DOCKETED	
Docket Number:	22-PSDP-01
Project Title:	Power Source Disclosure Program - 2021 Reporting
TN #:	243387
Document Title:	2021 Calpine Solutions PSD Public
Description:	N/A
Filer:	Bryan White
Organization:	Calpine Energy Solutions, LLC
Submitter Role:	Applicant
Submission Date:	6/1/2022 3:13:57 PM
Docketed Date:	6/1/2022

#### 2021 POWER SOURCE DISCLOSURE ANNUAL REPORT For the Year Ending December 31, 2021

Retail suppliers are required to use the posted template and are not allowed to make edits to this format. Please complete all requested information.

### **GENERAL INSTRUCTIONS**

	RETAIL SUPPLIER NAME							
Calpine Energy Solutions, LLC								
	CA Power Mix							
	CONTACT INFORMATION							
NAME	Greg Bass							
TITLE	Regulatory Director							
MAILING ADDRESS	401 West A Street, Suite 500							
CITY, STATE, ZIP	San Diego, CA 92101							
PHONE	619-684-8199							
EMAIL	greg.bass@calpinesolutions.com							
WEBSITE URL FOR PCL POSTING	calpinesolutions.com							

Submit the Annual Report and signed Attestation in PDF format with the Excel version of the Annual Report to PSDprogram@energy.ca.gov. Remember to complete the Retail Supplier Name, Electricity Portfolio Name, and contact information above, and submit separate reports and attestations for each additional portfolio if multiple were offered in the previous year.

NOTE: Information submitted in this report is not automatically held confidential. If your company wishes the information submitted to be considered confidential an authorized representative must submit an application for confidential designation (CEC-13), which can be found on the California Energy Commissions's website at https://www.energy.ca.gov/about/divisions-and-offices/chief-counsels-office.

If you have questions, contact Power Source Disclosure (PSD) staff at PSDprogram@energy.ca.gov or (916) 805-7439.

