

Appendix C

Table AC.1 Summary of Thermal Resources by Technology

	Nuclear	Coal	Geothermal	New CCCT Gas Fire HtRt<7500	Older CCCT Gas (or Oil) Ca.9000	“Good” SCCT/ST 9500-10500	HHR SCCT/ST >10500	Other	Total Area
Model Areas									
ALBERTA	0	5,898	0	2,441	0	1,417	295	41	10,092
AQUILA	0	0	0	0	0	0	0	0	0
ARIZONA	3,733	5,311	0	7,568	776	877	1,555	0	19,820
B.C.HYDR	0	0	0	250	0	1,000	1,000	60	2,310
IDAHO	0	2,110	0	0	0	0	0	0	2,110
IMPERIAL	0	0	283	78	295	0	0	50	706
LADWP	0	1,710	0	574	0	2,370	431	0	5,085
MEXICO-C	0	0	675	1,100	428	465	60	0	2,728
MONTANA	0	2,311	0	0	0	0	0	39	2,350
NEVADA	0	595	0	3,022	298	603	227	0	4,745
NEW MEXI	0	1,885	0	0	0	713	412	0	3,010
NORTHWES	1,170	1,938	0	4,354	495	812	628	272	9,669
PACE	0	4,612	23	0	0	345	235	53	5,268
PG AND E	2,192	90	985	7,474	372	6,222	1,468	275	19,078
PSCOLORA	0	1,938	0	913	19	3,392	278	0	6,540
SANDIEGO	0	0	0	764	65	1,788	539	0	3,156
SIERRA	0	532	47	0	20	978	12	100	1,689
SOCALIF	2,167	97	56	2,303	1,176	6,294	2,767	0	14,860
WAPA L.C	0	0	0	1,710	0	0	0	0	1,710
WAPA R.M	0	3,546	0	480	116	778	143	0	5,063
WAPA U.M	0	0	0	0	0	0	0	0	0
Total By Type	9,262	32,573	2,069	33,031	4,060	28,054	10,050	890	119,989

Table AC.2 Resource Additions since 1/1/2000

Facility	Location	Technology	Fuel Type	# of Units	Output (MW)	Est Online Date
On or before 1/1/04					35,458	1/1/2004
Silver Hawk	Nevada	Combined	Gas	0	570	5/1/2004
Pastoria Phase 2	California	Combined	Gas	0	500	6/1/2004
Grande Prairie	Canada-Alberta		Wood	0	25	6/1/2004
			Waste			
Metcalf Energy Center	California	Combined	Gas	2-2-1	600	12/1/2004
Otay Mesa	California	Combined	Gas	2-2-2	510	12/1/2004
Sundance Upgrade II	Canada-Alberta		Coal	0	100	12/1/2004
Contra Costa	California	Combined	Gas	2-2-1	530	6/1/2005
Genesee Phase 3	Canada-Alberta		Coal	1	400	7/1/2005
Total Conventional Thermal Additions					38,693	

Sum of Output (MW)	Fuel Type					Grand Total
	Coal	F02	Gas	Geothermal	Woodwaste	
Technology						
Biomass					10	10
Cogeneration		20	876			896
Combined			25,022			25,022
Combustion			132			132
Geothermal				112		112
Simple			3,958			3,958
(blank)	1,014		7,465	59	25	8,563
Grand Total	1,014	20	37,453	171	35	38,693

