

Summary of ISO Capital Expenditure Forecast - Incentive Projects
(\$000)

PIN	Project Title	Order #	High/Low Voltage	OD	Project Total (ISO & non-ISO)				ISO Portion			
					Prior	2014	2015	Total	Prior	2014	2015	Total
Incentive Transmission Projects includes only Direct Installation Expenditures												
04847	Devers-Colorado River											
04847	DEVERS-Colorado River: PRELIMINARY ENGINEERING & LICENSING	800062522	High	Jan-14	1,484	(4)	-	1,480	1,484	(4)	-	1,480
04847	DEVERS-Colorado River NO. 2 500KV T/L (CA): BUILD 110 MI single circuit 500KV T/L	800062494	High	Jun-13	322,044	8,005	8,900	338,949	322,044	8,005	8,900	338,949
04847	DEVERS-VALLEY #2 500KV T/L: BUILD A NEW 41.6 MILE SINGLE-CIRCUIT 500kv T/L	800062527	High	Sep-13	223,772	7,951	8,900	240,623	223,772	7,951	8,900	240,623
04847	DEVERS SUB: REPLACE CIRCUIT BREAKERS	800062846	High	May-13	3,637	1	-	3,638	3,637	1	-	3,638
04847	DEVERS SUB: EXTEND BUS TWO POSITIONS TO THE WEST AND EQUIP NEW POSITION 8	800062850	High	Dec-13	20,152	719	-	20,871	20,152	719	-	20,871
04847	VALLEY SUB: INSTALL A LINE POSITION TO TERMINATE THE DEVERS-VALLEY #2 T/L	800062902	High	Sep-13	6,857	177	-	7,034	6,857	177	-	7,034
04847	DEVERS-Colorado River JCT SERIES CAPACITOR (CA): INSTALL A NEW 2700A, 875MVAR SERIE	800063033	High	Dec-13	28,145	4,127	-	32,272	28,145	4,127	-	32,272
04847	Colorado River Switchyard	800403645	High	Jun-13	93,825	3,474	-	97,299	93,825	3,474	-	97,299
04847	Development of the Material Yards and helicopter assembly yards	800418261	High	Jan-14	1,556	(1,587)	-	(31)	1,556	(1,587)	-	(31)
04847	Devers-Valley #1 500k T/L Relocate Facilities	800504834	High	Sep-13	5,877	90	-	5,967	5,877	90	-	5,967
04847	Loop in DPV#1 into Colorado River Substation	800504836	High	Dec-13	8,332	17	-	8,349	8,332	17	-	8,349
04847	Total Devers-Colorado River				715,679	22,970	17,800	756,449	715,679	22,970	17,800	756,449
Various	Tehachapi - Segments 3B & 3C											
07183	230 kV Transmission Line Between Highwind and Windhub Substations	800062547	High	Dec-12	41,191	542	120	41,853	41,191	542	120	41,853
07183	New Highwind 220kV Substation Construction	800063658	High	Dec-12	9,113	-	550	9,663	9,113	-	550	9,663
07183	Highwind-Windhub 230kV transmission line cathodic protection	900604086	High	Dec-12	9,827	4,032	6,917	20,776	9,827	4,032	6,917	20,776
07183	Total Segment 3B				60,131	4,574	7,587	72,292	60,131	4,574	7,587	72,292
07014	Windhub 500kV Sub upgrade	800219424	High	Dec-12	-	(62)	-	(62)	-	(62)	-	(62)
07014	Windhub Substation Install transformer banks	800219436	High	Dec-12	63,319	261	-	63,580	63,319	261	-	63,580
07014	Antelope Substation 500kV Upgrades	800219505	High	Dec-12	98,671	343	-	99,014	98,671	343	-	99,014
07014	Total Segment 3C				161,990	542	-	162,532	161,990	542	-	162,532
Total Tehachapi Segments 3B & 3C					222,121	5,116	7,587	234,824	222,121	5,116	7,587	234,824
Total Tehachapi Segments 1-3 - Incentive Qualified					222,121	5,116	7,587	234,824	222,121	5,116	7,587	234,824
Various	Tehachapi - Segments 4-11											
06435	Antelope-Whirlwind 500kV T/L: Construct new 14-mile single-circuit 500kV T/L.	800217116	High	Apr-12	-	1,101	-	1,101	-	1,101	-	1,101
