

**EXHIBIT NO. ___(BJL-4)
DOCKETS UE-17___/UG-17___
2017 PSE GENERAL RATE CASE
WITNESS: BRANDON J. LOHSE**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

Docket UE-17___

Docket UG-17___

**THIRD EXHIBIT (NON-CONFIDENTIAL) TO THE
PREFILED DIRECT TESTIMONY OF**

BRANDON J. LOHSE

ON BEHALF OF PUGET SOUND ENERGY

JANUARY 13, 2017

PUGET SOUND ENERGY

**Utility Capital Structure
Proposed Cost of Capital and Rate of Return
Requested For Rate Year January 2018 through December 2018**

(A)	(B)	(C)	(D)	(E)
General Rate Case Request				
Description	Ratio	Cost Rates	Cost of Capital	
Marginal Short-Term Debt Rate	1.0%	3.06%	0.03%	
Commitment Fees			0.02%	
Amortization of Short-Term Debt Issue Cost			0.01%	
Weighted Short-Term Debt Rate	0.06%			
Marginal Long-Term Debt Rate	50.5%	5.73%	2.90%	
Amortization of Reacquired Debt			0.03%	
Weighted Long-Term Debt Rate	2.93%			
Total Debt	51.5%		2.99%	
Common Equity	48.5%	9.80%	4.75%	
Total	100.0%		7.74%	

Test Year Capital Structure and Cost of Capital				
Description	Amount (i)	Ratio	Cost Rates	Cost of Capital
	<i>(\$ in 000's)</i>			
Marginal Short-Term Debt Rate	\$58,313	0.8%	0.68%	0.01%
Commitment Fees				0.02%
Amortization of Short-Term Debt Issue Cost				0.02%
Weighted Short-Term Debt Rate	\$3,753,975	50.3%	5.89%	0.05%
Long Term Debt				2.96%
Amortization of Reacquired Debt				0.03%
Weighted Long-Term Debt Rate	\$3,812,288	51.1%		2.99%
Total Debt	\$3,647,340	48.9%	9.80%	3.04%
Common Equity	\$7,459,628	100.0%		4.79%
Total				7.83%

(i) Average of Month-End Balances.

**Puget Sound Energy
Requested Cost of Debt
For The 12 Months Ended December 31, 2018**

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	
	Bond	Interest Rate	Issue Date	Maturity Date	Net Proceeds Per \$100 (i)	Cost Rate (ii)	Annual Charge (\$'000)	Principal in 000's	
6	MTN-A	6.740%	Jun-98	Jun-18	98.99	6.83%	13,660	200,000	
7	MTN-C	7.150%	Dec-95	Dec-25	99.21	7.21%	1,082	15,000	
8	MTN-C	7.200%	Dec-95	Dec-25	99.21	7.26%	145	2,000	
9	MTN-A	7.020%	Dec-97	Dec-27	98.99	7.10%	21,300	300,000	
10	MTN-B	7.000%	Mar-99	Mar-29	99.04	7.08%	7,080	100,000	
11	PCB	3.900%	May-13	Mar-31	98.94	3.98%	5,511	138,460	
12	PCB	4.000%	May-13	Mar-31	98.94	4.08%	955	23,400	
13	SN	5.483%	May-05	Jun-35	84.89	6.65%	16,625	250,000	
14	SN	6.724%	Jun-06	Jun-36	107.52	6.17%	15,425	250,000	
15	SN	6.274%	Sep-06	Mar-37	98.81	6.36%	19,080	300,000	
16	SN	5.757%	Sep-09	Oct-39	98.98	5.83%	20,405	350,000	
17	SN	5.795%	Mar-10	Mar-40	98.96	5.87%	19,078	325,000	
18	SN	5.764%	Jun-10	Jul-40	98.97	5.84%	14,600	250,000	
19	SN	5.638%	Mar-11	Apr-41	98.97	5.71%	17,130	300,000	
20	SN	4.434%	Nov-11	Nov-41	98.96	4.50%	11,250	250,000	
21	SN	4.700%	Nov-11	Nov-51	98.86	4.76%	2,142	45,000	
22	SN	4.300%	May-15	May-45	98.48	4.39%	18,658	425,000	
23	Total First Mortgage Bonds and Senior Notes							204,124	3,523,860
24									
25									
26	JrSubN (iii)	6.974%	Jun-07	Jun-67	98.23	4.82%	12,059	250,000	
27	Total Junior Subordinated Notes							12,059	250,000
28									
29	Total Long-term Debt Cost of Interest							5.73%	\$3,773,860
30									
31	Short-Term Debt Cost of Interest							3.06%	\$74,730
32	Blended Cost of Interest (ST&LT Debt)							5.68%	\$3,848,590
33									
34	Projected AMA Long-term Debt in Rate year (\$ in 000's)							\$3,773,860	
35	Requested Long-term Debt Ratio in Rate Year							50.5%	
36	Implied AMA Total Capitalization in Rate Year (\$ in 000's)							\$7,472,990	
37									

(i) Net proceeds are face amount less underwriter's fees and issuance expenses.
(ii) Cost Rate for each bond is the yield to maturity based on net proceeds.
(iii) \$250M Jr Subordinated security becomes callable at par on June 1 2017; interest begins to float at LIBOR + 253bps on December 1 2017; maturity date is June 1 2067. See Page 4 for interest expense calculation.
(iv) For blended cost of interest for short-term debt and long-term debt, the cost rate is the total annual interest charge divided by the average outstanding balance for the period.

