DOCKETED	
Docket Number:	21-IEPR-02
Project Title:	Electricity Resource Plans
TN #:	239847
Document Title:	Silicon Valley Clean Energy Authority, PUBLIC Electricity Resource Plan
Description:	Public, redacted version of REVISED Electricity Resource Plan for Silicon Valley Clean Energy Authority.
Filer:	Josh Stoops
Organization:	Braun Blaising Smith Wynne P.C.
Submitter Role:	Public Agency
Submission Date:	9/24/2021 5:16:27 PM
Docketed Date:	9/24/2021

State of California California Energy Commission ELECTRICITY RESOURCE PLANNING FORMS Administrative Information



Name of Load Serving Entity ("LSE")	Silicon Valley Clean Energy
Name of Resource Planning Coordinator	Monica Padilla

Persons who prepared Supply Forms	S-1 Requirement	S-2 Supply	S-3 Small POU Hourly Loads	S-5 Bilateral Contracts	Application for Confidentiality
Name:	Alden Walden	Thomas Messier		Thomas Messier	Poonum Agrawal
Title:	Consultant	Settlements & Compiance Analyst		Settlements & Compiance Analyst	Senior Regulatory Analyst
E-mail:	Alden@pacificea.com	thomas.messier@svclean energy.org		thomas.messier@svcleanenergy.org	poonum.agrawal@svcleanenergy.org
Telephone:	(916) 936-3304	(408) 721-5301 x1021		(408) 721-5301 x1021	(408) 721-5301 x 1017
Address:	1839 Iron Point Road, Suite 120	333 W. El Camino Real Suite # 330		333 W. El Camino Real Suite # 330	333 W. El Camino Real Suite # 330
Address 2:					
City:	Folsom	Sunnyvlae		Sunnyvlae	Sunnyvlae
State:	CA	CA		CA	CA
Zip:	95630	94087		94087	94087
Date Completed:	9/17/2021	9/17/2021		9/17/2021	9/17/2021
Date Updated by LSE:					
Back-up / Additional Contact Persons for Questions about					
these Forms (Optional):					
Name:					
Title:					
E-mail:					
Telephone:					
Address:					
Address 2:					
City:					
State:					
Zip:					

State of California California Energy Commission ELECTRICITY RESOURCE PLANNING FORMS CEC S-1 Capacity/Energy Requirement Form



250% 254% 255% 111% 109% 102% 98% 166% 187% 186% 187% 252% 810 807 811 448 453 453 339 339 844 504 340 339

Yellow fills indicate confidentiality is being requested pursuant to Appendix A.

Bold font cells sum automatically. Data input by User are in dark green font. 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 line Capacity Procurment Requirement (MW) (â Actual Load â) PEAK LOAD CALCULATIONS (Forecast Load ð) 1 Forecast Total Peak-Hour 1-in-2 Demand 899 882 2a ESP Demand: Existing Customer Contracts 2b ESP Demand: New and Renewed Contracts 2c ESP Demand in PG&E service area 2d ESP Demand in SCE service area 2e ESP Demand in SDG&E service area 3 Additional Achievable Energy Efficiency (-) 4 Demand Response / Interruptible Programs (-) 5 Adjusted Demand: End-Use Customers 899 882 6 Coincidence Adjustment (-) (86 (16) 7 Coincident Peak-Hour Demand 866 813 8 Required Planning Reserve Margin 130 122 9 Credit for Imports That Carry Reserves (-) 10 Firm Sales Obligations 11 Firm LSE Procurement Requirement 934 996

line	Energy Procurement Requirement (GWh)												
	ENERGY DEMAND CALCULATIONS	(â Actual Lo	oad â)	(Forecast L	oadð)								
12	Forecast Total Energy Demand / Consumption	4,318	4,209	4,256	4,315	4,337	4,358	4,380	4,402	4,424	4,446	4,468	4,491
13a	ESP Demand: Existing Customer Contracts												
13b	ESP Demand: New and Renewed Contracts												
13c	ESP Demand in PG&E service area												
13d	ESP Demand in SCE service area												
13e	ESP Demand in SDG&E service area												
14	Additional Achievable Energy Efficiency (-)												
15	Demand Response / Interruptible Programs (-)												
16	Adjusted Demand: End-Use Customers	4,318	4,209	4,256	4,315	4,337	4,358	4,380	4,402	4,424	4,446	4,468	4,491
17	Firm Sales Obligations												
18	Firm LSE Procurement Requirement	4,318	4,209	4,256	4,315	4,337	4,358	4,380	4,402	4,424	4,446	4,468	4,491

		MW	MW
line	Historic LSE Peak Load:	Year 2019	Year 2020
19	Annual Peak Load / Actual Metered Deliveries	872.5	856.0
20	Date of Peak Load for Annual Peak Deliveries	8/15/19	8/18/20
21	Hour Ending for Annual Peak Deliveries	17	17
22	Interruptible Load called on during that hour (+)		
23	Self-Generation and DG Adjustments		
24	Adjustments for Major Outages		
25	Adjusted Annual Peak Load	872.5	856.0

Lines Notes

1,12	per Instructions: Demand figures with Transmission losses included at LAL*1.03
х	

Silicon Valley Clean Energy

State of California California Energy Commission ELECTRICITY RESOURCE PLANNING FORMS CEC Form S-2: Capacity/Energy Supply Resources Form Silicon Valley Clean Energy



