

# SOUTHERN CALIFORNIA EDISON COMPANY

## Transmission/Distribution ISO Facilities Study 12-31-2021 Facilities

TO2023 Draft Annual Update

Attachment 4

WP-Schedule 7

Page 1 of 40

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### Transmission

	Total Plant FERC Form 1	Total Plant	ISO Plant	ISO % of Total
<b>Land (Substation and Line)</b>				
350	\$381,460,213	\$381,460,213	\$281,930,574	73.91%
<b>Substation</b>				
352	1,306,459,913	1,306,459,914	843,791,400	64.59%
353	7,245,331,489	7,245,331,489	4,116,024,360	56.81%
<b>Total Substation</b>	8,551,791,402	8,551,791,402	4,959,815,760	58.00%
<b>Lines</b>				
354	2,528,290,970	2,528,290,969	2,450,974,771	96.94%
355	2,024,504,619	2,024,504,618	542,755,368	26.81%
356	2,065,980,164	2,065,980,164	1,618,978,825	78.36%
357	329,224,124	329,224,124	215,308,596	65.40%
358	403,637,836	403,637,836	58,752,899	14.56%
359	246,891,224	246,891,223	223,182,876	90.40%
<b>Total Lines</b>	7,598,528,937	7,598,528,934	5,109,953,334	67.25%
<b>Total Transmission</b>	<b>\$16,531,780,552</b>	<b>\$16,531,780,549</b>	<b>\$10,351,699,668</b>	<b>62.62%</b>

### Distribution

	Total Plant FERC Form 1	Total Plant	ISO Plant	ISO % of Total
<b>Land:</b>				
360	\$130,224,350	\$130,224,350	-	0.00%
<b>Structures:</b>				
361	903,343,848	903,343,847	-	0.00%
362	3,278,542,591	3,278,542,591	-	0.00%
<b>Total Structures</b>	4,181,886,439	4,181,886,438	-	0.00%
<b>Total Distribution</b>	<b>\$4,312,110,789</b>	<b>\$4,312,110,788</b>	<b>-</b>	<b>0.00%</b>
<b>Total Transmission &amp; Distribution</b>	<b>\$20,843,891,341</b>	<b>\$20,843,891,337</b>	<b>\$10,351,699,668</b>	<b>49.66%</b>

# Southern California Edison Company

Summary of ISO Facility Gross Plant  
High/Low Voltage Split  
12-31-2021 Facilities  
(\$)

Total ISO Plant			Gross ISO Plant Split into High Voltage, Low Voltage, and Transformers that Straddle HV/LV				
ISO Transmission and Distribution Facility	Total ISO Gross Plant	Land	Land HV	Land LV	Structures HV	Structures LV	Transformers HV/LV
<b>Transmission Lines:</b>							
1000 kV T Lines	113,056,258	-	-	-	113,056,258	-	-
500 kV T Lines	3,041,514,930	124,674,370	124,674,370	-	2,916,840,559	-	-
230 kV T Lines	1,985,852,202	99,189,198	99,189,198	-	1,886,663,004	-	-
161 kV T Lines	3,211,218	33,310	-	33,310	-	3,177,908	-
115 kV T Lines	137,270,284	5,497,943	-	5,497,943	-	131,772,341	-
66 kV T Lines	31,908,252	636,728	-	636,728	-	31,271,524	-
55 kV T Lines	27,359,782	188,043	-	188,043	-	27,171,739	-
<b>Total Transmission Lines</b>	<b>5,340,172,925</b>	<b>230,219,591</b>	<b>223,863,568</b>	<b>6,356,023</b>	<b>4,916,559,821</b>	<b>193,393,513</b>	<b>-</b>
<b>Substations:</b>							
High Voltage Substations (750 kV, 500kV, 220kV)	4,470,455,400	34,127,225	34,127,225	-	4,436,328,175	-	-
<b>Straddle Substations:</b>							
Antelope	223,686,439	21,982	19,474	2,508	186,172,165	23,972,002	13,520,290
Bailey	41,235,095	111,063	65,777	45,286	21,205,659	14,599,599	5,318,774
Eagle Mountain	9,425,488	-	-	-	5,136,883	368,252	3,920,353
Kramer	47,961,970	40,894	28,913	11,981	24,565,359	10,179,305	13,176,412
Ivanpah	46,485,858	-	-	-	19,018,373	21,890,948	5,576,537
Victor	112,364,535	17,594	7,206	10,389	37,959,556	54,728,227	19,659,159
<b>Total Straddle Substations</b>	<b>481,159,386</b>	<b>191,533</b>	<b>121,370</b>	<b>70,163</b>	<b>294,057,995</b>	<b>125,738,332</b>	<b>61,171,525</b>
Low Voltage Substations (Less Than 220kV)	59,911,956	17,392,224	-	17,392,224	-	42,519,733	-
<b>Total Substations</b>	<b>5,011,526,743</b>	<b>51,710,982</b>	<b>34,248,595</b>	<b>17,462,387</b>	<b>4,730,386,170</b>	<b>168,258,065</b>	<b>61,171,525</b>
<b>Total Lines and Substations</b>	<b>10,351,699,668</b>	<b>281,930,574</b>	<b>258,112,164</b>	<b>23,818,410</b>	<b>9,646,945,991</b>	<b>361,651,577</b>	<b>61,171,525</b>

Determination of High Voltage/Low Voltage Gross Plant Percentage of SCE ISO Transmission Facilities  
Gross Plant Percentage Determined Pursuant to ISO Tariff Section 12

Gross Plant that can be determined HV/LV	High Voltage	Low Voltage
Land	258,112,164	23,818,410
Structures	9,646,945,991	361,651,577
Total Determined HV/LV	9,905,058,155	385,469,987
Percentage:	96.254%	3.746%
Transformers	58,880,118	2,291,407
<b>Total HV &amp; LV Gross Plant</b>	<b>9,963,938,274</b>	<b>387,761,394</b>

**Southern California Edison Company**  
Summary of ISO Facility Gross Plant  
High/Low Voltage Mix Summary  
12-31-2021 Facilities  
(\$)

TO2023 Draft Annual Update  
Attachment 4  
WP-Schedule 7  
Page 3 of 40

Facility:	Location #	Structures HV	Structures LV	Transformers HV/LV	Total
<b>500/220/66, 220/66, 220/161, or 220/115 kV Substations</b>					
Antelope	5052	186,172,165	23,972,002	13,520,290	223,686,439
Bailey	5059	21,205,659	14,599,599	5,318,774	41,235,095
Eagle Mountain	5040	5,136,883	368,252	3,920,353	9,425,488
Ivanpah	8363	19,018,373	21,890,948	5,576,537	46,485,858
Kramer	5042 & 8046	24,565,359	10,179,305	13,176,412	47,961,970
Victor	8049	37,959,556	54,728,227	19,659,159	112,364,535
<b>Total Straddle Substations</b>		294,057,995	125,738,332	61,171,525	481,159,386

**SOUTHERN CALIFORNIA EDISON COMPANY**

12-31-2021 Facilities

**TRANSMISSION SUBSTATION FACILITIES**

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350	A/C 352	A/C 353	A/C 350	A/C 352	A/C 353		
				TOTAL	Land & Land Rights	Structures & Improvements	Station Equipment	Land & Land Rights	Structures & Improvements	Station Equipment		
BIG CREEK NO.4	2236	220kV	-	5,642,774	-	41,031	5,601,743	-	-	-	ISO	High
INYO	2570	220kV	-	8,188,442	-	381,449	7,806,993	-	-	-	ISO	High
METRO GOM MAINT	5001	500kV	-	62,090,661	-	-	62,090,661	-	-	-	ISO	High
HARBORGEN SUB	5019	220kV	-	4,219,117	-	85,990	4,133,127	-	-	-	ISO	High
EL SEGUNDO SWITCHRACK SUB	5026	220kV	12,470	10,175,589	12,470	1,756,170	8,406,949	-	-	-	ISO	High
MIDWAY SUB	5032	500kV	-	14,928,236	-	482,279	14,445,957	-	-	-	ISO	High
PASTORIA SUB	5036	220kV	21,435	19,203,580	21,435	1,724,275	17,457,869	-	-	-	ISO	High
SYCAMORE SUB	5039	220kV	-	22,357	-	-	-	-	-	22,357	Non-ISO	
CLWTR SWITCHRACKS 1,2	5044	115kV	-	1,476,690	-	-	1,476,690	-	-	-	ISO	Low
MOHAVE SWITCHRACK	5045	500kV	-	25,867,590	-	3,991,463	21,876,128	-	-	-	ISO	High
RANCHO VISTA SUB	5047	500kV	1,844,367	183,268,114	1,844,367	24,976,893	156,446,853	-	-	-	ISO	High
SYLMAR SUB	5058	220kV	-	1,970,927	-	22,786	1,948,141	-	-	-	ISO	High
LUGO SUB	5061	500kV	90,981	199,809,710	90,981	41,395,133	158,323,595	-	-	-	ISO	High
PISGAH SUB	5065	220kV	-	5,912,768	-	642,499	5,270,269	-	-	-	ISO	High
GENE SUB	5066	220kV	-	2,127,716	-	-	-	-	63,093	2,064,623	Non-ISO	
WINDHUB SUB	5079	500kV	1,231,926	246,465,178	1,096,103	28,772,348	189,423,340	135,823	3,565,305	23,472,259	MIX	High
SERRANO SUB	5080	500kV	1,226,475	257,562,574	1,226,475	42,312,563	214,023,536	-	-	-	ISO	High
LEWIS SUB	5089	220kV	1,444	5,763,783	1,444	352,755	5,409,584	-	-	-	ISO	High
EL DORADO SUB(NEVADA)	5090	500kV	13,183	286,830,030	13,183	51,757,663	235,059,184	-	-	-	ISO	High
MEAD SUB	5091	500kV	-	24,511	-	12,205	12,306	-	-	-	ISO	High
MOENKOPF SUB	5092	500kV	-	1,516,885	-	-	1,516,885	-	-	-	ISO	High
WEST SERIES CAPACITORS	5093	500kV	-	53,044,909	-	1,797,455	51,247,454	-	-	-	ISO	High
EAST SERIES CAPACITORS 1	5094	500kV	-	9,194,391	-	870,601	8,323,790	-	-	-	ISO	High
PALO VERDE SWITCHRACK SUB	5097	500kV	-	9,261,696	-	486,323	8,775,373	-	-	-	ISO	High
MIDWAY-PAC INTERTIE	8932	500kV	-	14,093,278	-	162,585	13,930,693	-	-	-	ISO	High
PARDEE-PAC INTERTIE	8950	220kV	-	997,399	-	55,269	942,130	-	-	-	ISO	High
SYLMAR-PAC INTERTIE	8958	220kV	51,663	230,884,489	51,663	7,768,618	223,064,208	-	-	-	ISO	High
EDISON ITAC	1451	Misc	-	35,855	-	-	-	-	-	35,855	Non-ISO	
EL SEGUNDO GEN. STATION	1510	220kV	-	86,280	-	-	-	-	83,831	2,450	Non-ISO	
SAN ONOFRE-COMMON 1,2,3	1808	220kV	-	-	-	-	-	-	-	-	Non-ISO	
SAN ONOFRE-COMMON 2,3	1809	220kV	-	-	-	-	-	-	-	-	Non-ISO	
SAN ONOFRE-UNIT 1	1810	220kV	-	-	-	-	-	-	-	-	Non-ISO	
SAN ONOFRE-UNIT 2	1812	220kV	-	-	-	-	-	-	-	-	Non-ISO	
SAN ONOFRE-UNIT 3	1818	220kV	-	-	-	-	-	-	-	-	Non-ISO	
SONGS 2,3 SPARE PARTS	1824	220kV	-	-	-	-	-	-	-	-	Non-ISO	
SONGS COMMON 2 & 3- (INC)	1839	220kV	-	-	-	-	-	-	-	-	Non-ISO	
PALOVERDE NUCL GEN PLT-U1	1860	500kV	-	2,597,299	-	-	-	-	-	2,597,299	Non-ISO	
PALO VERDE-UNIT 2	1864	500kV	-	2,488,614	-	-	-	-	-	2,488,614	Non-ISO	
PALO VERDE-UNIT 3	1866	500kV	-	5,007,603	-	-	-	-	-	5,007,603	Non-ISO	
PALOVERDE-COMMON 1,2,3	1867	500kV	7,766	2,729,463	-	-	-	7,766	-	2,721,697	Non-ISO	
COOLWATER COMMON	1936	220kV	-	-	-	-	-	-	-	-	Non-ISO	
SAN BERNARDINO COMMON	1996	220kV	-	27,803	-	-	-	-	27,803	-	Non-ISO	
PARKER DAM-US BUR OF RECL	2113	220kV	-	12,334	-	-	-	-	12,334	-	Non-ISO	
MAMMOTH POOL LAKE-FP 2085	2150	220kV	-	24,016	-	-	-	-	-	24,016	Non-ISO	
BIG CREEK CANYON	2202	220kV	-	1,641,022	-	-	-	-	-	1,641,022	Non-ISO	
PORTAL POWER PLANT	2237	33kV & Below	-	68,246	-	-	-	-	-	68,246	Non-ISO	
MAMMOTH POOL	2238	220kV	-	4,208,100	-	-	-	-	46,311	4,161,789	Non-ISO	
EASTWOOD POWER STATION	2239	33kV & Below	-	5,755,613	-	-	-	-	678,338	5,077,276	Non-ISO	
HYDRO PRODUCTION	2300	Misc	-	10,367	-	-	-	-	-	10,367	Non-ISO	
SNTA ANA RV&MILL CRK CNYN	2301	33kV & Below	-	421,924	-	-	-	-	-	421,924	Non-ISO	
LYTLE CRK&SN ANTONIO CNYN	2303	33kV & Below	-	140,226	-	-	-	-	-	140,226	Non-ISO	
KERN RIVER CANYON	2305	66kV	-	692,140	-	-	-	-	-	692,140	Non-ISO	
KAWEAH RIVER CANYON	2307	66kV	-	572,929	-	-	-	-	-	572,929	Non-ISO	
SAN GORGONIO CANYON	2309	33kV & Below	-	193,975	-	-	-	-	-	193,975	Non-ISO	
KERN RIVER NO.1	2313	66kV	-	647,201	-	-	-	-	4,184	643,018	Non-ISO	
BOREL	2314	66kV	-	260,974	-	-	-	-	1,383	259,591	Non-ISO	
SANTA ANA NO.1	2315	33kV & Below	-	36,406	-	-	-	-	-	36,406	Non-ISO	
SANTA ANA NO.3	2317	33kV & Below	-	14,930	-	-	-	-	-	14,930	Non-ISO	
MILL CREEK NO.1	2318	33kV & Below	1,464	8,780	-	-	-	1,464	-	7,316	Non-ISO	
MILL CREEK NO.2&3	2319	33kV & Below	-	52,080	-	-	-	-	-	52,080	Non-ISO	
KAWEAH NO.1	2324	66kV	-	625,062	-	-	-	-	-	625,062	Non-ISO	
KAWEAH NO.2	2325	66kV	-	51,820	-	-	-	-	2,694	49,126	Non-ISO	
KAWEAH NO.3	2326	66kV	-	57,269	-	-	-	-	-	57,269	Non-ISO	
LOWER TULE RIVER	2327	66kV	-	50,834	-	-	-	-	-	50,834	Non-ISO	
KERN RIVER NO.3	2328	66kV	-	460,723	-	-	-	-	-	460,723	Non-ISO	
ONTARIO NO.1	2331	33kV & Below	-	205,914	-	-	-	-	-	205,914	Non-ISO	
EASTERN HYDRO REGION	2500	55kV	-	7,254	-	-	-	-	7,254	-	Non-ISO	
BISHOP CREEK CANYON	2501	33kV & Below	-	705,804	-	-	-	-	-	705,804	Non-ISO	
MONO BASIN	2503	115kV	-	196,344	-	-	-	-	-	196,344	Non-ISO	
Lundy	2504	55kV	2560 & 2510	6,134,457	-	-	-	-	317,627	5,816,830	Non-ISO	
POOLE	2512	33kV & Below	-	513,159	-	-	-	-	3,682	509,477	Non-ISO	
RUSH CREEK	2514	115kV	-	175,912	-	-	-	-	-	175,912	Non-ISO	
BISHOP CREEK NO.2	2522	55kV	-	80,487	-	-	-	-	-	80,487	Non-ISO	
BISHOP CREEK NO.3	2523	33kV & Below	-	1,847,927	-	-	-	-	-	1,847,927	Non-ISO	
BISHOP CREEK NO.4	2524	33kV & Below	-	86,641	-	-	-	-	-	86,641	Non-ISO	
BISHOP CREEK NO.5	2525	33kV & Below	-	84,347	-	-	-	-	-	84,347	Non-ISO	
BISHOP CREEK NO.6	2526	33kV & Below	-	39,098	-	-	-	-	-	39,098	Non-ISO	
FISH LAKE VALLEY METERING	2553	55kV	-	53,607	-	-	-	-	1,343	52,264	Non-ISO	
CASA DIABLO	2557	115kV	2,119	10,134,994	-	-	-	2,119	442,110	9,690,765	Non-ISO	
LEE VINING	2561	115kV	344	2,586,678	-	-	-	344	283,997	2,302,338	Non-ISO	
SHERWIN	2571	115kV	-	1,893,204	-	-	-	-	100,772	1,792,432	Non-ISO	

**SOUTHERN CALIFORNIA EDISON COMPANY**

12-31-2021 Facilities

**TRANSMISSION SUBSTATION FACILITIES**

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353 TOTAL	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment	A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment		
ZACK	2582	55kV	400,881	744,954	-	-	-	400,881	-	344,073	Non-ISO	
SKILAND (MAMMOTH LAKE) SUBSTATION	2587	33kV & Below	-	129,731	-	-	-	-	129,731	-	Non-ISO	
MT. TOM	2598	55kV	-	(230)	-	-	-	-	-	(230)	Non-ISO	
MINARET	2612	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
DAF INDAL 500KW WND TURBN	3717	33kV & Below	714	714	-	-	-	714	-	-	Non-ISO	
LEBEC SUBSTATION	5016	220kV	-	44,611	-	-	-	-	29,473	15,138	Non-ISO	
ARCOGEN SUB	5022	220kV	-	1,008,589	-	-	-	-	44,764	963,824	Non-ISO	
CLWTR SWITCHRACK 3,4 SUB	5046	220kV	48,136	3,384,292	-	-	-	48,136	156,227	3,179,927	Non-ISO	
ORMOND BCH SWITCHRACK SUB	5049	220kV	158,170	6,311,469	-	-	-	158,170	34,483	6,118,817	Non-ISO	
SAUGUS SUB	5051	220kV	13,373	85,365,605	-	-	-	13,373	4,965,855	80,386,376	Non-ISO	
CAMINO SUB	5068	220kV	-	4,277,120	-	-	-	-	54,471	4,222,649	Non-ISO	
VELASCO SUB	5072	220kV	-	195,721	-	-	-	-	40,279	155,442	Non-ISO	
HUNTINGTON BCH SWITCHRCK	5078	220kV	21,660	5,244,336	-	-	-	21,660	262,196	4,960,480	Non-ISO	
TRITON SUB	5095	115kV	2,415,092	31,402,312	-	-	-	2,415,092	2,377,770	26,609,450	Non-ISO	
ALHAMBRA SUB	5101	66kV	-	2,855,210	-	-	-	-	83,447	2,771,763	Non-ISO	
BANDINI SUB	5107	66kV	4,583	20,718	-	-	-	4,583	16,136	-	Non-ISO	
BICKNELL SUB	5109	33kV & Below	-	2,451	-	-	-	-	-	2,451	Non-ISO	
WABASH (NEW) SUB	5110	66kV	-	24,360	-	-	-	-	-	24,360	Non-ISO	
THUMSGEN SUBSTATION	5112	66kV	-	2,049	-	-	-	-	-	2,049	Non-ISO	
EATON SUB	5115	66kV	-	34,188	-	-	-	-	34,188	-	Non-ISO	
RUSH SUB	5116	66kV	-	-	-	-	-	-	-	-	Non-ISO	
FEDERALGEN SUB	5120	66kV	-	6,944	-	-	-	-	6,944	-	Non-ISO	
GARFIELD SUB	5121	66kV	-	54,966	-	-	-	-	54,966	-	Non-ISO	
GRANADA SUB	5126	33kV & Below	-	2	-	-	-	-	2	-	Non-ISO	
LA CANADA SUB	5130	66kV	-	9,588	-	-	-	-	9,588	-	Non-ISO	
MONROVIA SUB	5134	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
GENAMIC SUB	5139	66kV	-	5,739	-	-	-	-	5,739	-	Non-ISO	
ROSEMEAD SUB	5141	66kV	-	38,779	-	-	-	-	38,757	22	Non-ISO	
SAN GABRIEL SUB	5142	66kV	-	23,648	-	-	-	-	23,648	-	Non-ISO	
DUARTE SUB	5150	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
JOSE SUB	5152	66kV	-	55,457	-	-	-	-	51,570	3,887	Non-ISO	
ARROYO SUB	5158	66kV	-	123	-	-	-	-	-	123	Non-ISO	
AMADOR SUB	5161	66kV	-	(47,687)	-	-	-	-	-	(47,687)	Non-ISO	
FAIR OAKS SUB	5162	33kV & Below	-	19,662	-	-	-	-	2,466	17,195	Non-ISO	
REPETTO SUB	5164	66kV	-	17,757	-	-	-	-	17,757	-	Non-ISO	
JPL SUB	5165	66kV	-	3,666	-	-	-	-	-	3,666	Non-ISO	
MAYFLOWER SUB	5167	33kV & Below	-	210,243	-	-	-	-	118,272	91,972	Non-ISO	
TEMPLE SUB	5170	33kV & Below	-	17,367	-	-	-	-	-	17,367	Non-ISO	
VAIL SUB	5175	66kV	-	15,470	-	-	-	-	15,470	-	Non-ISO	
KIMBALL SUBSTATION	5176	66kV	-	-	-	-	-	-	-	-	Non-ISO	
KIRK WALL SUBSTATION	5178	66kV	3,995	3,995	-	-	-	3,995	-	-	Non-ISO	
RAVENDALE SUB	5179	66kV	-	154,829	-	-	-	-	154,829	-	Non-ISO	
CITRUS SUB	5185	66kV	-	37,984	-	-	-	-	-	37,984	Non-ISO	
CORTEZ SUB	5186	66kV	-	48,544	-	-	-	-	16,955	31,589	Non-ISO	
DALTON SUB	5188	66kV	-	82,794	-	-	-	-	82,794	-	Non-ISO	
RAILROAD SUB	5196	66kV	-	71,448	-	-	-	-	71,448	-	Non-ISO	
ALHAMBRA DIST SUB TRG FAC	5198	66kV	-	2,072,267	-	-	-	-	25,705	2,046,562	Non-ISO	
BEVERLY HILLS SUB	5201	66kV	-	-	-	-	-	-	-	-	Non-ISO	
CULVER CITY SUB	5204	66kV	-	61,263	-	-	-	-	61,263	-	Non-ISO	
SEPULVEDA SUB	5207	66kV	-	41,604	-	-	-	-	41,604	-	Non-ISO	
HOWARD SUB	5210	66kV	-	51,234	-	-	-	-	33,804	17,431	Non-ISO	
INGLEWOOD SUB	5211	66kV	-	29,751	-	-	-	-	29,751	-	Non-ISO	
LENNOX SUB	5213	66kV	-	32,750	-	-	-	-	14,957	17,794	Non-ISO	
MADRID SUB	5215	33kV & Below	-	575	-	-	-	-	575	-	Non-ISO	
MANHATTAN SUB	5216	33kV & Below	-	10,762	-	-	-	-	10,762	-	Non-ISO	
MONETA SUB	5218	33kV & Below	-	16,856	-	-	-	-	16,856	-	Non-ISO	
OCEAN PARK SUB	5221	33kV & Below	-	4,164	-	-	-	-	-	4,164	Non-ISO	
PEARL SUB	5224	33kV & Below	-	14,955	-	-	-	-	14,955	-	Non-ISO	
BRIGHTON SUB	5226	66kV	-	3,804	-	-	-	-	-	3,804	Non-ISO	
REDONDO SUB	5227	33kV & Below	-	33,678	-	-	-	-	33,678	-	Non-ISO	
ROSECRANS SUB	5228	66kV	-	70,273	-	-	-	-	70,273	-	Non-ISO	
MOBIL OIL SUB	5229	66kV	-	3,652	-	-	-	-	3,652	-	Non-ISO	
SANTA MONICA SUB	5231	66kV	-	19,277	-	-	-	-	19,277	-	Non-ISO	
VICTORIA SUB	5232	66kV	-	162,536	-	-	-	-	162,536	-	Non-ISO	
WALTERIA SUB	5233	66kV	-	29,599	-	-	-	-	29,599	-	Non-ISO	
WINDSOR HILLS SUB	5235	66kV	-	75,772	-	-	-	-	58,264	17,508	Non-ISO	
VALDEZ SUB	5236	66kV	-	24,710	-	-	-	-	-	24,710	Non-ISO	
LAWNDALE SUB	5238	33kV & Below	-	44,342	-	-	-	-	44,342	-	Non-ISO	
CRATER SUB	5239	66kV	-	9,057	-	-	-	-	-	9,057	Non-ISO	
YUKON SUB	5241	66kV	4,415	4,415	-	-	-	4,415	-	-	Non-ISO	
COLORADO SUB	5242	66kV	-	40,181	-	-	-	-	40,181	-	Non-ISO	
TOPANGA SUB	5243	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
DITMAR SUB	5246	66kV	-	8,977	-	-	-	-	8,977	-	Non-ISO	
SAWTELLE SUB	5250	66kV	-	59,249	-	-	-	-	59,249	-	Non-ISO	
ROLLING HILLS SUB	5252	66kV	-	27,085	-	-	-	-	27,085	-	Non-ISO	
HAVEDA SUB	5254	33kV & Below	-	30,118	-	-	-	-	30,118	-	Non-ISO	
LUNADA SUB	5255	33kV & Below	-	8,090	-	-	-	-	8,090	-	Non-ISO	
BRIDGE SUB	5257	66kV	-	14,957	-	-	-	-	14,957	-	Non-ISO	
STIRRUP SUB	5259	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
COLOSSUS SUB	5260	66kV	-	7,141	-	-	-	-	-	7,141	Non-ISO	
CREST SUB	5264	66kV	-	15,678	-	-	-	-	15,678	-	Non-ISO	

**SOUTHERN CALIFORNIA EDISON COMPANY**

12-31-2021 Facilities

**TRANSMISSION SUBSTATION FACILITIES**

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353 TOTAL	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment	A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment		
SPACE SUB	5267	66kV	-	21,278	-	-	-	-	21,278	-	Non-ISO	
TOPAZ SUB	5268	66kV	-	29,219	-	-	-	-	29,219	-	Non-ISO	
TAHITI SUB	5271	66kV	-	23,749	-	-	-	-	23,749	-	Non-ISO	
LATIGO SUB	5272	66kV	-	-	-	-	-	-	-	-	Non-ISO	
STANHILL SUB	5273	66kV	-	0	-	-	-	-	-	0	Non-ISO	
GALAXY SUB	5274	66kV	-	8,898	-	-	-	-	8,898	-	Non-ISO	
MARYMOUNT SUB	5275	66kV	-	4,862	-	-	-	-	4,862	-	Non-ISO	
PALOGEN SUB	5282	66kV	-	42,738	-	-	-	-	42,738	-	Non-ISO	
BIG CREEK 2	5302	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
DELANO SUB	5305	66kV	-	60,018	-	-	-	-	60,018	-	Non-ISO	
EARLIMART	5306	66kV	-	-	-	-	-	-	-	-	Non-ISO	
GLENNVILLE SUB	5308	66kV	-	55,476	-	-	-	-	55,476	-	Non-ISO	
HAVILAH SUB	5311	66kV	-	-	-	-	-	-	-	-	Non-ISO	
LIBERTY SUB	5312	66kV	-	301,990	-	-	-	-	301,990	-	Non-ISO	
LAUREL SUB	5315	66kV	-	-	-	-	-	-	-	-	Non-ISO	
OCTOL SUB	5320	66kV	-	13,523	-	-	-	-	13,523	-	Non-ISO	
PIXLEY SUB	5321	66kV	-	18,619	-	-	-	-	18,619	-	Non-ISO	
POPLAR SUB	5322	66kV	-	-	-	-	-	-	-	-	Non-ISO	
PORTERVILLE SUB	5323	66kV	-	80,195	-	-	-	-	80,195	-	Non-ISO	
STRATHMORE SUB	5325	66kV	-	14,882	-	-	-	-	-	14,882	Non-ISO	
VISALIA SUB	5331	66kV	-	35,561	-	-	-	-	35,561	-	Non-ISO	
WOODVILLE SUB	5333	66kV	-	90,058	-	-	-	-	15,418	74,641	Non-ISO	
GREENHORN SUB	5339	66kV	-	-	-	-	-	-	-	-	Non-ISO	
ISABELLA SUB	5347	66kV	73,306	73,306	-	-	-	73,306	-	-	Non-ISO	
THREE RIVERS SUB	5350	66kV	-	28,746	-	-	-	-	28,746	-	Non-ISO	
BOXWOOD SUB	5351	66kV	-	-	-	-	-	-	-	-	Non-ISO	
LINE CREEK SUB	5352	33kV & Below	-	9,627	-	-	-	-	-	9,627	Non-ISO	
KERNVILLE SUB	5356	66kV	-	-	-	-	-	-	-	-	Non-ISO	
RIVERWAY SUB	5374	66kV	801,825	801,825	-	-	-	801,825	-	-	Non-ISO	
MASCOT SUBSTATION	5375	66kV	573,588	573,588	-	-	-	573,588	-	-	Non-ISO	
CANWIND SUB	5405	66kV	-	9,895	-	-	-	-	-	9,895	Non-ISO	
ENWIND SUB	5406	66kV	-	40,550	-	-	-	-	11,023	29,527	Non-ISO	
MORWIND SUB	5409	66kV	-	6,367	-	-	-	-	-	6,367	Non-ISO	
FLOWIND SUB	5410	66kV	-	-	-	-	-	-	-	-	Non-ISO	
ARBWIND SUB	5411	66kV	-	-	-	-	-	-	-	-	Non-ISO	
SILVER PEAK SUB	5412	55kV	-	79,333	-	-	-	-	-	79,333	Non-ISO	
DUTCHWIND SUB	5414	66kV	-	19,870	-	-	-	-	12,069	7,801	Non-ISO	
OAKWIND SUB	5415	66kV	-	23,342	-	-	-	-	-	23,342	Non-ISO	
MIDWIND SUB	5424	66kV	-	23,000	-	-	-	-	-	23,000	Non-ISO	
CASITAS SUB	5504	66kV	-	(251)	-	-	-	-	-	(251)	Non-ISO	
CHANNEL ISLANDS SUB	5506	66kV	-	116,483	-	-	-	-	116,483	-	Non-ISO	
ORTEGA SUB	5507	66kV	-	-	-	-	-	-	-	-	Non-ISO	
FILLMORE SUB	5510	66kV	-	5,566	-	-	-	-	5,566	-	Non-ISO	
MODOC SUB	5520	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
OJAI SUB	5526	66kV	-	13,050	-	-	-	-	13,050	-	Non-ISO	
SANTA BARBARA SUB	5531	66kV	-	40,153	-	-	-	-	40,153	-	Non-ISO	
CHARMIN SUB	5535	66kV	-	27,327	-	-	-	-	-	27,327	Non-ISO	
VENTURA SUB	5538	33kV & Below	-	52,173	-	-	-	-	52,173	-	Non-ISO	
ELIZABETH LAKE SUB	5546	66kV	-	3,072	-	-	-	-	-	3,072	Non-ISO	
CORUM SUB	5547	66kV	-	-	-	-	-	-	-	-	Non-ISO	
SAN FERNANDO SUB	5550	66kV	-	10,675	-	-	-	-	10,675	-	Non-ISO	
CHATSWORTH SUB	5555	66kV	-	43,900	-	-	-	-	43,900	-	Non-ISO	
NEWBURY SUB	5557	66kV	-	692,110	-	-	-	-	-	692,110	Non-ISO	
GRISWOLD SUB	5562	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
PLAYA SUB	5565	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
VEGAS SUB	5570	66kV	5,801	5,801	-	-	-	5,801	-	-	Non-ISO	
GAVIOTA SUB	5572	66kV	-	118,097	-	-	-	-	-	118,097	Non-ISO	
NEWHALL SUB	5576	66kV	-	-	-	-	-	-	-	-	Non-ISO	
POTRERO SUB	5597	66kV	-	-	-	-	-	-	-	-	Non-ISO	
RANDALL SUB	5601	66kV	-	76,552	-	-	-	-	20,403	56,150	Non-ISO	
TIMOTEO SUB	5604	66kV	-	1,760	-	-	-	-	1,760	-	Non-ISO	
ORANGE PRODUCTS SUB	5606	66kV	-	13,596	-	-	-	-	13,596	-	Non-ISO	
CARDIFF SUB	5608	66kV	-	117,952	-	-	-	-	117,952	-	Non-ISO	
INLAND CONTAINER SUB	5612	66kV	-	20,750	-	-	-	-	20,750	-	Non-ISO	
DECLIZ SUB	5615	66kV	-	23,032	-	-	-	-	-	23,032	Non-ISO	
FLANCO SUB	5616	33kV & Below	-	22,342	-	-	-	-	22,342	-	Non-ISO	
FIREHOUSE SUB	5618	66kV	-	6,520	-	-	-	-	6,520	-	Non-ISO	
HIGHLAND SUB	5619	66kV	-	59,490	-	-	-	-	59,490	-	Non-ISO	
BLOOMINGTON SUB	5620	66kV	-	450	-	-	-	-	450	-	Non-ISO	
HUSTON SUB	5621	33kV & Below	-	45,573	-	-	-	-	45,573	-	Non-ISO	
NORCO SUB	5624	33kV & Below	-	66,934	-	-	-	-	66,934	-	Non-ISO	
PEDLEY SUB	5626	66kV	-	22,868	-	-	-	-	22,868	-	Non-ISO	
TENNESSEE SUB	5628	66kV	-	44,558	-	-	-	-	44,558	-	Non-ISO	
REDLANDS SUB	5629	66kV	-	50,917	-	-	-	-	29,558	21,359	Non-ISO	
GRAPELAND PEAKER SUB	5630	66kV	-	-	-	-	-	-	-	-	Non-ISO	
SAN ANTONIO SUB	5631	66kV	-	7,606	-	-	-	-	-	7,606	Non-ISO	
STODDARD SUB	5632	33kV & Below	-	113,131	-	-	-	-	113,131	-	Non-ISO	
SAN DIMAS SUB	5633	66kV	-	19,651	-	-	-	-	19,651	-	Non-ISO	
UPLAND SUB	5635	66kV	-	21,532	-	-	-	-	21,532	-	Non-ISO	
YUCAIPA SUB	5636	66kV	-	31,005	-	-	-	-	31,005	-	Non-ISO	
TIPPECANOE SUB	5637	33kV & Below	-	21,769	-	-	-	-	21,769	-	Non-ISO	

**SOUTHERN CALIFORNIA EDISON COMPANY**

12-31-2021 Facilities

**TRANSMISSION SUBSTATION FACILITIES**

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353 TOTAL	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment	A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment		
FRANCIS SUB	5639	66kV	-	59,194	-	-	-	-	59,194	-	Non-ISO	
LAYFAIR SUB	5645	66kV	-	189,720	-	-	-	-	189,720	-	Non-ISO	
COLTON CEMENT SUB	5646	66kV	-	43,167	-	-	-	-	43,167	-	Non-ISO	
LINDE AIR SUB	5650	66kV	-	15,935	-	-	-	-	15,935	-	Non-ISO	
AMERON SUB	5652	66kV	-	531,131	-	-	-	-	-	531,131	Non-ISO	
REDUCTION SUB	5654	66kV	-	34,835	-	-	-	-	34,835	-	Non-ISO	
NOGALES SUB	5655	66kV	-	542,005	-	-	-	-	16,835	525,170	Non-ISO	
BAIN SUB	5656	66kV	-	704	-	-	-	-	704	-	Non-ISO	
PIPE SUB	5658	66kV	-	32,989	-	-	-	-	32,989	-	Non-ISO	
ARCHIBALD SUB	5659	66kV	-	206,393	-	-	-	-	-	206,393	Non-ISO	
RUNNING SPRINGS SUB	5661	33kV & Below	-	31,398	-	-	-	-	31,398	-	Non-ISO	
WIMBLEDON SUB	5664	66kV	-	18,626	-	-	-	-	1,282	17,343	Non-ISO	
ARCHLINE SUB	5667	66kV	-	12,856	-	-	-	-	12,856	-	Non-ISO	
CRESTMORE SUB	5668	66kV	-	14,975	-	-	-	-	14,975	-	Non-ISO	
DEL ROSA SUB	5670	66kV	-	17,327	-	-	-	-	-	17,327	Non-ISO	
WHIPPLE SUB	5674	66kV	-	-	-	-	-	-	-	-	Non-ISO	
LANDING SUB	5678	66kV	-	57,591	-	-	-	-	57,591	-	Non-ISO	
DIAMOND BAR SUB	5680	66kV	-	49,398	-	-	-	-	-	49,398	Non-ISO	
CUDAHY SUB	5714	66kV	-	32,040	-	-	-	-	32,040	-	Non-ISO	
FRUITLAND SUB	5718	66kV	-	12,712	-	-	-	-	12,712	-	Non-ISO	
FREMONT SUB	5720	66kV	-	6,957	-	-	-	-	6,957	-	Non-ISO	
PICO SUBSTATION	5722	66kV	-	105,305	-	-	-	-	105,305	-	Non-ISO	
HATHAWAY SUB	5726	66kV	-	37,411	-	-	-	-	37,411	-	Non-ISO	
ATHENS SUBSTATION	5727	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
LOCUST SUBSTATION	5735	33kV & Below	-	61,853	-	-	-	-	61,853	-	Non-ISO	
NAPLES SUBSTATION	5740	33kV & Below	-	114,340	-	-	-	-	-	114,340	Non-ISO	
THUMS "B" SUBSTATION	5742	66kV	-	23,963	-	-	-	-	23,963	-	Non-ISO	
SOMERSET SUBSTATION	5754	66kV	-	33,694	-	-	-	-	33,694	-	Non-ISO	
BULLIS SUBSTATION	5756	66kV	-	4	-	-	-	-	4	-	Non-ISO	
WATSON SUBSTATION	5758	66kV	-	3,790	-	-	-	-	-	3,790	Non-ISO	
DAISY SUBSTATION	5766	33kV & Below	-	12,648	-	-	-	-	12,648	-	Non-ISO	
LUCAS SUBSTATION	5771	66kV	-	352,437	-	-	-	-	-	352,437	Non-ISO	
DAVIDSON CITY	5779	33kV & Below	-	6,957	-	-	-	-	6,957	-	Non-ISO	
HEDDA SUB	5784	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
SOUTH GATE SUBSTATION	5787	33kV & Below	-	17,255	-	-	-	-	-	17,255	Non-ISO	
BOVINE SUBSTATION	5788	66kV	-	-	-	-	-	-	-	-	Non-ISO	
SEABRIGHT SUBSTATION	5790	66kV	-	29,034	-	-	-	-	29,034	-	Non-ISO	
MOVIE SUBSTATION	5798	66kV	-	19,621	-	-	-	-	1,963	17,658	Non-ISO	
VERA SUBSTATION	5801	66kV	-	-	-	-	-	-	-	-	Non-ISO	
BRYAN SUBSTATION	5808	66kV	-	62,236	-	-	-	-	62,236	-	Non-ISO	
CHICUITA SUBSTATION	5811	66kV	-	58,207	-	-	-	-	-	58,207	Non-ISO	
MURPHY SUB	5812	66kV	-	20,469	-	-	-	-	20,469	-	Non-ISO	
CARMENITA SUBSTATION	5814	66kV	-	142,984	-	-	-	-	14,314	128,669	Non-ISO	
PARKWOOD SUBSTATION	5816	66kV	-	93,280	-	-	-	-	93,280	-	Non-ISO	
FAIRVIEW SUBSTATION	5821	66kV	-	37,527	-	-	-	-	37,527	-	Non-ISO	
WAVE SUBSTATION	5828	66kV	-	-	-	-	-	-	-	-	Non-ISO	
LA HABRA SUBSTATION	5832	66kV	-	17,125	-	-	-	-	-	17,125	Non-ISO	
LA MIRADA SUBSTATION	5834	66kV	-	7	-	-	-	-	7	-	Non-ISO	
MORRO SUBSTATION	5836	66kV	-	47,115	-	-	-	-	47,115	-	Non-ISO	
NARROWS SUB	5838	66kV	-	16,683	-	-	-	-	16,683	-	Non-ISO	
OCEANVIEW SUBSTATION	5842	66kV	-	58,101	-	-	-	-	-	58,101	Non-ISO	
ORANGE SUBSTATION	5843	66kV	-	32,505	-	-	-	-	32,505	-	Non-ISO	
SANTA ANA SUBSTATION	5849	33kV & Below	-	6,882	-	-	-	-	6,882	-	Non-ISO	
TALBERT SUB	5853	66kV	-	24,273	-	-	-	-	-	24,273	Non-ISO	
ALTON SUBSTATION	5860	66kV	241,262	241,262	-	-	-	241,262	-	-	Non-ISO	
CHESTNUT SUBSTATION	5861	66kV	-	15,616	-	-	-	-	15,616	-	Non-ISO	
SULLIVAN SUBSTATION	5862	66kV	-	230,879	-	-	-	-	-	230,879	Non-ISO	
BARTOLO SUB	5863	33kV & Below	-	4,087	-	-	-	-	4,087	-	Non-ISO	
ESTRELLA SUBSTATION	5865	66kV	-	41,148	-	-	-	-	-	41,148	Non-ISO	
SHAWNEE SUBSTATION	5869	66kV	-	50,680	-	-	-	-	50,680	-	Non-ISO	
LA PALMA SUBSTATION	5873	66kV	-	-	-	-	-	-	-	-	Non-ISO	
TUSTIN SUBSTATION	5878	66kV	11,308	11,308	-	-	-	11,308	-	-	Non-ISO	
PIONEER SUB	5886	66kV	-	6,944	-	-	-	-	6,944	-	Non-ISO	
BORREGO SUBSTATION	5887	66kV	-	-	-	-	-	-	-	-	Non-ISO	
TELEGRAPH SUB	5892	66kV	-	109,334	-	-	-	-	12,346	96,987	Non-ISO	
PASSONS SUB	5893	66kV	-	3,215	-	-	-	-	3,215	-	Non-ISO	
NIGUEL SUBSTATION	5896	66kV	-	21,384	-	-	-	-	-	21,384	Non-ISO	
LAS LOMAS SUB	5902	66kV	4,664,177	4,664,177	-	-	-	4,664,177	-	-	Non-ISO	
ORANGE COUNTY REGION	6002	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
RIALTO COMB FAC. BLDG B&C	6011	Div Offices & Misc	-	2,770	-	-	-	-	2,770	-	Non-ISO	
CENTRAL ORANGE COUNTY DIS	6029	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
VENTURA S/C	6039	33kV & Below	-	566,817	-	-	-	-	566,817	-	Non-ISO	
IMPERIAL COUNTY	7013	115kV	-	1,702	-	-	-	-	-	1,702	Non-ISO	
ROADWAY(CEP)	8000	115kV	110,643	17,677,569	17,236	126,684	2,609,849	93,407	845,440	13,984,953	Mix	Low
PAUBA(CEP) SUB	8003	115kV	106,825	9,380,874	-	-	-	106,825	827,523	8,446,526	Non-ISO	
THORNHILL(CEP) SUB	8004	115kV	25,609	10,337,119	-	-	-	25,609	996,193	9,315,318	Non-ISO	
STADLER(CEP) SUB	8005	115kV	139,611	12,366,098	-	-	-	139,611	795,504	11,430,982	Non-ISO	
PAN AERO (CEP) SUB	8009	115kV	-	700,046	-	-	-	-	58,798	641,248	Non-ISO	
PHELAN(CEP) SUB	8010	115kV	154,446	13,157,640	-	-	-	154,446	791,087	12,212,107	Non-ISO	
BANWIND SUBSTATION	8011	115kV	-	35,320	-	-	-	-	-	35,320	Non-ISO	
APPLE VALLEY(CEP) SUB	8013	115kV	-	11,862,614	-	-	-	-	1,389,452	10,473,161	Non-ISO	

