

**RTO WEST PRICING MODEL**  
**Illustrative Company Rate Calculation Spreadsheets**  
**Summary Pages**  
**Dated 3\_29\_02**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1															
2	<b>Transmission Revenue Requirement</b>														
3		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	RTO West			
4	Gross Rev Req (Dat1, L24)	20,973,577	392,693,436	590,490,000	60,570,355	86,561,380	69,673,156	243,580,560	29,934,175	38,172,314	58,048,460	1,590,697,413			
5															
6															
7	<b>Long Term Adjustments</b>														
8	LT 3rd Party Contracts Credit (Dat2, L10)	-2,206,236	-1,400,894	-9,829,900	-1,191,117	-5,276,176	-82,081	-14,295,684	0	-435,471	-539,901	-35,257,460			
9															
10	LT Internal Merchant Rev (Dat2, L27)	-5,328,600	-15,472,595	-132,126,400	-229,950	-3,835,200	0	-56,147,094	-3,900,000	-1,045,036	0	-218,084,875			
11															
12	<b>Long Term Transmission Service Payments Between RTO West Filing Utilities</b>														
13		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	RTO West			
14	Paid (Dat3, L20)	9,762,180	17,312,635	29,730,313	4,290,278	3,123,249	0	52,009,452	39,101,400	38,277,548	23,625	193,630,680			
15															
16	Received (Dat3, L22)	-10,836,363	0	-146,461,708	-13,753,965	-2,902,028	0	-14,595,330	-361,100	-25,880	-4,694,307	-193,630,680			
17															
18	<b>Net LT Adjustments</b>														
19		-8,609,019	439,146	-258,687,695	-10,884,754	-8,890,155	-82,081	-33,028,656	34,840,300	36,771,161	-5,210,583	-253,342,335			
20															
21	<b>Pre RTO West Year 2000 Company Load Costs with LT Adjustments Only</b>														
22		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total			
23	<b>Company Load Net Cost</b>	12,364,558	393,132,582	331,802,306	49,685,601	77,671,225	69,591,075	210,551,904	64,774,475	74,943,475	52,837,877	1,337,355,078			
24	Rate for Company Load (\$/kwyr)	\$ 9.96	\$ 53.47	\$ 25.46	\$ 21.01	\$ 59.20	\$ 16.09	\$ 27.38	\$ 19.91	\$ 21.36	\$ 33.51	\$ 29.29			
25															
26															
27	<b>Short Term Year 2000 Adjustments</b>														
28	NWPP Revenue Credit (Dat2, L18)	-236,936	-2,011,577	-2,785,800	-7,240	0	-245,665	-74,530	-26,400	-104,540	-32,070	-5,524,758			
29															
30	Lost Revenue Credit (Dat2, L21)	-140,180	-2,134,329	-10,461,500	-3,620,159	-13,960,625	-653,074	-10,825,594	-626,600	-510,647	-394,214	-43,326,922			
31															
32	ST Internal Merchant Rev (Dat2, L29)	-3,120,781	-98,120,372	-33,328,100	-13,554,717	-3,400,000	-2,562,266	-119,144	-112,700	-3,931,326	-1,693,972	-159,943,378			
33															
34	<b>Short Term Transmission Service Payments Between RTO West Filing Utilities</b>														
35		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	RTO West			
36	Paid (Dat3, L39)	2,047,292	36,264,861	3,523,781	22,413,850	1,268,619	0	2,544,046	3,506,902	3,129,872	3,579,000	78,278,222			
37															
38	Received (Dat3, L41)	-2,410,091	0	-46,543,400	-1,956,677	-3,590,904	-1,226,204	-13,764,922	-1,229,271	-5,389,718	-2,167,037	-78,278,222			
39															
40	<b>Net ST Adjustments</b>														
41		-3,860,696	-66,001,417	-89,595,019	3,275,058	-19,682,910	-4,687,209	-22,240,144	1,511,931	-6,806,359	-708,293	-208,795,058			
42															
43	<b>Pre RTO West Year 2000 Company Load Costs</b>														
44		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total			
45	<b>Company Load Net Cost</b>	8,503,862	327,131,165	242,207,287	52,960,659	57,988,315	64,903,867	188,311,760	66,286,406	68,137,116	52,129,584	1,128,560,020			
46	Rate for Company Load (\$/kwyr)	\$ 6.85	\$ 44.49	\$ 18.58	\$ 22.39	\$ 44.20	\$ 15.01	\$ 24.49	\$ 20.38	\$ 19.42	\$ 33.06	\$ 24.72			
47															
48															
49	<b>Illustrative Pricing Model Example: The data on these spreadsheets are provided to illustrate how components of the Stage 2</b>														
50	<b>RTO West pricing model operate in relationship to one another. They are for illustrative purposes only and cannot be relied</b>														
51	<b>upon to predict actual RTO West company rates or any of the individual components on which company rates will be based.</b>														
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
56	<b>RTO West Effects:</b>														
57															
58	<b>Pre RTO West Year 2000 Company Load Costs with LT Adjustments Only</b>														
59		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total			
60	<b>Company Load Cost, Net of LT</b>	12,364,558	393,132,582	331,802,306	49,685,601	77,671,225	69,591,075	210,551,904	64,774,475	74,943,475	52,837,877	1,337,355,078			
61	Rate for Company Load (\$/kwyr)	\$ 9.96	\$ 53.47	\$ 25.46	\$ 21.01	\$ 59.20	\$ 16.09	\$ 27.38	\$ 19.91	\$ 21.36	\$ 33.51	\$ 29.29			
62															
63	<b>Expired LT Contracts (Calc 3, Ln 15)</b>														
64	Revenue Short Fall	0	0	0	0	0	0	0	0	0	0	0			
65															
66	<b>Estimated Revenue from Replacement Revenue Pool (Calc 2, Line 10)</b>														
67	Revenue Pool Allocation	-2,787,207	-4,145,906	-59,790,700	-5,584,076	-17,551,529	-2,124,943	-24,665,046	-1,882,271	-6,004,906	-2,593,321	-127,129,905			
68															
69	<b>Post RTO West Company Load Access Charge (60+64+67)</b>														
70		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total			
71	<b>Company Load Cost, Net of LT</b>	9,577,351	388,986,676	272,011,606	44,101,525	60,119,696	67,466,132	185,886,858	62,892,204	68,938,569	50,244,556	1,210,225,173			
72	Rate for Company Load (\$/kwyr)	\$ 7.72	\$ 52.90	\$ 20.87	\$ 18.65	\$ 45.82	\$ 15.60	\$ 24.18	\$ 19.33	\$ 19.65	\$ 31.86	\$ 26.51			
73															
74	<b>Additional Adjustments:</b>														
75															
76	<b>Grid Management Fee Payment (Calc 1, Line 13)</b>														
77		3,485,899	20,654,163	36,611,771	6,643,152	3,685,334	12,148,681	21,597,218	9,137,494	9,856,583	4,429,704	128,249,999			
78															
79	<b>EIA &amp; Congestion Payments (Calc 1, Line 18)</b>														
80		2,047,292	36,264,862	3,523,781	22,413,851	1,268,619	0	2,544,046	3,506,902	3,129,872	3,579,000	78,278,225			
81															
82	<b>Affiliate Merchant EIA fees that occurred only on the affiliate's system (Line 32)</b>														
83		-3,120,781	-98,120,372	-33,328,100	-13,554,717	-3,400,000	-2,562,266	-119,144	-112,700	-3,931,326	-1,693,972	-159,943,378			
84															
85															
86															
87	<b>Post RTO West Company Load Net Cost</b>														
88		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total			
89	<b>Company Load Cost</b>	11,989,762	347,785,329	278,819,058	59,603,811	61,673,649	77,052,547	209,908,978	75,423,900	77,993,698	56,559,288	1,256,810,020			
90	Rate for Company Load	\$ 9.66	\$ 47.30	\$ 21.39	\$ 25.20	\$ 47.01	\$ 17.82	\$ 27.30	\$ 23.19	\$ 22.23	\$ 35.87	\$ 27.53			
91	*Increase from Line 46	\$ 2.81	\$ 2.81	\$ 2.81	\$ 2.81	\$ 2.81	\$ 2.81	\$ 2.81	\$ 2.81	\$ 2.81	\$ 2.81	\$ 2.81			
92															
93	<b>Company Load (Dat4, Ln16)</b>														
94	Demand (MW) (12 CP)	1,241	7,353	13,034	2,365	1,312	4,325	7,689	3,253	3,509	1,577	45,658			
95	Pre:						Post:								
96	Check: Net Rev Req Pre RTO Company Load Cost	1,128,560,020					Company Load Net Cost	1,256,810,020							
97	RTO West Op Cost	135,000,000					Pool Revenue from Non PTO's	48,851,680							
