

Annual DEF T&D Rates (2018 = 100)						
Year	Winter			Summer		
	Distribution	Transmission	Total T&D	Distribution	Transmission	Total T&D
2018	\$ 80.61	\$ 26.63	\$ 107.24	87.20	\$ 28.80	\$ 116.00
2019	\$ 83.20	\$ 27.45	\$ 110.65	\$ 90.00	\$ 29.69	\$ 119.69
2020	\$ 85.66	\$ 28.19	\$ 113.85	\$ 92.65	\$ 30.50	\$ 123.15
2021	\$ 87.15	\$ 28.72	\$ 115.88	\$ 94.27	\$ 31.07	\$ 125.34
2022	\$ 88.77	\$ 29.30	\$ 118.07	\$ 96.02	\$ 31.69	\$ 127.71
2023	\$ 90.70	\$ 29.95	\$ 120.65	\$ 98.10	\$ 32.40	\$ 130.51
2024	\$ 92.83	\$ 30.63	\$ 123.46	\$ 100.41	\$ 33.13	\$ 133.55
2025	\$ 94.93	\$ 31.31	\$ 126.24	\$ 102.68	\$ 33.87	\$ 136.55
2026	\$ 97.10	\$ 32.05	\$ 129.14	\$ 105.03	\$ 34.66	\$ 139.69
2027	\$ 99.44	\$ 32.83	\$ 132.28	\$ 107.57	\$ 35.51	\$ 143.08
2028	\$ 101.86	\$ 33.65	\$ 135.51	\$ 110.17	\$ 36.40	\$ 146.57
2029	\$ 104.31	\$ 34.48	\$ 138.79	\$ 112.83	\$ 37.29	\$ 150.12
2030	\$ 106.78	\$ 35.30	\$ 142.08	\$ 115.50	\$ 38.18	\$ 153.68
2031	\$ 109.22	\$ 36.11	\$ 145.33	\$ 118.14	\$ 39.06	\$ 157.20
2032	\$ 111.64	\$ 36.94	\$ 148.58	\$ 120.76	\$ 39.96	\$ 160.71
2033	\$ 114.06	\$ 37.77	\$ 151.84	\$ 123.38	\$ 40.86	\$ 164.24
2034	\$ 116.52	\$ 38.62	\$ 155.15	\$ 126.04	\$ 41.78	\$ 167.81
2035	\$ 119.06	\$ 39.49	\$ 158.55	\$ 128.78	\$ 42.71	\$ 171.49
2036	\$ 121.65	\$ 40.37	\$ 162.02	\$ 131.59	\$ 43.67	\$ 175.25
2037	\$ 124.28	\$ 41.27	\$ 165.55	\$ 134.43	\$ 44.64	\$ 179.06
2038	\$ 126.94	\$ 42.19	\$ 169.13	\$ 137.31	\$ 45.64	\$ 182.95
2039	\$ 129.65	\$ 43.14	\$ 172.79	\$ 140.24	\$ 46.67	\$ 186.90
2040	\$ 132.45	\$ 44.12	\$ 176.57	\$ 143.27	\$ 47.73	\$ 190.99
2041	\$ 135.29	\$ 45.13	\$ 180.42	\$ 146.34	\$ 48.81	\$ 195.16
2042	\$ 138.20	\$ 46.16	\$ 184.35	\$ 149.48	\$ 49.93	\$ 199.41
2043	\$ 141.15	\$ 47.21	\$ 188.36	\$ 152.68	\$ 51.06	\$ 203.74
2044	\$ 144.19	\$ 48.28	\$ 192.48	\$ 155.97	\$ 52.23	\$ 208.19