**SOUTHERN CALIFORNIA EDISON COMPANY**

12-31-2021 Facilities

**TRANSMISSION SUBSTATION FACILITIES**

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353 TOTAL	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment	A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment		
BUNKER(CEP) SUB	8014	115kV	969,397	17,586,851	-	-	-	969,397	1,494,208	15,123,246	Non-ISO	
FARREL(CEP) SUB	8016	115kV	-	13,791,936	-	-	-	-	692,804	13,099,132	Non-ISO	
CONCHO(CEP) SUB	8017	115kV	285,201	10,812,437	-	-	-	285,201	945,811	9,581,425	Non-ISO	
AULD(CEP) SUB	8018	115kV	83,538	21,319,660	-	-	-	83,538	1,248,278	19,987,844	Non-ISO	
MAXWELL(CEP) SUB	8019	115kV	33,940	12,589,818	-	-	-	33,940	530,026	12,025,852	Non-ISO	
SAVAGE(CEP) SUB	8020	115kV	29,280	16,297,605	-	-	-	29,280	1,477,177	14,791,148	Non-ISO	
PEPPER(CEP) SUB	8021	115kV	17,579	11,633,058	-	-	-	17,579	512,277	11,103,203	Non-ISO	
YUCCA(CEP) SUB	8022	115kV	19,474	12,489,499	-	-	-	19,474	647,647	11,822,378	Non-ISO	
BLACK MOUNTAIN(CEP) SUB	8023	115kV	-	953,886	-	-	-	-	41,871	912,016	Non-ISO	
ALESSANDRO(CEP) SUB	8024	115kV	45,514	28,866,638	-	-	-	45,514	2,741,088	26,080,036	Non-ISO	
BAKER(CEP) SUB	8025	115kV	-	2,986,319	-	-	-	-	250,900	2,735,419	Non-ISO	
BANNING(CEP) SUB	8026	115kV	20,210	17,822,803	-	-	-	20,210	1,586,414	16,216,180	Non-ISO	
COTTONWOOD(CEP) SUB	8027	115kV	22,426	13,379,914	-	-	-	22,426	1,796,115	11,561,373	Non-ISO	
EDWARDS(CEP) SUB	8028	115kV	-	3,000,333	-	-	-	-	53,166	2,947,167	Non-ISO	
HI DESERT(CEP) SUB	8029	115kV	1,154,541	22,572,031	-	-	-	1,154,541	2,612,000	18,805,490	Non-ISO	
MOUNTAIN PASS(CEP) SUB	8030	115kV	70,286	4,718,760	-	-	-	70,286	50,241	4,598,233	Non-ISO	
RANDBURG(CEP) SUB	8031	115kV	116	6,254,044	-	-	-	116	416,451	5,837,477	Non-ISO	
ROCKET TEST(CEP) SUB	8032	115kV	-	301,980	-	-	-	-	18,045	283,935	Non-ISO	
SEARLES(CEP) SUB	8033	115kV	-	7,437,614	-	-	-	-	112,531	7,325,083	Non-ISO	
ZANJA(CEP) SUB	8035	115kV	152,559	11,470,132	-	-	-	152,559	1,723,775	9,593,799	Non-ISO	
SANTA ROSA(CEP) SUB	8036	115kV	44,689	22,492,791	-	-	-	44,689	739,368	21,708,734	Non-ISO	
NELSON(CEP) SUB	8038	115kV	22,819	15,695,691	-	-	-	22,819	1,337,012	14,335,859	Non-ISO	
HOMART(CEP) SUB	8039	115kV	174,875	6,664,030	-	-	-	174,875	665,463	5,823,692	Non-ISO	
HOLGATE(CEP) SUB	8041	115kV	27,167	3,291,430	-	-	-	27,167	405,785	2,858,479	Non-ISO	
CALECTRIC SUB (CEP)	8042	115kV	27,870	26,159,226	-	-	-	27,870	2,639,595	23,491,761	Non-ISO	
GARNET SUB	8044	115kV	34,673	19,982,662	-	-	-	34,673	1,742,523	18,205,466	Non-ISO	
IID TIE SUB	8045	115kV	39,144	63,017	-	-	-	39,144	-	23,873	Non-ISO	
TIEFORT SUB	8047	115kV	-	1,748,867	-	-	-	-	218,704	1,530,163	Non-ISO	
USBR BLYTHE SUB	8048	161kV	-	8,051,040	-	-	-	-	64,707	7,986,333	Non-ISO	
SN ONOFRE SWTHRK-100%SCE	8055	220kV	-	14,188,806	-	-	-	-	1,796,202	12,392,604	Non-ISO	
PUREWATER SUB	8059	115kV	-	1,532,818	-	-	-	-	175,506	1,357,312	Non-ISO	
WHIRLWIND SUB	8060	500kV	-	235,533,465	37,422,319	198,111,145	-	-	-	-	ISO	High
SEAWIND T/S	8061	115kV	2,976	319,255	-	-	-	2,976	463	315,815	Non-ISO	
TIFFANYWIND SUB	8064	115kV	-	11,459	-	-	-	-	-	11,459	Non-ISO	
ALBERHILL SUB	8065	500kV	5,634,964	5,634,964	2,952,721	-	-	2,682,243	-	-	Mix	High
NUSED GALE	8067	115kV	-	-	-	-	-	-	-	-	Non-ISO	
CARODEAN	8072	115kV	-	11,132,370	-	-	-	-	562,701	10,569,669	Non-ISO	
IVYGLEN SUB	8073	115kV	166,697	11,281,350	-	-	-	166,697	2,210,630	8,904,023	Non-ISO	
COOL WATER SWITCHRACK 1,2	8074	220kV	-	1,987,412	50,929	1,395,980	-	-	10,833	529,670	Mix	High
HIGHGROVE SWITCHRCK	8075	115kV	7,139	2,904,931	-	-	-	7,139	178,624	2,719,168	Non-ISO	
SUN CITY(NEW)	8078	115kV	119,513	10,654,821	-	-	-	119,513	1,941,711	8,593,598	Non-ISO	
AQUEDUCT SUB	8079	115kV	2,880	12,463,775	-	-	-	2,880	937,785	11,523,111	Non-ISO	
MENTONE SUB	8082	115kV	161,883	8,795,752	-	-	-	161,883	1,005,687	7,628,181	Non-ISO	
HIGHWIND SUB	8084	220kV	-	11,172,381	6,985,990	4,186,391	-	-	-	-	ISO	High
CAJALCO SUB	8086	115kV	25,836	12,396,220	-	-	-	25,836	1,003,523	11,366,861	Non-ISO	
HESPERIA SUB	8087	115kV	22,150	11,524,338	-	-	-	22,150	526,265	10,975,923	Non-ISO	
SKYLARK SUB	8088	115kV	81,206	13,616,466	-	-	-	81,206	2,808,006	10,727,254	Non-ISO	
MAYBERRY SUB	8089	115kV	23,090	16,704,168	-	-	-	23,090	468,965	16,212,114	Non-ISO	
PERMANENTE SUB	8090	115kV	-	87,113	-	-	-	-	-	87,113	Non-ISO	
ELCENTRO TELEMETERING	8091	161kV	-	15,844	-	-	-	-	-	15,844	Non-ISO	
NILAND TELEMETERING	8092	161kV	-	6,807	-	-	-	-	-	6,807	Non-ISO	
SHANDIN SUB	8093	115kV	42,272	13,381,554	-	-	-	42,272	1,728,031	11,611,250	Non-ISO	
ARROWHEAD SUB	8094	115kV	-	6,859,929	-	-	-	-	540,962	6,318,967	Non-ISO	
STETSON SUB	8095	115kV	23,493	11,457,036	-	-	-	23,493	1,190,046	10,243,498	Non-ISO	
MARSCINO SUB	8096	115kV	27,809	12,513,473	-	-	-	27,809	1,636,175	10,849,488	Non-ISO	
DUNN SIDING SUB	8097	115kV	4,913	867,488	-	-	-	4,913	140,330	722,246	Non-ISO	
EISENHOWER SUB	8098	115kV	189,886	14,336,409	-	-	-	189,886	869,300	13,277,223	Non-ISO	
TAMARISK SUB	8099	115kV	125,967	17,072,460	-	-	-	125,967	418,345	16,528,148	Non-ISO	
AMARGO SUB	8102	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
AMBOY SUB	8103	33kV & Below	-	41,774	-	-	-	-	41,774	-	Non-ISO	
FARRELL SUB	8104	115kV	-	-	-	-	-	-	-	-	Non-ISO	
BARSTOW SUB	8110	33kV & Below	-	66,341	-	-	-	-	6,894	59,447	Non-ISO	
BLYTHE SUB	8113	33kV & Below	-	462,527	-	-	-	-	22,511	440,016	Non-ISO	
BRYMAN SUB	8117	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
CADY SUB	8119	33kV & Below	-	13,562	-	-	-	-	13,562	-	Non-ISO	
MILITARY SUB	8120	33kV & Below	-	15,598	-	-	-	-	15,598	-	Non-ISO	
CANTIL SUB	8121	33kV & Below	-	65,190	-	-	-	-	57,897	7,293	Non-ISO	
CATHEDRAL CITY SUB	8123	33kV & Below	-	9,939	-	-	-	-	9,939	-	Non-ISO	
CAL CITY SUB	8132	33kV & Below	-	40,911	-	-	-	-	40,911	-	Non-ISO	
DESERT OUTPOST SUB	8136	33kV & Below	-	13,544	-	-	-	-	13,544	-	Non-ISO	
DOWNS SUB	8137	115kV	82,401	22,988,271	-	-	-	82,401	5,774,614	17,131,256	Non-ISO	
EAST BARSTOW SUB	8140	33kV & Below	-	12,855	-	-	-	-	12,855	-	Non-ISO	
FOREST HOME SUB	8148	33kV & Below	-	15,135	-	-	-	-	15,135	-	Non-ISO	
SUNSHINE SWITCHYARD SUB	8150	66kV	-	11,776	-	-	-	-	11,776	-	Non-ISO	
GLEN IVY SUB	8152	33kV & Below	-	42,866	-	-	-	-	15,642	27,225	Non-ISO	
NUGGET SUB	8156	33kV & Below	-	38,810	-	-	-	-	38,810	-	Non-ISO	
EL SOBRANTE SUB	8159	33kV & Below	-	24,846	-	-	-	-	24,846	-	Non-ISO	
HARVARD SUB	8161	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
DEFRAIN SUB	8162	33kV & Below	-	41,774	-	-	-	-	41,774	-	Non-ISO	
HELENDAL SUB	8163	33kV & Below	-	96,165	-	-	-	-	15,110	81,054	Non-ISO	
INYOKERN TOWN SUB	8170	33kV & Below	-	7,735	-	-	-	-	-	7,735	Non-ISO	



**SOUTHERN CALIFORNIA EDISON COMPANY**

12-31-2021 Facilities

**TRANSMISSION SUBSTATION FACILITIES**

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353 TOTAL	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment	A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment		
JOSHUA TREE SUB	8172	33kV & Below	-	9,177	-	-	-	-	9,177	-	Non-ISO	
Lakeview	8179	115kV	1,488,635	1,488,635	-	-	-	1,488,635	-	-	Non-ISO	
BOTTLE SUB	8182	115kV	-	1,492,973	-	-	-	-	209,778	1,283,195	Non-ISO	
MINNEOLA SUB	8190	33kV & Below	-	5,725	-	-	-	-	-	5,725	Non-ISO	
MORENO SUB	8193	115kV	104,923	6,839,604	-	-	-	104,923	786,407	5,948,274	Non-ISO	
MURRIETA 2 SUB	8195	33kV & Below	-	42,631	-	-	-	-	20,720	21,911	Non-ISO	
MURRIETA SUB	8196	66kV	-	-	-	-	-	-	-	-	Non-ISO	
SOUTHCAP SUB.	8197	115kV	-	882,819	-	-	-	-	-	882,819	Non-ISO	
MUSCOY SUB	8198	33kV & Below	-	132,416	-	-	-	-	-	132,416	Non-ISO	
BELDING SUB	8204	33kV & Below	-	48,986	-	-	-	-	48,986	-	Non-ISO	
NORTH INTAKE SUB	8205	33kV & Below	-	13,741	-	-	-	-	-	13,741	Non-ISO	
NORTH MUROC SUB	8206	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
HOLIDAY SUB	8207	33kV & Below	-	19,356	-	-	-	-	19,356	-	Non-ISO	
OLIVE LAKE SUB	8210	33kV & Below	-	558	-	-	-	-	558	-	Non-ISO	
ORDWAY SUB	8211	33kV & Below	-	15,611	-	-	-	-	15,611	-	Non-ISO	
ORO GRANDE SUB	8212	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
PALM CANYON SUB	8214	33kV & Below	-	60,590	-	-	-	-	60,590	-	Non-ISO	
PALM VILLAGE SUB	8215	33kV & Below	-	46,196	-	-	-	-	46,196	-	Non-ISO	
PEERLESS SUB	8216	33kV & Below	-	7,635	-	-	-	-	-	7,635	Non-ISO	
GAVILAN SUB	8219	33kV & Below	-	29,892	-	-	-	-	29,892	-	Non-ISO	
LUCERNE SUB	8220	33kV & Below	-	13,167	-	-	-	-	13,167	-	Non-ISO	
RANCHO SUB	8222	33kV & Below	-	9,001	-	-	-	-	6,894	2,107	Non-ISO	
RIALTO SUB	8225	33kV & Below	-	48,492	-	-	-	-	17,716	30,776	Non-ISO	
RIDGECREST SUB	8226	33kV & Below	-	17,438	-	-	-	-	-	17,438	Non-ISO	
RUBIDOUX SUB	8231	33kV & Below	-	6,317	-	-	-	-	6,317	-	Non-ISO	
SAN JACINTO SUB	8234	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
SILVER SPUR SUB	8238	33kV & Below	-	8,994	-	-	-	-	8,994	-	Non-ISO	
SIXTEENTH STREET SUB	8239	33kV & Below	-	34,308	-	-	-	-	34,308	-	Non-ISO	
SUNNY DUNES SUB	8244	33kV & Below	-	13,259	-	-	-	-	13,259	-	Non-ISO	
TEMESCAL SUB	8250	33kV & Below	-	4,236	-	-	-	-	-	4,236	Non-ISO	
THUNDERBIRD SUB	8251	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
TRONA SUB	8252	33kV & Below	-	6,499	-	-	-	-	6,499	-	Non-ISO	
TWENTYNINE PALMS SUB	8255	33kV & Below	-	11,480	-	-	-	-	11,480	-	Non-ISO	
VICTORVILLE SUB	8260	33kV & Below	-	40,294	-	-	-	-	18,135	22,159	Non-ISO	
PEREZ SUB	8263	33kV & Below	-	29,219	-	-	-	-	29,219	-	Non-ISO	
WHITEWATER SUB	8266	33kV & Below	-	28,566	-	-	-	-	28,566	-	Non-ISO	
WILDE SUB	8267	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
YERMO SUB	8268	33kV & Below	-	23,195	-	-	-	-	23,195	-	Non-ISO	
TENAJA SUBSTATION	8270	115kV	-	39,683	-	-	-	-	17,764	21,919	Non-ISO	
IRON MT SCE	8273	33kV & Below	-	8,651	-	-	-	-	8,651	-	Non-ISO	
CORONA SUB	8279	66kV	-	5,855	-	-	-	-	5,855	-	Non-ISO	
GALE SUB	8283	115kV	-	5,845,334	-	-	-	-	533,657	5,311,676	Non-ISO	
GOLD HILL SUB	8294	33kV & Below	-	6,894	-	-	-	-	6,894	-	Non-ISO	
TORTILLA SUB	8295	115kV	-	48,114	-	-	-	-	48,114	-	Non-ISO	
FORGE SUB	8297	66kV	-	259	-	-	-	-	259	-	Non-ISO	
BUCKWIND	8301	115kV	-	789,753	-	-	-	-	37,771	751,981	Non-ISO	
CAPWIND	8302	115kV	-	108,369	-	-	-	-	29,827	78,542	Non-ISO	
RENWIND	8303	115kV	-	865,726	-	-	-	-	51,653	814,074	Non-ISO	
SANWIND	8304	115kV	-	371,041	-	-	-	-	-	371,041	Non-ISO	
TRANSWIND	8305	115kV	-	1,086,501	-	-	-	-	25,366	1,061,136	Non-ISO	
VENWIND	8306	115kV	-	2,312,685	-	-	-	-	26,170	2,286,515	Non-ISO	
ALTWIND	8308	115kV	-	26,050	-	-	-	-	1,022	25,028	Non-ISO	
TERAWIND	8310	115kV	-	231,859	-	-	-	-	5,398	226,460	Non-ISO	
INDIGO SUBSTATION	8311	115kV	-	241,463	-	-	-	-	4,899	236,563	Non-ISO	
CALGEN	8312	115kV	532	439,450	-	-	-	532	6,214	432,703	Non-ISO	
MCGEN	8314	115kV	-	2,576,779	-	-	-	-	112,388	2,464,391	Non-ISO	
SEGS II	8320	115kV	-	45,594	-	-	-	-	-	45,594	Non-ISO	
SEGS III	8321	115kV	-	11,755	-	-	-	-	-	11,755	Non-ISO	
SEGS IV	8322	115kV	-	53,056	-	-	-	-	-	53,056	Non-ISO	
SEGS V	8323	115kV	-	8,814	-	-	-	-	-	8,814	Non-ISO	
SEGS VI	8324	115kV	-	39,130	-	-	-	-	-	39,130	Non-ISO	
SEGS VII	8325	115kV	-	119,704	-	-	-	-	-	119,704	Non-ISO	
SEGS VIII	8326	220kV	-	83,150	-	-	-	-	-	83,150	Non-ISO	
SEGS IX	8327	220kV	-	74,085	-	-	-	-	-	74,085	Non-ISO	
SOPOINT	8340	115kV	-	696,550	-	-	-	-	42,538	654,012	Non-ISO	
NEWCOMB	8342	115kV	51,172	13,294,863	-	-	-	51,172	1,223,085	12,020,606	Non-ISO	
ELISINORE	8343	115kV	20,961	20,517,665	-	-	-	20,961	1,435,426	19,061,279	Non-ISO	
SOUTH BASE SUB	8344	115kV	12,179	2,200,328	-	-	-	12,179	170,995	2,017,154	Non-ISO	
INDIAN WELLS SUB	8345	115kV	222,600	15,545,905	-	-	-	222,600	919,449	14,403,857	Non-ISO	
PECHANGA SUB	8347	115kV	560,579	15,123,454	-	-	-	560,579	934,130	13,628,745	Non-ISO	
MORAGA	8348	115kV	40,720	20,613,684	-	-	-	40,720	411,677	20,161,287	Non-ISO	
TANKER SUBSTATION	8351	115kV	120	939,764	-	-	-	120	4,440	935,204	Non-ISO	
PLUESS SUBSTATION	8353	115kV	-	151,193	-	-	-	-	-	151,193	Non-ISO	
AFG SUBSTATION	8354	115kV	-	1,162,054	-	-	-	-	78,655	1,083,399	Non-ISO	
RECTIFIER SUB	8357	115kV	-	1,103,474	-	-	-	-	5,170	1,098,304	Non-ISO	
MOUNTWIND SUBSTATION	8359	115kV	-	36,557	-	-	-	-	-	36,557	Non-ISO	
COSO SUB	8361	115kV	91,119	6,586,596	-	-	-	91,119	1,699,133	4,796,344	Non-ISO	
CALDWELL SUBSTATION	8360	220kV	-	30,789	-	-	-	-	-	30,789	Non-ISO	
MOVAL SUBSTATION	8362	115kV	-	620,314	-	-	-	-	128,640	491,674	Non-ISO	
SANDLOT SUB	8370	220kV	-	5,014,577	-	-	-	-	973,459	4,041,118	Non-ISO	
KARMA SUB	8371	115kV	1,200	190,758	-	-	-	1,200	-	189,559	Non-ISO	

**SOUTHERN CALIFORNIA EDISON COMPANY**

12-31-2021 Facilities

**TRANSMISSION SUBSTATION FACILITIES**

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353 TOTAL	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment	A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment		
PRIMM SUBSTATION	8372	220kV	-	31,107,160	-	11,978,708	19,128,452	-	-	-	ISO	High
BLAST SUBSTATION	8373	115kV	-	540,949	-	-	-	-	471,546	69,402	Non-ISO	
CALCITE SUBSTATION 220 kV	8375	220kV	-	14,699	-	-	14,699	-	-	-	ISO	High
PHARMACY SUBSTATION	8509	66kV	-	27,725	-	-	-	-	-	27,725	Non-ISO	
GLOW SUBSTATION	8511	66kV	-	128,972	-	-	-	-	-	128,972	Non-ISO	
PLASTER SUBSTATION	8558	66kV	4,671	4,671	-	-	-	4,671	-	-	Non-ISO	
ONEIL SUBSTATION	8810	66kV	1,188,142	1,188,142	-	-	-	1,188,142	-	-	Non-ISO	
SHELL WESTERN(BREA) SUB	8813	66kV	-	9,846	-	-	-	-	9,846	-	Non-ISO	
EAST TRANSITION	8860	500kV	-	16,225,430	-	7,537,209	8,688,222	-	-	-	ISO	High
MWD EASTSIDE RES	8956	115kV	-	-	-	-	-	-	-	-	Non-ISO	
WEST TRANSITION	8960	500kV	-	14,848,252	-	7,367,506	7,480,746	-	-	-	ISO	High
CONSTR FIELD FORCES	9009	Div Offices & Misc	-	527,316	-	-	-	-	-	527,316	Non-ISO	
TRANS/SUB SUPPORT SERV	9047	Div Offices & Misc	-	101,871,606	-	-	-	-	-	101,871,606	Non-ISO	
INFO TECH-GO2	9077	Div Offices & Misc	-	9,285,586	-	-	-	-	-	9,285,586	Non-ISO	
GENERAL OFFICE #5 - GOS	9201	Div Offices & Misc	-	-	-	-	-	-	-	-	Non-ISO	
PROP SVCS-SN GBRL VAL REG	9285	Div Offices & Misc	-	37,054	-	-	-	-	-	37,054	Non-ISO	
REAL PROP-LAND SVCS-STHRN	9287	Misc	-	12,869	-	-	-	-	12,869	-	Non-ISO	
ALHAMBRA COMM SITE	9300	Misc	-	9,775	-	-	-	-	-	9,775	Non-ISO	
TELCOMM-ALHAMBRA	9310	Misc	327,844	327,844	-	-	-	327,844	-	-	Non-ISO	
WESTMINSTER FENWICK BLDG	9440	Div Offices & Misc	-	8,929	-	-	-	-	8,929	-	Non-ISO	
TELECOMM BUSINESS VENTURE	9597	Div Offices & Misc	-	-	-	-	-	-	-	-	Non-ISO	
PLANT ACCTG-MISC. LEDGER	9900	Div Offices & Misc	631	631	-	-	-	631	-	-	Non-ISO	
CUMMINGS SUB	5357	66kV	-	119,219	-	-	-	-	-	119,219	Non-ISO	
MONOLITH SUB	5358	66kV	-	1,156,896	-	-	-	-	234	1,156,662	Non-ISO	
ACTON SUB	5365	66kV	24,167	39,564	-	-	-	24,167	-	15,397	Non-ISO	
DEL SUR SUB	5508	66kV	-	424,747	-	-	-	-	-	424,747	Non-ISO	
GOLDTOWN SUB	5511	66kV	-	526,259	-	-	-	-	-	526,259	Non-ISO	
LANCASTER SUB	5514	66kV	-	1,071,949	-	-	-	-	-	1,071,949	Non-ISO	
LITTLE ROCK SUB	5518	66kV	-	1,690,353	-	-	-	-	-	1,690,353	Non-ISO	
SHUTTLE SUB	5522	66kV	-	911,750	-	-	-	-	-	911,750	Non-ISO	
REDMAN WUB	5530	66kV	-	365,220	-	-	-	-	89,829	275,391	Non-ISO	
ANAVERDE SUB	5539	66kV	-	76,359	-	-	-	-	-	76,359	Non-ISO	
ROSAMOND SUB	5541	66kV	-	718,859	-	-	-	-	66,626	652,233	Non-ISO	
PIUTE SUB	5545	66kV	-	160,280	-	-	-	-	11,023	149,257	Non-ISO	
OASIS SUB	5548	66kV	-	397,008	-	-	-	-	-	397,008	Non-ISO	
CAL CEMENT SUB	5553	66kV	-	383,308	-	-	-	-	15,551	367,757	Non-ISO	
PALMDALE SUB	5564	66kV	-	644,295	-	-	-	-	-	644,295	Non-ISO	
QUARTZ HILL SUB	5566	66kV	-	239,513	-	-	-	-	19,046	220,467	Non-ISO	
HELIJET SUB	5599	66kV	-	499,396	-	-	-	-	-	499,396	Non-ISO	
ITTER SUB	8504	66kV	942,487	959,873	-	-	-	942,487	17,386	-	Non-ISO	
BIG CREEK NO.1	2211	220kV	-	14,226,553	-	158,350	7,946,563	-	119,309	6,002,331	Mix	High
BIG CREEK NO.8	2229	220kV	-	4,352,535	-	163,054	2,347,826	-	119,595	1,722,060	Mix	High
BIG CREEK NO.3	2230	220kV	-	24,177,782	-	1,927,811	16,450,634	-	608,323	5,191,015	Mix	High
CONTROL STATION	2556	115kV	-	17,483,185	-	1,269,339	12,404,411	-	391,970	3,417,464	Mix	Low
T.M. GOODRICH SUB-PASADEN	5010	220kV	-	658,293	-	688,345	(30,051)	-	-	-	ISO	High
EAGLE ROCK SUB	5011	220kV	19,613	41,662,575	3,604	912,706	6,739,827	16,009	4,058,092	29,932,335	Mix	High
MESA SUB	5012	220kV	2,031,347	361,810,016	943,733	49,164,327	117,983,420	1,087,614	62,193,573	130,437,348	Mix	High
RIO HONDO SUB	5013	220kV	457,530	99,120,951	115,692	2,719,940	22,228,292	341,838	8,036,701	65,678,487	Mix	High
WALNUT SUB	5014	220kV	97,955	70,799,077	28,868	1,944,955	18,891,268	69,087	4,654,634	45,210,264	Mix	High
GOULD SUB	5015	220kV	29,300	34,600,447	10,566	553,845	11,912,827	18,734	982,015	21,122,460	Mix	High
DRYCREEK WIND SUB	5018	220kV	-	-	-	-	-	-	(0)	0	Non-ISO	High
LA FRESA SUB	5021	220kV	101,370	154,522,964	23,704	4,359,099	31,749,707	77,666	10,199,337	108,113,450	Mix	High
EL NIDO SUB	5023	220kV	285,620	73,937,592	87,242	5,642,717	16,854,169	198,378	12,831,793	38,323,294	Mix	High
LA CIENEGA SUB	5024	220kV	2,100,227	61,843,213	547,377	2,020,548	13,550,115	1,552,850	4,994,373	39,177,951	Mix	High
ALAMITOS SWITCHRACK SUB	5025	220kV	62,281	50,169,193	20,287	3,043,638	13,277,497	41,995	6,281,378	27,504,399	Mix	High
LG BCH SWITCHRACK SUB	5027	220kV	97,213	10,286,793	32,700	465,822	2,961,676	64,513	919,017	5,843,065	Mix	High
REDONDO SWITCHRACK SUB	5028	220kV	13,018	6,707,286	9,718	29,680	4,967,290	3,301	10,081	1,687,217	Mix	High
EDMONSTON SUBSTATION	5029	220kV	-	5,050	-	-	-	-	5,050	-	Non-ISO	
MAGUNDEN SUB	5031	220kV	8,363	30,810,411	7,940	5,311,398	23,933,597	423	282,844	1,274,209	Mix	High
RECTOR SUB	5033	220kV	394,843	166,988,231	207,674	17,646,606	69,932,432	187,170	15,956,449	63,055,900	Mix	High
SPRINGVILLE SUB	5034	220kV	12,198	50,249,574	5,329	1,556,766	20,392,932	6,868	2,152,114	26,135,564	Mix	High
VESTAL SUB	5035	220kV	7,243	63,336,272	3,622	955,644	30,712,055	3,621	949,758	30,711,572	Mix	High
OMAR SUB	5037	220kV	-	36,798	-	-	-	-	36,798	-	Non-ISO	
EAGLE MT. SUB	5040	220kV	-	20,785,793	-	274,247	9,151,242	-	346,110	11,014,195	Mix	Straddle
CIMA SUB	5043	220kV	1,824	4,712,727	146	12,992	362,999	1,678	188,269	4,146,644	Mix	High
MANDALAY SWITCHRACK SUB	5048	220kV	49,104	5,822,186	-	-	-	49,104	171,619	5,601,462	Non-ISO	
PARDEE SUB	5050	220kV	970,263	79,127,404	895,477	16,926,436	55,206,473	74,786	1,404,902	4,619,330	Mix	High
ANTELOPE SUB	5052	500kV	21,983	223,695,707	21,982	8,182,530	215,481,927	1	314	8,954	Mix	Straddle
SANTA CLARA SUB	5053	220kV	140,739	66,747,823	38,121	1,263,928	16,777,281	102,619	3,402,420	45,163,455	Mix	High
GOLETA SUB	5055	220kV	236,194	43,483,893	63,570	1,044,720	11,704,822	172,624	2,827,097	27,671,060	Mix	High
MOORPARK SUB	5056	220kV	184,091	88,117,415	31,609	1,574,078	13,524,185	152,482	7,593,461	65,241,601	Mix	High
BAILEY SUB	5059	220kV	111,063	41,235,095	111,063	10,301,838	30,822,194	-	-	-	ISO	Straddle
PADUA SUB	5060	220kV	149,547	67,508,389	54,738	2,009,953	22,625,358	94,809	3,495,631	39,227,900	Mix	High
CHINO SUB	5062	220kV	34,437	164,304,336	10,723	12,953,046	38,195,652	23,714	9,571,408	103,549,793	Mix	High
JULIAN HINDS SUB	5063	220kV	-	26,130,358	-	1,874,487	24,033,470	-	16,091	206,309	Mix	High
VISTA SUB	5064	220kV	52,109	111,444,693	14,819	7,273,689	24,405,667	37,290	18,416,211	61,297,018	Mix	High
DEVERS SUB	5067	500kV	1,370,096	299,527,800	1,133,017	45,748,536	200,816,504	237,079	9,557,939	42,034,725	Mix	High
MIRA LOMA SUB	5069	500kV	474,735	303,547,993	387,196	46,864,280	200,323,650	87,539	10,637,413	45,247,915	Mix	High
HINSON SUB	5071	220kV	678,278	46,931,244	149,353	659,997	9,524,651	528,925	4,587,291	31,481,028	Mix	High
LIGHTHIPE SUB	5073	220kV	164,680	55,621,748	58,144	5,294,775	14,285,557	106,536	9,735,813	26,140,923	Mix	High
LAGUNA BELL SUB	5074	220kV	131,263	77,416,438	31,368	752,283	17,716,409	99,895	2,516,556	56,299,928	Mix	High

SOUTHERN CALIFORNIA EDISON COMPANY

12-31-2021 Facilities

TRANSMISSION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350	A/C 352	A/C 353	A/C 350	A/C 352	A/C 353		
				TOTAL	Land & Land Rights	Structures & Improvements	Station Equipment	Land & Land Rights	Structures & Improvements	Station Equipment		
DEL AMO SUB	5075	220kV	164,747	71,561,750	31,983	1,546,406	12,318,528	132,764	4,998,132	52,533,937	Mix	High
BARRE SUB	5081	220kV	86,188	81,598,611	24,682	1,740,834	21,603,149	61,506	4,452,621	53,715,819	Mix	High
VILLA PARK SUB	5082	220kV	270,570	78,246,793	67,761	1,668,101	17,871,961	202,809	5,060,699	53,375,462	Mix	High
VIEJO SUBSTATION	5083	220kV	13,285,971	57,817,562	3,334,581	2,397,171	8,779,596	9,951,390	6,828,195	26,526,628	Mix	High
CENTER SUB	5084	220kV	71,802	58,775,974	6,540	427,419	4,919,749	65,262	5,115,707	48,241,297	Mix	High
JOHANNA SUB	5085 & 5881	220kV	813,416	67,332,034	217,620	1,517,457	16,780,911	595,796	4,183,090	44,037,160	Mix	High
ELLIS SUB	5086	220kV	59,737	84,164,563	14,916	1,272,321	19,728,303	44,821	3,822,259	59,281,942	Mix	High
OLINDA SUB	5087	220kV	390,538	38,002,466	67,815	484,775	6,046,341	322,723	2,318,993	28,761,820	Mix	High
SANTIAGO SUB	5088	220kV	557,976	172,983,120	289,974	7,112,674	82,494,653	268,003	9,327,474	73,490,343	Mix	High
ETIWANDA SWITCHCRACK SUB	5096	220kV	186,144	67,950,496	37,405	959,556	12,657,355	148,739	3,914,339	50,233,102	Mix	High
NAVY ONE SUBSTATION	5703	66kV	-	32,077	-	-	-	-	32,077	-	Non-ISO	-
EL CASCO SUBSTATION	8006	220kV	-	86,306,059	-	4,714,290	8,412,302	-	25,678,488	47,500,978	Mix	High
MIRAGE(CEP) SUB	8012	220kV	629,541	67,215,753	237,211	1,942,837	23,146,889	392,329	3,274,006	38,222,481	Mix	High
TORTILLA(CEP) SUB	8037	115kV	17,114	13,179,933	6,493	618,811	4,375,134	10,621	1,013,616	7,155,258	Mix	Low
VICTOR SUB	8049	220kV	22,088	141,063,410	17,594	9,879,349	102,467,592	4,494	2,818,079	25,876,303	Mix	Straddle
LAKEVIEW SUB	8056	115kV	-	31,837,621	-	-	-	-	9,217,544	22,620,077	Non-ISO	-
EASTWIND SUB	8058	220kV	-	23,430	-	-	-	-	-	23,430	Non-ISO	-
CHEVMAIN	8063	220kV	-	16,089,454	-	119,117	3,647,691	-	389,675	11,932,971	Mix	High
MOUNTAINVIEW SUB	8066	220kV	-	103,392	-	-	-	-	103,392	-	Non-ISO	-
CLEMENTINE	8071	115kV	-	111,329	-	-	-	-	41,635	69,695	Non-ISO	-
BADLANDS SUB	8081	115kV	-	21,176	-	-	-	-	21,176	-	Non-ISO	-
INDIAN WELLS SUB	8175	115kV	-	103,197	-	-	-	-	103,197	-	Non-ISO	-
Inyokern (CEP) & Inyokern	5041 & 8040	115kV	7,964	15,702,659	2,162	190,966	4,069,290	5,803	512,273	10,922,164	Mix	-
Kramer & Kramer-Radial Line Agmt	5042 & 8046	220kV	48,811	57,248,316	40,894	2,323,181	45,597,896	7,918	449,812	8,828,616	Mix	Straddle
Vincent	5054 & 8954	500kV	17,324,279	317,610,561	17,324,279	55,266,224	245,020,059	-	-	-	ISO	High
Valley & Valley - CEP	5070 & 8034	500kV	311,358	236,768,130	124,235	16,078,033	78,189,690	187,123	26,293,205	115,895,845	Mix	High
San Onofre Switchcrack	8051-8055	220kV	-	-	-	-	-	-	-	-	Mix	High
San Bernardino-220kv Switchyard & 220kv to	8076 & 1999	220kV	302,392	66,829,769	121,046	2,364,048	24,266,411	181,347	3,429,699	36,467,218	Mix	High
GREENWALD SUB	8339	115kV	-	79,324	-	-	-	-	10,350	68,974	Non-ISO	-
IVANPAH SUB	8363	220kV	-	46,626,984	-	13,269,702	33,216,156	-	40,285	100,841	Mix	Straddle
NEW VICTOR SUB	8364	115kV	-	-	-	-	-	-	-	-	Non-ISO	-
LEATHERNECK SUB	8366	115kV	-	59,996	-	-	-	-	38,734	21,262	Non-ISO	-
RED BLUFF SUB	8369	500kV	-	219,023,646	-	93,692,706	125,330,941	-	-	-	ISO	High
COLORADO RIVER SUB	8367	500kV	-	207,214,137	-	40,297,018	166,917,119	-	-	-	ISO	High
FOGARTY SUB	8346	115kV	-	20,647,519	-	-	-	-	4,398,452	16,249,068	Non-ISO	-
MIDWAY-VINCENT LINES 1&2	4026	500kV	2,927,515	13,560,725	2,927,515	10,606,105	27,105	-	-	-	Trans Line	-
DWP-EDSN CELILO-SYLMR LN	4031	1000kV	-	95,841	-	95,841	-	-	-	-	Trans Line	-
DWP-EDSN CELILO-SYLMR LN	4034	1000kV	-	541	-	541	-	-	-	-	Trans Line	-
PARDEE-SYLMAR LINES 1&2	4045	220kV	187,213	293,302	187,213	106,089	-	-	-	-	Trans Line	-
EAGLE ROCK-SYLMAR LINE	4046	220kV	186,657	186,657	186,657	-	-	-	-	-	Trans Line	-
PARDEE-VINCENT LINE CONST	4059	220kV	13,002	13,002	13,002	-	-	-	-	-	Trans Line	-
RIO HONDO-VINCENT LN 2	4070	220kV	61,040	61,040	-	-	-	61,040	-	-	Trans Line	-
MANY TRANSMISSION LINES	4101	220kV	1,551,806	2,447,009	1,506,866	773,655	95,623	44,940	23,073	2,852	Trans Line	-
COGEN/RENEWABLE ENERGY SO	4102	220kV	1,466,128	1,466,128	997,926	-	-	468,201	-	-	Trans Line	-
ISO 66KV LINES	4103	66kV	-	-	-	-	-	-	-	-	Trans Line	-
ISO 66KV T/L	4703	66kV	-	-	-	-	-	-	-	-	Trans Line	-
DEVERS-HINS LN, OTHERS	4104	220kV	15,464,432	15,576,720	15,018,787	79,782	29,270	445,646	2,367	869	Trans Line	-
33 AND 66 KV LINES	4105	66kV	33,887,866	60,390,356	636,728	256,416	241,546	33,251,139	13,390,548	12,613,980	Trans Line	-
S/E DIV., 66KV LINES	4805	66kV	-	-	-	-	-	-	-	-	Trans Line	-
COGEN/RENEW ENGY SOURCES	4106	115kV	563,121	563,121	-	-	-	563,121	-	-	Trans Line	-
ANTELOPE/MESA LINE, OTHER	4107	220kV	4,278,569	10,040,076	4,278,569	1,337,192	4,424,314	-	-	-	Trans Line	-
CHINO-SERRANO/SN ONFRE LN	4108	220kV	8,072,253	12,641,014	8,072,253	4,568,761	-	-	-	-	Trans Line	-
VARIOUS 220KV LINES	4808	220kV	-	-	-	-	-	-	-	-	Trans Line	-
COACHELLA VALLEY-DEVERS (SCE PORTION)	4109	220kV	-	25,255	-	25,255	-	-	-	-	Trans Line	-
COACHELLA VALLEY - DEVERS 220 KV Line	4509	220kV	-	-	-	-	-	-	-	-	Trans Line	-
BIG CRK 3-BIG CRK 4	4111	220kV	1,944	1,944	-	-	-	1,944	-	-	Trans Line	-
BIGCRK-SPRGVL, MGDN-SPRGV	4113	220kV	874,872	898,860	874,872	23,989	-	-	-	-	Trans Line	-
ALAMITOS-MESA LN, OTHERS	4114	220kV	3,210,534	5,314,435	2,995,453	1,346,068	616,888	215,081	96,651	44,294	Trans Line	-
HINSON-LIGHTHIPE 1&2	4115	220kV	1,607,024	2,225,848	1,607,024	616,675	2,149	-	-	-	Trans Line	-
4115	220kV	-	-	-	-	-	-	-	-	-	Trans Line	-
HINSON-LAFRESA, OTHERS	4116	220kV	3,594,552	4,133,025	3,418,626	510,154	1,964	175,927	26,253	101	Trans Line	-
HINSON-LA FRESA	4416	220kV	-	-	-	-	-	-	-	-	Trans Line	-
ELDRDO-CIMA-PISGAH LN1,2	4117	220kV	1,141,243	1,289,144	1,141,243	135,044	12,857	-	-	-	Trans Line	-
MRA LMA-VLL PK LNS, OTHR	4118	220kV	5,611,464	6,710,118	5,611,464	1,065,072	33,582	-	-	-	Trans Line	-
CENTER-MESA LN, OTHERS	4119	220kV	2,101,337	2,605,294	2,101,337	503,857	101	-	-	-	Trans Line	-
ALAMITOS-CENTER, OTHERS	4120	220kV	4,380,988	6,159,410	3,848,254	767,105	795,059	532,733	106,194	110,064	Trans Line	-
KERN RIVER #1-GORMAN 66KV	4202	66kV	-	1,430	-	-	-	-	1,430	-	Trans Line	-
ALAMITOS-CENTER....	4420	220kV	-	-	-	-	-	-	-	-	Trans Line	-
BIG CREEK 4-SPRNGVLL-MGDN	4121	220kV	209,639	340,789	209,639	131,150	-	-	-	-	Trans Line	-
LUGO-VINCENT LINES 1&2	4123	500kV	1,749,466	1,766,099	1,749,466	-	16,633	-	-	-	Trans Line	-
BIG CRK 1-CMP TEN-...PRTL	4124	66kV	485	485	-	-	-	485	-	-	Trans Line	-
GOLETA-SNTA CLARA, OTHERS	4125	220kV	13,310,983	16,160,515	9,896,559	2,117,167	1,426	3,414,424	730,447	492	Trans Line	-
NORTH BOULDER-MEAD, OTHER	4127	220kV	19,842	19,842	19,842	-	-	-	-	-	Trans Line	-
KERN RIVER3-VESTAL 66 KV	4129	66kV	31,413	31,413	-	-	-	31,413	-	-	Trans Line	-
MOHAVE-LUGO 500KV	4130	500kV	157,990	157,990	157,990	-	-	-	-	-	Trans Line	-
CUMMINGS-KERBN RIV1, OTHE	4132	66kV	3,146	3,146	-	-	-	3,146	-	-	Trans Line	-
BOREL-...WALKER 66KV LN	4133	66kV	46,874	46,874	-	-	-	46,874	-	-	Trans Line	-
LUGO-VICTOR LNS, OTHER	4135	220kV	2,610,303	2,775,166	1,429,005	90,254	-	1,181,299	74,609	-	Trans Line	-
LUGO-ELDORADO LN	4136	500kV	1,330,373	1,330,373	1,330,373	-	-	-	-	-	Trans Line	-
LUGO-ELDORADO LN	4137	500kV	16,589	16,589	16,589	-	-	-	-	-	Trans Line	-
LUGO-MIRA LOMA 2&3	4138	500kV	9,751,973	12,853,694	9,751,973	3,101,623	98	-	-	-	Trans Line	-