itiality is being requ sted pursuant to Appendix A. ellow fills ind

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						Bold font cells sum autor	natically.		Data inp	ut by User a	re in dark	green font.							
CAPACITY SUPPLY RESOURCES (MW)	Plant/Unit Identifier- CEC ID	Plant/Unit	Plant/Unit Identifier- CAISO ID	Fuel Type	2019	2020 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2019	2020	2021	
1a Total Fossil Fuel Supply	CECID	Identifier- EIA ID			(Actual Capacity	0 (Actual Capacity)	0 (0 0	0	0 0) (0	0	0	0	0 (Actual Supply	y) 0	+
1b 1c																			+
1d 2a Total Nuclear Supply					0	0	0 0	0 0	0	0 0		0 0	0	0	0	0	0	0	+
2b 2c																		<u> </u>	+
3a Total Hydroelectric Supply 3b Hydro Supply from Plants 30 MW or more					0	0	0 (0	0 0			0	0	0	0	0	0	_
Action Supply from Plants Less than 30 MW Action Supply Controlled Renewable Supply					0	0	0 0	0 0	0	0 0		0 0	0	0	0	0	0	0	_
4b 4c									-									<u> </u>	_
4d 5a Total Qualifying Facility (QF) Contract Supply 5b Biofuels					0	0	0 0	0 0	0	0 0		0 0	0	0	0	0	0	0	_
5C Geothermal 5d Small Hydro																			+
Se Solar 5f Wind									-										+
5 Natural Gas 5 Other									-										_
6a Total Renewable Contract Supply 6b EXLN_Energy_PCC1_CFconfirm_Apr2017-Dec2021			Not Specified	Not Specified	0.0	0.0										825 300		3 1,822	2
6c SENA_Energy_PCC1_CFconfirm_Apr17-Dec2021 6d PWX_PCC1confirm_Apr2017-Dec2021			Not Specified Not Specified	Not Specified Not Specified												-	-	250	50 50
6e PGandE_PCC1confirm_Jun2018-Dec2021 6f Powerex_PCC1confirm_Jan2019-Dec2019			Not Specified Not Specified	Not Specified Not Specified												- 25		- 300	0
6g SENA_PCC1confirm_Jan2019-Dec2019 6h MSCG_PCC1confirm_Jan2019-Dec2020			Not Specified Not Specified	Not Specified Not Specified												50 205		-	-
6i PGandE PCC1confirm Jan-Dec2020 6j SENA_PCC1confirm_Jan-2019-Dec2020			Not Specified Not Specified	Not Specified Not Specified												- 100		-	+
6k SENA_PCC1confirm_Jan-2019-Dec2020 6i Direct Energy_PCC1confirm_Jan-Dec2019_Green-E			Not Specified Not Specified	Not Specified Not Specified												- 25	50	-	+
6m Direct Energy_PCC1confirm_Jan-Dec2020 6n 3 Phases PCC1confirm Jun-Dec2019 Green-E			Not Specified Not Specified	Not Specified Not Specified												- 28	25	5 -	+
60 MBCP_PCC1confirm_Jun-Dec2019 6p NextEra_PCC1confirm_2019 72,000MWh			Not Specified Not Specified	Not Specified Not Specified												20	-		_
6q SCE_PCC1confirm_Jan20-Dec21 6r PG&E_PCC1confirm_2020			Not Specified Not Specified	Not Specified Not Specified													518 120) -	
6s NextEra PCC1confirm 2020 6t PG&E_PCC1confirm_2021			Not Specified Not Specified	Not Specified Not Specified													20	475	15
6u Calpine_PCC1confirm_2021_100k MWh 6v PG&E_PCC1confirm_2021			Not Specified Not Specified	Not Specified Not Specified													-	100	12
6w PG&E_PCC1confirm_2022 6x Angela Solar + Storage PPA 2023-2038			Not Specified None	Not Specified Solar PV	0.0	0.0											-	-	_
6y Aratina Solar + Storage PPA 2023-2043 6z Atlas Solar_PPA 2022-2032			None None	Solar PV Solar PV	0.0	0.0											-	-	_
6aa Big Beau Solar_128MW Solar + 40MW Storage_Jan2021 - Dec2040 6ab Coso Geothermal_Energyconfirm_2022-2036	60309A, 60321A, 60322A	10875,	None BLM_2_UNITS,CALGEN_1_UNITS, NAVYII_2_UNITS	Solar PV Geothermal	0.0	0.0											-	-	_
Gac Calpine Energyconfirm 2021 Gad AES Wind PPA_2023-2042			Not Specified None	Geothermal Wind	0.0	0.0											-	-	_
6ae San Luis West Solar + Storage PPA 2023-2038 6af Ormat Binary Geothermal_30MW_Dec2021-Dec2032			None None	Solar PV Geothermal	0.0	0.0											-	-	_
6ag Rabbitbrush_Solar + Storage PPA 2022-2037 6ah RE Slate 1 150/WW Solar + 45 MW Storage Jun2021-Dec 2035			None None	Solar PV Solar PV	0.0	0.0											-	132	2
Gai Terra-Gen Wind PPA 2023-2038 Gai Victory Pass Solar + Storage PPA 2023-2038 Gai Victory Pass Solar + Storage PPA 2023-2038			None None	Wind Solar PV	0.0	0.0											-	-	28
6ak Yellow Pine, Solar + Storage PPA 2022-2042 6al Yellow Pine, Solar + Storage PPA 2022-2042 Renewable DG Supply Renewable DG Supply			None None	Solar PV Solar PV	0.0												-		-
Total Other Bilateral Contract Supply 7 Total Other Bilateral Contract Supply 7b EXLN_Energy_PCC1_CFconfirm_Apr2017-Dec2021 7			Not Specified	Large Hydroelectric (>30)	846.8	8 876.7										4,845			
C SENA_Energy_PCC1_CFconfirm_Apr17-Dec2021 7d MSCG_CFconfirm_Jan2017-Dec2021			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)												-	-	-	
7e MSCG_CFconfirm_May2018-Dec2021 7f SENA_CFconfirm_Jan2019-Dec2023			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)													-		
7g SENA_CFconfirm_May-Dec2019 7h MBCP_CFconfirm_Jun-Dec2019			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)												65 185		-	
7i Lancaster_CFconfirm_Jan-Dec2019 7j Powerex_ACSconfirm_Jan-Dec2019			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)												25		-	
7k CPA_CFconfirm_Dec2019 7l BPA_ACSconfirm_2020			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)												- 11	202	-	
7m Powerex_ACSconfirm_2020 7n Avangrid_CFconfirm_2021 150000 MWh			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)												-	- 140		
70 PG&E CF Allocation 2020 7p Powerex_CFconfirm_May-Oct2021			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)												-	609	-	
7q Powerex_CFconfirm_Jun-Sep2021 7r MSCG_CFconfrim_2021 part of 204RA190			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)												-		-	
7s BPA_CFconfirm_Jun-Sep2021 7t PG&E CFconfirm 2021 Allocation			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)														_	
7u MSCG_CFconfirm_Apr-21 7v WAPA_Energy-CFconfirm_2025-2054			Not Specified Not Specified	Large Hydroelectric (>30) Large Hydroelectric (>30)													-	_	
7w MSCG_Energy_CFconfirm_2022-2024 7x EXLN_Energy_PCC1_CFconfirm_Apr2017-Dec2021 7x ExtLN_Energy_PCC1_CFconfirm_Apr2017-Dec2021			Not Specified System	Large Hydroelectric (>30) Other												1,522			
Zy SENA Energy PCC1 CFconfirm Apr17-Dec2021 Zz Exelon Energyconfirm Jan2019-Dec20219 Block			System System	Other Other												1,522 518		_	
Taa EnergyAmerica_Energyconfirm_Mar2019-Sep2019 Tab SENA_Energyconfirm_Jun2019-Dec2019 Tab Decamparation			System System	Other Other												152	-	_	
Tac Direct Energy_Energyconfirm_Apr-Sep2019 Tad SENA Energyconfirm Jan-Dec2021 Block Table Decamparent De			System System	Other Other												- 141	-	_	
Tae MSCG_Energyconfirm_Jan-Dec2020_Block 7af SENA_Energyconfirm_Jan-Dec2021 7ar SenA_Energyconfirm_Jan-Dec2020_Dlock			System System	Other Other													- 186		
Tag Transalta_Energyconfirm_Jan-Dec2020_Block 7ah NextEra_Energyconfirm_Nov2019-Sep2020_Block 7ah Dec200_Dec10_Dec2020_Dlock			System System	Other Other												35		1	
Tai MSCG Energyconfirm Oct-Dec2020 Block Tai MSCG Energyconfirm Jan-Dec2021 Block Tai MSCG Energyconfirm Jan-Dec2021 Block Tai MSCG Energyconfirm Jan-Dec2021 Block			System System	Other Other Other												-	-		
7ak SENA_Energyconfirm_Jul-Dec2022_Block 7al MSCG_Energyconfirm_Jan-Jun2022_Block 7am SENA_Energyconfirm_Mar_Dec2022_Block			System System System	Other Other												-	435	-	
Tam SENA_Energyconfirm_Mar-Dec20 7an NextEra Energyconfirm_2021-2022 7ap SENA_Energyconfirm_2021			System System	Other Other														-	
7at MSCE_Energyconfirm_Jan-Jun2021 7ar TransAlta_Energyconfirm_Jul-Sep2021_Peak Hr			System System	Other Other												-	-	-	
Rest PEnergyconfirm Jan-Dec2023 7at Exelon Energyconfirm Jul-Dec2021			System	Other													-	1	
Tau Direct Energy_EnergyConfirm_Geb_022021 7av Malaga_RAconfirm_PGEOtherFlex_Jan-Dec2019			System System System	Other Not Specified	18.0	0.0											-		
7aw CalPeak, RAconfirm_PGEOtherFlex_Jan2019-Dec2020 7ax CalPeak, RAconfirm_PGEOtherFlex_Jan2019-Dec2020			System System	Not Specified Not Specified	0.0	0 12.0													
7ay Calpine RAconfirm 66MWBayAreaFlex Jan2019-Dec2023 7az Calpine RAconfirm 66MWBayAreaFlex Jan2019-Dec2023			System System	Not Specified Not Specified	66.0	0 66.0													
Tba Calpine_RAconfirm_34MWBayArea_Jan2019-Dec2023 7bb Calpine_RAconfirm_34MWBayArea_Jan2019-Dec2023			System System	Not Specified Not Specified	34.0	0 34.0 0 0.0													
Tbc Tenaska_RAconfirm_PGEOther_Jan2019-Dec2020 7bd Tenaska_RAconfirm_PGEOther_Jan2019-Dec2020			System System	Not Specified Not Specified	21.0	0 0.0 0 21.0													
Tenaska_RAconfirm_PGEOtherFlex_Jan2019-Dec2020 7bf Tenaska_RAconfirm_PGEOtherFlex_Jan2019-Dec2020			System System	Not Specified Not Specified	16.0	0 0.0 0 16.0													
Total Tenaska_RAconfirm_PGEOtherFlex_Jan2019-Dec2020 7bh Tenaska_RAconfirm_PGEOtherFlex_Jan2019-Dec2020			System System	Not Specified Not Specified	17.0	0 17.0													
Tbi Calpine RAconfirm SystemFlex Mar2019-Dec2020 7bj Calpine_RAconfirm_System_Jan2019-Dec2020 Calpine_RAconfirm_System_Jan2019-Dec2020 Calpine_RAconfirm_System_Jan2019-Dec2020			System System	Not Specified Not Specified	0.0	0 33.0 0 100.0													
7bk PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2021_60 Day	Pre-Pay		System	Not Specified	142.0														

Silicon Valley Clean Energy, 21-IEPR-02 [REVISED] Electricity Resource Plannning Forms Public Version

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
U	U		0	U	U	U	0	0	0
0	0	0	0	0	0	0	0	0	0
-									
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
U	0	0	0	U	U	U	U	0	U
									L
1,822	1,779	1,868	2,473	2,459	2,445	2,323	2,311	2,296	2,281
1,022	-	- 1,000			2,445		2,311		
250	-	-		-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
300	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
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275	-	-		-	-	-	-	-	-
		-	-	-	-	-	-	-	-
475	-	-	-	-	-	-	-	-	-
4/5	-	-		-	-	-	-		
212							-	-	
-	100	-		-	-	-	-	-	-
-	-	48	57	57	57	56	56	56	55
-	-	129	265	263	262	260	259	258	257
-	-	90	154	152	150	147	143	139	134
-	205	231	230	229	229	228	228	227	226
-	387 578	383	380	376	372	260	258	254	251
-		129	129	129	129	129	129	129	129
		7	129	129	129	129	129	129	129
-	40	58	57	57	57	57	56	56	56
-	32	119	119	119	118	118	118	118	118
132	269	267	266	265	263	262	261	259	258
-	-	189	189	189	189	189	189	189	189
-	-	58	304	302	300	299	298	296	294
28	160	-	-	-	-	-	-	-	-
-	8	162	161	160	159	159	158	157	156

PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2021_60 Day Pre-Pay				
PGandE RAconfirm System & Bay Area & PG&E Other Some Flex Jan2019-Dec2021 60 Day Pre-Pay	System System	Not Specified Not Specified Not Specified	93.0 0.0 15.0 0.0 0.0 53.8	
GandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2021_60 Day Pre-Pay GandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2021_60 Day Pre-Pay	System System	Not Specified Not Specified	0.0 5.0	
PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2021_60 Day Pre-Pay PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2021_60 Day Pre-Pay	System System	Not Specified Not Specified	0.0 14.2 0.0 1.0	
GandE RAconfirm System & Bay Area & PG&E Other Some Flex Jan2019-Dec2021 60 Day Pre-Pay GandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2021_60 Day Pre-Pay	System System	Not Specified Not Specified	0.0 1.0 0.0 26.0 0.0 15.0	
andE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2021_60 Day Pre-Pay G_RAconfirm_System_Jan-Dec2019	System System	Not Specified Not Specified	0.0 100.0 125.0 0.0	
Desert_RAconfirm_SouthSystemFlex_Jan2019-Dec2020 50MW	System	Not Specified	50.0 50.0 10.0 0.0	
pine RAconfirm 10MW (4MW Mar) Greater Bay Area Jan2019-Dec2019 pine RAconfirm 13MW PG&E Other Jan2019-Dec2019 Dec2019	System System	Not Specified Not Specified	13.0 0.0	
ine_RAconfirm_30MW_Import_System_North_Jan2019-Dec2019 ine_RAconfirm_9MW_Greater Bay Area_Jan2019-Dec2019 (Less March2019)	System System	Not Specified Not Specified	9.0 0.0	
neda Power_RAconfirm_8MW_Sep19_PG&E Other RAconfirmSale_8MW_Sep19_North System E RAconfirm Sep2019 Nov2019 North System	System System	Not Specified Not Specified	8.0 0.0 10.0 0.0	
caster RAconfirm_Sep2019_Import asses_RAconfirm_Sep2019_North & South System	System	Not Specified Not Specified	6.0 0.0 1.9 0.0	
Phases_RAconfirm_Sep2019_North & South System	System System	Not Specified	3.6 0.0	
Phases_RAconfirm_Sep2019_North & South System hmConnect RAconfirm Sep2019 South System 9 MW	System System	Not Specified Not Specified	5.4 0.0 0.3 0.0	
nConnect_RAconfirm_Sep2019_South System 9 MW nConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.3 0.0 0.3 0.0	
NmConnect_RAconfirm_Sep2019_South System 9 MW NmConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.3 0.0 0.3 0.0	
OhmConnect RAconfirm Sep2019 South System 9 MW	System	Not Specified	0.3 0.0	
NmConnect_RAconfirm_Sep2019_South System 9 MW NmConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.3 0.0	
mConnect_RAconfirm_Sep2019_South System 9 MW mConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.3 0.0 0.3 0.0	
mConnect RAconfirm Sep2019 South System 9 MW mConnect RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.3 0.0	
mConnect_RAconfirm_Sep2019_South System 9 MW	System	Not Specified	0.3 0.0	
nConnect_RAconfirm_Sep2019_South System 9 MW nConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.3 0.0 0.2 0.0	
nConnect RAconfirm Sep2019 South System 9 MW nConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.2 0.0 0.2 0.0	
mConnect_RAconfirm_Sep2019_South System 9 MW mConnect_RAconfirm_Sep2019_South System 9 MW	System	Not Specified Not Specified	0.2 0.0 0.2 0.0 0.2 0.0	
mConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified	0.3 0.0	
nConnect RAconfirm Sep2019 South System 9 MW nConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.3 0.0 0.3 0.0 0.3 0.0	
1Connect_RAconfirm_Sep2019_South System 9 MW 1Connect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.3 0.0 0.3 0.0	
Imconnect RAconfirm, Sep2019 South System 9 MW ImConnect RAconfirm Sep2019 South System 9 MW	System	Not Specified Not Specified	0.3 0.0 0.3 0.0	
mConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified	0.3 0.0	
mConnect_RAconfirm_Sep2019_South System 9 MW mConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.2 0.0	
mConnect_RAconfirm_Sep2019_South System 9 MW mConnect RAconfirm Sep2019 South System 9 MW	System System	Not Specified Not Specified	0.2 0.0 0.2 0.0	
ImConnect_RAconfirm_Sep2019_South System 9 MW ImConnect_RAconfirm_Sep2019_South System 9 MW	System System	Not Specified Not Specified	0.1 0.0 0.1 0.0	
hmConnect_RAconfirm_Sep2019_South System 9 MW ENA_RAconfirm_Jan2020-Dec2022 North System and PG&E Other	System System	Not Specified Not Specified	0.1 0.0 0.0 7.0	
ENA RAconfirm Jan2020-Dec2022 North System and PG&E Other	System	Not Specified	0.0 0.0	
Illhead_RAconfrim_Jan2020-Dec2022_Fresno_w/_Flex 22 MW &E_RAconfirm_Jan2020-Dec2022_Fresno_Humboldt_Stockton	System System	Not Specified Not Specified	0.0 22.0 0.0 0.0	
S&E_RAconfirm_Jan2020-Dec2022_Fresno_Humboldt_Stockton S&E_RAconfirm_Jan2020-Dec2022_Fresno_Humboldt_Stockton	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0 0.0	
owerex RAconfirm May-Oct2020 Import 44 MW Ik Hills Power_RAconfirm_Jan-Dec2020_North System	System System	Not Specified Not Specified	0.0 44.0 0.0 3.0	
IE_RAconfirm_Mar2020-Nov2021_Local _RAconfirm_Jun-Sep2020_Import_69MW	System System	Not Specified Not Specified	0.0 3.0 0.0 0.0 0.0 69.0	
pine_RAconfirm_Apr-Nov2020_Bay Area	System	Not Specified	0.0 18.0	
ine RAconfirm Jan2020-Dec-2022 NCNB Flex _RAconfirm_July2020_North System Flex 15MW	System System	Not Specified Not Specified	0.0 13.0 0.0 15.0 0.0 1.6	
pine_RAconfirm_Jan-Dec2020_Bay Area CP_RAconfirm_Jan-Dec2020_1 MW Humboldt & North System Flex + 3MW Oct2020 North System Flex	System System	Not Specified Not Specified	0.0 1.0	
3CP_RAconfirm_Jan-Dec2020_1 MW Humboldt & North System Flex + 3MW Oct2020 North System Flex FRAconfirm_Jan-Dec2021 Kern 9.39MW	System System	Not Specified Not Specified	0.0 1.0 0.0 0.0	
RAconfirm_Jan20-Dec22_NCNB_7.06MW _RAconfirm_Jan20-Dec22_NCNB_7.06MW	System	Not Specified Not Specified	0.0 2.0 0.0 1.8	
RAconfirm_Jan20-Dec22_NCNB_7.06MW	System System	Not Specified	0.0 3.3	
CE_RAconfirm_Jan-Sep2021_Bay Area_2.59MW CE RAconfirm Jan-Nov2020 System Varied MW	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
SF_RAconfirm_Jan21-Dec22_NCNB UD_RAconfirm_Jan-Dec2020_NCNB_1MW	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
nCE_RAconfirm_Jan-Dec2020_NCNB_1.5MW	System	Not Specified	0.0 1.5 0.0 10.8	
&E_RAconfirm_Mar-Aug20_Sierra + System mConnect RAconfirm_Jul20_System	System System	Not Specified Not Specified	0.0 6.5	
Ipine_RAconfirm_2021-2023 Incremental MW A_RAconfirm_Jul20 Import	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0 36.0	
okfield_RAconfirm_Jul-Sep20 Import pine_RAconfirm_2021_System w/ Flex_24 MW	System System	Not Specified Not Specified	0.0 38.0 0.0 0.0	
A RAconfirm 2022-2023 System E_RAconfirm_Jul20_0.18 MW NCNB	System System	Not Specified Not Specified	0.0 0.0	
oseville_Raconfirm_Jul-Aug20_NCNB	System	Not Specified	0.0 7.9	
BCP_RAconfirm_Jul-Aug20_NCNB ES_RAconfirm_2021-2022_ System w/ Flex	System System	Not Specified Not Specified	0.0 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
ariposa Energy RAconfirm_Oct22-Dec23_GBA w Flex S&E_RAconfirm_2021 & 2022 Local	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0 0.0 0.0	
CE_RAconfirm_Jun-Sep21_System_DR ETM_RAconfirm_2022-2023_System_w Flex	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0 0.0	
Ipine_RAconfirm_2021_Bay Area_64 MW Flex	System	Not Specified	0.0 0.0 0.0 0.0 0.0	
Ipine RAconfirm 2021 Bay Area 24 MW Flex AP_RAconfirm_Apr-Dec2021 & 2022 System DR 202 DAtorie for the second	System System	Not Specified Not Specified	0.0 0.0	
SCG_RAconfirm_Jun-Sep2021_Import 47 MW S&E_RAconfirm_2022_PG&E Other	System System	Not Specified Not Specified	0.0 0.0	
G&E_RAconfirm_2022_PG&E Other G&E_RAconfirm_2022_PG&E Other	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0	
werex_RAconfirm_Import_May-Oct2021 werex_RAconfirm_Import_Jun-Sep2021	System	Not Specified Not Specified	0.0 0.0 0.0 0.0	
G&E_RAconfirm_Jun-Aug2021_System	System System	Not Specified	0.0 0.0	
E_RAconfirm_Mar-Nov2022 Fresno & Stockton E RAconfirm_Aug-Oct2021 System Flex	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0	
A_RAconfirm_Jun-Sep2021 Import E_RAconfirm_Jan-Dec2022_NCNB	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0	
pine_RAconfirm_2022 NCNB 66 MW mConnect_Raconfirm_2022 Bay Area DR	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0	
S Redondo Beach RAconfirm Jan-Dec 2022 System	System	Not Specified	0.0 0.0	
ariposa Energy_RAconfirm_2024-2026 GBA 2E_RAConfirm_Apr-Jun2022 System	System System	Not Specified Not Specified	0.0 0.0 0.0 0.0 0.0	
on-Renewable DG Supply				
Fotal Exceptional Contracts			0 0	0 0 0 0 0 0 0 0
Short-Term and Spot Market Purchases (and Sales)			88 119	
CAPACITY/ENERGY BALANCE SUMMARY				
Total: Existing and Planned Supply Firm LSE Procurement Requirement			935 996 934 996	
			0 0	
Net Surplus (or Need)				
Net Surplus (or Need) Seneric Renewable Supply Seneric Non-Renewable Resources Specified Planning Reserve Margin				

Silicon Valley Clean Energy, 21-IEPR-02 [REVISED] Electricity Resource Plannning Forms Public Version

0 0 0 0 0 0 0 0 0 4,315 4,337 4,358 4,380 4,402 4,424 4,446

0

State of California California Energy Commission ELECTRICITY RESOURCE PLANNING FORMS CEC Form S-3: 2020 SMALL POU HOURLY LOADS



Silicon Valley Clean Energy

For Publicly Owned LSEs with Annual Peak Loads under 200 MW not submitting demand forms If load is reported for more than one LSE, load for each LSE should be reported in a separate column Report actual hourly demand in calendar year 2020, in megawatts, for each hour of each day. Add rows to report all 8,760 hours in 2020.

Begin with the hour that ended at 1 a.m. on January 1, 2020.

Show the load measured at the balancing authority load take-out point (or points).

Add columns for any additional metered take-out points.

The time basis should be Pacific Standard Time (PST) throughout the entire year.

Adjustments for spring and fall daylight saving time have already been included in the form below.

Total MWh	0
Maximum	0
Average	#DIV/0!
Minimum	0

Date (PST)	Hour Ending (PST)	Recorded Demand at Take Out (MW)
1/1/2020		
1/1/2020		
1/1/2020	3	
1/1/2020		
1/1/2020		
1/1/2020	6	
1/1/2020	7	
1/1/2020	8	
1/1/2020		
1/1/2020	10	
1/1/2020	11	
1/1/2020	12	
1/1/2020	13	
1/1/2020	14	
1/1/2020	15	
1/1/2020	16	
1/1/2020	17	
1/1/2020	18	
1/1/2020	19	
1/1/2020	20	
1/1/2020	21	
1/1/2020	22	
1/1/2020	23	
1/1/2020	24	

State of California	AT SAME
California Energy Commission	A CONTRACTOR
ELECTRICITY RESOURCE PLANNING FORMS	7 98
CEC Form S-5: Bilateral Contracts Table	
Do not delete any rows or columns or change hea	ders.
Silicon Valley Clean Energy	

Revised 3/2021.