Annual DEF T&D Rate Escalators						
Year	Winter			Summer		
	Distribution	Transmission	Total T&D	Distribution	Transmission	Total T&D
2018	\$ 1.00	\$ 1.00	\$ 1.00	1.00	\$ 1.00	\$ 1.00
2019	\$ 1.03	\$ 1.03	\$ 1.03	\$ 1.03	\$ 1.03	\$ 1.03
2020	\$ 1.06	\$ 1.06	\$ 1.06	\$ 1.06	\$ 1.06	\$ 1.06
2021	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08	\$ 1.08
2022	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10
2023	\$ 1.13	\$ 1.13	\$ 1.13	\$ 1.13	\$ 1.13	\$ 1.13
2024	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15
2025	\$ 1.18	\$ 1.18	\$ 1.18	\$ 1.18	\$ 1.18	\$ 1.18
2026	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
2027	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23	\$ 1.23
2028	\$ 1.26	\$ 1.26	\$ 1.26	\$ 1.26	\$ 1.26	\$ 1.26
2029	\$ 1.29	\$ 1.29	\$ 1.29	\$ 1.29	\$ 1.29	\$ 1.29
2030	\$ 1.32	\$ 1.33	\$ 1.32	\$ 1.32	\$ 1.33	\$ 1.32
2031	\$ 1.35	\$ 1.36	\$ 1.36	\$ 1.35	\$ 1.36	\$ 1.36
2032	\$ 1.38	\$ 1.39	\$ 1.39	\$ 1.38	\$ 1.39	\$ 1.39
2033	\$ 1.41	\$ 1.42	\$ 1.42	\$ 1.41	\$ 1.42	\$ 1.42
2034	\$ 1.45	\$ 1.45	\$ 1.45	\$ 1.45	\$ 1.45	\$ 1.45
2035	\$ 1.48	\$ 1.48	\$ 1.48	\$ 1.48	\$ 1.48	\$ 1.48
2036	\$ 1.51	\$ 1.52	\$ 1.51	\$ 1.51	\$ 1.52	\$ 1.51
2037	\$ 1.54	\$ 1.55	\$ 1.54	\$ 1.54	\$ 1.55	\$ 1.54
2038	\$ 1.57	\$ 1.58	\$ 1.58	\$ 1.57	\$ 1.58	\$ 1.58
2039	\$ 1.61	\$ 1.62	\$ 1.61	\$ 1.61	\$ 1.62	\$ 1.61
2040	\$ 1.64	\$ 1.66	\$ 1.65	\$ 1.64	\$ 1.66	\$ 1.65
2041	\$ 1.68	\$ 1.69	\$ 1.68	\$ 1.68	\$ 1.69	\$ 1.68
2042	\$ 1.71	\$ 1.73	\$ 1.72	\$ 1.71	\$ 1.73	\$ 1.72
2043	\$ 1.75	\$ 1.77	\$ 1.76	\$ 1.75	\$ 1.77	\$ 1.76
2044	\$ 1.79	\$ 1.81	\$ 1.79	\$ 1.79	\$ 1.81	\$ 1.79

DEF - Avoided T&D Costs

	2018 Projected Costs - Retail	2018 Projected Retail Winter Peak KW Demand	2018 Projected Retail Summer Peak KW Demand	2018 Class Non- Coincident Peak KW Demand	Cost \$/Winter KW	Cost \$/Summer KW
Transmission	\$ 246,826	9,270,373	8,570,475		\$ 26.63	\$ 28.80
Distribution Primary	395,840					
Distribution Secondary	258,295					
Distribution Services	93,180					
Total Distribution	747,315	9,270,373	8,570,475	10,388,000	\$ 80.61	87.20
Total T&D	\$ 994,141				107.2385009	115.9960165

