VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Item 11

то:	Board of Directors
FROM:	Gordon Samuel, Assistant General Manager & 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 2021
DATE:	September 8, 2022

RECOMMENDATION:

Attest to the veracity of the information presented in Valley Clean Energy's 2021 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.¹ Applicable regulations direct retail sellers to provide such communications no later than October 1st 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 refer to electricity that cannot be sourced back to a specific generator, such as energy purchased through open market transactions.

During the 2021 calendar year, VCE delivered a portion of its electric energy supply from various renewable energy sources, including eligible hydroelectric, solar, and wind. Consistent with its multi-year transition to renewables strategy, VCE is ramping up renewables from 2020 to 2024 where it's default product "Standard Green" is forecast to exceed 80% renewable content sourced from long-term energy contracts (solar, solar + storage, geothermal, and small hydro). As part of this approach, 12.6% of the energy delivered to VCE Standard Green

¹ California Public Utilities Code Section 398.1(b).

customers in 2021 was from renewable energy resources with a greenhouse gas emissions intensity of 722 lbs CO2e/MWh. For Ultra Green customers, 100% of the energy delivered in 2021 was generated from renewable energy resources with a greenhouse gas emissions intensity of 0 lbs CO2e/MWh. A copy of VCE's Power Content Label listing the energy resources used during 2021 is attached.

Consistent with applicable regulations and CEC guidance, VCE will complete required customer communications in accordance with the October 1, 2022 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 2021 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 2021 calendar year.

ATTACHMENTS:

- 1) 2021 Annual Power Source Disclosure Report for the Standard Green Product
- 2) 2021 Annual Power Source Disclosure Report for the Ultra Green Product
- 3) 2021 Power Content Label
- 4) EQ Research Report re 2021 Power Source Disclosure Annual Reports and Power Content Label

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
	Valley Clean Energy Alliance
	ELECTRICITY PORTFOLIO NAME
	Standard Green
	CONTACT INFORMATION
NAME	Gordon Samuel
TITLE	Assistant General Manager & Director of Power Services
MAILING ADDRESS	604 2nd Street
CITY, STATE, ZIP	Davis, CA 95616
PHONE	1-855-699-8232
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.

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.

וז you nave questions, contact Power Source Disclosure (רט) staπ at PSDprogram@energy.ca.gov or (916) 805-7439.

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

Specified Purchases: 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.

2021 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 1: PROCUREMENTS AND RETAIL SALES For the Year Ending December 31, 2021 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 Power", "BPA", or "Tacoma Power" 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 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) Net Specified Procurement (MWh) Unspecified Power (MWh) Procurement to be adjusted Net Specified Natural Gas Net Specified Coal & Other Fossil Fuels Net Specified Coal & Other Fossil Fuels Net Specified Ruclear, Large Hydro, Renewables, and ACS Power GHG Emissions (excludes grandfathered emissions) GHG Emissions Intensity (in MT CO₂e/MWh)

751,490 176,609 574,881 --176,609 246,049 0.3274

		State or					Gross MWh	MWh	Net MWh		GHG Emissions Factor	GHG Emissions (in MT	
Facility Name	Fuel Type	Province	WREGIS ID	RPS ID	N/A	EIA ID	Procured	Resold	Procured	Procured	(in MT CO ₂ e/MWh)	CO ₂ e)	N/A
Biglow Canyon Wind Farm - Biglow Canyon 3	Wind	OR	W1588	63056A		56485	4,269		4,269	4,269	-	-	
Biglow Canyon Wind Farm - Biglow Phase 2	Wind	OR	W1268	63055A		56485	30,984		30,984	30,984	-	-	
Tucannon River Wind Farm - Tucannon River 1	Wind	WA	W4482	63027A		58571	11,015		11,015	11,015	-	-	
Aquamarine Westside, LLC - Aquamarine Westside,	Solar	CA	W12082	64553A		62547	34,800		34,800	34,800	-	-	
Tucannon River Wind Farm - Tucannon River 2	Wind	WA	W4483	63027A		58571	13,732		13,732	13,732	-	-	
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
						FIRMED-AN	D-SHAPED IMPORT	TS .					