98	Lost Rev	43,326,922					GMC from others	6,750,000							
99	Out to NWPP	5,524,758					Excess FTO Revenue Beyond needs	1							
100	Total	1,312,411,700						1,312,411,700							
101															
102	<b>*The data from which these example company rates</b>														
103	<b>were derived are illustrative only and not indicative of what actual RTO West company rates are likely to be.</b>														
104															
105	<b>Illustrative Pricing Model Example: The data on these spreadsheets are provided to illustrate how components of the Stage 2</b>														
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**Dated 3\_29\_02**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	<b>Calculation Sheet 1</b>														
2	<b>Cost Allocations</b>														
3															
4															
5		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total			
6															
7		<b>Estimated RTO West Operating Cost (Assumption 0)</b>												135,000,000	
8		<b>Less - Excess FTO Revenue (Data 2, Line 37)</b>												(1)	
9		<b>Net RTO Operating Costs</b>												134,999,999	
10		<b>Percent of GMC Paid by PTO Schedulers</b>												Less 5% paid by other parties (Assumption 1)	0.95
11		<b>Estimated GMC Paid by PTOs</b>												128,249,999	
12		GMC - Load Ratio Share (Line 36)	0.0272	0.1610	0.2855	0.0518	0.0287	0.0947	0.1684	0.0712	0.0769	0.0345	1.00		
13		Distributed GMC Cost	3,485,899	20,654,163	36,611,771	6,643,152	3,685,334	12,148,681	21,597,218	9,137,494	9,856,583	4,429,704	128,249,999		
14															
15															
16		<b>Estimated EIA Fees and Congestion Payments paid by PTOs</b>													
17		Total Revenue Recovery Pool Collected (Calc 2 Ln 5)												127,129,905	
18		PTO Estimated Payments for EIA & Congestion	2,047,292	36,264,862	3,523,781	22,413,851	1,268,619	0	2,544,046	3,506,902	3,129,872	3,579,000	78,278,225		
19															
20		Distrib by STTP - Line 37	1.6%	28.5%	2.8%	17.6%	1.0%	0.0%	2.0%	2.8%	2.5%	2.8%	62%		
21		Paid by Non PTOs											48,851,680		
22															
23															
24															
25		<b>Assumptions:</b>	0.) Operating costs are derived from the average of the operating costs determined by the TCA Benefit cost study												
26			1.) \$ 84,109,140 Non-PTO historical use divided by total Revenue Requirement (\$1.590 Billion) 5.29%												
27			2.) 38% of EIA & Congestion Paid by parties other than PTO's - Based on Historic Short-Term												
28			3.) EIA Fees and Congestion Revenue of approx \$130 million roughly based on 2000 short-term transaction												
29															
30															
31		<b>Estimating Payment Distributions:</b>													
32															
33															
34			Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total		
35		Load 12 CP	1241	7353	13034	2365	1312	4325	7689	3253	3509	1577	45,658		
36		Load Ratio share	0.0271805	0.161046104	0.285471905	0.051798454	0.028735548	0.09472656	0.16839936	0.071247515	0.076854451	0.034539604	1		
37		ST Pmt Avg (Dat 5 line 60)	2,047,292	36,264,862	3,523,781	22,413,851	1,268,619	0	2,544,046	3,506,902	3,129,872	3,579,000	78,278,225		
38		Percent of Historical Short-term Payments	1.6%	28.5%	2.8%	17.6%	1.0%	0.0%	2.0%	2.8%	2.5%	2.8%	62%		
39															
40															
41															
42															
43		<b>Illustrative Pricing Model Example: The data on these spreadsheets are provided to illustrate how components of the Stage 2</b>													
44		<b>RTO West pricing model operate in relationship to one another. They are for illustrative purposes only and cannot be relied</b>													
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	<b>Calculation Sheet 2</b>													
2	<b>Calculation of Revenue Recovery Pool Allocations</b>													
3														
4														
5	<b>Pre-RTO West Short Term Transmission Service Payments Between RTO West Filing Utilities</b>													Total
6	Estimated External Interface Access Fee & Congestion Management Revenue beyond affiliated merchant use of own system													127,129,905
7	Carry over from prior year (over or (under) collection)													(100,000)
8	Back Stop Cumulative Recovery Total													127,029,905
9		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra			
10	Straight Allocation of Collections	2,787,207	4,145,906	59,790,700	5,584,076	17,551,529	2,124,943	24,665,046	1,882,271	6,004,906	2,593,321	127,129,905		
11	Cumulative Carry Over (over or (under) collection)													
12	Percentage Allocation	2.19%	3.26%	47.03%	4.39%	13.81%	1.67%	19.40%	1.48%	4.72%	2.04%	100.00%		
13														
14														
15														
16	Revenue Recovery Target Dollars													
17	Payment Received By :	Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total Recovery Revenue		
18	Short Term Total (Data 5 Ln 41)	2,787,207	4,145,906	59,790,700	5,584,076	17,551,529	2,124,943	24,665,046	1,882,271	6,004,906	2,593,321	127,129,905		
19	Expired Long Term (Calc 3 Ln 15)	0	0	0	0	0	0	0	0	0	0	0		
20	Total	2,787,207	4,145,906	59,790,700	5,584,076	17,551,529	2,124,943	24,665,046	1,882,271	6,004,906	2,593,321	127,129,905		
21														
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25	<b>Illustrative Pricing Model Example: The data on these spreadsheets are provided to illustrate how components of the Stage 2 RTO West pricing model operate in relationship to one another. They are for illustrative purposes only and cannot be relied upon to predict actual RTO West company rates or any of the individual components on which company rates will be based.</b>													
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1	<b>Calculation Sheet 3</b>												
2	<b>Long-Term Expiring Contracts</b>												
3													
4													
5	List of Expired Contracts after RTO Start-up:	Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total	
6													
7													
8													
9													
10													
11													
12													
13													
14													
15	Expired Long Term (to be added to the pool)	0	0	0	0	0	0	0	0	0	0	0	0
16													
17													
18	* Any Expired contract will be listed above with the Pre-RTO contract amount in the appropriate PTO's column												
19													
20	<div style="border: 1px solid black; padding: 5px;"> <b>Illustrative Pricing Model Example:</b> The data on these spreadsheets are provided to illustrate how components of the Stage 2 RTO West pricing model operate in relationship to one another. They are for illustrative purposes only and cannot be relied upon to predict actual RTO West company rates or any of the individual components on which company rates will be based.         </div>												
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1	<b>Data Input Sheet 1</b>													
2	<b>RTO West Transmission Revenue Requirements</b>													
3														
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Note to 23b: Account 565/567 - money paid for something that enables a transmission provider to provide transmission for sale (such as a payment to another utility to operate a phase shifter or an O&M payment). Does not include merchant payment for transmission service. Must be paid to an "external" party.

