

APPENDIX A: System Data

Intentionally left blank

1 Existing Generation

Table A1-1: Existing generation plants in PG&E planning area

Planning Area	Generating Plant	Maximum Capacity
PG&E - Humboldt	Humboldt Bay	172.2
	Kekawaka	4.9
	LP Samoa	25
	Fairhaven	17.3
	Blue Lake	12
	Humboldt Area Total	231
PG&E - North Coast and North Bay	Santa Fe	160
	Bear Canyon	20
	Westford Flat	30
	Western Geo	38
	Geysers 5	53
	Geysers 6	53
	Geysers 7	53
	Geysers 8	53
	Geysers 11	85
	Geysers 12	106
	Geysers 13	133
	Geysers 14	109
	Geysers 16	118
	Geysers 17	118
	Geysers 18	118
	Geysers 20	118
	SMUD Geo	72
	Potter Valley	10.5
	Geo Energy	20
	Indian Valley	3
	Sonoma Landfill	6
	Exxon	54
	Monticello	11.5
North Coast and North Bay Area Total	1564	
PG&E - North Valley	Pit River	793
	Battle Creek	17
	Cow Creek	5
	North Feather River	792
	South Feather River	154
	West Feather River	26
	Black Butte	11
	Colusa	717
	Hatchet Ridge Wind	103
	QFs	355
	North Valley Area Total	2,973
	PG&E - Central Valley	Wadham
Woodland Biomass		25
UC Davis Co-Gen		4
Cal-Peak Vaca Dixon		49

Planning Area	Generating Plant	Maximum Capacity
	Wolfskill Energy Center	60
	Lambie, Creed and Goosehaven	143
	EnXco	60
	Solano	228
	High Winds	200
	Shiloh	500
	Bowman Power House	4
	Camp Far West (SMUD)	7
	Chicago Park Power House	40
	Chili Bar Power House	7
	Colgate Power House	340
	Deer Creek Power House	6
	Drum Power House	102
	Dutch Flat Power House	48
	El Dorado Power House	20
	Feather River Energy Center	50
	French Meadow Power House	17
	Green Leaf No. 1	73
	Green Leaf No. 2	50
	Halsey Power House	11
	Haypress Power House	15
	Hellhole Power House	1
	Middle Fork Power House	130
	Narrows Power House	66
	Newcastle Power House	14
	Oxbow Power House	6
	Ralston Power House	83
	Rollins Power House	12
	Spaulding Power House	17
	SPI-Lincoln	18
	Ultra Rock (Rio Bravo-Rocklin)	25
	Wise Power House	20
	Yuba City Co-Generation	49
	Yuba City Energy Center	61
	Altamont Co-Generation	13
	Camanche Power House	11
	Co-generation National POSDEF	50
	Electra Power House	97
	Flowind Wind Farms	76
	GWF Tracy	347
	Ione Energy	21
	Lodi CT	25
	Lodi Stigg	48
	Pardee Power House	29
	Salt Springs Power House	42
	Simpson Paper Co-Generation	50
	Stockton Co-Generation (Air Products)	50
	Stockton Waste Water Facility	2
	Thermal Energy	21
	Tiger Creek Power House	55

Planning Area	Generating Plant	Maximum Capacity
	US Wind Power Farms	158
	West Point Power House	14
	Lodi Energy Center	307
	Beardsley Power House	11
	Donnells Power House	68
	Fiberboard (Sierra Pacific)	6
	Pacific Ultra Power Chinese Station	22
	Sand Bar Power House	15
	Spring Gap Power House	7
	Stanislaus Power House	83
	Stanislaus Waste Co-gen	24
	Tulloch Power House	17
	Mariposa Energy	198
	Patterson Pass Wind	22
	Central Valley Area Total	4,451
	PG&E - Greater Bay Area	Agnews Power Plant
Alameda Gas Turbines		49
Berkeley Cogeneration		27
Buena Vista Energy Wind		38
Chevron Richmond Refinery		133
Columbia Solar Energy		19
Contra Costa Carbon Plant		27
Crockett Cogen		240
Delta Energy Center		965
Diablo Winds		9
Dyer Summit Wind Repower		46
Gateway Generating Station		599
Gilroy Cogen		123
Gilroy Peaker		182
Hummingbird Energy Storage		76
Los Esteros Critical Energy Facility		320
Los Medanos Energy Center		587
Marsh Landing		774
Martinez Cogen		127
Metcalf Energy Center		619
Oakland Gas Turbines		165
Ox Mountain		13
Rhodia INC. (Rhone-Poulenc)		4
Richmond Steam Turbine		18
Riverview Energy Center		61
Russell City Energy Center		640
SRI International		6
Tosco (Rodeo Plant)		50
Vasco Wind		81
WDAT		6
Yerba Buena Battery	4	
Greater Bay Area Total	6042	
	Fresno Cogen-Agrico	106.9
	Adams_E	19
	Adera Solar	20

