

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

					Project Total (ISO & non-ISO)				ISO Portion			
PIN	Project Title	Order #	High/Low Voltage	OD	Prior	2015	2016	Total	Prior	2015	2016	Total
Incentive Transmission Projects includes only Direct Installation Expenditures												
04847	Devers-Colorado River (DCR)											
04847	DEVERS-Colorado River: PRELIMINARY ENGINEERING & LICENSING	800062522	High	Jan-14	-	0	-	0	-	0	-	0
04847	DEVERS-Colorado River NO. 2 500KV T/L (CA): BUILD 110 MI single circuit 500KV T/L	800062494	High	Jun-13	-	409	-	409	-	409	-	409
04847	DEVERS-VALLEY #2 500KV T/L: BUILD A NEW 41.6 MILE SINGLE-CIRCUIT 500KV T/L	800062527	High	Sep-13	-	1,820	-	1,820	-	1,820	-	1,820
04847	DEVERS SUB: REPLACE CIRCUIT BREAKERS	800062846	High	May-13	-	-	-	-	-	-	-	-
04847	DEVERS SUB: EXTEND BUS TWO POSITIONS TO THE WEST AND EQUIP NEW POSITION 8	800062850	High	Dec-13	-	9	-	9	-	9	-	9
04847	VALLEY SUB: INSTALL A LINE POSITION TO TERMINATE THE DEVERS-VALLEY #2 T/L	800062902	High	Sep-13	-	24	-	24	-	24	-	24
04847	DEVERS-Colorado River JCT SERIES CAPACITOR (CA): INSTALL A NEW 2700A, 875MVAR SERIES CAP	800063033	High	Dec-13	-	8	-	8	-	8	-	8
04847	Colorado River Switchyard	800403645	High	Jun-13	-	275	-	275	-	275	-	275
04847	Development of the Material Yards and helicopter assembly yards	800418261	High	Jan-14	50	(0)	-	49	50	(0)	-	49
04847	Devers-Valley #1 500K T/L Relocate Facilities	800504834	High	Sep-13	-	-	-	-	-	-	-	-
04847	Loop in DPV#1 into Colorado River Substation	800504836	High	Dec-13	-	55	-	55	-	55	-	55
04847	Colorado River Substation: Upgrade HVAC system 500kV MEER Building	901386485	High	Apr-15	3	25	-	28	3	25	-	28
04847	Total DCR				52	2,625	-	2,677	52	2,625	-	2,677
Various	Tehachapi - Segments 3B & 3C											
07183	230 kV Transmission Line Between Highwind and Windhub Substations	800062547	High	Dec-12	-	309	-	309	-	309	-	309
07183	New Highwind 220kV Substation Construction	800063658	High	Dec-12	-	-	-	-	-	-	-	-
07183	Highwind-Windhub 230kV transmission line cathodic protection	900604086	High	Dec-12	-	10,060	-	10,060	-	10,060	-	10,060
07183	Highwind Substation: Visual Mitigation Measures	901374880	High	Aug-15	43	642	-	685	43	642	-	685
07183	Total Segment 3B				43	11,012	-	11,055	43	11,012	-	11,055
07014	Windhub 500kV Sub upgrade	800219424	High	Dec-12	-	(5)	-	(5)	-	(5)	-	(5)
07014	Windhub Substation Install transformer banks	800219436	High	Dec-12	-	137	-	137	-	137	-	137
07014	Antelope Substation 500kV Upgrades	800219505	High	Dec-12	-	48	-	48	-	48	-	48
07014	Total Segment 3C				-	179	-	179	-	179	-	179
Total Tehachapi Segments 3B & 3C					43	11,191	-	11,234	43	11,191	-	11,234
Total Tehachapi Segments 1-3 - Incentive Qualified					43	11,191	-	11,234	43	11,191	-	11,234
Various	Tehachapi - Segments 4-11											
06435	Antelope-Whirlwind 500kV T/L: Construct new 14-mile single-circuit 500kV T/L	800217116	High	Apr-12	-	96	-	96	-	96	-	96
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	-	1	-	1	-	1	-	1
06435	Total Segment 4				-	97	-	97	-	97	-	97
05472	Antelope Vincent #2 500kV T/L	800217232	High	Jan-13	-	14	-	14	-	14	-	14
05472	TRTP 4-11: Licensing	800433760	High	Feb-15	-	-	-	-	-	-	-	-
05472	Total Segment 5				-	14	-	14	-	14	-	14
05243	New Vincent-Duarte 500kV T/L	800217316	High	Nov-14	-	11,446	493	11,939	-	11,446	493	11,939
05243	New Vincent-Angeles National Forest (ANF) 500kV T/L	800217330	High	Nov-14	-	(141)	-	(141)	-	(141)	-	(141)
05243	Tehachapi Renewable Acquire Easement	800051930	High	Mar-14	-	-	-	-	-	-	-	-
05243	Total Segment 6				-	11,304	493	11,798	-	11,304	493	11,798
06438	New Vincent-Rio Hondo #2 500kV T/L	800218130	High	Dec-14	14,667	105	-	14,772	14,667	105	-	14,772
06438	New Antelope-Mesa 500kV T/L	800218138	High	Jan-15	-	4,960	-	4,960	-	4,960	-	4,960
06438	Tehachapi Renewable Acquire Easement	800051909	High	Jan-15	-	-	-	-	-	-	-	-
06438	Total Segment 7				14,667	5,065	-	19,731	14,667	5,065	-	19,731
06439	Construct 1.33 mi. 220kV T/L at Rose Hills	800218522	High	Dec-14	17,537	-	-	17,537	17,537	-	-	17,537

