Granite State Electric Company (d/b/a National Grid) Docket DG 06-107

Return on Rate Base and Common Equity For the twelve months ended December 31, 2011

| | | | | Allowed per | | | | | |
|----------|--------------|----------------------------------|---------------------|---|-----------------------------|----------|--------------|--------|---------------|
| | | | Docket No. DG 06- | | ment Agreement | | Ceiling | | |
| Line | | | % | _ | Weighted | % | | | Weighted |
| No. | | <u>Description</u> | of Total | Cost | Cost | of Total | Cost | | Cost |
| 1 | | Common stock equity | 50.00% | 9.67% | 4.84% | 50.00% | 11.00% | | 5.50% |
| 2 | | Preferred stock | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | 0.00% |
| 3 | | Long-term debt | 50.00% | 7.54% | 3.77% | 50.00% | 7.54% | | 3.77% |
| 4 | | | | | | | | - | |
| 5 | | | 100.00% | | 8.61% | 100.00% | | _ | 9.27% |
| 6 | | | | | | | | = | |
| 7 | Five Quarter | | | Earned | | | | | |
| 8 | Average | | % | | Weighted | | | | Pre-Tax |
| 9 | Rate Base | | of Total | Cost | Cost | _ | Taxes | | Weighted Cost |
| 10 | | | | | | | | | |
| 11 | \$30,475,126 | Common stock equity | 50.00% | -1.77% | -0.88% | | -0.40% | (a) | -1.29% |
| 12 | 000 155 101 | Preferred stock | 0.00% | 0.00% | 0.00% | | 0.00% | | 0.00% |
| 13 | \$30,475,126 | Long-term debt | 50.00% | 7.54% | 3.77% | _ | 0.00% | | 3.77% |
| 14 15 | \$60,950,252 | | 100.00% | | 2.89% | | -0.40% | | 2.48% |
| = | \$00,930,232 | | 100.0076 | | 2.0970 | = | -0.40% | | 2.4670 |
| 16 17 | | - | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | Interest Evne | nse and Federal I | ncome Tay | | | | |
| 20 | | | | ng Imputed Capit | | | | | |
| 21 | | | Per Docket No. DG 0 | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | \$(000) | | |
| 24 | | | | | | | | | |
| 25 | | Interest: | \$60,950,252 | X | 3.77% | = | \$2,2 | 98 | |
| 26 | | | | | | | | | |
| 27 | | FIT and NH Business Profits Tax: | \$60,950,252 | X | -0.48% (b |) = | (29 | 91) | |
| 28 | | | | | | | | | |
| 29 | | | Plus: (Flowth | | %-(Flowthrough Items) | 64.91% | | 46 (c) | |
| 30 | | | | Total Federal and | State Income Taxes | | (\$24 | 45) | |
| 31 | | | | | | | | | |
| 32 | | | | | for Flowthrough items | | | | |
| 33 34 | | | | .88%/(1-0.35)/(1-0 lowthrough Items: | .0014)+0.88%) | | | | |
| 35 | | | | ITC Amortization | | | (\$: | 201 | |
| 35 36 | | | | | on and AFC Equity Deprecia | tion | (\$. \$12 | | |
| 37 | | | | 11 C Dasis Reduction | on and Ai C Equity Deprecia | | \$1. | | |
| ٥, | | | | | | _ | Ψ | | |

Granite State Electric Company (d/b/a National Grid) Docket No. DG 06-107

Annual Earnings Report

For the twelve months ended December 31, 2011

| Description | Total |
|--|--------------|
| Operating Revenues for 12 months | \$83,243,723 |
| Operating Expenses for 12 months: | |
| Purchased Power expenses | \$43,801,989 |
| Production Expenses | \$0 |
| Distribution Expenses | \$5,816,073 |
| Transmission Expenses | \$14,587,105 |
| Customer Accounts | \$1,727,77 |
| Customer Service & Information | \$290,22 |
| General and Administrative | \$7,148,600 |
| Less: Merger Costs to Achieve charged in 2011, not yet deferred | (\$12,479 |
| Less: Band A Variable Compensation | (\$17,650 |
| Depreciation | \$4,788,998 |
| Amortization of Merger Costs to Achieve | \$239,487 |
| Federal and State Income Taxes | \$0 |
| Property Taxes | \$2,913,228 |
| Other Taxes | \$370,041 |
| Interest on Customer Deposits | \$18,924 |
| Donations | \$10,913 |
| Total Operating Expenses (Sum of Lines 4 Through Line 19) | \$81,683,221 |
| | |
| Operating Income Before Taxes (Line 1 - Line 20) | \$1,560,502 |
| Adjusted for DSM Incentives | (\$19,453 |
| Adjusted Operating Income Before Taxes | \$1,541,049 |
| J 1 C | |
| Interest Charges (From Page 1 Line 28) | \$2,297,825 |
| | . , , |
| Net Taxable Income (Line 24 - Line 26) | (\$756,776 |
| , | |
| Income Taxes | (\$265,574 |
| Amortization ITC | (\$37,854 |
| Flowthrough Items (From Page 1 Line 37) | \$85,680 |
| Net Income Taxes (Line 28 + Line 30 + Line 31 - Line 32) | (\$217,748 |
| , | |
| Earnings Available for Common Equity (Line 28 - Line 33) | (\$539,028) |
| | |
| | |
| Average Common Equity 5 Quarter Average (From Page 1 Line 23) | \$30,475,126 |
| 23 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | 450,175,120 |
| Rate of Return on Adjusted Average Common Equity (Line 35/Line 38) | -1.77% |

