BOARD OF DIRECTORS MEETING AGENDA

August 26, 2021 -Thursday, 3:30 p.m.

COVID-19 NOTICE

RCEA AND HUMBOLDT BAY MUNICIPAL WATER DISTRICT OFFICES WILL NOT BE OPEN TO THE PUBLIC FOR THIS MEETING

Pursuant to the Governor's Executive Order N-29-20 of March 17, 2020, and the Humboldt County Health Officer's March 30, 2020, Shelter-in-Place Order, the RCEA Board of Directors meeting will not be convened in a physical location. Board members will participate in the meeting via an online Zoom video conference.

<u>To listen to the meeting by phone</u>, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 819 7236 8051. <u>To watch the meeting online</u>, join the Zoom webinar at https://us02web.zoom.us/j/81972368051.

You may submit written public comment by email to <u>PublicComment@redwoodenergy.org</u>. <u>Please identify the agenda item number in the subject line</u>. Comments will be included in the meeting record but not read aloud during the meeting.

To make a comment during the public comment periods, raise your hand in the online Zoom webinar, or press star (*) 9 on your phone to raise your hand. You will continue to hear the meeting while you wait. When it is your turn to speak, a staff member will unmute your phone or computer. You will have 3 minutes to speak.

While downloading the Zoom application may provide a better meeting experience, Zoom does <u>not</u> need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

In compliance with the Americans with Disabilities Act, any member of the public needing special accommodation to participate in this meeting should call (707) 269-1700 or email *Ltaketa@redwoodenergy.org* at least 3 business days before the meeting. Advance notice enables RCEA staff to make their best effort to reasonably accommodate access to this meeting while maintaining public safety.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board of Directors, including those received less than 72 hours prior to the RCEA Board meeting, will be made available to the public at www.redwoodenergy.org.

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OPEN SESSION Call to Order

1. REPORTS FROM MEMBER ENTITIES

2. ORAL COMMUNICATIONS

This time is provided for people to address the Board on matters not on the agenda. At the conclusion of all oral communications, the Board may respond to statements. Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

3. CONSENT CALENDAR

All matters on the Consent Calendar are considered to be routine by the Board and are enacted in one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

- **3.1** Approve Minutes of July 22, 2021, Board Meeting.
- 3.2 Approve Disbursements Report.
- 3.3 Accept Financial Reports.
- **3.4** Appoint Christopher Honar to the Community Advisory Committee for a Term Ending April 11, 2023.
- 3.5 Approve Proposed Revisions to the Feed-In Tariff (FIT) Power Purchase Agreement (PPA) Template; Direct General Counsel to Draft Amendments Consistent with the Revisions to Existing FIT Program PPAs with RPCA Solar 5 LLC (4 separate PPAs), North Coast Highway Solar 1 LLC, and North Coast Highway Solar 2 LLC; and Authorize RCEA's Executive Director to Execute Said Six FIT PPA Amendments.
- 3.6 Authorize Staff to Solicit Bids and Secure Construction for Electric Vehicle
 Charging Stations at the Humboldt County Airport as Appropriate for a Total
 Aggregate Budget Not to Exceed \$79,000, and to Seek Reimbursement Through
 the CALeVIP Program, and Authorize the Executive Director to Execute All
 Applicable Documents.

4. REMOVED FROM CONSENT CALENDAR ITEMS

Items removed from the Consent Calendar will be heard under this section.

COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

5. OLD CCE BUSINESS

5.1. 2020 Power Source Disclosure Attestation

Adopt Resolution 2021-4 Attesting to the Veracity of RCEA's 2020 Power Source Disclosure Report and Power Content Label.

6. NEW CCE BUSINESS

6.1. Wave Energy Update (Information only)

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

7. OLD BUSINESS

- **7.1.** Quarterly Budget Report FY 2020-2021 Fourth Quarter (Information only)
- **8. NEW BUSINESS** None.
- 9. STAFF REPORTS
 - **9.1.** Report from Executive Director Matthew Marshall on Offshore Wind and In-Person Brown Act Meetings

10. FUTURE AGENDA ITEMS

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

11. CLOSED SESSION

- 11.1. CONFERENCE WITH REAL PROPERTY NEGOTIATIONS Pursuant to Government Code § 54956.8 in re: APNs 001-104-001-000 and 001-011-021-000; RCEA negotiator: Executive Director; Owner's negotiating party: Kramer Investment Corporation and the City of Eureka; Under negotiation: price and terms.
- 12. RECONVENE TO OPEN SESSION
- 13. CLOSED SESSION REPORT
- 14. ADJOURNMENT

NEXT REGULAR MEETING

Thursday, September 23, 2021, 3:30 p.m. This meeting will be an online teleconference following shelter-in-place orders.

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BOARD OF DIRECTORS MEETING DRAFT MINUTES

July 22, 2021 - Thursday, 3:30 p.m.

Notice of this meeting was posted on July 18, 2021. Chair Sheri Woo called a regular meeting of the Board of Directors of the Redwood Coast Energy Authority to order on the above date at 3:32 p.m., stating that the teleconference meeting was being conducted pursuant to Brown Act waivers included in Governor Newsom's COVID-19 State of Emergency Executive Order N-29-20 of March 17, 2020, and the Humboldt County Health Officer's March 30, 2020, Shelter-in-Place Order. Chair Woo stated that the posted agenda contained public teleconference meeting participation instructions.

PRESENT: Vice Chair Stephen Avis, David Grover, Mike Losey (left at 4:52 p.m.), Sarah Schaefer, Mike Wilson (arrived 3:38 p.m.), Chair Sheri Woo. ABSENT: Scott Bauer, Chris Curran, Frank Wilson. STAFF AND OTHERS PRESENT: RCEA General Counsel Nancy Diamond, Power Resources Director Richard Engel, Power Resources Manager Jocelyn Gwynn, The Energy Authority Client Services Manager Jaclyn Harr, Executive Director Matthew Marshall, Account Services Manager Mahayla Slackerelli, Community Strategies Manager Nancy Stephenson, Clerk of the Board Lori Taketa.

REPORTS FROM MEMBER ENTITIES

Director Losey reported that Fortuna's wastewater treatment plant Tesla power pack activation has been delayed until August to ensure the online interface is working properly.

Director Schaefer asked for energy-related questions for prospective Arcata City Council members to be emailed to her.

Chair Woo reported that the Ruth Lake reservoir is currently full and contains three to four years' worth of water for Humboldt Bay Municipal Water District customers if water is conserved. Tributary and groundwater flow is very low and Mad River water flow is at a third of last year's flow rates. Watershed conditions are not good, with toxic blue-green algae already reported at Ruth Lake and in the Mad River. The Eel River has already disappeared in sections.

Director Grover reported that Trinidad has a Water Advisory Committee and stressed the importance of water conservation.

ORAL COMMUNICATIONS

No member of the public submitted public comment or asked to speak.

CONSENT CALENDAR

3.1 Approve Minutes of June 24, 2021, Board Meeting.

- **3.2** Approve Disbursements Report.
- 3.3 Accept Financial Reports.

Chair Woo requested that item 3.1 be removed from the consent calendar. No member of the public requested consent calendar item discussion.

M/S: Losey, Grover: Approve all consent calendar items except item 3.1.

<u>The motion passed with a unanimous roll call vote. Ayes: Avis, Grover, Losey, Schaefer, M. Wilson, Woo. Noes: None. Absent: Bauer, Curran, F. Wilson. Abstentions: None.</u>

REMOVED FROM CONSENT CALENDAR ITEMS

Chair Woo requested that the minute wording of Old Business item 5.1 – RCEA Fiscal Year 2021-22 Budget be changed from "bad customer debt" to "past due accounts," and that "untilled" be corrected to "unfilled." No member of the public commented on this item.

M/S: Avis, Grover: Approve consent calendar item 3.1 - Minutes of June 24, 2021, Board Meeting as amended.

<u>The motion passed with a unanimous roll call vote. Ayes: Avis, Grover, Losey, Schaefer, M. Wilson, Woo. Noes: None. Absent: Bauer, Curran, F. Wilson. Abstentions: None.</u>

OLD CCE BUSINESS - Chair Woo confirmed that a quorum was present to conduct Community Choice Energy business.

5.1. Energy Risk Management Quarterly Report

The Energy Authority Client Services Manager Jaclyn Harr updated the Community Choice Energy program's financial forecast and gave an overview of RCEA energy procurement requirements and recent policy changes.

This year's net revenue is forecasted to be negative. In 2022, the net revenue forecast improves but remains negative. Increased energy prices and PG&E generation rates are expected to combine with decreased exit fees, resulting in lower customer prices and a smaller pool of funds for customer programs and infrastructure investment. Ms. Harr described volatile energy costs, current hydroelectricity production, and the effect of regional weather on energy prices and the grid. A slight positive net revenue is forecast for 2023, partly due to the Sandrini Solar project long-term contract start. The Board can adjust programs to better position the agency based on forecasts.

Ms. Harr described the Diablo Canyon nuclear power plant decommissioning's effects on generation rates and exit fees, and the expected high cost of replacing the plant's power generation with renewable energy and storage. Smaller nuclear power plant projects are being considered in the Pacific Northwest to help decarbonization efforts, however no new nuclear power plants can be built in California until a federally-mandated waste storage

location is established. Transmission line undergrounding in rural areas will increase transmission rates for both PG&E and CCA customers in northern California.

Ms. Harr reviewed RCEA's energy procurement, which is directed by the Board's goals and policies, regulatory compliance and price risk mitigation.

Resource adequacy (RA) program rules were originally put in place after the energy crisis in the early 2000's to ensure California had enough electricity generating capacity to meet demand at all times. These rules have changed over time. Most recently CPUC has assigned PG&E to be the central procurement entity (CPE) to purchase local RA for RCEA from 2023. This is a transitional step as the state overhauls the RA system. CPE's reduce both CCA control of RA costs and incentive to build resources in locally constrained parts of the grid. Both CCAs and investor-owned utilities are critical of the new CPE requirement.

Ms. Harr reviewed California's recent generation capacity history. Once-through cooling natural gas plants built in the early 2000s are being retired this decade along with the Diablo Canyon nuclear power plant, ushering in a new period of large-scale energy development. A total of 11.5 gigawatts of capacity, over 1/6 of California's total energy generation, needs to be built between 2023-2026. This new mid-term reliability capacity development must complement the large number of intermittent wind and solar energy projects built between 2005-2020. New state goals include building more smart renewables and storage resources, as well as increasing energy efficiency and accommodating more distributed energy resources. RCEA's obligation is to build 39 MW of new, non-fossil fuel resources under long-term contracts. Some of these new resources must be zero-emission and provide power between 5-10 p.m. daily, some resources must be storage that can discharge for 8 hours, and some resources must generate energy 80% of the time. The procurement will likely be expensive but will result in a much lower carbon-emitting grid.

