



Redwood Coast Energy Authority
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BOARD OF DIRECTORS MEETING AGENDA

November 18, 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 AB 361 Brown Act open public meeting law revisions signed into law on September 17, 2021, Governor Newsom's State of Emergency Proclamation of March 4, 2020, and Resolution 2021-7 of the RCEA Board of Directors adopted on October 28, 2021, authorizing RCEA's legislative bodies, including but not limited to the RCEA Board of Directors, Community Advisory Committee and subcommittees of these bodies, to conduct remote teleconference meetings, this meeting will not be convened in a physical location. Board members will participate in the meeting via an online Zoom video conference.

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

To participate live during the public comment periods, raise your hand in the online Zoom webinar, or press star 9 (*9) on your phone to raise your hand. You will continue to hear the meeting while you wait. When a staff member prompts you, unmute your phone or computer to speak. Comment time may be limited to 3 minutes, subject to the Chair's discretion.

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

While downloading the Zoom application may provide a better meeting experience, Zoom does not 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.

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 October 28, 2021, Board Meeting.
- 3.2** Approve Disbursements Report.
- 3.3** Accept Financial Reports.
- 3.4** Accept Quarterly Budget Report (Q1).
- 3.5** Authorize Chair Woo to Finalize and Send a Letter to Senator Mike McGuire Expressing Support for the Great Redwood Trail and Opposition to New Coal Export Facilities and Infrastructure.
- 3.6** Authorize Extension of Resolution No. 2021-7 Ratifying Governor Newsom's March 4, 2020, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies, for the Extension Period November 28, 2021, Through December 28, 2021, Pursuant to Brown Act Revisions of AB 361.
- 3.7** Approve Expanding the Mission of the Existing Long-Duration Storage Ad Hoc Committee to Encompass Review of California Community Power's Firm Clean Energy Resources Solicitation.
- 3.8** Approve Contracting with Breadcrumb Cybersecurity for a Total of \$24,375 to Perform a Data Security Assessment, and Authorize the Executive Director to Develop and Execute the Contract and All Associated Documents.
- 3.9** Approve Accepting Technology and Equipment for Clean Heating Initiative Quick Start Grant Program Funds and Authorize the Executive Director to Execute a Contract for the Grant and Any Associated 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 Energy Risk Management Quarterly Report

Accept Energy Risk Management Quarterly Report.

6. NEW CCE BUSINESS – None.

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

7. OLD BUSINESS

7.1. Consultant Presentation on Small Hydropower (Information only)

8. NEW BUSINESS

8.1. RCEA Comments on McKay Tract Subdivision Draft Environmental Impact Report

Approve RCEA comments on McKay Tract Subdivision Draft Environmental Impact Report pertaining to RePower Humboldt strategic plan goals and authorize the Executive Director to submit comments to the Humboldt County Planning and Building Department.

9. STAFF REPORTS

9.1. Update from Executive Director

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. Public Employee Performance Evaluation, pursuant to Government Code Section 54957(b)(1): Executive Director.

12. RECONVENE TO OPEN SESSION

13. CLOSED SESSION REPORT

14. ADJOURNMENT

NEXT REGULAR MEETING

Thursday, December 16, 2021, 3:30 p.m.

Location for this meeting will be announced in keeping with AB 361 Brown Act revisions.



BOARD OF DIRECTORS MEETING DRAFT MINUTES

October 28, 2021 - Thursday, 3:30 p.m.

Notice of this meeting was posted on October 23, 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 the AB 361 Brown Act open public meeting law revisions signed into law on September 16, 2021, and Governor Newsom's State of Emergency Proclamation of March 4, 2020. Chair Woo stated that the posted agenda contained public teleconference meeting participation instructions.

PRESENT: Vice Chair Stephen Avis (left meeting at 5:15 p.m.), Scott Bauer, Chris Curran, David Grover, Mike Losey, Sarah Schaefer (left meeting at 5 p.m.), Frank Wilson, Mike Wilson, Chair Sheri Woo. ABSENT: None. STAFF AND OTHERS PRESENT: Power Resources Director Richard Engel; Power Resources Manager Jocelyn Gwynn; Renewable Properties Founder and President Aaron Halimi; Executive Director Matthew Marshall; Customer Service Coordinator Summer Sanderson; Community Strategies Manager Nancy Stephenson; Clerk of the Board Lori Taketa.

1.1. Teleconference Meeting Authorization

Board Clerk Taketa reviewed the revised Brown Act meeting law virtual meeting requirements and requested the directors to approve Resolution 2021-7 to allow the Board, Community Advisory Committee and subcommittees of those bodies to meet virtually for the next 30 days.

Chair Woo invited public comment. No member of the public commented. Chair Woo closed the public comment period.

M/S: Avis, Grover: Adopt Resolution No. 2021-7 Ratifying Governor Newsom's March 4, 2020, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies for the Period October 28, 2021, through November 27, 2021, Pursuant to Brown Act Revisions.

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

REPORTS FROM MEMBER ENTITIES

Director Mike Wilson reported that other counties have contacted him asking about how to engage in offshore wind development and that Humboldt County is far ahead in this area because a Community Choice Energy program was established here. Director Wilson predicted that a West Coast county coalition on offshore wind will be formed.

Chair Woo reported that Ruth Lake is full and that both generators are operating.

ORAL COMMUNICATIONS

There were no comments from the public on non-agenda items. Chair Woo closed the public comment period.

CONSENT CALENDAR

- 4.1** Approve Minutes of September 23, 2021, Board Meeting.
- 4.2** Approve Disbursements Report.
- 4.3** Accept Financial Reports.
- 4.4** Approve CA Energy Commission Grant Agreement ARV-21-035 for \$200,000 for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure Blueprint Development and Authorize the Executive Director to Execute the Amendment and All Associated Documents.

No director nor member of the public requested items be removed from the consent calendar.

M/S: M. Wilson, Grover: Approve all consent calendar items.

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

Chair Woo confirmed there was a quorum to conduct CCE business.

OLD CCE BUSINESS

6.1 Proposal for Non-Standard Rate Agreement with Nordic Aquafarms

Chair Woo recused herself due to a conflict of interest at 3:42 p.m. Her employer, SHN, has a contract with Nordic Aquafarms. Vice Chair Avis facilitated this discussion.

Power Resources Director Engel reported that Nordic Aquafarms expressed interest in negotiating a non-standard electricity rate with RCEA's CCE program. When fully built, Nordic Aquafarms would be the largest electricity user in Humboldt County with a 22 MW average full load starting around 2030, and smaller loads during construction phases prior to that date. Nordic Aquafarms' electrical usage would be well within historic industrial electrical usage levels on the Samoa Peninsula, which decreased starting around 2000. Nordic Aquafarms has also received permission to purchase direct access electricity, which is usually procured from sources only minimally meeting California renewable energy standards.

As a condition of approving non-standard rate negotiation, the Board had reserved the right to form ad hoc subcommittees to monitor and provide input on negotiation frameworks and progress. The Board delegated contract execution authority to the Executive Director. Staff time and contract development costs were discussed, as was the scale of Nordic Aquafarms' electricity use in the context of future offshore wind power generation, and the company's commitment to RCEA's green energy goals. The directors agreed that an ad hoc committee should be formed due to the potential contract's novelty and size.

Vice-Chair Avis invited public comment.

Member of the public George Baker, who is working with Nordic Aquafarms and RCEA on the non-standard rate, stated that Nordic's permit filings demonstrate a commitment to meeting RCEA's renewable and non-carbon electricity goals, whether with RCEA or with other power providers.

Marianne Naess, Executive Vice President Commercial of Nordic Aquafarms, stated her company's commitment to RCEA's non-carbon, renewable standards regardless of electricity provider. Water to water cooling plans are included in Phase II of the project to reduce energy consumption. The company's goal is to be able to procure clean energy by the time the facility's large energy usage begins. The goal of bringing salmon aquafarms to the U.S. was to eliminate air freight to reach American consumers.

Humboldt Baykeeper Director Jennifer Kalt reported that a consortium of environmental groups submitted comments on the mitigated negative declaration strongly suggesting an agreement with RCEA rather than PG&E for energy procurement because of RCEA's renewable energy standards. Ms. Kalt encouraged formation of an ad hoc committee.

Vice Chair Avis closed the public comment period and thanked Nordic Aquafarms for their support of RCEA goals.

M/S: M. Wilson, Grover: Establish an ad hoc committee with members Curran and Losey to monitor and provide input on staff negotiations with Nordic Aquafarms on a non-standard electric generation rate for the company's proposed aquaculture facility.

The motion passed with a unanimous roll call vote. Ayes: Avis, Bauer, Curran, Grover, Losey, Schaefer, F. Wilson, M. Wilson, Woo. Noes: None. Absent: None. Abstain: None. Recused: Woo.

Chair Woo returned to the meeting at 4:13 p.m.

NEW CCE BUSINESS

7.1. California Community Power Procurement Update

Power Resources Director Engel reported on the Long-Duration Energy Storage request for offers (RFO) in which RCEA is currently participating through the California Community Power (CC Power) joint powers agency. The RFO seeks to jointly procure 500 MW of energy storage which can discharge over a period of 8 hours and be online by 2026. This storage promotes grid reliability as renewable source generation from solar and wind fluctuates. A total of 51 offers have been evaluated by seven participating CC Power members. While a diversity of storage technologies was represented in the respondents, lithium-ion batteries, the current industry storage standard, were at an advantage due to proven reliability. To diversify technologies and potential benefits, the participating CC Power members established a category for non-lithium-ion battery technology for separate consideration.

LS Power's Kern County Tumbleweed long-duration storage project emerged as the current front runner in this procurement process. The project is scheduled to be operational by 2024. RCEA will procure the smallest share of the total CC Power procurement. RCEA's share may

increase by up to 25% of its current share should a participating Community Choice Aggregator (CCA) become unable to participate in the procurement. The CC Power JPA is expected to approve the Tumbleweed agreement by December 8. Participating CCA boards must approve participation agreements between December 2021 and March 2022.

CC Power is also preparing another RFO solicitation for a Firm Clean Energy Resources CPUC-mandated procurement. These resources must be renewable or have zero-emissions, or both and run at full output 80 percent of the time, which wind and solar cannot do. New geothermal or biomass projects are likely respondents for this solicitation. Staff seeks authorization to participate in this joint procurement due to the expense of developing new energy projects or adding new capacity to an existing resource. RCEA's share of the procurement would be for 3.5 MW. Procuring electricity from the existing DG Fairhaven biomass plant would not satisfy this compliance requirement.

The directors discussed the upstream environmental costs of lithium mining in Nevada and on the Pacific Ocean floor, and consequences of growing electricity demand occurring simultaneously with decreased fossil fuel use. A director commented on how climate solutions are not consequence-free panaceas to the problem of growing electricity demand. Large-scale seawater battery technology was mentioned as a potential solution for the area.

Chair Woo invited public comment. No member of the public commented. Chair Woo closed the public comment period.

M/S: M. Wilson, Bauer: Authorize staff to continue to participate in negotiations for procurement of long-duration energy storage from LS Power's Tumbleweed project, with a goal of bringing the Board a Project Participation Share Agreement for approval subsequent to approval of an Energy Storage Services Agreement by the California Community Power Board.

Approve RCEA participation in California Community Power's solicitation for firm clean resources.

The motion passed with a unanimous roll call vote. Ayes: Avis, Bauer, Curran, Grover, Losey, Schaefer, F. Wilson, M. Wilson. Noes: None. Absent: None. Abstain: None. Non-Voting: Woo.

OLD BUSINESS

8.1 Hatchery Road Project Delay and Re-Application

Power Resources Manager Gwynn reported that Blue Lake Hatchery Road solar feed-in tariff projects that were originally scheduled to come online in December 2021 and April 2022 are now scheduled to come online in April 2023 due to PG&E interconnection delays. PG&E determined that a new control building must be constructed, and underground cable laid to connect to PG&E's distribution system. These infrastructure upgrade costs increased the project's interconnection costs. With RCEA's FIT program's pricing adjusting mechanism, the price per MWh that RCEA will pay increases when there are few proposals. The Hatchery Road projects' developer, Renewable Properties, proposes terminating two lower-priced power purchase agreements and reapplying to take advantage of the FIT program's higher current price to maintain project viability. While RCEA would pay \$550,000 more over the 20-

year terms, the agency's goals include local renewable power development. Renewable Properties would not have exclusive rights to the increased grid capacity and RCEA customers would not own the infrastructure. The upgrade would enable more local, renewable resources to be brought online within approximately five miles of the Blue Lake substation.

Renewable Properties Founder and President Aaron Halimi stated this was the first time in many years of U.S. solar project development where he had seen a utility mis-scope interconnection upgrades to the point that costs would render the project unfeasible. Mr. Halimi thanked staff for their support of contract termination and reapplication, and stated there was time to explore interconnection line undergrounding with PG&E.

Chair Woo invited public comment. No member of the public came forward to speak. Chair Woo closed the public comment period.

M/S: M. Wilson, Avis: Approve the Revised Power Purchase Agreements for Hatchery Road C & D with RPCA Solar 5 LLC and authorize the Executive Director to execute the agreements.

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

Director Schaefer left the meeting at 5 p.m. and Vice Chair Avis left at 5:15 p.m.

NEW BUSINESS

9.1 Consideration of Potential New RCEA JPA Members

Executive Director Marshall reported that representatives from Del Norte and Trinity Counties have inquired about joining RCEA as joint power agreement (JPA) signers. Mr. Marshall wished to ascertain the Board's openness to additional membership before exploring the matter further. The JPA allows adjacent neighboring counties and government agencies within those counties to join the JPA by majority vote of the existing Board. Director Mike Wilson received an inquiry from a Del Norte County Supervisor about RCEA membership as a means to engage in offshore wind development as the county currently lacks capacity to do this. CCE and non-CCE membership options were described. If joining the CCE, Del Norte County and Crescent City's weighted vote would be in the middle-range of the current member jurisdiction. Trinity County's weighted vote would be similar to that of Blue Lake or Rio Dell.

The directors discussed the positive and negative aspects of expanded membership. Concerns expressed included unwieldy boards and service areas, potential changes to RCEA's mission, and added power charge indifference adjustment (exit fee) volatility from Del Norte customers leaving Pacific Power for RCEA. Potential benefits discussed included further spread of RCEA's mission and message, procurement savings from the unused Trinity River hydropower allocation, and a good ally in Del Norte County, whose offshore wind resource could be considered for development after the Humboldt lease area.

The Board provided direction that they would not want to have RCEA expand its membership and expend significant time and resources outside of Humboldt County unless there were

tangible benefits to RCEA's current customers and goals. Taking that into consideration, the Board agreed that Executive Director Marshall and Director Mike Wilson should speak with the Del Norte representative once more while expressing the Board's hesitancy to invite additional membership. There was some support for discussion with Trinity County.

No member of the public responded to Chair Woo's invitation to speak. Chair Woo closed the public comment period.

STAFF REPORTS

10.1. Report from Executive Director (Information only)

Executive Director Marshall stated there was nothing to report on offshore wind. Staff compiled [a report on agency work this month](#) which can be shared with the public, staff and Board members of their respective jurisdictions and which can be found on the RCEA Board webpage. Arcata Police Department Business Manager Eileen Verbeck will begin work as RCEA's Deputy Executive Director in November and will be introduced to the Board at next month's meeting.

No member of the public responded to Chair Woo's invitation for comment.

FUTURE AGENDA ITEMS

There were no requests for future agenda items from the directors or the public.

CLOSED SESSION

Chair Woo invited public comment on agenda item 12.1 – Public Employee Performance Evaluation, pursuant to Government Code Section 54957(b)(1): Executive Director.

There was no public comment on this item and the Board adjourned to closed session at 5:31p.m.

The Board reconvened in open session at 5:44 p.m.

Chair Woo stated there was nothing to report out from closed session and adjourned the meeting at 5:44 p.m.

Lori Taketa

Clerk of the Board

Redwood Coast Energy Authority

Disbursements Report

As of September 30, 2021

Type	Date	Num	Name	Memo	Amount
Liability Check	09/08/2021	E-pay	EDD	Taxes	-6,374.94
Liability Check	09/08/2021	E-pay	Internal Revenue Service	Taxes	-28,245.54
Bill Pmt -Check	09/10/2021	ACH	Leapfrog Energy	August 2021 RA	-36,740.00
Bill Pmt -Check	09/10/2021	ACH	Keenan	Anthem Medical Insurance September 2021	-21,938.43
Check	09/10/2021	12596	Steve Richards	Reimbursement for RCAM building permit	-250.00
Check	09/10/2021	12597-99	CCE Customers	RCEA Heat Pump Rebate - Audit #: 5591	-3,150.00
Bill Pmt -Check	09/10/2021	12600	Aiqueous, LLC	PowerPath Configuration Hours - August	-26,962.50
Bill Pmt -Check	09/10/2021	12601	Ameritas - Dental	September 2021	-1,562.84
Bill Pmt -Check	09/10/2021	12602	Ameritas - Vision	September 2021	-388.12
Bill Pmt -Check	09/10/2021	12603	AT&T	RCAM Interstate Dedicated Private Line Service	-1,338.96
Bill Pmt -Check	09/10/2021	12604	Braun Blaising Smith Wynne	Legal Services - Regulatory - July	-2,774.31
Bill Pmt -Check	09/10/2021	12605	Central Coast Community Energy	VOID: Replacement checks: Cost sharing of legal se	0.00
Bill Pmt -Check	09/10/2021	12606	City of Arcata	August Utility User Tax	-7,419.97
Bill Pmt -Check	09/10/2021	12607	City of Eureka-Water	Water service, 7/26-8/25/21	-101.64
Bill Pmt -Check	09/10/2021	12608	Colonial Life	Colonial Life Premiums August 2021	-769.54
Bill Pmt -Check	09/10/2021	12609	Donald Dame	Professional Services August 2021	-306.25
Bill Pmt -Check	09/10/2021	12610	FedEx	ResKit Mailing & USDA loan documents	-129.03
Bill Pmt -Check	09/10/2021	12611	Humboldt Builders' Exchange	Plan scans	-20.00
Bill Pmt -Check	09/10/2021	12612	North Coast Cleaning	August monthly cleaning service	-456.00
Bill Pmt -Check	09/10/2021	12613	PG&E CCA	July CCE Charges	-22,258.88
Bill Pmt -Check	09/10/2021	12614	PG&E EV Account	EV stations August	-601.29
Bill Pmt -Check	09/10/2021	12615	PG&E Utility Account	07/23-08/23/21 office utilities	-585.29
Bill Pmt -Check	09/10/2021	12616	Pierson's Home Ctr	Facility repairs	-25.12
Bill Pmt -Check	09/10/2021	12617	Platt/Rexel	LED Stock purchase	-12,682.03
Bill Pmt -Check	09/10/2021	12618	Premier Financial Group	Advisory Fee	-3,247.89
Bill Pmt -Check	09/10/2021	12619	Ray Morgan Company	Printer Charges: 8/6-9/5/21	-23.03
Bill Pmt -Check	09/10/2021	12620	Recology	August garbage service	-93.21
Bill Pmt -Check	09/10/2021	12621	Times Printing Company	Mailers / Misc. printing services	-1,355.47
Bill Pmt -Check	09/10/2021	12622	Verizon Wireless	August Tablet/cell service for staff	-1,733.66
Bill Pmt -Check	09/10/2021	12623	Wiyot Tribe	RCAM Cultural Monitoring from 03/08-05/26/21	-12,187.54
Bill Pmt -Check	09/10/2021	12624	City of Arcata	August Excessive Energy Use Tax	-2,842.40
Check	09/10/2021	12625	VISA	August Statement	-3,942.90
Liability Check	09/10/2021	90821	Newport Group	Deferred Compensation Contributions	-14,634.63
Paycheck	09/10/2021	ACH	Employees	Payroll	-65,484.84
Check	09/16/2021	91621	PG&E - CPE	Tierra Buena Energy Storage Project Security	-100,000.00
Bill Pmt -Check	09/24/2021	ACH	Humboldt Sawmill Company	Humboldt Sawmill Co. August 2021	-191,754.69
Bill Pmt -Check	09/24/2021	ACH	CalPine Corporation	Calpine August 2021 Costs	-61,645.44
Bill Pmt -Check	09/24/2021	ACH	Keenan	Anthem Medical Insurance October 2021	-21,938.43
Bill Pmt -Check	09/24/2021	12626	Diamond, Nancy	August legal services	-14,553.60
Bill Pmt -Check	09/24/2021	12627	Frontier Energy, Inc.	Professional Services - Program Support	-744.00
Bill Pmt -Check	09/24/2021	12628	Keyes & Fox, LLP	August legal services	-266.70
Bill Pmt -Check	09/24/2021	12629	NYLEX.net, Inc.	Onsite network support services - October	-3,200.00
Bill Pmt -Check	09/24/2021	12630	PG&E CCA	August CCE Charges	-22,268.96
Bill Pmt -Check	09/24/2021	12631	Silicon Valley Clean Energy	Cost sharing of legal services.	-4,485.50
Bill Pmt -Check	09/24/2021	12632	Winzler, John	Office Lease - October 2021	-7,132.00
Check	09/24/2021	12634-42	NEM Customers	NEM Closeouts	-897.46
Bill Pmt -Check	09/24/2021	12643	Bettendorf Enterprises Inc	Bettendorf self-install rebate / Audit 5582	-1,582.27
Check	09/24/2021	12644-47	NEM Customers	NEM Yearly Payouts	-1,381.12
Liability Check	09/24/2021	92421	Newport Group	Deferred Compensation Contributions	-14,295.65
Paycheck	09/24/2021	ACH	Employees	Payroll	-63,841.18
TOTAL					-790,613.25