Planning Area	Generating Plant	Maximum Capacity
PG&E - Greater Fresno Area	Alpaughn 20S	20
	Alpaughn 50S	50
	Atwell	20
	Avenal	6
	Balch 1 PH	31
	Balch 2 PH	107
	Bulld 12	2.8
	Blackwell Solar	3
	Mendota Biomass Power	25
	Cantua	20
	Chow 2 Peaker Plant	52.5
	Chevron USA (Coalinga)	25
	Chow II Biomass to Energy	12.5
	CID Solar	20
	Citizen Solar B	5
	Coalinga Cogeneration Company	46
	CalPeak Power – Panoche LLC	49
	Crane Valley	0.9
	Corcoran PB	20
	Corcoran City	11
	Dinuba Generation Project	13.5
	EI Nido Biomass to Energy	12.5
	EE Kettleman Land	20
	Exchequer Hydro	94.5
	Fresno Waste Water	9
	Friant Dam	27.3
	Fresno Solar West & South	3
	GWF Henrietta Peaker Plant	109.6
	Gates Dist	30
	Giffen Dist	10
	Guernsey Dist	20
	HEP Peaker Plant Aggregate	102
	Hanford L.P.	23
	Hass PH Unit 1 &2 Aggregate	146.2
	Helms Pump-Gen	1,212
	J.R. Wood	10.8
	Jgbswt	2.9
	Kansas	40
	Kent	20
	Kerkhoff PH1	32.8
	Kerkhoff PH2	142
Kingsburg Cogen	34.5	
Kings River Hydro	51.5	
Kings River Conservation District	112	
Liberty V Lost Hills	20	
Madera	28.7	
McCall	2.5	
McSwain Hydro	10	
Merced Falls	4	
Merced Solar	1.5	

Planning Area	Generating Plant	Maximum Capacity	
	Mission Solar	1.5	
	Morelos Del Sol	15	
	North Star Solar 1	60	
	O'Neill Pump-Gen	11	
	Panoche Energy Center	410	
	Pine Flat Hydro	210	
	Quinto Solar PV	107.6	
	Sanger Cogen	67.5	
	Sandrag	19	
	San Joaquin 2	3.2	
	San Joaquin 3	4.2	
	Schindler	30	
	Starwood Panoche	121.8	
	Stroud	20	
	Stratford	20	
	Suncity	20	
	SUN Harvest Solar	1.5	
	Rio Bravo Fresno (AKA Ultrapower)	45	
	Vega Solar	20	
	Wellhead Power Gates, LLC	49	
	Wellhead Power Panoche, LLC	49	
	Westlands	38	
	Westlands Solar Farm	18	
	Wishon/San Joaquin #1-A Aggregate	20.4	
	2097 Helton	1.5	
		Greater Fresno Area Total	4382
	PG&E - Kern Area	Badger Creek (PSE)	49
Chalk Cliff		48	
Cymric Cogen (Chevron)		21	
Cadet (Chev USA)		12	
Dexzel		33	
Discovery		44	
Double C (PSE)		59	
Elk Hills		623	
Frito Lay		8	
Hi Sierra Cogen		59	
Kern		177	
Kern Canyon Power House		11	
Kernfront		59	
Kern Ridge (South Belridge)		76	
La Paloma Generation		1080	
Midsun		25	
Mt. Poso		56	
Navy 35R		65	
Oildale Cogen		40	
Bear Mountain Cogen (PSE)		49	
Live Oak (PSE)		48	
McKittrick (PSE)	45		
Rio Bravo Hydro	11		
Shell S.E. Kern River	27		

