| Exh. EMA-9 | |
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| | |
| BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION | |
| DOCKET NO. UE-17 | |
| DOCKET NO. UG-17 | |
| | |
| EXH. EMA-9 | |
| ELIZABETH M. ANDREWS | |
| REPRESENTING AVISTA CORPORATION | |
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Rate Year Study (Natural Gas)

AVISTA UTILITIES CALCULATION OF GENERAL REVENUE REQUIREMENT WASHINGTON NATURAL GAS TWELVE MONTHS ENDED DECEMBER 31, 2016

The following information provides the Company's "Rate Year Study" results for the period 5/1/2018 through 4/30/2021. This Study is provided as additional support for the rate relief requested by the Company for the Three-Year Rate Plan beginning May 1, 2018 through April 30, 2021. See Exh. EMA-7 for the EOP Rate Base Study representing the Company's requested natural gas rate relief proposed in this case.

| | | | May 1, 2018 |
|-------------|--|------|--------------------|
| Line | | | |
| No. | Description | | (000's of Dollars) |
| 1 | Pro Forma Rate Base | \$ | 325,263 |
| 2 | Proposed Rate of Return | , | 7.69% |
| 3 | Net Operating Income Requirement | | \$25,013 |
| 4 | Pro Forma Net Operating Income | \$ | 19,498 |
| 5 | Net Operating Income Deficiency | | \$5,515 |
| 6 | Conversion Factor | | 0.620645 |
| 7 | Revenue Requirement | | \$8,886 |
| 8 | Total Base Distribution Revenues* | \$ | 92,192 |
| 9 | Percentage Base Distribution Revenue Increase | | 9.64% |
| 10 | Total Present Billed Revenue | \$ | 152,089 |
| 11 | Percentage Billed Revenue Increase | | 5.84% |
| * Line 8 "T | Total General Business Revenues" includes special contract transportation revenues | ies. | |
| | Total 05/01/2019 Revenue Increase | | |
| 12 | (Rate Year 2, per pg 9) | \$ | 3,461 |
| 13 | Percentage Billed Revenue Increase | | 2.15% |
| | Total 05/01/2020 Revenue Increase | | |
| 14 | (Rate Year 3, per pg 10) | \$ | 3,936 |
| 15 | Percentage Billed Revenue Increase | | 2.39% |

AVISTA UTILITIES RATE YEAR STUDY COST OF CAPITAL WASHINGTON NATURAL GAS

| Capital Structure | _ | | |
|-------------------|----------------------|-------|------------------|
| Component | Capital Structure | Cost | Weighted Cost |
| | | | |
| Total Debt | 51.5% | 5.62% | 2.89% |
| Common Equity | 48.5% | 9.90% | 4.80% |
| Total | 100.00% | _ | 7.69% |
| | | _ | |

AVISTA UTILITIES REVENUE CONVERSION FACTOR WASHINGTON NATURAL GAS TWELVE MONTHS ENDED DECEMBER 31, 2016

| Line No. | Description | Factor |
|-------------|---------------------------------|----------|
| 1 | Revenues | 1.000000 |
| | Expense: | |
| 2 | Uncollectibles | 0.004827 |
| 3 | Commission Fees | 0.002000 |
| 4 | Washington Excise Tax | 0.038334 |
| 6 | Total Expense | 0.045161 |
| 7 | Net Operating Income Before FIT | 0.954839 |
| 8 | Federal Income Tax @ 35% | 0.334194 |
| 9 | REVENUE CONVERSION FACTOR | 0.620645 |

(Natural Gas)
AVISTA UTILITIES
WASHINGTON NATURAL GAS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

ACTUAL RESTATEMENT ADJUSTMENTS RESULTS

| No. | DESCRIPTION | Report | Rate Base | Debits and Credits | Capital | B & O Taxes | Property Tax | Expense | Expense | & Damages | DFIT Expense |
|----------|--|-----------------------|-------------|-----------------------|----------|----------------|-----------------|----------|---------|---------------------|-----------------|
| | Adjsutment Number | 1.00 | 1.01 | 1.02 | 1.03 | 2.01 | 2.02 | 2.03 | 2.04 | 2.05 | 2.06 |
| | Workpaper Reference | G-ROO | G-DFIT | G-DDC | G-WC | G-EBO | G-RPT | G-UE | G-RE | G-ID | G-FIT |
| | REVENUES | | | | | | | | | | |
| 1 | Total General Business | | \$ - | \$ - | \$ - | \$ (5,097) | | \$ - | \$ - | \$ - | \$ - |
| 2 | Total Transportation | 4,595 | - | - | - | (118) | - | - | - | - | - |
| 3 4 | Other Revenues Total Gas Revenues | 69,723 220,416 | - | = | | (5,215) | | = | - | | |
| 4 | Total Gas Revenues | 220,416 | - | - | - | (3,213) | - | - | - | - | - |
| | EXPENSES | | | | | | | | | | |
| | Production Expenses | | | | | | | | | | |
| 5 | City Gate Purchases | 112,605 | - | - | - | - | - | - | - | - | - |
| 6 | Purchased Gas Expense | 988 | - | - | - | - | - | - | - | - | - |
| 7 | Net Nat Gas Storage Trans | 2,932 | - | - | - | - | - | - | - | | |
| 8 | Total Production | 116,525 | - | - | - | - | - | - | - | - | - |
| | Underground Storage | | | | | | | | | | |
| 9 | Operating Expenses | 974 | - | - | _ | - | - | - | - | - | - |
| 10 | Depreciation/Amortization | 492 | - | = | - | - | - | - | - | - | - |
| 11 | Taxes | 210 | - | - | - | - | - | - | - | - | - |
| 12 | Total Underground Storage | 1,676 | - | - | - | - | - | - | - | - | - |
| | The same of the sa | | | | | | | | | | |
| 10 | Distribution | ** *** | | | | | | | | | |
| 13 | Operating Expenses | 12,049 | - | - | - | - | - | - | - | - | - |
| 14 | Depreciation/Amortization | 9,866 | - | - | - | - (5.100) | - | - | - | - | - |
| 15 | Taxes | 12,807 | - | - | - | (5,183) | | - | - | - | |
| 16 | Total Distribution | 34,722 | - | = | - | (5,183) | 375 | = | - | - | - |
| 17 | Control According | 7.252 | | 2 | | | | (500) | | | |
| 17 18 | Customer Accounting Customer Service & Information | 7,352 7,595 | - | 2 | - | - | | (590) | - | - | - |
| 19 | Sales Expenses | 1,393 | - | - | - | - | - | _ | - | - | - |
| 17 | Butes Expenses | | | | | | | | | | |
| | Administrative & General | | | | | | | | | | |
| 20 | Operating Expenses | 13,763 | = | = | - | - | - | = | (3) | 76 | - |
| 21 | Depreciation/Amortization | 6,260 | - | - | - | - | - | - | - | - | - |
| 22 | Regulatory Amortizations | - | | | | | | | | | |
| 23 | Taxes | 20.022 | - | = | | - | - | <u> </u> | - (2) | 76 | |
| 24 | Total Admin. & General | 20,023 | - | - | - | - | - | - | (3) | 76 | - |
| 25 | Total Gas Expense | 187,893 | - | 2 | - | (5,183) | 375 | (590) | (3) | 76 | |
| 26 | OPERATING INCOME BEFORE FIT | 22 522 | | (2 |) - | (22) | (275) | 590 | 3 | (76) | |
| 26 | OPERATING INCOME BEFORE FIT | 32,523 | - | (2 | , - | (32) | (375) | 390 | 3 | (76) | , - |
| | FEDERAL INCOME TAX | | | | | | | | | | |
| 27 | Current Accrual | (841) | = | (1 |) - | (11) | (131) | 207 | 1 | (27) |) - |
| 28 | Debt Interest | - | 3 | - | 9 | - | - | - | - | - | |
| 29 | Deferred FIT | 9,923 | = | = | - | - | = | = | - | = | = |
| 30 | Amort ITC | (17) | | | | - | - | - | - | - | |
| 31 | NET OPERATING INCOME | \$ 23,458 | \$ (3 |) \$ (1 |) \$ (9) |) \$ (21) | \$ (244) | \$ 384 | \$ 2 | \$ (49) | |
| 31 | | \$ 25,456 | Ф (3 |) \$ (1 |) 4 (2) |) \$ (21) | J (244) | 3 304 | 9 2 | ý (1 2) | Ψ - |
| | RATE BASE | | | | | | | | | | |
| 22 | PLANT IN SERVICE | 0.000 | e | \$ - | s - | \$ - | ¢ | 6 | 6 | e | ė |
| 32 33 | Underground Storage Distribution Plant | \$ 26,868 390,508 | \$ - | 3 - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 34 | General Plant | 82,624 | - | - | | _ | - | _ | _ | - | - |
| | | | | | | | | | | | |
| 35 | Total Plant in Service | 500,000 | - | - | - | - | - | - | - | - | - |
| | ACCUMULATED DEPRECIATION/AMORT | | | | | | | | | | |
| 36 | Underground Storage | (10,317) | - | - | - | - | = | - | - | = | = |
| 37 38 | Distribution Plant General Plant | (129,098) (23,473) | - | - | | - | - | - | - | - | - |
| 39 | Total Accumulated Depreciation/Amortization | (162,888) | | | | | | | | | |
| 40 | NET PLANT | 337,112 | - | | | - | - | - | - | - | |
| 41 | DEFERRED TAXES | (73,856) | (325 |) - | - | - | - | - | - | - | - |
| | | | | | | | | | | | |
| 42 43 | Net Plant After DFIT GAS INVENTORY | 263,256 | (325 | - | - | - | - | - | - | - | - |
| 43 | GAIN ON SALE OF BUILDING | 9,116 | - | - | - | - | - | - | - | - | - |
| 45 | OTHER | (249) | | _ | | | | | | | |
| 46 | WORKING CAPITAL | 15,664 | - | - | (864) |) - | - | - | _ | - | - |
| | | | | | (2.2.1) | | | | | | |
| 47 | TOTAL RATE BASE | \$ 287,787 | \$ (325 | - \$ | \$ (864) | | \$ - | \$ - | \$ - | \$ - | \$ - |
| 48 | RATE OF RETURN | 8.15% | | | | | | | | | |
| 50 | REVENUE REQUIREMENT | -2,138 | -35 | ; ; | 2 -93 | 3 34 | 393 | -618 | -3 | 80 | 0 |
| | | | | | | | | | | | |
| | | 7.69% | | | | | | | | | |
| | Pro Forma Rate of Return | 7.09% | | | | | | | | | |