# 021 DOWED SOUDCE DISCLOSUDE ANNUAL DED

2021 POWER SOURCE DISCLOSURE ANNUAL REPORT													
SCHEDULE 1: PROCUREMENTS AND RETAIL SALES													
							ding Decemb						
					Cal		rgy Solution	s, LLC					
						CA	Power Mix						
Instructions: Enter information about po	Instructions: Enter information about power procurements underlying this electricity portfolio for which your company is filing the Annual Report.												
Insert additional rows as needed. All fields in white should be filled out. Fields in grey auto-populate as needed and should not be filled out. For Net Specified Procurement (MWh) 1,370,04											1,370,043		
EIA IDs for unspecified power or specified system mixes from asset-controlling suppliers, enter "Unspecified Power", "BPA", or "Tacoma Power" as Unspecified Power (MWh)													
applicable. For specified procurements	of ACS power,	use the AC	S Procuren	nent Calcula	ator to calc	culate the re	esource breakdo	own comprisir	ng the		Procurement to be adjus		-
ACS system mix. Procurements of unspecified power must not be entered as line items below; unspecified power will be calculated										-			
automatically in cell N9. Unbundled RECs must not be entered on Schedule 1; these products must be entered on Schedule 2. At the bottom Net Specified Coal & Other Fossil Fuels										-			
portion of the schedule, provide the oth	-			ail sales inc	luding, but	t not limited	to transmission	and distributi	ion losses		ar, Large Hydro, Renew		1,370,043
or municipal street lighting. Amounts sh	or municipal street lighting. Amounts should be in megawatt-hours.										1,458,501		
										GHG Em	issions Intensity (in MT	CO <sub>2</sub> e/MWh)	0.3430
					DI	RECTLY DE	LIVERED RENEW	ABLES			GHG Emissions		
		State or					Gross MWh	MWh	Net MWh	Adjusted Net MWh	Factor (in MT	GHG Emissions (in	
Facility Name	Fuel Type		WREGIS ID	<b>RPS ID</b>	N/A	EIA ID	Procured	Resold	Procured	Procured	CO <sub>2</sub> e/MWh)	MT CO <sub>2</sub> e)	N/A
Altwind 1 - Altwind 1	Wind	CA		60403A		P1	15		15	15	-	-	
Altwind 2 - Altwind 2	Wind	CA		60402A		P2	1,102	_	1,102	1,102		-	
Altwind 3 - Altwind 3	Wind	CA		60402A		P3	337	-	337	337	-	-	
Blythe Solar 110, LLC - BLY110-B01 Block 1	Solar	CA		60878A		60093	111,679	-	111,679	111,679		-	
Blythe Solar 110, LLC - BLY110-B02 Block 02	Solar	CA		60878A		60093	105,932	-	105,932	105,932	-	-	
Blythe Solar 110, LLC - BLY110-B03 Block 03	Solar	CA		60878A		60093	83,485	-	83,485	83,485	-	-	
Calabasas Gas-to-Energy Facility - CGTEF	Biomass & biowa			60866A		57163	30,457	-	30,457	30,457	0.0042	128	
Cameron Ridge, LLC (III) - Cameron Ridge LLC		CA		60392A		10586	18,852	-	18,852	18,852	-	-	
Desert Winds I - Desert Winds I	Wind	CA		60397A		P4	7,002	-	7,002	7,002	-	-	
Desert Winds II Pwr Purch Trst - Desert Winds	I Wind	CA		60422A		P5	17,135	-	17,135	17,135	-	-	
Desert Winds III - Desert Winds III	Wind	СА		60423A		P6	10,923	-	10,923	10,923	-	-	
Geysers Power Plant - Calistoga Power Plant	Geothermal	CA	W486	60117A		50066		-	25,000		0.0374	936	
Golden Hills A - Golden Hills A	Wind	CA	W4800	62804A		60049	133,437	-	133,437	133,437	-	-	
Mohave County Wind Farm LLC - White Hills	Wind	AZ	W10999	64321A		63114	146,410	-	146,410	146,410	-	-	
Murphys - Murphys Powerhouse	Eligible hydro	CA	W245	60521A		261	9,038	-	9,038	9,038	-	-	
Oak Creek Wind Power, LLC - Oak Creek Wind	Wind	CA	W509	60429A		50754	8,817	-	8,817	8,817	-	-	
RE Astoria 2 - Astoria 2	Solar	CA	W4931	62691A		59977	27,464	-	27,464	27,464	-	-	
Ridgetop Energy, LLC - Ridgetop Energy, LLC	Wind	CA	W406	60375A		10597	16,245	-	16,245	16,245	-	-	
Ridgetop Energy, LLC (II) - Ridgetop Energy, LL	Wind	CA	W408	60407A		54931	11,039	-	11,039	11,039	-	-	
San Gorgonio Altwind - San Gorgonio Altwind	Wind	CA	W4960	60402A		50281	972	-	972	972	-	-	
San Gorgonio East - San Gorgonio East	Wind	CA	W4764	63228A		50690	4,833	-	4,833	4,833	-	-	
Terra-Gen Mojave Wind Farms, LLC - Morwind		CA		60380A		50821	12,728	-	12,728	12,728	-	-	
Total Energy Facility - TEF - GEN 1	Biomass & biowa			60633A		10091	2,825	-	2,825	2,825	0.0600	169	
Total Energy Facility - TEF - GEN 4	Biomass & biowa			60633A		10091	2,484	-	2,484	2,484	0.0600	149	
Total Energy Facility - TEF - GEN2	Biomass & biowa			60633A		10091	2,825	-	2,825	2,825	0.0600	169	
Total Energy Facility - TEF - GEN3	Biomass & biowa	CA	W868	60633A		10091	2,825	-	2,825	2,825	0.0600	169	
									-	-	#N/A		
	ļ					L			-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
					EIA ID of	FIRMED-AN EIA ID of	ID-SHAPED IMPO	RTS			GHG Emissions		Eligible for
		State or			REC	Substitute	Gross MWh		Net MWh	Adjusted Net MWh	Factor (in MT	<b>GHG Emissions</b>	Grandfathered
Facility Name	Fuel Type		WREGIS ID	<b>RPS ID</b>	Source	Power	Procured	MWh Resold	Procured	Procured	CO <sub>2</sub> e/MWh)	(in MT CO <sub>2</sub> e)	Emissions?
		OR		63056A		Unspecified		-	37,682	37,682	0.4280	16,128	No
Biglow Canyon Wind Farm - Biglow Phase 2		OR		63055A		Unspecified		-	30,576	30,576	0.4280	13,087	No
Clearwater Paper Corporation - #3 turbine gene				60533A		Unspecified		-	1,430	1,430	0.4280	612	No
Clearwater Paper Corporation - #4 turbine gene				60533A		Unspecified		-	4,741	4,741	0.4280	2,029	No
Elkhorn Valley Wind Farm - Elkhorn Valley Wind		OR	W186	61034A		Unspecified		-	25,000	25,000	0.4280	10,700	No
Harvest Wind - Harvest Wind		WA		60857A		Unspecified		-	11,543	11,543	0.4280	4,940	No
Kettle Falls Woodwaste Plant - Kettle Falls Woo				60495A		Unspecified		-	2,894	2,894	0.4280	1,239	No
Kittitas Valley Wind Farm - Sagebrush Power P		WA		60939A		Unspecified	26,511	-	26,511	26,511	0.4280	11,347	No
Klondike III - Klondike Wind Power III LLC		OR		60602A		Unspecified		-	1,296	1,296	0.4280	555	No
Limon Wind - Limon Wind I	Wind	CO		62246A		Unspecified		-	4,378	4,378	0.4280	1,874	No
<u> </u>	-	1					.,	1	.,	.,		.,	