Table AC.3 Major Interfaces - Number and Description

Path Number	Description	Path Number	Description
1	ALBERTA - BRITISH COLUMBIA	46	Z2-WOR
2	ALBERTA - SASKATCHEWAN	47	SOUTHERN NEW MEXICO (NM1)
3	NORTHWEST - CANADA	48	NORTHERN NEW MEXICO (NM2)
4	WEST OF CASCADES - NORTH	49	Z2-EOR
5	WEST OF CASCADES - SOUTH	50	CHOLLA - PINNACLE PEAK
6	WEST OF HATWAI	51	Z5-South of Navajo
8	MONTANA - NORTHWEST	52	SILVER PEAK - CONTROL 55 KV
9	WEST OF BROADVIEW	53	BILLINGS - YELLOWTAIL
10	WEST OF COLSTRIP	54	CORONADO - SILVER KING - KYRENE
11	WEST OF CROSSOVER	55	BROWNLEE EAST
14	IDAHO - NORTHWEST	58	ELDORADO - MEAD 230 KV LINES
15	MIDWAY - LOS BANOS	59	EAGLE MTN 230_161 KV - BLYTHE 16
16	IDAHO - SIERRA	60	INYO - CONTROL 115 KV TIE
17	BORAH WEST	61	LUGO - VICTORVILLE 500 KV LINE
18	IDAHO - MONTANA	62	ELDORADO - MCCULLOUGH 500 KV
19	BRIDGER WEST	63	PERKINS - MEAD - MARKETPLACE 500
20	PATH C	64	MARKETPLACE - ADELANTO
21	ARIZONA - CALIFORNIA	65	PACIFIC DC INTERTIE (PDCI)
22	SOUTHWEST OF FOUR CORNERS	66	Z6-COI
23	FOUR CORNERS 345_500	73	NORTH OF JOHN DAY
24	PG&E - SPP	75	MIDPOINT - SUMMER LAKE
25	PACIFICORP_PG&E 115 KV INTERCON.	76	ALTURAS PROJECT
26	Z6- Path 26	77	Z8-Crystal - H Allen230 KV PS
27	IPP DC LINE	78	TOT 2B1
28	INTERMOUNTAIN - MONA 345 KV	79	TOT 2B2
29	INTERMOUNTAIN - GONDER 230 KV	179	Albuquerque Sum with caps
30	TOT 1A	180	Albuquerque Sum without caps
31	TOT 2A	500	Z2-SCIT
32	PAVANT INTRMTN - GONDER 230 KV	501	Z1-PV to Devers
33	BONANZA WEST	502	WOR - N.Gila
34	TOT 2B	503	WOR - IID230
35	TOT 2C	504	WOR -n- Mc-Vic
36	TOT 3	505	WOR -n- El Dor to Lugo
37	TOT 4A	506	Path 15 Borah W Summer
38	TOT 4B	507	Combined 4a; 4b
39	TOT 5	508	PACI vs PDCI
40	TOT 7	509	Tot 2a; 2b; 2c Nomogram
41	SYLMAR - SCE	510	Z1- Hassayampa - N. Gila
42	IID - SCE	511	Z1- N. Gila - Imperial Valley
43	NORTH OF SAN ONOFRE	512	Z1-Imperial Valley to Miguel
44	SOUTH OF SAN ONOFRE	513	Z1-North of Miguel
45	Z7-Path 45	514	Z1-Miguel Bank No. 1

Path Number	Description	Path Number	Description
515	Z1-Miguel Bank No. 2	533	Z77-Devers - Vista 2 (Post Outage)
516	Z77-Devers Bank No. 1 (Post Outage)	534	Z77-Devers - Vista 1 (Post Outage)
517	Z20-Imperial Valley - Miguel 2	535	Z2-AZ/CA
518	Z1-Imperial Valley - Ramona	536	Z2-AZ/NV
519	Z2: South of Lugo	537	Z2-NV/CA
520	Z3-Mohave - Lugo	538	Z9-HA-Red Butte PS
521	Z3- Eldorado - Lugo	539	Z9-Sigurd - Glen Canyon PS
522	Z3-Mccullgh - Victorville	540	Z9-Shiprock - Lost Canyon PS
523	Z3-Market Place - Adelanto	541	Z9-Pinto - 4 Corners PS
524	Z4-Perkins - Big Sandy	542	Z8-Crystal - H Allen 500 kV PS
525	Z4-Peacock - Mead	543	Adj-HA Phase Shifters
526	Z4-Navajo - Crystal	544	Adj- Perkins Phase Shifters
527	Z4- Moenkopi - El Dorado	545	Adj- Crystal 500 kV Phase Shifters
528	Z5-Navajo - Moenkopi	546	Adj-Crystal 230 kV Phase Shifters
529	Z5-Navajo - Table Mesa	547	Z7-Imperial Valley - La Rosita
530	Z6-East of PV	548	Z7- Miguel - Tijuana
531	Z77-Devers - San Bernardino 1(Post Outage)	549	Z1- Devers Bank No. 1
532	Z77-Devers - San Bernardino 2 (Post Outage)		

Table AC.4 Inflation and Natural Gas Price Forecast*Inflation Forecast and re-index to 2003*

CED 2003			
GDP IMPLICIT PRICE DEFLATOR (2001 = 100)			
YEAR	Current INDEX	5/15/2002 ANNUAL GROWTH RATE	Ratio to 2003 \$
2000	97.87	2.3%	0.95
2001	100.00	2.2%	0.97
2002	101.43	1.4%	0.99
2003	102.78	1.3%	1.00
2004	106.60	3.7%	1.04
2005	110.43	3.6%	1.07
2006	114.25	3.5%	1.11
2007	116.87	2.3%	1.14
2008	119.18	2.0%	1.16
2009	121.39	1.9%	1.18
2010	123.65	1.9%	1.20
2011	126.04	1.9%	1.23
2012	128.62	2.0%	1.25
2013	131.32	2.1%	1.28
2014	134.08	2.1%	1.30
2015	136.93	2.1%	1.33
2016	139.81	2.1%	1.36
2017	142.74	2.1%	1.39
2018	145.74	2.1%	1.42
2019	148.79	2.1%	1.45
2020	151.94	2.1%	1.48