Planning Area	Generating Plant	Maximum Capacity
	Solar Tannenhill	18
	Sunset	248
	North Midway (Texaco)	24
	Sunrise (Texaco)	597
	Midset (Texaco)	42
	Lost Hills (Texaco)	21
	University Cogen	36
	Kern Area Total	3,863
PG&E - Central Coast and Los Padres	Moss Landing Power Plant	1,020
	Soledad Energy	10
	Basic Energy Cogen (King City)	133
	King City Peaker	70
	Sargent Canyon Cogen (Oilfields)	45
	Salinas River Cogen (Oilfields)	45
	Diablo Canyon Power Plant	2,400
	Union Oil (Tosco)	6
	Santa Maria	8
	Vandenberg Air Force Base	15
	Topaz	562
	California Valley Solar	254
	Central Coast and Los Padres Area Total	4,568

Table A1-2: Existing generation plants in SCE planning area

Planning Area	Generating Plant	Maximum Capacity
SCE - Tehachapi and Big Creek Corridor	Big Creek 1-1 Gen 1	19.9
	Big Creek 1-1 Gen 2	21.6
	Big Creek 1-2 Gen 3	21.6
	Big Creek 1-2 Gen 4	31.2
	Big Creek 2-1 Gen 1	49.3
	Big Creek 2-1 Gen 2	49.2
	Big Creek 2-2 Gen 3	18.7
	Big Creek 2-2 Gen 4	19.7
	Big Creek 2-3 Gen 5	17.0
	Big Creek 2-3 Gen 6	18.5
	Big Creek 3-1 Gen 1	34.0
	Big Creek 3-1 Gen 2	33.0
	Big Creek 3-2 Gen 3	34.0
	Big Creek 3-2 Gen 4	36.0
	Big Creek 3-3 Gen 5	36.5
	Big Creek 4 Gen 41	50.1
	Big Creek 4 Gen 41	50.1
	Big Creek 8 Gen 81	19.8
	Big Creek 8 Gen 81	45.0
	Eastwood	207.0
	Mamoth 1G	93.5
	Mamoth 2G	93.5
	Portal	9.6
	Warne 1	38.0
	Warne 2	38.0
	Pandol 1	56.0
	Pandol 2	56.0
	Ultragen	41.0
	Omar 1G	90.8
	Omar 2G	90.8
	Omar 3G	90.8
	Omar 4G	90.8
	SYCCYN 1G	75.0
	SYCCYN 2G	75.0
	SYCCYN 3G	75.0
	SYCCYN 4G	75.0
	Pastoria Energy Facility	770.0
	Manzana Wind Project	189.0
	Pacific Wind Project	143.5
	Coram Brodie Wind Project Expansion	51.0
	Coram Brodie Wind Project Phase 2	51.0
	Alta 2012	720.0
	CPC Alta Wind 4-5 (fka CPC East)	420.0
CPC Alta Wind 1-3 (fka CPC West)	600.0	
Windstar I Alternate	120.0	
Eastwind	60.0	
Westwind	21.0	
Tehachap	114.4	

Planning Area	Generating Plant	Maximum Capacity
	WNDT167	120.0
	North Sky River Wind	170.0
	Sky River	76.9
	Catalina Solar	150.0
	KR 3-1	22.8
	KR 3-2	21.5
	LakeGen	18.0
	Wellhead Power Delano	50.0
	Kawgen	18.0
	Avenue	318.0
	Kingsbird	270.0
	AV Solar 1	249.0
	Arbwind	21.8
	Canwind	65.0
	Enwind	47.1
	Encawind	112.9
	Flowind	40.8
	Dutchwind	14.0
	Northwind	19.4
	Oakwind	27.9
	Southwind	6.6
	Zondwind	32.6
	Breeze	12.5
	Midwind	18.0
	Morwind	56.0
	Kern River	24.0
	Borel	10.0
	Alta Vista Suntower Generating Station	66.0
	Antelope Power Plant	20.0
	Down	20.0
	Twilight	20.0
	Antelope Valley PV1	318.5
	Antelope Valley PV2	285.0
	Rising Tree	198.8
	Western Antelope Blue Sky Ranch A	20.0
	First Solar North Rosamond	100.8
	AV Solar Ranch 2-A	20.4
	AV Solar Ranch 2-B	20.4
	RE Astoria	184.0
	RE Camelot	45.0
	RE Columbia	15.0
	TA Acacia	20.0
	SGS Antelope Valley	306.0
	North Rosamond	174.0
	Alamo	19.7
	Alpine Solar	66
	Antelope 2 - Antelope Expansion 2	121.3
	Big Sky Solar - Bayshore	60.6
	Big Sky Solar - DSR	55.8