SOUTHERN CALIFORNIA EDISON COMPANY

12-31-2021 Facilities

TRANSMISSION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights		A/C 350	A/C 352	A/C 353	A/C 350	A/C 352	A/C 353		
				TOTAL	Land & Land Rights	Structures & Improvements	Station Equipment	Land & Land Rights	Structures & Improvements	Station Equipment		
SPRGVLL-TULE 66KV LN	4139	66kv	517	517	-	-	-	517	-	-	Trans Line	
MOHAVE-LUGO 500 KV LN	4140	500kv	278,112	285,419	278,112	7,307.60	-	-	-	-	Trans Line	
MOHAVE-ELDORADO LN	4141	500kv	76,199	76,199	76,199	-	-	-	-	-	Trans Line	
BOREL-WELDON 66KV LN	4142	66kv	25,409	28,897	-	-	-	25,409	-	-	Trans Line	
ELDORADO-BORDER 500 KV LN	4143	500kv	6,167	6,167	6,167	-	-	-	-	-	Trans Line	
ELDORADO-MEAD LNS 1&2	4144	220kv	9,994	9,994	9,994	-	-	-	-	-	Trans Line	
VINCENT-PARDEE LN 2	4147	220kv	3,884,037	3,885,917	3,884,037	-	1,880	-	-	-	Trans Line	
MIRA LOMA-SERRANO LN	4148	500kv	1,733,248	1,733,248	1,733,248	-	-	-	-	-	Trans Line	
SANTA ANA LNS 1,2,3	4149	33kv & Below	232	232	-	-	-	232	-	-	Trans Line	
VINCENT-PEARLOSSOM LN	4153	220kv	309,032	309,032	-	-	-	309,032	-	-	Trans Line	
LUGO-VICTORVLL EDSON-DWP	4154	500kv	748,544	800,021	748,544	51,478	-	-	-	-	Trans Line	
MIDWAY-VINCENT LN 3	4155	500kv	5,825,616	5,825,616	5,825,616	-	-	-	-	-	Trans Line	
ELLIS-SANTIAGO LNS 1,2	4156	220kv	12,018,447	12,018,447	12,018,447	-	-	-	-	-	Trans Line	
RIO HONDO-VINCENT LN 2	4157	220kv	105,605	124,216	105,605	18,610	-	-	-	-	Trans Line	
LUCERNE-LUGO/MIRA LOMA LN	4158	500kv	498,252	498,252	-	-	-	498,252	-	-	Trans Line	
BIG CRK 2-BIG CRK 8	4166	220kv	9,034	9,034	9,034	-	-	-	-	-	Trans Line	
BIG CRK 3-MAMMOTH POOL	4168	220kv	4,331	527,846	-	-	-	4,331	523,515	-	Trans Line	
BIG CRK 1-RECTOR, OTHER	4169	220kv	11,719,539	13,298,247	11,457,326	677,162	866,223	262,213	15,498	19,824	Trans Line	
DEVERS-PALO VERDE	4185	500kv	14,776,950	14,776,950	14,776,950	-	-	-	-	-	Trans Line	
DEVERS-PALO VERDE	4186	500kv	1,193,710	1,193,710	1,193,710	-	-	-	-	-	Trans Line	
DEVERS-VALLEY LNS 1,2	4187	500kv	10,435,644	10,627,751	10,435,644	192,106	-	-	-	-	Trans Line	
SERRANO-VALLEY LN	4188	500kv	2,855,109	3,241,046	2,855,109	385,937	-	-	-	-	Trans Line	
VALLEY-INLAND 500KV TL	4191	500kv	-	-	-	-	-	-	-	-	Trans Line	
VALLEY-SERRANO 500 KV LN	4988	500kv	-	-	-	-	-	-	-	-	Trans Line	
SERRANO-VILLA PK LN 1,2,3	4189	220kv	78,248	115,521	78,248	37,274	-	-	-	-	Trans Line	
VARIOUS 66KV LINES	4200	66kv	-	-	-	-	-	-	-	-	Trans Line	
MAGUNDEN-PASTORIA	4201	220kv	-	-	-	-	-	-	-	-	Trans Line	
SSAN JOAQUIN REGION 66KV	4205	66kv	-	-	-	-	-	-	-	-	Trans Line	
E.MAGUNDEN-ANTELOPE 220KV	4207	220kv	-	25,798	-	-	-	-	25,798	-	Trans Line	
BIG CREEK #3/#4 220KV LN	4211	220kv	-	-	-	-	-	-	-	-	Trans Line	
BIG CREEK 3-SPRGVL-MGNDN	4213	220kv	-	-	-	-	-	-	-	-	Trans Line	
BIG CREEK 3-MAMMOTH POOL	4268	220kv	-	-	-	-	-	-	-	-	Trans Line	
RECTOR-VESTAL #2 220KV	4269	220kv	-	-	-	-	-	-	-	-	Trans Line	
BIG CREEK4-SPRGVL-MGNDN	4288	220kv	-	-	-	-	-	-	-	-	Trans Line	
ALL 66KV T/L-COASTAL REGN	4405	66kv	-	-	-	-	-	-	-	-	Trans Line	
MET T/S REGION	4300	66kv	-	243,728	-	-	-	-	-	-	Trans Line	
EAGLE ROCK-MESA 220 KV LN	4301	220kv	-	-	-	-	-	-	229,033	14,696	Trans Line	
ALL 66KV T/L-METRO REGION	4305	66kv	-	-	-	-	-	-	-	-	Trans Line	
ANTELOPE-MESA 220 KV LN	4307	220kv	-	-	-	-	-	-	-	-	Trans Line	
CHINO-VILLA PARK 220KV LN	4318	220kv	-	-	-	-	-	-	-	-	Trans Line	
CENTER-MESA 220KV LN	4319	220kv	-	-	-	-	-	-	-	-	Trans Line	
MESA VINCENT No 2 220 kv LINE	4325	220kv	-	-	-	-	-	-	-	-	Trans Line	
MIRA LOMA-SERRANO# 1&2 500KV	4348	500kv	-	-	-	-	-	-	-	-	Trans Line	
MIRA LOMA-SERRANO#2 500KV	4349	500kv	-	4,448	-	4,448	-	-	-	-	ISO	High
MIRA LOMA - VINCENT 500 KV LINE	4360	500kv	26,140,392	29,011,304	26,140,392	2,870,912	-	-	-	-	Trans Line	
COASTAL T/S REGION	4400	66kv	3,127	529,844	-	-	-	3,127	433,988	92,729	Trans Line	
MESA-REDONDO 220KV LN	4414	220kv	-	-	-	-	-	-	-	-	Trans Line	
CENTER MESA&OLINDA 220KV	4419	220kv	-	-	-	-	-	-	-	-	Trans Line	
EASTERN T/S REGION	4500	66kv	-	2,567,030	-	-	-	-	1,650,139	916,891	Trans Line	
DEVERS-HINDS 220KV LNS	4504	220kv	-	-	-	-	-	-	-	-	Trans Line	
33 & 66KV LNES IN ESTRN R	4505	66kv	-	-	-	-	-	-	-	-	Trans Line	
COGEN/RENEW ENGY RESOURCE	4506	115kv	-	-	-	-	-	-	-	-	Trans Line	
ISO 115KV T/L	4513	115kv	-	-	-	-	-	-	-	-	Trans Line	
ETIWANDA-PADUA 220KV LN	4518	220kv	-	-	-	-	-	-	-	-	Trans Line	
MIRA LOMA-WALNUT 220KV LN	4519	220kv	-	-	-	-	-	-	-	-	Trans Line	
LUGO-MIRA LOMA NO. 1&2	4538	500kv	-	-	-	-	-	-	-	-	Trans Line	
DESERT REGION 115KV LINES	4570	115kv	-	-	-	-	-	-	-	-	Trans Line	
DEVERS-VALLEY 500 KV LNS	4587	500kv	-	-	-	-	-	-	-	-	Trans Line	
NRTHN T/S REGION	4600	66kv	-	2,007,612	-	-	-	-	2,007,612	-	Trans Line	
BAILEY-PARDEE 220 KV LN	4601	220kv	-	-	-	-	-	-	-	-	Trans Line	
ISO 66KV T/L-NORTHERN REG	4603	66kv	-	-	-	-	-	-	-	-	Trans Line	
33&66KV LNS IN NRTHN T/S	4605	66kv	-	-	-	-	-	-	-	-	Trans Line	
ANTELOPE-MAGUNDEN 220 KV	4607	220kv	-	-	-	-	-	-	-	-	Trans Line	
MOORPARK-PARDEE 200KV LN	4625	220kv	-	-	-	-	-	-	-	-	Trans Line	
MIDWAY-VINCENT 500 KV LN	4626	500kv	-	275,784	-	275,784	-	-	-	-	ISO	High
ANTELOPE-PARDEE	4644	220kv	3,934,890	3,934,890	3,934,890	-	-	-	-	-	Trans Line	
PARDEE-SYLMAR 220 KV LN	4645	220kv	-	-	-	-	-	-	-	-	Trans Line	
PARDEE-VINCENT 220KV LN 2	4647	220kv	-	-	-	7,378	-	-	-	-	Trans Line	
EASTERN T/S REG	4700	66kv	46,629	1,160,272	-	-	-	46,629	522,260	591,382	Trans Line	
CORONA-JEFFERSON 66 KV LN	4705	66kv	252,313	2,363,464	188,043	1,573,386	-	64,271	537,765	-	Trans Line	
ANTELOPE-WINDHUB 500KV LN	4708	500kv	16,796,780	16,796,780	16,796,780	-	-	-	-	-	Trans Line	
WINDHUB-HIGHWIND 230KV LN	4709	220kv	3,268,655	3,268,655	3,268,655	-	-	-	-	-	Trans Line	
WHIRLWIND-WINDHUB 500KV L	4711	500kv	71,262	71,262	71,262	-	-	-	-	-	Trans Line	
ANTELOPE - VINCENT #2 500KV	4712	500kv	11,885,452	11,885,452	11,885,452	-	-	-	-	-	Trans Line	
ISO 115KV T/L	4713	115kv	-	-	-	-	-	-	-	-	Trans Line	
LAGUNA-BELL 220KV	4714	220kv	-	-	-	-	-	-	-	-	Trans Line	
CIMA-ELDO-PISGH	4717	220kv	-	-	-	-	-	-	-	-	Trans Line	
LUGO - MOHAVE 500 kv LINE	4718	500kv	-	-	-	-	-	-	-	-	Trans Line	
COLWTR-KRMIR-LUGO-VICTR220	4725	220kv	-	-	-	-	-	-	-	-	Trans Line	
LEE VINING-LUNDY 55K 4771	4730	55kv	10,585	10,585	-	-	-	10,585	-	-	Trans Line	
ELDORADO-IVANPAH NO 1&2 - CA	4733	220kv	-	-	-	-	-	-	-	-	Trans Line	

SOUTHERN CALIFORNIA EDISON COMPANY

12-31-2021 Facilities

TRANSMISSION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 350	A/C 350-353	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix/Trans Line	High / Low / Straddle Voltage
			Land & Land Rights	TOTAL	A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment	A/C 350 Land & Land Rights	A/C 352 Structures & Improvements	A/C 353 Station Equipment		
ELDORADO-IVANPAH NO 1&2 - NV	4734	220kV	352,196	352,196	352,196	-	-	-	-	-	Trans Line	
BISHOP CRK5&8 115KV LINES	4735	115kV	(11)	505,720	-	-	-	(11)	505,731	-	Trans Line	
LUGO-MOHAVE 500KV	4740	500KV	-	-	-	-	-	-	-	-	Trans Line	
115 KV LNS, ESTN T/S REG	4750	115kV	16,359,670	33,680,540	4,908,405	91,643	5,105,153	11,451,264	213,802	11,910,273	Trans Line	
LUGO-VICTORVILLE 500KV	4754	500KV	-	-	-	-	-	-	-	-	Trans Line	
DEVERS-SN BRDNO 220 KV LN	4756	220kV	1,079,238	1,095,639	1,079,238	16,401	-	-	-	-	Trans Line	
BLYTHE-EAGLE MT 161 KV LN	4759	161kV	33,310	33,310	33,310	-	-	-	-	-	Trans Line	
CONTROL-MORGAN 55 KV LN	4770	55KV	-	-	-	-	-	-	-	-	Trans Line	
HUMAN EXTERNAL CARGO TRAINING SITE	4799	66kV	-	321,805	-	-	-	-	321,805	-	Trans Line	
HOOVER-CLWTR 115 KV LN	4781	115kV	1,277	1,277	1,277	-	-	-	-	-	Trans Line	
HOOVER-CLWTER 115 KV LN	4782	115kV	165,196	165,196	165,196	-	-	-	-	-	Trans Line	
VICTOR-HESPERIA 115KV	4784	115kV	-	20,788	-	-	-	-	20,788	-	Trans Line	
VAR. TRANS. LINES-S/E DIV	4800	66kV	2,931	2,258,534	-	-	-	2,931	1,543,933	711,670	Trans Line	
SERRANO-VILLA PARK 220KV	4889	220kV	-	-	-	-	-	-	-	-	Trans Line	
NORTHEASTERN T/S DIV.	4900	66kV	-	-	-	-	-	-	-	-	Trans Line	
LUGO-VICTOR 220KV LN	4935	220kV	-	-	-	-	-	-	-	-	Trans Line	
SAN JACINTO REGION 115KV	4950	115kV	-	-	-	-	-	-	-	-	Trans Line	
DEVERS-VALLEY 500KV	4987	500KV	-	-	-	-	-	-	-	-	Trans Line	
BIG CREEK 4-MGNDN 220KV	4221	220kV	-	-	-	-	-	-	-	-	Trans Line	
ANTELOPE-MAGUNDEN 220KV	4707	220kV	-	-	-	-	-	-	-	-	Trans Line	
ANTELOPE-WHIRLWIND 500KV LN	4710	500KV	15,917,279	15,917,279	15,917,279	-	-	-	-	-	Trans Line	
BARRE 1&2-VILLA PARK 220K	4818	220kV	-	-	-	-	-	-	-	-	Trans Line	
ELLIS-HNGTN BCH#1-4 220KV	4820	220kV	-	-	-	-	-	-	-	-	Trans Line	
TOTAL TRANSMISSION SUBSTATIONS			\$ 357,963,062	\$ 8,854,965,661	\$ 264,564,240	\$ 839,216,715	\$ 4,088,923,058	\$ 93,398,822	\$ 460,160,118	\$ 3,108,702,708		
Recals based on all other TS locations												
Allocation % to use					73.91%	64.59%	56.81%	26.09%	35.41%	43.19%		
DIV MTCE / OVERHAUL MNGT	1000	66kV	-	19,799	-	-	11,248	-	-	8,551	Mix	Low
MOUNTAINVIEW POWER-COMMON	1250	220kV	-	27,323,050	-	-	15,522,042	-	-	11,801,008	Mix	High
PALOVERDE-SWITCHYARD	1869	500KV	-	10,366,594	-	1,592,383	4,488,547	-	873,137	3,412,527	Mix	High
PV UNIT 1-INCREMENTAL	1870	500KV	-	194,959	-	-	110,755	-	-	84,204	Mix	High
BIG CREEK NO.2	2212	220kV	-	2,274,534	-	-	1,292,148	-	-	982,387	Mix	High
BIG CREEK NO.2A	2234	220kV	-	1,031,434	-	-	585,951	-	-	445,483	Mix	High
COGEN/RENEW ENERGY SOURCE	4206	66kV	-	40,621	-	-	23,077	-	-	17,544	Mix	Low
SUBSTN DIV	5000	Misc	-	3,270,205	-	-	1,857,781	-	-	1,412,423	Mix	Low
NO. T/S REG OFC/VALENCIA	5038	Misc	123,342	3,846,745	91,160	2,404,800	-	32,182	1,318,602	-	Mix	Low
METRO REGION	5100	33kV & Below	-	265,939	-	-	151,078	-	-	114,861	Mix	Low
NEENACH SUB	5556	66kV	-	454,981	-	30,218	231,892	-	16,569	176,301	Mix	Low
BARSTOW NO RGN-SAN BERDOO	6072	CSTMR SRVC FAC.	-	7,617	-	4,920	-	-	2,697	-	Mix	Low
FRESNO COUNTY	7010	33kV & Below	-	-	-	-	-	-	-	-	Mix	Low
VENTURA COUNTY	7056	33kV & Below	-	74,798	-	-	42,492	-	-	32,306	Mix	Low
B&A-T/S 3RD FLOOR-GO3	9010	220kV	-	823	-	-	468	-	-	356	Mix	High
CHINO OFC BLDG (FACILITY)	9024	Misc	-	373,558	-	241,266	-	-	132,291	-	Mix	Low
IRVINE OPER CENTER	9078	Misc	-	8,245	-	5,325	-	-	2,920	-	Mix	Low
FUELS	9203	Misc	-	341,890	-	-	194,225	-	-	147,665	Mix	Low
RP&AS,LND&ESMNT REQUIS	9219	Div Offices & Misc	23,373,809	23,456,202	17,275,173	53,214	-	6,098,635	29,178	-	Mix	Low
INNOVATION VILLAGE 1	9221	Div Offices & Misc	-	1,509,815	-	-	857,716	-	-	652,099	Mix	Low
CONTROL SYS SEC-ALHAMBRA	9243	Div Offices & Misc	-	3,338,089	-	242,558	1,682,994	-	133,000	1,279,537	Mix	Low
TELECOMM-ALHAMBRA	9330	Misc	-	69,276	-	-	39,355	-	-	29,921	Mix	Low
CONWAY SUMMIT COMM SITE	9339	Misc	-	14,913	-	-	8,472	-	-	6,441	Mix	Low
INTERNAL ORDER	-	Misc	-	1,868	-	-	1,061	-	-	807	Mix	Low
CHINO-VILLA PARK 220KV LN	4318-NU	220kV	-	-	-	-	-	-	-	-	Mix	High
Total Locations Recalc'd			\$ 23,497,151	\$ 78,285,954	\$ 17,366,333	\$ 4,574,684	\$ 27,101,302	\$ 6,130,817	\$ 2,508,395	\$ 20,604,421		
ISO/Non-ISO/Mix/Trans Line Summary												
ISO Total			20,697,361	2,506,851,492	20,697,361	452,894,096	2,033,260,035	-	-	-		
Non-ISO Total			19,397,665	1,154,864,912	-	-	-	19,397,665	98,776,378	1,036,690,869		
Mix Total			58,029,401	4,891,703,325	31,013,622	356,709,916	2,070,492,456	27,015,779	340,888,899	2,065,582,654		
Trans Line Total			283,335,787	379,831,886	230,219,591	34,187,387	12,271,870	53,116,196	23,003,237	27,033,605		
Allocation Total			23,497,151	78,285,954	17,366,333	4,574,684	27,101,302	6,130,817	2,508,395	20,604,421		
Total Transmission Substations			\$ 381,460,213	\$ 8,933,251,615	\$ 281,930,574	\$ 843,791,400	\$ 4,116,024,360	\$ 99,529,639	\$ 462,668,514	\$ 3,129,307,129		

**SOUTHERN CALIFORNIA EDISON COMPANY**  
Transmission/Distribution ISO Facilities Study

2021 Year-End				2020 Year-End			Delta		
Transmission									
	Total Plant	ISO Plant	ISO % of Total	Total Plant	ISO Plant	ISO % of Total	Total Plant	ISO Plant	ISO % of Total
<b>Land (Substation and Line)</b>									
350	381,460,213	281,930,574	73.9%	347,032,204	255,945,466	73.8%	34,428,009	25,985,108	0.2%
<b>Substation</b>									
352	1,306,459,914	843,791,400	64.6%	1,253,582,423	804,153,066	64.1%	52,877,490	39,638,333	0.4%
353	7,245,331,489	4,116,024,360	56.8%	6,970,450,866	3,951,945,554	56.7%	274,880,623	164,078,806	0.1%
<b>Total Substation</b>	8,551,791,402	4,959,815,760	58.0%	8,224,033,289	4,756,098,621	57.8%	327,758,113	203,717,139	0.2%
<b>Lines</b>									
354	\$2,528,290,969	2,450,974,771	96.9%	2,396,538,521	2,302,122,819	96.1%	131,752,448	148,851,951	0.9%
355	2,024,504,618	542,755,368	26.8%	1,828,031,265	431,972,729	23.6%	196,473,353	110,782,638	3.2%
356	2,065,980,164	1,618,978,825	78.4%	1,891,498,739	1,449,635,758	76.6%	174,481,424	169,343,067	1.7%
357	329,224,124	215,308,596	65.4%	325,221,172	215,412,776	66.2%	4,002,952	(104,180)	#####
358	403,637,836	58,752,899	14.6%	406,147,584	59,261,609	14.6%	(2,509,748)	(508,710)	0.0%
359	246,891,223	223,182,876	90.4%	215,837,806	192,098,213	89.0%	31,053,418	31,084,663	1.4%
<b>Total Lines</b>	\$7,598,528,934	\$5,109,953,334	67.2%	7,063,275,087	4,650,503,904	65.8%	535,253,848	459,449,429	1.4%
<b>Total Transmission</b>	16,531,780,549	10,351,699,668	62.6%	15,634,340,580	9,662,547,991	61.8%	897,439,970	689,151,677	0.8%
Distribution									
	Total Plant	ISO Plant	ISO % of Total	Total Plant	ISO Plant	ISO % of Total	Total Plant	ISO Plant	ISO % of Total
<b>Land:</b>									
360	130,224,350	-	0.0%	129,613,197	-	0.0%	611,153	-	0.0%
<b>Structures:</b>									
361	903,343,847	-	0.0%	844,613,530	-	0.0%	58,730,317	-	0.0%
362	3,278,542,591	-	0.0%	3,106,963,772	-	0.0%	171,578,818	-	0.0%
<b>Total Structures</b>	4,181,886,438	-	0.0%	3,951,577,302	-	0.0%	230,309,136	-	0.0%
<b>Total Distribution</b>	4,312,110,788	-	0.0%	4,081,190,499	-	0.0%	230,920,289	-	0.0%
<b>Total Transmission &amp; Distribution</b>	20,843,891,337	10,351,699,668	49.7%	19,715,531,079	9,662,547,991	49.0%	1,128,360,259	689,151,677	0.7%

SOUTHERN CALIFORNIA EDISON COMPANY  
Transmission Line Study Results  
As of December 2021

Location	Study	Circuit Miles					Balance by FERC Account (Total Transmission) Current Study									
		UG Total	UG ISO	OH Total	OH ISO	Total Miles	Total ISO	350	352	353	354	355	356	357	358	359
4026	Lines	-	-	225.451	225.451	225.451	225.451	2,927,515	10,606,105	27,105	24,473,867	741,658	40,151,492	-	-	795,535
4031	Lines	-	-	293.444	293.444	293.444	293.444	-	95,841	-	30,018,821	-	65,416,274	-	-	136,841
4034	Lines	-	-	292.556	292.556	292.556	292.556	-	541	-	7,698,607	-	9,116,844	-	-	668,871
4045	Lines	-	-	22.845	22.845	22.845	22.845	187,213	106,089	-	701,607	-	453,192	-	-	38,006
4046	Lines	-	-	24.498	24.498	24.498	24.498	186,657	-	-	214,409	-	62,108	-	-	-
4051	Lines	-	-	32.154	32.154	32.154	32.154	-	316,356	-	-	-	204,878	-	-	145,317
4059	Lines	-	-	1.029	1.029	1.029	1.029	13,002	-	-	966,737	-	202,343	-	-	20,953
4070	Lines	-	-	-	-	-	-	61,040	-	-	436,317	-	1,532,264	-	-	11,892
4101	Lines	-	-	270.648	262.810	270.648	262.810	1,551,806	796,728	98,475	28,017,611	3,251,277	46,619,451	-	-	1,151,849
4102	Lines	-	-	8.219	5.594	8.219	5.594	1,466,128	-	-	2,749,397	373,282	4,969,039	-	-	824,324
4104	Lines	-	-	151.805	147.430	151.805	147.430	15,464,432	82,149	30,139	130,450,194	48,029,326	119,768,515	1,480	260,160	34,486,510
4105	Lines	193.688	-	4,183,825	82,250	4,377,514	82,250	33,887,866	13,646,964	12,855,526	34,859,771	1,203,153,592	333,727,135	102,415,171	315,282,163	19,827,242
4107	Lines	-	-	247.150	247.150	247.150	247.150	4,278,569	1,337,192	4,424,314	21,681,885	63,977,850	-	-	-	88,569,523
4108	Lines	-	-	154.750	154.750	154.750	154.750	8,072,253	4,568,761	-	17,142,419	1,472,898	14,513,710	-	-	1,734,061
4109	Lines	-	-	0.957	0.957	0.957	0.957	-	25,255	-	-	16,469	467,285	-	-	-
4111	Lines	-	-	-	-	-	-	1,944	-	-	862,303	-	530,489	-	-	29,429
4113	Lines	-	-	51.623	51.623	51.623	51.623	874,872	23,989	-	20,158,137	77,656,081	16,572,889	-	-	631,018
4114	Lines	-	-	128.113	119.530	128.113	119.530	3,210,534	1,442,719	661,182	18,040,619	7,782,698	19,520,304	-	-	304,171
4115	Lines	-	-	50.166	50.166	50.166	50.166	1,607,024	616,675	2,149	4,183,107	498,077	2,127,313	-	-	27,417
4116	Lines	0.949	0.949	59.868	56.891	60.816	57.840	3,594,552	536,408	2,065	3,540,908	11,502,588	9,835,612	180,589	456,828	13,558
4117	Lines	-	-	280.157	280.157	280.157	280.157	1,141,243	135,044	12,857	26,014,967	5,060,406	12,612,157	-	-	151,162
4119	Lines	-	-	105.716	105.716	105.716	105.716	2,101,337	503,857	101	34,568,368	398,849	27,396,197	-	-	2,830,220
4120	Lines	-	-	135.604	119.114	135.604	119.114	4,380,988	873,299	905,123	8,637,742	3,483,301	7,201,631	256	-	33,420
4121	Lines	-	-	129.634	129.634	129.634	129.634	209,639	131,150	-	17,133,469	3,423,698	9,841,181	-	-	250,994
4123	Lines	-	-	93.600	93.600	93.600	93.600	1,749,466	-	16,633	14,101,498	103,494	7,195,860	-	-	1,891
4124	Lines	-	-	-	-	-	-	485	-	-	48,890	312,251	202,022	1,343	68,591	-
4125	Lines	-	-	407.483	302.959	407.483	302.959	13,310,983	2,847,614	1,918	36,629,208	3,363,449	18,373,862	-	-	1,798,122
4127	Lines	-	-	108.464	108.464	108.464	108.464	19,842	-	-	700,024	8,020	549,803	-	-	5,205
4128	Lines	-	-	-	-	-	-	-	-	-	-	1,240	1,277	-	-	-
4129	Lines	-	-	22.667	-	22.667	-	31,413	-	-	345,087	1,719,581	931,818	-	-	-
4130	Lines	-	-	0.192	0.192	0.192	0.192	157,990	-	-	1,471,682	-	517,455	-	-	19,051
4132	Lines	-	-	-	-	-	-	3,146	-	-	60,500	175,424	177,342	-	-	40,795
4133	Lines	-	-	-	-	-	-	46,874	-	-	7,516	1,005,544	-	-	-	11,455
4136	Lines	-	-	176.989	176.989	176.989	176.989	1,330,373	-	-	17,938,062	2,050,363	10,656,252	-	-	117,747
4137	Lines	-	-	0.177	0.177	0.177	0.177	16,589	-	-	3,643,443	-	4,529,049	-	-	20,088
4138	Lines	-	-	95.056	95.056	95.056	95.056	9,751,973	3,101,623	98	35,252,656	118,240	24,914,542	-	-	591,464
4139	Lines	-	-	-	-	-	-	517	-	-	-	1,172,743	161,619	-	-	-
4140	Lines	-	-	175.424	175.424	175.424	175.424	278,112	7,308	-	25,306,365	1,513,721	10,310,625	-	-	329,333
4141	Lines	-	-	57.464	57.464	57.464	57.464	76,199	-	-	10,730,316	-	2,938,837	-	-	55,916
4142	Lines	-	-	41.975	-	41.975	-	25,409	-	3,488	-	6,393,029	1,340,361	-	-	-
4143	Lines	-	-	25.956	25.956	25.956	25.956	6,167	-	-	7,143,660	-	3,322,346	-	-	145,064
4144	Lines	-	-	30.560	30.560	30.560	30.560	9,994	-	-	-	(2,826)	429,215	-	-	1,023
4147	Lines	-	-	29.069	29.069	29.069	29.069	3,884,037	-	1,880	2,765,700	-	11,000,495	-	-	145,187
4148	Lines	-	-	38.006	38.006	38.006	38.006	1,733,248	-	-	27,661,022	-	7,820,475	-	-	761,201
4149	Lines	-	-	-	-	-	-	232	-	-	-	60,363	26,752	-	-	1,093
4153	Lines	-	-	13.084	-	13.084	-	309,032	-	-	60,375	2,104,848	308,138	-	-	23,687
4154	Lines	-	-	7.589	7.589	7.589	7.589	748,544	51,478	-	2,834,578	-	759,625	-	-	-
4155	Lines	-	-	20.821	20.821	20.821	20.821	5,825,616	-	-	20,858,769	1,757,686	7,511,408	-	-	187,772
4156	Lines	-	-	29.284	29.284	29.284	29.284	12,018,447	-	-	2,262,700	6,476,819	2,971,326	-	-	38,262
4157	Lines	-	-	28.598	28.598	28.598	28.598	105,605	18,610	-	9,924,999	5,178,581	10,040,756	-	-	537,026
4158	Lines	-	-	-	-	-	-	496,252	-	-	-	-	-	-	-	-
4166	Lines	-	-	8.658	8.658	8.658	8.658	9,034	-	-	164,051	-	136,431	-	-	-
4168	Lines	-	-	6.477	-	6.477	-	4,331	523,515	-	262,365	-	526,631	-	-	37,890
4169	Lines	-	-	418.869	409.497	418.869	409.497	11,719,539	692,660	886,048	20,901,158	53,130,391	77,308,631	-	-	1,248,665
4185	Lines	-	-	223.429	223.429	223.429	223.429	14,776,950	-	-	296,890,541	2,866,726	199,100,997	-	1,151,660	796,920
4186	Lines	-	-	128.965	128.965	128.965	128.965	1,193,710	-	-	22,930,180	-	24,561,685	-	-	147,245
4187	Lines	-	-	82.718	82.718	82.718	82.718	10,435,644	192,106	-	225,524,404	306,070	49,025,951	-	-	18,238,694
4188	Lines	-	-	39.800	39.800	39.800	39.800	2,855,109	385,937	-	25,551,539	514,984	14,907,621	-	-	2,640,525
4189	Lines	-	-	6.121	6.121	6.121	6.121	78,248	37,274	-	1,521,458	-	1,397,144	-	-	-
4191	Lines	-	-	0.771	-	0.771	-	-	-	-	3,058	12,338	4,980	-	-	-
4193	Lines	-	-	4.610	-	4.610	-	-	-	-	4,152,836	64,888	2,461,080	-	-	-
4207	Lines	-	-	-	-	-	-	-	25,798	-	-	-	-	-	-	-
4211	Lines	-	-	5.539	5.539	5.539	5.539	-	-	-	-	-	-	-	-	-
4300	Lines	-	-	9.532	-	9.532	-	-	229,033	14,696	-	276,217	1,681,100	103,541	439,317	-
4360	Lines	3.480	3.480	72.204	72.204	75.684	75.684	26,140,392	2,870,912	-	619,213,691	95,008,492	237,174,486	215,086,929	42,097,825	51,891,974
4400	Lines	-	-	-	-	-	-	3,127	433,988	92,729	-	16,046,070	561,624	1,437,204	2,605,185	-
4500	Lines	-	-	-	-	-	-	-	1,650,139	916,891	-	780,355	809,016	1,569,108	3,145	-
4600	Lines	-	-	-	-	-	-	-	2,007,612	-	-	-	557,013	129	-	-
4644	Lines	-	-	26.301	26.301	26.301	26.301	3,934,890	-	-	88,749,726	-	7,668,801	42,808,798	-	3,941,302
4700																

Location	Study	Circuit Miles						Balance by FERC Account (Total Transmission) Current Study									
		UG Total	UG ISO	OH Total	OH ISO	Total Miles	Total ISO	350	352	353	354	355	356	357	358	359	
4106	Lines	3.945	-	104.627	-	108.571	-	247,343	-	-	341,438	10,487,633	2,532,141	426,218	1,666,127	307,629	
4118	Lines	-	-	108.523	108.523	108.523	108.523	5,611,464	1,065,072	33,582	21,333,311	519,408	14,596,471	-	-	180,159	
4118	Lines	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4135	Lines	-	-	254.809	117.190	254.809	117.190	2,187,240	138,142	-	11,452,734	1,347,620	7,010,977	-	-	106,894	
4135	Lines	-	-	49.286	49.286	49.286	49.286	423,064	26,720	-	2,215,227	260,661	1,356,087	-	-	20,676	
4735	Lines	-	-	4.468	-	4.468	-	(3)	126,379	-	2,918	247,478	45,960	-	-	3,570	
4735	Lines	-	-	13.413	-	13.413	-	(8)	379,352	-	8,759	742,853	137,957	-	-	17,915	
4750	Lines	14.177	-	1,634.407	494.670	1,648.584	494.670	16,358,217	305,417	17,013,915	6,407,285	294,248,496	109,288,726	4,653,972	14,758,109	1,844,347	
4750	Lines	-	-	0.146	-	0.146	-	1,453	27	1,511	569	26,131	9,705	413	1,311	164	
4705	Lines	-	-	67.251	58.541	67.251	58.541	216,022	1,807,494	-	2,178,748	26,759,702	2,245,547	-	-	30,693	
4705	Lines	-	-	11.298	-	11.298	-	36,291	303,657	-	366,027	4,495,596	377,249	-	-	5,156	
2236	100% Subs	Allocated according to substation percentage						-	41,031	5,601,743	-	-	-	-	-	-	
2570	100% Subs	Allocated according to substation percentage						-	381,449	7,806,993	-	-	-	-	-	-	
5001	100% Subs	Allocated according to substation percentage						-	-	62,090,661	-	-	-	-	-	-	
5019	100% Subs	Allocated according to substation percentage						-	85,990	4,133,127	-	-	-	-	-	-	
5026	100% Subs	Allocated according to substation percentage						12,470	1,756,170	8,406,949	-	-	-	-	-	-	
5032	100% Subs	Allocated according to substation percentage						-	482,279	14,445,957	-	-	-	-	-	-	
5036	100% Subs	Allocated according to substation percentage						21,435	1,724,275	17,457,869	-	-	-	-	-	-	
5044	100% Subs	Allocated according to substation percentage						-	-	1,476,690	-	-	-	-	-	-	
5045	100% Subs	Allocated according to substation percentage						-	3,991,463	21,876,128	-	-	-	-	-	-	
5047	100% Subs	Allocated according to substation percentage						1,844,367	24,976,893	156,446,853	-	-	-	-	-	-	
5054 & 895	100% Subs	Allocated according to substation percentage						17,324,279	55,266,224	245,020,059	-	-	-	-	-	-	
5058	100% Subs	Allocated according to substation percentage						-	-	22,786	-	-	-	-	-	-	
5061	100% Subs	Allocated according to substation percentage						90,981	41,395,133	158,323,595	-	-	-	-	-	-	
5065	100% Subs	Allocated according to substation percentage						-	642,499	5,270,269	-	-	-	-	-	-	
5089	100% Subs	Allocated according to substation percentage						1,444	352,755	5,409,584	-	-	-	-	-	-	
5091	100% Subs	Allocated according to substation percentage						-	12,205	12,306	-	-	-	-	-	-	
5092	100% Subs	Allocated according to substation percentage						-	-	1,516,885	-	-	-	-	-	-	
5094	100% Subs	Allocated according to substation percentage						-	870,601	8,323,790	-	-	-	-	-	-	
5097	100% Subs	Allocated according to substation percentage						-	486,323	8,775,373	-	-	-	-	-	-	
8060	100% Subs	Allocated according to substation percentage						-	37,422,319	198,111,145	-	-	-	-	-	-	
8084	100% Subs	Allocated according to substation percentage						-	6,985,990	4,186,391	-	-	-	-	-	-	
8367	100% Subs	Allocated according to substation percentage						-	40,297,018	166,917,119	-	-	-	-	-	-	
8372	100% Subs	Allocated according to substation percentage						-	11,978,708	19,128,452	-	-	-	-	-	-	
8960	100% Subs	Allocated according to substation percentage						-	14,904,714	16,168,968	-	-	-	-	-	-	
8932	100% Subs	Allocated according to substation percentage						-	162,585	13,930,693	-	-	-	-	-	-	
8950	100% Subs	Allocated according to substation percentage						-	55,269	942,130	-	-	-	-	-	-	
9219	100% Subs	Allocated according to substation percentage						23,373,809	82,393	-	-	-	-	-	-	-	
5090	100% Subs	Allocated according to substation percentage						13,183	51,757,663	235,059,184	-	-	-	-	-	94,492	
5080	100% Subs	Allocated according to substation percentage						1,226,475	42,312,563	214,023,536	-	-	-	-	-	2,236,590	
5093	100% Subs	Allocated according to substation percentage						-	1,797,455	51,247,454	-	-	-	-	-	-	
8958	100% Subs	Allocated according to substation percentage						51,663	7,768,618	223,064,208	2,505,376	-	359,913	-	-	-	
5010	100% Subs	Allocated according to substation percentage						-	688,345	(30,051)	-	-	-	-	-	-	
5018	100% Subs	Allocated according to substation percentage						-	(0)	0	-	-	-	-	-	-	
8363	100% Subs	Allocated according to substation percentage						-	13,309,986	33,316,997	-	-	-	-	-	-	
8369	100% Subs	Allocated according to substation percentage						-	93,692,706	125,330,941	-	-	-	-	-	-	
8375	100% Subs	Allocated according to substation percentage						-	-	14,699	-	-	-	-	-	-	
4741	100% Subs	Allocated according to substation percentage						-	-	-	64,409	-	17,263	-	-	-	
9285	100% Subs	Allocated according to substation percentage						-	-	37,054	-	-	-	-	-	-	
4743	100% Subs	Allocated according to substation percentage						-	-	-	31,041	-	14,475	-	-	-	
4744	100% Subs	Allocated according to substation percentage						-	-	-	(22)	-	-	-	-	-	
4848	100% Subs	Allocated according to substation percentage						-	-	-	7,943	-	-	-	-	-	
4357	100% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-	
4349	100% Subs	Allocated according to substation percentage						-	4,448	-	-	-	-	-	-	-	
4626	100% Subs	Allocated according to substation percentage						-	-	275,784	-	-	-	-	-	-	
INTERNALORE	0% Subs	Allocated according to substation percentage						-	-	1,868	-	-	-	-	-	-	
1451	0% Subs	Allocated according to substation percentage						-	-	35,855	-	-	-	-	-	-	
2150	0% Subs	Allocated according to substation percentage						-	-	24,016	-	-	-	-	-	-	
2202	0% Subs	Allocated according to substation percentage						-	-	1,641,022	-	-	-	-	-	-	
2237	0% Subs	Allocated according to substation percentage						-	-	68,246	-	-	-	-	-	-	
2238	0% Subs	Allocated according to substation percentage						-	46,311	4,161,789	-	-	-	-	-	-	
2239	0% Subs	Allocated according to substation percentage						-	678,338	5,077,276	-	-	-	-	-	-	
2300	0% Subs	Allocated according to substation percentage						-	-	10,367	-	-	-	-	-	-	
2301	0% Subs	Allocated according to substation percentage						-	-	421,924	-	-	-	-	-	-	
2303	0% Subs	Allocated according to substation percentage						-	-	140,226	-	-	-	-	-	-	
2305	0% Subs	Allocated according to substation percentage						-	-	692,140	-	-	-	-	-	-	
2307	0% Subs	Allocated according to substation percentage						-	-	572,929	-	-	-	-	-	-	
2309	0% Subs	Allocated according to substation percentage						-	-	193,975	-	-	-	-	-	-	
2313	0% Subs	Allocated according to substation percentage						-	4,184	643,018	-	-	-	-	-	-	
2314	0% Subs	Allocated according to substation percentage						-	1,383	259,591	-	-	-	-	-	-	
2315	0% Subs	Allocated according to substation percentage						-	-	36,406	-	-	-	-	-	-	
2317	0% Subs	Allocated according to substation percentage						-	-	14,930	-	-	-	-	-	-	
2318	0% Subs	Allocated according to substation percentage						1,464	-	7,316	-	-	-	-	-	-	
2319	0% Subs	Allocated according to substation percentage						-	-	52,080	-	-	-	-	-	-	
2324	0% Subs	Allocated according to substation percentage						-	-	625,062	-	-	-	-	-	-	
2325	0% Subs	Allocated according to substation percentage						-	2,694	49,126	-	-	-	-	-	-	
2326	0% Subs	Allocated according to substation percentage						-	-	57,269	-	-	-	-	-	-	
2327	0% Subs	Allocated according to substation percentage						-	-	50,834	-	-	-	-	-	-	
2328	0% Subs	Allocated according to substation percentage						-	-	460,723	-	-	-	-	-	-	
2331	0% Subs	Allocated according to substation percentage						-	-	205,914	-	-	-	-	-	-	
2500	0% Subs	Allocated according to substation percentage						-	7,254	-	-	-	-	-	-	-	
2501	0% Subs	Allocated according to substation percentage						-	-	705,804	-	-	-	-	-	-	
2503	0% Subs	Allocated according to substation percentage						-	-	196,344	-	-	-	-	-	-	
2560 & 251	0% Subs	Allocated according to substation percentage						-	317,627	5,816,830	-	-	-	-	-	-	
2512	0% Subs	Allocated according to substation percentage						-	3,682	509,477	-	-	-	-	-	-	
2514	0% Subs	Allocated according to substation percentage						-	-	175,912	-	-	-	-	-	-	
2522	0% Subs	Allocated according to substation percentage						-	-	60,487	-	-	-	-	-	-	
2523	0% Subs	Allocated according to substation percentage						-	-	1,847,927	-	-	-	-	-	-	
2524	0% Subs	Allocated according to substation percentage						-	-	86,641	-	-	-	-	-	-	
2525	0% Subs	Allocated according to substation percentage						-	-	84,347	-	-	-	-	-	-	
2526	0% Subs	Allocated according to substation percentage						-	-	39,098	-	-	-	-	-	-	
2553	0% Subs	Allocated according to substation percentage						-	1,343	52,264	-	-	-	-	-	-	
2557	0% Subs	Allocated according to substation percentage						2,119	442,110	9,690,765	-	-	-	-	-	-	