Mnemonic		FHWDPPP.HNCR	FHWTPPP.HNCR
		Forecast: [INTERNAL] Handy-Whitman Electric: Distribution Plant - Total Distribution Plant- (Index- 1973=100)	Forecast: [INTERNAL] Handy-Whitman Electric: Transmission Plant - Total Transmission Plant- (Index- 1973=100)
Last Updated		11/29/2017	11/29/2017
Year	Yr/Qtr	Distribution	Transmission
1970	1970Q2	84.182236	84.128365
1970	1970Q3	85.698219	85.974068
1970	1970Q4	87.275917	87.66983
1971	1971Q1	88.837067	89.179451
1971	1971Q2	90.338608	90.504715
1971	1971Q3	91.752975	91.656609
1971	1971Q4	93.017136	92.614258
1972	1972Q1	94.064613	93.35714
1972	1972Q2	94.846275	93.878281
1972	1972Q3	95.338737	94.195023
1972	1972Q4	95.738525	94.561256
1973	1973Q1	96.468651	95.46653
1973	1973Q2	97.972435	97.418755
1973	1973Q3	100.70091	100.93519
1973	1973Q4	104.75919	106.05291
1974	1974Q1	109.8225	112.22695
1974	1974Q2	115.62153	118.98183
1974	1974Q3	121.96281	125.94173
1974	1974Q4	128.35692	132.58792
1975	1975Q1	134.071	138.35223
1975	1975Q2	138.51015	142.8251
1975	1975Q3	141.1618	145.66605
1975	1975Q4	142.14458	147.03737
1976	1976Q1	142.39859	147.78142
1976	1976Q2	142.9491	148.81654
1976	1976Q3	144.74434	150.99561
1976	1976Q4	147.86829	154.35861
1977	1977Q1	151.44469	158.04356
1977	1977Q2	154.59633	161.19865
1977	1977Q3	156.55295	163.06935
1977	1977Q4	157.32436	163.61
1978	1978Q1	157.84045	163.63197
1978	1978Q2	159.1151	164.02271

Average Annual HW Index			
Year	Distribution	Transmission	Total T&D
2018	721.985323	730.5225375	726.25393
2019	745.191283	753.099655	749.145469
2020	767.177963	773.585265	770.381614
2021	780.55237	788.1335475	784.342959
2022	795.011628	803.878695	799.445161
2023	812.307068	821.871705	817.089386
2024	831.424225	840.428985	835.926605
2025	850.180618	859.1772925	854.678955
2026	869.624435	879.27748	874.450958
2027	890.640625	900.82666	895.733643
2028	912.235233	923.3095525	917.772393
2029	934.230635	945.9273075	940.078971
2030	956.361863	968.4014425	962.381653
2031	978.199845	990.867235	984.53354
2032	999.858408	1013.4986	1006.6785
2033	1021.5837	1036.41895	1029.00133
2034	1043.5875	1059.716275	1051.65189
2035	1066.29228	1083.481175	1074.88673
2036	1089.52833	1107.665675	1098.597
2037	1113.04465	1132.299375	1122.67201
2038	1136.8989	1157.667225	1147.28306
2039	1161.16248	1183.709325	1172.4359
2040	1186.2439	1210.635425	1198.43966
2041	1211.71993	1238.197525	1224.95873
2042	1237.72208	1266.4021	1252.06209
2043	1264.1693	1295.205775	1279.68754
2044	1291.41663	1324.763025	1308.08983

1978	1978Q3	162.10767	165.62274
1978	1978Q4	166.8313	168.66589
1979	1979Q1	172.22348	172.67015
1979	1979Q2	177.24806	177.16266
1979	1979Q3	181.0043	181.76239
1979	1979Q4	183.3741	186.23091
1980	1980Q1	185.20802	190.5589
1980	1980Q2	187.47025	194.81064
1980	1980Q3	191.07797	199.09354
1980	1980Q4	196.16418	203.44315
1981	1981Q1	201.96326	207.79738
1981	1981Q2	207.75615	212.186
1981	1981Q3	212.93192	216.68085
1981	1981Q4	217.1496	221.16489
1982	1982Q1	220.47768	225.37982
1982	1982Q2	223.11813	229.16074
1982	1982Q3	225.27536	232.38377
1982	1982Q4	227.04266	234.9498
1983	1983Q1	228.46138	236.87643
1983	1983Q2	229.60713	238.25064
1983	1983Q3	230.55717	239.15903
1983	1983Q4	231.33658	239.67589
1984	1984Q1	231.94632	239.90941
1984	1984Q2	232.3958	239.97862
1984	1984Q3	232.70299	240.00121
1984	1984Q4	232.94772	240.10953
1985	1985Q1	233.27533	240.44675
1985	1985Q2	233.83946	241.15582
1985	1985Q3	234.78857	242.37549
1985	1985Q4	236.06284	243.979
1986	1986Q1	237.37247	245.54755
1986	1986Q2	238.44084	246.68002
1986	1986Q3	239.02399	247.02513
1986	1986Q4	239.13756	246.72855
1987	1987Q1	239.10925	246.50525
1987	1987Q2	239.29178	247.10133
1987	1987Q3	240.03094	249.23813
1987	1987Q4	241.54095	253.08043
1988	1988Q1	243.86688	258.14182
1988	1988Q2	247.04428	263.90887
1988	1988Q3	251.13026	269.95398