Community Advisory Committee member Norman Bell inquired, as a member of the public, whether Humboldt Sawmill Company's 10-year contract met the new state requirements, whether offshore wind energy's intermittent generation precluded it from being included in RCEA's portfolio, and whether wave energy merited consideration. Staff responded that the biomass contract helped fulfil another state long-term renewable contract requirement but not the new mid-term reliability procurement requirements. Offshore wind energy meets RCEA's internal procurement goals and its capacity could potentially be increased to 80% with the addition of batteries. The state's new reliability procurement requirements favor geothermal energy, or like resources which can generate energy around the clock.

M/S: Losey, M. Wilson: Accept Energy Risk Management Quarterly Report.

<u>The motion passed with a unanimous roll call vote. Ayes: Avis, Grover, Losey, Schaefer, M. Wilson, Woo. Noes: None. Absent: Bauer, Curran, F. Wilson. Abstentions: None.</u>

Director Losey left the meeting at 4:52 p.m.

OLD BUSINESS

7.1. RePower Humboldt Strategic Plan Update (Information only)

Executive Director Marshall reported on the RePower Humboldt Strategic Plan's four focus areas.

In Transportation, the agency is adding new public electric vehicle (EV) charging network stations at the Arcata Community Center and at the airport. EV customer rebate applications are being submitted and RCEA was awarded a CEC medium and heavy duty zero emission vehicle infrastructure planning grant.

In Integrated Demand-Side Management, or Customer Programs, a space and water heating building electrification program is being launched and a program to utilize customer battery storage as a virtual power plant is being finalized with Swell Energy. This program will also increase grid capacity and help fulfill resource adequacy requirements. Staff is conducting customer battery storage and solar workshops relating to this program this month. Energy efficiency programs are ramping back up after a year of pandemic shelter-in-place measures.

In the Energy Generation arena, solar panels are being installed at the airport microgrid with the goal of beginning operation by the end of the year. The Sandrini and local feed-in tariff (FIT) solar projects are progressing. The Hatchery Road FIT projects completed the County planning process earlier this year and are anticipated to be online before the end of 2022. The innovative behind-the-meter customer-based reliability contract with Leap began providing resource adequacy in June and was featured in a Los Angeles Times article.

In Regional Planning and Coordination, the Regional Climate Action Plan public review draft is being analyzed by city staff and will be addressed by local jurisdiction councils and communities in the coming months. In the state budget, \$11 million was allocated for Humboldt Harbor infrastructure development as matching funds to support the Harbor District's \$56 million federal grant application for harbor infrastructure development. The funding demonstrates state support to the federal government. RCEA is working with the Humboldt Area Foundation and other partners to develop a local energy resiliency network made up of community organizations and stakeholders. The network will work to engage the broader community on energy resilience issues.

The directors praised staff for helping the Harbor District secure the state budget allocation and noted how the federal government is focusing on Humboldt County for offshore wind generation. There was no public comment for this agenda item.

7.2. Racial Justice Plan

Customer Services Manager Mahayla Slackerelli gave a progress report on the agency's Racial Justice Plan. Internally, equity actions have been added to job descriptions and staff equity trainings have been added to staff work plans. RCEA has joined the Government Alliance on Race and Equity to gain access to staff training materials. Recruitment will include skills testing and bias training for hiring committee members. Staff demographic surveys will be conducted to track progress.

Externally, agency staff leadership will pursue more formalized relations with local Tribes through the Tribal Chairmen's Association and participate in outreach activities in Hoopa Valley. Staff will gather demographic data on people currently served through RCEA

programs to aid with program selection, design, and implementation. Staff is also sharing information on agency initiatives with CalCCA Environmental Justice Committee and the California Energy Efficiency Coordinating Committee Equity Metrics Working Group, which advises the CPUC on equity issues.

Staff requested that the ad hoc Racial Justice Plan Board Subcommittee continue through 2022 so it can participate in the first phase of the plan's implementation. The Board supported this subcommittee change and suggested modifying the subcommittee composition at a future meeting as the Board's membership changes.

Board members thanked Ms. Slackerelli for her work on the plan and expressed pride to be part of an agency that values this equity work. No member of the public commented.

M/S: M. Wilson, Grover: Accept Racial Justice Plan progress report and to continue the ad hoc Racial Justice Subcommittee through 2022.

<u>The motion passed with a unanimous roll call vote. Ayes: Avis, Grover, Schaefer, M. Wilson, Woo. Noes: None. Absent: Bauer, Curran, Losey, F. Wilson. Abstentions: None.</u>

STAFF REPORTS

9.1. Update by Executive Director Matthew Marshall on the Offshore Wind Project

Executive Director Marshall described the upcoming federal Bureau of Ocean Energy Management combined Humboldt and Central Coast offshore wind lease auction in mid-2022 following an environmental review of the auction process. Multiple, separate leases will be awarded at the same time and developers are usually allowed to win only one lease. The indepth environmental review of an actual proposed wind project takes place after lease areas have been awarded. There was no public comment on this agenda item.

FUTURE AGENDA ITEMS

There was a request for a briefing on new nuclear energy technology from a knowledgeable source and creating an opportunity for a change in Board membership on the ad hoc Racial Equity Subcommittee when more Board members are in attendance.

CLOSED SESSION

The Directors agreed to postpone closed session discussion regarding the current real estate search until August.

Chair Woo adjourned the meeting at 5:30 p.m.

Lori Taketa
Clerk of the Board

Redwood Coast Energy Authority Disbursements Report As of June 30, 2021

Туре	Date	Num	Name	Memo	Amount
Liability Check	06/10/2021	E-pay	EDD	Taxes	-4,691.80
Liability Check	06/10/2021	E-pay	Internal Revenue Service	Taxes	-22,810.84
Liability Check	06/10/2021	E-pay	EDD	Taxes	-61.95
Liability Check	06/10/2021	ACH	Newport Group	Deferred Compensation Contribution	-15.60
Check	06/10/2021	12346-75	Employees	Utilities reimbursement for (6) months.	-12,096.00
Check	06/10/2021	12376	CCE Customer	EV Rebate: EV12	-1,000.00
Check	06/10/2021	12377	CCE Customer	EV Rebate: EV11	-1,000.00
Check	06/10/2021	12378	NEM Customer	NEM Closeout Payments	-32,259.03
Check	06/10/2021	12393	VISA	May 2021 Statement	-6,952.31
Bill Pmt -Check	06/10/2021	12394	Aiqueous, LLC	PowerPath Configuration Project Hours - May	-6,525.00
Bill Pmt -Check	06/10/2021	12395	Boudreau, D.	Reimbursement - RCAM mileage	-119.52
Bill Pmt -Check	06/10/2021	12396	Braun Blaising Smith Wynne	Legal Services - Regulatory - April	-8,656.28
Bill Pmt -Check	06/10/2021	12397	City of Eureka-Water	Water service, 4/20-5/24/21	-371.40
Bill Pmt -Check	06/10/2021	12398	Developed Employment Services, LLC.	Facilities maintenance work	-33.96
Bill Pmt -Check	06/10/2021	12399	Diamond, Nancy	May Legal Services	-14,860.70
Bill Pmt -Check	06/10/2021	12400	Donald Dame	Professional Services May 2021	-320.25
Bill Pmt -Check	06/10/2021	12401	Environmental Indicator Accounting Srvcs.	Services & support for climate action plan.	-1,985.00
Bill Pmt -Check	06/10/2021	12402	Eureka Oxygen	Annual fire extinguisher service	-232.40
Bill Pmt -Check	06/10/2021	12403	FedEx	ResKit shipping tracking	-177.20
Bill Pmt -Check	06/10/2021	12404	Frontier Energy, Inc.	Professional Services - Program Support	-860.25
Bill Pmt -Check	06/10/2021	12405	Halvorsen, Nicole	N. Halvorsen: Education Reimbursement	-370.00
Bill Pmt -Check	06/10/2021	12406	HireRight	Background Check: new hires	-83.91
Bill Pmt -Check	06/10/2021	12407	Humboldt Bay Coffee Co.	Office Coffee	-34.60
Bill Pmt -Check	06/10/2021	12408	Mission Uniform & Linen	May mat service, janitorial supplies	-99.58
Bill Pmt -Check	06/10/2021	12409	North Coast Cleaning	May monthly cleaning service	-456.00
Bill Pmt -Check	06/10/2021	12410	PG&E CCA	April CCE Charges	-22,196.93
Bill Pmt -Check	06/10/2021	12411	PG&E EV Account	EV stations April	-326.92
Bill Pmt -Check	06/10/2021	12412	PG&E Utility Account	4/23-5/21/21 Office utilities	-659.90
Bill Pmt -Check	06/10/2021	12413	Ray Morgan Company	Printer Charges: 5/6-6/5/21	-48.45
Bill Pmt -Check	06/10/2021	12414	Times Printing Company	Misc. printing services	-1,262.92
Bill Pmt -Check	06/10/2021	12415	Verizon Wireless	May Tablet/cell service for staff & equipment	-1,655.20
Liability Check	06/10/2021	ACH	Newport Group	Deferred Compensation Contribution	-12,706.27
Paycheck	06/10/2021	ACH	Employees	Payroll 6/10/21	-55,591.42
Bill Pmt -Check	06/21/2021	ACH	Intuit	Intuit Payroll Services - annual	-650.00
Bill Pmt -Check	06/25/2021	ACH	CalPine Corporation	Calpine May 2021 Costs	-61,604.16
Bill Pmt -Check	06/25/2021	ACH	Humboldt Redwood Company	Humboldt Redwood Co. May 2021	-700,454.36
Bill Pmt -Check	06/25/2021	ACH	Keenan	Anthem Medical Insurance July 2021	-22,800.37
Bill Pmt -Check	06/25/2021	ACH	Snow Mountain Hydro, LLC	Cove plant hydro - MAY 2020	-951.20
Bill Pmt -Check	06/25/2021	ACH	Tesla Motors	Delivery of BESS to site.	-1,832,967.75
Liability Check	06/25/2021	E-pay	EDD	Taxes	-4,755.51
Liability Check	06/25/2021	E-pay	Internal Revenue Service	Taxes	-24,318.86
Liability Check	06/25/2021	E-pay	EDD	Taxes	-61.94
Bill Pmt -Check	06/25/2021	12416	AM Conservation	VOID: LED Stock	0.00
Bill Pmt -Check	06/25/2021	12417	AT&T	VOID: Phone charges	0.00
Bill Pmt -Check	06/25/2021	12418	Boudreau, D.	VOID: May mileage reimbursement	0.00
Bill Pmt -Check	06/25/2021	12419	City of Ferndale	VOID: City Staff Time & Expenses for MicroGrant	0.00
Bill Pmt -Check	06/25/2021	12420	Colonial Life	VOID: Colonial Life Premiums May 2021	0.00
Bill Pmt -Check	06/25/2021	12421	FedEx	VOID: ResKit Mailing	0.00
Bill Pmt -Check	06/25/2021	12421	Mission Uniform & Linen	VOID: Reskit Mailing VOID: June mat service, janitorial supplies	0.00
Bill Pmt -Check	06/25/2021	12422	Morse Media		0.00
				VOID: Website Development Services	
Bill Pmt -Check	06/25/2021	12424	North Coast Journal	VOID: Operto perwerk support services. July	0.00
Bill Pmt -Check	06/25/2021	12425	NYLEX.net, Inc.	VOID: May CCF Charges	0.00
Bill Pmt -Check	06/25/2021	12426	PG&E CCA	VOID: May CCE Charges	0.00
Bill Pmt -Check	06/25/2021	12427	Suddenlink Communications	VOID: DSL service	0.00