Location	Study	Circuit Miles					Balance by FERC Account (Total Transmission) Current Study									
		UG Total	UG ISO	OH Total	OH ISO	Total Miles	Total ISO	350	352	353	354	355	356	357	358	359
2561	0% Subs	Allocated according to substation percentage						344	283,997	2,302,338	-	-	-	-	-	-
2571	0% Subs	Allocated according to substation percentage						-	100,772	1,792,432	-	-	-	-	-	-
2582	0% Subs	Allocated according to substation percentage						400,881	-	344,073	-	-	-	-	-	-
2598	0% Subs	Allocated according to substation percentage						-	-	(230)	-	-	-	-	-	-
3717	0% Subs	Allocated according to substation percentage						714	-	-	-	-	-	-	-	-
5016	0% Subs	Allocated according to substation percentage						-	29,473	15,138	-	-	-	-	-	-
5022	0% Subs	Allocated according to substation percentage						-	44,764	963,824	-	-	-	-	-	-
5046	0% Subs	Allocated according to substation percentage						48,136	156,227	3,179,929	-	-	-	-	-	-
5048	0% Subs	Allocated according to substation percentage						49,104	171,619	5,601,462	-	-	-	-	-	-
5049	0% Subs	Allocated according to substation percentage						158,170	34,483	6,118,817	-	-	-	-	-	-
5051	0% Subs	Allocated according to substation percentage						13,373	4,965,855	80,386,376	-	-	-	-	-	-
5066	0% Subs	Allocated according to substation percentage						-	63,093	2,064,623	-	-	-	-	-	-
5068	0% Subs	Allocated according to substation percentage						-	54,471	4,222,649	-	-	-	-	-	-
5072	0% Subs	Allocated according to substation percentage						-	40,279	155,442	-	-	-	-	-	-
5078	0% Subs	Allocated according to substation percentage						21,660	262,196	4,960,480	-	-	-	-	-	-
5095	0% Subs	Allocated according to substation percentage						2,415,092	2,377,770	26,609,450	-	-	-	-	-	-
5101	0% Subs	Allocated according to substation percentage						-	83,447	2,771,763	-	-	-	-	-	-
5107	0% Subs	Allocated according to substation percentage						4,583	16,136	-	-	-	-	-	-	-
5109	0% Subs	Allocated according to substation percentage						-	-	2,451	-	-	-	-	-	-
5112	0% Subs	Allocated according to substation percentage						-	-	2,049	-	-	-	-	-	-
5116	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-
5141	0% Subs	Allocated according to substation percentage						-	38,757	22	-	-	-	-	-	-
5158	0% Subs	Allocated according to substation percentage						-	-	123	-	-	-	-	-	-
5161	0% Subs	Allocated according to substation percentage						-	-	(47,687)	-	-	-	-	-	-
5162	0% Subs	Allocated according to substation percentage						-	2,466	17,195	-	-	-	-	-	-
5165	0% Subs	Allocated according to substation percentage						-	-	3,666	-	-	-	-	-	-
5167	0% Subs	Allocated according to substation percentage						-	118,272	91,972	-	-	-	-	-	-
5170	0% Subs	Allocated according to substation percentage						-	-	17,367	-	-	-	-	-	-
5178	0% Subs	Allocated according to substation percentage						3,995	-	-	-	-	-	-	-	-
5179	0% Subs	Allocated according to substation percentage						-	154,829	-	-	-	-	-	-	-
5185	0% Subs	Allocated according to substation percentage						-	-	37,984	-	-	-	-	-	-
5186	0% Subs	Allocated according to substation percentage						-	16,955	31,589	-	-	-	-	-	-
5196	0% Subs	Allocated according to substation percentage						-	71,448	-	-	-	-	-	-	-
5198	0% Subs	Allocated according to substation percentage						-	25,705	2,046,562	-	-	-	-	-	-
5204	0% Subs	Allocated according to substation percentage						-	61,263	-	-	-	-	-	-	-
5207	0% Subs	Allocated according to substation percentage						-	41,604	-	-	-	-	-	-	-
5211	0% Subs	Allocated according to substation percentage						-	29,751	-	-	-	-	-	-	-
5213	0% Subs	Allocated according to substation percentage						-	14,957	17,794	-	-	-	-	-	-
5224	0% Subs	Allocated according to substation percentage						-	14,955	-	-	-	-	-	-	-
5235	0% Subs	Allocated according to substation percentage						-	58,264	17,508	-	-	-	-	-	-
5236	0% Subs	Allocated according to substation percentage						-	-	24,710	-	-	-	-	-	-
5238	0% Subs	Allocated according to substation percentage						-	44,342	-	-	-	-	-	-	-
5241	0% Subs	Allocated according to substation percentage						4,415	-	-	-	-	-	-	-	-
5250	0% Subs	Allocated according to substation percentage						-	59,249	-	-	-	-	-	-	-
5257	0% Subs	Allocated according to substation percentage						-	14,957	-	-	-	-	-	-	-
5259	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-
5273	0% Subs	Allocated according to substation percentage						-	-	0	-	-	-	-	-	-
5315	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-
5325	0% Subs	Allocated according to substation percentage						-	-	14,882	-	-	-	-	-	-
5333	0% Subs	Allocated according to substation percentage						-	15,418	74,641	-	-	-	-	-	-
5352	0% Subs	Allocated according to substation percentage						-	-	9,627	-	-	-	-	-	-
5357	0% Subs	Allocated according to substation percentage						-	-	119,219	-	-	-	-	-	-
5358	0% Subs	Allocated according to substation percentage						-	234	1,156,662	-	-	-	-	-	-
5365	0% Subs	Allocated according to substation percentage						24,167	-	15,397	-	-	-	-	-	-
5374	0% Subs	Allocated according to substation percentage						801,825	-	-	-	-	-	-	-	-
5375	0% Subs	Allocated according to substation percentage						573,588	-	-	-	-	-	-	-	-
5504	0% Subs	Allocated according to substation percentage						-	-	(251)	-	-	-	-	-	-
5506	0% Subs	Allocated according to substation percentage						-	116,483	-	-	-	-	-	-	-
5507	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-
5508	0% Subs	Allocated according to substation percentage						-	-	424,747	-	-	-	-	-	-
5510	0% Subs	Allocated according to substation percentage						-	5,566	-	-	-	-	-	-	-
5511	0% Subs	Allocated according to substation percentage						-	-	526,259	-	-	-	-	-	-
5514	0% Subs	Allocated according to substation percentage						-	-	1,071,949	-	-	-	-	-	-
5518	0% Subs	Allocated according to substation percentage						-	-	1,690,353	-	-	-	-	-	-
5522	0% Subs	Allocated according to substation percentage						-	-	911,750	-	-	-	-	-	-
5526	0% Subs	Allocated according to substation percentage						-	13,050	-	-	-	-	-	-	-
5530	0% Subs	Allocated according to substation percentage						-	89,829	275,391	-	-	-	-	-	-
5531	0% Subs	Allocated according to substation percentage						-	40,153	-	-	-	-	-	-	-
5538	0% Subs	Allocated according to substation percentage						-	52,173	-	-	-	-	-	-	-
5539	0% Subs	Allocated according to substation percentage						-	-	76,359	-	-	-	-	-	-
5541	0% Subs	Allocated according to substation percentage						-	66,626	652,233	-	-	-	-	-	-
5545	0% Subs	Allocated according to substation percentage						-	11,023	149,257	-	-	-	-	-	-
5546	0% Subs	Allocated according to substation percentage						-	-	3,072	-	-	-	-	-	-
5547	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-
5548	0% Subs	Allocated according to substation percentage						-	-	397,008	-	-	-	-	-	-
5553	0% Subs	Allocated according to substation percentage						-	15,551	367,757	-	-	-	-	-	-
5557	0% Subs	Allocated according to substation percentage						-	-	692,110	-	-	-	-	-	-
5562	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-
5564	0% Subs	Allocated according to substation percentage						-	-	644,295	-	-	-	-	-	-
5566	0% Subs	Allocated according to substation percentage						-	19,046	220,467	-	-	-	-	-	-
5599	0% Subs	Allocated according to substation percentage						-	-	499,396	-	-	-	-	-	-
5601	0% Subs	Allocated according to substation percentage						-	20,403	56,150	-	-	-	-	-	-
5606	0% Subs	Allocated according to substation percentage						-	13,596	-	-	-	-	-	-	-
5612	0% Subs	Allocated according to substation percentage						-	20,750	-	-	-	-	-	-	-
5615	0% Subs	Allocated according to substation percentage						-	-	23,032	-	-	-	-	-	-
5631	0% Subs	Allocated according to substation percentage						-	-	7,606	-	-	-	-	-	-
5646	0% Subs	Allocated according to substation percentage						-	43,167	-	-	-	-	-	-	-
5652	0% Subs	Allocated according to substation percentage						-	-	531,131	-	-	-	-	-	-
5655	0% Subs	Allocated according to substation percentage						-	16,835	525,170	-	-	-	-	-	-
5659	0% Subs	Allocated according to substation percentage						-	-	206,393	-	-	-	-	-	-
5664	0% Subs	Allocated according to substation percentage						-	1,282	17,343	-	-	-	-	-	-
5670	0% Subs	Allocated according to substation percentage						-	-	17,327	-	-	-	-	-	-
5674	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-
5678	0% Subs	Allocated according to substation percentage						-	57,591	-	-	-	-	-	-	-
5740	0% Subs	Allocated according to substation percentage						-	-	114,340	-	-	-	-	-	-

Location	Study	Circuit Miles						Balance by FERC Account (Total Transmission) Current Study								
		UG Total	UG ISO	OH Total	OH ISO	Total Miles	Total ISO	350	352	353	354	355	356	357	358	359
5758	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	3,790	-	-	-	-	-	-
5787	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	17,255	-	-	-	-	-	-
5788	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5798	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	1,963	-	-	-	-	-	-	-
5811	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5814	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	14,314	-	-	-	-	-	-	-
5816	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	93,280	-	-	-	-	-	-	-
5828	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5842	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	58,101	-	-	-	-	-
5843	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	32,505	-	-	-	-	-	-	-
5849	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	6,882	-	-	-	-	-	-	-
5853	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	24,273	-	-	-	-	-
5860	0% Subs	Allocated according to substation percentage	241,262	-	-	-	-	-	-	-	-	-	-	-	-	-
5862	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	230,879	-	-	-	-	-
5865	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	41,148	-	-	-	-
5869	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	50,680	-	-	-	-	-	-	-
5878	0% Subs	Allocated according to substation percentage	11,308	-	-	-	-	-	-	-	-	-	-	-	-	-
5892	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	12,346	-	-	-	-	-	-	-
5896	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	21,384	-	-	-	-	-
5902	0% Subs	Allocated according to substation percentage	4,664,177	-	-	-	-	-	-	-	-	-	-	-	-	-
7013	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	1,702	-	-	-	-	-
8003	0% Subs	Allocated according to substation percentage	106,825	-	-	-	-	-	827,523	-	-	-	-	-	-	-
8004	0% Subs	Allocated according to substation percentage	25,609	-	-	-	-	-	996,193	-	-	-	-	-	-	-
8005	0% Subs	Allocated according to substation percentage	139,611	-	-	-	-	-	795,504	-	-	-	-	-	-	-
8009	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	58,798	-	-	-	-	-	-	-
8010	0% Subs	Allocated according to substation percentage	154,446	-	-	-	-	-	791,087	-	-	-	-	-	-	-
8011	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	35,320	-	-	-	-
8013	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	1,389,452	-	-	-	-	-	-	-
8014	0% Subs	Allocated according to substation percentage	969,397	-	-	-	-	-	1,494,208	-	-	-	-	-	-	-
8016	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	692,804	-	-	-	-	-	-	-
8017	0% Subs	Allocated according to substation percentage	285,201	-	-	-	-	-	945,811	-	-	-	-	-	-	-
8018	0% Subs	Allocated according to substation percentage	83,538	-	-	-	-	-	1,248,278	-	-	-	-	-	-	-
8019	0% Subs	Allocated according to substation percentage	33,940	-	-	-	-	-	530,026	-	-	-	-	-	-	-
8020	0% Subs	Allocated according to substation percentage	29,280	-	-	-	-	-	1,477,177	-	-	-	-	-	-	-
8021	0% Subs	Allocated according to substation percentage	17,579	-	-	-	-	-	512,277	-	-	-	-	-	-	-
8022	0% Subs	Allocated according to substation percentage	19,474	-	-	-	-	-	647,647	-	-	-	-	-	-	-
8023	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	41,871	-	-	-	-	-	-	-
8024	0% Subs	Allocated according to substation percentage	45,514	-	-	-	-	-	2,741,088	-	-	-	-	-	-	-
8025	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	250,900	-	-	-	-	-	-	-
8026	0% Subs	Allocated according to substation percentage	20,210	-	-	-	-	-	1,586,414	-	-	-	-	-	-	-
8027	0% Subs	Allocated according to substation percentage	22,426	-	-	-	-	-	1,796,115	-	-	-	-	-	-	-
8028	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	53,166	-	-	-	-	-	-	-
8029	0% Subs	Allocated according to substation percentage	1,154,541	-	-	-	-	-	2,612,000	-	-	-	-	-	-	-
8030	0% Subs	Allocated according to substation percentage	70,286	-	-	-	-	-	50,241	-	-	-	-	-	-	-
8031	0% Subs	Allocated according to substation percentage	116	-	-	-	-	-	416,451	-	-	-	-	-	-	-
8032	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	18,045	-	-	-	-	-	-	-
8033	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	112,531	-	-	-	-	-	-	-
8035	0% Subs	Allocated according to substation percentage	152,559	-	-	-	-	-	1,723,775	-	-	-	-	-	-	-
8036	0% Subs	Allocated according to substation percentage	44,689	-	-	-	-	-	739,368	-	-	-	-	-	-	-
8038	0% Subs	Allocated according to substation percentage	22,819	-	-	-	-	-	1,337,012	-	-	-	-	-	-	-
8039	0% Subs	Allocated according to substation percentage	174,875	-	-	-	-	-	665,463	-	-	-	-	-	-	-
8041	0% Subs	Allocated according to substation percentage	27,167	-	-	-	-	-	405,785	-	-	-	-	-	-	-
8042	0% Subs	Allocated according to substation percentage	27,870	-	-	-	-	-	2,639,595	-	-	-	-	-	-	-
8044	0% Subs	Allocated according to substation percentage	34,673	-	-	-	-	-	1,742,523	-	-	-	-	-	-	-
8045	0% Subs	Allocated according to substation percentage	39,144	-	-	-	-	-	-	-	23,873	-	-	-	-	-
8047	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	218,704	-	-	-	-	-	-	-
8048	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	64,707	-	-	-	-	-	-	-
8055	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	1,796,202	-	-	-	-	-	-	-
8059	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	175,506	-	-	-	-	-	-	-
8061	0% Subs	Allocated according to substation percentage	2,976	-	-	-	-	-	463	-	-	-	-	-	-	-
8064	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	11,459	-	-	-	-	-
8072	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	562,701	-	-	-	-	-	-	-
8073	0% Subs	Allocated according to substation percentage	166,697	-	-	-	-	-	2,210,630	-	-	-	-	-	-	-
8074	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	61,762	-	-	-	-	-	-	-
8075	0% Subs	Allocated according to substation percentage	7,139	-	-	-	-	-	178,624	-	-	-	-	-	-	-
8079	0% Subs	Allocated according to substation percentage	2,880	-	-	-	-	-	937,785	-	-	-	-	-	-	-
8082	0% Subs	Allocated according to substation percentage	161,883	-	-	-	-	-	1,005,687	-	-	-	-	-	-	-
8086	0% Subs	Allocated according to substation percentage	25,836	-	-	-	-	-	1,003,523	-	-	-	-	-	-	-
8087	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	526,265	-	-	-	-	-	-	-
8088	0% Subs	Allocated according to substation percentage	81,206	-	-	-	-	-	2,808,006	-	-	-	-	-	-	-
8089	0% Subs	Allocated according to substation percentage	23,090	-	-	-	-	-	468,965	-	-	-	-	-	-	-
8090	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	87,113	-	-	-	-	-
8091	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	15,844	-	-	-	-	-
8092	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	6,807	-	-	-	-	-
8093	0% Subs	Allocated according to substation percentage	42,272	-	-	-	-	-	1,728,031	-	-	-	-	-	-	-
8094	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	540,962	-	-	-	-	-	-	-
8095	0% Subs	Allocated according to substation percentage	23,493	-	-	-	-	-	1,190,046	-	-	-	-	-	-	-
8097	0% Subs	Allocated according to substation percentage	4,913	-	-	-	-	-	140,330	-	-	-	-	-	-	-
8099	0% Subs	Allocated according to substation percentage	125,967	-	-	-	-	-	418,345	-	-	-	-	-	-	-
8102	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8104	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8110	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	6,894	-	-	-	-	-	-	-
8113	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	22,511	-	-	-	-	-	-	-
8117	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8120	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	15,598	-	-	-	-	-	-	-
8132	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	40,911	-	-	-	-	-	-	-
8137	0% Subs	Allocated according to substation percentage	82,401	-	-	-	-	-	5,774,614	-	-	-	-	-	-	-
8152	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	15,642	-	-	-	-	-	-	-
8163	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	15,110	-	-	-	-	-	-	-
8179	0% Subs	Allocated according to substation percentage	1,488,635	-	-	-	-	-	-	-	-	-	-	-	-	-
8182	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	209,778	-	-	-	-	-	-	-
8190	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	5,725	-	-	-	-	-
8193	0% Subs	Allocated according to substation percentage	104,923	-	-	-	-	-	786,407	-	-	-	-	-	-	-
8195	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	20,720	-	-	-	-	-	-	-
8197	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	882,819	-	-	-	-	-

Location	Study	Circuit Miles						Balance by FERC Account (Total Transmission) Current Study									
		UG Total	UG ISO	OH Total	OH ISO	Total Miles	Total ISO	350	352	353	354	355	356	357	358	359	
8198	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	132,416	-	-	-	-	-	-	-
8204	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	48,986	-	-	-	-	-	-	-	-
8212	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8214	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	60,590	-	-	-	-	-	-	-	-
8220	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	13,167	-	-	-	-	-	-	-	-
8222	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	6,894	-	-	-	-	-	-	-	-
8225	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	17,716	30,776	-	-	-	-	-	-	-
8226	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	17,438	-	-	-	-	-	-	-
8234	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8250	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	4,236	-	-	-	-	-	-	-
8260	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	18,135	22,159	-	-	-	-	-	-	-
8267	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8268	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	23,195	-	-	-	-	-	-	-	-
8270	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	17,764	21,919	-	-	-	-	-	-	-
8273	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	6,651	-	-	-	-	-	-	-	-
8283	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	533,657	5,311,676	-	-	-	-	-	-	-
8294	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	6,894	-	-	-	-	-	-	-	-
8301	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	37,771	751,981	-	-	-	-	-	-	-
8302	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	29,827	78,542	-	-	-	-	-	-	-
8303	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	51,653	814,074	-	-	-	-	-	-	-
8304	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	371,041	-	-	-	-	-	-	-
8305	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	25,366	1,061,136	-	-	-	-	-	-	-
8306	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	26,170	2,286,515	-	-	-	-	-	-	-
8308	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	1,022	25,028	-	-	-	-	-	-	-
8310	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	5,398	226,460	-	-	-	-	-	-	-
8311	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	4,899	236,563	-	-	-	-	-	-	-
8312	0% Subs	Allocated according to substation percentage	532	-	-	-	-	-	6,214	432,703	-	-	-	-	-	-	-
8314	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	112,388	2,464,391	-	-	-	-	-	-	-
8320	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	45,594	-	-	-	-	-	-	-
8321	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	11,755	-	-	-	-	-	-	-
8322	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	53,056	-	-	-	-	-	-	-
8323	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	8,814	-	-	-	-	-	-	-
8324	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	39,130	-	-	-	-	-	-	-
8325	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	119,704	-	-	-	-	-	-	-
8326	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	83,150	-	-	-	-	-	-	-
8327	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	74,085	-	-	-	-	-	-	-
8340	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	42,538	654,012	-	-	-	-	-	-	-
8342	0% Subs	Allocated according to substation percentage	51,172	-	-	-	-	-	1,223,085	12,020,606	-	-	-	-	-	-	-
8343	0% Subs	Allocated according to substation percentage	20,961	-	-	-	-	-	1,435,426	19,061,279	-	-	-	-	-	-	-
8344	0% Subs	Allocated according to substation percentage	12,179	-	-	-	-	-	170,995	2,017,154	-	-	-	-	-	-	-
8345	0% Subs	Allocated according to substation percentage	222,600	-	-	-	-	-	919,449	14,403,857	-	-	-	-	-	-	-
8346	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	4,398,452	16,249,068	-	-	-	-	-	-	-
8347	0% Subs	Allocated according to substation percentage	560,579	-	-	-	-	-	934,130	13,628,745	-	-	-	-	-	-	-
8351	0% Subs	Allocated according to substation percentage	120	-	-	-	-	-	4,440	995,204	-	-	-	-	-	-	-
8353	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	151,193	-	-	-	-	-	-	-
8354	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	78,655	1,083,399	-	-	-	-	-	-	-
8357	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	5,170	1,098,304	-	-	-	-	-	-	-
8359	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	36,557	-	-	-	-	-	-	-
8361	0% Subs	Allocated according to substation percentage	91,119	-	-	-	-	-	1,699,133	4,796,344	-	-	-	-	-	-	-
8362	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	128,640	491,674	-	-	-	-	-	-	-
8504	0% Subs	Allocated according to substation percentage	942,487	-	-	-	-	-	17,386	-	-	-	-	-	-	-	-
8509	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	27,725	-	-	-	-	-	-	-
8511	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	128,972	-	-	-	-	-	-	-
8558	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	4,671	-	-	-	-	-	-	-	-
8810	0% Subs	Allocated according to substation percentage	1,188,142	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8956	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9009	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	527,316	-	-	-	-	-	-	-
9047	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	101,871,606	-	-	-	-	-	-	-
9287	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	12,869	-	-	-	-	-	-	-	-
9440	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	8,929	-	-	-	-	-	-	-	-
9900	0% Subs	Allocated according to substation percentage	631	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5110	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	24,360	-	-	-	-	-	-	-	-
5139	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	5,739	-	-	-	-	-	-	-	-
5164	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	17,757	-	-	-	-	-	-	-	-
5215	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	575	-	-	-	-	-	-	-	-
5221	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	4,164	-	-	-	-	-	-	-	-
5226	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	3,804	-	-	-	-	-	-	-	-
5229	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	3,652	-	-	-	-	-	-	-	-
5239	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	9,057	-	-	-	-	-	-	-
5242	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	40,181	-	-	-	-	-	-	-	-
5252	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	27,085	-	-	-	-	-	-	-	-
5260	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	7,141	-	-	-	-	-	-	-
5268	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	29,219	-	-	-	-	-	-	-	-
5271	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	23,749	-	-	-	-	-	-	-	-
5275	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	4,862	-	-	-	-	-	-	-
5282	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	42,738	-	-	-	-	-	-	-	-
5302	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5320	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	13,523	-	-	-	-	-	-	-	-
5339	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5410	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5412	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	79,333	-	-	-	-	-	-	-
5520	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5576	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5616	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	22,342	-	-	-	-	-	-	-	-
5618	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	6,520	-	-	-	-	-	-	-
5621	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	45,573	-	-	-	-	-	-	-	-
5626	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	22,868	-	-	-	-	-	-	-
5633	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	19,651	-	-	-	-	-	-	-	-
5645	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	189,720	-	-	-	-	-	-	-	-
5650	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	15,935	-	-	-	-	-	-	-	-
5654	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	34,835	-	-	-	-	-	-	-	-
5656	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	704	-	-	-	-	-	-	-	-
5658	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	32,989	-	-	-	-	-	-	-	-
5714	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	32,040	-	-	-	-	-	-	-	-
5754	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	33,694	-	-	-	-	-	-	-	-

Location	Study	Circuit Miles					Balance by FERC Account (Total Transmission) Current Study									
		UG Total	UG ISO	OH Total	OH ISO	Total Miles	Total ISO	350	352	353	354	355	356	357	358	359
5766	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	12,648	-	-	-	-	-	-	-
5893	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	3,215	-	-	-	-	-	-	-
1860	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	2,597,299	232,241	-	84,727	-	-	-
1864	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	2,488,614	-	-	-	-	-
1866	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	5,007,603	-	-	-	-	-
1867	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	7,766	2,721,697	854,373	-	-	-	-
5832	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	17,125	-	-	-	-	3,858
8078	0% Subs	Allocated according to substation percentage	119,513	-	1,941,711	-	-	-	-	8,593,598	-	-	-	203,176	-	-
8096	0% Subs	Allocated according to substation percentage	-	-	27,809	-	-	-	-	1,636,175	-	-	-	36,281	-	-
8098	0% Subs	Allocated according to substation percentage	-	-	189,886	-	-	-	-	869,300	13,277,223	-	-	3,254	1,043	-
8348	0% Subs	Allocated according to substation percentage	-	-	40,720	-	-	-	-	411,677	-	-	-	816	-	-
9310	0% Subs	Allocated according to substation percentage	-	-	327,844	-	-	-	-	-	-	(2,151)	-	-	-	-
6011	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	2,770	-	-	-	-	-	-
8121	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	57,897	7,293	-	-	-	-	-
8123	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	9,939	-	-	-	-	-
8136	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	13,544	-	-	-	-	-
8159	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	24,846	-	-	-	-	-	-
8161	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8170	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	7,735	-	-	-	-	-
8172	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	9,177	-	-	-	-	-	-
8216	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	7,635	-	-	-	-	-
8238	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	8,994	-	-	-	-	-	-
8244	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	13,259	-	-	-	-	-	-
8255	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	11,480	-	-	-	-	-	-
9077	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	9,285,586	-	-	-	-	-
9235	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	203,753
2612	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5120	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	6,944	-	-	-	-	-	-
5152	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	51,570	3,887	-	-	-	-	-
5175	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	15,470	-	-	-	-	-	-
5188	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	82,794	-	-	-	-	-	-
5201	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	33,804	17,431	-	-	-	-	-
5405	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	9,895	-	-	-	-	-
5406	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	11,023	28,527	-	-	-	-	-
5409	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	6,367	-	-	-	-	-
5414	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	12,069	7,801	-	-	-	-	-
5415	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	23,342	-	-	-	-	-
5424	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	23,000	-	-	-	-	-
5535	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	27,327	-	-	-	-	-
5572	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	118,097	-	-	-	-	-
5604	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	1,760	-	-	-	-	-	-
5629	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	29,558	21,359	-	-	-	-	-
5636	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	31,005	-	-	-	-	-	-
5661	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	31,398	-	-	-	-	-
5667	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	12,856	-	-	-	-	-	-
5668	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	14,975	-	-	-	-	-	-
5680	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	49,398	-	-	-	-	-
5718	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	12,712	-	-	-	-	-	-
5720	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	6,957	-	-	-	-	-	-
5779	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	6,957	-	-	-	-	-	-
5812	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	20,469	-	-	-	-	-	-
5886	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	6,944	-	-	-	-	-
8207	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	19,356	-	-	-	-	-	-
8210	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	558	-	-	-	-	-
8231	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	6,317	-	-	-	-	-	-
8252	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	6,499	-	-	-	-	-	-
8056	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	9,217,544	22,620,077	-	-	-	-	-
8058	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	23,430	-	-	-	-	-
8081	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	21,176	-	-	-	-	-	-
8339	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	10,350	68,974	-	-	-	-	-
8373	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	471,546	69,402	-	-	-	-	-
5305	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	60,018	-	-	-	-	-	-
5312	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	301,990	-	-	-	-	-	-
5321	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	18,619	-	-	-	-	-	-
5331	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	35,561	-	-	-	-	-	-
1020	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	6,749	-	-	-	-
6027	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8366	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	38,734	21,262	-	-	-	-	-
8071	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	41,635	69,695	-	-	-	-	-
5216	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	10,762	-	-	-	-	-	-
5218	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	16,856	-	-	-	-	-	-
5227	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	33,678	-	-	-	-	-	-
5228	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	70,273	-	-	-	-	-	-
5231	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	19,277	-	-	-	-	-	-
5246	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	8,977	-	-	-	-	-
5254	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	30,118	-	-	-	-	-	-
5255	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	8,090	-	-	-	-	-
5267	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	21,278	-	-	-	-	-	-
5274	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	8,898	-	-	-	-	-	-
5411	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5570	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	5,801	-	-	-	-	-	-
5624	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	66,934	-	-	-	-	-
5628	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	44,558	-	-	-	-	-
5635	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	21,532	-	-	-	-	-
5639	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	59,194	-	-	-	-	-
5726	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	37,411	-	-	-	-	-
5881	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	14,630	-	-	-	-	-	-
8119	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	13,562	-	-	-	-	-
8140	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	12,855	-	-	-	-	-	-
8148	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	15,135	-	-	-	-	-
8175	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	103,197	-	-	-	-	-	-
8211	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	15,611	-	-	-	-	-
8263	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	29,219	-	-	-	-	-
8279	0% Subs	Allocated according to substation percentage	-	-	-	-	-	-	-	-	5,855	-	-	-	-	-

Location	Study	Circuit Miles						Balance by FERC Account (Total Transmission) Current Study									
		UG Total	UG ISO	OH Total	OH ISO	Total Miles	Total ISO	350	352	353	354	355	356	357	358	359	
8295	0% Subs	Allocated according to substation percentage						-	48,114	-	-	-	-	-	-	-	-
9300	0% Subs	Allocated according to substation percentage						-	-	9,775	-	-	-	-	-	-	-
2587	0% Subs	Allocated according to substation percentage						-	129,731	-	-	-	-	-	-	-	-
8371	0% Subs	Allocated according to substation percentage						1,200	-	189,559	-	-	-	-	-	-	-
1510	0% Subs	Allocated according to substation percentage						-	83,831	2,450	-	-	-	-	-	-	-
1936	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-	-
1996	0% Subs	Allocated according to substation percentage						-	27,803	-	-	-	-	-	-	-	-
5347	0% Subs	Allocated according to substation percentage						73,306	-	-	-	-	-	-	-	-	-
5608	0% Subs	Allocated according to substation percentage						-	117,952	-	-	-	-	-	-	-	-
5630	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-	-
5637	0% Subs	Allocated according to substation percentage						-	21,769	-	-	-	-	-	-	-	-
5808	0% Subs	Allocated according to substation percentage						-	62,236	-	-	-	-	-	-	-	-
5821	0% Subs	Allocated according to substation percentage						-	37,527	-	-	-	-	-	-	-	-
5836	0% Subs	Allocated according to substation percentage						-	47,115	-	-	-	-	-	-	-	-
5838	0% Subs	Allocated according to substation percentage						-	16,683	-	-	-	-	-	-	-	-
5861	0% Subs	Allocated according to substation percentage						-	15,616	-	-	-	-	-	-	-	-
5863	0% Subs	Allocated according to substation percentage						-	4,087	-	-	-	-	-	-	-	-
6039	0% Subs	Allocated according to substation percentage						-	566,817	-	-	-	-	-	-	-	-
6048	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-	-
8205	0% Subs	Allocated according to substation percentage						-	13,741	-	-	-	-	-	-	-	-
8215	0% Subs	Allocated according to substation percentage						-	46,196	-	-	-	-	-	-	-	-
8219	0% Subs	Allocated according to substation percentage						-	29,892	-	-	-	-	-	-	-	-
8239	0% Subs	Allocated according to substation percentage						-	34,308	-	-	-	-	-	-	-	-
8813	0% Subs	Allocated according to substation percentage						-	9,846	-	-	-	-	-	-	-	-
9159	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-	-
5722	0% Subs	Allocated according to substation percentage						-	105,305	-	-	-	-	-	-	-	-
5742	0% Subs	Allocated according to substation percentage						-	23,963	-	-	-	-	-	-	-	-
5790	0% Subs	Allocated according to substation percentage						-	29,034	-	-	-	-	-	-	-	-
8360	0% Subs	Allocated according to substation percentage						-	30,789	-	-	-	-	-	-	-	-
5619	0% Subs	Allocated according to substation percentage						-	59,490	-	-	-	-	-	-	-	-
8066	0% Subs	Allocated according to substation percentage						-	103,392	-	-	-	-	-	-	-	-
7054	0% Subs	Allocated according to substation percentage						-	-	-	-	204,260	80,606	-	-	-	-
8266	0% Subs	Allocated according to substation percentage						-	28,566	-	-	-	-	-	-	-	-
5632	0% Subs	Allocated according to substation percentage						-	113,131	-	-	-	-	-	-	-	-
5037	0% Subs	Allocated according to substation percentage						-	36,798	-	-	-	-	-	-	-	-
4806	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-	-
6005	0% Subs	Allocated according to substation percentage						-	-	-	-	-	55,706	-	-	-	-
5703	0% Subs	Allocated according to substation percentage						-	32,077	-	-	-	-	-	-	-	-
5232	0% Subs	Allocated according to substation percentage						-	162,536	-	-	-	-	-	-	-	-
4202	0% Subs	Allocated according to substation percentage						-	1,430	-	-	-	-	-	-	-	-
2113	0% Subs	Allocated according to substation percentage						-	12,334	-	-	-	-	-	-	-	-
5323	0% Subs	Allocated according to substation percentage						-	80,195	-	-	-	-	-	-	-	-
5029	0% Subs	Allocated according to substation percentage						-	5,050	-	-	-	-	-	-	-	-
4206	0% Subs	Allocated according to substation percentage						-	-	40,621	-	-	-	-	-	-	-
4242	0% Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-	-
5264	0% Subs	Allocated according to substation percentage						-	15,678	-	-	-	-	-	-	-	-
8150	0% Subs	Allocated according to substation percentage						-	11,776	-	-	-	-	-	-	-	-
5735	0% Subs	Allocated according to substation percentage						-	61,853	-	-	-	-	-	-	-	-
5555	0% Subs	Allocated according to substation percentage						-	43,900	-	-	-	-	-	-	-	-
5308	0% Subs	Allocated according to substation percentage						-	55,476	-	-	-	-	-	-	-	-
5142	0% Subs	Allocated according to substation percentage						-	23,648	-	-	-	-	-	-	-	-
6047	0% Subs	Allocated according to substation percentage						-	-	-	-	10,206	-	-	-	-	-
4784	0% Subs	Allocated according to substation percentage						-	20,788	-	-	-	-	-	-	-	-
8103	0% Subs	Allocated according to substation percentage						-	41,774	-	-	-	-	-	-	-	-
5121	0% Subs	Allocated according to substation percentage						-	54,966	-	-	-	-	-	-	-	-
8162	0% Subs	Allocated according to substation percentage						-	41,774	-	-	-	-	-	-	-	-
5233	0% Subs	Allocated according to substation percentage						-	29,599	-	-	-	-	-	-	-	-
5350	0% Subs	Allocated according to substation percentage						-	28,746	-	-	-	-	-	-	-	-
5115	0% Subs	Allocated according to substation percentage						-	34,188	-	-	-	-	-	-	-	-
5039	0% Subs	Allocated according to substation percentage						-	-	22,357	-	-	-	-	-	-	-
5550	0% Subs	Allocated according to substation percentage						-	10,675	-	-	-	-	-	-	-	-
8156	0% Subs	Allocated according to substation percentage						-	38,810	-	-	-	-	-	-	-	-
5130	0% Subs	Allocated according to substation percentage						-	9,588	-	-	-	-	-	-	-	-
5834	0% Subs	Allocated according to substation percentage						-	7	-	-	-	-	-	-	-	-
5756	0% Subs	Allocated according to substation percentage						-	4	-	-	-	-	-	-	-	-
5771	0% Subs	Allocated according to substation percentage						-	-	352,437	-	-	-	-	-	-	-
5620	0% Subs	Allocated according to substation percentage						-	450	-	-	-	-	-	-	-	-
8297	0% Subs	Allocated according to substation percentage						-	259	-	-	-	-	-	-	-	-
5126	0% Subs	Allocated according to substation percentage						-	2	-	-	-	-	-	-	-	-
1000	Mix Subs	Allocated according to substation percentage						-	-	19,799	-	-	-	-	-	-	-
1250	Mix Subs	Allocated according to substation percentage						-	-	27,323,050	-	-	-	-	-	-	-
1869	Mix Subs	Allocated according to substation percentage						-	2,465,520	7,901,074	-	-	-	-	-	-	-
1870	Mix Subs	Allocated according to substation percentage						-	-	194,959	-	-	-	-	-	-	-
8076 & 199	Mix Subs	Allocated according to substation percentage						302,392	5,793,747	60,733,629	-	-	-	-	-	-	-
2211	Mix Subs	Allocated according to substation percentage						-	277,659	13,948,894	-	-	-	-	-	-	-
2212	Mix Subs	Allocated according to substation percentage						-	-	2,274,534	-	-	-	-	-	-	-
2229	Mix Subs	Allocated according to substation percentage						-	282,649	4,069,886	-	-	-	-	-	-	-
2230	Mix Subs	Allocated according to substation percentage						-	2,536,133	21,641,649	-	-	-	-	-	-	-
2234	Mix Subs	Allocated according to substation percentage						-	-	1,031,434	-	-	-	-	-	-	-
5000	Mix Subs	Allocated according to substation percentage						-	-	3,270,205	-	-	-	-	-	-	-
5011	Mix Subs	Allocated according to substation percentage						-	19,613	4,970,799	36,672,163	-	-	-	-	-	-
5012	Mix Subs	Allocated according to substation percentage						-	2,031,347	111,357,900	248,420,768	-	-	-	-	-	-
5013	Mix Subs	Allocated according to substation percentage						-	457,530	10,756,642	87,906,780	-	-	-	-	-	-
5023	Mix Subs	Allocated according to substation percentage						-	285,620	18,474,509	55,177,463	-	-	-	-	-	-
5024	Mix Subs	Allocated according to substation percentage						-	2,100,227	7,014,920	52,728,066	-	-	-	-	-	-
5025	Mix Subs	Allocated according to substation percentage						-	62,281	9,325,015	40,781,896	-	-	-	-	-	-
5027	Mix Subs	Allocated according to substation percentage						-	97,213	1,384,839	8,804,741	-	-	-	-	-	-
5028	Mix Subs	Allocated according to substation percentage						-	13,018	39,761	6,654,507	-	-	-	-	-	-
5031	Mix Subs	Allocated according to substation percentage						-	8,363	5,594,243	25,207,806	-	-	-	-	-	-
5033	Mix Subs	Allocated according to substation percentage						-	394,843	33,605,056	132,988,332	-	-	-	-	-	-
5035	Mix Subs	Allocated according to substation percentage						-	7,243	1,905,402	61,423,628	-	-	-	-	-	-
5038	Mix Subs	Allocated according to substation percentage						-	123,342	3,723,403	-	-	-	-	-	-	-
5040	Mix Subs	Allocated according to substation percentage						-	-	620,356	20,165,437	-	-	-	-	-	-

Location	Study	Circuit Miles					Balance by FERC Account (Total Transmission) Current Study									
		UG Total	UG ISO	OH Total	OH ISO	Total Miles	Total ISO	350	352	353	354	355	356	357	358	359
5041 & 804	Mix Subs	Allocated according to substation percentage						7,964	703,240	14,991,455	-	-	-	-	-	-
5042 & 804	Mix Subs	Allocated according to substation percentage						48,811	2,772,992	54,426,512	-	-	-	-	-	-
5043	Mix Subs	Allocated according to substation percentage						1,824	201,261	4,509,643	-	-	-	-	-	-
5050	Mix Subs	Allocated according to substation percentage						970,163	18,331,337	59,825,803	-	-	-	-	-	-
5055	Mix Subs	Allocated according to substation percentage						236,194	3,871,817	39,375,983	-	-	-	-	-	-
5056	Mix Subs	Allocated according to substation percentage						184,091	9,167,539	78,765,786	-	-	-	-	-	-
5059	Mix Subs	Allocated according to substation percentage						111,063	10,301,838	30,822,194	-	-	-	-	-	-
5060	Mix Subs	Allocated according to substation percentage						149,547	5,505,584	61,853,258	-	-	-	-	-	-
5062	Mix Subs	Allocated according to substation percentage						34,437	22,524,454	141,745,445	-	-	-	-	-	-
5063	Mix Subs	Allocated according to substation percentage						-	1,890,578	24,239,779	-	-	-	-	-	-
5064	Mix Subs	Allocated according to substation percentage						52,109	25,689,900	85,702,684	-	-	-	-	-	-
5067	Mix Subs	Allocated according to substation percentage						1,370,096	55,306,475	242,851,228	-	-	-	-	-	-
5070 & 80	Mix Subs	Allocated according to substation percentage						311,358	42,371,238	194,085,535	-	-	-	-	-	-
5071	Mix Subs	Allocated according to substation percentage						678,278	5,247,288	41,005,679	-	-	-	-	-	-
5073	Mix Subs	Allocated according to substation percentage						164,680	15,030,588	40,426,480	-	-	-	-	-	-
5075	Mix Subs	Allocated according to substation percentage						164,747	6,544,538	64,852,465	-	-	-	-	-	-
5079	Mix Subs	Allocated according to substation percentage						1,231,926	32,337,653	212,895,600	-	-	-	-	-	-
5081	Mix Subs	Allocated according to substation percentage						86,188	6,193,455	75,318,968	-	-	-	-	-	-
5082	Mix Subs	Allocated according to substation percentage						270,570	6,728,800	71,247,423	-	-	-	-	-	-
5084	Mix Subs	Allocated according to substation percentage						71,802	5,543,125	53,161,047	-	-	-	-	-	-
5085	Mix Subs	Allocated according to substation percentage						813,416	5,685,917	60,818,071	-	-	-	-	-	-
5086	Mix Subs	Allocated according to substation percentage						59,737	5,094,581	79,010,245	-	-	-	-	-	-
5087	Mix Subs	Allocated according to substation percentage						390,538	2,803,767	34,808,161	-	-	-	-	-	-
5088	Mix Subs	Allocated according to substation percentage						557,976	16,440,148	155,984,996	-	-	-	-	-	-
5096	Mix Subs	Allocated according to substation percentage						186,144	4,873,895	62,890,457	-	-	-	-	-	-
5100	Mix Subs	Allocated according to substation percentage						-	-	265,929	-	-	-	-	-	-
5556	Mix Subs	Allocated according to substation percentage						-	46,787	408,193	-	-	-	-	-	-
8065	Mix Subs	Allocated according to substation percentage						5,634,964	-	-	-	-	-	-	-	-
9339	Mix Subs	Allocated according to substation percentage						-	-	14,913	-	-	-	-	-	-
8370	Mix Subs	Allocated according to substation percentage						-	973,459	4,041,118	-	-	-	-	-	-
8063	Mix Subs	Allocated according to substation percentage						-	508,792	15,580,662	-	-	-	-	-	-
6072	Mix Subs	Allocated according to substation percentage						-	7,617	-	-	-	-	-	-	-
9010	Mix Subs	Allocated according to substation percentage						-	-	823	-	-	-	-	-	-
9024	Mix Subs	Allocated according to substation percentage						-	373,558	-	-	-	-	-	-	-
7010	Mix Subs	Allocated according to substation percentage						-	-	-	-	-	-	-	-	-
7056	Mix Subs	Allocated according to substation percentage						-	-	74,798	-	-	-	-	-	-
8000	Mix Subs	Allocated according to substation percentage						110,643	972,123	16,594,803	-	-	-	-	-	-
8006	Mix Subs	Allocated according to substation percentage						-	30,392,778	55,913,280	-	-	-	-	-	-
8037	Mix Subs	Allocated according to substation percentage						17,114	1,632,427	11,530,392	-	-	-	-	-	-
8049	Mix Subs	Allocated according to substation percentage						22,088	12,697,428	128,343,895	-	-	-	-	-	-
9203	Mix Subs	Allocated according to substation percentage						-	-	341,890	-	-	-	-	-	-
9221	Mix Subs	Allocated according to substation percentage						-	-	1,509,815	-	-	-	-	-	-
9243	Mix Subs	Allocated according to substation percentage						-	375,558	2,962,532	-	-	-	-	-	-
9078	Mix Subs	Allocated according to substation percentage						-	8,245	-	-	-	-	-	-	-
9330	Mix Subs	Allocated according to substation percentage						-	-	69,276	-	-	-	-	-	-
2556	Mix Subs	Allocated according to substation percentage						-	1,661,309	15,821,876	-	40,798	25,499	-	-	-
5014	Mix Subs	Allocated according to substation percentage						97,955	6,599,590	64,101,532	-	-	-	-	-	-
5015	Mix Subs	Allocated according to substation percentage						29,300	1,535,860	33,035,287	-	-	-	-	-	4,090
5021	Mix Subs	Allocated according to substation percentage						101,370	14,558,437	139,863,157	-	-	-	-	-	-
5052	Mix Subs	Allocated according to substation percentage						21,983	8,182,843	215,490,881	-	-	-	37,191	-	-
5053	Mix Subs	Allocated according to substation percentage						140,739	4,666,348	61,940,736	-	-	-	-	-	13,555
5069	Mix Subs	Allocated according to substation percentage						474,735	57,501,692	245,571,566	-	123,410	-	-	-	-
5074	Mix Subs	Allocated according to substation percentage						131,263	3,268,838	74,016,337	-	-	-	14,172	-	-
5083	Mix Subs	Allocated according to substation percentage						13,285,971	9,225,366	35,306,224	-	-	-	10	-	-
8012	Mix Subs	Allocated according to substation percentage						629,541	5,216,843	61,369,369	-	-	-	-	-	-
5034	Mix Subs	Allocated according to substation percentage						12,198	3,708,880	46,528,496	-	-	-	-	-	-

LINES:

1000 kV T Lines  
500 kV T Lines  
220 kV T Lines  
161 kV T Lines  
115 kV T Lines  
66 kV T Lines  
55 kV T Lines

Total Lines

Non-Lines:

