

ATTACHMENT D

CONTROL REQUIREMENTS			TYPE	
	SITES FOR LOAD DROP	COST	B	N
1	ABERDEEN	\$ 60,000	1	
2	ALVEY	\$ 60,000	1	
3	ANGUS	\$ 89,000		1
4	BPA BELLINGHAM	\$ 60,000	1	
5	BANDON	\$ 60,000	1	
6	BELL SUB	\$ 60,000	1	
7	BOEING SUB	\$ 89,000		1
8	BREMERTON	\$ 89,000		1
9	BRUSH COLLEGE	\$ 89,000		1
10	CHEHALIS SUB	\$ 60,000	1	
11	COLUMBIA FALLS SUB	\$ 60,000	1	
12	CROWN ZELLERBACH	\$ 89,000		1
13	CROWN ZELLERBACH	\$ 89,000		1
14	EAST OMAK	\$ 60,000	1	
15	ELY	\$ 89,000		1
16	FIVE CORNERS	\$ 89,000		1
17	FLORAL HILLS	\$ 89,000		1
18	FRANKLIN SUB	\$ 60,000	1	
19	FREEWATER	\$ 89,000		1
20	GARDINER	\$ 89,000		1
21	GRANDVIEW	\$ 60,000	1	
22	HEDGES	\$ 89,000		1
23	HIGHLANDS	\$ 89,000		1
24	ITT RAYONIER	\$ 89,000		1
25	KENNWICK	\$ 89,000		1
26	KITSAP	\$ 60,000	1	
27	LAPINE SUB	\$ 89,000		1
28	LAGRANDE	\$ 89,000		1
29	LEBANON	\$ 89,000		1
30	LEXINGTON	\$ 60,000	1	
31	LONG BEACH	\$ 89,000		1
32	LONGVIEW FIBRE PLANT	\$ 89,000		1
33	MASON SUB	\$ 89,000		1
34	MCNARY SUB	\$ 60,000	1	
35	MILTON	\$ 89,000		1
36	MT. VERNON	\$ 89,000		1
37	NASELLE	\$ 60,000	1	
38	OKANOGAN	\$ 89,000		1
39	PAINE FIELD #2	\$ 89,000		1
40	PORT ANGELES	\$ 60,000	1	
41	PROSSER	\$ 89,000		1
42	ROGUE	\$ 60,000	1	
43	REDMOND	\$ 89,000		1
44	ROSS	\$ 60,000	1	
45	SACAJEWEA	\$ 60,000	1	
46	SALEM	\$ 60,000	1	
47	SALEM ALUMINA	\$ 89,000		1
48	SANTIAM	\$ 60,000	1	
49	SCOTT PAPER	\$ 89,000		1
50	STEVENS DRIVE	\$ 89,000		1
51	SURPRISE VALLEY	\$ 89,000		1
52	THAYER DRIVE	\$ 89,000		1
53	THE DALLES	\$ 60,000	1	
54	THURSTON	\$ 89,000		1
55	TILLAMOOK	\$ 60,000	1	
56	TOLEDO	\$ 60,000	1	
57	WEYERHAUSER PLANT (WAUNA)	\$ 89,000		1
58	WILLIPAW RIVER	\$ 60,000	1	
59	WINDISHAR	\$ 89,000		1
TOTAL		\$ 4,555,000	24	35

OUTPUT SITE TYPICAL (BPA)		
est cat #		cost/unit
	transfer trip	\$ 12,200
	aux equipment	\$ 2,000
54546	SER points addition	
53520	SCADA control point addition	
53550	SCADA indication addition	
	Design	cost/unit
96620	TEPS	\$ 250
96550	TEPD	\$ 250
	agreements	\$ 250
66702	Area assist	\$ 250
	Construction\Test & Energization	
		\$ 60,000

OUTPUT SITE TYPICAL (non-BPA)		
est cat #		cost/unit
	Transfer trip	\$ 12,200
	Aux equipment	\$ 2,000
	SCADA RTU	\$ 10,000
53520	SCADA control point addition	
53550	SCADA indication addition	
	Design	cost/unit
96620	TEPS	\$ 250
96550	TEPD	\$ 250
	Agreements	\$ 250
66702	Area assist	
	Construction\Test & Energization	
		\$ 89,000

CONTROL CENTER TYPICAL		
		cost/unit
	Transfer trip	\$ 12,200
	Controller equipment	\$ 50,000
53550	SCADA indication addition	\$ 350
54546	SER point addition	\$ 134
	SCADA RTU indication board	\$ 475
	Design	cost/unit
96620	TEPS	\$ 250
96550	TEPD	\$ 250
	TETC	\$ 250
	TOS	\$ 250
	System Ops Hardware	\$ 250
	Support	
		\$ 1,370,000

OUTPUT SITES	59	\$ 4,555,000
CONTROL CENTERS	2	\$ 2,740,000

TOTAL FOR CONTROL SYSTEMS \$ 7,295,000