

TAB 14

1604.08 Rate of Return Schedules

Pennichuck East Utility, Inc.
Overall Rate of Return
For the Twelve Months Ended December 31, 2019

Schedule 1

| <u>Capital Component</u> | <u>Amount</u> | <u>Component Ratio</u> | <u>Component Cost Rate</u> | <u>Average Cost Rate</u> |
|-------------------------------|-----------------------------|------------------------|----------------------------|--------------------------|
| Long-term Debt | 22,717,109 | 72.19% | 3.68% | 2.66% |
| Intercompany Debt | 8,169,417 | 25.96% | 2.90% (1) | 0.75% |
| Preferred Stock | - | 0.00% | 0.00% | 0.00% |
| Common Equity | <u>583,814</u> | <u>1.86%</u> | 4.85% (2) | <u>0.09%</u> |
| Overall Rate of Return | <u>\$ 31,470,340</u> | <u>100.00%</u> | | <u>3.50%</u> |

Notes:

(1) The interest reflected is the effective interest rates for 2019 per Schedule F-35 of the Annual Report.

(2) The return on equity based on methodology used in Order 25,292 in DW 11-026 is as follows:

| | |
|------------------------------------|--------------|
| Average prior 12 mos (Aug 2019-Jul | 1.85% |
| 2020) 30 year Treasury bonds | 1.85% |
| Plus 3.0% | <u>3.00%</u> |
| Total | <u>4.85%</u> |

Pennichuck East Utility, Inc.
Historical Capital Structure
For the Twelve Months Ended December 31, 2015 - 2019

Schedule 3

| | <u>2019</u> | <u>2018</u> | <u>2017</u> | <u>2016</u> | <u>2015</u> |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Bonds | | | | | |
| Other LTD | 21,074,432 | 19,367,850 | 15,737,689 | 16,658,945 | 13,537,311 |
| Long-term Debt | <u>\$ 21,074,432</u> | <u>\$ 19,367,850</u> | <u>\$ 15,737,689</u> | <u>\$ 16,658,945</u> | <u>\$ 13,537,311</u> |
| Intercompany Debt | 8,169,417 | 8,758,467 | 8,405,729 | 4,038,030 | 5,799,592 |
| Common Equity: | | | | | |
| Common Stock | 100 | 100 | 100 | 100 | 100 |
| Paid In Capital | 11,428,201 | 11,583,500 | 12,482,363 | 13,333,907 | 13,889,862 |
| Comprehensive Income | (212,036) | (157,658) | (224,522) | (272,011) | (328,900) |
| Retained Earnings | (1,176,457) | (636,301) | (1,088,842) | (128,250) | 128,854 |
| Total Common Equity | <u>\$ 10,039,808</u> | <u>\$ 10,789,641</u> | <u>\$ 11,169,098</u> | <u>\$ 12,933,745</u> | <u>\$ 13,689,917</u> |
| Total Capital | <u>\$ 39,283,657</u> | <u>\$ 38,915,958</u> | <u>\$ 35,312,517</u> | <u>\$ 33,630,720</u> | <u>\$ 33,026,820</u> |

| | | | | | |
|---------------------|----------------|----------------|----------------|----------------|----------------|
| Long-term Debt | 53.65% | 49.77% | 44.57% | 49.53% | 40.99% |
| Total Common Equity | 25.56% | 27.73% | 31.63% | 38.46% | 41.45% |
| Intercompany Debt | <u>20.80%</u> | <u>22.51%</u> | <u>23.80%</u> | <u>12.01%</u> | <u>17.56%</u> |
| Total Capital | <u>100.00%</u> | <u>100.00%</u> | <u>100.00%</u> | <u>100.00%</u> | <u>100.00%</u> |

Pennichuck East Utility, Inc.
Historical Capitalization Ratios
For the Twelve Months Ended December 31, 2015 - 2019

Schedule 4

| | <u>2019</u> | <u>2018</u> | <u>2017</u> | <u>2016</u> | <u>2015</u> |
|---------------------|----------------|----------------|----------------|----------------|----------------|
| Long-term Debt | 53.65% | 49.77% | 44.57% | 49.53% | 40.99% |
| Total Common Equity | 25.56% | 27.73% | 31.63% | 38.46% | 41.45% |
| Intercompany Debt | <u>20.80%</u> | <u>22.51%</u> | <u>23.80%</u> | <u>12.01%</u> | <u>17.56%</u> |
| Total Capital | <u>100.00%</u> | <u>100.00%</u> | <u>100.00%</u> | <u>100.00%</u> | <u>100.00%</u> |