DIRECTLY DELIVERED RENEWABLES

	FIRMED-AND-STAFED IMFORTS												
						EIA ID of					GHG Emissions		Eligible for
Facility Name	Fuel Type	State or Province	WREGIS ID	RPS ID		Substitute Power		MWh Resold	Net MWh Procured	Adjusted Net MWh Procured	Factor (in MT CO ₂ e/MWh)	GHG Emissions (in MT CO ₂ e)	Grandfathered Emissions?
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									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
					SPEC	IFIED NON-RE	NEWABLE PROCL	JREMENTS					

		State or					Gross MWh		Net MWh	Adjusted Net MWh	GHG Emissions Factor (in MT	GHG Emissions	
Facility Name	Fuel Type	Province	N/A	N/A	N/A	EIA ID	Procured	MWh Resold	Procured	Procured	CO ₂ e/MWh)	(in MT CO ₂ e)	N/A
Boundary Hydroelectric Units	Large hydro	WA				6433	31		31	31	-	-	
Mid-C Hydro - Rock Island 6200 and Rocky Reach 3	Large hydro	WA				3883	29,396		29,396	29,396	-	-	
Mid-C Hydro - Wells (Douglas County PUD)	Large hydro	WA				3886	11,383		11,383	11,383	-	-	
Mid-C Hydro - Priest Rapids and Wanapum dams (G	Large hydro	WA				3887	3,617		3,617	3,617	-	-	
Balch #1 PH	Large hydro	CA				217	352		352	352	-	-	
Balch #2 PH	Large hydro	CA				218	1,155		1,155	1,155	-	-	
Belden	Large hydro	CA				219	1,443		1,443	1,443	-	-	
Bucks Creek	Large hydro	CA				220	177		177	177	-	-	
Butt Valley	Large hydro	CA				221	204		204	204	-	-	
Caribou 1	Large hydro	CA				222	379		379	379	-	-	
Caribou 2	Large hydro	CA				223	1,485		1,485	1,485	-	-	
Cresta	Large hydro	CA				231	1,133		1,133	1,133	-	-	
Drum #1	Large hydro	CA				235	403		403	403	-	-	
Drum #2	Large hydro	CA				236	1,473		1,473	1,473	-	-	
Electra	Large hydro	CA				239	1,566		1,566	1,566	-	-	
Haas	Large hydro	CA				240	986		986	986	-	-	
James B Black	Large hydro	CA				249	3,227		3,227	3,227	-	-	
Kerckhoff #2 PH	Large hydro	CA				682	1,306		1,306	1,306	-	-	
Kings River	Large hydro	CA				254	315		315	315	-	-	
Pit 1	Large hydro	CA				265	1,159		1,159	1,159	-	-	
Pit 3	Large hydro	CA				266	1,587		1,587	1,587	-	-	
Pit 4	Large hydro	CA				267	1,841		1,841	1,841	-	-	
Pit 5	Large hydro	CA				268	4,006		4,006	4,006	-	-	
Pit 6	Large hydro	CA				269	1,984		1,984	1,984	-	-	
Pit 7	Large hydro	CA				270	2,407		2,407	2,407	-	-	
Poe	Large hydro	CA				272	2,042		2,042	2,042	-	-	
Rock Creek	Large hydro	CA				275	1,920		1,920	1,920	-	-	
Salt Springs	Large hydro	CA				279	709		709	709	-	-	

2021 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 2: RETIRED UNBUNDLED RECS For the Year Ending December 31, 2021 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 auto-populate as needed and should not be filled out.

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

0.0%

2021 POWER SOURCE DISCLOSURE ANNUAL REPORT **SCHEDULE 3: POWER CONTENT LABEL DATA** For the Year Ending December 31, 2021 Valley Clean Energy Alliance **Standard Green**

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

	Adjusted Net Procured (MWh)	Percent of Total Retail Sales
Renewable Procurements	94,800	12.6%
Biomass & Biowaste	-	0.0%
Geothermal	-	0.0%
Eligible Hydroelectric	-	0.0%
Solar	34,800	4.6%
Wind	60,000	8.0%
Coal	-	0.0%
Large Hydroelectric	81,809	10.9%
Natural gas	-	0.0%
Nuclear	-	0.0%
Other	-	0.0%
Unspecified Power	574,881	76.5%
Total	751,490	100.0%
Total Retail Sales (MWh)		751,490
GHG Emissions Intensity (cor	nverted to lbs CO ₂ e/MWh)	722
Percentage of Retail Sales Co	overed by Retired Unbundled	0.0%

