23                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 24                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 25                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 26                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 27                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 28                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 29                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 30                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 31                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 32                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 33                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 34                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 35                  |                            |         |                                     |                                    |                                      |                                     |                                     |                                    |



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| RATIO TABLE CONT-33 |                                  | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|---------------------|----------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| CUSTOMER RELATED    |                                  |          |                  |                                           |                                               |
| 1                   | ACCT 380-SERVICES                | CUST380  | 1.00000          | 0.65265                                   | 0.05303                                       |
| 2                   | ACCT 381-383 METERS,MET INST,REG | CUST3813 | 1.00000          | 0.28486                                   | 0.02315                                       |
| 3                   | ACCT 386-OTHER PROP CUST PREM    | CUST386  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 4                   | ACCT 397-COMM EQ METSCAN - TELM  | CUST397M | 1.00000          | 0.00000                                   | 0.00000                                       |
| 5                   | ACCT 397-COMM EQUIP - ITRON      | CUST397I | 1.00000          | 0.72177                                   | 0.05865                                       |
| 6                   | CUSTOMER DEPOSITS                | CUSTDEP  | 1.00000          | 0.60007                                   | 0.03006                                       |
| 7                   | CUSTOMERS TRANSPORTSTION         | CUSTTRAN | 1.00000          | 0.00000                                   | 0.00000                                       |
| 8                   | ACCT 902-METER READ EXP          | CUST902  | 1.00000          | 0.70722                                   | 0.05747                                       |
| 9                   | ACCT 903-CUST RECORDS & COLL     | CUST903  | 1.00000          | 0.66434                                   | 0.05444                                       |
| 10                  | ACCT 488 RECONNECT FEE           | CUST488R | 1.00000          | 0.74220                                   | 0.06055                                       |
| 11                  | ACCT 908-CUST ASSISTANCE EXP     | CUST908  | 1.00000          | 0.49554                                   | 0.03247                                       |
| 12                  | ACCT 909-INFO & INSTR ADVERT     | CUST909  | 1.00000          | 0.49554                                   | 0.03247                                       |
| 13                  |                                  |          |                  |                                           |                                               |
| 14                  |                                  |          |                  |                                           |                                               |
| 15                  |                                  |          |                  |                                           |                                               |
| 16                  |                                  |          |                  |                                           |                                               |
| 17                  |                                  |          |                  |                                           |                                               |
| 18                  |                                  |          |                  |                                           |                                               |
| 19                  |                                  |          |                  |                                           |                                               |
| 20                  |                                  |          |                  |                                           |                                               |
| 21                  |                                  |          |                  |                                           |                                               |
| 22                  |                                  |          |                  |                                           |                                               |
| 23                  |                                  |          |                  |                                           |                                               |
| 24                  |                                  |          |                  |                                           |                                               |
| 25                  |                                  |          |                  |                                           |                                               |
| 26                  |                                  |          |                  |                                           |                                               |
| 27                  |                                  |          |                  |                                           |                                               |
| 28                  |                                  |          |                  |                                           |                                               |
| 29                  |                                  |          |                  |                                           |                                               |
| 30                  |                                  |          |                  |                                           |                                               |
| 31                  |                                  |          |                  |                                           |                                               |
| 32                  |                                  |          |                  |                                           |                                               |
| 33                  |                                  |          |                  |                                           |                                               |
| 34                  |                                  |          |                  |                                           |                                               |
| 35                  |                                  |          |                  |                                           |                                               |

|                     |                                  | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|---------------------|----------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| RATIO TABLE CONT-33 |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| CUSTOMER RELATED    |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                   | ACCT 380-SERVICES                | CUST380  | 0.17344                             | 0.03813                            | 0.04301                              | 0.01845                             | 0.01141                             | 0.00989                            |
| 2                   | ACCT 381-383 METERS,MET INST,REG | CUST3813 | 0.41801                             | 0.09191                            | 0.11247                              | 0.04824                             | 0.01145                             | 0.00992                            |
| 3                   | ACCT 386-OTHER PROP CUST PREM    | CUST386  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 4                   | ACCT 397-COMM EQ METSCAN - TELM  | CUST397M | 0.01724                             | 0.05172                            | 0.13793                              | 0.01724                             | 0.31034                             | 0.46552                            |
| 5                   | ACCT 397-COMM EQUIP - ITRON      | CUST397I | 0.15726                             | 0.03448                            | 0.01910                              | 0.00828                             | 0.00047                             | 0.00000                            |
| 6                   | CUSTOMER DEPOSITS                | CUSTDEP  | 0.15449                             | 0.09963                            | 0.00864                              | 0.04311                             | 0.05405                             | 0.00995                            |
| 7                   | CUSTOMERS TRANSPORTSTION         | CUSTTRAN | 0.43538                             | 0.10067                            | 0.27964                              | 0.12053                             | 0.02440                             | 0.03938                            |
| 8                   | ACCT 902-METER READ EXP          | CUST902  | 0.15443                             | 0.03482                            | 0.02149                              | 0.00846                             | 0.00672                             | 0.00939                            |
| 9                   | ACCT 903-CUST RECORDS & COLL     | CUST903  | 0.17806                             | 0.03950                            | 0.03974                              | 0.01709                             | 0.00291                             | 0.00392                            |
| 10                  | ACCT 488 RECONNECT FEE           | CUST488R | 0.16175                             | 0.03549                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 11                  | ACCT 908-CUST ASSISTANCE EXP     | CUST908  | 0.15134                             | 0.03615                            | 0.10198                              | 0.03721                             | 0.04731                             | 0.09800                            |
| 12                  | ACCT 909-INFO & INSTR ADVERT     | CUST909  | 0.15134                             | 0.03615                            | 0.10198                              | 0.03721                             | 0.04731                             | 0.09800                            |
| 13                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 15                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 19                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 20                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 21                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 22                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 23                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 24                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 25                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 26                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 27                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 28                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 29                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 30                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 31                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 32                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 33                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 34                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 35                  |                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |

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| RATIO TABLE CONT-34                            |                               | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------------------------|-------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| EXTERNALLY DEVELOPED<br>UNCOLLECTIBLE ACCOUNTS |                               |         |                  |                                           |                                               |
| 1                                              | RESID NON HTG RATE R-6 & R-11 | C904RNH | 1.00000          | 0.00000                                   | 1.00000                                       |
| 2                                              | RESID HEATING RATE R-5 & R-10 | C904RH  | 1.00000          | 1.00000                                   | 0.00000                                       |
| 3                                              | LOW LF SMALL RATE G40 & T40   | C904G40 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 4                                              | LOW LF MEDIUM RATE G41 & T41  | C904G41 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 5                                              | LOW LF LARGE RATE G42 & T42   | C904G42 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 6                                              | HIGH LF SMALL RATE G50 & T50  | C904G50 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 7                                              | HIGH LF MEDIUM RATE G51 & T51 | C904G51 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 8                                              | HIGH LF LARGE RATE G52 & T52  | C904G52 | 0.00000          | 0.00000                                   | 0.00000                                       |
| INTERNALLY DEVELOPED<br>LATE PAYMENT CHARGES   |                               |         |                  |                                           |                                               |
| 9                                              | RESID NON HTG RATE R-6 & R-11 | C488RNH | 1.00000          | 0.00000                                   | 1.00000                                       |
| 10                                             | RESID HEATING RATE R-5 & R-10 | C488RH  | 1.00000          | 1.00000                                   | 0.00000                                       |
| 11                                             | LOW LF SMALL RATE G40 & T40   | C488G40 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 12                                             | LOW LF MEDIUM RATE G41 & T41  | C488G41 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 13                                             | LOW LF LARGE RATE G42 & T42   | C488G42 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 14                                             | HIGH LF SMALL RATE G50 & T50  | C488G50 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 15                                             | HIGH LF MEDIUM RATE G51 & T51 | C488G51 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 16                                             | HIGH LF LARGE RATE G52 & T52  | C488G52 | 1.00000          | 0.00000                                   | 0.00000                                       |
| 17                                             |                               |         |                  |                                           |                                               |
| 18                                             |                               |         |                  |                                           |                                               |
| 19                                             |                               |         |                  |                                           |                                               |
| 20                                             |                               |         |                  |                                           |                                               |
| 21                                             |                               |         |                  |                                           |                                               |
| 22                                             |                               |         |                  |                                           |                                               |
| 23                                             |                               |         |                  |                                           |                                               |
| 24                                             |                               |         |                  |                                           |                                               |
| 25                                             |                               |         |                  |                                           |                                               |
| 26                                             |                               |         |                  |                                           |                                               |
| 27                                             |                               |         |                  |                                           |                                               |
| 28                                             |                               |         |                  |                                           |                                               |
| 29                                             |                               |         |                  |                                           |                                               |

|                                                |                               | ALLOC   | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------------------------|-------------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| RATIO TABLE CONT-34                            |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| EXTERNALLY DEVELOPED<br>UNCOLLECTIBLE ACCOUNTS |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                                              | RESID NON HTG RATE R-6 & R-11 | C904RNH | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 2                                              | RESID HEATING RATE R-5 & R-10 | C904RH  | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 3                                              | LOW LF SMALL RATE G40 & T40   | C904G40 | 1.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 4                                              | LOW LF MEDIUM RATE G41 & T41  | C904G41 | 0.00000                             | 0.00000                            | 1.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 5                                              | LOW LF LARGE RATE G42 & T42   | C904G42 | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 1.00000                             | 0.00000                            |
| 6                                              | HIGH LF SMALL RATE G50 & T50  | C904G50 | 0.00000                             | 1.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 7                                              | HIGH LF MEDIUM RATE G51 & T51 | C904G51 | 0.00000                             | 0.00000                            | 0.00000                              | 1.00000                             | 0.00000                             | 0.00000                            |
| 8                                              | HIGH LF LARGE RATE G52 & T52  | C904G52 | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| INTERNALLY DEVELOPED<br>LATE PAYMENT CHARGES   |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                                              | RESID NON HTG RATE R-6 & R-11 | C488RNH | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 10                                             | RESID HEATING RATE R-5 & R-10 | C488RH  | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 11                                             | LOW LF SMALL RATE G40 & T40   | C488G40 | 1.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 12                                             | LOW LF MEDIUM RATE G41 & T41  | C488G41 | 0.00000                             | 0.00000                            | 1.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 13                                             | LOW LF LARGE RATE G42 & T42   | C488G42 | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 1.00000                             | 0.00000                            |
| 14                                             | HIGH LF SMALL RATE G50 & T50  | C488G50 | 0.00000                             | 1.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 15                                             | HIGH LF MEDIUM RATE G51 & T51 | C488G51 | 0.00000                             | 0.00000                            | 0.00000                              | 1.00000                             | 0.00000                             | 0.00000                            |
| 16                                             | HIGH LF LARGE RATE G52 & T52  | C488G52 | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 1.00000                            |
| 17                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 19                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 20                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 21                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 22                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 23                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 24                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 25                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 26                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 27                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 28                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 29                                             |                               |         |                                     |                                    |                                      |                                     |                                     |                                    |