Pennichuck East Utility, Inc.
 Weighted Average Cost of Long-Term Debt
 For the Twelve Months Ended December 31, 2019

Schedule 5

| Holder | Term | Maturity | Coupon Rate | Outstanding Balance as of 12/31/19 | New Debt Added in 2020 | Annual Interest (1) | Annual Amortization Issue Costs | All In Annual Cost | Effective Rate | 2019 TY | 2019 TY | 2019 TY Principal | 2019 Pro Form | 2019 Pro Form | 2019 TY Pro Form | 2020 Principal | 2020 Interest | 2020 Principal and |
|--|------|-----------|-------------|------------------------------------|------------------------|---------------------|---------------------------------|--------------------|----------------|-----------------------|-----------------------|---------------------------|--------------------------|-------------------------|-------------------------------------|----------------------|----------------------|------------------------|
| | | | | | | | | | | Principal Payments(6) | Interest Payments (6) | and Interest Payments (6) | Adj to 2019 TY Principal | Adj to 2019 TY Interest | Principal and Interest Payments (6) | Payments (6) | Payments (6) | Interest Payments (6) |
| CoBank | 20 | 03/01/30 | 5.950% | 2,715,544 | - | 161,575 | 1,277 | 162,852 | 6.00% | \$ 212,716.10 | \$ 120,540.12 | \$ 333,256.22 | \$ (14,511.62) | \$ 75,489.69 | \$ 394,234.29 | \$ 198,204.48 | \$ 196,029.81 | \$ 394,234.29 |
| State of NH SRF (Green Hills) (4) | 20 | 01/01/25 | 3.728% | 113,245 | - | 4,222 | 6,854 | 11,076 | 9.78% | \$ 17,325.00 | \$ 4,688.74 | \$ 22,013.74 | \$ - | \$ (862.06) | \$ 21,151.68 | \$ 17,325.00 | \$ 3,826.68 | \$ 21,151.68 |
| State of NH SRF (Pelham Tank) | 20 | 01/01/27 | 3.488% | 242,897 | - | 8,472 | 247 | 8,719 | 3.59% | \$ 30,113.95 | \$ 9,044.21 | \$ 39,158.16 | \$ 1,067.31 | \$ (1,067.31) | \$ 39,158.16 | \$ 31,181.26 | \$ 7,976.90 | \$ 39,158.16 |
| State of NH SRF (Maple Hills) | 20 | 06/01/30 | 2.952% | 353,184 | - | 10,426 | 483 | 10,909 | 3.09% | \$ 28,543.00 | \$ 10,884.44 | \$ 39,427.44 | \$ 857.00 | \$ (854.11) | \$ 39,430.33 | \$ 29,400.00 | \$ 10,030.33 | \$ 39,430.33 |
| State of NH SRF (Birch Hill) (3) | 20 | 12/01/31 | 2.864% | 1,193,378 | - | 34,178 | 549 | 34,727 | 2.91% | \$ 82,858.54 | \$ 35,469.37 | \$ 118,327.91 | \$ (82,858.54) | \$ (35,469.37) | \$ - | \$ 85,262.98 | \$ 33,064.91 | \$ 118,327.89 |
| State of NH SRF (Locke Lake - 2007) (4) | 20 | 05/01/30 | 2.952% | 151,960 | - | 4,486 | 90 | 4,576 | 3.01% | \$ 12,325.00 | \$ 4,743.25 | \$ 17,068.25 | \$ 59.00 | \$ (475.71) | \$ 16,651.54 | \$ 12,984.00 | \$ 4,267.54 | \$ 16,651.54 |
| State of NH SRF (Locke Lake - 2011) (4) | 20 | 06/01/33 | 2.864% | 227,937 | - | 6,528 | 434 | 6,962 | 3.05% | \$ 6,427.23 | \$ 6,722.64 | \$ 13,149.87 | \$ 572.19 | \$ (364.14) | \$ 13,357.92 | \$ 6,999.42 | \$ 6,358.50 | \$ 13,357.92 |
