

**EXHIBIT NO. ___(JAP-9)
DOCKETS UE-17___/UG-17___
2017 PSE GENERAL RATE CASE
WITNESS: JON A. PILIARIS**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

Docket UE-17___

Docket UG-17___

**EIGHTH EXHIBIT (NONCONFIDENTIAL) TO THE
PREFILED DIRECT TESTIMONY OF**

JON A. PILIARIS

ON BEHALF OF PUGET SOUND ENERGY

JANUARY 13, 2017

Puget Sound Energy - 2017 Gas Cost of Service Study
Proposed Test Year With Gas
Summary

| Line No. | Description | Total Company | Residential (16,23,53) | Comm. & Indus. (31,31T) | Large Volume (41,41T) | Interruptible (85, 85T) | Limited Interruptible (86, 86T) | Non-Exclusive Interruptible (87, 87T) | Contracts | Rentals |
|--|---|-------------------------|-------------------------|-------------------------|-----------------------|-------------------------|---------------------------------|---------------------------------------|----------------------|---------------------|
| | (a) | (b) | (c) | (d) | (e) | (g) | (h) | (i) | (j) | (k) |
| Rate Base | | | | | | | | | | |
| 1 | Plant in Service | \$ 3,588,211,730 | \$ 2,300,492,525 | \$ 969,895,180 | \$ 103,744,506 | \$ 100,953,487 | \$ 11,276,016 | \$ 53,646,676 | \$ 19,867,051 | \$ 28,336,289 |
| 2 | Accumulated Reserve | (1,372,435,514) | (869,743,796) | (381,294,307) | (34,472,640) | (34,332,340) | (3,649,371) | (18,502,354) | (6,742,281) | (23,698,426) |
| 3 | Other Rate Base Items | (455,082,583) | (297,099,665) | (120,252,974) | (13,164,802) | (12,850,033) | (1,269,143) | (7,017,312) | (2,660,147) | (768,507) |
| 4 | TOTAL RATE BASE | \$ 1,760,693,633 | \$ 1,133,649,065 | \$ 468,347,899 | \$ 56,107,064 | \$ 53,771,115 | \$ 6,357,502 | \$ 28,127,010 | \$ 10,464,623 | \$ 3,869,356 |
| Revenue at Current Rates | | | | | | | | | | |
| 5 | Gas Revenues | 374,239,634 | 241,458,159 | 88,240,149 | 19,551,216 | 13,012,175 | 3,588,371 | 8,389,564 | - | - |
| 6 | Base Rate Revenues | 434,535,123 | 304,383,541 | 88,444,666 | 13,505,385 | 13,826,318 | 2,175,329 | 4,788,874 | 1,369,462 | 6,041,548 |
| 7 | Other Revenues | 7,009,594 | 6,572,761 | 318,759 | 8,226 | (153,799) | 2,147 | 12,526 | 10 | 248,964 |
| 8 | TOTAL REVENUE | \$ 815,784,351 | \$ 552,414,461 | \$ 177,003,574 | \$ 33,064,826 | \$ 26,684,694 | \$ 5,765,847 | \$ 13,190,964 | \$ 1,369,472 | \$ 6,290,512 |
| Expenses at Current Rates | | | | | | | | | | |
| 9 | Operation and Maintenance | 499,478,223 | 326,539,315 | 118,097,401 | 23,274,645 | 16,161,159 | 4,088,704 | 9,632,372 | 722,116 | 962,512 |
| 10 | Depreciation Expense | 121,950,123 | 78,347,869 | 31,775,752 | 3,559,894 | 3,397,989 | 414,377 | 1,789,911 | 624,797 | 2,039,535 |
| 11 | Taxes Other Than Income | 34,356,123 | 23,164,085 | 7,509,712 | 1,392,386 | 1,142,949 | 240,422 | 559,046 | 72,050 | 275,474 |
| 12 | Income Taxes | 37,987,932 | 24,459,101 | 10,104,863 | 1,210,541 | 1,160,141 | 137,167 | 606,856 | 225,780 | 83,483 |
| 13 | TOTAL EXPENSES - Current | \$ 693,772,402 | \$ 452,510,371 | \$ 167,487,728 | \$ 29,437,466 | \$ 21,862,239 | \$ 4,880,669 | \$ 12,588,184 | \$ 1,644,743 | \$ 3,361,004 |
| 14 | Operating Income - Current | \$ 122,011,949 | \$ 99,904,090 | \$ 9,515,846 | \$ 3,627,360 | \$ 4,822,455 | \$ 885,178 | \$ 602,780 | \$ (275,270) | \$ 2,929,508 |
| 15 | Current Rate of Return | 6.93% | 8.81% | 2.03% | 6.47% | 8.97% | 13.92% | 2.14% | -2.63% | 75.71% |