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1	<b>Data Input Sheet 2</b>													
2	<b>2000 Year Wheeling Service Revenue Credits</b>													
3														
4														
5	<b>Revenue from Long Term Non PTO to PTO External Contracts - Note 1</b>													
6		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total		
7	Received From:													
8	Party													0
9	Party													
10	Subtotal	2,206,236	1,400,894	9,829,900	1,191,117	5,276,176	82,081	14,295,684	0	435,471	539,901	35,257,460		
11														
12														
13	<b>Revenue from Short Term NWPP Wheeling - Note 2</b>													
14		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total		
15	Received From:													
16	Party													0
17	Party													
18	Subtotal	236,936	2,011,577	2,785,800	7,240	0	245,665	74,530	26,400	104,540	32,070	5,524,758		
19														
20	<b>Lost Revenues</b>													
21	ST Lost Rev	140,180	2,134,329	10,461,500	3,620,159	13,960,625	653,074	10,825,594	626,600	510,647	394,214	43,326,922		
22														
23	<b>Total Lost Revenue: (18+21)</b>	377,116	4,145,906	13,247,300	3,627,399	13,960,625	898,739	10,900,124	653,000	615,187	426,284	48,851,680		
24														
25														
26	<b>Merchant Payments - Note 3</b>													
27	Long Term	5,328,600	15,472,595	132,126,400	229,950	3,835,200	0	56,147,094	3,900,000	1,045,036		218,084,875		
28														
29	Short Term	3,120,781	98,120,372	33,328,100	13,554,717	3,400,000	2,562,266	119,144	112,700	3,931,326	1,693,972	159,943,378		
30														
31														
32	<b>Excess FTO Revenues</b>													
33	Excess FTO Revenue Collect by RTO West and not used for Redispatch Costs and not used in the Replacement Revenue Pool													
34														1
35														0
36														
37	Total FTO Rev	0	0	0	0	0	0	0	0	0	0	0	0	1
38														
39	Notes:													
40	1. Historic Revenue paid by party who is not a filing utility whether contract is converted or not. Does not include converted load service.													
41	2. Historic Revenue paid by party who is not a filing utility, but is a NWPP member. This is combined with the Lost Revenue from other parties to form the Total Lost Revenue on Line 23.													
42	3. Historic Payments made to utility by own or affiliated merchant function. Do not double count if serving load that pays Company Rate.													
43														
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	<b>Data Input Sheet 3</b>														
2	<b>Year 2000 Wheeling Between RTO West Filing Utilities (Transfer Payments)</b>														
3															
4															
5															
6	<b>Revenue from RTO West Parties for Long Term Wheeling (\$)</b>														
7	Payment Made By :	Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total			
8	Payment Received By :														
9	Avista		0	7,657,668	0		0	125,695	3,053,000	0	0	10,836,363			
10	BC Hydro	0		0	0		0	0	0	0	0	0			
11	BPA	9,736,300	15,196,550		952,550	3,123,249	0	43,127,111	36,048,400	38,277,548	0	146,461,708			
12	Idaho Power	0	0	4,973,693			0	8,756,647	0	0	23,625	13,753,965			
13	NorthWestern		0	2,698,028	204,000		0	0	0	0	0	2,902,028			
14	Nevada	0	0	0	0		0	0	0	0	0	0			
15	PacifiCorp		2,116,085	9,345,517	3,133,728		0	0	0	0	0	14,595,330			
16	P. G. E.	0	0	361,100	0		0	0	0	0	0	361,100			
17	Puget	25,880	0	0	0		0	0	0	0	0	25,880			
18	Sierra	0	0	4,694,307	0		0	0	0	0	0	4,694,307			
19															
20	Payment Made Total	9,762,180	17,312,635	29,730,313	4,290,278	3,123,249	0	52,009,452	39,101,400	38,277,548	23,625	193,630,680			
21															
22	Payment Received Total	10,836,363	0	146,461,708	13,753,965	2,902,028	0	14,595,330	361,100	25,880	4,694,307	193,630,680			
23															
24															
25	<b>Revenue from RTO West Parties for Short Term Wheeling (\$)</b>														
26	Payment Made By :	Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Total			
27	Payment Received By :														
28	Avista		194,321	339,106	1,427,266	143,450	0	271,666	0	34,282	0	2,410,091			
29	BC Hydro	0	0	0	0	0	0	0	0	0	0	0			
30	BPA	1,742,100	32,069,700	0	5,238,300	0	0	1,251,300	3,256,500	2,240,100	745,400	46,543,400			
31	Idaho Power	0	50,614	99,082	0	25,938	0	735,000	0	6,688	1,039,355	1,956,677			
32	NorthWestern	161,771	1,433,595	0	1,387,542		0	241,423	154,808	211,765	0	3,590,904			
33	Nevada	0	2,650	0	1,214,639	0	0	8,915	0	0	0	1,226,204			
34	PacifiCorp		753,043	555,084	10,448,382	113,676	0	95,246	5,246	1,794,245		13,764,922			
35	P. G. E.	129,100	451,427	0	13,985	18	0	2,950	0	631,791	0	1,229,271			
36	Puget	14,321	1,271,629	2,530,176	587,185	985,537	0	523	348	0	0	5,389,718			
37	Sierra	0	37,883	333	2,096,552	0	0	32,269	0	0	0	2,167,037			
38															
39	Payment Made Total	2,047,292	36,264,861	3,523,781	22,413,850	1,268,619	0	2,544,046	3,506,902	3,129,872	3,579,000	78,278,222			
40															
41	Payment Received Total	2,410,091	0	46,543,400	1,956,677	3,590,904	1,226,204	13,764,922	1,229,271	5,389,718	2,167,037	78,278,222			
42															
43															
44															
45															
46															
47	<b>Illustrative Pricing Model Example: The data on these spreadsheets are provided to illustrate how components of the Stage 2</b>														
48	<b>RTO West pricing model operate in relationship to one another. They are for illustrative purposes only and cannot be relied</b>														
49	<b>upon to predict actual RTO West company rates or any of the individual components on which company rates will be based.</b>														

