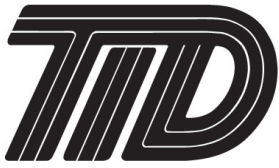


WATER & POWER

Serving Central California since 1887

Short Run Marginal Cost Daily Average

Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)	Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)	Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)
3/5/2018	0.0406	0.0337	1/31/2018	0.0314	0.0287	12/29/2017	0.0346	0.0303
3/4/2018	-	0.0309	1/30/2018	0.0342	0.0294	12/28/2017	0.0337	0.0297
3/3/2018	-	0.0379	1/29/2018	0.0350	0.0300	12/27/2017	0.0333	0.0302
3/2/2018	0.0393	0.0341	1/28/2018	-	0.0286	12/26/2017	0.0383	0.0330
3/1/2018	0.0391	0.0321	1/27/2018	-	0.0298	12/25/2017	-	0.0313
2/28/2018	0.0391	0.0335	1/26/2018	0.0335	0.0304	12/24/2017	-	0.0335
2/27/2018	0.0356	0.0324	1/25/2018	0.0317	0.0297	12/23/2017	-	0.0334
2/26/2018	0.0374	0.0327	1/24/2018	0.0329	0.0301	12/22/2017	0.0378	0.0351
2/25/2018	-	0.0263	1/23/2018	0.0357	0.0320	12/21/2017	0.0388	0.0356
2/24/2018	-	0.0269	1/22/2018	0.0365	0.0318	12/20/2017	0.0370	0.0321
2/23/2018	0.0271	0.0344	1/21/2018	-	0.0320	12/19/2017	0.0360	0.0321
2/22/2018	0.0423	0.0444	1/20/2018	-	0.0263	12/18/2017	0.0376	0.0321
2/21/2018	0.0460	0.0471	1/19/2018	0.0308	0.0298	12/17/2017	-	0.0291
2/20/2018	0.0396	0.0404	1/18/2018	0.0338	0.0311	12/16/2017	-	0.0291
2/19/2018	-	0.0339	1/17/2018	0.0344	0.0319	12/15/2017	0.0348	0.0314
2/18/2018	-	0.0226	1/16/2018	0.0366	0.0313	12/14/2017	0.0376	0.0317
2/17/2018	-	0.0275	1/15/2018	0.0384	0.0310	12/13/2017	0.0409	0.0338
2/16/2018	0.0279	0.0291	1/14/2018	-	0.0309	12/12/2017	0.0422	0.0342
2/15/2018	0.0312	0.0301	1/13/2018	-	0.0310	12/11/2017	0.0395	0.0331
2/14/2018	0.0316	0.0316	1/12/2018	0.0354	0.0301	12/10/2017	-	0.0301
2/13/2018	0.0312	0.0309	1/11/2018	0.0321	0.0273	12/9/2017	-	0.0311
2/12/2018	0.0273	0.0262	1/10/2018	0.0321	0.0263	12/8/2017	0.0364	0.0319
2/11/2018	-	0.0236	1/9/2018	0.0344	0.0304	12/7/2017	0.0410	0.0336
2/10/2018	-	0.0211	1/8/2018	0.0365	0.0316	12/6/2017	0.0395	0.0339
2/9/2018	0.0250	0.0250	1/7/2018	-	0.0291	12/5/2017	0.0367	0.0314
2/8/2018	0.0274	0.0242	1/6/2018	-	0.0299	12/4/2017	0.0368	0.0320
2/7/2018	0.0270	0.0245	1/5/2018	0.0371	0.0320	12/3/2017	-	0.0289
2/6/2018	0.0278	0.0237	1/4/2018	0.0430	0.0371	12/2/2017	-	0.0309
2/5/2018	0.0248	0.0220	1/3/2018	0.0454	0.0372	12/1/2017	0.0365	0.0317
2/4/2018	-	0.0195	1/2/2018	0.0424	0.0360	11/30/2017	0.0404	0.0328
2/3/2018	-	0.0224	1/1/2018	-	0.0337	11/29/2017	0.0389	0.0313
2/2/2018	0.0279	0.0260	12/31/2017	-	0.0338	11/28/2017	0.0390	0.0326
2/1/2018	0.0335	0.0294	12/30/2017	-	0.0295	11/27/2017	0.0365	0.0286