Table AC.5 Natural Gas Price Forecast, 2008

Region Name	CEC Natural Gas Region	Ave.												
		Annual	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NEW MEXICO	average of EL Paso North- and South-NM	4.51	5.05	4.41	4.19	4.23	4.32	4.23	4.37	4.51	4.46	4.64	4.91	5.05
ARIZONA	average of EL Paso North- and South-AZ	4.51	4.41	4.41	4.05	4.60	4.60	4.60	4.14	4.23	4.78	4.51	5.09	4.64
NEVADA	Nevada South	4.83	4.79	4.83	4.44	4.93	4.69	4.88	4.49	4.69	4.93	5.22	5.46	4.97
WAPA L.C.	Nevada South	4.83	4.79	4.83	4.44	4.93	4.69	4.88	4.49	4.69	4.93	5.22	5.46	4.97
MEXICO-CFE	Rosarito	4.75	5.18	4.94	4.56	4.47	4.75	4.61	4.37	4.61	4.66	4.66	5.18	5.80
IMPERIAL	SDG&E	4.71	5.13	4.90	4.52	4.43	4.71	4.57	4.33	4.57	4.62	4.62	5.13	5.75
SANDIEGO	SDG&E	4.71	5.13	4.90	4.52	4.43	4.71	4.57	4.33	4.57	4.62	4.62	5.13	5.75
SOCALIF	So. Calif Prod	4.62	5.08	4.94	4.76	4.48	4.39	4.34	4.25	4.34	4.53	4.62	4.99	5.41
LADWP	SoCal Gas	4.71	5.18	5.04	4.85	4.57	4.47	4.43	4.33	4.43	4.62	4.71	5.09	5.51
PG AND E	PG&E	4.65	4.93	4.93	4.60	4.51	4.60	4.46	4.46	4.46	4.46	4.46	4.88	5.07
NORTHWEST	ave. of PNW and PNW-Coastal	4.68	3.18	3.88	4.68	5.94	6.32	3.56	4.73	4.68	5.19	4.21	4.49	5.10
B.C.HYDRO	British Columbia	4.29	5.28	4.55	3.78	3.99	3.73	3.56	3.52	3.56	3.73	4.29	5.19	5.23
AQUILA	Alberta	3.88	4.19	4.04	3.88	3.88	3.84	3.61	3.65	3.38	3.53	3.88	4.04	4.19
ALBERTA	Alberta	3.88	4.19	4.04	3.88	3.88	3.84	3.61	3.65	3.38	3.53	3.88	4.04	4.19
IDAHO	PNW	5.00	3.40	4.15	5.00	6.35	6.75	3.80	5.05	5.00	5.55	4.50	4.80	5.45
MONTANA	Montana	4.36	4.71	3.92	3.66	3.75	4.10	4.49	4.45	4.32	4.05	4.53	4.71	4.93
WAPA U.M.	Montana	4.36	4.71	3.92	3.66	3.75	4.10	4.49	4.45	4.32	4.05	4.53	4.71	4.93
SIERRA	Nevada North	5.04	4.99	5.04	4.64	5.14	4.89	5.09	4.69	4.89	5.14	5.44	5.70	5.19
PACE	Utah	4.29	4.63	4.68	4.63	4.50	4.29	4.20	4.08	3.52	3.78	4.20	4.63	5.36
PSCOLORADO	Colorado	4.31	4.65	3.88	3.62	3.71	4.05	4.44	4.40	4.27	4.01	4.48	4.65	4.87
WAPA R.M.	Colorado	4.31	4.65	3.88	3.62	3.71	4.05	4.44	4.40	4.27	4.01	4.48	4.65	4.87
Average		4.53	4.68	4.48	4.29	4.48	4.57	4.33	4.32	4.32	4.44	4.56	4.90	5.11

