## Unitil Energy Systems, Inc. <br> PUC $\mathbf{3 0 8 . 1 1}$ - F-1 Rate of Return

12 Months Ending December 31, 2015
Schedule 1: Calculation of Per Books Rate of Return

| Cost of Service | Rolling 12 Months |  | Rate Base |  |  | Period End |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Electric Service Revenue | \$ | 152,704,795 |  | Utility Plant in | ervice |  | 272,786,687 |
| Other Operating Revenue |  | 1,959,705 |  | Less: Reserv | or Depreciation \& Amortization |  | 98,980,036 |
| Total Operating Revenue |  | 154,664,500 |  | Net Ut | Plant |  | 173,806,651 |
| Operating Expenses: |  |  |  | Plus: |  |  |  |
| Purchased Power |  | 68,228,194 |  | M\&S Inve | ries |  | 1,410,324 |
| Transmission |  | 25,413,039 |  | Cash Wo | g Capital |  | 2,520,438 |
| Distribution |  | 9,010,330 |  | Prepayme |  |  | 7,616,460 |
| Cust. Accounting \& Service |  | 6,166,451 |  | Other Spe | I Deposits - ISO |  | 1,932,574 |
| Admin. \& General |  | 9,124,580 |  | Less: |  |  |  |
| Depreciation |  | 9,639,845 |  | Deferred | me Taxes |  | 40,940,413 |
| Amortization |  | 4,430,384 |  | Customer | dvances |  | 557,928 |
| Taxes-Other Than Income |  | 5,305,221 |  | Customer | posits |  | 923,011 |
| State \& Federal Income Taxes - Adjusted |  | 4,639,922 |  |  |  |  |  |
| Int on Customer Deposits |  | 4,777 |  | Total | e Base | \$ | 144,865,096 |
| Total Operating Expenses | 141,962,744 |  |  | Utility Operating Income - Current Cost of Capital Utility Operating Income - Adjusted |  | \$ | 12,226,614 |
|  |  |  |  |  |  | \$ | 11,304,803 |
| Net Operating Income | \$ | 12,701,756 |  |  |  |  |  |
|  |  |  |  | Operating Income Deficiency (Surplus) |  | \$ | 921,812 |
| Less: Other Flow Through Operating Income | 1,396,954 |  |  |  |  | \$ | 604,619 |
|  |  |  |  | Revenue Deficiency (Surplus) |  | \$ | 1,526,431 |
| Net Operating Income - Adjusted | \$ | 11,304,803 |  |  |  |  |  |
|  |  |  |  | Return on Rate Base - Actual <br> Return on Rate Base - Current Cost of Capital |  |  | 7.80\% |
|  |  |  |  |  |  |  | 8.44\% |
|  |  |  |  | ROE - Actual |  |  | 8.40\% |
|  |  |  |  | ROE - Authorized DE 10-055 |  |  | 9.67\% |
| Schedule 2: Current Cost of Capital | Amount Outstanding |  | Percent Total | Cost Rate | Weighted Cost Rate |  |  |
| Common Equity | \$ | 77,284,950 | 50.03\% | 9.67\% | 4.84\% |  |  |
| Preferred Stock Equity | \$ | 189,800 | 0.12\% | 6.00\% | 0.01\% |  |  |
| Long Term Debt | \$ | 77,000,000 | 49.85\% | 7.21\% | 3.59\% |  |  |
| Short Term Debt (a) | \$ | 0 | 0.00\% | 1.54\% | 0.00\% |  |  |
| Total | \$ | 154,474,750 | 100.00\% |  | 8.44\% |  |  |

(a) Excluding Accrued Revenue and Power Supply Working Capital