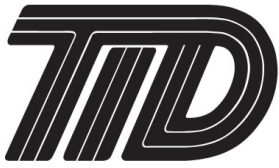


WATER & POWER

Serving Central California since 1887

Short Run Marginal Cost Daily Average

Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)	Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)	Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)
11/26/2017	-	0.0282	10/24/2017	0.1678	0.0449	9/21/2017	0.0305	0.0292
11/25/2017	-	0.0292	10/23/2017	0.1034	0.0353	9/20/2017	0.0325	0.0286
11/24/2017	0.0323	0.0260	10/22/2017	-	0.0336	9/19/2017	0.0323	0.0286
11/23/2017	-	0.0299	10/21/2017	-	0.0319	9/18/2017	0.0352	0.0281
11/22/2017	0.0353	0.0294	10/20/2017	0.0321	0.0296	9/17/2017	-	0.0280
11/21/2017	0.0365	0.0307	10/19/2017	0.0366	0.0306	9/16/2017	-	0.0310
11/20/2017	0.0375	0.0315	10/18/2017	0.0506	0.0352	9/15/2017	0.0330	0.0276
11/19/2017	-	0.0309	10/17/2017	0.0653	0.0359	9/14/2017	0.0349	0.0298
11/18/2017	-	0.0318	10/16/2017	0.0608	0.0341	9/13/2017	0.0425	0.0306
11/17/2017	0.0353	0.0302	10/15/2017	-	0.0373	9/12/2017	0.0515	0.0325
11/16/2017	0.0418	0.0314	10/14/2017	-	0.0332	9/11/2017	0.0584	0.0322
11/15/2017	0.0397	0.0305	10/13/2017	0.0345	0.0307	9/10/2017	-	0.0359
11/14/2017	0.0404	0.0314	10/12/2017	0.0355	0.0313	9/9/2017	-	0.0324
11/13/2017	0.0358	0.0284	10/11/2017	0.0363	0.0304	9/8/2017	0.0405	0.0309
11/12/2017	-	0.0351	10/10/2017	0.0427	0.0323	9/7/2017	0.0443	0.0329
11/11/2017	-	0.0381	10/9/2017	0.0401	0.0306	9/6/2017	0.0487	0.0330
11/10/2017	0.0395	0.0320	10/8/2017	-	0.0266	9/5/2017	0.0633	0.0363
11/9/2017	0.0420	0.0318	10/7/2017	-	0.0318	9/4/2017	-	0.0436
11/8/2017	0.0691	0.0418	10/6/2017	0.0402	0.0300	9/3/2017	-	0.0473
11/7/2017	0.0602	0.0415	10/5/2017	0.0377	0.0301	9/2/2017	-	0.0644
11/6/2017	0.0452	0.0347	10/4/2017	0.0375	0.0305	9/1/2017	0.1781	0.0385
11/5/2017	-	0.0316	10/3/2017	0.0352	0.0299	8/31/2017	0.1314	0.0379
11/4/2017	-	0.0326	10/2/2017	0.0346	0.0283	8/30/2017	0.0784	0.0368
11/3/2017	0.0384	0.0349	10/1/2017	-	0.0262	8/29/2017	0.1520	0.0369
11/2/2017	0.0360	0.0327	9/30/2017	-	0.0279	8/28/2017	0.2178	0.0404
11/1/2017	0.0378	0.0340	9/29/2017	0.0370	0.0288	8/27/2017	-	0.0429
10/31/2017	0.0397	0.0339	9/28/2017	0.0451	0.0298	8/26/2017	-	0.0375
10/30/2017	0.0346	0.0307	9/27/2017	0.0440	0.0305	8/25/2017	0.0463	0.0325
10/29/2017	-	0.0308	9/26/2017	0.0443	0.0308	8/24/2017	0.0382	0.0302
10/28/2017	-	0.0341	9/25/2017	0.0395	0.0283	8/23/2017	0.0416	0.0302
10/27/2017	0.0505	0.0357	9/24/2017	-	0.0264	8/22/2017	0.0441	0.0327
10/26/2017	0.0640	0.0365	9/23/2017	-	0.0261	8/21/2017	0.0418	0.0331
10/25/2017	0.1234	0.0414	9/22/2017	0.0315	0.0299	8/20/2017	-	0.0309