**RTO WEST PRICING MODEL**  
**Illustrative Company Rate Calculation Spreadsheets**  
**Dated 3 29 02**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	<b>Data Input Sheet 4</b>													
2	<b>Loads and Billing Determinants</b>													
3														
4														
5														
6														
7														
8														
9														
10														
11	<b>Company Billing Determinants</b>													
12		Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	Pacificorp	PGE	Puget	Sierra	Total		
13	* Load expected to be served by company rate.													
14	Test Determinants	1,241	7,353	13,034	2,365	1,312	4,325	7,689	3,253	3,509	1,577	45,658		
15	Percentage of Total	2.7180%	16.1046%	28.5472%	5.1798%	2.8736%	9.4727%	16.8399%	7.1248%	7.6854%	3.4540%	100%		
16														
17														
18														
19	1999 data													
20														
21														
22	<b>Illustrative Pricing Model Example: The data on these spreadsheets are provided to illustrate how components of the Stage 2</b>													
23	<b>RTO West pricing model operate in relationship to one another. They are for illustrative purposes only and cannot be relied</b>													
24	<b>upon to predict actual RTO West company rates or any of the individual components on which company rates will be based.</b>													

**RTO WEST PRICING MODEL**  
**Illustrative Company Rate Calculation Spreadsheets**  
**Dated 3\_29\_02**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>Data Input Sheet 5</b>															
2	<b>Wheeling Between RTO West Filing Utilities (Transfer Payments)</b>															
3	<b>For Year 2000</b>															
4																
5																
23																
24																
25	<b>Revenue from RTO West Parties for Short Term Wheeling (\$) - Test Year 2000</b>															
26	Payment Received By :	Avista	BC Hydro	BPA	Idaho	NorthWestem	Nevada	PacifiCorp	PGE	Puget	Sierra	Total ST Revenue				
27	Payment Made By :															
28	Avista	0	0	1,742,100	0	161,771	0	0	129,100	14,321	0	2,047,292				
29	BC Hydro	194,321	0	32,069,700	50,614	1,433,595	2,650	753,043	451,427	1,271,629	37,883	36,264,862				
30	BPA	339,106	0	0	99,082	0	0	555,084	0	2,530,176	333	3,523,781				
31	Idaho Power	1,427,266	0	5,238,300	0	1,387,542	1,214,639	10,448,382	13,985	587,185	2,096,552	22,413,851				
32	NorthWestern	143,450	0	0	25,938	0	0	113,676	18	985,537	0	1,268,619				
33	Nevada	0	0	0	0	0	0	0	0	0	0	0				
34	PacifiCorp	271,666	0	1,251,300	735,000	241,423	8,915	0	2,950	523	32,269	2,544,046				
35	P. G. E.	0	0	3,256,500	0	154,808	0	95,246	0	348	0	3,506,902				
36	Puget	34,282	0	2,240,100	6,688	211,765	0	5,246	631,791	0	0	3,129,872				
37	Sierra	0	0	745,400	1,039,355	0	0	1,794,245	0	0	0	3,579,000				
38	Lost Rev	140,180	2,134,329	10,461,500	3,620,159	13,960,625	653,074	10,825,594	626,600	510,647	394,214	43,326,922				
39	NWPP	236,936	2,011,577	2,785,800	7,240	0	245,665	74,530	26,400	104,540	32,070	5,524,758				
40																
41	Total ST Revenue Received	2,787,207	4,145,906	59,790,700	5,584,076	17,551,529	2,124,943	24,665,046	1,882,271	6,004,906	2,593,321	127,129,905				
42	Percentage of ST Revenue	2.19%	3.26%	47.03%	4.39%	13.81%	1.67%	19.40%	1.48%	4.72%	2.04%	100.00%				
43																
44																
45																
46	<b>Payments to RTO West Parties for Short Term Wheeling (\$) - Test Year 2000</b>															
47	Payment Made By :	Avista	BC Hydro	BPA	Idaho	NorthWestern	Nevada	PacifiCorp	PGE	Puget	Sierra	Lost Revenue	NWPP	Total ST Revenue		
48	Payment Received By :															
49	Avista	0	194,321	339,106	1,427,266	143,450	0	271,666	0	34,282	0	140,180	236,936	2,787,207		
50	BC Hydro	0	0	0	0	0	0	0	0	0	0	2,134,329	2,011,577	4,145,906		
51	BPA	1,742,100	32,069,700	0	5,238,300	0	0	1,251,300	3,256,500	2,240,100	745,400	10,461,500	2,785,800	59,790,700		
52	Idaho Power	0	50,614	99,082	0	25,938	0	735,000	0	6,688	1,039,355	3,620,159	7,240	5,584,076		
53	NorthWestern	161,771	1,433,595	0	1,387,542	0	0	241,423	154,808	211,765	0	13,960,625	0	17,551,529		
54	Nevada	0	2,650	0	1,214,639	0	0	8,915	0	0	0	653,074	245,665	2,124,943		
55	PacifiCorp	0	753,043	555,084	10,448,382	113,676	0	0	95,246	5,246	1,794,245	10,825,594	74,530	24,665,046		
56	P. G. E.	129,100	451,427	0	13,985	18	0	2,950	0	631,791	0	626,600	26,400	1,882,271		
57	Puget	14,321	1,271,629	2,530,176	587,185	985,537	0	523	348	0	0	510,647	104,540	6,004,906		
58	Sierra	0	37,883	333	2,096,552	0	0	32,269	0	0	0	394,214	32,070	2,593,321		
59																
60	Total ST Revenue Paid	2,047,292	36,264,862	3,523,781	22,413,851	1,268,619	0	2,544,046	3,506,902	3,129,872	3,579,000	43,326,922	5,524,758	127,129,905		
61	Percentage of ST Paid	1.61%	28.53%	2.77%	17.63%	1.00%	0.00%	2.00%	2.76%	2.46%	2.82%	34.08%	4.35%	100.00%		
62																
63	<b>Illustrative Pricing Model Example: The data on these spreadsheets are provided to illustrate how components of the Stage 2</b>															
64	<b>RTO West pricing model operate in relationship to one another. They are for illustrative purposes only and cannot be relied</b>															
65	<b>upon to predict actual RTO West company rates or any of the individual components on which company rates will be based.</b>															

## **NARRATIVE EXPLANATION RELATING TO RTO WEST “STAGE 2” ILLUSTRATIVE COMPANY RATE CALCULATION SPREADSHEETS**

### **A. Overview.**

This document provides an explanation of the purpose for and approach to constructing the RTO West Stage 2 Illustrative Company Rate Calculation Spreadsheets (the “Illustrative Calculation Spreadsheets”) that are part of this Attachment E2 (most current version dated March 29, 2002). The Illustrative Calculation Spreadsheets are meant to convey, in numerical table format, how the terms of the RTO West Transmission Operating Agreement, Exhibits G, H, I, and J are to be implemented. Neither this document nor the Illustrative Calculation Spreadsheets are intended to explain the structure of the Stage 2 pricing proposal itself or the theory underlying that structure. Rather, this explanation presumes general familiarity with the pricing approach from Stage 2 of RTO West development and is intended only as a guide to the layout of the Illustrative Calculation Spreadsheets themselves. For more information, see the Description of RTO West Pricing Proposal, Attachment E1 to the Stage 2 Filing and Request for Declaratory Order Pursuant to Order 2000 in Docket No. RT01-35 (the “Stage 2 Filing”). (Capitalized terms used in this narrative are defined in the Stage 2 Filing; see generally the Description of RTO West Pricing Proposal or the RTO West Transmission Operating Agreement.)