[illegible]

07018	Lugo-Pisgah								
	Lugo-Pisgah Phase II, Siting Study	800499057	High	Suspended	-	-	-	-	-
	Total Lugo-Pisgah				-	-	-	-	-

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PIN	Project Title	Order #	High/Low Voltage	OD	Project Total (ISO & non-ISO)				ISO Portion			
					Prior	2015	2016	Total	Prior	2015	2016	Total
06929	Red Bluff											
06929	Modify Existing Calif Series Capacitor Bank	900247848	High	Mar-14	-	3	-	3	-	3	-	3
06929	Red Bluff Substation: Construct a new 500/230kV substation	900248417	High	Jun-13	-	781	-	781	-	781	-	781
06929	Devers-Palo Verde 500kV line loop into Red Bluff Sub	900312870	High	Dec-13	-	-	-	-	-	-	-	-
06929	DCR #2 - Loop DCR line into Red Bluff Sub	900342200	High	Jun-13	-	-	-	-	-	-	-	-
06929	Siting study	800380461	High	Cancelled	-	-	-	-	-	-	-	-
06929	Red Bluff Sub - Cap on Devers-Palo Verde #1 TL	900389804	High	Cancelled	-	-	-	-	-	-	-	-
06929	Remaining Red Bluff Substation Work (Minor Additions)	901363478	High	Dec-15	3,325	4,816	-	8,141	3,325	4,816	-	8,141
06929	Total Red Bluff				3,325	5,600	-	8,925	3,325	5,600	-	8,925
7076/ 7061	Colorado River Substation Expansion (CRSE)											
7076	Colorado River Sub: Equipment and Installation	800404139	High	Jul-13	-	200	-	200	-	200	-	200
7061	Devers: Relays for Devers-Red Bluff 500kV N-2 Special Protection System (SPS)	900603420	High	May-15	162	650	-	812	162	650	-	812
7061	Red Bluff: Relays for Devers-Red Bluff 500kV N-2 SPS	900603421	High	May-15	169	750	-	919	169	750	-	919
7061	Colorado River Substation: Relays for D-RB 500kV N-2 SPS	900603422	High	May-15	164	650	-	814	164	650	-	814
	Total CRSE				495	2,251	-	2,745	495	2,251	-	2,745
Various	Whirlwind Substation Expansion Project (Whirlwind)											
7067	Whirlwind 2nd AA Bank	900692361	High	Dec-14	-	50	-	50	-	50	-	50
7069	Install N60 relays to add generation to Whirlwind AA Bank SPS	901368041	High	Dec-16	-	300	-	300	-	300	-	300
7067	Whirlwind 2nd AA bank and SPS	901074543	High	Dec-14	-	10	-	10	-	10	-	10
70650	Whirlwind 3rd AA bank and SPS	901307713	High	Dec-16	14	11,800	26,700	38,514	14	11,800	26,700	38,514
	Total Whirlwind				14	12,160	26,700	38,874	14	12,160	26,700	38,874
7091/ 6902	South of Kramer (Coolwater-Lugo 220kV T/L and Jasper Substation)											
7091	New Coolwater-Lugo 220 kV Transmission Line	900473253	High	Suspended	25,691	3,351	-	29,042	25,691	3,351	-	29,042