(Natural Gas) AVISTA UTILITIES WASHINGTON NATURAL GAS

RATE YEAR STUDY - 5/1/2018 - 4/30/2021 TWELVE MONTHS ENDED DECEMBER 31, 2016 (000'S OF DOLLARS)

| | | Office Space | Restate | Net | Weather | Eliminate | Misc. Restating | Project | Restating | Restate | Restated |
|----------|---|--------------|---------------|------------------|-------------------------|----------------------|---------------------------|------------------|------------|------------------|-----------------------|
| Line | DESCRIPTION | Charges to | Excise | Gains | Normalization / | Adder | Non-Util / Non- | Compass | Incentives | Debt | TOTAL |
| No. | DESCRIPTION Adjsutment Number | Subs 2.07 | Taxes 2.08 | & Losses 2.09 | Gas Cost Adjust 2.10 | Schedules 2.11 | Recurring Expense 2.12 | Deferral 2.13 | 2.14 | Interest 2.15 | <u> </u> |
| | Workpaper Reference | G-OSC | G-RET | G-NGL | G-WNGC | G-EAS | G-MR | G-CD | G-RI | G-DI | R-Ttl |
| | REVENUES | | | | | | | | | | |
| 1 | Total General Business | \$ - | \$ - | \$ - | \$ 11,209 | \$ (1,240) | \$ - | \$ - | \$ - | \$ - | \$ 150,970 |
| 2 | Total Transportation | = | - | = | (5.105) | (62.276) | = | = | - | - | 4,477 |
| 3 | Other Revenues Total Gas Revenues | | - | | (5,427) 5,782 | (63,276) (64,516) | | - | | | 1,020 156,467 |
| - | Total Gas Revenues | | | | 3,762 | (04,510) | | | | | 150,407 |
| | EXPENSES | | | | | | | | | | |
| 5 | Production Expenses City Gate Purchases | | | | 5,274 | (54,419) | | | | | 63,460 |
| 6 | Purchased Gas Expense | - | - | - | 5,274 | (34,419) | - | - | - | - | 994 |
| 7 | Net Nat Gas Storage Trans | | - | - | = | (2,932) | = | - | - | - | - |
| 8 | Total Production | = | - | - | 5,280 | (57,351) | - | - | - | - | 64,454 |
| | Underground Storage | | | | | | | | | | |
| 9 | Operating Expenses | - | - | = | - | - | - | - | - | - | 974 |
| 10 | Depreciation/Amortization | - | - | - | - | - | - | - | - | - | 492 |
| 11 12 | Taxes Total Underground Storage | | - | = | | - | <u> </u> | - | - | - | 210 1,676 |
| 12 | Total Oliderground Storage | - | - | - | = | - | = | - | - | - | 1,070 |
| | Distribution | | | | | | | | | | |
| 13 | Operating Expenses | = | - | - | = | - | 1 | - | - | - | 12,050 |
| 14 | Depreciation/Amortization | = | - | (13) | - | - (40) | = | = | - | - | 9,853 |
| 15 16 | Taxes Total Distribution | | 2 | (13) | 430 430 | (48) | 1 | - | - | - | 8,383 30,286 |
| 10 | Total Distribution | - | 2 | (13) | 430 | (40) | 1 | = | - | - | 30,200 |
| 17 | Customer Accounting | = | - | - | 54 | (6) | = | - | - | - | 6,812 |
| 18 | Customer Service & Information | - | - | - | - | (6,632) | - | = | - | - | 963 |
| 19 | Sales Expenses | - | - | - | - | - | - | - | - | - | - |
| | Administrative & General | | | | | | | | | | - |
| 20 | Operating Expenses | (9) | - | - | 22 | (2) | (316) | - | (181) | - | 13,350 |
| 21 | Depreciation/Amortization | - | - | - | | | - | - | - | - | 6,260 |
| 22 23 | Regulatory Amortizations Taxes | | | | = | - | = | 1,079 | - | - | 1,079 |
| 24 | Total Admin. & General | (9) | - | - | 22 | (2) | (316) | 1,079 | (181) | - | 20,689 |
| 25 | Total Gas Expense | (9) | 2 | (13) | 5,786 | (64,039) | (315) | 1,079 | (181) | _ | 124,880 |
| | | | | | | | | | | | |
| 26 | OPERATING INCOME BEFORE FIT | 9 | (2) | 13 | (4) | (477) | 315 | (1,079) | 181 | - | 31,587 |
| | FEDERAL INCOME TAX | | | | | | | | | | |
| 27 | Current Accrual | 3 | (1) | | (1) | | 110 | (378) | 63 | (171) | |
| 28 29 | Debt Interest Deferred FIT | - | - | - | = | - | = | - | - | | 9,923 |
| 30 | Amort ITC | - | - | = | - | = | - | - | = | - | (17) |
| | | | | | | | | | | | |
| 31 | NET OPERATING INCOME | \$ 6 | \$ (1) | \$ 8 | \$ (3) | \$ (310) | \$ 205 | \$ (701) | \$ 118 | \$ 171 | \$ 23,009 |
| | RATE BASE | | | | | | | | | | |
| 32 | PLANT IN SERVICE Underground Storage | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 26,868 |
| 33 | Distribution Plant | | φ - - | | φ - | φ - - | | - | · - | | 390,508 |
| 34 | General Plant | | - | - | - | - | = | - | - | - | 82,624 |
| 35 | Total Plant in Service | - | - | - | - | - | - | - | - | - | 500,000 |
| | ACCUMULATED DEPRECIATION/AMORT | | | | | | | | | | |
| 36 | Underground Storage | = | - | - | = | - | = | - | - | - | (10,317) |
| 37 | Distribution Plant | - | - | - | - | - | - | - | - | - | (129,098) |
| 38 39 | General Plant Total Accumulated Depreciation/Amortization | | - | - | = | - | = | - | | - | (23,473) (162,888) |
| 40 | NET PLANT | | - | - | | - | | - | | - | 337,112 |
| 41 | DEFERRED TAXES | | - | - | | - | | - | - | - | (74,181) |
| 42 | Net Plant After DFIT | _ | _ | - | - | - | - | - | _ | _ | 262,931 |
| 43 | GAS INVENTORY | - | - | - | - | - | - | - | - | - | 9,116 |
| 44 | GAIN ON SALE OF BUILDING | - | - | - | - | - | - | - | - | - | |
| 45 46 | OTHER WORKING CAPITAL | | | | | | | | | | (249) 14,800 |
| -+0 | Older General | | | | | | | | | | 17,000 |
| 47 | TOTAL RATE BASE | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 286,598 |
| 48 | RATE OF RETURN | | | | | | | | | | (1) |

