

**Appendix E4 to California's Compliance Plan for
the Federal Clean Power Plan:
Coal Prices**

Nominal \$/MMBTU

YEAR	BIT_LS_ANM	BIT_LS_RMO	BIT_LS_WMO	BIT_MS_ANM	LIG_MS_DAK	SUB_LS_AWA	SUB_LS_PRB	SUB_LS_RMO	SUB_LS_WMO	SUB_LS_WWY	SUB_MS_ANM	SUB_MS_PRB	SUB_MS_WMO	SUB_MS_WWY	WC_LS_USA
2014	1.917486047	1.526227055	1.086012659	2.697992688	1.528740464	2.502177335	0.720632038	1.827976684	0.667193626	1.999085052	1.631141576	0.706986459	1.117758558	1.734624234	1.531629781
2015	1.856113755	1.623268168	1.125241002	2.772128646	1.548106053	2.463759567	0.732015317	1.852138391	0.694864408	2.089890028	1.620797295	0.718666717	1.120330696	1.705951073	1.51851836
2016	1.919679714	1.722191147	1.225054509	3.003972581	1.490194494	2.620152096	0.79374838	1.902295816	0.794116975	2.315821074	1.743655869	0.860474325	1.207604893	1.801673574	1.614038501
2017	1.970510426	1.782109972	1.308166918	3.260312475	1.501590426	2.762656879	0.84966045	1.921005082	0.877908103	2.590825326	1.844641885	0.940213649	1.255013226	1.850190739	1.644006101
2018	2.050684909	1.807842758	1.346693054	3.26230711	1.638798818	2.866487472	0.902660128	1.953016753	0.924221624	2.840974333	1.92158971	1.011122276	1.337385546	1.91925566	1.685486701
2019	2.122003727	1.862228709	1.408142317	3.213426061	1.747012776	2.972063585	0.950766707	2.012368016	0.971745987	3.09437045	1.987616869	1.070563732	1.435274115	2.000932996	1.736047487
2020	2.205907087	1.93845216	1.46224742	3.158056309	1.820125337	3.058905607	1.004739228	2.091119747	1.018432194	3.235024233	2.06956224	1.129416039	1.493407187	2.074261568	1.801972352
2021	2.303797623	2.022675706	1.512445235	3.087034338	1.904845738	3.156061107	1.054080355	2.184539035	1.073380451	3.442851585	2.161088561	1.190576381	1.560496881	2.16824413	1.860883084
2022	2.399865139	2.104836277	1.546337468	3.024441122	1.983764373	3.2566626	1.119151179	2.269516217	1.150322098	3.583197827	2.256102361	1.261519737	1.650960364	2.265822859	1.912241209
2023	2.504407456	2.194733539	1.574591137	2.976318372	2.055711921	3.367349351	1.186441507	2.369147519	1.216482954	3.727578934	2.360760255	1.334856296	1.730265803	2.360091759	1.944943624
2024	2.61115027	2.275490003	1.602559977	2.916583194	2.147771577	3.518674399	1.241133365	2.464621898	1.277492046	3.749318414	2.460813075	1.394738458	1.804161034	2.44345224	1.997371897
2025	2.690689912	2.301690329	1.643271039	2.865144781	2.242015774	3.61781902	1.297152739	2.536538064	1.318914152	3.829488505	2.534731869	1.456043584	1.857539761	2.528365771	2.060687733
2026	2.783553933	2.350070571	1.690970984	2.809173976	2.338476641	3.726408604	1.354518576	2.616014822	1.368240791	3.944401068	2.62425716	1.526828503	1.919252544	2.614863454	2.114522247

