BOARD OF DIRECTORS MEETING AGENDA

October 27, 2022 -Thursday, 3:30 p.m.

COVID-19 NOTICE

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

Pursuant to the Governor's <u>Executive Order N-29-20</u> of March 17, 2020, and <u>revised Brown Act provisions</u> signed into law on September 16, 2021, the RCEA Board of Directors meeting will not be convened in a physical location. Board members will participate in the meeting via an online Zoom video conference.

To participate in the meeting online, go to https://us02web.zoom.us/j/81972368051. To participate by phone, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 819 7236 8051.

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

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 <u>not</u> need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

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

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

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OPEN SESSION Call to Order

1. REPORTS FROM MEMBER ENTITIES

2. ORAL COMMUNICATIONS

This time is provided for people to address the Board or submit written communications 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 September 22, 2022, Board Meeting.
- **3.2** Approve Disbursements Report.
- 3.3 Accept Financial Reports.
- 3.4 Accept Legislative Quarterly Report.
- 3.5 Extend Resolution No. 2022-6 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 27, 2022, through November 25, 2022, pursuant to Brown Act revisions of AB 361.

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. Integrated Resource Plan Power Portfolio Approval

Adopt Resolution No. 2022-8 Approving the 2022 Integrated Resource Plan Portfolio.

<u>Delegate Authority to the Executive Director to Approve the Final Integrated Resource Plan For Submission to the California Public Utilities Commission.</u>

NEW CCE BUSINESS – None.

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

7. OLD BUSINESS

7.1 Racial Justice Plan Progress Update

Accept Racial Justice Plan progress report.

Adopt Racial Justice Plan.

8. NEW BUSINESS

8.1 Rural Regional Energy Network Regulatory and Legal Services Agreement with PefferLegal

Authorize the Executive Director to execute a Legal Services Agreement with PefferLegal for RuralREN regulatory support and legal services through December 2023 for a not to exceed value of \$90,000, subject to sufficient budgetary allocations and pending RCEA General Counsel review.

- **8.2** PG&E Southern Humboldt Transmission Issues (Information only.)
- **8.3** Memorandum of Understanding with the California Fishermen's Resiliency Association

Approve a Memorandum of Understanding between the California Fishermen's Resiliency Association and RCEA, and authorize the Executive Director to execute the agreement contingent on final review and approval by RCEA Legal Counsel.

9. STAFF REPORTS

9.1 Executive Director's Report

10. FUTURE AGENDA ITEMS

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

11. CLOSED SESSION

- 11.1 Conference with real property negotiators pursuant to Government Code § 54956.8 in re: APNs 001-141-005 and 001-141-006; RCEA negotiator: Executive Director; Owner's negotiating party: Wells Commercial; Under negotiation: price and terms.
- **11.2** 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, November 17, 2022, 3:30 p.m.

Meeting location to be determined. Online and phone participation will be available via Zoom.

BOARD OF DIRECTORS DRAFT MEETING MINUTES

Fax: (707) 269-1777

Web: www.redwoodenergy.org

September 22, 2022 - Thursday, 3:30 p.m.

Notice of this meeting was posted on September 17, 2022. Vice Chair Chris Curran called a regular meeting of the Board of Directors of the Redwood Coast Energy Authority to order on the above date at 3:33 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. Vice Chair Curran stated that the posted agenda contained public teleconference meeting participation instructions.

PRESENT: Chair Stephen Avis, Rex Bohn, Vice Chair Chris Curran, Mike Johnson (Fortuna Alternate Director), Sarah Schaefer, Frank Wilson, Sheri Woo. ABSENT: Scott Bauer, Mike Losey (Fortuna Director), Jack Tuttle. STAFF AND OTHERS PRESENT: Ardi Arian, Renewable America President and CEO: General Counsel Nancy Diamond: Power Resources Director Richard Engel; Senior Power Resources Manager Jocelyn Gwynn; Executive Director Matthew Marshall: Power Resources Specialist Colin Mateer: Board Clerk Lori Taketa; Deputy Executive Director Eileen Verbeck.

ORAL COMMUNICATIONS

There were no public comments on items not on the agenda. Vice Chair Curran closed the oral communications portion of the meeting.

CONSENT CALENDAR

- **3.1** Approve Minutes of August 25, 2022, Board Meeting.
- **3.2** Approve Disbursements Report.
- **3.3** Accept Financial Reports.
- **3.4** Extend Resolution No. 2022-6 Ratifying Governor Newsom's March 4, 2020, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies, for the period September 22, 2022, through October 21, 2022, pursuant to Brown Act revisions of AB 361.

Neither directors nor members of the public requested that items be removed from the consent calendar.

M/S: Schaefer, Woo: Approve consent calendar items.

The motion passed with a unanimous roll call vote. Ayes: Avis, Bohn, Curran, Johnson, Schaefer, Wilson, Woo. Noes: None. Absent: Bauer, Tuttle. Abstain: None.

OLD BUSINESS

5.1. Foster Clean Power A Solar Plus Storage Power Purchase Agreement - CPUC Mid-Term Reliability Procurement

Power Resources Senior Manager Gwynn reported on the proposed solar and storage project in Arcata by developer Renewable America. Staff proposed that RCEA procure energy, resource adequacy, and renewable energy certificates from this project to satisfy the state's 2024-2025 mid-term reliability requirements. The project is going through the County permitting process.

Renewable America President and CEO Ardi Arian introduced himself and described site studies, current and proposed land use. The County issued a permit for a nearby cannabis project which requires solar electricity. The proposed site is desirable due to a nearby grid interconnection point. The project meets County development requirements.

The directors expressed concerns about using agriculture lands for solar farms and allowing willing landowners to submit piecemeal development requests. RCEA's strategic plans call for working with the County on limiting energy projects to designated renewable energy development areas. Efforts on that collaboration with the County have been postponed until County staff completes Climate Action Plan work.

There were no responses from the public to Vice Chair Curran's invitation for comment and the public comment period was closed.

M/S: Woo, Schaefer: Approve Power Purchase Agreement with Foster Clean Power A LLC and authorize the Executive Director to execute all applicable documents.

<u>The motion passed with a unanimous roll call vote. Ayes: Avis, Bohn, Curran, Johnson, Schaefer, Wilson, Woo. Noes: None. Absent: Bauer, Tuttle. Abstain: None.</u>

NEW BUSINESS

6.1. Rural Electric Vehicle Charging CEC Grant

Executive Director Marshall reported on the proposed award of \$700,000 to RCEA for rural Humboldt County electric vehicle charging site development. The grant requires \$175,000 in match funding.

The directors discussed the charging stations' potential to enable vehicles to help power the grid during emergencies and whether proposed Southern Humboldt sites can be powered given PG&E's recent reports of infrastructure limitations. Staff agreed to provide more detailed equipment costs for RCEA-developed projects going forward.

J.A. Savage submitted a written comment requesting that the charging stations be able to process credit and debit card transactions instead of requiring use of a cell phone app.

To member of the public Sunny's inquiry about the construction timeline, staff responded that the project will go through the design and permitting process in early 2023 before construction through early 2024. Vice Chair Curran closed the public comment period.

M/S: Johnson, Bohn: Approve accepting CEC Rural Electric Vehicle Charging Grant in the amount of \$700,000 and authorize \$175,000 in RCEA match funds for a total project

cost of \$875,000 and authorize the Executive Director to execute the Grant Agreement and any associated documents necessary to secure the grant following review and approval by RCEA General Counsel.

<u>The motion passed with a unanimous roll call vote. Ayes: Avis, Bohn, Curran, Johnson, Schaefer, Wilson, Woo. Noes: None. Absent: Bauer, Tuttle. Abstain: None.</u>

Vice Chair Curran confirmed there was a Community Choice Energy quorum.

OLD CCE BUSINESS

7.1. Renewable America North Bank Road Projects Update – CPUC Mid-Term Reliability Procurement

Power Resources Senior Manager Gwynn reported that the project developer has changed the project's location, scope and operation date and the project no longer helps meet statemandated mid-term reliability goals. The project would still fulfil Board local solar energy development goals. Development of a smaller solar project submitted to RCEA by Renewable America as a feed-in tariff project at this project's original site will be contingent upon Board approval to buy power from this larger solar development and County permit approval.

The directors expressed concern about the perceived piecemeal approach to local power purchase agreements (PPAs) and potential misconstrual of RCEA's PPAs as support for unpopular development projects on agricultural or timber lands regardless of social or environmental consequences. It was clarified that determination of each energy development project's environmental impacts and zoning appropriateness is beyond RCEA's purview. Developers usually need confirmed power buyers to find project financing to go through the permitting and construction phases. It is rare for fully permitted, post-CEQA process projects to respond to calls for renewable power providers and to find developable Humboldt land not already covered by trees or zoned for agriculture or industrial use. Projects under contract to RCEA to which the County does not grant permits will eventually fail to meet development milestones in the contract and go into seller default, if the contract is not canceled when the permit is denied. RCEA staff is honoring community-determined and Board-approved goals to procure local renewable energy. The directors expressed support for local renewable power, concern for project siting, and support for continued negotiation.

There were no responses from the public to Vice Chair Curran's invitation for comment and the public comment period was closed.

M/S: Avis, Schaefer: Authorize staff to continue negotiations with Renewable America of a long-term power purchase agreement for the 5 MW North River Clean Power solar plus storage project.

<u>The motion passed with a unanimous roll call vote. Ayes: Avis, Bohn, Curran, Johnson, Schaefer, Wilson. Noes: None. Absent: Bauer, Tuttle. Abstain: None. Non-Voting: Woo.</u>

NEW CCE BUSINESS

8.1 2022 Integrated Resource Plan Portfolio Review

Power Resources Director Engel described the state's required biennial Integrated Resource Plan filing, which helps the state plan for electricity needs for the next 10 years and helps staff ensure that the agency meets state decarbonization, reliability and cost-effectiveness guidelines as well as the Board's renewable energy procurement goals. Staff Director Engel described four possible energy portfolios with varied amounts of offshore wind, geothermal and biomass energy. Staff are recommending a diverse preferred conforming portfolio. The directors were asked to weigh the value of local versus non-local renewable power considering different available power sources, to consider whether to continue biomass procurement beyond the Humboldt Sawmill Company contract expiration in 2031 through 2035, and whether short-term large hydropower contracts should be pursued beyond the 2020s to hold a place for offshore wind and other resources that will take a long time to develop.

The directors discussed the need for power grid upgrades and the desirability of a southern transmission route to accommodate both large-scale Humboldt County offshore wind and Sonoma County geothermal development, the source of actual electrons used in Humboldt County and how local renewable projects green the greater electric grid and reduce local reliance on PG&E's Humboldt Bay Generation Station, and the probability of purchasing more in-state renewables as Pacific Northwest large hydropower availability wanes. The desirability of committing to local biomass through 2035 was mentioned, as it would allow HSC to invest in clean power delivery upgrades and repairs. Staff will request director approval for the diverse portfolio option at the next Board meeting.

Lucas Giese, a resident of Bayside, inquired about RCEA's public engagement on the Integrated Resource Plan beyond Board and Community Advisory Committee meetings. Staff described public engagement efforts to update the agency's RePower strategic plan in 2019 which included community input on power sources, and plans to do public workshops in 2023 to inform the 2024 IRP update. To Mr. Giese's inquiry on how load assumptions were developed, staff Manager Gwynn described requirements to use the California Energy Commission's load forecasts. Vice Chair Curran closed the public comment period.

STAFF REPORTS

9.1. Executive Director's Report

Executive Director Marshall described recent PG&E reports about transmission system problems that are preventing electricity load growth in Southern Humboldt. Previous staff discussions with PG&E covered upcoming Southern Humboldt cannabis projects and other planned growth but PG&E had previously expressed no concerns. Staff will discuss with PG&E immediate and near-term grid-management actions RCEA can take to alleviate local load congestion until transmission upgrades are made. To engage effectively, RCEA needs clearer understanding of congestion locations, which PG&E has previously not disclosed.

The directors differentiated between limited transmission into and out of the county and the current problem involving Southern Humboldt substations and transmission lines. They described completed construction projects that were promised electricity by PG&E but which were not connected to the utility's distribution system and the potential harm to regional economic development as developers threaten to abandon projects due to lack of electrical supply. No member of the public commented on this report. Vice Chair Curran closed the comment period.

FUTURE AGENDA ITEMS

Directors requested that a PG&E Regional Vice President attend the next RCEA Board meeting to discuss PG&E's inability to serve electricity load increases in Southern Humboldt, and PG&E's lack of communication with government agencies regarding this matter.

CLOSED SESSION

There was no public comment regarding closed session item:

11.1 Conference with real property negotiators pursuant to Government Code § 54956.8 in re: APNs 001-141-005 and 001-141-006; RCEA negotiator: Executive Director; Owner's negotiating party: Wells Commercial; Under negotiation: price and terms.

The directors adjourned to closed session at 5:29 p.m. The Board reconvened from closed session at 6:09 p.m. Executive Director Marshall stated there was nothing to report from closed session and adjourned the meeting at 6:09 p.m.

Lori Taketa Clerk of the Board



Redwood Coast Energy Authority Disbursements Report

As of August 31, 2022

Туре	Date	Num	Name	Memo	Amount
Liability Check	08/09/2022	E-pay	EDD	Taxes	-1.73
Liability Check	08/09/2022	E-pay	EDD	Taxes	-0.90
Liability Check	08/09/2022	E-pay	EDD	Taxes	-777.51
Liability Check	08/09/2022	E-pay	Internal Revenue Service	Taxes	-2,819.50
Liability Check	08/10/2022	E-pay	EDD	Taxes	-5,804.12
Liability Check	08/10/2022	E-pay	Internal Revenue Service	Taxes	-26,585.82
Liability Check	08/10/2022	E-pay	EDD	Taxes	-3.00
Check	08/10/2022	13938	NEM Customer	REISSUE - NEM Account Close Out #179783699	-15.71
Check	08/10/2022	13939	NEM Customer	REISSUE - NEM 2021 Annual Payout Acct#: 21519	-255.79
Check	08/10/2022	13940	CCE Customer	Heat Pump Rebate #DS-R-220725-0433	-800.00
Check	08/10/2022	13941	CCE Customer	Heat Pump Rebate #DS-R-220725-0434	-2,700.00
Check	08/10/2022	13942	SacTown Contractor's Corp.	VOID: PA install - With Open Arms - #DI-NR-22004	0.00
Check	08/10/2022	13943	SacTown Contractor's Corp.	VOID: PA install - McKinleyville Animal Care Center	0.00
Check	08/10/2022	13944	CCE Customer	PA equipment rebate - #DS-R-220725-0435	-1,208.00
Check	08/10/2022	13945	CCE Customer	PA equipment rebate - #DS-R-220728-0438	-190.00
Check	08/10/2022	13946	Sloan, J.	Per Diem - August travel to WEI Elec. Utilities traini	-143.00
Check	08/10/2022	13947	NEM Customer	NEM Account Close Out #3399178459	-299.91
Check	08/10/2022	13948	NEM Customer	NEM Close Out Acct #:3967315453	-264.10
Check	08/10/2022	13949	NEM Customer	NEM Account Close Out #4929594906	-253.69
Check	08/10/2022	13950	NEM Customer	NEM Close Out Acct #2343146327	-241.62
Check	08/10/2022	13951	NEM Customer	NEM Close Out Acct #1770179139	-217.74
Check	08/10/2022	13952	NEM Customer	NEM Account Close Out #6383230267	-182.26
Check	08/10/2022	13953	NEM Customer	NEM Account Closeout #6061649620	-137.17
Check	08/10/2022	13954	CCE Customer	VOID: Reissue to other account holder name - Trist	0.00
Check	08/10/2022	13955	CCE Customer	NEM Close Out Acct#: 8597583183	-98.62
Check	08/10/2022	13956	CCE Customer	NEM Close Out: Acct #3281238641	-89.21
Check	08/10/2022	13957	CCE Customer	NEM Close Out Acct #2470419534	-40.80
Check	08/10/2022	13958	CCE Customer	NEM Close Out Acct #8417215360	-18.57
Check	08/10/2022	13959	CCE Customer	NEM Closeout Acct #5212665583	-13.98
Check	08/10/2022	13960	CCE Customer	NEM Closeout Acct #6926683151	-2.62
Bill Pmt -Check	08/10/2022	13961	Advanced Security	Security monitoring: Aug-Oct 2022	-132.00
Bill Pmt -Check	08/10/2022	13962	Aigueous, LLC	July services and software fees	-9,575.00
Bill Pmt -Check	08/10/2022	13963	Amazon.com	monthly billing - July 2022	-2,493.79
Bill Pmt -Check	08/10/2022	13964	AT&T	VOID: reissued as two seperate payments for differ	0.00
Bill Pmt -Check	08/10/2022	13965	Bidwell Consulting Services, Inc.	Normal retirement age & trustee amendments	-400.00
Bill Pmt -Check	08/10/2022	13966	Boudreau, D.	March - July 2022 purchase and travel reimbursem	-1,129.24
Bill Pmt -Check	08/10/2022	13967	Braun Blaising & Wynne	Legal Services - Regulatory -June 2022	-13,599.10
Bill Pmt -Check	08/10/2022	13968	City of Arcata	July 2022 Utility User Tax	-12,208.92
Bill Pmt -Check	08/10/2022	13969	City of Arcata	July 2022 Excessive Energy Use Tax	-3,574.91
Bill Pmt -Check	08/10/2022	13970	AT&T		-163.00
				RCAM charges: 9/1 8/21/2022	-921.24
Bill Pmt -Check	08/10/2022	13971	AT&T	RCAM charges: 8/1 - 8/31/2022	
Bill Pmt -Check	08/10/2022	13972	Developed Employment Services, LLC.	Facilities maintenance work	-64.65
Bill Pmt -Check	08/10/2022	13973	Diamond, Nancy	July legal services	-6,000.00
Bill Pmt -Check	08/10/2022	13974	Donald Dame	Professional Services July 2022	-204.75
Bill Pmt -Check	08/10/2022	13975	FedEx	Res Kit 5797 & 5830	-96.67
Bill Pmt -Check	08/10/2022	13976	Frontier Energy, Inc.	PA Program Consulting - July 2022	-852.50
Bill Pmt -Check	08/10/2022	13977	Hilson, D.	Mileage reimbursement - July 2022	-9.38
Bill Pmt -Check	08/10/2022	13978	HSU - Sponsored Programs Foundation	Pole Mounted Solar Plan Set - personnel costs	-239.00
Bill Pmt -Check	08/10/2022	13979	HireRight	Background Check: new hires	-30.00
Bill Pmt -Check	08/10/2022	13980	Marshall, M.	M. Marshall travel: CalCCA meetings	-742.90
Bill Pmt -Check	08/10/2022	13981	Mission Uniform & Linen	AUG mat service & janitorial supplies	-131.11

Redwood Coast Energy Authority Disbursements Report

As of August 31, 2022

Туре	Date	Num	Name	Memo	Amount
Bill Pmt -Check	08/10/2022	13982	Newport Group	Participant Fees for Retirement Plan - 7/1 - 9/30/20	-827.50
Bill Pmt -Check	08/10/2022	13983	North Coast Cleaning	July monthly cleaning service	-480.00
Bill Pmt -Check	08/10/2022	13984	North Coast Journal	June and July job postings	-841.00
Bill Pmt -Check	08/10/2022	13985	Pacific Paper Company	Chair - ECD 202JSXT	-676.26
Bill Pmt -Check	08/10/2022	13986	PG&E EV Account	EV stations 6/14-7/14/2022	-1,344.94
Bill Pmt -Check	08/10/2022	13987	Premier Financial Group	Advisory Fee	-3,436.92
Bill Pmt -Check	08/10/2022	13988	Ray Morgan Company	Printer Charges: 7/6-8/5/22	-145.38
Bill Pmt -Check	08/10/2022	13989	Recology	Garbage service	-188.76
Bill Pmt -Check	08/10/2022	13990	Stitch Witch	remainder of logo gear order	-646.30
Bill Pmt -Check	08/10/2022	13991	Times Printing Company	Mailers	-1,341.69
Bill Pmt -Check	08/10/2022	13992	AT&T Long Distance	Phone charges 7/25 - 8/24/2022	-161.12
Bill Pmt -Check	08/10/2022	13993	City of Eureka-Water	Water service, 6/28- 7/26/22	-174.30
Bill Pmt -Check	08/10/2022	13994	Lost Coast Wind	June 2022 professional services	-6,450.00
Bill Pmt -Check	08/10/2022	13995	Optimum Business	Phone & Internet access - 6/28 - 7/27/2022	-1,101.75
Bill Pmt -Check	08/10/2022	13996	Verizon Wireless	Tablet/cell service for staff - 6/29 - 7/28/2022	-1,338.51
Check	08/10/2022	13997	VISA	June 2022 Statement 6/22/2022 - 7/20/2022	-7,478.99
Liability Check	08/09/2022	13998	Umpqua Bank	Health Savings Account contributions	-148.72
Paycheck	08/10/2022	ACH	Employees	Payroll	-64,718.85
Liability Check	08/10/2022	ACH	Newport Group	Deferred compensation contributions	-16,077.71
Check	08/22/2022	7.011	Umpqua Bank	Service Charge	-140.65
Liability Check	08/24/2022	E-pay	EDD	Taxes	-5,880.68
Liability Check	08/24/2022	E-pay	Internal Revenue Service	Taxes	-26,943.62
Liability Check	08/24/2022	E-pay	EDD	Taxes	-1.31
Bill Pmt -Check	08/25/2022	ACH	Leapfrog Energy	July 2022 RA	-36,740.00
Bill Pmt -Check	08/25/2022	ACH	CalPine Corporation	Calpine July 2022 Costs	-61,597.44
Bill Pmt -Check	08/25/2022	ACH	Humboldt Sawmill Co.	July 2022 Electricity	-761,100.40
Bill Pmt -Check	08/25/2022	ACH	Keenan	Anthem Medical Insurance September 2022	-20,339.55
Check	08/25/2022	13999	CCE Customer	REISSUE- Heat Pump Rebate #DS-R-220719-0423	-975.00
Check	08/25/2022	14000	NEM Customer	REISSUE - NEM Close Out: Acct #4446049021	-59.03
Check	08/25/2022	14000	CCE Customer	EV Rebate #: EV29	-1,000.00
Check	08/25/2022	14001	CCE Customer	EV Rebate #EV30 & Res EVSE rebate #EVSE12	-1,376.59
Check	08/25/2022	14002	CCE Customer	EV Rebate #: EV31	-1,000.00
	08/25/2022	14003	CCE Customer	EV Rebate #: EV32	-1,750.00
Check	08/25/2022	14004	CCE Customer		-800.00
Check				Heat Pump Rebate #DS-R-220725-0432	
Check	08/25/2022	14006	CCE Customer	PA Equipment Rebate - Res #DS-R-220818-0469	-260.00
Check	08/25/2022	14007	CCE Customer	PA Equipment Rebate - Res #DS-R-220727-0436	-940.00
Check	08/25/2022	14008	CCE Customer	PA Equipment Rebate - Res #DS-R-220728-0437	-255.00
Check	08/25/2022	14009	CCE Customer	PA Equipment Rebate - Res #DS-R-220801-0442	-940.00
Check	08/25/2022	14010	CCE Customer	PA install - Ingomar Club #DI-NR-220518-0281	-1,894.06
Check	08/25/2022	14011	CCE Customer	PA install - WWTP #DI-NR-220607-0353	-1,297.62
Check	08/25/2022	14012	NGI, Inc.	PA install - Broadway Medical - #DI-NR-2200406-0	-1,415.00
Check	08/25/2022	14013	CCE Customer	PA Equipment Rebate - Res #DS-R-220801-0443	-940.00
Check	08/25/2022	14014	SacTown Contractor's Corp.	PA installs: Red. Renal, Roger's Mk, A1AA	-16,703.84
Check	08/25/2022	14015	SacTown Contractor's Corp.	REISSUE - PA install: MACC	-4,130.23
Bill Pmt -Check	08/25/2022	14016	Advanced Display & Signs	RCEA Logo stickers	-242.21
Bill Pmt -Check	08/25/2022	14017	Alber's Tractor and Ag Work	Mowing services for ACV solar site	-700.00
Bill Pmt -Check	08/25/2022	14018	Ameritas - Dental	#010-055098-00001 Dental - Sept. 2022	-1,552.47
Bill Pmt -Check	08/25/2022	14019	Ameritas - Vision	010-055098-00002 Vision - Sept. 2022	-335.12
Bill Pmt -Check	08/25/2022	14020	Blue Lake Rancheria	Final Loan Repayment - September 2022	-2,013,777.78
Bill Pmt -Check	08/25/2022	14021	Colonial Life	Colonial Life Premiums August 2022	-1,489.40
Bill Pmt -Check	08/25/2022	14022	David L. Moonie & Co., LLP	Accounting consulting - July 2022	-1,748.00

Redwood Coast Energy Authority Disbursements Report As of August 31, 2022

Туре	Date	Num	Name	Memo	Amount
Bill Pmt -Check	08/25/2022	14023	FedEx	Res Kit - service 254	-27.74
Bill Pmt -Check	08/25/2022	14024	HSU - Sponsored Programs Foundation	Pole Mounted Solar Plan Set hours	-3,156.98
Bill Pmt -Check	08/25/2022	14025	Humboldt Bay Coffee Co.	Office Coffee	-43.25
Bill Pmt -Check	08/25/2022	14026	Humboldt Bay Harbor District	Conference Room Rental	-25.00
Bill Pmt -Check	08/25/2022	14029	Kullmann, S.	DSM Managers retreat lunch	-130.72
Bill Pmt -Check	08/25/2022	14030	Local Worm Guy	Bi-monthly compost pickup - June and July 2022	-50.00
Bill Pmt -Check	08/25/2022	14031	Mission Uniform & Linen	AUGUST mat service	-8.47
Bill Pmt -Check	08/25/2022	14032	Newport Group	Participant Fees for 457 Plan - 4/1 - 6/30/2021	-850.50
Bill Pmt -Check	08/25/2022	14033	North Coast Journal	August job posting ads	-614.00
Bill Pmt -Check	08/25/2022	14034	NYLEX.net, Inc.	Onsite network support services - September	-3,200.00
Bill Pmt -Check	08/25/2022	14035	PG&E CCA	July 2022 CCE Charges	-22,245.23
Bill Pmt -Check	08/25/2022	14036	PG&E Utility Account	7/15-8/15/22 utilities	-993.50
Bill Pmt -Check	08/25/2022	14037	Pierson Building Center	Safety - masks	-23.51
Bill Pmt -Check	08/25/2022	14038	Shred Aware	Shredding services - August 2022	-65.00
Bill Pmt -Check	08/25/2022	14039	Taketa, L.	Purchase reimbursement: wifi adapter	-22.98
Bill Pmt -Check	08/25/2022	14040	Thomas Koors	Office fridge repair	-280.00
Bill Pmt -Check	08/25/2022	14041	Times Printing Company	TECH Heat Pump postcards	-229.97
Bill Pmt -Check	08/25/2022	14042	Winzler, John	Office Lease - September 2022	-8,372.70
Paycheck	08/25/2022	ACH	Employees	Payroll	-64,293.46
Liability Check	08/25/2022	ACH	Newport Group	Deferred compensation contributions	-15,255.10
TOTAL					-3,291,525.34

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Redwood Coast Energy Authority Profit & Loss Budget vs. Actual July through August 2022