2

-14

Pro Forma Rate of Return

REVENUE REQUIREMENT

Revenue Conversion Factor

(1) The Restated TOTAL column does not represent 12/31/2016 Test Period Commission Basis results of operation on a normalized basis (CBR basis). Difference exists due to inclusion of proposed cost of debt (pro forma versus CBR cost of debt) impacting Adjustment 2.15 above.

500

-330

1,130

-190

-1,562

PRO FORMA ADJUSTMENTS

(Natural Gas)
AVISTA UTILITIES
WASHINGTON NATURAL GAS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

| Line No. | DESCRIPTION | Pro Forma Atmospheric Testing & Leak Survey | Pro Forma Labor Non-Exec | Pro Forma Labor Exec | Pro Forma Employee Benefits | Pro Forma Incentive Adjustment | Pro Forma Property Tax | Pro Forma IS/IT Expense | Pro Forma Revenue Normalization |
|-------------|--|---|--------------------------------|----------------------------|-----------------------------------|--------------------------------------|------------------------------|-------------------------------|---------------------------------------|
| | Adjsutment Number | 3.01 G-PAT | 3.02 G-PLN | 3.03 G-PLE | 3.04 G-PEB | 3.05 G-PI | 3.06 G-PPT | 3.07 G-PIS | 3.08 G-PREV |
| | Workpaper Reference REVENUES | G-FA1 | G-FLN | G-FLE | G-FEB | G-FI | G-FF1 | G-F1S | G-FREV |
| 1 | Total General Business | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ (66,671) |
| 2 | Total Transportation | - | - | - | - | - | - | - | 56 |
| 3 | Other Revenues | | - | - | - | - | - | - | (776) |
| 4 | Total Gas Revenues | - | = | = | - | - | - | = | (67,391) |
| | EXPENSES Production Expenses | | | | | | | | |
| 5 | City Gate Purchases | - | _ | _ | - | _ | - | _ | (63,460) |
| 6 | Purchased Gas Expense | - | 31 | - | (6) | - | - | - | - |
| 7 | Net Nat Gas Storage Trans | | - | = | - | - | - | - | <u>-</u> _ |
| 8 | Total Production | = | 31 | - | (6) | - | - | - | (63,460) |
| 0 | Underground Storage | | | | | | | | |
| 9 10 | Operating Expenses Depreciation/Amortization | - | - | - | - | - | - | - | - |
| 11 | Taxes | - | - | - | = = | - | 37 | - | - - |
| 12 | Total Underground Storage | - | - | - | - | - | 37 | = | - |
| | Distribution | | | | | | | | |
| 13 | Operating Expenses | 348 | 371 | | (76) | - | = | = | = |
| 14 | Depreciation/Amortization | - | - | = | - | - | - | - | - |
| 15 16 | Taxes Total Distribution | 348 | 371 | - | (76) | - | 439 439 | - | (2,554) |
| | | | | | | | | | |
| 17 | Customer Accounting Customer Service & Information | - | 203 18 | - | (41) | - | | | (322) |
| 18 19 | Sales Expenses | - - | - | - | (4) | - | - | - | - |
| | Administrative & General | | | | | | | | |
| 20 | Operating Expenses | - | 251 | (10) | (49) | 34 | - | 201 | (133) |
| 21 | Depreciation/Amortization | - | - | - | - | | - | - | - |
| 22 23 | Regulatory Amortizations Taxes | | | | | - | | | - |
| 24 | Total Admin. & General | | 251 | (10) | (49) | 34 | - | 201 | (133) |
| 25 | Total Gas Expense | 348 | 874 | (10) | (176) | 34 | 476 | 201 | (66,469) |
| 26 | OPERATING INCOME BEFORE FIT | (348) | (874) | 10 | 176 | (34) | (476) | (201) | (922) |
| | FEDERAL INCOME TAX | | | | | | | | |
| 27 | Current Accrual | (122) | (306) | 4 | 62 | (12) | (167) | (70) | (323) |
| 28 29 | Debt Interest Deferred FIT | - | - | - | = | - | - | - | - |
| 30 | Amort ITC | | | | - | - | | - | <u> </u> |
| 31 | NET OPERATING INCOME | \$ (226) | \$ (568) | \$ 7 | \$ 114 | \$ (22) | \$ (309) | \$ (131) | \$ (599) |
| | RATE BASE | | | | | | | | |
| | PLANT IN SERVICE | | | | | | | | |
| 32 33 | Underground Storage Distribution Plant | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 33 34 | General Plant | - | : | : | - | : | - | | - |
| 35 | Total Plant in Service | - | - | - | - | - | - | - | = |
| | ACCUMULATED DEPRECIATION/AMORT | | | | | | | | |
| 36 | Underground Storage | - | - | = | - | - | - | - | - |
| 37 38 | Distribution Plant General Plant | = | - | - | - | - | - | | - |
| 39 | Total Accumulated Depreciation/Amortization | | - | | <u> </u> | - | <u>=</u> | - | |
| 40 | NET PLANT | - | - | - | - | - | - | - | _ |
| 41 | DEFERRED TAXES | | | | | - | - | | |
| 42 | Net Plant After DFIT | - | - | - | = | - | - | - | - |
| 43 | GAS INVENTORY | | | | | - | - | - | - |
| 44 45 | GAIN ON SALE OF BUILDING OTHER | | | | | - | = | - | - |
| 45 | WORKING CAPITAL | | | | | - | _ | - | |
| 47 | TOTAL RATE BASE | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 48 | RATE OF RETURN | | | | | | | | |
| 50 | REVENUE REQUIREMENT | 364 | 915 | -10 | -184 | 36 | 499 | 211 | 966 |

