

Exhibit No. \_\_\_ JLB-2Cr  
Dockets UE-141335  
Witness: Jason L. Ball  
*Redacted Version*

**BEFORE THE  
WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION**

**DOCKET UE-141335**

**In the Matter of the**

**Petition of King County, Washington,  
BNSF Railway, Frontier Communications  
Northwest, Inc., Verizon Wireless, and  
New Cingular Wireless PCS, LLC. For a  
Declaratory Order to address the  
degradation of service from Puget Sound  
Energy due to the physical deterioration  
of the Maloney Ridge Line underground  
cable.**

**EXHIBIT TO  
TESTIMONY OF**

**JASON L. BALL**

**STAFF OF  
WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

*Economic Feasibility Analysis*

**November 19, 2014  
Revised June 8, 2015**

**CONFIDENTIAL PER PROTECTIVE ORDER  
*Redacted Version***

**SUMMARY - UPDATED FOR PSE FIRST REVISED RESPONSE TO STAFF DR 039**

*Italics/Bold - Updated Information Italics Only - Changed due to formulas*

Line No.

**Replacement of Maloney Line**

1			Present Value of Capital Costs for Replacement of Maloney Line	<b>\$5,297,578</b>
2			Amortization Period (Years)	35
3		Total Amortization Period	Annualized	
3	Present Value of Regulated Costs (Capital Only)	\$ 6,781,319	\$507,518	
4	Present Value of Regulated Costs (O&M)	\$ 6,709,748	\$502,161	
5	Total	\$ 13,491,067	\$1,009,679	

Based on Attachment B to PSE Response to Petitioners Data Request No. 001

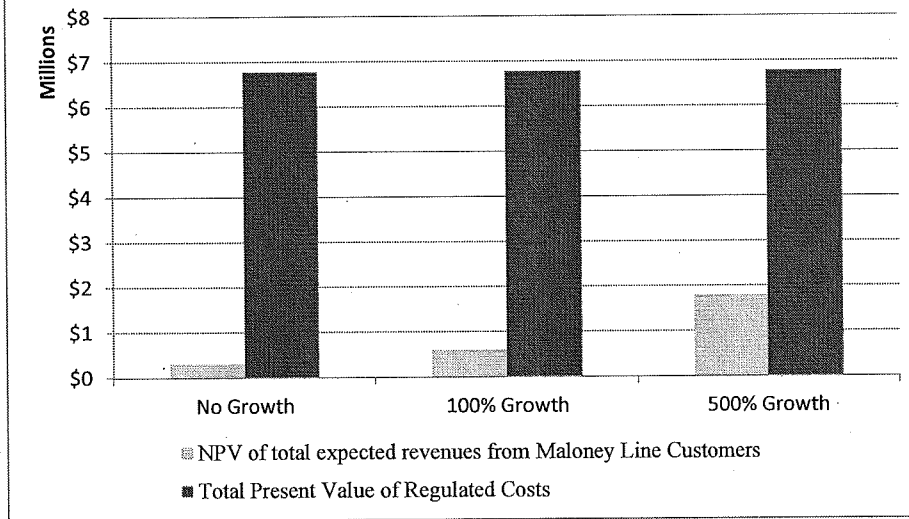
**Expected Revenues from Customers**

		Total Amortization Period	Annualized
9	PV Of Revenues From Maloney Ridge Customers	\$ 296,598	\$19,915
10	Difference From Regulated Costs (Capital Costs Only)	\$ 6,484,721	\$435,405
11	% relative recovery from rest of Schedule 24	95.626%	

**Comparison of Growth in Expected Revenues from Customers**

	No Growth	100% Growth	500% Growth	
15	NPV of remaining total Revenue Requirement assigned to Schedule 24	\$6,484,721	\$6,188,123	\$5,001,731
16	NPV of total expected revenues from Maloney Line Customers	\$296,598	\$593,196	\$1,779,588
17	Total Present Value of Regulated Costs	\$6,781,319	\$6,781,319	\$6,781,319

**Distribution of Revenue Requirement Over Next 35 Years**



Summary of Usage History by Year

Billed Rate Category SCH_24EC	
Bill Year	Sum of Total Billed Amount Incl Tax Average of Billed Quantity
2011	
2012	
2013	
2014	