	Jul - Aug 22	Budget	% of Budget
Ordinary Income/Expense			
Income			
5 REVENUE EARNED			
5000 · Revenue - government agencies	0.00	1,101,031.00	0.0%
Total 5100 · Revenue - program related sales	5,364.29	30,400.00	17.65%
Total 5300 · Revenue - Escrow interest	341.85		
Total 5400 · Revenue-nongovernment agencies	40,267.57	489,124.00	8.23%
Total 5500 · Revenue - Electricity Sales	12,624,012.94	93,848,684.00	13.45%
Total 5 REVENUE EARNED	12,669,986.65	95,469,239.00	13.27%
Total Income	12,669,986.65	95,469,239.00	13.27%
Gross Profit	12,669,986.65	95,469,239.00	13.27%
Expense			
Total 6 WHOLESALE POWER SUPPLY	7,747,759.40	76,236,276.00	10.16%
Total 7 PERSONNEL EXPENSES	607,098.41	4,071,684.00	14.91%
Total 8.1 FACILITIES AND OPERATIONS	93,482.68	801,816.00	11.66%
Total 8.2 COMMUNICATIONS AND OUTREACH	5,065.89	177,004.00	2.86%
8.4 PROFESSIONAL & PROGRAM SRVS			
8400 · Regulatory	44,253.18	180,000.00	24.59%
8410 · Contracts - Program Related Ser	12,261.00	290,000.00	4.23%
8420 · Accounting	3,059.00	87,455.00	3.5%
8430 · Legal	15,907.50	180,000.00	8.84%
8450 · Wholesale Services - TEA	122,088.82	654,984.00	18.64%
8460 · Procurement Credit - TEA	105,334.15	690,545.00	15.25%
8470 · Data Management - Calpine	123,279.36	737,532.00	16.72%
Total 8.4 PROFESSIONAL & PROGRAM SRVS	426,183.01	2,820,516.00	15.11%
Total 8.5 PROGRAM EXPENSES	78,380.31	638,100.00	12.28%
Total 8.6 INCENTIVES & REBATES	52,864.44	477,823.00	11.06%
Total 9 NON OPERATING COSTS	41,638.01	2,246,020.00	1.85%
Total Expense	9,052,472.15	87,469,239.00	10.35%
Net Ordinary Income	3,617,514.50	8,000,000.00	45.22%
Income	3,617,514.50	8,000,000.00	45.22%

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Redwood Coast Energy Authority Balance Sheet

As of August 31, 2022

	Aug 31, 22
ASSETS	
Current Assets	
Checking/Savings	
1010 · Petty Cash	226.92
1050 · GRANTS & DONATIONS 3840	15,995.51
1060 · Umpqua Checking Acct 0560	-61,418.43
1071 · Umpqua Deposit Cntrol Acct 8215	4,524,862.77
1075 · Umpqua Reserve Account 2300	99,923.52
1076 · First Republic Bank - 4999	62,263.94
8413 · COUNTY TREASURY 3839	5,329.01
Total Checking/Savings	4,647,183.24
Total Accounts Receivable	99,180.42
Other Current Assets	
1101 · Allowance for Doubtful Accounts	-2,631,603.88
1103 · Accounts Receivable-Other	13,377,305.15
1120 · Inventory Asset	21,715.00
1202 · Prepaid Expenses	-17,945.10
1205 · Prepaid Insurance	34,941.40
1499 · Undeposited Funds	1,403.00
Total Other Current Assets	10,785,815.57
Total Current Assets	15,532,179.23
Total Fixed Assets	8,780,044.01
Other Assets	
1700 · Retained Deposits	4,191,600.00
Total Other Assets	4,191,600.00
TOTAL ASSETS	28,503,823.24
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Total Accounts Payable	4,138,449.43
Total Credit Cards	8,719.87
Other Current Liabilities	
2002 · Deposits Refundable	275,715.01
2013 · Unearned Revenue - PA 2020-2023	988,348.00
Total 2050 · Current Loans	4,000,000.00
Total 2100 · Payroll Liabilities	200,816.74
Total Other Current Liabilities	5,464,879.75
Total Current Liabilities	9,612,049.05
Long Term Liabilities	
Total 2700 · Long-Term Debt	6,287,592.00
Total Long Term Liabilities	6,287,592.00
Total Liabilities	15,899,641.05
Total Equity	12,604,182.19
TOTAL LIABILITIES & EQUITY	28,503,823.24

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STAFF REPORT Agenda Item # 3.4

AGENDA DATE:	October 27, 2022
TO:	Board of Directors
PREPARED BY:	Aisha Cissna, Regulatory and Legislative Policy Manager
SUBJECT:	Legislative Quarterly Report

BACKGROUND

The RCEA Board of Directors adopted the RCEA 2022 Policy Platform ("Platform") in March 2022 to serve as a guide for RCEA's regulatory and legislative engagement based on the principles set forth in RCEA's RePower Humboldt strategic plan.

In accordance with the procedures as described in the Platform, staff will keep the Board apprised of legislative positions taken by RCEA through a quarterly report summarizing RCEA's legislative engagement.

SUMMARY

On September 1, the California Legislature completed the 2022 session.

During the 2022 session, RCEA adopted positions for the bills listed below. Per the Platform procedures, RCEA conferred with the Board Chair and Vice Chair to gain approval for officially adopting a position.

These positions have not changed since the previous Legislative Quarterly Report that the Board received during the July 2022 RCEA Board of Directors meeting, but they are provided here for reference. While RCEA's position did not change on these bills during the legislative session, the status of these bills has been updated.

Senate Bill 881 - Oppose

- o This bill died in the Senate Appropriations Committee.
- o This bill would have allowed the California Public Utilities Commission (CPUC) to enforce Integrated Resource Plans by ensuring all load serving entities (LSEs), as defined, are making procurement decisions that will enable to the state to reach its 2030 GHG emission reduction requirements. If the CPUC determines that an LSE will fail to meet their requirement, the CPUC may issue fines and/or order procurement.
- CCAs are in favor of assertive climate policies; however, RCEA and other CCAs opposed this bill because it would directly impede CCAs' statutory autonomy and self-governance and is in direct conflict with RCEA's Platform. The Integrated Resource Plan is intended to be a planning document and not a blueprint for procurement mandates.
- RCEA submitted a Letter of Opposition to SB 881 in May 2022. This letter encouraged the legislature to engage with community choice stakeholders to arrive at a policy which would maintain CCAs' statutorily granted procurement

autonomy and result in bold climate action.

- Assembly Bill 1814 Support
 - This bill did not pass this session and is not expected to be re-introduced in future sessions.
 - This bill sought to authorize Community Choice Aggregators to submit applications to the California Public Utilities Commission to receive funding to administer transportation electrification programs in the communities they represent.
 - This bill was sponsored by the California Community Choice Association (CalCCA), the trade association that represents California CCAs' interests.
 - o RCEA's Chair and Vice Chair approved RCEA's adoption of "support" for this bill.
- Assembly Bill 2703 Support
 - o This bill was held in the Senate Appropriations Committee.
 - This bill would require a person who receives state funding to deploy a publicly available electric vehicle charging station to agree, as a condition of receiving the funding, to operate the station in compliance with reliability standards that would be developed by the Energy Commission. This bill would also require the Energy Commission to develop a program to provide financial assistance to low-income and disadvantaged community members to use electric vehicle charging stations.
 - RCEA staff engaged with the bill's sponsor, ChargePoint, to advocate for CCA-friendly amendments. RCEA was successful in securing these amendments.

CalCCA also adopts positions on behalf of its members. A summary of CalCCA positions on various bills, and the status of those bills, from this session is attached. As of the writing of this report, CalCCA did not adopt a position on all bills of interest.

CalCCA and its member CCAs are currently in the process of developing a 2023 legislative strategy.

ALIGNMENT WITH RCEA'S STRATEGIC PLAN

This report addresses legislative activity that reflects RCEA's Policy Platform, the purpose of which is to facilitate the achievement of RCEA's Strategic Plan goals.

EQUITY IMPACTS

This report reflects legislation that is intended to improve CCAs' abilities to meet the energy needs of their local communities which are often unique in their constituent marginalized populations. The legislation thus better enables CCAs to tailor services to meet those needs.

FINANCIAL IMPACT

N/A

RECOMMENDED ACTION

Accept Legislative Quarterly Report.

ATTACHMENTS

Energy Bills of Interest: Status as of September 2022



Energy Bills of Interest: Status as of September 2022

Bill	Author	Summary	Status	CalCCA Position
Budget bills (AB 179, 209, 211)	Ting	Budget bills; key energy provisions: -Hydrogen development -Industrial grid support and decarbonization program -Food production investment program -Equitable building decarbonization -Offshore wind infrastructure -Zero emission vehicles and infrastructure -Development of new community emission reduction programs at Air Resources Board -Community resilience and heat program -Community Resilience Centers -Financing for transmission, renewable energy, and carbon capture projects -Demand side grid support program -Medium- and heavy-duty fleet purchasing assistance program	Chaptered	N/A
AB 1960	Villapudua	Establishes regional diversity goals for the appointment of CPUC commissioners.	Vetoed	Support
AB 2061	Ting	Requires data collection of EV chargers to monitor reliability.	Chaptered	Support
AB 2143	Carillo	Requires mandatory prevailing wage for solar installers working on any commercial solar project and all residential projects greater than 15 kW. Also includes storage.	Chaptered	N/A

Bill	Author	Summary	Status	CalCCA Position
AB 2316	Ward	Creates the Community Renewable Energy Program to provide a pathway for solar for those communities that have not benefited from current rooftop solar initiatives.	Chaptered	Neutral
AB 2399	Mayes	Allows an IOU to exit retail service under certain conditions.	Died, Assembly Energy	Watch
AB 2587	E. Garcia	Requires the CPUC to open a proceeding once the SB 423 (available firm zero-carbon resources) study with findings is completed.	Held in Senate Appropriations	Watch
AB 2696	E. Garcia	Requests CEC, CAISO, CPUC and Office of Business and Economic Development to seek additional financing mechanisms to help finance needed transmission.	Held in Senate Appropriations	Watch
AB 2667	Friedman	DER Fund	Failed Senate Floor	N/A
AB 2703	Muratsuchi	Studies the reliability of Zero Emission Vehicle refueling stations.	Held in Senate Appropriations	Support
AB 2838	O'Donnell	Allows an IOU to terminate a green tariff program and to spread the costs to all ratepayers in their service territory.	Chaptered	Neutral
AB 2937	Calderon	Allows IOUs to seek cost recovery of wildfire and climate adaptation investments.	Died, Assembly Appropriations	Watch
SB 599	Hueso	Makes certain updates to CPUC supplier diversity report to the Legislature to become consistent with existing law.	Chaptered	N/A
SB 881	Min	Enforcement of IRP plans specifically targeting GHG reductions.	Died, Senate Appropriations	Oppose, Unless Amended
SB 887	Becker	Seeks to ensure that transmission necessary to ensure additional renewables can be delivered to the grid are included in the current TPP.	Chaptered	Watch

Bill	Author	Summary	Status	CalCCA Position
SB 1020	Laird	Established internal energy retail sales requirements including accelerating the state agency requirements to 100% by 2035.	Chaptered	Support
SB 1112	Becker	On-bill financing for building decarbonization investments.	Chaptered	Watch
SB 1136	Portantino	CEQA expedited review for pollution control projects	Governor's veto pending; Governor did not sign bill	N/A
SB 1158	Becker	Hourly reporting of resources that LSEs relied upon to serve load.	Chaptered	N/A
SB 1174	Hertzberg	Interconnection delays	Chaptered	Support
SB 1287	Bradford	Increases financial security requirements for CCAs and ESPs.	Died, Senate Energy	Oppose, Unless Amended
SB 1385	Cortese	Multi-family solar program	Held in Assembly Appropriations	N/A
SB 1393	Archuleta	Requirements for the adoption and implementation of Reach Codes.	Held in Assembly Appropriations	Neutral



STAFF REPORT Agenda Item # 3.5

AGENDA DATE:	October 27, 2022
TO:	Board of Directors
PREPARED BY:	Eileen Verbeck, Deputy Executive Director
SUBJECT:	Virtual Board and CAC Meeting Authorization

BACKGROUND

In response to the COVID-19 public health emergency and in compliance with emergency Brown Act meeting law changes, the RCEA Board of Directors, Community Advisory Committee and the subcommittees of those bodies have been meeting online via the Zoom teleconference platform since April 2020. In September 2021 Governor Newsom signed AB 361 into law. This bill authorized 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. Governor Newsom announced last week that the March 2020, COVID-19 State of Emergency will end on February 28, 2023.

According to the Centers for Disease Control and Prevention, COVID-19 transmission in Humboldt County is classified as low level. The CDC advises that people with symptoms, a positive COVID test, or exposure to someone with COVID-19 should wear a mask. The California Department of Public Health recommends masking in indoor settings with unvaccinated persons or with persons whose vaccination status is unknown, and in any public place for people who are older or with medical conditions that put them at higher risk of severe COVID illness.

SUMMARY

At its June 2022 meeting, this Board decided to continue meeting virtually until the number of COVID-19 cases locally begin trending downward. While Humboldt County's transmission level is low this month, COVID case counts in previous years have trended upward during cold weather months.

In order to continue virtual meetings and for Board directors and CAC members to participate without making their remote meeting locations publicly accessible, the Board must adopt or extend AB 361 resolutions every 30 days. After February 28, 2023, the Board cannot conduct fully virtual meetings under AB 361 guidelines unless another state of emergency is declared.

ALIGNMENT WITH RCEA'S STRATEGIC PLAN

N/A - Operations.

EQUITY IMPACTS

N/A. Staff recommends taking measures to reduce health risks to vulnerable populations.

FINANCIAL IMPACT

Annual teleconferencing subscription costs have been included in the Fiscal Year 2022-23 budget.

STAFF RECOMMENDATION

Extend Resolution No. 2022-6 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 27, 2022, through November 25, 2022, pursuant to Brown Act revisions of AB 361.

ATTACHMENTS

1. Resolution No. 2022-6 Ratifying Governor Newsom's March 4, 2020, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies, for the period June 27, 2022, through July 27, 2022, pursuant to Brown Act revisions of AB 361, adopted June 23, 2022.

RESOLUTION NO. 2022-6

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 JUNE 27, 2022, THROUGH JULY 27, 2022,
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 Humboldt County Department of Health and Human Services recommends practicing physical distancing at meetings of legislative bodies; and

WHEREAS, 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. <u>Recitals</u>. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. <u>Ratification of Governor's Proclamation of a State of Emergency</u>. 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 3. 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 4. <u>Effective Date of Resolution</u>. 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 5 of this Resolution.

Section 5. 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 23rd day of June 2022.

	ATTEST:
Stephen duis	Lori Jaketa
Stephen Avis, 4RCEA64B6ard Chair	Lori Taketa, Clerk 81 the Board
Date:6/30/2022	Date:

CLERK'S CERTIFICATE

I hereby certify that the foregoing is a true and correct copy of Resolution 2022-6 passed and adopted at a regular meeting of the Redwood Coast Energy Authority, County of Humboldt, State of California, held on the 23rd day of June 2022, by the following vote:

AYES: Avis, Bauer, Bohn, Curran, Losey, Schaefer, Tuttle, Wilson, Woo.

NOES: None.

ABSENT: None.

ABSTENTIONS: None.

Lori Jaketa

Clerk of the Board, Redwood Coast Energy Authority



STAFF REPORT

Agenda Item # 5.1

AGENDA DATE:	October 27, 2022
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources
	Jocelyn Gwynn, Senior Manager of Power Resources
	Aisha Cissna, Regulatory and Legislative Policy Manager
SUBJECT:	Integrated Resource Plan Portfolio Approval

SUMMARY

As discussed with the Board in the September meeting, RCEA is required to submit an Integrated Resource Plan (IRP) to the California Public Utilities Commission (CPUC) by November 1 this year. Integrated resource planning is a standard tool used by utilities and other load serving entities (LSEs) to do long-term planning that takes into account supply-side and demand-side resources needed to meet customer load at affordable rates. In California, IRPs also address non-energy requirements that the LSE must meet, such as system reliability, dependence on unspecified system power, renewable resource integration, greenhouse gas (GHG) emissions targets, and consideration of impacts that power portfolios may have on disadvantaged communities.

This year's IRP calls for each LSE to develop two portfolios that conform to the CPUC's forecasted scenarios in which the entire CA electric sector produces 30 and 25 million metric tons (MMT) respectively of GHG emissions in 2035. If a single portfolio can achieve emissions at or below both targets and is reflective of the LSE's planned procurement, then the LSE is allowed to submit one portfolio. Staff have developed the portfolio presented herein that achieves a GHG emissions target below RCEA's assigned benchmarks under both scenarios, and propose the Board approve it as RCEA's Preferred Conforming Portfolio.

The IRP cycle is every two years and carries with it no binding procurement commitments, so RCEA will be able to update its plan again in 2024.

BACKGROUND

The IRP cycle is comprised of the following high-level steps:

- 1. CPUC staff conducts modelling of the electric system over a planning horizon that is typically ten years (set to align with the CAISO's transmission planning horizon). This electric system modelling is based on LSE IRP submissions in the last cycle, to determine system resource needs given the state's Renewable Portfolio Standard (RPS) and GHG reduction goals under Senate Bills 100 and 350, and its reliability needs given any planned power plant retirement.
- 2. From this, the CPUC adopts a Preferred System Plan (PSP), an aggregated portfolio of new resources to be built over the CPUC's prescribed planning horizon. This year the CPUC adopted the two GHG targets described above of 30 and 25 MMT.

- 3. Individual LSEs develop their IRPs based on the PSP and their own resource commitments and procurement plans.
- 4. CPUC staff aggregates the individual LSE plans into a new PSP that it provides to the California Independent System Operator for use in its Transmission Planning Process, and the cycle repeats.

Required Filing Templates

Narrative Template: This document provides a written description of the IRP, including analysis methodology, results, and an action plan for implementing the preferred portfolio. RCEA's draft IRP narrative is attached to this report. Staff request that the Board delegate authority to the Executive Director to approve the final version of the narrative prior to submitting the IRP to the CPUC.

Resource Data Template (RDT): This spreadsheet details executed and planned energy and capacity contracts from 2024-2035, and shows how those procurements address the LSE's forecasted Resource Adequacy (RA) requirements over the planning horizon. Two RDT spreadsheets, one each for the 30 and 25 MMT scenarios, will be submitted to the Commission and made available on the RCEA website, but are not included for Board review.

Clean System Power (CSP) Calculator: This spreadsheet calculates GHG emissions and criteria air pollutants associated with the LSE's energy portfolio in the years 2024, 2026, 2030, and 2035. The tool compares forecasted hourly generation and load on an hourly basis and assigns emissions associated with the state's natural gas generation and unspecified electricity imports ("system power") based on how each LSE plans to rely on system power to meet its load on an hourly basis. Two CSP calculators, one each for the 30 and 25 MMT scenarios, will be submitted to the Commission and made available on the RCEA website, but are not included for Board review.

Modelling Approach and Results

At the September Board meeting, RCEA staff presented a proposed Preferred Conforming Portfolio that aligns with RCEA's RePower Strategic Plan and the CPUC's PSP and includes other long-term resource commitments and development opportunities. Since then, the portfolios have undergone additional refinement based on economic modelling conducted by The Energy Authority (TEA) and additional guidance from CPUC staff.

RCEA staff provided TEA with four candidate portfolios across the IRP planning period for further analysis. In addition to RCEA's existing long-term commitments already under contract, anticipated procurement pursuant to compliance obligations and authorized Board actions, and planned development efforts that are fixed in scale (base case resources) that are being incorporated in all the portfolios, the candidate portfolios are differentiated by the following additional resources and procurement levels:

- 1. Diverse Portfolio: Mix of 40 MW offshore wind by 2030 and 15 MW new geothermal by 2030; biomass at current 18 MW level through end of IRP planning horizon in 2035
- 2. Maximum Offshore Wind: 75 MW offshore wind by 2030; no new geothermal; no biomass after 2031 expiration of current power purchase agreement (PPA)

- 3. Maximum Geothermal: no offshore wind; 20 MW new geothermal by 2030, increasing to 40 MW by 2035; no biomass after 2031 expiration of current PPA
- Short-Term Renewables: business-as-usual continuation of short-term procurement to meet portfolio needs in lieu of large new renewables; no biomass after 2031 expiration of current PPA

TEA in consultation with RCEA staff used multiple modeling tools to test and compare the performance of these candidate resource portfolios including the HedgeFox resource analysis model and RCEA's Financial Model. TEA used expected future market prices and forecasted resource productivity in the HedgeFox model to evaluate resource performance on a long-term hourly basis, then used these results to evaluate the incremental value of each candidate resource and portfolio configuration. Finally, TEA evaluated the overall financial impact of the Preferred Conforming Portfolio on RCEA's financial outlook using the RCEA Financial Model, including projected costs spanning energy, resource adequacy, and renewable attributes. Candidate portfolio 1 was selected as the Preferred Conforming Portfolio for its diversification and its overall financial and reliability performance, as discussed further in the Financial Impacts section.

Staff recommends the Board adopt portfolio 1 as the Preferred Conforming Portfolio, summarized in figures 1-3 below. Figure 1 shows RCEA's planned new resource capacity by technology type across the IRP planning horizon (bold colored columns), as compared to RCEA's proportional share of the statewide new resources in the CPUC's Preferred System Plan (faded columns). As shown, RCEA's portfolio significantly exceeds its share of PSP resources, particularly for solar, geothermal, and offshore wind.

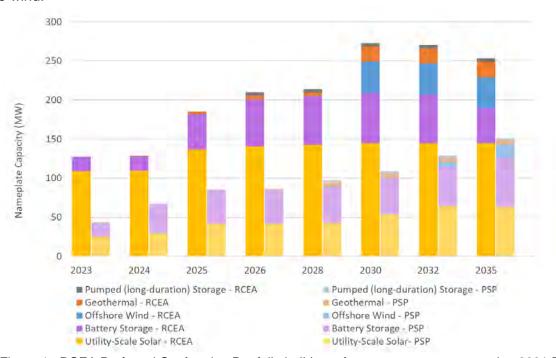


Figure 1: RCEA Preferred Conforming Portfolio buildout of new resources compared to 2021 PSP1.

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¹ The relative capacities of these resource types are not indicative of how much energy they will contribute to RCEA's electric portfolio, as different generating technologies have different capacity factors.

Figure 1 presents RCEA's portfolio in terms of generating capacity of each resource. Some resources generate more energy in MWh per MW of capacity because they operate more consistently over time. Figure 2 shows RCEA's planned energy supply in 2035, the final year of the IRP planning horizon, from both new and existing resources. Figure 2 does not include energy storage, which is not a generation resource and thus doesn't supply energy but rather enables energy from one or more of the generating resources shown to be moved from one period to another.

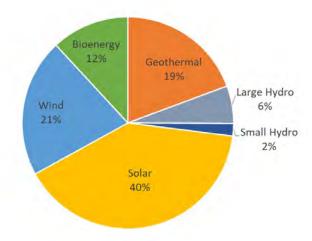


Figure 2: RCEA's anticipated 2035 energy supply achieved with the Preferred Conforming Portfolio.

Figure 3 summarizes emissions associated with RCEA's Preferred Conforming Portfolio in each of the four years analyzed in the Clean System Power calculator. Benchmarks are the emissions targets for RCEA set by the CPUC for 2030 and 2035. The portfolio achieves a 2035 GHG emissions target of 27,800 MT, which is 51% less than RCEA's assigned GHG benchmark under the 25 MMT electric sector scenario. The emissions largely come from unspecified system power incurred when the portfolio doesn't supply enough energy to meet the forecasted demand, as well as allocated emissions from combined heat and power resources that contribute to grid reliability. As shown in 2030, the calculator results in negative emissions based on credits for oversupply of clean energy outweighing positive emissions from polluting resources and unspecified power.

FINANCIAL IMPACTS

Apart from staff and consultant time required to prepare the IRP, there is no direct cost or other financial impact associated with the plan itself. The IRP currently has no binding commitments for procurement. However, development of the IRP is a risk management activity that mitigates financial risk exposure for RCEA through holistic, long-term planning of our community choice energy program's power portfolio, while ensuring conformance with state regulatory mandates.

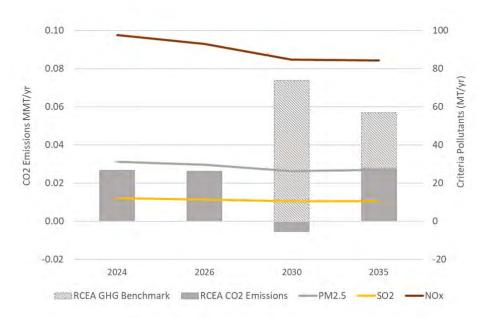


Figure 3: Emissions summary from the CPUC's Clean System Power calculator showing GHG (CO₂) emissions and criteria air pollutants (PM2.5, SO₂, NO_x) under RCEA's Preferred Conforming Portfolio.

TEA evaluated the forecasted economic performance of the four portfolio configurations described above. Figure 4 shows the relative financial performance of the incremental resources in the various candidate portfolios on a net present value basis. The value of the base resources is not included in the chart since it does not vary across the four portfolio configurations. The Preferred Conforming Portfolio, portfolio 1, is not projected to generate the most value of the alternatives considered. However, by providing a more diversified portfolio it reduces risk associated with any one technology for RCEA and more fully achieves energy resource diversification goals stated in RCEA's strategic plan. Thus, staff are recommending portfolio 1 as the Preferred Conforming Portfolio for its high likelihood of implementation. Furthermore, the modeling that produced these financial results is sensitive to currently unknown values including future contract prices for emerging technologies (floating offshore wind and advanced geothermal) and future tax benefits.



Figure 4: Relative net present value of incremental resources in candidate portfolios, in millions.

ALIGNMENT WITH RCEA'S STRATEGIC PLAN

The integrated resource planning process is required by the CPUC, with an obligation for each LSE to meet its proportional share of specific reliability and decarbonization goals set by the state. At the same time, it is also an opportunity for RCEA to periodically consider how to fulfill the many "Energy Generation & Utility Services" strategies in its RePower Humboldt strategic plan in the most timely and cost-effective manner. The high-level goals of this section of the strategic plan, which are considered in selecting RCEA's Preferred Conforming Portfolio, are:

- By 2025 100% of RCEA's power mix will be from a combination of state-designated renewable energy sources—solar, wind, biomass, small-hydroelectric, and geothermal—and statedesignated net zero carbon emission existing large hydroelectric facilities.
- By 2030 Humboldt County will be a net exporter of renewable electricity and RCEA's power mix will consist of 100% local, net-zero-carbon-emission renewable sources.
- Humboldt County can effectively respond to regional and local disruptions to energy supply
 and distribution systems through modernization of the local electric grid, the deployment of
 local distributed energy resources, and the development of community microgrids.

The resource-specific but non-quantitative strategies included in this section of the strategic plan are also taken into account in designing the Preferred Conforming Portfolio.

The Preferred Conforming Portfolio also incorporates CPUC-assigned quantities of resources such as demand response that are also identified in the "Integrated Demand Side Management" section of RCEA's strategic plan. In future iterations of the IRP, staff will seek to incorporate impacts of RCEA's demand side strategies such as building electrification, transportation electrification, and distributed energy resources as our agency further increases its impact in these areas.

