

Summary of ISO Capital Expenditures - Non-Incentive Projects

(\$000)

PIN	Project Title	Order #	High/Low Voltage	OD	Project Total (ISO & non-ISO)				ISO Portion			
					Prior	2012	2013	Total	Prior	2012	2013	Total
Non-Incentive Transmission Projects includes Direct Installation and Removal Expenditures												
Other Transmission												
06489	EL SEGUNDO: CONNECT UNITS 567 TO 220KV: Install Relays at various stations		High	Sep-12	249	2,610		2,859	249	2,610	-	2,859
06489	EL SEGUNDO: CONNECT UNITS 567 TO 220KV		High	Sep-12	929	8,000		8,929	929	8,000	-	8,929
06489	Total El Segundo Substation				1,178	10,610	-	11,788	1,178	10,610	-	11,788
06694	CPV Sentinel Project		High	Mar-13	105	5,700	1,945	7,750	105	5,700	1,945	7,750
06904	EME Walnut Creek - Walnut Sub		High	Aug-12	(463)	1,600		1,137	(463)	1,600	-	1,137
06904	EME Walnut Creek - Mesa/Villa Park Substations		High	Aug-12	20	550		570	20	550	-	570
06904	Total EME Walnut Creek				(444)	2,150	-	1,706	(444)	2,150	-	1,706
06953	Windhub: Interconnection of Coram Proj		High	Apr-12	10,707	1,150		11,857	2,784	299	-	3,083
06960	Water Valley Project - Network Upgrades		High	May-13	116	2,727	1,014	3,857	116	2,727	1,014	3,857
06964	Mountain View IV		High	Apr-12	191	100		291	191	100	-	291
07071	Homestead WindFarm Energy		High	Aug-13	1,338	900	1,600	3,838	1,338	900	1,600	3,838
07081	Neenach Substation: Install new transfer bus for pos 1 to 6		High	May-13	5	1,750	550	2,305	5	1,750	550	2,305
Total Other Transmission					13,195	25,087	5,109	43,391	5,272	24,236	5,109	34,617
TSP Projects												
05309	Rector Sub: Replace existing 2A Bank with 1 new 280 MVA Bank		High	Jul-13	-	2,312	150	2,462	-	670	44	714
05360	Mirage Install the 3rd 220/115KV Transformer (220KV ISO Breakers)		High	Jun-12	7,741	110	-	7,851	1,393	20	-	1,413
06219	Goleta Substation Install 4 New 220 KV Bank Breakers		High	Dec-12	2,997	550	-	3,547	2,697	495	-	3,192
06221	Ellis: Phase II Install No.3A Xfmr bank		High	Apr-13	4,404	2,501	800	7,705	969	550	176	1,695
06284	La Cienega: Install a new 280 MVA, 220/66 KV transformer bank		High	Jun-13	5,043	9,000	5,349	19,392	908	1,620	963	3,491
06668	Valley Sub: Add a 3 phase Xfmr bank , high-side and low-side CBs		High	Dec-12	17,037	450	-	17,487	2,556	68	-	2,623
06824	La Fresa (Phase 1): Add a Transformer bank 220/66KV		High	Jun-13	7,378	17,599	2,812	27,788	1,033	2,464	394	3,890
07048	Lugo: Erect four-hour-rated modular walls between existing xfmers		High	Dec-12	1,906	900	200	3,006	1,906	900	200	3,006
Total TSP					46,505	33,422	9,311	89,238	11,462	6,787	1,776	20,024
Transmission Project Reliability												
06154	Maguenden: Install Bushing Current Transformer		High	Dec-12	293	594	-	887	293	594	-	887
06154	Rector: Install Bushing Current Transformer		High	Mar-13	210	134	45	389	210	134	45	389
06414	Coachella Valley-Devers 220KV Loop-In (Subs)		High	Dec-12	4,362	1,372	-	5,734	4,362	1,372	-	5,734
06414	Coachella Valley-Devers 220KV Loop-In (Lines)		High	Dec-12	869	3,896	800	5,565	869	3,896	800	5,565
06477	Victor: Reconstruct 115KV switchrack and terminate existing 115KV		Low	Jun-13	9,122	5,537	600	15,259	7,571	4,596	498	12,665
06477	Victor-Hi Desert 220KV T/L: Move existing tower within Victor Sub for new 115KV switchrack		High	Feb-12	993	588		1,581	993	588	-	1,581
06767	Santiago: Install seven (7) 230KV CB's.		High	Dec-12	8,631	3,206		11,837	8,545	3,174	-	11,719
06792	Rector 230KV Switchrack: Install 2X79.2 MVAR switching shunt capacitor		High	Feb-12	8,460	717	1,237	10,414	8,460	717	1,237	10,414
07014	Rector: Install relay racks equipped with new relays/Mech Elec Equip Room (MEER)		High	Mar-13	76	415	40	531	76	415	40	531
07014	Liberty Sub: RAS Expansion		High	Dec-12	172	400	-	572	172	400	-	572
07097	RAS Expansion: Monitoring the Big Creek 3 - Big Creek 8 line		High	Jul-12	206	210		416	206	210	-	416
07150	Mesa Substation: Upgrade Two (2) 220KV CBs to Eagle Rock		High	Dec-12	44	252		296	44	252	-	296
07228	Del Amo - Ellis Loop-In Project		High	Jun-12	-	10,003		10,003	-	10,003	-	10,003
07252	Anelope 220 Substation - Ten (10) 220 KV CB Upgrade		High	Jun-13	-	2,300	1,900	4,200	-	2,300	1,900	4,200
07284	Ellis, Johanna, Santiago, Viejo: Under Voltage Load Shedding		High	Jun-12	-	4,000		4,000	-	4,000	-	4,000
Total Transmission Project Reliability					33,438	33,625	4,622	71,685	31,801	32,651	4,520	68,972