Pro Forma Rate of Return

Revenue Conversion Factor

(Natural Gas)
AVISTA UTILITIES
WASHINGTON NATURAL GAS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

| Line No. | DESCRIPTION | Pro Forma Regulatory Amortization | Pro Forma 2017 Threshhold Capital Adds | Pro Forma O&M Offsets | Pro Forma Director Fees Expense | Pro Forma Leap Deferral Gas Line Ext. | Pro Forma Sub-Total |
|-------------|---|---|--|-----------------------------|---------------------------------|---|------------------------|
| | Adjsutment Number Workpaper Reference | 3.09 G-PRA | 3.10 G-PCAP16 | 3.11 G-POFF | 3.12 G-PDF | 3.13 G-PLEAP | PF-STtl |
| | REVENUES | | | | | | |
| 1 2 | Total General Business Total Transportation | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 84,299 4,533 |
| 3 | Other Revenues | - | - | - | - | - | 244 |
| 4 | Total Gas Revenues | - | - | - | - | - | 89,076 |
| | EXPENSES | | | | | | |
| | EXPENSES Production Expenses | | | | | | |
| 5 | City Gate Purchases | - | - | - | - | - | - |
| 6 | Purchased Gas Expense | - | - | - | - | - | 1,019 |
| 7 8 | Net Nat Gas Storage Trans Total Production | | <u> </u> | - | <u> </u> | - | 1,019 |
| 0 | Total Floduction | - | - | - | - | - | 1,019 |
| | Underground Storage | | | | | | |
| 9 | Operating Expenses | - | - | - | - | - | 974 |
| 10 11 | Depreciation/Amortization Taxes | - | - | - | - | - | 492 247 |
| 12 | Total Underground Storage | - | - | - | - | - | 1,713 |
| | Distribution | | | | | | |
| 13 | Operating Expenses | - | - | - | _ | - | 12,693 |
| 14 | Depreciation/Amortization | - | 366 | _ | _ | - | 10,219 |
| 15 | Taxes | | - | - | - | - | 6,268 |
| 16 | Total Distribution | - | 366 | - | - | - | 29,180 |
| 17 | Customer Accounting | | | | | | 6,652 |
| 18 | Customer Service & Information | - | - | - | _ | - | 977 |
| 19 | Sales Expenses | - | - | - | - | - | - |
| | Administrative & General | | | | | | |
| 20 | Operating Expenses | = | - | (32) | 108 | = | 13,720 |
| 21 | Depreciation/Amortization | - | 1,217 | - | - | - | 7,477 |
| 22 | Regulatory Amortizations | (1,079) | | | | 584 | 584 |
| 23 24 | Taxes Total Admin. & General | (1,079) | 1,217 | (32) | 108 | 584 | 21,781 |
| 25 | Total Gas Expense | (1,079) | 1,583 | (32) | 108 | 584 | 61,322 |
| 26 | OPERATING INCOME BEFORE FIT | 1,079 | (1,583) | | (108) | | 27,754 |
| | FEDERAL INCOME TAX | | | | | | |
| 27 | Current Accrual | 378 | (554) | 11 | (38) | (204) | (2,681) |
| 28 | Debt Interest | - | (180) | | - | (15) | (183) |
| 29 | Deferred FIT | - | - | - | - | - | 9,923 |
| 30 | Amort ITC | | - | = | - | = | (17) |
| 31 | NET OPERATING INCOME | \$ 701 | \$ (848) | \$ 21 | \$ (70) | \$ (365) | \$ 20,712 |
| | RATE BASE | - | | | | | |
| | PLANT IN SERVICE | | | | | | |
| 32 33 | Underground Storage | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 26,868 405,018 |
| 34 | Distribution Plant General Plant | - | 14,510 8,260 | - | | - | 90,884 |
| 35 | Total Plant in Service | - | 22,770 | - | - | = | 522,770 |
| | ACCUMULATED DEPRECIATION/AMORT | | | | | | |
| 36 | Underground Storage | - | - | - | - | - | (10,317) |
| 37 | Distribution Plant | - | (163) | | | - | (129,261) |
| 38 39 | General Plant Total Accumulated Depreciation/Amortization | | (624) (787) | | _ | | (24,097) (163,675) |
| 40 | NET PLANT | | 21,983 | - | - | - | 359,095 |
| 41 | DEFERRED TAXES | | (4,142) | | | | (78,323) |
| 42 | Net Plant After DFIT | - | 17,841 | = | - | - | 280,772 |
| 43 | GAS INVENTORY | | - | | - | | 9,116 |
| 44 | GAIN ON SALE OF BUILDING | | | | - | 1 474 | 1 225 |
| 45 46 | OTHER WORKING CAPITAL | | | | | 1,474 | 1,225 14,800 |
| 47 | TOTAL RATE BASE | \$ - | \$ 17,841 | s - | \$ - | \$ 1,474 | |
| 48 | RATE OF RETURN | <u> </u> | . 1,,,,,,,,, | | · | . 2,274 | |
| 50 | REVENUE REQUIREMENT | -1,130 | 3,578 | -34 | 113 | 770 | 4,531 |

Pro Forma Rate of Return

Revenue Conversion Factor

(Natural Gas)
AVISTA UTILITIES
WASHINGTON NATURAL GAS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Step 1 Increase (5/1/2018) 05.2018 Rate Year Analysis $(5/1/2018\hbox{-}4/30/2018)$

| Line No. | DESCRIPTION | EOP 2017 Capital Net Plant Adj | Rate Period Capital Add 05.2018-04.2019 AMA | Rate Period IS/IT Expense | Rate Period Revenues 05.2018-04.2019 | May 1, 2018 Rate Period Total |
|-------------|--|--------------------------------------|---|---------------------------------|--|-------------------------------------|
| | Adjsutment Number | 18.01 | 18.02 | 18.03 | 18.04 | 18-Ttl |
| | Workpaper Reference | G-EOPCAP17 | G-RPCAP | G-RPIS | G-RPRev | |
| | REVENUES | 6 | | e | 6 2 200 | ¢ 97.690 |
| 1 2 | Total General Business Total Transportation | \$ - | s - | \$ - | \$ 3,390 (29) | \$ 87,689 4,504 |
| 3 | Other Revenues | = | | - | (1,584) | |
| 4 | Total Gas Revenues | - | - | - | 1,777 | 90,853 |
| | EXPENSES | | | | | |
| | EXPENSES Production Expenses | | | | | |
| 5 | City Gate Purchases | - | _ | - | - | _ |
| 6 | Purchased Gas Expense | - | - | - | - | 1,019 |
| 7 | Net Nat Gas Storage Trans | | - | - | <u>-</u> | - 1 010 |
| 8 | Total Production | - | - | - | - | 1,019 |
| | Underground Storage | | | | | |
| 9 | Operating Expenses | Ē | - | = | = | 974 |
| 10 | Depreciation/Amortization | 37 | 14 | - | = | 543 |
| 11 12 | Taxes Total Underground Storage | 37 | - 14 | - | = | 247 1,764 |
| 12 | Total Oliderground Storage | 37 | 14 | - | - | 1,704 |
| | Distribution | | | | | |
| 13 | Operating Expenses | - | - | - | - | 12,693 |
| 14 | Depreciation/Amortization | 725 | 482 | - | - | 11,426 |
| 15 | Taxes | | - | - | 129 | 6,397 |
| 16 | Total Distribution | 725 | 482 | = | 129 | 30,516 |
| 17 | Customer Accounting | _ | _ | | 16 | 6,668 |
| 18 | Customer Service & Information | - | | - | - | 977 |
| 19 | Sales Expenses | Ē | - | = | = | - |
| | | | | | | |
| 20 | Administrative & General Operating Expenses | | | 135 | 7 | 13,862 |
| 21 | Depreciation/Amortization | 926 | 1,476 | - | - | 9,879 |
| 22 | Regulatory Amortizations | | | | | 584 |
| 23 | Taxes | | - | - | - | - |
| 24 | Total Admin. & General | 926 | 1,476 | 135 | 7 | 24,325 |
| 25 | Total Gas Expense | 1,688 | 1,972 | 135 | 152 | 65,269 |
| 26 | OPERATING INCOME BEFORE FIT | (1,688) | (1,972) | (135) | 1,625 | 25,584 |
| 20 | | (1,000) | (1,772) | (155) | 1,023 | 20,001 |
| | FEDERAL INCOME TAX | | | | | (2.442) |
| 27 28 | Current Accrual Debt Interest | (591) (138) | | (47) | 569 | (3,441) (379) |
| 29 | Deferred FIT | (136) | (36) | - | - | 9,923 |
| 30 | Amort ITC | | - | - | - | (17) |
| | | | | | | |
| 31 | NET OPERATING INCOME | \$ (959) | \$ (1,224) | \$ (88) | \$ 1,056 | \$ 19,498 |
| | RATE BASE | | | | | |
| 32 | PLANT IN SERVICE | \$ 1,349 | \$ 811 | \$ - | \$ - | \$ 29,028 |
| 33 | Underground Storage Distribution Plant | \$ 1,349 29,936 | \$ 811 19,165 | φ - | \$ - | \$ 29,028 454,119 |
| 34 | General Plant | 7,229 | 7,681 | - | - | 105,794 |
| 35 | Total Plant in Service | 38,514 | 27,657 | - | - | 588,941 |
| | ACCUMULATED DEPRECIATION/AMORT | , | , | | | 200,5 |
| 36 | Underground Storage | (655) | (518) | - | - | (11,490) |
| 37 | Distribution Plant | (12,080) | | = | = | (150,882) |
| 38 | General Plant | (4,979) | | = | = | (36,154) |
| 39 | Total Accumulated Depreciation/Amortization | (17,714) | | - | - | (198,526) |
| 40 41 | NET PLANT DEFERRED TAXES | 20,800 (7,174) | 10,520 (4,796) | - | - | 390,415 (90,293) |
| | | | | | | |
| 42 43 | Net Plant After DFIT GAS INVENTORY | 13,626 | 5,724 | - | - | 300,122 |
| 43 44 | GAS INVENTORY GAIN ON SALE OF BUILDING | - | | - | - | 9,116 |
| 45 | OTHER | | | | | 1,225 |
| 46 | WORKING CAPITAL | | | - | - | 14,800 |
| | | | | | | |
| 47 | TOTAL RATE BASE | \$ 13,626 | \$ 5,724 | \$ - | \$ - | \$ 325,263 |
| 48 50 | RATE OF RETURN REVENUE REQUIREMENT | 3,234 | 2,681 | 141 | -1,702 | 8,886 |
| 50 | AL . LIVE REQUIREMENT | 3,234 | 2,001 | 141 | -1,702 | 0,000 |