Table AC.6 Natural Gas Price Forecast, 2013

Region Name	CEC Source (#1)	Ave.												
		Annual	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NEW MEXICO	ave. of EL Paso North- and South-NM	5.54	6.20	5.42	5.15	5.20	5.31	5.20	5.37	5.54	5.48	5.70	6.03	6.20
ARIZONA	ave. of EL Paso North- and South-AZ	5.54	5.42	5.42	4.98	5.65	5.65	5.65	5.09	5.20	5.87	5.54	6.25	5.70
NEVADA	Nevada South	5.88	5.83	5.88	5.41	6.00	5.70	5.94	5.47	5.70	6.00	6.35	6.64	6.06
WAPA L.C.	Nevada South	5.88	5.83	5.88	5.41	6.00	5.70	5.94	5.47	5.70	6.00	6.35	6.64	6.06
MEXICO-CFE	Rosarito	5.82	6.34	6.05	5.59	5.47	5.82	5.65	5.35	5.65	5.70	5.70	6.34	7.10
IMPERIAL	SDG&E	5.76	6.28	5.99	5.53	5.41	5.76	5.59	5.30	5.59	5.64	5.64	6.28	7.03
SANDIEGO	SDG&E	5.76	6.28	5.99	5.53	5.41	5.76	5.59	5.30	5.59	5.64	5.64	6.28	7.03
SOCALIF	So. Calif Prod	5.69	6.26	6.09	5.86	5.52	5.41	5.35	5.23	5.35	5.58	5.69	6.15	6.66
LADWP	SoCal Gas	5.76	6.34	6.16	5.93	5.59	5.47	5.41	5.30	5.41	5.64	5.76	6.22	6.74
PG AND E	PG&E	5.62	5.96	5.96	5.56	5.45	5.56	5.40	5.40	5.40	5.40	5.40	5.90	6.13
NORTHWEST	ave. of PNW and PNW-Coastal	5.68	3.86	4.71	5.68	7.21	7.66	4.31	5.73	5.68	6.30	5.11	5.45	6.19
B.C.HYDRO	British Columbia	5.22	6.42	5.53	4.59	4.85	4.54	4.33	4.28	4.33	4.54	5.22	6.32	6.37
AQUILA	Alberta	4.70	5.08	4.89	4.70	4.70	4.65	4.37	4.42	4.09	4.28	4.70	4.89	5.08
ALBERTA	Alberta	4.70	5.08	4.89	4.70	4.70	4.65	4.37	4.42	4.09	4.28	4.70	4.89	5.08
IDAHO	PNW	6.02	4.09	5.00	6.02	7.65	8.13	4.58	6.08	6.02	6.68	5.42	5.78	6.56
MONTANA	Montana	5.20	5.62	4.68	4.37	4.47	4.89	5.36	5.30	5.15	4.84	5.41	5.62	5.88
WAPA U.M.	Montana	5.20	5.62	4.68	4.37	4.47	4.89	5.36	5.30	5.15	4.84	5.41	5.62	5.88
SIERRA	Nevada North	6.07	6.01	6.07	5.58	6.19	5.89	6.13	5.65	5.89	6.19	6.56	6.86	6.25
PACE	Utah	5.09	5.50	5.55	5.50	5.34	5.09	4.99	4.84	4.17	4.48	4.99	5.50	6.36
PSCOLORADO	Colorado	5.11	5.52	4.60	4.29	4.39	4.80	5.26	5.21	5.06	4.75	5.31	5.52	5.77
WAPA R.M.	Colorado	5.11	5.52	4.60	4.29	4.39	4.80	5.26	5.21	5.06	4.75	5.31	5.52	5.77
Average		5.49	5.67	5.43	5.19	5.43	5.53	5.24	5.22	5.23	5.38	5.52	5.94	6.18