06435	Path 26 Loop: Construct approx. 2-miles of new single-circuit 500kV T/L to loop existing Midway-Vincent No.3 500kV.	800217211	High	Jan-13	-	4	-	4	-	4	-	4
06435	Total Segment 4				-	1,105	-	1,105	-	1,105	-	1,105
05472	Antelope Vincent #2 500kV T/L	800217232	High	Jan-13	114,912	2,907	3,652	121,471	114,912	2,907	3,652	121,471
05472	TRTP 4-11: Licensing	800433760	High	Feb-15	2,210	(2,281)	-	(71)	2,210	(2,281)	-	(71)
05472	Total Segment 5				117,122	626	3,652	121,399	117,122	626	3,652	121,399
05243	New Vincent-Duarte 500kV T/L	800217316	High	Mar-14	237,449	54,401	5,536	297,386	237,449	54,401	5,536	297,386
05243	New Vincent-Angeles National Forest (ANF) 500kV T/L	800217330	High	Mar-14	16,217	374	-	16,591	16,217	374	-	16,591
05243	Tehachapi Renewable Acquire Easement	800051930	High	Jan-14	996	(1)	-	995	996	(1)	-	995
05243	Total Segment 6				254,661	54,774	5,536	314,971	254,661	54,774	5,536	314,971
06438	New Vincent-Rio Hondo #2 500kV T/L	800218130	High	Dec-14	13,960	185	-	14,145	13,960	185	-	14,145
06438	New Antelope-Mesa 500kV T/L	800218138	High	Jan-15	110,538	67,366	12,092	189,996	110,538	67,366	12,092	189,996
06438	Tehachapi Renewable Acquire Easement	800051909	High	Jan-15	1,558	-	-	1,558	1,558	-	-	1,558
06438	Total Segment 7				126,056	67,551	12,092	205,699	126,056	67,551	12,092	205,699

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					Prior	2014	2015	Total	Prior	2014	2015	Total
06439	Construct 1.33 mi. 220kV T/L at Rose Hills	800218522	High	Dec-14	13,375	1,493	-	14,868	13,375	1,493	-	14,868
06439	Construct 220kV T/L at Water Tank/Fullerton Rd.	800218551	High	Dec-14	4,806	(0)	-	4,806	4,806	(0)	-	4,806
06439	Chino-Mira Loma #1 & #2 230kV T/L	800218618	High	May-15	32,122	19	-	32,141	32,122	19	-	32,141
06439	New 33 mile Vincent-Mira Loma 500kV T/L	800218645	High	May-15	213,807	152,504	95,239	461,550	213,807	152,504	95,239	461,550
06439	Chino Hills State Park 500kV reroute alternative	800375079	High	May-15	14	-	-	14	14	-	-	14
06439	Tehachapi Renewable Acquire Easement	800051911	High	Mar-15	13,735	3,021	-	16,756	13,735	3,021	-	16,756
06439	Total Segment 8				277,858	157,037	95,239	530,134	277,858	157,037	95,239	530,134
07553	Mira Loma-Vincent 500 kV T/L (UG): Civil & Cable Portion	900610533	High	Oct-16	11,910	40,530	195,760	248,200	11,910	40,530	195,760	248,200
07553	Mira Loma Substation	901094247	High	Oct-16	-	18	-	18	-	18	-	18
07553	Vincent Substation	901094249	High	Oct-16	-	20	-	20	-	20	-	20
07553	ACQ: CHUG - TRTP-Segment 8	801025887	High	Oct-16	2,997	7,331	-	10,328	2,997	7,331	-	10,328
07553	East Transition Station	901109252	High	Oct-16	1	81	-	81	1	81	-	81
07553	West Transition Station	901109253	High	Oct-16	1	68	-	69	1	68	-	69
07553	Total Segment 8A (Chino Hills Underground (CHUG))				14,908	48,048	195,760	258,717	14,908	48,048	195,760	258,717
06440	WHIRLWIND - CONSTRUCT NEW SUBSTATION	800216839	High	Dec-12	124,639	2,436	-	127,074	124,639	2,436	-	127,074
06440	ANTELOPE - CONSTRUCT ADDITION TO EXISTING SUBSTATION	800216848	High	Dec-12	27,904	14	-	27,918	27,904	14	-	27,918
06440	VINCENT - EXTEND 500KV SWITCHRACK ADDING FOUR BAY POSITIONS. EXTEND 220KV SWITCHRACK ADDING ONE BAY POSITION.	800216929	High	Dec-13	67,146	(85)	-	67,060	67,146	(85)	-	67,060
