**PUBLIC SERVICE OF NEW HAMPSHIRE**
**2012 Pole Attachment Rates**
**Calculations using 2010 FERC Form 1 Data**

## 1. ACCUMULATED DEPRECIATION

= Accumulated Depreciation (Distribution) x Gross Pole Investment / Gross Plant Investment (Distribution)

**A.** Accumulated Depreciation (Account 108) (Poles)
357,026,270 x 208,842,716 / 1,197,253,170 (Account 364) (Poles) = 62,277,835

**B.** Accumulated Deprecation (Poles) Related to Accounts 364, 365, & 369

| | | |
|---|---|---|
| 357,026,270 x 208,842,716 / 1,197,253,170 (Account 364) | | 62,277,835 |
| 357,026,270 x 311,030,860 / 1,197,253,170 (Account 365) | + | 92,750,799 |
| 357,026,270 x 111,219,561 / 1,197,253,170 (Account 369) | + | 33,166,172 |
| | = | 188,194,807 |

## 2. ACCUMULATED DEFERRED TAXES ("ADT")

**A.** ADT (Poles) = (Sum Accounts 281 + 282 + 283 + 190) x [Gross Pole Investment / Gross Inv. In Total Electric Plant]

= (0 + 286,592,172 + 186,517,679 - 160,102,483 ) x [208,842,716 / 2,526,645,146 ]

= 25,871,978

**B.** ADT (Electric) = Sum Accounts 281 + 282 + 283 + 190

= 0 + 286,592,172 + 186,517,679 - 160,102,483

= 313,007,368

**C.** ADT related to A/C 364, 365, & 369 = (Sum Accounts 364 + 365 + 369) x [(Sum Accounts 281+ 282 + 283 + 190) /Total Electric Plant]

= (208,842,716 + 311,030,860 + 111,219,561 ) x [(0 + 286,592,172 + 186,517,679 - 160,102,483 ) / 2,526,645,146 ]

= 78,181,458

## 3. NET POLE INVESTMENT

| | | | | | | |
|---|---|---|---|---|---|---|
| **A.** Net Pole Investment | = | Gross Pole Investment (Account 364) | - | Accumulated Depreciation (Account 108) (Poles) | - | Accumulated Deferred Income Taxes (Account 190,281-283) (Poles) |
| | = | 208,842,716 | - | 62,277,835 | - | 25,871,978 |
| | = | 120,692,902 | | | | |

**B.** Net Cost of a Bare Pole (Electric) = 0.85 x Net Pole Investment / Number of Poles

= 0.85 x 120,692,902 / 265,071 = 102,588,967 / 265,071

= $387.02

| | | | |
|---|---|---|---|
| Accumulated Depreciation Distribution | = | 357,026,270 | pg 219, col b, row 26 |
| Gross Investment Account 364 | = | 208,842,716 | pg 207, col g, row 64 |
| Gross Investment Account 365 | = | 311,030,860 | pg 207, col g, row 65 |
| Gross Investment Account 369 | = | 111,219,561 | pg 207, col g, row 69 |
| Gross Plant Investment Distribution | = | 1,197,253,170 | pg 207, col g, row 75 |
| Account 282 (Electric) | = | 286,592,172 | pg 275, col k, row 2 |
| Account 283 (Electric) | = | 186,517,679 | pg 277, col k, row 9 |
| Account 190 (Electric) | = | (160,102,483) | pg 234, col c, row 8 (enter in as a negative #) |
| Gross Inv. In Total Electric Plant | = | 2,526,645,146 | pg 200, col c, row 8 |
| Accumulated Depreciation (Account 108) (Poles) | = | 62,277,835 | see *1.A. Accumulated Depreciation Calculation* |
| Accumulated Deferred Income Taxes (A/C 190,281-283) (Poles) | = | 25,871,978 | see *2.A. Accumulated Deferred Taxes* |
| Net Pole Investment | = | 120,692,902 | see *3.A. Net Pole Investment* |
| Number of Poles | = | 265,071 | Plant Accounting |

