

Summary of ISO Capital Expenditures - Non-Incentive Projects

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					Project Total (ISO & non-ISO)				ISO Portion			
PIN	Project Title	Order #	High/Low Voltage	OD	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: CONNNECT 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 Xfmer 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 Xfmer 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	Magunden: 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 switchcrack 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	-	-
06767	Santiago: Install seven (7) 230kV CB's.		High	Dec-12	8,631	3,206		11,837	8,545	3,174	-	-
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	-
07014	Rector: Install relay racks equipped with new relays/Mech Elec Equip Room (MEER)		High	Mar-13	76	415	40	531	76	415	40	-
07014	Liberty Sub: RAS Expansion		High	Dec-12	172	400	-	572	172	400	-	-
07097	RAS Expansion: Monitoring the Big Creek 3 - Big Creek 8 line		High	Jul-12	206	210		416	206	210	-	-
07150	Mesa Substation: Upgrade Two (2) 220KV CBs to Eagle Rock		High	Dec-12	44	252		296	44	252	-	-
07228	Del Amo - Ellis Loop-In Project		High	Jun-12	-	10,003		10,003	-	10,003	-	-
07252	Antelope 220 Substation - Ten (10) 220 KV CB Upgrade		High	Jun-13	-	2,300	1,900	4,200	-	2,300	1,900	-
07284	Ellis, Johanna, Santiago, Viejo: Under Voltage Load Shedding		High	Jun-12	-	4,000		4,000	-	4,000	-	-
Total Transmission Project Reliability					33,438	33,625	4,622	71,685	31,801	32,651	4,520	25,240

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PIN	Project Title	Order #	High/Low Voltage	OD	Prior	2012	2013	Total	Prior	2012	2013	Total
Infrastructure Replacement												
03138	Sylmar Converter Station & HVDC T/L: Capital Additions & Betterment		High	Blanket Specifics	-	568	-	568	-	568	-	568
04211	Mira Loma - Replace (12) 220kV Circuit Breakers		High	May-12	4,145	555	-	4,700	4,145	555	-	4,700
04211	Lugo Substation: Replace (5) 220kV Circuit Breakers		High	Dec-12	670	1,300	-	1,970	670	1,300	-	1,970
04329	Coolwater: Replace (3) 115kV Circuit Breaks		Low	Feb-12	592	275	-	866	207	96	-	303
04329	Lugo Substation: Replace (6) 13.8kV CBs		Low	Dec-12	49	516	-	565	49	516	-	565
04329	Mira Loma: Replace (5) 13.8kV CBs		Low	Dec-12	32	430	-	462	32	430	-	462
04343	Substation Relay Replacement Program		High	Blanket Specifics	-	3,693	-	3,693	-	3,693	-	3,693
04651	Palo Verde Switchrack		High	Blanket Specifics	-	600	-	600	-	600	-	600
04756	Misc. Substation Equipment Replacement		High	Blanket Specifics	-	3,533	-	3,533	-	3,533	-	3,533
05210	Vincent Sub: Replace 1AA Transformer Bank		High	Apr-13	3,295	491	100	3,886	3,295	491	100	3,886
05210	Devers Sub: Replace All Phases 1AA Transformer Bank		High	Apr-12	10,780	4,300	-	15,080	10,780	4,300	-	15,080
05210	Victor Sub: Replace #1 & #2 Transformer Bank		High	Dec-12	7,155	1,200	-	8,355	7,155	1,200	-	8,355
05210	Bailey Sub: Replace 2AA Transformer Bank		High	May-12	1,867	2,500	-	4,367	1,867	2,500	-	4,367
Total Infrastructure Replacement					28,584	19,960	100	48,644	28,200	19,782	100	48,081
Grid Applications												
06446	Phasor Measurement System Installations - Lighthipe		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					123,263	166,874	72,044	362,182	77,797	92,133	19,650	145,847
Total Forecast Expenditures (Closing by September 2013)					123,263	166,874	72,044	362,182	77,797	92,133	19,650	145,847