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

	<u>Jul - Sep 21</u>	<u>Budget</u>	<u>% of Budget</u>
Ordinary Income/Expense			
Income			
5 REVENUE EARNED			
Total 5000 · Revenue - government agencies	124,240.50	911,000.00	13.64%
Total 5100 · Revenue - program related sales	6,058.89	31,000.00	19.55%
Total 5400 · Revenue-nongovernment agencies	977,665.48	1,377,873.00	70.96%
Total 5500 · Revenue - Electricity Sales	11,175,764.60	44,645,168.00	25.03%
Total 5 REVENUE EARNED	12,283,729.47	46,965,041.00	26.16%
Total Income	12,283,729.47	46,965,041.00	26.16%
Gross Profit	12,283,729.47	46,965,041.00	26.16%
Expense			
Total 6 WHOLESALE POWER SUPPLY	10,056,090.13	41,084,582.00	24.48%
Total 7 PERSONNEL EXPENSES	658,909.19	3,517,800.00	18.73%
Total 8.1 FACILITIES AND OPERATIONS	1,902,913.01	3,313,389.00	57.43%
Total 8.2 COMMUNICATIONS AND OUTREACH	36,859.22	118,570.00	31.09%
Total 8.3 TRAVEL AND MEETINGS	44.85	44,300.00	0.1%
8.4 PROFESSIONAL & PROGRAM SRVS			
8400 · Regulatory	22,106.58	180,000.00	12.28%
8410 · Contracts - Program Related Ser	215,058.70	393,000.00	54.72%
8420 · Accounting	220.00	55,000.00	0.4%
8430 · Legal	46,133.55	153,000.00	30.15%
8450 · Wholesale Services - TEA	163,746.00	639,088.00	25.62%
8460 · Procurement Credit - TEA	166,921.30	340,032.00	49.09%
8470 · Data Management - Calpine	184,728.00	738,144.00	25.03%
Total 8.4 PROFESSIONAL & PROGRAM SRVS	798,914.13	2,498,264.00	31.98%
Total 8.5 PROGRAM EXPENSES	149,467.65	631,393.00	23.67%
Total 8.6 INCENTIVES & REBATES	26,221.40	601,000.00	4.36%
Total 9 NON OPERATING COSTS	198.85	414,320.00	0.05%
Total Expense	13,629,618.43	52,223,618.00	26.1%
Net Ordinary Income	-1,345,888.96	-5,258,577.00	25.59%
Other Income/Expense			
Total Other Income	0.00	6,600,000.00	0.0%
Net Other Income	0.00	6,600,000.00	0.0%
Net Income	<u>-1,345,888.96</u>	<u>1,341,423.00</u>	<u>-100.33%</u>

Redwood Coast Energy Authority
Balance Sheet
As of September 30, 2021

	<u>Sep 30, 21</u>
ASSETS	
Current Assets	
Checking/Savings	
1010 · Petty Cash	300.00
1050 · GRANTS & DONATIONS 3840	15,204.58
1060 · Umpqua Checking Acct 0560	443,891.99
1071 · Umpqua Deposit Cntrl Acct 8215	3,020,421.90
1075 · Umpqua Reserve Account 2300	10,000.00
1076 · First Republic Bank - 4999	15,000.00
8413 · COUNTY TREASURY 3839	5,329.01
Total Checking/Savings	<u>3,510,147.48</u>
Total Accounts Receivable	300,798.29
Other Current Assets	
1101 · Allowance for Doubtful Accounts	-1,611,171.13
1103 · Accounts Receivable-Other	6,568,716.72
1120 · Inventory Asset	21,715.00
1202 · Prepaid Expenses	-3,838.43
1205 · Prepaid Insurance	11,998.61
1210 · Retentions Receivable	1,001.00
1499 · Undeposited Funds	14,377.00
Total Other Current Assets	<u>5,002,798.77</u>
Total Current Assets	<u>8,813,744.54</u>
Total Fixed Assets	<u>151,725.39</u>
Total Other Assets	<u>4,293,600.00</u>
TOTAL ASSETS	<u><u>13,259,069.93</u></u>
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Total Accounts Payable	3,478,709.19
Total Credit Cards	9,077.08
Other Current Liabilities	
2002 · Deposits Refundable	252,765.00
2013 · Unearned Revenue - PA 2020-2023	1,464,718.45
Total 2100 · Payroll Liabilities	<u>188,142.67</u>
Total Other Current Liabilities	<u>1,905,626.12</u>
Total Current Liabilities	<u>5,393,412.39</u>
Total Liabilities	5,393,412.39
Equity	
2320 · Investment in Capital Assets	151,725.38
3900 · Fund Balance	9,059,821.12
Net Income	-1,345,888.96
Total Equity	<u>7,865,657.54</u>
TOTAL LIABILITIES & EQUITY	<u><u>13,259,069.93</u></u>



REDWOOD COAST Energy Authority

STAFF REPORT Agenda Item # 3.4

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Lori Biondini, Business Planning and Finance Director
SUBJECT:	Fiscal Year 2021-2022 Q1 Budget Update

SUMMARY

The September 2021 Profit and Loss Budget versus Actual report presented this month reflects RCEA's revenue and expenses for the first quarter of the 2021-2022 fiscal year.

Overall, total ordinary income and expenses are a little over 25% of their respective budgets, which is right on track. Other income, debt proceeds of \$6.6M from a USDA Rural Utilities Services guaranteed loan, began advancing in October and will be reflected in next month's financial reports.

REVENUE

- Total revenue from government agencies is low. This budget line item includes the RCEA-administered California Public Utilities Commission efficiency program as well as a Zero-emissions Vehicles grant from the California Energy Commission (CEC). The paperwork for the CEC grant is not yet finalized so the bulk of the revenue will post in future quarters.
- Over 70% of revenue expected from nongovernment agencies was realized during the first quarter which includes the remainder of RCEA's CEC grant subaward from Humboldt State Sponsored Programs Foundation for airport microgrid expenses.
- Electricity sales are right on budget.

EXPENSES

- Wholesale power expenses are on budget.
- Personnel expenses are low for the first quarter, however RCEA added a Deputy Executive Director at the beginning of November and anticipates filling two more vacancies before the end of the fiscal year.
- The facilities and operations expense category includes capital expenses associated with the airport microgrid and database development that are occurring during the first half of the fiscal year.
- Communications and outreach expenses this quarter included one of the two required customer mailings per year.
- Travel and meetings expenses continue to be very low due to pandemic-related sheltering in place.
- Total expenses for professional and program services are tracking a little higher than budgeted. Procurement credit expenses paid to The Energy Authority, wholesale services,

legal services, and program-related contracts which includes reimbursable engineering expenses for the airport microgrid, are all higher than anticipated. Staff will continue to monitor spending in these categories and prepare a mid-year budget revision, if necessary.

- The bulk of the incentives and rebates line item directly correlates with energy efficiency program revenues, but also includes some CCE-funded customer rebate programs which became available in the first quarter and have steadily increasing customer participation.
- The non-operating costs category includes payments towards the USDA loan, however due to the delays in receiving the loan funds, the repayment schedule starts after the end of this fiscal year. Once all debt proceeds are advanced staff will evaluate whether to move planned repayments to the 2022-23 fiscal year budget.

RECOMMENDED ACTIONS

Accept Quarterly Budget Report (Q1).



STAFF REPORT
Agenda Item # 3.5

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	Letter to Sen. McGuire expressing support for the Great Redwood Trail and opposition to new coal export facilities and infrastructure

SUMMARY

At the request of RCEA Board Chair Woo, staff prepared the attached draft letter to Senator Mike McGuire expressing support for the proposed Great Redwood Trail and opposition to new coal export facilities and infrastructure.

The below background information is taken from the staff report to the County Board of Supervisors that accompanied the County resolution opposing coal export that the supervisors unanimously passed on October 5:

After decades of failed attempts to restart freight service on over 300 miles of the Northwestern Pacific Railroad, which at one point ran from Marin County to north of Eureka, State Sen. Mike McGuire, D-Healdsburg, in February 2018 introduced the Great Redwood Trail Act (SB1029), a bill to convert the publicly owned line into a destination for bikers and hikers.

In an effort to facilitate the further development of that trail, NCRA has recently submitted an application to the federal Surface Transportation Board to “railbank” the section of rails between Willits and Humboldt County. Railbanking allows for the removal of tracks, if necessary, to facilitate trail development, but also preserves the rail corridor for future transportation-related uses, including the restoration of rail travel/freight transport.

In an August 16, 2021, filing before the Surface Transportation Board, a newly-formed corporation called North Coast Railroad Company, L.L.C. objected to railbanking and alleged that they intend to rebuild the dormant rail line. From reporting, it appears that coal interests from the Powder Basin region of Wyoming are behind this corporation. The proposed use is suspected to be for the transportation of coal that is mined in the Wyoming region and bound for Asian nations. If their “offer of financial assistance” is accepted by the Surface Transportation Board, the historic rail line and public owned transportation asset would be transferred to the private company. If transferred, Humboldt County and the State would lack the ability to affect the use of the rail line as many issues would be preempted from local control.

In addition to the County of Humboldt and other local opposition, the Mendocino Board of Supervisors, Ukiah City Council, Santa Rosa City Council and the Transportation Authority of Marin have also taken positions opposing the proposal.

STAFF RECOMMENDATION

Authorize Chair Woo to finalize and send a letter to Senator Mike McGuire expressing support for the Great Redwood Trail and opposition to new coal export facilities and infrastructure.

ATTACHMENT

Draft letter to Sen. McGuire expressing support for the Great Redwood Trail and opposition to new coal export facilities and infrastructure

DRAFT Letter Text

Re: Support for the proposed Great Redwood Trail and opposition to coal export facilities and infrastructure.

Honorable Senator McGuire,

The Redwood Coast Energy Authority (RCEA) would like to express its support for the proposed Great Redwood Trail and its strong opposition to coal exports through Humboldt County.

To complete the Great Redwood Trail, the North Coast Railroad Authority petitioned the Surface Transportation Board to preserve its right-of-way for public use under the railbanking provisions of the National Trail System Act. Our understanding is that on August 16, 2021, attorneys on behalf of the North Coast Railroad Company, L.L.C. moved before the Surface Transportation Board to oppose railbanking efforts for the line and indicated that it would offer financial assistance to rebuild the defunct line to “deploy it in the transportation of high-volume shipments by rail.” The North Coast Railroad Company, L.L.C. evidently represents coal interests seeking avenues for the export of coal to foreign markets via shipping terminals on Humboldt Bay.

Coal has the largest climate impact per unit of energy produced, has contributed the largest proportion of the carbon dioxide now causing global climate change, and which is resulting in local impacts including increasingly catastrophic wildfires and accelerating sea level rise.

Coal is a friable material which invariably produces large amounts of hazardous dust during transportation, handling, storage, and processing, which pollutes local air and waterways and has significant negative health effects for humans and wildlife. Coal-fired power plants emit mercury into the atmosphere which is deposited throughout the world in rain and fog, contaminating fish with mercury at levels that can harm human health, particularly children.

RCEA joins the Humboldt County Board of Supervisors and many other local and regional stakeholders in opposing coal exports through Humboldt County and/or the construction of any potential new infrastructure for the transportation, storage, processing or export of coal.

Sincerely,

Sheri Woo
Chair, RCEA Board of Directors



REDWOOD COAST Energy Authority

STAFF REPORT Agenda Item # 3.6

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Lori Taketa, Clerk of the Board
SUBJECT:	Virtual Board Meeting Authorization Extension

SUMMARY

On September 16, 2021, Governor Newsom signed AB 361, which allows legislative bodies to meet virtually provided there is a state of emergency, and either (1) state or local officials have imposed or recommended measures to promote social distancing; or (2) the legislative body determines by majority vote that meeting in person would present imminent risks to the health and safety of attendees.

In order to continue to qualify for AB 361's waiver of in-person meeting requirements, the Board must, within 30 days of its first meeting under AB 361, and every 30 days thereafter, make findings that (a) state or local officials continue to recommend and promote social distancing, or that (b) an in-person meeting would constitute an imminent risk to the safety of attendees. This item would extend Resolution 2021-7 by making the necessary findings to permit remote meetings.

STAFF RECOMMENDATION

Authorize extension of Resolution No. 2021-7 Ratifying Governor Newsom's March 4, 2020, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies, for the extension period November 28, 2021, through December 28, 2021, pursuant to Brown Act revisions of AB 361.

ATTACHMENTS

Resolution No. 2021-7 - A Resolution of the Board of Directors of the Redwood Coast Energy Authority Ratifying the Proclamation of a State of Emergency by Governor Gavin Newsom on March 4, 2020, and Authorizing Remote Teleconference Meetings of the Legislative Bodies of Redwood Coast Energy Authority for the Period October 28, 2021, through November 27, 2021, Pursuant to Brown Act Provisions.

RESOLUTION NO. 2021-7

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE REDWOOD COAST ENERGY AUTHORITY
RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY
BY GOVERNOR GAVIN NEWSOM ON MARCH 4, 2020,
AND AUTHORIZING REMOTE TELECONFERENCE MEETINGS
OF THE LEGISLATIVE BODIES OF REDWOOD COAST ENERGY AUTHORITY
FOR THE PERIOD OCTOBER 28, 2021, THROUGH NOVEMBER 27, 2021,
PURSUANT TO BROWN ACT PROVISIONS**

WHEREAS, the Redwood Coast Energy Authority (RCEA) is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

WHEREAS, all meetings of RCEA's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch RCEA's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within RCEA's boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body has determined that meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, such conditions now exist in Humboldt County, specifically, Governor Newsom's Proclamation of a State of Emergency of March 4, 2020, remains in effect; and

WHEREAS, the Centers for Disease Control and Prevention continue to list Humboldt County as an area of high transmission of COVID-19 and Humboldt County Health Officer Dr. Ian Hoffman issued a recommendation on September 29, 2021, to continue to practice physical distancing at meetings of legislative bodies and stated that virtual meetings do the most to reduce COVID-19 risk; and

WHEREAS, the Board of Directors does hereby find that the COVID-19 public health emergency and increased risk of infection has caused, and will continue to cause, conditions of peril to the safety of persons within Humboldt County that are likely to be beyond the control of services, personnel, equipment, and facilities of RCEA, and desires to ratify the proclamation of state of emergency by the Governor of the State of California; and

WHEREAS, as a consequence of the emergency, the Board of Directors does hereby find that the legislative bodies of RCEA shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, public access and participation in meetings of RCEA's legislative bodies shall be provided via online video conferencing software which shall also allow for public participation and real-time public comment opportunity by telephone.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF REDWOOD COAST ENERGY AUTHORITY DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Proclamation of Imminent Risk of In-Person Meetings. The Board hereby proclaims that as Humboldt County remains an area of high transmission of COVID-19 as determined by the Centers for Disease Control and Prevention, that meeting in-person presents imminent risks to the health or safety of attendees.

Section 3. Ratification of Governor's Proclamation of a State of Emergency. The Board hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

Section 4. Remote Teleconference Meetings. The staff and legislative bodies of Redwood Coast Energy Authority, including but not limited to the Board of Directors and its subcommittees, and the Community Advisory Committee and its subcommittees, are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective for 30 days or until this Resolution is extended by a majority vote of the Board of Directors in accordance with Section 6 of this Resolution.

Section 6. Extension by Motion. The Board of Directors may extend the application of this Resolution by motion and majority vote by up to 30 days at a time, provided that it makes all necessary findings consistent with and pursuant to the requirements of Section 54953(e)(3).

Adopted this 28th day of October, 2021

ATTEST:

Sheri Woo, RCEA Board Chair

Lori Taketa, Clerk of the Board

Date: _____

Date: _____

CLERK'S CERTIFICATE

I hereby certify that the foregoing is a true and correct copy of Resolution 2021-7 passed and adopted at a regular meeting of the Redwood Coast Energy Authority, County of Humboldt, State of California, held on the 28th day of October, 2021, by the following vote:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

Clerk of the Board, Redwood Coast Energy Authority



STAFF REPORT
Agenda Item # 3.7

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources
SUBJECT:	Proposed Expansion of Ad Hoc Procurement Committee Scope

SUMMARY

This item follows from these previous Board actions:

- In October 2020, the Board created an ad hoc committee to review procurement of long-duration energy storage, which RCEA and other CCAs intended to procure through a joint solicitation. This procurement was launched in anticipation of a California Public Utilities Commission (CPUC) decision ordering load-serving entities such as RCEA to contract for long-duration storage. This decision was in fact issued in June 2021. Current members of the ad hoc committee include Directors Losey, Curran, Bauer, and Avis.
- In December 2020, the Board adopted a resolution approving a joint powers agreement creating the California Community Power (CC Power) Joint Powers Agency, with the purpose among other things of pursuing joint procurement by community choice aggregators including RCEA. The long-duration storage procurement already underway was subsequently absorbed into CC Power's scope.
- In October 2021, the Board approved RCEA participation in a new CC Power solicitation for firm clean energy resources, another energy product category that RCEA and other load-serving entities were instructed to procure by the CPUC in its June 2021 decision. That CC Power solicitation is now active.

As it did with the long-duration storage procurement, the Board may wish to have some Board-level visibility into the details of the firm clean energy resources procurement process over the coming months. Staff queried the four Board members serving on the long-duration storage ad hoc committee, and they all agreed to expanding the scope of this committee to monitor the new solicitation, as an alternative to creating a new ad hoc committee whose members would need to familiarize themselves with CC Power's procurement process. The long-duration storage committee could be renamed as a 2020-21 CC Power procurement monitoring committee.

FINANCIAL IMPACTS

There are no specific financial impacts to RCEA associated with adopting staff's recommendation to expand the scope of the existing ad hoc committee.

STAFF RECOMMENDATION

Approve expanding the mission of the existing long-duration storage ad hoc committee to encompass review of California Clean Power's firm clean energy resources solicitation.

ATTACHMENTS

None



STAFF REPORT

Agenda Item # 3.8

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Dana Boudreau, Director of Infrastructure Planning and Operations
SUBJECT:	Data security audit contract with Breadcrumb Cybersecurity

SUMMARY

RCEA's cybersecurity procedures continue to evolve, particularly in the realm of data security compliance regarding customer utility data. As part of the ongoing Energy Watch contract with PG&E, RCEA has been required to complete periodic third-party data security compliance assessments since 2013. The California Public Utilities Commission (CPUC) also requires a triannual data security audit of all Community Choice Aggregators.

Earlier this year PG&E initiated their third-party assessment and as of September RCEA had satisfied all but one required security control: an external vulnerability assessment and associated network penetration test. This testing is a critical element of the third-party assessment and must be completed before the end of the year for RCEA to have continued access to PG&E's customer data portal, which is an integral part of RCEA's energy efficiency program delivery. This testing also supports RCEA's next required CPUC triannual data security audit which is due to be completed in the first part of 2022.

Staff contacted five data-security consulting firms for qualifications and price quotes to perform the needed external vulnerability assessment and network penetration test. Breadcrumb Cybersecurity was the lowest-cost responsive vendor at \$24,375. This cost exceeds the Executive Director's contracting authority of \$20,000, and staff is requesting the Board approve contracting with Breadcrumb Cybersecurity.