| INTERNALLY DEVELOPED-35 |                                  | ALLOC    | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|-------------------------|----------------------------------|----------|------------------|-------------------------------------------|-----------------------------------------------|
| 1                       | TOTAL GAS PLANT IN SERVICE       | PLANT    | 1.00000          | 0.39009                                   | 0.02097                                       |
| 2                       | SUM OF ALLOCATED LABOR EXP       | LABOR    | 1.00000          | 0.40191                                   | 0.02275                                       |
| 3                       | ACCT 305-STRUCTURES & IMPROVE    | PLT305   | 1.00000          | 0.47420                                   | 0.00570                                       |
| 4                       | ACCT 311-LP GAS EQUIP            | PLT311   | 1.00000          | 0.47420                                   | 0.00570                                       |
| 5                       | ACCT 320-OTHER EQUIPMENT         | PLT320   | 1.00000          | 0.47420                                   | 0.00570                                       |
| 6                       | ACCT 380-SERVICES                | PLT380   | 1.00000          | 0.65265                                   | 0.05303                                       |
| 7                       | ACCT 381-METERS                  | PLT381   | 1.00000          | 0.28486                                   | 0.02315                                       |
| 8                       | ACCT 382-METER INSTALLATION      | PLT382   | 1.00000          | 0.28486                                   | 0.02315                                       |
| 9                       | ACCT 386-OTHER PROP CUST PREM    | PLT386   | 1.00000          | 0.28420                                   | 0.00578                                       |
| 10                      | ACCT 383-HOUSE REGULATORS        | PLT383   | 1.00000          | 0.28486                                   | 0.02315                                       |
| 11                      | ACCT 396-POWER OPERATED EQUIP    | PLT396   | 1.00000          | 0.38167                                   | 0.02058                                       |
| 12                      | ACCT 391-OFFICE FURN & EQUIP     | PLT391   | 1.00000          | 0.40191                                   | 0.02275                                       |
| 13                      | ACCT 392-TRANSPORTATION EQUIP    | PLT392   | 1.00000          | 0.40191                                   | 0.02275                                       |
| 14                      | ACCT 393-STORES EQUIPMENT        | PLT393   | 1.00000          | 0.38167                                   | 0.02058                                       |
| 15                      | ACCT 394-TOOLS, SHOP & GAR EQ    | PLT394   | 1.00000          | 0.38167                                   | 0.02058                                       |
| 16                      | ACCT 397-COMMUNICATION EQUIP     | PLT397   | 1.00000          | 0.40191                                   | 0.02275                                       |
| 17                      | ACCT 376 MAINS & 380 SERVICES    | PLT37680 | 1.00000          | 0.40488                                   | 0.02126                                       |
| 18                      | TOTAL DISTRIBUTION PLANT         | DISTRPLT | 1.00000          | 0.38167                                   | 0.02058                                       |
| 19                      | TOTAL GAS COSTS                  | GASCOSTS | 1.00000          | 0.45494                                   | 0.01014                                       |
| 20                      | ACCT 381 - 383 METER & HSE REGUL | PLT3813  | 1.00000          | 0.28486                                   | 0.02315                                       |
| 21                      | ACCT 851-879 DIST OPER EXP       | EXP8519  | 1.00000          | 0.33428                                   | 0.02127                                       |
| 22                      | REV CLAIMED ROR LESS GAS COSTS   | REVCLAIM | 1.00000          | 0.41323                                   | 0.02366                                       |
| 23                      | TOTAL GENERAL PLANT              | GENPLT   | 1.00000          | 0.39499                                   | 0.02201                                       |
| 24                      | TOTAL GAS O & M LABOR            | OMLAB    | 1.00000          | 0.41692                                   | 0.02435                                       |
| 25                      | TOTAL PROD & STORAGE PLANT       | PSPLT    | 1.00000          | 0.47420                                   | 0.00570                                       |
| 26                      | TOTAL ADMIN & GEN EXPENSE        | TOTAG    | 1.00000          | 0.40357                                   | 0.02242                                       |
| 27                      |                                  |          |                  |                                           |                                               |
| 28                      |                                  |          |                  |                                           |                                               |
| 29                      |                                  |          |                  |                                           |                                               |
| 30                      |                                  |          |                  |                                           |                                               |
| 31                      |                                  |          |                  |                                           |                                               |
| 32                      |                                  |          |                  |                                           |                                               |
| 33                      |                                  |          |                  |                                           |                                               |
| 34                      |                                  |          |                  |                                           |                                               |
| 35                      |                                  |          |                  |                                           |                                               |
| 36                      |                                  |          |                  |                                           |                                               |
| 37                      |                                  |          |                  |                                           |                                               |
| 38                      |                                  |          |                  |                                           |                                               |
| 39                      |                                  |          |                  |                                           |                                               |
| 40                      |                                  |          |                  |                                           |                                               |

