

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY

Respondent.

DOCKETS UE-220066, UG-220067, and UG-210918 (*Consolidated*)

**J. RANDALL WOOLRIDGE
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT**

EXHIBIT JRW-7

Industry Average Betas

July 28, 2022

Exhibit JRW-7
Industry Average Betas*
Value Line Investment Survey Betas**
4-Feb-22

Rank	Industry	Beta	Rank	Industry	Beta	Rank	Industry	Beta
1	Oilfield Svcs/Equip.	1.50	33	Bank	1.19	65	Educational Services	1.02
2	Insurance (Life)	1.47	34	Chemical (Specialty)	1.19	66	Retail Store	1.01
3	Petroleum (Integrated)	1.44	35	Electronics	1.19	67	Environmental	1.01
4	Hotel/Gaming	1.43	36	Machinery	1.18	68	Investment Co.(Foreign)	1.01
5	Homebuilding	1.41	37	Toiletries/Cosmetics	1.18	69	Investment Co.	1.01
6	Petroleum (Producing)	1.41	38	Medical Services	1.18	70	IT Services	1.00
7	Apparel	1.40	39	Electrical Equipment	1.17	71	Med Supp Non-Invasive	1.00
8	Air Transport	1.39	40	R.E.I.T.	1.16	72	Computer Software	0.99
9	Shoe	1.38	41	Heavy Truck & Equip	1.15	73	E-Commerce	0.98
10	Office Equip/Supplies	1.36	42	Maritime	1.14	74	Cable TV	0.97
11	Retail (Hardlines)	1.32	43	Chemical (Basic)	1.13	75	Drug	0.95
12	Aerospace/Defense	1.32	44	Automotive	1.12	76	Healthcare Information	0.94
13	Building Materials	1.30	45	Semiconductor Equip	1.12	77	Tobacco	0.93
14	Auto Parts	1.29	46	Publishing	1.12	78	Trucking	0.93
15	Retail (Softlines)	1.29	47	Reinsurance	1.12	79	Beverage	0.91
16	Pipeline MLPs	1.29	48	Computers/Peripherals	1.10	80	Electric Utility (West)	0.90
17	Metal Fabricating	1.27	49	Med Supp Invasive	1.10	81	Foreign Electronics	0.90
18	Steel	1.27	50	Industrial Services	1.09	82	Telecom. Utility	0.90
19	Metals & Mining (Div.)	1.26	51	Power	1.08	83	Telecom. Services	0.90
20	Advertising	1.26	52	Precision Instrument	1.06	84	Electric Utility (East)	0.89
21	Retail Automotive	1.25	53	Packaging & Container	1.06	85	Natural Gas Utility	0.89
22	Restaurant	1.24	54	Semiconductor	1.06	86	Electric Util. (Central)	0.87
23	Public/Private Equity	1.24	55	Entertainment	1.06	87	Biotechnology	0.87
24	Oil/Gas Distribution	1.23	56	Wireless Networking	1.05	88	Retail/Wholesale Food	0.81
25	Furn/Home Furnishings	1.23	57	Insurance (Prop/Cas.)	1.05	89	Household Products	0.80
26	Recreation	1.23	58	Human Resources	1.05	90	Water Utility	0.79
27	Paper/Forest Products	1.23	59	Railroad	1.05	91	Food Processing	0.78
28	Financial Svcs. (Div.)	1.22	60	Information Services	1.03	92	Entertainment Tech	0.77
29	Bank (Midwest)	1.21	61	Retail Building Supply	1.03	93	Precious Metals	0.62
30	Natural Gas (Div.)	1.21	62	Thrift	1.03			
31	Chemical (Diversified)	1.21	63	Telecom. Equipment	1.02			
32	Diversified Co.	1.20	64	Internet	1.02		Mean	1.11

* Industry averages for 93 industries using Value Line's database of 1,705 companies - Updated 2-2-22.

** Value Line computes betas using monthly returns regressed against the New York Stock Exchange Index for five years.

These betas are then adjusted as follows: $VL\ Beta = \{(2/3) * Regressed\ Beta\} + \{(1/3) * (1.0)\}$ to account to tendency for Betas to regress toward average of 1.0. See M. Blume, "On the Assessment of Risk," *Journal of Finance*, March 1971.