1988	1988Q4	255.87061	275.86548
1989	1989Q1	260.63208	281.22003
1989	1989Q2	264.86777	285.7388
1989	1989Q3	268.10953	289.20615
1989	1989Q4	270.2616	291.69568
1990	1990Q1	271.73642	293.70251
1990	1990Q2	273.03488	295.80716
1990	1990Q3	274.62601	298.5564
1990	1990Q4	276.54294	301.83298
1991	1991Q1	278.36612	304.82706
1991	1991Q2	279.68579	306.75543
1991	1991Q3	280.13693	306.91446
1991	1991Q4	279.78851	305.48575
1992	1992Q1	279.22485	303.68735
1992	1992Q2	279.07019	302.80789
1992	1992Q3	279.90067	304.02817
1992	1992Q4	281.78577	307.44937
1993	1993Q1	284.21539	311.94281
1993	1993Q2	286.67764	316.36392
1993	1993Q3	288.73123	319.71228
1993	1993Q4	290.29538	321.84781
1994	1994Q1	291.72095	323.64716
1994	1994Q2	293.42715	326.11221
1994	1994Q3	295.82538	330.20056
1994	1994Q4	298.93814	335.8923
1995	1995Q1	302.36011	342.08276
1995	1995Q2	305.72357	347.7157
1995	1995Q3	308.71396	351.85757
1995	1995Q4	311.08762	354.17969
1996	1996Q1	312.7616	355.16757
1996	1996Q2	313.70416	355.41971
1996	1996Q3	313.90808	355.5108
1996	1996Q4	313.62036	355.89737
1997	1997Q1	313.37701	356.90402
1997	1997Q2	313.7233	358.84366
1997	1997Q3	315.17184	362.02356
1997	1997Q4	317.67871	366.11624
1998	1998Q1	320.55862	370.09854
1998	1998Q2	323.13647	372.99619
1998	1998Q3	324.80933	373.93082
1998	1998Q4	325.42764	372.92764

1999	1999Q1	325.40979	371.10962
1999	1999Q2	325.23367	369.65768
1999	1999Q3	325.34756	369.6713
1999	1999Q4	326.00412	371.56549
2000	2000Q1	327.22711	374.9317
2000	2000Q2	329.01886	379.29187
2000	2000Q3	331.40195	384.24301
2000	2000Q4	334.30042	389.42719
2001	2001Q1	337.49265	394.48657
2001	2001Q2	340.81332	399.18942
2001	2001Q3	344.14935	403.35757
2001	2001Q4	347.41751	406.80521
2002	2002Q1	350.60843	409.4444
2002	2002Q2	353.79337	411.2775
2002	2002Q3	357.07211	412.33038
2002	2002Q4	360.40121	412.9006
2003	2003Q1	363.62473	413.62408
2003	2003Q2	366.65439	415.16681
2003	2003Q3	369.45248	418.1922
2003	2003Q4	372.15866	422.90726
2004	2004Q1	375.1568	428.98969
2004	2004Q2	378.87592	436.10754
2004	2004Q3	383.77444	444.04196
2004	2004Q4	390.08456	452.68808
2005	2005Q1	397.69772	461.96698
2005	2005Q2	406.61624	471.99936
2005	2005Q3	416.95633	483.0072
2005	2005Q4	428.34393	494.61267
2006	2006Q1	439.9303	505.89731
2006	2006Q2	451.09512	516.17255
2006	2006Q3	461.41867	524.94348
2006	2006Q4	471.15326	532.63849
2007	2007Q1	481.4176	540.83594
2007	2007Q2	493.60388	551.35846
2007	2007Q3	509.1236	565.99414
2007	2007Q4	527.28357	583.97772
2008	2008Q1	545.27808	601.89941
2008	2008Q2	560.34277	616.34515
2008	2008Q3	570.06812	624.29333
2008	2008Q4	574.10046	625.29095
2009	2009Q1	574.46259	621.86487

