

Appendix H

Avoided Cost

2018 OR IRP Final

Appendix H  
Avoided Cost  
Results are in \$/therm

					Distribution		System Total Avoided			System Total	
	Fixed Transportation Costs	Variable Transportation Costs	Fixed Storage Costs	Variable Storage Costs	Commodity Cost	System Cost	Risk Premium	Carbon Adder	Cost (Nominal)	Avoided Cost (Real)	
2018	0.0305	0.0017	0.002	0.00019	0.350944684	0	0	0.1	0.423868153	0.398559617	
2019	0.1369	0.002541816	0.002	0.00019	0.399202196	0	0	0.1	0.594917414	0.525995093	
2020	0.1369	0.002541816	0.002	0.00019	0.484061832	0	0	0.1	0.688263013	0.57219222	
2021	0.1369	0.002541816	0.002	0.00019	0.557774211	0	0	0.1	0.76934663	0.601411986	
2022	0.140130292	0.002601793	0.002047192	0.000194483	0.621542305	0	0	0.1	0.843167672	0.619764185	
2023	0.140130292	0.002601793	0.002047192	0.000194483	0.693478733	0	0	0.1	0.922297743	0.637450081	
2024	0.140130292	0.002601793	0.002047192	0.000194483	0.799488816	0	0	0.1	1.044050343	0.690981311	
2025	0.140130292	0.002601793	0.002047192	0.000194483	0.727178832	0	0	0.1	0.959367852	0.586253175	
2026	0.144648233	0.002685677	0.002113196	0.000200754	0.736982874	0	0	0.1	0.975293806	0.56039986	
2027	0.144648233	0.002685677	0.002113196	0.000200754	0.756181276	0	0	0.1	0.996412049	0.538349146	
2028	0.144648233	0.002685677	0.002113196	0.000200754	0.770469101	0	0	0.1	1.012128656	0.514189595	
2029	0.144648233	0.002685677	0.002113196	0.000200754	0.799488816	0	0	0.1	1.044050343	0.498736909	
2030	0.149928472	0.002783715	0.002190336	0.000208082	0.810386073	0	0	0.1	1.062046346	0.47704137	
2031	0.149928472	0.002783715	0.002190336	0.000208082	0.827386931	0	0	0.1	1.080747289	0.456456332	
2032	0.149928472	0.002783715	0.002190336	0.000208082	0.843742459	0	0	0.1	1.09873837	0.436346883	
2033	0.149928472	0.002783715	0.002190336	0.000208082	0.845870177	0	0	0.1	1.10107886	0.411167251	
2034	0.155630402	0.002889583	0.002273636	0.000215995	0.84721031	0	0	0.1	1.109041919	0.389413102	
2035	0.155630402	0.002889583	0.002273636	0.000215995	0.862945902	0	0	0.1	1.12635107	0.371876624	
2036	0.155630402	0.002889583	0.002273636	0.000215995	0.854291659	0	0	0.1	1.116831403	0.346717072	
2037	0.155630402	0.002889583	0.002273636	0.000215995	0.86935556	0	0	0.1	1.133401738	0.330852171	
2038	0.161603808	0.003000491	0.002360903	0.000224286	0.881992516	0	0	0.1	1.154100203	0.316778821	
2039	0.161603808	0.003000491	0.002360903	0.000224286	0.902696713	0	0	0.1	1.176874821	0.303742384	
2040	0.161603808	0.003000491	0.002360903	0.000224286	0.916893979	0	0	0.1	1.192491813	0.289396343	
2041	0.161603808	0.003000491	0.002360903	0.000224286	0.926062919	0	0	0.1	1.202577647	0.274418424	
2042	0.167806485	0.003115655	0.002451519	0.000232894	0.935323548	0	0	0.1	1.219823113	0.261733614	
2043	0.167806485	0.003115655	0.002451519	0.000232894	0.944676784	0	0	0.1	1.230111672	0.248181662	
2044	0.167806485	0.003115655	0.002451519	0.000232894	0.954123552	0	0	0.1	1.240503117	0.235334654	
2045	0.167806485	0.003115655	0.002451519	0.000232894	0.963664787	0	0	0.1	1.250998476	0.223155164	
2046	0.174247234	0.003235241	0.002545613	0.000241833	0.973301435	0	0	0.1	1.268928492	0.212838317	
2047	0.174247234	0.003235241	0.002545613	0.000241833	0.983034449	0	0	0.1	1.279634808	0.201818613	
2048	0.174247234	0.003235241	0.002545613	0.000241833	0.992864794	0	0	0.1	1.290448186	0.191371936	
2049	0.174247234	0.003235241	0.002545613	0.000241833	1.002793442	0	0	0.1	1.301369699	0.181468343	
2050	0.180935191	0.003359416	0.002643319	0.000251115	1.012821376	0	0	0.1	1.320011459	0.173077412	
2051	0.180935191	0.003359416	0.002643319	0.000251115	1.02294959	0	0	0.1	1.331152494	0.164116787	
2052	0.180935191	0.003359416	0.002643319	0.000251115	1.033179086	0	0	0.1	1.34240494	0.15562209	
2053	0.180935191	0.003359416	0.002643319	0.000251115	1.043510877	0	0	0.1	1.35376991	0.147568976	
2054	0.187879846	0.003488357	0.002744775	0.000260754	1.053945985	0	0	0.1	1.373151688	0.140744434	
2055	0.187879846	0.003488357	0.002744775	0.000260754	1.064485445	0	0	0.1	1.384745094	0.133448136	
2056	0.187879846	0.003488357	0.002744775	0.000260754	1.0751303	0	0	0.1	1.396454434	0.126550683	
2057	0.187879846	0.003488357	0.002744775	0.000260754	1.085881603	0	0	0.1	1.408280867	0.120002283	
2058	0.19509105	0.003622247	0.002850125	0.000270762	1.096740419	0	0	0.1	1.428432063	0.114451721	
2059	0.19509105	0.003622247	0.002850125	0.000270762	1.107707823	0	0	0.1	1.440496207	0.108526891	
2060	0.19509105	0.003622247	0.002850125	0.000270762	1.118784901	0	0	0.1	1.452680993	0.1029101	
2061	0.19509105	0.003622247	0.002850125	0.000270762	1.12997275	0	0	0.1	1.464987627	0.097585257	
2062	0.202579035	0.003761276	0.002959518	0.000281154	1.141272478	0	0	0.1	1.485938807	0.093070851	
2063	0.202579035	0.003761276	0.002959518	0.000281154	1.152685202	0	0	0.1	1.498492804	0.088253091	
			Discount Rate	0.0635							