Usage History

kWh Usage History	

Calculation of Present Value of Expected Revenues from Customers

Line No.	Year	Discount Rate*	Avg Yearly Revenues	Growth Rate**	Total Nominal Revenues	NPV	No Growth	50%	100%	500%
1	2012	1.000								
2	2013	1.067	\$ 22,327	1.00207	\$ 22,327	\$ 20,922	\$ 20,922	\$ 31,383	\$ 41,844	\$ 125,533
3	2014	1.139	\$ 22,373	1.00000	\$ 22,373	\$ 19,646	\$ 40,568	\$ 60,853	\$ 81,137	\$ 243,410
4	2015	1.215	\$ 22,373	1.00000	\$ 22,373	\$ 18,410	\$ 58,978	\$ 88,468	\$ 117,957	\$ 353,871
5	2016	1.297	\$ 22,373	1.00000	\$ 22,373	\$ 17,252	\$ 76,230	\$ 114,345	\$ 152,460	\$ 457,381
6	2017	1.384	\$ 22,373	1.00000	\$ 22,373	\$ 16,166	\$ 92,397	\$ 138,595	\$ 184,793	\$ 554,379
7	2018	1.477	\$ 22,373	1.00000	\$ 22,373	\$ 15,149	\$ 107,546	\$ 161,319	\$ 215,091	\$ 645,274
8	2019	1.576	\$ 22,373	1.00000	\$ 22,373	\$ 14,196	\$ 121,742	\$ 182,613	\$ 243,483	\$ 730,450
9	2020	1.682	\$ 22,373	1.00000	\$ 22,373	\$ 13,303	\$ 135,044	\$ 202,567	\$ 270,089	\$ 810,267
10	2021	1.795	\$ 22,373	1.00000	\$ 22,373	\$ 12,466	\$ 147,510	\$ 221,265	\$ 295,021	\$ 885,062
11	2022	1.915	\$ 22,373	1.00000	\$ 22,373	\$ 11,681	\$ 159,192	\$ 238,788	\$ 318,384	\$ 955,151
12	2023	2.044	\$ 22,373	1.00000	\$ 22,373	\$ 10,946	\$ 170,138	\$ 255,207	\$ 340,276	\$ 1,020,829
13	2024	2.181	\$ 22,373	1.00000	\$ 22,373	\$ 10,258	\$ 180,396	\$ 270,594	\$ 360,792	\$ 1,082,376
14	2025	2.328	\$ 22,373	1.00000	\$ 22,373	\$ 9,612	\$ 190,008	\$ 285,013	\$ 380,017	\$ 1,140,050
15	2026	2.484	\$ 22,373	1.00000	\$ 22,373	\$ 9,008	\$ 199,016	\$ 298,524	\$ 398,032	\$ 1,194,095
16	2027	2.651	\$ 22,373	1.00000	\$ 22,373	\$ 8,441	\$ 207,457	\$ 311,185	\$ 414,913	\$ 1,244,740
17	2028	2.829	\$ 22,373	1.00000	\$ 22,373	\$ 7,910	\$ 215,366	\$ 323,050	\$ 430,733	\$ 1,292,199
18	2029	3.018	\$ 22,373	1.00000	\$ 22,373	\$ 7,412	\$ 222,778	\$ 334,168	\$ 445,557	\$ 1,336,671
19	2030	3.221	\$ 22,373	1.00000	\$ 22,373	\$ 6,946	\$ 229,724	\$ 344,586	\$ 459,448	\$ 1,378,345
20	2031	3.437	\$ 22,373	1.00000	\$ 22,373	\$ 6,509	\$ 236,233	\$ 354,349	\$ 472,466	\$ 1,417,397
21	2032	3.668	\$ 22,373	1.00000	\$ 22,373	\$ 6,099	\$ 242,332	\$ 363,498	\$ 484,664	\$ 1,453,992
22	2033	3.915	\$ 22,373	1.00000	\$ 22,373	\$ 5,715	\$ 248,047	\$ 372,071	\$ 496,095	\$ 1,488,285
23	2034	4.177	\$ 22,373	1.00000	\$ 22,373	\$ 5,356	\$ 253,403	\$ 380,105	\$ 506,807	\$ 1,520,420
24	2035	4.458	\$ 22,373	1.00000	\$ 22,373	\$ 5,019	\$ 258,422	\$ 387,633	\$ 516,844	\$ 1,550,533
25	2036	4.757	\$ 22,373	1.00000	\$ 22,373	\$ 4,703	\$ 263,125	\$ 394,688	\$ 526,250	\$ 1,578,751
26	2037	5.077	\$ 22,373	1.00000	\$ 22,373	\$ 4,407	\$ 267,532	\$ 401,298	\$ 535,065	\$ 1,605,194
27	2038	5.417	\$ 22,373	1.00000	\$ 22,373	\$ 4,130	\$ 271,662	\$ 407,493	\$ 543,324	\$ 1,629,973
28	2039	5.781	\$ 22,373	1.00000	\$ 22,373	\$ 3,870	\$ 275,532	\$ 413,298	\$ 551,064	\$ 1,653,193
29	2040	6.169	\$ 22,373	1.00000	\$ 22,373	\$ 3,627	\$ 279,159	\$ 418,738	\$ 558,317	\$ 1,674,952
30	2041	6.584	\$ 22,373	1.00000	\$ 22,373	\$ 3,398	\$ 282,557	\$ 423,835	\$ 565,114	\$ 1,695,342
31	2042	7.026	\$ 22,373	1.00000	\$ 22,373	\$ 3,185	\$ 285,741	\$ 428,612	\$ 571,483	\$ 1,714,449
32	2043	7.497	\$ 22,373	1.00000	\$ 22,373	\$ 2,984	\$ 288,726	\$ 433,088	\$ 577,451	\$ 1,732,354
33	2044	8.001	\$ 22,373	1.00000	\$ 22,373	\$ 2,796	\$ 291,522	\$ 437,283	\$ 583,044	\$ 1,749,132
34	2045	8.538	\$ 22,373	1.00000	\$ 22,373	\$ 2,620	\$ 294,142	\$ 441,214	\$ 588,285	\$ 1,764,855
35	2046	9.111	\$ 22,373	1.00000	\$ 22,373	\$ 2,456	\$ 296,598	\$ 444,897	\$ 593,196	\$ 1,779,588
36	2047	9.723	\$ 22,373	1.00000	\$ 22,373	\$ 2,301	\$ 298,899	\$ 448,349	\$ 597,798	\$ 1,793,395
37	2048	10.376	\$ 22,373	1.00000	\$ 22,373	\$ 2,156	\$ 301,055	\$ 451,583	\$ 602,111	\$ 1,806,333
38	2049	11.072	\$ 22,373	1.00000	\$ 22,373	\$ 2,021	\$ 303,076	\$ 454,614	\$ 606,152	\$ 1,818,456
39	2050	11.816	\$ 22,373	1.00000	\$ 22,373	\$ 1,893	\$ 304,970	\$ 457,454	\$ 609,939	\$ 1,829,817
40	2051	12.609	\$ 22,373	1.00000	\$ 22,373	\$ 1,774	\$ 306,744	\$ 460,116	\$ 613,488	\$ 1,840,463