Nominal \$/MMBTU

YEAR	BIT_LS_ANM	BIT_LS_RMO	BIT_LS_WMO	BIT_MS_ANM	LIG_MS_DAK	SUB_LS_AWA	SUB_LS_PRB	SUB_LS_RMO	SUB_LS_WMO	SUB_LS_WWY	SUB_MS_ANM	SUB_MS_PRB	SUB_MS_WMO	SUB_MS_WWY	WC_LS_USA
2014	1.908063511	1.526227055	1.086012659	2.703314173	1.528740464	2.502177335	0.720632038	1.827976684	0.667193626	1.999085052	1.631141576	0.706986459	1.117758558	1.734624234	1.531629781
2015	1.799148627	1.614274992	1.08910941	2.750680843	1.548106053	2.412697192	0.720208618	1.821354928	0.6835658	2.025087236	1.598049263	0.712362623	1.066981615	1.679786179	1.502012726
2016	1.871325061	1.717610851	1.209281275	2.949354897	1.490194494	2.535631061	0.781721889	1.881391467	0.75959015	2.26631421	1.726277239	0.847631425	1.177414771	1.785682389	1.58881915
2017	1.970510426	1.772730446	1.292016709	3.193204842	1.485444292	2.682772824	0.84350349	1.910303104	0.8543401	2.590825326	1.844641885	0.927063808	1.242648563	1.850190739	1.644006101
2018	2.055760862	1.817458943	1.324616119	3.193506257	1.597415009	2.7914128	0.877410894	1.958502755	0.900058967	2.823651319	1.92767069	0.984159015	1.324708906	1.880087177	1.667837626
2019	2.116802738	1.827742993	1.368555986	3.137055789	1.704609553	2.888146496	0.911959903	2.012368016	0.928419733	3.064787559	1.981386095	1.029122555	1.376824038	1.932133007	1.699879832
2020	2.174014454	1.872997931	1.43334925	3.074001578	1.768121756	2.973141898	0.958468343	2.068140409	0.967826867	3.186650039	2.044090704	1.080004087	1.433670899	1.998088121	1.737286165
2021	2.249462774	1.950621101	1.453365343	3.001112905	1.816248262	3.068392743	1.000024952	2.137559701	1.041049715	3.306868219	2.109014138	1.125635851	1.513003497	2.066420511	1.775868121
2022	2.322091731	2.025904916	1.498014422	2.936594285	1.893181525	3.167029685	1.050067773	2.197468083	1.097433725	3.437847651	2.1828955	1.180369345	1.574655473	2.082107492	1.844636722
2023	2.402186744	2.103286308	1.50049273	2.880101183	1.963112285	3.275720797	1.101695685	2.277082201	1.155658807	3.572532324	2.2587101	1.244357564	1.652262017	2.115944336	1.895579573
2024	2.495099147	2.182052008	1.526848482	2.824825521	2.024771442	3.417249195	1.161758556	2.358009754	1.222249146	3.689910199	2.349589885	1.309975347	1.731704768	2.149214535	1.957020949
2025	2.578083946	2.223096025	1.565940638	2.764730828	2.106721719	3.514225083	1.216080693	2.434051677	1.269543034	3.816004391	2.42823053	1.377338526	1.783534193	2.214770016	2.00917054
2026	2.668581053	2.275556139	1.618594794	2.706649379	2.1806048	3.612500918	1.271742441	2.511374229	1.310630652	3.841144495	2.515517223	1.438433169	1.836135308	2.341370083	2.061922191