Appendix H  
 Avoided Cost  
 Results are in \$/therm

	Fixed Transportation Costs	Variable Transportation Costs	Fixed Storage Costs	Variable Storage Costs	Commodity Cost	Distribution System Cost	Risk Premium	Carbon Adder	Zone 1 Total Avoided Cost (Nominal)	Zone 1 Total Avoided Cost (Real)
2018	0.039249	0.003	0.002	0.00019	0.350944684	0	0	0.1	0.434922053	0.408953505
2019	0.061165	0.003	0.002	0.00019	0.399202196	0	0	0.1	0.512112916	0.452783655
2020	0.061165	0.003	0.002	0.00019	0.484061832	0	0	0.1	0.605458515	0.503352128
2021	0.061165	0.003	0.002	0.00019	0.557774211	0	0	0.1	0.686542132	0.536682233
2022	0.062608249	0.003070788	0.002047192	0.000194483	0.621542305	0	0	0.1	0.758409919	0.557463182
2023	0.062608249	0.003070788	0.002047192	0.000194483	0.693478733	0	0	0.1	0.83753939	0.578868978
2024	0.062608249	0.003070788	0.002047192	0.000194483	0.707036938	0	0	0.1	0.852453416	0.553997998
2025	0.062608249	0.003070788	0.002047192	0.000194483	0.727178832	0	0	0.1	0.874609499	0.534458805
2026	0.064626802	0.003169793	0.002113196	0.000200754	0.736982874	0	0	0.1	0.88780276	0.51012786
2027	0.064626802	0.003169793	0.002113196	0.000200754	0.756181276	0	0	0.1	0.908921002	0.491078812
2028	0.064626802	0.003169793	0.002113196	0.000200754	0.770469101	0	0	0.1	0.924637609	0.469741703
2029	0.064626802	0.003169793	0.002113196	0.000200754	0.799488816	0	0	0.1	0.956559296	0.456942934
2030	0.066985939	0.003285503	0.002190336	0.000208082	0.810386073	0	0	0.1	0.971361526	0.436308298
2031	0.066985939	0.003285503	0.002190336	0.000208082	0.827386931	0	0	0.1	0.990062469	0.41815537
2032	0.066985939	0.003285503	0.002190336	0.000208082	0.843742459	0	0	0.1	1.00805355	0.400332815
2033	0.066985939	0.003285503	0.002190336	0.000208082	0.845870177	0	0	0.1	1.01039404	0.37730353
2034	0.069533481	0.003410454	0.002273636	0.000215995	0.84721031	0	0	0.1	1.014908265	0.356360359
2035	0.069533481	0.003410454	0.002273636	0.000215995	0.862945902	0	0	0.1	1.032217415	0.34079741
2036	0.069533481	0.003410454	0.002273636	0.000215995	0.854291659	0	0	0.1	1.022697749	0.317493552
2037	0.069533481	0.003410454	0.002273636	0.000215995	0.8693556	0	0	0.1	1.039268083	0.303373544
2038	0.072202315	0.003541354	0.002360903	0.000224286	0.881992516	0	0	0.1	1.056353511	0.289949191
2039	0.072202315	0.003541354	0.002360903	0.000224286	0.902696713	0	0	0.1	1.079128129	0.278514711
2040	0.072202315	0.003541354	0.002360903	0.000224286	0.916893979	0	0	0.1	1.094745121	0.265674977
2041	0.072202315	0.003541354	0.002360903	0.000224286	0.926062919	0	0	0.1	1.104830955	0.252113425
2042	0.074973584	0.003677279	0.002451519	0.000232894	0.935323548	0	0	0.1	1.118324707	0.23995542
2043	0.074973584	0.003677279	0.002451519	0.000232894	0.944676784	0	0	0.1	1.128613266	0.227703812
2044	0.074973584	0.003677279	0.002451519	0.000232894	0.954123552	0	0	0.1	1.139004711	0.216079306
2045	0.074973584	0.003677279	0.002451519	0.000232894	0.963664787	0	0	0.1	1.14950007	0.205049712
2046	0.07785122	0.00381842	0.002545613	0.000241833	0.973301435	0	0	0.1	1.163534374	0.195160483
2047	0.07785122	0.00381842	0.002545613	0.000241833	0.983034449	0	0	0.1	1.17424069	0.185196297
2048	0.07785122	0.00381842	0.002545613	0.000241833	0.992864794	0	0	0.1	1.185054069	0.175742113
2049	0.07785122	0.00381842	0.002545613	0.000241833	1.002793442	0	0	0.1	1.195975582	0.166771754
2050	0.080839306	0.003964979	0.002643319	0.000251115	1.012821376	0	0	0.1	1.210572105	0.15872793
2051	0.080839306	0.003964979	0.002643319	0.000251115	1.02294959	0	0	0.1	1.22171314	0.150624092
2052	0.080839306	0.003964979	0.002643319	0.000251115	1.033179086	0	0	0.1	1.232965585	0.142935023
2053	0.080839306	0.003964979	0.002643319	0.000251115	1.043510877	0	0	0.1	1.244330555	0.135639435
2054	0.08394208	0.004117162	0.002744775	0.000260754	1.053945985	0	0	0.1	1.259511832	0.129096648
2055	0.08394208	0.004117162	0.002744775	0.000260754	1.064485445	0	0	0.1	1.271105238	0.122505822
2056	0.08394208	0.004117162	0.002744775	0.000260754	1.0751303	0	0	0.1	1.282814578	0.116252315
2057	0.08394208	0.004117162	0.002744775	0.000260754	1.085881603	0	0	0.1	1.294641011	0.110318816
2058	0.087163945	0.004275187	0.002850125	0.000270762	1.096740419	0	0	0.1	1.310430482	0.104996959
2059	0.087163945	0.004275187	0.002850125	0.000270762	1.107707823	0	0	0.1	1.322494626	0.099636659
2060	0.087163945	0.004275187	0.002850125	0.000270762	1.118784901	0	0	0.1	1.334679412	0.094550691
2061	0.087163945	0.004275187	0.002850125	0.000270762	1.12997275	0	0	0.1	1.346986046	0.089724976
2062	0.090509472	0.004439278	0.002959518	0.000281154	1.141272478	0	0	0.1	1.363408089	0.085396216
2063	0.090509472	0.004439278	0.002959518	0.000281154	1.152685202	0	0	0.1	1.375962087	0.081036697
		Discount Rate		0.0635						