**4. CARRYING CHARGE** Carrying Charge Rate = Administrative + Maintenance + Depreciation + Taxes + Return

A. ADMINISTRATIVE ELEMENT

| | | | | | | |
|---|---|---|---|---|---|---|
| | | Total Administrative and General | | | | |
| Administrative Element | = | Gross Plant Investment (Electric) | - | Accumulated Depreciation (Account 108 - Electric) | - | Accumulated Deferred Taxes (Electric Plant) (Accounts 190, 281-283) |
| | = | | | 112,765,246 | | |
| | | 2,526,645,146 | - | 890,944,704 | - | 313,007,368 |
| | = | 112,765,246 / 1,322,693,074 | | | = | 8.525% |

B. MAINTENANCE ELEMENT

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | Account 593 | | |
| Maintenance Element | = | Pole Investment in Accounts 364, 365, & 369 | - | Deprecation (Poles) Related to Accounts 364, 365, & 369 | - | Accumulated Deferred Income Taxes related to Accounts 364, 365, & 369 |
| | = | | | 25,006,174 | | |
| | | 631,093,137 | - | 188,194,807 | - | 78,181,458 |
| | = | 25,006,174 / 364,716,872 | | | = | 6.856% |

C. DEPRECIATION ELEMENT

| | | | | | | |
|---|---|---|---|---|---|---|
| Depreciation Element | = | Gross Pole Investment (Account 364) / Net Pole Investment | x | Depreciation Rate for Gross Pole Investment | | |
| | = | 208,842,716 / 120,692,902 | x | 0.0244 | = | 4.222% |

D. TAXES ELEMENT

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | Accounts 408.1 + 409.1 + 410.1 + 411.4 - 411.1 | | |
| Taxes Element | = | Gross Plant Investment (Total Plant) | - | Accumulated Depreciation (Account 108) | - | Accumulated Deferred Taxes (Plant) (Account 190, 281-283) |
| | = | | | 104,900,107 | | |
| | | 2,526,645,146 | - | 890,944,704 | - | 313,007,368 |
| | = | 104,900,107 / 1,322,693,074 | | | = | 7.931% |

E. RETURN ELEMENT

| | | | | |
|---|---|---|---|---|
| Return Element | = | Applicable Rate of Return (default = 11.25%) | = | 7.585% |

F. TOTAL CARRYING CHARGE

| | |
|---|---|
| Administrative | 8.525% |
| Maintenance | 6.856% |
| Depreciation | 4.222% |
| Taxes | 7.931% |
| Return | 7.585% |
| Carrying Charge | **35.119%** |

| | | | |
|---|---|---|---|
| Total Administrative and General | = | 112,765,246 | pg 323, col b, row 197 |
| Gross Plant Investment (Electric) | = | 2,526,645,146 | pg 200, col c, row 8 |
| Accumulated Depreciation (Account 108 - Electric) | = | 890,944,704 | pg 219, col c, row 29 |
| Accumulated Deferred Taxes (Electric Plant) (A/C 190, 281-283) | = | 313,007,368 | see *2. B. Accumulated Deferred Taxes* |
| Account 593 | = | 25,006,174 | pg 322, col b, row 149 |
| Gross Pole Investment Account 364 | = | 208,842,716 | pg 207, col g, row 64 |
| Gross Pole Investment Account 365 | = | 311,030,860 | pg 207, col g, row 65 |
| Gross Pole Investment Account 369 | = | 111,219,561 | pg 207, col g, row 69 |
| Pole Investment in Accounts 364, 365, & 369 | = | 631,093,137 | sum *Accounts 364, 365, 369, pg 207, col g* |
| Accumulated Deprecation (Poles) Related to Accounts 364, 365, & 369 | = | 188,194,807 | see *1.B. Accumulated Depreciation Calculation* |
| Accumulated Deferred Taxes related to Accounts 364, 365, & 369 | = | 78,181,458 | see *2.C. Accumulated Deferred Taxes* |
| Net Pole Investment | = | 120,692,902 | see *3.A. Net Pole Investment* |
| Depreciation Rate for Gross Pole Investment | = | 2.4400 | pg 337.1, col e, row 15 |
| Accounts 408.1 + 409.1 + 410.1 - 411.1 + 411.4 | = | 104,900,107 | pg 114, col c, rows 14-19 |
| Gross Plant Investment (Total Plant) | = | 2,526,645,146 | pg 200, col b, row 8 |
| Accumulated Deferred Taxes (Plant) (A/C 190, 281-283) | = | 313,007,368 | see *2.B. Accumulated Deferred Taxes* |
| Rate of Return | = | 7.58% | PSNH Revenue Requirements |