	-							-					
Limon Wind II - Limon Wind II, LLC	Wind	CO	W3158	62246A	58127	Unspecified	20,360	-	20,360	20,360	0.4280	8,714	No
Limon Wind III, LLC - Limon Wind III, LLC	Wind	CO	W4269	62859A	59083	Unspecified	175,262	-	175,262	175,262	0.4280	75,012	No
Monroe Street HED - Monroe Street HED	Eligible hydro	WA	W218	60496A	9095	Unspecified	1,795	-	1,795	1,795	0.4280	768	No
Murphy Flat - Murphy Flat Power, LLC	Solar	ID	W5395	63449A	60009	Unspecified	736	-	736	736	0.4280	315	No
Neal Hot Springs Unit #1 - Neal Hot Springs Geo	Geothermal	OR	W3155	62427A	58022	Unspecified	6,050	-	6,050	6,050	0.4280	2,589	No
Nine Mile HED - Nine Mile HED	Eligible hydro	WA	W216	60497A		Unspecified		_	2,464	2,464	0.4280	1,055	No
Post Falls HED - Post Falls 2	Eligible hydro	ID	W794	60498A		Unspecified	134	-	134	134	0.4280	57	No
Post Falls HED - Post Falls HED	Eligible hydro	ID	W220	60498A		Unspecified	1,504	-	1,504	1,504	0.4280	644	No
	<b>3</b> ,								· · ·				
Raft River Energy I - Raft River Energy I	Geothermal	ID	W228	64433A		Unspecified	23,388	-	23,388	23,388	0.4280	10,010	No
Tucannon River Wind Farm - Tucannon River 1		WA	W4482	63027A		Unspecified	1,934	-	1,934	1,934	0.4280	828	No
Tucannon River Wind Farm - Tucannon River 2		WA	W4483	63027A		Unspecified	79,808	-	79,808	79,808	0.4280	34,158	No
Upper Falls HED - Upper Falls HED	Eligible hydro	WA	W217	60499A		Unspecified	888	-	888	888	0.4280	380	No
Vansycle II - Vansycle II	Wind	OR	W1458	60944A	55989	Unspecified	60,992	-	60,992	60,992	0.4280	26,105	No
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
		<u>.</u>	<u>.</u>		SPECIF	ED NON-RE		UREMENTS					
						-					GHG Emissions		
		State or					Gross MWh		Net MWh	Adjusted Net MWh	Factor (in MT	<b>GHG Emissions</b>	
Facility Name	Fuel Type	Province	N/A	N/A	N/A	EIA ID	Procured	MWh Resold	Procured	Procured	CO₂e/MWh)	(in MT CO <sub>2</sub> e)	N/A
Kern River No. 3	Large Hydro	CA				339	23,168	-	23,168	23,168	-	-	
Balch #1 PH	Large Hydro	CA				217	346	-	346	346	-	_	
Balch #2 PH	Large Hydro	CA				218	1,079	-	1,079	1,079	-	-	
Belden		CA				218	1,362		1,362	1,362			
	Large Hydro							-	-		-	-	
Bucks Creek	Large Hydro	CA				220	174	-	174	174	-	-	
Butt Valley	Large Hydro	CA				221	176	-	176	176	-	-	
Caribou 1	Large Hydro	CA				222	336	-	336	336	-	-	
Caribou 2	Large Hydro	CA				223	1,443	-	1,443	1,443	-	-	
Cresta	Large Hydro	CA				231	1,131	-	1,131	1,131	-	-	
Drum #1	Large Hydro	CA				235	398	-	398	398	-	-	
Drum #2	Large Hydro	CA				236	1,408	-	1,408	1,408	-	-	
Electra		CA				239		-	1,506	1,506	-	_	
Haas	Large Hydro	CA				240	890	-	890	890	-		
James B Black	Large Hydro	CA				240	3,183		3,183	3,183			
								-				-	
Kerckhoff #2 PH	Large Hydro	CA				682	1,171	-	1,171	1,171	-	-	
Kings River	Large Hydro	CA				254	295	-	295	295	-	-	
Pit 1	Large Hydro	CA				265	2,725	-	2,725	2,725	-	-	
Pit 3	Large Hydro	CA				266	1,732	-	1,732	1,732	-	-	
Pit 4	Large Hydro	CA				267	1,979	-	1,979	1,979	-	-	
Pit 5	Large Hydro	CA				268	3,009	-	3,009	3,009	-	-	
Pit 6	Large Hydro	CA				269	2,366	-	2,366	2,366	-	-	
Pit 7	Large Hydro	CA				270	1,055	-	1,055	1,055	-	-	
Poe	Large Hydro	CA				272	1,120	-	1,120	1,120	-	_	
Rock Creek	Large Hydro	CA				275	975	-	975	975	-	-	
Salt Springs	Large Hydro	CA				273	189	-	189	189	 _		
										287			
Stanislaud	Large Hydro	CA				285	287	-	287		-	-	
Tiger Creek	Large Hydro	CA				287	10	-	10	10	-	-	
South Feather Water and Power Agency - Forbe		CA				417	370	-	370	370	-	-	
South Feather Water and Power Agency - Wood		CA				419	339	-	339	339	-	-	
NID-Chicago Park	Large Hydro	CA				412	592	-	592	592	-	-	
									-	-	#N/A		
				Р	ROCUREME	NTS FROM	ASSET-CONTROL	LING SUPPLIE	RS				
											GHG Emissions		
							Gross MWh		Net MWh	Adjusted Net MWh	Factor (in MT	<b>GHG Emissions</b>	
Facility Name	Fuel Type	N/A	N/A	N/A	N/A	EIA ID	Procured	MWh Resold	Procured	Procured	CO₂e/MWh)	(in MT CO <sub>2</sub> e)	N/A
										-	#N/A		
										-	#N/A		
	1									-	#N/A		
	1									-	#N/A		
END USES OTHER THAN RETAIL SALES	MWh					L			1				
END USES OTHER THAN RETAIL SALES													
		-											
		4											
		]											
		-											

