

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

PIN	Project Title	Order #	High/ Low	OD	Project Total (ISO & non-ISO)				ISO Portion			
			Voltage		Prior	2020	2021	Total	Prior	2020	2021	Total
Incentive Transmission Projects includes only Direct Installation Expenditures												
Various	Tehachapi - Segments 4-11											
05472	Antelope Vincent #2 500kV T/L	800217232	High	Oct-12	-	0	-	0	-	0	-	0
05472	Total Segment 5				-	0	-	0	-	0	-	0
05243	New Vincent-Duarte 500kV T/L	800217316	High	Jun-16	-	642	-	642	-	642	-	642
05243	Total Segment 6				-	642	-	642	-	642	-	642
06438	New Antelope-Mesa 500kV T/L	800218138	High	Feb-18	-	3	-	3	-	3	-	3
06438	Total Segment 7				-	3	-	3	-	3	-	3
06439	New 33 mile Vincent-Mira Loma 500kV T/L	800218645	High	Mar-16	-	5	-	5	-	5	-	5
06439	Total Segment 8				-	5	-	5	-	5	-	5
07553	Mira Loma-Vincent 500 kV T/L (UG): Civil & Cable Portion	900610533	High	Oct-16	-	25	-	25	-	25	-	25
07553	Acquire Easements for TRTP Segment 8A	801025887	High	Oct-16	-	11	-	11	-	11	-	11
07553	TRTP-Segment 8A CHUG: Land/ Easements Acquisition/ Condemnation	801479004	High	Jun-20	152	-	-	152	152	-	-	152
07553	Total Segment 8A (TRTP 500 kV Underground)				152	36	-	189	152	36	-	189
06442	Mesa-Vincent #1 500kV T/L	800217339	High	May-15	-	368	-	368	-	368	-	368
06442	Total Segment 11				-	368	-	368	-	368	-	368
	Total Tehachapi Segments 4-11 - Incentive Qualified				152	1,055	-	1,207	152	1,055	-	1,207
	Total Tehachapi - Segments 1-11 Incentive Qualified				152	1,055	-	1,207	152	1,055	-	1,207
08169	Colorado River Substation Expansion (CRSE)											
08169	Colorado River Substation: Installation of the 2nd AA 1120MVA 500/220kV transformer bank	902519003	High	Sep-21	240	5,041	4,440	9,720	240	5,041	4,440	9,720
	Total CRSE				240	5,041	4,440	9,720	240	5,041	4,440	9,720
07650	Whirlwind Substation Expansion Project (Whirlwind)											
07650	Whirlwind Install 500/220kV AA xfrmr	901307713	High	Apr-17	-	(2)	-	(2)	-	(2)	-	(2)
	Total Whirlwind				-	(2)	-	(2)	-	(2)	-	(2)
06902	Calcite Substation (formerly Jasper; part of South of Kramer)											
06902	Calcite Substation (SCE Funded): Construct new Calcite 220kV Substation (switching station) to interconnect the Ord Mountain gen-tie and the Sorrel I Solar Farm gen-tie	900295954	High	Nov-22	4,018	20	-	4,038	4,018	20	-	4,038
06902	Total Calcite				4,018	20	-	4,038	4,018	20	-	4,038
06420	West of Devers											
06420	West of Devers Upgrade Project: Preliminary Engineering & Licensing	800062511	High	May-21	52,934	-	-	52,934	52,934	-	-	52,934
06420	Devers Sub: Install 220kV CBs & DSs	901453922	High	Oct-21	4,207	709	-	4,916	4,207	709	-	4,916
06420	El Casco Sub: Install 220kV Terminal Equipment	901453923	High	Dec-19	-	60	-	60	-	60	-	60
06420	Etiwanda Sub: Install 220kV Relay Equipment	901453924	High	Aug-19	260	150	48	458	260	150	48	458
06420	San Bernardino Sub: Install Disconnects	901453925	High	Aug-21	5,290	675	800	6,765	5,290	675	800	6,765
06420	Rebuild Devers-El Casco & El Casco-San Bernardino 220 kV lines with 2B-1590 ACSR on double circuit towers	901460764	High	Dec-20	356,186	149,479	53,816	559,481	356,186	149,479	53,816	559,481
06420	Vista Sub: Install Disconnects	901453926	High	Dec-19	4,201	450	-	4,651	4,201	450	-	4,651