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12 MONTHS ENDED DECEMBER 31, 2010

|                                     | ALLOC    | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|-------------------------------------|----------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INTERNALLY DEVELOPED-35             |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 1 TOTAL GAS PLANT IN SERVICE        | PLANT    | 0.19794                             | 0.04201                            | 0.14172                              | 0.04540                             | 0.05822                             | 0.10364                            |
| 2 SUM OF ALLOCATED LABOR EXP        | LABOR    | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 3 ACCT 305-STRUCTURES & IMPROVE     | PLT305   | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 4 ACCT 311-LP GAS EQUIP             | PLT311   | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 5 ACCT 320-OTHER EQUIPMENT          | PLT320   | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 6 ACCT 380-SERVICES                 | PLT380   | 0.17344                             | 0.03813                            | 0.04301                              | 0.01845                             | 0.01141                             | 0.00989                            |
| 7 ACCT 381-METERS                   | PLT381   | 0.41801                             | 0.09191                            | 0.11247                              | 0.04824                             | 0.01145                             | 0.00992                            |
| 8 ACCT 382-METER INSTALLATION       | PLT382   | 0.41801                             | 0.09191                            | 0.11247                              | 0.04824                             | 0.01145                             | 0.00992                            |
| 9 ACCT 386-OTHER PROP CUST PREM     | PLT386   | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 10 ACCT 383-HOUSE REGULATORS        | PLT383   | 0.41801                             | 0.09191                            | 0.11247                              | 0.04824                             | 0.01145                             | 0.00992                            |
| 11 ACCT 396-POWER OPERATED EQUIP    | PLT396   | 0.19709                             | 0.04276                            | 0.14300                              | 0.04673                             | 0.06003                             | 0.10813                            |
| 12 ACCT 391-OFFICE FURN & EQUIP     | PLT391   | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 13 ACCT 392-TRANSPORTATION EQUIP    | PLT392   | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 14 ACCT 393-STORES EQUIPMENT        | PLT393   | 0.19709                             | 0.04276                            | 0.14300                              | 0.04673                             | 0.06003                             | 0.10813                            |
| 15 ACCT 394-TOOLS, SHOP & GAR EQ    | PLT394   | 0.19709                             | 0.04276                            | 0.14300                              | 0.04673                             | 0.06003                             | 0.10813                            |
| 16 ACCT 397-COMMUNICATION EQUIP     | PLT397   | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 17 ACCT 376 MAINS & 380 SERVICES    | PLT37680 | 0.16353                             | 0.03532                            | 0.14427                              | 0.04558                             | 0.06566                             | 0.11951                            |
| 18 TOTAL DISTRIBUTION PLANT         | DISTRPLT | 0.19709                             | 0.04276                            | 0.14300                              | 0.04673                             | 0.06003                             | 0.10813                            |
| 19 TOTAL GAS COSTS                  | GASCOSTS | 0.21663                             | 0.04370                            | 0.18476                              | 0.05967                             | 0.02711                             | 0.00305                            |
| 20 ACCT 381 - 383 METER & HSE REGUL | PLT3813  | 0.41801                             | 0.09191                            | 0.11247                              | 0.04824                             | 0.01145                             | 0.00992                            |
| 21 ACCT 851-879 DIST OPER EXP       | EXP8519  | 0.29679                             | 0.06493                            | 0.13069                              | 0.04781                             | 0.03887                             | 0.06536                            |
| 22 REV CLAIMED ROR LESS GAS COSTS   | REVCLAIM | 0.20669                             | 0.04407                            | 0.13190                              | 0.04317                             | 0.04995                             | 0.08733                            |
| 23 TOTAL GENERAL PLANT              | GENPLT   | 0.20236                             | 0.04382                            | 0.13806                              | 0.04546                             | 0.05510                             | 0.09820                            |
| 24 TOTAL GAS O & M LABOR            | OMLAB    | 0.21103                             | 0.04556                            | 0.12991                              | 0.04336                             | 0.04699                             | 0.08186                            |
| 25 TOTAL PROD & STORAGE PLANT       | PSPLT    | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 26 TOTAL ADMIN & GEN EXPENSE        | TOTAG    | 0.20613                             | 0.04381                            | 0.13662                              | 0.04441                             | 0.05198                             | 0.09105                            |
| 27                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 28                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 29                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 30                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 31                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 32                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 33                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 34                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 35                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 36                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 37                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 38                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 39                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |
| 40                                  |          |                                     |                                    |                                      |                                     |                                     |                                    |

