#### **VALLEY CLEAN ENERGY ALLIANCE**

#### Staff Report – Item 15

TO: Board of Directors

FROM: Gordon Samuel, Assistant General Manager and Director of Power Services

SUBJECT: Accept and attest to the veracity of VCE's Power Content Label for the Standard

Green and Ultra Green products for 2020

DATE: September 9, 2021

#### **RECOMMENDATION:**

Attest to the veracity of the information presented in Valley Clean Energy's 2020 Power Source Disclosure Annual Reports and Power Content Label for the Standard Green and Ultra Green products.

#### **BACKGROUND:**

California Public Utilities Code requires all retail sellers of electric energy, including Valley Clean Energy (VCE), to disclose "accurate, reliable, and simple-to-understand information on the sources of energy, and the associated emissions of greenhouse gases," that are delivered to their respective customers. Applicable regulations direct retail sellers to provide such communications no later than October 1<sup>st</sup> of each year. The format for requisite communications is highly prescriptive, offering little flexibility to retail sellers when presenting such information to customers. This format has been termed the "Power Content Label" by the California Energy Commission ("CEC").

Information presented in the Power Content Label includes the appropriate share of total energy supply based on resource type, including both renewable and conventional fuel sources. In the event that a retail seller meets a certain percentage of its supply obligation from unspecified resources, the report must identify such purchases as "unspecified sources of power." Unspecified sources of power refers to electricity that cannot be sourced back to a specific generator, such as energy purchased through open market transactions.

During the 2020 calendar year, VCE delivered a substantial portion of its electric energy supply from various renewable energy sources, including eligible hydroelectric, solar, and wind. For VCE Standard Green customers, 43.9% of the energy delivered was from renewable energy resources with a greenhouse gas emissions intensity of 190 lbs CO2e/MWh. For Ultra Green customers, 100% of the energy delivered was generated from renewable energy resources with

<sup>&</sup>lt;sup>1</sup> California Public Utilities Code Section 398.1(b).

a greenhouse gas emissions intensity of 0 lbs CO2e/MWh. A copy of VCE's Power Content Label listing the energy resources used during 2020 is attached.

Consistent with applicable regulations and CEC guidance, VCE will complete required customer communications in accordance with the October 1, 2020 deadline. All customers currently enrolled in the VCE program will receive the Power Content Label via mail or e-mail, as applicable.

To fulfill its Power Content Label reporting obligation, VCE may provide the CEC with the Board's attestation regarding the veracity of the information presented in VCE's 2020 Power Source Disclosure Annual Reports and Power Content Label for the Standard Green and Ultra Green products. Staff recommends VCE self-certify both the Standard Green and Ultra Green products in lieu of submitting them to a third-party Certified Public Accountant for a formal audit. VCE's technical consultants (SMUD) prepared the Power Source Disclosure annual reports and Power Content Label, which were subsequently reviewed by another VCE consultant (EQ Research). EQ Research's review, as detailed in the attached report, verified that the information contained in the annual reports and Power Content Label is accurate.

Based on the foregoing, staff requests that the Board accept this determination and attest to the veracity of the information included in VCE's Power Source Disclosure annual reports and Power Content Label for the Standard Green and Ultra Green products for the 2020 calendar year.

#### **ATTACHMENTS:**

- 1) 2020 Annual Power Source Disclosure Report for the Standard Green Product
- 2) 2020 Annual Power Source Disclosure Report for the Ultra Green Product
- 3) 2020 Power Content Label
- EQ Research Report re 2020 Power Source Disclosure Annual Reports and Power Content Label

## 2020 POWER SOURCE DISCLOSURE ANNUAL REPORT For the Year Ending December 31, 2020

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									
	Valley Clean Energy Alliance								
	ELECTRICITY PORTEOLIO NAME								
	ELECTRICITY PORTFOLIO NAME Standard Green								
	CONTACT INFORMATION								
NAME	Ourstern Ourseal								
NAME	Gordon Samuel								
	Assistant General Manager &								
TITLE	Director of Power Services								
MAILING ADDRESS	604 2nd Street								
CITY STATE ZID	Davis, CA 95616								
CITY, STATE, ZIP	Davis, CA 93010								
PHONE	1-855-699-8232								
EMAIL	info@valleycleanenergy.org								
WEBSITE URL FOR	https://valleycleanenergy.org/power-sources/								
PCL POSTING									

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) 639-0573.

#### INTRODUCTION

Retail suppliers are required to submit separate Annual Reports for each electricity portfolio offered to California retail consumers in the previous calendar year. Enter the Retail Supplier Name and Electricity Portfolio Name at the top of Schedule 1, Schedule 2, Schedule 3, and the Attestation.

A complete Annual Report includes the following tabs:

PSD Intro
Instructions
Schedule 1 - Procurements and Retail Sales
Schedule 2 - Retired Unbundled Renewable Energy Credits (RECs)
Schedule 3 - Annual Power Content Label Data
GHG Emissions Factors
Asset-Controlling Supplier (ACS) Procurement Calculator
PSD Attestation

#### **INSTRUCTIONS**

#### Schedule 1: Procurements and Retail Sales

Retail suppliers of electricity must complete this schedule by entering information about all power procurements and generation that served the identified electricity portfolio covered in this filing in the prior year. The schedule is divided into sections: directly delivered renewables, firmed-and-shaped imports, specified non-renewables, and procurements from ACSs. Insert additional rows as needed to report all procurements or generation serving the subject product. Provide the annual retail sales for the subject product in the appropriate space. At the bottom of Schedule 1, provide the retail suppliers' other electricity end-uses that are not retail sales, such as transmission and distribution losses. Retail suppliers shall submit a purchase agreement or ownership arrangement documentation substantiating that any eligible firmed-and-shaped product for which it is claiming an exclusion was executed prior to January 1, 2019. Any retail supplier that offered multiple electricity portfolios in the prior year must submit separate Annual Reports for each portfolio offered.

<u>Specified Purchases</u>: A Specified Purchase refers to a transaction in which electricity is traceable to specific generating facilities by any auditable contract trail or equivalent, such as a tradable commodity system, that provides commercial verification that the electricity claimed has been sold once and only once to retail consumers. Do not enter data in the grey fields. For specified purchases, include enter following information for each line item:

Facility Name - Provide the name used to identify the facility.

**Fuel Type** - Provide the resource type (solar, natural gas, etc.) that this facility uses to generate electricity. **Location** - Provide the state or province in which the facility is located.

**Identification Numbers** - Provide all applicable identification numbers from the Western Renewable Energy Generation Information System (WREGIS), the Energy Information Agency (EIA), and the California Renewables Portfolio Standard (RPS).

**Gross Megawatt Hours Procured** - Provide the quantity of electricity procured in MWh from the generating facility. **Megawatt Hours Resold** - Provide the quantity of electricity resold at wholesale.