Redwood Coast Energy Authority Disbursements Report As of June 30, 2021

Туре	Date	Num	Name	Memo	Amount
Bill Pmt -Check	06/25/2021	12428	Times Printing Company	VOID: Misc. printing	0.00
Bill Pmt -Check	06/25/2021	12429	Winzler, John	VOID: Office Lease - July	0.00
Bill Pmt -Check	06/25/2021	12430	WREGIS	VOID: Reitred RECs	0.00
Liability Check	06/25/2021	12431	Umpqua Bank	VOID: 74-3104616	0.00
Check	06/25/2021	12432	Robert Canevari	VOID: NEM Yearly Payout #2888224005	0.00
Check	06/25/2021	12433	Sanderson, Summer	Utilities Reimbursement for (1) months.	-72.00
Liability Check	06/25/2021	ACH	Newport Group	Deferred Compensation Contribution	-12,563.12
Paycheck	06/25/2021	ACH	Employees	Payroll 6/25/21	-55,053.43
TOTAL					-2,926,774.29

Redwood Coast Energy Authority Profit & Loss Budget vs. Actual July 2020 through June 2021

	Jul '20 - Jun 21	Budget	% of Budget
Ordinary Income/Expense			
Income			
5 REVENUE EARNED			
Total 5000 · Revenue - government agencies	90,420.00	737,317.00	12.26%
Total 5100 · Revenue - program related sales	14,132.29	9,000.00	157.03%
Total 5400 · Revenue-nongovernment agencies	903,192.74	1,556,600.00	58.02%
Total 5500 · Revenue - Electricity Sales	45,117,248.77	41,763,500.00	108.03%
Total 5 REVENUE EARNED	46,124,993.80	44,066,417.00	104.67%
Total Income	46,124,993.80	44,066,417.00	104.67%
Gross Profit	46,124,993.80	44,066,417.00	104.67%
Expense			
Total 6 WHOLESALE POWER SUPPLY	39,952,747.89	36,074,000.00	110.75%
Total 7 PERSONNEL EXPENSES	2,639,615.71	2,838,644.00	92.99%
Total 8.1 FACILITIES AND OPERATIONS	3,198,138.97	6,606,484.00	48.41%
Total 8.2 COMMUNICATIONS AND OUTREACH	66,001.87	114,000.00	57.9%
Total 8.3 TRAVEL AND MEETINGS	751.25	18,450.00	4.07%
8.4 PROFESSIONAL & PROGRAM SRVS			
8400 · Regulatory	172,402.45	200,000.00	86.2%
8410 · Contracts - Program Related Ser	393,261.56	326,000.00	120.63%
8420 · Accounting	19,280.00	75,000.00	25.71%
8430 · Legal	172,987.00	125,000.00	138.39%
8450 · Wholesale Services - TEA	626,785.83	620,500.00	101.01%
8460 · Procurement Credit - TEA	665,206.68	650,500.00	102.26%
8470 · Data Management - Calpine	846,876.87	913,450.00	92.71%
Total 8.4 PROFESSIONAL & PROGRAM SRVS	2,896,800.39	2,910,450.00	99.53%
Total 8.5 PROGRAM EXPENSES	600,306.11	627,550.00	95.66%
Total 8.6 INCENTIVES & REBATES	108,003.08	601,000.00	17.97%
Total 9 NON OPERATING COSTS	43,145.67	35,500.00	121.54%
Total Expense	49,505,510.94	49,826,078.00	99.36%
Net Ordinary Income	-3,380,517.14	-5,759,661.00	58.69%
Net Other Income	0.00	6,000,000.00	0.0%
t Income	-3,380,517.14	240,339.00	-1,406.56%

Redwood Coast Energy Authority Balance Sheet

As of June 30, 2021

	Jun 30, 21
ASSETS	
Current Assets	
Checking/Savings	
1010 · Petty Cash	493.22
1050 · GRANTS & DONATIONS 3840	15,204.58
1060 · Umpqua Checking Acct 0560	943,476.70
1071 · Umpqua Deposit Cntrol Acct 8215	1,405,051.11
1075 · Umpqua Reserve Account 2300	2,000,000.00
1076 · First Republic Bank - 4999	15,000.00
8413 · COUNTY TREASURY 3839	5,065.52
Total Checking/Savings	4,384,291.13
Accounts Receivable	
1100 · Accounts Receivable	92,033.40
Total Accounts Receivable	92,033.40
Other Current Assets	
1101 · Allowance for Doubtful Accounts	-1,383,011.05
1103 · Accounts Receivable-Other	7,847,340.61
1120 · Inventory Asset	21,715.00
1202 · Prepaid Expenses	-14,838.49
1205 · Prepaid Insurance	-46,160.38
1210 · Retentions Receivable	1,001.00
1499 · Undeposited Funds	1,377.00
Total Other Current Assets	6,427,423.69
Total Current Assets	10,903,748.22
Total Fixed Assets	151,725.39
Other Assets	
1700 · Retained Deposits	3,971,875.00
Total Other Assets	3,971,875.00
TOTAL ASSETS	15,027,348.61
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 · Accounts Payable	3,664,872.37
Total Accounts Payable	3,664,872.37
Total Credit Cards	8,485.19
Total Other Current Liabilities	1,846,789.03
Total Current Liabilities	5,520,146.59
Total Liabilities	5,520,146.59
Equity	
2320 · Investment in Capital Assets	151,725.38
3900 · Fund Balance	12,735,993.78
Net Income	-3,380,517.14
Total Equity	9,507,202.02
TOTAL LIABILITIES & EQUITY	15,027,348.61



STAFF REPORT Agenda Item # 3.4

AGENDA DATE:	August 26, 2021
TO:	Board of Directors
PREPARED BY:	Lori Taketa, Clerk of the Board
SUBJECT:	Community Advisory Committee Member Nomination

BACKGROUND

The County of Humboldt has two vacant seats on the Community Advisory Committee following the resignation of Tom Hofweber and the end of Matty Tittmann's term last year.

Director Mike Wilson has nominated Christopher Honar to serve on the CAC. Mr. Honar is a 12-year resident of Humboldt County who lives in Arcata and is a former RCEA employee. He is currently the Operations Director for Eel River Dry Farms, an energy-intensive cannabis extraction facility, and he would like to help guide RCEA's program choices to best serve member communities' power and climate goals. Mr. Honar has prior training and certifications in alternative energy technologies and building efficiency, and volunteers with the Humboldt-Del Norte Land Trust.

The current Community Advisory Committee members are:

REPRESENTING JURISDICTION	MEMBER NAME	TERM EXPIRATION DATE
AT-LARGE	Jerome Carman	4/12/2022
AT-LARGE	Colin Fiske	4/12/2022
AT-LARGE	Larry Goldberg, Chair	4/12/2022
AT-LARGE	Pam Halstead	4/12/2022
ARCATA	Norman Bell	4/11/2023
BLUE LAKE	Kit Mann	4/11/2023
COUNTY 1 (ORLEANS - E. HUMBOLDT)	Luna Latimer	4/11/2023
COUNTY 2	Vacant	4/11/2023
COUNTY 3	Vacant	4/12/2022
EUREKA	Catherine Gurin	4/11/2023
FERNDALE	Dennis Leonardi, Vice Chair	4/12/2022
FORTUNA	Elizabeth Burks	4/12/2022
HBMWD	Ethan Lawton	4/12/2022
RIO DELL	Roger Hess	4/12/2022
TRINIDAD	Richard Johnson	4/11/2023

STAFF RECOMMENDATION

Appoint Christopher Honar to the Community Advisory Committee for the remainder of a term ending on April 11, 2023.



STAFF REPORT Agenda Item # 3.5

AGENDA DATE:	August 26, 2021
TO:	Board of Directors
PREPARED BY:	Jocelyn Gwynn, Power Resources Manager
SUBJECT:	Feed-in Tariff Contract Amendments

SUMMARY

In March 2019, the Board directed staff to launch the Feed-In Tariff (FIT) program¹. This program offers above-market pricing for new renewable energy generation in Humboldt County less than one megawatt in capacity. RCEA currently has six 20-year FIT power purchase agreements (PPA) in place with two developers for the Hatchery Road and North Coast Highway Solar (NCHS) projects. These projects together will generate about 2% of RCEA's annual energy needs.

Due to the advent of unforeseen development delays, the projects' commercial operation dates (COD) are expected to be significantly delayed. Staff have determined the best way to accommodate these unforeseen delays is to modify some of the delay damage terms set forth in the FIT PPA so that the program will still result in successful projects. Imposing the damage terms as they are could result in the developers' termination of the contracts and the projects not being built due to exorbitant delay damages.

The following list and table summarize the proposed PPA revisions. In addition to the previous, the NCHS project capacities need to be adjusted slightly to comply with an operational threshold imposed by the CA Independent System Operator (CAISO). Staff seeks Board approval of the revisions to the FIT Program template PPA, and authorization for the General Counsel to draft consistent contract amendments to each of the already executed FIT PPAs for the Executive Director's signature.

Amendments to the form FIT PPA² and all executed FIT PPAs (see Attachment A for contract language):

- Extension of the permitted COD delays due to interconnection and permitting issues that are outside of developer control from 6 months to 12 months. (Sections 2.6.2.1 and 2.6.2.2)
- Reduction in the daily delay damage amount from \$0.20 per kW of contract capacity to \$0.10 per kW. (Section 2.6.4)
- Clarification that the contract can be terminated upon mutual agreement that a force majeure event is expected to extend beyond 12 months. (Section 10.4)

¹ https://redwoodenergy.org/fit/

² https://redwoodenergy.org/wp-content/uploads/2020/05/RCEA-FIT-PPA_Final_May_2020-1.docx

Additional amendments to the NCHS PPAs:

 Reduction in contract capacity from 1,000 kW to 990 kW so that the projects fall below the wholesale generator threshold set by CAISO. (Section 3.1)

Parent Company	Contract Counterparty	Project Name	Project Location	Current Capacity	Revised Capacity	Current COD	Revised COD
Renewable	RPCA Solar 5	Hatchery Road A	Blue Lake	0.99 MW	n/a	12/1/2021	3/31/2023
Properties	LLC						
Renewable	RPCA Solar 5	Hatchery Road B	Blue Lake	0.99 MW	n/a	12/1/2021	3/31/2023
Properties	LLC						
Renewable	RPCA Solar 5	Hatchery Road C	Blue Lake	0.99 MW	n/a	4/1/2022	3/31/2023
Properties	LLC						
Renewable	RPCA Solar 5	Hatchery Road D	Blue Lake	0.99 MW	n/a	4/1/2022	3/31/2023
Properties	LLC						
EDP	North Coast	North Coast	Hydesville	1 MW	0.99 MW	11/1/2021	TBD
Renewables	Highway Solar	Highway Solar 1					
NA	1 LLC						
EDP	North Coast	North Coast	Hydesville	1 MW	0.99 MW	11/1/2021	TBD
Renewables	Highway Solar	Highway Solar 2	_				
NA	2 LLC						

FINANCIAL IMPACTS

The proposed FIT PPA amendments will result in RCEA collecting significantly less in damages from the two developers it is in contract with. However, as previously described the risk of contract termination and unsuccessful projects could make this opportunity cost moot. Relaxing the damage terms is aligned with the intent of the program to produce financially viable local generation, while still incentivizing the developers to bring the projects online as soon as possible.