EQUITY IMPACTS

RCEA's IRP includes a section on local air pollutant minimization and disadvantaged communities. It notes that some parts of Humboldt County, including Tribal lands, meet state criteria for being designated as disadvantaged communities. These areas can experience disproportionately high air pollution due to wildfire hazard and can be more prone to extended power outages, where electric utility service is even available. Also, some Humboldt County communities are exposed to emissions including criteria pollutants from natural gas- and biomass-fired thermal power plants. The IRP identifies actions RCEA is taking to address such inequities, including:

- Adopting a resolution calling for a Racial Justice Plan following the previous IRP cycle, and anticipated adoption of this plan
- Adopting a memorandum of understanding with Humboldt Sawmill Company to cooperate on monitoring of the company's biomass power plant under contract to RCEA and consider other potential feedstock uses that could result in reduced air quality impacts
- Requiring offerors of energy products such as biomass power to disclose their environmental
 compliance history and including contract terms allowing RCEA to terminate a contract on the
 grounds of non-compliance with applicable laws, including air quality standards.

RECOMMENDED ACTIONS

Adopt Resolution No. 2022-8 Approving the 2022 Integrated Resource Plan Portfolio.

<u>Delegate authority to the Executive Director to approve the final Integrated Resource Plan for submission to the California Public Utilities Commission.</u>

ATTACHMENTS

Attachment A: Resolution No. 2022-8 Approving the 2022 Integrated Resource Plan Portfolio

Draft Integrated Resource Plan Narrative

RESOLUTION NO. 2022-8

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE REDWOOD COAST ENERGY AUTHORITY APPROVING THE 2022 INTEGRATED RESOURCE PLAN PORTFOLIOS

WHEREAS, on October 17, 2016, the Redwood Coast Energy Authority (RCEA) Board of Directors adopted Resolution 2016-2 approving RCEA's Community Choice Aggregation Implementation Plan and Statement of Intent which was subsequently certified by the California Public Utilities Commission (CPUC) on December 29, 2016; and

WHEREAS, Community Choice Aggregators (CCA) are defined as a Load-Serving Entity (LSE) per Public Utilities Code Section 380; and

WHEREAS, all LSEs in California are required to produce and submit to the CPUC an Integrated Resource Plan (IRP) by November 1, 2022; and

WHEREAS, the CPUC requires all LSEs to submit, as part of their individual IRPs, one resource portfolio that achieves greenhouse gas (GHG) emissions that are equal to or less than the LSE's proportional share of the 38 MMT by 2030 and 30 MMT by 2035 GHG targets and another portfolio that achieves emissions that are equal to or less than the LSE's proportional share of the 30 MMT by 2030 and 25 MMT by 2035 GHG targets; and

WHEREAS, if an LSE intends to achieve emissions below its proportional share of both the 2030 30 MMT target and the 2035 25 MMT target, then that LSE will only be required to submit one portfolio as part of its individual IRP filings; and

WHEREAS, RCEA has developed a portfolio that goes below its proportional share of both the 2030 30 MMT target and the 2035 25 MMT target and thus is only submitting one portfolio, which is its Preferred Conforming Portfolio; and

WHEREAS, RCEA's Preferred Conforming Portfolio is consistent with the procurement timing, resource mix, and operational attributes of the CPUC's 2021 Preferred System Plan, the state's proposed electric sector portfolio under each GHG scenario; and

WHEREAS, the analysis conducted for RCEA's Preferred Conforming Portfolio indicates a path toward achievement of economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in Public Utilities Code Section 454 and sufficient procurement of the resource adequacy requirements established pursuant to Public Utilities Code Section 380; and

WHEREAS, the Preferred Conforming Portfolio reflects RCEA's procurement targets, strategic planning, and intended GHG reduction performance; and

WHEREAS, the CPUC has directed CCAs to seek Board approval for the IRP prior to submission.

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

- 1. Approve the Preferred Conforming Portfolio as RCEA's current procurement plan, to be updated in the next IRP cycle;
- 2. Authorize procurement efforts based on this plan;
- 3. Approve the IRP for submission to the CPUC for compliance as presented by staff or in a form substantially similar to that presented by staff; and
- 4. Delegate authority to the Executive Director to approve the final IRP report on behalf of the Board for submittal to the CPUC by November 1, 2022.

Adopted this day of	, 2022	
		ATTEST:
Stephen Avis, RCEA Board Chair		Lori Taketa, Clerk of the Board
1		,
Date:		Date:
	CLERK'S CER	ПГІСАТЕ
	t Energy Authority	copy of Resolution 2022-8 passed and adopted at a v, County of Humboldt, State of California, held on
AYES:		
NOES:		
ABSENT:		
ABSTENTIONS:		
	Clerk of the Bo	oard, Redwood Coast Energy Authority

a

Standard LSE Plan

Redwood Coast Energy Authority

2022 INTEGRATED RESOURCE PLAN

November 1, 2022

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I. Executive Summary

Introduction to RCEA

Formed in 2003, the Redwood Coast Energy Authority ("RCEA") is a Joint Powers Authority ("JPA") of the County of Humboldt, the Cities of Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, and Trinidad, and the special district of the Humboldt Bay Municipal Water District.

As a JPA, RCEA is a local government agency. RCEA is governed by a nine-member board composed of representatives of its member local governments. Through these representatives RCEA is controlled by and accountable to the communities RCEA serves. RCEA operates several programs, including its Community Choice Aggregation ("CCA") program.¹

RCEA's CCA program was established in October 2016 with the submission of its Implementation Plan to the California Public Utilities Commission ("CPUC" or "Commission") and began serving load in May 2017. RCEA currently provides retail electric generation services and complementary energy programs to customers within the municipal boundaries of the following communities:

- Unincorporated Humboldt County
- City of Arcata
- City of Blue Lake
- City of Eureka
- City of Ferndale
- City of Fortuna
- City of Rio Dell
- City of Trinidad.

RCEA's service area is identified in Figure 1.

3

¹ In addition, RCEA provides a range of demand-side management programs for residential and non-residential CCA customers and operates an advanced fuels and transportation program. RCEA is identified in the Energy Element of County of Humboldt's General Plan as the regional energy authority, with the purpose to "foster, coordinate, and facilitate countywide strategic energy planning, implementation and education".



Figure 1: RCEA Service Area Map, showing locations of member entities

As of August 2022, RCEA was serving 53,723 residential accounts and 9,539 commercial and industrial accounts. Residential customers make up about 90% of RCEA's accounts and 50% of its electricity sales, with the remainder being commercial and industrial accounts. RCEA's service area has a population of 136,463 (U.S. Census estimate for 2020), the majority of which live in households or work at businesses that receive generation service from RCEA. In 2021, RCEA's peak demand was 112 MW, and its annual energy load was 651 GWh.

Based on current information, RCEA anticipates no changes to its service territory in the planning horizon of this IRP.

RCEA's Mission

RCEA's CCA program was formed for the express purpose of empowering its member communities to choose the generation resources that reflect their specific values and needs. Chief among these needs identified through community workshops and input to RCEA's Board of Directors are affordability, GHG reduction, air quality, protection of natural resources, and

energy reliability in rural Humboldt County, an area especially prone to extended electric outages. These values, needs, and preferences are embodied in the following procurement goals adopted by RCEA's governing board:

- Minimize Greenhouse Gas Emissions Associated with RCEA's CCA Program. Procure
 a power mix that by 2025 has zero greenhouse gas emissions (GHG) as counted
 under the California Air Resources Board's Regulation for the Mandatory Reporting
 of Greenhouse Gas Emissions, other than emissions from resources meeting
 California's Renewable Portfolio Standard.²
- Maximize Renewable Energy Content of RCEA's CCA Program. Procure a power mix that reaches 100% clean and renewable content by 2025.³
- Maximize Local Energy Content of RCEA's CCA Program (see additional discussion
 of this goal below). Work toward Humboldt County being a net exporter of
 renewable electricity by 2030 and RCEA's power mix consisting of 100% local, netzero-carbon-emission renewable sources, where technically and financially feasible.⁴
- Support Customer Installation of Distributed Generation. Support the deployment
 of behind-the-meter grid-connected renewable energy and storage systems as core
 strategies toward achieving environmental, economic, and community
 stability/resilience goals.⁵
- Implement a Community Solar and Storage Program. Evaluate, design, and launch community solar and storage program services that support the increased adoption of grid-connected solar and storage technologies.⁶
- **Minimize Energy Interruptions.** Work with local utility providers to minimize the impact of power outages and improve the reliability and resiliency of the local electricity delivery service.⁷
- Provide CCA Program Customer Rate Savings. Provide customer rates that are affordable and price-competitive with customers' other electric supply options.⁸

² RePower Humboldt: The Redwood Coast Energy Authority's Comprehensive Action Plan for Energy, Adopted by RCEA Board of Directors December 2019, Strategy 4.1.2.

³ Ibid, Strategy 4.1.4.

⁴ Ibid, Section 4.

⁵ Ibid, Strategy 2.4.1.

⁶ Ibid, Strategy 2.4.3.

⁷ Ibid, Strategy 4.2.1

⁸ Ibid, Strategy 4.3.1

Consistent with Public Utilities Code ("PUC") Sections 366.2(a)(5) and 454.52 (b)(3)⁹, all procurement by RCEA, including the portfolios set forth in this IRP, strives for consistency with these board-adopted goals.

Regarding the above local energy content goal, RCEA's procurement driven by compliance needs (SB 100, SB 350, D.19-11-016 and D.21-06-035) has resulted in execution of several long-term contracts for non-local resources that extend past 2030 and are therefore in conflict with the local goal as stated. RCEA is currently revisiting the feasibility of the goal and, barring assignment of these agreements to other buyers as allowed for in the contracts, may find it necessary to modify the goal to allow some portion of RCEA's 100% renewable power mix to come from non-local sources, provided that the associated goal of Humboldt County being a net exporter of renewable electricity is met, regardless of what entity is procuring the locally produced energy.

Introduction to RCEA's IRP

In accordance with the requirements of California Public Utilities Code Sections 454.51 and 454.52, Commission Decisions ("D.") 18-02-018, D.19-11-016, D.20-03-028, and D. 22-02-004 (and subsequent updates to D. 22-02-004¹⁰), RCEA is providing its load serving entity ("LSE")-specific Integrated Resource Plan ("IRP") to the Commission for certification review and use in the Commission's statewide planning process. In addition to this narrative, RCEA's IRP includes the following documents:

- RCEA's 25 million metric ton ("MMT") resource data spreadsheet
- RCEA's 30 MMT resource data spreadsheet
- RCEA's 25 MMT clean system power calculator
- RCEA's 30 MMT clean system power calculator

The future resources identified in RCEA's IRP represent RCEA's best good-faith projection of the resource mix that it will procure over the IRP planning horizon, based on the best information currently available. The resources identified in future iterations of RCEA's IRP may change due to new information and changed circumstances, and the ultimate resource mix that RCEA actually procures may differ from what is reflected in the plan due to a number of variables

⁹ Section references that are not preceded by "PUC" reference narrative sections.

¹⁰ The 2021 PSP Portfolio was updated by IRP staff with more recent Inputs and posted on the IRP website on June 15, 2022. In all instances where this narrative references D. 22-02-004, it is also referring to the updated guidance. Updated guidance is located here: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2022-irp-cycle-events-and-materials/lse-filing-requirement-resolve-results.pdf

including availability of supply, price of supply and/or other market or regulatory considerations.

As directed in D.22-02-004 and the June 15, 2022 Administrative Judge's Ruling Finalizing Load Forecasts and Greenhouse Gas Emissions Benchmarks for 2022 Integrated Resource Plans, RCEA is submitting one preferred conforming portfolio, a 2035 sub-25 MMT portfolio, that has lower than RCEA's proportional share of all four GHG emissions benchmarks for the electric sector:

- 38 MMT in 2030 declining to 30 MMT in 2035
- 30 MMT in 2030 declining to 25 MMT in 2035

Accordingly, RCEA is submitting this single preferred conforming portfolio as the conforming portfolio for these benchmarks.

RCEA's governing board has approved this portfolio, indicating a goal to achieve a level of emissions below RCEA's proportional share of the 25 MMT benchmark by 2035. This portfolio reflects actual planned procurement and is consistent with the action plan described in Section IV.

Summary of RCEA's IRP

This narrative provides a detailed description of the development and content of RCEA's 2035 sub-25 MMT Preferred Conforming Portfolio, its compliance with applicable requirements, and an action plan detailing RCEA's planned next steps.

RCEA developed its IRP through the following steps:

- Compiled contracted and owned resources, long-term RA capacity contracts, and expected allocation shares of Power Charge Indifference Adjustment ("PCIA") Carbon-Free, PCIA Renewables Portfolio Standard ("RPS") and Cost Allocation Mechanism ("CAM") resources.
- 2. Compiled shortlisted resources for which RCEA is currently negotiating long-term energy and capacity contracts.
- 3. Compiled expected resource procurements via solicitations that have been authorized by RCEA's Board of Directors.
- Compiled expected energy allocations from PCIA Carbon-Free and RPS Voluntary
 Allocation resources, and capacity allocations from CAM and demand response ("DR")
 resources.
- 5. Identified candidate resources that are compatible with RCEA's Board-adopted RePower Humboldt Comprehensive Action Plan for Energy ("RePower Humboldt" or "Strategic

- Plan") and adjusted their capacities and commercial operation dates according to current procurement and development expectations.
- 6. Identified its short energy position in the IRP planning years of 2024, 2026, 2030 and 2035 by comparing the forecasted generation of the above resources with its assigned load.
- 7. Added hypothetical generic future contracts with existing carbon-free and renewable resources to help fill its short energy positions in advance of the anticipated online dates of candidate resources.
- 8. Evaluated four portfolio configurations for financial performance and reliability, and selected one for further analysis, based on the most favorable combination of cost, reliability, and compatibility with the RCEA Board's procurement directives expressed in its Strategic Plan, and presented this set of portfolio configurations to RCEA's Board for concurrence on staff's recommended configuration.
- 9. Populated its Resource Data Template ("RDT") with all contracts described in steps 1-4 above.
- 10. Used the Commission's Clean System Power Calculator Tool ("CSP") to ensure the greenhouse gas ("GHG") emissions associated with the resulting portfolio are lower than RCEA's assigned share of the 2030 30 MMT benchmark and 2035 25 MMT benchmark.
- 11. Identified the resulting portfolio as RCEA's 2035 25 MMT portfolio, and further populated its Resource Data Template with the additional existing and candidate resources in steps 5 & 7 above.
- 12. Identified its perfect capacity shortfall via the Reliability tab of the Resource Data Template and added hypothetical short-term resource adequacy contracts with existing generic resources until it satisfied its perfect capacity standard.
- 13. Identified the resulting portfolio as its 2035 25 MMT Preferred Conforming Portfolio.

RCEA reached the following findings regarding its Preferred Conforming Portfolio:

- 1. The portfolio includes the procurement of the following new resources that are not yet operational:
 - o 100 MW Sandrini Sol 1 Solar Park
 - 40 MW of Redwood Coast Offshore Wind
 - 17.25 MW Fairhaven Energy Storage
 - o 5.94 MW of Feed-In Tariff Phase I projects
 - o 6 MW of Feed-In Tariff Phase II projects
 - o 5 MW North River Clean Power
 - 4 MW Ormat geothermal portfolio
 - o 3 MW Foster Clean Power A Solar
 - 2.50 MW Tumbleweed Long-Duration Storage



- 2 MW Goal Line Long-Duration Storage
- o 0.50 MW Mad River Solar
- 0.36 MW Fish Lake Geothermal
- o 24 MW of new solar plus storage
- o 15 MW of new geothermal
- 11 MW of new short duration storage
- o 8 MW of new small hydro
- 2. The portfolio provides for the following overall resource mix in 2035:
 - o 147 MW of solar
 - o 49 MW of short-duration storage
 - o 40 MW of offshore wind
 - o 19 MW of geothermal
 - o 18 MW of biomass
 - o 8 MW of small hydro
 - 4 MW of long-duration storage
- 3. The discretionary procurement to be undertaken following the submission of this IRP is consistent with procurement timing, resource quantities, and general resource attributes identified in the 2021 Preferred System Portfolio ("PSP").
- 4. Under a 25 MMT by 2035 planning scenario, the portfolio would have 2030 CO₂ emissions of -0.005 MMT and 2035 GHG emissions of 0.028 MMT according to the 25 MMT CSP tool calculations. This is 107% lower than RCEA's assigned 2030 GHG emissions benchmark under this scenario of 0.074 MMT and 51% lower than RCEA's assigned 2035 GHG emissions benchmark of 0.057 MMT.
- 5. Under a 30 MMT by 2035 planning scenario, the portfolio would have 2030 CO₂ emissions of -0.02 MMT and 2035 GHG emissions of 0.009 MMT according to the 30 MMT CSP tool calculations. This is 120% lower than RCEA's assigned 2030 GHG emissions benchmark under this scenario of 0.098 MMT and 51% lower than RCEA's assigned 2035 GHG emissions benchmark of 0.071 MMT.
- 6. The portfolio meets the Commission's perfect capacity equivalent standard.
- 7. The portfolio provides more than RCEA's load-proportional share of renewable integration resources.
- 8. The portfolio is also consistent with the Commission's 30 MMT by 2035 GHG emission planning target and can be used in either a 25 MMT or 30 MMT consolidated statewide portfolio.

RCEA's Preferred Conforming Portfolio is consistent with its program goals and Board directives, while contributing its share of renewables integration and reliability at a forecasted cost that is affordable to RCEA customers. To implement its Preferred Conforming Portfolio,

RCEA is adopting the action plan described in Section IV, below. This action plan consists of the following steps, many of which are already underway:

- Procure remaining Mid-Term Reliability ("MTR" or "MTR Order") capacity obligation
- Continue to closely monitor progress of the Sandrini Sol 1 project.
- Continue development and implementation of RCEA's Feed-In Tariff ("FIT") and add energy storage to FIT Phase II
- Pursue development of local small hydropower
- Secure import allocation rights for out-of-state long-lead time MTR resources
- Continue to procure local biomass power and investigate opportunities for alternative uses of biomass waste
- Continue to participate as an active partner in the development of Humboldt offshore wind power
- Reduce reliance on large hydropower and unspecified system power
- Ensure best outcomes for disadvantaged communities

Board Approval of IRP

In compliance with Public Utilities Code Section 454.52(b)(3), this IRP was formally submitted to RCEA's governing board for approval based on the IRP's compliance with Sections 454.51 and 454.52 ("IRP Statute") and all relevant procurement requirements adopted by RCEA's governing board.

On October 27, 2022 RCEA's Board of Directors issued Resolution 2022-8, which formally approves this IRP and adopts RCEA's sub-25 MMT portfolio as RCEA's Preferred Conforming Portfolio for use as the basis for future procurement activities. In Resolution 2022-8, RCEA's Board of Directors also makes the following approvals, authorizations, and determinations regarding its Preferred Conforming Portfolio:

- Approves the Preferred Conforming Portfolio as RCEA's actual procurement plan and authorizes procurement efforts based on this plan.
- The Preferred Conforming Portfolio achieves economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in PUC Section 454.52(a)(1)(A-I).
- The Preferred Conforming Portfolio includes a diversified procurement portfolio consisting of both short-term and long-term electricity and electricity-related demand reduction products.
- The Preferred Conforming Portfolio achieves the resource adequacy requirements established pursuant to PUC Section 380.

- The Preferred Conforming Portfolio is consistent with the procurement timing, resource mix, and operational attributes of both the Commission's 30 MMT conforming portfolio and the Commission's 25 MMT conforming portfolio.
- The Preferred Conforming Portfolio is aligned with all RCEA board-adopted procurement directives.

A copy of Resolution 2022-8 is attached to this IRP Narrative and is identified as Attachment A.

Request for Certification

RCEA respectfully requests that the Commission certify this IRP.

As both the Legislature and the Commission have recognized, The Legislature has granted CCAs broad authority to procure resources on their customers' behalf, an authority limited only where "other generation procurement arrangements have been expressly authorized by statute." Likewise, the Legislature has granted CCAs autonomy in setting their own rates and managing interactions with their customers. The Commission has three primary interests in the CCA IRP process:

- Ensuring that CCA IRPs provide the CCA procurement information that the Commission needs to develop its statewide plan.¹³
- Ensuring that CCAs' current and planned procurement is consistent with the resource adequacy ("RA") requirements established pursuant to Public Utilities Code Section 380.¹⁴
- Ensuring that each CCA's current and planned procurement satisfies the CCA's share
 of renewables integration resources identified in the Commission's 2021 Preferred
 System Portfolio, and that the CCA either self-provides or pays for IOU procurement
 for its share of any renewable integration shortfall.¹⁵

¹¹ PUC Section 366.2(a)(5).

¹² D.05-12-041 at 5 ("Nothing in the statute directs the CPUC to regulate the CCA's program except to the extent that its programs may affect utility operations and the rates and services to other customers. For example, the statute does not require the CPUC to set CCA rates or regulate the quality of its services"); D.19-04-040 at 18 ("the Commission does not approve CCA or ESP rates").

¹³ D.19-04-040 at 17-18 ("The Commission's portfolio aggregation and evaluation process, which relies on fulfillment of IRP filing requirements by LSEs, is the only process capable of assessing the overall needs of the CAISO grid and meeting the statewide GHG, reliability, and least-cost goals collectively. While LSEs may use their IRP process to meet local planning needs as well, the statewide planning function is the statutorily required process...").

¹⁴ PUC Section 454.52(b)(3)(C).

¹⁵ PUC Section 454.51.

RCEA has prepared its IRP with these interests in mind, and thanks the Commission in advance for its recognition of CCA procurement autonomy and the benefits of a collaborative approach with CCAs in its certification review of RCEA's IRP.

II. Study Design

a. Objectives

RCEA had the following objectives in performing the analytical work to develop its IRP:

- 1. Identify a portfolio that achieves emissions that are equal to or less than RCEA's proportional share of the 30 MMT by 2030 and 25MMT by 2035 GHG targets ("25MMT conforming portfolio"), as determined using the Commission's Clean System Power calculator. Since this lower emission portfolio is RCEA's Preferred Conforming Portfolio, a second portfolio achieving emissions that are equal to or less than RCEA's proportional share of the 38MMT by 2030 and 30 MMT by 2035 GHG targets ("30 MMT conforming portfolio") was not developed, in keeping with direction from the Commission.
- 2. Identify a portfolio that achieves economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in PUC Section 454.52(a)(1)(A-I).
- 3. Identify a diverse and balanced portfolio that includes both short-term and long-term power products, but that transitions to mostly long-term procurements over the planning period.
- 4. Identify a portfolio that achieves the RA requirements established pursuant to Public Utilities Code Section 380 and provides RCEA's share of system reliability and renewable integration resources.
- 5. Identify a portfolio that complies with all RCEA board-adopted procurement directives.
- 6. Identify a portfolio that is compliant with RCEA's obligations under the Renewables Portfolio Standard program.
- 7. Identify a portfolio that is cost-effective and minimizes rate impacts on RCEA's customers.

b. Methodology

i. Modeling Tool(s)

RCEA used multiple modeling tools to test and compare the performance of candidate Preferred Conforming Portfolio resource portfolios including HedgeFox and RCEA's own Financial Model, both developed by The Energy Authority (TEA). RCEA used the HedgeFox

model to shape forward market prices in the IRP study horizon to evaluate resource performance on a long-term hourly basis as well as candidate resource production curves. RCEA used these results to evaluate the incremental value of each candidate resource and portfolio configuration. Finally, RCEA evaluated the overall financial impact of its Preferred Conforming Portfolio on RCEA's financial outlook using its own Financial Model, including projected costs spanning energy, resource adequacy, and renewable attributes.

HedgeFox

HedgeFox is a Monte Carlo simulation model of markets, resources and portfolios developed by The Energy Authority ("TEA"). HedgeFox utilizes a combination of methodologies from statistical approaches, data science, machine learning models, and operational research optimization. In RCEA's IRP, HedgeFox used a deterministic price outlook to generate stochastically derived forward price shapes and resource production curves around it. This dataset allowed RCEA to value the performance of candidate portfolios under a range of potential price scenarios over the IRP study horizon.

RCEA Financial Model

RCEA maintains a financial model that provides a multi-year point forecast of all revenue and cost streams. For the IRP, the Financial Model was used to evaluate the comprehensive financial impact of its Preferred Conforming Portfolio integrating the cost of energy, renewables, and resource adequacy into a portfolio value metric. This outcome was benchmarked using comparable environmental and reliability targets fulfilled with generic resources.

None of the tools used in modeling RCEA's portfolio are resource investment models, such as the Commission's RESOLVE model, so they do not include capacity expansion logic to directly derive resources that would be an optimal investment plan for RCEA's service territory, taken as an independent system. Instead, RCEA has utilized the tools above to iterate through resource configurations for the Preferred Conforming Portfolio that would allow RCEA to meet its assigned share of GHG emissions and system reliability, while meeting the broader objectives of the CCA program as determined by RCEA's Board and community. While this approach is more top-down than the RESOLVE model, the iterative nature of RCEA's analysis should result in an IRP that can be easily evaluated and incorporated by the Commission as part of this IRP cycle.

ii. Modeling Approach

Load Forecast

RCEA developed its IRP using its assigned load forecast linked in the June 15, 2022

Administrative Judge's Ruling Finalizing Load Forecasts and Greenhouse Gas Emissions

Benchmarks for 2022 Integrated Resource Plans ("Load Forecast Ruling"). RCEA's assigned load forecast is as follows:

Table 1: RCEA's 2023-2035 Load Forecast

Year	Load Forecast (GWh)
2023	674.1
2024	677.9
2025	678.7
2026	680.6
2027	682.1
2028	683.3
2029	684.4
2030	685.3
2031	686.1
2032	686.8
2033	687.4
2034	688.0
2035	688.5

Load Shape

In developing its Preferred Conforming Portfolio, RCEA used its own load shape rather than the default load shape from the CSP Calculator. RCEA elected to use its own load shape to reflect the significant differences between its expected load shape and the default load shape, which reflects the CAISO hourly system average load shape forecast for the 2021 IEPR mid case. These differences are due to the geography of RCEA's service territory and the demographics of its customer base. Humboldt County is at the northernmost latitude of CAISO's territory and the majority of RCEA's load within the county is located within ten miles of the coast where cooling loads are minimal year-round. RCEA's 4,000-square-mile service territory is also primarily rural in nature, with the largest city served containing a population under 30,000. These geographical and demographic differences from most of the state results in a load which is more akin to the Pacific Northwest than the rest of California, with a winter peak driven by lighting and heating needs, and little HVAC usage over the summer months. RCEA's own load shape results in a peak demand that is 21% to 24% (37 to 40 MW) lower than the peak demand of the default CAISO average load shape, depending on the modeling. RCEA's custom load shape implies a winter peak that is near 1% (1 to 2 MW) greater than the default winter peak, and a summer peak that is 31% to 35% (56 to 60 MW) lower than the default summer peak.

The use of this custom load shape does not change RCEA's total annual energy volumes for both load and load modifiers, and these energy volumes remain consistent with RCEA's assigned load forecast.

Load-Proportional GHG Emissions Benchmark

RCEA assessed the emissions of its Preferred Conforming Portfolio against its 2030 and 2035 load-proportional share of the respective 30MMT and 25 MMT benchmarks, as assigned in the Load Forecast Ruling:¹⁶

Table 2: RCEA's Assigned Shares of GHG Reduction Benchmarks

	/IMT g Portfolio	25 MMT Conforming Portfolio			
2030 (38 MMT)	2035 (30 MMT)	2030 (30 MMT)	2035 (25 MMT)		
0.098	0.074	0.071	0.057		

Compiling Existing Resources

To initially populate its resource data templates, RCEA added the following existing resources:

- Long-term energy purchase contracts and owned generating resources
- Long-term capacity (Resource Adequacy) purchase and sales contracts
- Carbon-free and voluntary RPS energy allocations from PG&E's PCIA resources
- RCEA's assigned share of capacity from CAM and DR resources, estimated per guidance from Energy Division staff
- Short-term procurements from generic existing large hydro, given the long timeline required for the development of selected new resources described below.
- RCEA also included in its analysis an assumed extension of its long-term contract with an existing biomass facility, currently set to expire in 2031, through the end of the planning period.