Pro Forma Rate of Return Revenue Conversion Factor

(Natural Gas)
AVISTA UTILITIES
WASHINGTON NATURAL GAS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Step 2 Increase (5/1/2019) 05.2019 Rate Year Analysis (5/1/2019-4/30/2020)

| Line | | May 1, 2018 FINAL Rate Period | Rate Period Capital (AMA) | 2.71% Rate Period O&M/A&G | Rate Period Property Tax | Rate Period Revenues | May 1, 2019 FINAL Rate Period | May 1, 2019 (I |
|----------|--|--|------------------------------|---------------------------------|-----------------------------|-------------------------|-------------------------------------|----------------|
| No. | DESCRIPTION | Total | 05.2019-04.2020 | 2.71% | Expense | 05.2019-04.2020 | Total | Total |
| | Adjsutment Number | 18-Ttl | 19.01 | 19.02 | 19.03 | 19.04 | 19-Ttl | 19-Ttl |
| | Workpaper Reference | | G-CAP19 | G-LN19 | G-PT19 | G-Rev19 | | |
| | REVENUES | | | | | | | |
| 1 | Total General Business | \$ 87,689 | s - | \$ - | \$ - | \$ 1,147 | \$ 88,836 | \$ 1,147 |
| 2 | Total Transportation | 4,504 | - | - | - | 69 | 4,573 | 69 |
| 3 | Other Revenues | (1,340) | - | = | = | (69) | (1,409) | (69) |
| 4 | Total Gas Revenues | 90,853 | - | - | - | 1,147 | 92,000 | 1,147 |
| | EXPENSES | | | | | | | |
| | EXPENSES | | | | | | | |
| 5 | Production Expenses City Gate Purchases | | | | | | | |
| 6 | Purchased Gas Expense | 1,019 | | 28 | - | - | 1,047 | 28 |
| 7 | Net Nat Gas Storage Trans | - 1,017 | | - | _ | _ | 1,047 | |
| 8 | Total Production | 1,019 | - | 28 | - | - | 1,047 | 28 |
| | | , | | | | | , | |
| | Underground Storage | | | | | | | |
| 9 | Operating Expenses | 974 | - | 26 | = | - | 1,000 | 26 |
| 10 | Depreciation/Amortization | 543 | 15 | - | - | - | 558 | 15 |
| 11 | Taxes | 247 | - | | 18 | - | 265 | 18 |
| 12 | Total Underground Storage | 1,764 | 15 | 26 | 18 | - | 1,823 | 59 |
| | Distribution | | | | | | | |
| 13 | Operating Expenses | 12,693 | | 344 | | _ | 13,037 | 344 |
| | | | | 344 | - | | | |
| 14 | Depreciation/Amortization | 11,426 | 790 | = | 212 | 47 | 12,216 | 790 |
| 15 | Taxes | 6,397 30,516 | 790 | 344 | 213 213 | 47 | 6,657 31,910 | 260 1,394 |
| 16 | Total Distribution | 30,510 | /90 | 344 | 213 | 47 | 31,910 | 1,394 |
| 17 | Customer Assessmen | 6 669 | | 101 | | 6 | 4 955 | 107 |
| 17 18 | Customer Accounting Customer Service & Information | 6,668 977 | | 181 26 | | 6 | 6,855 1,003 | 187 26 |
| 19 | Sales Expenses | <i>,</i> , , , , , , , , , , , , , , , , , , | | 20 | _ | _ | 1,003 | |
| | | | | | | | | |
| | Administrative & General | | | | | | | |
| 20 | Operating Expenses | 13,862 | - | 376 | - | 2 | 14,240 | 378 |
| 21 | Depreciation/Amortization | 9,879 | 838 | - | = | - | 10,717 | 838 |
| 22 | Regulatory Amortizations | 584 | | | | | 584 | - |
| 23 | Taxes | | - | | - | | | |
| 24 | Total Admin. & General | 24,325 | 838 | 376 | - | 2 | 25,541 | 1,216 |
| 25 | Total Gas Expense | 65,269 | 1,643 | 981 | 231 | 55 | 68,179 | 2,910 |
| 26 | OPERATING INCOME BEFORE FIT | 25,584 | (1,643) | (981) | (231) | 1,092 | 23,821 | (1,763) |
| | FEDERAL INCOME TAX | | | | | | | |
| 27 | Current Accrual | (3,441) | (575) | (343) | (81) | 382 | (4,058) | (617) |
| 28 | Debt Interest | (379) | (152) | - | - | - | (531) | |
| 29 | Deferred FIT | 9,923 | - | = | = | = | 9,923 | - |
| 30 | Amort ITC | (17) | - | - | - | - | (17) | - |
| 31 | NET OPERATING INCOME | \$ 19,498 | \$ (916) | \$ (638) | \$ (150) | \$ 710 | \$ 18,504 | \$ (994) |
| | | | | | | | | |
| | RATE BASE | | | | | | | |
| 32 | PLANT IN SERVICE Underground Storage | \$ 29,028 | \$ 972 | \$ - | \$ - | \$ - | \$ 30,000 | \$ 972 |
| 33 | Distribution Plant | \$ 29,028 454,119 | 32,273 | φ - | • - | • - | 486,392 | 32,273 |
| 34 | General Plant | 105,794 | 6,616 | - | : | | 112,410 | 6,616 |
| | | | | | | | | |
| 35 | Total Plant in Service | 588,941 | 39,861 | - | - | = | 628,802 | 39,861 |
| | ACCUMULATED DEPRECIATION/AMORT | | | | | | /4 | |
| 36 | Underground Storage | (11,490) | | | - | - | (12,022) | |
| 37 38 | Distribution Plant General Plant | (150,882) | | | - | - | (160,776) (43,101) | |
| 38 39 | Total Accumulated Depreciation/Amortization | (36,154) (198,526) | | | - | - | (215,899) | (6,947) |
| 40 | NET PLANT | 390,415 | 22,488 | | | | 412,903 | 22,488 |
| 41 | DEFERRED TAXES | (90,293) | | | | _ | (97,777) | |
| | | | | | | | | |
| 42 | Net Plant After DFIT | 300,122 | 15,004 | - | = | = | 315,126 | 15,004 |
| 43 | GAS INVENTORY | 9,116 | | | - | - | 9,116 | - |
| 44 | GAIN ON SALE OF BUILDING | | | | - | - | 1.00- | - |
| 45 | OTHER WORKING CAPITAL | 1,225 | | | _ | | 1,225 | |
| 46 | WORKING CAPITAL | 14,800 | | | - | | 14,800 | - |
| 47 | TOTAL RATE BASE | \$ 325,263 | \$ 15,004 | \$ - | \$ - | \$ - | \$ 340,267 | \$ 15,004 |
| 48 | RATE OF RETURN | φ 343,403 | φ 15,004 | φ - | φ - | Ψ - | 5.44% | |
| 46 | | 8,886 | | | | | | |
| 50 | REVENUE REQUIREMENT | | 3,335 | 1,027 | 242 | -1,144 | 12,347 | 3,461 |