Nominal \$/MMBTU

YEAR	Reference Case				Stress Case			
	SW_Base_Price	CA_Base_Price	NW_Base_Price	RO_Base_Price	SW_Low_Price	CA_Low_Price	NW_Low_Price	RO_Low_Price
2014	0.458341161	0.434772945	0.458640141	0.893407332	0.457651028	0.433772945	0.451640141	0.889407332
2015	0.483564652	0.428731832	0.530998169	0.979254891	0.474493558	0.417725008	0.541837866	0.981993593
2016	0.469891783	0.356808853	0.284702281	0.84135135	0.464715766	0.341389149	0.258235549	0.819830983
2017	0.477695183	0.360890028	0.31093677	0.860501918	0.472842098	0.344269554	0.293193307	0.830516539
2018	0.379783853	0.380157242	0.365276586	0.869440261	0.370402333	0.345541057	0.345802243	0.850814152
2019	0.387301115	0.391771291	0.382726612	0.887498432	0.373511833	0.332257007	0.353945724	0.833773688
2020	0.387515932	0.39254784	0.393208507	0.908125035	0.357496338	0.332002069	0.351461847	0.857792972
2021	0.38541879	0.398324294	0.393454511	0.949929619	0.344310469	0.320378899	0.316915349	0.860367682
2022	0.410200556	0.404163723	0.405597615	0.952641469	0.349926189	0.308095084	0.33277589	0.857526658
2023	0.427675429	0.401266461	0.407844636	0.965338455	0.357733474	0.302713692	0.335359866	0.868693825
2024	0.455472392	0.402509997	0.415591737	0.98145663	0.370443282	0.290947992	0.329164351	0.870084777
2025	0.470287202	0.584309671	0.426077443	0.965094958	0.383203274	0.469903975	0.330223282	0.862321861
2026	0.492662632	0.618929429	0.440703101	0.976566984	0.394575943	0.476443861	0.330997643	0.862598942

Put together by Nancy Tran, DAO, July 2015 (4-3848)

	FGDP\$.US	FGDP.US	FPDPGDP.US	
Mnemonic:	FGDP\$.US	FGDP.US	FPDPGDP.US	
Description:	NIPA: Gross Domestic Product, (Bil. 09\$, SAAR)	NIPA: Gross Domestic Product, (Bil. \$, SAAR)	NIPA: Chain-Type Price Index - GDP, (Index 2009=100, SA)	
Source:	U.S. Bureau of Economic Analysis (BEA); Moody's Analytics (ECCA) Forecast	U.S. Bureau of Economic Analysis (BEA); Moody's Analytics (ECCA) Forecast	U.S. Bureau of Economic Analysis (BEA); Moody's Analytics (ECCA) Forecast	
Native Frequency:	QUARTERLY	QUARTERLY	QUARTERLY	
Geography:	United States	United States	United States	
Last Updated:	07/06/2015	07/06/2015	07/06/2015	
Historical End Date:	12/31/14	12/31/14	12/31/14	
2013		15710.28	16768.05	106.74
2014		16085.60	17418.92	108.32
2015		16470.03	17944.30	109.14
2016		16971.79	18817.35	111.18
2017		17459.72	19815.49	113.83
2018		17932.01	20860.65	116.70
2019		18319.67	21833.09	119.58
2020		18651.44	22714.39	122.21
2021		18993.68	23638.61	124.92
2022		19348.85	24613.54	127.72
2023		19699.29	25609.36	130.57
2024		20048.10	26621.41	133.41
2025		20398.25	27655.63	136.26
2026		20763.88	28732.20	139.13

FPDIGDP.US

NIPA: Implicit Price Deflator - GDP, (Index 2009=100, SA)

U.S. Bureau of Economic Analysis (BEA); Moody's Analytics (ECCA) Forecast

QUARTERLY

United States

07/06/2015

12/31/14

	Chained Deflator indexed to 2013	Implicit deflator indexed to 2013	implicit deflator indexed to 1977	Implicit deflator indexed to 2014					
	106.73	100.00	100.00	303.84	98.56	1.014883931	3.038418288	1.197674865	0.9856328
	108.28	101.48	101.46	308.27	100.00				
	108.95	102.25	102.08	310.16	100.61				
	110.87	104.16	103.88	315.63	102.39				
	113.49	106.65	106.33	323.08	104.80				
	116.33	109.34	108.99	331.16	107.43				
	119.17	112.03	111.66	339.27	110.06				
	121.78	114.49	114.10	346.69	112.46				
	124.45	117.04	116.60	354.29	114.93				
	127.21	119.66	119.19	362.13	117.47				
	130.00	122.32	121.80	370.08	120.05				
	132.78	124.99	124.41	378.02	122.62				
	135.57	127.66	127.03	385.96	125.20				
	138.37	130.34	129.65	393.92	127.79				