06420	Acquire Easements for West of Devers	801275175	High	Feb-19	6,492	2,500	1,000	9,992	6,492	2,500	1,000	9,992
06420	Total West of Devers				429,569	154,024	55,664	639,256	429,569	154,024	55,664	639,256
06092	Alberhill System											
06092	Licensing Phase - Site Selection, PEA/Application Preparation, Environmental Surveys and CPUC Licensing Review.	800063633	High	Apr-25	23,982	1,296	1,800	27,078	12,566	679	943	14,189
06092	Valley: Replace existing LFCB relay with SEL-311L relay on Valley 500kV position 7XS. Replace existing SEL-311C/RFL9745 relay with SEL-311L relay on Valley 115kV position 3S.	800374409	High	Jul-23	8	-	-	8	6	-	-	6

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			Voltage		Prior	2020	2021	Total	Prior	2020	2021	Total
06092	Replace existing LFCB relay with SEL-311L relay on Serrano 500kV position 3E	800374410	High	Aug-23	3	-	-	3	3	-	-	3
06092	Alberhill Real Properties Acquisition	800796373	High	Dec-25	84	-	-	84	41	-	-	41
06092	Alberhill-Serrano 500kV: Form the Alberhill-Serrano 500 kV line by looping the existing Serrano-Valley 500 kV line into Alberhill Sub.	900502072	High	Dec-20	200	-	-	200	200	-	-	200
06092	Alberhill-Valley 500kV: Form the Alberhill-Valley 500 kV line by looping the existing Serrano-Valley 500 kV line into Alberhill Substation	900502073	High	Dec-20	40	-	-	40	40	-	-	40
06092	Total Alberhill System				24,317	1,296	1,800	27,414	12,857	679	943	14,479
07546	Eldorado-Lugo-Mohave Upgrade											
07546	ELMSC Real Properties Acquisition	801648460	High	Dec-21	192	1,737	419	2,348	192	1,737	419	2,348
07546	Eldorado Sub: Upgrade Terminal Equipment	901056467	High	Dec-21	14,220	3,735	5,499	23,454	14,220	3,735	5,499	23,454
07546	Lugo Sub: Upgrade Terminal Equipment and	901056468	High	May-21	20,334	3,527	7,427	31,288	20,334	3,527	7,427	31,288
07546	Mohave Sub:Install CBs, Disc.&series cap	901490550	High	Oct-20	15,708	4,379	6,809	26,896	15,708	4,379	6,809	26,896
07546	Mid-Line Cap:Inst cap on Eldor Lugo T/L	901624163	High	Jan-22	12,777	7,257	7,792	27,826	12,777	7,257	7,792	27,826
07546	Inst Eldo-Lug-Mhve Series Caps at Ludlow	901826564	High	Dec-21	16,189	4,088	7,629	27,906	16,189	4,088	7,629	27,906
07546	Eldorado-Mohave T/L: Instal OPGW, splice	901904770	High	Apr-21	2,835	1,790	2,284	6,909	2,835	1,790	2,284	6,909
07546	Lugo-Mohave T/L(CA): Instal OPGW, splice	901904772	High	Apr-21	7,638	6,127	5,539	19,304	7,638	6,127	5,539	19,304
07546	Lugo-Mohave T/L(NV): Instal OPGW, splice	901904773	High	Apr-21	485	397	499	1,381	485	397	499	1,381
07546	Eldorado-Lugo T/L(CA): Clear infractions	901904774	High	Apr-21	1,568	1,977	1,692	5,237	1,568	1,977	1,692	5,237
07546	Total Eldorado-Lugo-Mohave Upgrade				91,947	35,014	45,589	172,550	91,947	35,014	45,589	172,550
07555	Mesa Substation											
07555	Build new Mesa 230/66/16 kV substation. Install an L90 relay, since an L90 relay is being added at Walnut Substation.	900959223	High	Dec-19	-	6,182	-	6,182	-	3,137	-	3,137
07555	Laguna Bell: Replace (4) 230 kV CBs	901192480	High	Dec-19	3,173	251	-	3,424	3,173	251	-	3,424
07555	Lighthipe:Replace (2) 230kV CBs&disconct	901192481	High	Jun-19	1,702	114	-	1,816	1,702	114	-	1,816
07555	Rio Hondo Sub: Upgrade/Update Protection	901192483	High	May-20	281	114	-	394	281	114	-	394