| INTERNALLY DEVELOPED CONT-36 |                                    | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------|------------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| 1                            | ACCT 717-PROPANE EXPENSES          | EXP717  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 2                            | ACCT 718-DISPATCHING PROD          | EXP718  | 0.00000          | 0.00000                                   | 0.00000                                       |
| 3                            | ACCT 735-MISCELLANEOUS             | EXP735  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 4                            | ACCT 741-MAINTENANCE OF PLANT      | EXP741  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 5                            | ACCT 742-MAINTENANCE OF EQUIP      | EXP742  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 6                            | ACCT 743-GAS SYS PROD TRAINING     | EXP743  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 7                            | ACCT 813-OTHER GAS SUPPLY EXP      | EXP813  | 1.00000          | 0.39666                                   | 0.00866                                       |
| 8                            | ACCT 851-SYSTEM CONTROL & DISP     | EXP851  | 0.00000          | 0.00000                                   | 0.00000                                       |
| 9                            | ACCT 857-MEAS & REG STATION EXP    | EXP857  | 0.00000          | 0.00000                                   | 0.00000                                       |
| 10                           | ACCT 874-MAINS & SERVICE EXP       | EXP874  | 1.00000          | 0.40488                                   | 0.02126                                       |
| 11                           | ACCT 875-GAS SYSTEM T&D TRAINING   | EXP875  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 12                           | ACCT 878-METER & HOUSE REG EXP     | EXP878  | 1.00000          | 0.28486                                   | 0.02315                                       |
| 13                           | ACCT 879-CUSTOMER INSTALL EXP      | EXP879  | 1.00000          | 0.52951                                   | 0.04303                                       |
| 14                           | ACCT 880-OTHER EXPENSE             | EXP880  | 1.00000          | 0.32746                                   | 0.00723                                       |
| 15                           | ACCT 882-METERING SYS GAS TRAINING | EXP882  | 1.00000          | 0.28486                                   | 0.02315                                       |
| 16                           | ACCT 887-MAINTENANCE OF MAINS      | EXP887  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 17                           | ACCT 889-MT OF M & R STA EQ        | EXP889  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 18                           | ACCT 890-MT OF REG EQ (INDUST)     | EXP890  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 19                           | ACCT 891-MT OF REG EQ (CITY GATE)  | EXP891  | 1.00000          | 0.30450                                   | 0.00630                                       |
| 20                           | ACCT 892-MAINTENANCE OF SERV       | EXP892  | 1.00000          | 0.65265                                   | 0.05303                                       |
| 21                           | ACCT 893-MAINT MET & HOUSE REG     | EXP893  | 1.00000          | 0.28486                                   | 0.02315                                       |
| 22                           | ACCT 902-METER READING EXP         | EXP902  | 1.00000          | 0.70722                                   | 0.05747                                       |
| 23                           | ACCT 903-CUST RECORDS & COLL       | EXP903  | 1.00000          | 0.66434                                   | 0.05444                                       |
| 24                           | ACCT 908-CUST ASSISTANCE EXP       | EXP908  | 1.00000          | 0.49554                                   | 0.03247                                       |
| 25                           | ACCT 904-UNCOLLECTIBLE ACCTS       | EXP904  | 1.00000          | 0.68650                                   | 0.01653                                       |
| 26                           | ACCT 904-UNCOLL ACCTS EXP BASE     | EXP904B | 1.00000          | 0.89038                                   | 0.02289                                       |
| 27                           | ACCT 920-ADMIN & GEN SALARY        | EXP920  | 1.00000          | 0.40191                                   | 0.02275                                       |
| 28                           | ACCT 923-OUTSIDE SERV EMPLOYED     | EXP923  | 1.00000          | 0.40191                                   | 0.02275                                       |
| 29                           | ACCT 930-MISC GEN EXP              | EXP930  | 1.00000          | 0.40191                                   | 0.02275                                       |
| 30                           | ACCT 935-MAINT OF GENERAL PLT      | EXP935  | 1.00000          | 0.39499                                   | 0.02201                                       |
| 31                           | GAS PROD LABOR ACCTS 717-735       | LABPO   | 1.00000          | 0.47420                                   | 0.00570                                       |
| 32                           | GAS PROD LABOR ACCTS 741-743       | LABPM   | 1.00000          | 0.47420                                   | 0.00570                                       |
| 33                           | DIST LABOR OPER ACCT 851 - 882     | LABDO   | 1.00000          | 0.33077                                   | 0.01586                                       |
| 34                           | DIST LABOR MAINT ACCT 886 - 894    | LABDM   | 1.00000          | 0.34769                                   | 0.01355                                       |
| 35                           | CUST ACCTS LABOR ACCT 902 - 903    | LABCA   | 1.00000          | 0.67367                                   | 0.05510                                       |
| 36                           | CUST SERV & INFO LABOR ACCT 908    | LABSE   | 1.00000          | 0.49554                                   | 0.03247                                       |
| 37                           | ACCT 880-ENERGY MGT & CONTROL      | E880USC | 1.00000          | 0.32729                                   | 0.00688                                       |
| 38                           |                                    |         |                  |                                           |                                               |
| 39                           |                                    |         |                  |                                           |                                               |
| 40                           |                                    |         |                  |                                           |                                               |