### **B. Purpose.**

The Illustrative Calculation Spreadsheets are based on preliminary and estimated data that are not intended as a basis for projecting actual transmission pricing that would take effect when RTO West begins commercial operation. The purpose of the Illustrative Calculation Spreadsheets is to provide a means for demonstrating and evaluating the various elements of the Stage 2 pricing proposal and how those elements interact with one another. The central goal of the Illustrative Calculation Spreadsheets is to advance the reader’s understanding of the mechanics of the RTO West Stage 2 pricing proposal.

The data currently contained in the Illustrative Calculation Spreadsheets reflect 2000 data and filing utilities and their corporate configurations in 2000 (*e.g.*, the relationship between a Participating Transmission Owner (“PTO”) and its affiliates). To the extent that the test period for establishing revenue requirements or the reference period for establishing allocations from the Replacement Revenue Pool are updated, the model results will also change. The results would also change if the Initial Participating Transmission Owners were different from the Stage 2 filing utilities. The filing utilities intend that each filing utility will continue to honor the obligations and receive the benefits reflected in the Stage 2 Filing (*see* Stage 2 Filing letter at 19, n.17); therefore, a change in corporate configuration of a PTO alone should not affect the model results. The results are not intended as a basis for projecting actual transmission pricing that would take effect when RTO West begins commercial operations.

The filing utilities understand that one of the tasks necessary to launch commercial operation of RTO West will be for each participating utility and RTO West to complete appropriate filings to establish actual RTO West transmission service rates. The Illustrative Calculation Spreadsheets are not meant to form the basis for any Section 205 filings, however. The filing utilities anticipate that data sufficient to project actual transmission access and service charges applicable to RTO West operations will be produced later in the RTO West development process.

**C. Comparison Between the Open Access Transmission Tariff Rate and the RTO West Company Rate.**

The illustrative Company Rates developed according to the RTO West pricing proposal should not be compared to the Open Access Transmission Tariff (“OATT”) rates because the Company Rates are not equivalent to the transmission rates developed for OATT service. First, different test periods may be used in current OATT rates and in the Illustrative Calculation Spreadsheets, the latter of which is based on 2000 data. Second, some of the filing utilities have not revised their OATT rates recently, and thus their RTO West revenue requirements may include additional new facilities not currently covered under existing OATT rates.

Third, the Company Rates can generally be expected to be higher than the OATT rates, even after subtracting the RTO West operating costs. This reflects, in part, the fact that Company Rates are intended to recover from Company Loads all of the transmission costs currently recovered in delivering power to those loads, not just the transmission costs associated with a filing utility’s use of its own transmission facilities.

In establishing the RTO West pricing methodology, the underlying objective is to keep the dollar amounts recovered from loads consistent with current practices but to recover those same dollar amounts through a different methodology. For the investor-owned utilities, the Company Rate is similar to the portion of the utility’s retail rate that recovers transmission costs. This comparison can easily be seen in two places on the Illustrative Calculation Spreadsheets Summary Pages. The amount a PTO pays other filing utilities for transmission is not included in the revenue requirement for calculating the OATT rates. On line 14, however, this amount is added to the Revenue Requirement for calculating the Company Rate, just as these costs are included in the utility’s retail rates.

Lastly, the Illustrative Calculation Spreadsheets Summary Pages use a 12 CP (the average of 12 monthly coincident peaks) billing determinant (shown on line 94) to calculate the Company Rate (on line 72). This may lead to differences when comparing the illustrative Company Rate to the portion of the current retail rate that recovers transmission costs because some investor-owned utilities currently calculate their Point-to-Point Transmission rate using a one-CP (annual peak) divisor. The use of 12 CP billing determinant results in a lower divisor and a higher apparent \$/kW-year rate.

## **D. Summary Pages of the Pricing Matrix.**

The Summary Pages (pages 1 and 2) of the Illustrative Calculation Spreadsheets lay out the main elements of the RTO West Stage 2 pricing proposal. They show an approximation of each filing utility's revenue requirement (based on 2000 data) relating to the facilities the particular filing utility expects to include as part of RTO West's Transmission System.<sup>1</sup> The Summary Pages also show anticipated "transfer payments" to be made among the filing utilities, which are intended to capture pre-RTO West revenues related to long-term transmission agreements and tariff usage. The Summary Pages also illustrate how RTO West's own projected operating expenses, as well as the Replacement Revenues (that is, pooled Northwest Power Pool ("NWPP") Revenues, Short-Term Revenues, and Other Lost Revenues), will be recovered. Most of the elements contained in the Summary Pages are carried over from Calculation Sheets (sheets 1-3) or Data Input Sheets (sheets 1-5) included with the Illustrative Calculation Spreadsheets. A more detailed explanation of each of the components of the Summary Pages is provided below under "Explanation of Summary Pages," Section F.

## **E. Calculation Sheets and Data Input Sheets.**

The Calculation Sheets (sheets 1-3) and Data Input Sheets (sheets 1-5) included with the Illustrative Calculation Spreadsheets provide details for most of the entries on the Summary Pages. Explanations of the purpose and contents of each of the Data Input Sheets and Calculation Sheets are set out below under the headings for each of the individual sheets.

## **F. Explanation of Summary Pages.**

### **F.1 Transmission Revenue Requirement (Line 4).**

The first entry on page 1 of the Summary Pages (line 4) sets out preliminary gross revenue requirement figures for each of the filing utilities. The basis for calculating each filing utility's revenue requirement is laid out in Data Input Sheet 1. The totals shown on Data Input Sheet 1, line 24 are carried over to line 4 of the Summary Pages. Line 4 of the Summary Pages represents an approximation of each filing utility's revenue requirement (based on 2000 data) solely for those transmission facilities that a given filing utility expects to include as part of the RTO West Transmission System. For use in calculating the External Interface Access Fee ("EIAF"), RTO West will use the sum of the Transmission Revenue Requirements.

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<sup>1</sup> Entries on the Summary Pages that are shown as negative values are so designated to show that amounts represented will be treated as revenue credits against a PTO's revenue requirement. (See lines 8, 10, 16, 19, 28, 30, 32, 38, 41, 67, and 83.)

F.2 Long-Term Adjustments – External Revenue Credit (Line 8).

The entries on line 8 on page 1 of the Summary Pages show a credit for total revenues that each filing utility receives from long-term “external” transmission contracts (again for illustration only, based on 2000 data). For purposes of this element of the Illustrative Calculation Spreadsheets, “external” means that the contract or tariff schedule under which a particular filing utility receives these revenues (1) is not with another filing utility and (2) does not cover any long-term arrangements a given filing utility has with its own merchant function. Each of the types of revenues excluded from line 8 of the Summary Pages is picked up as another separate entry somewhere else on the Illustrative Calculation Spreadsheets. The line 8 entries also do not include any revenues received through sales of short-term transmission service. The calculations for the numbers set out on line 8 of the Summary Pages are shown on Data Input Sheet 2 (totals at Data Input Sheet 2, line 10).