Pro Forma Rate of Return 5.8%

Revenue Conversion Factor

2.1%

Step 3 Increase (5/1/2020) 05.2020 Rate Year Analysis

(Natural Gas)
AVISTA UTILITIES
WASHINGTON NATURAL GAS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS) (5/1/2020-4/30/2021)

| | | | | 2.71% | | | | Incremental |
|----------------|---|-----------------------|--------------------------|-------------|-------------------------|--------------------------|-----------------------|---------------------|
| | | 2019 | Rate Period | Rate Period | Rate Period | Rate Period | May 1, 2020 | May 1, 2020 (I) |
| Line | DESCRIPTION | Rate Period Total | | O&M/A&G | Property Tax Expense | Revenues | Rate Period | Rate Period |
| No. | DESCRIPTION A disconnect Number | 18-Ttl | 05.2020-04.2021 20.01 | 2.71% | 20.03 | 05.2020-04.2021 20.04 | Total 20-Ttl | Total 20-Ttl |
| | Adjsutment Number Workpaper Reference | 10-111 | G-CAP20 | G-LN20 | G-PT20 | G-Rev20 | 20-111 | 20-111 |
| | | | 0 0.11 20 | 0 221,20 | 01120 | 0 110.20 | | |
| | REVENUES Total Consult Provinces | A 00.036 | | \$ - | \$ - | \$ 749 | ¢ 90.505 | 6 740 |
| 1 2 | Total Tennan artation | \$ 88,836 4,573 | 5 - | 3 - | \$ - | \$ 749 49 | \$ 89,585 4,622 | \$ 749 49 |
| 3 | Total Transportation Other Revenues | (1,409) | - | _ | _ | 339 | (1,070) | 339 |
| 4 | Total Gas Revenues | 92,000 | | | | 1,137 | 93,137 | 1,137 |
| - | | , | | | | -, | , | |
| | EXPENSES | | | | | | | |
| | Production Expenses | | | | | | | |
| 5 | City Gate Purchases | - | - | - | - | - | - | - |
| 6 | Purchased Gas Expense | 1,047 | - | 28 | - | = | 1,075 | 28 |
| 7 | Net Nat Gas Storage Trans | | - | - | - | - | - | - |
| 8 | Total Production | 1,047 | - | 28 | = | = | 1,075 | 28 |
| | Underground Storage | | | | | | | |
| 9 | Underground Storage Operating Expenses | 1,000 | _ | 27 | _ | _ | 1,028 | 27 |
| 10 | Depreciation/Amortization | 558 | 15 | | _ | _ | 573 | 15 |
| 11 | Taxes | 265 | - | _ | 16 | _ | 281 | 16 |
| 12 | Total Underground Storage | 1,823 | 15 | 27 | 16 | = | 1,882 | 58 |
| | | | | | | | Í | |
| | Distribution | | | | | | | |
| 13 | Operating Expenses | 13,037 | - | 353 | = | = | 13,390 | 353 |
| 14 | Depreciation/Amortization | 12,216 | 838 | = | = | = | 13,054 | 838 |
| 15 | Taxes | 6,657 | - | - | 189 | 31 | 6,877 | 220 |
| 16 | Total Distribution | 31,910 | 838 | 353 | 189 | 31 | 33,321 | 1,411 |
| | | | | | | | | |
| 17 | Customer Accounting | 6,855 | - | 186 | | 4 | 7,044 | 190 |
| 18 | Customer Service & Information | 1,003 | - | 27 | = | = | 1,031 | 27 |
| 19 | Sales Expenses | - | - | - | - | - | - | - |
| | | | | | | | | |
| 20 | Administrative & General | 11210 | | 205 | | | 14.620 | 200 |
| 20 21 | Operating Expenses | 14,240 | 1 150 | 386 | - | 2 | 14,628 11,876 | 388 |
| 22 | Depreciation/Amortization | 10,717 | 1,159 | - | - | - | | 1,159 |
| 23 | Regulatory Amortizations Taxes | 584 | | | | | 584 | _ |
| 24 | Total Admin. & General | 25,541 | 1,159 | 386 | | 2 | 27,088 | 1,547 |
| 25 | | 68,179 | 2,012 | 1,008 | 205 | 37 | 71,440 | 3,262 |
| | Total Gas Expense | | | | | | | |
| 26 | OPERATING INCOME BEFORE FIT | 23,821 | (2,012) | (1,008) | (205) | 1,100 | 21,697 | (2,125) |
| | FEDERAL INCOME TAX | | | | | | | |
| 27 | Current Accrual | (4,058) | (704) | (353) | (72) | 385 | (4,801) | (744) |
| 28 | Debt Interest | (531) | (161) | - | - | - | (692) | (161) |
| 29 | Deferred FIT | 9,923 | - | - | - | - | 9,923 | - |
| 30 | Amort ITC | (17) | - | = | = | = | (17) | - |
| 31 | NET OPERATING INCOME | \$ 18,504 | \$ (1,147) | \$ (655) | \$ (133) | \$ 715 | \$ 17,283 | \$ (1,220) |
| | | | | | | | | |
| | RATE BASE PLANT IN SERVICE | | | | | | | |
| 32 | Underground Storage | \$ 30,000 | \$ 924 | \$ - | \$ - | \$ - | \$ 30,924 | \$ 924 |
| 33 | Distribution Plant | 486,392 | 33,276 | J - | • - | · - | 519,668 | 33,276 |
| 34 | General Plant | 112,410 | 8,611 | _ | _ | | 121,021 | 8,611 |
| 35 | Total Plant in Service | 628,802 | 42,811 | | | | 671,613 | 42,811 |
| 33 | | 020,002 | 42,811 | - | - | - | 6/1,613 | 42,811 |
| | ACCUMULATED DEPRECIATION/AMORT | (4.0.00) | | | | | | |
| 36 | Underground Storage | (12,022) | (547) | | - | - | (12,569) | (547) |
| 37 38 | Distribution Plant General Plant | (160,776) (43,101) | (10,831) (8,065) | | - | - | (171,607) (51,166) | (10,831) (8,065) |
| 39 | Total Accumulated Depreciation/Amortization | (215,899) | (19,443) | | | | (235,342) | (19,443) |
| 40 | NET PLANT | 412,903 | 23,368 | - | | | 436,271 | 23,368 |
| 41 | DEFERRED TAXES | (97,777) | (7,471) | | - | - | (105,248) | (7,471) |
| | | | | <u> </u> | <u> </u> | | | |
| 42 | Net Plant After DFIT | 315,126 | 15,897 | - | - | - | 331,023 | 15,897 |
| 4.0 | GAS INVENTORY | 9,116 | | | = | = | 9,116 | - |
| 43 | GAIN ON SALE OF BUILDING | - | | | = | = | - | - |
| 44 | | 1,225 | | | | | 1,225 | - |
| 44 45 | OTHER | | | | | | | |
| 44 | OTHER WORKING CAPITAL | 14,800 | | | - | = | 14,800 | - |
| 44 45 46 | WORKING CAPITAL | 14,800 | \$ 15.007 | • | • | <u>-</u> | | ¢ 15 907 |
| 44 45 | | | \$ 15,897 | \$ - | \$ - | \$ - | \$ 356,164 | \$ 15,897 -7.68% |

Pro Forma Rate of Return

Revenue Conversion Factor

2.4%

| Exh | . EMA- | -9 – Natural | Gas Rate | Year Study |
|-----|--------|--------------|----------|------------|
|-----|--------|--------------|----------|------------|

| 2 Q. Please explain the purpose of the natural g | iaturai gas Ka | te Year Study. |
|--|----------------|----------------|
|--|----------------|----------------|

- A. The Rate Year Study was developed to show the planned investment, and operating expenses, offset by revenues from increased sales to customers through each rate year of the Three-Year Rate Plan, May 1, 2018 through April 30, 2021. This Study is provided as additional evidence demonstrating the need for revenue increases for the three-year rate period. This information is the same information presented to Avista's Board of Directors and Rating Agencies, and reflects the planned operations for Avista for the specific rate year. Therefore, the results of the Rate Year Study reflect the revenue increases actually needed by Avista during the three-year period in order for revenue to be sufficient during the rate year to cover Avista's costs, and have a reasonable opportunity to earn the allowed return on investment.
- The results of the natural gas Rate Year Study are \$8.9 million for Rate Year 1, effective May 1, 2018; \$3.5 million for Rate Year 2, effective May 1, 2019; and \$3.9 million for Rate Year 3, effective May 1, 2020.