| State of NH SRF (Liberty Tree) (9) | 20 | 04/01/35 | 3.104% | 334,930 | - | 10,396 | 531 | 10,927 | 3.26% | \$ 8,013.00 | \$ 10,651.04 | \$ 18,664.04 | \$ 752.00 | \$ (477.56) | \$ 18,938.48 | \$ 8,765.00 | \$ 10,173.48 | \$ 18,938.48 |
| State of NH SRF (Locke Lake - 2012) | 20 | 12/1/2033 | 2.720% | 300,407 | - | 8,171 | 1,057 | 9,228 | 3.07% | \$ 17,522.57 | \$ 8,430.29 | \$ 25,952.86 | \$ 482.62 | \$ (482.60) | \$ 25,952.86 | \$ 18,005.19 | \$ 7,947.69 | \$ 25,952.86 |
| CoBank \$1.7M Loan (RX0848T4) | 10 | 06/20/23 | 3.620% | 1,294,541 | - | 46,882 | 1,632 | 48,494 | 3.75% | \$ 72,802.23 | \$ 49,104.29 | \$ 121,906.52 | \$ 2,584.90 | \$ (2,579.31) | \$ 121,912.11 | \$ 75,387.13 | \$ 46,524.86 | \$ 121,912.11 |
| CoBank \$925K Loan (RX0848T3) | 20 | 06/20/33 | 4.250% | 706,244 | - | 30,015 | 444 | 30,459 | 4.31% | \$ 37,785.18 | \$ 31,402.82 | \$ 69,188.00 | \$ 1,575.36 | \$ (1,571.50) | \$ 69,191.86 | \$ 39,360.54 | \$ 29,831.32 | \$ 69,191.86 |
| SRF Loan - Locke Lake Dam Site Phase 2 | 20 | 07/01/35 | 2.720% | 327,933 | - | 8,920 | - | 8,920 | 2.72% | \$ 16,784.77 | \$ 9,168.10 | \$ 25,952.87 | \$ 462.28 | \$ - | \$ 25,952.86 | \$ 17,247.05 | \$ 8,705.81 | \$ 25,952.86 |
| SRF Loan - Locke Lake-Winwood & Monroe-Phase I | 20 | 07/01/36 | 2.720% | 333,303 | - | 9,066 | 343 | 9,409 | 2.82% | \$ 15,794.06 | \$ 9,299.52 | \$ 25,093.58 | \$ 434.98 | \$ (435.02) | \$ 25,093.54 | \$ 16,229.04 | \$ 8,864.50 | \$ 25,093.54 |
| SRF Loan - Locke Lake-Winwood & Monroe-Phase II | 20 | 11/01/36 | 2.464% | 349,020 | - | 8,600 | 263 | 8,863 | 2.54% | \$ 16,530.00 | \$ 8,821.30 | \$ 25,351.30 | \$ 412.00 | \$ (411.94) | \$ 25,351.36 | \$ 16,942.00 | \$ 8,409.36 | \$ 25,351.36 |
| SRF Loan - W&E Main Replacement | 20 | 08/01/36 | 2.616% | 882,518 | - | 23,087 | 672 | 23,759 | 2.69% | \$ 41,985.90 | \$ 23,683.68 | \$ 65,649.58 | \$ 1,111.09 | \$ (1,111.06) | \$ 65,649.61 | \$ 43,076.99 | \$ 22,572.62 | \$ 65,649.61 |
| SRF Loan - Hickory & Avery | 20 | 04/01/36 | 2.720% | 359,529 | - | 9,779 | 119 | 9,898 | 2.75% | \$ 17,528.81 | \$ 9,654.68 | \$ 27,183.49 | \$ 464.07 | \$ (464.11) | \$ 27,183.45 | \$ 17,992.88 | \$ 9,190.57 | \$ 27,183.45 |
| SRF Loan - Hardwood Treatment Station | 20 | 07/01/36 | 2.464% | 491,091 | - | 12,100 | 349 | 12,450 | 2.54% | \$ 23,832.44 | \$ 12,419.77 | \$ 36,252.21 | \$ 594.00 | \$ (593.94) | \$ 36,252.27 | \$ 24,426.44 | \$ 11,825.83 | \$ 36,252.30 |
| CoBank 625K Loan | 25 | 03/06/40 | 4.900% | 557,471 | - | 27,316 | 1,635 | 28,951 | 5.19% | \$ 15,609.72 | \$ 28,158.70 | \$ 43,768.42 | \$ 714.99 | \$ (713.68) | \$ 43,769.73 | \$ 16,324.71 | \$ 27,445.02 | \$ 43,769.73 |
| CoBank 1.25M Loan T6(1st tranche) | 25 | 11/01/41 | 4.200% | 1,160,174 | - | 48,727 | 489 | 49,217 | 4.24% | \$ 31,223.38 | \$ 50,197.69 | \$ 81,421.07 | \$ 1,216.68 | \$ (1,214.92) | \$ 81,422.83 | \$ 32,440.06 | \$ 48,982.77 | \$ 81,422.83 |
