

ATTACHMENT C
COMMUNICATIONS REQUIREMENTS

	SITES FOR LOAD DROP	LOAD	COST	COMMENTS	TYPE	
					B	N
1	ABERDEEN	35.6	\$ 21,000	Channel costs	1	
2	ALVEY	36.2	\$ 16,800	Channel costs	1	
3	ANGUS	48.0	\$ 368,215	Microwave radio extension and channel costs		1
4	BPA BELLINGHAM	21.0	\$ 16,800	Channel costs	1	
5	BANDON	9.2	\$ 12,600	Channel costs	1	
6	BELL SUB	41.6	\$ 12,600	Channel costs	1	
7	BOEING SUB	33.0	\$ 359,400	Microwave radio extension and channel costs		1
8	BREMERTON	36.1	\$ 368,215	Microwave radio extension and channel costs		1
9	BRUSH COLLEGE	21.6	\$ 368,215	Microwave radio extension and channel costs		1
10	CHEHALIS SUB	47.7	\$ 12,600	Channel costs	1	
11	COLUMBIA FALLS SUB	47.4	\$ 12,600	Channel costs	1	
12	CROWN ZELLERBACH	15.0	\$ 359,400	Microwave radio extension and channel costs		1
13	CROWN ZELLERBACH	32.7	\$ 359,400	Microwave radio extension and channel costs		1
14	EAST OMAK	20.2	\$ 12,600	Channel costs	1	
15	ELY	24.6	\$ 368,215	Microwave radio extension and channel costs		1
16	FIVE CORNERS	14.2	\$ 368,215	Microwave radio extension and channel costs		1
17	FLORAL HILLS	12.1	\$ 368,215	Microwave radio extension and channel costs		1
18	FRANKLIN SUB	37.4	\$ 12,600	Channel costs	1	
19	FREEWATER	15.9	\$ 368,215	Microwave radio extension and channel costs		1
20	GARDINER	41.5	\$ 372,000	Microwave radio extension and channel costs		1
21	GRANDVIEW	27.7	\$ 12,600	Channel costs	1	
22	HEDGES	17.7	\$ 368,215	Microwave radio extension and channel costs		1
23	HIGHLANDS	65.6	\$ 359,400	Microwave radio extension and channel costs		1
24	ITT RAYONIER	23.0	\$ 368,215	Microwave radio extension and channel costs		1
25	KENNWICK	54.8	\$ 368,215	Microwave radio extension and channel costs		1
26	KITSAP	22.1	\$ 16,800	Channel costs	1	
27	LAPINE SUB	36.6	\$ 367,800	Microwave radio extension and channel costs		1
28	LAGRANDE	69.0	\$ 368,215	Microwave radio extension and channel costs		1
29	LEBANON	11.3	\$ 368,215	Microwave radio extension and channel costs		1
30	LEXINGTON	25.0	\$ 21,000	Channel costs	1	
31	LONG BEACH	12.7	\$ 368,215	Microwave radio extension and channel costs		1
32	LONGVIEW FIBRE PLANT	35.0	\$ 359,400	Microwave radio extension and channel costs		1
33	MASON SUB	37.4	\$ 367,800	Microwave radio extension and channel costs		1
34	MCNARY SUB	40.9	\$ 26,000	Channel costs (including fiber channel cards)	1	
35	MILTON	14.6	\$ 368,215	Microwave radio extension and channel costs		1
36	MT. VERNON	49.3	\$ 368,215	Microwave radio extension and channel costs		1
37	NASELLE	2.9	\$ 12,600	Channel costs	1	
38	OKANOGAN	24.9	\$ 368,215	Microwave radio extension and channel costs		1
39	PAINE FIELD #2	16.3	\$ 368,215	Microwave radio extension and channel costs		1
40	PORT ANGELES	74.1	\$ 29,400	Channel costs	1	
41	PROSSER	17.6	\$ 368,215	Microwave radio extension and channel costs		1
42	ROGUE	27.9	\$ 33,600	Channel costs	1	
43	REDMOND	30.0	\$ 368,215	Microwave radio extension and channel costs		1
44	ROSS	72.0	\$ 13,400	Channel costs (including additional comm. cables)	1	
45	SACAJEWEA	3.9	\$ 12,600	Channel costs	1	
46	SALEM	16.4	\$ 16,800	Channel costs	1	
47	SALEM ALUMINA	16.6	\$ 368,215	Microwave radio extension and channel costs		1
48	SANTIAM	2.4	\$ 12,600	Channel costs	1	
49	SCOTT PAPER	38.8	\$ 419,400	Microwave radio extension w/ passive and channel costs		1
50	STEVENS DRIVE	35.6	\$ 367,800	Microwave radio extension and channel costs		1
51	SURPRISE VALLEY	16.1	\$ 368,215	Microwave radio extension and channel costs		1
52	THAYER DRIVE	24.6	\$ 368,215	Microwave radio extension and channel costs		1
53	THE DALLES	17.7	\$ 12,600	Channel costs	1	
54	THURSTON	16.6	\$ 368,215	Microwave radio extension and channel costs		1
55	TILLAMOOK	19.6	\$ 12,600	Channel costs	1	
56	TOLEDO	55.0	\$ 372,000	Microwave radio extension and channel costs	1	
57	WEYERHAUSER PLANT (WAUNA)	98.4	\$ 359,400	Microwave radio extension and channel costs		1
58	WILLIPAW RIVER	10.2	\$ 15,000	Channel costs	1	
59	WINDISHAR	28.5	\$ 363,600	Microwave radio extension and channel costs		1
	TOTAL LOAD	1799.4		TOTAL	24	35

**TOTAL FOR COMMUNICATIONS
(ROUNDED TO NEAREST \$1000)**

\$ 13,634,000

B=BPA SITE WITH RADIO AND SCADA
N= NON-BPA SITE

BOEING SUB	\$	359,400	
CROWN ZELLERBACH (PORT ANGELES)	\$	359,400	
CROWN ZELLERBACH (DRISCOLL)	\$	359,400	
GARDINER	\$	372,000	
HIGHLANDS	\$	359,400	
LAPINE SUB	\$	367,800	
LONGVIEW FIBRE PLANT	\$	359,400	
MASON SUB	\$	367,800	
SCOTT PAPER	\$	419,400	
STEVENS DRIVE SUB	\$	367,800	
TOLEDO	\$	372,000	
WEYERHAUSER PLANT (WAUNA)	\$	359,400	
WINDISHAR	\$	363,600	
	\$	<u>368,215</u>	AVERAGE COST TO INSTALL MICROWAVE EXTENSION AND CHANNELS TO NEW SITES BASED ON ORIGINAL TESTIMONY