Planning Area	Generating Plant	Maximum Capacity
	Herder: Ducor	76.6
	RE Garland	203.8
	Goldtown	13.0
	Monolith	38.3
	Portal Ridge Solar	34.3
	Big Sky Solar - Solverde	86.5
	Big Sky Solar - Summer Solar	20.2
	Growers: Tulare Solar	37.4
	Valentine Solar	101.2
	Tehachapi and Big Creek Corridor Total	9,922.3
	SCE - East of Lugo Area	Desert Star Energy Star
Mountain Pass - Ivanpah Solar		392
Copper Mountain Solar I		58
Copper Mountain Solar II		155
East of Lugo Area Total		1,111
SCE - North of Lugo	ALBAG1	140
	BLM E7G	24
	BLM E8G	24
	BLM W9G	19.5
	BORAX I	22
	BSPHYD26	14.18
	BSPHYD34	15.9
	BLM E7G	24
	CALGEN	92.2
	CSA DIABLO 1	15
	CSA DIABLO 2	10
	High Desert Power Plant	854.9
	KERRMGEE	15
	LUNDY	3
	LUZ (8 & 9)	160
	NAVYII4G	22.5
	NAVYII5G	22.5
	NAVYII6G	22.5
	OCASOG2	140
	OXBOW G1	49.8
	POOLE	10.9
	RUSH	11.5
	SEGS 1G	14.2
	SEGS 2G	43.8
SUNGEN	150	
North of Lugo Area Total	1,897	
	Blythe Energy Center	520
	Indigo Peaker	136
	Cabazon Wind	42.6
	Mountainview IV Wind	42
	Wintec 5 Wind	3.7
	Wintec 6 Wind	45
	Pacificorp Wind	2.1

Planning Area	Generating Plant	Maximum Capacity
SCE - Eastern Area	FPLE Green 1 Wind	8.7
	FPLE Green 2 Wind	3.0
	FPLE Green 3 Wind	6.8
	Wintec 2 Wind	16.5
	Wintec 3 Wind	11.6
	Wintec 4 Wind	16.5
	Seawest 1 Wind	44.4
	Seawest 2 Wind	22.2
	Seawest 3 Wind	22.4
	Renwind Wind	9.0
	Whitewater Wind	66
	Altamesa 4 Wind	40
	Painted Hills Wind	16.9
	Altwind QF 1	32.9
	Altwind QF 2	15.1
	Buchwind QF	17
	Capwind QF	20
	Garnet QF Wind	101.4
	Panaero Wind	30
	Renwind QF 1	6.3
	Renwind QF 2	6.6
	Sanwind QF 1	3.0
	Sanwind QF 2	28.0
	Seawind QF	27
	Terawind QF	22.5
	Transwind QF	40.0
	Venwind QF 1	25.5
	Venwind QF 2	19.3
	CPV Sentinel Peaker	850
	Genesis Solar Energy Project	250
	Inland Empire Energy Center	800
	Desert Sunlight PV Project	550
	McCoy Photovoltaic Project	250
	Mountainview Power Project	1,048
Dracker Solar ¹	247	
Windustries	9.8	
Edom Hills Wind Farm	20	
Karen Avenue Wind Farm	11.7	
Eastern Area Total	5,506.5	
SCE Metro Area	Agua Mansa Generating Facility	43
	Alamitos	2,010
	Anaheim CT	41
	AP North Lake Solar	20
	Barre Peaker	45
	Berry Petroleum Placerita	37
	BP West Coast Products	21
	Calabasas Gas-to-Energy Facility	7
	Canyon Power Plant	195

¹ The total size is 485 MW, and 247MW is operational.