RECs

2021 POWER SOURCE DISCLOSURE ANNUAL REPORT ATTESTATION FORM For the Year Ending December 31, 2021 Valley Clean Energy Alliance Standard Green

I, <u>Gordon Samuel</u>, <u>Assistant General Manager & Director of Power Services</u>, 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 <u>Valley Clean Energy Alliance</u>, 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: <u>Gordon Samuel</u> Representing (Retail Supplier):<u>Valley Clean Energy Alliance</u>

Signature: _____ Dated: <u>June 15, 2022</u> Executed at: <u>Davis, California</u>

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

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

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Schedule 2: Retired Unbundled RECs

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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

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2021 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 1: PROCUREMENTS AND RETAIL SALES For the Year Ending December 31, 2021 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 Power", "BPA", or "Tacoma Power" 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 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) Net Specified Procurement (MWh) 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 GHG Emissions (excludes grandfathered emissions) GHG Emissions Intensity (in MT CO₂e/MWh)



		State or					Gross MWh	MWh			GHG Emissions Factor	GHG Emissions (in MT	
Facility Name	Fuel Type	Province	WREGIS ID	RPS ID	N/A	EIA ID	Procured	Resold	Procured	Procured	(in MT CO ₂ e/MWh)	CO ₂ e)	N/A
Indian Valley Hydro - Indian Valley Hydro	Eligible hydro	CA	W607	60161A		50129	1,177		1,177	1,177	-	-	
Aquamarine Westside, LLC - Aquamarine Westside	, Solar	CA	W12082	64553A		62547	3,241		3,241	3,241	-	-	
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DIRECTLY DELIVERED RENEWABLES

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						EIA ID of					GHG Emissions		Eligible for
		State or					Gross MWh		Net MWh	Adjusted Net MWh	Factor (in MT	GHG Emissions	Grandfathered
Facility Name	Fuel Type	Province	WREGIS ID	RPS ID	Source	Power	Procured	MWh Resold	Procured	Procured	CO ₂ e/MWh)	(in MT CO ₂ e)	Emissions?
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
					SPEC	FIED NON-RE	NEWABLE PROCL	IREMENTS					

Facility Name	Fuel Type	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 CO ₂ e/MWh)	GHG Emissions (in MT CO ₂ e)	N/A
									-	-	#N/A		
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PROCUREMENTS FROM ASSET-CONTROLLING SUPPLIERS													
											GHG Emissions		
							Gross MWh		Net MWh	Adjusted Net MWh	Factor (in MT	GHG Emissions	
Facility Name	Fuel Type	N/A	N/A	N/A	N/A	EIA ID	Procured	MWh Resold	Procured	Procured	CO ₂ e/MWh)	(in MT CO ₂ e)	N/A
										-	#N/A		
										-	#N/A		
										-	#N/A		
										-	#N/A		
END USES OTHER THAN RETAIL SALES	MWh												
Distribution losses	295												

2021 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 2: RETIRED UNBUNDLED RECS For the Year Ending December 31, 2021 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 auto-populate as needed and should not be filled out.

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

2021 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 3: POWER CONTENT LABEL DATA For the Year Ending December 31, 2021 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	4,418	100.0%
Biomass & Biowaste	-	0.0%
Geothermal	-	0.0%
Eligible Hydroelectric	1,177	26.6%
Solar	3,241	73.4%
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	4,418	100.0%
Total Retail Sales (MWh)		4,418
GHG Emissions Intensity (co	nverted to Ibs CO ₂ e/MWh)	
Percentage of Retail Sales Co RECs	overed by Retired Unbundled	0.0%

RECs

2021 POWER SOURCE DISCLOSURE ANNUAL REPORT ATTESTATION FORM For the Year Ending December 31, 2021 Valley Clean Energy Alliance UltraGreen