| CoBank 950K Loan T6(2nd tranche) | 25 | 11/01/41 | 4.830% | 887,255 | - | 42,854 | 211 | 43,066 | 4.85% | \$ 21,944.94 | \$ 44,091.35 | \$ 66,036.29 | \$ 976.13 | \$ (974.35) | \$ 66,038.07 | \$ 22,921.07 | \$ 43,117.00 | \$ 66,038.07 |
| SRF Loan - Locke Lake Varney Road | 20 | 11/01/37 | 1.960% | 1,356,529 | - | 26,588 | 691 | 27,279 | 2.01% | \$ 63,287.36 | \$ 27,261.88 | \$ 90,549.24 | \$ 1,251.66 | \$ (1,251.66) | \$ 90,549.24 | \$ 64,539.02 | \$ 26,010.22 | \$ 90,549.24 |
| Intercompany 2018 PEU - \$1,701,516 | 30 | 05/01/48 | 3.200% | 1,646,609 | - | 52,691 | - | 52,691 | 3.20% | \$ 35,000.76 | \$ 53,301.12 | \$ 88,301.88 | \$ 1,136.58 | \$ (1,136.58) | \$ 88,301.88 | \$ 36,137.34 | \$ 52,164.54 | \$ 88,301.88 |
| Intercompany 2018 PEU (North Country)- \$1,157,403 (5) | 30 | 05/01/48 | 3.200% | 1,120,054 | - | 35,842 | - | 35,842 | 3.20% | \$ 23,808.14 | \$ 36,256.42 | \$ 60,064.56 | \$ (23,808.14) | \$ (36,256.42) | \$ - | \$ 24,581.29 | \$ 35,483.27 | \$ 60,064.56 |
| SRF Loan 2017 - Brady Ave (Derry) | 30 | TBD | 1.960% | 563,319 | - | 11,041 | 63 | 11,104 | 1.97% | \$ 5,633.11 | \$ 16,196.16 | \$ 21,829.27 | \$ 5,871.92 | \$ (5,276.75) | \$ 22,424.44 | \$ 11,505.03 | \$ 10,919.41 | \$ 22,424.44 |
| SRF Loan 2017 Hillcrest Road (Litchfield) | 20 | TBD | 1.960% | 238,741 | - | 4,679 | - | 4,679 | 1.96% | \$ 3,306.31 | \$ 5,482.03 | \$ 8,788.34 | \$ 6,743.12 | \$ (892.66) | \$ 14,638.80 | \$ 10,049.43 | \$ 4,589.37 | \$ 14,638.80 |
| Co-Bank | 25 | 05/20/43 | 5.330% | 339,168 | - | 18,078 | 402 | 18,480 | 5.45% | \$ 7,034.31 | \$ 18,555.81 | \$ 25,590.12 | \$ 337.59 | \$ (336.95) | \$ 25,590.76 | \$ 7,371.90 | \$ 18,218.86 | \$ 25,590.76 |
| Merrimack River Crossing SRF | 20 | 09/01/39 | 1.960% | 2,367,217 | - | 46,397 | 238 | 46,636 | 1.97% | \$ 32,783.37 | \$ 64,446.05 | \$ 97,229.42 | \$ 66,860.63 | \$ (18,940.57) | \$ 145,149.48 | \$ 99,644.00 | \$ 45,505.48 | \$ 145,149.48 |
| Locke Lake Georgetown Main Replacement (7) | 30 | TBD | 2.704% | 959,333 | - | 25,913 | - | 25,913 | 2.70% | \$ - | \$ - | \$ - | \$ 821,128.03 | \$ (825,913.31) | \$ 47,041.34 | \$ 821,128.03 | \$ 25,913.31 | \$ 47,041.34 |
| CoBank 1.153M Loan T9 (8) | 25 | 06/01/44 | 4.380% | 1,144,579 | - | 50,133 | - | 50,133 | 4.38% | \$ 8,421.40 | \$ 18,326.07 | \$ 26,747.47 | \$ 17,606.13 | \$ 32,176.77 | \$ 76,530.37 | \$ 26,027.53 | \$ 50,502.84 | \$ 76,530.37 |
| 2020 CoBank 800K Loan (2) | 25 | 2045 | 3.700% | - | 800,122 | 29,605 | - | 29,605 | 3.70% | \$ - | \$ - | \$ - | \$ 20,001.72 | \$ 29,604.51 | \$ 49,606.23 | \$ 20,002.00 | \$ 29,605.23 | \$ 49,606.23 |
| TOTAL | | | | 22,717,109 | 800,122 | 816,749 | 19,073 | 835,822 | 3.68% | \$ 800,253.90 | \$ 655,275.75 | \$ 1,455,529.65 | \$ 140,762.36 | \$ 120,233.51 | \$ 1,716,525.52 | \$ 941,016.26 | \$ 775,509.26 | \$ 1,716,525.55 |