lley Clean Energy	Yellow fills indicate confidentiality is being requested pursuant to Append	×A.		
Contract Name:	Fuels Supplier / Seller:	Unit Contingent: Generating Unit(s) Specified Supply Resources(s) Balancing Area	Supply Resoucre(s) Delivery Contract Start Contract Capac Zone/Point Date Expiration Date Under	ity (Mm) Contract / Agreement Products Contract Type Notes (1): Notes (2):
EXLN_Energy_PCC1_CFconfirm_Apr2017-Dec2021	Not Specified Exelon Generation Company, LLC	Portfolio Seller's portfolio	Zone/Point Date Expiration Date Under 0 CAISO 4/1/2017 12/31/2021 12/31/2021	Environment Products PCC1 (Renewable Carton Free) Available Energy
SENA Energy PCC1 CFconfirm Apr17-Dec2021	Not Specified Shell Energy North America (US), L.P.	Portfolio Seller's portfolio	CAISO 4/1/2017 12/31/2021	Environment Products PCC1 (Renewable Carbon Free) Available Energy
PWX_PCC1confirm_Apr2017-Dec2021	Not Specified Powerex Corp.	Portfolio Seller's portfolio	CAISO 4/1/2017 12/31/2021	Environment Products PCC1 (Renewable Carbon Free) Available Energy
PGandE_PCC1confirm_Jun2018-Dec2021 Powerex_PCC1confirm_Jan2019-Dec2019	Not Specified Pacific Gas & Electric Company Not Specified Powerex Corp.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 6/1/2018 12/31/2021 CAISO 1/1/2019 12/31/2019	Environmeti Poducis PCCI (Reservable Carbon File) Available Energy Environmeti Poducis PCCI (Reservable Carbon File) Available Energy
SENA_PCC1confirm_Jan2019-Dec2019	Not Specified Powersk Corp. Not Specified Shell Energy North America (US), L.P.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2019 CAISO 1/1/2019 12/31/2019	Environmert Poducis PCC1 (Revensible Carbon Free) Available Energy Environmert Poducis PCC1 (Revensible Carbon Free) Available Energy
MSCG PCC1confirm Jan2019-Dec2020	Not Specified Morgan Stanley Capital Group	Portfolio Seller's portfolio	CAISO 1/8/2019 12/31/2020	Environment Products PCC1 (Renewable Carbon Free) Available Energy
PGandE_PCC1confirm_Jan-Dec2020 SENA_PCC1confirm_Jan-2019-Dec2020	Not Specified Pacific Gas & Electric Company	Portfolio Seller's portfolio	CAISO 1/1/2020 12/31/2020	Environment Products PCC1 (Renewable Carbon Free) Available Energy
	Not Specified Shell Energy North America (US), L.P.	Portfolio Seller's portfolio	CAISO 6/1/2019 12/31/2020	Environment Products PCC1 (Renewable Carbon Free) Available Energy
SENA_PCC1confirm_Jan-2019-Dec2020	Not Specified Shell Energy North America (US), L.P. Not Specified Direct Energy Business Marketing, LLC	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 6/1/2019 12/31/2020 CAISO 6/1/2019 12/31/2019	Environmert Poducts PCC1 (Revensible Carton Free) Available Energy Environmert Poducts PCC1 (Revensible Carton Free) Available Energy
Direct Energy_PCC1confirm_Jan-Dec2019_Green-E Direct Energy_PCC1confirm_Jan-Dec2020	Not Specified Direct Energy Business Marketing, LLC Not Specified Direct Energy Business Marketing, LLC		CAISO 6/1/2019 12/31/2019 CAISO 1/1/2020 12/31/2020	Environment Poducts PCC1 (Reservable Carbon File) Available Energy Environment Poducts PCC1 (Reservable Carbon File) Available Energy Environment Poducts PCC1 (Reservable Carbon File) Available Energy
3 Phases_PCC1confirm_Jun-Dec2019_Green-E	Not Specified 3 Phases Renewables Inc.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 6/1/2019 12/31/2019	Environment Podust Pod (Revended Cation For) / Andalade Energy
MBCP_PCC1confirm_Jun-Dec2019 NextEra_PCC1confirm_2019 72,000MWh	Not Specified Monterey Bay Community Power Authority	Portfolio Seller's portfolio	CAISO 6/1/2019 12/31/2019	Environment Products PCC1 (Renewable Carbon Free) Available Energy
NextEra_PCC1confirm_2019 72,000MWh	Not Specified NextEra Energy Marketing, LLC	Portfolio Seller's portfolio	CAISO 11/1/2019 12/31/2019	Environment Products PCC1 (Renewable Carbon Free) Available Energy
SCE_PCC1confirm_Jan20-Dec21	Not Specified Southern California Edison Company	Portfolio Seller's portfolio	CAISO 1/1/2020 12/31/2021	Environment Products PCC1 (Renewable Carbon Free) Available Energy
PG&E_PCC1confirm_2020 NextEra PCC1confirm_2020	Not Specified Pacific Gas & Electric Company	Portfolio Seller's portfolio Partfolio Callada portfolio	CAISO 2/8/2020 12/31/2020 CAISO 1/20/2020 12/31/2020	Environment Products PCC1 (Renewalds Cathon Free) Available Energy
PG&E_PCC1confirm_2021	Not Specified NextEra Energy Marketing, LLC Not Specified Pacific Gas & Electric Company	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/30/2020 12/31/2020 CAISO 1/1/2021 12/31/2021	Environmet Poducts PCC1 (Reservable Cathon Free) Available Energy Environmet Poducts PCC1 (Reservable Cathon Free) Available Energy
Calpine PCC1confirm 2021 100k MWh	Not Specified Calpine Energy Services, L.P.	Portfolio Seller's portfolio	CAISO 1/1/2021 12/31/2021	Environment Podust Pod (Revended Cattor Pod Natilities Energy
Calpine_PCC1confirm_2021_100k MWh PG&E_PCC1confirm_2021	Not Specified Pacific Gas & Electric Company	Portfolio Seller's portfolio	CAISO 1/1/2021 12/31/2021	Environment Products PCC1 (Renewable Carbon Free) Available Energy
PG&E_PCC1confirm_2022	Not Specified Pacific Gas & Electric Company	Portfolio Seller's portfolio	CAISO 1/1/2022 12/31/2022	Environment Products PCC1 (Renewable Carbon Free) Available Energy
Angela Solar + Storage PPA 2023-2038	Solar Angiola East, LLC	None None	CAISO 3/31/2023 3/30/2038	Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, RA Assumes projects are attributed same monthly NCC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Storage
Aratina Solar + Storage PPA 2023-2043 Atlas Solar_PPA 2022-2032	Solar 91MC 8me, LLC Solar Attas Solar III, LLC	None None	CAISO 6/30/2023 6/29/2043 CAISO 12/31/2022 12/31/2032	Renewable Energy Supply PCC1 (Renewable Cathor Free)/Available Energy, RPS, RJ Assumes projects are athibited same nonthy NCC profiles as 2021 VNCs assigned by CAISD to existing solar projects. Projects ais have storage capacity, SVCE is waiting for darky on how storage capacity will be counted and is not including 1 here. [Solar + Storage Renewable Energy Supply PCC1 (Renewable Cathor Free)/Available Energy, RPS, RJ Assumes projects are athibited same nonthy NCC profiles as 2021 VNCs assigned by CAISD to existing solar projects. Projects ais have storage capacity, SVCE is waiting for darky on how storage capacity will be counted and is not including 1 here. [Solar + Storage Renewable Energy Supply PCC1 (Renewable Cathor Free)/Available Energy, RPS, RJ Assumes projects are athibited same nonthy NCC profiles as 2021 VNCs assigned by CAISD to existing solar groups. Projects ais have storage capacity. SVCE is waiting for darky on how storage capacity. SVCE is wait
Big Beau Solar_128MW Solar + 40MW Storage_Jan2021 - Dec2040	Solar Atlas Solar III, LLC Solar EDF Renewable Development, Inc	None None	CAISO 12/31/2022 12/31/2032 CAISO 12/31/2021 12/30/2041	Rerewable Energy Suppy PCC1 (Rewable Energy, RSP, RASsame sprotes are antibulated same nonthin Nucl profess are antibulated same nonthin Nucl PCC profess are antibulated same nonthin Nucl PCC and the Same Supple Sci Profess and the Same Same Sci Profess and the Same Same Same Sci Profess and the Same Same Same Same Same Same Same Sam
Coso Geothermal_Energyconfirm_2022-2036	Geothermal Coso Geothermal Power Holdings	60309A, 60321A, 60322A BLM_2_UNITS, CALGEN_1_UNITS,	CAISO 1/1/2022 12/31/2036	Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, Re Assumes projects are attributed same monthly NQC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Geothermal vaired annual deliver
Calpine_Energyconfirm_2021	Geothermal Calpine Energy Services, L.P.	None None	CAISO 1/1/2021 12/31/2021	Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS Assumes projects are attributed same monthly NOC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here.
AES Wind PPA_2023-2042	Wind AES North America Development, LLC	None None	CAISO 1/1/2023 12/31/2042	Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, R4 Assumes projects are attributed same monthly NQC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Wind
San Luis West Solar + Storage PPA 2023-2038	Solar San Luis West Solar	None None	CAISO 12/1/2023 11/30/2038 CAISO 12/31/2021 12/31/2031	Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, RA Assumes projects are attributed assee monthly NOC profile as 3221 NOCs assigned by CAISO to existing solar projects. Projects atto have storage capacity will be counted and is not including it here. Solar - Storage