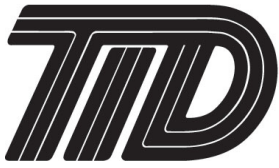


WATER & POWER

Serving Central California since 1887

Short Run Marginal Cost Daily Average

Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)	Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)	Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)
8/19/2017	-	0.0310	7/17/2017	0.0457	0.0286	6/14/2017	0.0325	0.0225
8/18/2017	0.0385	0.0280	7/16/2017	-	0.0248	6/13/2017	0.0271	0.0222
8/17/2017	0.0371	0.0281	7/15/2017	-	0.0328	6/12/2017	0.0158	0.0165
8/16/2017	0.0358	0.0274	7/14/2017	0.0338	0.0280	6/11/2017	-	0.0051
8/15/2017	0.0333	0.0289	7/13/2017	0.0344	0.0269	6/10/2017	-	0.0132
8/14/2017	0.0341	0.0261	7/12/2017	0.0248	0.0265	6/9/2017	0.0233	0.0230
8/13/2017	-	0.0285	7/11/2017	0.0361	0.0286	6/8/2017	0.0289	0.0264
8/12/2017	-	0.0309	7/10/2017	0.0198	0.0272	6/7/2017	0.0355	0.0256
8/11/2017	0.0471	0.0308	7/9/2017	-	0.0282	6/6/2017	0.0359	0.0258
8/10/2017	0.0481	0.0305	7/8/2017	-	0.0369	6/5/2017	0.0367	0.0219
8/9/2017	0.0487	0.0313	7/7/2017	0.0697	0.0311	6/4/2017	-	0.0215
8/8/2017	0.0467	0.0310	7/6/2017	0.0487	0.0297	6/3/2017	-	0.0249
8/7/2017	0.0481	0.0315	7/5/2017	0.0444	0.0290	6/2/2017	0.0357	0.0234
8/6/2017	-	0.0313	7/4/2017	-	0.0271	6/1/2017	0.0280	0.0227
8/5/2017	-	0.0339	7/3/2017	0.0190	0.0241	5/31/2017	0.0319	0.0236
8/4/2017	0.0484	0.0324	7/2/2017	-	0.0213	5/30/2017	0.0365	0.0237
8/3/2017	0.0873	0.0364	7/1/2017	-	0.0235	5/29/2017	-	0.0232
8/2/2017	0.1674	0.0382	6/30/2017	0.0352	0.0244	5/28/2017	-	0.0189
8/1/2017	0.1732	0.0365	6/29/2017	0.0341	0.0245	5/27/2017	-	0.0190
7/31/2017	0.0588	0.0317	6/28/2017	0.0310	0.0225	5/26/2017	0.0265	0.0229
7/30/2017	-	0.0321	6/27/2017	0.0365	0.0256	5/25/2017	0.0295	0.0238
7/29/2017	-	0.0331	6/26/2017	0.0420	0.0269	5/24/2017	0.0344	0.0249
7/28/2017	0.0455	0.0303	6/25/2017	-	0.0296	5/23/2017	0.0265	0.0254
7/27/2017	0.0488	0.0299	6/24/2017	-	0.0333	5/22/2017	0.0284	0.0228
7/26/2017	0.0443	0.0301	6/23/2017	0.0495	0.0296	5/21/2017	-	0.0072
7/25/2017	0.0448	0.0336	6/22/2017	0.0047	0.0267	5/20/2017	-	0.0173
7/24/2017	0.0478	0.0333	6/21/2017	0.2171	0.0345	5/19/2017	0.0215	0.0187
7/23/2017	-	0.0343	6/20/2017	0.0829	0.0327	5/18/2017	0.0271	0.0263
7/22/2017	-	0.0338	6/19/2017	0.0711	0.0319	5/17/2017	0.0220	0.0244
7/21/2017	0.0423	0.0292	6/18/2017	-	0.0200	5/16/2017	0.0230	0.0245
7/20/2017	0.0427	0.0284	6/17/2017	-	0.0317	5/15/2017	0.0196	0.0204
7/19/2017	0.0395	0.0279	6/16/2017	0.0455	0.0261	5/14/2017	-	0.0103
7/18/2017	0.0400	0.0296	6/15/2017	0.0366	0.0235	5/13/2017	-	0.0168