The NCHS capacity revisions will result in a modest decrease in expected output of the projects, which will in turn slightly reduce costs to RCEA, since the FIT contract prices are above market prices.

STAFF RECOMMENDATION

Approve proposed revisions to the FIT PPA template; direct General Counsel to draft amendments consistent with the revisions to existing FIT Program PPAs with RPCA Solar 5 LLC (4 separate PPAs), North Coast Highway Solar 1 LLC, and North Coast Highway Solar 2 LLC; and authorize RCEA's Executive Director to execute said six FIT PPA amendments.

ATTACHMENTS

Attachment A: Proposed FIT PPA Revisions

Attachment A: Proposed FIT PPA Revisions

2.6 Commercial Operation.

- 2.6.2 Seller shall achieve Commercial Operation no later than the expected Commercial Operation Date specified in Section 2.6.1, which date shall be no later than eighteen (18) months from the Execution Date of this Agreement. The expected Commercial Operation Date specified in Section 2.6.1 may be extended for only the following reasons:
- 2.6.2.1 If Seller has taken all commercially reasonable actions (including but not limited to Seller's timely filing of all required applications and documents, payment of all applicable fees, and completion of all electric system upgrades needed, if any) to have the Project physically interconnected to the Transmission/Distribution Owner's distribution system, but fails to secure any necessary commitments from the Transmission/Distribution Owner for such interconnection and upgrades due to delays beyond Seller's reasonable control, then the expected Commercial Operation Date specified in Section 2.6.1 shall be extended for the number of days necessary to physically interconnect the Facility; provided, however, that such delay may not extend the expected Commercial Operation Date specified in Section 2.6.1 for a period of more than twelve (12) months; or
- 2.6.2.2 If Seller has taken all commercially reasonable actions (including but not limited to Seller's timely filing of all required applications and documents and payment of all applicable fees, if any) to obtain permits necessary to construct and operate the facility but fails to secure any such permits due to delays beyond Seller's reasonable control, then the expected Commercial Operation Date specified in Section 2.6.1 shall be extended for the number of days necessary to secure such permits; provided, however, that such delay may not extend the expected Commercial Operation Date specified in Section 2.6.1 for a period of more than twelve (12) months.
- 2.6.4 Notwithstanding anything in this Agreement, if Seller is unable to achieve Commercial Operation by the expected Commercial Operation Date specified in Section 2.6.1, which may be extended pursuant to Section 2.6.2, then Seller shall either (i) terminate the Agreement, in which case Buyer may retain the full Reservation Deposit, or (ii) pay to Buyer daily delay damages in the amount of ten cents (\$0.10) for each kilowatt of Contract Capacity for each day beyond the expected Commercial Operation Date specified in Section 2.6.1, as may be extended pursuant to Section 2.6.2, that Seller requires to achieve Commercial Operation.
- 10.4 <u>Termination</u>. Either Party may terminate this Agreement on at least five (5) Business Days' prior Notice, in the event of Force Majeure which materially interferes with such Party's ability to perform its obligations under this Agreement and which (a) extends, or is reasonably likely to extend, for more than 365 consecutive days, (b) extends, or is reasonably likely to extend, for more than a total of 365 days in any consecutive 540-day period."



STAFF REPORT Agenda Item # 3.6

AGENDA DATE:	August 26, 2021
TO:	Board of Directors
PREPARED BY:	Dana Boudreau, Director of Operations
SUBJECT:	EV Charging Network: CALeVIP Grant Funds for Humboldt County Airport

SUMMARY

In August 2020 the Redwood Coast Energy Authority applied for state CALeVIP grant funds to install two electric vehicle (EV) charging stations at the Humboldt County Airport as part of the larger airport microgrid project. RCEA's application was approved and CALeVIP reserved \$24,000 in state grant funds for this project.

RCEA seeks to solicit bids from qualified contractors to install new hardware and perform necessary site modifications.

Staff recommends a working project budget of \$79,000, composed of \$24,000 in reserved grant funds and \$55,000 of RCEA general funds.

FINANCIAL IMPACTS

Using \$55,000 of RCEA general funds will secure \$24,000 in CALeVIP grant funds to sustain or expand our EV charging network at this high-value airport location. The resulting charging stations will be capital assets owned and operated by RCEA and will generate revenue from the sale of electricity to EV drivers. Installing charging stations at the airport is budgeted in RCEA's cost-share for the microgrid grant funding from the CA Energy Commission.

RECOMMENDED ACTIONS

Authorize staff to solicit bids and secure construction for electric vehicle charging stations at the Humboldt County Airport as appropriate for a total aggregate budget not to exceed \$79,000, and to seek reimbursement through the CALeVIP Program, and authorize the Executive Director to execute all applicable documents.



STAFF REPORT Agenda Item # 5.1

AGENDA DATE:	August 26, 2021
TO:	Board of Directors
PREPARED BY:	Jocelyn Gwynn, Power Resources Manager
SUBJECT:	2020 Power Source Disclosure and Power Content Label Approval

SUMMARY

Each year, the Board is presented with RCEA's power mix from the previous year for submission to the California Energy Commission (CEC) as part of their Power Source Disclosure (PSD) Program. Staff submitted the 2020 PSD Report (Exhibit I to Attachment A) to the CEC by the June 1 due date. The report shows annual energy purchases from each generating facility RCEA procured from last year, and percentages of each resource type in the REpower and REpower+ products. Additionally, this is the first year that the PSD includes greenhouse gas emissions intensity of each product.

Staff have also prepared the 2020 Power Content Label (PCL) that is to be mailed out to RCEA customers and submitted to the CEC by September 30. The PCL (Exhibit II to Attachment A) includes information from RCEA's PSD and compares it to the state's overall power mix.

Staff ask that the Board adopt a resolution (Attachment A) formally approving and attesting to the information in the PSD and PCL, as part of the documentation required by the CEC for compliance with the PSD Program.

FINANCIAL IMPACTS

None.

RECOMMENDED ACTIONS

Adopt Resolution 2021-4 Approving and Attesting to the Veracity of RCEA's 2020 Power Source Disclosure Report and Power Content Label.

ATTACHMENTS

Attachment A: Resolution 2021-4

Exhibit I: RCEA 2020 Power Source Disclosure Report

Exhibit II: RCEA 2020 Power Content Label

Attachment A

RESOLUTION NO. 2021-4

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE REDWOOD COAST ENERGY AUTHORITY APPROVING AND ATTESTING TO THE VERACITY OF THE 2020 POWER SOURCE DISCLOSURE REPORT AND POWER CONTENT LABEL

WHEREAS, Senate Bill 1305 was adopted in 1997, establishing an Electricity Generation Source Disclosure (also known as Power Source Disclosure or "PSD") Program, which requires retail suppliers of electricity to annually submit a PSD Report to the California Energy Commission ("CEC") and to annually mail a Power Content Label ("PCL") to their electricity customers; and

WHEREAS, Redwood Coast Energy Authority ("RCEA") is a retail supplier of electricity as defined by the PSD Program (Ca. Code of Regs., Title 20, Section 1391(r)); and

WHEREAS, the PSD Regulation requiring an annual audit by an outside certified public accountant of the information in the annual PSD Report, was updated effective May 4, 2020, with an exemption from this requirement for retail suppliers that are public agencies providing electric services, provided that the governing body of the public agency approves at a public meeting the submission to the CEC of an attestation of the veracity of the annual report for each electricity product; and

WHEREAS, RCEA is a public agency providing electric services; and

WHEREAS, the CEC exemption therefore allows the RCEA Board of Directors to approve an attestation of the veracity of RCEA's 2020 PSD Annual Report and PCL provided hereto as Exhibits I and II.

NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that the Board:

- 1. Approves the submission to the CEC of the attached 2020 PSD Report and PCL for RCEA's REpower and REpower+ electricity products; and
- 2. Attests to the veracity of the information presented in the Power Source Disclosure and Power Content Label.

Adopted this 26th day of August, 2021

ATTEST:

Sheri Woo, RCEA Board Chair

Date: _______ Date: ________

Attachment A

CLERK'S CERTIFICATE

I hereby certify that the foregoing is a true and correct copy of Resolution 2021-4 passed and adopted at a regular meeting of the Redwood Coast Energy Authority, County of Humboldt, State of California, held on the 26th day of August, 2021, by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTENTIONS:	
	Clerk of the Board, Redwood Coast Energy Authority

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				
Redwood Coast Energy Authority					
	ELECTRICITY PORTECLIO NAME				
	ELECTRICITY PORTFOLIO NAME				
	REpower				
	CONTACT INFORMATION				
NAME	Colin Mateer				
TITLE	Power Resources Specialist				
MAILING ADDRESS	633 3rd St.				
CITY, STATE, ZIP	Eureka, CA 95501				
PHONE	(707) 269-1700				
EMAIL	cmateer@redwoodenergy.org				
WEBSITE URL FOR PCL POSTING	https://redwoodenergy.org/community-choice-energy/about-community-choice/power-procurement-policy/power-resources/				

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.

Version: April 2021

2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 1: PROCUREMENTS AND RETAIL SALES For the Year Ending December 31, 2020 REDWOOD COAST ENERGY AUTHORITY REpower

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 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.