| Calculation of Rate Schedule Revenue Requirement at Equal Rates of Return | | | | | | | | | | |
| 16 | Required Return | 7.74% | 7.74% | 7.74% | 7.74% | 7.74% | 7.74% | 7.74% | 7.74% | 7.74% |
| 17 | Required Operating Income | \$ 136,277,687 | \$ 87,744,438 | \$ 36,250,127 | \$ 4,342,687 | \$ 4,161,884 | \$ 492,071 | \$ 2,177,031 | \$ 809,962 | \$ 299,488 |
| 18 | Operating Income (Deficiency)/Surplus | (14,265,738) | 12,159,653 | (26,734,281) | (715,326) | 660,571 | 393,108 | (1,574,250) | (1,085,232) | 2,630,020 |
| 19 | Revenue Conversion Factor | 0.620450 | | | | | | | | |
| 20 | Revenue (Deficiency) / Surplus | \$ (22,992,568) | \$ 6,467,542 | \$ (28,981,736) | \$ (989,396) | \$ 392,930 | \$ 360,730 | \$ (1,707,180) | \$ (1,133,809) | \$ 2,598,352 |
| 21 | Revenue Requirement | \$ 838,776,919 | \$ 545,946,919 | \$ 205,985,310 | \$ 34,054,223 | \$ 26,291,764 | \$ 5,405,117 | \$ 14,898,144 | \$ 2,503,281 | \$ 3,692,160 |
| 22 | Revenues Other Than Rate Sch. Rev. | 7,009,594 | 6,572,761 | 318,759 | 8,226 | (153,799) | 2,147 | 12,526 | 10 | 248,964 |
| 23 | Rate Schedule Revenue Requirement | 831,767,325 | 539,374,158 | 205,666,551 | 34,045,997 | 26,445,563 | 5,402,971 | 14,885,618 | 2,503,271 | 3,443,196 |
| 24 | Deficiency / (Surplus) as % of Rate Rev | 2.84% | -1.18% | 16.40% | 2.99% | -1.46% | -6.26% | 12.95% | 82.79% | -43.01% |
| Expenses at Required Return | | | | | | | | | | |
| 25 | Operation and Maintenance | \$ 499,642,390 | \$ 326,668,342 | \$ 118,122,208 | \$ 23,276,547 | \$ 16,166,172 | \$ 4,088,934 | \$ 9,632,879 | \$ 722,260 | \$ 965,048 |
| 26 | Depreciation Expense | 121,950,123 | 78,347,869 | 31,775,752 | 3,559,894 | 3,397,989 | 414,377 | 1,789,911 | 624,797 | 2,039,535 |
| 27 | Taxes Other Than Income | 35,237,245 | 23,781,294 | 7,689,054 | 1,419,771 | 1,170,985 | 244,833 | 568,756 | 74,827 | 287,724 |
| 28 | Income Taxes | 45,669,474 | 29,404,977 | 12,148,168 | 1,455,324 | 1,394,734 | 164,903 | 729,568 | 271,435 | 100,365 |
| 29 | TOTAL EXPENSES - Required | \$ 702,499,232 | \$ 458,202,481 | \$ 169,735,183 | \$ 29,711,536 | \$ 22,129,880 | \$ 4,913,047 | \$ 12,721,113 | \$ 1,693,319 | \$ 3,392,672 |
| 30 | Rate Schedule Revenue as Proposed | \$ 831,767,430 | \$ 560,594,539 | \$ 183,113,441 | \$ 33,711,018 | \$ 27,508,489 | \$ 5,816,443 | \$ 13,526,597 | \$ 1,455,355 | \$ 6,041,548 |
| 31 | Other Revenue | 7,009,594 | 6,572,761 | 318,759 | 8,226 | (153,799) | 2,147 | 12,526 | 10 | 248,964 |
| 32 | Revenue as Proposed | \$ 838,777,025 | \$ 567,167,300 | \$ 183,432,200 | \$ 33,719,244 | \$ 27,354,690 | \$ 5,818,589 | \$ 13,539,123 | \$ 1,455,365 | \$ 6,290,512 |
| 33 | Proposed Revenue Increase | \$ 22,992,673 | \$ 14,752,839 | \$ 6,428,626 | \$ 654,418 | \$ 669,996 | \$ 52,742 | \$ 348,159 | \$ 85,893 | \$ - |
| 34 | Proposed Revenue - Revenue Requirement | \$ 838,777,025 | \$ 567,167,300 | \$ 183,432,200 | \$ 33,719,244 | \$ 27,354,690 | \$ 5,818,589 | \$ 13,539,123 | \$ 1,455,365 | \$ 6,290,512 |
| 35 | Current Revenue to Cost Ratio | 0.97 | 1.01 | 0.86 | 0.97 | 1.01 | 1.07 | 0.89 | 0.55 | 1.75 |
| 36 | Parity Ratio | 1.00 | 1.04 | 0.88 | 1.00 | 1.04 | 1.10 | 0.91 | 0.56 | 1.80 |
| 37 | Proposed Revenue to Cost Ratio | 1.00 | 1.04 | 0.89 | 0.99 | 1.04 | 1.08 | 0.91 | 0.58 | 1.75 |