7091	Lugo Substation Work to support the Coolwater-Lugo 220kV line	901366163	High	Suspended	66	386	-	452	66	386	-	452
7091	Coolwater Substation Work to support the Coolwater-Lugo 220kV line	901366164	High	Suspended	16	180	-	196	16	180	-	196
7091	Coolwater Substation	901366166	High	Suspended	0	20	-	20	0	20	-	20
7091	Lugo Sub: Perform all necessary work to support the Coolwater-Lugo 220 kV T/L and SPS	901366169	High	Suspended	0	10	-	10	0	10	-	10
6902	Jasper: LGIA Engineer and construct a new interconnection facility	900295954	High	On hold	2,115	-	-	2,115	2,115	-	-	2,115
6902	Lugo – Pisgah 220KV T/L loop into Jasper Substation.	900704372	High	On hold	-	-	-	-	-	-	-	-
6902	Pisgah Sub (NU) - Upgrade line protection	900704371	High	On hold	-	-	-	-	-	-	-	-
6902	Lugo Sub (NU) - Upgrade line protection	900704365	High	On hold	-	-	-	-	-	-	-	-
	Total South of Kramer				27,889	3,947	-	31,836	27,889	3,947	-	31,836
06420	West of Devers											
06420	West of Devers Upgrade Project: Preliminary Engineering & Licensing	800062511	High	Dec-19	28,711	9,179	29,192	67,081	28,711	9,179	29,192	67,081
06420	Devers-El Casco, El Casco-San Bernardino, and Devers-Vista #1 & #2 220kV line rebuild	900463423	High	Cancelled	-	-	-	-	-	-	-	-
06420	Devers Sub: Install 220kV CBs & DSs	901453922	High	Dec-19	-	0	406	406	-	0	406	406
06420	El Casco Sub: Install 220kV Terminal Equipment	901453923	High	Dec-19	-	-	459	459	-	-	459	459
06420	Etiwanda Sub: Install 220kV Relay Equipment	901453924	High	Dec-19	-	-	10	10	-	-	10	10
06420	San Bernardino Sub: Install Disconnects	901453925	High	Dec-19	-	-	730	730	-	-	730	730
06420	Rebuild Devers-El Casco & El Casco-San Bernardino 220 kV lines with 2B-1590 ACSR on double circuit towers	901460764	High	Dec-19	-	3,295	86,773	90,067	-	3,295	86,773	90,067
06420	Vista Sub: Install Disconnects	901453926	High	Dec-19	-	-	437	437	-	-	437	437
06420	Acquire Easements for West of Devers	801275175	High	Dec-19	53	6,259	16,386	22,699	53	6,259	16,386	22,699
06420	Total West of Devers				28,764	18,733	134,392	181,889	28,764	18,733	134,392	181,889
Total Incentive Transmission Projects					687,949	370,969	274,463	1,333,381	687,949	370,969	274,463	1,333,381
Total Incentive Transmission Projects (Closing by Dec 2016)					631,296	348,289	140,070	1,119,655	631,296	348,289	140,070	1,119,655