⁽¹⁾ Per 2011 CTA Annual Report

⁽²⁾ Calculated using imputed capital structure as stated in Docket No. DG 06-107, Sec.3C.

⁽³⁾ Below the line items brought above the line for ratemaking purposes.

⁽⁴⁾ Calculation: Rate Base x weighted cost rate for long term debt. \$60,950,251 x 3.77% = \$2,297,825; (3.77% = 50% x 7.54%)

⁽⁵⁾ Calculation: Taxable Income x Federal income and State Unitary Income Tax Rates of 35% and 1.68% (of 8.50% of NH Unitary tax), respec $$756,776 \times 35.0928\% = $265,574;$ (35.09% = ((100% - .14% x 35%) + .14%)

Granite State Electric Company (d/b/a National Grid) Docket DG 06-107

Rate Base Calculation for Annual Earnings Report For the twelve months ended December 31, 2011

| Line | | | | | | | | 5-Quarter |
|------------|--|--------|----------------|----------------|----------------|----------------|----------------|----------------|
| <u>No.</u> | Description | | 12/31/10 | 03/31/11 | 06/30/11 | 09/30/11 | 12/31/11 | Average |
| 1 | Utility Plant in Service | | \$129,412,983 | \$130,673,431 | \$132,249,216 | \$132,788,610 | \$133,551,517 | \$131,735,151 |
| 2 | Accumulated Depreciation | | (\$52,630,083) | (\$53,280,369) | (\$53,992,379) | (\$54,787,464) | (\$55,632,411) | (\$54,064,541) |
| 3 | Materials and Supplies | | \$493,715 | \$499,369 | \$540,089 | \$575,920 | \$607,904 | \$543,399 |
| 4 | Cash Working Capital Requirement | (1) | \$3,188,719 | \$3,442,099 | \$3,591,176 | \$3,575,351 | \$3,645,588 | \$3,488,587 |
| 5 | Prepayments | (2) | \$17,400 | \$20,546 | (\$282) | \$28,049 | \$18,666 | \$16,876 |
| 6 | Customer Deposits | | (\$326,425) | (\$544,970) | (\$644,541) | (\$649,156) | (\$653,995) | (\$563,817) |
| 7 | Customer Advances for Construction | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 8 | Unamortized Debt Expense | | \$34,637 | \$33,983 | \$33,328 | \$32,673 | \$32,018 | \$33,328 |
| 9 | Net Deferred Income Tax Reserve | (3) | (\$19,858,345) | (\$20,019,599) | (\$20,402,021) | (\$20,408,224) | (\$20,505,475) | (\$20,238,733) |
| 10 | | | | | | | | |
| 11 | | _ | \$60,332,600 | \$60,824,490 | \$61,374,586 | \$61,155,759 | \$61,063,812 | \$60,950,251 |
| | Notes | | | | | | | |
| | Notes: | .1 | | | | | | |
| | (1) Represents 45/365 days of non-purchase power O&M expenses for | tne pe | riod. | | | | | |
| | (2) Excludes Adjustment to Federal Tax Reserves for Prior Periods. | | | | | | | |
| | (3) Deferred Income Tax Reserve Calculation: | | (#10.022.056) | (016 001 110) | (017.262.525) | (017.260.720) | (017.466.714) | |
| | Accumulated deferred income taxes in FERC 282 | | (\$19,923,956) | (\$16,981,112) | (\$17,363,535) | (\$17,369,738) | (\$17,466,714) | |
| | Less: FAS 109 in FERC 282 | | \$1,168,033 | \$1,214,488 | \$1,214,487 | \$1,214,487 | \$1,214,487 | |
| | Add: Reserve in FERC 283 | | (\$467,215) | (\$3,524,858) | (\$3,524,858) | (\$3,524,858) | (\$3,524,858) | |
| | Add: Deferred tax asset-NOL in FERC 236 | | \$1,700,559 | \$1,700,559 | \$1,700,559 | \$1,700,559 | \$1,700,584 | |
| | Add: Deferred tax asset-CIAC in FERC 190 | | \$300 | \$300 | \$300 | \$300 | \$0 | |
| | Add: Deferred tax asset-M&S in FERC 190 | | \$0 | \$0 | \$0 | \$0 | \$0 | |
| | Total | _ | (\$19,858,345) | (\$20,019,599) | (\$20,402,021) | (\$20,408,224) | (\$20,505,475) | |