Puget Sound Energy - 2017 Gas Cost of Service Study
Proposed Test Year With Gas
Functional Rate Base

| | System Total | Residential (16,23,53) | Comm. & Indus. (31,31T) | Large Volume (41,41T) | Interruptible (85, 85T) | Limited Interruptible (86, 86T) | Non-Exclusive Interruptible (87, 87T) | Contracts | Rentals |
|---------------------------------|-------------------------|---------------------------|----------------------------|--------------------------|----------------------------|---------------------------------------|---|----------------------|---------------------|
| Gas Supply | | | | | | | | | |
| Demand | \$ 879,380 | \$ 632,682 | \$ 215,433 | \$ 29,727 | \$ 887 | \$ 652 | \$ - | \$ - | \$ - |
| Commodity | \$ 1,276,469 | \$ 717,605 | \$ 266,509 | \$ 64,767 | \$ 100,611 | \$ 12,166 | \$ 91,386 | \$ 23,424 | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 2,155,850 | \$ 1,350,287 | \$ 481,942 | \$ 94,494 | \$ 101,498 | \$ 12,819 | \$ 91,386 | \$ 23,424 | \$ - |
| Storage | | | | | | | | | |
| Demand | \$ 33,728,236 | \$ 23,816,222 | \$ 7,241,670 | \$ 1,247,982 | \$ 645,915 | \$ 366,974 | \$ 409,473 | \$ - | \$ - |
| Commodity | \$ 5,010,600 | \$ 2,533,857 | \$ 941,090 | \$ 239,265 | \$ 554,190 | \$ 43,761 | \$ 536,136 | \$ 162,301 | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 38,738,836 | \$ 26,350,079 | \$ 8,182,760 | \$ 1,487,247 | \$ 1,200,105 | \$ 410,735 | \$ 945,609 | \$ 162,301 | \$ - |
| Transmission | | | | | | | | | |
| Demand | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Distribution | | | | | | | | | |
| Demand | \$ 673,875,827 | \$ 474,001,393 | \$ 161,444,509 | \$ 24,672,060 | \$ 9,337,304 | \$ 564,764 | \$ 1,995,157 | \$ 1,860,640 | \$ - |
| Commodity | \$ 332,288,037 | \$ 181,649,396 | \$ 67,465,721 | \$ 17,152,608 | \$ 32,338,643 | \$ 3,137,163 | \$ 23,446,665 | \$ 7,097,841 | \$ - |
| Customer | \$ 702,702,099 | \$ 450,231,013 | \$ 224,621,167 | \$ 10,729,832 | \$ 9,264,035 | \$ 1,889,813 | \$ 1,454,322 | \$ 1,200,365 | \$ 3,311,552 |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 1,708,865,963 | \$ 1,105,881,802 | \$ 453,531,397 | \$ 52,554,500 | \$ 50,939,982 | \$ 5,591,740 | \$ 26,896,144 | \$ 10,158,846 | \$ 3,311,552 |
| Gas Costs | | | | | | | | | |
| Demand | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sales Specific Costs | | | | | | | | | |
| Demand | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ 9,367,095 | \$ 66,897 | \$ 6,133,923 | \$ 1,596,133 | \$ 577,393 | \$ 334,607 | \$ 100,339 | \$ - | \$ 557,804 |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 9,367,095 | \$ 66,897 | \$ 6,133,923 | \$ 1,596,133 | \$ 577,393 | \$ 334,607 | \$ 100,339 | \$ - | \$ 557,804 |
| Transport Specific Costs | | | | | | | | | |
| Demand | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ 1,565,889 | \$ - | \$ 17,877 | \$ 374,691 | \$ 952,137 | \$ 7,601 | \$ 93,532 | \$ 120,052 | \$ - |
| Sub-total | \$ 1,565,889 | \$ - | \$ 17,877 | \$ 374,691 | \$ 952,137 | \$ 7,601 | \$ 93,532 | \$ 120,052 | \$ - |
| TOTAL | | | | | | | | | |
| Demand | \$ 708,483,443 | \$ 498,450,296 | \$ 168,901,611 | \$ 25,949,769 | \$ 9,984,106 | \$ 932,391 | \$ 2,404,630 | \$ 1,860,640 | \$ - |
| Commodity | \$ 338,575,106 | \$ 184,900,858 | \$ 68,673,320 | \$ 17,456,639 | \$ 32,993,444 | \$ 3,193,091 | \$ 24,074,187 | \$ 7,283,566 | \$ - |
| Customer | \$ 702,702,099 | \$ 450,231,013 | \$ 224,621,167 | \$ 10,729,832 | \$ 9,264,035 | \$ 1,889,813 | \$ 1,454,322 | \$ 1,200,365 | \$ 3,311,552 |
| Direct Sales | \$ 9,367,095 | \$ 66,897 | \$ 6,133,923 | \$ 1,596,133 | \$ 577,393 | \$ 334,607 | \$ 100,339 | \$ - | \$ 557,804 |
| Direct Transport | \$ 1,565,889 | \$ - | \$ 17,877 | \$ 374,691 | \$ 952,137 | \$ 7,601 | \$ 93,532 | \$ 120,052 | \$ - |
| TOTAL RATE BASE | \$ 1,760,693,633 | \$ 1,133,649,065 | \$ 468,347,899 | \$ 56,107,064 | \$ 53,771,115 | \$ 6,357,502 | \$ 28,127,010 | \$ 10,464,623 | \$ 3,869,356 |

Puget Sound Energy - 2017 Gas Cost of Service Study
Proposed Test Year With Gas
Functional Revenue Requirement