FINANCIAL IMPACTS

The cost to complete required testing, audit, and reports is \$24,375. This testing is a necessary element of RCEA's CPUC data security audit and the PG&E Energy Watch energy efficiency program contract. If the testing is not completed before the end of the year PG&E will freeze access to the PG&E utility data portal that RCEA accesses through the Energy Watch contract.

STAFF RECOMMENDATION

Approve contracting with Breadcrumb Cybersecurity for a total of \$24,375 to perform a data security assessment and authorize the Executive Director to develop and execute the contract and any associated documents.

ATTACHMENTS

Breadcrumb Cybersecurity proposal and Scope of Work.

Proposal for Services Security Posture Assessment

Breadcrumb Cybersecurity ("Breadcrumb," "Consultant"), a California cybersecurity firm, has developed this Proposal for Services ("Proposal") and Scope of Work ("SOW") for the Customer entity ("Customer"), as each is defined below, as of the Effective Date (as defined by the "Effective Date" on the last page of this PROPOSAL). Either party may be referred to individually as the "Party" or collectively as the "Parties."

This Proposal represents Breadcrumb's current understanding of the Customer's expressed business need(s). During the review of this Proposal, the Customer is encouraged to communicate desired modifications, changes, additions, or otherwise clarify where required.

1. Overview. The premise of this Proposal is to provide a holistic security posture assessment and penetration test of the Customer's IT infrastructure. Through various tactics and techniques, Breadcrumb engineers will play the role of a persistent threat, attempting to exploit the threat prevention strategies of the Customer. In general terms, Breadcrumb is seeking the unintended or unauthorized disclosure of sensitive data or unauthorized access to systems that would logically lead to such disclosures. In-scope applications, processes, systems, and discovered vulnerabilities will be evaluated for best practices within their relevant CIS20 control categories.
2. Scope of Work.
 - a. Vulnerability Assessment. A comprehensive vulnerability assessment is the foundation for understanding an organization's security posture. Breadcrumb will evaluate the Customer's technology assets for known security vulnerabilities and weaknesses through automated and manual discovery processes and baseline findings against industry best practices. For the purposes of this Proposal and Scope of Work, Breadcrumb will leverage the CIS 20 Controls framework ("CIS20") as an industry baseline.
 - i. In-Scope Assessment Categories
 1. External Vulnerability Assessment - automated and manual assessment of public-facing IP connected assets for known vulnerabilities/CVEs
 2. Internal Vulnerability Assessment - automated and manual assessment of internal IP connected assets for known vulnerabilities/CVEs
 3. Privilege Use – systematic review of privileged credential use, credential disclosure, hash disclosure, and POLP
 4. Logging and Auditing – systematic review of logging and auditing capabilities, log maintenance, and real-time threat analysis

5. Malware/AV Defenses – systematic review of installed/deployed anti-virus solution(s) against known bypass mechanisms, validation of common attack vectors, and testing of known malicious payloads
 6. Active Directory Security – review of credential disclosure, account control, GPO best practices, and Active Directory password/hash crypto-strength(s)
 7. Data Protection – systematic review of Data Loss Prevention (DLP) controls, organizational susceptibility to data leakage, and data encryption standards
 8. Boundary Protection – systematic review of ingress/egress policies, insider threat concerns / best practices, and simulated data exfiltration exercises
 9. Network Protocols – systematic review of 'over the wire' protocols for clear text disclosures, challenge disclosures, and layer-2 protocol manipulation
- b. Simulated Penetration Testing. A network penetration test provides your organization with a unique birds-eye view of your security system's effectiveness. Newer companies may not yet have a handle on their network security. Conversely, more mature companies often have large, multi-faceted networks that easily overlooked elements - particularly as more organizations move to cloud-based systems. Both scenarios leave the potential for catastrophic breaches. During the penetration test, Breadcrumb engineers will carefully and systematically play the role of a determined hacker, simulating sophisticated, and targeted real-world attacks. Actual hacking tools and industry-leading scanning, mapping, and analysis frameworks will be leveraged to identify and exploit configuration deficiencies.
- i. Penetration Testing Scope
 1. External, public-facing IT assets (i.e., websites, server systems, interfaces VPNs, APIs, NAT'd protocols, applications, and other similar assets)
 2. Targeted evaluation of Customer employees for disclosure of sensitive information
 - ii. Typical Penetration Testing Strategies
 1. Credential Harvesting
 2. Custom Malware Development
 3. Data Inference and Metadata Harvesting
 4. Domain Hijacking

5. Help Desk Impersonation
 6. Vendor Impersonation
- iii. Penetration Testing Methodology
1. Network Scope
 - a. Effective communication with your organization is emphasized to create an operating environment that is comfortable for both parties. Variables such as IT assets, IP scopes, engagement timelines, and rules of engagement will be discussed.
 2. Information Gathering
 - a. Employing numerous reconnaissance strategies, Breadcrumb engineers will collect as much information as possible on the Customers' organization. The harvested information will allow Breadcrumb engineers to assess potential risk, exploitability likelihood and ultimately guide the decision on the chosen attack vector.
 3. Enumeration and Scanning
 - a. Utilizing various automated tools, scripts, and other methods of advanced information gathering, Breadcrumb engineers will enumerate and validate attack surfaces.
 4. Attack & Penetration
 - a. After careful and intentional preparation, the engagement focus turns to the exploitation of isolated vulnerabilities. Breadcrumb engineers will otherwise attempt to prove the existence of conceptual attack vectors while preserving the integrity of the network.

- c. Executive Reporting. At the conclusion of the engagement, Breadcrumb will develop an 'Information Technology Security Assessment' report, summarizing all objectives, processes, findings, and recommendations. The report will include the following:
- i. Engagement Overview - this section will highlight the premise of the scope, the services being performed, and the key objectives. This is useful for regulators, insurance companies, and key-Customers seeking clarity on your security assessment practices.
 - ii. Executive Summary - this section is intended for executive personnel, and in plain terms, outlines the overall risk for the organization. In addition, it will detail the following: 1) Summary of Strengths, 2) Summary of Weaknesses, and 3) Strategic Recommendations.
 - iii. Summary of Findings - this section breaks down each security 'control category' and presents 'key findings' and 'key recommendations' associated with each category. This section is highly technical and is intended for senior technical personnel.
 - iv. Recommendations / Quick Wins - understanding that security assessment reports can be overwhelming to start with, this section outlines practical and tactical steps to make immediate and measurable improvements to the organization's security posture.

3. Assumptions.

a. Breadcrumb Cybersecurity

- i. Provide a team of consultants that are qualified to carry out the proposed Scope of Work
- ii. Provide regular project updates throughout the engagement
- iii. Promptly respond to project-related emails and phone calls

b. Customer

- i. Assign a primary point of contact (POC) within the organization
- ii. As required, provide access to IT systems and networks
- iii. As required, provide access to network maps and related documentation

4. Typical Engagement Timeline.

a. Kick-Off Meeting

- i. Duration: 60-90 minutes

b. Security Assessment & Control Review

- i. Duration: 4-5 weeks

c. Penetration Testing Exercises

- i. Duration: 4-6 weeks

d. Report Development

- i. Duration: 5-7 business days

e. Delivery & Presentation

- i. Duration: 90-120 minutes

5. Investment. This Proposal is represented as a flat fee consulting engagement. *The proposed fee is representative of all labor, travel, insurances, taxes, and material. Any addition in scope and cost will result in a subsequent Proposal that must be signed by all parties.*

a. Fees.

Description	Fee
Security Posture Assessment & Vulnerability Analysis Simulated Penetration Testing	\$29,875.00
(discount)	-\$5,500.00
Total Proposal Fee	\$24,375.00

- b. Terms. Breadcrumb will invoice 50% of the total fees before the commencement of the project and the remaining balance upon delivery of the final report.

- c. Expenses. The Customer will reimburse Breadcrumb for all approved out-of-pocket expenses incurred by Breadcrumb in connection with the Services.

6. Proposal Review.

- a. Please read the Proposal in its entirety to make sure you understand all the details of our proposed scope and services. It's important to us that everything is transparent and understood from the beginning to lay a solid foundation for a great working relationship.
- b. If you have any questions at all, please let us know. We are happy to clarify any points and finding the best way to work together.
- c. Once we receive notification of your acceptance, we will contact you shortly to discuss the next steps.
- d. If you would like to speak to us by phone, don't hesitate to call (559) 578-4800

IN WITNESS WHEREOF, the parties have executed this PROPOSAL effective as of _____,
the "Effective Date".

The Cybersecurity Initiative, Inc., dba Breadcrumb Cybersecurity
a California corporation

BY: _____ DATE: _____

Printed Name: Brian W. Horton, CISSP

Title: CEO

CUSTOMER

Redwood Coast Energy Authority

BY: _____ DATE: _____

Printed Name: _____

Title: _____



STAFF REPORT
Agenda Item # 3.9

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Stephen Kullmann, Director of Demand Side Management
SUBJECT:	Accept TECH Quick Start Pilot Grant

SUMMARY

RCEA's Demand-Side Management (DSM) Department has implemented a Heat Pump Rebate Program using joint funds from the Community Choice Energy program, as directed by the Board, and California Public Utility Commission (CPUC) Program Administrator funds.

CPUC regulations do not allow for the incentivizing of heat pump fuel switching measures for non-natural gas fuel types, such as kerosene, fuel oil, propane, or cord wood. Heating costs for these fuels, and greenhouse gas impacts, are generally higher than those from natural gas. DSM applied for competitive grant funding to provide heat pump rebates for customers dependent on non-standard heating fuels and was approved to receive \$99,500 through the Technology and Equipment for Clean Heating (TECH) initiative Quick Start Grant (QSQ) program.

These funds will cover rebates for eligible heat pump equipment and any necessary panel upgrades, which will be added to RCEA's existing rebate amount. The grant will also fund 500 hours of program intern work and 150 hours of project technician work. Additional staff time will serve as a cost share. After meeting with the TECH grant team, the available budget may be increased by \$60,000 up to a total award of \$155,000. The project term is 16 months and may be extended upon successful completion.

FINANCIAL IMPACTS

RCEA will receive \$99,500 - \$155,000 in grant funding depending on the final Scope of Work, which will be used toward customer heat pump rebates and staff time. The cost-share/in-kind match for the grant will come from already-committed and budgeted RCEA staff time and heat pump rebate funding.

RECOMMENDED ACTIONS

Approve accepting Technology and Equipment for Clean Heating (TECH) initiative Quick Start Grant funds and authorize the Executive Director to execute a contract for the grant and any associated documents.

ATTACHMENTS

Technology for Clean Heating Quick Start Grant Proposal
Technology for Clean Heating Terms and Conditions



QSG Implementation Plan / Solicitation Outline

Program Description

TECH

The Technology and Equipment for Clean Heating (TECH) initiative is a \$120 million program aimed at driving adoption of low-emission space and water heating technologies in homes across California, advancing the state's mission to achieve carbon neutrality by 2045. The initiative was created as part of California Senate Bill 1477 and is funded by revenues collected through California's Cap-and-Trade program. TECH is administered by Energy Solutions and a team of expert partners with oversight and management from the CPUC. Through a combination of financial incentives, outreach and education, collecting and analyzing market data, and pilot programs, TECH will serve as a national model for accelerating the adoption of heat pump technologies for space and water heating.

Quick Start Grant Overview

TECH will be providing Quick Start Grants (QSG) to fund localized, vanguard approaches to accelerate deployment of heat pump space and water heating technologies in single family and multifamily homes. The goal of the QSG program is to test market transformation strategies and approaches, support technology development, and leverage high-impact opportunities to increase the installed base of heat pump technologies. QSG funding will help facilitate rapid integration of promising concepts into TECH and will ensure that innovative approaches have a funding source to scale deployment or refine strategic ideas.

QSG Funding Categories & Eligibility

The focus of the QSG program is to fund projects and partnerships that accelerate heat pump space and water heating deployment and could be scaled to statewide approaches in the future. Target areas include:

- Scalable project finance solutions

- Initiatives serving low-income households, disadvantaged communities (DACs),¹ hard-to-reach customers,² environmental and social justice communities,³ households with high energy burdens, multifamily buildings, or renters
- Approaches that support whole home electrification
- Innovative outreach, marketing, service delivery strategies, or business models
- Projects that demonstrate ways to reduce total installed project costs
- Demonstration of emerging technologies with potential to scale
- Projects that test strategies to improve the customer or installer experience
- Programs that can influence purchasing or management decisions for large groups

Awards will be made in the amount of \$50,000-\$250,000 with 6-12 grants likely. Projects must be completed within 16 months of contract award. The attached evaluation criteria are designed to prioritize grants that:

- Result in heat pump or heat pump water heater installations
- Show a clear pathway to scaling heat pump adoption
- Demonstrate initial or final results within 1 year of award
- Provide cost sharing or other in-kind contributions to maximize impact relative to budget
- Demonstrate the unique need for QSG funding
- Demonstrate qualifications and planning that support rapid project rollout and a high likelihood of success
- Support decarbonization in low-income or other historically excluded customer groups
- Are submitted by or include partnerships with diverse business enterprises (DBEs) in California, non-profits, or community-based organizations (CBOs). The QSG program follows Southern California Edison's DBE policy and recognizes certification from:
 - o The Supplier Clearinghouse (CPUC) - www.thesupplierclearinghouse.com;
 - o Central Contractor Registration (SBA 8A Program only) - www.dol.gov/general/business-ccr
 - o California Department of General Services (DVBE only) - <https://www.dgs.ca.gov/PD>

¹ CalEPA designates the highest scoring 25% of census tracts from CalEnviroScreen 3.0 as disadvantaged communities, as well as 22 census tracts that score in the highest 5% of CalEnviroScreen's Pollution Burden, but do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data. <https://calepa.ca.gov/wp-content/uploads/sites/6/2017/04/SB-535-Designation-Final.pdf>

² CPUC defines hard-to-reach customers in the Statewide Deemed Workpaper Rulebook 3.0, available here: https://static1.squarespace.com/static/53c96e16e4b003bdba4f4fee/t/5dfd68a171e0665b4c4c5adf/1576888489519/SW+Deemed+Workpaper+Rulebook_Version+3.0.pdf

³ The CPUC defines Environmental and Social Justice (ESJ) communities in its ESJ Action Plan, available here: <https://www.cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan>

In awarding proposals, the QSG program will strive to allocate 40% of funds to projects that benefit low-income households, disadvantaged communities (DACs), or other hard to reach customers. The final percentage of awards will be dependent on proposals received.

Projects with promising results after year 1 could be eligible for renewal in future grant cycles.

Applicants must use the form attached to this solicitation to apply. Applicants will be expected to provide regular updates and a final report on their work.

Selected projects will be subject to terms and conditions within the Quick Start Grant Recipient Agreement in the Appendix of this solicitation.

Timeline

Date	Deadline
Sept. 1, 2021	2022 Quick Start Grant solicitation open
Sept. 8, 2021	Applicant's conference
Sept. 20, 2021	Applicant questions due by 5:00 PM PDT
Oct 1, 2021	Applications due by 5:00 PM PDT
Nov. 1, 2021	Application decisions are announced
Dec. 17, 2021	All contracts must be finalized

Application Form Questions

Instructions

To receive communications during the application period, submit your intent to bid via email to TECH.pilots@energy-solution.com with the subject line "Quick Start Grants - Intent to bid."

Direct all questions via email to TECH.pilots@energy-solution.com with the subject line "Quick Start Grants – Q&A" before 5:00 PM PDT September 20, 2021. Questions and answers will be added on a rolling basis to the QSG website <https://energy-solution.com/tech-qsg/>.

Review the information on the TECH website and the QSG page, which provide resources on the broader TECH initiative and other funding resources.

Fill in the following application form and attach additional information as needed.

Submit final proposals via email to TECH.pilots@energy-solution.com with the subject line "Quick Start Grants - [Company Name]" by 5:00 PM October 1, 2021.

Contact Info

Lead organization/business name, primary point of contact, POC email and phone:

Redwood Coast Energy Authority, Stephen Kullmann, skullmann@redwoodenergy.org, 707-269-1700

Mailing Address:

633 Third Street
Eureka, CA 95501

Subcontractors (list):

Does the proposal team include a DBE, non-profit or community based organization based in California?

No

If your company is a DBE, non-profit, or CBO please provide a description and attach certification, if applicable.

Does the proposal team accept the contractor T&Cs? If not, please attach an explanation.

Yes

Proposed Project/Scope

Please provide a brief summary of your project. The summary should include a detailed description of heat pump space or water heating equipment to be installed and/or approaches to be implemented. Please clearly describe where and/or with whom the work will take place and indicate if a specific housing type (e.g., single family, multifamily, regulated affordable, naturally occurring affordable, etc.) or community type (e.g., urban, rural) is being targeted. (1 page, ~500 words)

Users of non-standard, non-CPUC regulated heating fuels such as propane, kerosene, fuel oil, diesel, and cordwood, have typically been unable to access incentives for energy efficient solutions such as heat pumps. These customers, who tend to be more rural, isolated, and lower income than the average California ratepayer, are subject to higher fuels costs, adverse health impacts from poorer indoor air quality, and more difficulties in acquiring and maintaining adequate supply of fuel. Combustion of these non-standard fuels is usually less efficient than natural gas, contributing to even worse indoor air quality as well as higher greenhouse gas emissions. Many customers in rural California must rely on these fuels because although they are located within the service territories of utility natural gas, gas lines have never been extended to their areas.

The Redwood Coast Energy Authority's (RCEA) non-standard fuel switching program aims to address this missed opportunity by extending its existing heat pump rebate program to this hard-to-reach customer segment in Humboldt County. RCEA will use its extensive customer database to reach out to low-income customers in single family or mobile homes within the Pacific Gas & Electric natural gas service territory who have no gas connections to provide incentives for fuel switching to efficient electric air source heat pumps. RCEA's existing heat pump rebate combines California ratepayer-funded energy efficiency program funds with internal funding from its Community Choice Aggregator program and works with local contractors to incentivize air-source heat pump mini-splits, ducted units, and water heaters installations in residential and non-residential buildings. RCEA's heat pump rebates include additional incentives for electric panel upgrades when necessary. Because CPUC-approved fuel substitution incentives are limited to existing natural gas customers, RCEA is unable to offer this rebate to non-standard heating fuel customers. Under this pilot program, RCEA will leverage its CCA funds with TECH Initiative funding to extend the rebates to this hard-to-reach customer segment. Because this customer segment is generally more remote and lower income, incentives will be set at sufficiently high amounts to encourage adoption. RCEA will set a goal of 20 completed heat pump installations within the 16 month grant period, with a pipeline list of an additional 100 customers that can be served through future funding cycles. Because most of these installations are expected to be in smaller buildings, RCEA will focus on mini-split heat pump units for this pilot project, but will study expanding its offerings to ducted units and water heaters for future funding cycles.

RCEA is requesting \$99,500 in program funding to provide rebates for 20 mini-split units and funding a part time Project Intern and Project Technician over the course of the project. RCEA will provide \$54,341 cost share.

Extrapolating its data from RCEA's current heat pump rebate program, mini split units are expected to be in the 2-3 ton range with approximately 75% requiring panel upgrades. RCEA will commit \$500 per unit base rebate from internal funds with an additional \$1200/ton and \$750 per panel upgrade from TECH Initiative funds.

Describe how your project fits into the goals of TECH and the quick start grants program (e.g., scalable, transformative, high-impact, innovative) and provide any market research you have conducted. (1 page, ~500 words)

Despite being burdened with higher-than-average heating costs, users of non-standard heating fuels have typically been unable to access incentives for energy efficient solutions such as heat pumps. In addition to the higher per therm costs of propane, kerosene, diesel, fuel oil, and cord wood to the consumers than natural gas, acquisition of these fuels is more time and labor intensive, requiring either coordination with a fuel supplier to arrange delivery or having to drive and acquire the fuels themselves. While indoor air quality is cited as a reason for fuel substitution from natural gas to electricity, combustion of these non-standard fuels is usually less efficient than natural gas, contributing to even worse indoor air quality as well as higher greenhouse gas emissions. Many customers in California must rely on these fuels because although they are located within the service territories of utility natural gas, gas lines have never been extended to their areas. These customers tend to be more rural, isolated, and lower income than the average California ratepayer, yet are ineligible for programs to address their energy needs.

By focusing the project on these customers who have been traditionally underserved by other funding sources, this project aligns well with TECH by having a higher impact per unit and being innovative in its outreach to the targeted population. RCEA research has estimated that Humboldt County has 3805 residential housing units that rely on propane for heating fuel, 8855 that rely on wood, and 222 diesel generators out of approximately 65,000 utility customers. These customers generally live in more remote areas, spend a greater proportion of their incomes on heating fuels, and are underserved by many utility programs. Current ratepayer-funded incentives do not include non-standard fuels under fuel-substitution initiatives.