Selecting New Resources

RCEA's approach to selecting new resources for its IRP has generally been top-down in nature, driven by the local Board and community's stated goals and values. RCEA's relatively small load and significant contractual commitments to date, in combination with the constraints the

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¹⁶ Load Forecast Ruling at 10.

portfolio is subject to due to state and local decarbonization targets, RCEA's local development goals, and conformance to the Commission's IRP process all support utilization of this approach. RCEA has determined that a bottom-up analysis to selecting new resources starting from production cost modeling that serves RCEA's load at the least cost while meeting state regulatory compliance as the main objectives is not realistic or very useful, since it does not reflect RCEA's actual procurement plans and requires significant staff time from a small team tasked with resource planning, procurement and contract management.

To identify its new resource procurement, RCEA referred to its Board-adopted Strategic Plan, the 2021 PSP new resource buildout, and new resource development opportunities. The origins of RCEA's Strategic Plan are in a 2013 study funded through the CEC's Renewable Energy Secure Community Program (RePower Humboldt Technical Study). The study found that Humboldt County could achieve an electricity portfolio made up almost entirely of local renewable energy resources, chiefly biomass, wind, wave, and hydropower, by 2030. The study's findings informed the launch of RCEA's CCA program and its initial portfolio targets. More recently, RCEA updated its organization's strategic plan in 2019. The updated strategic plan sets quantitative, resource-specific procurement targets and expresses a strong preference for reliance on local resources, made both feasible and desirable by RCEA's relatively light load, a rich natural resource supply in RCEA's service area, and isolation from the state's other load pockets.

In 2019, RCEA conducted an extensive stakeholder engagement process to develop the portfolio presented in its Strategic Plan, including hosting community workshops, accepting public comments, and integrating feedback from its Community Advisory Committee ("CAC") and Board of Directors. The result of this effort regarding new supply-side resources was that staff was directed by RCEA's Board and Community Advisory Committee to 1) pursue local offshore wind development instead of onshore wind, 2) procure more community-scale local solar and storage, and 3) investigate small hydro development opportunities. RCEA staff utilized these goals, as well as other emerging priorities in resource development, in identifying portfolios to evaluate for its IRP, and compared them to RCEA's load proportional share of the Commission's PSP to ensure consistency with statewide resource development plans.

Four candidate portfolios across the IRP planning horizon were evaluated, each with the same base case set of resources and a different configuration of incremental resources and procurement volumes. The base case resources reflect RCEA's existing contractual

¹⁷ RePower Humboldt: A Strategic Plan for Renewable Energy Security and Prosperity. Schatz Energy Research Center and Redwood Coast Energy Authority. March 2013.

commitments, shortlisted contracts under review, anticipated procurement pursuant to compliance obligations and authorized Board actions, and planned development efforts that are unlikely to vary in scale and timing. The base case resources and assumptions are listed below:

- All active and in-progress contracts, represented in the RDT as having a status of online, development or review
- 20 MW incremental solar plus battery storage operational by 2025 to be procured for Mid-Term Reliability compliance
- 8 MW of new small hydropower operational by 2030
- 11 MW new standalone battery storage operational by 2026
- 6 MW solar plus storage procured through FIT Phase II program, operational 2025-2027
- 4 MW of community scale microgrids operational 2026-2030
- PG&E RPS & Carbon-Free Allocations contracted through 2035
- Balance of portfolio through 2029 met with short-term carbon-free energy

Incremental to the base case described above, the following resources, volumes and timing assumptions differentiate the four candidate portfolios:

- 1. Diverse Portfolio: 40 MW offshore wind by 2030; 15 MW new geothermal by 2030; biomass at current 18 MW level through 2035
- 2. Maximum Offshore Wind: 75 MW offshore wind by 2030; no new geothermal; no biomass after 2031 expiration of current PPA
- 3. Maximum Geothermal: no offshore wind; 20 MW new geothermal by 2030, increasing to 40 MW by 2035; no biomass after 2031 expiration of current PPA
- 4. Short-Term Portfolio Content Category ("PCC") 1: business-as-usual case for comparison comprised of short-term RPS procurement to meet portfolio needs 2030 and beyond in lieu of large new renewables; no biomass after 2031 expiration of current PPA

The portfolios were analyzed by leveraging the long-term hourly price forecast described above, as well as generation profiles and pricing for prospective resources that were provided to RCEA by private developers through its power solicitation processes. These profiles were further refined using the HedgeFox model. Each candidate portfolio was evaluated considering cost, reliability, GHG emissions, feasibility for development, and alignment with RCEA's Boardadopted goals. Candidate portfolio 1 was ranked the highest for its overall ability to achieve these goals, high portfolio value, and resource diversity, as discussed further in Sections III(a) and III(b).

Economic Portfolio Value

RCEA evaluated candidate resources using long-run economic performance through 2044 to capture the value of resources with commercial operation dates near the end of the current IRP cycle's time horizon. RCEA believes this allows for more holistic evaluation of long-term portfolio structures. Economic performance was modeled on an hourly basis with scaling to expected monthly production and is agnostic to long-run market fundamental views. This approach avoids temporal effects related to resource construction timing and captures the most important elements of a resource's production curve relative to market value. Candidate resources are further evaluated for their resource adequacy value and renewable attribute value, culminating in a forward net value projection that is discounted to the present day.

Confirming Reliability

RCEA used its assigned percent share of the CAISO managed coincident peak provided by Energy Division staff as the basis to forecast its RA obligations through the IRP study horizon. RCEA then evaluated whether the candidate portfolio provided sufficient long-term capacity to meet RCEA's assigned reliability need each year, using a combination of contracted and calculated Net Qualifying Capacity ("NQC") and marginal Effective Load Carrying Capability ("ELCC") values provided in the RDT. RCEA targeted RA positions between 70% and 100% in each year to ensure the majority of its forecasted obligation across the planning horizon would be hedged by long-term contracts. RCEA then added enough short-term RA in years with outstanding open positions such that its total effective MW supply was equal to or greater than its reliability need in each year. Five of the twelve IRP years were over 100% hedged by long-term resources and thus didn't require the addition of assumed short-term RA procurement.

This procurement strategy allows RCEA some flexibility to adjust its portfolio due to the potential for significant changes in the compliance program as California continues to reassess its RA program to ensure system reliability over the ten-year planning horizon during the transition to a less carbon-intensive set of system resources. RCEA expects that this aspect of its planned portfolio may evolve the most in future IRP cycles as part of the broader policy discussion of California and Western Electricity Coordinating Council ("WECC") reliability.

RCEA also evaluated the performance of each candidate portfolio in terms of the monthly expected generation during RCEA's peak demand and total monthly generation relative to RCEA's load. These outcomes were incorporated into the comparative evaluation of the four candidate portfolios and used to weight them based on compatibility between generation profile and load, and a reduced reliance on unspecified system power.

Calculating GHG Emissions

RCEA calculated the emissions associated with the candidate portfolios described above, including its final Preferred Conforming Portfolio, using the Commission's Clean System Power calculator tool. In comparing the emissions associated with each candidate portfolio, where scenarios failed to comply or meet RCEA's own emissions objectives, portfolios were modified to achieve compliance.

III. Study Results

a. Conforming and Alternative Portfolios

As required by the Commission, RCEA is submitting one portfolio that achieves emissions that are equal to or less than RCEA's proportional share of both the 30 MMT Conforming Portfolio and 25MMT Conforming Portfolio. In addition to conformance with the "equal to or less than" GHG emissions requirement, this portfolio is consistent with inputs and assumptions used by staff to develop the 2021 PSP, utilizes RCEA's assigned forecasts for energy load, peak demand and demand modifiers, and achieves a perfect capacity equivalent equal to or greater than RCEA's annual reliability need. In keeping with guidance from Energy Division staff, RCEA is providing copies of the Resource Data Template and Clean System Power Calculator for both the 25 MMT and 30 MMT GHG emissions benchmarks that contain identical supply and demand resources and inputs.

RCEA's 25 MMT Conforming Portfolio

The diverse portfolio described in Section II(b)(ii). was built out into RCEA's 25 MMT Conforming Portfolio. Table 3 is a list of resources by type, size and contract status included in this portfolio across the whole IRP horizon. The table includes existing resources that RCEA owns or contracts with, consistent with definitions provided in the Resource Data Template, resources RCEA plans to contract with in the future, and new resources that RCEA plans to invest in. No short-term procurements are listed in the table.

Table 3: Specific Projects in RCEA's 25 MMT Conforming Portfolio

Resource Name	Contract Status	Contracted Capacity (MW)	Description
Humboldt Redwood	Online	18	Biomass co-generation facility located in Scotia, Humboldt County
Cove Hydro	Online	6	Run-of-river hydroelectric plant located on Hatchet Creek in Shasta County
Redwood Coast Airport Solar Microgrid	Online	2	RCEA-owned front-of-meter multi-customer solar plus battery storage microgrid at Humboldt County's regional airport
Tierra Buena Energy Storage	Online	3	Jointly procured standalone storage resource in Sutter County that provides capacity only
Leapfrog Demand Response	Online	6	CAISO-wide DR capacity that provides capacity only
Sandrini Sol 1	Development	100	Solar facility in Kern County under construction
Hatchery Road Solar	Development	4	Feed-in Tariff Phase I project near Blue Lake, Humboldt County
North Coast Highway Solar	Development	2	Feed-in Tariff Phase I project near Hydesville, Humboldt County
Fairhaven Energy Storage	Development	17.25	Short-duration Li-ion battery storage in Samoa, Humboldt County to provide MTR capacity
Tumbleweed Long- Duration Storage	Development	2.5	Standalone Li-ion battery storage in Kern County to provide MTR long lead time ("LLT") capacity
Goal Line Long- Duration Storage	Development	2	Standalone Li-ion battery storage in San Diego County to provide MTR LLT capacity
Ormat Geothermal Portfolio	Development	Up to 4	Multiple new geothermal resources in Nevada and California to provide MTR LLT capacity
Fish Lake Geothermal	Development	0.36	New geothermal resource to be built in Nevada to provide MTR LLT capacity
Foster Clean Power A	Review	3	Solar plus storage resource to be built in Arcata, Humboldt County
North River Clean Power	Review	5	Solar plus storage resource to be built near McKinleyville, Humboldt County
Mad River Solar	Review	1	Feed-in Tariff Phase I project under evaluation
Feed-In Tariff Phase II-A	Planned New	2	Solar plus storage hybrid resource to be located in Humboldt County
Feed-In Tariff Phase II-B	Planned New	2	Solar plus storage hybrid resource to be located in Humboldt County

Feed-In Tariff Phase II-C	Planned New	2	Solar plus storage hybrid resource to be located in Humboldt County
Community Microgrids	Planned New 4		Solar plus storage hybrid microgrids to be located in Humboldt County
Redwood Coast Offshore Wind	Planned New	40	Initial scale floating wind project 20-30 miles west of Humboldt Bay
New Local Small Hydro	Planned New	8	Run-of-river hydroelectric plant(s) to be located in Humboldt and/or Trinity County
GeoZone Project	Planned New 15		New geothermal resource to be developed in Sonoma, Mendocino, and/or Lake County
New Local Storage	Planned New	11	Short-duration Li-ion battery storage to be
New Local Storage	Platified New	11	developed in Blue Lake, Humboldt County
Zero Emission Resource	Planned New	20	Solar plus storage hybrid resource to be located anywhere within CAISO for MTR Zero Emission Resource requirement

In summary, RCEA's 25 MMT Conforming Portfolio is composed of the following supply resources to meet RCEA's projected 2030 and 2035 energy and capacity needs:

- 18 MW online biomass
- 5.6 MW online small hydro
- 8 MW planned new small hydro
- 2.3 MW online solar
- 114.4 MW in development solar
- 30 MW planned new solar
- 40 MW planned new offshore wind
- 4.36 MW in development geothermal
- 15 MW planned new geothermal
- 4.5 MW in development long-duration storage
- 4.7 online short-duration storage
- 23.5 MW in development short-duration storage
- 41 MW planned new short-duration storage
- Carbon-Free and RPS Voluntary Allocations from existing PCIA resources

This portfolio includes a mix of online, in development and planned new resources, both contracted and not-yet-procured. Contracts with the status "review" in the RDT are included in the "development" categories listed above. On a nameplate capacity basis, approximately 8% of RCEA's 2035 energy portfolio is composed of existing resources, while 92% of its 2035 portfolio is composed of new build resources. On the basis of expected energy production, the

split is 12% online and 88% new. This reflects RCEA's plans to be an active player in the State's development of new renewable resources.

As demonstrated in Table 4, new resource procurement in RCEA's 25 MMT Conforming Portfolio is generally consistent with the Commission's adopted 2021 PSP (38 MMT core portfolio, adopted with the 2020 IEPR demand forecast and high EV assumptions, 2022 costs and transmission upgrades), identified in D. 22-02-004 and subsequent guidance¹⁰. RCEA's share of PSP resources is calculated as its assigned forecast energy load as a percent of the total assigned forecast CPUC-jurisdictional energy load.

Table 4: 25 MMT Conforming Portfolio Resource Procurement by Resource Type Compared to 2021 PSP

Resource Type	2021 PSP 2035 New Resource Capacity (MW)	RCEA Share of 2021 PSP New Resources (MW)	RCEA 25 MMT Conforming Portfolio (MW)	Explanation of Differences Between Load Share and 25 MMT Conforming Portfolio
Biomass	134	0 0 1		No difference
Geothermal	1,135	4	19.4	Pursuant to Strategic Plan goals & MTR Order
Hydro (Small)	-	0	8	Pursuant to Strategic Plan goals
Wind	3,562	13	0	Higher solar and offshore wind procurement in lieu of onshore wind
Wind on New OOS Transmission	4,636	17	0	Higher solar and offshore wind procurement in lieu of onshore wind
Offshore Wind	4,707	17	40	Pursuant to Strategic Plan goals
Utility-Scale Solar	17,418	63	144	Pursuant to Strategic Plan goals, RPS SB350 compliance & MTR Order
Battery Storage	17,350	63	65	Minimal difference
Pumped (Long- Duration) Storage	1,000	4	4.5	Minimal difference
Shed Demand Response	997	4	0	DR MCC bucket cannot accommodate additional capacity
Total Resources (Renewables + Storage + DR)	50,920	185	281	

The differences between RCEA's proportional share of the 2021 PSP and the new resource buildout contemplated in its 25 MMT Conforming Portfolio reflect RCEA's prior resource commitments and Board-adopted goals for renewable energy procurement and local development. For example, RCEA's 2019 RPS RFP resulted in the execution of a long-term PPA with a new solar facility that will hedge around 45% of RCEA's retail load starting in mid-2023, resulting in higher solar and lower wind procurement than RCEA's load share of the PSP solar and wind buildout. The 2019 RFP was developed to meet RCEA's long-term contracting requirement in RPS Compliance Period 4, as well as its internal clean and renewable energy goals.

As demonstrated in Figure 2, RCEA's 25 MMT Conforming Portfolio is generally consistent with new resource procurement timing, as set forth in D.22-02-004.

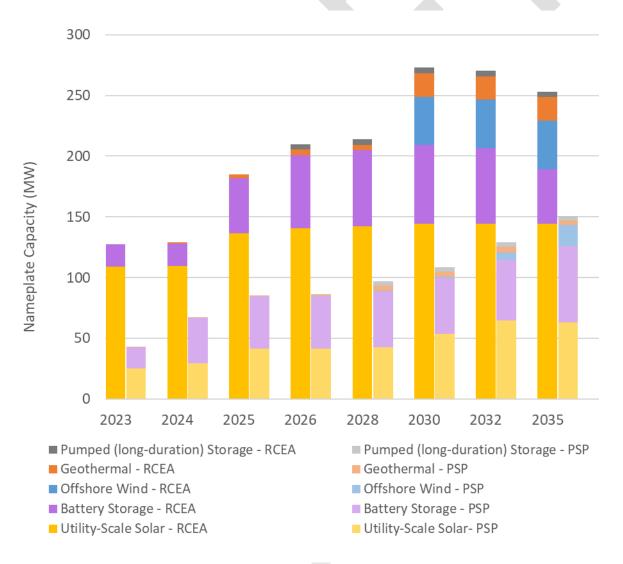


Figure 2: 25 MMT Conforming Portfolio New Resource Timing Compared To 2021 PSP Buildout

Generally, RCEA's timeline for new resource procurement under its 25 MMT conforming portfolio aligns with the gradual annual increase of each resource category outlined in the 2021 PSP new resource buildout. In comparison to the 2021 PSP, RCEA's 25 MMT conforming portfolio results in deficiencies of new battery storage resources in 2024 and 2035. However, the 2024 deficiency is attributed to MTR procurement challenges (see Section IV(a)(ii), whereas the 2035 deficiency is due to expiration of two 10-year battery storage contracts. On a cumulative capacity basis, RCEA's 25 MMT Conforming Portfolio results in the buildout of new resources in excess of its 2021 PSP obligation. Deviations from the resource procurement timing across all resources are mainly due to RCEA's more aggressive renewable procurement targets, leading to higher procurement at a faster rate across all resource types. Another major exception is RCEA's prior commitment to contract for a 100 MW solar facility that is to be online in 2023, which was an outcome of RCEA's 2019 RPS solicitation expressly to meet RCEA's long-term contracting requirement under SB 350.

Consistent with Energy Division staff guidance, RCEA does not plan to procure exactly according to the timing and proportional share of the 2021 PSP. This would be infeasible and imprudent for RCEA given its small size and thus small annual incremental resource shares. The resource timing outlined in RCEA's Conforming Portfolio layers in contracts of varying sizes to account for the pricing benefit associated with larger projects, while still allowing for smaller procurements in line with RCEA's Strategic Plan and Board direction, such as distributed solar and storage procured through RCEA's Feed-In Tariff program.

RCEA's 30 MMT Conforming Portfolio

RCEA's 30 MMT Conforming Portfolio is identical to its 25 MMT Conforming Portfolio described in the previous section and achieves emissions less than RCEA's proportional share of the 2030 38 MMT and 2035 30 MMT GHG emission planning scenario.

b. Preferred Conforming Portfolio

RCEA has adopted its 25 MMT Conforming Portfolio, which is described in detail in Section III(a), as its Preferred Conforming Portfolio and determined that it achieves the following statutory and administrative requirements in PUC Section 454.52(a)(1):

RCEA's Preferred Conforming Portfolio consists of a combination of:

- Utility-Scale Solar
- Community-Scale Solar
- Offshore Wind
- Biomass

- Geothermal
- Small Hydropower
- Short-Duration Storage
- Long-Duration Storage
- Demand Response

A summary of the new resources required to achieve RCEA's Preferred Conforming Portfolio is provided in Figure 3.

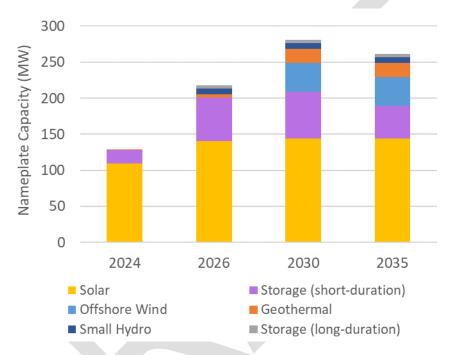


Figure 3: RCEA 25 MMT Preferred Conforming Portfolio New Resource Capacity Buildout

As stated above, in accordance with PUC Section 454.51(b)(3), RCEA's governing board has determined that the resource mix in its Preferred Conforming Portfolio achieves "economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in PUC Section 454.51(a)(1)." These benefits and characteristics are discussed as follows.

GHG Reduction Goals

RCEA's Preferred Conforming Portfolio achieves results and performance characteristics consistent with the PUC Section 454.52(a)(1)(A) goal of meeting the Commission's greenhouse gas reduction targets. The resultant GHG emissions from RCEA's Preferred Conforming Portfolio are lower than RCEA's load-proportional share of the 2030 30 MMT emissions benchmark and the 2035 25 MMT emissions benchmark, which are 0.074 MMT and 0.057 MMT, respectively. According to the CSP calculator, RCEA's Preferred Conforming Portfolio would result in -0.005 MMT of CO₂ in 2030 and 0.028 MMT of CO₂ in 2035, beating the

benchmarks by 0.079 and 0.029 MMT, respectively. RCEA's negative emissions in 2030 are a result of its Preferred Conforming Portfolio's oversupply of power (a negative net system power). By supplying excess power to the grid, RCEA avoids reliance on system power - dispatchable gas within CAISO and unspecified imports - to serve part of its demand, thereby receiving an emissions credit.

Renewable Energy

RCEA's Preferred Conforming Portfolio achieves results and performance characteristics consistent with the PUC Section 454.52(a)(1)(B) goal of ensuring that portfolios are composed of at least 50% eligible renewable resources. The portfolio contemplates increasing amounts of renewable energy each year until arriving at a portfolio of 100% PCC1 renewable resources by 2030, excluding RCEA's allocation of PCIA carbon-free energy.

Beginning in 2024 and for each year thereafter in the IRP planning horizon, RCEA will have over 100% of its RPS procurement obligation required by SB 100 under long-term contracts of 10 years or greater duration, thereby significantly exceeding the SB 350 requirement for a minimum of 65% of the SB 100 RPS requirement in each compliance period to come from such long-term contracts. As of the date of submitting this IRP, RCEA has already procured long-term PCC1 solar, biomass and hydroelectric contracts making up well over half of its total portfolio, with the biomass and hydroelectric contracts currently delivering and the solar project set to begin delivering in mid-2023.

Minimizing Bill Impact

As noted in Section III(b)(C) above, RCEA is committed to providing just, reasonable and competitive rates that will not increase bills above what the customer would pay in the absence of RCEA's CCA program. RCEA's Preferred Conforming Portfolio achieves results and performance characteristics consistent with the PUC Section 454.52(a)(1)(D) goal of minimizing the impact of planned procurement on ratepayers' bills. The portfolio consists primarily of renewable resources that have benefitted from increasing economies of scale over the past several years and have price projections that continue to drop in the foreseeable future. However, the portfolio also includes more expensive RPS resources such as offshore wind and geothermal, as RCEA recognizes the benefits of having a diverse portfolio, the importance of advancing emerging technologies such as floating offshore wind, the community benefits associated with these local resources, and these resources' contributions to reliability. The above-market cost of these resources is a tradeoff for their time-of-generation benefits, but RCEA's financial modeling supports their inclusion in the portfolio.

Based on the modeling described in Section II(b)(ii), RCEA's Preferred Conforming Portfolio is expected to maintain load-weighted annual cost within 6% of RCEA's calendar-year 2019

expenses throughout the modeling horizon after accounting for changes in the market prices of energy.

As described in Section II(b)(ii), RCEA compared four potential candidate portfolios based on net cost through 2035. The portfolio that was eventually selected to become RCEA's Preferred Conforming Portfolio was chosen for its resource diversity, cost, reliability performance, alignment with RCEA's Board-adopted goals, and likelihood for implementation. The Preferred Conforming Portfolio is not projected to be the least expensive of the candidate portfolios considered. However, by providing a more diversified portfolio it reduces risk associated with any one technology for RCEA and more fully achieves energy resource diversification goals stated in RCEA's strategic plan.

Ensuring System and Local Reliability and Resource Diversity

RCEA will continue throughout the IRP planning horizon to procure RA in keeping with Commission year-ahead and month-ahead requirements, as well as contracting for long-term incremental capacity in keeping with existing and any future Commission reliability decisions. RCEA's Preferred Conforming Portfolio includes resources already contracted specifically to meet Commission reliability decisions to date.

RCEA's Preferred Conforming Portfolio achieves results and performance characteristics consistent with the PUC Section 454.52(a)(1)(E) goal of ensuring system and local reliability. Specifically, the portfolio is expected to supply between 146-151% of RCEA's forecast total load in the summer months and 101-108% in the winter months during 2030 and 2035.

RCEA's Preferred Conforming Portfolio places strong emphasis on developing new local resource capacity in Humboldt County, as well as preserving existing capacity via continued local biomass procurement. About 42% of the total energy supply in the 2035 portfolio is expected to come from resources within the Humboldt local reliability area, which could reduce the future need for gas-fired generation within the region, especially if coupled with sufficient transmission infrastructure upgrades.

RCEA's Preferred Conforming Portfolio also emphasizes a diverse portfolio that includes several dispatchable or baseload resources to complement the intermittent solar and wind in the portfolio, including storage, biomass, hydropower and geothermal. Although these have been and will be some of RCEA's more expensive procurements, their contribution to system and local reliability outweighs their above-market cost. In recent decades, generation located within the area now served by RCEA consisted mainly of PG&E's natural gas-fired Humboldt Bay Generating Station ("HBGS"), three biomass power plants with intermittent operating histories, and a handful of small, run-of-the-river hydropower plants operated seasonally. RCEA's Preferred Conforming Portfolio calls for a number of additional new generators to serve RCEA's load and be located within or adjacent to RCEA's service area. These planned resources,

including offshore wind, stand-alone and solar-coupled energy storage, stand-alone solar, and small hydro, will diversify energy sources meeting local load. Particularly in the case of projects including energy storage, these new resources will contribute to resilience for local communities by potentially keeping segments of the local grid energized under conditions where outages might otherwise occur. Plans for large-scale development of offshore wind off the Humboldt Coast, with RCEA as an active development partner, will call for development of new bulk transmission infrastructure that will benefit RCEA's service area by increasing capacity for both import and export of energy, overcoming the currently limited transmission connection between Humboldt County and the rest of the state. Transmission upgrades may also have the benefit of resolving current transmission and distribution constraints impeding interconnection of new load and distributed generation within the county, as described further in PUC Section III(m).

Demand-Side Energy Management

RCEA's Preferred Conforming Portfolio achieves results and performance characteristics consistent with the PUC Section 454.52(a)(1)(G) goal of enhancing demand-side management ("DSM"). The associated load implications of energy efficiency, building and vehicle electrification, and BTM customer solar are incorporated into RCEA's Preferred Conforming Portfolio via demand-side assumptions in the CSP Calculator from the CEC's IEPR demand forecast. A summary of these load modifiers is presented in Table 5.

Table 5: RCEA CSP Summary of Demand Modifiers

Demand Summary (GWh)	2024	2026	2030	2035
Managed Retail Sales Forecast (assigned to LSE)	678	681	685	689
Baseline Demand, non-C&I	428	435	448	455
Baseline Demand, C&I	397	403	415	422
Electric Vehicle Load	29	41	63	95
Building Electrification	3	6	12	19
Energy Efficiency	(11)	(19)	(34)	(49)
BTM PV	(114)	(130)	(164)	(199)
Demand (at generator bus-bar)	732	735	739	743

Minimizing Localized Air Pollutants with Emphasis on Disadvantaged Communities

RCEA's Preferred Conforming Portfolio increases reliance over the IRP planning horizon on renewable and carbon-free resources that minimize local air pollutants and greenhouse gas emissions. RCEA does plan to continue to procure local biomass power that, while an RPS

resource, does produce some local emissions. However, the use of existing generating infrastructure and community benefits including jobs and a means of disposing residual material from local forest products manufacturing make biomass a preferred resource for communities served by RCEA. RCEA's service area does not include any CalEnviroScreen 4.0 ("CES") disadvantaged communities ("DACs") as defined by the State of California, but discussion on the broader definition of disadvantaged communities per this IRP cycle is included in subsequent narrative sections.