500kV  
230kV  
115kV

SOUTHERN CALIFORNIA  
Transmission Line Study  
As of December 2021

Location	Study	Balance by FERC Account (ISO Transmission) Current Study									Non ISO Account Balances		
		350	352	353	354	355	356	357	358	359	350	352	353
4026	Lines	2,927,515	10,606,105	27,105	24,473,867	741,658	40,151,492	-	-	795,535	-	-	-
4031	Lines	-	95,841	-	30,018,821	-	65,416,274	-	-	136,841	-	-	-
4034	Lines	-	541	-	7,698,607	-	9,116,844	-	-	668,871	-	-	-
4045	Lines	187,213	106,089	-	701,607	-	453,192	-	-	38,006	-	-	-
4046	Lines	186,657	-	-	214,409	-	62,108	-	-	-	-	-	-
4051	Lines	-	-	-	316,356	-	204,878	-	-	145,317	-	-	-
4059	Lines	13,002	-	-	966,737	-	202,343	-	-	20,953	-	-	-
4070	Lines	-	-	-	-	-	-	-	-	-	61,040	-	-
4101	Lines	1,506,866	773,655	95,623	27,206,231	3,157,121	45,269,367	-	-	1,118,492	44,940	23,073	2,852
4102	Lines	997,926	-	-	1,871,389	254,076	3,382,199	-	-	561,079	468,201	-	-
4104	Lines	15,018,787	79,782	29,270	126,690,951	46,645,243	116,317,090	-	-	33,492,696	445,646	2,367	869
4105	Lines	636,728	256,416	241,546	685,311	23,652,903	6,560,771	-	-	372,539	33,251,139	13,390,548	12,613,980
4107	Lines	4,278,569	1,337,192	4,424,314	139,664,861	21,681,885	63,977,850	-	-	88,569,523	-	-	-
4108	Lines	8,072,253	4,568,761	-	17,142,419	1,472,898	14,513,710	-	-	1,734,061	-	-	-
4109	Lines	-	25,255	-	-	16,469	467,285	-	-	-	-	-	-
4111	Lines	-	-	-	-	-	-	-	-	-	1,944	-	-
4113	Lines	874,872	23,989	-	20,158,137	77,656,081	16,572,889	-	-	631,018	-	-	-
4114	Lines	2,995,453	1,346,068	616,888	16,832,037	7,261,318	18,212,594	-	-	283,794	215,081	96,651	44,294
4115	Lines	1,607,024	616,675	2,149	4,183,107	498,077	2,127,313	-	-	27,417	-	-	-
4116	Lines	3,418,626	510,154	1,964	3,364,860	10,930,699	9,346,602	180,589	456,828	12,894	175,927	26,253	101
4117	Lines	1,141,243	135,044	12,857	26,014,967	5,060,406	12,612,157	-	-	151,162	-	-	-
4119	Lines	2,101,337	503,857	101	34,568,369	398,849	27,396,197	-	-	2,830,220	-	-	-
4120	Lines	3,848,254	767,105	795,059	7,587,282	3,059,728	6,325,904	225	-	29,356	532,733	106,194	110,064
4121	Lines	209,639	131,150	-	17,133,469	3,423,698	9,841,181	-	-	250,994	-	-	-
4123	Lines	1,749,466	-	16,633	14,101,498	103,494	7,195,860	-	-	1,891	-	-	-
4124	Lines	-	-	-	-	-	-	-	-	-	485	-	-
4125	Lines	9,896,559	2,117,167	1,426	27,233,383	2,500,685	13,660,749	-	-	1,336,882	3,414,424	730,447	492
4127	Lines	19,842	-	-	700,024	8,020	549,803	-	-	5,205	-	-	-
4128	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4129	Lines	-	-	-	-	-	-	-	-	-	31,413	-	-
4130	Lines	157,990	-	-	1,471,682	-	517,455	-	-	19,051	-	-	-
4132	Lines	-	-	-	-	-	-	-	-	-	3,146	-	-
4133	Lines	-	-	-	-	-	-	-	-	-	46,874	-	-
4136	Lines	1,330,373	-	-	17,938,062	2,050,363	10,656,252	-	-	117,747	-	-	-
4137	Lines	16,589	-	-	3,643,443	-	4,529,049	-	-	20,088	-	-	-
4138	Lines	9,751,973	3,101,623	98	35,252,656	118,240	24,914,542	-	-	591,464	-	-	-
4139	Lines	-	-	-	-	-	-	-	-	-	517	-	-
4140	Lines	278,112	7,308	-	25,306,365	1,513,721	10,310,625	-	-	329,333	-	-	-
4141	Lines	76,199	-	-	10,730,316	-	2,938,837	-	-	55,916	-	-	-
4142	Lines	-	-	-	-	-	-	-	-	-	25,409	-	3,488
4143	Lines	6,167	-	-	7,143,660	-	3,322,346	-	-	145,064	-	-	-
4144	Lines	9,994	-	-	907,758	(2,826)	429,215	-	-	1,023	-	-	-
4147	Lines	3,884,037	-	1,880	2,765,700	-	11,000,495	-	-	145,187	-	-	-
4148	Lines	1,733,248	-	-	27,661,022	-	7,820,475	-	-	761,201	-	-	-
4149	Lines	-	-	-	-	-	-	-	-	-	232	-	-
4153	Lines	-	-	-	-	-	-	-	-	-	309,032	-	-
4154	Lines	748,544	51,478	-	2,834,578	-	759,625	-	-	-	-	-	-
4155	Lines	5,825,616	-	-	20,858,769	1,757,686	7,511,408	-	-	187,772	-	-	-
4156	Lines	12,018,447	-	-	2,262,700	6,476,819	2,971,326	-	-	38,262	-	-	-
4157	Lines	105,605	18,610	-	9,924,999	5,178,581	10,040,756	-	-	537,026	-	-	-
4158	Lines	-	-	-	-	-	-	-	-	-	498,252	-	-
4166	Lines	9,034	-	-	164,051	-	136,431	-	-	-	-	-	-
4168	Lines	-	-	-	-	-	-	-	-	-	-	4,331	523,515
4169	Lines	11,457,326	677,162	866,223	20,433,515	51,941,651	75,578,927	-	-	1,220,727	262,213	15,498	19,824
4185	Lines	14,776,950	-	-	296,890,541	2,866,726	199,100,997	-	1,151,660	796,920	-	-	-
4186	Lines	1,193,710	-	-	22,930,180	-	24,561,685	-	-	147,245	-	-	-
4187	Lines	10,435,644	192,106	-	225,524,404	306,070	49,025,951	-	-	18,238,694	-	-	-
4188	Lines	2,855,109	385,937	-	25,551,539	514,984	14,907,621	-	-	2,640,525	-	-	-
4189	Lines	78,248	37,274	-	1,521,458	-	1,397,144	-	-	-	-	-	-
4191	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4193	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4207	Lines	-	-	-	-	-	-	-	-	-	25,798	-	-
4211	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4300	Lines	-	-	-	-	-	-	-	-	-	229,033	14,696	-
4360	Lines	26,140,392	2,870,912	-	619,213,691	95,008,492	237,174,486	215,086,929	42,097,825	51,891,974	-	-	-
4400	Lines	-	-	-	-	-	-	-	-	-	3,127	433,988	92,729
4500	Lines	-	-	-	-	-	-	-	-	-	-	1,650,139	916,891
4600	Lines	-	-	-	-	-	-	-	-	-	-	2,007,612	-
4644	Lines	3,934,890	-	-	88,749,726	7,668,801	42,808,798	-	-	3,941,302	-	-	-
4700	Lines	-	-	-	-	-	-	-	-	-	46,629	522,260	591,382
4708	Lines	16,796,780	-	-	14,032,500	30,806,236	20,048,113	-	-	-	-	-	-
4709	Lines	-	-	-	3,268,655	-	12,122,060	-	15,046,586	-	-	-	-
4710	Lines	15,917,279	-	-	42,532,775	-	38,248,497	-	-	2,227,281	-	-	-
4711	Lines	71,262	-	-	56,720,609	(10,509)	20,121,664	-	-	-	-	-	-
4712	Lines	11,885,452	-	-	167,665,138	6,874,070	50,353,934	-	-	-	-	-	-
4716	Lines	-	-	-	237,004	-	-	-	-	-	-	-	-
4730	Lines	-	-	-	-	-	-	-	-	-	10,585	-	-
4731	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4732	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4733	Lines	-	-	-	25,282,715	1,258,272	20,581,547	-	-	-	-	-	-
4734	Lines	352,196	-	-	49,426,495	666,768	164,687,185	-	-	2,600,779	-	-	-
4755	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4756	Lines	1,079,238	16,401	-	6,958,865	568,180	4,604,528	-	-	119,281	-	-	-
4759	Lines	33,310	-	-	-	2,841,800	331,263	-	-	4,845	-	-	-
4781	Lines	1,277	-	-	98,307	43,204	94,968	-	-	1,376	-	-	-
4782	Lines	165,196	-	-	327,795	1,893,719	811,371	-	-	21,669	-	-	-
4792	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4799	Lines	-	-	-	-	-	-	-	-	-	321,805	-	-
4800	Lines	-	-	-	-	-	-	-	-	-	2,931	1,543,933	711,670
4647	Lines	-	7,378	-	-	-	-	-	-	-	-	-	-
4900	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4106	Lines	-	-	-	-	-	-	-	-	-	315,778	-	-

Location	Study	Balance by FERC Account (ISO Transmission) Current Study								Non ISO Account Balances			
		350	352	353	354	355	356	357	358	359	350	352	353
4106	Lines	-	-	-	-	-	-	-	-	-	247,343	-	-
4118	Lines	5,611,464	1,065,072	33,582	21,333,311	519,408	14,596,471	-	-	180,159	-	-	-
4118	Lines	-	-	-	-	-	-	-	-	-	-	-	-
4135	Lines	1,005,941	63,534	-	5,267,267	619,789	3,224,443	-	-	49,162	1,181,299	74,609	-
4135	Lines	423,064	26,720	-	2,215,227	260,661	1,356,087	-	-	20,676	-	-	-
4735	Lines	-	-	-	-	-	-	-	-	-	(3)	126,379	-
4735	Lines	-	-	-	-	-	-	-	-	-	(8)	379,352	-
4750	Lines	4,908,405	91,643	5,105,153	1,939,230	89,057,297	33,077,343	-	-	553,410	11,449,812	213,775	11,908,762
4750	Lines	-	-	-	-	-	-	-	-	-	1,453	27	1,511
4705	Lines	188,043	1,573,386	-	1,896,555	23,293,765	1,954,702	-	-	26,717	27,979	234,108	-
4705	Lines	-	-	-	-	-	-	-	-	-	36,291	303,657	-
2236	100% Subs	-	41,031	5,601,743	-	-	-	-	-	-	-	-	-
2570	100% Subs	-	381,449	7,806,993	-	-	-	-	-	-	-	-	-
5001	100% Subs	-	-	62,090,661	-	-	-	-	-	-	-	-	-
5019	100% Subs	-	85,990	4,133,127	-	-	-	-	-	-	-	-	-
5026	100% Subs	12,470	1,756,170	8,406,949	-	-	-	-	-	-	-	-	-
5032	100% Subs	-	482,279	14,445,957	-	-	-	-	-	-	-	-	-
5036	100% Subs	21,435	1,724,275	17,457,869	-	-	-	-	-	-	-	-	-
5044	100% Subs	-	-	1,476,690	-	-	-	-	-	-	-	-	-
5045	100% Subs	-	3,991,463	21,876,128	-	-	-	-	-	-	-	-	-
5047	100% Subs	1,844,367	24,976,893	156,446,853	-	-	-	-	-	-	-	-	-
5054 & 895	100% Subs	17,324,279	55,266,224	245,020,059	-	-	-	-	-	-	-	-	-
5058	100% Subs	-	22,786	1,948,141	-	-	-	-	-	-	-	-	-
5061	100% Subs	90,981	41,395,133	158,323,595	-	-	-	-	-	-	-	-	-
5065	100% Subs	-	642,499	5,270,269	-	-	-	-	-	-	-	-	-
5089	100% Subs	1,444	352,755	5,409,584	-	-	-	-	-	-	-	-	-
5091	100% Subs	-	12,205	12,306	-	-	-	-	-	-	-	-	-
5092	100% Subs	-	-	1,516,885	-	-	-	-	-	-	-	-	-
5094	100% Subs	-	870,601	8,323,790	-	-	-	-	-	-	-	-	-
5097	100% Subs	-	486,323	8,775,373	-	-	-	-	-	-	-	-	-
8060	100% Subs	-	37,422,319	198,111,145	-	-	-	-	-	-	-	-	-
8084	100% Subs	-	6,985,990	4,186,391	-	-	-	-	-	-	-	-	-
8367	100% Subs	-	40,297,018	166,917,119	-	-	-	-	-	-	-	-	-
8372	100% Subs	-	11,978,708	19,128,452	-	-	-	-	-	-	-	-	-
8960	100% Subs	-	14,904,714	16,168,968	-	-	-	-	-	-	-	-	-
8932	100% Subs	-	162,585	13,930,693	-	-	-	-	-	-	-	-	-
8950	100% Subs	-	55,269	942,130	-	-	-	-	-	-	-	-	-
9219	100% Subs	23,373,809	82,393	-	-	-	-	-	-	-	-	-	-
5090	100% Subs	13,183	51,757,663	235,059,184	-	-	-	-	-	94,492	-	-	-
5080	100% Subs	1,226,475	42,312,563	214,023,536	-	-	-	-	-	2,236,590	-	-	-
5093	100% Subs	-	1,797,455	51,247,454	-	-	-	-	-	-	-	-	-
8958	100% Subs	51,663	7,768,618	223,064,208	2,505,376	-	359,913	-	-	-	-	-	-
5010	100% Subs	-	688,345	(30,051)	-	-	-	-	-	-	-	-	-
5018	100% Subs	-	(0)	0	-	-	-	-	-	-	-	-	-
8363	100% Subs	-	13,309,986	33,316,997	-	-	-	-	-	-	-	-	-
8369	100% Subs	-	93,692,706	125,330,941	-	-	-	-	-	-	-	-	-
8375	100% Subs	-	-	14,699	-	-	-	-	-	-	-	-	-
4741	100% Subs	-	-	-	64,409	-	17,263	-	-	-	-	-	-
9285	100% Subs	-	-	37,054	-	-	-	-	-	-	-	-	-
4743	100% Subs	-	-	-	31,041	-	14,475	-	-	-	-	-	-
4744	100% Subs	-	-	-	(22)	-	-	-	-	-	-	-	-
4848	100% Subs	-	-	-	7,943	-	-	-	-	-	-	-	-
4357	100% Subs	-	-	-	-	-	-	-	-	-	-	-	-
4349	100% Subs	-	4,448	-	-	-	-	-	-	-	-	-	-
4626	100% Subs	-	275,784	-	-	-	-	-	-	-	-	-	-
TERNALORC	0% Subs	-	-	1,086	-	-	-	-	-	-	-	-	781
1451	0% Subs	-	-	-	-	-	-	-	-	-	-	-	35,855
2150	0% Subs	-	-	-	-	-	-	-	-	-	-	-	24,016
2202	0% Subs	-	-	-	-	-	-	-	-	-	-	-	1,641,022
2237	0% Subs	-	-	-	-	-	-	-	-	-	-	-	68,246
2238	0% Subs	-	-	-	-	-	-	-	-	-	46,311	4,161,789	-
2239	0% Subs	-	-	-	-	-	-	-	-	-	678,338	5,077,276	-
2300	0% Subs	-	-	-	-	-	-	-	-	-	-	-	10,367
2301	0% Subs	-	-	-	-	-	-	-	-	-	-	-	421,924
2303	0% Subs	-	-	-	-	-	-	-	-	-	-	-	140,226
2305	0% Subs	-	-	-	-	-	-	-	-	-	-	-	692,140
2307	0% Subs	-	-	-	-	-	-	-	-	-	-	-	572,929
2309	0% Subs	-	-	-	-	-	-	-	-	-	-	-	193,975
2313	0% Subs	-	-	-	-	-	-	-	-	-	-	-	643,018
2314	0% Subs	-	-	-	-	-	-	-	-	-	4,184	-	-
2315	0% Subs	-	-	-	-	-	-	-	-	-	1,383	-	-
2317	0% Subs	-	-	-	-	-	-	-	-	-	-	-	36,406
2318	0% Subs	-	-	-	-	-	-	-	-	-	-	-	14,930
2319	0% Subs	-	-	-	-	-	-	-	-	-	1,464	-	7,316
2324	0% Subs	-	-	-	-	-	-	-	-	-	-	-	52,080
2325	0% Subs	-	-	-	-	-	-	-	-	-	-	-	625,062
2326	0% Subs	-	-	-	-	-	-	-	-	-	2,694	-	49,126
2327	0% Subs	-	-	-	-	-	-	-	-	-	-	-	57,269
2328	0% Subs	-	-	-	-	-	-	-	-	-	-	-	50,834
2328	0% Subs	-	-	-	-	-	-	-	-	-	-	-	460,723
2331	0% Subs	-	-	-	-	-	-	-	-	-	-	-	205,914
2500	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
2501	0% Subs	-	-	-	-	-	-	-	-	-	7,254	-	-
2503	0% Subs	-	-	-	-	-	-	-	-	-	-	-	705,804
2560 & 251	0% Subs	-	-	-	-	-	-	-	-	-	-	-	196,344
2512	0% Subs	-	-	-	-	-	-	-	-	-	317,627	5,816,830	-
2514	0% Subs	-	-	-	-	-	-	-	-	-	3,682	-	509,477
2522	0% Subs	-	-	-	-	-	-	-	-	-	-	-	175,912
2523	0% Subs	-	-	-	-	-	-	-	-	-	-	-	80,487
2524	0% Subs	-	-	-	-	-	-	-	-	-	-	-	1,847,927
2525	0% Subs	-	-	-	-	-	-	-	-	-	-	-	86,641
2526	0% Subs	-	-	-	-	-	-	-	-	-	-	-	84,347
2526	0% Subs	-	-	-	-	-	-	-	-	-	-	-	39,098
2553	0% Subs	-	-	-	-	-	-	-	-	-	-	1,343	52,264
2557	0% Subs	-	-	-	-	-	-	-	-	-	2,119	442,110	9,690,765



Location	Study	Balance by FERC Account (ISO Transmission) Current Study								Non ISO Account Balances			
		350	352	353	354	355	356	357	358	359	350	352	353
2561	0% Subs	-	-	-	-	-	-	-	-	-	344	283,997	2,302,338
2571	0% Subs	-	-	-	-	-	-	-	-	-	-	100,772	1,792,432
2582	0% Subs	-	-	-	-	-	-	-	-	-	400,881	-	344,073
2598	0% Subs	-	-	-	-	-	-	-	-	-	-	-	(230)
3717	0% Subs	-	-	-	-	-	-	-	-	-	714	-	-
5016	0% Subs	-	-	-	-	-	-	-	-	-	-	29,473	15,138
5022	0% Subs	-	-	-	-	-	-	-	-	-	-	44,764	963,824
5046	0% Subs	-	-	-	-	-	-	-	-	-	48,136	156,227	3,179,929
5048	0% Subs	-	-	-	-	-	-	-	-	-	49,104	171,619	5,601,462
5049	0% Subs	-	-	-	-	-	-	-	-	-	158,170	34,483	6,118,817
5051	0% Subs	-	-	-	-	-	-	-	-	-	13,373	4,965,855	80,386,376
5066	0% Subs	-	-	-	-	-	-	-	-	-	-	63,093	2,064,623
5068	0% Subs	-	-	-	-	-	-	-	-	-	-	54,471	4,222,649
5072	0% Subs	-	-	-	-	-	-	-	-	-	-	40,279	155,442
5078	0% Subs	-	-	-	-	-	-	-	-	-	21,660	262,196	4,960,480
5095	0% Subs	-	-	-	-	-	-	-	-	-	2,415,092	2,377,770	26,609,450
5101	0% Subs	-	-	-	-	-	-	-	-	-	-	83,447	2,771,763
5107	0% Subs	-	-	-	-	-	-	-	-	-	4,583	16,136	-
5109	0% Subs	-	-	-	-	-	-	-	-	-	-	-	2,451
5112	0% Subs	-	-	-	-	-	-	-	-	-	-	-	2,049
5116	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5141	0% Subs	-	-	-	-	-	-	-	-	-	-	38,757	22
5158	0% Subs	-	-	-	-	-	-	-	-	-	-	-	123
5161	0% Subs	-	-	-	-	-	-	-	-	-	-	-	(47,687)
5162	0% Subs	-	-	-	-	-	-	-	-	-	-	2,466	17,195
5165	0% Subs	-	-	-	-	-	-	-	-	-	-	-	3,666
5167	0% Subs	-	-	-	-	-	-	-	-	-	-	118,272	91,972
5170	0% Subs	-	-	-	-	-	-	-	-	-	-	-	17,367
5178	0% Subs	-	-	-	-	-	-	-	-	-	3,995	-	-
5179	0% Subs	-	-	-	-	-	-	-	-	-	-	154,829	-
5185	0% Subs	-	-	-	-	-	-	-	-	-	-	-	37,984
5186	0% Subs	-	-	-	-	-	-	-	-	-	-	16,955	31,589
5196	0% Subs	-	-	-	-	-	-	-	-	-	-	71,448	-
5198	0% Subs	-	-	-	-	-	-	-	-	-	-	25,705	2,046,562
5204	0% Subs	-	-	-	-	-	-	-	-	-	-	61,263	-
5207	0% Subs	-	-	-	-	-	-	-	-	-	-	41,604	-
5211	0% Subs	-	-	-	-	-	-	-	-	-	-	29,751	-
5213	0% Subs	-	-	-	-	-	-	-	-	-	-	14,957	17,794
5224	0% Subs	-	-	-	-	-	-	-	-	-	-	14,955	-
5235	0% Subs	-	-	-	-	-	-	-	-	-	-	58,264	17,508
5236	0% Subs	-	-	-	-	-	-	-	-	-	-	-	24,710
5238	0% Subs	-	-	-	-	-	-	-	-	-	-	44,342	-
5241	0% Subs	-	-	-	-	-	-	-	-	-	4,415	-	-
5250	0% Subs	-	-	-	-	-	-	-	-	-	-	59,249	-
5257	0% Subs	-	-	-	-	-	-	-	-	-	-	14,957	-
5259	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5273	0% Subs	-	-	-	-	-	-	-	-	-	-	-	0
5315	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5325	0% Subs	-	-	-	-	-	-	-	-	-	-	-	14,882
5333	0% Subs	-	-	-	-	-	-	-	-	-	-	15,418	74,641
5352	0% Subs	-	-	-	-	-	-	-	-	-	-	-	9,627
5357	0% Subs	-	-	-	-	-	-	-	-	-	-	-	119,219
5358	0% Subs	-	-	-	-	-	-	-	-	-	-	234	1,156,662
5365	0% Subs	-	-	-	-	-	-	-	-	-	24,167	-	15,397
5374	0% Subs	-	-	-	-	-	-	-	-	-	801,825	-	-
5375	0% Subs	-	-	-	-	-	-	-	-	-	573,588	-	-
5504	0% Subs	-	-	-	-	-	-	-	-	-	-	-	(251)
5506	0% Subs	-	-	-	-	-	-	-	-	-	-	116,483	-
5507	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5508	0% Subs	-	-	-	-	-	-	-	-	-	-	-	424,747
5510	0% Subs	-	-	-	-	-	-	-	-	-	-	5,566	-
5511	0% Subs	-	-	-	-	-	-	-	-	-	-	-	526,259
5514	0% Subs	-	-	-	-	-	-	-	-	-	-	-	1,071,949
5518	0% Subs	-	-	-	-	-	-	-	-	-	-	-	1,690,353
5522	0% Subs	-	-	-	-	-	-	-	-	-	-	-	911,750
5526	0% Subs	-	-	-	-	-	-	-	-	-	-	13,050	-
5530	0% Subs	-	-	-	-	-	-	-	-	-	-	89,829	275,391
5531	0% Subs	-	-	-	-	-	-	-	-	-	-	40,153	-
5538	0% Subs	-	-	-	-	-	-	-	-	-	-	52,173	-
5539	0% Subs	-	-	-	-	-	-	-	-	-	-	-	76,359
5541	0% Subs	-	-	-	-	-	-	-	-	-	-	66,626	652,233
5545	0% Subs	-	-	-	-	-	-	-	-	-	-	11,023	149,257
5546	0% Subs	-	-	-	-	-	-	-	-	-	-	-	3,072
5547	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5548	0% Subs	-	-	-	-	-	-	-	-	-	-	-	397,008
5553	0% Subs	-	-	-	-	-	-	-	-	-	-	15,551	367,757
5557	0% Subs	-	-	-	-	-	-	-	-	-	-	-	692,110
5562	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5564	0% Subs	-	-	-	-	-	-	-	-	-	-	-	644,295
5566	0% Subs	-	-	-	-	-	-	-	-	-	-	19,046	220,467
5599	0% Subs	-	-	-	-	-	-	-	-	-	-	-	499,396
5601	0% Subs	-	-	-	-	-	-	-	-	-	-	20,403	56,150
5606	0% Subs	-	-	-	-	-	-	-	-	-	-	13,596	-
5612	0% Subs	-	-	-	-	-	-	-	-	-	-	20,750	-
5615	0% Subs	-	-	-	-	-	-	-	-	-	-	-	23,032
5631	0% Subs	-	-	-	-	-	-	-	-	-	-	-	7,606
5646	0% Subs	-	-	-	-	-	-	-	-	-	-	43,167	-
5652	0% Subs	-	-	-	-	-	-	-	-	-	-	-	531,131
5655	0% Subs	-	-	-	-	-	-	-	-	-	-	16,835	525,170
5659	0% Subs	-	-	-	-	-	-	-	-	-	-	-	206,393
5664	0% Subs	-	-	-	-	-	-	-	-	-	-	1,282	17,343
5670	0% Subs	-	-	-	-	-	-	-	-	-	-	-	17,327
5674	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5678	0% Subs	-	-	-	-	-	-	-	-	-	-	57,591	-
5740	0% Subs	-	-	-	-	-	-	-	-	-	-	-	114,340

Location	Study	Balance by FERC Account (ISO Transmission) Current Study								Non ISO Account Balances			
		350	352	353	354	355	356	357	358	359	350	352	353
5758	0% Subs	-	-	-	-	-	-	-	-	-	-	-	3,790
5787	0% Subs	-	-	-	-	-	-	-	-	-	-	-	17,255
5788	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5798	0% Subs	-	-	-	-	-	-	-	-	-	1,963	-	17,658
5811	0% Subs	-	-	-	-	-	-	-	-	-	-	-	58,207
5814	0% Subs	-	-	-	-	-	-	-	-	-	-	14,314	128,669
5816	0% Subs	-	-	-	-	-	-	-	-	-	-	93,280	-
5828	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5842	0% Subs	-	-	-	-	-	-	-	-	-	-	-	58,101
5843	0% Subs	-	-	-	-	-	-	-	-	-	-	32,505	-
5849	0% Subs	-	-	-	-	-	-	-	-	-	-	6,882	-
5853	0% Subs	-	-	-	-	-	-	-	-	-	-	-	24,273
5860	0% Subs	-	-	-	-	-	-	-	-	-	241,262	-	-
5862	0% Subs	-	-	-	-	-	-	-	-	-	-	-	230,879
5865	0% Subs	-	-	-	-	-	-	-	-	-	-	-	41,148
5869	0% Subs	-	-	-	-	-	-	-	-	-	-	50,680	-
5878	0% Subs	-	-	-	-	-	-	-	-	-	11,308	-	-
5892	0% Subs	-	-	-	-	-	-	-	-	-	-	12,346	96,987
5896	0% Subs	-	-	-	-	-	-	-	-	-	-	-	21,384
5902	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
7013	0% Subs	-	-	-	-	-	-	-	-	-	4,664,177	-	-
8003	0% Subs	-	-	-	-	-	-	-	-	-	-	-	1,702
8004	0% Subs	-	-	-	-	-	-	-	-	-	106,825	827,523	8,446,526
8005	0% Subs	-	-	-	-	-	-	-	-	-	25,609	996,193	9,315,318
8009	0% Subs	-	-	-	-	-	-	-	-	-	139,611	795,504	11,430,982
8010	0% Subs	-	-	-	-	-	-	-	-	-	-	58,798	641,248
8011	0% Subs	-	-	-	-	-	-	-	-	-	154,446	791,087	12,212,107
8013	0% Subs	-	-	-	-	-	-	-	-	-	-	-	35,320
8014	0% Subs	-	-	-	-	-	-	-	-	-	-	1,389,452	10,473,161
8016	0% Subs	-	-	-	-	-	-	-	-	-	969,397	1,494,208	15,123,246
8017	0% Subs	-	-	-	-	-	-	-	-	-	-	692,804	13,099,132
8018	0% Subs	-	-	-	-	-	-	-	-	-	285,201	945,811	9,581,425
8019	0% Subs	-	-	-	-	-	-	-	-	-	83,538	1,248,278	19,987,844
8020	0% Subs	-	-	-	-	-	-	-	-	-	33,940	530,026	12,025,852
8021	0% Subs	-	-	-	-	-	-	-	-	-	29,280	1,477,177	14,791,148
8022	0% Subs	-	-	-	-	-	-	-	-	-	17,579	512,277	11,103,203
8023	0% Subs	-	-	-	-	-	-	-	-	-	19,474	647,647	11,822,378
8024	0% Subs	-	-	-	-	-	-	-	-	-	-	41,871	912,016
8025	0% Subs	-	-	-	-	-	-	-	-	-	45,514	2,741,088	26,080,036
8026	0% Subs	-	-	-	-	-	-	-	-	-	-	250,900	2,735,419
8027	0% Subs	-	-	-	-	-	-	-	-	-	20,210	1,586,414	16,216,180
8028	0% Subs	-	-	-	-	-	-	-	-	-	22,426	1,796,115	11,561,373
8029	0% Subs	-	-	-	-	-	-	-	-	-	-	53,166	2,947,167
8030	0% Subs	-	-	-	-	-	-	-	-	-	1,154,541	2,612,000	18,805,490
8031	0% Subs	-	-	-	-	-	-	-	-	-	70,286	50,241	4,598,233
8032	0% Subs	-	-	-	-	-	-	-	-	-	116	416,451	5,837,477
8033	0% Subs	-	-	-	-	-	-	-	-	-	-	18,045	283,935
8035	0% Subs	-	-	-	-	-	-	-	-	-	-	112,531	7,325,083
8036	0% Subs	-	-	-	-	-	-	-	-	-	152,559	1,723,775	9,593,799
8038	0% Subs	-	-	-	-	-	-	-	-	-	44,689	739,368	21,708,734
8039	0% Subs	-	-	-	-	-	-	-	-	-	22,819	1,337,012	14,335,859
8041	0% Subs	-	-	-	-	-	-	-	-	-	174,875	665,463	5,823,692
8042	0% Subs	-	-	-	-	-	-	-	-	-	27,167	405,785	2,858,479
8044	0% Subs	-	-	-	-	-	-	-	-	-	27,870	2,639,595	23,491,761
8045	0% Subs	-	-	-	-	-	-	-	-	-	34,673	1,742,523	18,205,466
8047	0% Subs	-	-	-	-	-	-	-	-	-	39,144	-	23,873
8048	0% Subs	-	-	-	-	-	-	-	-	-	-	218,704	1,530,163
8055	0% Subs	-	-	-	-	-	-	-	-	-	-	64,707	7,986,333
8059	0% Subs	-	-	-	-	-	-	-	-	-	-	1,796,202	12,392,604
8061	0% Subs	-	-	-	-	-	-	-	-	-	-	175,506	1,357,312
8064	0% Subs	-	-	-	-	-	-	-	-	-	2,976	463	315,815
8072	0% Subs	-	-	-	-	-	-	-	-	-	-	-	11,459
8073	0% Subs	-	-	-	-	-	-	-	-	-	-	562,701	10,569,669
8074	0% Subs	-	-	-	-	-	-	-	-	-	166,697	2,210,630	8,904,023
8075	0% Subs	-	-	-	-	-	-	-	-	-	-	61,762	1,925,650
8079	0% Subs	-	-	-	-	-	-	-	-	-	7,139	178,624	2,719,168
8082	0% Subs	-	-	-	-	-	-	-	-	-	2,880	937,785	11,523,111
8086	0% Subs	-	-	-	-	-	-	-	-	-	161,883	1,005,687	7,628,181
8087	0% Subs	-	-	-	-	-	-	-	-	-	25,836	1,003,523	11,366,861
8088	0% Subs	-	-	-	-	-	-	-	-	-	22,150	526,265	10,975,923
8089	0% Subs	-	-	-	-	-	-	-	-	-	81,206	2,808,006	10,727,254
8090	0% Subs	-	-	-	-	-	-	-	-	-	23,090	468,965	16,212,114
8091	0% Subs	-	-	-	-	-	-	-	-	-	-	-	87,113
8092	0% Subs	-	-	-	-	-	-	-	-	-	-	-	15,844
8093	0% Subs	-	-	-	-	-	-	-	-	-	-	-	6,807
8094	0% Subs	-	-	-	-	-	-	-	-	-	42,272	1,728,031	11,611,250
8095	0% Subs	-	-	-	-	-	-	-	-	-	-	540,962	6,318,967
8097	0% Subs	-	-	-	-	-	-	-	-	-	23,493	1,190,046	10,243,498
8099	0% Subs	-	-	-	-	-	-	-	-	-	4,913	140,330	722,246
8102	0% Subs	-	-	-	-	-	-	-	-	-	125,967	418,345	16,528,148
8104	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8110	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8113	0% Subs	-	-	-	-	-	-	-	-	-	-	6,894	59,447
8117	0% Subs	-	-	-	-	-	-	-	-	-	-	22,511	440,016
8120	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8132	0% Subs	-	-	-	-	-	-	-	-	-	-	15,598	-
8137	0% Subs	-	-	-	-	-	-	-	-	-	-	40,911	-
8152	0% Subs	-	-	-	-	-	-	-	-	-	82,401	5,774,614	17,131,256
8163	0% Subs	-	-	-	-	-	-	-	-	-	-	15,642	27,225
8179	0% Subs	-	-	-	-	-	-	-	-	-	-	15,110	81,054
8182	0% Subs	-	-	-	-	-	-	-	-	-	1,488,635	-	-
8190	0% Subs	-	-	-	-	-	-	-	-	-	-	209,778	1,283,195
8193	0% Subs	-	-	-	-	-	-	-	-	-	-	-	5,725
8195	0% Subs	-	-	-	-	-	-	-	-	-	104,923	786,407	5,948,274
8197	0% Subs	-	-	-	-	-	-	-	-	-	-	20,720	21,911
		-	-	-	-	-	-	-	-	-	-	-	882,819

Location	Study	Balance by FERC Account (ISO Transmission) Current Study								Non ISO Account Balances			
		350	352	353	354	355	356	357	358	359	350	352	353
8198	0% Subs	-	-	-	-	-	-	-	-	-	-	-	132,416
8204	0% Subs	-	-	-	-	-	-	-	-	-	-	48,986	-
8212	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8214	0% Subs	-	-	-	-	-	-	-	-	-	-	60,590	-
8220	0% Subs	-	-	-	-	-	-	-	-	-	-	13,167	-
8222	0% Subs	-	-	-	-	-	-	-	-	-	-	6,894	2,107
8225	0% Subs	-	-	-	-	-	-	-	-	-	-	17,716	30,776
8226	0% Subs	-	-	-	-	-	-	-	-	-	-	-	17,438
8234	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8250	0% Subs	-	-	-	-	-	-	-	-	-	-	-	4,236
8260	0% Subs	-	-	-	-	-	-	-	-	-	-	18,135	22,159
8267	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8268	0% Subs	-	-	-	-	-	-	-	-	-	-	23,195	-
8270	0% Subs	-	-	-	-	-	-	-	-	-	-	17,764	21,919
8273	0% Subs	-	-	-	-	-	-	-	-	-	-	8,651	-
8283	0% Subs	-	-	-	-	-	-	-	-	-	-	533,657	5,311,676
8294	0% Subs	-	-	-	-	-	-	-	-	-	-	6,894	-
8301	0% Subs	-	-	-	-	-	-	-	-	-	-	37,771	751,981
8302	0% Subs	-	-	-	-	-	-	-	-	-	-	29,827	78,542
8303	0% Subs	-	-	-	-	-	-	-	-	-	-	51,653	814,074
8304	0% Subs	-	-	-	-	-	-	-	-	-	-	-	371,041
8305	0% Subs	-	-	-	-	-	-	-	-	-	-	25,366	1,061,136
8306	0% Subs	-	-	-	-	-	-	-	-	-	-	26,170	2,286,515
8308	0% Subs	-	-	-	-	-	-	-	-	-	-	1,022	25,028
8310	0% Subs	-	-	-	-	-	-	-	-	-	-	5,398	226,460
8311	0% Subs	-	-	-	-	-	-	-	-	-	-	4,899	236,563
8312	0% Subs	-	-	-	-	-	-	-	-	-	532	6,214	432,703
8314	0% Subs	-	-	-	-	-	-	-	-	-	-	112,388	2,464,391
8320	0% Subs	-	-	-	-	-	-	-	-	-	-	-	45,594
8321	0% Subs	-	-	-	-	-	-	-	-	-	-	-	11,755
8322	0% Subs	-	-	-	-	-	-	-	-	-	-	-	53,056
8323	0% Subs	-	-	-	-	-	-	-	-	-	-	-	8,814
8324	0% Subs	-	-	-	-	-	-	-	-	-	-	-	39,130
8325	0% Subs	-	-	-	-	-	-	-	-	-	-	-	119,704
8326	0% Subs	-	-	-	-	-	-	-	-	-	-	-	83,150
8327	0% Subs	-	-	-	-	-	-	-	-	-	-	-	74,085
8340	0% Subs	-	-	-	-	-	-	-	-	-	-	42,538	654,012
8342	0% Subs	-	-	-	-	-	-	-	-	-	51,172	1,223,085	12,020,606
8343	0% Subs	-	-	-	-	-	-	-	-	-	20,961	1,435,426	19,061,279
8344	0% Subs	-	-	-	-	-	-	-	-	-	12,179	170,995	2,017,154
8345	0% Subs	-	-	-	-	-	-	-	-	-	222,600	919,449	14,403,857
8346	0% Subs	-	-	-	-	-	-	-	-	-	-	4,398,452	16,249,068
8347	0% Subs	-	-	-	-	-	-	-	-	-	560,579	934,130	13,628,745
8351	0% Subs	-	-	-	-	-	-	-	-	-	120	4,440	935,204
8353	0% Subs	-	-	-	-	-	-	-	-	-	-	-	151,193
8354	0% Subs	-	-	-	-	-	-	-	-	-	-	78,655	1,083,399
8357	0% Subs	-	-	-	-	-	-	-	-	-	-	5,170	1,098,304
8359	0% Subs	-	-	-	-	-	-	-	-	-	-	-	36,557
8361	0% Subs	-	-	-	-	-	-	-	-	-	91,119	1,699,133	4,796,344
8362	0% Subs	-	-	-	-	-	-	-	-	-	-	128,640	491,674
8504	0% Subs	-	-	-	-	-	-	-	-	-	942,487	17,386	-
8509	0% Subs	-	-	-	-	-	-	-	-	-	-	-	27,725
8511	0% Subs	-	-	-	-	-	-	-	-	-	-	-	128,972
8558	0% Subs	-	-	-	-	-	-	-	-	-	4,671	-	-
8810	0% Subs	-	-	-	-	-	-	-	-	-	1,188,142	-	-
8956	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
9009	0% Subs	-	-	-	-	-	-	-	-	-	-	-	527,316
9047	0% Subs	-	-	-	-	-	-	-	-	-	-	-	101,871,606
9287	0% Subs	-	-	-	-	-	-	-	-	-	-	12,869	-
9440	0% Subs	-	-	-	-	-	-	-	-	-	-	8,929	-
9900	0% Subs	-	-	-	-	-	-	-	-	-	631	-	-
5110	0% Subs	-	-	-	-	-	-	-	-	-	-	24,360	-
5139	0% Subs	-	-	-	-	-	-	-	-	-	-	5,739	-
5164	0% Subs	-	-	-	-	-	-	-	-	-	-	17,757	-
5215	0% Subs	-	-	-	-	-	-	-	-	-	-	575	-
5221	0% Subs	-	-	-	-	-	-	-	-	-	-	4,164	-
5226	0% Subs	-	-	-	-	-	-	-	-	-	-	3,804	-
5229	0% Subs	-	-	-	-	-	-	-	-	-	-	3,652	-
5239	0% Subs	-	-	-	-	-	-	-	-	-	-	-	9,057
5242	0% Subs	-	-	-	-	-	-	-	-	-	-	40,181	-
5252	0% Subs	-	-	-	-	-	-	-	-	-	-	27,085	-
5260	0% Subs	-	-	-	-	-	-	-	-	-	-	-	7,141
5268	0% Subs	-	-	-	-	-	-	-	-	-	-	29,219	-
5271	0% Subs	-	-	-	-	-	-	-	-	-	-	23,749	-
5275	0% Subs	-	-	-	-	-	-	-	-	-	-	4,862	-
5282	0% Subs	-	-	-	-	-	-	-	-	-	-	42,738	-
5302	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5320	0% Subs	-	-	-	-	-	-	-	-	-	-	13,523	-
5339	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5410	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5412	0% Subs	-	-	-	-	-	-	-	-	-	-	-	79,333
5520	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5576	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5616	0% Subs	-	-	-	-	-	-	-	-	-	-	22,342	-
5618	0% Subs	-	-	-	-	-	-	-	-	-	-	6,520	-
5621	0% Subs	-	-	-	-	-	-	-	-	-	-	45,573	-
5626	0% Subs	-	-	-	-	-	-	-	-	-	-	22,868	-
5633	0% Subs	-	-	-	-	-	-	-	-	-	-	19,651	-
5645	0% Subs	-	-	-	-	-	-	-	-	-	-	189,720	-
5650	0% Subs	-	-	-	-	-	-	-	-	-	-	15,935	-
5654	0% Subs	-	-	-	-	-	-	-	-	-	-	34,835	-
5656	0% Subs	-	-	-	-	-	-	-	-	-	-	704	-
5658	0% Subs	-	-	-	-	-	-	-	-	-	-	32,989	-
5714	0% Subs	-	-	-	-	-	-	-	-	-	-	32,040	-
5754	0% Subs	-	-	-	-	-	-	-	-	-	-	33,694	-