Notes:
 (1) The annual interest expense is calculated based on the outstanding balance at year end multiplied by the stated interest rate. The calculated interest expense will differ from interest expense recorded in the test year due to loan repayments made during the year.
 (2) Projected terms for CoBank 2020 loan
 Returned CoBank FALOC to pay for PEU 2019 OCP's \$ 800,122.00 \$ 20,001.72 \$29,604.51 Loan approved via PUC Order #26.418 in response to DW20-081. Loan expected to be closed on during two weeks of December 2020
 Loan Term 25 Year
 Loan Interest Rate 3.70%
 (3) The Long Term Debt related to the SRF Loan for the Birch Hill assets associated with Capital Recovery Surcharge Related Property. The amount of this debt is proformed out in Schedule 1 and 2 and will be included in intercompany debt. The annual interest and amortization issue costs have also been removed on this schedule.
 (4) Principal payment shown is net of debt principal forgiveness
 (5) The Long Term Debt related to the intercompany Loan for the Locke Lake assets associated with Capital Recovery Surcharge Related Property. The amount of this debt is proformed out in Schedule 1 and 2 and will be included in intercompany debt. The annual interest and amortization issue costs have also been removed on this schedule.
 (6) 2019 P&I payments associated with NCCRS debt is not included in these totals
 (7) Portion of \$4.24 million NHDES SRF loan approved in Order #26.159 in response to DW 18-132 associated with the Georgetown water main replacement work that was completed in 2019.
 (8) CoBank Loan approved in Order #26.253 in response to DW 19-069 associated with OCP's completed in 2018.