Appendix H  
 Avoided Cost  
 Results are in \$/therm

	Fixed Transportation Costs	Variable Transportation Costs	Fixed Storage Costs	Variable Storage Costs	Commodity Cost	Distribution		Risk Premium	Carbon Adder	Zone 2 Total Avoided	
						System Cost				Cost (Nominal)	Cost (Real)
2018	0.039249	0.003	0.003	0.002	0.00019	0.350944684	0	0	0.1	0.434922053	0.408953505
2019	0.074	0.003	0.002	0.00019	0.399202196		0	0	0.1	0.526231416	0.4652665
2020	0.074	0.003	0.002	0.00019	0.484061832		0	0	0.1	0.619577015	0.515089641
2021	0.074	0.003	0.002	0.00019	0.557774211		0	0	0.1	0.700660632	0.547718916
2022	0.075746104	0.003070788	0.002047192	0.000194483	0.621542305		0	0	0.1	0.772860959	0.568085754
2023	0.075746104	0.003070788	0.002047192	0.000194483	0.693478733		0	0	0.1	0.85199103	0.588857292
2024	0.075746104	0.003070788	0.002047192	0.000194483	0.707036938		0	0	0.1	0.866905056	0.563389925
2025	0.075746104	0.003070788	0.002047192	0.000194483	0.727178832		0	0	0.1	0.88906114	0.543289953
2026	0.078188234	0.003169793	0.002113196	0.000200754	0.736982874		0	0	0.1	0.902720335	0.518699438
2027	0.078188234	0.003169793	0.002113196	0.000200754	0.756181276		0	0	0.1	0.923838578	0.499138594
2028	0.078188234	0.003169793	0.002113196	0.000200754	0.770469101		0	0	0.1	0.939555185	0.477320247
2029	0.078188234	0.003169793	0.002113196	0.000200754	0.799488816		0	0	0.1	0.971476871	0.464068975
2030	0.081042417	0.003285503	0.002190336	0.000208082	0.810386073		0	0	0.1	0.986823652	0.44325345
2031	0.081042417	0.003285503	0.002190336	0.000208082	0.827386931		0	0	0.1	1.005524596	0.424685838
2032	0.081042417	0.003285503	0.002190336	0.000208082	0.843742459		0	0	0.1	1.023515677	0.406473358
2033	0.081042417	0.003285503	0.002190336	0.000208082	0.845870177		0	0	0.1	1.025856167	0.383077743
2034	0.084124542	0.003410454	0.002273636	0.000215995	0.84721031		0	0	0.1	1.030958432	0.361959584
2035	0.084124542	0.003410454	0.002273636	0.000215995	0.862945902		0	0	0.1	1.048267582	0.346096541
2036	0.084124542	0.003410454	0.002273636	0.000215995	0.854291659		0	0	0.1	1.038747915	0.32247628
2037	0.084124542	0.003410454	0.002273636	0.000215995	0.8693556		0	0	0.1	1.05531825	0.308058761
2038	0.08735341	0.003541354	0.002360903	0.000224286	0.881992516		0	0	0.1	1.073019715	0.294523751
2039	0.08735341	0.003541354	0.002360903	0.000224286	0.902696713		0	0	0.1	1.095794333	0.282816131
2040	0.08735341	0.003541354	0.002360903	0.000224286	0.916893979		0	0	0.1	1.111411325	0.269719565
2041	0.08735341	0.003541354	0.002360903	0.000224286	0.926062919		0	0	0.1	1.121497159	0.255916517
2042	0.090706208	0.003677279	0.002451519	0.000232894	0.935323548		0	0	0.1	1.135630594	0.24366869
2043	0.090706208	0.003677279	0.002451519	0.000232894	0.944676784		0	0	0.1	1.145919153	0.231195368
2044	0.090706208	0.003677279	0.002451519	0.000232894	0.954123552		0	0	0.1	1.156310597	0.219362386
2045	0.090706208	0.003677279	0.002451519	0.000232894	0.963664787		0	0	0.1	1.166805956	0.208136764
2046	0.094187694	0.00381842	0.002545613	0.000241833	0.973301435		0	0	0.1	1.181504495	0.198174625
2047	0.094187694	0.00381842	0.002545613	0.000241833	0.983034449		0	0	0.1	1.192210811	0.188030469
2048	0.094187694	0.00381842	0.002545613	0.000241833	0.992864794		0	0	0.1	1.20302419	0.178407061
2049	0.094187694	0.00381842	0.002545613	0.000241833	1.002793442		0	0	0.1	1.213945703	0.169277582
2050	0.097802806	0.003964979	0.002643319	0.000251115	1.012821376		0	0	0.1	1.229231955	0.161174574
2051	0.097802806	0.003964979	0.002643319	0.000251115	1.02294959		0	0	0.1	1.24037299	0.15292465
2052	0.097802806	0.003964979	0.002643319	0.000251115	1.033179086		0	0	0.1	1.251625435	0.145098219
2053	0.097802806	0.003964979	0.002643319	0.000251115	1.043510877		0	0	0.1	1.262990405	0.13767347
2054	0.101556673	0.004117162	0.002744775	0.000260754	1.053945985		0	0	0.1	1.278887885	0.131082642
2055	0.101556673	0.004117162	0.002744775	0.000260754	1.064485445		0	0	0.1	1.290481291	0.124373235
2056	0.101556673	0.004117162	0.002744775	0.000260754	1.0751303		0	0	0.1	1.302190631	0.118008228
2057	0.101556673	0.004117162	0.002744775	0.000260754	1.085881603		0	0	0.1	1.314017064	0.111969886
2058	0.105454622	0.004275187	0.002850125	0.000270762	1.0967740419		0	0	0.1	1.330550226	0.106669034
2059	0.105454622	0.004275187	0.002850125	0.000270762	1.107707823		0	0	0.1	1.342614371	0.10115248
2060	0.105454622	0.004275187	0.002850125	0.000270762	1.118784901		0	0	0.1	1.354799157	0.095976004
2061	0.105454622	0.004275187	0.002850125	0.000270762	1.12997275		0	0	0.1	1.367105791	0.091065185
2062	0.109502181	0.004439278	0.002959518	0.000281154	1.141272478		0	0	0.1	1.38430007	0.086704772
2063	0.109502181	0.004439278	0.002959518	0.000281154	1.152685202		0	0	0.1	1.396854067	0.082267121