Planning Area	Generating Plant	Maximum Capacity
	Carson Cogeneration Company	47
	Center Area Lumped Units	18
	Center Peaker	45
	Century	36
	Chevron CIC	170.7
	Chiquita Canyon Landfill Generating Facility	7
	City Of Long Beach	28
	Clearwater Power Plant	28
	Corona Energy Partners, Ltd.	30
	County Of Los Angeles (Pitchess Honor Ranch)	19
	Coyote Canyon	6
	Devil Canyon	235
	Drews	36
	E. F. Oxnard, Incorporated	34
	El Segundo Energy Center	570
	Ellwood Generating Station	54
	Etiwanda Hydro Recovery Plant	10
	Foothill Hydro Recovery Plant	8
	Glen Arm Power Plant	132
	Grapeland Peaker	43
	H. Gonzales Gas Turbine	12
	Harbor Cogen Combined Cycle	100
	Houweling Nurseries Oxnard CHP	13.2
	Huntington Beach 1 & 2	452
	L.A. County Sanitation District #2 (Puente Hills B)	47
	Long Beach 1 – 4	260
	Malburg Generating Facility	134
	Mira Loma Peaker	43
	MM West Coast Covina, LLC	6
	Mojave Siphon PH	18
	MWD Perris Hydroelectric Recovery Plant	8
	O.L.S. Energy Company- Chino-Mens Inst.	25
	Ormond Beach	1,516
	Procter & Gamble Paper Prod. (Oxnard II)	46
	Redondo ²	1,356
	Ripon Cogeneration	27
	Riverside Energy Resource Center (RERC)	194
	San Dimas Hydro Recovery Plant	8
	Springs Generation Plant	36
	SPVP044	8
	Sunshine Gas Producers, L.L.C.	20
	Tequesquite Landfill Solar Project	7.5
	Walnut Creek Energy Park	500
	Watson Cogeneration	406
	Weyerhaeuser Company (Formerly Williamette Industries)	13

² Redondo Unit 7 retired on 10/1/2019

Planning Area	Generating Plant	Maximum Capacity
	Multiple smaller facilities	85.5
	Metro Area Total	9,987

Table A1-3: Existing generation plants in SDG&E planning area

Planning Area	Generating Plant	Maximum Capacity
SDG&E	Otay Mesa GT1	185.1
	Otay Mesa GT2	185.1
	Otay Mesa ST1	233.5
	Larkspur Border 1	46.0
	Larkspur Border 2	46.0
	Cabrillo	3.1
	Capistrano	5.3
	Carlton Hills	1.6
	Carlton Hills	0.3
	Chicarita	3.7
	Border/Calpeak	48.0
	El Cajon/Calpeak	45.4
	Escondido/Calpeak	48.0
	DIVSON_6_NSQF	41.7
	East Gate	0.3
	Encina 2	104.0
	Encina 3	110.0
	Encina 5	300.0
	Encina 4	330.0
	Encina GT	14.5
	MMC-Electrovest (Escondido)	49.5
	Palomar_CT1	162.4
	Palomar_CT2	162.4
	Palomar_ST	240.8
	Goalline	38.4
	Mesa Heights	3.6
	Miramar 1	48.0
	Miramar 2	47.9
	Mission	0.7
	North Island	36.4
	Otay Landfill I	2.8
	Otay Landfill II	2.6
	Covanta Otay 3	3.5
	MMC-Electrovest (Otay)	35.5
	Orange Grove 1	50.0
	Orange Grove 2	50.0
	NTC Point Loma Steam turbine	2.0
	NTC Point Loma	19.4
	Sampson	1.0
	San Marcos Landfill	0.7
El Cajon Energy Center	48.1	
Lake Hodges Pumped Storage 1	20.0	

Planning Area	Generating Plant	Maximum Capacity
	Lake Hodges Pumped Storage 2	20.0
	BREGGO SOLAR (NQC)	26.0
	Kumeyaay	50.0
	East County	155.0
	Ocotillo Express	265.0
	Miramar GT 1	17.0
	Miramar GT 2	16.0
	Naval Station	47.0
	El Cajon GT	13.0
	Ash	0.9
	Rancho Santa Fe 1	0.4
	Rancho Santa Fe 2	0.3
	Murray	0.2
	Kyocera	0.1
	SDG&E Area Total	3,388