This pilot program will be scalable both within Humboldt County and across California. RCEA is a founding member of a statewide Rural Hard-To-Reach Working Group whose members have all expressed interest in reaching non-standard fuel users with their programs. RCEA will produce a final report from this pilot project with lessons learned and a plan for future funding that will be shared with this group and others to help promote additional projects to serve these customers.

Fuel switching non-standard fuel customers to electric heat pumps has the added benefit of avoiding costs of extending natural gas lines to these remote areas of the state. Taking the opportunity now to conduct outreach and offer incentives to these customers is an innovative solution to addressing the higher-than-average utility costs of these underserved customers while having a significant impact on greenhouse gas emissions and planning for California's greener energy grid of the future.

Describe the unique role for QSG funding in supporting this project. For example, explain how QSG funding complements without duplicating sources of funding included as cost share. Or explain how this project is not eligible for other available sources of funding. (1/2 page, ~250 words)

The TECH Initiative Quick Start Grant program complements RCEA's existing heat pump rebate program and extends its reach to a traditional underserved population. Fuel-substitution programs through CPUC ratepayer-funds have not included users of non-standard fuels, who are typically lower income customers facing a higher cost for heating fuels. Even within existing utility service territories, fuel-switching programs have not been made available to those most in need. RCEA's proposed project addresses this need and this project would not be possible without TECH QSG funds. Cost sharing is achieved through RCEA's local funds, so there is no duplicity of ratepayer funds.

RCEA's cost sharing will include a \$500 per unit rebate and staff time as follows: Customer Energy Solutions Director: 120 hours; Project Manager: 120 hours; Outreach Manager: 90 hours; Admin and Contracts Manager: 60 hours. At RCEA's fully loaded rate the personnel cost share totals \$44,340. The \$500 per unit rebate for 20 units brings the total cost share amount to \$54,340.

In the following table, provide SMART (specific, measurable, achievable, realistic, and time-bound) key performance indicators (KPIs) for your project, metrics for evaluating success, a description of how you will gather the necessary data, and any analytical methods (if applicable) in the following table. Be quantitative where possible (e.g., emissions reduced, # of customers, # of units). Attach additional pages for KPIs if more space is needed.

KPI/Goal	Metric	Data Collection and/or Analysis Approach
Customer Identification through data search of eligible low income, non-standard heating fuel customers	500 potential customers	spreadsheet of potential customers and contact information developed by Month 4
Project Identification of viable potential projects	150 potential projects	spreadsheet of potential project specifics developed by Month 8
Project completion of heat pump installations	20 total installed heat pumps	5 completed installations by Month 12. 20 total by Month 15.
Final Program Report including Lessons Learned, Pipeline of future projects, and future funding possibilities	Final report completion	Within 90 days of Program closeout

Does your program have potential to provide direct or indirect benefits to low-income customers or historically excluded communities?

Yes

If yes, describe in detail factors such as whether the benefits will be direct or indirect, how the results of the project will address the distinct needs of these groups, the estimated percentage of project resources that will be directed to these communities, and/or your organization's or project team's experience working in any specific locations/communities targeted in the project (½ page, ~250 words)

100 percent of RCEA's heat pump rebate program will directly benefit both low income and historically excluded communities. RCEA will use PG&E low-income programs CARE/FERA eligibility as a metric to determine low income. Rebates will be offered first to qualifying low income customers, and outreach will be directed at these customers using RCEA's extensive customer database. If during the course of market research and outreach phases it become apparent that we will not be able to implement 20 projects exclusively with low income customers, we will maximize the number of low income projects while expanding the eligibility criteria.

Non-standard fuel users are typically more rural and remote communities that have been historically excluded from California's fuel-substitution initiatives, so this project is by design targeted at underserved communities. Furthermore, Humboldt County is home to seven Native American tribal governments and an extensive Native American population and many of the areas that are not connected to natural gas lines correspond with both Tribal lands and off-reservation land with significant Native American populations.

RCEA's project team has extensive experience working with both the rural hard-to-reach communities that will be served by this project and Humboldt's Native American communities. Rebates will be set at levels to help greater acceptance by lower income customers, and our work with contractors will help keep overall project costs low. RCEA will expand on its existing Contractor/Vendor Network to align customers with qualified installers. Rebates will not be limited to specific equipment brands and models to help allow for greater choice for consumers, although there will be efficiency requirements corresponding with RCEA's existing heat pump rebate program to insure that customers are receiving the highest value for their investment.

Please provide an implementation plan and timeline for the project (½ page, ~250 words)

The project will have seven distinct tasks leading to successful implementation of 20 heat pump mini split units in low-income households switching from non-standard heating fuels. A minimum of 5 of the 20 installations will be completed by the end of the first year to demonstrate successful progress. In addition to the completed installations, the project will result in a pipeline of an additional 100 projects, and Final Project Report including Lesson Learned and a Scaling and Future Funding Plan.

1. Project Development will consist of team kickoff meetings and finalization of timelines and responsibilities, development of outreach strategies, as well as hiring the project intern. Months 1-2
2. Partner contractor recruitment for RCEA's existing Contractor/Vendor Network. Months 2-4.
3. Market Research and Customer Identification. Months 2-5.
4. Customer Outreach. Months 3-6.
5. Project Identification and Selection. Months 5-10.
6. Project Installation. Minimum of 5 completed installations by Month 12 and 20 by Month 15.
7. Program Closeout, Final Report with Lessons Learned, Scaling, and Funding Plans. Months 15-19.

Describe how the qualifications and expertise of the applicants will support the success of the project. If multiple organizations are applying, describe the specific role of each partner.
(1 page, ~500 words)

The Redwood Coast Energy Authority (RCEA) is a Joint Powers Agency of Humboldt County jurisdictions, established in 2003 to provide energy efficiency services to its member agencies and community. Throughout these years RCEA has leveraged multiple partnerships and funding sources to deliver energy efficiency programs to its rural, hard-to-reach community, ranging from lighting upgrades to full facility assessments and benchmarking. Building on its success, in 2017 RCEA became a Community Choice Aggregator, procuring electric power in a more cost-effective and less carbon intensive manner while prioritizing local resources. RCEA's Customer Energy Solutions team has continued to provide Trusted Energy Advisor services and rebates and incentives to its customers through a Local Government Partnership with PG&E, CPUC Program Administrator status, and innovative locally funded programs. Being a part of the rural community it serves provides RCEA a unique perspective on the needs of this hard-to-reach customer base and how to communicate the values of fuel substitution and energy efficiency in meaning terms. RCEA has established mutually beneficial partnerships with the local contractors who will be instrumental in the successful outcome of this program through the millions of dollars of incentives provided to the community over the years and the work it has provided these small business, and RCEA's Contractor/Vendor Network helps align customers with qualified installers. RCEA regularly offers professional development opportunities, including a recent heat pump training offered to local contractors, facility managers, and building professionals.

Humboldt County has just over 130,000 residents in an area of approximately 4,000 square miles. Stretching along 110 miles of the Pacific Coast, Humboldt is located about 250 miles north of San Francisco and 50 miles south of Oregon. With just two major highways out of the county, Humboldt can feel very remote and has frequently been completely cut off from the rest of California due to landslides, floods, or fires. Much of our population resides in remote corners of the county down narrow, curvy roads, increasing the travel time required for assessments and services. RCEA is an expert in serving rural hard-to-reach customers with innovative and effective energy solutions. RCEA is also a founding member of the statewide Rural Hard-to-Reach Working group and is a member of the CPUC California Energy Efficiency Coordinating Committee.

RCEA's Customer Energy Solutions 11-person staff has many decades of combined experience with energy upgrade programs. This project will be managed by the Customer Energy Solutions Director, Stephen Kullmann, who after completing his MS in Environmental Systems at Humboldt State University directed Natural Resources and Community Development programs at local Native American Tribes prior to joining RCEA. This experience gives him a unique perspective on the needs and challenges of these remote rural communities and proven success working with Tribal communities. The program team will be made up of the experienced staff who have successfully implemented RCEA's ongoing heat pump rebate program with the support of RCEA's Community Strategies outreach team and Administrative Support staff. Finally, RCEA will hire a project intern from the communities we will be serving to assist with all aspects of the project. This team has the deep local knowledge along with the professional energy expertise to ensure project success.

Please supply 3 references (name, company/organization, email, phone number)

Lindsey Tillisch, PG&E, L2T4@pge.com, 415-215-2603

Mike Wilson, Humboldt County Board of Supervisors, mike.wilson@co.humboldt.ca.us, 707-476-2396

Jana Ganion, Blue Lake Rancheria, jganion@bluelakerancheria.gov, 707-668-5101

Please attach any supporting materials that strengthen your proposal (e.g. links to similar projects completed, letters of support, results from other pilots/projects). Proposals seeking funding over \$100,000 are strongly encouraged to add supporting materials.

Budget

Itemized budget table. If more space is needed, attach a separate document

'Cost per unit' and 'total units' refer to the line item. For example, unit cost could represent labor rates (e.g. \$/hour or \$/FTE) or actual or estimated costs of heat pump equipment, M&V equipment, software, or other intellectual property.

Attach quotations for price estimates where applicable.

Line Item (equipment, labor, etc.)	Cost Per Unit (\$)	Source for Price Estimate	Total Units	Cost (\$)
Project Intern (hourly)	28/hr	RCEA fully loaded rate	500	14000
Mini Split Heat Pump Rebate (per unit)	3000/unit	\$1200 per ton avg 2.5 ton unit	20	60000
Panel Upgrade Rebate (per unit)	750/unit	avg cost of panel upgrade	15	11250
Mini Split Heat Pump Rebate (per unit)	500/unit	Current RCEA rebate amount	20	10000
Project Technician (hourly)	95/hr	RCEA fully loaded rate	150	14250
RCEA Personnel (total as listed under Cost Share)	1	See cost share section for detail	44340	44341
Total Cost of Project				153841
Leveraged Funds (if applicable)				54341
Total Funding Requested				99500

Propose your **milestone-based payment structure**. Project initiation/mobilization is an acceptable milestone if upfront funds are needed at the outset of the project.

Please use the following table. If more space is needed, attach a separate document.

Milestone	% of Total Requested Budget	Amount (\$)	Expected Date
Project Initialization/mobilization	14	\$14,000	Month 1
initial 5 projects completed	32	\$32,063	Month 12
final 15 projects completed	54	\$53,437	Month 15

Cost share / in-kind contribution detail

Please provide a description of your cost share funding or in-kind contribution and what is excluded. It should be clear from this table and the rest of the application why Quick Start Grant funding is needed to support the project. If more space is needed, attach a separate document. Attach documentation.

Cost Share / In-Kind Source	Description	Amount (\$)
Director Customer Energy Solutions/RCEA Personnel	120 hours at \$122/hr fully loaded rate	14640
Project Manager/RCEA Personnel	120 hours at \$110/hr fully loaded rate	13200
Outreach Manager/RCEA Personnel	90 hours at \$110/hr fully loaded rate	9900
Administrative Contracts Manager/RCEA Personnel	60 hours at \$110/hr fully loaded rate	6600
RCEA Heat Pump Base Rebate	\$500 per unit for 20 units	10000
Total		54340

Scoring Rubric

Criteria	Available Points per Criteria	Total Points Available
Program Value & Scalability		55
<ul style="list-style-type: none"> The proposal fits with the goals of TECH and the QSG program and is testing or demonstrating a deployment approach with potential to scale 	30	
<ul style="list-style-type: none"> The proposal demonstrates high impact (based on proposed KPIs) relative to the proposed budget 	20	
<ul style="list-style-type: none"> The proposal will demonstrate results within 1 year 	5	
Feasibility		35
<ul style="list-style-type: none"> Clear and reasonable implementation plan 	10	
<ul style="list-style-type: none"> Funding request appropriate to proposal 	5	
<ul style="list-style-type: none"> Clearly defined audience & geography 	5	
<ul style="list-style-type: none"> Applicant has qualifications/expertise to carry out proposal 	5	
<ul style="list-style-type: none"> The project leverages funding from another source 	10	
Equity		20
<ul style="list-style-type: none"> The proposal will or has the potential to benefit LMI customers/a historically excluded market 	15	
<ul style="list-style-type: none"> The applicant is a DBE, non-profit, or CBO 	5	
Firm is able to accept terms and conditions (Y/N)		
TOTAL MAXIMUM POINTS		110

Appendix – Quick Start Grant Recipient Participation Agreement

Quick Start Grant Recipient Information - FOR REFERENCE ONLY

Company Name			
Parent Company Name (if applicable)			
Street Address	City	State	Zip
Mailing Address (if different from above)	City	State	Zip
Federal Tax ID Number		Tax Status (Circle one) Corporation, Partnership, Sole Proprietor, tax-exempt	
Primary Management Contact	Phone Number	Email Address	
Secondary Management Contact	Phone Number	Email Address	
Incentive Data Entry Contact	Phone Number	Email Address	
Payee Name		Payee Title	
Check Mailing Address			

1. GENERAL PROGRAM INFORMATION

Program Description

The TECH Initiative (hereafter referred to as the “Program”) supports the installation of Heat Pump Water Heaters (“HPWH”) and HVAC Heat Pumps (“HP”) in California Gas Corporation Territory. The Program provides incentives to participating contractors for selling qualifying HPWHs and HPs to residential customers residing in a zip code served by a California Gas Corporation.

The Quick Start Grants (QSG) Program is designed to fund localized, vanguard approaches to accelerate deployment of heat pump space and water heating technologies. This allocation of funds is targeted at testing market transformation strategies and approaches, supporting technology development, and leveraging high-impact opportunities to increase the installed base of heat pump technologies.

Cohen Ventures, Inc. dba Energy Solutions (hereinafter referred to as “Energy Solutions” or “Program Implementer”) is implementing the program on behalf of the California Public Utilities Commission (“CPUC”). To participate in the Program and to be eligible for quick start grant funding, all Quick Start Grant Recipients are required to sign this Participation Agreement agreeing to the terms and conditions of participation.

Program Term

This Agreement is effective upon the date it is executed by Quick Start Grant Recipient and will continue until June 7, 2025 (“Program End Date”) unless earlier terminated in accordance with the provisions in this Agreement. The Program or this Agreement may be modified or terminated by Energy Solutions at any time without notice. Termination of this Agreement or expiration of this Agreement shall not relieve Quick Start Grant Recipient of any warranties or other obligations expressed herein which by their terms are intended to extend beyond termination.

PROGRAM DEFINITIONS

When used in this Agreement, the following terms, with initial capitalization, have the meanings specified below:

“Gas Corporation” refers to any gas investor-owned utility (IOU) active within the State of California. The gas IOUs within California include Pacific Gas & Electric (“PG&E”), Southern California Gas (“SoCal Gas”), San Diego Gas & Electric (“SDG&E”), Southwest Gas (“SW Gas”)

“Qualifying Customer” means eligible residential customers that reside in a zip code served by a Gas Corporation that has available Incentives being offered. For a current list of zip codes that contain incentives, please refer to www.energy-solution.com/tech.

“Heat Pump Incentive (Incentive)” means financial reimbursement (e.g. rebates, discounts) paid to Participating Trade Professionals to encourage the installation of HPs and HPWHs. The Incentive for each Qualifying Equipment will be set forth on the Qualifying Equipment List, as such may be modified in accordance with this Agreement.

“Incentive Application” refers to the form Participating Trade Professionals must complete and submit to Energy Solutions in order to request reimbursement of Incentives for Qualifying Equipment. The process for submitting an Incentive Application is included in Exhibit A.

“Participating Trade Professional” means an entity that participates in any TECH Initiative program. The CPUC at its sole discretion, reserves the right to review and approve if an organization is a Participating Trade Professional.

“Quick Start Grant Recipient” refers to the selected awardee of the Quick Start Grant solicitation.

2. PROGRAM TERMS OF PARTICIPATION

Term, termination, suspension rights

Energy Solutions reserves the right to terminate this Agreement or any part of this Agreement for any reason or for no reason in its sole discretion. In the event of such termination, the Quick Start Grant Recipient shall immediately cease participation in the Program, including but not limited to any applicable use of Program materials such as announcement flyers, program website material or any other physical or digital material containing program details.

Energy Solutions reserves the right to terminate this Agreement for cause in the event of any default by the Quick Start Grant Recipient, or if the Quick Start Grant Recipient fails to comply with any of the terms and conditions of this Agreement. In the event of termination for cause, the Quick Start Grant Recipient shall be liable to the Program for any and all damages sustained by reason of the default, which gave rise to termination.

Changes to the program

Energy Solutions may, in its sole discretion, make changes to the Program at any time, including, without limitation, modifying incentive amounts, and adding or removing Qualifying Equipment from the Program. The date of such change(s) will take effect on the earlier of (a) the date the change is posted on the Program website, or (b) the date the Quick Start Grant Recipient receives written notice of such change and will apply to any installations completed on or after the date the change takes effect regardless of date the incentive is applied for. Written notice will generally be provided in email format.

3. QUICK START GRANT RECIPIENT TERMS AND REQUIREMENTS

1.0 Subcontracting

Quick Start Grant Recipient may use subcontractors to install Qualifying Equipment or provide any services associate with the Quick Start Grant, provided the Quick Start Grant Recipient takes full responsibility for the services provided by their subcontractors. Quick Start Grant Recipient represents and warrants to Energy Solutions, SCE, and CPUC that all of Quick Start Grant Recipient’s subcontractors will perform their services in a professional manner and with the degree of skill and care that is consistent with current, good, and sound professional procedures and practices.

2.0 Confidential Data

Qualifying Customer account numbers and names are considered confidential data and may not be provided via email. This data may be provided through the TECH Clearinghouse, or if any additional transfer of confidential data is required, Energy Solutions will setup a secure file transfer website for Quick Start Grant Recipient to use to transfer data.

3.0 Marketing Materials.

Quick Start Grant Recipient shall submit all marketing materials related to the Services being provided to Energy Solutions hereunder to the Energy Solutions Representative for approval prior to their release or communication. Except as provided for herein, Quick Start Grant Recipient shall not use the name or logo of the CPUC on marketing materials for its program unless Quick Start Grant Recipient obtains prior written approval of the CPUC.

Quick Start Grant Recipient shall not use SCE's, or any Gas Corporation's, name, trademark, trade name, logo, identity, or any affiliation for any reason or in any way, including on marketing materials, without SCE's, and, if applicable, such Gas Corporation's prior written consent, which may be withheld by SCE or such Gas Corporation, if applicable, in its sole discretion. Quick Start Grant Recipient is prohibited from stating, implying or in any way representing to third parties, Customers or program participants that SCE or any Gas Corporation has endorsed or approved Quick Start Grant Recipients, its Subcontractors or their performance of the Services.

Notwithstanding the foregoing, Quick Start Grant Recipient shall disclose their source of funding for the program by stating prominently on marketing materials that the program is "funded by California gas corporation ratepayers under the auspices of the California Public Utilities Commission."

4.0 Non-Discrimination

Quick Start Grant Recipient and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religions creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Quick Start Grant Recipient and subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment.

5.0 Governing Law; Jurisdiction and Venue

This Agreement will be interpreted under, and any disputes arising out of this Agreement will be governed by, the laws of the State of California, without reference to its conflicts of law principles. Quick Start Grant Recipient irrevocably consents to the jurisdiction of the state and federal courts located in the State of California, USA, in connection with all actions arising out of or in connection with this Agreement, and waives any objections that venue is an inconvenient forum. Quick Start Grant Recipient further agrees that it will not initiate any action against Energy Solutions, CPUC, or SCE in any other jurisdiction.

6.0 Waiver

Delay or failure to enforce or insist on strict compliance with any provision of this Agreement does not constitute a waiver or otherwise modify this Agreement. Waiver of any right granted under this Agreement on one occasion will not: (i) waive any other right; (ii) constitute a continuing waiver or (iii) waive that right on any other occasion.