RCEA's Preferred Conforming Portfolio achieves results and performance characteristics consistent with the PUC Section 454.52(a)(1)(H) goal of minimizing localized air pollutants and other GHG emissions with early priority on disadvantaged communities. RCEA's Preferred Conforming Portfolio relies primarily on renewable generation, and would have extremely low GHG and localized air pollution emissions. While RCEA's Preferred Conforming Portfolio does not include any energy contracts with gas generators, it does include a biomass facility located in RCEA's service territory. Air pollutant implications of this are discussed further in Section III(f). Lastly, RCEA's Preferred Conforming Portfolio minimizes RCEA's reliance on unspecified system power, instead opting for renewable generation procurement and development whenever feasible. RCEA's Preferred Conforming Portfolio will not include any contracts for new natural gas resources or re-contracting with terms of five years or more for existing natural gas resources.

c. GHG Emissions Results

RCEA used its load-based proportional share of the 2030 30 MMT and 2035 25 MMT benchmarks to determine the emissions compliance for its Preferred Conforming Portfolio, as described in Section III(d). Under the 2035 25 MMT GHG emission planning scenario, RCEA's Preferred Conforming Portfolio would result in CO₂ emissions that are 107% lower than its assigned 2030 GHG benchmark and 51% lower than its assigned 2035 GHG benchmark, as shown in Figure 4. Also shown are the resultant criteria air pollutants generated by the portfolio from the 25 MMT Clean System Power Calculator, which are described further in Section III(d).

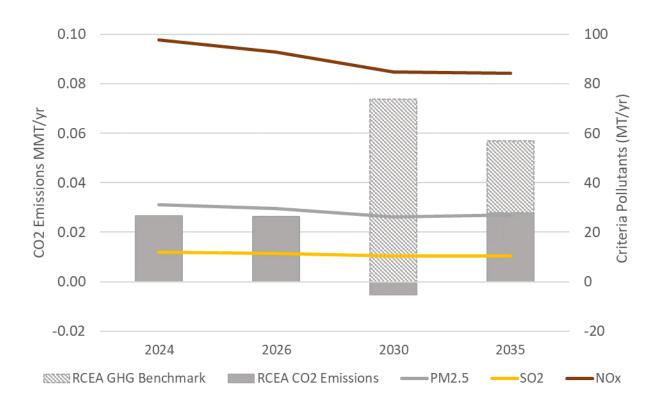


Figure 4: RCEA Preferred Conforming Portfolio 25 MMT CSP Calculator Results

Under the 2035 30 MMT GHG emission planning scenario, RCEA's Preferred Conforming Portfolio would result in CO2 emissions that are 120% lower than its assigned 2030 GHG benchmark and 87% lower than its assigned 2035 GHG benchmark, as shown in Figure 5. Also shown are the resultant criteria air pollutants generated by the portfolio from the 30 MMT Clean System Power Calculator, which are described further in Section II.

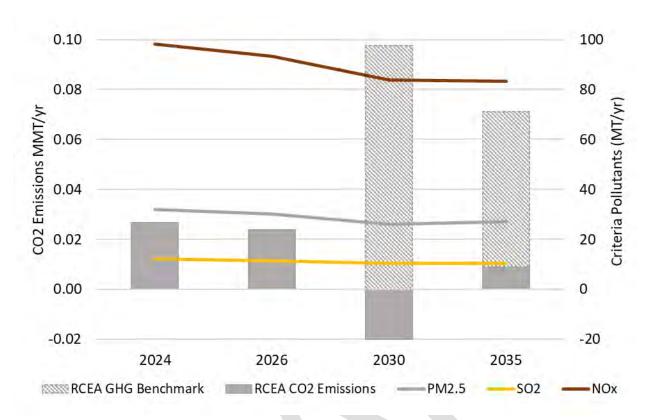


Figure 5: RCEA Preferred Conforming Portfolio 30 MMT CSP Calculator Results

RCEA used a custom hourly load shape for analyzing GHG emissions in the CSP tool. Historical load data from January 2018 through December 2021 was obtained from RCEA's settlement quality meter data (SQMD). This load data was aggregated using the same methodology as RCEA's current SQMD process, which has used localized load profiles instead of PG&E system profiles since March 1, 2019. This dataset is reflective of realized customer opt-out rates. Hourly load data across all four historic years were synchronized across 8,760 hourly intervals, and averaged at each interval. The average load at each hour was then divided by the total average annual usage to generate a normalized load profile that could be applied to forecasted demand. The monthly energy usage is the sum of the hourly output in each month and the peak demand for each month is the resulting maximum forecasted hour for each month.

d. Local Air Pollutant Minimization and Disadvantaged Communities

i. Local Air Pollutants

Table 6 shows 2030 and 2035 criteria air emissions associated with RCEA's Preferred Conforming Portfolio as estimated by the 25 MMT version of the CSP calculator, in metric tons per year.

Table 6: 25 MMT Preferred Conforming Portfolio Criteria Air Pollutants

Pollutant	2030	2035		
PM 2.5	26.2	27.1		
SO ₂	10.4	10.4		
NOx	84.2	84.2		

Table 7 shows 2030 and 2035 criteria air emissions associated with RCEA's Preferred Conforming Portfolio as estimated by the 30 MMT version of the CSP calculator, in metric tons per year.

Table 7: 30 MMT Preferred Conforming Portfolio Criteria Air Pollutants

Pollutant	2030	2035		
PM 2.5	26.0	27.0		
SO ₂	10.4	10.4		
NOx	83.9	83.3		

ii. Focus on Disadvantaged Communities

CalEnviroScreen 4.0's mapping tool shows that no part of RCEA's service territory includes the state's top 25% of impacted census tracts, or census tracts with the highest pollution burden. Therefore, there are no "disadvantaged communities" in RCEA's service area according to CES 4.0 criteria.

While not featured in the top 25th percentile of CES 4.0, the Yurok Reservation and Hoopa Reservation are identified as SB 535 Disadvantaged Communities according to the 2022 map developed by the California Office of Environmental Health Hazard Assessment.¹⁸

In addition to these two SB 535 Disadvantaged Communities, a number of other federally recognized tribes have tribal lands within Humboldt County¹⁹:

- Bear River Band of the Rohnerville Rancheria
- Big Lagoon Rancheria
 Blue Lake Rancheria
- Karuk Tribe
- Wiyot Tribe

¹⁸ https://oehha.ca.gov/calenviroscreen/sb535

¹⁹ List of Federally Recognized Tribes, Indian Health Service, January 28, 2022

Of the tribes within RCEA's service area footprint, the Hoopa Valley Tribe experiences particularly high air pollution due to its location within a high fire threat district. ²⁰ Consequently, the Hoopa Valley Tribe is also subject to frequent PSPS events and power outages. RCEA has initiated conversations with the Tribe to discuss the feasibility of installing a clean energy substation microgrid and other clean sources of back-up power. Additionally, RCEA is partnering with the Bear River Band of the Rohnerville Rancheria to launch a Mobile Home Solar program. This program, developed per the request of RCEA's Community Advisory Committee, is geared toward providing clean energy to low-income customers living in mobile homes.

RCEA recognizes poverty and low household income are widespread in Humboldt County, as shown by other criteria beyond those used in CES. For example, of RCEA's ~62,000 electric accounts, approximately 15,000 are residential CARE-eligible accounts. RCEA is dedicated to minimizing local air pollution and recognizes that lower income residents can be the most vulnerable to air pollution and other adverse environmental impacts, generally. RCEA also adopted a resolution calling for a Racial Justice Plan following the 2020 IRP cycle; one of the goals to be included in this plan is to pursue energy justice in power procurement and energy resource development. It is anticipated the RCEA Board of Directors will adopt the Racial Justice Plan in Q4 2022.

RCEA's Preferred Conforming Portfolio includes approximately one-fifth of its 2030 energy mix from a biomass plant within RCEA's service territory. As part of its solicitation process for procuring biomass power, RCEA required the offerors to disclose their environmental compliance history, including emissions violations. This compliance history was considered in selecting local power providers. Furthermore, in response to concerns from members of the public and the RCEA Board, the biomass PPA includes clauses that allow the contract to be canceled on the grounds of non-compliance with applicable laws, including air quality standards.

The Humboldt Redwood biomass plant is the only specified source of NO_x , SO_2 or $PM_{2.5}$ emissions in RCEA's Preferred Conforming Portfolio. Since the portfolio contemplates steady biomass procurement from the same facility, with the facility's current contract with RCEA running until 2031 and this contract assumed in RCEA's Preferred Conforming Portfolio to be extended throughout the IRP planning horizon, the resulting criteria pollutants are expected to remain constant over time as is shown in the CSP Calculator results. RCEA's Board made it a condition of extending the biomass contract to 2031 that the plant's owner, Humboldt Sawmill

²⁰ Office of the State Fire Marshal, CalFire, State Responsibility Area, November, 2007 (most recent data available)

Company (HSC), provides periodic reporting to RCEA on plant performance and alternative uses of the biomass feedstock used by the plant. This condition was in response to community concerns about criteria pollutants and GHG emissions from the plant. To fulfill the Board's intent, RCEA has entered a memorandum of understanding with HSC that calls for annual reporting on fuel use and sources, emissions, and information regarding HSC's consideration of other potential feedstock uses that could result in reduced air quality impacts.

As previously stated, RCEA's Board adopted a policy of transitioning to 100% clean and renewable power by 2025. With the exception of resource adequacy resources, RCEA intends to develop or contract exclusively with renewable and GHG-free generation resources, as well as energy storage resources. RCEA's Preferred Conforming Portfolio does not include energy contracts for gas generators, including those located within or adjacent to DACs. RCEA's Preferred Conforming Portfolio minimizes the use of unspecified system power, reducing its potential indirect reliance on gas generators that have an impact on DACs. The portfolio does, however, continue to rely on unspecified system power for short-term energy needs, which is an issue RCEA looks forward to addressing along with the CPUC and other LSEs over the IRP planning horizon.

e. Cost and Rate Analysis

RCEA's goal since CCA program launch has been to offer competitive rates to its customers. RCEA's rates are currently discounted 0.5% below the corresponding rates offered to bundled customers by the IOU operating in RCEA's service area. Like many other CCAs, RCEA does not currently use a traditional bottom-up, cost-of-service rate-making model. Given the construct in California where CCAs operate within IOU service areas and must compete with the IOU for rate-sensitive customers who can opt out of CCA service at any time, RCEA sets its rates at a fixed discount relative to the IOU's corresponding rates, taking the PCIA and other departing load charges into account. The intent is to apply a rate discount that guarantees costcompetitiveness with the IOU while allowing RCEA to cover its operating costs, including new resource procurement, and building reserves needed for long-term financial viability. Should RCEA find itself challenged to meet its financial targets due to increased procurement costs over expected revenue, the first response would be to temporarily reduce reserve contributions or even draw down reserves. RCEA might also respond by temporarily reducing its short-term procurement of renewable or carbon-free resources such that state-mandated RPS targets are achieved but voluntary over-procurement is reduced or eliminated. Reducing or eliminating the customer rate discount is generally considered a last-resort solution. Therefore, procurement cost impacts do not necessarily imply customer rate impacts.

In order to ensure long-term financial stability, RCEA may make a strategic decision to move to a cost-of-service rate structure in the future rather than a fixed discount from IOU rates, but in any case, will continue to provide customer rates that are just and reasonable. RCEA's Preferred Conforming Portfolio has been designed to keep power procurement costs at a level that will support this customer rate goal. In selecting supply resources for this portfolio, RCEA carefully considered the cost implications of candidate resource selections and procurement timing. This analysis was informed by forward price projections generated as described in Section II(b). In general, RCEA sought to balance the need to procure resources with enough lead time to meet its LSE-specific energy shortfalls and the Commission-identified overall system need for new resources with the cost-saving benefits of waiting to procure renewable and storage resources with downward sloping cost projections.

RCEA's Preferred Conforming Portfolio takes advantage of the historically falling cost of solar, wind, and battery storage resources. (Recent data show cost declines have leveled off or even reversed, but this may be a transitory consequence of recent global supply chain interruptions.) It also takes advantage of the fact that, compared to IOUs, CCAs have significantly shorter generation project development timelines, in part because CCAs do not require Commission approval of such projects. These shorter timelines result in significant direct cost savings and give RCEA more flexibility to time its procurement to take maximum advantage of falling renewable generation prices. RCEA used recent developer-derived estimates for new resource builds as a starting point for expected resource costs. Additionally, RCEA's analysis is cognizant of the recently passed Inflation Reduction Act, which has created further downward pressure on the expected costs of new renewable and carbon-free generating technologies. RCEA has calibrated the expected costs assumed in its economic analysis of various portfolio configurations to account for these effects. In general, these calibrations, applied in a technology-neutral and conforming manner with the legislation, result in greater net portfolio value over time for planned new resources that do not yet have executed contracts. RCEA believes the benefits of the Inflation Reduction Act in reducing the costs of new resource builds may be greater than assumed in its economic analysis but chooses to temper expectations in this analysis out of a sense of prudent portfolio management practice.

RCEA's Preferred Conforming Portfolio is diverse in both technology type and operational timing, seeking to both capture current opportunities for development while looking ahead to further cost-effective resource buildout. To ensure that its Preferred Conforming Portfolio is cost-effective, RCEA evaluated incremental portfolio value for each resource, relative to its current portfolio. The RCEA Preferred Conforming Portfolio meets reliability and emissions requirements while representing a clear net economic benefit to RCEA customers on an economic basis.

RCEA's Preferred Conforming Portfolio reflects its Board's larger commitment to developing renewable resources within the local region, which represents the broader community and RCEA customers' prioritization to reduce their contribution to climate change. As always, the prioritization for local green energy development must be balanced against the potential cost and rate impacts to RCEA's customers. At this time, RCEA believes that the cost impact of its Preferred Conforming Portfolio can be absorbed over time with reasonable rate adjustments, but this is an issue that RCEA staff will continue to monitor and discuss with its Board and the larger community.

In September 2021, RCEA's Board adopted a policy allowing the organization to "negotiate and execute non-standard pricing agreements with eligible commercial and industrial customers and RCEA's member agencies," provided that such agreements:

- 1) apply exclusively to customers with aggregate annual load across all its accounts in RCEA's service territory greater than 7 million kWh, and RCEA's member agencies regardless of annual load;
- 2) be based on marginal cost and account for any volume and/or price risk;
- 3) be priced to allow RCEA to cover variable costs and achieve some level of contribution to fixed cost and reserve margin, in conformance with RCEA's financial objectives and its Risk Management Policy and controls;
- 4) require a commitment level from the customer (e.g. volume, length of term) commensurate with the non-standard pricing agreement offered to the customer;
- 5) be consistent with RCEA's renewable and carbon-free compliance requirements and portfolio targets.

As these terms show, such pricing agreements would, for specific large customers, constitute a departure from RCEA's IOU-discounted ratemaking approach described above, instead using a cost-of-service approach. A number of large existing electric customers located in RCEA's service area but not currently served by RCEA and developers of industrial projects that could add substantial load to RCEA have expressed interest in such non-standard pricing agreements. This potential added load is not included in RCEA's load forecast and thus is not reflected volumetrically in the Preferred Conforming Portfolio.

f. System Reliability Analysis

RCEA's Preferred Conforming Portfolio is reliable and contributes RCEA's fair share to system reliability. To confirm this, RCEA assessed the portfolio based on annual RA position relative to its assigned reliability need, total seasonal generation, and hourly generation during system peak hours. For total generation, RCEA's Preferred Conforming Portfolio is expected to

generate 146-151% of RCEA's forecast load in the summer months (June through October) and 101-108% in the winter months (November through May) during 2030 and 2035. During system peak hours, RCEA's Preferred Conforming Portfolio is expected to provide up to 180% of RCEA's own forecasted local demand in summer months in 2030 and 2035. In the winter and shoulder months, the Preferred Conforming Portfolio is expected to generate up to 125% of RCEA's forecast demand during forecasted system winter peaks in 2030 and 2035.

RCEA intentionally developed its Preferred Conforming Portfolio to exceed its forecasted need in the summer months, given the summer-peaking nature of California's broader electric system. It is expected that RCEA's portfolio and Humboldt's renewable resources in general could provide much-needed reliability to the broader grid during these critical months (assuming sufficient transmission upgrades) and, likewise, RCEA's service territory could utilize some amount of system power during its own winter peak when demand is lessened in other parts of the state. Additional transmission infrastructure or upgrades to existing infrastructure would likely be required to maximize RCEA's contribution to system reliability via capacity resources developed in Humboldt County, given the transmission-constrained nature of the region.

The effective capacity of RCEA's Preferred Conforming Portfolio is provided in Figure 6 and Table 8 from the Reliability tab of the Resource Data Template. Figure 6 shows effective resource capacity by contract status and Table 8 shows total reliability need, total supply, and net capacity position for all study years (note that the rows containing RCEA's total reliability need and net capacity position are confidential and are excluded from the public version of this narrative).

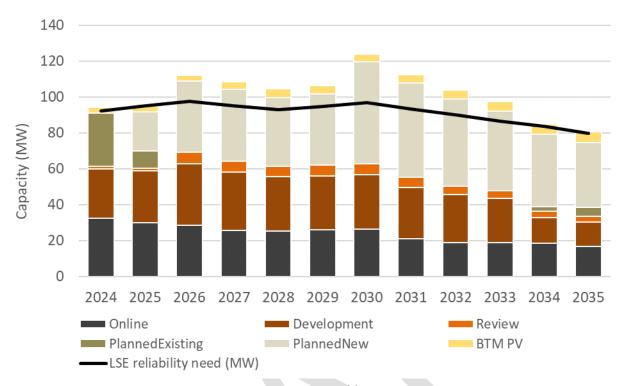


Figure 6: RCEA Capacity Need by Contract Status

Table 8: Load and Resource by Contract Status

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
RCEA reliability need	Confidential											
			ELCC b	y contr	act stat	us (effe	ctive M	W)				
Online	32	30	29	26	25	26	26	21	19	19	19	17
Development	27	29	34	32	30	30	30	28	26	25	14	14
Review	1	1	6	6	6	6	6	6	5	4	4	3
PlannedExisting	30	10	0	0	0	0	0	0	0	0	3	5
PlannedNew	0	22	40	40	38	40	57	53	48	44	40	36
BTM PV	3	3	3	4	5	5	4	5	5	5	6	6
RCEA total supply	94	95	112	108	105	106	124	112	104	97	85	81
Net capacity position		Confidential										

As demonstrated above, RCEA's Preferred Conforming Portfolio meets the perfect capacity equivalent standard in all IRP years. This demonstrates that RCEA's preferred resource

selections work together to effectively and reliably integrate a renewables-heavy portfolio, thus meeting and exceeding RCEA's share of any systemwide renewable integration resource requirement.

g. High Electrification Planning

RCEA's strategic plan, updated in 2019, includes a goal to "[e]xpand existing energy efficiency, conservation and electrification programs to reduce greenhouse gas emissions from fossil fuel use in buildings by 20% by 2030 and maintain a trajectory to reduce emission from natural gas by 90% by 2050." The strategic plan also describes RCEA's transportation electrification goals as follows:

Accelerate the adoption of electric vehicles, with a target of over 6,000 electric vehicles on the road in Humboldt County by 2025 and 22,000 vehicles by 2030. Develop public, workplace, and residential electric vehicle charging infrastructure necessary to support these county-wide electric vehicle targets.

Work with other local public entities to reduce vehicle miles traveled in Humboldt County by at least 25% by 2030.

By 2030 reduce greenhouse gas emission from transportation by over 65% through reductions in vehicle miles traveled, improved vehicle efficiency, the adoption of electric vehicles, and, where determined to be an effective emissions-reduction strategy, the use of biofuels as a bridge to a full transition to zero-emissions vehicles. Maintain a trajectory of emissions reduction to eliminate the use of fossil fuels by 2050.

To achieve these ambitious goals, in addition to operating a community choice aggregation program, RCEA's organization includes separate departments focused on demand-side management, transportation electrification and infrastructure planning. Strategies implemented by these departments in pursuit of the above goals are described and quantified in this integrated resource plan.

RCEA's demand-side management department is implementing or has implemented the following programs that include high electrification targets or activities:

- As an elect-to-administer Program Administrator (PA), RCEA is operating an Enhanced Heat Pump Incentive Campaign (EHPIC) promoting non-residential heat pump installations. This program is funded through June 2023. RCEA also offers rebates for residential heat pump installations.
- RCEA, on behalf of six partners, submitted a Motion to form the Rural Regional Energy
 Network ("RuralREN") in March 2022. The RuralREN consists of six program areas. The
 RuralREN's key electrification offerings consist of a residential whole-house energy
 efficiency and electrification rebate and direct-install program, a commercial energy
 efficiency and electrification rebate and direct-install program, and a workforce program
 to build careers and upskill existing workers in building electrification technologies.

- RCEA has applied to extend its existing Local Government Partnership ("LGP") with PG&E for the period July 2023-December 2025, with an option to extend that for one additional year. The RCEA-PG&E LGP has in its most recent phase been a non-resource program (i.e. without specific measurable energy saving targets). Program offerings include public energy project management, benchmarking, leads to resource acquisition programs, public and non-residential energy assessments, and energy education events and workshops.
- RCEA is a recipient of a TECH Quick Start Grant 2.0 ("QSG") which is funding a barrier analysis for rural unregulated fuel users electrification. Current offerings under this program include community and contractor workshops to educate and identify rural barriers to electrification, electrification assessments, heat pump (space and water heating) installations, and the barrier analysis itself. The term for this grant is January 2023 – April 2024.
- Energy Conservation Assistance Act ("<u>ECAA</u>") is a funding source provided by the California Energy Commission (CEC) which provides low-interest loan financing to public agencies, community colleges, cities, community service districts, and others for energy efficiency and renewable energy projects. RCEA helps local qualified entities navigate the ECAA financing process to fund their own energy projects, including electrification projects.

RCEA's infrastructure planning and transportation department is pursuing the following strategies and programs to achieve high transportation electrification:

- Regional Electric Vehicle Charging Network ("<u>REVNet</u>"): RCEA owns and operates a network of 27 public charging stations within its service area that features 52 charging ports at 13 locations.²¹
- California Electric Vehicle Infrastructure Project ("<u>CALeVIP</u>") 1.0/2.0: RCEA has received funding from the CEC's CALeVIP program for a number of the public electric vehicle charging stations operated by, or to be operated by, RCEA. Many of these charging stations are already operational, with additional stations to be installed as part of RCEA's Redwood Coast Airport Microgrid and at other locations.²²
- CEC Regional MD/HD Community Blueprint. RCEA has received a \$200,000 grant from the CEC to identify how the region can transition to clean energy for mid- and heavyduty vehicles. The project scope includes inventorying vehicle classes and counts, identifying use cases, determining types and volumes of fueling requirements (electricity and hydrogen), and recommending associated infrastructure. Initial tasks include characterizing existing vehicle population and stakeholder engagement,

²¹ https://redwoodenergy.org/evs/public-charging/

²² https://calevip.org/incentive-project/northern-california

- scheduled to begin in the second quarter of 2023. Electric load impacts of this program have not yet been determined but are expected to be available for reporting in the next IRP cycle.²³
- GFO-21-604: North Coast Plug-In Electric Vehicle Charging Network Phase 2. With funding from the CEC, RCEA collaborated with Schatz Energy Research Center on a project to improve electric vehicle charging access in RCEA's service area. Key tasks included installing ten electric vehicle charging stations at nine locations in Humboldt County, the successful demonstration of a not-for-profit electric vehicle charging stations owner/operator model, the development of a novel hardware and software solution to address parking scarcity at one key location, and data collection from network operations.²⁴
- Communities in Charge program. RCEA has engaged with non-profit GRID Alternatives through this CALSTART-administered, CEC-funded program "to design and implement incentive projects for the deployment of light-duty electric vehicle chargers."²⁵
- Transportation electrification rebates. To date these have included rebates for purchase
 of electric vehicles, electric vehicle chargers, and electric bikes, with the EV and EV
 charger rebates currently active. The electric vehicle rebate offers an additional 50% of
 the rebate amount offered by the State of California's Clean Vehicle Rebate Project
 rebate. ²⁶

Table 9: 2035 Additional Resource Planning for High Electrification

Resource	MWs	Annual	2035 GHG	Transmission	Substation/	Alternative	Note
Туре		GWh	target	Zone	Bus	location	
[Content to be Added After 10/27/22 Board Meeting Packet Deadline]							

 $^{^{23} \} https://www.energy.ca.gov/sites/default/files/2021-08/2021-09-08_Business_Meeting_Agenda_ADA.pdf. (See item 11.d.)$

²⁴ https://www.energy.ca.gov/publications/2022/north-coast-plug-electric-vehicle-charging-network

²⁵ https://www.energy.ca.gov/proceedings/energy-commission-proceedings/communities-charge#:~:text=CALSTART%2C%20Inc.,incentive%20projects%20with%20public%20input.

²⁶ https://redwoodenergy.org/evs/rebates/ and https://redwoodenergy.org/evs/evchargers/

h. Existing Resource Planning

In developing its Preferred Conforming Portfolio, RCEA aimed to reduce reliance on uncontracted existing resources and on system power over the IRP planning horizon. The following existing resources, which have contract statuses of "online" and "planned existing" in the RDT, are included in the portfolio:

- 1. Long-term energy purchase contracts and owned generating resources
- 2. Long-term capacity purchase and sales contracts
- 3. Carbon-free and voluntary RPS energy allocations from PG&E's PCIA resources
- 4. RCEA's assigned share of capacity of CAM, RMR and DR resources
- 5. Short-term procurements from existing generic large hydro
- 6. Extension of the Humboldt Redwood biomass contract from 2031 to 2035

The first four groups of existing resources do not present risk of non-availability for RCEA's portfolio because they are already procured through executed contracts. Risk associated with reliance on short-term procurement from existing generic large hydropower resources due to drought and declining snowpack is discussed in Section III(i). Competition with other LSEs is a factor for this resource, including those within California and across the greater WECC as other states adopt and ramp up clean energy goals. Given that procurement of existing large hydro has little to no incremental climate benefits, RCEA aims to reduce reliance on this resource over the next several years, and to phase it out completely from its portfolio by 2030. Risk of not being able to extend the contracted delivery term of the Humboldt Redwood biomass facility, should RCEA choose to, is very low. The technology type and cost are such that competition with other LSEs is virtually nonexistent, as demonstrated by the fact that the plant was operating on a merchant basis for years prior to RCEA's award of a contract in 2016. Table 10 shows a comparison of the amounts of existing resources included in RCEA's 2022 Preferred Conforming Portfolio to those included in its 2020 38 MMT Preferred Conforming Portfolio, in terms of maximum energy contribution throughout the respective IRP horizons. Excluded from the table are resources that have become operational since RCEA's 2020 IRP submission, as well as RCEA's PCIA Allocations of PG&E's RPS and carbon-free resources. The portfolio reliance on existing resources has significantly reduced from 2020 to 2022, and new candidate resources that were not yet planned in 2020 have now been incorporated into RCEA's procurement strategy.

Table 10: Existing Resources in RCEA's Preferred Conforming Portfolio

Resource Type	2020 38 MMT PCP (GWh)	2022 25 MMT PCP (GWh)
Biomass	120	100
Large Hydro	240	200
Small Hydro	15	10

Wind	145	0
Total	520	310

There is some risk of reduced generation and underperformance of future existing resources within RCEA's service area due to PG&E's disconnection of all third-party generators with nameplate capacity greater than 1 MW during islanding of the utility's HBGS facility to mitigate PSPS events and other transmission outages, as discussed in Section III.n. RCEA is engaging PG&E on this issue in an effort to come to resolution that maintains safe operation of the HBGS island while not precluding continued operation of third-party generators during transmission shutoffs

i. Hydro Generation Risk Management

RCEA plans to phase out large hydropower procurement by 2030 when large-scale renewables come online; as such, the Preferred Conforming Portfolio includes short-term large hydro in declining amounts through 2029, as shown in Table 11. RCEA's renewable and carbon-free procurement targets are based on guidance from the RCEA Board of Directors and generally guided the development of RCEA's Preferred Conforming Portfolio.