Ormat Binary Geothermal_30MW_Dec2021-Dec2032 Rehbithnish_Solar + Storage PPA 2022-2037	Geothermal Ormat Solar Rabbitbrush Solar, LLC	None None None	CAISO 12/31/2021 12/31/2031 CAISO 6/30/2022 6/29/2037	Renewable Energy Study PCC1 (Renewable Cation Free) Available Energy, RPS, RI Assumes projects are attributed same monthly NOC profiles as 2021 NOCs assigned by CAISO to existing adult projects. Projects also have storage capacity. SUCE is waiting for chirdly on have storage capacity will be contraded and is not including a three [cechemal] Basewable Energy Study PCC1 (Renewable Cation Free) Available Energy, RPS, RI Assumes projects are attributed same monthly NOC profiles a 2021 NOCs assigned by CAISO to existing adult projects. Projects also have storage capacity. SUCE is waiting for chirdly on have storage capacity will be contraded and is not including a three [cechemal] Basewable Energy Study PCC1 (Renewable Cation Free) Available Energy, RPS, RI Assumes projects are attributed same monthly NOC profiles a 2021 NOCs assigned by CAISO to existing adult projects. Projects also have storage capacity. Will be contraded and is not including a three [cechemal] Basewable Energy Study PCC1 (Renewable Cation Free) Available Energy, RPS, RI Assumes projects are attributed same monthly NOC profiles a 2021 NOCs assigned by CAISO to existing adult profiles. Projects adult profiles adult profiles adult profiles adult profiles adult profiles adult profiles. Projects adult profiles adul
Rabbithush Solar + Storge PPA 2022-2037 RE Slate 1_150MW Solar + 45 MW Storage_Jun2021-Dec 2035	Solar Recurrent Energy Development Holdings, L	C None None	CAISO 11/30/2021 11/29/2038	Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, R4 Assumes projects are attributed same monthly NQC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity, SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Solar + Storage Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, R4 Assumes projects are attributed same monthly NQC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Solar + Storage Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, R4 Assumes projects are attributed same monthly NQC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Solar + Storage
Terra-Gen Wind PPA 2023-2038	Wind TGP Energy Management, LLC	None None	CAISO 1/1/2023 12/31/2037	Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, RA Assumes projects are attributed same monthly NQC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Wind
Victory Pass Solar + Storage PPA 2023-2038	Solar Victory Pass I, LLC	None None	CAISO 9/30/2023 9/29/2038	Renewable Energy Supply PCC1 (Renewable Carbon Free) Available Energy, RPS, RP Assumes projects are attributed same monthly NOC profile as 2021 NQCs assigned by CAISO to existing solar projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Solar + Storage
Yellow Pine_Solar + Storage PPA 2022-2042	Solar Yellow Pine Energy Center I, LLC	None None	CAISO 12/1/2022 11/30/2042	Environment Peduats PCC1 [Resexuable Carbon File] Available Energy, RPS, Rel Assumes projects are attributed same monthly NOC profile as 2221 VDCs assigned by CAISO to esting solar projects. Projects and have storage capacity. SVCE is waiting for darity on how storage capacity will be counted and is not including it here Solar + Storage
Yellow Pine_Solar + Storage PPA 2022-2042 EXLN Energy PCC1 (Econfirm Apr/2017-Dec/2021	Solar Yellow Pine Energy Center I, LLC	None None Portfolio Seller's portfolio	CAISO 12/1/2022 11/30/2042 CAISO 4/1/2017 12/31/2021	Renewable Energy Supply PCC1 (Renewable Cathon Free] Available Energy Assumes projects are attributed same monthly NQC profile as 2021 NQCs assigned by CAISO to existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Solar how existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Solar how existing solar projects. Projects also have storage capacity. SVCE is waiting for clarity on how storage capacity will be counted and is not including it here. Solar how existing solar projects. Projects also have storage capacity.
EXLN_Energy_PCC1_CFconfirm_Apr2017-Dec2021 SENA_Energy_PCC1_CFconfirm_Apr17-Dec2021	Large Hydroelectric (>30) Exelon Generation Company, LLC Large Hydroelectric (>30) Shell Energy North America (US), L.P.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 4/1/2017 12/31/2021 CAISO 4/1/2017 12/31/2021	Non-Rerewable Cation Free Available Energy Non-Rerewable Cation Free Available Energy
MSCG_CFconfirm_Jan2017-Dec2021	Large Hydroelectric (>30) Snell Energy North America (US), L.P. Large Hydroelectric (>30) Morgan Stanley Capital Group	Portfolio Seller's portfolio	CAISO 1/1/2017 12/31/2021	Non-Renewable Carbon Free Available Energy
MSCG_CFconfirm_May2018-Dec2021	Large Hydroelectric (>30) Morgan Stanley Capital Group	Portfolio Seller's portfolio	CAISO 5/1/2018 12/31/2021	Non-Renewable Carbon Free Available Energy
SENA_CFconfirm_Jan2019-Dec2023	Large Hydroelectric (>30) Shell Energy North America (US), L.P.	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2023	Non-Renewable Carbon Free Available Energy
SENA_CFconfirm_May-Dec2019 MRCR_CFconfirm_lum_Dec2010	Large Hydroelectric (>30) Shell Energy North America (US), L.P.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 5/1/2019 12/31/2019 CAISO 6/1/2010 12/31/2019	Non-Reinewable Cathon Free Available Energy Non-Reinewable Cathon Free Available Energy
MBCP_CFconfirm_Jun-Dec2019 Lancaster_CFconfirm_Jan-Dec2019	Large Hydroelectric (>30) Monterey Bay Community Power Authority	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 6/1/2019 12/31/2019 CAISO 1/1/2019 12/31/2019	Non-Reservable Cattors Free Available Energy Non-Reservable Cattors Free Available Energy
Powerex_ACSconfirm_Jan-Dec2019	Large Hydroelectric (>30) City of Lancaster Large Hydroelectric (>30) Powerex Corp.	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2019	Non-Rerewable Cation Free Available Energy Non-Rerewable Cation Free Available Energy
CPA_CFconfirm_Dec2019	Large Hydroelectric (>30) Clean Power Alliance	Portfolio Seller's portfolio	CAISO 12/3/2019 12/31/2019	Non-Renewable Carbon Free Available Energy
BPA_ACSconfirm_2020	Large Hydroelectric (>30) Bonneville Power Administration	Portfolio Seller's portfolio	CAISO 6/1/2020 9/30/2020	Non-Renewable Carbon Free Available Energy
Powerex_ACSconfirm_2020	Large Hydroelectric (>30) Powerex Corp.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 3/1/2020 12/31/2020	Non-Renewable Carbon Free Available Energy
Avangrid_CFconfirm_2021 150000 MWh PC&E_CE_Allocation_2020	Large Hydroelectric (>30) Avangrid Renewables, LLC	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2021 12/31/2021 CAISO 1/1/2021 12/31/2021	Non-Reinwahle Carbon Free Available Energy Non-Demensional Carbon Free Available Energy
PG&E_CF_Allocation_2020 Powerex_CFconfirm_May-Oct2021	Large Hydroelectric (>30) Pacific Gas & Electric Company Large Hydroelectric (>30) Powerex Corp.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2021 12/31/2021 CAISO 5/1/2021 10/31/2021	Non-Resexable Cation Free Analable Energy Non-Resexable Cation Free Analable Energy
Powerex_CFconfirm_Jun-Sep2021	Large Hydroelectric (>30) Powerex Corp.	Portfolio Seller's portfolio	CAISO 6/1/2021 9/30/2021	Non-Renewable Carbon Free Available Energy
MSCG_CFconfrim_2021 part of 204RA190	Large Hydroelectric (>30) Morgan Stanley Capital Group	Portfolio Seller's portfolio	CAISO 6/1/2021 9/30/2021	Non-Renewable Carbon Free Available Energy
BPA_CFconfirm_Jun-Sep2021	Large Hydroelectric (>30) Bonneville Power Administration	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 6/1/2021 9/30/2021	Non-Renewable Carbon Free Available Energy
PG&E_CFconfirm_2021 Allocation	Large Hydroelectric (>30) Pacific Gas & Electric Company	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 2/1/2021 12/31/2021 CAISO 4/1/2021 4/20/2021	Non-Renewable Carbon Free Available Energy
MSCG_CFconfirm_Apr-21 WAPA_Energy-CFconfirm_2025-2054	Large Hydroelectric (>30) Morgan Stanley Capital Group Large Hydroelectric (>30) Western Area Power Administration	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 4/1/2021 4/30/2021 CAISO 1/1/2025 12/31/2054	Non-Rerewable Cation Free Available Energy Non-Rerewable Cation Free Available Energy
MSCG_Energy_CFconfirm_2025-2054 MSCG_Energy_CFconfirm_2022-2024	Large Hydroelectric (>30) Western Area Hower Administration Large Hydroelectric (>30) Morgan Stanley Capital Group	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2022 12/31/2034	Non-Harkwalac Labon Free Available Enrgy Non-Barkwalac Cabon Free Available Enrgy
EXLN_Energy_PCC1_CFconfirm_Apr2017-Dec2021	Not Specified Exelon Generation Company, LLC	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2019	Normentendad autoritiete Nationale Entrity Entry Available Entry
SENA_Energy_PCC1_CFconfirm_Apr17-Dec2021	Not Specified Shell Energy North America (US), L.P.	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2020	Energy Available Energy
Exelon_Energyconfirm_Jan2019-Dec2019_Block	Not Specified Exelon Generation Company, LLC	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2020	Energy Available Energy
EnergyAmerica_Energyconfirm_Mar2019-Sep2019	Not Specified Direct Energy Business Marketing, LLC	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2023	Energy Available Energy Available Energy English Energy Energy English E
