

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY, INC.

Respondent.

DOCKETS UE-240004 & UG-240005 (*Consolidated*)

**DAVID J. GARRETT
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT**

EXHIBIT DJG-8

Account 376.40 – Mains – Wrapped Steel

August 6, 2024

Account 376.40 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	PSE R2.5-50	PC R2.5-58	PSE SSD	PC SSD
0.0	548,107,360	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	551,590,514	99.95%	99.94%	99.95%	0.0000	0.0000
1.5	547,317,814	99.56%	99.83%	99.85%	0.0000	0.0000
2.5	524,865,288	99.17%	99.70%	99.74%	0.0000	0.0000
3.5	516,295,138	98.93%	99.56%	99.63%	0.0000	0.0000
4.5	503,400,605	98.63%	99.41%	99.51%	0.0001	0.0001
5.5	446,768,329	98.44%	99.25%	99.37%	0.0001	0.0001
6.5	444,699,690	98.06%	99.07%	99.23%	0.0001	0.0001
7.5	431,233,950	97.70%	98.88%	99.08%	0.0001	0.0002
8.5	427,163,347	97.33%	98.68%	98.92%	0.0002	0.0003
9.5	412,906,956	96.94%	98.45%	98.74%	0.0002	0.0003
10.5	407,515,490	96.73%	98.21%	98.56%	0.0002	0.0003
11.5	403,028,137	96.54%	97.95%	98.36%	0.0002	0.0003
12.5	391,324,346	96.34%	97.67%	98.14%	0.0002	0.0003
13.5	335,483,027	96.02%	97.37%	97.92%	0.0002	0.0004
14.5	315,471,448	95.87%	97.04%	97.67%	0.0001	0.0003
15.5	265,790,552	95.72%	96.69%	97.41%	0.0001	0.0003
16.5	222,631,326	95.38%	96.32%	97.14%	0.0001	0.0003
17.5	220,395,286	95.13%	95.91%	96.84%	0.0001	0.0003
18.5	176,059,453	94.77%	95.48%	96.53%	0.0000	0.0003
19.5	163,896,040	94.69%	95.01%	96.19%	0.0000	0.0002
20.5	143,442,988	94.52%	94.51%	95.84%	0.0000	0.0002
21.5	138,400,028	94.08%	93.97%	95.46%	0.0000	0.0002
22.5	124,639,927	93.82%	93.40%	95.06%	0.0000	0.0002
23.5	114,902,959	93.62%	92.79%	94.63%	0.0001	0.0001
24.5	104,636,584	93.34%	92.14%	94.18%	0.0001	0.0001
25.5	98,139,952	92.98%	91.44%	93.70%	0.0002	0.0001
26.5	88,290,810	92.71%	90.70%	93.19%	0.0004	0.0000
27.5	90,040,596	92.37%	89.92%	92.66%	0.0006	0.0000
28.5	89,927,066	92.07%	89.08%	92.09%	0.0009	0.0000
29.5	83,062,194	91.75%	88.19%	91.49%	0.0013	0.0000
30.5	81,544,435	91.11%	87.24%	90.86%	0.0015	0.0000
31.5	73,542,974	90.44%	86.24%	90.19%	0.0018	0.0000
32.5	71,623,935	89.55%	85.18%	89.49%	0.0019	0.0000
33.5	69,688,073	88.53%	84.06%	88.75%	0.0020	0.0000
34.5	66,427,051	87.33%	82.87%	87.96%	0.0020	0.0000
35.5	64,102,589	86.24%	81.62%	87.14%	0.0021	0.0001
36.5	61,556,960	85.39%	80.29%	86.28%	0.0026	0.0001
37.5	58,619,192	84.61%	78.89%	85.37%	0.0033	0.0001
38.5	56,012,375	84.00%	77.41%	84.41%	0.0043	0.0000
39.5	57,541,162	83.51%	75.85%	83.41%	0.0059	0.0000
40.5	56,077,464	83.24%	74.21%	82.36%	0.0081	0.0001
41.5	54,699,368	82.89%	72.49%	81.25%	0.0108	0.0003
42.5	52,962,899	82.45%	70.68%	80.10%	0.0139	0.0006
43.5	50,281,038	82.13%	68.78%	78.89%	0.0178	0.0011
44.5	49,702,980	81.80%	66.80%	77.62%	0.0225	0.0018
45.5	47,325,817	81.46%	64.72%	76.29%	0.0280	0.0027
46.5	49,921,356	81.10%	62.57%	74.90%	0.0344	0.0038

Account 376.40 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	PSE R2.5-50	PC R2.5-58	PSE SSD	PC SSD
47.5	53,292,429	80.85%	60.32%	73.45%	0.0421	0.0055
48.5	55,882,083	80.65%	58.00%	71.93%	0.0513	0.0076
49.5	56,101,124	80.49%	55.61%	70.36%	0.0619	0.0103
50.5	53,799,866	80.37%	53.14%	68.71%	0.0741	0.0136
51.5	53,562,826	80.21%	50.62%	67.00%	0.0875	0.0174
52.5	48,616,474	80.06%	48.06%	65.23%	0.1024	0.0220
53.5	42,881,083	79.91%	45.45%	63.39%	0.1187	0.0273
54.5	38,601,274	79.82%	42.82%	61.49%	0.1369	0.0336
55.5	33,882,646	79.71%	40.19%	59.53%	0.1562	0.0407
56.5	28,610,672	79.64%	37.56%	57.51%	0.1771	0.0490
57.5	26,513,515	79.61%	34.96%	55.44%	0.1994	0.0584
58.5	22,576,282	79.60%	32.39%	53.32%	0.2229	0.0691
59.5	17,560,895	79.54%	29.88%	51.15%	0.2466	0.0806
60.5	12,699,749	79.18%	27.43%	48.94%	0.2678	0.0914
61.5	8,992,531	79.11%	25.07%	46.71%	0.2920	0.1050
62.5	5,568,359	79.08%	22.81%	44.46%	0.3167	0.1199
63.5	2,733,631	79.03%	20.65%	42.19%	0.3409	0.1357
64.5	2,632,709	79.03%	18.60%	39.92%	0.3652	0.1530
65.5	2,510,480	79.03%	16.67%	37.65%	0.3888	0.1712
66.5		79.03%	14.87%	35.40%		
Sum of Squared Differences				[8]	3.8171	1.2268
SSD for Truncated OLT Curve (Up to 1% of Beginning Exposures)				[9]	2.7222	0.7669

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])². This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])². This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.