Location	Study	Balance by FERC Account (ISO Transmission) Current Study								Non ISO Account Balances			
		350	352	353	354	355	356	357	358	359	350	352	353
5766	0% Subs	-	-	-	-	-	-	-	-	-	-	12,648	-
5893	0% Subs	-	-	-	-	-	-	-	-	-	-	3,215	-
1860	0% Subs	-	-	-	-	-	-	-	-	-	-	-	2,597,299
1864	0% Subs	-	-	-	-	-	-	-	-	-	-	-	2,488,614
1866	0% Subs	-	-	-	-	-	-	-	-	-	-	-	5,007,603
1867	0% Subs	-	-	-	-	-	-	-	-	-	7,766	-	2,721,697
5832	0% Subs	-	-	-	-	-	-	-	-	-	-	-	17,125
8078	0% Subs	-	-	-	-	-	-	-	-	-	119,513	1,941,711	8,593,598
8096	0% Subs	-	-	-	-	-	-	-	-	-	27,809	1,636,175	10,849,488
8098	0% Subs	-	-	-	-	-	-	-	-	-	189,886	869,300	13,277,223
8348	0% Subs	-	-	-	-	-	-	-	-	-	40,720	411,677	20,161,287
9310	0% Subs	-	-	-	-	-	-	-	-	-	327,844	-	-
6011	0% Subs	-	-	-	-	-	-	-	-	-	-	2,770	-
8121	0% Subs	-	-	-	-	-	-	-	-	-	-	57,897	7,293
8123	0% Subs	-	-	-	-	-	-	-	-	-	-	9,939	-
8136	0% Subs	-	-	-	-	-	-	-	-	-	-	13,544	-
8159	0% Subs	-	-	-	-	-	-	-	-	-	-	24,846	-
8161	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8170	0% Subs	-	-	-	-	-	-	-	-	-	-	-	7,735
8172	0% Subs	-	-	-	-	-	-	-	-	-	-	9,177	-
8216	0% Subs	-	-	-	-	-	-	-	-	-	-	-	7,635
8238	0% Subs	-	-	-	-	-	-	-	-	-	-	8,994	-
8244	0% Subs	-	-	-	-	-	-	-	-	-	-	13,259	-
8255	0% Subs	-	-	-	-	-	-	-	-	-	-	11,480	-
9077	0% Subs	-	-	-	-	-	-	-	-	-	-	-	9,285,586
9235	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
2612	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5120	0% Subs	-	-	-	-	-	-	-	-	-	-	6,944	-
5152	0% Subs	-	-	-	-	-	-	-	-	-	-	51,570	3,887
5175	0% Subs	-	-	-	-	-	-	-	-	-	-	15,470	-
5188	0% Subs	-	-	-	-	-	-	-	-	-	-	82,794	-
5201	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5210	0% Subs	-	-	-	-	-	-	-	-	-	-	33,804	17,431
5405	0% Subs	-	-	-	-	-	-	-	-	-	-	-	9,895
5406	0% Subs	-	-	-	-	-	-	-	-	-	-	11,023	29,527
5409	0% Subs	-	-	-	-	-	-	-	-	-	-	-	6,367
5414	0% Subs	-	-	-	-	-	-	-	-	-	-	12,069	7,801
5415	0% Subs	-	-	-	-	-	-	-	-	-	-	-	23,342
5424	0% Subs	-	-	-	-	-	-	-	-	-	-	-	23,000
5535	0% Subs	-	-	-	-	-	-	-	-	-	-	-	27,327
5572	0% Subs	-	-	-	-	-	-	-	-	-	-	-	118,097
5604	0% Subs	-	-	-	-	-	-	-	-	-	-	1,760	-
5629	0% Subs	-	-	-	-	-	-	-	-	-	-	29,558	21,359
5636	0% Subs	-	-	-	-	-	-	-	-	-	-	31,005	-
5661	0% Subs	-	-	-	-	-	-	-	-	-	-	31,398	-
5667	0% Subs	-	-	-	-	-	-	-	-	-	-	12,856	-
5668	0% Subs	-	-	-	-	-	-	-	-	-	-	14,975	-
5680	0% Subs	-	-	-	-	-	-	-	-	-	-	-	49,398
5718	0% Subs	-	-	-	-	-	-	-	-	-	-	12,712	-
5720	0% Subs	-	-	-	-	-	-	-	-	-	-	6,957	-
5779	0% Subs	-	-	-	-	-	-	-	-	-	-	6,957	-
5812	0% Subs	-	-	-	-	-	-	-	-	-	-	20,469	-
5886	0% Subs	-	-	-	-	-	-	-	-	-	-	6,944	-
8207	0% Subs	-	-	-	-	-	-	-	-	-	-	19,356	-
8210	0% Subs	-	-	-	-	-	-	-	-	-	-	558	-
8231	0% Subs	-	-	-	-	-	-	-	-	-	-	6,317	-
8252	0% Subs	-	-	-	-	-	-	-	-	-	-	6,499	-
8056	0% Subs	-	-	-	-	-	-	-	-	-	-	9,217,544	22,620,077
8058	0% Subs	-	-	-	-	-	-	-	-	-	-	-	23,430
8081	0% Subs	-	-	-	-	-	-	-	-	-	-	21,176	-
8339	0% Subs	-	-	-	-	-	-	-	-	-	-	10,350	68,974
8373	0% Subs	-	-	-	-	-	-	-	-	-	-	471,546	69,402
5305	0% Subs	-	-	-	-	-	-	-	-	-	-	60,018	-
5312	0% Subs	-	-	-	-	-	-	-	-	-	-	301,990	-
5321	0% Subs	-	-	-	-	-	-	-	-	-	-	18,619	-
5331	0% Subs	-	-	-	-	-	-	-	-	-	-	35,561	-
1020	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
6027	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8366	0% Subs	-	-	-	-	-	-	-	-	-	-	38,734	21,262
8071	0% Subs	-	-	-	-	-	-	-	-	-	-	41,635	69,695
5216	0% Subs	-	-	-	-	-	-	-	-	-	-	10,762	-
5218	0% Subs	-	-	-	-	-	-	-	-	-	-	16,856	-
5227	0% Subs	-	-	-	-	-	-	-	-	-	-	33,678	-
5228	0% Subs	-	-	-	-	-	-	-	-	-	-	70,273	-
5231	0% Subs	-	-	-	-	-	-	-	-	-	-	19,277	-
5246	0% Subs	-	-	-	-	-	-	-	-	-	-	8,977	-
5254	0% Subs	-	-	-	-	-	-	-	-	-	-	30,118	-
5255	0% Subs	-	-	-	-	-	-	-	-	-	-	8,090	-
5267	0% Subs	-	-	-	-	-	-	-	-	-	-	21,278	-
5274	0% Subs	-	-	-	-	-	-	-	-	-	-	8,898	-
5411	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5570	0% Subs	-	-	-	-	-	-	-	-	-	5,801	-	-
5624	0% Subs	-	-	-	-	-	-	-	-	-	-	66,934	-
5628	0% Subs	-	-	-	-	-	-	-	-	-	-	44,558	-
5635	0% Subs	-	-	-	-	-	-	-	-	-	-	21,532	-
5639	0% Subs	-	-	-	-	-	-	-	-	-	-	59,194	-
5726	0% Subs	-	-	-	-	-	-	-	-	-	-	37,411	-
5881	0% Subs	-	-	-	-	-	-	-	-	-	-	14,630	-
8119	0% Subs	-	-	-	-	-	-	-	-	-	-	13,562	-
8140	0% Subs	-	-	-	-	-	-	-	-	-	-	12,855	-
8148	0% Subs	-	-	-	-	-	-	-	-	-	-	15,135	-
8175	0% Subs	-	-	-	-	-	-	-	-	-	-	103,197	-
8211	0% Subs	-	-	-	-	-	-	-	-	-	-	15,611	-
8263	0% Subs	-	-	-	-	-	-	-	-	-	-	29,219	-
8279	0% Subs	-	-	-	-	-	-	-	-	-	-	5,855	-

Location	Study	Balance by FERC Account (ISO Transmission) Current Study								Non ISO Account Balances			
		350	352	353	354	355	356	357	358	359	350	352	353
8295	0% Subs	-	-	-	-	-	-	-	-	-	-	48,114	-
9300	0% Subs	-	-	-	-	-	-	-	-	-	-	-	9,775
2587	0% Subs	-	-	-	-	-	-	-	-	-	-	129,731	-
8371	0% Subs	-	-	-	-	-	-	-	-	-	1,200	-	189,559
1510	0% Subs	-	-	-	-	-	-	-	-	-	-	83,831	2,450
1936	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
1996	0% Subs	-	-	-	-	-	-	-	-	-	-	27,803	-
5347	0% Subs	-	-	-	-	-	-	-	-	-	73,306	-	-
5608	0% Subs	-	-	-	-	-	-	-	-	-	-	117,952	-
5630	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5637	0% Subs	-	-	-	-	-	-	-	-	-	-	21,769	-
5808	0% Subs	-	-	-	-	-	-	-	-	-	-	62,236	-
5821	0% Subs	-	-	-	-	-	-	-	-	-	-	37,527	-
5836	0% Subs	-	-	-	-	-	-	-	-	-	-	47,115	-
5838	0% Subs	-	-	-	-	-	-	-	-	-	-	16,683	-
5861	0% Subs	-	-	-	-	-	-	-	-	-	-	15,616	-
5863	0% Subs	-	-	-	-	-	-	-	-	-	-	4,087	-
6039	0% Subs	-	-	-	-	-	-	-	-	-	-	566,817	-
6048	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8205	0% Subs	-	-	-	-	-	-	-	-	-	-	13,741	-
8215	0% Subs	-	-	-	-	-	-	-	-	-	-	46,196	-
8219	0% Subs	-	-	-	-	-	-	-	-	-	-	29,892	-
8239	0% Subs	-	-	-	-	-	-	-	-	-	-	34,308	-
8813	0% Subs	-	-	-	-	-	-	-	-	-	-	9,846	-
9159	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5722	0% Subs	-	-	-	-	-	-	-	-	-	-	105,305	-
5742	0% Subs	-	-	-	-	-	-	-	-	-	-	23,963	-
5790	0% Subs	-	-	-	-	-	-	-	-	-	-	29,034	-
8360	0% Subs	-	-	-	-	-	-	-	-	-	-	30,789	-
5619	0% Subs	-	-	-	-	-	-	-	-	-	-	59,490	-
8066	0% Subs	-	-	-	-	-	-	-	-	-	-	103,392	-
7054	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
8266	0% Subs	-	-	-	-	-	-	-	-	-	-	28,566	-
5632	0% Subs	-	-	-	-	-	-	-	-	-	-	113,131	-
5037	0% Subs	-	-	-	-	-	-	-	-	-	-	36,798	-
4806	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
6005	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5703	0% Subs	-	-	-	-	-	-	-	-	-	-	32,077	-
5232	0% Subs	-	-	-	-	-	-	-	-	-	-	162,536	-
4202	0% Subs	-	-	-	-	-	-	-	-	-	-	1,430	-
2113	0% Subs	-	-	-	-	-	-	-	-	-	-	12,334	-
5323	0% Subs	-	-	-	-	-	-	-	-	-	-	80,195	-
5029	0% Subs	-	-	-	-	-	-	-	-	-	-	5,050	-
4206	0% Subs	-	-	-	-	-	-	-	-	-	-	-	40,621
4242	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
5264	0% Subs	-	-	-	-	-	-	-	-	-	-	15,678	-
8150	0% Subs	-	-	-	-	-	-	-	-	-	-	11,776	-
5735	0% Subs	-	-	-	-	-	-	-	-	-	-	61,853	-
5555	0% Subs	-	-	-	-	-	-	-	-	-	-	43,900	-
5308	0% Subs	-	-	-	-	-	-	-	-	-	-	55,476	-
5142	0% Subs	-	-	-	-	-	-	-	-	-	-	23,648	-
6047	0% Subs	-	-	-	-	-	-	-	-	-	-	-	-
4784	0% Subs	-	-	-	-	-	-	-	-	-	-	20,788	-
8103	0% Subs	-	-	-	-	-	-	-	-	-	-	41,774	-
5121	0% Subs	-	-	-	-	-	-	-	-	-	-	54,966	-
8162	0% Subs	-	-	-	-	-	-	-	-	-	-	41,774	-
5233	0% Subs	-	-	-	-	-	-	-	-	-	-	29,599	-
5350	0% Subs	-	-	-	-	-	-	-	-	-	-	28,746	-
5115	0% Subs	-	-	-	-	-	-	-	-	-	-	34,188	-
5039	0% Subs	-	-	-	-	-	-	-	-	-	-	-	22,357
5550	0% Subs	-	-	-	-	-	-	-	-	-	-	10,675	-
8156	0% Subs	-	-	-	-	-	-	-	-	-	-	38,810	-
5130	0% Subs	-	-	-	-	-	-	-	-	-	-	9,588	-
5834	0% Subs	-	-	-	-	-	-	-	-	-	-	7	-
5756	0% Subs	-	-	-	-	-	-	-	-	-	-	4	-
5771	0% Subs	-	-	-	-	-	-	-	-	-	-	-	352,437
5620	0% Subs	-	-	-	-	-	-	-	-	-	-	450	-
8297	0% Subs	-	-	-	-	-	-	-	-	-	-	259	-
5126	0% Subs	-	-	-	-	-	-	-	-	-	-	2	-
1000	Mix Subs	-	-	11,281	-	-	-	-	-	-	-	-	8,518
1250	Mix Subs	-	-	15,568,043	-	-	-	-	-	-	-	-	11,755,007
1869	Mix Subs	-	1,613,207	4,501,850	-	-	-	-	-	-	-	852,313	3,399,225
1870	Mix Subs	-	-	111,083	-	-	-	-	-	-	-	-	83,876
8076 & 199	Mix Subs	79,045	1,514,152	15,876,043	-	-	-	-	-	-	223,347	4,279,595	44,857,586
	Mix Subs	-	119,013	5,961,702	-	-	-	-	-	-	-	158,646	7,987,192
2212	Mix Subs	-	-	1,295,977	-	-	-	-	-	-	-	-	978,557
2229	Mix Subs	-	271,730	3,912,662	-	-	-	-	-	-	-	10,919	157,225
2230	Mix Subs	-	2,159,010	18,423,530	-	-	-	-	-	-	-	377,124	3,218,119
2234	Mix Subs	-	-	587,687	-	-	-	-	-	-	-	-	443,747
5000	Mix Subs	-	-	1,863,287	-	-	-	-	-	-	-	-	1,406,918
5011	Mix Subs	3,697	936,214	6,913,560	-	-	-	-	-	-	15,916	4,034,585	29,758,602
5012	Mix Subs	795,139	55,133,191	119,172,471	-	-	-	-	-	-	1,236,208	56,224,709	129,248,298
5013	Mix Subs	112,803	2,652,039	21,673,327	-	-	-	-	-	-	344,726	8,104,603	66,233,453
5023	Mix Subs	99,252	8,050,324	17,844,250	-	-	-	-	-	-	186,368	10,424,185	37,333,214
5024	Mix Subs	650,675	2,173,303	16,335,764	-	-	-	-	-	-	1,449,552	4,841,617	36,392,301
5025	Mix Subs	30,436	4,557,052	19,929,748	-	-	-	-	-	-	31,845	4,767,964	20,852,149
5027	Mix Subs	32,178	458,382	2,977,245	-	-	-	-	-	-	65,036	926,457	5,827,496
5028	Mix Subs	8,659	26,446	4,426,056	-	-	-	-	-	-	4,360	13,315	2,228,451
5031	Mix Subs	7,963	5,326,827	23,854,482	-	-	-	-	-	-	400	267,416	1,353,324
5033	Mix Subs	210,939	17,953,010	72,041,033	-	-	-	-	-	-	183,904	15,652,046	60,947,299
5035	Mix Subs	3,340	896,317	28,299,764	-	-	-	-	-	-	3,902	1,009,084	33,123,864
5038	Mix Subs	90,779	2,436,249	-	-	-	-	-	-	-	32,563	1,287,154	-
5040	Mix Subs	-	261,558	10,206,069	-	-	-	-	-	-	-	358,798	9,959,368

Location		Balance by FERC Account (ISO Transmission) Current Study								Non ISO Account Balances				
		350	352	353	354	355	356	357	358	359	350	352	353	
5041 & 804	Mix Subs	2,139	77,525	4,104,507	-	-	-	-	-	-	5,825	625,715	10,886,948	
5042 & 804	Mix Subs	38,992	2,215,149	43,477,527	-	-	-	-	-	-	9,819	557,843	10,948,986	
5043	Mix Subs	207	22,807	511,031	-	-	-	-	-	-	1,617	178,454	3,998,612	
5050	Mix Subs	844,999	15,966,184	52,100,931	-	-	-	-	-	-	125,264	2,365,153	7,724,877	
5055	Mix Subs	82,821	1,349,552	13,818,295	-	-	-	-	-	-	153,373	2,522,266	25,557,587	
5056	Mix Subs	25,309	1,260,343	10,828,630	-	-	-	-	-	-	158,782	7,907,196	67,937,155	
5059	Mix Subs	111,063	10,301,838	30,822,194	-	-	-	-	-	-	-	-	-	
5060	Mix Subs	60,622	2,227,827	25,052,698	-	-	-	-	-	-	88,925	3,277,757	36,800,560	
5062	Mix Subs	7,915	12,677,618	60,438,980	-	-	-	-	-	-	26,521	9,846,836	81,306,465	
5063	Mix Subs	-	1,874,180	24,029,523	-	-	-	-	-	-	-	210,256	16,389	
5064	Mix Subs	10,899	5,427,584	17,862,619	-	-	-	-	-	-	41,210	20,262,316	67,840,065	
5067	Mix Subs	1,150,199	46,430,221	204,522,997	-	-	-	-	-	-	219,897	8,876,254	38,328,231	
5070 & 80:	Mix Subs	93,653	11,112,441	68,676,085	-	-	-	-	-	-	217,704	31,258,797	125,409,450	
5071	Mix Subs	149,353	659,997	9,524,651	-	-	-	-	-	-	528,925	4,587,291	31,481,028	
5073	Mix Subs	49,277	4,497,623	12,096,870	-	-	-	-	-	-	115,402	10,532,965	28,329,610	
5075	Mix Subs	27,115	923,920	10,845,962	-	-	-	-	-	-	137,632	5,620,618	54,006,503	
5079	Mix Subs	1,095,247	28,749,882	189,275,436	-	-	-	-	-	-	136,679	3,587,771	23,620,164	
5081	Mix Subs	28,104	2,019,523	24,559,538	-	-	-	-	-	-	58,084	4,173,932	50,759,430	
5082	Mix Subs	87,262	2,497,761	22,533,915	-	-	-	-	-	-	183,308	4,231,039	48,713,508	
5084	Mix Subs	6,484	397,808	4,898,493	-	-	-	-	-	-	65,318	5,145,317	48,262,553	
5085	Mix Subs	230,653	1,338,731	19,144,004	-	-	-	-	-	-	582,763	4,347,028	41,674,028	
5086	Mix Subs	12,727	1,093,689	16,824,049	-	-	-	-	-	-	47,010	4,000,891	62,186,196	
5087	Mix Subs	59,383	426,327	5,292,754	-	-	-	-	-	-	331,155	2,377,441	29,515,407	
5088	Mix Subs	305,738	11,487,737	83,391,544	-	-	-	-	-	-	252,238	4,952,410	72,593,452	
5096	Mix Subs	35,636	933,077	12,039,946	-	-	-	-	-	-	150,508	3,940,818	50,850,510	
5100	Mix Subs	-	-	151,526	-	-	-	-	-	-	-	114,413	-	
5556	Mix Subs	-	26,658	232,579	-	-	-	-	-	-	-	20,129	175,614	
8065	Mix Subs	3,550,027	-	-	-	-	-	-	-	-	2,084,937	-	-	
9339	Mix Subs	-	-	8,497	-	-	-	-	-	-	-	-	6,416	
8370	Mix Subs	-	-	-	-	-	-	-	-	-	-	973,459	4,041,115	
8063	Mix Subs	-	120,107	3,678,016	-	-	-	-	-	-	-	388,685	11,902,647	
6072	Mix Subs	-	4,984	-	-	-	-	-	-	-	-	2,633	-	
9010	Mix Subs	-	-	469	-	-	-	-	-	-	-	-	354	
9024	Mix Subs	-	244,421	-	-	-	-	-	-	-	-	129,136	-	
7010	Mix Subs	-	-	-	-	-	-	-	-	-	-	-	-	
7056	Mix Subs	-	-	42,618	-	-	-	-	-	-	-	-	-	
8000	Mix Subs	18,353	155,625	2,758,242	-	-	-	-	-	-	92,289	816,499	13,836,561	
8006	Mix Subs	-	5,025,365	9,244,852	-	-	-	-	-	-	-	25,367,413	46,668,428	
8037	Mix Subs	6,515	620,584	4,389,890	-	-	-	-	-	-	10,599	1,011,843	7,140,502	
8049	Mix Subs	19,578	11,262,489	113,750,657	-	-	-	-	-	-	2,510	1,434,939	14,599,238	
9209	Mix Subs	-	-	159,801	-	-	-	-	-	-	-	147,085	-	
9221	Mix Subs	-	-	860,258	-	-	-	-	-	-	-	649,557	-	
9243	Mix Subs	-	245,730	1,687,982	-	-	-	-	-	-	-	129,828	1,274,545	
9078	Mix Subs	-	5,395	-	-	-	-	-	-	-	-	2,850	-	
9330	Mix Subs	-	-	39,472	-	-	-	-	-	-	-	-	29,804	
2556	Mix Subs	-	1,390,888	13,625,264	-	35,042	21,901	-	-	-	-	270,422	2,196,612	
5014	Mix Subs	6,386	2,842,508	11,315,821	-	-	-	-	-	-	91,569	3,757,082	52,785,711	
5015	Mix Subs	10,549	552,960	11,893,790	-	-	-	-	-	-	18,751	982,900	21,141,497	
5021	Mix Subs	16,100	2,299,100	22,221,759	-	-	-	-	-	-	85,270	12,259,336	117,641,398	
5052	Mix Subs	21,982	8,182,503	215,481,449	-	-	-	37,189	-	-	1	340	9,432	
5053	Mix Subs	38,399	1,273,160	16,899,826	-	-	-	-	-	-	-	102,340	3,393,188	
5069	Mix Subs	404,114	48,629,790	209,164,217	-	105,051	-	-	-	-	70,622	8,671,903	36,407,345	
5074	Mix Subs	33,912	842,702	19,124,765	-	-	-	3,661	-	-	97,351	2,426,136	54,891,572	
5083	Mix Subs	3,201,270	2,222,776	8,507,158	-	-	-	-	2	-	10,084,701	7,002,590	26,799,067	
8012	Mix Subs	250,019	2,017,175	24,359,570	-	-	-	-	-	-	379,522	37,009,800	37,009,800	
5034	Mix Subs	3,396	950,992	13,018,822	-	-	-	-	-	-	8,801	2,757,888	33,509,674	
		350	352	353	354	355	356	357	358	359				
		-	96,382	-	37,717,428	-	74,533,118	-	-	-	805,712			
		124,674,370	17,215,468	43,836	1,662,714,300	142,651,229	774,170,915	215,086,929	43,249,485	-	78,967,701			
		99,180,198	14,927,373	6,881,335	740,771,870	258,920,696	725,674,734	180,814	15,503,414	-	140,071,914			
		33,310	-	-	-	2,841,800	831,263	-	-	-	4,845			
		5,497,943	118,363	5,105,153	4,580,559	91,254,882	35,339,769	-	-	-	597,131			
		636,728	256,416	241,546	685,311	23,652,903	6,560,771	-	-	-	372,539			
		188,043	1,573,386	-	1,896,555	23,293,765	1,954,702	-	-	-	26,717			
		230,219,591	34,187,387	12,271,870	2,448,366,023	542,615,275	1,618,565,272	215,267,743	58,752,899	-	220,846,624			
		-	-	-	-	-	-	-	-	-	-			
		58,181,409	817,607,921	4,116,905,408	2,608,748	140,093	413,552	40,853	-	-	2,336,252			
		-	-	-	103,393	105,051	31,738	37,189	-	-	2,331,081			
		-	-	-	2,505,354	-	359,913	3,664	-	-	5,171			
		-	-	-	-	35,042	21,901	-	-	-	-			
						(0)	0	(0)	-	-	0			
						5,539,498								

## ISO Study Assumptions

The following assumptions have been made in completing this analysis.

### 1. Devers-Mirage System

Beginning in the 2009 CPUC GRC and the 2009 FERC rate case, the Devers-Mirage system split was assumed to be completed and all 115kV facilities transferred from ISO to non-ISO. This assumption was consistent with the plant forecast that was utilized in the cases. The physical work is complete and CAISO relinquished operational control of the Devers-Mirage 115kV system **effective June 1, 2013**. The facilities assumed transferred control for purposes of the Transmission Plant Study include: 220/115kV transformation at Devers and Mirage Substations, the 115kV buses at Devers and Mirage Substation, Farrell, Garnet, Eisenhower, Thornhill, Tamarisk, Santa Rosa, Indian Wells, Concho 115kV substations, and all 115kV lines interconnecting these substations that were under ISO Operational Control.

### 2. East Kern Wind Resource Area and Future Project (Antelope-Bailey System)

The 2012 Transmission Plant Study maintained the ability to adjust for the Antelope-Bailey 66kV System split as part of the EKWRA project by maintaining the EKWRA Reconfiguration Option in the Study. The EKWRA project was forecast for 2014, therefore it was assumed in the development of the Transmission Plant Study for the 2015 CPUC GRC to be completed. CAISO relinquished operational control of the Antelope-Bailey 66kV system **effective December 15, 2013**, but the EKWRA project's physical work was completed in early 2015. As a result of the EKWRA project the existing Antelope-Bailey will be split into three radial 66kV systems -- one radiating from Bailey, one radiating from Antelope, and a third radiating from a new 500/220/66kV Windhub substation. Post EKWRA, the Bailey-Neenach and Neenach-Antelope 66kV lines will still remain operated in parallel with the CAISO controlled 230kV lines connecting Bailey and Antelope Substations. The following substations and interconnecting 66kV lines were impacted by the EKWRA project:

Substations affected EKWRA include:

2313 Kern River 1	2313
5079 Wind Hub	5079
5357 Cummings	5357
5358 Monolith	5358
5365 Acton	5365
5508 Del Sur	5508
5511 Goldtown	5511
5512 Gorman	5512
5514 Lancaster	5514
5518 Little Rock	5518
5522 Shuttle	5522
5530 Redman	5530
5539 Anaverde	5539
5541 Rosamond	5541
5545 Piute	5545
5547 Corum	5547
5548 Oasis	5548
5553 Cal Cement	5553
5564 Palmdale	5564
5566 Quartz Hill	5566
5599 Helijet	5599
8504 Ritter Ranch	8504

For purpose of the 2012 Plant Study, the study assumed that EKWRA facilities were under ISO Operational Control during 2012. This study no longer maintains the ISO to Non-ISO reconfiguration option for EKWRA.

### 3. Current FERC methodology for transformer bank circuit breakers

Pursuant to the Commission's ruling in the Whitewater case (Docket No. ER02-2189), FERC's current methodology classifies all circuit breakers that connect both ISO controlled operating buses as FERC jurisdiction (either in double breaker or breaker and half scheme). SCE has not implemented this methodology for those circuit breakers classified in the original 1998 split of the transmission system into ISO and non-ISO. This study reflects the current single-line diagram classification and the ISO register.

### 4. Classification of Distribution Plant

In the 2011 Transmission Plant Study, a more thorough review of ISO distribution plant was instituted. At all substations, unless specific distribution voltage facilities could be identified as ISO controlled, no allocation of distribution plant was made. An exception to this general rule is those substation locations where ISO facilities are clearly identifiable by review of the single line diagrams and ISO register, however only distribution plant is recorded at the location. In these cases, distribution plant will be assigned or allocated consistent with the methodology for determining substation investment.

**SOUTHERN CALIFORNIA EDISON COMPANY**  
12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 360	A/C 360-362	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low / Straddle Voltage
			Land & Land Rights	TOTAL	A/C 360	A/C 361	A/C 362	A/C 360	A/C 361	A/C 362		
					Land & Land Rights	Structures & Improvements	Station Equipment	Land & Land Rights	Structures & Improvements	Station Equipment		
ACTON SUB	5365	66kV	466,446	10,634,679	-	-	-	466,446	2,212,670	7,955,563	Non-ISO	
GORMAN SUB	5512	66kV	383	6,079,282	-	-	-	383	376,613	5,702,286	Non-ISO	
ANAVERDE SUB	5539	66kV	157	10,830,153	-	-	-	157	804,403	10,025,593	Non-ISO	
CORUM SUB	5547	66kV	384	4,198,493	-	-	-	384	1,848,744	2,349,365	Non-ISO	
QUARTZ HILL SUB	5565	66kV	15,905	7,930,981	-	-	-	15,905	393,952	7,511,123	Non-ISO	
RITTER SUB	8504	66kV	-	9,506,544	-	-	-	-	603,492	8,903,052	Non-ISO	
DIV MTCE / OVERHAUL MNGT	1000	66kV	-	227	-	-	-	-	227	-	Non-ISO	
HUNTINGTON BCH GEN STATN	1610	220kV	-	126,169	-	-	-	-	-	126,169	Non-ISO	
PALOVERDE-COMMON 1,2,3	1867	500kV	-	-	-	-	-	-	-	-	Non-ISO	
HUNTINGTON LK(FP2175)	2110	66kV	-	61,855	-	-	-	-	-	61,855	Non-ISO	
SHAVER LAKE (FP 67)	2120	66kV	-	56,093	-	-	-	-	-	56,093	Non-ISO	
BIG CREEK CANYON	2202	220kV	-	99,245	-	-	-	-	-	99,245	Non-ISO	
BIG CREEK NO.1	2211	220kV	-	177,814	-	-	-	-	157,933	19,882	Non-ISO	
BIG CREEK NO.8	2229	220kV	-	(0)	-	-	-	-	-	(0)	Non-ISO	
BIG CREEK NO.3	2230	220kV	-	271,299	-	-	-	-	-	271,299	Non-ISO	
BIG CREEK NO.2A	2234	220kV	-	46,173	-	-	-	-	-	46,173	Non-ISO	
PORTAL POWER PLANT	2237	33kV & Below	-	26,636	-	-	-	-	-	26,636	Non-ISO	
MAMMOTH POOL	2238	220kV	-	91,293	-	-	-	-	-	91,293	Non-ISO	
EASTWOOD POWER STATION	2239	33kV & Below	-	-	-	-	-	-	-	-	Non-ISO	
TIMBERWINE SUBSTATION	2260	33kV & Below	-	4,472,393	-	-	-	-	1,249,353	3,223,040	Non-ISO	
EAST END HYDRO SHP FACILTY	2304	-	-	9,117	-	-	-	-	9,117	-	Non-ISO	
KERN RIVER NO.1	2313	66kV	-	-	-	-	-	-	-	-	Non-ISO	
BOREL	2314	66kV	-	-	-	-	-	-	-	-	Non-ISO	
SANTA ANA NO.1	2315	33kV & Below	-	85,969	-	-	-	-	-	85,969	Non-ISO	
SANTA ANA NO.3	2317	33kV & Below	-	796,870	-	-	-	-	69,035	727,835	Non-ISO	
MILL CREEK NO.1	2318	33kV & Below	-	70,541	-	-	-	-	-	70,541	Non-ISO	
MILL CREEK NO.2&3	2319	33kV & Below	4	5,391	-	-	-	4	-	5,386	Non-ISO	
LYTLE CREEK NO.1	2320	33kV & Below	-	47,967	-	-	-	-	-	47,967	Non-ISO	
KAWEAH NO.1	2324	66kV	-	11,649	-	-	-	-	-	11,649	Non-ISO	
LOWER TULE RIVER	2327	66kV	-	70,031	-	-	-	-	-	70,031	Non-ISO	
KERN RIVER #3	2328	66kV	-	1,520,517	-	-	-	-	(20,170)	1,540,687	Non-ISO	
ONTARIO NO.1	2331	33kV & Below	-	410,379	-	-	-	-	-	410,379	Non-ISO	
EASTERN HYDRO REGION	2500	55kV	-	110,283	-	-	-	-	-	110,283	Non-ISO	
POOLE	2512	33kV & Below	-	244	-	-	-	-	-	244	Non-ISO	
RUSH CREEK	2514	115kV	-	96,338	-	-	-	-	-	96,338	Non-ISO	
BISHOP CREEK NO.2	2522	55kV	-	469,042	-	-	-	-	62,237	406,805	Non-ISO	
BISHOP CREEK NO.3	2523	33kV & Below	-	144,854	-	-	-	-	-	144,854	Non-ISO	
BISHOP CREEK NO.4	2524	33kV & Below	-	1,002,881	-	-	-	-	-	1,002,881	Non-ISO	
BISHOP CREEK NO.5	2525	33kV & Below	-	36,610	-	-	-	-	-	36,610	Non-ISO	
BISHOP CREEK NO.6	2526	33kV & Below	-	25,968	-	-	-	-	-	25,968	Non-ISO	
CONTROL STATION	2556	115kV	-	(0)	-	-	-	-	(0)	-	Non-ISO	
CASA DIABLO	2557	115kV	-	569,516	-	-	-	-	-	569,516	Non-ISO	
LUNDY	2560 & 2510	55kV	-	45,508	-	-	-	-	-	45,508	Non-ISO	
LEE VINING	2561	115kV	-	41,579	-	-	-	-	-	41,579	Non-ISO	
INYO	2570	220kV	-	13,269	-	-	-	-	-	13,269	Non-ISO	
SHERWIN	2571	115kV	-	97,743	-	-	-	-	-	97,743	Non-ISO	
BRIDGEPORT (OLD)	2580	33kV & Below	138	7,979	-	-	-	138	1,412	6,429	Non-ISO	
ZACK	2582	55kV	7,434	11,157,395	-	-	-	7,434	886,772	10,263,488	Non-ISO	
JUNE LAKE	2583	33kV & Below	-	808,514	-	-	-	-	16,176	792,372	Non-ISO	
DEEP SPRINGS	2589	55kV	-	126,796	-	-	-	-	1,191	125,605	Non-ISO	
WHITE MOUNTAIN RADIO	2594	55kV	-	2,232,539	-	-	-	-	-	2,232,539	Non-ISO	
MT. TOM	2598	55kV	-	4,240,473	-	-	-	-	46,013	4,194,460	Non-ISO	
MORGAN	2604	33kV & Below	-	57,328	-	-	-	-	-	57,328	Non-ISO	
TIMBERWINE	2609	33kV & Below	-	1,660,992	-	-	-	-	-	1,660,992	Non-ISO	
BRIDGEPORT	2610	33kV & Below	24,261	1,452,420	-	-	-	24,261	137,912	1,290,247	Non-ISO	
SKILAND	2611	33kV & Below	62,995	3,466,119	-	-	-	62,995	227,115	3,176,010	Non-ISO	
MINARET	2612	33kV & Below	-	2,143,683	-	-	-	-	362,477	1,781,206	Non-ISO	
ELLWD ENGY SPPT FAC-GS TB	3020	-	-	9,065	-	-	-	-	-	9,065	Non-ISO	
CATALINA ISLAND-DIESEL	3064	66kV	-	28,270,108	-	-	-	-	9,737,562	18,532,545	Non-ISO	
CLWTR COMG CYCLE GEN STN	3393	33kV & Below	-	175,075	-	-	-	-	-	175,075	Non-ISO	
TRANSMISSION CONST & MTCE	4000	66kV	-	10,186	-	-	-	-	10,186	-	Non-ISO	
33 AND 66 KV LINES	4105	66kV	689,533	689,533	-	-	-	689,533	-	-	Non-ISO	
EASTERN T/S REGION	4500	66kV	-	52,105	-	-	-	-	52,105	-	Non-ISO	
NRTHN T/S REGION	4600	66kV	-	-	-	-	-	-	-	-	Non-ISO	
33&66KV LNS IN NRTHN T/S	4605	66kV	83,844	83,844	-	-	-	83,844	-	-	Non-ISO	
115 KV LNS, ESTN T/S REG	4750	115kV	1,837	1,837	-	-	-	1,837	-	-	Non-ISO	
S/E DIV., 66KV LINES	4805	66kV	133,073	133,073	-	-	-	133,073	-	-	Non-ISO	
SUBSTN DIV	5000	Misc	-	485,808	-	-	-	-	-	485,808	Non-ISO	
WALNUT SUB	5014	220kV	-	-	-	-	-	-	-	-	Non-ISO	
EL NIDO SUB	5023	220kV	-	-	-	-	-	-	-	-	Non-ISO	
EL SEGUNDO SWITCHCRACK SUB	5026	220kV	-	-	-	-	-	-	-	-	Non-ISO	
LG BCH SWITCHCRACK SUB	5027	220kV	-	-	-	-	-	-	-	-	Non-ISO	
MAGUNDEN SUB	5031	220kV	-	67,791	-	-	-	-	67,791	-	Non-ISO	
RECTOR SUB	5033	220kV	-	(0)	-	-	-	-	0	(0)	Non-ISO	
VESTAL SUB	5035	220kV	-	-	-	-	-	-	-	-	Non-ISO	
KRAMER SUB	5042 & 8046	220kV	-	(0)	-	-	-	-	-	(0)	Non-ISO	
MOHAVE SWITCHCRACK	5045	500kV	-	9,512	-	-	-	-	-	9,512	Non-ISO	
MANDALAY SWITCHCRACK SUB	5048	220kV	-	-	-	-	-	-	-	-	Non-ISO	
ORMOND BCH SWITCHCRACK SUB	5049	220kV	-	18,020	-	-	-	-	-	18,020	Non-ISO	
SAUGUS SUB	5051	220kV	-	-	-	-	-	-	-	-	Non-ISO	
ANTELOPE SUB	5052	500kV	-	-	-	-	-	-	-	-	Non-ISO	
SANTA CLARA SUB	5053	220kV	-	-	-	-	-	-	-	-	Non-ISO	
VINCENT SUB	5054 & 8954	500kV	-	0	-	-	-	-	-	0	Non-ISO	
GOLETA SUB	5055	220kV	-	4,132,290	-	-	-	-	8,889	4,123,401	Non-ISO	
MOORPARK SUB	5056	220kV	-	148,339	-	-	-	-	-	148,339	Non-ISO	
PADUA SUB	5060	220kV	-	-	-	-	-	-	-	-	Non-ISO	
LUGO SUB	5061	500kV	-	60,034	-	-	-	-	-	60,034	Non-ISO	
DEVERS SUB	5067	500kV	-	-	-	-	-	-	-	-	Non-ISO	
CAMINO SUB	5068	220kV	-	119,664	-	-	-	-	119,664	-	Non-ISO	
Valley & Valley - CEP	5070 & 8034	500kV	-	(3,087)	-	-	-	-	-	(3,087)	Non-ISO	
HINSON SUB	5071	220kV	-	-	-	-	-	-	-	-	Non-ISO	
LIGHTHIPE SUB	5073	220kV	-	-	-	-	-	-	-	-	Non-ISO	
LAGUNA BELL SUB	5074	220kV	-	-	-	-	-	-	-	-	Non-ISO	
DEL AMO SUB	5075	220kV	-	-	-	-	-	-	-	-	Non-ISO	
HUNTINGTON BCH SWITCHCRCK	5078	220kV	-	238,719	-	-	-	-	238,719	-	Non-ISO	
WINDHUB SUB	5079	500kV	-	(0)	-	-	-	-	-	(0)	Non-ISO	
SERRANO SUB	5080	500kV	-	6,654	-	-	-	-	-	6,654	Non-ISO	
BARRE SUB	5081	220kV	-	19,476	-	-	-	-	19,476	-	Non-ISO	
VILLA PARK SUB	5082	220kV	-	(0)	-	-	-	-	(0)	-	Non-ISO	
Johanna	5085 & 5881	220kV	-	1,918,551	-	-	-	-	43,708	1,874,844	Non-ISO	
ELLIS SUB	5086	220kV	-	-	-	-	-	-	-	-	Non-ISO	
EL DORADO SUB(NEVADA)	5090	500kV	-	-	-	-	-	-	-	-	Non-ISO	
ETRWANDA SWITCHCRACK SUB	5096	220kV	-	-	-	-	-	-	-	-	Non-ISO	
METRO REGION	5100	33kV & Below	-	796,718	-	-	-	-	194,833	601,885	Non-ISO	
ALHAMBRA SUB	5101	66kV	90,249	27,670,911	-	-	-	90,249	4,348,991	23,231,671	Non-ISO	
ALLEN SUB	5102	33kV & Below	4,232	2,294,450	-	-	-	4,232	859,385	1,430,832	Non-ISO	
SANTÉE DAIRY	5103	66kV	-	428,924	-	-	-	-	13,227	415,697	Non-ISO	
AMALIA SUB	5104	33kV & Below	11,584	9,005,054	-	-	-	11,584	387,757	8,605,713	Non-ISO	
ANITA SUB	5105	66kV	4,391	12,838,397	-	-	-	4,391	2,351,499	10,482,507	Non-ISO	
ARCADIA SUB	5106	66kV	137,667	9,072,162	-	-	-	137,667	189,686	8,744,810	Non-ISO	
BANDINI SUB	5107	66kV	11,615	7,120,567	-	-	-	11,615	242,353	6,866,599	Non-ISO	
PROCTOR SUB	5108	66kV	125,486	5,705,247	-	-	-	125,486	426,278	5,153,484	Non-ISO	
BICKNELL SUB	5109	33kV & Below	3,032	2,966,663	-	-	-	3,032	211,730	2,751,901	Non-ISO	
WABASH (NEW) SUB	5110	66kV	74,633	8,287,411	-	-	-	74,633	1,104,641	7,108,137	Non-ISO	
RENO SUB	5111	66kV	1,654	99,720	-	-	-	1,654	33,215	64,851	Non-ISO	
LIQUID SUB	5113	66kV	-	277,734	-	-	-	-	18,126	259,607	Non-ISO	
BEVEDERE SUB	5											