Pennichuck East Utility, Inc.
Short-Term and Long-Term Intercompany Debt
For the Thirteen Months Ended December 31, 2019

Schedule 6

| | Dec-18 | Jan-19 | Feb-19 | Mar-19 | Apr-19 | May-19 | Jun-19 | Jul-19 | Aug-19 | Sep-19 | Oct-19 | Nov-19 | Dec-19 | 13 Month Average |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------|
| NOTE PAYABLE- PCP-2015 3M LOAN | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CURR PORT LTD: 3M PCP NP | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CURR PORT LTD: 1M PCP NP | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| ST NOTE PAYABLE - PCP 2018 1.7M LOAN | (35,001) | (35,094) | (35,188) | (35,282) | (35,376) | (35,470) | (35,565) | (35,659) | (35,754) | (35,850) | (35,945) | (36,041) | (36,137) | (35,566) |
| ST NOTE PAYABLE - PCP 2018 1.1M LOAN | (23,808) | (23,872) | (23,935) | (23,999) | (24,063) | (24,127) | (24,192) | (24,256) | (24,321) | (24,386) | (24,451) | (24,516) | (24,581) | (24,193) |
| INTERCOMPANY SHORT TERM DEBT | (58,809) | (58,966) | (59,123) | (59,281) | (59,439) | (59,597) | (59,756) | (59,915) | (60,075) | (60,235) | (60,396) | (60,557) | (60,719) | (59,759) |
| NOTE PAYABLE- PCP-2015 3M LOAN | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| NOTE PAYABLE- PCP 2018 1.7M LOAN | (1,646,609) | (1,643,641) | (1,640,666) | (1,637,682) | (1,634,691) | (1,631,692) | (1,628,684) | (1,625,669) | (1,622,646) | (1,619,614) | (1,616,575) | (1,613,527) | (1,610,471) | (1,628,628) |
| NOTE PAYABLE - PCP 2018 1.1M LOAN | (1,120,054) | (1,118,036) | (1,116,012) | (1,113,982) | (1,111,947) | (1,109,907) | (1,107,862) | (1,105,811) | (1,103,754) | (1,101,692) | (1,099,624) | (1,097,551) | (1,095,473) | (1,107,823) |
| INTERCO LOAN NC-INTEGRATED | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| INTERCO PAY/REC: PEU/TSC | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| INTERCO PAY/REC: PEU/PWS | - | - | (6) | (6) | (6) | (6) | (6) | (6) | (6) | (6) | (6) | (6) | (6) | (4) |
| INTERCO PAY/REC: PEU/PAC | - | 0 | 1 | 2 | 3 | 4 | 1,006 | 1,003 | 1,014 | 1,027 | 1,070 | 1,091 | - | 478 |
| INTERCO PAY/REC: PEU/PWW | - | (367,609) | (704,784) | (1,252,016) | (1,650,223) | (2,046,211) | (2,426,112) | (1,649,555) | (2,049,873) | (969,290) | (1,111,053) | (1,507,078) | - | (1,210,293) |
| AP INTERCO PAY/REC: PEU/PAC | - | 335 | 335 | 335 | 335 | 335 | 335 | 3,099 | 4,699 | 4,460 | 6,674 | 12,977 | - | 2,609 |
| INTERCO PAY/REC: PEU/PCP | (5,932,995) | (5,594,894) | (4,964,447) | (4,887,092) | (4,462,009) | (4,399,090) | (4,342,002) | (4,721,582) | (4,691,169) | (4,543,594) | (4,067,725) | (3,307,824) | (5,402,754) | (4,716,706) |
| INTERCOMPANY LONG TERM DEBT | (8,699,658) | (8,723,845) | (8,425,579) | (8,890,442) | (8,858,539) | (9,186,568) | (9,503,326) | (9,098,520) | (9,461,735) | (8,228,709) | (7,887,239) | (7,511,918) | (8,108,698) | (8,660,367) |
| TOTAL INTERCOMPANY DEBT | (8,758,467) | (8,782,811) | (8,484,702) | (8,949,723) | (8,917,977) | (9,246,165) | (9,563,082) | (9,158,436) | (9,521,810) | (8,288,944) | (7,947,635) | (7,572,476) | (8,169,417) | (8,720,127) |

Pennichuck East Utility, Inc.
Weighted Average Cost of Preferred Stock
For the Twelve Months Ended December 31, 2019

Schedule 7

| Security | Term | Maturity | Rate | Outstanding Balance | Annual Dividends | Annual Amortization | All In Annual Cost | Effective Rate |
|----------|------|----------|------|------------------------|---------------------|------------------------|-----------------------|-------------------|
|----------|------|----------|------|------------------------|---------------------|------------------------|-----------------------|-------------------|

NOT APPLICABLE

Pennichuck East Utility, Inc.
Return on Common Equity
For the Twelve Months Ended December 31, 2019

Schedule 8

Source: 30 yr treasury rates used by S&P

| Date | Open | High | Low | Close |
|------------|------------------------|------|----------------|---------|
| Aug 2019 | | | | 2.1200% |
| Sept 2019 | | | | 2.1600% |
| Oct 2019 | | | | 2.1900% |
| Nov 2019 | | | | 2.2800% |
| Dec 2019 | | | | 2.3000% |
| Jan 2020 | | | | 2.2200% |
| Feb 2020 | | | | 1.9700% |
| Mar 2020 | | | | 1.4600% |
| April 2020 | | | | 1.2700% |
| May 2020 | | | | 1.3800% |
| Jun 2020 | | | | 1.4900% |
| Jul 2020 | | | | 1.3100% |
| | 30 year Treasury bonds | | Average | 1.8458% |
| | | | Plus | 3.0000% |
| | | | Cost of Equity | 4.8458% |