Granite State Electric Company (d/b/a National Grid) Calculation of Interim Cumulative Earnings Calculation at December 31, 2011 (\$000)

| Line | - | | | | |
|--|--|----------|-----|------------------|--|
| 1 | Actual Earnings Available for Common - CY 2008 | \$1,159 | (a) | | |
| 2 | Actual Earnings Available for Common - CY 2009 | (\$399) | (b) | | |
| 3 | Actual Earnings Available for Common - CY 2010 | \$1,123 | (c) | | |
| 4 | Estimated Earnings Available for Common - CY 2011 | (\$539) | (d) | | |
| 5 | Estimated Earnings Available for Common - CY 2012 | n/a | | | |
| 6 | | | | | |
| 7 | Four Year Average | | | \$470 | |
| 8 | | | | | |
| 9 | Actual Average Common Equity - 2008 | \$30,733 | (a) | | |
| 10 | Actual Average Common Equity - 2009 | \$30,844 | (b) | | |
| 11 | Actual Average Common Equity - 2010 | \$31,017 | (c) | | |
| 12 | Estimated Average Common Equity - 2011 | \$30,475 | (d) | | |
| 13 | Estimated Average Common Equity - 2012 | n/a | | | |
| 14 | | | | | |
| 15 | Four Year Average | | | \$30,767 | |
| 16 | | | | | Customer |
| 17 | Average Annual Return | | | 1.53% | Share |
| 18 | | | _ | | |
| | | | | | |
| 19 | ROE >11.00% shared 50% with customers | | | 0.00% * 50.00% = | 0.00% |
| 19 20 | ROE >11.00% shared 50% with customers | | | 0.00% * 50.00% = | 0.00% |
| | ROE >11.00% shared 50% with customers | | | 0.00% * 50.00% = | 0.00% |
| 20 | ROE >11.00% shared 50% with customers Total Customer ROE Sharing | | | 0.00% * 50.00% = | 0.00% |
| 20 21 | | | | 0.00% * 50.00% = | |
| 20 21 22 | Total Customer ROE Sharing | | | 0.00% * 50.00% = | 0.00% |
| 20 21 22 23 | Total Customer ROE Sharing | | | 0.00% * 50.00% = | 0.00% |
| 20 21 22 23 24 | Total Customer ROE Sharing Annual Average Equity | | | 0.00% * 50.00% = | 0.00% \$30,767 |
| 20 21 22 23 24 25 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 |
| 20 21 22 23 24 25 26 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings Tax Gross-up Average Annual Customer Shared Earnings - Pre-tax | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 |
| 20 21 22 23 24 25 26 27 28 29 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings Tax Gross-up | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 / 64.91% |
| 20 21 22 23 24 25 26 27 28 29 30 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings Tax Gross-up Average Annual Customer Shared Earnings - Pre-tax Number of Years | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 / 64.91% \$0 x 4 |
| 20 21 22 23 24 25 26 27 28 29 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings Tax Gross-up Average Annual Customer Shared Earnings - Pre-tax | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 / 64.91% |
| 20 21 22 23 24 25 26 27 28 29 30 31 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings Tax Gross-up Average Annual Customer Shared Earnings - Pre-tax Number of Years Total Customer Shared Earnings 1/1/2008 - 12/31/2012 | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 / 64.91% \$0 x 4 |
| 20 21 22 23 24 25 26 27 28 29 30 31 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings Tax Gross-up Average Annual Customer Shared Earnings - Pre-tax Number of Years Total Customer Shared Earnings 1/1/2008 - 12/31/2012 December 31, 2008 Earnings Report - submitted May 1, 2009 | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 / 64.91% \$0 x 4 |
| 20 21 22 23 24 25 26 27 28 29 30 31 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings Tax Gross-up Average Annual Customer Shared Earnings - Pre-tax Number of Years Total Customer Shared Earnings 1/1/2008 - 12/31/2012 December 31, 2008 Earnings Report - submitted May 1, 2009 December 31, 2009 Earnings Report - submitted May 1, 2010 | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 / 64.91% \$0 x 4 |
| 20 21 22 23 24 25 26 27 28 29 30 31 | Total Customer ROE Sharing Annual Average Equity Average Annual Customer Shared Earnings Tax Gross-up Average Annual Customer Shared Earnings - Pre-tax Number of Years Total Customer Shared Earnings 1/1/2008 - 12/31/2012 December 31, 2008 Earnings Report - submitted May 1, 2009 | | | 0.00% * 50.00% = | 0.00% \$30,767 \$0 / 64.91% \$0 x 4 |