| | System Total | Residential (16,23,53) | Comm. & Indus. (31,31T) | Large Volume (41,41T) | Interruptible (85, 85T) | Limited Interruptible (86, 86T) | Non-Exclusive Interruptible (87, 87T) | Contracts | Rentals |
|----------------------------------|-----------------------|---------------------------|----------------------------|--------------------------|----------------------------|---------------------------------------|---|---------------------|---------------------|
| Gas Supply | | | | | | | | | |
| Demand | \$ 457,316 | \$ 329,022 | \$ 112,034 | \$ 15,459 | \$ 461 | \$ 339 | \$ - | \$ - | \$ - |
| Commodity | \$ 1,106,298 | \$ 615,547 | \$ 228,607 | \$ 55,795 | \$ 90,795 | \$ 10,454 | \$ 83,210 | \$ 21,890 | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 1,563,614 | \$ 944,569 | \$ 340,642 | \$ 71,254 | \$ 91,256 | \$ 10,793 | \$ 83,210 | \$ 21,890 | \$ - |
| Storage | | | | | | | | | |
| Demand | \$ 7,680,859 | \$ 5,423,617 | \$ 1,649,130 | \$ 284,200 | \$ 147,093 | \$ 83,570 | \$ 93,248 | \$ - | \$ - |
| Commodity | \$ 888,064 | \$ 449,093 | \$ 166,796 | \$ 42,407 | \$ 98,223 | \$ 7,756 | \$ 95,023 | \$ 28,766 | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 8,568,923 | \$ 5,872,711 | \$ 1,815,926 | \$ 326,607 | \$ 245,316 | \$ 91,326 | \$ 188,272 | \$ 28,766 | \$ - |
| Transmission | | | | | | | | | |
| Demand | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Distribution | | | | | | | | | |
| Demand | \$ 139,713,036 | \$ 97,920,711 | \$ 33,379,335 | \$ 5,134,770 | \$ 2,108,975 | \$ 131,124 | \$ 599,517 | \$ 438,603 | \$ - |
| Commodity | \$ 110,935,536 | \$ 66,031,412 | \$ 23,141,549 | \$ 5,260,183 | \$ 8,123,697 | \$ 947,078 | \$ 5,610,137 | \$ 1,564,656 | \$ 256,825 |
| Customer | \$ 204,756,135 | \$ 143,010,956 | \$ 54,177,405 | \$ 2,119,614 | \$ 1,918,069 | \$ 373,685 | \$ 264,005 | \$ 220,307 | \$ 2,672,094 |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 455,404,708 | \$ 306,963,080 | \$ 110,698,289 | \$ 12,514,566 | \$ 12,150,741 | \$ 1,451,888 | \$ 6,473,659 | \$ 2,223,566 | \$ 2,928,919 |
| Gas Costs | | | | | | | | | |
| Demand | \$ 117,341,500 | \$ 79,224,830 | \$ 27,712,601 | \$ 5,258,891 | \$ 2,586,463 | \$ 843,981 | \$ 1,714,734 | \$ - | \$ - |