06440	WINDHUB - CONSTRUCT 500kV SWITCHYARD & AA TRANSFORMER BANK	800217014	High	Dec-12	-	293	-	-	-	293	-	293
06440	MESA SUB - EQUIP 220KV line protection	800218099	High	Jan-14	2,627	87	-	-	2,627	87	-	2,714
06440	MIRA LOMA SUB - EQUIP 1 500KV line protection	800218712	High	Jul-14	20,801	347	-	21,148	20,801	347	-	21,148
06440	VINCENT - EXTEND 500KV SWITCHRACK ADDING FOUR BAY POSITIONS. EXTEND 220KV SWITCHRACK ADDING ONE BAY POSITION. REMOVE MIDWAY NO. 3 SERIES CAPACITOR.	800219576	High	Jan-14	118	7,005	-	-	118	7,005	-	7,124
06440	GOULD - ADD CB'S ON TRANSFORMERS TO COMPLY WITH L&B CRITERIA. ADD NEW 220KV LINE POSITION (PART OF SEGMENT 9-1)	800219704	High	Jan-14	6,577	893	-	7,470	6,577	893	-	7,470
06440	Vincent Substation Administration and Control Building	900817489	High	Sep-14	2,925	3,806	-	6,731	2,925	3,806	-	6,731
06440	Replace the protective relays at Lugo Substation for the Mira Loma No.3 500kV transmission line	900516432	High	Jan-14	-	91	-	-	-	91	-	91
06440	Total Segment 9				252,735	14,888	-	257,402	252,735	14,888	-	267,623
06441	Whirlwind - Windhub 500kV T/L	800217239	High	Apr-12	72,438	(643)	-	71,795	72,438	(643)	-	71,795
06441	Total Segment 10				72,438	(643)	-	71,795	72,438	(643)	-	71,795
06442	Mesa-Vincent #1 500kV T/L	800217339	High	May-15	61,095	109,502	45,761	216,358	61,095	109,502	45,761	216,358
06442	Mesa-Gould 220kV T/L	800217366	High	May-15	15,159	2,277	-	17,435	15,159	2,277	-	17,435
06442	Connect to Vincent & Eagle Rock to Gould	800217381	High	May-15	2,700	1,212	-	3,913	2,700	1,212	-	3,913
06442	TRTP Seg 11 - Acquire Easement	800208616	High	May-15	4,093	(5)	-	4,088	4,093	(5)	-	4,088
06442	Total Segment 11				83,047	112,985	45,761	241,794	83,047	112,985	45,761	241,794
Total Tehachapi Segments 4-11 - Incentive Qualified					1,198,827	455,266	358,040	2,001,911	1,198,827	455,266	358,040	2,012,132
Total Tehachapi - Segments 1-11 Incentive Qualified					1,420,948	461,487	365,627	2,237,840	1,420,948	461,487	365,627	2,248,062
06551	EITP											
06551	Ivanpah SS, EITP	900316933	High	Jul-13	40,725	123	-	40,848	40,725	123	-	40,848
06551	Eldorado SS Upgrades EITP	900316934	High	Jun-13	11,148	6	-	11,154	11,148	6	-	11,154
06551	Eldorado-Ivanpah 220kV T/L CA	900344621	High	May-13	38,896	2,706	-	41,603	38,896	2,706	-	41,603
06551	Eldorado-Ivanpah 220kV T/L NV	900344623	High	May-13	199,899	641	-	200,540	199,899	641	-	200,540
06551	Total EITP				290,669	3,475	-	294,144	290,669	3,475	-	294,144

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07018	Lugo-Pisgah											
	Lugo-Pisgah Phase II, Siting Study	800499057	High	Suspended	-	-	-	-	-	-	-	-
	Total Lugo-Pisgah				-	-	-	-	-	-	-	-
06929	Red Bluff											
06929	Modify Existing Calif Series Capacitor Bank	900247848	High	Mar-14	9,692	2,293	-	11,985	9,692	2,293	-	11,985
06929	Red Bluff Substation: Construct a new 500/230kV substation	900248417	High	Jun-13	179,504	11,222	3,330	194,056	179,504	11,222	3,330	194,056
06929	Siting study	800380461	High	Jan-14	(148)	2	-	(146)	(148)	2	-	(146)
06929	Devers-Palo Verde 500kV line loop into Red Bluff Sub	900312870	High	Dec-13	9,411	29	-	9,440	9,411	29	-	9,440