|                              |                                    | ALLOC   | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------|------------------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INTERNALLY DEVELOPED CONT-36 |                                    |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                            | ACCT 717-PROPANE EXPENSES          | EXP717  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 2                            | ACCT 718-DISPATCHING PROD          | EXP718  | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 3                            | ACCT 735-MISCELLANEOUS             | EXP735  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 4                            | ACCT 741-MAINTENANCE OF PLANT      | EXP741  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 5                            | ACCT 742-MAINTENANCE OF EQUIP      | EXP742  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 6                            | ACCT 743-GAS SYS PROD TRAINING     | EXP743  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 7                            | ACCT 813-OTHER GAS SUPPLY EXP      | EXP813  | 0.19686                             | 0.04037                            | 0.18778                              | 0.05937                             | 0.04929                             | 0.06102                            |
| 8                            | ACCT 851-SYSTEM CONTROL & DISP     | EXP851  | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 9                            | ACCT 857-MEAS & REG STATION EXP    | EXP857  | 0.00000                             | 0.00000                            | 0.00000                              | 0.00000                             | 0.00000                             | 0.00000                            |
| 10                           | ACCT 874-MAINS & SERVICE EXP       | EXP874  | 0.16353                             | 0.03532                            | 0.14427                              | 0.04558                             | 0.06566                             | 0.11951                            |
| 11                           | ACCT 875-GAS SYSTEM T&D TRAINING   | EXP875  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 12                           | ACCT 878-METER & HOUSE REG EXP     | EXP878  | 0.41801                             | 0.09191                            | 0.11247                              | 0.04824                             | 0.01145                             | 0.00992                            |
| 13                           | ACCT 879-CUSTOMER INSTALL EXP      | EXP879  | 0.25532                             | 0.05614                            | 0.06626                              | 0.02842                             | 0.01142                             | 0.00990                            |
| 14                           | ACCT 880-OTHER EXPENSE             | EXP880  | 0.17630                             | 0.03710                            | 0.18990                              | 0.05875                             | 0.07479                             | 0.12846                            |
| 15                           | ACCT 882-METERING SYS GAS TRAINING | EXP882  | 0.41801                             | 0.09191                            | 0.11247                              | 0.04824                             | 0.01145                             | 0.00992                            |
| 16                           | ACCT 887-MAINTENANCE OF MAINS      | EXP887  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 17                           | ACCT 889-MT OF M & R STA EQ        | EXP889  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 18                           | ACCT 890-MT OF REG EQ (INDUST)     | EXP890  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 19                           | ACCT 891-MT OF REG EQ (CITY GATE)  | EXP891  | 0.16559                             | 0.03511                            | 0.19255                              | 0.05890                             | 0.08435                             | 0.15269                            |
| 20                           | ACCT 892-MAINTENANCE OF SERV       | EXP892  | 0.17344                             | 0.03813                            | 0.04301                              | 0.01845                             | 0.01141                             | 0.00989                            |
| 21                           | ACCT 893-MAINT MET & HOUSE REG     | EXP893  | 0.41801                             | 0.09191                            | 0.11247                              | 0.04824                             | 0.01145                             | 0.00992                            |
| 22                           | ACCT 902-METER READING EXP         | EXP902  | 0.15443                             | 0.03482                            | 0.02149                              | 0.00846                             | 0.00672                             | 0.00939                            |
| 23                           | ACCT 903-CUST RECORDS & COLL       | EXP903  | 0.17806                             | 0.03950                            | 0.03974                              | 0.01709                             | 0.00291                             | 0.00392                            |
| 24                           | ACCT 908-CUST ASSISTANCE EXP       | EXP908  | 0.15134                             | 0.03615                            | 0.10198                              | 0.03721                             | 0.04731                             | 0.09800                            |
| 25                           | ACCT 904-UNCOLLECTIBLE ACCTS       | EXP904  | 0.12518                             | 0.02522                            | 0.10276                              | 0.02987                             | 0.01297                             | 0.00097                            |
| 26                           | ACCT 904-UNCOLL ACCTS EXP BASE     | EXP904B | 0.03958                             | 0.01067                            | 0.03038                              | 0.00559                             | 0.00051                             | 0.00000                            |
| 27                           | ACCT 920-ADMIN & GEN SALARY        | EXP920  | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 28                           | ACCT 923-OUTSIDE SERV EMPLOYED     | EXP923  | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 29                           | ACCT 930-MISC GEN EXP              | EXP930  | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 30                           | ACCT 935-MAINT OF GENERAL PLT      | EXP935  | 0.20236                             | 0.04382                            | 0.13806                              | 0.04546                             | 0.05510                             | 0.09820                            |
| 31                           | GAS PROD LABOR ACCTS 717-735       | LABPO   | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 32                           | GAS PROD LABOR ACCTS 741-743       | LABPM   | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 33                           | DIST LABOR OPER ACCT 851 - 882     | LABDO   | 0.24470                             | 0.05302                            | 0.15383                              | 0.05184                             | 0.05493                             | 0.09504                            |
| 34                           | DIST LABOR MAINT ACCT 886 - 894    | LABDM   | 0.16233                             | 0.03484                            | 0.16894                              | 0.05226                             | 0.07759                             | 0.14280                            |
| 35                           | CUST ACCTS LABOR ACCT 902 - 903    | LABCA   | 0.17292                             | 0.03849                            | 0.03577                              | 0.01521                             | 0.00374                             | 0.00511                            |
| 36                           | CUST SERV & INFO LABOR ACCT 908    | LABSE   | 0.15134                             | 0.03615                            | 0.10198                              | 0.03721                             | 0.04731                             | 0.09800                            |
| 37                           | ACCT 880-ENERGY MGT & CONTROL      | E880USC | 0.17332                             | 0.03641                            | 0.19137                              | 0.05902                             | 0.07568                             | 0.13002                            |
| 38                           |                                    |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 39                           |                                    |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 40                           |                                    |         |                                     |                                    |                                      |                                     |                                     |                                    |