2009	2009Q2	573.46039	616.80341
2009	2009Q3	573.22809	612.65009
2009	2009Q4	574.85309	610.83417
2010	2010Q1	578.22363	611.43738
2010	2010Q2	583.14948	614.36664
2010	2010Q3	589.52246	619.58386
2010	2010Q4	596.87183	626.42999
2011	2011Q1	604.33832	633.52002
2011	2011Q2	611.20941	639.58417
2011	2011Q3	616.89838	643.50781
2011	2011Q4	621.3299	645.22632
2012	2012Q1	625.14374	645.98212
2012	2012Q2	629.09613	647.15619
2012	2012Q3	633.92694	650.03369
2012	2012Q4	639.72717	654.76434
2013	2013Q1	645.85083	660.22717
2013	2013Q2	651.72882	665.31262
2013	2013Q3	656.90338	669.04883
2013	2013Q4	661.31506	671.26208
2014	2014Q1	665.43567	672.76178
2014	2014Q2	669.87604	674.48297
2014	2014Q3	675.23413	677.31085
2014	2014Q4	681.2558	681.34125
2015	2015Q1	686.81842	685.79968
2015	2015Q2	690.87848	689.93573
2015	2015Q3	692.49872	693.09106
2015	2015Q4	691.72845	695.04889
2016	2016Q1	689.83496	696.18097
2016	2016Q2	688.18958	696.94165
2016	2016Q3	688.06085	697.77899
2016	2016Q4	689.91498	699.07806
2017	2017Q1	693.29218	701.1319
2017	2017Q2	697.69373	704.24603
2017	2017Q3	702.72314	708.75641
2017	2017Q4	708.07416	714.55096
2018	2018Q1	713.55762	721.00311
2018	2018Q2	719.11926	727.5802
2018	2018Q3	724.77625	733.86383
2018	2018Q4	730.48816	739.64301
2019	2019Q1	736.21826	745.02997
2019	2019Q2	742.05835	750.29529

2019	2019Q3	748.15295	755.74249
2019	2019Q4	754.33557	761.33087
2020	2020Q1	760.21362	766.74902
2020	2020Q2	765.45111	771.72839
2020	2020Q3	769.79376	776.07489
2020	2020Q4	773.25336	779.78876
2021	2021Q1	776.14368	783.08478
2021	2021Q2	778.88104	786.2793
2021	2021Q3	781.88489	789.70441
2021	2021Q4	785.29987	793.4657
2022	2022Q1	788.99567	797.45258
2022	2022Q2	792.89441	801.62012
2022	2022Q3	796.97424	805.97833
2022	2022Q4	801.18219	810.46375
2023	2023Q1	805.47028	814.97864
2023	2023Q2	809.88617	819.52441
2023	2023Q3	814.52667	824.15497
2023	2023Q4	819.34515	828.8288
2024	2024Q1	824.2149	833.48291
2024	2024Q2	829.05652	838.10535
2024	2024Q3	833.84955	842.7373
2024	2024Q4	838.57593	847.39038
2025	2025Q1	843.19958	852.02246
2025	2025Q2	847.7923	856.69336
2025	2025Q3	852.47467	861.51508
2025	2025Q4	857.25592	866.47827
2026	2026Q1	862.07922	871.4964
2026	2026Q2	866.98981	876.58813
2026	2026Q3	872.08807	881.83185
2026	2026Q4	877.34064	887.19354
2027	2027Q1	882.62433	892.57678
2027	2027Q2	887.92798	898.00128
2027	2027Q3	893.30298	903.54889
2027	2027Q4	898.70721	909.17969
2028	2028Q1	904.09351	914.81891
2028	2028Q2	909.47559	920.45245
2028	2028Q3	914.9256	926.12872
2028	2028Q4	920.44623	931.83813
2029	2029Q1	925.93896	937.48187
2029	2029Q2	931.42401	943.08557
2029	2029Q3	936.98291	948.737