| Commodity | \$ 239,879,891 | \$ 152,496,699 | \$ 56,568,606 | \$ 13,059,213 | \$ 9,009,392 | \$ 2,522,969 | \$ 6,169,450 | \$ 53,563 | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 357,221,391 | \$ 231,721,529 | \$ 84,281,206 | \$ 18,318,104 | \$ 11,595,855 | \$ 3,366,950 | \$ 7,884,184 | \$ 53,563 | \$ - |
| Sales Specific Costs | | | | | | | | | |
| Demand | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ 13,708,487 | \$ 445,031 | \$ 8,822,857 | \$ 2,272,813 | \$ 799,356 | \$ 473,396 | \$ 131,793 | \$ - | \$ 763,241 |
| Direct Transport | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Sub-total | \$ 13,708,487 | \$ 445,031 | \$ 8,822,857 | \$ 2,272,813 | \$ 799,356 | \$ 473,396 | \$ 131,793 | \$ - | \$ 763,241 |
| Transport Specific Costs | | | | | | | | | |
| Demand | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport | \$ 2,309,797 | \$ - | \$ 26,390 | \$ 550,879 | \$ 1,409,240 | \$ 10,764 | \$ 137,027 | \$ 175,497 | \$ - |
| Sub-total | \$ 2,309,797 | \$ - | \$ 26,390 | \$ 550,879 | \$ 1,409,240 | \$ 10,764 | \$ 137,027 | \$ 175,497 | \$ - |
| TOTAL | | | | | | | | | |
| Demand | \$ 265,192,711 | \$ 182,898,181 | \$ 62,853,100 | \$ 10,693,320 | \$ 4,842,992 | \$ 1,059,015 | \$ 2,407,500 | \$ 438,603 | \$ - |
| Commodity | \$ 352,809,789 | \$ 219,592,752 | \$ 80,105,558 | \$ 18,417,598 | \$ 17,322,107 | \$ 3,488,257 | \$ 11,957,820 | \$ 1,668,875 | \$ 256,825 |
| Customer | \$ 204,756,135 | \$ 143,010,956 | \$ 54,177,405 | \$ 2,119,614 | \$ 1,918,069 | \$ 373,685 | \$ 264,005 | \$ 220,307 | \$ 2,672,094 |
| Direct Sales | \$ 13,708,487 | \$ 445,031 | \$ 8,822,857 | \$ 2,272,813 | \$ 799,356 | \$ 473,396 | \$ 131,793 | \$ - | \$ 763,241 |
| Direct Transport | \$ 2,309,797 | \$ - | \$ 26,390 | \$ 550,879 | \$ 1,409,240 | \$ 10,764 | \$ 137,027 | \$ 175,497 | \$ - |
| TOTAL REVENUE REQUIREMENT | \$ 838,776,919 | \$ 545,946,919 | \$ 205,985,310 | \$ 34,054,223 | \$ 26,291,764 | \$ 5,405,117 | \$ 14,898,144 | \$ 2,503,281 | \$ 3,692,160 |
| TOTAL FIXED COSTS | \$ 485,967,129 | \$ 326,354,168 | \$ 125,879,753 | \$ 15,636,625 | \$ 8,969,658 | \$ 1,916,860 | \$ 2,940,324 | \$ 834,406 | \$ 3,435,335 |