Table AC.7 2008 and 2013 Generation Expansion Plan

					2008			2013		
	Renew. Resource Name (region name / type)	General Location	Capacity Factor (%)	Bus Location	Nameplate Capacity (MW)	Depend. Capacity (MW)	Renew. Energy / Year (gWh)	Nameplate Capacity (MW)	Depend. Capacity (MW)	Renew. Energy / Year (gWh)
California	PG&E-Geothermal 1	Siskiyou	90%	Cottonwood	107.5	107.5	847.5	67.5	67.5	532.2
	PG&E-Wind 1	Solano	35%	Vaca-Dixon	400.0	80.0	1,226.4	-	-	-
	PG&E-Geothermal 2	Modoc	90%	Round Mt.	18.8	18.8	147.8	67.5	67.5	532.2
	PG&E-Wind 2	Alameda	35%	Tesla	186.3	37.3	571.0	18.8	3.8	57.5
	PG&E-Biomass 1	PG&E	80%	Los Banos	35.0	35.0	245.3	33.8	33.8	236.5
	PG&E-Digester Gas 1	PG&E	85%	Los Banos	40.0	40.0	297.8	-	-	-
	IID-Geothermal 1	Imperial	90%	Devers	240.0	240.0	1,892.2	120.0	120.0	946.1
	IID-Biomass 1	Imperial	80%	Devers	57.5	57.5	403.0	35.2	35.2	246.4
	SCE-Wind 1	Kern	35%	Vincent	2,661.3	532.3	8,159.4	1,316.3	263.3	4,035.6
	SCE-Geothermal 1	Mono	90%	Lugo	125.0	125.0	985.5	187.5	187.5	1,478.3
	SCE-Wind 2	Riverside	35%	Devers	530.0	106.0	1,625.0	-	-	-
	SCE-Wind 3	San Bernardino	35%	Eldorado	110.0	22.0	337.3	217.5	43.5	666.9
	SCE-Solar 1	San Bernardino	35%	Kramer	30.0	30.0	92.0	135.0	135.0	413.9
	SCE-Biomass 1	Los Angeles	80%	Rio Hondo	50.0	50.0	350.4	-	-	-
	SCE-Digester Gas 1	Los Angeles	85%	Rio Hondo	30.0	30.0	223.4	-	-	-
	SCE-Wind 4	Los Angeles	35%	Rio Hondo	135.0	27.0	413.9	210.0	42.0	643.9
	SCE-Wind 5	SCE	35%	Rio Hondo	30.0	6.0	92.0	-	-	-
	SCE-Digester Gas 2	Los Angeles	85%	Rio Hondo	35.0	35.0	260.6	-	-	-
	SDG&E-Wind 3	San Diego	35%	Los Coches	400.0	80.0	1,226.4	-	-	-
SDG&E-Digester Gas 1	San Diego	85%	Los Coches	30.0	30.0	223.4	-	-	-	
California Subtotal					5,251.3	1,689.3	19,620.2	2,408.9	998.9	9,789.3
Northwest	ID-Geothermal 1	Idaho	90%	Ponderosa 230	205.5	205.5	1,619.8	95.4	95.4	752.0
	ID-Geothermal 2	Idaho	90%	McCall 138	27.7	27.7	218.0	12.8	12.8	101.2
	WA-Wind 1	Washington	35%	Ellensburg	175.0	35.0	536.6	81.3	16.3	249.1
	WA-Wind 2	Washington	35%	Cusick	140.0	28.0	429.2	65.0	13.0	199.3

					2008			2013		
	Renew. Resource Name (region name / type)	General Location	Capacity Factor (%)	Bus Location	Nameplate Capacity (MW)	Depend. Capacity (MW)	Renew. Energy / Year (gWh)	Nameplate Capacity (MW)	Depend. Capacity (MW)	Renew. Energy / Year (gWh)
	ID-Wind 1	Idaho	35%	Adelaide	70.0	14.0	214.6	32.5	6.5	99.6
	ID-Wind 2	Idaho	35%	Mt Home	70.0	14.0	214.6	32.5	6.5	99.6
	ID-Wind 3	Idaho	35%	Don	35.0	7.0	107.3	16.3	3.3	49.8
Northwest Subtotal					723.1	331.1	3,340.1	335.7	153.7	1,550.8
Rocky Mountain	NV-Geothermal 1	Nevada	90%	Boardertown 345	184.6	184.6	1,455.4	184.6	184.6	1,455.4
	ID-Geothermal 1	Idaho	90%	Soda Springs	53.4	53.4	421.0	53.4	53.4	421.0
	CO-Geothermal 1	Colorado	90%	Blundll 1	40.0	40.0	315.4	40.0	40.0	315.4
	NV-Wind 1	Nevada	35%	Tonopah	120.0	24.0	367.9	120.0	24.0	367.9
	NV-Wind 2	Nevada	35%	Pahrump	120.0	24.0	367.9	120.0	24.0	367.9
	UT-Wind 3	Utah	35%	Pinto	20.0	4.0	61.3	20.0	4.0	61.3
	UT-Wind 4	Utah	35%	Washngtn	40.0	8.0	122.6	40.0	8.0	122.6
	UT-Wind 5	Utah	35%	Smithfld	140.0	28.0	429.2	140.0	28.0	429.2
	WY-Wind 6	Wyoming	35%	Miners	540.0	108.0	1,655.6	540.0	108.0	1,655.6
	WY-Wind 7	Wyoming	35%	Spence	600.0	120.0	1,839.6	600.0	120.0	1,839.6
	WY-Wind 8	Wyoming	35%	Naughton	240.0	48.0	735.8	240.0	48.0	735.8
	MT-Wind 1	Montana	35%	Conrad	280.0	56.0	858.5	280.0	56.0	858.5
	MT-Wind 2	Montana	35%	Clyde P	460.0	92.0	1,410.4	460.0	92.0	1,410.4
	CO-Wind 1	Colorado	35%	Laporte	80.0	16.0	245.3	80.0	16.0	245.3
	CO-Wind 2	Colorado	35%	Walsenbg	80.0	16.0	245.3	80.0	16.0	245.3
	UT-Solar 1	Utah	35%	Gonder	10.6	10.6	32.5	10.6	10.6	32.5
CO-Solar 1	Colorado	35%	Vilas 115	11.6	11.6	35.6	11.6	11.6	35.6	
Rocky Mountain Subtotal					3,020.2	844.2	10,599.3	3,020.2	844.2	10,599.3
Southwest	AZ-Geothermal 1	Arizona	90%	N. Gila 500	92.4	92.4	728.5	92.4	92.4	728.5
	NM-Geothermal 1	New Mexico	90%	Luna 345	40.8	40.8	321.7	40.8	40.8	321.7
	AZ-Wind 1	Arizona	35%	Apachst3	40.0	8.0	122.6	40.0	8.0	122.6
	AZ-Wind 2	Arizona	35%	Glenc7-8	20.0	4.0	61.3	20.0	4.0	61.3
	NM-Wind 1	New Mexico	35%	Blackwtr	220.0	44.0	674.5	220.0	44.0	674.5