7.0 Compensation and Method of Payment

Energy Solutions will pay Quick Start Grant Recipient the Quick Start Grant on a fixed price basis at the schedule and amounts set forth in the Budget and Payment Sections of the Quick Start Grant solicitation, attached and incorporated herein as Attachment 1. Quick Start Grant Recipient shall be paid in arrears, based upon invoices submitted by Quick Start Grant Recipient, and approved by Energy Solutions and SCE. If a payment schedule sets forth progress payments that are due when given tasks or milestones are completed, the full amount of the progress payment due upon completion of the task or milestone shall then become payable to Quick Start Grant Recipient at that time, without deduction, subject to invoicing and payment timing terms described below. Quick Start Grant payments to Quick Start Grant Recipient will be subject to Energy Solutions first receiving payment from Energy Solutions' client when Energy Solutions is invoicing such work by Quick Start Grant Recipient to such client. Energy Solutions shall pay Quick Start Grant Recipient for all approved invoices within seven (7) business days of receiving payment from such client.

In accordance with the billing schedule set forth in the Budget and Payment Sections of Attachment 1, Quick Start Grant Recipient shall submit to Energy Solutions invoices for payment within seven (7) calendar days of month end. Each invoice shall specify the Quick Start Grant Recipient's payee name, Task Order, and shall specify in detail the final incentive amount and calculation, Services performed, the names of Quick Start Grant's personnel who performed the Services set forth in the Task Order, their respective hours worked and labor rates together with reimbursable costs and other allowable charges itemized. Each invoice shall include the current monthly amount being invoiced, the cumulative amount invoiced to date, the accumulative retained amount, and the total fixed price. Energy Solutions shall review Quick Start Grant Recipient's invoices, and Quick Start Grant Recipient shall provide any supporting documentation reasonably requested by Energy Solutions and make any corrections to invoices as may be requested by Energy Solutions from time to time.

8.0 INDEMNITY

Quick Start Grant Recipient agrees to indemnify and hold harmless Energy Solutions, SCE, the CPUC, its officers, agents and employees, from and against any and all claims, demands, liabilities, losses or causes of action which arise out of or are connected with this agreement or the equipment excepting only those claims, demands, liabilities, losses, or causes of action arising solely from the negligence of the Energy Solutions, SCE, the CPUC, its officers, agents and employees.

9.0 REGULATORY AND GOVERNING AUTHORITY

Quick Start Grant Recipient understands and agrees that this Participation Agreement and the Program shall at all times be subject to changes or modifications by the CPUC at its sole discretion. Quick Start Grant Recipient understands and agrees that the CPUC may at any time commence an investigation or other regulatory proceeding in connection with the Program and/or this Participant Agreement. Quick Start Grant Recipient agrees to cooperate fully with any such investigation or proceeding.

10.0 TAX LIABILITY

Quick Start Grant Recipient will report grant funding on IRS Form 1099 unless Quick Start Grant Recipient has indicated its tax-exempt corporate tax status above. Quick Start Grant Recipient is encouraged to consult its tax adviser concerning the taxability of incentives. Neither the CPUC nor program implementer are responsible for any taxes, interest, and/or penalties that may be imposed on Quick Start Grant Recipient as a result of receipt of incentives from this program or any other program related cost. Quick Start Grant Recipient assumes all responsibility for collecting and reporting any and all applicable sales tax. Quick Start Grant Recipient acknowledges that at the time of purchase, sales tax must be applied prior to the application of any rebate.

11.0 CONFIDENTIALITY

Quick Start Grant Recipient acknowledges and agrees that CPUC and Program Implementer have no duty of confidentiality with respect to any information submitted by Quick Start Grant Recipient pursuant to its participation in the Program and that Program Administrator and Program Implementer may disclose such information to the CPUC and SCE. This Program is subject to oversight by the CPUC which may wish to review any Program data that Program Implementer receives. Neither the CPUC, SCE nor Program Implementer will have any liability to Quick Start Grant Recipient or any other party as result of any public disclosure of any data or other materials submitted by Quick Start Grant Recipient pursuant to the Program

12.0 TECH Program Terms and Conditions:

Qualifying Equipment: Qualifying Equipment is limited to those listed at <http://www.energy-solution.com/tech>. Only Qualifying Equipment is eligible to receive Incentives.

Program Funding: The Program is funded by California gas corporation ratepayers under the auspices of the California Public Utilities Commission ("CPUC"). Total Program incentive funding is available on a first-come, first-served basis until the funding is depleted or the Program is terminated.

Cancellation Policy, Requirements, Process, and Any Applicable Fees: There are no applicable fees for participating in the Program, however, Energy Solutions reserves the right to terminate Agreements with Quick Start Grant Recipient for any reason or for no reason in its sole discretion. This may result in cancellation of incentives.

Risks and Benefits of Participation: There are no guaranteed benefits for participating in the Program. Incentives are available on a first come first serve basis and can significantly reduce upfront costs of installations. Installing Qualifying Equipment does not guarantee a certain amount of energy or gas savings. The Program will not assume liability for any unpaid incentives, which may present a risk to the Quick Start Grant Recipient and Qualifying Customer. As part of this Agreement, the Quick Start Grant Recipient acknowledges all risks associated with participating in the TECH initiative.

Disclosure: Quick Start Grant Recipient, Energy Solutions, and other third parties associated with the Program are not a representative of SCE or any Gas Corporation or otherwise affiliated with SCE or any Gas Corporation.

Installation Requirements: The Program requires that the Qualifying Equipment is installed at an eligible customer address that is in a Gas Corporation territory and that the Qualifying Equipment is installed in place of an existing water heater or furnace, or has controls installed that prevent furnace from operating as the main heating source.

Quality Assurance and Quality Controls Protocols: All incentive applications will be subject to automated and manual protocols designed by Energy Solutions to evaluate that equipment and customers are eligible to receive program funding, that equipment replaced an existing system and equipment is in good working order. These processes will be used to identify fraudulent activities and ensure no fraudulent data is submitted in applications.

Inspections and Verification: The installation of equipment will be subject to verification by Energy Solutions or its representatives. Verification (including onsite inspections at customer address) may be performed per Energy Solutions requirements on all equipment listed, or a select portion of the equipment.

Notice: California Consumers are not obligated to purchase any full fee service or other service not funded by the Program. The Program is funded by California Gas Corporation ratepayers and administered by Southern California Edison Company under the auspices of the California Public Utilities Commission. Any data related to the Program, including any customer data, will be shared with authorized entities, including but not limited to, policy makers, program implementers, and the program evaluator under confidentiality protocols. As this data will not be made public and will follow the confidentiality rules and protocols established by the CPUC in prior proceedings, it does not require individual customer permission.

By signing below, Quick Start Grant Recipient agrees to be bound by the terms and conditions of this Agreement, including(if applicable) all associated Exhibits and Appendices, and has caused this Agreement to be executed by its duly authorized representative.

Quick Start Grant Recipient Signature

Title

Print Name

Date



REDWOOD COAST EnergyAuthority

STAFF REPORT Agenda Item # 5.1

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Jaclyn Harr, TEA Client Services Specialist Richard Engel, Director of Power Resources
SUBJECT:	Energy Risk Management Quarterly Report

BACKGROUND

The RCEA Board of Directors adopted an Energy Risk Management Policy in December 2016 in order to establish functions and procedures to manage the risks associated with the Community Choice Energy program's power procurement activities. In accordance with this policy, a quarterly update on activities and projected financial performance is presented to the Board during regularly scheduled meetings.

SUMMARY

TEA Client Services Specialist Jaclyn Harr and RCEA staff will provide an energy risk management quarterly update. This quarter's update, usually given in October, was delayed a month in anticipation of having greater certainty regarding PG&E's 2022 generation rates, an important consideration in RCEA's financial outlook since our rates are set in relation to PG&E's.

RECOMMENDED ACTION

Accept Energy Risk Management Quarterly Report.

ATTACHMENTS

Energy Risk Management Quarterly Report slides will be presented at the meeting.

Energy Risk Management Quarterly Report

November 18th, 2021



Overview

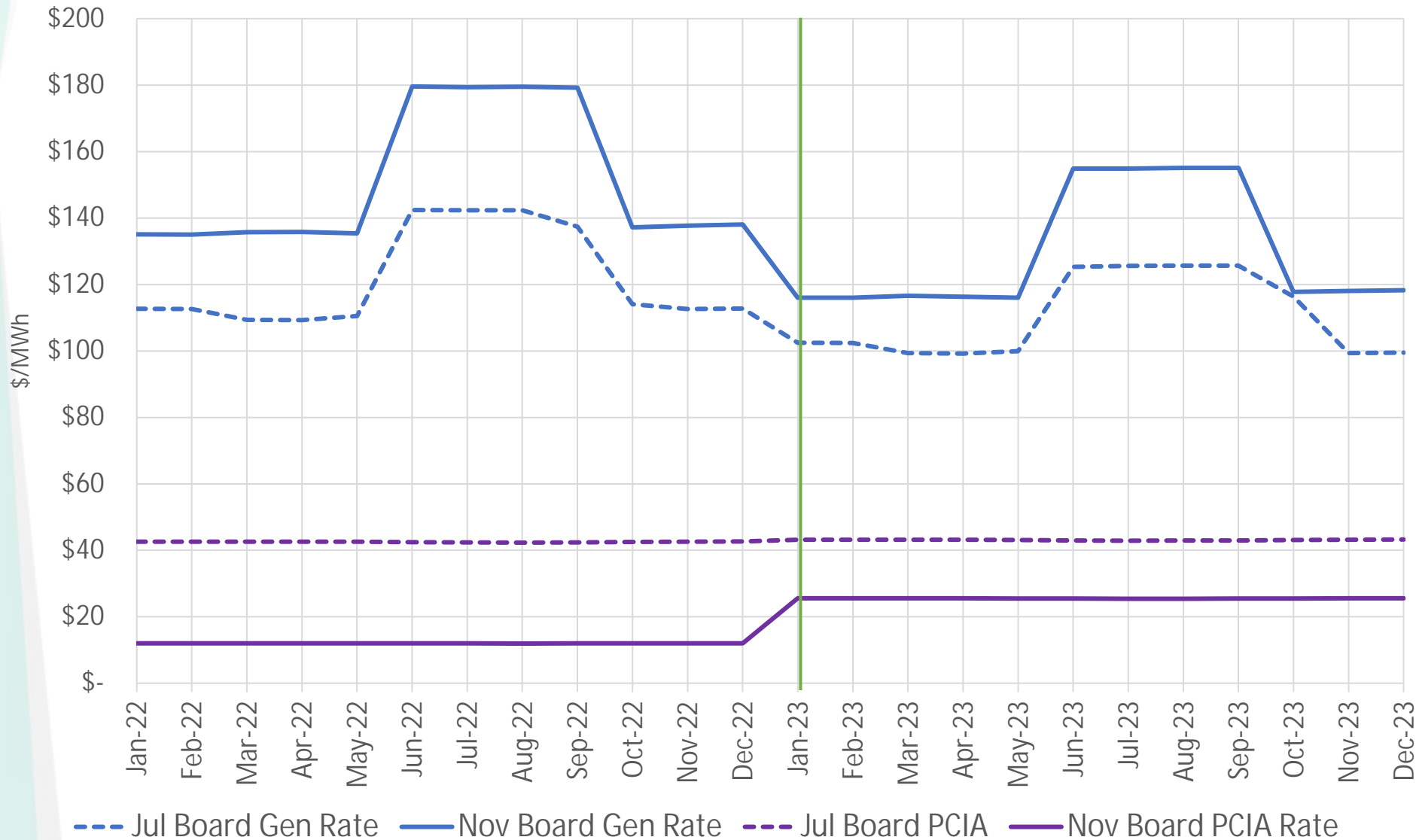
Rates

- Significant improvement in forecasted PG&E rates
 - 2022: PG&E ERRA Filing with Market Price Benchmarks
 - 2023+: CalCCA NewGen Model

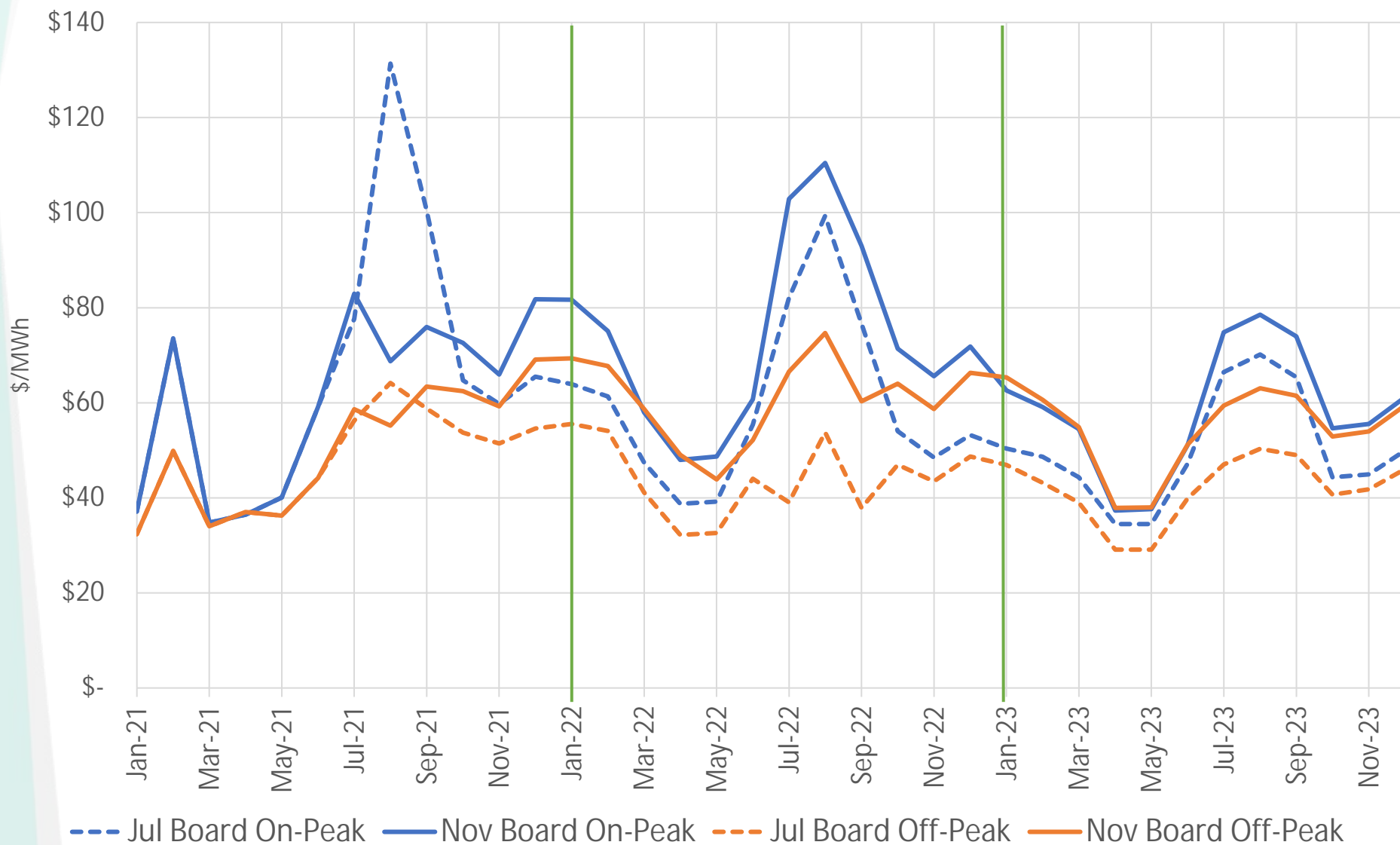
Energy Costs

- 2021 Q3 energy prices settled below forecast
- Forecasted 2021 Q4 and 2022+ energy prices up
 - Q4 2021 prices up 17.6%
 - 2022 prices up 29.6%
 - 2023 price up 23.2%