Q. Please explain what is shown on pages 1-3 of Exh. EMA-9.

- A. Page 1 of Exh. EMA-9 shows, at line 7, the calculation of the natural gas
 Rate Year 1 revenue requirement of \$8,886,000, or 9.64% revenue increase, as shown on
 line 9. This page also shows the effect on billed rates of 5.84%.
- Also shown on page 1, at lines 12-15, are the incremental rate adjustments, per the
 Rate Year Study, for Rate Year 2 (effective May 1, 2019) and Rate Year 3 (May 1, 2020).
- 22 As shown on lines 12 and 13, the incremental revenue requirement for Rate Year 2 is

- 1 \$3,461,000, or 2.15% on a billed basis. Lines 14 and 15 show the incremental revenue
- 2 requirement for Rate Year 3 is \$3,936,000, or 2.39% on a billed basis.
- Page 2 of Exh. EMA-9, shows the Cost of Capital and Capital Structure included
- 4 in the Rate Year Study, including: 1) 48.5% Common Equity / 51.5% Debt capital
- 5 structure; 2) Return on Equity of 9.9%; and 3) cost of debt of 5.62%, resulting in an overall
- Rate of Return (weighted average cost of capital) of 7.69%. Company witness Mr. Thies
- discusses the Company's rate of return and the capital structure, while Company witness
- 8 Mr. McKenzie provides additional testimony related to the appropriate return on equity for
- 9 Avista.
- Page 3 shows the derivation of the natural gas net-operating-income-to-gross-
- 11 revenue conversion factor. The conversion factor takes into account uncollectible accounts
- receivable, Commission fees and Washington State excise taxes. Federal income taxes are
- reflected at 35%.

14

15

- Q. Now turning to pages 4 through 7 of Exh. EMA-9, please explain what is included on those pages?
- A. Page 4 begins with actual operating results and rate base for the twelve-
- months-ending December 31, 2016 test period on an AMA basis in column (1.00).
- 18 Individual normalizing and restating adjustments that are standard components of our
- annual reporting to the Commission begin in column (1.01) on page 4 and continue through
- column (2.15) on page 5. Individual Pro Forma adjustments are shown on pages 6 and 7
- 21 in columns (3.01) though (3.13). The last column on page 7, labeled "Pro Forma Sub-
- 22 Total" is the subtotal of the previous columns (1.00) through (3.13), and produces the

- 1 Traditional Pro Forma Study net operating income (NOI), total rate base, and revenue
- 2 requirement totaling \$4,531,000, as seen in Exh. EMA-6.
- Provided with Exh. EMA-6 are explanations of each of the natural gas Commission
 Basis, restating and Pro Forma adjustments included on pages 4 through 7. The Company
 has also provided workpapers, both in hard copy and electronic formats, which include
- 6 additional details related to each of these adjustments.

Q. Now turning to pages 8 through 10 of Exh. EMA-9, please explain what is included on those pages?

A. Page 8 of Exh. EMA-9 includes additional Rate Year 1 (May 1, 2018 – April 30, 2019) adjustments necessary beyond that included in the Traditional Pro Forma Study. These adjustments represent Rate Year 1 adjustments that do not meet the Commissions traditional pro forma methodology for inclusion in the Traditional Pro Forma Study; but none-the-less, are planned costs during the Rate Year 1 period. These individual Rate Year adjustments include columns (18.01) through (18.04). A summary column on page 8, labeled "May 1, 2018 Rate Period Total" sums the Traditional Pro Forma Total column and these four adjustments reflecting the overall revenue requirement needed per Rate Year 1 of \$8,886,000.

Turning to page 9, this page starts with the "May 1, 2018 Rate Period Total." Four Rate Year 2 adjustments, (19.01) through (19.04) for the period May 1, 2019 – April 30, 2020, are included here to reflect planned capital additions and expenses, offset by revenues from increased sales to customers for Rate Year 2, effective May 1, 2019. The impact of including these Rate Year 2 adjustments, result in a total revenue requirement as of May 1,

| 1 | 2019 of \$12,347,000 as shown in column "May 1, 2019 Rate Period Total." This reflects | | | | | |
|----|---|--|--|--|--|--|
| 2 | an incremental revenue requirement amount of \$3,461,000 above the May 1, 2018 level. | | | | | |
| 3 | Turning to Page 10, this page starts with the "May 1, 2019 Rate Period Total." Four | | | | | |
| 4 | Rate Year 3 adjustments, (20.01) through (20.04) for the period May 1, 2020 – April 30, | | | | | |
| 5 | 2021, are included here to reflect planned capital additions and expenses, offset by revenues | | | | | |
| 6 | from increased sales to customers for Rate Year 3, effective May 1, 2020. The impact of | | | | | |
| 7 | including these Rate Year 3 adjustments, result in a total revenue requirement as of May 1, | | | | | |
| 8 | 2020 of \$16,282,000. This reflects an incremental revenue requirement amount of | | | | | |
| 9 | \$3,936,000 above the May 1, 2019 level. | | | | | |
| 10 | Below is an explanation of each of the Rate Year Study adjustments mentioned | | | | | |
| 11 | above. The Company has also provided workpapers, both in hard copy and electronic | | | | | |
| 12 | formats, which include additional details related to each of these adjustments. | | | | | |
| 13 | | | | | | |
| 14 | Rate Year 1 (May 1, 2018 – April 30, 2019) Adjustments | | | | | |
| 15 | Q. Please explain each of the Rate Year 1 adjustments included on page 8 | | | | | |
| 16 | of Exh. EMA-9. | | | | | |
| 17 | A. Page 8 of Exh. EMA-9 includes the following adjustments: | | | | | |
| 18 | EOP 2017 Capital Net Rate Base Additions, column (18.01), adjustment starts | | | | | |
| 19 | with the Traditional Pro Forma Study net plant after ADFIT results and adjusts total net | | | | | |
| 20 | plant after ADFIT, including all 2017 remaining capital additions, to a 2017 EOP basis. | | | | | |
| 21 | Specifically, Avista reviewed the planned capital projects that were below the 0.5 percent | | | | | |
| 22 | threshold for 2017 (i.e., those not included in the Traditional Pro Forma Study adjustment | | | | | |
| 23 | 3.10 Pro Forma 2017 "Threshold Capital Additions" discussed in Exh. EMA-6). These | | | | | |

additions were included for 2017, together with the associated A/D and ADFIT on a 2017

2 EOP basis, as well as annual depreciation expense. The associated ADFIT includes the

3 repairs deduction and bonus tax depreciation expected through 2017 on an EOP basis². In

addition, the plant-in-service for 2016 AMA was adjusted to a 2017 EOP basis. The effect

of this adjustment increases rate base by \$13,626,000 and decreases net operating income

by \$959,000. Company witness Ms. Schuh sponsors this adjustment.