Table A1-4: Existing generation plants in VEA planning area

Planning Area	Generating Plant	Maximum Capacity
VEA	Community Solar (WDAT)	15
	VEA Area Total	15

2 Retired Generation (non-OTC)

Table A2-1: Generation plants projected to be retired in planning horizon

PTO Area	Project	Capacity (MW)	Expected Retirement Year
SCE	Ellwood	54	2021

3 Planned Generation

Table A3-1: Planned Generation

PTO Area	Project	Capacity (MW)	Expected In-service Year
SCE	Huntington Beach Energy Project Unit 6 (CCGT) *	644	2020
	Alamitos Energy Center Unit 8 (CCGT) *	640	2020

Notes:

*These projects have received PPTA approvals from the CPUC as part of Long Term Procurement Plan (LTPP) process.

4 Reactive Resources

Table A4-1: Summary of key existing reactive modeled in ISO reliability assessments

Substation	Capacity (Mvar)	Technology
Gates	225	Shunt Capacitors
Los Banos	225	Shunt Capacitors
Gregg	150	Shunt Capacitors
McCall	132	Shunt Capacitors
Mesa (PG&E)	100	Shunt Capacitors
Metcalf	350	Shunt Capacitors
Olinda	200	Shunt Capacitors
Table Mountain	454	Shunt Capacitors
Devers	156 & 605 (dynamic capability)	Static VAR Compensator
Rector	200	Static VAR Compensator
Santiago	3x81	Synchronous Condensers
Sunrise San Luis Rey	63	Shunt Capacitors
Southbay / Bay Boulevard	100	Shunt Capacitors
Mira Loma 230kV	158	Shunt Capacitors
Mira Loma 500kV	300	Shunt Capacitors
Suncrest	126	Shunt Capacitors
Penasquitos	126	Shunt Capacitors
San Luis Rey	2x225	Synchronous Condensers
Talega	2x225	Synchronous Condensers
Talega	100	STATCOM
Miguel	2x225	Synchronous Condensers
San Onofre	225	Synchronous Condensers

5 Special Protection Schemes

Table A5-1: Existing Special Protection Schemes in the PG&E area

PTO	Area	SPS Name
PG&E	Central Coast / Los Padres	Mesa and Santa Maria Undervoltage SPS
	Central Coast / Los Padres	Divide Undervoltage SPS
	Central Coast / Los Padres	Temblor-San Luis Obispo 115 kV Overload Scheme
	Bulk	COI RAS
	Bulk	Colusa SPS
	Bulk	Diablo Canyon SPS
	Bulk	Gates 500/230 kV Bank #11 SPS
	Bulk	Midway 500/230 kV Transformer Overload SPS
	Bulk	Path 15 IRAS
	Bulk	Path 26 RAS North to South
	Bulk	Path 26 RAS South to North
	Bulk	Table Mt 500/230 kV Bank #1 SPS
	Central Valley	Drum (Sierra Pacific) Overload Scheme (Path 24)
	Central Valley	Stanislaus – Manteca 115 kV Line Load Limit Scheme
	Central Valley	Vaca-Suisun 115 kV Lines Thermal Overload Scheme
	Central Valley	West Sacramento 115 kV Overload Scheme
	Central Valley	West Sacramento Double Line Outage Load Shedding SPS Scheme
	Greater Fresno Area	Ashlan SPS
	Greater Fresno Area	Atwater SPS
	Greater Fresno Area	Gates Bank 11 SPS
Greater Fresno Area	Helms HTT RAS	
Greater Fresno Area	Helms RAS	