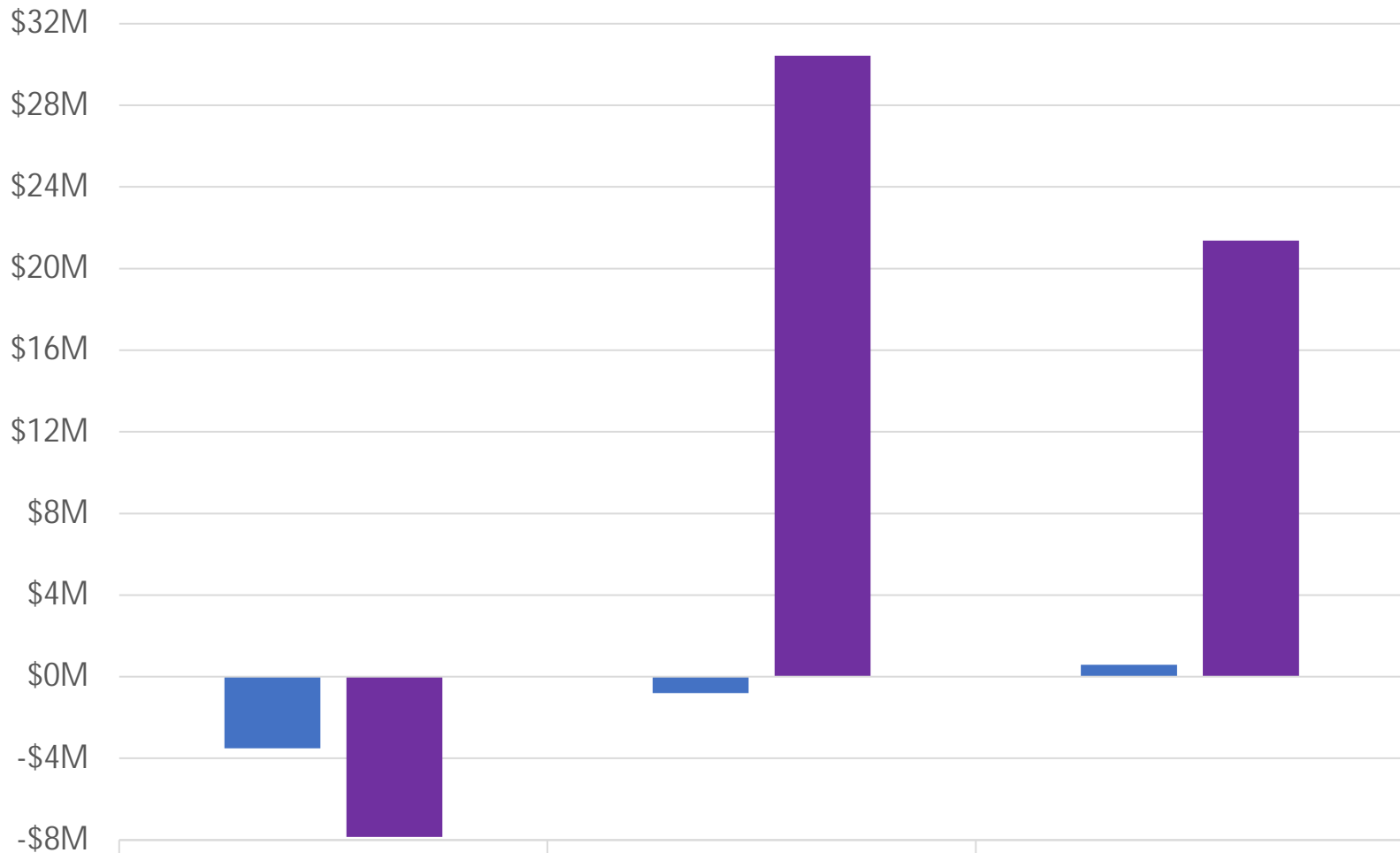
PG&E Rates & PCIA



NP15 + DLAP & LSP Energy Price



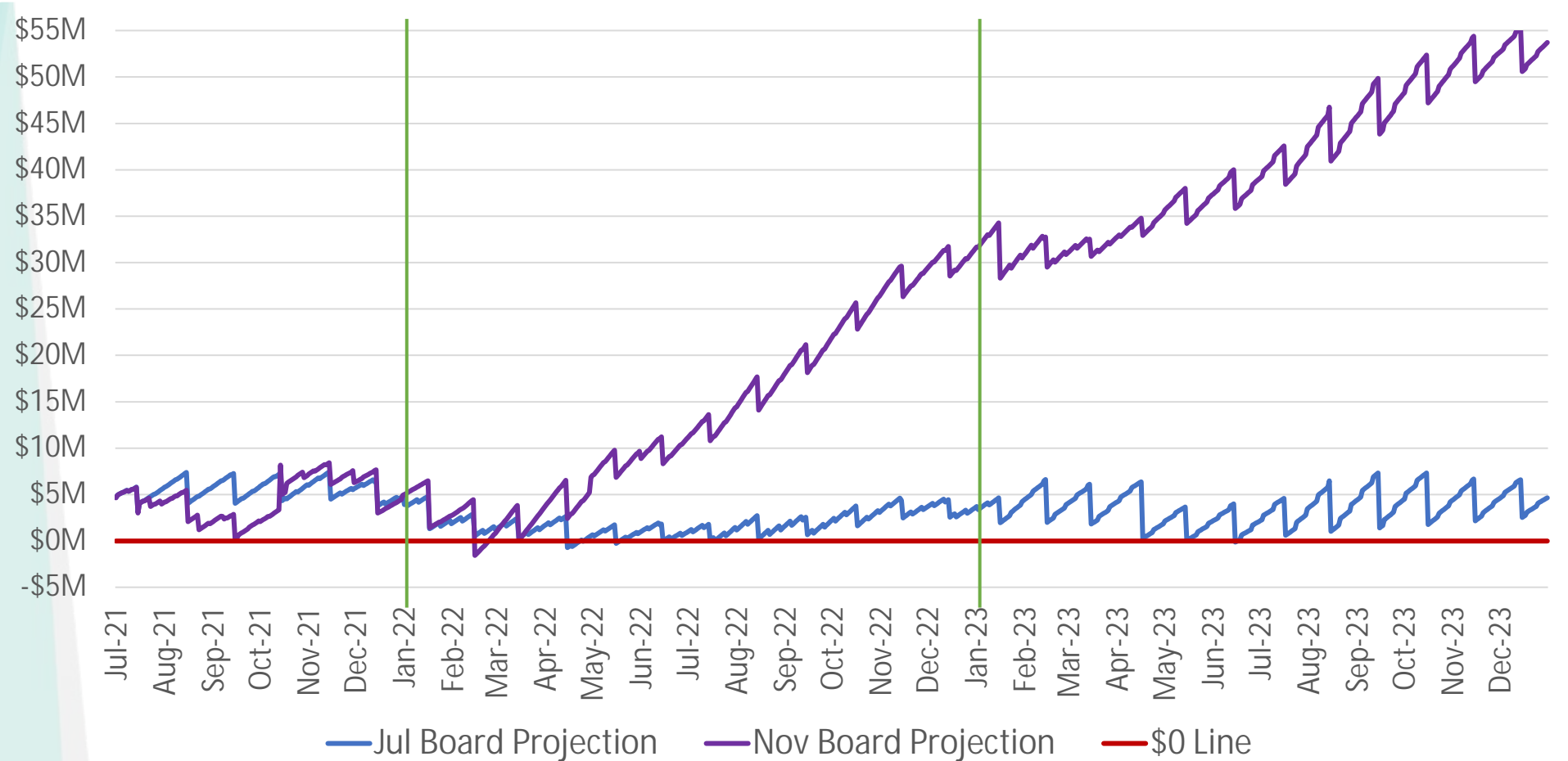
Net Revenue



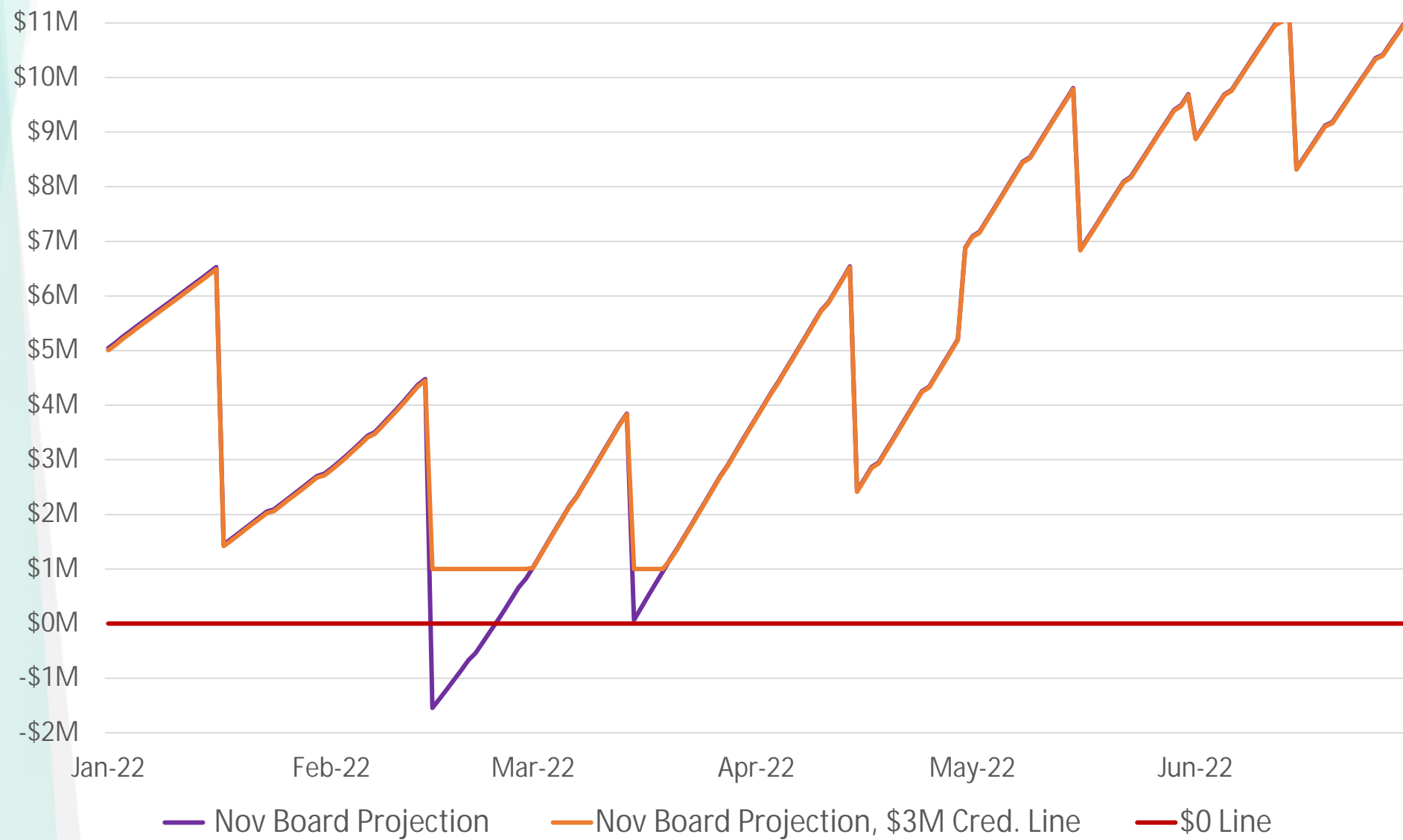
■ Jul Board Meeting	2021	2022	2023
	\$(3,510,000)	\$(800,000)	\$590,000
■ Nov Board Meeting	\$(7,850,000)	\$30,430,000	\$21,370,000

Cash Projection

	July-Dec 2021			CY 2022			CY 2023		
	Min	Average	Ending	Min	Average	Ending	Min	Average	Ending
Jul	\$ 3.14 M	\$ 5.54 M	\$ 4.81 M	\$ (0.71 M)	\$ 1.89 M	\$ 3.59 M	\$ (0.14 M)	\$ 3.57 M	\$ 4.65 M
Nov	\$ 0.14 M	\$ 4.55 M	\$ 4.92 M	\$ (1.55 M)	\$ 13.50 M	\$ 31.49 M	\$ 28.33 M	\$ 40.74 M	\$ 53.71 M



2022 Q1 & Q2 Cash





STAFF REPORT
Agenda Item # 7.1

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Michael J. Furniss, RCEA Consultant Richard Engel, Director of Power Resources
SUBJECT:	Consultant Presentation on Small Hydropower

SUMMARY

Consultant Michael J. Furniss has been working since May 2020 for RCEA to determine the potential for small hydropower development in and near Humboldt County as a possible future component of RCEA's local renewable energy portfolio. With his contract services for RCEA concluding November 30, 2021, Mr. Furniss will provide a brief presentation on his findings.

In addition, Mr. Furniss is scheduled to give a more in-depth online public presentation on his work On December 7, 2021. Details can be found on the [Events page](#) on RCEA's website.

RECOMMENDED ACTION

None – Information only.

ATTACHMENTS

Mr. Furniss's slides will be presented at the meeting.

HUMBOLDT COUNTY RUN-OF-THE-RIVER HYDROPOWER ASSESSMENT

MJ Furniss
Bikash Pradhan
To RCEA Board of Directors
11/18/21



How do we move from
powering our world by
burning carbon to using only
the sun, the wind, crustal
heat, and moving water?

Two free public webinars



Small-Scale, Run-of-the-River Hydroelectric Power

Tuesday 🌧️ **December 7**

10-11:00 am & 5:30-6:30 pm



**Presented by
consultant
Michael Furniss**



- Hydropower done right
- Fish-friendly
- Complementary with solar and wind
- An important and feasible climate change solution
- The North Coast's untapped potential

Register at www.RedwoodEnergy.org

or call (707) 269-1700 for more information

Very fortunate

Bikash Pradhan

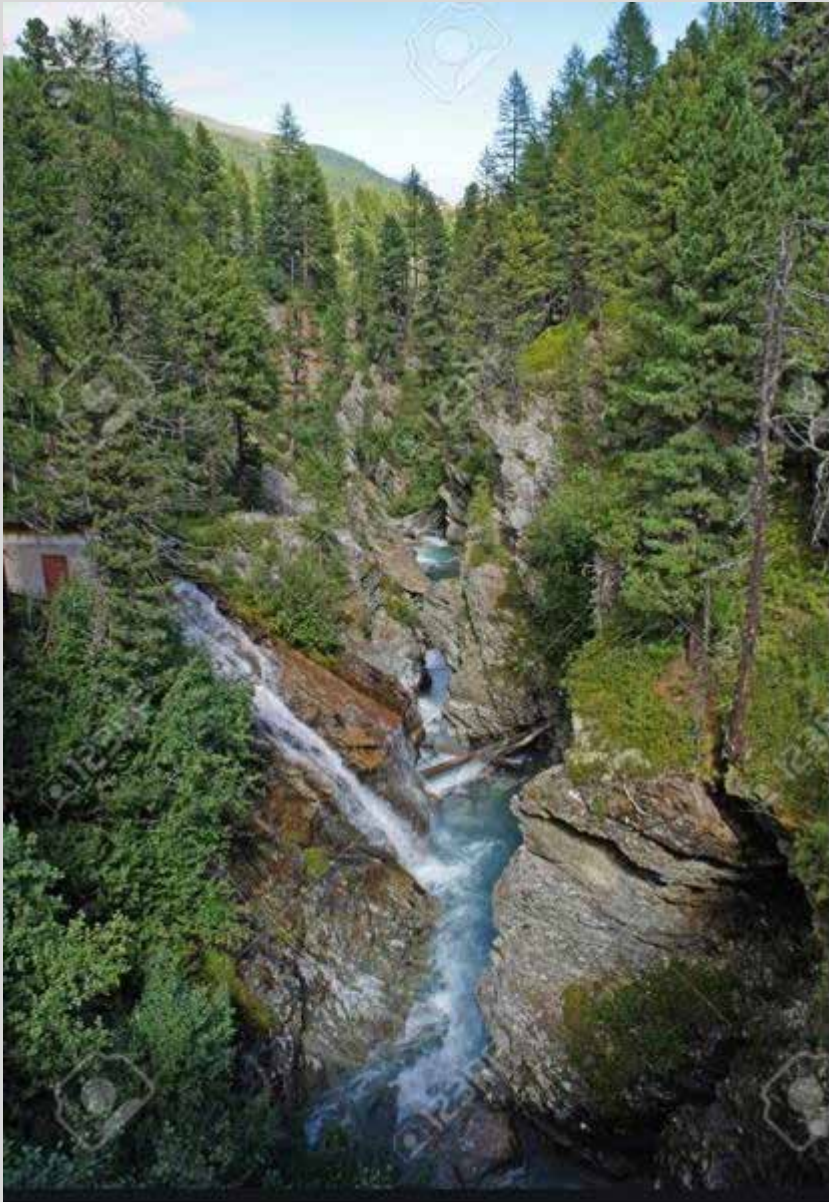


HSU ERE Graduate Student from Bhutan

Expert hydrologist working in run-of-the-river
hydropower in Bhutan

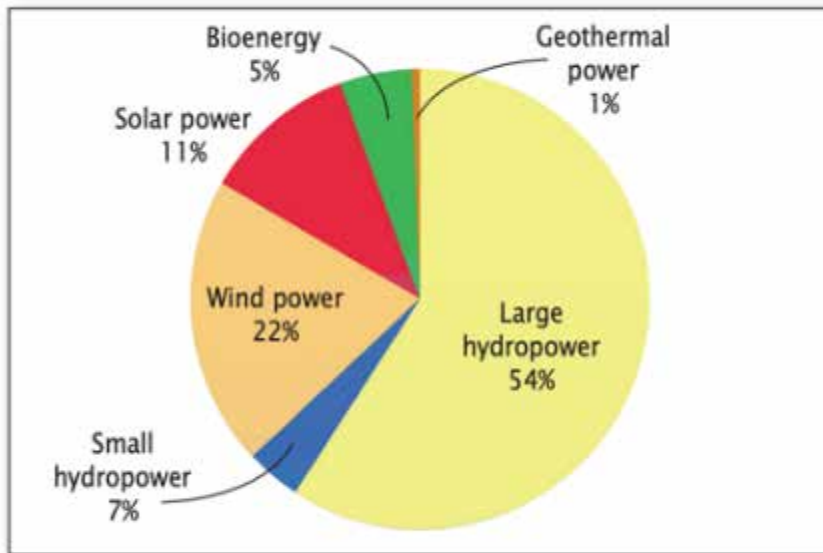
MS Thesis in final preparation
Dr. Eileen Cashman, Chair

The Fuel: Water at elevation



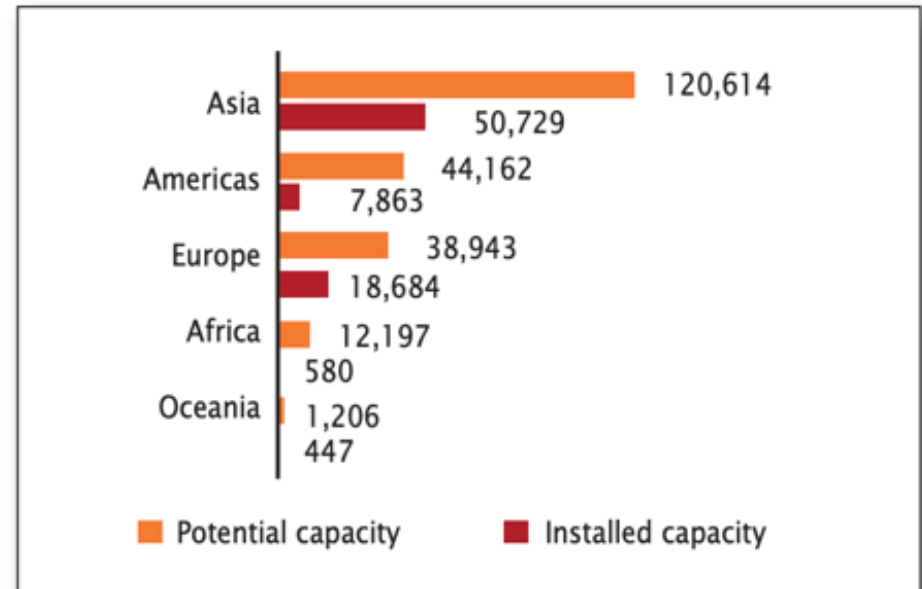
Global Picture of Small Hydropower (SHP)

Global share of renewable energy (%)



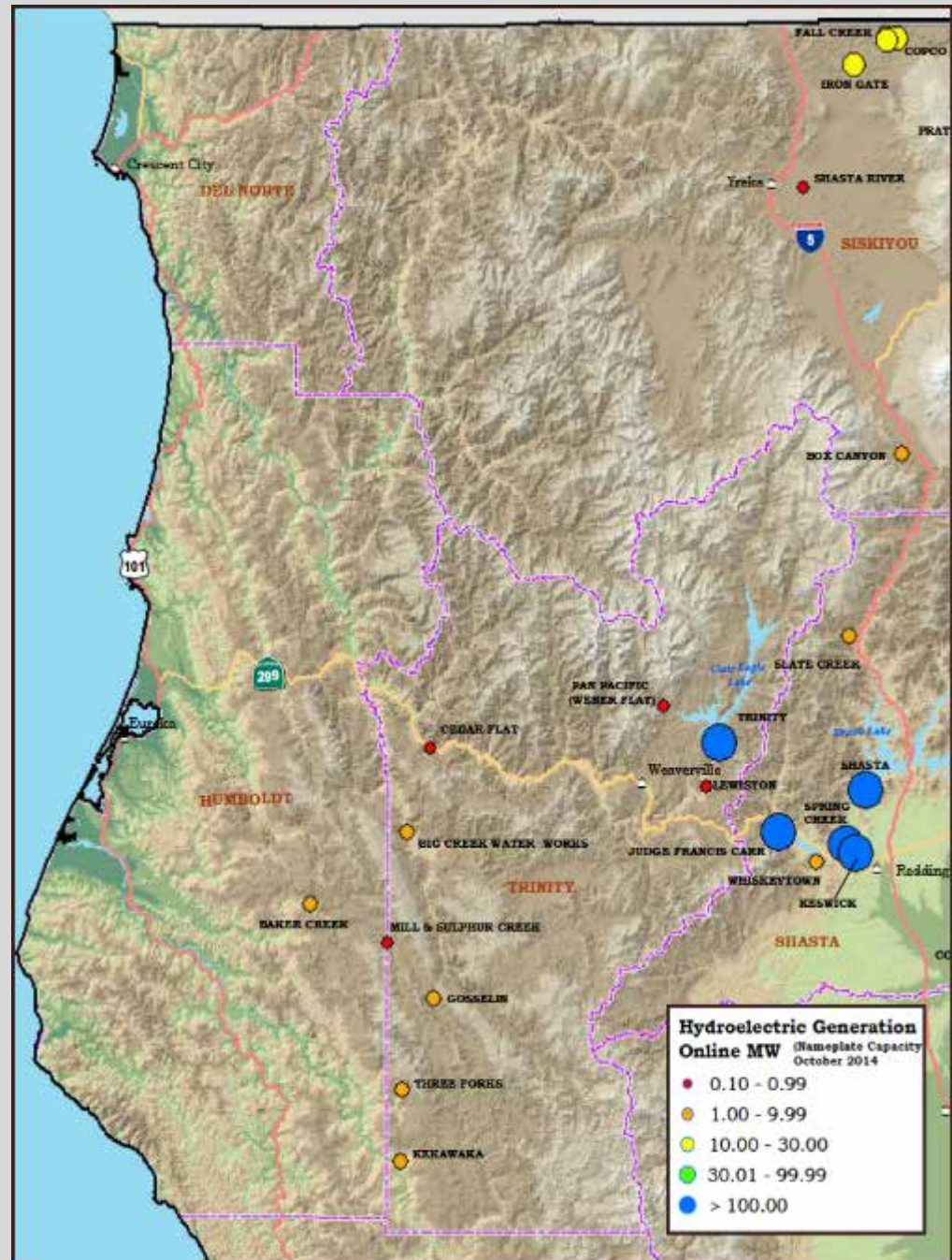
Source: World Bank

SHP by region (<10 MW)



The globally installed small hydropower capacity is estimated at 78 GW in 2016,

Existing SHP facilities in NW Calif.