<u>Unspecified Power</u>: Unspecified Power refers to electricity that is not traceable to specific generation sources by any auditable contract trail or equivalent, or to power purchases from a transaction that expressly transferred energy only and not the RECs associated from a facility. **Do not enter procurements of unspecified power**. The schedule will calculate unspecified power procurements automatically.

#### Schedule 2: Retired Unbundled RECs

Complete this schedule by entering information about unbundled REC retirements in the previous calendar year.

#### Schedule 3: Annual Power Content Label Data

This schedule is provided as an automated worksheet that uses the information from Schedule 1 to calculate the power content and GHG emissions intensity for each electricity portfolio. The percentages calculated on this worksheet should be used for your Power Content Label.

#### ACS Resource Mix Calculator

Retail suppliers may report specified purchases from ACS system power if the ACS provided its fuel mix of its specified system mix to the Energy Commission. Use the calculator to determine the resource-specific procurement quantities, and transfer them to Schedule 1.

#### **GHG Emissions Factors**

This tab will be displayed for informational purposes only; it will not be used by reporting entities, since the emissions factors below auto-populate in the relevant fields on Schedules 1 & 3.

#### **Attestation**

This template provides the attestation that must be submitted with the Annual Report to the Energy Commission, stating that the information contained in the applicable schedules is correct and that the power has been sold once and only once to retail consumers. This attestation must be included in the package that is transmitted to the Energy Commission. Please provide the complete Annual Report in Excel format and the complete Annual Report with signed attestation in PDF format as well.

#### 2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 1: PROCUREMENTS AND RETAIL SALES For the Year Ending December 31, 2020 Valley Clean Energy Alliance Standard Green

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 EIA IDs for unspecified power or specified system mixes from asset-controlling suppliers, enter "unspecified," "BPA," "Powerex,", or "Tacoma" as applicable. For specified procurements of ACS power, use the ACS Procurement Calculator to calculate the resource breakdown comprising the ACS system mix. Procurements of unspecified power must not be entered as line items below; unspecified power will be calculated automatically in cell 199. Unbundled RECs must not be entered on Schedule 1; these products must be entered on Schedule 2. At the bottom portion of the schedule, provide the other electricity end-uses that are not retail sales including, but not limited to transmission and distribution losses or municipal street lighting. Amounts should be in megawatt-hours.

Retail Sales (MWh)	704,453
Net Specified Procurement (MWh)	566,041
Unspecified Power (MWh)	138,413
Procurement to be adjusted	-
Net Specified Natural Gas	-
Net Specified Coal & Other Fossil Fuels	
Net Specified Nuclear, Large Hydro, Renewables, and ACS Power	566,041
GHG Emissions (excludes grandfathered emissions)	60,736
GHG Emissions Intensity (in MT CO <sub>2</sub> e/MWh)	0.0862

	DIRECTLY DELIVERED RENEWABLES												
Facility Name	Fuel Type		WREGIS ID		N/A	EIA ID	Gross MWh Procured	MWh Resold	Net MWh Procured	Adjusted Net MWh Procured	GHG Emissions Factor (in MT CO2e/MWh)	GHG Emissions (in MT CO <sub>2</sub> e)	N/A
Biglow Canyon Wind Farm - Biglow Canyon 3	Wind	OR		63056A		56485	21,991		21,991	21,991	-	•	
Biglow Canyon Wind Farm - Biglow Phase 2	Wind	OR	W1268	63055A		56485	29,822		29,822	29,822	-	•	
Campo Verde Solar Project - Campo Verde Solar		CA	W3591	60652A		58467	15,036		15,036	15,036	-	-	
Centinela Solar Energy - CSE - Block 1F	Solar	CA	W3961	60837A		58430	13,277		13,277	13,277	-	-	
Centinela Solar Energy - CSE - Block 1G	Solar	CA	W3964	60837A		58430	4,437		4,437	4,437	-	-	
Centinela Solar Energy - CSE - Blocks 1A, 1B, & 1C	Solar	CA	W3805	60837A		58430	15,373		15,373	15,373	-	-	
Centinela Solar Energy - CSE - Blocks 1D & 1E	Solar	CA	W3880	60837A		58430	13,652		13,652	13,652	-	-	
Indian Valley Hydro - Indian Valley Hydro	Eligible hydro	CA	W607	60161A		50129	8,643		8,643	8,643		-	
Ivanpah - Unit 1 Mojave Solar Project - Mojave Solar Project -	Solar	CA	W3189	62273A		57074	10,875		10,875	10,875	0.0903	982	
Alpha	Solar	CA	W4255	60848A		57331	26,386		26,386	26,386		_	
Mt. Poso Cogeneration Facility - MTNPOS 1 UNIT	Biomass & biowa	CA	W1091	60695A		54626	15,727		15,727	15,727	0.0326	513	
Topaz Solar Farms LLC - Topaz 10-16	Solar	CA	W3226	61698A		57695	35,293		35,293	35,293		-	
Topaz Solar Farms LLC - Topaz 1-9	Solar	CA	W3193	61698A		57695	48,719		48,719	48,719	-	-	
Tucannon River Wind Farm - Tucannon River 1	Wind	WA		63027A		58571	49,768		49,768	49,768	-	-	
							D-SHAPED IMPO	RTS	10). 00	.0,			
					EIA ID of	EIA ID of					GHG Emissions		Eligible for
Facility Name	Fuel Type	State or Province	WREGIS ID	RPS ID	REC Source	Substitute Power	Gross MWh Procured	MWh Resold	Net MWh Procured	Adjusted Net MWh Procured	Factor (in MT CO2e/MWh)	GHG Emissions (in MT CO <sub>2</sub> e)	Grandfathered Emissions?
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7.								-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
	_				SPECIF	IED NON-RE	NEWABLE PROCI	JREMENTS					
											GHG Emissions		
		State or					Gross MWh		Net MWh	Adjusted Net MWh	Factor (in MT	GHG Emissions	
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
Mid-C Hydro - Wanapum (Grant County PUD)	Large hydro	WA				3888	28,801		28,801	28,801	-	•	
Mid-C Hydro - Rock Island 6200 and Rocky Reach 3883 (Chelan County PUD)	Large hydro	WA				3883	21,199		21,199	21,199			
Mid-C Hydro - Wanapum (Grant County PUD)	Large hydro	WA				3888	7,772		7,772	7,772	<u> </u>	-	
Mid-C Hydro - Wallapum (Grant County POD)  Mid-C Hydro - Wells (Douglas County PUD)	Large hydro	WA				3886	175,249		175,249	175,249	<u> </u>	-	
Balch #1 PH	Large hydro	CA				217	175,249		175,249	175,249		-	
Balch #2 PH	Large hydro	CA				217	982.88		983	983		-	
Belden	Large hydro	CA				219	1,414.91		1,415	1,415	<u>.</u>	-	
Bucks Creek	Large hydro	CA				219	0.68		1,413	1,413	<u> </u>	-	
Butt Valley	Large hydro	CA				221	580.56		581	581		-	
Caribou 1	Large hydro	CA				221	551.08		551	551		-	
Caribou 1	Large hydro	CA				222	1,817.80		1,818	1,818		-	
Cresta	Large hydro	CA				231	556.99		557	557		-	
Orosia	Large Hyuro	54				231	550.99	l	557	557	-	-	