F.3 Long-Term Adjustments – Merchant Revenue Credit Long Term (Line 10).

The entries on line 10 on page 1 of the Summary Pages show a credit for revenues that each filing utility receives under long-term transmission service arrangements with its own merchant function (based on 2000 data). These long-term merchant function revenues do not include those related to a filing utility’s use, by its merchant function, of the filing utility’s transmission system to serve the filing utility’s own load. The entries on line 10 of the Summary Pages are carried over from Data Input Sheet 2 (totals at Data Input Sheet 2, line 27).

F.4 Long-Term Transmission Service Payments Between RTO West Filing Utilities – Paid (Line 14).

The entries on line 14 on page 1 of the Summary Pages show approximately how much each filing utility paid, under long-term transmission arrangements, to all of the other filing utilities during 2000. The entries on line 14 do not include amounts paid for short-term transactions. The calculations for the numbers set out on line 14 of the Summary Pages are shown on Data Input Sheet 3 (totals at Data Input Sheet 3, line 20).

F.5 Long-Term Transmission Service Payments Between RTO West Filing Utilities – Received (Line 16).

The entries on line 16 on page 1 of the Summary Pages show approximately how much each filing utility received, under long-term transmission arrangements, from all of the other filing utilities during 2000. The entries on line 16 do not include revenues received from short-term transactions. The calculations for the numbers set out on line 16 of the Summary Pages are shown on Data Input Sheet 3 (totals at Data Input Sheet 3, line 22).

F.6 Net Long-Term Adjustments (Line 19).

The entries on line 19 on page 1 of the Summary Pages are a summation of all adjustments based on long-term transmission revenues and payments that are to be applied to each filing utility's gross revenue requirement. Line 19 is the summation of the entries shown on lines 8-16 on page 1 of the Summary Pages.

F.7 Pre-RTO West Company Load Costs – Long-Term Adjusted (Line 23).

The entries on line 23 on page 1 of the Summary Pages show the gross revenue requirement (line 4), with adjustments for long-term transactions (line 19).

F.8 Pre-RTO West Company Load Rates – Long-Term Adjusted (Line 24).

The entries on line 24 on page 1 of the Summary Pages show the per unit Company Load Rates (\$/kW-year) based on line 23 divided by the appropriate Company Load (line 94).

F.9 Short-Term Adjustments – NWPP Revenue Credit (Line 28).

The entries on line 28 on page 1 of the Summary Pages represent revenues that each of the filing utilities received during 2000 through short-term transmission services to utilities within the NWPP area, excluding other filing utilities. The source is Data Input Sheet 2, line 18. In the Stage 1 proposal, this revenue was to be collected as a separate transfer payment or access charge to all loads within RTO West. In the Stage 2 proposal, this revenue is pooled with other historical short-term revenues and collected via the EIAF and excess revenue from the congestion management process.

F.10 Short-Term Adjustments – Other Lost Revenue Credit (Line 30).

The entries on line 30 on page 1 of the Summary Pages represent revenues that each of the filing utilities received during 2000 through short-term transmission services to parties that are neither utilities within the NWPP area nor other filing utilities. These revenues are characterized as "Other Lost Revenues" because there will be no direct means for filing utilities to continue to receive these revenues from the parties that previously paid them. They are not associated with contracts or other obligations that will remain in place (or be converted in some fashion) after RTO West commences operation. Under the Stage 2 proposal, this shortfall will be pooled with other historical short-term revenues to establish a Revenue Recovery Target and collected via the EIAF and excess revenue from the congestion management process. The entries on line 30 are carried forward from Data Input Sheet 2, line 21.

F.11 Short-Term Adjustments – Merchant Revenue Credit (Line 32).

The entries on line 32 on page 1 of the Summary Pages represent revenues that each filing utility received during 2000 through short-term usage of its transmission facilities by its internal or affiliated merchant function. The revenues do not include transactions a merchant function carried out to serve the filing utility's own load. The entries on line 32 are from Data Input Sheet 2, line 29.

F.12 Short-Term Transmission Service Payments Between RTO West Filing Utilities – Paid (Line 36).

The entries on line 36 on page 1 of the Summary Pages show approximately how much each filing utility paid, for short-term transmission service, to all of the other filing utilities during 2000. The calculations for the numbers set out on line 36 of the Summary Pages are shown on Data Input Sheet 3, line 39.

F.13 Short-Term Transmission Service Payments Between RTO West Filing Utilities – Received (Line 38).

The entries on line 38 on page 1 of the Summary Pages show approximately how much each filing utility received, through providing short-term transmission service, from all of the other filing utilities during 2000. The calculations for the numbers set out on line 38 of the Summary Pages are shown on Data Input Sheet 3, line 41.

F.14 Net Short-Term Adjustments (Line 41).

The entries on line 41 on page 1 of the Summary Pages are a summation of all adjustments based on short-term transmission revenues and payments that are to be applied to each filing utility's gross revenue requirement. Line 41 is the summation of the entries shown on lines 28-38 on page 1 of the Summary Pages.

F.15 Pre-RTO West Company Load Costs (Line 45).

The entries on line 45 on page 1 of the Summary Pages represent a summation of the entries on lines 4, 19, and 41 on page 1 of the Summary Pages. These numbers are designed to show, roughly, what each filing utility's loads paid for transmission service during 2000. These figures are intended to reflect each filing utility's net costs after adjustments for long-term and short-term transmission service payments, and they do not include any costs or effects resulting from RTO West's role in operating the RTO West Transmission System.

F.16 Pre-RTO West Company Rates in \$/kW-year (Line 46).

The entries on line 46 on page 1 of the Summary Pages are for comparison purposes. They are intended to help identify the \$/kW-year effect of RTO West's operations, as distinct from underlying cost-recovery elements attributable to each filing utility. The results are derived by taking the pre-RTO West Company Load Costs shown on line 45 and dividing them by the Company Loads shown on line 94 of the Summary Pages.

F.17 RTO West Effects – Pre-RTO West Cost with Long-Term Adjustment (Lines 60 and 61).

Lines 60 and 61 of the Summary Pages repeat the entries from lines 23 and 24. This analysis uses the filing utilities' long-term positions as a starting point for calculating the effects on Company Costs of RTO West operation. Lines 60-90 illustrate the impact that RTO West's operational costs will have on these rates.

F.18 RTO West Effects – Expired Long-Term Contracts (Line 64).

The entries on line 64 on page 2 of the Summary Pages show the effects of revenues lost after RTO West start-up, as a result of long-term contracts expiring during the Company Rate Period. Because the analysis uses the filing utilities' long-term positions as a starting point, any expiring long-term contracts must have a corresponding adjustment. The entries on line 64 are from Calculation Sheet 3, line 15.

F.19 RTO West Effects – Estimated Revenue from Replacement Revenue Pool (Line 67).