Context

Water x Head = Power

Not new technology

Seasonal complementarity
with solar and wind

Definitions

Large Hydropower

More than 30 MW

Small Hydropower

Between 100 KW and 10 MW

Micro Hydropower

Up to 100 KW

High head

or

Low head

Grid-Connected

or

Not Grid-Connected

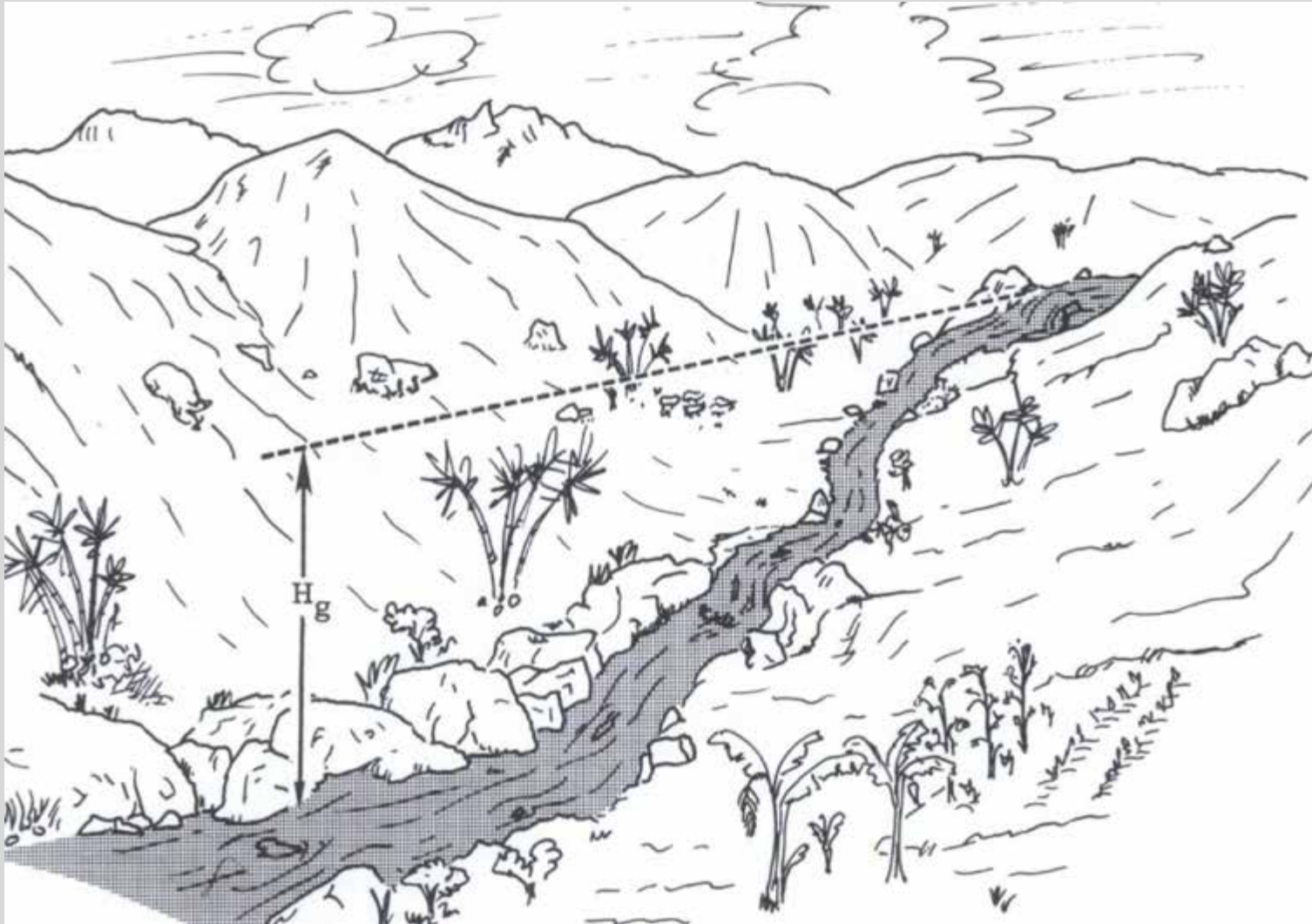
Run-of-the-River

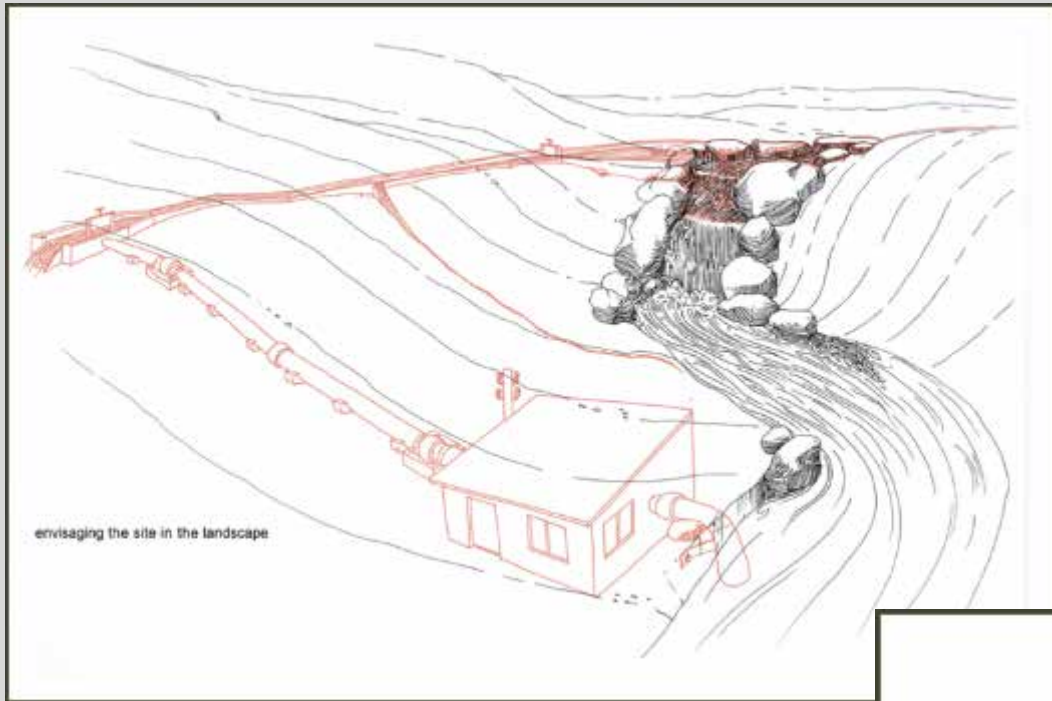
or

With Impoundment(s)

Focus on is on Small, High head, Grid-connected

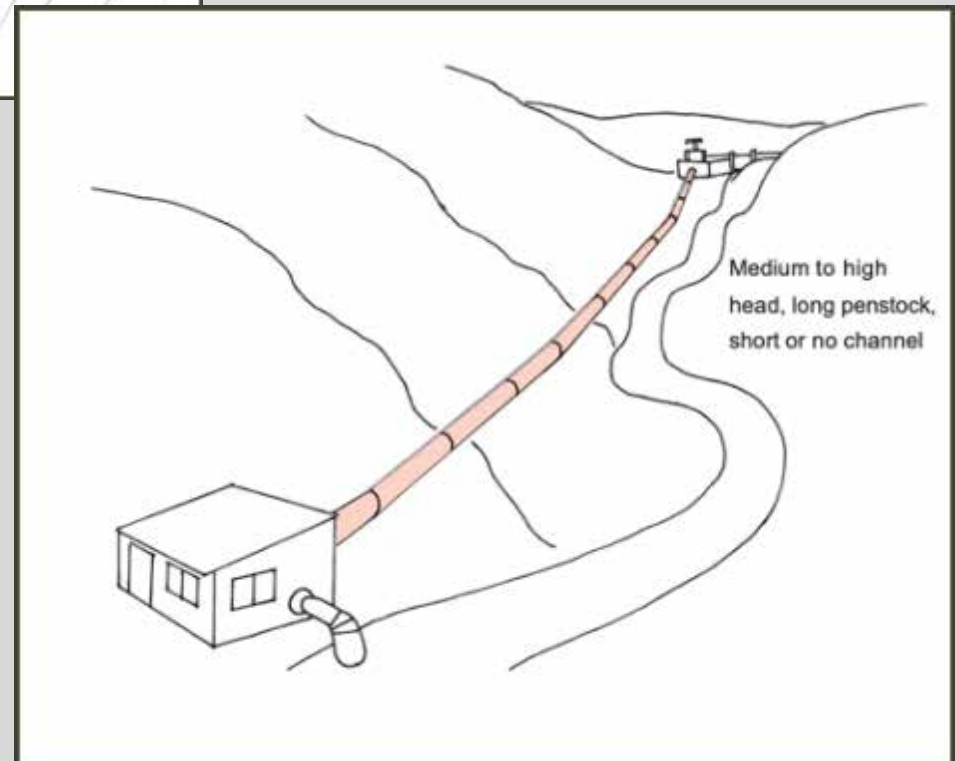
What is "Head"?





With headrace
ditch and penstock

Penstock only



Why?

Why pursue this assessment?

Why so few existing systems?

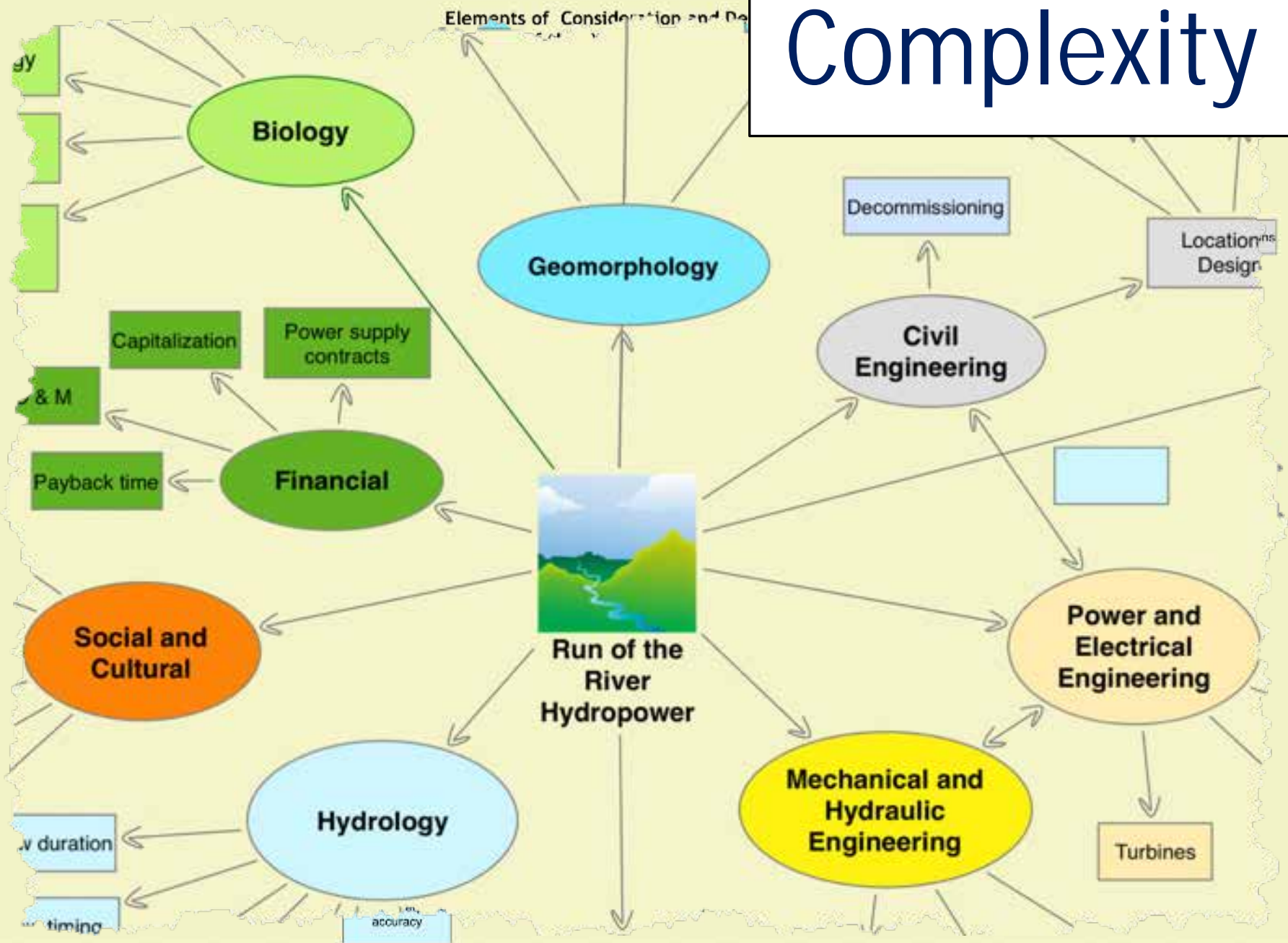
Why pursue hydropower opportunities?

- Good reputation
- Gain accurate knowledge of regional capacity
- Diverse green power for portfolio
- Lots of water and relief in our region. Streams and grid intersect
- Wettest and most reliably wet part of California
- Steep streams with no salmon or steelhead
- Strong complementarity with solar and wind.
Best in Winter when solar and wind yield the least
- Baseline power 24/7

Why pursue hydropower opportunities?

- Public lands mission
- Humboldt County General Plan
- RCEA's strategic plan

Complexity



Features of environmental significance

1. Diversion point
2. Diversion of streamflows
3. Penstock
4. Powerhouse
5. Transmission lines
6. Access roads or trails

Key features of a run-of-the-river small hydroelectric facility



How?

How to “de-risk” suitable watersheds for development

Most crucial to know è Site hydrology

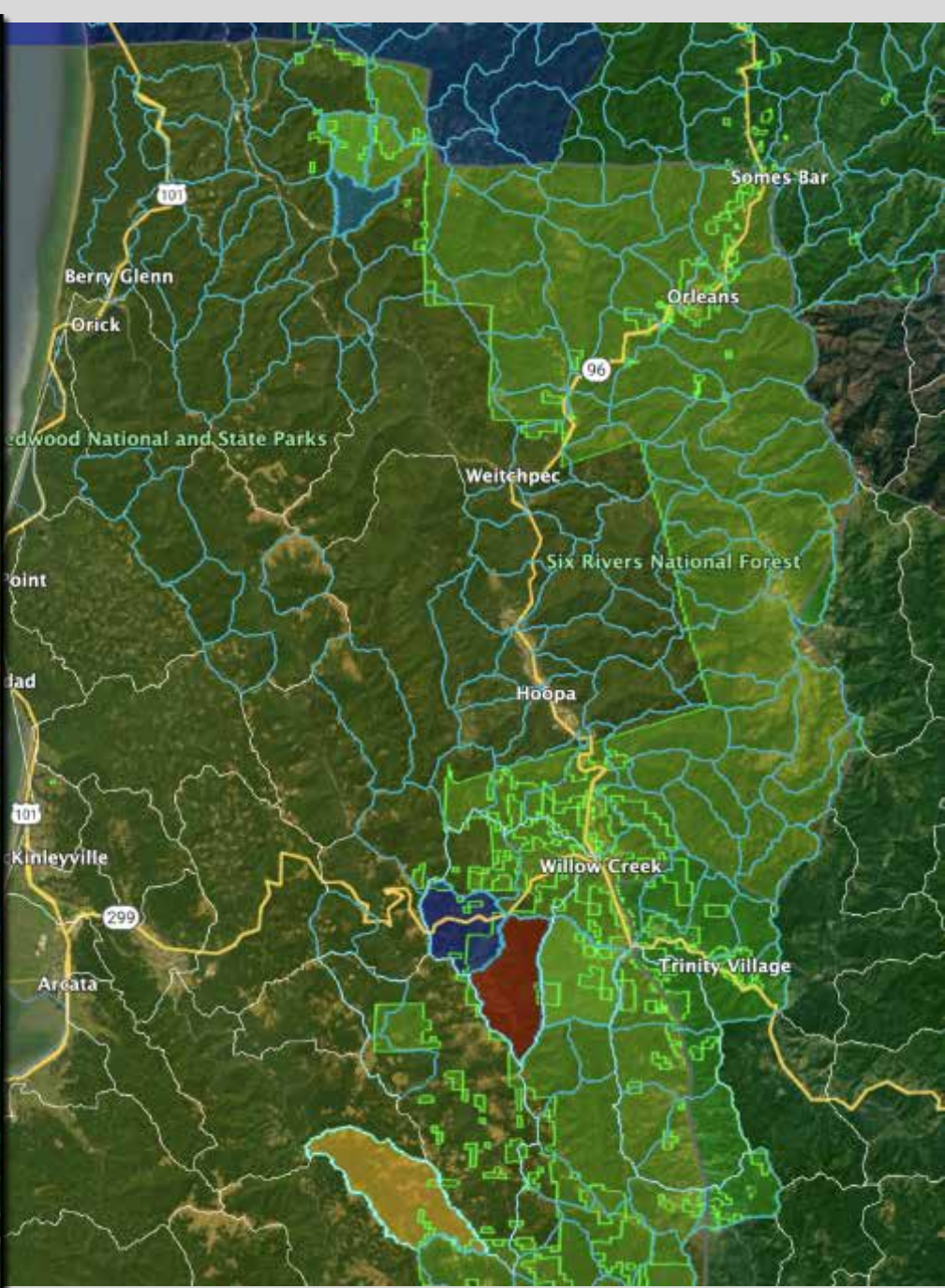
Must be fish-friendly

How?



What we did?

- Project effort downsized in February due to pandemic and funding shortfall
- Reviewed all Humboldt County watersheds (HUC-6)
- Selected the 6 most promising
- Worked up accurate hydrology and context, Analysis advice, best practices, data schema, curated online literature archive, annotated bibliography