Drum #1	Large hydro	CA			235	96.28		96	96	-	-	
Drum #2	Large hydro	CA			236	763.42		763	763	-	•	
Electra	Large hydro	CA			239	1,157.42		1,157	1,157	-	•	
Haas	Large hydro	CA			240	1,012.49		1,012	1,012	-	•	
James B Black	Large hydro	CA			249	1,718.01		1,718	1,718	-	•	
Kerckhoff #2 PH	Large hydro	CA			682	710.37		710	710	-	•	
Kings	Large hydro	CA			254	278.38		278	278		-	
Pit 1	Large hydro	CA			265	665.92		666	666		-	
Pit 3	Large hydro	CA			266	764.02		764	764		-	
Pit 4	Large hydro	CA			267	1,184.59		1,185	1,185		-	
Pit 5	Large hydro	CA			268	1,929.35		1,929	1,929		-	
Pit 6	Large hydro	CA			269	672.68		673	673		-	
Pit 7	Large hydro	CA			270	1,095.23		1,095	1,095		-	
Poe	Large hydro	CA			272	942.60		943	943		-	
Rock Creek	Large hydro	CA			275	1,068.80		1,069	1,069		-	
Salt Springs	Large hydro	CA			279	631.94		632	632	-	-	
Stanislaus	Large hydro	CA			285	972.59		973	973		-	
Tiger Creek	Large hydro	CA			287	1,348.72		1,349	1,349		-	
Forbestown	Large hydro	CA			417	209.60		210	210	-	-	
Woodleaf	Large hydro	CA			419	482.46	•	482	482	-	•	
NID-Chicago Park	Large hydro	CA			412	260.89		261	261		-	
	·		 	DOCUBEMENTS F	DOM A	COUT CONTROL	INC CURRINE	30				

Facility Name	Fuel Type	N/A	N/A	N/A		MWh Resold	Net MWh	Adjusted Net MWh Procured	GHG Emissions Factor (in MT CO2e/MWh)	GHG Emissions (in MT CO₂e)	N/A
								-	#N/A		
								-	#N/A		
								-	#N/A		
								-	#N/A		

END USES OTHER THAN RETAIL SALES	MWh
Distribution losses	46,243.7

## 2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 2: RETIRED UNBUNDLED RECS

#### For the Year Ending December 31, 2020 Valley Clean Energy Alliance Standard Green

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.

	DETIDED LINDI	Total Retired Ur	nbundled RECs	-
	RETIRED UNB	State or		
Facility Name	Fuel Type	Province	RPS ID	Total Retired (in MWh)
r denity Nume	r dor rypo		I II	

# 2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 3: POWER CONTENT LABEL DATA For the Year Ending December 31, 2020 Valley Clean Energy Alliance Standard Green

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	308,999	43.9%
Biomass & Biowaste	15,727	2.2%
Geothermal	-	0.0%
Eligible Hydroelectric	8,643	1.2%
Solar	183,048	26.0%
Wind	101,581	14.4%
Coal	-	0.0%
Large Hydroelectric	257,042	36.5%
Natural gas	-	0.0%
Nuclear	-	0.0%
Other	-	0.0%
Unspecified Power	138,413	19.6%
Total	704,453	100.0%

Total Retail Sales (MWh)	704,453
GHG Emissions Intensity (converted to lbs CO₂e/MWh)	190
- ,	
Percentage of Retail Sales Covered by Retired Unbundled RECs	0.0%

#### ASSET CONTROLLING SUPPLIER RESOURCE MIX CALCULATOR

Instructions: Enter total net specified procurement of ACS system resources into cell A8, A23, or A38. In Column E, the calculator will determine quantities of resource-specific net procurement for entry on Schedule 1.

Net MWh		Powerex	Resource Mix	Resource-Specific
Procured	N/A	Resource Type	Factors	Procurements from ACS
		Biomass & biowaste		-
		Geothermal		-
		Eligible hydroelectric		-
		Solar		-
		Wind	0.00	-
		Coal		-
		Large hydroelectric	0.88	-
		Natural gas	0.01	-
		Nuclear	0.01	-
		Other	0.04	-
		Unspecified Power	0.06	-

Net MWh		Bonneville Power Adı	ministration Resource Mix	Resource-Specific
Procured	N/A	Resource Type	Factors	Procurements from ACS
		Biomass & biowaste		-
		Geothermal		-
		Eligible hydroelectric		-
		Solar	0.00	-
		Wind		-
		Coal		-
		Large hydroelectric	0.85	-
		Natural gas	0.00	-
		Nuclear	0.11	-
		Other	0.01	-
		Unspecified Power	0.04	-

		Tacoma Pov	ver	
Net MWh			Resource Mix	Resource-Specific
Procured	N/A	Resource Type	Factors	Procurements from ACS
		Biomass & biowaste		-
		Geothermal		-
		Eligible hydroelectric		-
		Solar		-
		Wind		-
		Coal		-
		Large hydroelectric	0.90	-
		Natural gas		-
		Nuclear	0.06	-
		Other		-
		Unspecified Power	0.04	-

## POWER SOURCE DISCLOSURE ANNUAL REPORT ATTESTATION FORM

for the year ending December 31, 2020 Valley Clean Energy Alliance Standard Green

I, Gordon Samuel, Assistant General Manager & Director of Power Services, 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 Valley Clean Energy Alliance, 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: Gordon Samuel

Representing (Retail Supplier): Valley Clean Energy Alliance

Signature:

Dated: May 25, 2021

Executed at: Davis, California

## 2020 POWER SOURCE DISCLOSURE ANNUAL REPORT For the Year Ending December 31, 2020

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#### **GENERAL INSTRUCTIONS**

	RETAIL SUPPLIER NAME						
	Valley Clean Energy Alliance						
	ELECTRICITY PORTFOLIO NAME						
	UltraGreen						
	CONTACT INFORMATION						
NAME	Gordon Samuel						
TIT! F	Assistant General Manager &						
TITLE Director of Power Services							
MAILING ADDRESS	604 2nd Street						
	D : 04 07040						
CITY, STATE, ZIP	Davis, CA 95616						
PHONE	1-855-699-8232						
EMAU	to Continue to the continue to						
EMAIL	info@valleycleanenergy.org						
WEBSITE URL FOR PCL POSTING	https://valleycleanenergy.org/power-sources/						

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.