Table 11: RCEA's Procurement Targets

	2024	2025	2026	2027	2028	2029	2030
Renewable	50%	56%	62%	68%	76%	84%	100%
Carbon Free	45%	44%	38%	32%	24%	16%	0%

In developing the portfolio, RCEA took several steps to manage the risk of reduced hydropower availability due to in-state drought. Specifically, RCEA limited its reliance on large hydro, which could come from in-state or out-of-state resources, to the near-term IRP planning years, in recognition that once new RPS resources in the portfolio are fully developed, they will generate sufficient energy to meet RCEA's load. Compared to RCEA's 2020 IRP portfolio, RCEA's Preferred Conforming Portfolio relies on less large hydropower, as shown in Table 10. The Preferred Conforming Portfolio also relies less on in-state hydroelectric generation, favoring import of this resource from the larger WECC region where climate and drought impacts aren't yet taking as severe of a toll on the hydro resources as in California. The only in-state large hydropower included in the portfolio is a small amount from PG&E's Carbon-Free Allocation of PCIA

At the same time, RCEA recognizes the important role that small, run-of-river RPS-eligible hydropower, both existing and new projects, can play in the portfolio. In 2019, RCEA added a 15-year contract with the existing 5.6 MW Cove hydro project to its portfolio, which began delivering RPS-eligible power to RCEA in early 2020. RCEA has also recently engaged a consultant to investigate potential for development of new RPS small hydro projects in

Humboldt and Trinity Counties, as a first step in procurement of this resource included in RCEA's Preferred Conforming Portfolio.

j. Long-Duration Storage Planning

RCEA and twelve other CCAs issued a request for information ("RFI") on long-duration storage ("LDS") in June 2020. This RFI defined long-duration storage resources as those with the capability to discharge at full capacity for at least 8 hours. Subsequently RCEA and a smaller group including seven other CCAs issued an LDS request for offers ("RFO") in October 2020, to meet each CCA's respective portfolio needs and in anticipation of potential procurement mandates by the CPUC.

In February 2021, California Community Power ("<u>CC Power</u>") was formed by ten CCAs, including RCEA, to share resources and risk related to the procurement of difficult-to-acquire resources. Once formed, CC Power took over the Joint LDS RFO, including shortlisting of projects and coordination of negotiations and development of necessary agreements.

In June 2021, as part of the 2020 IRP, the CPUC issued through a decision ("<u>D. 21-06-035</u>") the Mid-term Reliability Procurement Order ("<u>MTR Order</u>") requiring jurisdictional load serving entities (LSEs), such as RCEA, to procure and/or develop a collective 11,500 MW of new capacity by 2026. The MTR Order identified a need of 1,000 MW of LDS.

Through the Joint LDS RFO, projects were evaluated, ranked, and selected for shortlisting with the objective of meeting the RFO's cost effectiveness goals, criteria and requirements under the MTR Order and CC Power's enhanced contract conditions for labor, environment and environmental justice. Subsets of the CCAs that issued the joint RFO elected to contract for two LDS projects:

- The Tumbleweed project, with a nameplate capacity of 69 MW/552 MWh, for which RCEA's entitlement share is 3.62% or 2.50 MW, with an expected NQC of 1.95 MW. This project's expected COD is June 1, 2026 with an agreement term of 15 years.
- The Goal Line project, with a nameplate capacity of 50 MW/400 MWh, for which RCEA's entitlement share is 4.00% or 2.00 MW, with an expected NQC of 1.64 MW. This project's expected COD is June 1, 2025 with an agreement term of 15 years.

Energy storage service agreements between the developers and CC Power are now in place, along with project participation share agreements among CC Power and the participating CCAs.

The two LDS projects RCEA is participating in through CC Power will satisfy RCEA's LDS procurement mandate (approximately 3.50 MW, provided the balance of RCEA's 7 MW long lead time MTR procurement obligation is met through clean firm resources, also being addressed through participation in CC Power joint procurement; see section III.k below) under the Commission's MTR Order.

One disadvantage of participating in joint procurement is that it is generally unlikely to result in RCEA procuring resources within its own service area. RCEA's board has adopted a goal of procuring 100% of RCEA's energy locally by 2030. Since energy storage technically is not generation, procurement of non-local storage is not necessarily at odds with this goal. However, RCEA does prefer to procure future energy storage resources co-located with generation under contract to RCEA to maximize benefits of the storage to RCEA. RCEA does not have plans to procure additional long-duration storage at this time.

k. Clean Firm Power Planning

Included within the CPUC's MTR Order is an identified need of 1,000 MW of new incremental capacity delivered from "clean firm generation (with an annual capacity factor of at least 80 percent) resources that are not subject to use limitations or are weather dependent. The [...] resource [...] must be a generating resource, not storage, able to generate when needed, for as long as needed, and may not have any on-site emissions, except if the resource otherwise qualifies under the Renewables Portfolio Standard (RPS) program eligibility requirements."²⁷ As with the CPUC's LDS procurement requirement discussed in Section III.j above, RCEA elected to meet this requirement via joint procurement with other CCAs through a CC Power solicitation. As long lead-time resources, these firm clean resources need to be online by August 2026. RCEA's share of the firm clean resources ("FCR") requirement is approximately 3.5 MW.

In October 2021, CC Power issued the FCR RFO. Offers were due December 13, 2021, and CC Power received bids from six bidders and 16 projects with only five of the projects located in California. Two bidders offering geothermal projects were shortlisted, Open Mountain Energy ("OME") and Ormat. Project details are as follows:

- The OME Fish Lake project, with a nameplate capacity of 13 MW, for which RCEA's entitlement share is 2.8% or 0.36 MW. This project's expected COD is on or about April 1, 2024 with an agreement term of 20 years.
- The Ormat portfolio of projects, with a nameplate capacity of 64 to 125 MW, for which RCEA's entitlement share is 3.2% or up to 4 MW. The first project's expected COD is on or about June 1, 2024 with an agreement term of 20 years.

On May 31, 2022, CC Power's board of directors unanimously approved Resolutions No. 22-05-03 and 22-05-04 approving and delegating authority to the CC Power General Manager

²⁷ 2022 IRP narrative template: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2022-irp-cycle-events-and-materials/narrative-template.docx

to execute power purchase agreements ("<u>PPAs</u>") with OME and Ormat respectively, and subsequent project participation share agreements ("<u>PPSAs</u>") with the participating members once each member receives governing board approval to participate in the projects. RCEA's board approved the agreements at its July 28, 2022 meeting. Once all participating CCAs' boards approve the agreements, the PPAs and PPSAs will be executed.

Almost all these geothermal resources are expected to be outside the CAISO balancing authority in northern Nevada or the Imperial Irrigation District and will require Maximum Import Capability ("MIC") to be secured to deliver energy and capacity. MIC at northern Nevada delivery points is limited, and suppliers indicate that transmission capacity on NV Energy to southern Nevada is constrained. MIC expansion at northern Nevada delivery points such as Gonder, Summit, and Silver Peak would considerably decrease the risk of these projects not being able to provide clean firm capacity to CAISO. Transmission projects that focus on better connecting CAISO with northern Nevada resources, such as alleviating the Control substation constraint for the Oxbow line, could also de-risk northern Nevada as a source of clean firm resources and potentially reduce significant wheeling costs through other transmission providers.

The CC Power 125 MW portfolio also may contain a new resource inside CAISO at the Geysers. However, the Phase 1 results of its Cluster 14 study indicate that required network upgrades are costly and not high priority—with a potential completion no earlier than 2029, which is after the envisioned extension in the mid-term reliability order. This may result in substituting an import resource.

Beyond compliance with the MTR Order, procurement of geothermal energy helps RCEA to build its long-term renewable resource portfolio, ensuring compliance with SB 100 and SB 350, as well as fulfilling RCEA's board's own goal of procuring 100% renewable energy by 2030. However, the geothermal resources are not located within or adjacent to RCEA's own service area; thus, this procurement is at odds with RCEA's additional goal of procuring all its energy locally by 2030. Given the difficulty of procuring resources that meet the CPUC's restrictive criteria for FCR (biomass and geothermal being seen as the only commercially mature forms of generation that meet these criteria), RCEA does not plan to voluntarily procure more resources in this category.

I. Out-of-State Wind Planning

The Commission's PSP calls for 1.5 GW of new out-of-state wind generation ("OOS wind") to be operational in 2030 and 4.6 GW of new OOS wind operational by 2035. RCEA's PCP does not contain any OOS wind resources. As a small LSE with goals to procure as much of its energy and capacity within or as close to its service area as possible, OOS wind resources are not part of RCEA's procurement strategy. As discussed in Section III.m., RCEA is currently

active in efforts to develop the Humboldt offshore wind resource and does not have additional plans for long-term wind contracts. Additionally, CAISO's import capability allocation process for securing import rights to OOS capacity presents more risk in these transactions than RCEA can bear, unless mandated to procure resources that are only available at reasonable cost outside of CAISO. RCEA communicated this intent to CAISO on September 21, 2022 in response to its Request for Expressions of Interest Accessing OOS Wind Resources in Idaho, considering the attributes of the proposed Southwest Intertie Project North transmission line. Consequently, RCEA does not intend to initiate any OOS wind procurement in this or subsequent IRP cycles.

m. Offshore Wind Planning

Four years ago, RCEA began exploring how to access offshore wind resources to deliver local clean energy to Humboldt County, with the objective of being involved in development of prospective projects. Since then, RCEA has undertaken the following activities which are described in more detail below:

- 1) Formed a public-private partnership with a consortium of private wind developers;
- 2) Submitted an unsolicited lease request to the Bureau of Ocean Energy Management (BOEM);
- 3) Cost-shared a CAISO interconnection study for a prospective Humboldt project;
- 4) Supported the Humboldt Bay Harbor District in seeking funding for port development activities under a Memorandum of Understanding; and
- 5) Conducted significant outreach and stakeholder engagement within the Humboldt community through workshops, presentations and one-on-one meetings with various stakeholder groups including Native American Tribes, commercial fishing associations, local government, environmental non-profits, organized labor, and elected officials.

In 2017-2018, RCEA issued an RFQ and selected an experienced offshore wind development team with which to enter a public-private partnership. That team has since formed Redwood Coast Offshore Wind LLC ("ROW") as the special purpose project company to develop and operate a community-led, commercial scale offshore wind farm off the Humboldt County coast, which is expected to have a capacity of approximately 100-150 MW. While RCEA is expected to be a principal purchaser of the power, it is expected that there will be other off-takers as well, given the size and cost of the project. RCEA and ROW have since been engaging in BOEM's leasing and environmental assessment process and are planning to bid on one or more lease blocks in the Humboldt Wind Energy Area (WEA) in Q4 2022 following issuance of BOEM's Final Sale Notice.

Two of the four portfolio configurations RCEA analyzed in its IRP modeling include offshore wind procurement at different scales. RCEA modeled 40 MW in its diverse portfolio configuration, which eventually became its Preferred Conforming Portfolio, and 75 MW in its high offshore wind portfolio configuration. These quantities were arrived at by scaling up or down according to the open energy position after accounting for resources in the base portfolio and expected sizes of other resources incremental to the base portfolio. Although RCEA is confident it will be a primary off-taker of the initial Humboldt offshore wind project, the exact quantity will depend on price, timing of commercial operation, and other contractual supply relative to RCEA's load at the time of operation.

Developing and procuring offshore wind has been an integral part of RCEA's strategic resource planning for many years, dating back to the RePower Humboldt Technical Study described in Section II(b)(ii). The benefits of offshore wind in RCEA's Preferred Conforming Portfolio include the resource's complementary generation profile to solar and other renewables in the planned portfolio, as well as its proximity to RCEA's load and thus reduced basis risk assuming the resource is interconnected in or near Humboldt. Beyond the portfolio benefits, development of this resource has numerous benefits for RCEA's service area including workforce and economic development, and port infrastructure revitalization spurred by the potential establishment of an offshore wind manufacturing hub at Humboldt Bay. Additionally, the resource may have less negative impact on the local community than local renewable energy alternatives such as onshore wind or even large-scale solar development.

The risks and challenges posed to the successful and timely development of offshore wind include:

- Cost of transmission upgrades needed to enable development of fully deliverable north coast offshore floating wind projects;
- Uncertainty regarding offshore wind CODs contingent on BOEM lessee plan approval timelines, as well as environmental review and permitting;
- Uncertainty regarding costs of mitigating yet-to-be-identified environmental impacts of offshore wind, and how these costs will affect PPA pricing;
- Need to organize joint procurement for offshore wind, long-duration storage, and other long lead time resources due to large scale of expected development relative to RCEA's portfolio needs;
- Anticipated technology risk and high PPA price for floating offshore wind as a newly commercialized technology;

RCEA has been tracking the implementation of AB 525 objectives by way of participating in workshops and reviewing the first of several AB 525 reports that will be published²⁸. The Schatz Energy Research Center ("SERC") at Cal Poly Humboldt, with whom RCEA has partnered on renewable energy microgrids, has conducted much of the research informing the first of several AB 525 reports.

Section 7.2 of D.22-02-004 references the Commission's request to CAISO to study an "offshore wind sensitivity portfolio to evaluate the transmission needs and costs to interconnect approximately 8,000 MW of offshore wind at various potential locations including Humboldt, Diablo, and Morro Bay". The Decision also references RCEA's comments on the 2021 Preferred System Plan which conveyed that the CPUC's busbar map should map "100-150 MW of offshore wind to the Humboldt area as energy-only resources." While not captured in the decision, RCEA also commented that it would be prudent for the CPUC to proactively plan for the full-scale development of offshore wind beyond the initial 100-150 MW energy-only resource included in the busbar map. RCEA reiterates that comment here as CPUC and CAISO planning for the maximum expansion of the Humboldt WEA established by BOEM will be necessary to meet the preliminary planning goal of 2-5 GW of offshore wind by 2030 and 25 GW by 2045. Further details about the necessity to plan for transmission that accommodates the full buildout of the Humboldt WEA are in the following Section III(n).

n. Transmission Planning

Transmission Upgrades for Contracted Resources

In terms of contracted resources in RCEA's Preferred Conforming Portfolio, only the Sandrini solar project ("Sandrini Sol 1") and likely a portion of the Ormat Geothermal Portfolio will require transmission upgrades. The remainder of contracted resources in the portfolio will be interconnected to the distribution system via the IOU's Wholesale Distribution Access Tariff, so will not require transmission upgrades. A summary of interconnection upgrades needed for these projects is included as Table 12.

Sandrini Sol 1 (COD June 2023): Interconnection work for Sandrini Sol 1 is scheduled to be completed in Q1 of 2023. PG&E is currently constructing the final portion of the required transmission line that is within their property of the Wheeler Ridge Substation. A material modification amendment ("MMA") to the project developer's large generator interconnection agreement ("LGIA") with PG&E and CAISO, which was executed in 2020, was required for the project to interconnect at higher voltage than was originally

²⁸ Offshore Wind Energy Development off the California Coast: Maximum Feasible Capacity and Megawatt Planning Goals for 2030 and 2045, California Energy Commission, August 2022.

anticipated. The MMA has been accepted and is not expected to impact the anticipated schedule.

As described in Section III.k., RCEA is a joint participant in procurement of geothermal resources located outside of CAISO by CC Power for purposes of compliance with the MTR Order, specifically procurement of clean firm energy from long lead time resources, as defined in the decision. The geothermal resources consist of a single project located in Nevada from one developer, and a portfolio of projects from a second developer in Nevada and the Imperial Irrigation District. The individual participating CCAs each need to secure their own proportionate share of maximum import capability (MIC), since CC Power is not a load-serving entity and is ineligible to pursue MIC. All the CCAs filed MIC expansion requests in June 2022, immediately after CC Power executed the power purchase agreements for these projects with the developers. Following are additional project/portfolio-specific details on these geothermal resources being procured through CC Power.

Fish Lake Geothermal (COD June 2024): The Fish Lake geothermal project will connect to the Silver Peak substation in NV Energy territory. It is currently finalizing its interconnection agreement and expecting execution shortly. The developer does not anticipate any transmission-scale upgrades—just an upgrade to the Silver Peak substation. Fish Lake has secured transmission to a point where CC Power members have secured 2023 MIC in preparation for a long-term MIC reservation. However, wheeling power has resulted in higher costs that could be mitigated if MIC in northern Nevada became available.

Ormat Geothermal Portfolio (COD starting Oct 2024): The Ormat portfolio of geothermal projects are expected to mostly be import resources in northern NV Energy territory or the Imperial Irrigation District. Projects are at various stages of maturity in their subsurface characterization, permitting, and interconnection. The RDT contains a representation of what the portfolio might look like (entered as 7 projects with potential substations). Ormat has limited ability to deliver at southern Nevada import points (Mead and Merchant), so MIC expansion will likely be needed at Summit, Gonder, and Silver Peak to deliver up to 125 MW. One potential CAISO resource in the portfolio (at the Geysers – queue position 1859) recently received Phase 1 results from its Cluster 14 study indicating that it is impacted by a costly network upgrade with a completion date no earlier than 2029—which may require it be substituted for an import resource.

Project	Location	Interconnection Upgrades Needed
Hatchery Road Solar	Blue Lake, Humboldt	The developer is working with PG&E on engineering for the Distribution and Network Upgrades, and reconstruction of the control room at the Blue Lake substation
North Coast Highway Solar	Hydesville, Humboldt	

Fairhaven Energy Storage	Samoa, Humboldt	The developer is working with PG&E to repower the Fairhaven substation and has submitted final designs for needed modification of the site's grid interconnection
Tumbleweed Long- Duration Storage	Kern County	None
Goal Line Long- Duration Storage	San Diego County	Network Upgrades possible, but full extent unknown; project is included in CAISO's ongoing Queue Cluster 14 study process
Foster Clean Power A	Arcata, Humboldt	None
North River Clean Power	McKinleyville, Humboldt	Reliability Network Upgrades and Distribution Upgrades possible at Janes Creek substation, but study is in progress
Mad River Solar	McKinleyville, Humboldt	Reliability Network Upgrades and Distribution Upgrades possible at Janes Creek substation, but study is in progress

Humboldt-Specific Transmission Issues

Limited distribution and transmission capacity is a key barrier to RCEA's decarbonization efforts. This issue is both import and export capacity, so it will affect both distributed energy resources and electrification deployment. Some pockets of excess capacity are available, but they may not align with priority sites identified using RCEA's project selection criteria for its service area. RCEA's service territory experienced widespread Public Safety Power Shutoffs with little notice in 2019. Following this first set of PSPS events, RCEA engaged local agencies and PG&E to assess the islanding capability of the HBGS natural gas plant to power the Humboldt Bay and surrounding loads during subsequent PSPS events that affect transmission into the region but not the local area itself. In summer 2020, PG&E successfully activated the HBGS island to maintain power to most of the local grid. This resulted in a significant reduction in PSPS impacts to RCEA's generation and load during the following fire season.

The HBGS island is no longer utilized solely during PSPS events, but also to mitigate impacts of other transmission shutoffs and outages on the lines that connect Humboldt County to the larger grid, such as those caused by extreme winter storm events. Despite the benefits of this implemented solution for RCEA's customers, it has been accompanied by impacts to RCEA's contracted generation, which has resulted in material financial harm to RCEA. PG&E has established a protocol of disconnecting generators above 1 MW in size during HBGS islanding events. In 2021, PG&E disconnected Humboldt Sawmill Company during PSPS events that coincided with very high pricing hours, resulting in an estimated \$135,000 to \$165,000 loss to

RCEA. RCEA is engaging PG&E to explore whether alternative practices can be implemented that avoid or reduce disconnections for Humboldt Sawmill Company and other current and future renewable energy generators within the Humboldt Bay island area.

While the HBGS island can serve most customers in the area served by RCEA, it does not extend to RCEA customers in the portion of northeastern Humboldt County served by PG&E's Hoopa and Willow Creek substations. RCEA's infrastructure planning and transportation department has tentatively identified a need for a substation-level microgrid solution of 2-10 MW in scale as one medium-term solution for this area.

Another key transmission issue specific to RCEA's service area, and parts of Sonoma Clean Power Authority's (SCPA) service area, is PG&E's recently announced inability to accommodate new load and generation in the Southern Humboldt area due to grid constraints. The IOU recently announced that constraints on the Bridgeville-Garberville 60kV transmission line are preventing interconnection of new loads and generators in this portion of the two CCAs' service territories. Additional transmission planning and budgeting must be immediately effectuated to enable new interconnections in southern Humboldt County and northern Mendocino County to accommodate the region's planned development activities and to support state and local electrification goals. RCEA is beginning to work with PG&E and County officials to better understand the impacts of this transmission constraint and identify possible near-term solutions for customers and generators while PG&E and CAISO pursue transmission upgrades as a long-term solution. Similar to the northeastern part of Humboldt not served by the HBGS island, RCEA's infrastructure planning and transportation department has tentatively identified a need for a substation-level microgrid solution of 2-10 MW in scale as one medium-term solution that could help mitigate the southern Humboldt County grid constraints.

Planned Resource Transmission Needs

Two resource types that RCEA has included as planned new resources in its Preferred Conforming Portfolio will require substantial transmission upgrades for California LSEs and their customers to access the full resource capability. North coast offshore wind and northern California geothermal are very site-specific resources that happen to be located in constrained areas of the grid. There are potential synergies in the build-out of transmission for both resources, as one of the potential transmission corridors being evaluated for offshore wind traverses the area of Northern California with geothermal activity. As described in Section III.m., RCEA is actively participating in efforts to develop the North Coast offshore wind resource, while to the south SCPA is working on a similar effort for geothermal development within and adjacent to their service territory. RCEA is in the early stages of collaborating with SCPA on shared transmission interests under a recently implemented MOU, as described further in Section IV.a.v.

In 2019, RCEA and the ROW consortium cost-shared a CAISO cluster 11 phase 1 interconnection study to determine the amount and cost of upgrades needed for an initial offshore wind project of up to 150 MW. The study results were made available to RCEA. Additionally, between 2020 and 2022, SERC published a series of reports on transmission needs associated with north coast offshore wind development.²⁹ These reports are a valuable planning reference for RCEA and its commercial offshore wind partners. One of the findings from SERC's transmission study was that an initial scale project of 100-150 MW would be feasible to interconnect with minimal transmission upgrades and generation curtailment. However, transmission infrastructure upgrades are needed to unlock economies of scale and facilitate gigawatt-scale development of offshore wind off the Humboldt County coast which is key to achieving the state's goal of 5 GW of OSW by 2030 and 25 GW of OSW by 2045. As discussed in Section III.m., RCEA encourages the CPUC and CAISO to begin planning for these transmission upgrades beyond the initial energy-only resource included in RCEA's Preferred Conforming Portfolio. RCEA asks the CPUC to include this in the forthcoming busbar map and overall Preferred System Plan submitted to CAISO for inclusion in the TPP. RCEA further encourages the CPUC and CAISO to pursue other avenues outside the TPP that could expedite the budgeting for full-scale buildout of the Humboldt County offshore wind resource.

RCEA sees an opportunity to align the transmission planning to address the issues described above regarding the Southern Humboldt grid constraints with that required for the North Coast offshore wind buildout. The cost-effectiveness and viability of the North Coast offshore wind projects would be improved by the buildout of regional T&D necessary to serve new load and generation in southern Humboldt. Even partial buildout of the Humboldt WEA is currently impeded due to the grid constraints recently announced by PG&E and described above. Humboldt County has a local peak load of 112 MW, existing local generation resources of approximately 200 MW in aggregate, and existing transmission capacity of approximately 70 MW linking Humboldt County to the rest of the statewide grid.

RCEA's Preferred Conforming Portfolio includes a total of 104 MW of planned new resources to be built at the locations identified in RCEA's Resources Data Template. Table 13 provides a list of these resources, their identified locations, and RCEA's preferred alternate locations if the Commission's modeling finds that the selected locations are not feasible. Other than Redwood Coast Offshore Wind and the GeoZone Project, the remainder of planned new resources in the portfolio will be interconnected to the distribution system via the IOU's Wholesale Distribution Access Tariff, so will not require transmission upgrades.

²⁹ http://schatzcenter.org/publications/

Table 13: RCEA Preferred Conforming Portfolio Planned New Resource Locations

Resource Name	Contracted Capacity (MW)	Selected Location	Preferred Alternative Location
Feed-In Tariff Phase II Projects	6	Humboldt County	None
Community Microgrids	4	Humboldt County	None
New Local Storage	11	Humboldt County	Sonoma County
Zero Emission Resource	20	PG&E TAC area	SCE TAC area
Redwood Coast Offshore Wind	40	Humboldt WEA	Morro Bay WEA
New Local Small Hydro	8	Humboldt County	Trinity County
GeoZone Project	15	Sonoma County	Mendocino County

IV. Action Plan

a. Proposed Procurement Activities and Potential Barriers

Below are the activities RCEA proposes to undertake across resource types in order to implement its Preferred Conforming Portfolio. Per the CPUC's guidance, barriers are integrated into the discussion of each new resource identified. A summary of barriers that are crosscutting or otherwise do not relate directly to any specific resource type are described in Section IV.a.xii.

i. Resources to meet D.19-11-016 procurement requirements

In D.19-11-016, the Commission ordered LSEs to collectively procure a total of 3,300 MW of incremental system capacity by 2023, with specific procurement obligations allocated to each LSE. As part of its contribution to system reliability and renewable integration needs, RCEA committed to self-procuring its assigned share of the identified system capacity needs. RCEA has since procured in excess of its assigned obligation share of 10.7 MW³⁰, of which 50% was online by August 1, 2021, 75% was online by August 1, 2022, and 100% is anticipated to be online by August 1, 2023.

Detailed information regarding RCEA's procurement towards the D.19-11-016 requirement is provided in RCEA's response to the August 1, 2022 IRP Data Request, as well as its RDT. RCEA's contract with Leapfrog Power for 5.5 MW RA from aggregated demand response began commercial operation June 1, 2021. RCEA's contract with Viridity Energy Solutions (owned by Ormat) for 2.5 MW RA from the 5 MW Tierra Buena Energy Storage facility began commercial operation August 1, 2022. The remainder of RCEA's incremental capacity obligation will be met when the Sandrini Sol 1 project comes online in spring 2023. RCEA has sold a small portion of

³⁰ D.19-11-016, Ordering Paragraph 3.

the incremental capacity from Sandrini to the University of California Regents under long-term contract. The project has begun construction under a limited notice to proceed so it does not face any special development barriers other than common risks such as interconnection approval and securing the remaining permits. Based on expected ELCC values for standalone solar and with the resale to UC Regents, the incremental RA from Sandrini Sol 1 will be more than adequate to ensure RCEA's 2023 compliance.

ii. Resources to meet D.21-06-035 procurement requirements, including:

a. 1,000 MW of firm zero-emitting resource requirements

RCEA has contracted for up to 4.36 MW of new geothermal capacity through its share of two executed contracts from CC Power. These resources were identified through a solicitation completed in early 2022, as discussed in Section III.k. RCEA expects these two contracts to provide 3.6 MW of MTR NQC (based on September ELCCs) which satisfies its 3-3.5 MW obligation for firm zero-emitting resources.