Bucks Creek

Large hydro

Retail Sales (MWh)	634,014
Net Specified Procurement (MWh)	474,084
Unspecified Power (MWh)	159,930
Procurement to be adjusted	-
Net Specified Natural Gas	•
Net Specified Coal & Other Fossil Fuels	1
Net Specified Nuclear, Large Hydro, Renewables, and ACS Power	474,084
GHG Emissions (excludes grandfathered emissions)	128,677
GHG Emissions Intensity (in MT CO ₂ e/MWh)	0.2030

										GHG Emi	issions Intensity (in MT	CO ₂ e/MWh)	0.2030
					DI	RECTLY DEL	IVERED RENEW	ABLES					
Facility Name	Fuel Type	State or Province	WREGIS ID	RPS 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 ₂ e)	N/A
		WA		60857A		57152	803	-	803	803	-	-	
		WA		60496A		9095	4,594	-	4,594	4,594	-	-	
	iomass & biowa			60076A		10052	7,202	-	7,202	7,202	0.1138	819	
·	iomass & biowa			60083A		50049	24,109	10,652	13,457	13,457	0.0523	703	
	iomass & biowa			60083A		50049	40,181	19,674	20,507	20,507	0.0523	1,072	
	iomass & biowa			60083A		50049	40,181	19,674	20,507	20,507	0.0523	1,072	
		CA		60025A		286	972	-	972	972	0.0363	35	
		CA		60005A		286	22,272	-	22,272	22,272	0.0363	808	
		CA		60008A		286	12,528	-	12,528	12,528	0.0363	455	
		CA		60009A		286	1,728	-	1,728	1,728	0.0363	63	
Clearwater Paper Corporation - #3 turbine gener Bi				60533A		50637	2,000	-	2,000	2,000	0.0252	50	
· · ·		CA		60178A		10707	5,094	_	5,094	5,094	-	-	
	g						D-SHAPED IMPO	RTS		5,551			
					EIA ID of	EIA ID of					GHG Emissions		Eligible for
		State or			REC	Substitute	Gross MWh		Net MWh	Adjusted Net MWh	Factor (in MT	GHG Emissions	Grandfathered
Facility Name	Fuel Type	Province	WREGIS ID		Source	Power	Procured	MWh Resold	Procured	Procured	CO2e/MWh)	(in MT CO ₂ e)	Emissions?
·		ID		63450A	60012	113	800	-	800	800	1.12944	904	
<u> </u>		ID		63450A	60012	55282	3,271	-	3,271	3,271	0.39229	1,283	
·		ID		63451A	60011	55282	9,731	-	9,731	9,731	0.39229	3,817	
Elkhorn Valley Wind Farm W		OR	W186	61034A	56623	55282	4,994	-	4,994	4,994	0.39229	1,959	
Elkhorn Valley Wind Farm W		OR	W186	61034A	56623	60768	12,648	-	12,648	12,648	0.40876	5,170	
Elkhorn Valley Wind Farm W		OR	W186	61034A	56623	59784	12,862	-	12,862	12,862	0.42544	5,472	
		OR	W186	61034A	56623	58557	29,411	-	29,411	29,411	0.40365	11,872	
Grand View 2 West Sc	olar	ID	W5070	61595A	60068	58557	21,411	-	21,411	21,411	0.40365	8,643	
Grand View 5 East Sc	olar	ID	W5069	61595A	P207	58557	3,450	-	3,450	3,450	0.40365	1,393	
Grand View 5 East Sc	olar	ID	W5069	61595A	P207	58557	6,315	-	6,315	6,315	0.40365	2,549	
ID Solar 1, LLC	olar	ID	W5076	63560A	60445	58557	12,897	-	12,897	12,897	0.40365	5,206	
Murphy Flat Power, LLC So	olar	ID	W5395	63449A	60009	58557	1,082	-	1,082	1,082	0.40365	437	
Murphy Flat Power, LLC So	olar	ID	W5395	63449A	60009	3883	798	-	798	798	-	-	
Orchard Ranch Solar, LLC So	olar	ID	W5373	63448A	60010	3883	957	-	957	957	-	-	
Orchard Ranch Solar, LLC	olar	ID	W5373	63448A	60010	6008	1,098	-	1,098	1,098	-	-	
Simcoe Solar, LLC So	olar	ID	W5372	63447A	60748	6008	1,046	-	1,046	1,046	-	-	
Simcoe Solar, LLC So		ID	W5372	63447A	60748	Unspecified	968	-	968	968	0.42800	414	
Vansycle II W		OR	W1458	60944A	58324	Unspecified	3,869	-	3,869	3,869	0.42800	1,656	
·		OR		60944A	58324	6008	800	-	800	800	-	-	
Vansycle II W	/ind	OR	W1458	60944A	58324	55124	700	-	700	700	0.38977	273	
					SPECIF	IED NON-RE	NEWABLE PROC	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	CO2e/MWh)	(in MT CO ₂ e)	N/A
_	arge hydro	CA				217	110	-	110	110	-	-	
		CA				218	766	-	766	766	-	-	
		CA				219	1,119	-	1,119	1,119	-	-	

0.442

Butt Valley	Large hydro	CA		221	464	-	464	464	-	-	
Caribou 1	Large hydro	CA		222	441	-	441	441	-	-	
Caribou 2	Large hydro	CA		223	1,454	-	1,454	1,454	-	•	
Cresta	Large hydro	CA		231	454	-	454	454	-	•	
Drum #1	Large hydro	CA		235	76	-	76	76	-	-	
Drum #2	Large hydro	CA		236	630	-	630	630	-	-	
Electra	Large hydro	CA		239	994	-	994	994	-	-	
Haas	Large hydro	CA		240	773	-	773	773	-	-	
James B Black	Large hydro	CA		249	1,526	-	1,526	1,526	-	-	
Kerckhoff #2 PH	Large hydro	CA		682	591	-	591	591	-	-	
Kings River	Large hydro	CA		254	210	-	210	210	-	-	
Pit 1	Large hydro	CA		265	595	-	595	595	-	-	
Pit 3	Large hydro	CA		266	651	-	651	651	-	-	
Pit 4	Large hydro	CA		267	1,058	-	1,058	1,058	-	-	
Pit 5	Large hydro	CA		268	1,731	-	1,731	1,731	-	-	
Pit 6	Large hydro	CA		269	649	-	649	649	-	-	
Pit 7	Large hydro	CA		270	973	-	973	973	-	-	
Poe	Large hydro	CA		272	777	-	777	777	-	-	
Rock Creek	Large hydro	CA		275	875	-	875	875	-	-	
Salt Springs	Large hydro	CA		279	540	-	540	540	-	-	
Stanislaus	Large hydro	CA		285	843	-	843	843	-	-	
Tiger Creek	Large hydro	CA		287	1,184	-	1,184	1,184	-	-	
South Feather Water and Power Agency - Forbe	Large hydro	CA		417	194	-	194	194	-	-	
South Feather Water and Power Agency - Wood	Large hydro	CA		419	423	-	423	423	-	-	
NID-Chicago Park	Large hydro	CA		412	210	-	210	210	-	-	
GCPD	Large hydro	WA		3887	72,125	-	72,125	72,125	-	-	
CHPD - Rocky Reach	Large hydro	WA		3883	16,604	-	16,604	16,604	-	-	
CHPD - Rock Island	Large hydro	WA		6200	4,271	-	4,271	4,271	-	-	

					ROCUREM	ENIS FROM	ASSET-CONTROL	LING SUPPLIER	(5				
Facility Name	Fuel Type	N/A	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 ₂ e)	N/A
Powerex (Asset-Controlling Supplier)	Wind					Powerex			12	12	0.0342	0	
Powerex (Asset-Controlling Supplier)	Large hydro					Powerex			105,480	105,480	0.034	3,607	
Powerex (Asset-Controlling Supplier)	Natural gas					Powerex			1,692	1,692	0.034	58	
Powerex (Asset-Controlling Supplier)	Nuclear					Powerex			1,020	1,020	0.034	35	
Powerex (Asset-Controlling Supplier)	Other					Powerex			4,740	4,740	0.0342	162	
Powerex (Asset-Controlling Supplier)	Unspecified Powe	r				Powerex			7,056	7,056	0.0342	241	

END USES OTHER THAN RETAIL SALES	MWh

2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 2: RETIRED UNBUNDLED RECS For the Year Ending December 31, 2020 REDWOOD COAST ENERGY AUTHORITY REpower

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 UNBUNDLED RECS State or											
	RETIRED UNBL	JNDLED RECS										
		State or										
Facility Name	Fuel Type	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 REDWOOD COAST ENERGY AUTHORITY REpower

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	240,784	38.0%
Biomass & Biowaste	63,673	10.0%
Geothermal	37,500	5.9%
Eligible Hydroelectric	9,688	1.5%
Solar	63,824	10.1%
Wind	66,099	10.4%
Coal	-	0.0%
Large Hydroelectric	218,792	34.5%
Natural gas	1,692	0.3%
Nuclear	1,020	0.2%
Other	4,740	0.7%
Unspecified Power	166,986	26.3%
Total	634,014	100.0%

Total Retail Sales (MWh)	634,014
GHG Emissions Intensity (converted to lbs CO₂e/MWh)	447
Percentage of Retail Sales Covered by Retired Unbundled RECs	0.0%

POWER SOURCE DISCLOSURE ANNUAL REPORT ATTESTATION FORM for the year ending December 31, 2020 REDWOOD COAST ENERGY AUTHORITY

REpower

I, Colin Mateer, Power Resources Specialist, 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 Redwood Coast Energy Authority, 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: Colin Mateer

Representing (Retail Supplier): Redwood Coast Energy Authority

Signature: /s/ Colin Mateer

Dated: 5/28/2021 Executed at: Arcata, CA

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
	Redwood Coast Energy Authority
	ELECTRICITY PORTFOLIO NAME
	REpower+
	CONTACT INFORMATION
NAME	Colin Mateer
TITLE	Power Resources Specialist
MAILING ADDRESS	633 3rd St.
CITY, STATE, ZIP	Eureka, CA 95501
DUONE	(707) 000 4700
PHONE	(707) 269-1700
EMAIL	ann ata a n Qua de ca a de ca a cura cura
EMAIL	cmateer@redwoodenergy.org
	hater the decorate and a second second to the decorate and
WEBSITE URL FOR	https://redwoodenergy.org/community-choice-energy/about-
PCL POSTING	community-choice/power-procurement-policy/power-resources/

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.