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GHG Emissions Factors
Asset-Controlling Supplier (ACS) Procurement Calculator
PSD Attestation

#### **INSTRUCTIONS**

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**Fuel Type** - Provide the resource type (solar, natural gas, etc.) that this facility uses to generate electricity. **Location** - Provide the state or province in which the facility is located.

**Identification Numbers** - Provide all applicable identification numbers from the Western Renewable Energy Generation Information System (WREGIS), the Energy Information Agency (EIA), and the California Renewables Portfolio Standard (RPS).

**Gross Megawatt Hours Procured** - Provide the quantity of electricity procured in MWh from the generating facility. **Megawatt Hours Resold** - Provide the quantity of electricity resold at wholesale.

<u>Unspecified Power</u>: Unspecified Power refers to electricity that is not traceable to specific generation sources by any auditable contract trail or equivalent, or to power purchases from a transaction that expressly transferred energy only and not the RECs associated from a facility. **Do not enter procurements of unspecified power**. The schedule will calculate unspecified power procurements automatically.

#### Schedule 2: Retired Unbundled RECs

Complete this schedule by entering information about unbundled REC retirements in the previous calendar year.

#### Schedule 3: Annual Power Content Label Data

This schedule is provided as an automated worksheet that uses the information from Schedule 1 to calculate the power content and GHG emissions intensity for each electricity portfolio. The percentages calculated on this worksheet should be used for your Power Content Label.

#### ACS Resource Mix Calculator

Retail suppliers may report specified purchases from ACS system power if the ACS provided its fuel mix of its specified system mix to the Energy Commission. Use the calculator to determine the resource-specific procurement quantities, and transfer them to Schedule 1.

#### **GHG Emissions Factors**

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#### **Attestation**

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#### 2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 1: PROCUREMENTS AND RETAIL SALES For the Year Ending December 31, 2020 Valley Clean Energy Alliance UltraGreen

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 EIA IDs for unspecified power or specified system mixes from asset-controlling suppliers, enter "unspecified," "BPA," "Powerex,", or "Tacoma" as applicable. For specified procurements of ACS power, use the ACS Procurement Calculate the resource breakdown comprising the 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 portion of the schedule, provide the other electricity end-uses that are not retail sales including, but not limited to transmission and distribution losses or municipal street lighting. Amounts should be in megawatt-hours.

Retail Sales (MWh)	1,950
Net Specified Procurement (MWh)	1,950
Unspecified Power (MWh)	-
Procurement to be adjusted	-
Net Specified Natural Gas	-
Net Specified Coal & Other Fossil Fuels	•
Net Specified Nuclear, Large Hydro, Renewables, and ACS Power	1,950
GHG Emissions (excludes grandfathered emissions)	0
GHG Emissions Intensity (in MT CO <sub>2</sub> e/MWh)	0.0000

entinela Solar Energy - CSE - Block 1F Solar dian Valley Hydro - Indian Valley Hydro Eligible	Fuel Type Pr ar CA ible hydro CA	A N		RPS ID 60837A 60161A	N/A	EIA ID 58430 50129	Gross MWh Procured 975 975	MWh Resold	Net MWh Procured 975 975 - - - -	Adjusted Net MWh Procured 975 975	GHG Emissions Factor (in MT CO2e/MWh)  #N/A #N/A #N/A #N/A #N/A #N/A	GHG Emissions (in MT CO <sub>2</sub> e)	N/A
entinela Solar Energy - CSE - Block 1F Solar Solar Valley Hydro - Indian Valley Hydro Eligible Solar S	Fuel Type Pr ar CA ible hydro CA	Province A A I I I I I I I I I I I I I I I I I	W3961	60837A	N/A	58430	Procured 975		975 975	975 975 975 	Factor (in MT CO2e/MWh) - - #N/A #N/A #N/A #N/A #N/A	MT CO <sub>2</sub> e)	N/A
lian Valley Hydro - Indian Valley Hydro Eligible	ible hydro CA	State or							975 - - - - - -	975 - - - - - -	#N/A #N/A #N/A #N/A #N/A		
	S	State or	W607	60161A		50129	975			-	#N/A #N/A #N/A #N/A	-	
Facility Name Fu									-	-	#N/A #N/A #N/A #N/A		
Facility Name Fu									- - -	-	#N/A #N/A #N/A		
Facility Name Fu									- - -	-	#N/A #N/A		
Facility Name Fu										-	#N/A		
Facility Name Fu									-				
Facility Name Fu										-	#NI/A		
Facility Name Fu													
Facility Name Fu									-	-	#N/A		
Facility Name Fu									-	-	#N/A		
Facility Name Fu									-	-	#N/A		
Facility Name Fu							ND-SHAPED IMPO	RTS			0110 5 1		
Facility Name Fu					REC	EIA ID of Substitute	Gross MWh		Net MWh	Adjusted Net MWh	GHG Emissions Factor (in MT	GHG Emissions	Eligible fo Grandfather
		Province	WREGIS ID	RPS ID	Source	Power	Procured	MWh Resold	Procured	Procured	CO2e/MWh)	(in MT CO <sub>2</sub> e)	Emissions
									-	-	#N/A		 I
									-	-	#N/A		 I
									-	-	#N/A		I
									-	-	#N/A		1
									-	-	#N/A		1
					SPECIF	IED NON-RE	NEWABLE PROC	JREMENTS					
Facility Name Fu		State or Province	N/A	N/A	N/A	EIA ID	Gross MWh Procured	MWh Resold	Net MWh Procured	Adjusted Net MWh Procured	GHG Emissions Factor (in MT CO2e/MWh)	GHG Emissions (in MT CO <sub>2</sub> e)	N/A
racinty Name ra	del Type TT	TOVINGO	11//	N/A	IV/A		riocurcu	mivii recoold	-	-	#N/A	(III MT CO2e)	N/A
<del></del>		_								-	#N/A		
									-	_	#N/A		
									-	-	#N/A		
<del></del>									-	_	#N/A		
									-	-	#N/A		
									-	_	#N/A		
									-	_	#N/A		
<del></del>									-	-	#N/A		
					PROCUREMI	ENTS FROM	ASSET-CONTROL	LING SUPPLIER	S				
							Gross MWh		Net MWh	Adjusted Net MWh	GHG Emissions Factor (in MT	GHG Emissions	
Facility Name Fu	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		
										-	#N/A		
D USES OTHER THAN RETAIL SALES	MWh									-	#N/A		

## 2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 2: RETIRED UNBUNDLED RECS

#### For the Year Ending December 31, 2020 Valley Clean Energy Alliance UltraGreen

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.