	Greater Fresno Area	Henrietta RAS
	Greater Fresno Area	Herndon-Bullard SPS
	Greater Fresno Area	Kerckhoff 2 RAS
	Greater Fresno Area	Reedley SPS
	Greater Bay Area	Metcalf SPS
	Greater Bay Area	SF RAS
	Greater Bay Area	South of San Mateo SPS
	Greater Bay Area	Metcalf-Monta Vista 230kV OL SPS
	Greater Bay Area	San Mateo-Bay Meadows 115kV line OL
	Greater Bay Area	Moraga-Oakland J 115kV line OL RAS
	Greater Bay Area	Grant 115kV OL SPS
	Greater Bay Area	Oakland 115 kV C-X Cable OL RAS
	Greater Bay Area	Oakland 115kV D-L Cable OL RAS
	Greater Bay Area	Sobrante-Standard Oil #1 & #2-115kV line
	Greater Bay Area	Gilroy SPS
	Greater Bay Area	Transbay Cable Run Back Scheme
	Humboldt	Humboldt – Trinity 115kV Thermal Overload Scheme
	North Valley	Caribou Generation 230 kV SPS Scheme #1
	North Valley	Caribou Generation 230 kV SPS Scheme #2
	North Valley	Cascade Thermal Overload Scheme
	North Valley	Hatchet Ridge Thermal Overload Scheme
	North Valley	Coleman Thermal Overload Scheme

Table A5-2: Existing Special Protection Schemes in SCE area

PTO	Area	SPS Name
SCE	Antelope-Bailey	Antelope-RAS
	Big Creek Corridor	Big Creek / San Joaquin Valley RAS
	North of Lugo	Bishop RAS
	North of Lugo	High Desert Power Project RAS
	North of Lugo	Kramer RAS
	Antelope-Bailey	Midway-Vincent RAS
	Antelope-Bailey	Lancaster N-2 Line Loss Tripping Scheme
	Antelope-Bailey	Palmdale N-2 Line Loss Tripping Scheme
	Antelope-Bailey	Pastoria Energy Facility Existing RAS
	North of Lugo	Reliant Energy Cool Water Stability Tripping Scheme
	Eastern Area	West-of-Devers Remedial Action Scheme
	Eastern Area	Colorado River Corridor SPS
	Eastern Area	Inland Empire Area RAS
	Eastern Area	Blythe Energy RAS
	Eastern Area	Eagle Mountain Thermal Overload Scheme
	Metro Area	El Nido N-2 Remedial Action Scheme
	Metro Area	Mountain view Power Project Remedial Action Scheme
	Metro Area	South of Lugo N-2 Remedial Action Scheme
	Metro Area	Mira Loma Low Voltage Load Shedding
	Metro Area	Santiago N-2 Remedial Action Scheme
	Metro Area	Valley Direct Load Trip Remedial Action Scheme
Metro Area	El Segundo N-2 Remedial Action Scheme	

Table A5-3: Existing Special Protection Schemes in the SDG&E

PTO	Area	SPS Name
SDG&E	SDG&E	TL695A at Talega SPS
	SDG&E	TL682/TL685 SPS
	SDG&E	TL633 At Rancho Carmel SPS
	SDG&E	TL687 at Borrego SPS
	SDG&E	TL13816 SPS
	SDG&E	TL13835 SPS
	SDG&E	Border TL649 Overload SPS
	SDG&E	Crestwood TL626 at DE SPS for Kumeyaay Wind Generation
	SDG&E	Crestwood TL629 at CN SPS for Kumeyaay Wind Generation
	SDG&E	Crestwood TL629 at DE SPS for Kumeyaay Wind Generation
	SDG&E	230kV TL 23040 Otay Mesa – Tijuana SPS (currently disabled and will not be enabled until its need is reevaluated with CENACE)
	SDG&E	230kV Otay Mesa Energy Center Generation SPS
	SDG&E	ML (Miguel) Bank 80/81 Overload SPS
	SDG&E	CFE SPS to protect lines from La Rosita to Tijuana
	SDG&E	TL 50001 IV Generator Drop SPS
	SDG&E	TL 50003 IV Generator Drop SPS
	SDG&E	TL 50004 IV Generator Drop SPS
	SDG&E	TL 50005 IV Generator Drop SPS
	SDG&E	TL 50001 IV Generator SPS
	SDG&E	Imperial Valley BK80 RAS
SDG&E	TL23040 IV 500 kV N-1 RAS	
SDG&E	TL 23054 / TL23055 RAS	
SDG&E	Path 44 South of SONGS Safety Net	