WATER & POWER

Serving Central California since 1887

Short Run Marginal Cost Daily Average

Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)	Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)	Date	On-Peak (\$/KWH)	Off-Peak (\$/KWH)
5/12/2017	0.0206	0.0256	4/9/2017	-	0.0177	3/7/2017	0.0285	0.0267
5/11/2017	0.0319	0.0298	4/8/2017	-	0.0191	3/6/2017	0.0251	0.0207
5/10/2017	0.0311	0.0286	4/7/2017	0.0313	0.0305	3/5/2017	-	0.0191
5/9/2017	0.0373	0.0280	4/6/2017	0.0314	0.0283	3/4/2017	-	0.0195
5/8/2017	0.0360	0.0286	4/5/2017	0.0302	0.0269	3/3/2017	0.0234	0.0199
5/7/2017	-	0.0237	4/4/2017	0.0250	0.0235	3/2/2017	0.0235	0.0228
5/6/2017	-	0.0227	4/3/2017	0.0178	0.0164	3/1/2017	0.0260	0.0255
5/5/2017	0.0376	0.0289	4/2/2017	-	0.0118	2/28/2017	0.0254	0.0223
5/4/2017	0.0606	0.0337	4/1/2017	-	0.0199	2/27/2017	0.0317	0.0265
5/3/2017	0.0631	0.0320	3/31/2017	0.0162	0.0156	2/26/2017	-	0.0195
5/2/2017	0.0524	0.0322	3/30/2017	0.0156	0.0154	2/25/2017	-	0.0215
5/1/2017	0.0391	0.0284	3/29/2017	0.0204	0.0212	2/24/2017	0.0275	0.0265
4/30/2017	-	0.0215	3/28/2017	0.0185	0.0205	2/23/2017	0.0252	0.0253
4/29/2017	-	0.0230	3/27/2017	0.0158	0.0172	2/22/2017	0.0262	0.0218
4/28/2017	0.0239	0.0266	3/26/2017	-	0.0116	2/21/2017	0.0306	0.0241
4/27/2017	0.0276	0.0252	3/25/2017	-	0.0116	2/20/2017	-	0.0273
4/26/2017	0.0246	0.0224	3/24/2017	0.0183	0.0220	2/19/2017	-	0.0184
4/25/2017	0.0289	0.0270	3/23/2017	0.0174	0.0180	2/18/2017	-	0.0277
4/24/2017	0.0284	0.0216	3/22/2017	0.0294	0.0242	2/17/2017	0.0357	0.0281
4/23/2017	-	0.0163	3/21/2017	0.0294	0.0263	2/16/2017	0.0295	0.0245
4/22/2017	-	0.0254	3/20/2017	0.0268	0.0231	2/15/2017	0.0311	0.0261
4/21/2017	0.0418	0.0276	3/19/2017	-	0.0219	2/14/2017	0.0339	0.0285
4/20/2017	0.0274	0.0239	3/18/2017	-	0.0250	2/13/2017	0.0386	0.0317
4/19/2017	0.0262	0.0267	3/17/2017	0.0356	0.0272	2/12/2017	-	0.0304
4/18/2017	0.0299	0.0291	3/16/2017	0.0311	0.0248	2/11/2017	-	0.0275
4/17/2017	0.0331	0.0314	3/15/2017	0.0340	0.0269	2/10/2017	0.0370	0.0287
4/16/2017	-	0.0202	3/14/2017	0.0377	0.0293	2/9/2017	0.0381	0.0303
4/15/2017	-	0.0228	3/13/2017	0.0400	0.0281	2/8/2017	0.0386	0.0307
4/14/2017	0.0193	0.0181	3/12/2017	-	0.0170	2/7/2017	0.0365	0.0278
4/13/2017	0.0181	0.0249	3/11/2017	-	0.0213	2/6/2017	0.0362	0.0285
4/12/2017	0.0283	0.0295	3/10/2017	0.0277	0.0194	2/5/2017	-	0.0286
4/11/2017	0.0274	0.0324	3/9/2017	0.0312	0.0223			
4/10/2017	0.0279	0.0280	3/8/2017	0.0306	0.0235			