Total Retired Unbundled RECs						
	RETIRED UNBL	JNDLED RECS				
Facility Name	Fuel Type	State or Province	RPS ID	Total Retired (in MWh)		

# 2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 3: POWER CONTENT LABEL DATA For the Year Ending December 31, 2020 Valley Clean Energy Alliance UltraGreen

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	1,950	100.0%			
Biomass & Biowaste	-	0.0%			
Geothermal	-	0.0%			
Eligible Hydroelectric	975	50.0%			
Solar	975	50.0%			
Wind	-	0.0%			
Coal	-	0.0%			
Large Hydroelectric	-	0.0%			
Natural gas	-	0.0%			
Nuclear	-	0.0%			
Other	-	0.0%			
Unspecified Power	-	0.0%			
Total	1,950	100.0%			
Total Retail Sales (MWh) 1,950					
GHG Emissions Intensity (converted to Ibs CO <sub>2</sub> e/MWh)					

GHG Emissions Intensity (converted to Ibs CO <sub>2</sub> e/MWh)	-
Percentage of Retail Sales Covered by Retired Unbundled RECs	0.0%

#### ASSET CONTROLLING SUPPLIER RESOURCE MIX CALCULATOR

Instructions: Enter total net specified procurement of ACS system resources into cell A8, A23, or A38. In Column E, the calculator will determine quantities of resource-specific net procurement for entry on Schedule 1.

Net MWh		Powerex	Resource Mix	Resource-Specific
Procured	N/A	Resource Type	Factors	Procurements from ACS
		Biomass & biowaste		-
		Geothermal		-
		Eligible hydroelectric		-
		Solar		-
		Wind	0.00	-
		Coal		-
		Large hydroelectric	0.88	-
		Natural gas	0.01	-
		Nuclear	0.01	-
		Other	0.04	-
		Unspecified Power	0.06	-

Net MWh		Bonneville Power Adı	Bonneville Power Administration  Resource Mix Resource-Specific			
Procured	N/A	Resource Type	Factors	Procurements from ACS		
		Biomass & biowaste		-		
		Geothermal		-		
		Eligible hydroelectric		-		
		Solar	0.00	-		
		Wind		-		
		Coal		-		
		Large hydroelectric	0.85	-		
		Natural gas	0.00	-		
		Nuclear	0.11	-		
		Other	0.01	-		
		Unspecified Power	0.04	-		

		Tacoma Pov	ver	
Net MWh			Resource Mix	Resource-Specific
Procured	N/A	Resource Type	Factors	Procurements from ACS
		Biomass & biowaste		-
		Geothermal		-
		Eligible hydroelectric		-
		Solar		-
		Wind		-
		Coal		-
		Large hydroelectric	0.90	-
		Natural gas		-
		Nuclear	0.06	-
		Other		-
		Unspecified Power	0.04	-

## POWER SOURCE DISCLOSURE ANNUAL REPORT ATTESTATION FORM

for the year ending December 31, 2020 Valley Clean Energy Alliance UltraGreen

I, Gordon Samuel, Assistant General Manager & Director of Power Services, 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 Valley Clean Energy Alliance, 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: Gordon Samuel

Representing (Retail Supplier): Valley Clean Energy Alliance

Signature: \_

Dated: May 25, 2021

Executed at: Davis, California

#### 2020 POWER CONTENT LABEL

#### Valley Clean Energy Alliance

#### https://valleycleanenergy.org/power-sources/

	se Gas Emissio (lbs CO <sub>2</sub> e/MWh		Energy Resources	Standard Green	UltraGreen	2020 CA Power Mix
Standard Green	UltraGreen	2020 CA Utility Average	Eligible Renewable <sup>1</sup>	43.9%	100.0%	33.1%
Standard Siccin	OlitaOrecii	2020 Of Cully Average	Biomass & Biowaste	2.2%	0.0%	2.5%
190	0	466	Geothermal	0.0%	0.0%	4.9%
1000	<del>-</del>	-	Eligible Hydroelectric	1.2%	50.0%	1.4%
	<b>■</b> 3	Standard Green	Solar	26.0%	50.0%	13.2%
800			Wind	14.4%	0.0%	11.1%
600			Coal	0.0%	0.0%	2.7%
600		UltraGreen	Large Hydroelectric	36.5%	0.0%	12.2%
400			Natural Gas	0.0%	0.0%	37.1%
			Nuclear	0.0%	0.0%	9.3%
200	<b></b> ■:	2020 CA Utility	Other	0.0%	0.0%	0.2%
0	4	Average	Unspecified Power <sup>2</sup>	19.6%	0.0%	5.4%
U -			TOTAL	100.0%	100.0%	100.0%
Percentag	Percentage of Retail Sales Covered by Retired Unbundled RECs <sup>3</sup> :				0%	

<sup>&</sup>lt;sup>1</sup>The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.

<sup>2</sup>Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

<sup>&</sup>lt;sup>3</sup>Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled renewable energy credits (RECs) represent renewable generation that was not delivered to serve retail sales. Unbundled RECs are not reflected in the power mix or GHG emissions intensities above.

For specific information about this electricity portfolio, contact:	Valley Clean Energy Alliance 1-855-699-8232					
For general information about the Power Content Label, visit:	http://www.energy.ca.gov/pcl/					
For additional questions, please contact the	Toll-free in California: 844-454-2906					
California Energy Commission at:	Outside California: 916-653-0237					



### Valley Clean Energy Alliance

#### POWER SOURCE DISCLOSURE INDEPENDENT REVIEW OF

#### STANDARD GREEN PRODUCT AND ULTRAGREEN PRODUCT

#### **FOR REPORTING YEAR 2020**

To: Gordon Samuel, Asst. General Manager & Director of Power Resources

From: Miriam Makhyoun, CEO, EQ Research, LLC

Blake Elder, Sr. Energy Policy Research Analyst, EQ Research, LLC

Date: September 1, 2021

#### Introduction

Valley Clean Energy Alliance (VCE) has engaged EQ Research, LLC (EQ Research) to assist with an independent review of VCE's Standard Green Power Source Disclosure (PSD) Annual Report and UltraGreen PSD Annual Report (together, the "Annual Reports") for the year ending December 31, 2020. We have performed the procedures enumerated below to assist VCE with complying with the auditing and verification requirements of the PSD Program, as defined in Section 1394.2 of the California Code of Regulations, Title 20.

EQ Research obtained the underlying documentation<sup>1</sup> used by VCE to complete the Annual Reports from VCE and accepts the accuracy of the information provided by VCE. EQ Research did not access VCE's Western Renewable Energy Generation Information System (WREGIS) account information to verify the authenticity of the information provided by VCE but was provided an export of information from WREGIS.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> All files referenced in this report can be accessed at: https://eqresearch.sharefile.com/d-s2c331eafa2424b838bb8359014dcad93

<sup>&</sup>lt;sup>2</sup> See 2020 Standard Green RPS Retirement and 2020 UltraGreen RPS Retirement files in the Sharefile link.

#### **Review Procedures and Findings**

EQ Research based its detailed review of the Annual Reports on the audit procedures detailed in Section 1394.2(b) of the PSD program regulations. The procedures and associated findings for the Annual Reports are detailed below.