SENA_Energyconfirm_Jun2019-Dec2019	Not Specified Shell Energy North America (US), L.P. Not Specified Direct Energy Business Marketing, LLC		CAISO 1/1/2019 12/31/2023	Energy Available Energy Description of the Senergy Sene
Direct Energy_Energyconfirm_Apr-Sep2019 SENA_Energyconfirm_Jan-Dec2021_Block	Not Specified Shell Energy North America (US), L.P.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2023	Energy Analabé Energy English Energy Energy Energy Energy Energy English Energy Energy English Energy Energy English Energy English Energy English En
MSCG_Energyconfirm_Jan-Dec2020_Block	Not Specified Morgan Stanley Capital Group	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2020	Energy Available Energy
SENA Energyconfirm Jan-Dec2021	Not Specified Shell Energy North America (US), L.P.	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2020	Energy Available Energy
Transalta_Energyconfirm_Jan-Dec2020_Block	Not Specified TransAlta Energy Marketing (U.S.) Inc.	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2020	Energy Available Energy
NextEra_Energyconfirm_Nov2019-Sep2020_Block	Not Specified NextEra Energy Marketing, LLC Not Specified Morgan Stanley Capital Group	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2020	Energy Available Energy Energy Available Construction Constru
MSCG_Energyconfirm_Oct-Dec2020_Block MSCG_Energyconfirm_Jan-Dec2021_Block	Not Specified Morgan Stanley Capital Group Not Specified Morgan Stanley Capital Group	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2020	Energy Anabbé Energy English Energy Energy Energy Energy Energy Energy English Energy English Energy Energy English Energy English Energy English English English English Energy English Engl
SENA_Energyconfirm_Jul-Dec2022_Block	Not Specified Shell Energy North America (US), L.P.	Portfolio Seller's portfolio	CAISO 1//2019 12/31/2020 CAISO 3/1/2019 12/31/2020	Circle yr Polador Einig Polador Einig Eilio Charlon Circle yr Carlon Carlo
MSCG_Energyconfirm_Jan-Jun2022_Block	Not Specified Morgan Stanley Capital Group		CAISO 1/1/2019 12/31/2020	Energy Available Energy E
SENA_Energyconfirm_Mar-Dec20	Not Specified Shell Energy North America (US), L.P.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2021	Energy Available Energy Available Energy
NextEra_Energyconfirm_2021-2022 TransAlta_EnergyconfirmSale_Apr20	Not Specified NextEra Energy Marketing, LLC	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2021	Energy Available Energy
TransAlta_EnergyconfirmSale_Apr20	Not Specified TransAlta Energy Marketing (U.S.) Inc.	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2021	Energy Available Energy
SENA_Energyconfirm_2021 MSCG_Energyconfirm_Jan-Jun2021	Not Specified Shell Energy North America (US), L.P. Not Specified Morgan Stanley Capital Group	Portfolio Seller's portfolio Partfolio Callado portfolio	CAISO 1/1/2019 12/31/2021 CAISO 1/1/2019 12/31/2021	Energy Available Energy Construction of the Senergy Available Energy Available Energy Available Energy Available Energy Available Energy
TransAlta_Energyconfirm_Jul-Sep2021_Peak Hr	Not Specified TransAlta Energy Marketing (U.S.) Inc.	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2021	Energy Available Energy English Energy Energy Energy Energy Energy English Energy Energy English Energy English English English Energy English Energy English Energy English Englis
BP_Energyconfirm_Jan-Dec2023	Not Specified BP Energy Company	Portfolio Seller's portfolio Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2021	Energy Avalable Energy Energy
Exelon Energyconfirm Jul-Dec2021	Not Specified Exelon Generation Company, LLC	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2021	Energy Available Energy
Direct Energy_Energyconfirm_Feb-Dec2021	Not Specified Direct Energy Business Marketing, LLC	Portfolio Seller's portfolio	CAISO 1/1/2019 12/31/2021	Energy Available Energy
WAPA_Energy-CFconfirm_2025-2054	Not Specified Western Area Power Administration	Portfolio Seller's portfolio Partfolio Seller's portfolio	CAISO 1/1/2019 12/31/2021	Energy Available Energy Available Chergy Energy Engrave Energy Engrave Energy Ene
MSCG_Energy_CFconfirm_2022-2024 Malaga_RAconfirm_PGEOtherFlex_Jan-Dec2019	Not Specified Morgan Stanley Capital Group COMBUSTION TURBINE Malaga Power, LLC	Portfolio Seller's portfolio Portfolio MALAGA_1_PL1X2 CAISO	CAISO 1/1/2019 12/31/2019 CAISO 1/1/2019 12/31/2020	Energy Analble Energy Local RA-0hy
CalPeak_RAconfirm_PGEOtherFlex_Jan-Dec2019 CalPeak_RAconfirm_PGEOtherFlex_Jan2019-Dec2020	COMBUSTION TURBINE Malaga Power, LLC COMBUSTION TURBINE CalPeak Power, LLC	Portfolio MALAGA_1_PL1X2 CAISO Portfolio PNOCHE_1_UNITA1 CAISO	CAISO 1/1/2019 12/31/2020 CAISO 1/1/2019 12/31/2019	Local RA ONY Local RA ONY
CalPeak_RAconfirm_PGEOtherFlex_Jan2019-Dec2020 CalPeak_RAconfirm_PGEOtherFlex_Jan2019-Dec2020	COMBUSTION TURBINE CalPeak Power, LLC COMBUSTION TURBINE CalPeak Power, LLC	Portfolio PNOCHE_1_UNITA1 CAISO	CAISO 1/1/2019 12/31/2019 CAISO 1/1/2019 12/31/2019	Loca rokuny Loca Rohy
Calpine_RAconfirm_66MWBayAreaFlex_Jan2019-Dec2023	COMBINED CYCLE Calpine Energy Services, L.P.	Portfolio LMEC_1_PL1X3 CAISO	CAISO 1/1/2019 12/31/2019	Local RA Only
Calpine_RAconfirm_66MWBayAreaFlex_Jan2019-Dec2023	COMBINED CYCLE Calpine Energy Services, L.P.	Portfolio LMEC_1_PL1X3 CAISO	CAISO 1/1/2019 12/31/2019	System RA Only
Calpine_RAconfirm_34MWBayArea_Jan2019-Dec2023	COMBINED CYCLE Calpine Energy Services, L.P.	Portfolio LMEC_1_PL1X3 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 11/30/2019	Local RA Only Decal 2004 Control Con
Calpine_RAconfirm_34MWBayArea_Jan2019-Dec2023 Tenaska_RAconfirm_PGEOther_Jan2019-Dec2020	COMBINED CYCLE Calpine Energy Services, L.P. HYDRO Tenaska Power Services Co.	Portfolio LMEC_1_PLIX3 CAISO Portfolio MDEKRL_2_PROJECT CAISO	CAISO 9/1/2019 11/30/2019 CAISO 9/1/2019 9/30/2019	System RA Only Local RA Only
Tenaska_RAconfirm_PGEOther_Jan2019-Dec2020	HYDRO Tenaska Power Services Co. HYDRO Tenaska Power Services Co.	Portfolio MDFKRL_2_PROJCT CAISO Portfolio MDFKRL_2_PROJCT CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	Local rokulty de la construcción de Local Rohy
Tenaska_RAconfirm_PGEOtherFlex_Jan2019-Dec2020	HYDRO Tenaska Power Services Co.	Portfolio FMEADO_7_UNIT CAISO	CAISO 9/1/2019 9/30/2019	Local RAONY
Tenaska_RAconfirm_PGEOtherFlex_Jan2019-Dec2020	HYDRO Tenaska Power Services Co.	Portfolio FMEADO_7_UNIT CAISO	CAISO 9/1/2019 9/30/2019	Local RA Only Control RA ONLY CONT
Tenaska_RAconfirm_PGEOtherFlex_Jan2019-Dec2020	HYDRO Tenaska Power Services Co.	Portfolio MDFKRL_2_PROJCT CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	Local RA Only Local A Day Local RA Only Local RA Only Local RA Only Local RA Day Lo
Tenaska_RAconfirm_PGEOtherFlex_Jan2019-Dec2020 Calpine_RAconfirm_SystemFlex_Mar2019-Dec2020	HYDRO Tenaska Power Services Co. COMBINED CYCLE Calpine Energy Services, L.P.	Portfolio MDFKRL_2_PROJCT CAISO Portfolio DELTA 2 PL1X4 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	Local RA Otly System RA Otly State S
Calpine_RAcontirm_System:riex_Mar2019-Dec2020 Calpine_RAconfirm_System_Jan2019-Dec2020	COMBINED CYCLE Calpine Energy Services, L.P. COMBINED CYCLE Calpine Energy Services, L.P.	Portfolio DELTA_2_PL1X4 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	System rko twy System R A Only System R A Only
PGandE_RAconfirm_System & Bay Area & PG&E Other Some Flex Jan2019-Dec2	60 Day Pre-Pay STEAM Pacific Gas & Electric Company	Portfolio DIABLO 7 UNIT 1 CAISO	CAISO 9/1/2019 9/30/2019	
PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2 PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2	60 Day Pre-Pay PUMPED STORAGE Pacific Gas & Electric Company	Portfolio HELMPG_7_UNIT 3 CAISO	CAISO 9/1/2019 9/30/2019	System RA Only Local RA Only
PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2	_60 Day Pre-Pay COMBINED CYCLE Pacific Gas & Electric Company	Portfolio LECEF_1_UNITS CAISO	CAISO 9/1/2019 9/30/2019	Local RA Only Control
PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2 PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2		Portfolio Seller's portfolio CAISO Portfolio Seller's portfolio CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	Local RA Only Local RA Only Local RA Only
PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2 PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2		Portfolio Seller's portfolio CAISO Portfolio Seller's portfolio CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	Local RA Only Local RA Only Local RA Only Local RA Only RA Design Control RA Only Local RA Only
GandE RAconfirm System & Bay Area & PG&E Other Some Flex Jan2019-Dec2	60 Day Pre-Pay Not Specified Pacific Gas & Electric Company	Portfolio Seller's portfolio CAISO	CAISO 9/1/2019 9/30/2019	Local Information Constraints of the Constraints of
PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2	_60 Day Pre-Pay Not Specified Pacific Gas & Electric Company	Portfolio Seller's portfolio CAISO	CAISO 9/1/2019 9/30/2019	Local RA Only
PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2	60 Day Pre-Pay Not Specified Pacific Gas & Electric Company	Portfolio Seller's portfolio CAISO	CAISO 9/1/2019 9/30/2019	Local RA Only RA Only Constraints of the Constraint
PGandE_RAconfirm_System & Bay Area & PG&E Other_Some Flex_Jan2019-Dec2 NRG_RAconfirm_System_Jan-Dec2019	60 Day Pre-Pay Not Specified Pacific Gas & Electric Company COMBINED CYCLE NRG Power Marketing, LLC	Portfolio Seller's portfolio CAISO Portfolio SUNRIS_2_PL1X3 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	System RA Ohy
IghDesert_RAconfirm_SouthSystemFlex_Jan2019-Dec2020 50MW	COMBINED CYCLE NRG Power Marketing, LLC COMBINED CYCLE High Desert Power Project, LLC	Portfolio SUNRIS_2_PL1X3 CAISO Portfolio HIDSRT 2_UNITS CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	System RA Only System
Calpine_RAconfirm_10MW_(4MW Mar)_Greater Bay Area_Jan2019-Dec2019	COMBINED CYCLE Calpine Energy Services, L.P.	Portfolio HIDSRT 2_UNITS CAISO Portfolio DELTA_2_PL1X4 CAISO	CAISO 9/1/2019 9/30/2019	jsaan voorge jaar voorge vo
Calpine RAconfirm 13MW PG&E Other Jan2019-Dec2019	STEAM Calpine Energy Services, L.P.	Portfolio ADLIN_1_UNITS CAISO	CAISO 9/1/2019 9/30/2019	Local RA Only
Calpine_RAconfirm_30MW_Import_System_North_Jan2019-Dec2019	Import Calpine Energy Services, L.P.	Portfolio CALJ_MALIN500_1_F_STRAT1 CAISO	CAISO 9/1/2019 9/30/2019	System RA Only
Calpine_RAconfirm_9MW_Greater Bay Area_Jan2019-Dec2019 (Less March2019)	COMBINED CYCLE Calpine Energy Services, L.P.	Portfolio DELTA_2_PL1X4 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	Local RA Only
Alameda Power_RAconfirm_8MW_Sep19_PG&E Other RAconfirmSale_8MW_Sep1 SJCE_RAconfirm_Sep2019_Nov2019_North System	North System STEAM Alameda Municipal Power COMBINED CYCLE San Jose Clean Energy	Portfolio NCPA_7_GP2UN4 CAISO Portfolio DELTA_2_PLIX4 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	Local RA Oty System RA Oty
Lancaster_RAconfirm_Sep-2019_Import	Import City of Lancaster	Portfolio DELTA_2_PL1X4 CAISO Portfolio MSCG_MALIN_I_F_IMSO10 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	System rootay Rootay System Rootay Rootay Rootay System Rootay Root
Phases_RAconfirm_Sep2019_North & South System	PHOTO VOLTAIC 3 Phases Renewables Inc.	Portfolio FRNTBW_6_SOLAR1 CAISO	CAISO 9/1/2019 9/30/2019	System RA Only
Phases_RAconfirm_Sep2019_North & South System	WIND 3 Phases Renewables Inc.	Portfolio TEHAPI_2_WIND1 CAISO	CAISO 9/1/2019 9/30/2019	System RA Only
Phases_RAconfirm_Sep2019_North & South System	WIND 3 Phases Renewables Inc.	Portfolio TEHAPI_2_WIND2 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	System RA.Only System D.d. Only
	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Portfolio SCEC_1_PDRP14 CAISO Portfolio SCEC 1 PDRP20 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	System RA Only System RA Only
DhmConnect_RAconfirm_Sep2019_South System 9 MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Portfolio SCEC_1_PDRP30 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 9/1/2019 9/30/2019	System No COV/ System RA Only RA Only
OhmConnect_RAconfirm_Sep2019_South System 9 MW	Demand Response Ohm Connect, Inc	Portfolio SCEC 1 PDRP31 CAISO	CAISO 9/1/2019 9/30/2019	jskemi tokum Byslem Rothy
DhmConnect_RAconfirm_Sep2019_South System 9 MW DhmConnect_RAconfirm_Sep2019_South System 9 MW	Demand Response Ohm Connect, Inc	Portfolio SCEC_1_PDRP32 CAISO	CAISO 9/1/2019 9/30/2019	System RA Only
OhmConnet, RAcontIm, Sep2019, South System 9 MW	Demand Response Ohm Connect, Inc	Portfolio SCEC_1_PDRP86 CAISO	CAISO 9/1/2019 9/30/2019	System RA.Only
OhmConnet, RAcontIm, Sep2019, South System 9 MW		Portfolio SCEC_1_PDRP87 CAISO	CAISO 9/1/2019 9/30/2019	System RA.Only System Control System
OhmConnect, RAconfilm, Sep2019. South System 9 MW OhmConnect, RAconfilm, Sep2019. South System 9 MW	Demand Response Ohm Connect, Inc	Portfolio SCEC_1 PDRP88 CAISO Portfolio SCEC_1 PDRP89 CAISO	CAISO 9/1/2019 9/30/2019 CAISO 1/1/2022 12/31/2022	System PA Only System PA Only
OhmConnect, RAcordim, Sep2019 South System 9 MW OhmConnect, RAcordim, Sep2019 South System 9 MW	Demand Response Ohm Connect, Inc	Portfolio SCEC_1_PDRP89 CAISO Portfolio SCEC_1 PDRP90 CAISO	CAISO 1/1/2022 12/31/2022 CAISO 1/1/2022 12/31/2022	System RA Only System System RA Only System Sy
OmcComet, RAcordim, Sep2019 South System 9 MW OmcComet, RAcordim, Sep2019 South System 9 MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc		CAISO 1/1/2020 12/31/2022	System RAONY RADIA Strategy Control Stra
OmcConnet, RAconfim. Bep2019 South System B MW OmcConnet, RAconfim. Sep2019 South System B MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Portfolio SCEC 1 PDRP91 CAISO	0.100	organian to company and a second
OmcConnet, RAconfm. Sep2019 South System 8 MW OmcConnet, RAconfm. Sep2019 South System 8 MW	Demand Response Ohm Connect, Inc	Portfolio SCEC 1 PDRP91 CAISO Portfolio SCEC_1 PDRP92 CAISO	CAISO 1/1/2020 12/31/2022	
OmcConnet, ReAconfim. spe2019 Subm System B MW OhmConnet, ReAconfim. spe2019 Subm System B MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Portfolio SCEC. PDR/P91 CAISO Portfolio SCEC. PDR/P92 CAISO Portfolio SCEC. PDR/P93 CAISO	CAISO 1/1/2020 12/31/2022 CAISO 1/1/2020 12/31/2022	System RA Only
Omic-Omeret, PAcontim, Beg2019, South System 9 MW Omic-Omeret, PAcontim, Beg2019, South System 9 MW Omic-Omeret, PAcontim, Beg2019, South System 9 MW Omic-Omeret, PAcontim, Beg2019, South System 8 MW Omic-Omeret, PAcontim, Beg2019, South System 8 MW Omic-Omeret, PAcontim, Beg2019, South System 9 MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Partifolio SCEC_1 PDRP91 CAISO Partifolio SCEC_1 PDRP92 CAISO Partifolio SCEC_1 PDRP93 CAISO Partifolio SCEC_1 PDRP94 CAISO Partifolio SCEC_1 PDRP94 CAISO	CAISO 11/1/2020 12/31/2022 CAISO 11/1/2020 12/31/2022 CAISO 11/1/2020 12/31/2022	System RA Only
OmnConnet, FAcontim Seg2019 South System 8 MW OmnConnet, FAcontim Seg2019 South System 8 MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Institution SEEC_1 PDRP91 CAISO Partifolio SEEC_1 PDRP92 CAISO Partifolio SEEC_1 PDRP3 CAISO Partifolio SEEC_1 PDRP4 CAISO Partifolio SEEC_1 PDRP4 CAISO Partifolio SEEC_1 PDRP4 CAISO Partifolio SEEC_1 PDRP4 CAISO	CAISO 5/1/2020 10/1/2020	System RA Only System RA Only
OmcComet, RAconfm. Bep2019 South System 9 MW OmcComet, RAconfm. Bep2019 South System 8 MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Instriktion SCEC [. PDRPI/2 CASO Portfolio SCEC [. PDRPi/4 CASO Portfolio SCEN [. PDRPi/3 CASO Portfolio SCEN [. PDRP3 CASO	CAISO 5/1/2020 10/1/2020 CAISO 1/1/2020 12/31/2020	System RA Only System RA Only System RA Only
OmnCommed, RAcontimus, Beg2019, South System B MW OmnCommed, RAcontimus, Beg2019, South System B MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Instriktion SCEC [. PDRPI/2 CASO Portfolio SCEC [. PDRPi/4 CASO Portfolio SCEN [. PDRPi/3 CASO Portfolio SCEN [. PDRP3 CASO	CAISO 5/1/2020 10/1/2020	System RA Only
OmcCommel, RAcontim. Bep2019 South System B MW OmcCommel, RAcontim. Bep2019 South System B MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Partfolio SECC PDRP1 CASO Portfolio SECC PDRP2 CASO Partfolio SECC PDRP32 CASO Partfolio SECC PDRP42 CASO Partfolio SECC PDRP44 CASO Partfolio SEC PDRP44 CASO Partfolio SEC PDRP45 CASO Partfolio SECN PDRP44 CASO Partfolio SECN PDRP45 CASO Partfolio SECN & PDRP44 CASO Partfolio SECN & PDRP45 CASO Partfolio SECN & PDRP42 CASO	CAISO 5/1/2020 10/1/2020 CAISO 1/1/2020 12/31/2020 CAISO 3/1/2020 11/30/2021	System RA Only
OmcConnett, RAconfm. Sep2013 South System B MW OmcConnett, RAconfm. Sep2013 South System B MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Instribution SCECPORPHY CASO Portfolio SCENPORPHY CASO	CAISO 5/1/2020 10/1/2020 CAISO 1/1/2020 12/31/2020 CAISO 3/1/2020 11/30/2021 CAISO 3/1/2020 11/30/2021 CAISO 6/1/2020 9/30/2020	System RA, Oxly
OmnConnet, RAconfim, Sep2013 South System 9 MW OmnConnet, RAconfim, Sep	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Instribution SCECPORPHY CASO Portfolio SCENPORPHY CASO	CAISO 51/12020 101/12020 CAISO 11/12020 123/12020 CAISO 11/12020 123/12020 CAISO 31/12020 11/102021 CAISO 61/12020 93/02020 CAISO 61/12020 11/02020 CAISO 41/12020 11/02020 CAISO 11/12020 12/31/12022 CAISO 71/12020 73/12020	System RA Only
OmnCommed, RAconfmin. Spe2019 South System B MW OmnCommed, RAconfmin. Spe3019 South System B MW	Demand Response Ohm Connect, Inc Demand Response Ohm Connect, Inc	Partfolio SECC PDRP1 CASO Portfolio SECC PDRP2 CASO Partfolio SECC PDRP32 CASO Partfolio SECC PDRP42 CASO Partfolio SECC PDRP44 CASO Partfolio SEC PDRP44 CASO Partfolio SEC PDRP45 CASO Partfolio SECN PDRP44 CASO Partfolio SECN PDRP45 CASO Partfolio SECN & PDRP44 CASO Partfolio SECN & PDRP45 CASO Partfolio SECN & PDRP42 CASO	CAISO 5/1/2020 10/1/2020 CAISO 1/1/2020 12/31/2020 CAISO 3/1/2020 11/30/2021 CAISO 3/1/2020 11/30/2021 CAISO 6/1/2020 9/30/2020	System RA, Oxly