06929	DCR #2 - Loop DCR line into Red Bluff Sub	900342200	High	Jun-13	8,570	28	-	8,598	8,570	28	-	8,598
06929	Total Red Bluff				207,028	13,574	3,330	223,932	207,028	13,574	3,330	223,932
07061	Colorado River Substation Expansion											
07076	Colorado River Sub: Equipment and Installation	800404139	High	Jul-13	63,052	997	8,500	72,549	63,052	997	8,500	72,549
07061	Devers: Relays for D-RB 500kV N-2 SPS	900603420	High	May-15	-	220	611	831	-	220	611	831
07061	Red Bluff:Relays for D-RB 500kV N-2 SPS	900603421	High	May-15	-	220	611	831	-	220	611	831
07061	Colorado River Substation: Relays for D-RB 500kV N-2 SPS	900603422	High	May-15	-	240	591	831	-	240	591	831
	Total CRS Expansion				63,052	1,677	10,313	75,042	63,052	1,677	10,313	75,042
Various	Whirlwind Substation Expansion Project											
07067	Whirlwind 2nd AA Bank	900692361	High	Dec-14	20,483	18,500	-	38,983	20,483	18,500	-	38,983
07067	Whirlwind 3rd AA Bank	TBD	High	Dec-16	-	500	11,000	11,500	-	500	11,000	11,500
07067	Whirlwind 2nd AA bank and SPS	TBD	High	Dec-14	-	700	-	700	-	700	-	700
07067	Total Whirlwind Substation Expansion Project				20,483	19,700	11,000	51,183	20,483	19,700	11,000	51,183
Various	South of Kramer (Coolwater-Lugo 220kV T/L and Jasper Substation)											
07091	New Coolwater-Lugo 220 kV Transmission Line	900473253	High	Apr-18	16,423	10,500	31,520	58,443	16,423	10,500	31,520	58,443
07091	Lugo Substation Work to support the Coolwater-Lugo 220kV line	TBD	High	Apr-18	-	-	310	310	-	-	310	310
07091	Coolwater Substation Work to support the Coolwater-Lugo 220kV line	TBD	High	Apr-18	-	-	1,470	1,470	-	-	1,470	1,470
07091	Real Properties Acquisition for Coolwater-Lugo 220kV transmission line	TBD	High	Apr-18	-	-	10,410	10,410	-	-	10,410	10,410
06902	Jasper: LGIA Engineer and construct a new interconnection facility	900295954	High	On hold	1,404	300	-	1,705	1,404	300	-	1,705
06902	Lugo – Pisgah 220KV T/L loop into Jasper Substation.	900704372	High	On hold	-	-	-	-	-	-	-	-
06902	Permanent Interconnection (NU) - Line drop for Coolwater-Lugo TL	900704374	High	On hold	-	-	-	-	-	-	-	-
06902	Pisgah Sub (NU) - Upgrade line protection	900704371	High	On hold	-	-	-	-	-	-	-	-
06902	Lugo Sub (NU) - Upgrade line protection	900704365	High	On hold	-	-	-	-	-	-	-	-
	Total South of Kramer				17,827	10,800	43,710	72,337	17,827	10,800	43,710	72,337
06420	West of Devers											
06420	Pre-Engineering (Morongo Transmission Relocation Project)	800062511	High	Dec-19	20,114	10,664	20,264	51,042	20,114	10,664	20,264	51,042
06420	Devers-El Casco, El Casco-San Bernardino, and Devers-Vista #1 & #2 220kV line rebuild	900463423	High	Cancelled	-	-	-	-	-	-	-	-
06420	Real Properties Acquisition	TBD	High	Dec-19	-	-	6,715	6,715	-	-	6,715	6,715
06420	Total West of Devers				20,114	10,664	26,979	57,757	20,114	10,664	26,979	57,757
Total Incentive Transmission Projects (2015 Includes expenditures through December 2015)					2,755,801	544,348	478,759	3,768,685	2,755,801	544,348	478,759	3,778,907
Total Incentive Transmission Projects (Closing by Dec 2015)					2,630,514	473,873	201,310	3,305,697	2,630,514	473,873	201,310	3,305,697