#### Standard Green PSD Report Review and UltraGreen PSD Report Review

(b) Audit Procedures (1)(A)

EQ Research used the following publicly available sources in order to validate the information in the Annual Reports:

Source 1 (EIA): Energy Information Administration (EIA), Form EIA-923 detailed data, 2020: EIA-923 Early release Zip File, EIA923\_Schedules\_2\_3\_4\_5\_M\_12\_2020\_Early\_Release.xlsx and 2019 Zip File, EIA923\_Schedules\_2\_3\_4\_5\_M\_12\_2019\_Final.xlsx, Page 1 Generation and Fuel Data, accessed on August 27, 2021 from https://www.eia.gov/electricity/data/eia923/

<u>Source 2 (CEC)</u>: California Energy Commission (CEC), California's Renewables Portfolio Standard (RPS) Public Search exported to Excel, accessed on August 27, 2021 from <a href="https://rps.energy.ca.gov/Pages/Search/SearchApplications.aspx">https://rps.energy.ca.gov/Pages/Search/SearchApplications.aspx</a>

EQ Research agreed the specified purchases<sup>3</sup> by (a) facility name, (b) facility number provided by EIA, RPS ID, (c) kilowatt-hours, and (d) fuel type from the information used to prepare used to prepare the Annual Reports is consistent with what is presented in the Annual Reports Schedule 1<sup>4</sup> with three exceptions:

- a. In the Standard Green PSD Annual Report, Ivanpah Unit 1's Natural Gas (CEC Renewable) and Solar fuel components are not split out into two different rows, as is shown in Col. D of the "Pivot" tab of the "2020PSDSupplyProductAllocations" spreadsheet from VCE. Ivanpah Unit 1 comprises a solar generator and a natural gas generator, both of which have the same EIA Plant ID (57074) and the solar generator portion of the unit has an RPS ID (62273A). Both Ivanpah Unit 1 components have the same PCC Categorization, WREGIS ID, RPS ID, and EIA ID in the VCE primary materials and PSD Annual Report. Ivanpah Unit 1 is considered a renewable resource by the CEC because the natural gas used to maintain the system overnight does not count towards the resource's 5% limit on fossil fuel use. Therefore, listing the Ivanpah Unit 1 resource in the PSD Annual Report as "Solar" appears to be the appropriate reporting value.
- b. Row 59 of Schedule 1 of Standard Green PSD Annual Report lists "Kings" as the facility name and Row 33 of "Hydro" tab lists "Kings River" as the facility name. The EIA ID and Gross MWh Procured for the resource are both consistent between the VCE primary materials and the PSD Annual Report. This facility name inconsistency has no material impact on the resource percentages or greenhouse gas content of the Standard Green Product.
- c. Row 42 of Schedule 1 of Standard Green PSD Annual Report, resource, "Mid-C Hydro-Rock Island 6200 and Rocky Reach 3883 (Chelan County PUD)" includes two resources on one row (Rock Island, which is EIA Plant ID 6200 and Rocky Reach, which is EIA Plant ID 3883) and lists only EIA Plant ID 3883, but Row 12 of the "Hydro" tab lists EIA Plant IDs 6200 & 3883. The PSD report Schedule 1 is missing the 6200 EIA Plant ID. This inconsistency has no material impact on the resource percentages or greenhouse

<sup>&</sup>lt;sup>3</sup> There were no resales.

<sup>&</sup>lt;sup>4</sup> This information was checked against information in the following links: Source for RPS IDs: <a href="https://rps.energy.ca.gov/Pages/Search/SearchApplications.aspx">https://rps.energy.ca.gov/Pages/Search/SearchApplications.aspx</a>; Source for EIA IDs: <a href="https://www.eia.gov/electricity/data/eia923/">https://www.eia.gov/electricity/data/eia923/</a>

gas content of the Standard Green Product. Both resources are considered large hydro and both have a greenhouse gas emissions content of 0 MT CO2e/MWh (per "GHG Emissions Factors" tab of the PSD Annual Report spreadsheet). The combined output of the two plants is represented equally in EQ Research's validation in Appendix A since VCE has confirmed that it does not have detail on the specific output for each plant.

EQ Research verified that the MWh listed in the Annual Reports do not exceed the annual MWh from EIA 923 data as expected (see Appendix A. Specified Facility Review Results).

EQ Research also tested the mathematical accuracy of Schedule 1 and noted no exceptions.

#### (b) Audit Procedures (1)(B)(1)

EQ Research agreed the facility name, facility numbers provided by EIA and RPS, kilowatt hours, and the fuel type from the invoice match the information used to prepare Schedule 1 of the Annual Reports.

EQ Research verified the above information by reviewing a sample of 14 invoices for power purchases represented in the 2020 Annual Reports against the information used to prepare Schedule 1 of the Annual Reports and against the CEC and EIA data mentioned in (b) Audit Procedures (1)(A) above. The invoices were for purchases of 266,651 MWh of the total 567,991 MWh or 47% of the total MWh purchased by VCE for its green tariffs. The 266,651 MWh represented in the invoices were all RPS purchases (RECs and electricity) out of the total 310,949 MWh RPS portfolio, or 86% of the total RPS portfolio in Schedule 1.

See Appendix B. Sample of Purchases VCE used to Prepare Schedule 1 which shows two limitations to EQ Research's review that have been clarified by VCE as being limited only by the sample provided with no exceptions to note otherwise:

VCE confirmed that outside of the sample of 14 invoices reviewed by EQ Research, there are additional invoices that were not reviewed by EQ Research for the remaining 44,298 MWh of RPS purchases and invoices for another remaining 257,042 MWh of carbon-free electricity, representing a total of 301,340 MWh not contained in the invoices.

Only 12 RPS resources out of 16 RPS resources in Schedule 1 were included in the sample of 14 invoices but the sample did not show all of the energy for the 12 resources. In total, the 12 RPS resources produced 306,512 MWh of renewable electricity in 2020. VCE confirmed that in addition to the invoices for 266,651 MWh of RPS purchases from those 12 RPS resources, there are additional invoices for the remaining 39,861 MWh.

#### (b) Audit Procedures (1)(B)(2)

This is not applicable since there are no facilities in the Annual Reports owned by VCE.

#### (b) Audit Procedures (1)(B)(3)

EQ Research verified a match between the date of generation from the 14 invoices in the sample to the reporting period of the information used to prepare Schedule 1.

See the "Energy Delivery Term" column in Appendix B. Sample of Purchases VCE used to Prepare Schedule 1.

#### (b) Audit Procedures (1)(B)(4)

This requirement is not applicable since VCE did not use unbundled Renewable Energy Credits (RECs) in its Annual Reports.

#### (b) Audit Procedures (1)(C)

The requirement that the auditor shall agree any excluded emissions meet the requirements pursuant to section 1393(d) is not applicable to 2019 deliveries for the 2020 reports but VCE has taken notice of this requirement for 2020 deliveries for the 2021 reports.