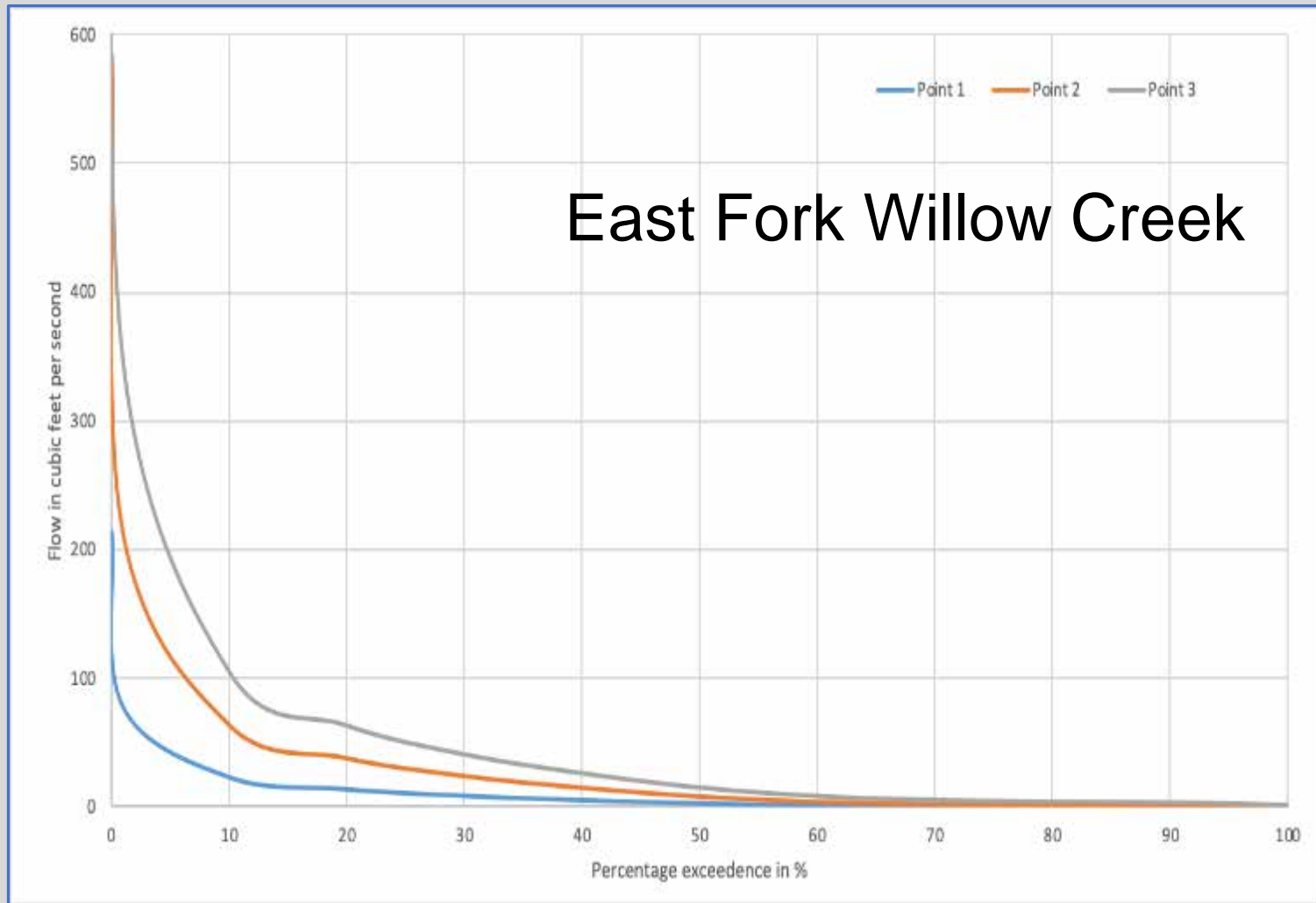


Power Yield Estimates

for November – April
2/3 flow, 75% efficiency

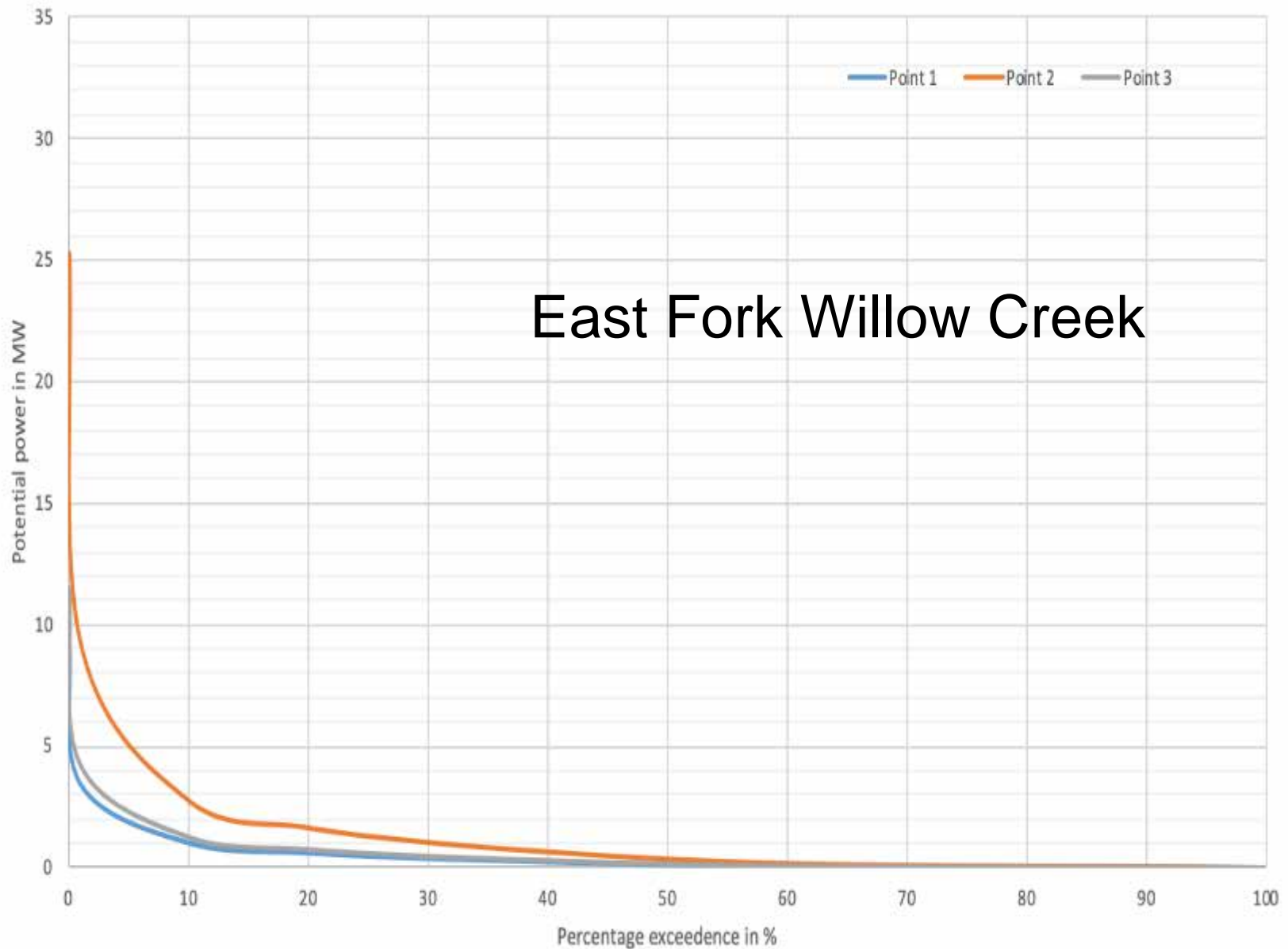
Watershed	Average power yield (MW)
Boulder Creek	6.41
East Fork Willow Creek	1.93
Upper Willow Creek	1.24
Ruby Creek	0.27
Pecwan Creek	6.8
Madden Creek	3.58

Hydrology & Power



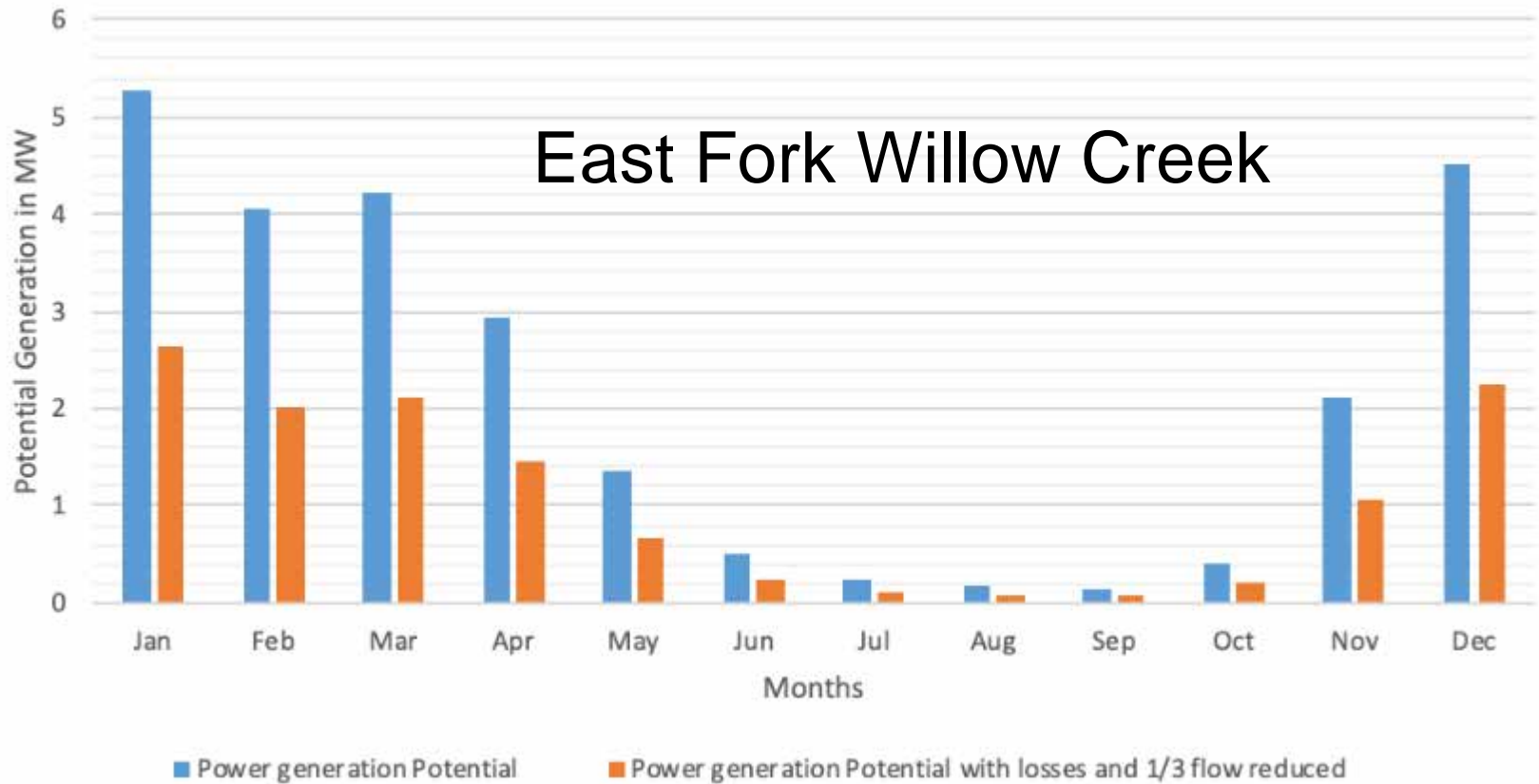
Streamflow duration curve for
each selected diversion point

East Fork Willow Creek



Power duration curve for each selected diversion point

Monthly power estimates



What next?

Screen and workup Trinity County watersheds

Consider working up environmental screening when offices reopen

Demonstrate and discuss with key landowners

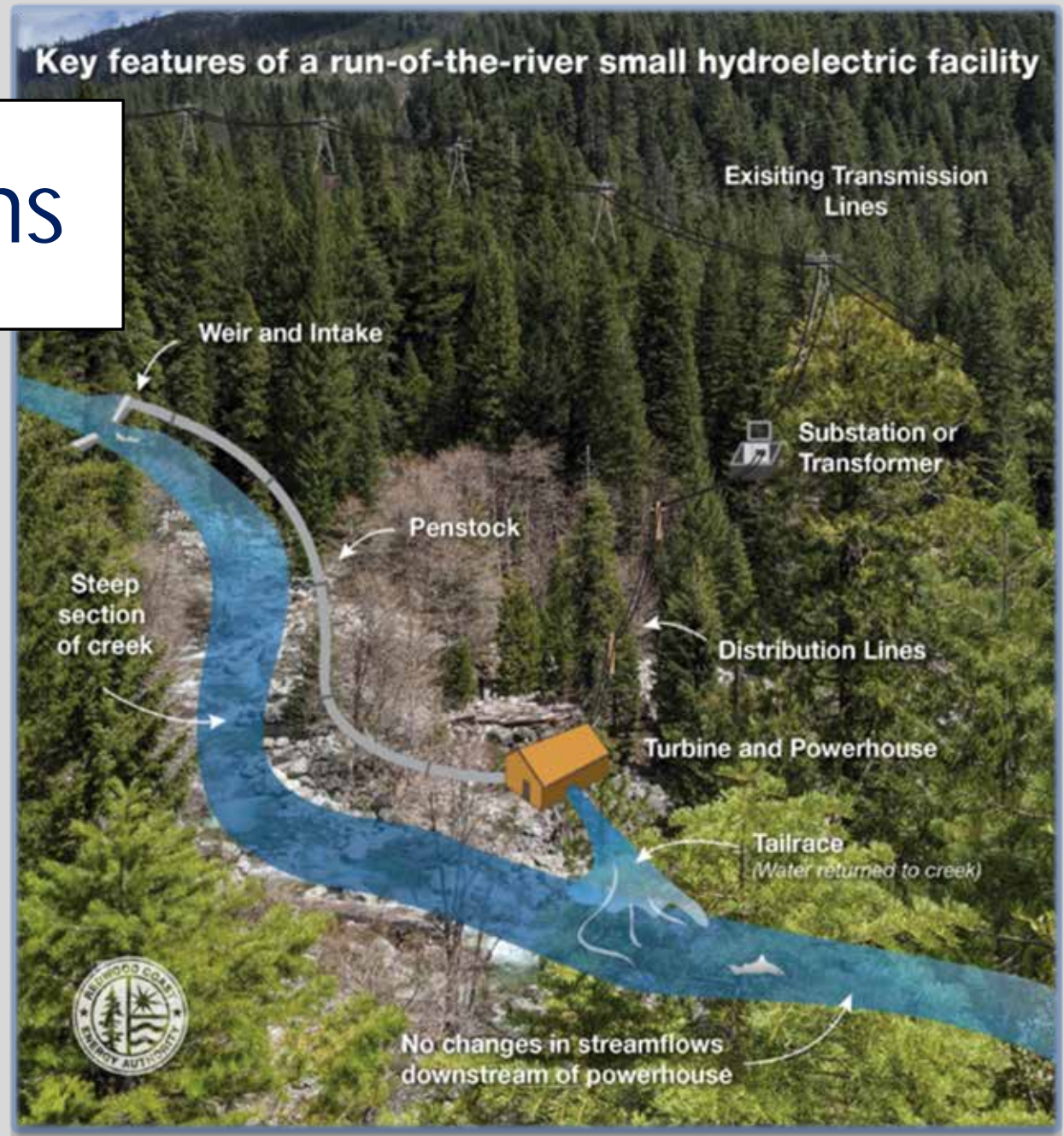
Prepare and advertise a solicitation for small hydro

Review existing permitted/operating systems for opportunities

Consider developing an advisory capacity to support micro hydropower at the home and village-scale

Identify specific project opportunities that benefit the community

Questions





STAFF REPORT

Agenda Item # 8.1

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	RCEA Comments on McKay Tract Subdivision Draft Environmental Impact Report

BACKGROUND

The RCEA Board of Directors formed the Community Advisory (CAC) and approved the Committee's Charter in June 2016. The CAC's initial role was to help plan and conduct workshops to inform the public about the proposed Community Choice Energy program, gather feedback regarding the CCE Technical Study Scenarios and Implementation Plan, synthesize the public feedback and develop program implementation recommendations for the RCEA Board of Directors.

The Board voted to continue the CAC after the CCE program's launch and revised the Board Operating Guidelines document in December 2017 to include a description of the CAC. The CAC's role was adjusted to support RCEA public engagement efforts and to provide decision-making support and input to the RCEA Board.

SUMMARY

At the July Community Advisory Committee meeting, the CAC agreed to report the group's past year accomplishments and upcoming year goals annually to the RCEA Board of Directors. The process aims to organize the body's work and help the Board thoughtfully utilize the committee as a resource to support Board decision-making and agency public engagement efforts. The Board will have the opportunity to evaluate proposed 2022 CAC work goals at next month's Board meeting.

The CAC discussed these potential 2022 work goals at their last meeting. One proposed goal that received strong CAC member support was to review and provide input on energy-specific considerations for large developments and local planning efforts. Current examples include: the proposed Nordic Aquafarms facility, the McKinleyville Town Center Master Plan, and the McKay Tract Subdivision. The evaluation and input would focus on the proposed project's impact on RePower Humboldt strategic plan goals.

As the McKay Tract Subdivision draft environmental impact report (DEIR) comment period closes on December 1, prior to the next CAC meeting, the committee formed an ad hoc Major Project Subcommittee to present recommended comments to the RCEA Board and report outcomes to the full CAC at their next meeting in January.

The comments, after Board input, would be submitted to the Humboldt County Planning and Building Department for the McKay Tract Subdivision Draft Environmental Impact Report at the Board's discretion.

RECOMMENDED ACTION

Approve RCEA comments on McKay Tract Subdivision Draft Environmental Impact Report pertaining to RePower Humboldt strategic plan goals and authorize the Executive Director to submit comments to the Humboldt County Planning and Building Department.

ATTACHMENTS

The CAC ad hoc Major Project Subcommittee's recommended RCEA comments on the McKay Tract Subdivision DEIR will be presented at this meeting.

RCEA Board of Directors Meeting

November 18, 2021

Proposed North McKay Ranch Subdivision :

81 acres mixed-use development

320 residential units

~22,000sqft of commercial

Community Advisory
Committee ad hoc
subcommittee reviewed
Draft EIR and proposes
RCEA submit comments to
the County (deadline for
comments is Dec 1)



RCEA Board of Directors Meeting

November 18, 2021

CAC Subcommittee Recommended Comments:

1. Humboldt County General Plan Policy E-P5 recognizes RCEA's CAPE/RePower Humboldt plan as the governing document to "foster, coordinate, and facilitate countywide strategic energy planning, implementation and education." The DEIR therefore needs to assess the project's consistency with the RePower Humboldt plan.
2. The project is large and will be completed over the course of 20 years, so it will have a major impact on the region's ability to meet the RePower targets.

RCEA Board of Directors Meeting

November 18, 2021

CAC Subcommittee Recommended Comments:

3. The project must show major net reductions in vehicle miles traveled (VMT) to be consistent with the RePower Humboldt target of a 25% reduction in countywide VMT by 2030, and a 65% reduction in greenhouse gas emissions from transportation by 2030.
 - Consistency with this target will require adoption of mitigation measures including completion of bicycle and pedestrian networks in the project area, transit improvements, and transportation demand management strategies.

RCEA Board of Directors Meeting

November 18, 2021

CAC Subcommittee Recommended Comments:

4. The project must be consistent with the RePower Humboldt target of a 20% reduction in building greenhouse gas emissions by 2030, with a trajectory to achieve a 90% reduction by 2050.
 - Consistency with this target will require all-electric construction and a commitment to no natural gas hook-ups.
5. These targets align with the draft Regional Transportation Plan update and the draft Humboldt County Regional Climate Action Plan, both of which are currently under development.



REDWOOD COAST **Energy**Authority

STAFF REPORT **Agenda Item # 9.1**

AGENDA DATE:	November 18, 2021
TO:	Board of Directors
FROM:	Matthew Marshall, Executive Director
SUBJECT:	Executive Director's Staff Report

SUMMARY

Executive Director Matthew Marshall will provide a brief update on:

- local and national offshore wind related activities,
- RCEA activities over the last month, and
- other topics as needed.

RECOMMENDED ACTION

None. (Information only)

November 2021 News and Updates



REDWOOD COAST Energy Authority

Welcome Eileen Verbeck, our new Deputy Executive Director!

Eileen came to us from the City of Arcata, where for the last 12 years she served as the Arcata Police Department's Business Manager. At RCEA, her newly-created position will oversee many of RCEA's internal functions, including human resources, risk management (workers compensation and employee safety), information technology, records management, and general internal administration and operations.



"I am excited to join the RCEA team, and look forward to providing support to the brilliant minds that are working to make Humboldt County a leader in sustainable energy initiatives."



Redwood Coast Airport Microgrid

The project's construction phase is complete, and the airport microgrid is now undergoing testing and commissioning with a goal to enter full commercial operation by the end of 2021 or early 2022. Testing has included feeding power onto PG&E's distribution lines, so the system is already starting to green the grid.



RCEA's Matthew Marshall visits with his brother Marc Marshall, a senior engineer at the Schatz Energy Research Center, while he conducts testing.

RCEA's Dana Boudreau, Matthew Marshall, Nancy Stephenson, and Aisha Cissna

Renewable Energy

On November 1 we closed our solicitation for mid-term reliability resources. The intent is to enter into contracts for electricity generating capacity and energy from new resources, with a preference for projects in our local area. We had a strong response to the solicitation. Staff will review and score the responses in the coming weeks, with a goal to bring the Board a shortlist of projects recommended for contracts in December.

2021 to date

Residential EV Charging Equipment REBATE

6
approved



Electric Vehicles REBATE

16
approved



Heat Pumps REBATE

18
approved



Non-Res Services ASSESSMENTS

7
completed



Residential Services ASSESSMENTS

23 consultations
7 residential kits





Social Media

Follow us and share our posts to engage our community

Events

Run-of-the-River Hydroelectric Power Webinar

Tuesday, December 7, 2021, with Michael Furniss

Our October **Certify & Amplify Supplier Diversity Webinar** was a success. Watch the recording on our website: <https://redwoodenergy.org/supplier-diversity/>

Customer Energy Solutions

Community Grid Program with Swell Energy

Swell officially launched their customer program October 14.

Contractor and Vendor Network - RCEA released an open enrollment opportunity for contractors and vendors to be listed on the RCEA website. It will be a resource for RCEA customers for their energy projects.

RCEA Partner Contractor - We are entering into a contract with SacTown Contractors to help streamline RCEA direct install programs. Customers will have the option of using RCEA's partner contractor with set pricing, while always reserving the option to go with any contractor of their choice. Team trainings are being scheduled.

Workforce Education and Training - The DSM team is continuing to meet, strategize and set goals for RCEA's participation in County-wide workforce education goals to make sure new energy jobs can go to local skilled workers.

Rural Regional Energy Network - We are developing programs and budgets for a 5-year program beginning in 2023.

Mobile Home Solar

We have received the final plan set and engineer's estimate for our Mobile Home Solar Program, and are working with partners to plan for project implementation.

Heat Pump Installations RCEA was awarded a \$99,500 Technology and Equipment for Clean Heating (TECH) initiative Quick Start Grant to offer rebates for heat pump installations for non-natural gas (propane, kerosene, fuel oil or cord wood) users.



Agency Projects

City of Ferndale - solar and lighting

City of Rio Dell - solar, storage, generator

Eureka City Schools - solar, storage, EV bus charger

Southern Humboldt Unified School District - solar

Coastal Grove Charter - carbon monoxide monitors and HVAC assessment

Arcata Elementary - carbon monoxide monitors and HVAC assessment

Redwood Coast Montessori - carbon monoxide monitors and HVAC assessment

CA Redwood Coast Humboldt County Airport - exterior lighting project

Yurok Tribe - multiple project locations