**SOUTHERN CALIFORNIA EDISON COMPANY**  
12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	ISO RELATED				NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low / Straddle Voltage
			A/C 360 Land & Land Rights	A/C 360-362 TOTAL	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements		
GRANADA SUB	5126	33kV & Below	4,593	3,416,034	-	-	-	4,593	102,009	3,309,432	Non-ISO
OUTFALL SUBSTATION	5127	66kV	-	32,971	-	-	-	-	-	32,971	Non-ISO
SIMPSON PAPER SUBSTATION	5128	66kV	-	706,093	-	-	-	-	-	706,093	Non-ISO
REFUSE SUB	5129	66kV	-	545,407	-	-	-	-	19,653	525,755	Non-ISO
LA CANADA SUB	5130	66kV	-	7,169,218	-	-	-	-	705,985	6,463,233	Non-ISO
HILLGEN SUB	5131	66kV	-	2,456,796	-	-	-	-	27,206	2,429,590	Non-ISO
SIGGEN SUB	5132	66kV	-	1,283,788	-	-	-	-	3,613	1,280,175	Non-ISO
MICHELLINDA SUB	5133	33kV & Below	5,712	3,591,150	-	-	-	5,712	222,413	3,363,025	Non-ISO
MONROVIA SUB	5134	33kV & Below	966	6,956,377	-	-	-	966	41,872	6,913,539	Non-ISO
MONTEBELLO SUB	5135	33kV & Below	1,868	564,120	-	-	-	1,868	43,811	518,441	Non-ISO
NEWMARK SUB	5136	66kV	16,471	17,642,880	-	-	-	16,471	2,311,017	15,315,391	Non-ISO
CYBER SUB	5137	66kV	-	1,092,336	-	-	-	-	248,681	843,655	Non-ISO
RAMONA SUB	5138	66kV	2,143	2,706,332	-	-	-	2,143	219,402	2,484,787	Non-ISO
GENAMIC SUB	5139	66kV	246,412	3,023,692	-	-	-	246,412	138,717	2,638,563	Non-ISO
ROSEMEAD SUB	5141	66kV	12,792	8,345,102	-	-	-	12,792	1,379,917	6,952,394	Non-ISO
SAN GABRIEL SUB	5142	66kV	6,712	5,557,632	-	-	-	6,712	100,670	5,450,250	Non-ISO
SAN MARINO SUB	5143	33kV & Below	3,835	4,960,202	-	-	-	3,835	87,500	4,868,867	Non-ISO
SIERRA MADRE SUB	5144	33kV & Below	676	5,476,613	-	-	-	676	1,020,570	4,455,367	Non-ISO
SANGAR SUB	5145	33kV & Below	17,347	212,045	-	-	-	17,347	20,654	174,044	Non-ISO
TERRACE SUB	5146	33kV & Below	4,514	2,316,737	-	-	-	4,514	51,288	2,260,935	Non-ISO
PUREAIR SUB	5147	66kV	36,627	609,173	-	-	-	36,627	1,2876	569,670	Non-ISO
AEROJET SUB	5148	66kV	-	455,244	-	-	-	-	37,025	418,219	Non-ISO
SO. PACIFIC SUB-PIPELINE	5149	66kV	11,866	501,157	-	-	-	11,866	34,056	455,235	Non-ISO
DUARTE SUB	5150	33kV & Below	11,360	3,210,581	-	-	-	11,360	79,683	3,119,538	Non-ISO
HOYTE SUB	5151	33kV & Below	8,899	2,365,744	-	-	-	8,899	457,007	1,899,838	Non-ISO
JOSE SUB	5152	66kV	16,667	576,736	-	-	-	16,667	27,844	532,225	Non-ISO
IVAR SUB	5153	33kV & Below	4,184	3,734,524	-	-	-	4,184	725,816	3,004,524	Non-ISO
PACKAGE SUB	5154	66kV	16,257	16,257	-	-	-	16,257	-	-	Non-ISO
DIEMER SUB	5155	66kV	-	779,413	-	-	-	-	114,878	664,535	Non-ISO
SERVER SUBSTATION 66/16 kV	5156	66kV	-	4,642,126	-	-	-	-	457,682	4,184,445	Non-ISO
MT WILSON SUB	5157	33kV & Below	3,524	4,778	-	-	-	3,524	1,254	-	Non-ISO
ARROYO SUB	5158	66kV	3,910	12,939,291	-	-	-	3,910	348,831	12,586,549	Non-ISO
MOBILE 1-9, 14-20 SUB	5159	33kV & Below	-	103,944	-	-	-	-	1,792	102,152	Non-ISO
NIETOS SUB	5160	66kV	19,316	3,572,726	-	-	-	19,316	764,061	2,789,349	Non-ISO
AMADOR SUB	5161	66kV	27,986	15,577,586	-	-	-	27,986	1,666,104	13,883,497	Non-ISO
FAIR OAKS SUB	5162	33kV & Below	9,204	2,556,614	-	-	-	9,204	41,031	2,506,379	Non-ISO
REPETTO SUB	5164	66kV	11,399	10,431,310	-	-	-	11,399	162,578	10,257,333	Non-ISO
MAYFLOWER SUB	5167	33kV & Below	12,984	3,382,336	-	-	-	12,984	125,944	3,243,408	Non-ISO
HARDING SUB	5168	33kV & Below	10,403	10,403	-	-	-	10,403	-	-	Non-ISO
RAYMOND SUB	5169	33kV & Below	-	6,117	-	-	-	-	6,085	31	Non-ISO
TEMPLE SUB	5170	33kV & Below	16,469	3,758,435	-	-	-	16,469	238,903	3,503,063	Non-ISO
BRADBURY SUB	5171	66kV	11,331	8,113,858	-	-	-	11,331	407,558	7,694,968	Non-ISO
SHULTZ SUB	5172	66kV	-	961,974	-	-	-	-	43,094	918,879	Non-ISO
SHARON SUB	5173	33kV & Below	21,259	342,339	-	-	-	21,259	6,427	314,652	Non-ISO
VAIL SUB	5175	66kV	52,687	7,338,606	-	-	-	52,687	304,842	6,981,077	Non-ISO
KIMBALL SUBSTATION	5176	66kV	924,235	19,502,787	-	-	-	924,235	2,035,399	16,543,153	Non-ISO
DOCK SUBSTATION	5177	66kV	-	221,603	-	-	-	-	-	221,603	Non-ISO
KIRK WALL SUBSTATION	5178	66kV	-	25,215	-	-	-	-	-	25,215	Non-ISO
RAVENDALE SUB	5179	66kV	20,819	11,315,189	-	-	-	20,819	276,813	11,017,558	Non-ISO
AIRPAC SUB	5180	66kV	830	830	-	-	-	830	-	-	Non-ISO
AZUSA CITY SUB	5181	66kV	-	2,980,835	-	-	-	-	105,518	2,875,317	Non-ISO
BADILLO SUB	5182	33kV & Below	4,275	2,523,866	-	-	-	4,275	28,372	2,491,220	Non-ISO
BASSETT SUB	5184	66kV	25,036	7,902,451	-	-	-	25,036	328,580	7,548,835	Non-ISO
CITRUS SUB	5185	66kV	65,892	8,900,922	-	-	-	65,892	3,644,708	5,190,321	Non-ISO
CORTEZ SUB	5186	66kV	24,041	7,874,407	-	-	-	24,041	269,955	7,580,411	Non-ISO
COVINA SUB	5187	33kV & Below	2,659	133,275	-	-	-	2,659	130,616	-	Non-ISO
DALTON SUB	5188	66kV	2,386	8,499,365	-	-	-	2,386	411,945	8,085,035	Non-ISO
GRAND CROSSING SUB	5189	66kV	-	89,521	-	-	-	-	240,404	(150,883)	Non-ISO
MCA SUB	5190	66kV	27,864	941,074	-	-	-	27,864	18,822	894,388	Non-ISO
INDUSTRY SUB	5191	66kV	32,825	5,334,994	-	-	-	32,825	328,632	4,973,537	Non-ISO
LARK ELLEN SUB	5192	66kV	72,232	11,419,776	-	-	-	72,232	257,807	11,089,737	Non-ISO
MERCED SUB	5193	66kV	54,374	9,599,400	-	-	-	54,374	166,594	9,378,431	Non-ISO
SANIGEN SUB	5194	66kV	-	874,101	-	-	-	-	40,674	833,426	Non-ISO
PUEENTE SUB	5195	66kV	1,220	3,877,641	-	-	-	1,220	125,764	3,750,658	Non-ISO
RAILROAD SUB	5196	66kV	119,063	15,549,316	-	-	-	119,063	268,963	15,161,290	Non-ISO
ALHAMBRA DIST SUB TRG FAC	5198	66kV	-	2,175,758	-	-	-	-	30,613	2,145,145	Non-ISO
BEVERLY HILLS SUB	5201	66kV	351,856	42,373,639	-	-	-	351,856	1,544,278	41,377,504	Non-ISO
POLARIS SUB	5202	66kV	866	1,456,984	-	-	-	866	88,620	1,367,498	Non-ISO
CULVER CITY SUB	5204	66kV	6,230	16,736,657	-	-	-	6,230	510,809	16,219,618	Non-ISO
DOUGLAS-EL SEGUNDO SUB	5205	66kV	-	1,369,615	-	-	-	-	24,728	1,344,886	Non-ISO
EL PORTO SUB	5206	33kV & Below	2,211	828,509	-	-	-	2,211	14,058	812,241	Non-ISO
SEPULVEDA SUB	5207	66kV	8,981	4,214,913	-	-	-	8,981	496,860	3,709,073	Non-ISO
FAIRFAX SUB	5208	66kV	79,779	9,141,108	-	-	-	79,779	971,477	8,089,852	Non-ISO
DOHENY SUB	5209	33kV & Below	69,465	2,163,790	-	-	-	69,465	86,816	2,007,510	Non-ISO
HOWARD SUB	5210	66kV	196,527	4,899,939	-	-	-	196,527	398,354	4,305,058	Non-ISO
INGLEWOOD SUB	5211	66kV	23,554	7,571,189	-	-	-	23,554	243,784	7,303,851	Non-ISO
MOOG SUBSTATION	5212	66kV	-	294,240	-	-	-	-	30,763	263,478	Non-ISO
LENNOX SUB	5213	66kV	192,067	20,133,476	-	-	-	192,067	371,313	19,570,096	Non-ISO
COSMIC SUB	5214	66kV	813	545,933	-	-	-	813	3,448	541,672	Non-ISO
MADRID SUB	5215	33kV & Below	2,750	1,421,486	-	-	-	2,750	31,768	1,386,967	Non-ISO
MANHATTAN SUB	5216	33kV & Below	4,119	2,708,506	-	-	-	4,119	59,730	2,644,657	Non-ISO
MARINE SUB	5217	66kV	16,040	4,688,571	-	-	-	16,040	291,942	4,380,588	Non-ISO
MONETA SUB	5218	33kV & Below	2,806	1,056,143	-	-	-	2,806	24,987	1,028,349	Non-ISO
MORNINGSIDE SUB	5219	33kV & Below	18,302	2,757,917	-	-	-	18,302	1,484,786	1,254,829	Non-ISO
HUGHTRON SUB	5220	66kV	-	339,853	-	-	-	-	1,880	337,973	Non-ISO
OCEAN PARK SUB	5221	33kV & Below	31,028	1,476,704	-	-	-	31,028	32,768	1,412,908	Non-ISO
OLYMPIC SUB	5222	33kV & Below	13,087	2,189,887	-	-	-	13,087	696,664	1,480,137	Non-ISO
PALOS VERDES SUB	5223	33kV & Below	5,883	1,584,041	-	-	-	5,883	361,414	1,216,745	Non-ISO
PEARL SUB	5224	33kV & Below	7,678	1,134,134	-	-	-	7,678	256,836	869,636	Non-ISO
PERRY SUB	5225	33kV & Below	2,931	4,034,339	-	-	-	2,931	1,255,845	2,775,563	Non-ISO
BRIGHTON SUB	5226	66kV	77,687	4,893,835	-	-	-	77,687	299,533	4,516,615	Non-ISO
REDON-											

**SOUTHERN CALIFORNIA EDISON COMPANY**  
12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	ISO RELATED					NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low / Straddle Voltage
			A/C 360 Land & Land Rights	A/C 360-362 TOTAL	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment		
CREST SUB	5264	66kV	85,248	6,528,246	-	-	-	85,248	618,258	5,824,740	Non-ISO	
REFINERY SUB	5265	66kV	-	564,320	-	-	-	-	12,888	551,432	Non-ISO	
BLUFF COVE SUB	5266	33kV & Below	17,786	3,767,913	-	-	-	17,786	225,766	3,524,360	Non-ISO	
SPACE SUB	5267	66kV	1,459	708,997	-	-	-	1,459	10,369	697,169	Non-ISO	
TOPAZ SUB	5268	66kV	11,438	1,551,507	-	-	-	11,438	27,226	1,512,843	Non-ISO	
TORRANCE SUB	5269	66kV	63,292	8,648,122	-	-	-	63,292	427,883	8,156,947	Non-ISO	
CORNER SUB	5270	66kV	-	112,639	-	-	-	-	8,314	104,325	Non-ISO	
TAHITI SUB	5271	66kV	-	3,015,857	-	-	-	-	316,147	2,699,711	Non-ISO	
LATIGO SUB	5272	66kV	36,792	6,308,013	-	-	-	36,792	323,193	5,948,028	Non-ISO	
STANHILL SUB	5273	66kV	-	2,295,392	-	-	-	-	3,970	2,291,422	Non-ISO	
GALAXY SUB	5274	66kV	143	956,000	-	-	-	143	4,008	951,848	Non-ISO	
MARYMOUNT SUB	5275	66kV	87,320	3,305,753	-	-	-	87,320	1,007,937	2,210,496	Non-ISO	
AIRCHEM SUB	5276	66kV	-	123,845	-	-	-	-	-	123,845	Non-ISO	
TAPIA SUB	5277	66kV	4,988	3,848,558	-	-	-	4,988	495,466	3,348,105	Non-ISO	
WESTHILL SUB	5278	66kV	2,247	942,301	-	-	-	2,247	28,340	911,715	Non-ISO	
VARWIND SUB	5279	66kV	-	26,041	-	-	-	-	15,034	11,007	Non-ISO	
GATX SUB	5280	66kV	-	159,052	-	-	-	-	5,014	154,038	Non-ISO	
CARBON SUB	5281	66kV	-	2,389,951	-	-	-	-	33,501	2,356,450	Non-ISO	
PALOGEN SUB	5282	66kV	-	-	-	-	-	-	-	-	Non-ISO	
CHEVGEN SUB	5283	66kV	-	6,411,859	-	-	-	-	141,639	6,270,219	Non-ISO	
XEROX SUBSTATION	5284	66kV	6,307	839,884	-	-	-	6,307	18,519	815,058	Non-ISO	
RALPHS SUB (COMPTON)	5285	66kV	13,453	630,632	-	-	-	13,453	33,798	583,381	Non-ISO	
TOYOTA SUB	5286	66kV	37,270	646,091	-	-	-	37,270	38,464	570,357	Non-ISO	
SONY SUBSTATION	5287	66kV	-	492,220	-	-	-	-	30,821	461,399	Non-ISO	
SHRED SUBSTATION	5288	66kV	-	300,812	-	-	-	-	11,633	289,179	Non-ISO	
TIDELANDS SUBSTATION	5289	66kV	-	1,371,206	-	-	-	-	39,933	1,331,273	Non-ISO	
HANJIN SUBSTATION	5290	66kV	-	6,802,893	-	-	-	-	317,258	6,485,635	Non-ISO	
WASTEWATER SUBSTATION	5291	66kV	-	495,068	-	-	-	-	39,508	455,559	Non-ISO	
AIRPRO SUBSTATION	5292	66kV	-	1,098,561	-	-	-	-	22,499	1,076,063	Non-ISO	
DEL MAR SUBSTATION	5293	66kV	-	2,107,439	-	-	-	-	43,271	2,064,168	Non-ISO	
MAGMAGEN SUBSTATION	5294	66kV	-	144,305	-	-	-	-	-	144,305	Non-ISO	
CHEVCENTRAL SUB	5295	66kV	-	5,419,270	-	-	-	-	223,138	5,196,132	Non-ISO	
APL SUBSTATION	5296	66kV	-	1,007,578	-	-	-	-	34,654	972,924	Non-ISO	
KIWI SUBSTATION	5298	66kV	-	313,119	-	-	-	-	378	312,741	Non-ISO	
DOWNEY MED SUB	5299	66kV	-	400,066	-	-	-	-	65,809	334,256	Non-ISO	
NORTHERN DIVISION	5300	Div Offices & Misc	-	598,867	-	-	-	-	-	598,867	Non-ISO	
PITMAN SUB	5301	33kV & Below	-	3,501,994	-	-	-	-	701,348	2,800,646	Non-ISO	
BIG CREEK 2	5302	33kV & Below	-	8,136,802	-	-	-	-	1,561,369	6,575,433	Non-ISO	
BLISS SUB	5303	66kV	533	11,584,450	-	-	-	533	364,971	11,218,946	Non-ISO	
BROWNING SUB	5304	66kV	1,931	13,370,824	-	-	-	1,931	754,382	12,614,510	Non-ISO	
DELANO SUB	5305	66kV	647	16,562,844	-	-	-	647	1,301,622	15,260,576	Non-ISO	
EARLMART SUB	5306	66kV	17	6,930,795	-	-	-	17	374,045	6,556,732	Non-ISO	
EKETER SUB	5307	33kV & Below	2,428	2,428	-	-	-	2,428	-	-	Non-ISO	
GLENNVILLE SUB	5308	66kV	-	1,279,202	-	-	-	-	79,407	1,199,795	Non-ISO	
GOSHEN SUB	5309	66kV	1,398	12,612,049	-	-	-	1,398	522,747	12,087,903	Non-ISO	
HANFORD SUB	5310	66kV	45,307	13,185,141	-	-	-	45,307	725,548	12,414,286	Non-ISO	
HAVILAH SUB	5311	66kV	9,406	4,750,303	-	-	-	9,406	879,377	3,861,520	Non-ISO	
LIBERTY SUB	5312	66kV	-	22,424,471	-	-	-	8,311	1,265,323	21,150,836	Non-ISO	
ELCANS SUB	5313	66kV	-	279,986	-	-	-	-	5,324	274,662	Non-ISO	
LAUREL SUB	5315	66kV	601	8,095,406	-	-	-	601	753,985	7,340,820	Non-ISO	
LEMON COVE SUB	5316	66kV	2,554	6,009,288	-	-	-	2,554	900,108	5,106,625	Non-ISO	
LINDSAY SUB	5317	66kV	4,389	7,923,179	-	-	-	4,389	262,964	7,655,826	Non-ISO	
LORAINE SUB	5318	66kV	-	1,136,707	-	-	-	-	19,022	1,117,685	Non-ISO	
MARIPOSA SUB	5319	66kV	2,251	9,884,677	-	-	-	2,251	817,099	9,065,326	Non-ISO	
OCTOL SUB	5320	66kV	1,554	14,580,561	-	-	-	1,554	143,599	14,435,408	Non-ISO	
PIXLEY SUB	5321	66kV	1,250	7,342,774	-	-	-	1,250	450,178	6,891,347	Non-ISO	
POPLAR SUB	5322	66kV	711	12,207,279	-	-	-	711	1,608,971	10,597,597	Non-ISO	
PORTERVILLE SUB	5323	66kV	2,930	16,056,988	-	-	-	2,930	1,455,056	14,599,002	Non-ISO	
ULTRAGEN SUB	5324	66kV	32,746	617,983	-	-	-	32,746	27,723	557,514	Non-ISO	
STRATHMORE SUB	5325	66kV	2,537	10,425,885	-	-	-	2,537	863,655	9,559,693	Non-ISO	
TERRA BELLA SUB	5326	66kV	300	10,745,233	-	-	-	300	591,853	10,153,080	Non-ISO	
TIPTON SUB	5327	66kV	501	10,321,747	-	-	-	501	870,473	9,450,773	Non-ISO	
TULARE SUB	5328	66kV	3,522	12,021,502	-	-	-	3,522	323,989	11,693,991	Non-ISO	
VENICE HILL SUB	5329	66kV	14,777	4,677,347	-	-	-	14,777	180,497	4,482,073	Non-ISO	
VENIDA SUB	5330	66kV	1,683	8,900,088	-	-	-	1,683	981,088	7,917,316	Non-ISO	
VISALIA SUB	5331	66kV	198	10,625,391	-	-	-	198	193,815	10,431,377	Non-ISO	
WALKERBASIN SUB	5332	66kV	-	2,947,451	-	-	-	-	440,523	2,506,929	Non-ISO	
WOODVILLE SUB	5333	66kV	200	10,116,570	-	-	-	200	90,576	10,025,795	Non-ISO	
KAWGEN SUB	5334	66kV	-	313,771	-	-	-	-	5,506	308,265	Non-ISO	
LOUIS RICH	5335	66kV	-	272,004	-	-	-	-	7,049	264,955	Non-ISO	
COLUMBINE SUB	5336	66kV	3,281	6,529,069	-	-	-	3,281	1,644,141	4,881,647	Non-ISO	
OAK GROVE SUB	5337	66kV	1,488	8,010,762	-	-	-	1,488	525,985	7,483,289	Non-ISO	
MOONEY SUB	5338	33kV & Below	-	178,051	-	-	-	-	21,033	157,018	Non-ISO	
GREENHORN SUB	5339	66kV	2,952	3,791,246	-	-	-	2,952	29,157	3,759,137	Non-ISO	
DIVISADERO SUB	5340	33kV & Below	-	250	-	-	-	-	250	-	Non-ISO	
GRANGEVILLE SUB	5342	33kV & Below	1,318	94,257	-	-	-	1,318	2,935	90,004	Non-ISO	
QUINN SUB	5343	66kV	5,352	7,273,255	-	-	-	5,352	758,055	6,509,848	Non-ISO	
WOODLAKE SUB	5344	33kV & Below	5,748	5,748	-	-	-	5,748	-	-	Non-ISO	
CAPTIVE SUB	5345	66kV	10,241	483,013	-	-	-	10,241	17,811	454,961	Non-ISO	
CHATHAM SUB	5346	66kV	1,846	6,141,834	-	-	-	1,846	1,200,457	4,939,531	Non-ISO	
ISABELLA SUB	5347	66kV	4,659	19,558,804	-	-	-	4,659	7,641,165	11,912,980	Non-ISO	
WHEATLAND SUB	5348	66kV	1,739	8,409,060	-	-	-	1,739	1,182,147	7,225,174	Non-ISO	
THREE RIVERS SUB	5350	66kV	2,788	2,009,366	-	-	-	2,788	383,972	1,622,606	Non-ISO	
BOXWOOD SUB	5351	66kV	43,039	4,682,441	-	-	-	43,039	315,615	4,323,787	Non-ISO	
LINE CREEK SUB	5352	33kV & Below	-	264,771	-	-	-	-	4,794	259,977	Non-ISO	
WELDON SUB	5353	66kV	7,156	9,961,491	-	-	-	7,156	1,042,714	8,911,622	Non-ISO	
KERNVILLE SUB	5356	66kV	-	3,504,992	-	-	-	-	1,073,220	2,431,772	Non-ISO	
CUMMINGS SUB	5357	66kV	679	5,120,807	-	-	-	679	44,856	5,075,722	Non-ISO	
MONOLITH SUB	5358	66kV	288	12,018,323	-	-	-	288	1,593,313	10,424,722	Non-ISO	
BREEZE SUB	5360	66kV	43,084	4,029,141	-	-	-	43,084	35,086	3,950,972	Non-ISO	
PANDOL SUB	5361	66kV	12,561	775,119	-	-	-	12,561	28,844	73		

**SOUTHERN CALIFORNIA EDISON COMPANY**  
12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	ISO RELATED					NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low / Straddle Voltage
			A/C 360 Land & Land Rights	A/C 360-362 TOTAL	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment		
CORRECTION SUBSTATION	5464	66kV	-	646,503	-	-	-	-	29,688	616,816	Non-ISO	
NORTHERN DIV SUB	5500	OFFICES & MISCE	-	16,765	-	-	-	-	-	-	Non-ISO	
TORREY SUB	5502	66kV	1,068	92,446	-	-	-	1,068	11,012	80,366	Non-ISO	
CARPINTERIA SUB	5503	66kV	3,006	18,224,146	-	-	-	3,006	667,627	17,553,513	Non-ISO	
CASITAS SUB	5504	66kV	1,190	7,482,310	-	-	-	1,190	241,872	7,239,249	Non-ISO	
COLONIA SUB	5505	66kV	1,945	12,331,430	-	-	-	1,945	377,587	11,951,898	Non-ISO	
CHANNEL ISLANDS SUB	5506	66kV	97,258	4,466,542	-	-	-	97,258	476,605	3,892,679	Non-ISO	
ORTEGA SUB	5507	66kV	319,669	4,493,435	-	-	-	319,669	1,044,884	3,128,882	Non-ISO	
DEL SUR SUB	5508	66kV	1,493	6,590,729	-	-	-	1,493	392,100	6,197,136	Non-ISO	
OXGEN SUB	5509	66kV	554	37,551	-	-	-	554	86	36,910	Non-ISO	
FILLMORE SUB	5510	66kV	58,777	7,679,473	-	-	-	58,777	317,029	7,303,668	Non-ISO	
GOLDTOWN SUB	5511	66kV	187	8,786,215	-	-	-	187	181,745	8,604,282	Non-ISO	
LANCASTER SUB	5514	66kV	-	10,215,220	-	-	-	-	1,421,171	8,794,049	Non-ISO	
COLEGIO SUBSTATION	5515	66kV	-	1,074,553	-	-	-	-	24,287	1,050,266	Non-ISO	
MOOGEN SUB	5516	66kV	-	2,753,737	-	-	-	-	2,679,728	-	Non-ISO	
CAMARILLO SUB	5517	66kV	28,584	9,209,363	-	-	-	28,584	499,785	8,680,994	Non-ISO	
LITTLE ROCK SUB	5518	66kV	443	8,502,297	-	-	-	443	416,398	8,085,457	Non-ISO	
MALIBU SUB	5519	66kV	14,389	9,452,746	-	-	-	14,389	485,602	8,952,755	Non-ISO	
MODOC SUB	5520	33kV & Below	6,752	4,648,802	-	-	-	6,752	171,751	4,470,299	Non-ISO	
UNIOIL SUB	5521	66kV	-	882,345	-	-	-	-	25,088	857,257	Non-ISO	
SHUTTLE SUB	5522	66kV	11,913	8,543,636	-	-	-	11,913	490,778	8,040,944	Non-ISO	
NORTHWIND SUB	5523	66kV	-	1,052,105	-	-	-	-	96,567	955,538	Non-ISO	
MONTECITO SUB	5524	33kV & Below	5,859	1,378,155	-	-	-	5,859	186,352	1,185,943	Non-ISO	
OAK PARK SUB	5525	66kV	389,361	6,268,650	-	-	-	389,361	1,069,763	4,809,526	Non-ISO	
OJAI SUB	5526	66kV	18,795	3,373,572	-	-	-	18,795	227,981	3,126,796	Non-ISO	
OXNARD SUB	5527	33kV & Below	7,735	1,797,764	-	-	-	7,735	366,370	1,423,659	Non-ISO	
PIERPONT SUB	5528	33kV & Below	1,727	1,323,960	-	-	-	1,727	167,975	1,154,257	Non-ISO	
PIRU SUB	5529	33kV & Below	-	13,026	-	-	-	-	13,026	-	Non-ISO	
REDMAN WUB	5530	66kV	959	1,695,480	-	-	-	959	86,736	1,607,785	Non-ISO	
SANTA BARBARA SUB	5531	66kV	36,967	14,053,258	-	-	-	36,967	1,062,807	12,953,484	Non-ISO	
SANTA SUSANA SUB	5532	66kV	5,325	10,670,055	-	-	-	5,325	237,111	10,427,619	Non-ISO	
MCGRATH BEACH PEAKER SUB	5533	66kV	-	3,547,504	-	-	-	-	694,197	2,853,307	Non-ISO	
SATICOY SUB	5534	66kV	12,556	8,771,468	-	-	-	12,556	2,495,733	6,263,178	Non-ISO	
CHARMIN SUB	5535	66kV	10,253	1,704,501	-	-	-	10,253	25,441	1,668,807	Non-ISO	
SOMIS SUB	5536	66kV	2,602	3,362,396	-	-	-	2,602	948,600	2,411,195	Non-ISO	
VENTURA SUB	5538	33kV & Below	3,099	4,459,060	-	-	-	3,099	3,458,618	997,342	Non-ISO	
ROSAMOND SUB	5541	66kV	1,088	15,457,385	-	-	-	1,088	2,107,922	13,348,375	Non-ISO	
NORTH OAKS	5542	66kV	141,650	12,664,712	-	-	-	141,650	266,281	12,256,781	Non-ISO	
WILLAMETTE SUB	5543	66kV	-	569,875	-	-	-	-	21,159	548,716	Non-ISO	
CAMAR SUB	5544	33kV & Below	-	1,173	-	-	-	-	1,173	-	Non-ISO	
PIUTE SUB	5545	66kV	3,757	6,625,057	-	-	-	3,757	188,169	6,433,131	Non-ISO	
ELIZABETH LAKE SUB	5546	66kV	86,331	9,369,445	-	-	-	86,331	266,398	9,016,715	Non-ISO	
OASIS SUB	5548	66kV	5,188	10,309,746	-	-	-	5,188	1,221,238	9,083,320	Non-ISO	
PORTER SUB	5549	33kV & Below	881	7,720,336	-	-	-	881	183,660	535,795	Non-ISO	
SAN FERNANDO SUB	5550	66kV	519	9,300,640	-	-	-	519	484,073	8,816,049	Non-ISO	
MAC NEIL SUBSTATION	5551	66kV	2,903	2,980,450	-	-	-	2,903	302,755	2,674,792	Non-ISO	
LEVY SUB	5552	66kV	16,548	6,099,607	-	-	-	16,548	412,162	5,670,896	Non-ISO	
CAL CEMENT SUB	5553	66kV	-	5,370,277	-	-	-	-	218,974	5,151,304	Non-ISO	
SHELLSOM SUB	5554	66kV	1,155	34,310	-	-	-	1,155	3,687	29,468	Non-ISO	
CHATSWORTH SUB	5555	66kV	3,166	8,438,606	-	-	-	3,166	110,164	8,325,276	Non-ISO	
NEENACH SUB	5556	66kV	3,378	6,861,303	-	-	-	3,378	152,214	6,705,711	Non-ISO	
NEWBURY SUB	5557	66kV	55,458	15,155,297	-	-	-	55,458	672,068	14,427,771	Non-ISO	
SOLEMINT SUB	5560	66kV	17,363	6,705,535	-	-	-	17,363	547,164	6,141,009	Non-ISO	
GREAT LAKES SUB	5561	66kV	-	1,056,465	-	-	-	-	98,191	958,274	Non-ISO	
GRISWOLD SUB	5562	33kV & Below	24,305	331,339	-	-	-	24,305	52,006	255,027	Non-ISO	
ESTERO SUB	5563	66kV	19,480	4,551,436	-	-	-	19,480	180,336	4,351,620	Non-ISO	
PALMDALE SUB	5564	66kV	62,303	9,640,586	-	-	-	62,303	620,966	8,957,317	Non-ISO	
PLAYA SUB	5565	33kV & Below	24,433	2,562,130	-	-	-	24,433	295,806	2,241,891	Non-ISO	
WILSONA SUB	5567	66kV	4,376	7,925,765	-	-	-	4,376	1,140,712	6,780,677	Non-ISO	
LOCKHEED SUB	5568	66kV	247,855	5,542,757	-	-	-	247,855	446,923	4,847,978	Non-ISO	
THOUSAND OAKS SUB	5569	66kV	50,503	11,469,671	-	-	-	50,503	655,097	10,764,071	Non-ISO	
VEGAS SUB	5570	66kV	36,581	5,133,297	-	-	-	36,581	139,081	5,163,635	Non-ISO	
GAVIDITA SUB	5572	66kV	9,947	3,584,716	-	-	-	9,947	886,060	2,688,708	Non-ISO	
ROCKETDYNE SUB	5573	66kV	-	7,455	-	-	-	-	7,455	-	Non-ISO	
APPGEN SUB	5574	66kV	-	258,184	-	-	-	-	-	258,184	Non-ISO	
TENGEN SUB	5575	66kV	290,531	1,380,755	-	-	-	290,531	303,058	787,166	Non-ISO	
NEWHALL SUB	5576	66kV	37,678	10,393,463	-	-	-	37,678	385,461	9,970,323	Non-ISO	
SAN MIGUEL SUB	5577	66kV	50,004	6,338,617	-	-	-	50,004	190,300	6,098,312	Non-ISO	
BURRO FLATS SUB	5578	66kV	463	204,007	-	-	-	463	4,953	198,591	Non-ISO	
WAKEFIELD SUB	5579	66kV	33,431	6,152,925	-	-	-	33,431	564,066	5,555,428	Non-ISO	
ROYAL SUB	5580	66kV	37,664	20,766,305	-	-	-	37,664	291,221	19,947,420	Non-ISO	
EXXON CO. USA SUB	5581	66kV	4,192	2,255,242	-	-	-	4,192	116,903	2,134,147	Non-ISO	
PITCHGEN SUB	5582	66kV	-	1,352,210	-	-	-	-	21,096	1,331,114	Non-ISO	
UNIVERSAL CITY SUB	5584	66kV	12,340	4,003,807	-	-	-	12,340	2,334,856	1,656,611	Non-ISO	
SAN MARCOS SUB	5585	66kV	28,884	4,872,212	-	-	-	28,884	181,978	4,661,349	Non-ISO	
GONZALES SUB	5587	66kV	144,447	7,729,709	-	-	-	144,447	271,589	7,313,673	Non-ISO	
COPCO SUB	5588	66kV	-	8	-	-	-	-	-	8	Non-ISO	
THRUST SUB	5589	66kV	-	65,498	-	-	-	-	5,405	60,093	Non-ISO	
WESTPAC SUB	5591	66kV	-	958,130	-	-	-	-	28,672	929,458	Non-ISO	
HASKELL SUB	5594	66kV	28,940	9,893,625	-	-	-	28,940	478,898	9,385,787	Non-ISO	
CAMGEN SUB	5595	66kV	-	184,540	-	-	-	-	1,270	183,270	Non-ISO	
ISLA VISTA SUB	5596	66kV	119,260	6,637,005	-	-	-	119,260	832,670	5,685,076	Non-ISO	
POTRERO SUB	5597	66kV	73,582	10,656,888	-	-	-	73,582	614,297	9,969,009	Non-ISO	
HELIET SUB	5599	66kV	-	2,453,296	-	-	-	-	235,231	2,218,065	Non-ISO	
EASTERN DIV SUB	5600	Div Offices & Misi	-	6,616,419	-	-	-	-	-	6,616,419	Non-ISO	
RANDALL SUB	5601	66kV	17,910	10,576,267	-	-	-	17,910	815,006	9,743,351	Non-ISO	
ARRO SUB	5602	33kV & Below	2,514	2,053,477	-	-	-	2,514	189,584	1,861,380	Non-ISO	
TROPHY SUB	5603	66kV	60,671	8,368,064	-	-	-	60,671	482,983	7,824,410	Non-ISO	
TIMOTEO SUB	5604	66kV	8,333	7,960,270								

**SOUTHERN CALIFORNIA EDISON COMPANY**  
12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 360	A/C 360-362	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low / Straddle Voltage
			Land & Land Rights	TOTAL	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment		
EUCUD SUB	5644	33kV & Below	2,156	1,331,632	-	-	-	2,156	388,247	941,229	Non-ISO	
LAYFAIR SUB	5645	66kV	3,268	8,847,012	-	-	-	3,268	417,855	8,425,889	Non-ISO	
COLTON CEMENT SUB	5646	66kV	-	1,017,342	-	-	-	-	25,322	992,020	Non-ISO	
VALENCIA SUB	5647	33kV & Below	8,437	2,391,543	-	-	-	8,437	1,872,714	510,393	Non-ISO	
NAROD SUB	5648	66kV	6,865	15,543,919	-	-	-	6,865	705,701	14,831,353	Non-ISO	
LINDE AIR SUB	5650	66kV	-	1,749,839	-	-	-	-	8,644	1,741,195	Non-ISO	
AMERON SUB	5652	66kV	11,898	1,584,080	-	-	-	11,898	14,597	1,557,584	Non-ISO	
SMILEY SUB	5653	33kV & Below	1,590	1,967,234	-	-	-	1,590	475,672	1,489,971	Non-ISO	
REDUCTION SUB	5654	66kV	2,631	3,991,408	-	-	-	2,631	287,656	3,701,121	Non-ISO	
NOGALES SUB	5655	66kV	23,176	8,430,283	-	-	-	23,176	87,310	8,323,797	Non-ISO	
BAIN SUB	5656	66kV	28,695	8,487,985	-	-	-	28,695	870,060	7,589,230	Non-ISO	
WHEEL SUB	5657	66kV	882	882	-	-	-	882	-	-	Non-ISO	
PIPE SUB	5658	66kV	410	1,170,862	-	-	-	410	16,221	1,154,230	Non-ISO	
ARCHIBALD SUB	5659	66kV	9,307	9,212,325	-	-	-	9,307	426,938	8,776,080	Non-ISO	
RUNNING SPRINGS SUB	5661	33kV & Below	12,065	3,849,315	-	-	-	12,065	81,708	3,755,543	Non-ISO	
ARBORS SUB	5662	66kV	-	235,774	-	-	-	-	-	235,774	Non-ISO	
MILLIKEN SUB	5663	66kV	795,975	10,947,729	-	-	-	795,975	539,620	9,612,135	Non-ISO	
WIMBLEDON SUB	5664	66kV	-	11,282,481	-	-	-	-	739,840	10,542,641	Non-ISO	
HAVASU SUB	5665	66kV	2,142	2,034,037	-	-	-	2,142	7,329	2,024,566	Non-ISO	
ARCHLINE SUB	5667	66kV	19,821	9,065,785	-	-	-	19,821	592,297	8,453,667	Non-ISO	
CRESTMORE SUB	5668	66kV	850	45,459	-	-	-	850	2,432	42,177	Non-ISO	
DEL ROSA SUB	5670	66kV	14,078	11,518,898	-	-	-	14,078	1,606,447	9,898,473	Non-ISO	
ALDER SUB	5672	66kV	8,032	14,654,012	-	-	-	8,032	705,773	13,940,207	Non-ISO	
WHIPPLE SUB	5674	66kV	14,262	3,579,820	-	-	-	14,262	188,999	3,376,821	Non-ISO	
CUCAMONGA SUB	5677	66kV	13,341	10,537,185	-	-	-	13,341	771,396	9,752,447	Non-ISO	
LANDING SUB	5678	66kV	4,700	2,037,953	-	-	-	4,700	31,814	2,001,439	Non-ISO	
CHASE SUB	5679	66kV	-	10,933,776	-	-	-	-	530,684	10,403,091	Non-ISO	
DIAMOND BAR SUB	5680	66kV	505,887	6,900,688	-	-	-	505,887	322,656	6,072,145	Non-ISO	
GARDEN STATE SUB	5681	66kV	-	26,504	-	-	-	-	6,899	19,605	Non-ISO	
UNIMED SUB	5682	66kV	-	557,685	-	-	-	-	48,746	508,940	Non-ISO	
DELGEN SUB	5683	66kV	-	-	-	-	-	-	-	-	Non-ISO	
CINGEN SUB	5685	66kV	-	321,497	-	-	-	-	13,700	307,797	Non-ISO	
SOQUEL SUB	5686	66kV	333,364	11,562,292	-	-	-	333,364	692,686	10,536,241	Non-ISO	
ROCKAIR SUB	5688	66kV	9,232	414,148	-	-	-	9,232	12,621	392,295	Non-ISO	
SIMPSON SUB	5690	66kV	-	1,946	-	-	-	-	1,946	-	Non-ISO	
DATABANK SUB	5694	66kV	4,232	874,361	-	-	-	4,232	20,896	849,234	Non-ISO	
CLAREMONT SUB	5695	66kV	28,833	1,291,920	-	-	-	28,833	39,672	1,223,414	Non-ISO	
FIBRE SUB	5696	66kV	-	907,445	-	-	-	-	13,172	894,273	Non-ISO	
POLYPRO SUB	5697	66kV	-	1,059,795	-	-	-	-	43,119	1,016,676	Non-ISO	
BHP SUBSTATION	5698	66kV	-	61,145	-	-	-	-	61,145	-	Non-ISO	
KINDER SUB.	5699	66kV	-	516,946	-	-	-	-	30,407	486,538	Non-ISO	
ALON SUB	5701	66kV	13,817	7,426,640	-	-	-	13,817	116,587	7,296,236	Non-ISO	
VIDEO SUB	5702	66kV	8,662	8,662	-	-	-	8,662	-	-	Non-ISO	
NAVY MOLE SUB	5704	66kV	-	256,547	-	-	-	-	46,572	209,975	Non-ISO	
SHELLWAT SUB	5705	66kV	-	1,767,054	-	-	-	-	49,560	1,717,494	Non-ISO	
BELMONT SUB	5706	33kV & Below	3,742	2,808,520	-	-	-	3,742	2,808,520	-	Non-ISO	
BIXBY SUB	5707	33kV & Below	18,626	1,875,546	-	-	-	18,626	129,709	1,727,211	Non-ISO	
BOWL SUB	5708	66kV	21,182	8,020,463	-	-	-	21,182	371,645	7,627,636	Non-ISO	
INJECTION SUB	5709	66kV	2,075	146,543	-	-	-	2,075	29,479	114,989	Non-ISO	
BREWSTER SUB	5710	33kV & Below	14,222	4,737,241	-	-	-	14,222	220,876	4,502,143	Non-ISO	
CARSON SUB	5711	66kV	95,073	6,885,151	-	-	-	95,073	836,953	5,953,125	Non-ISO	
CAMERON SUB	5712	66kV	-	4,969,574	-	-	-	-	167,327	4,802,247	Non-ISO	
CUDAHY SUB	5714	66kV	23,610	11,755,072	-	-	-	23,610	529,392	11,202,070	Non-ISO	
BOOST SUB	5717	66kV	1,297	849,534	-	-	-	1,297	43,253	804,985	Non-ISO	
FRUITLAND SUB	5718	66kV	39,968	7,017,315	-	-	-	39,968	203,696	6,773,651	Non-ISO	
ASTRO SUB	5719	66kV	-	721,769	-	-	-	-	7,855	713,914	Non-ISO	
FREMONT SUB	5720	66kV	96,955	14,149,646	-	-	-	96,955	521,550	13,531,141	Non-ISO	
DIKE SUBSTATION	5721	66kV	-	2,155,647	-	-	-	-	126,045	2,029,602	Non-ISO	
PICO SUBSTATION	5722	66kV	-	12,090,082	-	-	-	-	1,022,286	11,067,796	Non-ISO	
CORNUTA SUBSTATION	5723	66kV	86,695	3,595,212	-	-	-	86,695	201,856	3,306,656	Non-ISO	
GRAHAM SUBSTATION	5725	33kV & Below	3,622	4,133,640	-	-	-	3,622	281,576	3,848,441	Non-ISO	
HATHAWAY SUBSTATION	5726	66kV	26,442	11,184,330	-	-	-	26,442	1,162,406	9,995,482	Non-ISO	
ATHENS SUBSTATION	5727	33kV & Below	8,170	2,032,687	-	-	-	8,170	44,170	1,980,347	Non-ISO	
HUNTINGTON PARK SUB	5728	33kV & Below	1,512	6,118,944	-	-	-	1,512	310,291	5,807,142	Non-ISO	
PACLINE SUBSTATION	5730	66kV	1,790	601,201	-	-	-	1,790	31,989	567,421	Non-ISO	
LYNWOOD SUBSTATION	5731	33kV & Below	15,754	4,914,711	-	-	-	15,754	109,063	4,799,894	Non-ISO	
MAHWOOD SUBSTATION	5732	33kV & Below	2,736	2,736	-	-	-	2,736	117,132	2,618,564	Non-ISO	
LAKEWOOD SUBSTATION	5733	66kV	2,066	2,927,503	-	-	-	2,066	111,929	2,813,508	Non-ISO	
LINDEN SUBSTATION	5734	33kV & Below	1,533	2,061,554	-	-	-	1,533	203,842	1,856,180	Non-ISO	
LOCUST SUBSTATION	5735	33kV & Below	2,319	4,152,874	-	-	-	2,319	118,306	4,032,249	Non-ISO	
LOS CERRITOS SUB	5738	66kV	176,528	5,072,375	-	-	-	176,528	749,008	4,146,839	Non-ISO	
RANDOLPH SUBSTATION	5739	66kV	18,869	8,799,545	-	-	-	18,869	611,880	8,168,796	Non-ISO	
NAPLES SUBSTATION	5740	33kV & Below	4,644	1,554,268	-	-	-	4,644	103,502	1,446,122	Non-ISO	
THUMS "A" SUBSTATION	5741	66kV	-	120,809	-	-	-	-	615	120,259	Non-ISO	
THUMS "B" SUBSTATION	5742	66kV	-	361,629	-	-	-	-	51,516	310,113	Non-ISO	
OLDFIELD SUBSTATION	5744	33kV & Below	11,496	5,522,286	-	-	-	11,496	1,292,524	4,218,266	Non-ISO	
LARDER SUBSTATION	5745	33kV & Below	-	1,525,967	-	-	-	-	36,616	1,489,351	Non-ISO	
SANITREAT SUBSTATION	5746	66kV	1,000	24,065	-	-	-	1,000	5,047	18,018	Non-ISO	
FERNWOOD SUBSTATION	5749	66kV	21,800	8,255,262	-	-	-	21,800	532,491	7,700,972	Non-ISO	
CALDEN SUBSTATION	5750	66kV	109,960	4,842,665	-	-	-	109,960	115,203	4,617,501	Non-ISO	
NOLA SUBSTATION	5751	66kV	149,061	3,668,545	-	-	-	149,061	630,256	2,899,228	Non-ISO	
SIGNAL HILL	5753	66kV	23,308	2,974,130	-	-	-	23,308	272,234	2,701,896	Non-ISO	
SOMERSET SUBSTATION	5754	66kV	5,781	10,985,555	-	-	-	5,781	298,259	10,681,515	Non-ISO	
STATE STREET SUBSTATION	5755	66kV	36,338	7,722,230	-	-	-	36,338	530,837	7,155,055	Non-ISO	
BULLIS SUBSTATION	5756	66kV	7,072	9,959,528	-	-	-	7,072	234,429	9,718,027	Non-ISO	
WBCO SUBSTATION	5757	66kV	-	201,793	-	-	-	-	9,280	192,512	Non-ISO	
WATSON SUBSTATION	5758	66kV	65,255	12,727,799	-	-	-	65,255	3,010,565	9,651,979	Non-ISO	
THUMS "C" SUBSTATION	5759	66kV	-	362,333	-	-	-	-	49,955	312,378	Non-ISO	
THUMS "D" SUBSTATION	5760	66kV	-	404,714	-	-	-	-	48,389	356,325	Non-ISO	
COLLEGE SUBSTATION	5763	66kV	-	407,305	-	-	-	-	16,078	391,227	Non-ISO	
REVITAL SUBSTATION	5765	66kV	29,526	286,282	-	-	-	29,526	4,032	252,724	Non-ISO	
DAISY SUBSTATION	5766	33kV & Below	21,725	3,411,178	-	-	-	21,725	608,520	2,780,933	Non-ISO	
COMPTON SUBSTATION	5767	33kV & Below	1,227	1,150,919	-	-	-	1,227	107,153	1,042,538	Non-ISO	
BROADWAY	5768	66kV	96,151	7,102,482	-	-	-	96,151	250,877	6,755,454	Non-ISO	
CLARK SUBSTATION	5769	66kV	7,528	2,208,299	-	-	-	7,528	158,391	2,042,380	Non-ISO	
GAGE SUBSTATION	5770	33kV & Below	1,200	1,026,915	-	-	-	1,200	28,895	996,820	Non-ISO	
LUCAS SUBSTATION	5771	66kV	11,216	9,812,426	-	-	-	11,216	850,817	8,950,392	Non-ISO	
IMPERIAL SUB	5772	66kV	22,377	11,609,511	-	-	-	22,377	164,798	11,422,336	Non-ISO	
FUEL SUBSTATION	5773	66kV	-	308,696	-	-	-	-	25,825	282,871	Non-ISO	
LONGDON SUBSTATION	5774	33kV & Below	2,943	3,253,503	-	-	-	2,943	303,864	2,946,697	Non-ISO	
DOMHILL SUBSTATION	5775	66kV	-	255,143	-	-	-	-	16,317	238,827	Non-ISO	
JERSEY SUBSTATION	5776	66kV	30,305	5,317,123	-	-	-	30,305	274,432	5,012,387	Non-ISO	
WOODRUFF SUBSTATION	5777	33kV & Below	12,169	4,305,798	-	-	-	12,169	97,558	3,715,471	Non-ISO	
DAVIDSON CITY	5779	33kV &										