#### (b) Audit Procedures (2)

EQ Research obtained a copy of the 2020 Power Content Label to be provided to VCE customers for the Standard Green and UltraGreen products. EQ Research verified that the resource portfolio percentages listed for each product on the 2020 Power Content Label match the respective percentages listed in Schedule 3 of the Power Source Disclosure Annual Reports. EQ Research also verified that the greenhouse gas emissions intensity for each product listed on the Power Content Label match those calculated on the Power Source Disclosure Annual Reports.

This report is intended solely for the information and use of the specified parties listed above and is not intended to be and should not be used by anyone other than those specified parties



### **Appendix A. Specified Facility Review Results**

								MWh Generation Annual EIA -		% Resource MWh			
		Standard					MWh Generation Vlookup	MWh Procured by VCEA in	Procured in 2020 by	VCEA Reported of			
RPS	Ultra Green	Green	EIA Plant ID RPS ID	Facility Name Vlookup using EIA ID	Facility Name VLOOKUP using RPS ID	Facility Name from VCEA Annual Reports	using EIA ID	2020	VCEA		Technology VLOOKUP using RPS ID	EIA Fuel Source	Fuel Type VCEA
1		1	58467 60652A	Campo Verde Solar	Campo Verde Solar Project	Campo Verde Solar Project - Campo Verde Solar	335,31	320,281			Photovoltaic	SUN	Solar
1		1	57074 62273A	Ivanpah 1	Ivanpah Solar - Unit 1	Ivanpah - Unit 1	270,94	260,066			Solar Thermal Electric	SUN	Solar
1		1	57331 60848A	Mojave Solar Project	Mojave Solar Project	Mojave Solar Project - Mojave Solar Project - Alpha	558,414				Solar Thermal Electric	SUN	Solar
1		1	54626 60695A	Mt Poso Cogeneration	Mt. Poso Cogeneration Company, LLC	Mt. Poso Cogeneration Facility - MTNPOS_1_UNIT	289,509				Biomass	WDS	Biomass & biowaste
1		1	58571 63027A	Tucannon River Wind Farm	Tucannon River Wind Farm	Tucannon River Wind Farm - Tucannon River 1	941,73	891,963				WND	Wind
1	1		50129 60161A	Indian Valley Dam Hydro Project	Indian Vly Hydro Elec Ptrn.	Indian Valley Hydro - Indian Valley Hydro			975		Small Hydroelectric	WAT	Eligible hydro
1		1	50129 60161A	Indian Valley Dam Hydro Project	Indian Vly Hydro Elec Ptrn.	Indian Valley Hydro - Indian Valley Hydro			8,643		Small Hydroelectric	WAT	Eligible hydro
1							9,619	1	9,618	99.999		11.000	
1		1	56485 63056A	Biglow Canyon Wind Farm	Biglow Canyon Wind Farm Phase 3	Biglow Canyon Wind Farm - Biglow Canyon 3			21,991		Wind	WND	Wind
1		1	56485 63055A	Biglow Canyon Wind Farm	Biglow Canyon Wind Farm Phase 2	Biglow Canyon Wind Farm - Biglow Phase 2	1,152,089	1,100,276	29,822 <b>51,813</b>	4.509	Wind	WND	Wind
		1	57695 61698A	Topaz Solar Farm	Topaz Solar Farms LLC	Topaz Solar Farms LLC - Topaz 10-16	1,152,08	1,100,276	35,293	4.50%	Photovoltaic	SUN	Solar
1		1	57695 61698A	Topaz Solar Farm	Topaz Solar Farms LLC	Topaz Solar Farms LLC - Topaz 10-16 Topaz Solar Farms LLC - Topaz 1-9			48,719		Photovoltaic	SUN	Solar
1			37093 61698A	Topaz solar Farm	Topaz Solat Farms ECC	Topaz Sour Farms CCC - Topaz 1-9	1,282,710	1,198,704				SUN	Solar
1	1		58430 60837A	Centinela Solar Energy	Centinela Solar Energy	Centinela Solar Energy - CSE - Block 1F	1,282,710	1,190,704	975		Photovoltaic	SUN	Solar
1		1	58430 60837A	Centinela Solar Energy	Centinela Solar Energy  Centinela Solar Energy	Centinela Solar Energy - CSE - Block 1F			13,277		Photovoltaic	SUN	Solar
1		1	58430 60837A	Centinela Solar Energy  Centinela Solar Energy	Centinela Solar Energy  Centinela Solar Energy	Centinela Solar Energy - CSE - Block 1F Centinela Solar Energy - CSE - Block 1G			4,437		Photovoltaic	SUN	Solar
1		1	58430 60837A	Centinela Solar Energy	Centinela Solar Energy	Centinela Solar Energy - CSE - Blocks 1A, 1B, & 1C			15,373		Photovoltaic	SUN	Solar
1		1	58430 60837A	Centinela Solar Energy  Centinela Solar Energy	Centinela Solar Energy  Centinela Solar Energy	Centinela Solar Energy - CSE - Blocks 1D, 1B, & 1C			13,652		Photovoltaic	SUN	Solar
î		•	30430 00037A	Certained Solar Energy	Certureia John Erreigy	Centineia Joiai Energy - CDE - Blocks 10 ta 1E	498,999	451,281		9.56%		3014	Joint
-		1	3888	Wanapum		Mid-C Hydro - Wanapum (Grant County PUD)	430,33.	431,261	28,801	9.30%		WAT	Large hydro
		1	3888	Wanapum		Mid-C Hydro - Wanapum (Grant County PUD)			7,772			WAT	Large hydro
		•	3000	wanapani		ma-criparo - wanapani (diant coanty rob)	5,131,31	5,094,742		0.719		****	carge nyaro
		1	3883	Rocky Reach		Mid-C Hydro - Rocky Reach 3883 (Chelan County PUD)	5,896,167					WAT	Large hydro
i		1	6200	Rock Island		Mid-C Hydro - Rock Island (Chelan County PUD)	2,500,454			0.429		WAT	Large hydro
i		1	3886	Wells		Mid-C Hydro - Wells (Douglas County PUD)	4,377,02					WAT	Large hydro
ı		1	217	Balch 1		Balch #1 PH	45,723					WAT	Large hydro
i		1	218	Balch 2		Baich #2 PH	251,778					WAT	Large hydro
ı		1	219	Belden		Belden	247,400					WAT	Large hydro
i		1	220	Bucks Creek		Bucks Creek	36,984			0.009		WAT	Large hydro
i		1	221	Butt Valley		Butt Valley	108.67					WAT	Large hydro
ı		1	222	Caribou 1		Caribou 1	97,37					WAT	Large hydro
ı		1	223	Caribou 2		Caribou 2	344,354					WAT	Large hydro
i		1	231	Cresta		Cresta	162,870					WAT	Large hydro
i		1	235	Drum 1		Drum #1	16,260					WAT	Large hydro
ı		1	236	Drum 2		Drum #2	216,026					WAT	Large hydro
l		1	239	Electra		Electra	286,159					WAT	Large hydro
1		1	240	Haas		Haas	204,477			0,509		WAT	Large hydro
ı		1	249	James B Black		James B Black	449,61					WAT	Large hydro
ı		1	682	Kerckhoff 2		Kerckhoff #2 PH	252,500	251,791				WAT	Large hydro
1		1	254	Kings River PH		Kings	70,752					WAT	Large hydro
l		1	265	Pit 1		Pit 1	198,660					WAT	Large hydro
1		1	266	Pit 3		Pit 3	260,84					WAT	Large hydro
ı		1	267	Pit 4		Pit 4	330,935					WAT	Large hydro
l		1	268	Pit 5		Pit 5	547,242					WAT	Large hydro
ı		1	269	Pit 6		Pit 6	195,133					WAT	Large hydro
ı		1	270	Pit 7		Pit 7	314,550			0.359		WAT	Large hydro
1		1	272	Poe		Poe	236,234			0.409		WAT	Large hydro
l		1	275	Rock Creek		Rock Creek	302,018					WAT	Large hydro
1		1	279	Salt Springs		Salt Springs	109,102					WAT	Large hydro
1		1	285	Stanislaus		Stanislaus	240,725					WAT	Large hydro
ı		1	287	Tiger Creek		Tiger Creek	235,233	233,888		0.579		WAT	Large hydro
1		1	417	Forbestown		Forbestown	51,550					WAT	Large hydro
ı		1	419	Woodleaf		Woodleaf	96,393			0.509		WAT	Large hydro
1		1	412	Chicago Park		NID-Chicago Park	76.20			0.349		WAT	Large hydro
				-		TOTALS	29,230,07						