| INTERNALLY DEVELOPED CONT-37 |                                     | ALLOC   | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------|-------------------------------------|---------|------------------|-------------------------------------------|-----------------------------------------------|
| 1                            | TOTAL GAS PROD OPER LABOR           | TLABPO  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 2                            | TOTAL GAS PROD MAINT LABOR          | TLABPM  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 3                            | TOTAL DISTR OPER LABOR              | TLABDO  | 1.00000          | 0.33077                                   | 0.01586                                       |
| 4                            | TOTAL DISTR MAINT LABOR             | TLABDM  | 1.00000          | 0.34769                                   | 0.01355                                       |
| 5                            | TOTAL CUST ACCTS LABOR              | TLABCA  | 1.00000          | 0.67367                                   | 0.05510                                       |
| 6                            | CUSTOMER SERVICE & INFO LABOR       | TLABSE  | 1.00000          | 0.49554                                   | 0.03247                                       |
| 7                            | ACCT 886-MAINT STRUCT & IMPROV      | EXP886  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 8                            | ACCT 894-MAINT OF OTHER EQUIP       | EXP894  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 9                            | ACCT 921-OFFICE SUPPLIES & EXP      | EXP921  | 1.00000          | 0.40191                                   | 0.02275                                       |
| 10                           | ACCT 926-EMPLOY PENSION & BENF      | EXP926  | 1.00000          | 0.40191                                   | 0.02275                                       |
| 11                           | ACCT 380-383-SERV,METRS & REGUL     | PLT3803 | 1.00000          | 0.52951                                   | 0.04303                                       |
| 12                           | ACCT 925-INJURIES & DAMAGES         | EXP925  | 1.00000          | 0.40191                                   | 0.02275                                       |
| 13                           | ACCT 924 & 925 PROP & LIABILITY INS | EXP9245 | 1.00000          | 0.40156                                   | 0.02269                                       |
| 14                           | ACCT 303-MISC INTANGIBLE PLT        | PLT303  | 1.00000          | 0.40191                                   | 0.02275                                       |
| 15                           | ACCT 321-LNG EQUIPMENT              | PLT321  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 16                           | ACCT 361-STRUCTURES & IMPROVE       | PLT361  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 17                           | ACCT 362-GAS HOLDERS                | PLT362  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 18                           | ACCT 363-PURIFICATION EQUIPMENT     | PLT363  | 1.00000          | 0.47420                                   | 0.00570                                       |
| 19                           | ACCT 375-STRUCTURES & IMPROVE       | PLT375  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 20                           | ACCT 376-MAINS                      | PLT376  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 21                           | ACCT 378-MEAS & REG STATION EQ      | PLT378  | 1.00000          | 0.28420                                   | 0.00578                                       |
| 22                           | ACCT 397-COMM EQ METSCAN - TEL      | PLT397M | 1.00000          | 0.00000                                   | 0.00000                                       |
| 23                           | ACCT 397-COMM EQUIP - ITRON         | PLT397I | 1.00000          | 0.72177                                   | 0.05865                                       |
| 24                           |                                     |         |                  |                                           |                                               |
| 25                           |                                     |         |                  |                                           |                                               |
| 26                           |                                     |         |                  |                                           |                                               |
| 27                           |                                     |         |                  |                                           |                                               |
| 28                           |                                     |         |                  |                                           |                                               |
| 29                           |                                     |         |                  |                                           |                                               |
| 30                           |                                     |         |                  |                                           |                                               |
| 31                           |                                     |         |                  |                                           |                                               |
| 32                           |                                     |         |                  |                                           |                                               |
| 33                           |                                     |         |                  |                                           |                                               |
| 34                           |                                     |         |                  |                                           |                                               |
| 35                           |                                     |         |                  |                                           |                                               |
| 36                           |                                     |         |                  |                                           |                                               |
| 37                           |                                     |         |                  |                                           |                                               |
| 38                           |                                     |         |                  |                                           |                                               |
| 39                           |                                     |         |                  |                                           |                                               |
| 40                           |                                     |         |                  |                                           |                                               |

NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

|                              |                                     | ALLOC   | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------|-------------------------------------|---------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INTERNALLY DEVELOPED CONT-37 |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                            | TOTAL GAS PROD OPER LABOR           | TLABPO  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 2                            | TOTAL GAS PROD MAINT LABOR          | TLABPM  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 3                            | TOTAL DISTR OPER LABOR              | TLABDO  | 0.24470                             | 0.05302                            | 0.15383                              | 0.05184                             | 0.05493                             | 0.09504                            |
| 4                            | TOTAL DISTR MAINT LABOR             | TLABDM  | 0.16233                             | 0.03484                            | 0.16894                              | 0.05226                             | 0.07759                             | 0.14280                            |
| 5                            | TOTAL CUST ACCTS LABOR              | TLABCA  | 0.17292                             | 0.03849                            | 0.03577                              | 0.01521                             | 0.00374                             | 0.00511                            |
| 6                            | CUSTOMER SERVICE & INFO LABOR       | TLABSE  | 0.15134                             | 0.03615                            | 0.10198                              | 0.03721                             | 0.04731                             | 0.09800                            |
| 7                            | ACCT 886-MAINT STRUCT & IMPROV      | EXP886  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 8                            | ACCT 894-MAINT OF OTHER EQUIP       | EXP894  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 9                            | ACCT 921-OFFICE SUPPLIES & EXP      | EXP921  | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 10                           | ACCT 926-EMPLOY PENSION & BENF      | EXP926  | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 11                           | ACCT 380-383-SERV,METRS & REGUL     | PLT3803 | 0.25532                             | 0.05614                            | 0.06626                              | 0.02842                             | 0.01142                             | 0.00990                            |
| 12                           | ACCT 925-INJURIES & DAMAGES         | EXP925  | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 13                           | ACCT 924 & 925 PROP & LIABILITY INS | EXP9245 | 0.20488                             | 0.04430                            | 0.13567                              | 0.04481                             | 0.05271                             | 0.09336                            |
| 14                           | ACCT 303-MISC INTANGIBLE PLT        | PLT303  | 0.20510                             | 0.04437                            | 0.13549                              | 0.04480                             | 0.05255                             | 0.09305                            |
| 15                           | ACCT 321-LNG EQUIPMENT              | PLT321  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 16                           | ACCT 361-STRUCTURES & IMPROVE       | PLT361  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 17                           | ACCT 362-GAS HOLDERS                | PLT362  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 18                           | ACCT 363-PURIFICATION EQUIPMENT     | PLT363  | 0.26205                             | 0.01310                            | 0.19494                              | 0.02162                             | 0.02721                             | 0.00117                            |
| 19                           | ACCT 375-STRUCTURES & IMPROVE       | PLT375  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 20                           | ACCT 376-MAINS                      | PLT376  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 21                           | ACCT 378-MEAS & REG STATION EQ      | PLT378  | 0.15870                             | 0.03395                            | 0.19360                              | 0.05880                             | 0.09208                             | 0.17290                            |
| 22                           | ACCT 397-COMM EQ METSCAN - TEL      | PLT397M | 0.01724                             | 0.05172                            | 0.13793                              | 0.01724                             | 0.31034                             | 0.46552                            |
| 23                           | ACCT 397-COMM EQUIP - ITRON         | PLT397I | 0.15726                             | 0.03448                            | 0.01910                              | 0.00828                             | 0.00047                             | 0.00000                            |
| 24                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 25                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 26                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 27                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 28                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 29                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 30                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 31                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 32                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 33                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 34                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 35                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 36                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 37                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 38                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 39                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |
| 40                           |                                     |         |                                     |                                    |                                      |                                     |                                     |                                    |

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NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

**NH Gas Cost of Service Workpapers**  
**Update Pages 1 to 76**  
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|                              | ALLOC | TOTAL<br>COMPANY | RESIDENTIAL<br>HEATING<br>RATE R-5 & R-10 | RESIDENTIAL<br>NON-HEATING<br>RATE R-6 & R-11 |
|------------------------------|-------|------------------|-------------------------------------------|-----------------------------------------------|
| INTERNALLY DEVELOPED CONT-38 |       |                  |                                           |                                               |
| -----                        |       |                  |                                           |                                               |
| REVENUES FROM GAS SALES      |       |                  |                                           |                                               |
| 1 REVENUES FIRM SALES OF GAS |       | 1.00000          | 0.45758                                   | 0.01246                                       |
| 2                            |       |                  |                                           |                                               |
| 3                            |       |                  |                                           |                                               |
| 4                            |       |                  |                                           |                                               |
| 5                            |       |                  |                                           |                                               |
| 6                            |       |                  |                                           |                                               |
| 7                            |       |                  |                                           |                                               |
| 8                            |       |                  |                                           |                                               |
| 9                            |       |                  |                                           |                                               |
| 10                           |       |                  |                                           |                                               |
| 11                           |       |                  |                                           |                                               |
| 12                           |       |                  |                                           |                                               |
| 13                           |       |                  |                                           |                                               |
| 14                           |       |                  |                                           |                                               |
| 15                           |       |                  |                                           |                                               |
| 16                           |       |                  |                                           |                                               |
| 17                           |       |                  |                                           |                                               |
| 18                           |       |                  |                                           |                                               |

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NORTHERN - NEW HAMPSHIRE  
GAS COST OF SERVICE STUDY  
12 MONTHS ENDED DECEMBER 31, 2010

**NH Gas Cost of Service Workpapers**  
**Update Pages 1 to 76**  
**Page 76 of 76**

|                              |                            | ALLOC | HIGH WINTER<br>SMALL<br>G-40 & T-40 | LOW WINTER<br>SMALL<br>G-50 & T-50 | HIGH WINTER<br>MEDIUM<br>G-41 & T-41 | LOW WINTER<br>MEDIUM<br>G-51 & T-51 | HIGH WINTER<br>LARGE<br>G-42 & T-42 | LOW WINTER<br>LARGE<br>G-52 & T-52 |
|------------------------------|----------------------------|-------|-------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| INTERNALLY DEVELOPED CONT-38 |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| -----                        |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| REVENUES FROM GAS SALES      |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 1                            | REVENUES FIRM SALES OF GAS |       | 0.20415                             | 0.04295                            | 0.17071                              | 0.05458                             | 0.03470                             | 0.02287                            |
| 2                            |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 3                            |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 4                            |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 5                            |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 6                            |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 7                            |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 8                            |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 9                            |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 10                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 11                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 12                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 13                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 14                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 15                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 16                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 17                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |
| 18                           |                            |       |                                     |                                    |                                      |                                     |                                     |                                    |