## 5. TELECOM FORMULA

Maximum Rate = Space Factor x Net Cost of a Bare Pole x Carrying Charge Rate

where Space Factor (urbanized) = $\dfrac{\left(\text{Space Occupied}\right) + \left(\dfrac{\text{2/3 x Unusable Space}}{\text{No. of Attaching Entities}}\right)}{\text{Pole Height}}$

$= \dfrac{\left(1\right) + \left(\dfrac{2/3 \times 24}{5}\right)}{37.5}$

$= 0.1120$

Space Factor (nonurbanized) = $\dfrac{\left(\text{Space Occupied}\right) + \left(\dfrac{\text{2/3 x Unusable Space}}{\text{No. of Attaching Entities}}\right)}{\text{Pole Height}}$

$= \dfrac{\left(1\right) + \left(\dfrac{2/3 \times 24}{3}\right)}{37.5}$

$= 0.1689$

| | | | | | | | | | Fully Owned | Jointly Owned =1/2 x Fully Owned |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Rate (urbanized) | = | Space Factor | x | Net Cost of a Bare Pole | x | Carrying Charge Rate | | | | |
| | = | 0.1120 | x | $387.02 | x | 35.12% | = | | **$15.22** | **$7.61** |
| Maximum Rate (nonrbanized) | = | Space Factor | x | Net Cost of a Bare Pole | x | Carrying Charge Rate | | | | |
| | = | 0.1689 | x | $387.02 | x | 35.12% | = | | **$22.96** | **$11.48** |

| | | | |
|---|---|---|---|
| Space Occupied | = | 1 foot | |
| Unusable Space | = | 24 feet | |
| Number of Attaching Entities (non-urbanized) | = | 3 | |
| Number of Attaching Entities (urbanized) | = | 5 | |
| Pole Height | = | 37.5 feet | |
| Net Cost of a Bare Pole | = | $387.02 | see *3.B. Net Cost of a Bare Pole* |
| Carrying Charge Rate | = | 35.12% | see 4. *Carrying Charge Rate* |

## 6. CABLE FORMULA

Maximum Rate = Space Factor x Net Cost of a Bare Pole x Carrying Charge Rate

where Space Factor = Space Occupied / Usuable Space

= 1 / 13.5 = 0.0741

| | | | | | | | | | Fully Owned | Jointly Owned =1/2 x Fully Owned |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Rate | = | 0.074 | x | $387.02 | x | 35.119% | = | | **$10.07** | **$5.04** |

| | | | |
|---|---|---|---|
| Space Occupied | = | 1 foot | |
| Usable Space | = | 13.5 feet | |
| Net Cost of a Bare Pole | = | $387.02 | see *3.B. Net Cost of a Bare Pole* |
| Carrying Charge Rate | = | 35.12% | see 4. *Carrying Charge Rate* |