Discount Rate 0.0635

Appendix H  
Avoided Cost  
Results are in \$/therm

	Fixed Transportation Costs	Variable Transportation Costs	Fixed Storage Costs	Variable Storage Costs	Commodity Cost	Distribution System Cost	Risk Premium	Carbon Adder	Zone 3 Total Avoided Cost (Nominal)	Zone 3 Total Avoided Cost (Real)
2018	0.039249	0.003	0.002	0.00019	0.350944684	0	0	0.1	0.434922053	0.408953505
2019	0.196	0.003	0.002	0.00019	0.399202196	0	0	0.1	0.660431416	0.583919173
2020	0.196	0.003	0.002	0.00019	0.484061832	0	0	0.1	0.753777015	0.62665774
2021	0.196	0.003	0.002	0.00019	0.557774211	0	0	0.1	0.834860632	0.65262545
2022	0.200624816	0.003070788	0.002047192	0.000194483	0.621542305	0	0	0.1	0.910227542	0.669056049
2023	0.200624816	0.003070788	0.002047192	0.000194483	0.693478733	0	0	0.1	0.989357614	0.683798801
2024	0.200624816	0.003070788	0.002047192	0.000194483	0.707036938	0	0	0.1	1.004271639	0.652626218
2025	0.200624816	0.003070788	0.002047192	0.000194483	0.727178832	0	0	0.1	1.026427723	0.627232307
2026	0.207093161	0.003169793	0.002113196	0.000200754	0.736982874	0	0	0.1	1.044515754	0.60017451
2027	0.207093161	0.003169793	0.002113196	0.000200754	0.756181276	0	0	0.1	1.065633997	0.575748911
2028	0.207093161	0.003169793	0.002113196	0.000200754	0.770469101	0	0	0.1	1.081350604	0.549356276
2029	0.207093161	0.003169793	0.002113196	0.000200754	0.799488816	0	0	0.1	1.113272229	0.53180384
2030	0.214652889	0.003285503	0.002190336	0.000208082	0.810386073	0	0	0.1	1.133795171	0.509268926
2031	0.214652889	0.003285503	0.002190336	0.000208082	0.827386931	0	0	0.1	1.152496115	0.486759628
2032	0.214652889	0.003285503	0.002190336	0.000208082	0.843742459	0	0	0.1	1.170487196	0.464840815
2033	0.214652889	0.003285503	0.002190336	0.000208082	0.845870177	0	0	0.1	1.172827686	0.437959853
2034	0.222816353	0.003410454	0.002273636	0.000215995	0.84721031	0	0	0.1	1.183519425	0.415564067
2035	0.222816353	0.003410454	0.002273636	0.000215995	0.862945902	0	0	0.1	1.200828575	0.396466154
2036	0.222816353	0.003410454	0.002273636	0.000215995	0.854231659	0	0	0.1	1.191308908	0.369838398
2037	0.222816353	0.003410454	0.002273636	0.000215995	0.86935556	0	0	0.1	1.207879243	0.352592957
2038	0.231368491	0.003541354	0.002360903	0.000224286	0.881992516	0	0	0.1	1.231436305	0.338006128
2039	0.231368491	0.003541354	0.002360903	0.000224286	0.902696713	0	0	0.1	1.254210922	0.32370224
2040	0.231368491	0.003541354	0.002360903	0.000224286	0.916893979	0	0	0.1	1.269827915	0.308164426
2041	0.231368491	0.003541354	0.002360903	0.000224286	0.926062919	0	0	0.1	1.279913748	0.292065892
2042	0.240248876	0.003677279	0.002451519	0.000232894	0.935323548	0	0	0.1	1.300127528	0.27896428
2043	0.240248876	0.003677279	0.002451519	0.000232894	0.944676784	0	0	0.1	1.310416087	0.264383511
2044	0.240248876	0.003677279	0.002451519	0.000232894	0.954123552	0	0	0.1	1.320807532	0.250568915
2045	0.240248876	0.003677279	0.002451519	0.000232894	0.963664787	0	0	0.1	1.331302891	0.237479998
2046	0.249470109	0.00381842	0.002545613	0.000241833	0.973301435	0	0	0.1	1.352315151	0.226824823
2047	0.249470109	0.00381842	0.002545613	0.000241833	0.983034449	0	0	0.1	1.363021467	0.214970006
2048	0.249470109	0.00381842	0.002545613	0.000241833	0.992864794	0	0	0.1	1.373834846	0.203738079
2049	0.249470109	0.00381842	0.002545613	0.000241833	1.002793442	0	0	0.1	1.384756359	0.193096122
2050	0.25904527	0.003964979	0.002643319	0.000251115	1.012821376	0	0	0.1	1.406598665	0.184430563
2051	0.25904527	0.003964979	0.002643319	0.000251115	1.02294959	0	0	0.1	1.41777397	0.174792058
2052	0.25904527	0.003964979	0.002643319	0.000251115	1.033179086	0	0	0.1	1.428992146	0.165659957
2053	0.25904527	0.003964979	0.002643319	0.000251115	1.043510877	0	0	0.1	1.440357116	0.157007497
2054	0.268987946	0.004117162	0.002744775	0.000260754	1.053945985	0	0	0.1	1.463062284	0.149960033
2055	0.268987946	0.004117162	0.002744775	0.000260754	1.064485445	0	0	0.1	1.47465569	0.142123486
2056	0.268987946	0.004117162	0.002744775	0.000260754	1.0751303	0	0	0.1	1.48636503	0.134698638
2057	0.268987946	0.004117162	0.002744775	0.000260754	1.085881603	0	0	0.1	1.498191463	0.127663736
2058	0.279312241	0.004275187	0.002850125	0.000270762	1.096740419	0	0	0.1	1.521793607	0.121932223
2059	0.279312241	0.004275187	0.002850125	0.000270762	1.107707823	0	0	0.1	1.533857752	0.115560744
2060	0.279312241	0.004275187	0.002850125	0.000270762	1.118784901	0	0	0.1	1.546042538	0.109523972
2061	0.279312241	0.004275187	0.002850125	0.000270762	1.12997275	0	0	0.1	1.558349172	0.103804224
2062	0.290032804	0.004439278	0.002959518	0.000281154	1.141272478	0	0	0.1	1.582883755	0.099142937
2063	0.290032804	0.004439278	0.002959518	0.000281154	1.152685202	0	0	0.1	1.595437752	0.093962622

Discount Rate 0.0635

Appendix H  
 Avoided Cost  
 Results are in \$/therm

					Distribution			Zone 4 Total Avoided		Zone 4 Total
	Fixed Transportation Costs	Variable Transportation Costs	Fixed Storage Costs	Variable Storage Costs	Commodity Cost	System Cost	Risk Premium	Carbon Adder	Cost (Nominal)	Avoided Cost (Real)
2018	0.0279	0.00117	0.002	0.00019	0.35094684	0	0	0.1	0.420425153	0.39522193
2019	0.04833	0.00185	0.002	0.00019	0.399202196	0	0	0.1	0.496729416	0.439182363
2020	0.04833	0.00185	0.002	0.00019	0.484061832	0	0	0.1	0.590075015	0.490562949
2021	0.04833	0.00185	0.002	0.00019	0.557774211	0	0	0.1	0.671158632	0.524656676
2022	0.049470395	0.001893653	0.002047192	0.000194483	0.621542305	0	0	0.1	0.74266283	0.542888841
2023	0.049470395	0.001893653	0.002047192	0.000194483	0.693478733	0	0	0.1	0.821792901	0.567985724
2024	0.049470395	0.001893653	0.002047192	0.000194483	0.799488816	0	0	0.1	0.836706927	0.543764567
2025	0.049470395	0.001893653	0.002047192	0.000194483	0.727178832	0	0	0.1	0.85886301	0.524836396
2026	0.05106537	0.001954706	0.002113196	0.000200754	0.736982874	0	0	0.1	0.871548588	0.500788279
2027	0.05106537	0.001954706	0.002113196	0.000200754	0.756181276	0	0	0.1	0.892666831	0.482296883
2028	0.05106537	0.001954706	0.002113196	0.000200754	0.770469101	0	0	0.1	0.908383438	0.46148413
2029	0.05106537	0.001954706	0.002113196	0.000200754	0.799488816	0	0	0.1	0.940305124	0.449178408
2030	0.05292946	0.00202606	0.002190336	0.000208082	0.810386073	0	0	0.1	0.954514012	0.428740868
2031	0.05292946	0.00202606	0.002190336	0.000208082	0.827386931	0	0	0.1	0.973214956	0.41103978
2032	0.05292946	0.00202606	0.002190336	0.000208082	0.843742459	0	0	0.1	0.991206036	0.393642086
2033	0.05292946	0.00202606	0.002190336	0.000208082	0.845870177	0	0	0.1	0.993546526	0.371012294
2034	0.05494242	0.002103114	0.002273636	0.000215995	0.84721031	0	0	0.1	0.997420023	0.350219788
2035	0.05494242	0.002103114	0.002273636	0.000215995	0.862945902	0	0	0.1	1.014729174	0.335023484
2036	0.05494242	0.002103114	0.002273636	0.000215995	0.854291659	0	0	0.1	1.005209507	0.312064378
2037	0.05494242	0.002103114	0.002273636	0.000215995	0.86935556	0	0	0.1	1.021779842	0.298268538
2038	0.05705122	0.002183835	0.002360903	0.000224286	0.881992516	0	0	0.1	1.038194036	0.284964756
2039	0.05705122	0.002183835	0.002360903	0.000224286	0.902696713	0	0	0.1	1.060968653	0.27382789
2040	0.05705122	0.002183835	0.002360903	0.000224286	0.916893979	0	0	0.1	1.076585646	0.261267998
2041	0.05705122	0.002183835	0.002360903	0.000224286	0.926062919	0	0	0.1	1.08667148	0.24796958
2042	0.05924096	0.002267655	0.002451519	0.000232894	0.935323548	0	0	0.1	1.099468235	0.235909446
2043	0.05924096	0.002267655	0.002451519	0.000232894	0.944676784	0	0	0.1	1.109756794	0.223899417
2044	0.05924096	0.002267655	0.002451519	0.000232894	0.954123552	0	0	0.1	1.120148238	0.212520066
2045	0.05924096	0.002267655	0.002451519	0.000232894	0.963664787	0	0	0.1	1.130643597	0.201686063
2046	0.061514747	0.002354692	0.002545613	0.000241833	0.973301435	0	0	0.1	1.143954153	0.191876278
2047	0.061514747	0.002354692	0.002545613	0.000241833	0.983034449	0	0	0.1	1.154660468	0.182108187
2048	0.061514747	0.002354692	0.002545613	0.000241833	0.992864794	0	0	0.1	1.165473847	0.17283839
2049	0.061514747	0.002354692	0.002545613	0.000241833	1.002793442	0	0	0.1	1.17639536	0.164041408
2050	0.063875806	0.00244507	0.002643319	0.000251115	1.012821376	0	0	0.1	1.190240355	0.156062069
2051	0.063875806	0.00244507	0.002643319	0.000251115	1.02294959	0	0	0.1	1.20138139	0.148117406
2052	0.063875806	0.00244507	0.002643319	0.000251115	1.033179086	0	0	0.1	1.212633836	0.140578008
2053	0.063875806	0.00244507	0.002643319	0.000251115	1.043510877	0	0	0.1	1.223998806	0.133423154
2054	0.066327487	0.002538917	0.002744775	0.000260754	1.053945985	0	0	0.1	1.238399709	0.126932711
2055	0.066327487	0.002538917	0.002744775	0.000260754	1.064485445	0	0	0.1	1.249993115	0.12047109
2056	0.066327487	0.002538917	0.002744775	0.000260754	1.0751303	0	0	0.1	1.261702455	0.114339075
2057	0.066327487	0.002538917	0.002744775	0.000260754	1.085881603	0	0	0.1	1.273528888	0.108519812
2058	0.068873268	0.002636366	0.002850125	0.000270762	1.096740419	0	0	0.1	1.288508033	0.103240445
2059	0.068873268	0.002636366	0.002850125	0.000270762	1.107707823	0	0	0.1	1.300572178	0.097985024
2060	0.068873268	0.002636366	0.002850125	0.000270762	1.118784901	0	0	0.1	1.312756964	0.092997672
2061	0.068873268	0.002636366	0.002850125	0.000270762	1.12997275	0	0	0.1	1.325063598	0.088264685
2062	0.071516762	0.002737555	0.002959518	0.000281154	1.141272478	0	0	0.1	1.340644214	0.083970415
2063	0.071516762	0.002737555	0.002959518	0.000281154	1.152685202	0	0	0.1	1.353198211	0.079696029