					2008			2013		
	Renew. Resource Name (region name / type)	General Location	Capacity Factor (%)	Bus Location	Nameplate Capacity (MW)	Depend. Capacity (MW)	Renew. Energy / Year (gWh)	Nameplate Capacity (MW)	Depend. Capacity (MW)	Renew. Energy / Year (gWh)
	NM-Wind 2	New Mexico	35%	Curecant	40.0	8.0	122.6	40.0	8.0	122.6
	NM-Wind 3	New Mexico	35%	Shiprock	80.0	16.0	245.3	80.0	16.0	245.3
	AZ-Solar 1	Arizona	35%	Palo Verde 500	208.6	208.6	639.6	208.6	208.6	639.6
	NM-Solar 1	New Mexico	35%	Luna 345	55.6	55.6	170.5	55.6	55.6	170.5
Southwest Subtotal					797.4	477.4	3,086.6	797.4	477.4	3,086.6
Total					9,792.0	3,342.0	36,646.2	6,562.2	2,474.2	25,026.0

Table AC.8 Aggregation of regional synthetic load in Henwood Energy Services, Inc. data

	PLEXOS Region	Utility	State	Has Load?	Underlying Load Shape	Percent
Arizona-New Mexico-Southern Nevada	ARIZONA	Arizona Electric Power Cooperative Inc	AZ	Yes	Arizona Electric Power Cooperative Inc (AEPC)	38.3%
		Arizona Public Service Co	AZ	Yes	Arizona Public Service Co (APS)	92.6%
		Mesa, City of	AZ	Yes	Arizona Electric Power Cooperative Inc (AEPC)	14.3%
		Morenci Water & Electric	AZ	Yes	Arizona Electric Power Cooperative Inc (AEPC)	30.1%
		Navajo Tribal Utility Authority	AZ	Yes	Navajo Tribal Utility Authority (NTUA)	100.0%
		Salt River Project Agricultural Improvement & Power	AZ	Yes	Salt River Project (SRP)	94.2%
		Tucson Electric Power Co	AZ	Yes	Tucson Electric Power Co (TEPC)	100.0%
		WAPA - Lower Colorado	NV	Yes	Arizona Electric Power Cooperative Inc (AEPC)	3.0%
	NEVADA	Nevada Power Co	NV	Yes	Nevada Power Co (NEVP/NPC)	7.5%
	NEW MEXI	El Paso Electric	NM	Yes	El Paso Electric (EPE)	3.3%
		Farmington, City of	NM	Yes	City of Farmington (FARM)	100.0%
		Los Alamos County	NM	Yes	Los Alamos County (LAC)	100.0%
		Public Service Co of New Mexico	NM	Yes	Public Service Co of New Mexico (PSNM)	100.0%
		Texas-New Mexico Power WECC	NM	Yes	Texas New Mexico Power WSCC (TNP)	100.0%
		Tri-State G&T New Mexico/Plains Electric	NM	Yes	Tri-State G&T New Mexico (TSGTNM/PEGT)	100.0%
	WAPA L.C	Arizona Electric Power Cooperative Inc	AZ	Yes	Arizona Electric Power Cooperative Inc (AEPC)	100.0%
Arizona Public Service Co		AZ	Yes	Arizona Public Service Co (APS)	100.0%	