The entries on line 67 on page 2 of the Summary Pages represent an example allocation among the filing utilities of the revenue from the Replacement Revenue Pool (collected from the EIAF and excess Congestion Management revenues). The entries on line 67 are from Calculation Sheet 2, line 10. The allocation among the PTOs of the available Replacement Revenue Pool is set by historic Short-Term revenues and expired Long-Term contracts.

F.20 Post-RTO West Company Load Access Charge (Line 71).

Line 71 approximates the amounts that each PTO's Company Loads will pay through a load access charge. The entries on line 71 on page 2 of the Summary Pages represent a summation of the entries on lines 60, 64, and 67 on page 2 of the Summary Pages. They are derived by taking the long-term positions of each PTO (compiled from revenue requirements and long-term contracts) and adjusting for expired long-term contracts and revenue flowing from the Replacement Revenue Pool. The remainder of the RTO West cost is collected through the Grid Management Charge ("GMC"), Financial Transmission Options ("FTO") rights auctions, congestion settlements, and internal merchant payments, as explained below.

F.21 Post-RTO West Company Access Charge Rates \$/kW-year (Line 72).

Line 72 on page 2 of the Summary Pages shows the results of dividing the post-RTO West Company Load Access Charges for each filing utility (line 71) by each filing utility's Company Loads (line 94), which yields an illustrative dollar amount per kW-year. Line 72 illustrates what a PTO Company Rate would be, based on 2000 data and the assumptions in this illustration.

F.22 RTO West Effects – Grid Management Charge Payment (Line 77).

In this Stage 2 pricing proposal, RTO West's administrative and operating costs, including the start-up and development costs incurred in establishing RTO West, are collected through the GMC. The GMC will be a dollar-per-megawatt-hour (\$/MW-hour) charge levied on all schedules submitted to RTO West by an RTO West Customer. The costs are based on a theoretical annual operating cost (including amortization of start-up expenses) of \$135 million.<sup>2</sup> The entries on line 77 on page 2 of the Summary Pages represent an example allocation among the filing utilities of RTO West's own operating costs as reflected on Calculation Sheet 1, line 13.

F.23 RTO West Effects – EIAF and Congestion Payments (Line 80).

The EIAF is a postage stamp rate based upon the average cost of the RTO West Transmission System. It is based upon the total RTO West Transmission Revenue Requirement (line 4 of the Summary Pages) divided by the sum of the total Company Loads (line 94) and export MWs (estimated at 4,500 MW for rate illustration). The EIAF revenue, along with revenue from FTO purchases and congestion payments in excess of the redispatch cost, constitute the Revenue Replacement Pool. In addition, RTO West may implement a Backstop-Recovery Mechanism, as described in the Stage 2 Filing Pricing Proposal (Attachment E1). (The Backstop Recovery Mechanism is not included in the illustrative modeling.) To the extent that PTOs pay any of these fees, it constitutes part of the RTO West cost to each PTO and is shown on line 80 of the Summary Pages. The source for line 80 is Calculation Sheet 1, line 18. The model uses the historical (year 2000) short-term payments paid by PTOs as a percentage of all short-term payments in order to estimate the PTO payments for these three types of costs. (In other words, the model simply assumes that the EIAF alone, or in combination with excess Congestion Management payments, will collect sufficient revenues to meet the Revenue Replacement Target.)

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<sup>2</sup> Tabors Caramanis & Associates ("TCA") was hired by the filing utilities for the purpose of evaluating the benefits and costs associated with operating an RTO. That study ("RTO West Benefit/Cost Study," published March 11, 2002) indicated that, on average, "the cost to operate an RTO would be approximately . . . \$127 to \$143 million per year, including the amortized start-up costs of the RTO."

F.24 RTO West Effects – Affiliated Merchant EIAF and Transfer Payments (Line 83).

Line 83 of the Summary Pages is the same as line 32, the internal payments by each PTO's affiliated merchant. The line is repeated here to make it easier to compare the net post-RTO West Company Load cost (line 89) to the net pre-RTO West cost (line 45). The source for line 83 is line 32 of the Summary Pages. The Revenue Recovery Target does not include revenues from affiliated merchants of PTOs. This lowers the Revenue Recovery Target; however, for symmetrical treatment, future usage by affiliated merchants should be directly credited against a PTO's revenue requirement. For this reason, when a PTO's affiliated merchant uses External Interface Access at an External Interface Point located on the facilities owned by a PTO, the EIAF will not go into the Replacement Revenue Pool, but instead will be credited directly to the PTO to reduce its revenue requirement.

F.25 Post-RTO West Company Load Cost (Line 89).

The entries on line 89 on page 2 of the Summary Pages represent a summation of example Company Load costs after including the entries designed to capture RTO West costs and effects. The entries on line 89 are derived by adding the amounts on lines 77-83 to the numbers on line 71.

F.26 Post-RTO West Company Rates in \$/kW-year (Line 90).

Line 90 on page 2 of the Summary Pages shows the results of dividing the post-RTO West Company Load costs for each filing utility (line 89) by each filing utility's Company Load (line 94), which yields an illustrative dollar amount per kW-year.

F.27 Company Load (Line 94).

The entries on line 94 on page 2 of the Summary Pages show illustrative billing determinants for recovery of each filing utility's Company Load costs. The billing determinants are based on 12 monthly coincident peaks over a year, although the Bonneville Power Administration ("Bonneville") has indicated that it may have a Company Rate structure that applies different billing determinants to different customer groups within the Bonneville Company Load. The demand figures on line 94 reflect 2000 data. The entries on line 94 are from Data Input Sheet 4, line 14. In calculating the EIAF, RTO West will use the sum of the RTO West Company Loads and the export loads. For purposes of the Illustrative Calculation Spreadsheets, Company Loads are calculated based on 2000 data and export loads are assumed to be 4,500 MW.

**G. Explanation of Calculation Sheet 1.**

G.1 Grid Management Charge.

The first calculation (lines 7-13) on this sheet determines the total amount to be recovered through a GMC and estimates how that charge will be distributed among the PTOs and other

users of the RTO West Transmission System. Line 7 is the estimated cost of operating RTO West as reported in the TCA Benefit/Cost Study. Line 8 contains a \$1 credit to illustrate a GMC reduction option RTO West would have available if RTO West collects excess revenues through the congestion management process and the EIAFs. Line 11 estimates the amount of the GMC paid by the PTOs based on their historic use of the system after the reduction for the percentage paid by non-PTO users. Line 11 is the PTO share calculated in line 10 multiplied by the net RTO West operating costs in line 9. Line 13 is an estimated allocation of the GMC to PTOs based on their relative load ratio share (line 12).

The GMC will be a scheduling fee applied to all schedules, including schedules to load, schedules between generators, schedules for export, etc. The fee will apply to all parties submitting schedules, whether or not they are PTOs. The distribution of payment of the GMC is estimated and is not intended to show the results of actual schedules. For the purposes of the Illustrative Calculation Spreadsheets:

- Five percent of the schedules, and hence the GMC, are assumed to come from parties that are not PTOs. This amount is excluded from the calculation.
- The remaining GMC is estimated to be distributed among PTOs in proportion to the size of each PTO's load. This calculation uses the same 12 CP determinant that is compiled on Data Input Sheet 4.