#### 2021 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 2: RETIRED UNBUNDLED RECS For the Year Ending December 31, 2021 Calpine Energy Solutions, LLC CA Power Mix

INSTRUCTIONS: Enter information about retired unbundled RECs associated with this electricity portfolio. Insert additional rows as needed. All fields in white should be filled out. Fields in grey autopopulate as needed and should not be filled out.

Fuel Type Wind Biogas Wind Biogas	UNDLED RECS State or Province CA CA CO	<b>RPS ID</b> 63338A 60866A	Total Retired (in MWh) 45298 377
Wind Biogas Wind Biogas	Province CA CA CO	63338A 60866A	45298
Wind Biogas Wind Biogas	CA CA CO	63338A 60866A	45298
Biogas Wind Biogas	CA CO	60866A	
Wind Biogas	СО		077
Biogas			
-		63340A	50000
Biogas	CA	60633A	3096
-			355
Biogas	CA	60633A	7002
		1	
		1	
	1		
	1		
		1	
ł	Biogas Biogas	-	5

#### 2021 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 3: POWER CONTENT LABEL DATA For the Year Ending December 31, 2021 Calpine Energy Solutions, LLC CA Power Mix

Instructions: No data input is needed on this schedule. Retail suppliers should use these auto-populated calculations to fill out their Power Content Labels.

	Adjusted Net Procured (MWh)	Percent of Total Retail Sales
Renewable Procurements	1,315,227	
Biomass & Biowaste	50,481	
Geothermal	54,438	
Eligible Hydroelectric	15,823	
Solar	329,296	
Wind	865,189	
Coal	-	0.0%
Large Hydroelectric	54,816	
Natural gas	-	0.0%
Nuclear	-	0.0%
Other	-	0.0%
Unspecified Power		

Total Retail Sales (MWh)	
Total Retail Sales (MWh)	

GHG Emissions Intensity (converted to lbs CO<sub>2</sub>e/MWh)

756

Percentage of Retail Sales Covered by Retired Unbundled RECs	2.5%
RECS	

#### 2021 POWER SOURCE DISCLOSURE ANNUAL REPORT ATTESTATION FORM For the Year Ending December 31, 2021 Calpine Energy Solutions, LLC CA Power Mix

## I, Greg Bass, Regulatory Director, declare under penalty of perjury, that the statements contained in this report including Schedules 1, 2, and 3 are true and correct and that I, as an authorized agent of Calpine Energy Solutions, LLC, have authority to submit this report on the company's behalf. I further declare that the megawatt-hours claimed as specified purchases as shown in these Schedules were, to the best of my knowledge, sold once and only once to retail customers. Name: Greg Bass Representing (Retail Supplier): Calpine Energy Solutions, LLC