\*Discount rate is calculated by the Company in PSE response to Petitioners Data Request No. 001 Attachment B

	Structure	Cost	WACC	After-Tax
Long Term Debt	48.00%	6.22%	2.99%	1.94%
Short Term Debt	4.00%	2.68%	0.11%	0.07%
Common	48.00%	9.80%	4.70%	4.70%
Total	100.00%		7.80%	6.71%

\*\*Growth rate is used to increase Maloney Ridge Customers relative revenues due to inclusion of Maloney Ridge line in Schedule 24 rates  
 Based on PSE last Cost-of-Service Study provided in PSE Response to Petitioner Data Request No. 007 Attachment B

Voltage Level	Schedule	kWh	Proforma Revenue
Demand <= 50 kW	24	2594865426	\$245,723,262

% Growth in RR/Rates from  
 Maloney Ridge  
 0.207%

**Maloney Line Maintenance Options**

Amortization Period (Years) 35

	Total Regulated Costs over Amortization Period	Expected Revenues from Customers during Amortization Period	Expected Revenues from Customers as % of Total Costs
Option 1: Silicon injection to Sobiesky and Maloney cable and Install new poly cable whole project	\$6,781,319	\$296,598	4.37%
<b>Option 2: Replace Sobieski and Maloney Cable and Install new Poly Cable whole project</b>	<b>\$8,012,412</b>	<b>\$296,598</b>	<b>3.70%</b>
Option 3: Silicon injection to Sobiesky and Maloney cable and Install new poly cable down to Foss River Bridge	\$4,923,138	\$296,598	6.02%
Option 4: Replace 4 worst cable Segments (33546, 33547, 33548, 33549)	\$4,209,912	\$296,598	7.05%
Option 5: Install new cable from Foss River Bridge to BNSF OH Pole	\$2,716,072	\$296,598	10.92%
Option 6: Replace cables to Sobieski and Maloney (33550, 38338)	\$3,506,947	\$296,598	8.46%