	PLEXOS Region	Utility	State	Has Load?	Underlying Load Shape	Percent	
		Salt River Project Agricultural Improvement & Power	AZ	Yes	Salt River Project (SRP)	24.0%	
		WAPA - Lower Colorado	NV	Yes	Arizona Electric Power Cooperative Inc (AEPC)	7.4%	
California-Mexico Power Area	IMPERIAL	Imperial Irrigation District	CA	Yes	Imperial Irrigation District (IID)	5.8%	
	LADWP	Los Angeles Department of Water and Power	CA	Yes	Los Angeles Department of Water and Power (LADWP)	8.4%	
	MEXICO-C	CFE - North Baja California	MX	Yes	CFE - North Baja California (CFE)	100.0%	
	PG AND E		Dept of Water Resources - North	CA	Yes	California Dept. of Water Resources (CDWR)	100.0%
			Modesto Irrigation District	CA	Yes	Modesto Irrigation District (MID)	100.0%
			Northern California Power Agency	CA	Yes	Northern California Power Agency (NCPA)	48.0%
			Pacific Gas & Electric - NP15	CA	Yes	Pacific Gas & Electric - NP15	100.0%
			Pacific Gas & Electric - San Francisco	CA	No	Pacific Gas & Electric - SF Peninsula (Inactive)	100.0%
			Pacific Gas & Electric - ZP26	CA	Yes	Pacific Gas & Electric - ZP26	100.0%
			Redding Electric Dept	CA	Yes	Redding Electric Dept (RDNG)	100.0%
			Sacramento Municipal Utilities District	CA	Yes	Sacramento Municipal Utilities District (SMUD)	100.0%
			Silicon Valley Power - Santa Clara Electric Dept	CA	Yes	Silicon Valley Power (SVP/SNCL)	100.0%
			Turlock Irrigation District	CA	Yes	Turlock Irrigation District (TID)	100.0%
		WAPA - Mid Pacific (CVP)	CA	Yes	WAPA - Mid Pacific (WAMP/CVP)	100.0%	
	SANDIEGO	San Diego Gas & Electric	CA	Yes	San Diego Gas & Electric (SDGE)	100.0%	
	SOCALIF		Anaheim Public Utilities Dept.	CA	Yes	Anaheim Public Utilities Dept. (ANHM)	100.0%
			Arizona Electric Power Cooperative Inc	AZ	Yes	Arizona Electric Power Cooperative Inc (AEPC)	100.0%
			Burbank Public Service Dept	CA	Yes	Burbank Public Service Dept (BUR)	100.0%
			Dept of Water Resources - South	CA	Yes	California Dept. of Water Resources (CDWR)	1.5%
			Glendale Water & Power	CA	Yes	Glendale Public Service Dept (GLEN)	100.0%
			Metropolitan Water District of Southern CA	CA	Yes	Metropolitan Water District of Southern CA (MWD)	52.0%
			Pasadena Water and Power Dept	CA	Yes	Pasadena Water and Power Dept (PASA)	100.0%
			Riverside Utilities Dept	CA	Yes	Riverside Utilities Dept (RVSD)	100.0%
		Southern California Edison	CA	Yes	Southern California Edison (SCE)	100.0%	
	Vernon Municipal Light Dept	CA	Yes	Vernon Municipal Light Dept (VERN)	100.0%		
Pow	ALBERTA	Alberta Load - Central	AB	Yes	ESBI Alberta Ltd. (EAL)	100.0%	
		Alberta Load - Northeast (Ft. McMurray)	AB	Yes	ESBI Alberta Ltd. (EAL)	100.0%	