Discount Rate 0.0635

Year	CPI	CPI %
2017	1.2685	0.012685
2018	1.4762	0.014762
2019	1.7722	0.017722
2020	2.0099	0.020099
2021	2.2166	0.022166
2022	2.3596	0.023596
2023	2.4513	0.024513
2024	2.7809	0.027809
2025	3.0448	0.030448
2026	3.2241	0.032241
2027	3.3843	0.033843
2028	3.4908	0.034908
2029	3.5356	0.035356
2030	3.6504	0.036504
2031	3.7112	0.037112
2032	3.761	0.03761
2033	3.7889	0.037889
2034	3.8031	0.038031
2035	3.8162	0.038162
2036	3.8332	0.038332
2037	3.8382	0.038382
2038	3.8382	0.038382
2039	3.8382	0.038382
2040	3.8382	0.038382
2041	3.8382	0.038382
2042	3.8382	0.038382
2043	3.8382	0.038382
2044	3.8382	0.038382
2045	3.8382	0.038382
2046	3.8382	0.038382
2047	3.8382	0.038382
2048	3.8382	0.038382
2049	3.8382	0.038382
2050	3.8382	0.038382
2051	3.8382	0.038382
2052	3.8382	0.038382
2053	3.8382	0.038382
2054	3.8382	0.038382
2055	3.8382	0.038382
2056	3.8382	0.038382
2057	3.8382	0.038382
2058	3.8382	0.038382
2059	3.8382	0.038382
2060	3.8382	0.038382
2061	3.8382	0.038382
2062	3.8382	0.038382

year	\$ per Metric Tons	Converted to Dths	Cost per Dth
2018	10	529.1	\$0.58323
2019	20	1058.2	\$1.16647
2020	30	1587.3	\$1.74970
2021	40	2116.4	\$2.33293
2022	50	2645.5	\$2.91616
2023	60	3174.6	\$3.49940
2024	60	3174.6	\$3.49940
2025	60	3174.6	\$3.49940
2026	60	3174.6	\$3.49940
2027	60	3174.6	\$3.49940
2028	60	3174.6	\$3.49940
2029	60	3174.6	\$3.49940
2030	60	3174.6	\$3.49940
2031	60	3174.6	\$3.49940
2032	60	3174.6	\$3.49940
2033	60	3174.6	\$3.49940
2034	60	3174.6	\$3.49940
2035	60	3174.6	\$3.49940
2036	60	3174.6	\$3.49940
2037	60	3174.6	\$3.49940
2038	60	3174.6	\$3.49940
2039	60	3174.6	\$3.49940
2040	60	3174.6	\$3.49940
2041	60	3174.6	\$3.49940
2042	60	3174.6	\$3.49940
2043	60	3174.6	\$3.49940
2044	60	3174.6	\$3.49940
2045	60	3174.6	\$3.49940
2046	60	3174.6	\$3.49940
2047	60	3174.6	\$3.49940
2048	60	3174.6	\$3.49940
2049	60	3174.6	\$3.49940
2050	60	3174.6	\$3.49940
2051	60	3174.6	\$3.49940
2052	60	3174.6	\$3.49940
2053	60	3174.6	\$3.49940
2054	60	3174.6	\$3.49940
2055	60	3174.6	\$3.49940
2056	60	3174.6	\$3.49940
2057	60	3174.6	\$3.49940
2058	60	3174.6	\$3.49940
2059	60	3174.6	\$3.49940
2060	60	3174.6	\$3.49940
2061	60	3174.6	\$3.49940



2062	60	3174.6	\$ 3.49940
2063	60	3174.6	\$ 3.49940
2064	60	3174.6	\$ 3.49940
2065	60	3174.6	\$ 3.49940
2066	60	3174.6	\$ 3.49940
2067	60	3174.6	\$ 3.49940