## **Appendix B. Sample of Purchases VCE used to Prepare Schedule 1**

To	otal MWh on	VCEA MWh				Resource MWh		Remaining		
			Energy Delivery Term	Invoice or PO#	PCC1/2 Resource	VCEA PCL Total S		Match T/F		Notes
			, , , , , , , , , , , , , , , , , , , ,		,					
0220 SDGE.pdf	5,229	5,229	Feburary 2020	156307	1 Centinela Solar Energy - CSE - Blocks 1A, 1B, & 1C	15,373	10,144	FALSE	5,229	VCEA confirms remaining amount
1220 SDGE.pdf	5,423	4,915	December 2020	156613	1 Centinela Solar Energy - CSE - Blocks 1A, 1B, & 1C (4,915)					
	Γ									
		508	December 2020	156613	1 Campo Verde Solar Project - Campo Verde Solar (508)	15,036	4,403	FALSE	10,633	VCEA confirms remaining amount
		3,895	December 2020	156613	1 Campo Verde Solar Project - Campo Verde Solar (3,895)					
0620 SDGE.pdf	5,229	1,334	June 2020	REDACTED	1 Cartinala Calas Farano, CCF, Diagla 15 (1 224)	14.252	1,334	FALSE	12.010	VCEA confirms remaining amount
0620 SDGE.par	5,229	1,334	June 2020	KEDACIED	1 Centinela Solar Energy - CSE - Block 1F (1,334)	14,252	1,334	FALSE	12,918	VCEA confirms remaining amount
					Biglow Canyon Wind Farm - Biglow Canyon 3 (21,991) Biglow Canyon Wind Farm - Biglow Phase 2 (509)					
0520 PGE30 VCEA.pdf	98,922	49,154	January 2020	407663	2 Biglow Canyon Wind Farm - Biglow Phase 2 (26,654)	51,813	49,154	FALSE	3.650	VCEA confirms remaining amount
0520 PGESO VCEA.pdr	90,922	49,134	January 2020	407663	2 biglow canyon wind rarm - biglow rhase 2 (20,034)	31,613	49,134	FALSE	2,039	VCEA confirms remaining amount
		49,768	January 2020	407663	2 Tucannon River Wind Farm - Tucannon River 1 (49,768)	49,768	49,768	TRUE		
0720 PGAE K674 Recs.pdf	237,000	26,386	April 2020	165639	1 Mojave Solar Project - Mojave Solar Project - Alpha (26,386)	26,386	26,386	TRUE		100,000 MWh of invoice went to another offtaker
		.,								,
	L	15,727	April 2020	165639	1 Mt. Poso Cogeneration Facility - MTNPOS_1_UNIT (15,727)	15,727	15,727	TRUE	-	
		84,012	April 2020	165639	Topaz Solar Farms LLC - Topaz 1-9 (48,719)  1 Topaz Solar Farms LLC - Topaz 10-16 (35,293)	84,012	84,012	TRUE		
	-	84,012	April 2020	100039	1 Topaz Solar Farms LLC - Topaz 10-16 (35,293)	84,012	84,012	TRUE		
		10,875	April 2020	165639	1 Ivanpah - Unit 1 Solar (9,873) and Natural Gas (1,002)	10,875	10,875	TRUE		
					4.0 11.1.5 1.5 205.01.1.40.045/5.000	40.000				Mana di Li
0920 SDGE.pdf	5,229	5,229	September 2020	156526	1 Centinela Solar Energy - CSE - Blocks 1D & 1E (5,229)	13,652	5,229	FALSE	8,423	VCEA confirms remaining amount
2003 Indian Valley Hydro Project.pdf	810	810	March 2020	4500110130	1 Indian Valley Hydro	9,618	9,618.936	TRUE	(1	VCEA rounded down for PCL
2006 Indian Valley Hydro Project VCEA Contract.pdf	1,306	1,306	June 2020	N/A	1 Indian Valley Hydro					
2009 Indian Valley Hydro Project VCEA Contract.pdf	1,208	1,208	September 2020	N/A	1 Indian Valley Hydro					
2005 maian vancy riyaro rroject veest contractipar	1,200	2,200	September 2020	,	I mater vency rigare					
2010 Indian Valley Hydro Project VCEA Contract.pdf	57	57	October 2020	N/A	1 Indian Valley Hydro					
2004 Indian Valley Hydro Project.pdf	1,948	1,948	April 2020	4500110130	1 Indian Valley Hydro					
2005 Indian Valley Hydro Project.pdf	1,521	1,521	May 2020	4500110130	1 Indian Valley Hydro					
2007 Indian Valley Hydro Project VCEA Contract.pdf	1,396	1,396	July 2020	REDACTED	1 Indian Valley Hydro					
2008 Indian Valley Hydro Project VCEA Contract.pdf	1,373	1,373	August 2020	REDACTED	1 Indian Valley Hydro					
TOTALS	366.651	266,651	, lugust 2020	HEDACIED	2 maint rancy rigaro	306.512	266.651		39,861	
	300,031	200,031				300,312	200,001		33,001	