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PIN	Project Title	Order #	High/Low Voltage	OD	Project Total (ISO & non-ISO)				ISO Portion			
					Prior	2012	2013	Total	Prior	2012	2013	Total
Infrastructure Replacement												
03138	Sylmar Converter Station & HVDC T/L: Capital Additions & Betterment											
04211	Mira Loma - Replace (12) 220KV Circuit Breakers		High	Blanket Specifics	-	568	-	568	-	568	-	568
04211	Lugo Substation: Replace (5) 220KV Circuit Breakers		High	May-12	4,145	555	-	4,700	4,145	555	-	4,700
04329	Coolwater: Replace (3) 115KV Circuit Breakers		Low	Dec-12	670	1,300	-	1,970	670	1,300	-	1,970
04329	Lugo Substation: Replace (6) 13.8KV CBs		Low	Feb-12	592	275	-	866	207	96	-	303
04329	Mira Loma: Replace (5) 13.8KV CBs		Low	Dec-12	49	516	-	565	49	516	-	565
04343	Substation Relay Replacement Program		High	Dec-12	32	430	-	462	32	430	-	462
04651	Palo Verde Switchrack		High	Blanket Specifics	-	3,693	-	3,693	-	3,693	-	3,693
04756	Misc. Substation Equipment Replacement		High	Blanket Specifics	-	600	-	600	-	600	-	600
05210	Vincent Sub: Replace 1AA Transformer Bank		High	Blanket Specifics	-	3,533	-	3,533	-	3,533	-	3,533
05210	Devers Sub: Replace All Phases 1AA Transformer Bank		High	Apr-13	3,295	491	100	3,886	3,295	491	100	3,886
05210	Victor Sub: Replace #1 & #2 Transformer Bank		High	Apr-12	10,780	4,300	-	15,080	10,780	4,300	-	15,080
05210	Bailey Sub: Replace 2AA Transformer Bank		High	Dec-12	7,155	1,200	-	8,355	7,155	1,200	-	8,355
	Total Infrastructure Replacement			May-12	1,867	2,500	-	4,367	1,867	2,500	-	4,367
					28,584	19,960	100	48,644	28,200	19,782	100	48,081
Grid Applications												
06446	Phasor Measurement System Installations - Lighthouse		High	Sep-12	478	350	-	828	110	81	-	190
06446	Phasor Measurement System Installations - Moorpark		High	Dec-12	177	650	-	827	67	247	-	314
06446	Phasor Measurement System Installations - Vincent		High	Apr-12	463	531	110	1,104	463	531	110	1,104
06446	Phasor Measurement System Installations - Lugo		High	Apr-12	422	335	106	863	422	335	106	863
	Total Grid Applications				1,540	1,866	216	3,622	1,062	1,194	216	2,472
PWRD Blankets												
03362	Substation Spare Parts		High	Blanket	-	2,332	7,545	9,877	-	117	377	494
03362	Substation Spare Parts				-	2,332	7,545	9,877	-	117	377	494
03363	Substation Breakdown Maintenance Replacements		High	Blanket Specifics	-	11,516	4,682	16,198	-	921	375	1,296
03363	Substation Planned Maintenance Replacements		High	Blanket Specifics	-	6,250	8,454	14,704	-	875	1,184	2,059
03363	Facilities - Operational		High	Blanket Specifics	-	800	1,018	1,818	-	40	51	91
03363	Substation Storm		High	Blanket Specifics	-	802	825	1,627	-	-	-	-
03363	Substation Equipment Additions & Replacements				-	19,368	14,979	34,347	-	1,836	1,609	3,445
03364	Transmission Breakdown Maintenance Replacements		High	Blanket Specifics	-	2,100	4,245	6,345	-	777	1,571	2,348
03364	Transmission Breakdown Maintenance Replacements		High	Blanket Specifics	-	1,338	-	1,338	-	495	-	495
03364	Transmission Planned Maintenance		High	Blanket Specifics	-	2,160	2,668	4,828	-	583	720	1,304
03364	Transmission Deteriorated Pole Replacements		High	Blanket Specifics	-	19,130	14,461	33,591	-	1,913	1,446	3,359
03364	Transmission Equipment Additions & Replacements				-	24,728	21,374	46,102	-	3,768	3,737	7,505
03367	Substation Claim - Northwest		High	Blanket Specifics	-	486	500	987	-	63	65	128
03367	Transmission Claim		High	Blanket Specifics	-	632	2,161	2,793	-	88	303	391
03367	Transmission Storm - Eastern		High	Blanket Specifics	-	5,368	6,127	11,495	-	1,611	1,838	3,449
03367	Transmission Storm & Claims				-	6,486	8,788	15,275	-	1,762	2,206	3,968
	Total PWRD Blankets				-	52,914	52,687	105,601	-	7,483	7,929	15,412
Total Non-Incentive Transmission Projects												
	Total Non-Incentive Transmission Projects				123,263	166,874	72,044	362,182	77,797	92,133	19,650	189,579
Total Forecast Expenditures (Closing by September 2013)												
	Total Forecast Expenditures (Closing by September 2013)				123,263	166,874	72,044	362,182	77,797	92,133	19,650	189,579
Total Forecast Blanket Expenditures (Closing by September 2013)												
	Total Forecast Blanket Expenditures (Closing by September 2013)				23,098	61,405	52,787	137,289	23,098	15,974	8,029	47,101