**SOUTHERN CALIFORNIA EDISON COMPANY**  
12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 360	A/C 360-362	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low ISO/Straddle Voltage
			Land & Land Rights	TOTAL	Land & Land Rights	Structures & Improvements	Station Equipment	Land & Land Rights	Structures & Improvements	Station Equipment		
SMITH TOOL SUBSTATION	5803	66kV	5,082	5,082	-	-	-	5,082	-	-	Non-ISO	
ATWOOD SUBSTATION	5804	66kV	9,422	8,857,902	-	-	-	9,422	742,276	8,106,204	Non-ISO	
BAYSIDE SUBSTATION	5805	66kV	44,428	5,512,668	-	-	-	44,428	169,299	5,288,941	Non-ISO	
APOLLO SUBSTATION	5806	66kV	597	1,259,586	-	-	-	597	169,147	1,089,842	Non-ISO	
BOLSA SUBSTATION	5807	66kV	34,046	4,856,761	-	-	-	34,046	541,481	4,281,234	Non-ISO	
BRYAN SUBSTATION	5808	66kV	14,865	10,294,769	-	-	-	14,865	353,174	9,926,730	Non-ISO	
SLATER SUBSTATION	5809	66kV	75,818	7,369,085	-	-	-	75,818	667,995	6,625,272	Non-ISO	
BRISTOL SUBSTATION	5810	33kV & Below	9,030	134,929	-	-	-	9,030	9,955	115,943	Non-ISO	
CHILQUITA SUBSTATION	5811	66kV	648,506	12,656,393	-	-	-	648,506	574,221	11,233,666	Non-ISO	
MURPHY SUB	5812	66kV	61,155	7,656,257	-	-	-	61,155	579,327	7,015,922	Non-ISO	
CAROLINA SUBSTATION	5813	66kV	30,813	7,350,072	-	-	-	30,813	642,971	6,676,286	Non-ISO	
CARMENITA SUBSTATION	5814	66kV	6,616	12,852,006	-	-	-	6,616	764,154	12,081,236	Non-ISO	
PAPER SUBSTATION	5815	66kV	1,488	943,149	-	-	-	1,488	10,365	931,296	Non-ISO	
PARKWOOD SUBSTATION	5816	66kV	58,055	6,025,761	-	-	-	58,055	138,864	5,828,864	Non-ISO	
COSTA MESA SUBSTATION	5817	33kV & Below	4,078	1,848,383	-	-	-	4,078	170,360	1,673,945	Non-ISO	
CROWN SUBSTATION	5818	66kV	57,929	7,946,941	-	-	-	57,929	599,195	7,289,818	Non-ISO	
ELV SUBSTATION	5819	66kV	52,170	8,213,170	-	-	-	52,170	228,310	11,839,940	Non-ISO	
DOWNEY SUB	5820	33kV & Below	8,033	3,842,113	-	-	-	8,033	22,467	3,811,612	Non-ISO	
FAIRVIEW SUBSTATION	5821	66kV	1,818	13,401,835	-	-	-	1,818	887,836	12,512,800	Non-ISO	
FULLERTON SUBSTATION	5822	66kV	20,432	10,083,730	-	-	-	20,432	288,582	9,774,716	Non-ISO	
GALLATIN SUB	5823	66kV	19,042	3,506,310	-	-	-	19,042	159,384	3,327,884	Non-ISO	
WEICO SUBSTATION	5824	66kV	-	75	-	-	-	-	-	75	Non-ISO	
HAMILTON SUBSTATION	5825	66kV	11,053	9,650,567	-	-	-	11,053	1,583,251	8,056,263	Non-ISO	
CAMDEN SUBSTATION	5826	66kV	183,449	8,134,449	-	-	-	183,449	567,751	4,038,248	Non-ISO	
WAVE SUBSTATION	5828	66kV	1,978	6,286,634	-	-	-	1,978	210,782	6,073,873	Non-ISO	
IRVINE SUBSTATION	5829	66kV	2,643	12,148,707	-	-	-	2,643	394,189	11,751,875	Non-ISO	
SOUTH PAC SUBSTATION	5830	66kV	-	150,508	-	-	-	-	21,986	128,522	Non-ISO	
LA HABRA SUBSTATION	5832	66kV	916	13,455,732	-	-	-	916	669,888	12,784,928	Non-ISO	
GILBERT SUBSTATION	5833	66kV	42,324	5,496,089	-	-	-	42,324	102,755	5,351,010	Non-ISO	
LA MIRADA SUBSTATION	5834	66kV	52,555	6,895,746	-	-	-	52,555	969,982	5,873,208	Non-ISO	
LA VETA SUBSTATION	5835	66kV	77,254	8,667,802	-	-	-	77,254	2,314,164	6,276,383	Non-ISO	
MORRO SUBSTATION	5836	66kV	5,900,026	5,900,026	-	-	-	5,900,026	5,630,229	3,000,000	Non-ISO	
CYPRESS SUBSTATION	5837	66kV	25,204	10,951,591	-	-	-	25,204	313,359	10,613,028	Non-ISO	
NARROWS SUB	5838	66kV	30,474	11,151,539	-	-	-	30,474	521,223	10,599,842	Non-ISO	
SUNNYHILLS SUBSTATION	5840	66kV	-	379,176	-	-	-	-	46,227	332,949	Non-ISO	
LEANDRO SUBSTATION	5841	66kV	-	466,741	-	-	-	-	466,741	-	Non-ISO	
OCEANVIEW SUBSTATION	5842	66kV	6,909	9,131,371	-	-	-	6,909	501,675	8,622,786	Non-ISO	
ORANGE SUBSTATION	5843	66kV	91,402	20,817,068	-	-	-	91,402	5,142,524	15,583,142	Non-ISO	
WILSHIRE SUB	5844	66kV	-	39,287	-	-	-	-	-	39,287	Non-ISO	
MOULTON SUBSTATION	5845	66kV	64,266	10,137,799	-	-	-	64,266	929,065	9,144,468	Non-ISO	
MERCURY SUB	5846	66kV	503	503	-	-	-	503	-	-	Non-ISO	
RIVERA SUB	5848	33kV & Below	3,356	8,063,477	-	-	-	3,356	1,055,265	7,004,857	Non-ISO	
SANTA ANA SUBSTATION	5849	33kV & Below	3,722	2,740,293	-	-	-	3,722	2,736,571	-	Non-ISO	
SANTA FE SPRINGS SUB	5850	66kV	26,233	7,997,584	-	-	-	26,233	412,935	7,558,415	Non-ISO	
GISLER SUBSTATION	5851	66kV	141,656	8,012,670	-	-	-	141,656	466,528	7,404,468	Non-ISO	
STEWART SUB	5852	66kV	5,013,295	5,013,295	-	-	-	5,013,295	4,836,664	5,000,000	Non-ISO	
TALBERT SUBSTATION	5853	66kV	23,620	4,454,321	-	-	-	23,620	248,425	4,182,276	Non-ISO	
BROOKHURST SUBSTATION	5854	66kV	118,649	5,911,028	-	-	-	118,649	370,312	5,422,067	Non-ISO	
WASHINGTON SUBSTATION	5856	66kV	86,492	8,113,774	-	-	-	86,492	838,349	7,188,933	Non-ISO	
SPONGE SUB	5857	66kV	-	70,615	-	-	-	-	10,308	60,307	Non-ISO	
CEDARWOOD SUBSTATION	5859	33kV & Below	3,886	1,223,902	-	-	-	3,886	82,512	1,137,504	Non-ISO	
ALTON SUBSTATION	5860	66kV	62,261	62,261	-	-	-	62,261	-	-	Non-ISO	
CHESTNUT SUBSTATION	5861	66kV	1,681	8,824,955	-	-	-	1,681	256,241	8,567,034	Non-ISO	
SULLIVAN SUBSTATION	5862	66kV	14,328	14,473,521	-	-	-	14,328	710,846	13,748,347	Non-ISO	
BARTOLO SUB	5863	33kV & Below	4,112	942,241	-	-	-	4,112	84,224	853,905	Non-ISO	
EDGEWATER SUBSTATION	5864	33kV & Below	3,840	180,639	-	-	-	3,840	31,971	144,829	Non-ISO	
ESTRELLA SUBSTATION	5865	66kV	130,440	14,389,705	-	-	-	130,440	711,187	13,548,077	Non-ISO	
MARION SUBSTATION	5866	66kV	95,573	4,970,708	-	-	-	95,573	157,610	4,717,525	Non-ISO	
ARCH BEACH SUBSTATION	5867	33kV & Below	7,596	48,163	-	-	-	7,596	40,567	-	Non-ISO	
SHAWNEE SUBSTATION	5869	66kV	406,611	4,306,611	-	-	-	406,611	132,787	3,689,540	Non-ISO	
LAMPSON SUBSTATION	5870	66kV	143,290	7,973,401	-	-	-	143,290	426,818	7,403,292	Non-ISO	
NORSEAL SUBSTATION	5871	66kV	-	622,894	-	-	-	-	25,437	597,457	Non-ISO	
LAFAYETTE SUBSTATION	5872	66kV	109,897	11,181,489	-	-	-	109,897	659,968	10,411,624	Non-ISO	
LA PALMA SUBSTATION	5873	66kV	8,903	12,513,684	-	-	-	8,903	1,810,287	10,694,494	Non-ISO	
MAC ARTHUR SUBSTATION	5874	66kV	100,888	8,333,758	-	-	-	100,888	184,557	8,048,314	Non-ISO	
EDINGER SUBSTATION	5875	33kV & Below	11,499	2,606,225	-	-	-	11,499	457,316	2,137,410	Non-ISO	
TUSTIN SUBSTATION	5878	66kV	-	84,595	-	-	-	-	84,595	-	Non-ISO	
CABRILLO SUBSTATION	5879	66kV	72,333	14,272,493	-	-	-	72,333	643,532	13,556,627	Non-ISO	
YORBA LINDA SUBSTATION	5880	66kV	109,294	9,787,687	-	-	-	109,294	336,282	9,342,110	Non-ISO	
BASTA SUBSTATION	5883	33kV & Below	6,540	2,128,489	-	-	-	6,540	295,663	1,826,286	Non-ISO	
BURRIS PIT	5884	66kV	-	632,420	-	-	-	-	43,060	589,360	Non-ISO	
POWERINE SUB	5885	66kV	-	980,589	-	-	-	-	14,763	965,826	Non-ISO	
PIONEER SUB	5886	66kV	145,164	8,403,360	-	-	-	145,164	287,857	7,970,339	Non-ISO	
BORRIGO SUBSTATION	5887	66kV	40,290	8,749,873	-	-	-	40,290	545,306	8,164,277	Non-ISO	
WESTGATE SUB	5888	33kV & Below	23,707	1,878,139	-	-	-	23,707	135,828	1,718,604	Non-ISO	
PLACENTIA SUBSTATION	5889	66kV	62,828	5,675,358	-	-	-	62,828	597,957	5,014,573	Non-ISO	
CANYON SUBSTATION	5890	66kV	11,185	11,302,560	-	-	-	11,185	709,739	10,581,636	Non-ISO	
FRIENDLY HILLS SUB	5891	33kV & Below	11,260	538,670	-	-	-	11,260	117,855	409,554	Non-ISO	
TELEGRAPH SUB	5892	66kV	5,865	13,147,458	-	-	-	5,865	1,820,234	11,321,359	Non-ISO	
PASSONS SUB	5893	66kV	98,244	6,975,375	-	-	-	98,244	558,277	6,318,854	Non-ISO	
AMMONIA SUBSTATION	5894	66kV	-	1,711	-	-	-	-	151,108	1,711	Non-ISO	
PALUARINO SUBSTATION	5895	33kV & Below	8,006	1,370,124	-	-	-	8,006	151,108	1,211,000	Non-ISO	
NIGUEL SUBSTATION	5896	66kV	46,880	14,457,059	-	-	-	46,880	427,698	13,982,481	Non-ISO	
SOCO SUBSTATION	5897	66kV	-	734,573	-	-	-	-	24,132	710,441	Non-ISO	
FLORADAY SUB	5898	33kV & Below	11,336	3,538,991	-	-	-	11,336	127,939	3,399,717	Non-ISO	
TRASK SUBSTATION	5899	66kV	16,481	13,487,113	-	-	-	16,481	153,628	13,317,003	Non-ISO	
HOPEFUL SUB	5901	66kV	6,999	673,412	-	-	-	6,999	28,568	637,845	Non-ISO	
LAS LOMAS SUB	5902	66kV	-	18,869,818	-	-	-	-	3,697,566	15,172,252	Non-ISO	
SKINWATER SUB	5903	33kV & Below	-	1,388,512	-	-	-	-	947,632	1,040,880	Non-ISO	
Safari Substation	5920	66kV	8,253,906	33,860,166	-	-	-	8,253,906	5,482,574	20,123,686	Non-ISO	
CUSTOMER SERVICE DEPART.	6000		42,379,381	46,059,647	-	-	-	42,379,381	3,583,850	96,416	Non-ISO	
ORANGE COUNTY REGION	6002	33kV & Below	-	3,931,315	-	-	-	-	3,931,315	-	Non-ISO	
INLAND REGION	6003		10,165,017	21,006,989	-	-	-	10,165,017	10,841,972	-	Non-ISO	
DESERT SPRINGS REGION	6004		735	735	-	-	-	735	-	-	Non-ISO	
NORTH COAST REGION	6005		404,961	7,033,025	-	-	-	404,961	6,628,064	-	Non-ISO	
RIALTO COMB FAC. BLDG B&C	6011	Div Offices & Msa	30,622	11,984,250	-	-	-	30,622	11,943,904	9,724	Non-ISO	
SAN BERNARDINO REG OFFICE	6013		-	360,871	-	-	-	-	360,871	-	Non-ISO	
REGIONAL OFFICE-VENTURA	6015		-	104,380	-	-	-	-	104,380	-	Non-ISO	
MONTEBELLO DISTRICT OFFICE	6022		285,487	9,688,115	-	-	-	285,487	9,312,234	90,394	Non-ISO	
COVINA SERVICE CENTER	6026		11,193,628	17,884,601	-	-	-	11,193,628	16,668,049	22,924	Non-ISO	
MONROVIA SERVICE CENTER	6027		540,938	10,582,390	-	-	-	540,938	9,941,452	-	Non-ISO	
CENTRAL ORANGE COUNTY DIS	6029	33kV & Below	707,581	26,206,7								

**SOUTHERN CALIFORNIA EDISON COMPANY**  
12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 360	A/C 360-362	ISO RELATED				NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low / Straddle Voltage
			Land & Land Rights	TOTAL	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment		A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment		
Customer Service	6072	CSTMR SRVC FAC	129,019	6,137,470	-	-	-		129,019	6,008,451	-	Non-ISO	
HIGH DESERT S/C	6073		947,081	17,429,903	-	-	-		947,081	16,482,822	-	Non-ISO	
MENFEE S/C	6077		729,979	35,582,335	-	-	-		729,979	34,374,890	477,466	Non-ISO	
PALM SPRINGS S/C	6079		1,970,088	15,443,216	-	-	-		1,970,088	13,463,427	9,701	Non-ISO	
29 PALMS SERVICE CENTER	6084		157,613	7,032,401	-	-	-		157,613	6,874,788	-	Non-ISO	
BISHOP SERVICE CENTER	6085		124,733	9,726,149	-	-	-		124,733	9,600,365	1,050	Non-ISO	
RIDGECREST SERVICE CENTER	6086		520,911	28,992,071	-	-	-		520,911	28,062,460	8,700	Non-ISO	
BLTYHE SERVICE CENTER	6087		397,023	22,305,557	-	-	-		397,023	21,908,535	-	Non-ISO	
WILDOMAR SERVICE CENTER	6088		6,360,238	40,163,042	-	-	-		6,360,238	33,902,804	-	Non-ISO	
MOBILE TRANSFORMER- MONTEBE	6090		-	54,470	-	-	-		-	-	54,470	Non-ISO	
FRAZIER PARK FACILITY	6108		6,195	494,618	-	-	-		6,195	488,423	-	Non-ISO	
MAMMOTH LAKES SERVICE CTR	6112		80,672	5,680,251	-	-	-		80,672	5,599,579	-	Non-ISO	
29 PALMS LOCAL OFFICE	6113		2,188	163,547	-	-	-		2,188	161,359	-	Non-ISO	
SANTA ANA CMB FAC-EDBU OF	6114		-	3,502,904	-	-	-		-	3,502,904	-	Non-ISO	
CHINO YARD TRAINING FAC	6115		-	883,254	-	-	-		-	883,254	-	Non-ISO	
RCRO-EMPIRE LAKES(LEASED)	6213		-	7,318,472	-	-	-		-	7,318,472	-	Non-ISO	
FRESNO COUNTY	7010	33kV & Below	-	15,009	-	-	-		-	-	15,009	Non-ISO	
INYO COUNTY	7014		-	12,826	-	-	-		-	-	12,826	Non-ISO	
KERN COUNTY	7015	33kV & Below	-	497,356	-	-	-		-	395,128	102,228	Non-ISO	
KINGS COUNTY	7016	33kV & Below	-	12,396	-	-	-		-	-	12,396	Non-ISO	
LOS ANGELES COUNTY	7019		-	961,598	-	-	-		-	143,480	818,119	Non-ISO	
MONO COUNTY	7026	33kV & Below	-	52,402	-	-	-		-	-	52,402	Non-ISO	
ORANGE COUNTY	7030		-	679,527	-	-	-		-	-	679,527	Non-ISO	
RIVERSIDE COUNTY	7033		-	86,770	-	-	-		-	-	86,770	Non-ISO	
SAN BERNARDINO COUNTY	7036		-	8,279,016	-	-	-		-	-	8,279,016	Non-ISO	
SANTA BARBARA COUNTY	7042	33kV & Below	-	43,385	-	-	-		-	-	43,385	Non-ISO	
TULARE COUNTY	7054		368	216,805	-	-	-		368	-	216,437	Non-ISO	
VENTURA COUNTY	7056	33kV & Below	-	130,155	-	-	-		-	-	130,155	Non-ISO	
ROADWAY(CEP) SUB	8000	115kV	-	-	-	-	-		-	-	-	Non-ISO	
PALUBA(CEP) SUB	8003	115kV	-	29,290	-	-	-		-	29,290	-	Non-ISO	
STADLER(CEP) SUB	8005	115kV	-	10,272	-	-	-		-	10,272	-	Non-ISO	
THORNHILL(CEP) SUB	8004	115kV	-	-	-	-	-		-	-	-	Non-ISO	
RIVERTX SUBSTATION	8007	115kV	-	16,324	-	-	-		-	-	16,324	Non-ISO	
PHELAN(CEP) SUB	8010	115kV	-	-	-	-	-		-	-	-	Non-ISO	
BANKWIND SUBSTATION	8011	115kV	-	(19)	-	-	-		-	-	(19)	Non-ISO	
APPLE VALLEY(CEP) SUB	8013	115kV	-	-	-	-	-		-	-	-	Non-ISO	
FARREL(CEP) SUB	8016	115kV	-	21,477	-	-	-		-	21,477	-	Non-ISO	
CONCHO(CEP) SUB	8017	115kV	-	21,477	-	-	-		-	21,477	-	Non-ISO	
SAVAGE(CEP) SUB	8020	115kV	-	340,536	-	-	-		-	6,417	334,118	Non-ISO	
PEPPER(CEP) SUB	8021	115kV	-	-	-	-	-		-	-	-	Non-ISO	
YUCCA(CEP) SUB	8022	115kV	-	15,178	-	-	-		-	-	15,178	Non-ISO	
ALESSANDRO(CEP) SUB	8024	115kV	-	-	-	-	-		-	-	-	Non-ISO	
BANNING SUB	8026	115kV	-	30,022	-	-	-		-	21,477	8,546	Non-ISO	
HI DESERT(CEP) SUB	8029	115kV	-	7,515	-	-	-		-	-	7,515	Non-ISO	
MOUNTAIN PASS(CEP) SUB	8030	115kV	-	78,759	-	-	-		-	5,567	73,192	Non-ISO	
RANDSBURG(CEP) SUB	8031	115kV	-	42,906	-	-	-		-	-	42,906	Non-ISO	
SEARLES(CEP) SUB	8033	115kV	-	871,723	-	-	-		-	12,120	859,603	Non-ISO	
SANTA ROSA(CEP) SUB	8036	115kV	-	741,556	-	-	-		-	21,477	720,080	Non-ISO	
HOLGATE(CEP) SUB	8041	115kV	-	-	-	-	-		-	-	-	Non-ISO	
CALECTRIC SUB (CEP)	8042	115kV	-	21,477	-	-	-		-	21,477	-	Non-ISO	
GARNET SUB	8044	115kV	-	135,943	-	-	-		-	-	135,943	Non-ISO	
PUREWATER SUB	8059	115kV	-	31,948	-	-	-		-	-	31,948	Non-ISO	
WHIRLWIND SUB	8060	500kV	-	1,434	-	-	-		-	-	1,434	Non-ISO	
TIFFANYWIND SUB	8064	115kV	-	42,101	-	-	-		-	-	42,101	Non-ISO	
CARODEAN	8072	115kV	88,409	88,409	-	-	-		88,409	-	-	Non-ISO	
IVIGLEN SUB	8073	115kV	-	21,160	-	-	-		-	-	21,160	Non-ISO	
SN BRDND SWITCHCRK	8076 & 1999	220kV	-	-	-	-	-		-	-	-	Non-ISO	
NUSED RAILROAD CNVY(NEW)	8077	33kV & Below	-	7,662	-	-	-		-	-	7,662	Non-ISO	
AQUEDUCT SUB	8079	115kV	4,973	5,990	-	-	-		4,973	-	1,017	Non-ISO	
CAJALCO SUB	8086	115kV	-	-	-	-	-		-	-	-	Non-ISO	
HEPERIA SUB	8087	115kV	-	10,187	-	-	-		-	-	10,187	Non-ISO	
SHANDIN SUB	8093	115kV	-	139,799	-	-	-		-	139,799	-	Non-ISO	
ARROWHEAD SUB	8094	115kV	-	469,114	-	-	-		-	-	469,114	Non-ISO	
MARSHINO SUB	8096	115kV	-	6,720	-	-	-		-	-	6,720	Non-ISO	
DUNN SIDING SUB	8097	115kV	-	-	-	-	-		-	-	-	Non-ISO	
EISENHOWER SUB	8098	115kV	-	393,482	-	-	-		-	21,477	372,006	Non-ISO	
TAMARISK SUB	8099	115kV	-	16,277	-	-	-		-	16,277	-	Non-ISO	
AMARGO SUB	8102	33kV & Below	735	1,003,413	-	-	-		735	29,623	973,054	Non-ISO	
AMBOY SUB	8103	33kV & Below	-	33,699	-	-	-		-	-	33,699	Non-ISO	
FARREL SUB	8104	115kV	55,706	535,979	-	-	-		55,706	63,285	416,988	Non-ISO	
APPLE VALLEY SUB	8105	115kV	5,648	37,575	-	-	-		5,648	29,057	2,871	Non-ISO	
ARABY SUB	8106	33kV & Below	-	-	-	-	-		-	-	-	Non-ISO	
BARSTOW SUB	8110	33kV & Below	1,279	7,018,423	-	-	-		1,279	111,437	6,905,707	Non-ISO	
BLTYHE SUB	8113	33kV & Below	4,124	8,889,370	-	-	-		4,124	1,011,824	7,873,421	Non-ISO	
BRYMAN SUB	8117	33kV & Below	237	971,525	-	-	-		237	36,850	934,437	Non-ISO	
CABAZON SUB	8118	33kV & Below	46,675	2,211,122	-	-	-		46,675	209,983	1,954,464	Non-ISO	
CADY SUB	8119	33kV & Below	203	7,548	-	-	-		203	54,480	781,852	Non-ISO	
MILITARY SUB	8120	33kV & Below	-	715,653	-	-	-		-	8,387	707,266	Non-ISO	
CANTIL SUB	8121	33kV & Below	98	306,992	-	-	-		98	3,796	303,098	Non-ISO	
CATHEDRAL CITY SUB	8123	33kV & Below	661	2,669,633	-	-	-		661	27,262	2,641,710	Non-ISO	
PALM SPRINGS SUB	8124	33kV & Below	3,159	2,223,252	-	-	-		3,159	157,115	2,062,978	Non-ISO	
CHASE 2 SUB	8126	33kV & Below	191,176	197,655	-	-	-		191,176	-	6,479	Non-ISO	
CONVERSE FLATS SUB	8130	33kV & Below	-	228,432	-	-	-		-	-	175,819	Non-ISO	
CAL CITY SUB	8132	33kV & Below	29,661	6,208,498	-	-	-		29,661	209,895	5,968,942	Non-ISO	
DAGGETT SUB	8133	33kV & Below	259	29,505	-	-	-		-	-	29,246	Non-ISO	
DESERT OUTPOST SUB	8136	33kV & Below	10,454	1,490,405	-	-	-		10,454	28,924	1,451,027	Non-ISO	
DOWNS SUB	8137	115kV	513,494	4,261,797	-	-	-		513,494	227,824	3,520,479	Non-ISO	
FORT IRWIN SUBSTATION	8138	33kV & Below	-	80,729	-	-	-		-	-	80,729	Non-ISO	
DUNES SUB	8139	33kV & Below	-	892,353	-	-	-		-	9,651	882,701	Non-ISO	
EAST BARSTOW SUB	8140	33kV & Below	1,368	453,170	-	-	-		1,368	29,750	422,053	Non-ISO	
VENT SUB	8141	33kV & Below	-	8,593	-	-	-		-	-	8,593	Non-ISO	
EDGE MONT SUB	8143	33kV & Below	1,173	7,742	-	-	-		1,173	-	6,569	Non-ISO	
FOREST HOME SUB	8148	33kV & Below	-	776,283	-	-	-		-	92,489	683,794	Non-ISO	
GEORGE AIR FORCE BASE SUB	8149	33kV & Below	13,868	337,118	-	-	-		13,868	241	323,010	Non-ISO	
SUNSHINE SWITCHYARD SUB	8150	66kV	-	272,705	-	-	-		-	(959,010)	1,231,716	Non-ISO	
GLEN AVON SUB	8151	66kV	94,930	10,486,256	-	-	-		94,930	838,009	9,553,317	Non-ISO	
GLEN IVY SUB	8152	33kV & Below	2,658	285,016	-	-	-		2,658	-	17,740	Non-ISO	
GOLDSTONE SUB	8154	33kV & Below	-	188,589	-	-	-		-	-	188,589	Non-ISO	
NUGGET SUB	8155	33kV & Below	12,402	8,070,278	-	-	-		12,402	726,659	7,331,217	Non-ISO	
EL SORRANTE SUB	8159	33kV & Below	13,384	9,261,863	-	-	-		13,384	1,368,601	7,879,879	Non-ISO	
HARPER LAKE SUB	8160	33kV & Below	73	13,982	-	-	-		73	13,909	-	Non-ISO	
HARVARD SUB	8161	33kV & Below	854	305,995	-	-	-		854	14,232	290,910	Non-ISO	
DEFRAIN SUB	8162	33kV & Below	9,916	2,384,016	-	-	-		9,916	232,939	2,141,161	Non-ISO	
HELENDALE SUB	8163	33kV & Below	277	2,029,852	-	-	-		277	13,948	2,015,627	Non-ISO	
HEMET SUB	8164	33kV & Below	2,925	4,754,001	-	-	-		2,925	903,532	3,847,544	Non-ISO	
HINKLEY SUB	8167	33kV & Below	286	2,296,854	-	-	-		286	58,407	2,228,150	Non-ISO	
IDYLLWILD SUB	8168	33kV & Below	834	97,075	-	-	-		834	35,577	60,664	Non-ISO	

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12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 360	A/C 360-362	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low / Straddle Voltage
			Land & Land Rights	TOTAL	Land & Land Rights	Structures & Improvements	Station Equipment	Land & Land Rights	Structures & Improvements	Station Equipment		
OLIVE LAKE SUB	8210	33kV & Below	-	2,972,038	-	-	-	492	23,286	2,948,260	Non-ISO	
ORDWAY SUB	8211	33kV & Below	-	2,688,427	-	-	-	626	43,313	2,644,487	Non-ISO	
ORO GRANDE SUB	8212	33kV & Below	-	708,404	-	-	-	-	57,555	650,749	Non-ISO	
PALM CANYON SUB	8214	33kV & Below	47,783	4,257,043	-	-	-	47,783	672,844	3,536,416	Non-ISO	
PALM VILLAGE SUB	8215	33kV & Below	-	5,313,964	-	-	-	792	538,327	4,774,845	Non-ISO	
PEERLESS SUB	8216	33kV & Below	-	430,700	-	-	-	-	16,613	414,087	Non-ISO	
GAVILAN SUB	8219	33kV & Below	19,370	3,817,028	-	-	-	19,370	76,655	3,721,003	Non-ISO	
LUCERNE SUB	8220	33kV & Below	-	3,482,500	-	-	-	5,113	81,509	3,395,878	Non-ISO	
RAILROAD CANYON (OLD) SUB	8221	33kV & Below	-	542	-	-	-	542	-	-	Non-ISO	
RANCHO SUB	8222	33kV & Below	18,851	3,754,339	-	-	-	18,851	253,222	3,482,266	Non-ISO	
RIALTO SUB	8225	33kV & Below	-	3,568,893	-	-	-	1,322	1,386,354	2,181,217	Non-ISO	
RIDGECREST SUB	8226	33kV & Below	-	1,642	-	-	-	1,642	58,034	453,961	Non-ISO	
RIPLEY SUB	8227	33kV & Below	14,356	813,037	-	-	-	14,356	57,249	741,432	Non-ISO	
CANYON LAKE SUBSTATION	8228	33kV & Below	-	2,016,737	-	-	-	-	65,839	1,950,899	Non-ISO	
RUBIDOUX SUB	8231	33kV & Below	-	1,637,088	-	-	-	7,370	88,068	1,541,650	Non-ISO	
SAN JACINTO SUB	8234	33kV & Below	-	666,542	-	-	-	1,501	534,431	130,611	Non-ISO	
SECOND AVENUE SUB	8235	33kV & Below	-	673,206	-	-	-	1,404	66,916	604,885	Non-ISO	
SILVER SPUR SUB	8238	33kV & Below	-	2,350,628	-	-	-	6,198	92,236	2,252,194	Non-ISO	
SIXTEENTH STREET SUB	8239	33kV & Below	-	2,285,387	-	-	-	7,367	139,823	2,138,197	Non-ISO	
SUN CITY SUB	8243	33kV & Below	-	680	-	-	-	-	672	8	Non-ISO	
SUNNY DUNES SUB	8244	33kV & Below	22,642	7,724,980	-	-	-	22,642	1,074,784	6,627,554	Non-ISO	
TEMESCAL SUB	8250	33kV & Below	38,511	105,792	-	-	-	38,511	2,562	64,718	Non-ISO	
THUNDERBIRD SUB	8251	33kV & Below	-	543,507	-	-	-	2,201	24,757	516,548	Non-ISO	
TRONA SUB	8252	33kV & Below	-	375,555	-	-	-	-	981	370,573	Non-ISO	
TWENTYNINE PALMS SUB	8255	33kV & Below	-	2,370,746	-	-	-	729	58,833	2,311,184	Non-ISO	
VERDANT SUB	8259	33kV & Below	-	567,806	-	-	-	1,067	17,642	549,097	Non-ISO	
VICTORVILLE SUB	8260	33kV & Below	-	6,349,724	-	-	-	4,212	1,131,648	5,213,863	Non-ISO	
WEST BARSTOW SUB	8262	33kV & Below	-	1,283,642	-	-	-	-	160,467	1,123,175	Non-ISO	
PEREZ SUB	8263	33kV & Below	-	901,037	-	-	-	1,362	38,239	861,436	Non-ISO	
WEST RIVERSIDE SUB	8265	33kV & Below	-	2,151,514	-	-	-	471	155,812	1,995,230	Non-ISO	
WHITewater SUB	8266	33kV & Below	-	411,629	-	-	-	368	-	411,262	Non-ISO	
WILDE SUB	8267	33kV & Below	-	565	-	-	-	-	565	-	Non-ISO	
YERMO SUB	8268	33kV & Below	-	1,537,398	-	-	-	1,072	18,125	1,518,202	Non-ISO	
CLEARGLEN SUB	8269	66kV	-	45,211	-	-	-	-	13,363	31,848	Non-ISO	
TENAJA SUBSTATION	8270	115kV	-	10,900,297	-	-	-	-	2,166,438	8,733,859	Non-ISO	
IRON MOUNTAIN SUB	8273	33kV & Below	-	1,199,406	-	-	-	-	80,598	1,118,809	Non-ISO	
JEFFERSON SUB	8275	66kV	62,251	16,060,201	-	-	-	62,251	690,696	15,307,253	Non-ISO	
CORONA SUB	8279	66kV	10,199	22,555,596	-	-	-	10,199	2,518,547	20,026,850	Non-ISO	
GALE SUB	8283	115kV	-	1,061,404	-	-	-	1,975	155,503	903,927	Non-ISO	
GOLD HILL SUB	8294	33kV & Below	-	1,151,678	-	-	-	-	64,271	1,087,407	Non-ISO	
TORTILLA SUB	8295	115kV	-	95,619	-	-	-	-	95,619	-	Non-ISO	
NELSON SUB	8296	115kV	-	632	-	-	-	632	-	-	Non-ISO	
FORGE SUB	8297	66kV	2,301	617,714	-	-	-	2,301	72,099	543,314	Non-ISO	
METALCAN SUB	8299	66kV	18,384	142,770	-	-	-	18,384	-	124,386	Non-ISO	
CAPWIND	8302	115kV	-	3,088	-	-	-	-	-	3,088	Non-ISO	
TRANSWIND	8305	115kV	-	28,183	-	-	-	-	-	28,183	Non-ISO	
VENWIND	8306	115kV	-	137,752	-	-	-	-	-	137,752	Non-ISO	
ALTWIND	8308	115kV	-	8,980	-	-	-	-	-	8,980	Non-ISO	
SEGS II	8320	115kV	-	15,875	-	-	-	-	-	15,875	Non-ISO	
SEGS III	8321	115kV	-	282	-	-	-	-	-	282	Non-ISO	
NEWCOMB	8342	115kV	-	8,031	-	-	-	-	-	8,031	Non-ISO	
ELSDORE	8343	115kV	-	165,756	-	-	-	-	-	165,756	Non-ISO	
SOUTH BASE SUB	8344	115kV	-	6,599	-	-	-	-	-	6,599	Non-ISO	
INDIAN WELLS SUB	8345	115kV	-	27,417	-	-	-	21,477	5,941	Non-ISO		
PECHANGA SUB	8347	115kV	-	20,876	-	-	-	-	-	20,876	Non-ISO	
MORAGA	8348	115kV	2,414	1,432,621	-	-	-	2,414	52,480	1,377,728	Non-ISO	
COSO SUB	8361	115kV	-	109,790	-	-	-	-	109,790	-	Non-ISO	
PRIMM SUBSTATION	8372	220kV	-	(25)	-	-	-	-	-	(25)	Non-ISO	
TAYSHILL SUB	8502	66kV	-	847,267	-	-	-	-	13,858	833,409	Non-ISO	
GETTY SUB	8503	66kV	-	801,678	-	-	-	-	507,968	250,909	Non-ISO	
FRAZIER PARK SUB	8505	66kV	9,273	2,828,281	-	-	-	9,273	518,152	2,300,855	Non-ISO	
RINGMILL SUB	8507	66kV	7,867	394,280	-	-	-	7,867	7,028	379,386	Non-ISO	
PHARMACY SUBSTATION	8509	66kV	-	1,463,381	-	-	-	-	63,928	1,399,453	Non-ISO	
HAAGEN DAZS SUBSTATION	8510	66kV	-	346,351	-	-	-	-	5,309	341,042	Non-ISO	
GLOW SUBSTATION	8511	66kV	-	87,986	-	-	-	-	-	87,986	Non-ISO	
SQUIRREL SUBSTATION	8512	66kV	-	-	-	-	-	-	-	-	Non-ISO	
SPARKLE SUBSTATION	8513	66kV	-	(24,677)	-	-	-	-	-	(24,677)	Non-ISO	
SERRFERN SUBSTATION	8550	66kV	-	1,451,823	-	-	-	2,991	1,448,833	Non-ISO		
ICEGEN SUBSTATION	8553	66kV	-	80,286	-	-	-	-	7,505	72,782	Non-ISO	
THREE M SUB	8555	66kV	2,628	2,628	-	-	-	2,628	-	-	Non-ISO	
NORTHROP SUB	8556	66kV	8,184	2,431,102	-	-	-	8,184	33,628	2,389,290	Non-ISO	
CARBONIC SUBSTATION	8557	66kV	-	331,339	-	-	-	5,965	19,740	305,634	Non-ISO	
PLASTER SUBSTATION	8558	66kV	-	45,091	-	-	-	-	22,382	22,709	Non-ISO	
VAPOR SUBSTATION	8559	66kV	-	128,112	-	-	-	-	-	128,112	Non-ISO	
CANINE PT	8560	115kV	-	6,221	-	-	-	-	6,221	-	Non-ISO	
NIAGARA SUB	8567	66kV	16,827	3,016,048	-	-	-	16,827	480,371	2,518,849	Non-ISO	
CRS	8367	500kV	-	-	-	-	-	-	-	-	Non-ISO	
RECOVERY SUBSTATION	8801	66kV	-	4,640,384	-	-	-	-	342,143	4,298,240	Non-ISO	
BREA SUBSTATION	8802	66kV	308,988	8,910,584	-	-	-	308,988	501,676	8,099,920	Non-ISO	
SAFARI SUBSTATION	8803	66kV	-	-	-	-	-	-	-	-	Non-ISO	
LIMESTONE	8804	66kV	60,389	15,676,932	-	-	-	60,389	302,713	15,313,829	Non-ISO	
CHIP SUB	8805	66kV	-	324,971	-	-	-	-	15,163	309,807	Non-ISO	
NORWELD SUBSTATION	8807	66kV	-	145,109	-	-	-	-	17,703	127,406	Non-ISO	
TEAM SUBSTATION	8808	66kV	-	4,417,652	-	-	-	-	63,766	4,353,885	Non-ISO	
ONEIL SUBSTATION	8810	66kV	12,956	10,381,244	-	-	-	12,956	811,552	9,556,736	Non-ISO	
COYGEN SUBSTATION	8811	66kV	-	515,001	-	-	-	-	21,202	493,799	Non-ISO	
ORCOGEN SUBSTATION	8812	66kV	192	256,118	-	-	-	192	10,152	245,775	Non-ISO	
SHELL WESTERN(BREA) SUB	8813	66kV	-	232,306	-	-	-	-	6,771	225,535	Non-ISO	
JOHNHAR SUBSTATION	8814	66kV	-	-	-	-	-	-	-	-	Non-ISO	
UNIVERSITY SUBSTATION	8817	66kV	10,271	586,978	-	-	-	10,271	2,312	574,396	Non-ISO	
COMPRESS SUB	8818	66kV	-	925,844	-	-	-	-	34,559	891,285	Non-ISO	
WESBASIN SUB	8820	66kV	-	458,648	-	-	-	-	6,863	451,785	Non-ISO	
REYNOLDS ALUM SUB	8822	66kV	9,319	9,319	-	-	-	9,319	-	-	Non-ISO	
TITAN SUBSTATION	8824	66kV	-	695,527	-	-	-	-	3,354	692,173	Non-ISO	
FINANCE SUB-METRO RGN	8825	66kV	14,155	320,216	-	-	-	14,155	-	306,061	Non-ISO	
DUCTILE SUBSTATION	8827	66kV	-	22,754	-	-	-	-	12,626	10,128	Non-ISO	
ORCOSAN SUB	8829	66kV	-	769,250	-	-	-	-	46,705	722,546	Non-ISO	
PIER SUBSTATION	8830	66kV	-	2,983,873	-	-	-	-	289,008	2,694,865	Non-ISO	
STEVEDORE SUB	8831	66kV	-	1,142,545	-	-	-	-	72,650	1,069,896	Non-ISO	
SHIP SUBSTATION	8832	66kV	-	3,114,913	-	-	-	-	153,063	2,961,851	Non-ISO	
WHARF SUBSTATION	8833	66kV	-	2,450,052	-	-	-	-	331,030	2,119,022	Non-ISO	
PROCESS SUBSTATION	8834	66kV	-	3,849,692	-	-	-	-	360,469	3,489,223	Non-ISO	
CANNVAL SUBSTATION	8835	66kV	-	2,388,423	-	-	-	-	164,802	2,223,621	Non-ISO	
HOLLYWOOD PARK	8836	66kV	-	-	-	-	-	-	-	-	Non-ISO	
MWD EASTSIDE RES	8956	115kV	-	26,094	-	-	-	-	-	26,094	Non-ISO	
AIRCRAFT OPERATIONS	9030	Div Offices & Misc	-	30,489	-	-	-	-	30,489	-	Non-ISO	
PROPERTY SVCS-G01	9033	Div Offices & Misc	-	8,380	-	-	-	-	8,380	-	Non-ISO	
TRANS/SUB SUPPORT SERV	9047	Div Offices & Misc	-	27,426	-	-	-	-	-	27,426	Non-ISO	
INFO TECH-G02	9077	Div Offices & Misc	-	6,299	-	-	-	-	-	6,299	Non-ISO	
IRVINE OPER CENTER	9078	Misc	-	11,760	-	-	-	-	11,760	-	Non-ISO	
VENTURA CORP WH	9135	-	-	6,953	-	-	-	-	6,953	-	Non-ISO	
IRVINDALE BUSINESS CENTER	9188	-										

**SOUTHERN CALIFORNIA EDISON COMPANY**  
12-31-2021 Facilities  
DISTRIBUTION SUBSTATION FACILITIES

DESCRIPTION	LOCATION NUMBER	Voltage	A/C 360	A/C 360-362	ISO RELATED			NON-ISO RELATED PLANT			ISO/Non-ISO/Mix	High / Low / Straddle Voltage
			Land & Land Rights	TOTAL	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment	A/C 360 Land & Land Rights	A/C 361 Structures & Improvements	A/C 362 Station Equipment		
PALM SPRGS GARAGE	9679	66kV	-	35,107	-	-	-	-	35,107	-	-	Non-ISO
CATALINA COMMON UTIL PLNT	9805	Div Offices & Misi	-	-	-	-	-	-	-	-	-	Non-ISO
No Desc	9970	220kV	-	823	-	-	-	-	-	823	-	Non-ISO
PLANT ACCTG-MISC. LEDGER	9900	Div Offices & Misi	4,313	4,313	-	-	-	4,313	-	-	-	Non-ISO
COASTAL DIV SUB	5200		-	1,660	-	-	-	-	-	1,660	-	Non-ISO
THRIVE SUBSTATION	8134	33kV & Below	-	764,422	-	-	-	-	203,895	560,527	-	Non-ISO
WARNE GENERATING PLANT	9122	220kV	-	36,994	-	-	-	-	36,994	-	-	Non-ISO
TELECOMM-ALHAMBRA	9330	Misc	-	150,294	-	-	-	-	-	150,294	-	Non-ISO
<b>Total Distribution Substations</b>			<b>\$ 130,224,350</b>	<b>\$ 4,312,110,788</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 130,224,350</b>	<b>\$ 903,343,847</b>	<b>\$ 3,278,542,591</b>		

<b>ISO/Non-ISO/Mix Summary</b>	<b>Non-ISO Total</b>	<b>130,224,350</b>	<b>4,312,110,788</b>				<b>130,224,350</b>	<b>903,343,847</b>	<b>3,278,542,591</b>	
	<b>Mix Total</b>	-	-	-	-	-	-	-	-	-