I, <u>Gordon Samuel</u>, <u>Assistant General Manager & Director of Power Services</u>, 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 <u>Valley Clean Energy Alliance</u>, 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: <u>Gordon Samuel</u> Representing (Retail Supplier):<u>Valley Clean Energy Alliance</u>

Signature: _____ Dated: <u>June 15, 2022</u> Executed at: <u>Davis, California</u>

		2021 POW	ER CONTENT LABEL			
			lean Energy Alliance	-		
	ht	tps://valleyclea	inenergy.org/power-so	ources/		
Valley https://valleyc Greenhouse Gas Emissions Intensity (Ibs CO2e/MWh) Standard Green UltraGreen 2021 CA Utility Ave 722 0 456 1000 Image Image Image 200 456 Image Image Image 1000 Image Image Image Image Image 1000 Image <thimage< th=""> Image Image</thimage<>			Energy Resources	Standard Green	UltraGreen	2021 CA Power Mix
Standard Croop	Lilitra Croop	2021 CA Litility Average	Eligible Renewable ¹	12.6%	100.0%	33.6%
Standard Gleen	OnaGleen	2021 CA Olinty Average	Biomass & Biowaste	0.0%	0.0%	2.3%
722	0	456	Geothermal	0.0%	0.0%	4.8%
1000			Eligible Hydroelectric	0.0%	26.6%	1.0%
		Standard Green	Solar	4.6%	73.4%	14.2%
800			Wind	8.0%	0.0%	11.4%
COD			Coal	0.0%	0.0%	3.0%
600		UltraGreen	Large Hydroelectric	10.9%	0.0%	9.2%
400 — — —			Natural Gas	0.0%	0.0%	37.9%
			Nuclear	0.0%	0.0%	9.3%
200 —	-	2021 CA Utility	Other	0.0%	0.0%	0.2%
0		Average	Unspecified Power ²	76.5%	0.0%	6.8%
0			TOTAL	100.0%	100.0%	100.0%
Percenta	ge of Retail Sales	Covered by Retired	Unbundled RECs ³ :	0%	0%	
² Unspecified pc	wer is electricity th gy credits (RECs) a	at has been purchas g re tracking instrumer	ed through open market trans eneration source. nts issued for renewable gener	actions and is r ration. Unbundle	not traceable to ed renewable er	a specific
(RECs) represent	renewable generation		ered to serve retail sales. Unt emissions intensities above.	oundled RECs a	re not reflected	in the power
For specific in	nformation about	this electricity	Valley C	lean Energy	Alliance	
	<u>portfolio, contact</u>	:	1	-855-699-823	2	
For general info	rmation about the	e Power Content	http://w	ww.energy.ca	gov/ncl/	
	Label, visit:					
For additiona	l questions, pleas	se contact the	Toll-free in	California: 844	4-454-2906	
Californ	ia Enerav Commi	ssion at:	Outside C	alifornia: 916-	653-0237	



Valley Clean Energy Alliance

POWER SOURCE DISCLOSURE INDEPENDENT REVIEW OF

STANDARD GREEN PRODUCT AND ULTRAGREEN PRODUCT

FOR REPORTING YEAR 2021

To:	Gordon Samuel, Asst. General Manager & Director of Power Resources
From:	Miriam Makhyoun, CEO, EQ Research, LLC Blake Elder, Principal Analyst, EQ Research, LLC
Date:	August 25, 2022

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, 2021. EQ Research 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 documentation¹ 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.²

¹ All files referenced in this report can be accessed at: https://eq-research.sharefile.com/ds4e4f26f20f12499f8b7a55bd43da30f1

² See the file entitled, "2021PSDSupplyProductAllocations.xlsx" 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:

<u>Source 1 (EIA)</u>: Energy Information Administration (EIA), Form EIA-923 detailed data, 2021: EIA-923 Early release Zip File, EIA923_Schedules_2_3_4_5_M_12_2021_Early_Release.xlsx, Page 1 Generation and Fuel Data, accessed on August 17, 2022 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 17, 2022 from https://rps.energy.ca.gov/Pages/Search/SearchApplications.aspx

EQ Research agreed the specified purchases³ 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 1⁴ with one exception:

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 (Rocky Reach's EIA ID) in the EIA ID column of Schedule 1. The PSD report Schedule 1 is missing the 6200 EIA Plant ID in the EIA ID column even though the EIA ID is included in the Facility Name on Schedule 1. This inconsistency has no material impact on the resource percentages or greenhouse 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) with one exception:

• EIA 923 2021 Early Release data shows there were 1,174 net MWh of electricity supplied by Indian Valley Hydro in 2021 but VCEA's Schedule 1 for Standard Green shows that it purchased 1,177 MWh or 100.3% of that amount. EQ Research does not see this as a major discrepancy and expects that it could be due to rounding.