2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 1: PROCUREMENTS AND RETAIL SALES For the Year Ending December 31, 2020 REDWOOD COAST ENERGY AUTHORITY REpower+

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 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)	7,419
Net Specified Procurement (MWh)	7,419
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	7,419
GHG Emissions (excludes grandfathered emissions)	101
GHG Emissions Intensity (in MT CO ₂ e/MWh)	0.0137

Facility Name					DI	RECTLY DEI	LIVERED RENEWA	BLES			ssions Intensity (in MT (0.0
D: (O D	Fuel Type	State or Province	WREGIS ID	RPS 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 CO₂e)	N/A
re Points Solar Park	Solar	CA	W5015	62621A		59523	3,100	-	3,100	3,100	-	-	
rvest Wind	Wind	WA	W1306	60857A		57152	3,265	-	3,265	3,265	-	-	
Fairhaven Power, LLC	Biomass & biowa	€ CA	W583	60076A		10052	890	-	890	890	0.1138	101	
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
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						FIRMED-AN	ID-SHAPED IMPOR	RTS					
		State or				EIA ID of	Cuana MNA/h		Not BOA/b	Adjusted Not BMA/b	GHG Emissions	OHO Fortagions	Eligible
Facility Name	Fuel Type	State or	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	Grandfath Emission
rphy Flat Power, LLC	Solar	ID	WKEGIS ID W5395	63449A	60009		165		165	165	·	(in MT CO ₂ e)	
iphy riat Fower, LLC	Solal		W3393	03449A	00009	3003	100	-	103		- #N/A	-	
-		 	1	-	<u> </u>					-	#N/A #N/A		
-		 	1	-	<u> </u>				-	-	#N/A #N/A		
		+	1	-					-	-	#N/A #N/A		
					SPECIE	IED NON PE	NEWABLE PROCL	IDEMENTS	-	-	#IN/PA		
					OI LOII	ILD NON-ILL	NEWABLE I ROOK	REWENTS			GHG Emissions		
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	Factor (in MT CO2e/MWh)	GHG Emissions (in MT CO ₂ e)	N/A
									-	-	#N/A		
									•	-	#N/A		
									-	-	#N/A		
									•	-	#N/A		
									-	-	#N/A		
									•	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
									-	-	#N/A		
				P	ROCUREME	NTS FROM	ASSET-CONTROL	LING SUPPLIEF	RS				
E - We Nove	- Fred Fred	NIA	NIA	NI/A	NI/A	EIA ID	Gross MWh	MMA/b Dooold	Net MWh	Adjusted Net MWh	GHG Emissions Factor (in MT	GHG Emissions	N/A
Facility Name	Fuel Type	N/A	N/A	N/A	N/A	EIA ID	Procured	MWh Resold	Procured	Procured	CO2e/MWh)	(in MT CO₂e)	N/A
										-	#N/A		
										-	#N/A		
										-	#N/A		
	S MWh									-	#N/A		

2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 2: RETIRED UNBUNDLED RECS For the Year Ending December 31, 2020 REDWOOD COAST ENERGY AUTHORITY REpower+

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										
		State or										
Facility Name	Fuel Type	Province	RPS ID	Total Retired (in MWh)								
				<u>. </u>								

2020 POWER SOURCE DISCLOSURE ANNUAL REPORT SCHEDULE 3: POWER CONTENT LABEL DATA For the Year Ending December 31, 2020 REDWOOD COAST ENERGY AUTHORITY REpower+

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	7,419	100.0%
Biomass & Biowaste	890	12.0%
Geothermal	-	0.0%
Eligible Hydroelectric	-	0.0%
Solar	3,265	44.0%
Wind	3,265	44.0%
Coal	-	0.0%
Large Hydroelectric	-	0.0%
Natural gas	-	0.0%
Nuclear	-	0.0%
Other	-	0.0%
Unspecified Power	-	0.0%
Total	7,419	100.0%
Total Retail Sales (MWh)		7,419
GHG Emissions Intensity (converted	to lbs CO ₂ e/MWh)	30

Percentage of Retail Sales Covered by Retired Unbundled

RECs

0.0%

POWER SOURCE DISCLOSURE ANNUAL REPORT ATTESTATION FORM for the year ending December 31, 2020 REDWOOD COAST ENERGY AUTHORITY REpower+

I, Colin Mateer, Power Resources Specialist, 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 Redwood Coast Energy Authority, 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: Colin Mateer

Representing (Retail Supplier): Redwood Coast Energy Authority

Signature: /s/ Colin Mateer

Dated: 5/28/2021

Executed at: Arcata, CA

2020 POWER CONTENT LABEL

Redwood Coast Energy Authority

https://redwoodenergy.org/power-resources/

Greenhou	ıse Gas Emissio (Ibs CO₂e/MWh	•	Energy Resources	Repower	Repower+	2020 CA Power Mix
Repower	Repower+	2020 CA Utility Average	Eligible Renewable ¹	38.0%	100.0%	33.1%
Trepower -	2020 OA Guilty Average	Biomass & Biowaste	10.0%	12.0%	2.5%	
447	30	466	Geothermal	5.9%	0.0%	4.9%
1000		Eligible Hydroelectric	1.5%	0.0%	1.4%	
	■ Repower		Solar	10.1%	44.0%	13.2%
800			Wind	10.4%	44.0%	11.1%
600	■ Repower+		Coal	0.0%	0.0%	2.7%
600			Large Hydroelectric	34.5%	0.0%	12.2%
400			Natural Gas	0.3%	0.0%	37.1%
	200 2020 CA Utility		Nuclear	0.2%	0.0%	9.3%
200		2020 CA Utility	Other	0.7%	0.0%	0.2%
0 Average	Unspecified Power ²	26.3%	0.0%	5.4%		
		TOTAL	100.0%	100.0%	100.0%	
Percentage of Retail Sales Covered by Retired Unbundled RECs ³ :		0%	0%			

¹The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.

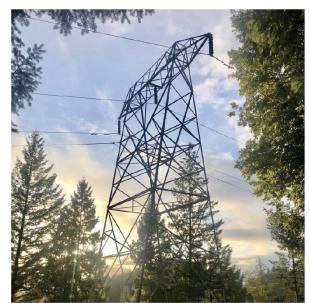
²Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

³Renewable 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:	Redwood Coast Energy Authority (707) 269-1700
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







2020 Power Source Disclosure

Past & Future Power Portfolio

Presentation to RCEA Board of Directors August 26, 2021

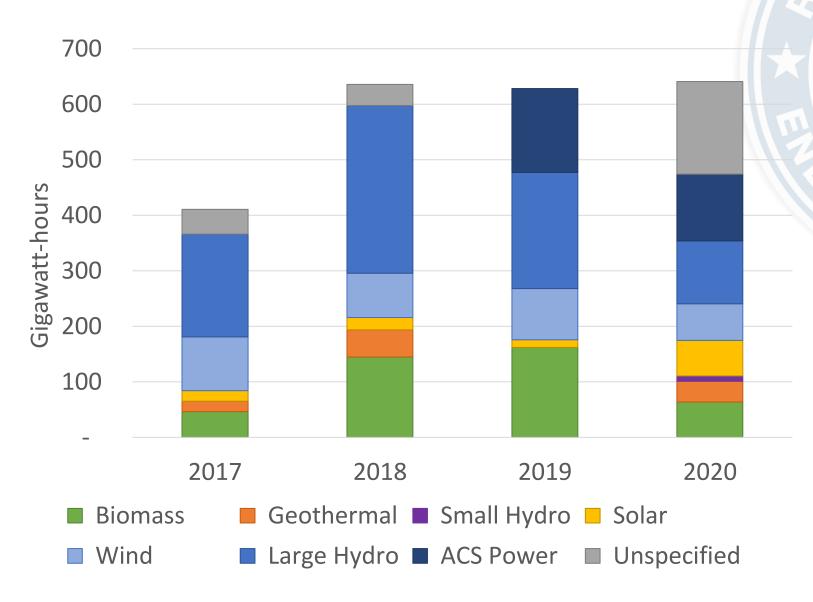
2020 POWER CONTENT LABEL

Redwood Coast Energy Authority

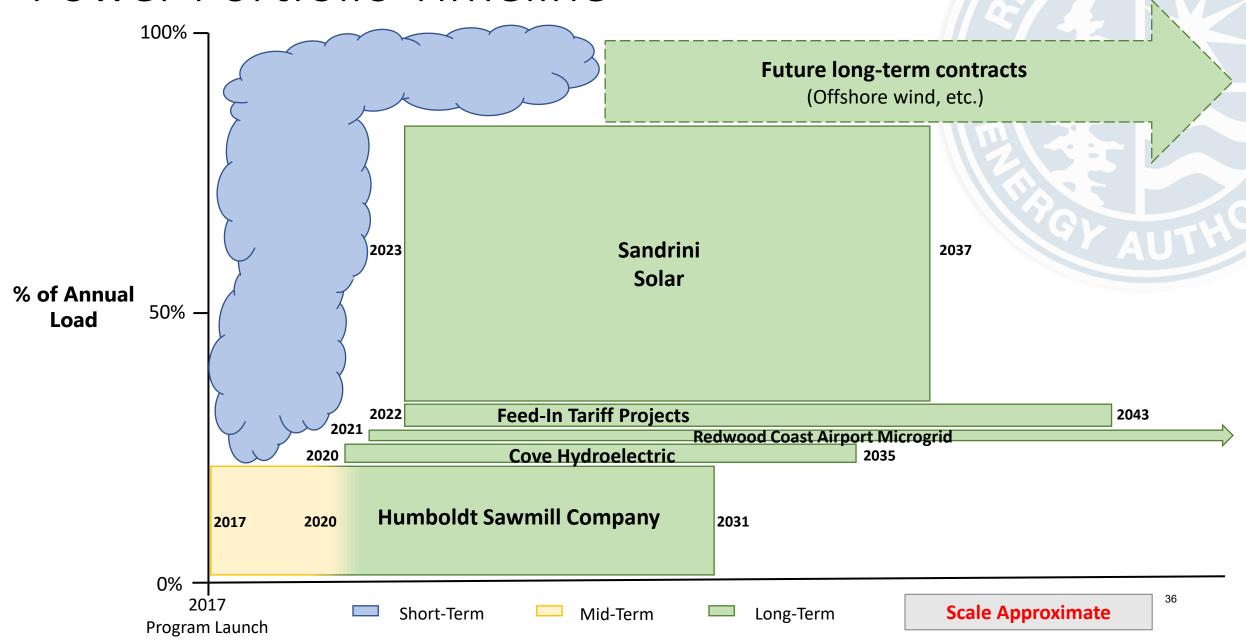
https://redwoodenergy.org/power-resources/

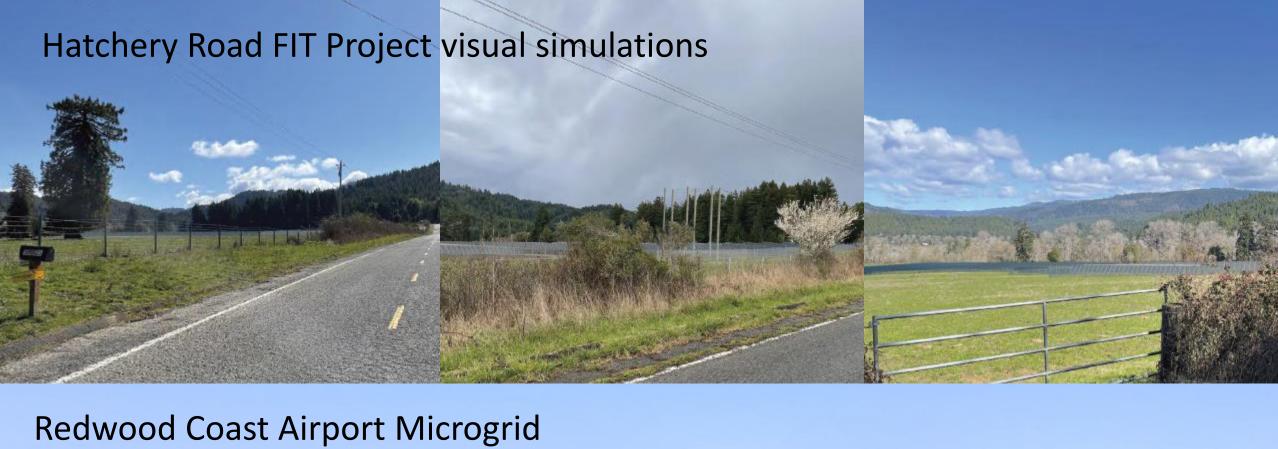
Greenhous	se Gas Emissior (lbs CO ₂ e/MWh)		Energy Resources	REpower	REpower+	2020 CA Power Mix
REpower	REpower+	2020 CA Utility	Eligible Renewable ¹	38.0%	100.0%	33.1%
1/Lpower	Average	Biomass & Biowaste	10.0%	12.0%	2.5%	
447	30	466	Geothermal	5.9%	0.0%	4.9%
1000		Eligible Hydroelectric	1.5%	0.0%	1.4%	
	■ REpower		Solar	10.1%	44.0%	13.2%
800			Wind	10.4%	44.0%	11.1%
600	■ REpower+		Coal	0.0%	0.0%	2.7%
600			Large Hydroelectric	34.5%	0.0%	12.2%
400			Natural Gas	0.3%	0.0%	37.1%
			Nuclear	0.2%	0.0%	9.3%
200		2020 CA Utility	Other	0.7%	0.0%	0.2%
	/	Average	Unspecified Power ²	26.3%	0.0%	5.4%
0			TOTAL	100.0%	100.0%	100.0%
Percentag	e of Retail Sales C	Covered by Retire	d Unbundled RECs ³ :	0%	0%	24