Puget Sound Energy - 2017 Gas Cost of Service Study
Proposed Test Year With Gas
Unit Costs

| | System Total | Residential (16,23,53) | Comm. & Indus. (31,31T) | Large Volume (41,41T) | Interruptible (85, 85T) | Limited Interruptible (86, 86T) | Non-Exclusive Interruptible (87, 87T) | Contracts | Rentals |
|--|---------------|---------------------------|----------------------------|--------------------------|----------------------------|---------------------------------------|---|---------------|---------|
| Gas Supply | | | | | | | | | |
| Demand (per Peak Day therm per month) | \$ 0.0040 | \$ 0.0041 | \$ 0.0041 | \$ 0.0037 | \$ 0.0003 | \$ 0.0037 | \$ - | \$ - | \$ - |
| Commodity (per therm) | \$ 0.0010 | \$ 0.0011 | \$ 0.0011 | \$ 0.0010 | \$ 0.0007 | \$ 0.0010 | \$ 0.0007 | \$ 0.0006 | \$ - |
| Customer (per customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales (per sales customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport (per transp. cust. per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Demand and Commodity (per therm) | \$ 0.0014 | \$ 0.0016 | \$ 0.0016 | \$ 0.0013 | \$ 0.0007 | \$ 0.0011 | \$ 0.0007 | \$ 0.0006 | \$ - |
| Storage | | | | | | | | | |
| Demand (per Peak Day therm per month) | \$ 0.0676 | \$ 0.0678 | \$ 0.0605 | \$ 0.0684 | \$ 0.0962 | \$ 0.9130 | \$ 0.3247 | \$ - | \$ - |
| Commodity (per therm) | \$ 0.0008 | \$ 0.0008 | \$ 0.0008 | \$ 0.0008 | \$ 0.0008 | \$ 0.0008 | \$ 0.0008 | \$ 0.0008 | \$ - |
| Customer (per customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales (per sales customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport (per transp. cust. per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Demand and Commodity (per therm) | \$ 0.0075 | \$ 0.0102 | \$ 0.0085 | \$ 0.0060 | \$ 0.0019 | \$ 0.0092 | \$ 0.0015 | \$ 0.0008 | \$ - |
| Transmission | | | | | | | | | |
| Demand (per Peak Day therm per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity (per therm) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer (per customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales (per sales customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport (per transp. cust. per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Demand and Commodity (per therm) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Distribution | | | | | | | | | |
| Demand (per Peak Day therm per month) | \$ 1.2293 | \$ 1.2234 | \$ 1.2248 | \$ 1.2355 | \$ 1.3794 | \$ 1.4326 | \$ 2.0874 | \$ 1.4630 | \$ - |
| Commodity (per therm) | \$ 0.0971 | \$ 0.1143 | \$ 0.1078 | \$ 0.0964 | \$ 0.0643 | \$ 0.0949 | \$ 0.0459 | \$ 0.0423 | \$ - |
| Customer (per customer per month) | \$ 21.2286 | \$ 15.9751 | \$ 80.7669 | \$ 128.3992 | \$ 736.5858 | \$ 124.8530 | \$ 1,389.4975 | \$ 1,835.8905 | \$ - |
| Direct Sales (per sales customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport (per transp. cust. per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Demand and Commodity (per therm) | \$ 0.2194 | \$ 0.2838 | \$ 0.2634 | \$ 0.1905 | \$ 0.0810 | \$ 0.1081 | \$ 0.0508 | \$ 0.0541 | \$ - |
| Gas Costs | | | | | | | | | |