The 13 MW Fish Lake geothermal project is expected to be commissioned in June 2024, of which RCEA's share is 0.36 MW. As represented in the RDT, the project has high viability scores with subsurface characterization complete, a nearly finalized interconnection agreement, and partial financing. The CC Power members have also secured the MIC at the project's delivery point sufficient to claim a long-term reservation, as discussed in Section III.n.

The Ormat portfolio of up to 125 MW, of which RCEA's share is 4 MW, has several risks. The contract included an illustrative facility list indicating a possible first COD in October 2024 and final COD in 2026. RCEA used the illustrative facility list to calibrate the representation of the Ormat portfolio in the RDT, which is likely to mostly rely on resources in northern NV Energy territory or the Imperial Irrigation District. Unlike Fish Lake, many of the projects in Ormat's portfolio are still dependent on subsurface characterization and need additional permitting. Importantly, although CC Power is hopeful the Ormat contract will provide 125 MW of capacity for MTR, only 64 MW is guaranteed. Because specific projects are not yet identified, the CC Power members have also not been able to secure MIC, which is scarce in northern Nevada and may be difficult to obtain. Although Ormat can provide some transmission service to southern Nevada, MIC expansion at Gonder, Silver Peak, and Summit or transmission upgrades will likely be required to deliver the maximum capacity of the portfolio to CAISO.

CC Power currently holds bi-weekly meetings with Ormat and plans to closely follow development progress in the Ormat portfolio. An update will be provided to the CPUC on timing and scope of the contract in the planned February 2023 regulatory filing. If it

is determined unlikely Ormat can deliver 125 MW by June 2028, RCEA will consider offering a solicitation for replacement capacity independently or through CC Power in 2023.

b. 1,000 MW of long-duration storage resource requirements

As discussed in Section III.j., RCEA participated in the joint CCA RFO for LDS capacity, as a member of CC Power. Earlier in 2022, RCEA and its fellow participating CCAs executed agreements for shares of the Tumbleweed and Goal Line LDS projects, which are both expected to be online by 2026 in time for the Commission's LLT resource deadline. RCEA is currently participating in the CC Power project committees for both contracts and reviewing the progress reporting from the respective developers.

High cost relative to the uncertain market value of long-duration storage is a barrier to procuring these resources. Revenue estimates of energy arbitrage and ancillary services for these assets are highly speculative in 2026 and beyond.

c. 2,500 MW of zero-emissions generation, generation paired with storage, or demand response resource requirements

On September 29, 2021 RCEA released an "RFQ-RFO for Long-Term Reliability Resources" aimed at procuring MTR capacity with a special emphasis on the zero-emissions generation category. The submitted offers that could have counted toward this requirement were deemed either uneconomic or to not have a clear pathway to achieving deliverability status by the summer 2025 deadline. Then on August 26, 2022 RCEA released a "Request for Offers for Zero-Emission Reliability Resources Compliant with California Public Utilities Commission Mid-Term Reliability Decision D.21-06-035." The RFO sought to procure bundled energy, renewable energy certificates, where applicable, and RA specifically to satisfy RCEA's 8 MW NQC requirement for replacing the Diablo Canyon Nuclear Power Plant as identified in D.21-06-035. RCEA received a small number of offers by the response deadline, but none were deemed conforming, either being RA-only or having too late a commercial operation date for compliance.

From RCEA's solicitation efforts to date it seems there is a shortage of resources that can comply with the Commission's deadline for zero-emissions generating capacity, which RCEA attributes mainly to supply chain delays, the anti-circumvention tariff investigation earlier this year, and the backup of the interconnection queues. RCEA is currently evaluating alternative options for complying with this mandate and will continue to make good faith effort to procure its needed zero-emissions generating capacity. RCEA has included a new, generic 20 MW solar plus short-duration battery storage resource in its IRP as a placeholder for compliance with this MTR Order subcategory and is indifferent as to the location of this resource, given the market scarcity.

d. All other procurement requirements

RCEA's general incremental capacity obligation pursuant to the MTR Order is 7 MW by August 1, 2023, an additional 20 MW by June 1, 2024 and an additional 5 MW by June 1, 2025.

In an effort to procure this capacity, RCEA issued a solicitation in Q3 2021, as described above, and has since executed two contracts. The Fairhaven Energy Storage project is a 17.25 MW standalone short-duration battery to be built in RCEA's service area at the site and to utilize the interconnection capacity of the former DG Fairhaven biomass plant. It is expected the facility will be operational in Q4 2023 and provide 16.6 MW of MTR capacity in time for the 2024 tranche. The second project is Foster Clean Power A, a 3 MW solar plus 1.25 MW storage facility to be built in RCEA's service area. It is expected the project will be operational as energy-only in summer 2023, after which the project owner will pursue full capacity deliverability status ("FCDS") through CAISO's Distributed Generation Deliverability process. FCDS would be awarded in Q2 2024, in time to provide 1.3 MW of MTR capacity for the 2024 tranche.

Despite best efforts to procure for the first MTR Order deadline, RCEA currently does not have any incremental capacity procured for August 1, 2023. Both Fairhaven and Foster were shortlisted with CODs prior to that deadline, and a third project was shortlisted with a COD prior to the 2024 deadline. During the negotiation process, all three project CODs slipped beyond their original anticipated dates, such that Fairhaven and Foster could no longer meet the 2023 compliance tranche deadline, and the third shortlisted project could no longer meet any of the MTR Order deadlines. The COD slippage was due to the developers' concerns around supply chain delays and uncertainty in availability of specific equipment that their original bids were designed around. Given the late stage at which RCEA was notified of the delays, procuring a new project in time to comply with the 2023 obligation was infeasible. RCEA continues to make good faith efforts to comply with the mandate to purchase capacity from another LSE with excess MTR capacity and confidence in its own 2023 position.

iii. Offshore wind

In anticipation of BOEM's Final Sale Notice, RCEA and ROW are preparing to bid on one or more lease blocks in the Humboldt Wind Energy Area for site assessment and development of a 100-150 MW project. Most recently, RCEA helped inform the provisions of the multi-factor lease auction by submitting comments in response to BOEM's Proposed Sale Notice. BOEM intends to hold the lease auction in Q4 of 2022 and RCEA plans to execute a public private partnership agreement with the ROW partners in advance of that. The agreement will contemplate RCEA's role as an eventual off-taker of the project without binding the parties to a specific procurement. When the time comes, RCEA may decide to procure offshore wind directly as an active member of the project development consortium but is also evaluating options for joint procurement with other LSEs.

Figure 7 shows a general timeline of OSW development in California that shows key dates in the development process. Regardless of who the eventual lessee is, RCEA is committed to ensuring

a North Coast project is developed with community values and stakeholder concerns prioritized, resulting in the success of this resource in its portfolio.

The risks and challenges facing offshore wind development are described in Section III.m. above.



Figure 7: CA offshore wind timeline from Aker Offshore Wind, one of RCEA's partners; https://redwoodenergy.org/redwood-coast-offshore-wind/

iv. Out-of-state wind

As described In Section III.I. RCEA does not plan to procure any OOS wind and thus does not have any action items planned for this resource type.

v. Other renewable energy not described above

Continue to procure local biomass power and investigate opportunities for alternative uses of biomass waste. RCEA's biomass PPA for the Humboldt Redwood plant was extended to 2031 but has not yet been procured through the end of the IRP planning horizon. As California's leading producer of forest products, Humboldt County incidentally generates a large amount of mill waste that must be disposed of, with biomass power plants having historically offered an important means of such disposal, while simultaneously providing a source of renewable energy. In conjunction with extending the PPA to its current term, and in response to community concerns about air quality and greenhouse gas impacts from biomass power, RCEA and HSC executed a memorandum of understanding that encourages the parties to work together to identify and pursue economically viable alternative uses for the biomass feedstock, in an effort to plan for the transition away from combustion-based use called for in RCEA's strategic plan following the PPA term. RCEA and HSC's first annual meet and confer on this

topic as called for in the memorandum of understanding occurred in May 2022. HSC provided a summary of their recent request for information to assess opportunities to use biomass feedstock for production of alternative energy products. At this time, no viable alternative for the continuous stream of biomass feedstock in Humboldt has presented itself, so RCEA has included continued procurement of the Humboldt Redwood plant in its Preferred Conforming Portfolio. To date, RCEA's Board at multiple decision points has elected to continue procuring biomass power and has not indicated a firm date by which to end such procurement. Extended procurement will continue to be weighed against other power supply options over the next decade in light of any feedstock alternatives identified through the aforementioned MOU process. Action to extend the contract is not anticipated prior to 2030.

The challenges associated with biomass procurement from existing plants include community acceptance of the combustion-based technology, particulate emissions staying within compliant levels, and disconnections by the T&D operator during events that warrant islanding of the local grid.

Pursue additional clean microgrid projects as a source of local renewable energy and to foster community resiliency. RCEA has collaborated with SERC and PG&E on development of the Redwood Coast Airport Microgrid ("RCAM"), designed to increase renewable generation in RCEA's portfolio while providing resilience for a subset of its customers and ancillary services on the local distribution grid. RCAM is the first front-of-meter, multi-customer, renewable energy microgrid and became operational at the Arcata-Eureka Airport in late 2021. The project, funded through a CEC grant and USDA loan, has served as a great model that RCEA intends to replicate throughout its service territory. RCEA has engaged in preliminary conversations with stakeholders in eastern Humboldt to assess the feasibility of substation microgrids. RCEA's infrastructure planning team is planning on ramping up these efforts over the next few years and anticipates bringing at least two microgrids online by 2026 and 2030.

Barriers to developing local microgrids include high cost and ability to secure funding, risk of disconnection by the T&D operator during events that warrant islanding of the local grid, and ability to secure deliverability status in order to capture RA value.

Support development of new geothermal power in California. In pursuit of their respective long-lead resource development goals, RCEA and SCPA have executed an MOU to collaborate on enabling transformative renewable energy development along the Northern California coast, specifically within the Humboldt Offshore Wind Energy Area ("WEA") and the Sonoma-Mendocino Geothermal Opportunity Zone ("GeoZone"). The CCAs are in early stages of collaboration in various areas including: advocacy for upgrades to the shared grid interconnection transmission corridors to the Humboldt WEA and GeoZone; mitigation of policy barriers for renewable energy project development; and the sharing of experience and information on partnerships and agreements for the mutual benefit of the CCA's regions. The

anticipated actions contemplated by this MOU are: to share non-confidential information on best practices and local Tribal and community engagement related to working with private entities in public-private partnerships; to understand, collaborate and engage with regulatory authorities and transmission operators on relevant transmission-related issues; to explore grant or public funding opportunities that are consistent with the purpose of this MOU; to develop communication strategies for engaging local and state agencies and elected officials in order to advance the purpose of this MOU; and to timely communicate with the other Party about relevant developments that could affect or impact the purpose of this MOU. RCEA plans to engage in all these activities with SCPA over the coming years in anticipation of an individual or joint procurement effort in the latter part of this decade.

Barriers to development of geothermal include potentially high cost and available transmission capacity to accommodate resource scale and timing.

Pursue development of local small hydropower. RCEA hired an expert consultant to perform an updated assessment of regional small hydropower potential and develop a plan for RCEA to facilitate development of feasible sites. The consultant's final report was completed in December 2021 and will inform RCEA's next steps in facilitating small hydropower development, possibly including a solicitation in the coming years. RCEA's planning documents, dating back to the original *RePower Humboldt* technical study in 2012, have identified the potential for tens of MW of new, low-impact run-of-the-river hydropower that can be developed in RCEA's service area. RCEA hired a consultant to perform an updated assessment of local hydropower potential and develop a detailed plan for RCEA to facilitate development of this resource, with the intent of having new resources online as early as 2028. The consultant's work has been completed, including identification of project sites with greatest development potential, and characterization of the hydrologic profiles associated with several divergence points on the candidate creeks.

While small hydro presents a promising renewable development opportunity there are numerous barriers including: uncertainty regarding environmental compliance and permitting needed for development; seasonal variation in production; vulnerability to drought while ensuring sufficient in-stream flows; and community acceptance of the development on remote creek sites.

Continue development and implementation of FIT and add energy storage to FIT 2.0.

RCEA's FIT offers above-market pricing on 20-year contracts for small (1 MW or less), new RPS projects built within RCEA's service area. The tariff uses a market-adjusting price that can move upward or downward in each application period depending on the amount of capacity offered in the previous application period. The tariff was launched in 2019 with a program capacity of 6.5 MW, which is now approaching full subscription with six contracts approved by RCEA's

Board and multiple projects in the County permitting pipeline. In 2020 the Board approved adding 6 MW to the program capacity along with making modifications to the program, which may include a downward adjustment in the base price, increased allowed project capacity, and optional or required co-located storage coupled with a resource adequacy price adder. RCEA is planning to develop and launch Phase II of the FIT program in 2023-2024 with project CODs anticipated 2025-2027.

Interconnection and commodity cost increases have been major challenges for RCEA's FIT projects. For one project, following execution of the GIA, PG&E discovered that interconnection of the project would require reconstruction of the entire control room upon their physical site walk. Because this site walk takes place after interconnection costs have already been agreed upon between the parties, this presents a huge risk to the independent developer of being saddled with those unforeseen costs.

The Humboldt-specific transmission issues described in Section III.n. pose significant barriers and potentially negative economic impact to development of new resources within RCEA's service area. In addition, uncertainty in projects' ability to secure a deliverability status for new resources in Humboldt due to insufficient grid capacity is a concern.

vi. Other energy storage not described above

RCEA recently contracted for Fairhaven Energy Storage, a battery project sited at a former biomass facility in its service territory, which will take advantage of the unused interconnection capacity and deliverability allocation at the site. RCEA is aware of other former biomass power plant and lumber mill sites around Humboldt County that could be ideal locations for additional energy storage projects, and is in preliminary discussions with landowners regarding the development opportunities. Timing and type of procurement is not yet known.

The main barrier to developing these former industrial sites is competing interests for use of the properties. As population growth in Humboldt has increased, the need for development of housing, business and recreation has also increased. As such, these previously developed sites are of high value for alternate uses to power projects.

vii. Other demand response not described above

As mentioned in Section IV(a)(i) above, RCEA has contracted with Leapfrog Power for 5.5. MW of RA from aggregated demand response as part of its procurement for compliance with CPUC decision D.19-11-016. The pool of energy users participating in this demand response aggregation is distributed across CAISO, with only a small number of RCEA customers included by happenstance.

RCEA has also been working to develop its own demand response program specifically for RCEA customers. Since its CCA launch, RCEA has sought to mirror customer rate and program offerings made available to bundled IOU customers in RCEA's service area. Beginning In 2017, RCEA offered an alternative to PG&E's Peak Day Pricing ("PDP") open to all nonresidential

customers. It was not feasible to build monthly PDP-style credits for unbundled CCA customers into PG&E's billing system in the same way bundled customers can receive these credits. RCEA instead worked with its billing services provider Calpine Energy Solutions to apply a cumulative credit to each participating customer's bill following the program's summer season, and to set up a system to alert customers of event days, mirroring PG&E's notification system. This program satisfied a small number of nonresidential CCA customers who requested such a program and might otherwise have opted out of CCA service. However, the program did not enjoy widespread participation.

In summer 2021, RCEA introduced a Demand Reduction Incentive Program ("<u>DRIP</u>") that improved on the earlier PDP alternative by allowing RCEA to set its own event days rather than being limited to event days called by PG&E. In principle, this increased financial benefit to RCEA by aligning event days with days when day-ahead wholesale prices were expected to be at a maximum, while allowing customers to receive a \$0.25/kWh credit for reduction of load below a custom baseline calculated for each customer. These event days were aligned fairly well with CAISO Flex Alert days (seven out of the eleven DRIP event days called by RCEA in 2021 coincided with Flex Alert days), adding a reliability benefit to the program. Credits were applied monthly with an end-of-season true-up. However, participation was again low and RCEA did not realize a net procurement cost savings. RCEA suspended the program for 2022 and is currently planning for an improved program offering for 2023 and beyond that may include an external business partner to enable use of dispatchable automated demand response.

viii. Other energy efficiency not described above

RCEA implements and administers numerous energy efficiency programs, some funded directly by RCEA's CCA program and others via CPUC rate-payer dollars. Energy efficiency falls under the larger umbrella of demand side management, and regardless of the funding source, RCEA's general framework for demand side management is to first evaluate opportunities for energy efficiency to decrease load, then assess opportunities for renewable generation resources to provide energy for the remaining load.

RCEA's CCA-funded energy efficiency programs are implemented by its in-house Demand Side Management Department, the key offering being the Public Agency Solar Program. The Public Agency Solar Program provides the following services at local government facilities: electric load analysis, energy efficiency upgrade options, solar site assessments, project feasibility studies, identification of funding sources, and contracting assistance. RCEA also offers a building decarbonization rebate program for heat pump space heaters, heat pump water heaters, and helps local organizations access additional funding opportunities.

RCEA's CPUC rate-payer funded energy efficiency programs are intended to complement the CCA-funded initiatives. These include services and rebates

administered in its role as an Elect-to-Administer Program Administrator and a Local Government Partnership contractor for PG&E. In its Program Administrator capacity, RCEA provides technical assistance and incentives to customers for installing energy saving or demand reducing measures that result in sufficient quantifiable energy savings at low enough cost to pass the applicable total resource cost test. In its Local Government Partnership capacity, RCEA provides "non-resource" services (services not associated with a specific energy savings target) including assistance with benchmarking and Energy Star certification of buildings, workshops and training, services for hard-to-reach customers, and referral of customers to PG&E "resource" programs (programs that do have quantified energy or peak demand saving targets).

RCEA also has a pending application to form a Rural Regional Energy Network program, which will provide energy efficiency services to hard-to-reach and underserved customers across a variety of rural regions in California. The CPUC is set to issue a decision on the approval of the RuralREN by Q4 of 2023.

ix. Other distributed generation not described above

As described in Section III.b. above, RCEA has partnered with Swell Energy to develop a customer program for dispatchable behind-the-meter energy storage. This Community Grid program, authorized by RCEA's Board of Directors in May 2021, aims to provide multiple benefits of 1) RA value to RCEA's portfolio, 2) critical energy resilience to host customers, 3) utility cost savings to host customers 4) greenhouse gas emissions reductions, and 5) improved grid operability. The program leverages Self-Generation Incentive Program (SGIP) incentives to improve economics. RCEA's contract with Swell calls for the program to deliver 0.3 to 3 MW of RA value through 1 to 17 MW nameplate capacity of battery storage to be installed by Swell, or through Swell achieving operational control of systems already installed by other developers. The capacity will be aggregated as a virtual power plant ("VPP") that can be dispatched by CAISO. In the absence of such CAISO dispatch, the batteries will be managed to reduce peak time-ofuse charges for customers, while reserving 20% of battery capacity at all times for customer use during power outages. In addition to the SGIP incentives, customers will receive an incentive payment from Swell for participating in the dispatchable VPP. Contract terms call for 100% of customers to be enrolled by February 2023 and initial delivery to begin by May 2023. The contract allows for RA benefits to alternatively be delivered via load modification should RCEA as buyer determine that to be preferable to receiving supply RA.

x. Transportation electrification, including any investments above and beyond what is included in Integrated Energy Policy Report (IEPR)

As noted in section III(g) above, RCEA's strategic plan calls for transportation electrification through adoption of electric vehicles and deployment of public, workplace and residential electric vehicle charging infrastructure. Coupled with targeted reduction of vehicle miles traveled, this is expected to reduce greenhouse gas emissions from transportation by over 65% by 2030, with a trajectory to eliminate fossil fuels for transportation, and thus transportation-related emissions, by 2050.

Working with the California Energy Commission and other partners, RCEA has produced three transportation-focused regional readiness plans, and has made progress on implementation of these plans: a North Coast Plug-in Electric Vehicle Readiness Plan (2014)³¹, a Northwest California Alternative Fuels Readiness Plan (2016), and a Regional Hydrogen Infrastructure Plan (2017). The Plug-in EV plan led to engagement with regional municipalities in a coordinated effort to streamline processes for the permitting and inspection of residential, commercial, and public electric vehicle charging stations (EVCS); development of streamlined EVCS installation processes and detailed regional siting assessments, and engagement with potential site hosts; and education and outreach to promote PEV adoption through profile raising campaigns and installation of trailblazing signage for existing EVCS.

The Northwest California Alternative Fuels Readiness Project, which covered Humboldt and four surrounding counties, was led by RCEA and launched to develop an established and engaged network of public and private stakeholders throughout the Northwest California region that can foster the successful introduction of alternative fuel vehicles, wise and effective deployment of alternative fuels infrastructure, and the development of a robust market for alternative fuels.

The North Coast and Upstate FCEV Fuel Cell Electric Vehicle (FCEV) Readiness Plan laid the groundwork to prepare nine of California's northernmost counties for the introduction of FCEVs by launching a multi-county public engagement campaign to boost awareness of FCEV technology amongst a variety of stakeholder groups (e.g., general public, planners, fleet managers, state agencies), identify fueling infrastructure needs and ideal sites through stakeholder collaboration, modeling, and analysis.

The Humboldt Transit Authority was recently awarded a \$38.7 million grant (total project cost \$65.2 million) from the California State Transportation Agency's Transit and Intercity Rail Capital Program to purchase 11 hydrogen buses and construct a fueling facility for these vehicles. The station will also support hydrogen car fueling. It is anticipated that hydrogen for this project will initially be transported into the area from an industrial hydrogen producer, likely made from reforming of natural gas. A future transition to local production of this

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 $^{^{31}\} https://redwoodenergy.org/wp-content/uploads/2021/03/FINAL-North-Coast-EV-Readiness-Plan-1.pdf$

hydrogen via electrolysis could increase demand for locally generated renewable electricity for transportation.

The southern Humboldt grid constraint issues described in Section III(n) could be a barrier to achieving RCEA's transportation electrification actions identified in this plan. RCEA is still working to understand the extent of how the constraints on PG&E's grid will impact the planned additional load anticipated from adoption of EVs and installation of charging infrastructure.

xi. Building electrification, including any investments above and beyond what is included in Integrated Energy Policy Report (IEPR)

As detailed in Section III(g), building electrification is a key pillar of RCEA's strategic plan which seeks to "reduce greenhouse gas emissions from fossil fuel use in buildings by 20% by 2030 and maintain a trajectory to reduce emission from natural gas by 90% by 2050."

Under its current Program Administrator funding, RCEA is operating an Enhanced Heat Pump Incentive Campaign (EHPIC) promoting non-residential and residential heat pump installations for space and water heating. This program is funded through June 2023.

Beginning in 2023, RCEA will implement a TECH Quick Start grant focused on identifying and addressing barriers to electrification faced by users of "unregulated" fuels (i.e. firewood and propane). These unregulated fuels make up an especially large fraction of fuel use in the rural, forested area served by RCEA, where fuelwood is widely available and propane is distributed by numerous retailers, while natural gas infrastructure is limited to communities in the central, more densely populated part of the county.

RCEA's proposed RuralREN is also a funding source that will lead to building electrification investments above and beyond what is included in the IEPR; details regarding the RuralREN building electrification program offerings as well as the programs mentioned above can be found in Section III(g).

A substantial barrier to building electrification in RCEA's service area, similar to transportation, is the southern Humboldt grid constraints described in Section III(g). These constraints are hampering the addition of new electrical load and transmission capacity must be expanded to accommodate successful building electrification.

xii. Other

Unlike most other CCAs in California, RCEA existed as a community-based energy services agency for many years prior to taking on its role as a CCA. Consequently, RCEA's current version of its strategic plan, last updated in 2019 with extensive community engagement and input, describes many other energy functions the agency plays or intends to play in its Humboldt County service area, some of which complement or contribute secondary benefits to RCEA's

role as a load-serving entity. Among many others included in RCEA's RePower Humboldt strategic plan, some key strategies include:

- Support renewable energy permitting, climate action planning, and countywide strategic energy planning. Humboldt County's general plan recognizes RCEA as the County's regional energy authority. In this role, RCEA is working with the County and its other member agencies to develop a multijurisdictional climate action plan that relies heavily on RCEA's delivery of emissions-free energy to the community, The climate action plan is still in development and about to undergo the environmental review process. RCEA is also advocating for creation of designated renewable energy production zones by the County planning department to facilitate permitting of future energy projects that can contribute to RCEA's power portfolio.
- Support upgrade of the electricity transmission and distribution system. This activity is critical to ensure north coast offshore wind can be developed at a scale that not only contributes to RCEA's own power portfolio but also increases regional grid reliability by enabling export of offshore wind power beyond the currently transmission-constrained Humboldt Local Reliability Area. Data available from PG&E also show that transmission and distribution within Humboldt County are highly constrained in multiple locations. Resolving these constraints is critical to enabling interconnection of new renewable generation resources as well as being able to serve expanding load and support electrification and fuel switching.
- Reduce reliance on unspecified system power. Through the development of new renewable energy resources, energy storage capacity, and customer-sited distributed resources as outlined in this plan and the above actions, RCEA plans to phase out its reliance on unspecified system power, which makes up the majority of the GHG emissions in its Preferred Conforming Portfolio.

Through playing this broader role as an energy authority in Humboldt County beyond its status as simply a community choice aggregator or load-serving entity, RCEA is more empowered to advocate for and facilitate actions that ensure a reliable, locally sourced, decarbonized, and affordable energy portfolio is available to RCEA's electric customers.

Other Barriers

In addition to the barriers integrated into previous section, REA also considers the following potential barriers in its integrated resource planning:

Regulatory and legislative barriers

 Assignment of unexpected and unplanned resources (for example, through CAM, RMR, CPM);

- Legislative and regulatory changes that reduce the value or cost recovery of existing contracts (e.g., reductions of a project's RA value within RCEA's portfolio under the RA restructuring to Slice of Day).
- Shifts in procurement responsibility to the Central Procurement Entity, and potential shortfalls or other future changes to the CPE construct;
- Anticipated change in law and associated regulatory risk have resulted in challenging contract negotiations for recent RA procurement by RCEA;
- The timing of CPUC decisions about voluntary allocations of PCIA resources to RCEA, which could occur too late to allow timely portfolio optimization and compliance; and
- National policy that restricts or penalizes trade with international suppliers (for example, the Department of Commerce's ongoing "Initiative of Circumvention Inquiry on the Antidumping Duty and Countervailing Duty Orders").
- Ongoing CPUC microgrid proceedings (R.19-09-009) that may affect cost recovery through tariffs and market participation of microgrids including RCEA's Redwood Coast Airport Microgrid;

Market barriers

- Construction timelines, especially considering current supply chain delays and issues.
 Supply chain challenges have already led to delayed COD for multiple projects offered to or under contract to RCEA;
- Commodity and shipping cost increases, especially considering the recent reversal in solar module cost curves and potential industry shifts of these risks from developers to LSEs;
- Federal import tariff issues that affect industry-wide equipment costs;
- The risk of CAISO curtailments of solar and wind resources that exceed current forecasts; and
- The risk of long-term resource procurement without any certainty of cost recovery;
- Depending on preferred ownership models that emerge, Tribes and other candidates for new local decarbonization and reliability development projects may prefer behind-themeter rather than front-of-meter systems, limiting RCEA's role in bringing some of these resources online to technical assistance.

b. Disadvantaged Communities

RCEA has several current and planned activities to increase equity throughout its region, several already described in previous sections of the narrative:

- Stakeholder engagement to inform RCEA's RePower Humboldt strategic energy plan
- Draft Racial Justice Plan
- Public Agency Solar Program

- Mobile Home Solar Program
- Supplier Diversity Program
- ETA PA program and Local Government Partnership program to deliver energy efficiency services to underserved and hard-to-reach customers
- Proposed RuralREN to bring energy efficiency services to rural underserved and hard-toreach customers across the state

According to CalEnviroScreen 4.0, no Humboldt County census tracts fall within the state's top 25% of impacted census tracts, or census tracts with the highest pollution burden. That said, there are other important indicators of equity such as: income, unemployment, geographic proximity to services such as comprehensive medical care, living on land under tribal ownership, race, and more. Customers within RCEA's service territory fall into categories, which often intersect and result in compounding levels of inequity.