The individual PTO results on line 13 carry over to line 77 on page 2 of the Summary Pages.

#### G.2 Estimated EIAF and Congestion Payments Paid by PTOs.

The next calculation (lines 16-21 on Calculation Sheet 1) is an estimate of how much of the revenue generated by FTO sales, the EIAF, and congestion clearing will come from PTOs and how those payments will be allocated among the PTOs. For illustrative purposes, the use is assumed to mirror historic short-term use. Therefore, the allocation is based on the historic short-term payments by the PTOs as a percent of the total short-term payments (not including merchants' payments to their affiliated PTOs). Line 20 shows the relative share for each PTO of the historical short-term transactions. Line 20 is multiplied by the Total Revenue Recovery Pool dollars collected (line 17), and the result is in line 18. Line 18 is carried over to line 80 on page 2 of the Summary Pages.

#### G.3 Estimated Payment Distributions.

The final section of Calculation Sheet 1 (lines 34-38) brings the load data forward from Data Input Sheet 4 and the short-term use data forward from Data Input Sheet 5.

### **H. Explanation of Calculation Sheet 2.**

This sheet calculates the allocation of the EIAFs and the excess congestion management revenues. Line 6 is the estimated net revenues received by RTO West from these sources. The

revenues are estimated based on the actual short-term revenues collected in 2000. Line 7 shows the total over- or, in this case, under-recovery of the revenue recovery pool target since RTO West start-up. For illustrative purposes only, a shortfall of \$100,000 was used in the spreadsheet. Line 8 shows the cumulative recovery total. Line 8 would be used to determine whether the Backstop Recovery Mechanism must be initiated. The Backstop Recovery Mechanism will be designed and implemented by RTO West; therefore, no attempt has been made to model the mechanism.

Line 10 of Calculation Sheet 2 allocates the dollars collected (line 6) by each PTO's percentage allocation from line 12. Line 12 is the result of taking each PTO's Revenue Recovery Target (line 20) and dividing by the total for all PTOs. Line 18 is the total short-term revenue that the PTO received in the reference period (year 2000 for illustrative purposes). The entries on line 18 are from Data Input Sheet 5, line 41. The entries on line 19 are the total of all expired long-term contracts for each PTO and come from Calculation Sheet 3, line 15. Line 10 of Calculation Sheet 2 is carried forward to line 67 on page 2 of the Summary Pages.

#### **I. Explanation of Calculation Sheet 3.**

This sheet allows for the input of individual, expired long-term contracts in lines 6-14. The total of all expired long-term contracts is carried forward to line 64 on page 2 of the Summary Pages as an addition to the Company Load costs for each PTO. The total is also used on Calculation Sheet 2, line 19 as one component of the Revenue Recovery Target. For illustrative purposes, no contracts were assumed to have expired.

#### **J. Explanation of Data Input Sheet 1.**

Data Input Sheet 1 shows a breakdown of the components used to derive each filing utility's gross revenue requirement for facilities included in RTO West. In most cases (but not all), these data are based on 2000 costs and transactions. The year or years to which gross revenue figures relate are shown at the top of each column. The results of the computations on Data Input Sheet 1 are carried over to line 4 on page 1 of the Summary Pages.

#### **K. Explanation of Data Input Sheet 2.**

Data Input Sheet 2 is where each filing utility's revenues from providing transmission service to third parties are shown. The entries shown on line 10 represent revenues received by each filing utility during 2000 from long-term transmission arrangements with parties *other than* (1) other filing utilities and (2) a given filing utility's own merchant function. The totals on line 10 of Data Input Sheet 2 are carried over to line 8 on page 1 of the Summary Pages. These revenues will not be recovered under the Stage 2 pricing methodology and become part of the calculation of the Revenue Recovery Target.

The entries shown on line 18 represent revenues generated from each filing utility's short-term transmission sales to parties within the NWPP (excluding other filing utilities). The totals on line 18 of Data Input Sheet 2 are carried over to line 28 on page 1 of the Summary Pages.

The entries on line 21 represent revenues that each filing utility received during 2000 through short-term transmission services to parties that are neither utilities within the NWPP area nor other filing utilities. These revenues are characterized as “Other Lost Revenues” because, under the Stage 2 RTO West pricing proposal, there will be no means for filing utilities to continue to receive these revenues from the parties that previously paid them. These revenues are not associated with contracts or other obligations that will remain in place (or be converted in some fashion) after RTO West commences operation. The totals on line 21 of Data Input Sheet 2 are carried over to line 30 on page 1 of the Summary Pages.

The entries on line 27 represent revenues that each filing utility receives from its own merchant function in connection with long-term transactions that do *not* relate to serving the filing utility’s own load. The totals on line 27 of Data Input Sheet 2 are carried over to line 10 on page 1 of the Summary Pages.

The entries on line 29 represent revenues that each filing utility receives from its own merchant function in connection with short-term transactions that do *not* relate to serving the filing utility’s own load. The totals on line 29 of Data Input Sheet 2 are carried over to line 32 on page 1 of the Summary Pages.

Line 33 of Data Input Sheet 2 represents example excess revenues from FTO sales or EIAF collections that need to be allocated back out. For illustrative purposes, \$1 was input to illustrate a GMC reduction option that RTO West will have available if it collects excess revenues through the congestion management process and the EIAF. Line 33 carries over to Calculation Sheet 1, line 8.

**L. Explanation of Data Input Sheet 3.**

Data Input Sheet 3 shows the revenues that each filing utility paid to and received from other filing utilities during 2000. The first table shows activity associated with long-term transmission service, while the second table shows activity associated with short-term transmission service. The long-term paid totals on line 20 are carried over to line 14 on page 1 of the Summary Pages. The long-term received totals on line 22 of Data Input Sheet 3 are carried over to line 16 on page 1 of the Summary Pages. The second table shows the short-term activity between PTOs. The short-term paid totals on line 39 of Data Input Sheet 3 are carried over to line 36 on page 1 of the Summary Pages. The short-term received totals on line 41 of Data Input Sheet 3 are carried over to line 38 on page 1 of the Summary Pages.

**M. Explanation of Data Input Sheet 4.**

Data Input Sheet 4 shows the calculations used to derive test billing determinants for the Company Rate figures. Bonneville has indicated that it may have a Company Rate structure that applies different billing determinants to different customer groups within the Bonneville Company Load. The billing determinants shown on line 14 of Data Input Sheet 4 are carried over to line 94 on page 2 of the Summary Pages.

**N. Explanation of Data Input Sheet 5.**

Data Input Sheet 5 establishes the Revenue Recovery Target. It is very similar to Data Input Sheet 3 in that it shows the short-term revenues that each filing utility paid to and received from other filing utilities during 2000. The difference is that Data Input Sheet 5 combines information from Data Input Sheet 2 for short-term NWPP and lost revenue with the PTO-to-PTO payments, allowing a complete view of the short-term revenue received by each PTO. Line 41 of Data Input Sheet 5 is carried over to line 18 of Calculation Sheet 2 as a component of the Revenue Recovery Target. Line 60 is carried over to line 37 of Calculation Sheet 1.