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line	Contract Name:	Fuels	Supplier / Seller:	Unit Contingent:	Generating Unit(s) Specified	Supply Resources(s) Balancing Area	Supply Resoucre(s) Delivery Contra Zone/Point D	et Start Cont	ract Capacity on Date Under Co	((MW) Contract / Agreement Products	Contract Type	Notes (1):	Notes (2):	1
OhmConnect_RAconfirm_Sep	2019_South System 9 MW	Demand Response	Ohm Connect, Inc	Portfolio	SCEW_2_PDRP49	CAISO Balancing Area	CAISO 1	/1/2020 12	2/31/2020	System	RA Only			
OhmConnect_RAconfirm_Sep	2019_South System 9 MW	Demand Response	Ohm Connect, Inc	Portfolio	SCEW_2_PDRP71	CAISO	CAISO 1	/1/2021 12	2/31/2021	System	RA Only			
OhmConnect RAconfirm Sep:	2019 South System 9 MW	Demand Response	Ohm Connect, Inc	Portfolio	SCEW_2_PDRP72	CAISO	CAISO 1	/1/2020 12	2/31/2022	System	RA Only			
OhmConnect_RAconfirm_Sep	2019_South System 9 MW	Demand Response	Ohm Connect, Inc	Portfolio	SCEW_2_PDRP74	CAISO		/1/2020 12	2/31/2022	System	RA Only			
OhmConnect_RAconfirm_Sep:	2019_South System 9 MW	Demand Response	Ohm Connect, Inc	Portfolio	SCEW_2_PDRP75	CAISO			2/31/2022	System	RA Only			
OhmConnect_RAconfirm_Sep:	2019_South System 9 MW	Demand Response	Ohm Connect, Inc	Portfolio	SCHD_1_PDRP04	CAISO			9/30/2021	System	RA Only			
OhmConnect_RAconfirm_Sep		Demand Response	Ohm Connect, Inc	Portfolio	SCHD_1_PDRP33	CAISO	CAISO 1		1/30/2020	System	RA Only			
OhmConnect_RAconfirm_Sep		Demand Response	Ohm Connect, Inc	Portfolio	SCHD_1_PDRP34	CAISO	CAISO 1		2/31/2022	System	RA Only			
OhmConnect_RAconfirm_Sep:		Demand Response	Ohm Connect, Inc	Portfolio	SCLD_1_PDRP11	CAISO			2/31/2020	System	RA Only			
OhmConnect_RAconfirm_Sep:		Demand Response	Ohm Connect, Inc	Portfolio	SCNW_6_PDRP28 SCNW_6_PDRP32	CAISO			2/31/2020	System	RA Only			
OhmConnect_RAconfirm_Sep		Demand Response	Ohm Connect, Inc	Portfolio	SCNW_6_PDRP32 COLGAT 7 UNIT 1	CAISO			8/31/2020	System	RA Only			
	lec2022 North System and PG&E Other	HYDRO Not Specified	Shell Energy North America (US), L.P. Shell Energy North America (US), L.P.	Portfolio	Seller's portfolio	CAISO	CAISO 7 CAISO 1		7/31/2020 2/31/2023	Local	RA Only RA Only			
	lec2022 North System and PG&E Other 0-Dec2022_Fresno_w/_Flex 22 MW	COMBUSTION TURBINE	E Wellhead Power Exchange, LLC	Portiolio	PNOCHE 1 PL1X2	CAISO	CAISO 7		7/31/2020	System	RA Only RA Only			
	ec2022_Fresno_W_Flex 22 MW	Not Specified	Pacific Gas & Electric Company	Portfolio	Seller's portfolio	CAISO			9/30/2020	Local	RA Only RA Only			·
PORE Reconfirm Jon2020 De	lec2022_Fresho_Humboldt_Stockton	Not Specified	Pacific Gas & Electric Company Pacific Gas & Electric Company	Portfolio	Seller's portfolio	CAISO			2/31/2021	Local	RA Only			-
PORE Reconfirm Jon2020 De	ec2022_Fresno_Humbold_Stockton	Not Specified	Pacific Gas & Electric Company Pacific Gas & Electric Company	Portfolio	Seller's portfolio	CAISO	CAISO		2/31/2020	Local	RA Only			-
Powerex RAconfirm May-Oct	2020 Import 44 MW	Import	Powerex Corp.	Portfolio	PWRX NOB I F DARA01	CAISO	CAISO 7		7/31/2020	System	RA Only			-
Elk Hills Power_RAconfirm_Jar		COMBINED CYCLE	Elk Hills Power, LLC	Portfolio	ELKHIL_2_PL1X3	CAISO	CAISO 7		8/30/2020	System	RA Only			
PG&E_RAconfirm_Mar2020-N		HYDRO	Pacific Gas & Electric Company	Portfolio	BUCKCK_7_PL1X2	CAISO			8/30/2020	Local	RA Only			
BPA_RAconfirm_Jun-Sep2020		Import	Bonneville Power Administration	Portfolio	TSC7 MALIN500 1 F BPARA	CAISO			2/31/2022	System	RA Only			
Calpine_RAconfirm_Apr-Nov20		Not Specified	Calpine Energy Services, L.P.	Portfolio	DELTA 2 PLX4	CAISO	CAISO 10	/1/2022 12	2/31/2023	Local	RA Only			
Calpine RAconfirm Jan2020-E		STEAM	Calpine Energy Services, L.P.	Portfolio	SANTFG 7 UNITS	CAISO			9/30/2022	Local	RA Only			
SCP_RAconfirm_July2020_No		COMBINED CYCLE	Sonoma Clean Power Authority	Portfolio	SUNRIS_2_PL1X3	CAISO	CAISO 6		9/30/2021	System	RA Only			
Calpine_RAconfirm_Jan-Dec2	2020_Bay Area	Not Specified	Calpine Energy Services, L.P.	Portfolio	DELTA_2_PLX4	CAISO	CAISO 1		2/31/2023	Local	RA Only			
MBCP_RAconfirm_Jan-Dec20	20_ 1 MW Humboldt & North System Flex + 3MW Oct2020 North System Fle	x Not Specified	Monterey Bay Community Power Authority	Portfolio	DELTA_2_PL1X2	CAISO	CAISO 1	/1/2021 12	2/31/2021	System	RA Only			
	20_ 1 MW Humboldt & North System Flex + 3MW Oct2020 North System Fle	Not Specified	Monterey Bay Community Power Authority	Portfolio	Seller's portfolio	CAISO	CAISO 1		2/31/2021	Local	RA Only			
EDF_RAconfirm_Jan-Dec2021		Not Specified	EDF Trading North America, LLC	Portfolio	SIERRA_1_UNIT	CAISO			2/31/2022	Local	RA Only			
TID_RAconfirm_Jan20-Dec22_		STEAM	Turlock Irrigation District	Portfolio Portfolio	NCPA_7_GP1UN1 NCPA_7_GP1UN2	CAISO			9/30/2021	Local	RA Only			
TID_RAconfirm_Jan20-Dec22_		STEAM	Turlock Irrigation District	Portfolio	NCPA_7_GP1UN2	CAISO	CAISO 1		2/31/2022	Local	RA Only			
TID_RAconfirm_Jan20-Dec22		STEAM	Turlock Irrigation District	Portfolio	NCPA_7_GP2UN4	CAISO	CAISO 1		2/31/2022	Local	RA Only			
EBCE_RAconfirm_Jan-Sep202		Not Specified	East Bay Community Energy Authority	Portfolio	Seller's portfolio	CAISO			2/31/2022	Local	RA Only			
EBCE_RAconfirm_Jan-Nov202		Not Specified	East Bay Community Energy Authority	Portfolio	Seller's portfolio	CAISO			0/31/2021	System	RA Only			
CPSF_RAconfirm_Jan21-Dec2		Not Specified	Clean Power SF	Portfolio	Seller's portfolio	CAISO			9/30/2021	Local	RA Only			
SMUD_RAconfirm_Jan-Dec20		STEAM	Sacramento Municipal Utility District	Portfolio	SANTFG_7_UNITS GEYS13_7_UNIT13	CAISO			8/31/2021	Local	RA Only			
MarinCE_RAconfirm_Jan-Dec		STEAM	Marin Clean Energy Authority	Portiolio	Seller's portfolio	CAISO			1/30/2022	Local	RA Only			
PG&E_RAconfirm_Mar-Aug20 OhmConnect_RAconfirm_Jul2	J_Sierra + System	Not Specified Not Specified	Pacific Gas & Electric Company Ohm Connect, Inc	Portiolio	Seller's portfolio	CAISO		/1/2021 10	D/31/2021 B/30/2021	Local	RA Only RA Only			·
Calpine_RAconfirm_2021-2023		COMBINED CYCLE	Calpine Energy Services, L.P.	Portfolio	Sutter	CAISO			2/31/2022	System	RA Only			
TEA_RAconfirm_Jul20 Import		Not Specified	The Energy Authority	Portfolio	Seller's portfolio	CAISO			2/31/2022	System	RA Only			-
Brookfield_RAconfirm_Jul-Sep		Not Specified	Brookfield	Portfolio	Seller's portfolio	CAISO			2/31/2022	System	RA Only			-
Calpine_RAconfirm_2021_Sys		COMBINED CYCLE	Calpine Energy Services, L.P.	Portfolio	LMEC 1 PL1X3	CAISO			2/31/2022	System	RA Only			
TEA RAconfirm 2022-2023 S		COMBINED CYCLE	The Energy Authority	Portfolio	TERMEX 2 PL1X3	CAISO			2/31/2026	System	RA Only			
PCE_RAconfirm_Jul20_0.18 N		Not Specified	Peninsula Clean Energy Authority	Portfolio	Seller's portfolio	CAISO	CAISO 6		6/30/2022	Local	RA Only			
Roseville_Raconfirm_Jul-Aug2		Not Specified	The City of Roseville	Portfolio	Seller's portfolio	CAISO	CAISO 3/	31/2023 3	3/30/2038	Local	RA Only			
MBCP_RAconfirm_Jul-Aug20_	NCNB	STEAM	Monterey Bay Community Power Authority	Portfolio	SANTEG 7 UNITS	CAISO	CAISO 3/	31/2023 3	3/30/2038	Local	RA Only			
AES_RAconfirm_2021-2022_3	System w/ Flex	STEAM	AES Redondo Beach, LLC	Portfolio	REDOND_7_UNIT 5	CAISO		30/2023 6	5/29/2043	System	RA Only			-
Mariposa Energy_RAconfirm_0	Oct22-Dec23_GBA w Flex	COMBUSTION TURBINE	Mariposa Energy, LLC	Portfolio	KELSO_2_UNITS	CAISO	CAISO 12/3	31/2021 12	2/30/2041	System	RA Only			
PG&E_RAconfirm_2021 & 202	22 Local	Not Specified	Pacific Gas & Electric Company	Portfolio	Seller's portfolio	CAISO			2/30/2041	Local	RA Only			
3CE_RAconfirm_Jun-Sep21_S		Not Specified	Central Coast Community Energy	Portfolio	Seller's portfolio	CAISO	CAISO 1		2/31/2036	System	RA Only			
BETM_RAconfirm_2022-2023		Not Specified	Boston Energy Trading and Marketing, LLC	Portfolio	Seller's portfolio	CAISO			2/31/2042	System	RA Only			
Calpine_RAconfirm_2021_Bay		COMBINED CYCLE	Calpine Energy Services, L.P.	Portfolio	DELTA_2_PL1X4	CAISO			1/30/2038	Local	RA Only			
Calpine_RAconfirm_2021 Bay		COMBINED CYCLE	Calpine Energy Services, L.P.	Portfolio	LMEC_1_PL1X3	CAISO			1/30/2038	Local	RA Only			
LEAP_RAconfirm_Apr-Dec202		Not Specified	Leapfrog Power, Inc	Portfolio	Seller's portfolio	CAISO			2/31/2031	System	RA Only			
MSCG_RAconfirm_Jun-Sep20		Not Specified	Morgan Stanley Capital Group	Portfolio	NOB	CAISO			5/29/2037	System	RA Only			
PG&E_RAconfirm_2022_PG&E	E Other	Not Specified	Pacific Gas & Electric Company		Seller's portfolio	CAISO			5/29/2037	Local	RA Only			
PG&E_RAconfirm_2022_PG&E		Not Specified	Pacific Gas & Electric Company	Portfolio Portfolio	Seller's portfolio	CAISO CAISO			1/29/2038	Local	RA Only			
PG&E_RAconfirm_2022_PG&E		Not Specified	Pacific Gas & Electric Company	Portfolio	Seller's portfolio MALIN500 ISL				1/29/2038	Local	RA Only			
Powerex_RAconfirm_Import_M	Way-Oct2021	Import	Powerex Corp.	Portiolio	MALIN500_ISL MALIN500 ISL	CAISO			1/29/2038	System	RA Only			-
Powerex_RAconfirm_Import_J	Jun-Sepzuzi	COMBINED CYCLE	Powerex Corp.	Portiolio	MRCHNT 2 PL1X3	CAISO CAISO				System	RA Only			
SDG&E_RAconfirm_Jun-Aug2 PCE_RAconfirm_Mar-Nov2022	2 Eroone & Steekten	Not Specified	San Diego Gas & Electric Peninsula Clean Energy Authority	Portfolio	HELMPG 7 UNIT1	CAISO			2/31/2037 9/29/2038	Josef	RA Only RA Only			
3CE_RAconfirm_Aug-Oct2021		Not Specified	Central Coast Community Energy	Portfolio	Seller's portfolio	CAISO			1/30/2042	Exetom	RA Only RA Only			
BPA_RAconfirm_Jun-Sep2021		Import	Bonneville Power Administration	Portfolio	BPA1_MALIN500_I_F_BPARA	CAISO			1/30/2042	System	RA Only RA Only			-
SCE_RAconfirm_Jan-Dec2022		Not Specified	Southern California Edison Company	Portfolio	Seller's portfolio	CAISO			2/31/2022	Local	RA Only			-
Calpine_RAconfirm_2022 NCN		Not Specified	Calpine Energy Services, L.P.	Portfolio	Seller's portfolio	CAISO			2/31/2022	Local	RA Only RA Only			
OhmConnect_Raconfirm_2022		Not Specified	Ohm Connect, Inc	Portfolio	Seller's portfolio	CAISO			2/31/2022	Local	RA Only RA Only			
AES Redondo Beach_RAconfi		STEAM	AES Redondo Beach, LLC	Portfolio	REDOND 7 UNIT 5	CAISO	CAISO		2/31/2022	Svetem	RA Only RA Only			-
Mariposa Energy_RAconfirm_2	2024-2026 GRA	COMBUSTION TURBINE	Mariposa Energy, LLC	Portfolio	KELSO 2 UNITS	CAISO			2/31/2022	System	RA Only RA Only			
SCE_RAConfirm_Apr-Jun2022	2 System	COMBINED CYCLE	Southern California Edison	Portfolio	LAPLMA 2 UNIT 4	CAISO			6/30/2022	System	RA Only			
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