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Rate Period Capital Additions (AMA) 05.2018-04.2019, column (18.02), this adjustment includes planned capital additions for the period January 1, 2018 through April 30, 2019, together with the associated A/D and ADFIT for the period 12-months ended April 30, 2019 on an average-of-monthly-average (AMA) basis. Annual depreciation for these capital additions are also included in this adjustment. The associated ADFIT includes repairs and bonus tax depreciation expected through April 2019 on an AMA basis. In addition, total plant-in-service as of EOP 2017 was adjusted to a 04.2019 AMA basis. The effect of this adjustment increases rate base by \$5,724,000 and decreases net operating income by \$1,224,000. Ms. Schuh sponsors this adjustment.

Rate Period IS/IT Expense, column (18.03), adjusts the level of information services and information technology (IS/IT) expense included in the Traditional Pro Forma Study in Pro Forma IS/IT adjustment (3.07), which included the level of IS/IT expenses that would be known as of May 1, 2018. This adjustment includes the incremental IS/IT

¹ The Company reviewed large capital additions in 2017 to determine any offsets (e.g., reduced O&M costs, reduced load losses, etc.). Maintenance records were reviewed to determine whether any specific maintenance costs were incurred in the test year that would be reduced or eliminated by the investment. Those costs were quantified and included as a reduction to O&M expenses in adjustment (3.11) Pro Forma O&M Savings included in Exh. EMA-6 and Exh. EMA-9.

² The IRS extended bonus depreciation through 2019. The Company has included bonus depreciation through 2019 within its capital adjustments.

| 1 | expenses planned during the period May 1, 2018 through April 30, 2019. This adjustment |
|---|--|
| 2 | includes the incremental costs associated with software development, application licenses, |
| 3 | maintenance fees, and technical support for a range of information services programs. |
| 4 | These incremental expenditures are necessary to support Company cyber and general |
| 5 | security, emergency operations readiness, electric and natural gas facilities and operations |
| 6 | support, and customer services. Company witness Mr. Kensok sponsors this adjustment |
| 7 | and provides more information within his testimony. The effect of this adjustment |
| 8 | decreases net operating income by \$88,000. |
| | |

Rate Period Revenues 05.2018-04.2019, column (18.04), reflects the incremental revenue at present rates from loads and customers included in the Company's forecast for the period 12-months ended April 30, 2019 compared to the test year Pro Forma Normalized Revenue. The adjustment includes estimated deferred revenues associated with the Decoupling Mechanism assuming the decoupling base is updated by Pro Forma Normalized Revenue at present rates. Company witness Ms. Knox sponsors this adjustment. The effect of this adjustment increases Washington net operating income by \$1,056,000.

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Rate Year 2 (May 1, 2019 – April 30, 2020) Adjustments

- 19 Q. Please explain each of the Rate Year 2 adjustments included on page 9
 20 of Exh. EMA-9.
- A. Page 9 of Exh. EMA-9 includes the following adjustments:
- Rate Period Capital Additions (AMA) 05.2019-04.2020, column (19.01), this adjustment includes planned capital additions for the period May 1, 2019 through April 30,

2020, together with the associated A/D and ADFIT for the period 12-months ended April 2 30, 2020 on an AMA basis. Annual depreciation for these capital additions is also included 3 in this adjustment. The associated ADFIT includes the repairs deduction and bonus tax 4 depreciation expected through April 2020 on an AMA basis. In addition, total plant-in-5 service as of AMA 04.2019 was adjusted to a 04.2020 AMA basis. The effect of this 6 adjustment increases rate base by \$15,004,000 and decreases net operating income by

\$916,000. Ms. Schuh sponsors this adjustment.

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Rate Period O&M/A&G (2.71%) Expense, column (19.02), reflects the annual planned increase in operating expenses of 2.71%, including O&M, customer service, and administrative and general expenses. Per the Company's current financial forecast, the annual percentage increase in O&M has been reduced to reflect "efficiency reductions" in O&M, resulting in an O&M average increase of 2.71% on a system basis over the fouryear period 2017 to 2020 for the combined electric and natural gas systems. This 2.71% growth in operating expenses is a significant reduction from the prior year's average growth in O&M expenses, and reflects an effort by the Company to reduce its O&M expenses from previous years. The effect of this adjustment decreases Washington net operating income by \$638,000.

Rate Period Property Tax Expense, column (19.03), restates the Rate Year 1 level of property tax expense (beginning May 1, 2018) included in adjustment (3.06) Pro Forma Property tax, to the level of property tax expense the Company will experience during Rate Year 2 beginning May 1, 2019. The property on which the tax is calculated is the property value as of December 31, 2018. The effect of this adjustment decreases net operating income by \$150,000.

| 1 | Rate | Period Revenues 05.2019-04.2020, column (19.04), reflects the incremental | | | |
|----|---|--|--|--|--|
| 2 | revenue at pr | esent rates from loads and customers included in the Company's forecast for | | | |
| 3 | the period 12-months ended April 30, 2020 compared to the Rate Period Revenues | | | | |
| 4 | 05.2018-04.2019. The adjustment includes estimated deferred revenues associated with | | | | |
| 5 | the Decoupling Mechanism assuming the decoupling base is updated by Pro Forma | | | | |
| 6 | Normalized Revenue at present rates. Ms. Knox sponsors this adjustment. The effect of | | | | |
| 7 | this adjustme | ent increases Washington net operating income by \$710,000. | | | |
| 8 | | | | | |
| 9 | Rate Year 3 | (May 1, 2020 – April 30, 2021) Adjustments | | | |
| 10 | Q. | Please explain each of the Rate Year 3 adjustments included on page 10 | | | |
| 11 | of Exh. EMA | A-9. | | | |
| 12 | A. | Page 10 of Exh. EMA-9 includes the following adjustments: | | | |
| 13 | Rate | Period Capital Additions (AMA) 05.2020-04.2021, column (20.01), this | | | |
| 14 | adjustment in | acludes planned capital additions for the period May 1, 2020 through April 30, | | | |
| | | | | | |

Rate Period Capital Additions (AMA) 05.2020-04.2021, column (20.01), this adjustment includes planned capital additions for the period May 1, 2020 through April 30, 2021, together with the associated A/D and ADFIT for the period 12-months ended April 30, 2021 on an AMA basis. Annual depreciation for these capital additions are also included in this adjustment. The associated ADFIT includes the repairs deduction and bonus tax depreciation expected through April 2021 on an AMA basis. In addition, total plant-in-service as of AMA 04.2020 was adjusted to a 04.2021 AMA basis. The effect of this adjustment increases rate base by \$15,897,000 and decreases net operating income by \$1,147,000. Ms. Schuh sponsors this adjustment.

Rate Period O&M/A&G (2.71%) Expense, column (20.02), reflects the annual planned increase in operating expenses of 2.71%, including O&M, customer service, and

administrative and general expenses. Per the Company's current financial forecast, the annual percentage increase in O&M has been reduced to reflect "efficiency reductions" in O&M, resulting in an O&M average increase of 2.71% on a system basis over the four-year period 2017 to 2020 for the combined electric and natural gas systems. This 2.71% growth in operating expenses is a significant reduction from the prior year's average growth in O&M expenses, and reflects an effort by the Company to reduce its O&M expenses from previous years. The effect of this adjustment decreases Washington net operating income by \$655,000.

Rate Period Property Tax Expense, column (20.03), restates the Rate Year 2 level of property tax expense (beginning May 1, 2019) included in adjustment (19.03) Rate Period Property tax, to the level of property tax expense the Company will experience during Rate Year 3 beginning May 1, 2020. The property on which the tax is calculated is the property value as of December 31, 2019. The effect of this adjustment decreases net operating income by \$133,000.

Rate Period Revenues 05.2020-04.2021, column (20.04), reflects the incremental revenue at present rates from loads and customers included in the Company's forecast for the period 12-months ended April 30, 2021 compared to the Rate Period Revenues 05.2019-04.2020. The adjustment includes estimated deferred revenues associated with the Decoupling Mechanism assuming the decoupling base is updated by Pro Forma Normalized Revenue at present rates. Ms. Knox sponsors this adjustment. The effect of this adjustment increases Washington net operating income by \$715,000.