**Nominal - Scaling Tax**

<b>Year</b>	<b>Zone 1 Avoided Cost</b>	<b>Zone 2 Avoided Cost</b>	<b>Zone 3 Avoided Cost</b>	<b>Oregon Avoided Cost</b>	<b>Washington Avoided Cost</b>	<b>System Avoided Cost</b>
<b>2018</b>	\$ 0.434922	\$ 0.434922	\$ 0.434922	\$ 0.420425	\$ 0.434922	\$ 0.423868
<b>2019</b>	\$ 0.512113	\$ 0.526231	\$ 0.660431	\$ 0.496729	\$ 0.566259	\$ 0.594917
<b>2020</b>	\$ 0.605459	\$ 0.619577	\$ 0.753777	\$ 0.590075	\$ 0.659604	\$ 0.688263
<b>2021</b>	\$ 0.686542	\$ 0.700661	\$ 0.834861	\$ 0.671159	\$ 0.740688	\$ 0.769347
<b>2022</b>	\$ 0.758409	\$ 0.772861	\$ 0.910228	\$ 0.742663	\$ 0.813833	\$ 0.843168
<b>2023</b>	\$ 0.837539	\$ 0.851991	\$ 0.989358	\$ 0.821793	\$ 0.892963	\$ 0.922298
<b>2024</b>	\$ 0.852453	\$ 0.866905	\$ 1.004272	\$ 0.836707	\$ 0.907877	\$ 0.937212
<b>2025</b>	\$ 0.874609	\$ 0.889061	\$ 1.026428	\$ 0.858863	\$ 0.930033	\$ 0.959368
<b>2026</b>	\$ 0.887803	\$ 0.902720	\$ 1.044516	\$ 0.871549	\$ 0.945013	\$ 0.975294
<b>2027</b>	\$ 0.908921	\$ 0.923839	\$ 1.065634	\$ 0.892667	\$ 0.966131	\$ 0.996412
<b>2028</b>	\$ 0.924638	\$ 0.939555	\$ 1.081351	\$ 0.908383	\$ 0.981848	\$ 1.012129
<b>2029</b>	\$ 0.956559	\$ 0.971477	\$ 1.113272	\$ 0.940305	\$ 1.013769	\$ 1.044050
<b>2030</b>	\$ 0.971362	\$ 0.986824	\$ 1.133795	\$ 0.954514	\$ 1.030660	\$ 1.062046
<b>2031</b>	\$ 0.990062	\$ 1.005525	\$ 1.152496	\$ 0.973215	\$ 1.049361	\$ 1.080747
<b>2032</b>	\$ 1.008054	\$ 1.023516	\$ 1.170487	\$ 0.991206	\$ 1.067352	\$ 1.098738
<b>2033</b>	\$ 1.010394	\$ 1.025856	\$ 1.172828	\$ 0.993547	\$ 1.069693	\$ 1.101079
<b>2034</b>	\$ 1.014908	\$ 1.030958	\$ 1.183519	\$ 0.997420	\$ 1.076462	\$ 1.109042
<b>2035</b>	\$ 1.032217	\$ 1.048268	\$ 1.200829	\$ 1.014729	\$ 1.093771	\$ 1.126351
<b>2036</b>	\$ 1.022698	\$ 1.038748	\$ 1.191309	\$ 1.005210	\$ 1.084252	\$ 1.116831
<b>2037</b>	\$ 1.039268	\$ 1.055318	\$ 1.207879	\$ 1.021780	\$ 1.100822	\$ 1.133402

**Real - Scaling Tax**

	<b>Zone 1</b>	<b>Zone 2</b>	<b>Zone 3</b>	<b>Oregon</b>	<b>Washington</b>	<b>System</b>
	<b>Avoided Cost</b>	<b>Avoided Cost</b>	<b>Avoided Cost</b>	<b>Avoided Cost</b>	<b>Avoided Cost</b>	<b>Avoided Cost</b>
<b>Year</b>	<b>Avoided Cost</b>	<b>Cost</b>	<b>Cost</b>	<b>Cost</b>	<b>Cost</b>	<b>Cost</b>
<b>2018</b>	0.4089535	0.408954	0.408954	0.395322	0.4089535	0.395322
<b>2019</b>	0.45278365	0.465266	0.583919	0.439182	0.50065644	0.439182
<b>2020</b>	0.50335213	0.51509	0.626658	0.490563	0.5483665	0.490563
<b>2021</b>	0.53668223	0.547719	0.652625	0.524657	0.57900887	0.524657
<b>2022</b>	0.55746318	0.568086	0.669056	0.545889	0.59820166	0.545889
<b>2023</b>	0.57886898	0.588857	0.683799	0.567986	0.61717502	0.567986
<b>2024</b>	0.553998	0.56339	0.652663	0.543765	0.59001685	0.543765
<b>2025</b>	0.5344588	0.54329	0.627232	0.524836	0.56832702	0.524836
<b>2026</b>	0.51012786	0.518699	0.600175	0.500788	0.5430006	0.500788
<b>2027</b>	0.49107881	0.499139	0.575749	0.482297	0.52198877	0.482297
<b>2028</b>	0.4697417	0.47732	0.549356	0.461484	0.49880608	0.461484
<b>2029</b>	0.45694293	0.464069	0.531804	0.449178	0.48427192	0.449178
<b>2030</b>	0.4363083	0.443253	0.509269	0.428741	0.46294356	0.428741
<b>2031</b>	0.41815537	0.424686	0.48676	0.41104	0.44320028	0.41104
<b>2032</b>	0.40033281	0.406473	0.464841	0.393642	0.42388233	0.393642
<b>2033</b>	0.37730353	0.383077	0.43796	0.371012	0.39944694	0.371012
<b>2034</b>	0.35636036	0.361996	0.415564	0.35022	0.37797347	0.35022
<b>2035</b>	0.34079741	0.346097	0.396466	0.335023	0.36112004	0.335023
<b>2036</b>	0.31749355	0.322476	0.369838	0.312064	0.33660274	0.312064
<b>2037</b>	0.30337354	0.308059	0.352593	0.298269	0.32134175	0.298269

**Nominal - Scaling Tax with 20% Adder**

<b>Year</b>	<b>Zone 1 Avoided Cost</b>	<b>Zone 2 Avoided Cost</b>	<b>Zone 3 Avoided Cost</b>	<b>Oregon Avoided Cost</b>	<b>Washington Avoided Cost</b>	<b>System Avoided Cost</b>
<b>2018</b>	\$ 0.474460	\$ 0.474460	\$ 0.474460	\$ 0.458646	\$ 0.474460	\$ 0.462402
<b>2019</b>	\$ 0.558669	\$ 0.574071	\$ 0.720471	\$ 0.541887	\$ 0.617737	\$ 0.649001
<b>2020</b>	\$ 0.660500	\$ 0.675902	\$ 0.822302	\$ 0.643718	\$ 0.719568	\$ 0.750832
<b>2021</b>	\$ 0.748955	\$ 0.764357	\$ 0.910757	\$ 0.732173	\$ 0.808023	\$ 0.839287
<b>2022</b>	\$ 0.827356	\$ 0.843121	\$ 0.992976	\$ 0.810178	\$ 0.887817	\$ 0.919819
<b>2023</b>	\$ 0.913679	\$ 0.929445	\$ 1.079299	\$ 0.896501	\$ 0.974141	\$ 1.006143
<b>2024</b>	\$ 0.929949	\$ 0.945715	\$ 1.095569	\$ 0.912771	\$ 0.990411	\$ 1.022413
<b>2025</b>	\$ 0.954119	\$ 0.969885	\$ 1.119739	\$ 0.936941	\$ 1.014581	\$ 1.046583
<b>2026</b>	\$ 0.968512	\$ 0.984786	\$ 1.139472	\$ 0.950780	\$ 1.030923	\$ 1.063957
<b>2027</b>	\$ 0.991550	\$ 1.007824	\$ 1.162510	\$ 0.973818	\$ 1.053961	\$ 1.086995
<b>2028</b>	\$ 1.008696	\$ 1.024969	\$ 1.179655	\$ 0.990964	\$ 1.071107	\$ 1.104140
<b>2029</b>	\$ 1.043519	\$ 1.059793	\$ 1.214479	\$ 1.025787	\$ 1.105930	\$ 1.138964
<b>2030</b>	\$ 1.059667	\$ 1.076535	\$ 1.236867	\$ 1.041288	\$ 1.124356	\$ 1.158596
<b>2031</b>	\$ 1.080068	\$ 1.096936	\$ 1.257268	\$ 1.061689	\$ 1.144758	\$ 1.178997
<b>2032</b>	\$ 1.099695	\$ 1.116563	\$ 1.276895	\$ 1.081316	\$ 1.164384	\$ 1.198624
<b>2033</b>	\$ 1.102248	\$ 1.119116	\$ 1.279448	\$ 1.083869	\$ 1.166937	\$ 1.201177
<b>2034</b>	\$ 1.107173	\$ 1.124682	\$ 1.291112	\$ 1.088095	\$ 1.174322	\$ 1.209864
<b>2035</b>	\$ 1.126055	\$ 1.143565	\$ 1.309995	\$ 1.106977	\$ 1.193205	\$ 1.228747
<b>2036</b>	\$ 1.115670	\$ 1.133180	\$ 1.299610	\$ 1.096592	\$ 1.182820	\$ 1.218362
<b>2037</b>	\$ 1.133747	\$ 1.151256	\$ 1.317686	\$ 1.114669	\$ 1.200897	\$ 1.236438