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
ACCOUNT 364 POLES
DECEMBER 31, 2010 BALANCES

| DESCRIPTION | FULLY OWNED UNITS | JOINTLY OWNED UNITS | TOTAL UNITS |
|---|---|---|---|
| POLE, 0 FOOT FULLY | 3 | - | 3 |
| POLE, LAMINATED COLUMN 56 - 60 FOOT FULLY | 22 | - | 22 |
| POLE, LAMINATED COLUMN 61 - 65 FOOT FULLY | 6 | - | 6 |
| POLE, LAMINATED COLUMN 66 - 70 FOOT FULLY | 5 | - | 5 |
| POLE, LAMINATED COLUMN 51 - 55 FOOT FULLY | 2 | - | 2 |
| POLE, STEEL 30 FOOT FULLY | 13 | - | 13 |
| POLE, STEEL 35 FOOT FULLY | 228 | - | 228 |
| POLE, STEEL 40 FOOT FULLY | 10 | - | 10 |
| POLE, STEEL 45 FOOT FULLY | 2 | - | 2 |
| POLE, STEEL 55 FOOT FULLY | 1 | - | 1 |
| POLE, STEEL 60 FOOT FULLY | 1 | - | 1 |
| POLE, STEEL 65 FOOT FULLY | 3 | - | 3 |
| POLE, STEEL 70 FOOT FULLY | 1 | - | 1 |
| POLE, STEEL 75 FOOT FULLY | 7 | - | 7 |
| POLE, WOOD 10 FOOT JOINT | - | 5 | 5 |
| POLE, WOOD 15 FOOT FULLY | 30 | - | 30 |
| POLE, WOOD 25 FOOT FULLY | 10,705 | - | 10,705 |
| POLE, WOOD 25 FOOT JOINT | - | 11,279 | 11,279 |
| POLE, WOOD 30 FOOT FULLY | 14,361 | - | 14,361 |
| POLE, WOOD 30 FOOT JOINT | - | 43,569 | 43,569 |
| POLE, WOOD 35 FOOT FULLY | 27,890 | - | 27,890 |
| POLE, WOOD 35 FOOT JOINT | - | 119,495 | 119,495 |
| POLE, WOOD 40 FOOT FULLY | 25,668 | - | 25,668 |
| POLE, WOOD 40 FOOT JOINT | - | 139,095 | 139,095 |
| POLE, WOOD 45 FOOT FULLY | 8,724 | - | 8,724 |
| POLE, WOOD 45 FOOT JOINT | - | 27,264 | 27,264 |
| POLE, WOOD 50 FOOT FULLY | 2,844 | - | 2,844 |
| POLE, WOOD 50 FOOT JOINT | - | 2,809 | 2,809 |
| POLE, WOOD 55 FOOT FULLY | 1,263 | - | 1,263 |
| POLE, WOOD 55 FOOT JOINT | - | 426 | 426 |
| POLE, WOOD 60 FOOT FULLY | 680 | - | 680 |
| POLE, WOOD 60 FOOT JOINT | - | 58 | 58 |
| POLE, WOOD 65 FOOT FULLY | 307 | - | 307 |
| POLE, WOOD 65 FOOT JOINT | - | 32 | 32 |
| POLE, WOOD 70 FOOT FULLY | 127 | - | 127 |
| POLE, WOOD 70 FOOT JOINT | - | 13 | 13 |
| POLE, WOOD 75 FOOT FULLY | 86 | - | 86 |
| POLE, WOOD 75 FOOT JOINT | - | 1 | 1 |
| POLE, WOOD 80 FOOT FULLY | 27 | - | 27 |
| POLE, WOOD 85 FOOT FULLY | 13 | - | 13 |
| POLE, WOOD 90 FOOT FULLY | 9 | - | 9 |
| POLE, WOOD 95 FOOT FULLY | 6 | - | 6 |
| POLE, WOOD 100 FOOT FULLY | 4 | - | 4 |
| SUBTOTAL | 93,048 | 344,046 | 437,094 |
| TOTAL EQUIVALENT POLES | 93,048 | 172,023 | 265,071 |