2029	2029Q4	942.57666	954.40479
2030	2030Q1	948.10492	960.00177
2030	2030Q2	953.58954	965.56433
2030	2030Q3	959.11279	971.18982
2030	2030Q4	964.6402	976.84985
2031	2031Q1	970.08301	982.45154
2031	2031Q2	975.4729	988.02454
2031	2031Q3	980.90094	993.66071
2031	2031Q4	986.34253	999.33215
2032	2032Q1	991.7478	1004.9839
2032	2032Q2	997.12653	1010.6229
2032	2032Q3	1002.547	1016.3174
2032	2032Q4	1008.0123	1022.0702
2033	2033Q1	1013.4302	1027.7852
2033	2033Q2	1018.8265	1033.4907
2033	2033Q3	1024.2878	1039.2793
2033	2033Q4	1029.7903	1045.1206
2034	2034Q1	1035.2587	1050.924
2034	2034Q2	1040.738	1056.7251
2034	2034Q3	1046.3339	1062.6248
2034	2034Q4	1052.0194	1068.5912
2035	2035Q1	1057.692	1074.522
2035	2035Q2	1063.3712	1080.444
2035	2035Q3	1069.1411	1086.4506
2035	2035Q4	1074.9648	1092.5081
2036	2036Q1	1080.7775	1098.5529
2036	2036Q2	1086.5776	1104.5876
2036	2036Q3	1092.4282	1110.6816
2036	2036Q4	1098.33	1116.8406
2037	2037Q1	1104.1886	1122.9713
2037	2037Q2	1110.0382	1129.1144
2037	2037Q3	1115.9777	1135.379
2037	2037Q4	1121.9741	1141.7328
2038	2038Q1	1127.9257	1148.0651
2038	2038Q2	1133.8602	1154.4027
2038	2038Q3	1139.8729	1160.8445
2038	2038Q4	1145.9368	1167.3566
2039	2039Q1	1151.9683	1173.8402
2039	2039Q2	1158.0156	1180.3384
2039	2039Q3	1164.1943	1186.9669
2039	2039Q4	1170.4717	1193.6918

2040	2040Q1	1176.7634	1200.4333
2040	2040Q2	1183.0515	1207.184
2040	2040Q3	1189.3885	1214.0111
2040	2040Q4	1195.7722	1220.9133
2041	2041Q1	1202.109	1227.7799
2041	2041Q2	1208.4449	1234.6508
2041	2041Q3	1214.8965	1241.6425
2041	2041Q4	1221.4293	1248.7169
2042	2042Q1	1227.9252	1255.7539
2042	2042Q2	1234.4069	1262.7867
2042	2042Q3	1240.9711	1269.9277
2042	2042Q4	1247.5851	1277.1401
2043	2043Q1	1254.1583	1284.3131
2043	2043Q2	1260.7451	1291.4929
2043	2043Q3	1267.4718	1298.8059
2043	2043Q4	1274.302	1306.2112
2044	2044Q1	1281.1406	1313.6166
2044	2044Q2	1287.9651	1321.0094
2044	2044Q3	1294.8295	1328.4592
2044	2044Q4	1301.7313	1335.9669
2045	2045Q1	1308.574	1343.4219
2045	2045Q2	1315.4122	1350.8774
2045	2045Q3	1322.3762	1358.4701
2045	2045Q4	1329.4371	1366.1622
2046	2046Q1	1336.4786	1373.8215
2046	2046Q2	1343.5365	1381.4818
2046	2046Q3	1350.7263	1389.2626
2046	2046Q4	1358.0084	1397.1145
2047	2047Q1	1365.2616	1404.9021
2047	2047Q2	1372.5233	1412.6602
2047	2047Q3	1379.9124	1420.5098
2047	2047Q4	1387.3877	1428.4006