Puget Sound Energy
Interest Calculation on \$250M Jr. Subordinated Security
For The 12 Months Ended December 31, 2018

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
	Jan-18	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	
	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	\$250,000,000	
1														
2	JrSubN Principle													
3														
4														
5	Interest Rate Components:													
6	Floating Rate after Dec 1 2017													
7	3-month LIBOR Rate Forecast (f)	1.42%	1.42%	1.42%	2.01%	2.01%	2.01%	2.56%	2.56%	2.56%	2.90%	2.90%	2.90%	
8	LIBOR Spread	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%	
9	Floating Rate after Dec 1 2017	3.95%	3.95%	3.95%	4.54%	4.54%	4.54%	5.09%	5.09%	5.09%	5.43%	5.43%	5.43%	
10														
11	Number of Days in Month	31	28	31	30	31	30	31	31	30	31	30	31	
12														
13	Monthly Interest Expense	\$850,347	\$768,056	\$850,347	\$945,833	\$977,361	\$945,833	\$1,095,764	\$1,095,764	\$1,060,417	\$1,168,958	\$1,131,250	\$1,168,958	
14														
15														
16	(f) Moody's 3-month LIBOR forecast as of October 11, 2016. LIBOR rate is reset quarterly.													
														Total
														\$12,658,888

Puget Sound Energy
Schedule of Annual Charges on Reacquired Debt
For The 12 Months Ended December 31, 2018

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Issue	Issue Date	Maturity Date	Redemption Date	Refinance Issue	Refinance Date	Maturity Date for Amort.	Monthly Amortization (i)	No. of Months in Period	Annual Amortization (j)
1	9.14% PP	21-Jun-91	21-Jun-01	15-Jun-98	20 Yr 6.740%	15-Jun-98	15-Jun-18	\$292	6	\$1,749
2	WNG 8.4%	13-Jan-92	12-Jan-22	21-Mar-03			12-Jan-22	\$95	12	\$1,141
3	WNG 8.39%	13-Jan-92	13-Jan-22	21-Mar-03			13-Jan-22	\$222	12	\$2,663
4	WNG 8.25%	12-Aug-92	12-Aug-22	29-May-03			12-Aug-22	\$5,207	12	\$62,486
5	WNG 7.19%	18-Aug-93	18-Aug-23	18-Aug-03			18-Aug-23	\$888	12	\$10,656
6	9.625% PP	15-Oct-90	15-Oct-97	7-Feb-94	30 Yr 7.350%	1-Feb-94	1-Feb-24	\$14,073	12	\$168,880
7	8.231% Capital Trust I (Tender)	6-Jun-97	1-Jun-27	1-Jun-05			1-Jun-27	\$19,150	12	\$229,804
8	PCB Series 1991A	7-Aug-91	1-Aug-21	11-Mar-03	2003 PCB's	11-Mar-03	1-Mar-31	\$3,790	12	\$45,480
9	PCB Series 1991B	7-Aug-91	1-Aug-21	11-Mar-03	2003 PCB's	11-Mar-03	1-Mar-31	\$2,880	12	\$34,561
10	PCB Series 1992	1-Mar-92	1-Mar-22	11-Mar-03	2003 PCB's	11-Mar-03	1-Mar-31	\$8,819	12	\$105,825
11	PCB Series 1993	1-Mar-92	1-Mar-22	11-Mar-03	2003 PCB's	11-Mar-03	1-Mar-31	\$2,691	12	\$32,298
12	PCB Series 2003	11-Mar-03	1-Mar-31	24-Jun-13	2013 PCB's	23-May-13	1-Mar-31	\$24,927	12	\$299,129
13	PCB Series 2003	11-Mar-03	1-Mar-31	24-Jun-13	2013 PCB's	23-May-13	1-Mar-31	\$4,213	12	\$50,553
14	\$200mm VRN	15-Jul-04	15-Jul-06	27-May-05	30 Yr 5.483%	27-May-05	27-May-35	\$1,424	12	\$17,087
15	8.40% Capital Trust II	24-May-01	30-Jun-41	30-Jun-06	30 Yr 6.724%	30-Jun-06	15-Jun-36	\$16,418	12	\$197,021
16	\$25M 9.57% Gas FMB's	1-Sep-90	1-Sep-20	23-Dec-11	40 Yr 4.70%	22-Nov-11	15-Nov-51	\$33,377	12	\$400,519
17	SN 5.197%	12-Oct-05	1-Oct-15	5-Jun-15	30 Yr 4.30%	26-May-15	20-May-45	\$6,859	12	\$82,302
18	SN 6.75%	23-Jan-09	15-Jan-16	5-Jun-15	30 Yr 4.30%	26-May-15	20-May-45	\$26,387	12	\$316,650
19	Total Amortization on Reacquired Debt									\$2,058,805
20	Implied Rate Year Capitalization									\$7,472,990,099
21	Weighted Cost of Reacquired Debt									0.03%

(i) Amortization is over life of replacement issue or remaining life of called bond if no replacement issue.