| Demand (per Peak Day therm per month) | \$ 1.0325 | \$ 0.9899 | \$ 1.0169 | \$ 1.2654 | \$ 1.6917 | \$ 9.2209 | \$ 5.9704 | \$ - | \$ - |
| Commodity (per therm) | \$ 0.2100 | \$ 0.2639 | \$ 0.2636 | \$ 0.2394 | \$ 0.0713 | \$ 0.2528 | \$ 0.0505 | \$ 0.0014 | \$ - |
| Customer (per customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales (per sales customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport (per transp. cust. per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Demand and Commodity (per therm) | \$ 0.3127 | \$ 0.4010 | \$ 0.3927 | \$ 0.3358 | \$ 0.0918 | \$ 0.3374 | \$ 0.0645 | \$ 0.0014 | \$ - |
| Sales Specific Costs | | | | | | | | | |
| Demand (per Peak Day therm per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity (per therm) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer (per customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales (per sales customer per month) | \$ 1.422 | \$ 0.050 | \$ 13.153 | \$ 144.691 | \$ 801.761 | \$ 160.202 | \$ 2,196.546 | \$ - | \$ - |
| Direct Transport (per transp. cust. per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Transport Specific Costs | | | | | | | | | |
| Demand (per Peak Day therm per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Commodity (per therm) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Customer (per customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Sales (per sales customer per month) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Direct Transport (per transp. cust. per month) | \$ 849.190 | \$ - | \$ 1,055.601 | \$ 688.598 | \$ 876.939 | \$ 283.259 | \$ 1,054.053 | \$ 1,462.475 | \$ - |
| TOTAL | | | | | | | | | |
| Demand (per Peak Day therm per month) | \$ 2.3334 | \$ 2.2852 | \$ 2.3063 | \$ 2.5730 | \$ 3.1677 | \$ 11.5702 | \$ 8.3824 | \$ 1.4630 | \$ - |
| Commodity (per therm) | \$ 0.3088 | \$ 0.3801 | \$ 0.3733 | \$ 0.3376 | \$ 0.1371 | \$ 0.3496 | \$ 0.0978 | \$ 0.0451 | \$ - |
| Customer (per customer per month) | \$ 21.2286 | \$ 15.9751 | \$ 80.7669 | \$ 128.3992 | \$ 736.5858 | \$ 124.8530 | \$ 1,389.4975 | \$ 1,835.8905 | \$ - |
| Direct Sales (per sales customer per month) | \$ 1.4217 | \$ 0.0497 | \$ 13.1535 | \$ 144.6915 | \$ 801.7608 | \$ 160.2017 | \$ 2,196.5458 | \$ - | \$ - |
| Direct Transport (per transp. cust. per month) | \$ 849.1899 | \$ - | \$ 1,055.6012 | \$ 688.5982 | \$ 876.9385 | \$ 283.2593 | \$ 1,054.0532 | \$ 1,462.4745 | \$ - |
| Demand and Commodity (per therm) | \$ 0.5409 | \$ 0.6966 | \$ 0.6662 | \$ 0.5336 | \$ 0.1754 | \$ 0.4557 | \$ 0.1175 | \$ 0.0569 | \$ - |
| All Customer (per customer per month) | \$ 22.8893 | \$ 16.0249 | \$ 93.9593 | \$ 299.4491 | \$ 1,584.7408 | \$ 286.6171 | \$ 2,804.3378 | \$ 3,298.3650 | \$ - |
| PDAY | 113,653,153 | 80,036,710 | 27,253,119 | 4,155,899 | 1,528,891 | 91,530 | 287,208 | 299,796 | 0 |
| COM1 | 1,142,550,752 | 577,787,183 | 214,593,771 | 54,558,711 | 126,370,130 | 9,978,634 | 122,253,420 | 37,008,902 | 0 |
| CUST | 9,645,293 | 8,952,091 | 670,787 | 16,508 | 2,604 | 2,993 | 190 | 120 | 0 |
| CUSTXT | 9,642,573 | 8,952,091 | 670,762 | 15,708 | 997 | 2,955 | 60 | 0 | 0 |
| TRANSCUS | 2,720 | 0 | 25 | 800 | 1,607 | 38 | 130 | 120 | 0 |