REpower Mix To Date



Power Portfolio Timeline









STAFF REPORT Agenda Item # 6.1

AGENDA DATE:	August 26, 2021
TO:	Board of Directors
PREPARED BY:	Colin Mateer, Power Resources Specialist
	Richard Engel, Director of Power Resources
SUBJECT:	Wave Energy Report

SUMMARY

At the RCEA Board's March 25, 2021, meeting, Director David Grover asked staff to provide information on the current status of wave energy as a possible component of RCEA's renewable future power portfolio. The attached report by Power Resources Specialist Colin Mateer provides the requested information.

FINANCIAL IMPACTS

None

STAFF RECOMMENDATION

None. Information only.

ATTACHMENTS

An Overview of Wave Energy



An Overview of Wave Energy

Written by Colin Mateer, Power Resources Specialist

The turbulent movement of water across the world's oceans is a large source of kinetic energy. The energy is concentrated at the water's surface and decreases rapidly with depth. Waves can travel thousands of miles with little energy loss, and in combination with storms and other wind-driven events, create very energetic seas (OpenEI, 2021).

Innovative technologies are continuing to explore opportunities to harness the kinetic energy from the movement of waves. Such devices are referred to as wave energy converters (WECs). Methods for harnessing this energy source involve placing WECs on or just below the water's surface, which are then anchored to the ocean floor. However, the wave energy industry is still in development, and WEC technologies vary significantly.

North America is estimated to have the greatest power per meter of coastline, unmatched by any other continental coastline worldwide (see Figure 1). Off the coast of the United States, there is an estimated 2.64 trillion kWh of annual energy potential, equal to approximately 64% of U.S. electricity generation in 2019 (EIA, 2020).

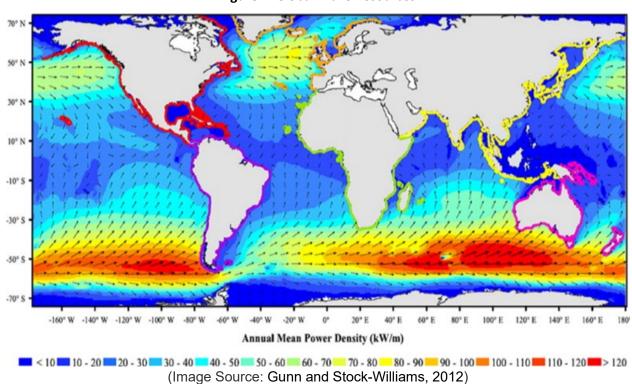


Figure 1: Global Wave Resources

Wave energy is measured as the annual average power per meter of wave crest width, which can be approximated as power per meter of coastline. The kinetic energy in waves is abundant, however, the actual energy that is turned into electricity could be substantially less due to efficiency limitations of the WECs, and environmental regulations along coastlines (OpenEI, 2021).

The California Energy Commission oversees the Renewable Portfolio Standards (RPS) program, which specifies the amount of electrical energy that RCEA and other load serving entities must procure from qualifying (RPS-eligible) renewable sources. The CEC recognizes wave energy as an RPS-eligible resource. However, there have been no wave energy generating facilities that have been developed, or certified by the CEC, within California to date.

In 2007, PG&E launched the WaveConnect project which was intended to demonstrate the technical and economic viability of wave power adjacent to PG&E's service territory. WEC developers could apply to test and demonstrate full scale WEC devices at designated offshore locations, providing invaluable real-world performance data and experience. The multi-stage process included:

- 1. Site selection, permitting, pilot plant design, and assessment of technology and commercial readiness
- 2. Development of infrastructure, undersea cabling, and pilot plant deployment of WECs
- 3. Large scale deployment of WECs in larger quantities and connected to the grid

Offshore areas in the Eureka region were identified by PG&E as one of two potential project sites. However, WaveConnect was halted in 2010 near the end of the first stage for a combination of reasons. WaveConnect was poised to pioneer the permitting and regulatory process for wave power projects in the United States. However, since no wave power projects had ever been licensed by federal or state agencies at the time, the permitting process proved to be complicated, time-consuming and expensive. Additionally, WECs were found to be early-stage devices with evolving designs and little real-world operating experience, raising concerns for cost, performance, and reliability (PG&E, 2011).

The Humboldt County offshore region continues to be an area of interest for potential WEC deployment. On April 8, 2021, RCEA was approached by WEC developer Atargis Energy Corporation. Although their proprietary technology is yet to be commercially deployed, Atargis has successfully secured permits for offshore WEC demonstrations in Ireland. The timeline for commercial deployment is estimated to be approximately $3 - 3\frac{1}{2}$ years should financing be secured from investors.

On July 6, 2021, the U.S. Department of Energy (DOE) released a Funding Opportunity Announcement for up to \$27 million in federal funding for open water Research and Development at the PacWave – South test site that is being constructed off the coast of Newport, Oregon (see Figure 2). This funding opportunity will only fund projects that perform testing at the PacWave - South test site, but will help advance WECs toward commercial viability (DOE, 2021).

Spire Cable
Spire

Figure 2: Concept of PacWave South

(Image Source: PacWave, 2021)

It is unclear when wave power will become competitive with renewable energy alternatives. WECs are still pre-commercial in terms of their technological maturity, in part due to the harsh ocean environment in which WECs operate and the complex regulatory requirements for coastal and off-shore areas. Significant additional investment in design, testing, and demonstration will be needed to improve viability, reduce costs, and assess environmental impacts.

RCEA staff will continue to monitor wave energy opportunities and engage with researchers and developers interested in bringing pilot projects to the Humboldt Coast as a potential addition to RCEA's local clean energy portfolio. Staff will keep the Board informed as any such opportunities arise.

References

Atargis Energy Corporation. Atargis - Website. August 2021. URL: https://atargis.com/

Kester Gunn, Clym Stock-Williams. *Renewable Energy, Volume 44: Quantifying the Global Wave Power Resource.* August 2012.

Open Energy Information (OpenEI). *Portal and Repository for Information on Marine Renewable Energy* (PRIMRE). July 2021. URL: https://openei.org/wiki/PRIMRE

Pacific Gas and Electric Company (PG&E). *PG&E WaveConnect Program, Final Report*. December 2011. URL: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/waveconnect/waveconnect.page?WT.mc_id=Vanity_waveconnect

PacWave. PacWave South Test Site - Website. August 2021.

URL: http://pacwaveenergy.org/south-test-site/

- U.S. Department of Energy (DOE). DOE Announces \$27 Million To Accelerate Ocean Wave Energy

 Technology To Market. July 2021. URL: https://www.energy.gov/articles/doe-announces-27-million-accelerate-ocean-wave-energy-technology-market
- U.S. Energy Information Administration (EIA). *Hydropower Explained, Wave Power*. December 2020. URL: https://www.eia.gov/energyexplained/hydropower/wave-power.php

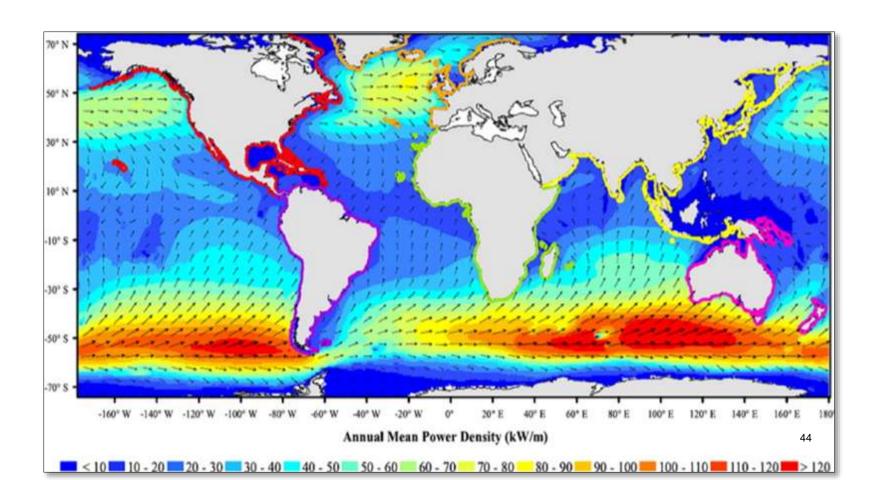


An Overview of Wave Energy

presentation to RCEA Board of Directors August 26, 2021

Wave Energy

- Generated by wind on ocean surfaces
- Major source of kinetic energy globally
- North America estimated to have the greatest global power potential



Wave Energy Converters (WECs)

- capture and convert wave energy into electricity
- no single technology has emerged as a front runner

Attenuator



Point Absorber



Oscillating Wave Surge Converter



Oscillating Water Column



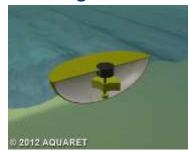
Overtopping/Terminator Device



Submerged Pressure Differential



Bulge Wave



Wave Energy in the U.S.