PLEXOS Region	Utility	State	Has Load?	Underlying Load Shape	Percent
PLEXOS Region	Alberta Load - Northwest	AB	Yes	ESBI Alberta Ltd. (EAL)	50.6%
	Alberta Load - South	AB	Yes	ESBI Alberta Ltd. (EAL)	1.5%
	Medicine Hat Alberta, City of	AB	Yes	ESBI Alberta Ltd. (EAL)	13.9%
AQUILA	Aquila Networks Canada - West Kootenay Power	BC	Yes	West Kootenay (incl Cominco) (WKP)	32.5%
B.C.HYDR	British Columbia Hydro and Power Authority	BC	Yes	British Columbia Hydro and Power Authority (BCHA)	1.5%
IDAHO	Bonneville Power Administration	WA	Yes	Bonneville Power Administration Control Area (BPA)	100.0%
	Idaho Power Co	ID	Yes	Idaho Power Company (IPC)	100.0%
NORTHWES	Avista	WA	Yes	Avista - Washington Water Power (AVIST/WWP)	3.3%
	Bonneville Power Administration	WA	Yes	Bonneville Power Administration Control Area (BPA)	20.0%
	Deseret Generation & Transmission Cooperative	UT	Yes	Deseret Generation & Transmission Coop (DGTC)	80.0%
	Eugene Water and Electric Board	OR	Yes	Eugene Water and Electric Board (EWEB)	97.5%
	PacifiCorp Northwest (OR/WA/CA)	OR	Yes	Bonneville Power Administration Control Area (BPA)	2.5%
	Portland General Electric	OR	Yes	Portland General Electric (PGE)	2.5%
	PUD No 1 of Chelan County	WA	Yes	PUD No 1 of Chelan County (CHEL)	16.5%
	PUD No 1 of Cowlitz County	WA	Yes	Bonneville Power Administration Control Area (BPA)	0.8%
	PUD No 1 of Douglas County	WA	Yes	PUD No 1 of Douglas County (DPUD)	9.1%
	PUD No 1 of Pend Oreille County	WA	Yes	Bonneville Power Administration Control Area (BPA)	9.1%
	PUD No 1 of Snohomish County	WA	Yes	Bonneville Power Administration Control Area (BPA)	8.2%
	PUD of Grant County	WA	Yes	PUD of Grant County (GPUD)	3.3%
	Puget Sound Energy	WA	Yes	Puget Sound Power & Light (PSPL/PSE)	4.9%
	Seattle City Light	WA	Yes	Seattle City Light (SCL)	23.0%
	Tacoma Public Utilities-Tacoma Power	WA	Yes	Tacoma Public Utilities-Light Div. (TCL/TPU)	86.3%
PACE	Bonneville Power Administration	WA	Yes	Bonneville Power Administration Control Area (BPA)	100.0%
	PacifiCorp Idaho	ID	Yes	Idaho Power Company (IPC)	2.7%
	PacifiCorp Utah (UT/WWY)	UT	Yes	Utah Associated Municipal Power Systems (UAMP)	11.8%
	PacifiCorp Wyoming	WY	Yes	Black Hills Power & Light (BHPL)	0.9%
	Tri-State G&T Colorado/Wyoming	CO	Yes	Tri-State G&T CO/WY (TSGTCW)	12.7%
	Utah Associated Municipal Power Systems	UT	Yes	Utah Associated Municipal Power Systems (UAMP)	4.5%
	Utah Municipal Power Agency	UT	Yes	Utah Municipal Power Agency (UMPA)	12.7%

	PLEXOS Region	Utility	State	Has Load?	Underlying Load Shape	Percent
		WAPA - Colorado Missouri (Wyoming)	WY	Yes	WAPA - Lower Missouri (WALM)	100.0%
	SIERRA	Deseret Generation & Transmission Cooperative	UT	Yes	Deseret Generation & Transmission Coop (DGTC)	100.0%
		Sierra Pacific Power Co	NV	Yes	Sierra Pacific Power Co (SPP)	6.4%
		Utah Associated Municipal Power Systems	UT	Yes	Utah Associated Municipal Power Systems (UAMP)	100.0%
	WAPA U.M	WAPA - Colorado Missouri (Wyoming)	WY	Yes	WAPA - Lower Missouri (WALM)	1.4%
	MONTANA	Northwestern Energy - Montana	MT	Yes	Montana Power Co. (MPC)	9.9%
	PSCOLORA	Aquila Networks CO - WestPlains Energy Colorado	CO	Yes	WestPlains Energy Colorado (WPE/WEPL)	100.0%
		Xcel Energy - Public Service of Colorado	CO	Yes	Public Service of Colorado (PSC)	100.0%
Rocky Mountain Power Area	WAPA R.M	Basin Electric Power Coop WECC	WY	Yes	Basin Electric Coop (BEPKW)	100.0%
		Black Hills Power & Light	SD	Yes	Black Hills Power & Light (BHPL)	100.0%
		Colorado Springs Utilities	CO	Yes	Colorado Springs Utilities (CSU)	1.6%
		Platte River Power Authority	CO	Yes	Platte River Power Authority (PRPA)	12.4%
		Tri-State G&T Colorado/Wyoming	CO	Yes	Tri-State G&T CO/WY (TSGTCW)	774.8%
		WAPA - Colorado Missouri (Colorado)	CO	No	WAPA - Upper Colorado (WAUM)	95.8%
		WAPA - Colorado Missouri (Wyoming)	WY	Yes	WAPA - Lower Missouri (WALM)	98.8%
		Xcel Energy - Public Service of Colorado	CO	Yes	Public Service of Colorado (PSC)	114.3%