**Nominal - Scaling Tax with 30% Adder**

<b>Year</b>	<b>Zone 1 Avoided Cost</b>	<b>Zone 2 Avoided Cost</b>	<b>Zone 3 Avoided Cost</b>	<b>Oregon Avoided Cost</b>	<b>Washington Avoided Cost</b>	<b>System Avoided Cost</b>
<b>2018</b>	\$ 0.513999	\$ 0.513999	\$ 0.513999	\$ 0.496866	\$ 0.513999	\$ 0.500935
<b>2019</b>	\$ 0.605224	\$ 0.621910	\$ 0.780510	\$ 0.587044	\$ 0.669215	\$ 0.703084
<b>2020</b>	\$ 0.715542	\$ 0.732227	\$ 0.890827	\$ 0.697361	\$ 0.779532	\$ 0.813402
<b>2021</b>	\$ 0.811368	\$ 0.828053	\$ 0.986653	\$ 0.793187	\$ 0.875358	\$ 0.909228
<b>2022</b>	\$ 0.896302	\$ 0.913381	\$ 1.075723	\$ 0.877692	\$ 0.961802	\$ 0.996471
<b>2023</b>	\$ 0.989819	\$ 1.006898	\$ 1.169241	\$ 0.971210	\$ 1.055320	\$ 1.089988
<b>2024</b>	\$ 1.007445	\$ 1.024524	\$ 1.186866	\$ 0.988835	\$ 1.072945	\$ 1.107614
<b>2025</b>	\$ 1.033629	\$ 1.050709	\$ 1.213051	\$ 1.015020	\$ 1.099130	\$ 1.133798
<b>2026</b>	\$ 1.049221	\$ 1.066851	\$ 1.234428	\$ 1.030012	\$ 1.116833	\$ 1.152620
<b>2027</b>	\$ 1.074179	\$ 1.091809	\$ 1.259386	\$ 1.054970	\$ 1.141791	\$ 1.177578
<b>2028</b>	\$ 1.092754	\$ 1.110383	\$ 1.277960	\$ 1.073544	\$ 1.160366	\$ 1.196152
<b>2029</b>	\$ 1.130479	\$ 1.148109	\$ 1.315685	\$ 1.111270	\$ 1.198091	\$ 1.233878
<b>2030</b>	\$ 1.147973	\$ 1.166246	\$ 1.339940	\$ 1.128062	\$ 1.218053	\$ 1.255146
<b>2031</b>	\$ 1.170074	\$ 1.188347	\$ 1.362041	\$ 1.150163	\$ 1.240154	\$ 1.277247
<b>2032</b>	\$ 1.191336	\$ 1.209609	\$ 1.383303	\$ 1.171425	\$ 1.261416	\$ 1.298509
<b>2033</b>	\$ 1.194102	\$ 1.212375	\$ 1.386069	\$ 1.174191	\$ 1.264182	\$ 1.301275
<b>2034</b>	\$ 1.199437	\$ 1.218405	\$ 1.398705	\$ 1.178769	\$ 1.272182	\$ 1.310686
<b>2035</b>	\$ 1.219893	\$ 1.238862	\$ 1.419161	\$ 1.199225	\$ 1.292639	\$ 1.331142
<b>2036</b>	\$ 1.208643	\$ 1.227611	\$ 1.407911	\$ 1.187975	\$ 1.281388	\$ 1.319892
<b>2037</b>	\$ 1.228226	\$ 1.247194	\$ 1.427494	\$ 1.207558	\$ 1.300971	\$ 1.339475

**Nominal - Flat \$10/Ton Tax with 10% Adder**

<b>Year</b>	<b>Zone 1 Avoided Cost</b>	<b>Zone 2 Avoided Cost</b>	<b>Zone 3 Avoided Cost</b>	<b>Oregon Avoided Cost</b>	<b>Washington Avoided Cost</b>	<b>System Avoided Cost</b>
<b>2018</b>	\$ 0.434922	\$ 0.434922	\$ 0.434922	\$ 0.420425	\$ 0.434922	\$ 0.423868
<b>2019</b>	\$ 0.453790	\$ 0.467908	\$ 0.602108	\$ 0.438406	\$ 0.507935	\$ 0.536594
<b>2020</b>	\$ 0.488812	\$ 0.502930	\$ 0.637130	\$ 0.473428	\$ 0.542958	\$ 0.571616
<b>2021</b>	\$ 0.511572	\$ 0.525691	\$ 0.659891	\$ 0.496189	\$ 0.565718	\$ 0.594377
<b>2022</b>	\$ 0.525116	\$ 0.539568	\$ 0.676934	\$ 0.509370	\$ 0.580539	\$ 0.609875
<b>2023</b>	\$ 0.545923	\$ 0.560375	\$ 0.697741	\$ 0.530176	\$ 0.601346	\$ 0.630681
<b>2024</b>	\$ 0.560837	\$ 0.575289	\$ 0.712655	\$ 0.545090	\$ 0.616260	\$ 0.645595
<b>2025</b>	\$ 0.582993	\$ 0.597445	\$ 0.734811	\$ 0.567247	\$ 0.638416	\$ 0.667751
<b>2026</b>	\$ 0.596186	\$ 0.611104	\$ 0.752899	\$ 0.579932	\$ 0.653396	\$ 0.683677
<b>2027</b>	\$ 0.617305	\$ 0.632222	\$ 0.774018	\$ 0.601050	\$ 0.674515	\$ 0.704796
<b>2028</b>	\$ 0.633021	\$ 0.647939	\$ 0.789734	\$ 0.616767	\$ 0.690231	\$ 0.720512
<b>2029</b>	\$ 0.664943	\$ 0.679860	\$ 0.821656	\$ 0.648689	\$ 0.722153	\$ 0.752434
<b>2030</b>	\$ 0.679745	\$ 0.695207	\$ 0.842179	\$ 0.662898	\$ 0.739044	\$ 0.770430
<b>2031</b>	\$ 0.698446	\$ 0.713908	\$ 0.860880	\$ 0.681598	\$ 0.757745	\$ 0.789131
<b>2032</b>	\$ 0.716437	\$ 0.731899	\$ 0.878871	\$ 0.699590	\$ 0.775736	\$ 0.807122
<b>2033</b>	\$ 0.718778	\$ 0.734240	\$ 0.881211	\$ 0.701930	\$ 0.778076	\$ 0.809462
<b>2034</b>	\$ 0.723292	\$ 0.739342	\$ 0.891903	\$ 0.705804	\$ 0.784846	\$ 0.817425
<b>2035</b>	\$ 0.740601	\$ 0.756651	\$ 0.909212	\$ 0.723113	\$ 0.802155	\$ 0.834735
<b>2036</b>	\$ 0.731081	\$ 0.747131	\$ 0.899692	\$ 0.713593	\$ 0.792635	\$ 0.825215
<b>2037</b>	\$ 0.747652	\$ 0.763702	\$ 0.916263	\$ 0.730163	\$ 0.809205	\$ 0.841785