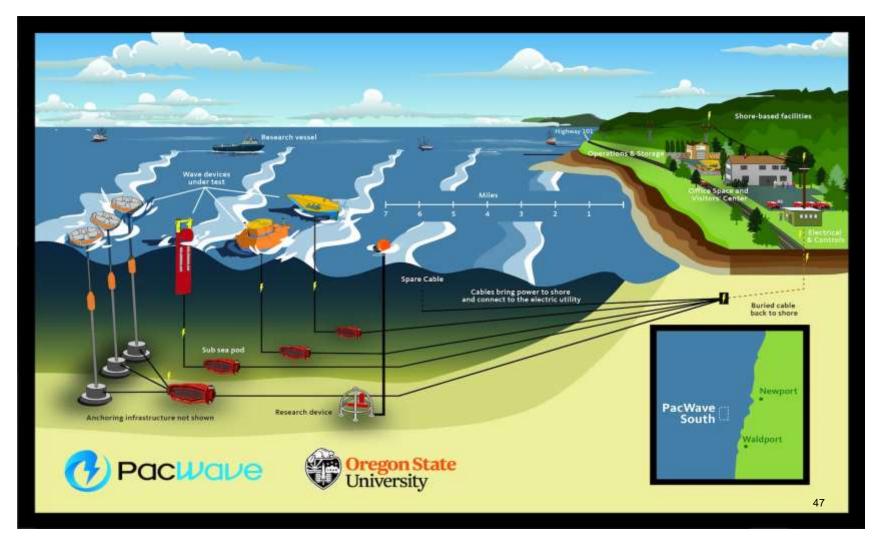
- To date, only wave energy facilities less than 1 MW have been deployed in U.S. for research and development
- PG&E's WaveConnect program
 - Intended to demonstrate technical and economic viability
 - Areas off Humboldt coast were identified as potential project sites
 - Halted in 2010 due to technological and regulatory challenges
- WEC developer Atargis Energy Corporation approached RCEA in April 2021 for a potential future project





PacWave South

"PACWAVE SOUTH is an in-development, state-of-the-art, pre-permitted, accredited, grid-connected wave energy test facility; developed in partnership with US Department of Energy, the State of Oregon and local stakeholders." - PacWave





STAFF REPORT

Agenda Item # 7.1

AGENDA DATE:	August 26, 2021
TO:	Board of Directors
PREPARED BY:	Lori Biondini, Business Planning and Finance Director
SUBJECT:	Fiscal Year 2020-2021 Q4 Budget Update

SUMMARY

The June 2021 Profit and Loss Budget versus Actual report presented this month presents RCEA's preliminary final revenue and expenses for the 2020-2021 fiscal year. Overall, total ordinary income and expenses both came in under budget, however expected debt proceeds of \$6.6M from a USDA Rural Utilities Services guaranteed loan were not realized due to processing delays at the USDA. Although some microgrid construction expenses that will be covered by the USDA loan were also delayed, a significant portion were not. Budgeted expenses exceeded budgeted regular income by \$5.7M; without the debt income and because only half of the anticipated facilities and operations expenses expected to be paid with debt income were incurred, net income for the year is around - \$3.4M.

REVENUE

- Total revenue from grants and contracts was much lower than budgeted. An invoice for the
 remainder of RCEA's subaward of CEC grant funding for Airport Microgrid expenses was
 submitted this month and RCEA is slowly but surely ramping up energy efficiency services as
 a program administrator for the CPUC and a local government partner with PG&E after more
 than a year of pause/sheltering in place.
- Income from debt proceeds was delayed and included in the current 2021-2022 fiscal year budget. Staff have just executed all USDA loan closing documents this past week and are preparing a request to draw upon loan funds.
- Electricity sales ended up around 8% higher than budgeted.

EXPENSES

- As has been relayed during risk management presentations and previous budget updates, wholesale power expenses this past year were higher than originally anticipated. The final number is about 11% over what was budgeted.
- The Airport Microgrid project and associated expenses have been delayed overall, but key
 milestones were reached in early summer with the delivery of battery energy storage system
 components. About half the facilities and operations budgeted expenses for the microgrid
 project were incurred in fiscal year 2020-2021, paid temporarily from reserves until the USDA
 loan funding is received.
- Communications and Outreach and Travel and Meetings expenses were much lower than budgeted due to pandemic-related sheltering in place.

- Total expenses for Professional and Program Services came in slightly under budget, though some sub-categories were over budget -- legal services exceeded its budget by more than 38%. As reported earlier, reliance on legal services has grown commensurate with new programs, initiatives, and power purchase agreements. Staff may also need to begin managing legal costs more closely.
- The bulk of the Incentives and Rebates line item directly correlates with energy efficiency program revenues. Ramping up new programs combined with delayed implementation due to the pandemic resulted in less services and customer rebates.
- As mentioned previously, the non-operating costs line item includes bank fees associated with
 escrow accounts to hold required performance deposits. These fees were difficult to anticipate
 as they were the result of ongoing regulatory rulings and negotiation with third parties and
 were about 20% more than what was budgeted for.

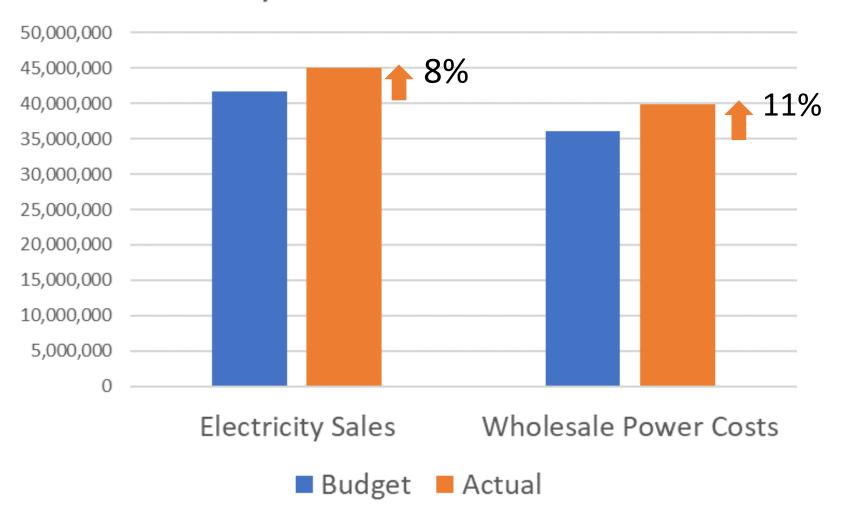
Staff will provide a presentation on the preliminary year-end financials at the Board Meeting.

RECOMMENDED ACTIONS

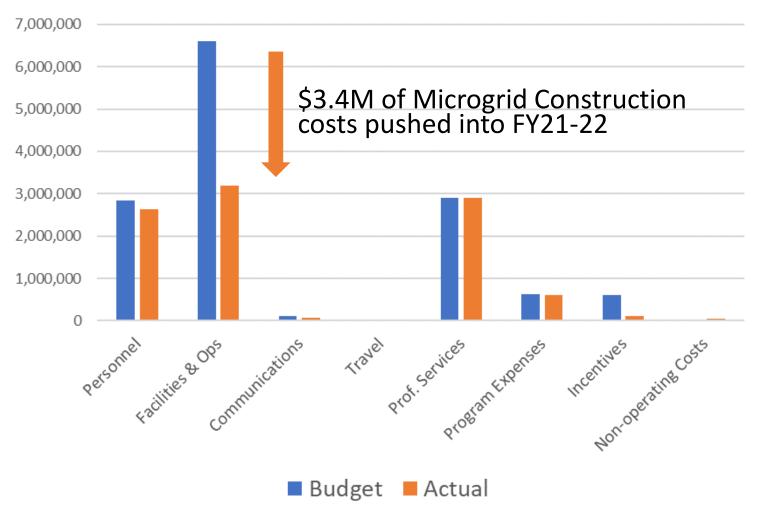
None. Informational only.

Fiscal Year 2020-21 Q4/Year End Budget Update

Electricity Sales and Wholesale Costs



Expenses other than Wholesale Power Costs



Remainer of categories generally at or below Budget

Expenses

	Budget	Actual (preliminary final)
Wholesale Power Supply	\$36.1M	\$40M
Personnel	\$2.8M	\$2.6M
Facilities and Operations including Airport Microgrid	\$6.6M	\$3.2M
Professional and Program Services	\$2.9M	\$2.9M
Communications, Travel, Program Expenses, Incentives and Rebates, Non-operating Costs	\$1.4M	\$0.8M

Preliminary Bottom Line

	Budget	Actual (preliminary final)
Revenue	\$50M	\$46.1M
Expenses	\$49.8M	\$49.5M
Net Revenue	\$0.2M	(\$3.4M)
Net Revenue Excluding USDA Loan	(\$5.8M)	(\$3.4M)

Anticipated Revenue Recovery in FY21-22

- Large portion of ACV income from State grant (\$355K) and USDA loan (\$6.6M) pushed into FY21-22 due to shift in construction timeline from 2020 into 2021 and delays in processing RCEA's loan documents.
- Customer program activities will be ramping back up after pandemic slow-down.
- State funding will pay some amount of delinquent customer bills by January 2022.



STAFF REPORT Agenda Item # 9.1

AGENDA DATE:	August 26, 2021
TO:	Board of Directors
FROM:	Matthew Marshall, Executive Director
SUBJECT:	Offshore Wind and Future Board Meeting Planning (Information only)

SUMMARY

Offshore Wind Update

Executive Director Matthew Marshall will provide a brief update on local and national offshore wind related activities at this Board meeting.

Future In-Person and Hybrid Board Meeting Planning

At the June Board meeting, the Directors requested an update on returning to in-person public meetings.

There have been no announcements that Governor Newsom will extend Executive Order N-29-20's waiver of certain teleconference meeting requirements beyond September 30, however, the current infection surge caused by the highly-transmissible COVID delta variant makes the possibility of safely returning to in-person and hybrid meetings less certain. After September 30, directors participating from a remote location must once again list their remote meeting location addresses on published agendas, and post agendas at and enable public meeting participation from these remote locations. Remote locations must also be ADA accessible.

Two Brown Act teleconference-related bills are still active at the California state legislature: AB 339 and AB 361.

AB 339 would require both in-person and virtual meeting options for Brown Act bodies for jurisdictions of 250,000 residents or more. Smaller jurisdictions may choose to offer both in-person and virtual (internet and phone) public participation but would not be required to do so. Governing body members would follow pre-pandemic remote location posting requirements and there has been no indication of plans to add waivers for those requirements to AB 339. This bill has been ordered to a third reading in the Senate.

AB 361 would allow for virtual Brown Act body meetings without complying with teleconference meeting posting and public access requirements and without a physical meeting location during

a declared state of emergency or when state or local officials impose social distancing measures. AB 361 has also been ordered to a third reading in the Senate.

AB 703, which would have allowed for non-state of emergency, completely virtual meetings without listing or opening teleconference locations to the public, did not cross over to the Senate and is dead for this year.

The Humboldt Bay Municipal Water District is testing a relatively inexpensive (\$1,000) solution in their Board room which RCEA has used in the past as a physical meeting space. Staff awaits information on whether the device performed well. Unsatisfactory audio quality plagued initial tests of the device with earlier software versions. More expensive hybrid meeting solutions, or solutions requiring staff to provide in-meeting video switching support, may be needed. The Water District has expressed interest in cost-sharing an inexpensive solution with RCEA.

Staff are also evaluating hybrid meeting solutions for the smaller RCEA office meeting room.

The Board and Community Advisory Committee may choose to meet in other venues already configured for hybrid meetings. This option may require compensation for meeting room use.

STAFF RECOMMENDATION	
N/A – Information only.	
N/A – Information only.	
ATTACHMENTS	
ATTACHMENTS	

None.