07555	Relocation of the Laguna Bell-Rio Hondo, Lighthipe-Mesa, Goodrich-Laguna Bell, Eagle Rock-Mesa, Mesa-Vincent #1 and 2, Redondo-Mesa, Center-Mesa, and Mesa-Walnut 230kV lines	901197441	High	Dec-20	5,409	592	-	6,001	5,409	592	-	6,001
07555	Mesa-Redondo 220kV: Install 4 structures and 2300 ckt ft of conductor.	901560422	High	Dec-20	2,122	256	-	2,378	2,122	256	-	2,378
07555	Center Sub:Replc 3 GE relays	901564026	High	Jun-20	198	6	-	203	198	6	-	203
07555	Redondo Sub: Replc 1 SEL-311L relay.	901564029	High	Dec-19	443	85	-	528	443	85	-	528
07555	Eagle Rock-Mesa: Install 1 structure and 1500 ckt ft of conductor	902124236	High	Dec-20	289	324	-	613	289	324	-	613
07555	Goodrich-Mesa: Install 1000 ckt ft of conductor	902124387	High	Dec-20	208	325	-	533	208	325	-	533
07555	Laguna Bell-Mesa #1 220kV: Install 2300 ckt ft of conductor	902124388	High	Dec-20	56	377	-	433	56	377	-	433
07555	Laguna Bell-Mesa #2: Install 3 structures and 1400 ckt ft of conductor	902124389	High	Dec-20	386	426	-	812	386	426	-	812
07555	Lighthipe-Mesa: Install 3 structures, 2 shoofly Emergency Steel Poles (ESPs), 1200 ckt ft of shoofly conductor, and 1000 ckt ft of permanent conductor	902124390	High	Dec-19	-	53	-	53	-	53	-	53
07555	Mesa-Rio Hondo #1 220kV: Install 4 structures and 3000 ckt ft of conductor	902124394	High	Dec-20	690	881	-	1,572	690	881	-	1,572
07555	Mesa-Rio Hondo #2: Install 3000 ckt ft of conductor	902124395	High	Dec-20	607	1,567	-	2,174	607	1,567	-	2,174
07555	Mesa-Vincent #1: Install 2 structures, 2 shoofly ESPs, 800 ckt ft of shoofly conductor, and 1300 ckt ft of permanent conductor.	902124396	High	Dec-19	-	(6)	-	(6)	-	(6)	-	(6)
07555	Mesa-Vincent #2: Install 2 structures and 1400 ckt ft of conductor	902124398	High	Dec-20	730	285	-	1,015	730	285	-	1,015
07555	Mesa-Walnut: Install 4 structures and 2900 ckt ft of conductor	902124580	High	Dec-20	1,079	1,674	-	2,753	1,079	1,674	-	2,753
07555	Redondo-Vincent: Install 1500 ckt ft of shoofly conductor.	902124582	High	May-18	-	(2)	-	(2)	-	(2)	-	(2)
07555	Goodrich-Laguna Bell: Install 1500ft cnd	902132965	High	May-18	-	213	-	213	-	213	-	213
07555	Laguna Bell-Rio Hondo: Install 1 shoofly ESP and 500 ckt ft of shoofly conductor.	902132967	High	Dec-20	2,295	276	-	2,571	2,295	276	-	2,571
07555	Mesa: Upgrade Mesa from a 230/66/16kV substation to a 500/230/66/16kV substation	902178838	High	Aug-21	27,221	95,086	69,486	191,793	27,221	95,086	69,486	191,793
07555	Mesa-Mira Loma: Install 2 new structures and 1600 ckt ft of conductor	902124234	High	Dec-20	21	1,779	2,016	3,816	21	1,779	2,016	3,816
07555	Mesa-Vincent: Install 1600 ckt ft of conductor	902124235	High	Dec-20	2	399	1,160	1,561	2	399	1,160	1,561
07555	Mira Loma 500kV T/L: Install (1) L90 relay. Install (2) SEL-411L relays. Install (2) RFL-9745 channels.	902472308	High	May-21	72	4	82	158	72	4	82	158
07555	Vincent 500 kV T/L: Install (1) L90 relay. Install (2) SEL-411L relays. Install (2) RFL-9745 channels	902472309	High	May-21	110	6	88	203	110	6	88	203
07555	Total Mesa Substation				47,092	111,265	72,833	231,190	47,092	108,220	72,833	228,145
Total Incentive Transmission Projects					597,335	307,712	180,326	1,085,373	585,874	304,050	179,469	1,069,393
Total Incentive Transmission Projects (Closing by Dec 2021)					556,463	299,139	170,734	1,026,336	556,463	296,094	170,734	1,023,291