**Nominal - Flat \$20/Ton Tax with 10% Adder**

<b>Year</b>	<b>Zone 1 Avoided Cost</b>	<b>Zone 2 Avoided Cost</b>	<b>Zone 3 Avoided Cost</b>	<b>Oregon Avoided Cost</b>	<b>Washington Avoided Cost</b>	<b>System Avoided Cost</b>
<b>2018</b>	\$ 0.493245	\$ 0.493245	\$ 0.493245	\$ 0.478748	\$ 0.493245	\$ 0.482191
<b>2019</b>	\$ 0.512113	\$ 0.526231	\$ 0.660431	\$ 0.496729	\$ 0.566259	\$ 0.594917
<b>2020</b>	\$ 0.547135	\$ 0.561254	\$ 0.695454	\$ 0.531752	\$ 0.601281	\$ 0.629940
<b>2021</b>	\$ 0.569896	\$ 0.584014	\$ 0.718214	\$ 0.554512	\$ 0.624041	\$ 0.652700
<b>2022</b>	\$ 0.583439	\$ 0.597891	\$ 0.735258	\$ 0.567693	\$ 0.638863	\$ 0.668198
<b>2023</b>	\$ 0.604246	\$ 0.618698	\$ 0.756064	\$ 0.588500	\$ 0.659670	\$ 0.689005
<b>2024</b>	\$ 0.619160	\$ 0.633612	\$ 0.770978	\$ 0.603414	\$ 0.674584	\$ 0.703919
<b>2025</b>	\$ 0.641316	\$ 0.655768	\$ 0.793135	\$ 0.625570	\$ 0.696740	\$ 0.726075
<b>2026</b>	\$ 0.654510	\$ 0.669427	\$ 0.811223	\$ 0.638255	\$ 0.711720	\$ 0.742001
<b>2027</b>	\$ 0.675628	\$ 0.690545	\$ 0.832341	\$ 0.659374	\$ 0.732838	\$ 0.763119
<b>2028</b>	\$ 0.691344	\$ 0.706262	\$ 0.848057	\$ 0.675090	\$ 0.748555	\$ 0.778835
<b>2029</b>	\$ 0.723266	\$ 0.738184	\$ 0.879979	\$ 0.707012	\$ 0.780476	\$ 0.810757
<b>2030</b>	\$ 0.738068	\$ 0.753530	\$ 0.900502	\$ 0.721221	\$ 0.797367	\$ 0.828753
<b>2031</b>	\$ 0.756769	\$ 0.772231	\$ 0.919203	\$ 0.739922	\$ 0.816068	\$ 0.847454
<b>2032</b>	\$ 0.774760	\$ 0.790223	\$ 0.937194	\$ 0.757913	\$ 0.834059	\$ 0.865445
<b>2033</b>	\$ 0.777101	\$ 0.792563	\$ 0.939535	\$ 0.760253	\$ 0.836399	\$ 0.867786
<b>2034</b>	\$ 0.781615	\$ 0.797665	\$ 0.950226	\$ 0.764127	\$ 0.843169	\$ 0.875749
<b>2035</b>	\$ 0.798924	\$ 0.814974	\$ 0.967535	\$ 0.781436	\$ 0.860478	\$ 0.893058
<b>2036</b>	\$ 0.789405	\$ 0.805455	\$ 0.958016	\$ 0.771916	\$ 0.850958	\$ 0.883538
<b>2037</b>	\$ 0.805975	\$ 0.822025	\$ 0.974586	\$ 0.788487	\$ 0.867529	\$ 0.900109

**Nominal - Flat \$30/Ton Tax with 10% Adder**

<b>Year</b>	<b>Zone 1 Avoided Cost</b>	<b>Zone 2 Avoided Cost</b>	<b>Zone 3 Avoided Cost</b>	<b>Oregon Avoided Cost</b>	<b>Washington Avoided Cost</b>	<b>System Avoided Cost</b>
<b>2018</b>	\$ 0.551569	\$ 0.551569	\$ 0.551569	\$ 0.537072	\$ 0.551569	\$ 0.540515
<b>2019</b>	\$ 0.570436	\$ 0.584555	\$ 0.718755	\$ 0.555053	\$ 0.624582	\$ 0.653241
<b>2020</b>	\$ 0.605459	\$ 0.619577	\$ 0.753777	\$ 0.590075	\$ 0.659604	\$ 0.688263
<b>2021</b>	\$ 0.628219	\$ 0.642337	\$ 0.776537	\$ 0.612835	\$ 0.682365	\$ 0.711023
<b>2022</b>	\$ 0.641763	\$ 0.656214	\$ 0.793581	\$ 0.626016	\$ 0.697186	\$ 0.726521
<b>2023</b>	\$ 0.662570	\$ 0.677021	\$ 0.814388	\$ 0.646823	\$ 0.717993	\$ 0.747328
<b>2024</b>	\$ 0.677484	\$ 0.691935	\$ 0.829302	\$ 0.661737	\$ 0.732907	\$ 0.762242
<b>2025</b>	\$ 0.699640	\$ 0.714091	\$ 0.851458	\$ 0.683893	\$ 0.755063	\$ 0.784398
<b>2026</b>	\$ 0.712833	\$ 0.727750	\$ 0.869546	\$ 0.696579	\$ 0.770043	\$ 0.800324
<b>2027</b>	\$ 0.733951	\$ 0.748869	\$ 0.890664	\$ 0.717697	\$ 0.791161	\$ 0.821442
<b>2028</b>	\$ 0.749668	\$ 0.764585	\$ 0.906381	\$ 0.733414	\$ 0.806878	\$ 0.837159
<b>2029</b>	\$ 0.781589	\$ 0.796507	\$ 0.938302	\$ 0.765335	\$ 0.838800	\$ 0.869080
<b>2030</b>	\$ 0.796392	\$ 0.811854	\$ 0.958825	\$ 0.779544	\$ 0.855690	\$ 0.887076
<b>2031</b>	\$ 0.815093	\$ 0.830555	\$ 0.977526	\$ 0.798245	\$ 0.874391	\$ 0.905777
<b>2032</b>	\$ 0.833084	\$ 0.848546	\$ 0.995517	\$ 0.816236	\$ 0.892382	\$ 0.923768
<b>2033</b>	\$ 0.835424	\$ 0.850886	\$ 0.997858	\$ 0.818577	\$ 0.894723	\$ 0.926109
<b>2034</b>	\$ 0.839938	\$ 0.855989	\$ 1.008550	\$ 0.822450	\$ 0.901492	\$ 0.934072
<b>2035</b>	\$ 0.857248	\$ 0.873298	\$ 1.025859	\$ 0.839759	\$ 0.918801	\$ 0.951381
<b>2036</b>	\$ 0.847728	\$ 0.863778	\$ 1.016339	\$ 0.830240	\$ 0.909282	\$ 0.941862
<b>2037</b>	\$ 0.864298	\$ 0.880348	\$ 1.032909	\$ 0.846810	\$ 0.925852	\$ 0.958432