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

³ There were no resales.

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

(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 comparing information from a sample of two invoices for power purchases represented in the 2021 Annual Reports and the information used to prepare Schedule 1 of the Annual Reports along with the CEC and EIA data mentioned in (b) Audit Procedures (1)(A) above. The invoices were for purchases of 60,000 MWh of the total 181,027 MWh or 33% of the total MWh purchased by VCE for its green tariffs. The two invoices represent 60% of the RPS purchases (RECs and electricity) out of the total 99,218 MWh RPS portfolio for both green tariffs in the 2021 Annual Reports.

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 two invoices reviewed by EQ Research, there are additional invoices that were not reviewed by EQ Research for the remaining 39,218 MWh of RPS purchases and invoices for another remaining 81,809 MWh of carbon-free electricity, representing a total of 121,027 MWh not contained in the invoices.

Only four resources out of 41 resources in Schedule 1 were included in the sample of two invoices but VCE confirmed the other resources also have corresponding invoices not represented in this limited sample used to examine the RPS portion of its portfolio.

(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 two 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)

Section 1393(d) provides that emissions from purchases of eligible firmed-and-shaped products under a purchase agreement or ownership arrangement executed prior to January 1, 2019 are excluded from a portfolio's emissions intensity calculation. As shown on Schedule 1 of the Annual Reports, VCE did not claim any purchases from firmed-and-shaped imports for either Standard Green or UltraGreen products.

(b) Audit Procedures (2)

EQ Research obtained a copy of the 2021 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 2021 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

									% Resource			
								Adjusted Net	MWh VCEA			
	Standard					EIA Net Generation	Gross MWh Generation					
RPS	Ultra Green Green	EIA Plant ID RPS ID		D Facility Name VLOOKUP using RPS ID		(MWh)	Procured by VCEA in 2021			RPS ID Technology		rce VCEA Fuel Type
1	1	50129 60161A	Indian Valley Dam Hydro Project	Indian Vly Hydro Elec Ptrn.	Indian Valley Hydro - Indian Valley Hydro	1,174	1,177	1,177		Small Hydroelectric	HYC	Eligible hydro
1	1	62547 64553A	Aquamarine	Aquamarine Westside, LLC	Aquamarine Westside, LLC - Aquamarine West	91,987	3,241	3,241		Photovoltaic	SUN	Solar
1	1	56485 63056A	Biglow Canyon Wind Farm	Biglow Canyon Wind Farm Phase 3	Biglow Canyon Wind Farm - Biglow Canyon 3	1,116,246	4,269	4,269		Wind	WND	Wind
1	1	56485 63055A	Biglow Canyon Wind Farm	Biglow Canyon Wind Farm Phase 2	Biglow Canyon Wind Farm - Biglow Phase 2	1,116,246	30,984	30,984		Wind	WND	Wind
1	1	58571 63027A	Tucannon River Wind Farm	Tucannon River Wind Farm	Tucannon River Wind Farm - Tucannon River 1	866,065	11,015	11,015		Wind	WND	Wind
1	1	62547 64553A	Aquamarine	Aquamarine Westside, LLC	Aquamarine Westside, LLC - Aquamarine West	91,987	34,800	34,800		Photovoltaic	SUN	Solar
1	1	58571 63027A	Tucannon River Wind Farm	Tucannon River Wind Farm	Tucannon River Wind Farm - Tucannon River 2	866,065	13,732	13,732		Wind	WND	Wind
	1	6433	Boundary		Boundary Hydroelectric Units	3,204,939	31	31			HYC	Large hydro
	1	3883	Rocky Reach		Mid-C Hydro - Rock Island 6200 and Rocky Reac	5,728,929	14,698	14,698			HYC	Large hydro
	0	6200	Rock Island		Mid-C Hydro - Rock Island 6200 and Rocky Reac	2,382,768	14,698	14,698			HYC	Large hydro
	1	3886	Wells		Mid-C Hydro - Wells (Douglas County PUD)	4,074,325	11,383	11,383			HYC	Large hydro
	1	3887 217	Priest Rapids Balch 1		Mid-C Hydro - Priest Rapids and Wanapum dan Balch #1 PH	4,540,765	3,617 352	3,617 352			HYC HYC	Large hydro
	1	217			Balch #2 PH	36,687		1,155			HYC	Large hydro
	1	218	Balch 2 Belden		Balch #2 PH Belden	120,507 145,216	1,155 1,443	1,155			HYC	Large hydro
	1	219	Bucks Creek		Bucks Creek	145,216	1,443	1,443			HYC	Large hydro Large hydro
	1	220	Butt Valley		Butt Valley	19,146	204	204			HYC	Large hydro
	1	221	Caribou 1		Caribou 1	35,589	204	204			HYC	Large hydro
	1	222	Caribou 2		Caribou 1 Caribou 2	158,880	1,485	1,485			HYC	Large hydro
	1	223	Cresta		Cresta	124,158	1,485	1,485			HYC	Large hydro
	1	235	Drum 1		Drum #1	43.384	403	403			HYC	Large hydro
	1	235	Drum 2		Drum #2	45,584	1.473	1.473			HYC	Large hydro
	1	239	Electra		Electra	171,176	1,566	1,566			HYC	Large hydro
	1	240	Haas		Haas	98,992	986	986			HYC	Large hydro
	1	240	James B Black		James B Black	367,761	3,227	3,227			HYC	Large hydro
	1	682	Kerckhoff 2		Kerckhoff #2 PH	126,294	1,306	1,306			HYC	Large hydro
	1	254	Kings River PH		Kings River	32,203	315	315			HYC	Large hydro
	1	265	Pit 1		Pit 1	142.099	1,159	1,159			HYC	Large hydro
	1	266	Pit 3		Pit 3	188,394	1,587	1,587			HYC	Large hydro
	1	267	Pit 4		Pit 4	186,986	1.841	1.841			HYC	Large hydro
	1	268	Pit 5		Pit 5	465,090	4,006	4,006			HYC	Large hydro
	1	269	Pit 6		Pit 6	229,588	1.984	1.984			HYC	Large hydro
1	1	270	Pit 7		Pit 7	280,981	2,407	2,407			HYC	Large hydro
	1	272	Poe		Poe	226,461	2,042	2,042			HYC	Large hydro
	1	275	Rock Creek		Rock Creek	228,174	1,920	1,920	1%		HYC	Large hydro
1	1	279	Salt Springs		Salt Springs	69,590	709	709			HYC	Large hydro
1	1	285	Stanislaus		Stanislaus	130,746	1,064	1,064	1%		HYC	Large hydro
	1	287	Tiger Creek		Tiger Creek	143,610	1,380	1,380	1%		HYC	Large hydro
1	1	417	Forbestown		Forbestown	49,467	398	398	1%		HYC	Large hydro
	1	419	Woodleaf		Woodleaf	79,488	665	665	1%		HYC	Large hydro
	1	412	Chicago Park		NID-Chicago Park	66,756	617	617	1%		HYC	Large hydro
					TOTALS	28,230,877	181,027	181,027	0.64%			



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

	VCEA MWh				Resource MWh	MWh		
Invoice File Name	Invoice	from Invoice	Energy Delivery Term	Invoice or PO#	PCC1/2 Resource	VCEA PCL Total	Sum	Match T/F
1121 PGE36 VCEA PCC1 Rec Invoice.pdf	37,359	37,359	July 2021	453571	Biglow Canyon Wind Farm - Biglow Canyon 3 (4,269) Biglow Canyon Wind Farm - Biglow Phase 2 (30,984) 1 Tucannon River Wind Farm - Tucannon River 1 (11,015 Tucannon River Wind Farm - Tucannon River 2 (13,732)		
1221 PGE36 VCEA PCC1 Rec Invoice.pdf	22,641	22,641	August 2021	456048	1	, 60,000	60,000	TRUE