In a rural context, equity in community engagement means including the voices of those who are far-removed from where decisions are made.

As described in section 3(b)(ii), RCEA engaged in extensive stakeholder outreach to inform the 2019 update of its RePower Humboldt strategic plan. RCEA traveled to remote regions of eastern and southern Humboldt County to receive community input on RCEA's goals related to power procurement, transportation electrification, demand side management, and more. In response to community feedback received through these workshops and written comment, RCEA's Board adopted a policy of transitioning to a 100% clean and renewable power portfolio by 2025. Apart from resource adequacy resources, RCEA intends to develop or contract exclusively with renewable and GHG-free generation resources, as well as energy storage resources. RCEA's Preferred Conforming Portfolio does not include energy contracts for gas generators, including those located within or adjacent to DACs.

That said, as described in section 3(d)(2), community concerns have been raised about air quality and greenhouse gas impacts from biomass power. In response to this concern, RCEA and the owners of the HSC biomass plant executed a memorandum of understanding that calls for annual reporting on fuel use and sources, emissions, and information regarding HSC's consideration of other potential feedstock uses that could result in reduced air quality impacts. RCEA has supplemented this effort through hiring a consultant, per the request of RCEA's Community Advisory Committee, to analyze alternative energy and non-energy uses of biomass.

In terms of evaluation criteria for power solicitations, RCEA considers project location and community benefits when evaluating responses to power solicitations in an effort to contract

for projects that benefit racially diverse communities and to avoid projects that are detrimental to those communities. This is one key aspect of the power procurement section of RCEA's draft Racial Justice Plan. Other procurement-related strategies include:

- a) Incorporating energy justice best practices and affordability into renewable development and power purchase solicitations and resource planning.
- b) Continue to implement its own Supplier Diversity program, in line with General Order 156, to promote participation of Diverse Business Enterprises in the power industry, including encouraging qualified energy suppliers to register themselves in the CPUC's Supplier Clearinghouse.
- c) For energy projects in which RCEA takes an active role in inception, development, ownership and/or operation, work with private partners to utilize collaborative and inclusive engagement with local communities throughout the development process, rather than a "decide-announce-defend" approach.
- **d)** Seek partnerships with expert consultants on racially diverse community engagement, especially for large-scale projects such as offshore wind.

RCEA has a long history of partnership with tribes in its service territory and seeks to expand and deepen these partnerships. RCEA has initiated conversations with local tribes located in high fire threat districts to develop clean substation microgrids and will engage in extensive outreach when the planning process is more advanced. RCEA's aforementioned Public Agency Solar Program and Community Grid Program serve to reduce the use of diesel generators which are disproportionately relied upon in remote, disadvantaged regions of RCEA's service territory that is not served by the HBGS island.

RCEA's draft Racial Justice Plan aims to achieve diversity, equity, and inclusion in program selection design and implementation. One example of such a program is the Mobile Home Solar Program, an idea initially proposed by RCEA's Community Advisory Committee, RCEA is now partnering with the Bear River Band of the Rohnerville Rancheria to provide clean energy to low-income customers living in mobile homes. In looking ahead to offshore wind development, RCEA has contracted with a consultant to assist with tribal outreach to inform responsible development that is done in collaboration and serves the needs and interests of local tribal stakeholders.

Since the inception of its CCA program, RCEA has provided program materials in both Spanish and English. In 2020, RCEA hosted a Certify and Amplify workshop to encourage contractors to achieve supplier diversity certification; this workshop was recorded in both English and Spanish as well.

RCEA plans to improve and expand upon the outreach efforts described above to conduct targeted community outreach for future procurement, programs, and all agency activities.

c. Commission Direction of Actions [Additional Content May be Added After 10/27/22 Board Meeting Packet Deadline]

RCEA requests that the Commission provide clear direction as soon as possible regarding any new procurement mandates emerging from the current IRP cycle. Like other LSEs, RCEA has been challenged to procure resources with online dates early enough to satisfy the earlier compliance tranches of the 2019 incremental reliability procurement mandate (D.19-11-016) and the 2021 mid-term reliability decision (D.21-06-035). Early notification of any future procurement mandates will allow RCEA to identify the largest range of options and carefully select and negotiate for optimal resource solutions.

Additionally, RCEA requests that the Commission delay the earliest compliance deadline of an additional procurement mandate beyond 2025 to avoid the current market challenges that are driving up incremental resource costs and delaying development schedules.

RCEA requests that energy-only resources which are contractually obligated and on-track to obtain deliverability status qualify for IRP procurement mandates at the time of commercial operation.

V. Lessons Learned [Additional Content May be Added After 10/27/22 Board Meeting Packet Deadline]

RCEA's lessons learned and suggested changes to the IRP process for consideration by the Commission that would facilitate the ability of the Commission and LSEs to achieve state policy goals are detailed below.

- It is challenging to keep abreast of IRP requirements and instructions as they are modified and updated in the months leading up to the submission deadline, as this information is dispersed across the 2022 IRP guidance documentation, IRP ruling and slide decks, question and answer documents, and emails issued subsequently by the Energy Division. It would be helpful if the Commission and Energy Division staff were to issue comprehensive guidance at one time, and only to make changes when absolutely necessary. If changes to IRP guidance are needed, RCEA suggests consolidating those in successive versions of a single comprehensive and authoritative document for each required filing document, showing redline changes from the prior version.
- Ordered procurement and the baseline resource lists associated with such ordered procurement should be timed carefully so that LSEs that are ahead of the curve in reliability procurement are not penalized for their foresight. The existing system tends to unintentionally reward lagging procurement and disincentivize advance planning.

- A central database where the CPUC stores procurement data provided by LSEs and uses it to auto-populate templates would provide efficiency by ensuring consistent information is used in the various regulatory filings required, and sparing LSE staff from having to re-compile the same data in different formats for each filing. The IRS's use of centrally stored taxpayer data to auto-populate tax returns or the Department of Education's system for completing income fields in the FAFSA student financial aid form using IRS taxpayer data are models to consider emulating.
- Like many CCAs, RCEA is a small organization with lean staffing, in which staff responsible for resource planning are the very same staff tasked with procurement and contract management contemplated in the plans. The CPUC's IRP model came into being in an era when most load was served by a few large IOUs with the staffing and resources to conduct extensive analysis in developing their plans plans that would each contribute hundreds or thousands of MWs of potential new procurement to the state-level resource planning. For smaller LSEs like RCEA, the effort entailed in developing CPUC IRPs may be out of proportion to the benefit the many resulting small-scale IRPs contribute to state-level resource planning. RCEA encourages the Commission to reconsider alternative IRP requirements that reduce administrative burden for smaller LSEs such as it has made available in the past.
- Emissions accounting for biomass and geothermal resources in the CSP model doesn't align with state emissions accounting methodologies. The model assumes zero greenhouse gas emissions from all renewables. In the case of biomass, this ignores the non-biogenic emissions tracked by the California Air Resources Board (CARB) and included in RCEA's reporting to The Climate Registry for the specific plants RCEA procures from in keeping with state protocols for biomass emissions reporting. RCEA encourages the Commission to quantify incidental greenhouse gas emissions, such as those from ancillary use of fossil fuels in biomass facilities in the CSP Calculator consistently with how they are accounted for by CARB.
- RCEA encourages the Commission to improve coordination between its IRP and RPS groups and consider timing in what these two groups require from LSEs. In the last few cycles, the RPS Procurement Plan effectively required results from IRP modeling months ahead of when the LSEs had all the guidance needed from the Commission to complete their IRPs.

Glossary of Terms

Alternative Portfolio: LSEs are permitted to submit "Alternative Portfolios" developed from scenarios using different assumptions from those used in the Preferred System Plan with updates. Any deviations from the "Conforming Portfolio" must be explained and justified.

Approve (Plan): the CPUC's obligation to approve an LSE's integrated resource plan derives from Public Utilities Code Section 454.52(b)(2) and the procurement planning process described in Public Utilities Code Section 454.5, in addition to the CPUC obligation to ensure safe and reliable service at just and reasonable rates under Public Utilities Code Section 451.

Balancing Authority Area (CAISO): the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

Baseline resources: Those resources assumed to be fixed as a capacity expansion model input, as opposed to Candidate resources, which are selected by the model and are incremental to the Baseline. Baseline resources are existing (already online) or owned or contracted to come online within the planning horizon. Existing resources with announced retirements are excluded from the Baseline for the applicable years. Being "contracted" refers to a resource holding signed contract/s with an LSE/s for much of its energy and capacity, as applicable, for a significant portion of its useful life. The contracts refer to those approved by the CPUC and/or the LSE's governing board, as applicable. These criteria indicate the resource is relatively certain to come online. Baseline resources that are not online at the time of modeling may have a failure rate applied to their nameplate capacity to allow for the risk of them failing to come online.

Candidate resource: those resources, such as renewables, energy storage, natural gas generation, and demand response, available for selection in IRP capacity expansion modeling, incremental to the Baseline resources.

Capacity Expansion Model: a capacity expansion model is a computer model that simulates generation and transmission investment to meet forecast electric load over many years, usually with the objective of minimizing the total cost of owning and operating the electrical system. Capacity expansion models can also be configured to only allow solutions that meet specific requirements, such as providing a minimum amount of capacity to ensure the reliability of the system or maintaining greenhouse gas emissions below an established level.

Certify (a Community Choice Aggregator Plan): Public Utilities Code 454.52(b)(3) requires the CPUC to certify the integrated resource plans of CCAs. "Certify" requires a formal act of the Commission to determine that the CCA's Plan complies with the requirements of the statute and the process established via Public Utilities Code 454.51(a). In addition, the Commission must review the CCA Plans to determine any potential impacts on public utility bundled customers under Public Utilities Code Sections 451 and 454, among others.

Clean System Power (CSP) methodology: the methodology used to estimate GHG and criteria pollutant emissions associated with an LSE's Portfolio based on how the LSE will expect to rely on system power on an hourly basis.

Community Choice Aggregator: a governmental entity formed by a city or county to procure electricity for its residents, businesses, and municipal facilities.

Conforming Portfolio: the LSE portfolio that conforms to IRP Planning Standards, the 2030 LSE-specific GHG Emissions Benchmarks, use of the LSE's assigned load forecast, as well as other IRP requirements including the filing of a complete Narrative Template, a Resource Data Template and Clean System Power Calculator.

Effective Load Carrying Capacity: a percentage that expresses how well a resource is able avoid loss-of-load events (considering availability and use limitations). The percentage is relative to a reference resource, for example a resource that is always available with no use limitations. It is calculated via probabilistic reliability modeling, and yields a single percentage value for a given resource or grouping of resources.

Effective Megawatts (MW): perfect capacity equivalent MW, such as the MW calculated by applying an ELCC % multiplier to nameplate MW.

Electric Service Provider: an entity that offers electric service to a retail or end-use customer, but which does not fall within the definition of an electrical corporation under Public Utilities Code Section 218.

Filing Entity: an entity required by statute to file an integrated resource plan with CPUC.

Future: a set of assumptions about future conditions, such as load or gas prices.

GHG Benchmark (or LSE-specific 2030 GHG Benchmark): the mass-based GHG emission planning targets calculated by staff for each LSE based on the methodology established by the California Air Resources Board and required for use in LSE Portfolio development in IRP.

GHG Planning Price: the systemwide marginal GHG abatement cost associated with achieving a specific electric sector 2030 GHG planning target.

Integrated Resources Planning Standards (Planning Standards): the set of CPUC IRP rules, guidelines, formulas and metrics that LSEs must include in their LSE Plans.

Integrated Resource Planning (IRP) process: integrated resource planning process; the repeating cycle through which integrated resource plans are prepared, submitted, and reviewed by the CPUC

Long term: more than 5 years unless otherwise specified.

Load Serving Entity: an electrical corporation, electric service provider, community choice aggregator, or electric cooperative.

Load Serving Entity (LSE) Plan: an LSE's integrated resource plan; the full set of documents and information submitted by an LSE to the CPUC as part of the IRP process.

Load Serving Entity (LSE) Portfolio: a set of supply- and/or demand-side resources with certain attributes that together serve the LSE's assigned load over the IRP planning horizon.

Loss of Load Expectation (LOLE): a metric that quantifies the expected frequency of loss-of-load events per year. Loss-of-load is any instance where available generating capacity is insufficient to serve electric demand. If one or more instances of loss-of-load occurring within the same day regardless of duration are counted as one loss-of-load event, then the LOLE metric can be compared to a reference point such as the industry probabilistic reliability standard of "one expected day in 10 years," i.e. an LOLE of 0.1.

Maximum Import Capability: a California ISO metric that represents a quantity in MWs of imports determined by the CAISO to be simultaneously deliverable to the aggregate of load in the ISO's Balancing Authority (BAA) Area and thus eligible for use in the Resource Adequacy process. The California ISO assess a MIC MW value for each intertie into the ISO's BAA and allocated yearly to the LSEs. A LSE's RA import showings are limited to its share of the MIC at each intertie.

Net Qualifying Capacity (NQC): Qualifying Capacity reduced, as applicable, based on: (1) testing and verification; (2) application of performance criteria; and (3) deliverability restrictions. The Net Qualifying Capacity determination shall be made by the California ISO pursuant to the provisions of this California ISO Tariff and the applicable Business Practice Manual.

Non-modeled costs: embedded fixed costs in today's energy system (e.g., existing distribution revenue requirement, existing transmission revenue requirement, and energy efficiency program cost).

Nonstandard LSE Plan: type of integrated resource plan that an LSE may be eligible to file if it serves load outside the CAISO balancing authority area.

Optimization: an exercise undertaken in the CPUC's Integrated Resource Planning (IRP) process using a capacity expansion model to identify a least-cost portfolio of electricity resources for meeting specific policy constraints, such as GHG reduction or RPS targets, while maintaining reliability given a set of assumptions about the future. Optimization in IRP considers resources assumed to be online over the planning horizon (baseline resources), some of which the model may choose not to retain, and additional resources (candidate resources) that the model is able to select to meet future grid needs.

Planned resource: any resource included in an LSE portfolio, whether already online or not, that is yet to be procured. Relating this to capacity expansion modeling terms, planned resources can be baseline resources (needing contract renewal, or currently owned/contracted by another LSE), candidate resources, or possibly resources that were not considered by the modeling, e.g., due to the passage of time between the modeling taking place and LSEs developing their plans. Planned resources can be specific (e.g., with a CAISO ID) or generic, with only the type, size and some geographic information identified.

Qualifying capacity: the maximum amount of Resource Adequacy Benefits a generating facility could provide before an assessment of its net qualifying capacity.

Preferred Conforming Portfolio: the conforming portfolio preferred by an LSE as the most suitable to its own needs; submitted to CPUC for review as one element of the LSE's overall IRP plan.

Preferred System Plan: the Commission's integrated resource plan composed of both the aggregation of LSE portfolios (i.e., Preferred System Portfolio) and the set of actions necessary to implement that portfolio (i.e., Preferred System Action Plan).

Preferred System Portfolio: the combined portfolios of individual LSEs within the CAISO, aggregated, reviewed and possibly modified by Commission staff as a proposal to the Commission, and adopted by the Commission as most responsive to statutory requirements per Pub. Util. Code 454.51; part of the Preferred System Plan.

Short term: 1 to 3 years (unless otherwise specified).

Staff: CPUC Energy Division staff (unless otherwise specified).

Standard LSE Plan: type of integrated resource plan that an LSE is required to file if it serves load within the CAISO balancing authority area (unless the LSE demonstrates exemption from the IRP process).

Transmission Planning Process (TPP): annual process conducted by the California Independent System Operator (CAISO) to identify potential transmission system limitations and areas that need reinforcements over a 10-year horizon.







RCEA 2022 Integrated Resource Plan

Presentation to the RCEA Board of Directors October 27, 2022



- 1. Modelling conducted of the electric system over the planning horizon.
- 2. Preferred System Plan and GHG benchmarks adopted. This cycle has two 2035 GHG benchmarks at 30 MMT and 25 MMT.
- 3. Individual IRPs developed by load-serving entities.
- 4. Individual LSE IRPs aggregated into new Preferred System Plan and provided to CAISO for transmission planning; cycle repeated.



IRP Filing Requirements

Narrative: Written description of IRP analysis, results, and an action plan. RCEA's draft narrative has been made available to the Board.

Resource Data Template: Spreadsheet of current and planned energy and capacity supply resources through 2035. LSEs must submit two, one for each of the GHG emissions targets.

Clean System Power Tool: Calculator for GHG emissions and criteria air pollutants associated with the IRP portfolio. LSEs must submit two, one for each of the GHG emissions targets.

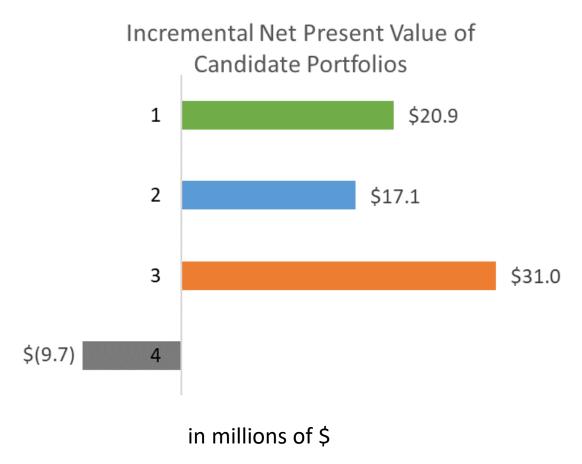
Final versions of all filing documents will be available on RCEA's website 11/1/22

Base Case Assumptions

- All active and in-progress contracts included
- 40 MW of offshore wind procured and operational by 2030
- 18 MW biomass procured past 2031 (could come from alternative, cleaner sources)
- 15 MW new geothermal procured and operational by 2030
- 20 MW solar + storage procured for Mid-Term Reliability compliance and operational by 2025
- 8 MW of new local small hydropower operational by 2030
- 11 MW new local battery storage operational by 2026
- Additional 6 MW solar + 6 MW storage Feed-in-Tariff projects operational 2025-2027
- Development of two additional community scale microgrids by 2026-2030
- PG&E Renewable Portfolio Standard & Carbon-Free Allocations contracted through 2035
- Balance of portfolio through 2029 met with short-term carbon-free energy

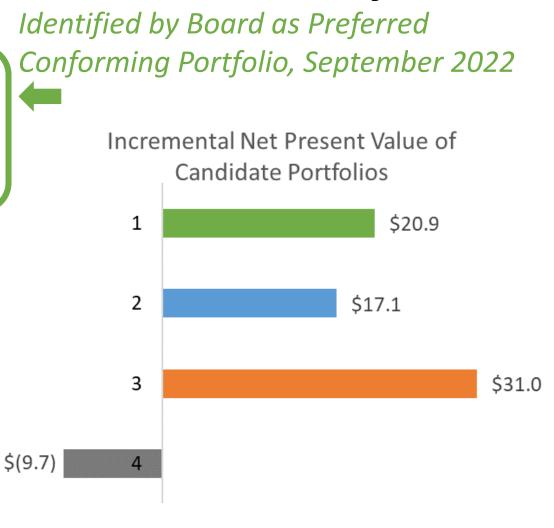
Candidate Portfolios Economic Analysis

- 1. Diverse Portfolio: Mix of 40 MW offshore wind by 2030 and 15 MW new geothermal by 2030; biomass at current 18 MW level through end of IRP planning horizon in 2035
- 2. Maximum Offshore Wind: 75 MW offshore wind by 2030; no new geothermal; no biomass after 2031 expiration of current PPA
- 3. Maximum Geothermal: no offshore wind; 20 MW new geothermal by 2030, increasing to 40 MW by 2035; no biomass after 2031
- 4. Short-Term Renewables: business-as-usual continuation of short-term procurement to meet portfolio needs in lieu of large new renewables; no biomass after 2031



Candidate Portfolios Economic Analysis

- Diverse Portfolio: Mix of 40 MW offshore wind by 2030 and 15 MW new geothermal by 2030; biomass at current 18 MW level through end of IRP planning horizon in 2035
- Maximum Offshore Wind: 75 MW offshore wind by 2030; no new geothermal; no biomass after 2031 expiration of current PPA
- 3. Maximum Geothermal: no offshore wind; 20 MW new geothermal by 2030, increasing to 40 MW by 2035; no biomass after 2031
- 4. Short-Term Renewables: business-as-usual continuation of short-term procurement to meet portfolio needs in lieu of large new renewables; no biomass after 2031



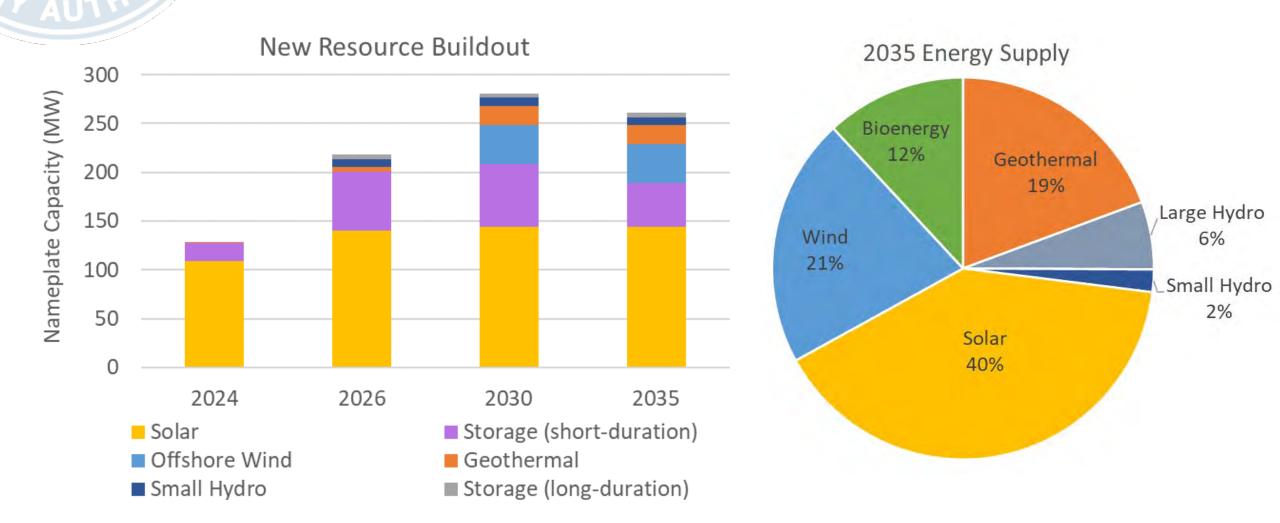
in millions of \$

Preferred Conforming Portfolio Resource Summary

Туре	Capacity (MW)	Resource Name(s)	Status
Solar	147	Sandrini, RCAM, FIT projects, RNA projects, planned MTR procurement	Existing & new
Wind	40	Redwood Coast Offshore Wind	New
Biomass	18	Humboldt Redwood	Existing
Small Hydro	14	Cove Hydro, planned new small hydro	Existing & new
Geothermal	19	Fish Lake, Ormat portfolio, planned new geothermal	New
Energy Storage (short-duration)	65	RCAM, Tierra Buena, Fairhaven, FIT storage, planned new storage	Existing & new
Energy Storage (long-duration)	4.5	Tumbleweed, Goal Line	New

In addition, the portfolio includes expected allocations of renewable and carbon free (large hydro) energy from PG&E's PCIA portfolio, plus short-term carbon free energy & RA procurement

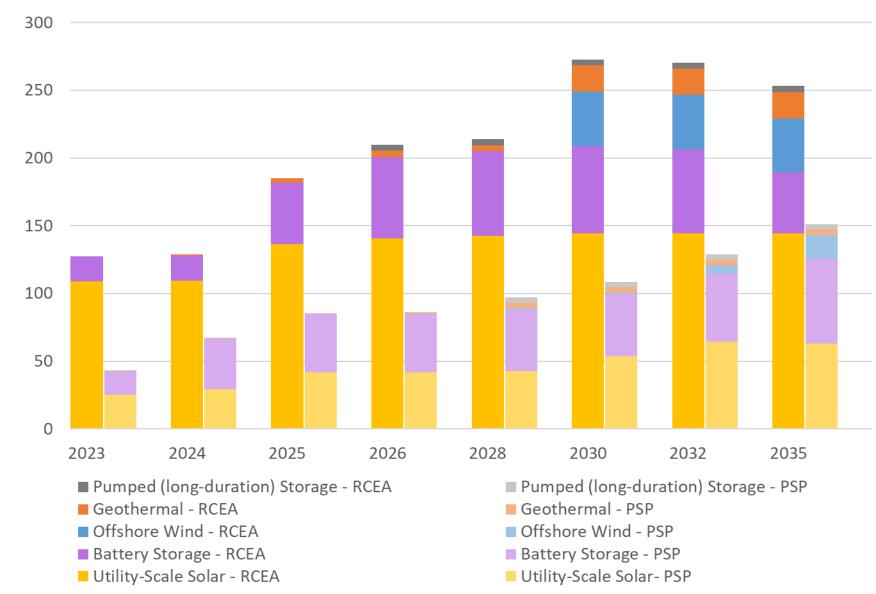




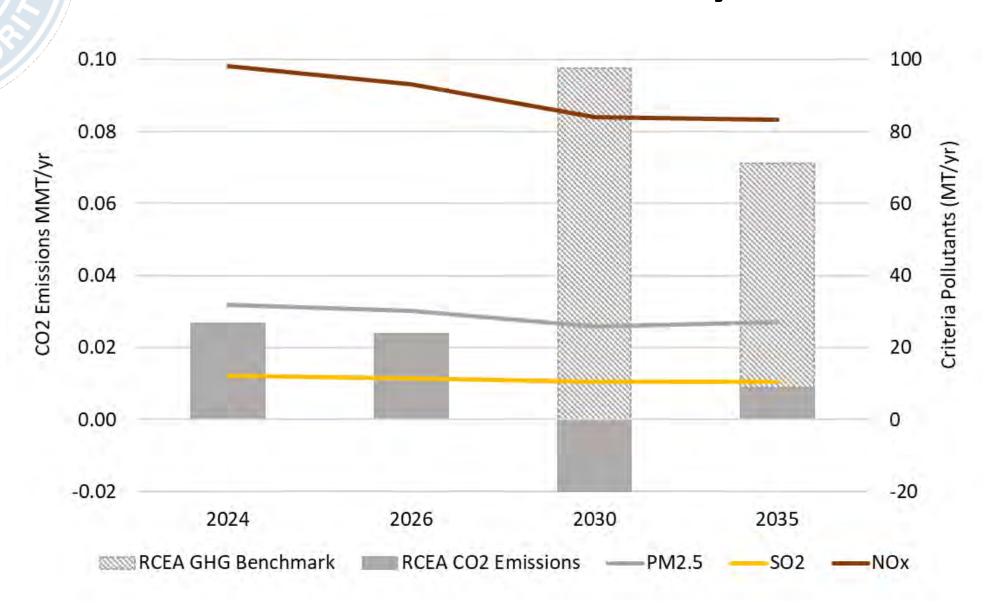


Nameplate Capacity (MW)

New Resources: Comparison with RCEA's Share of State's Preferred System Plan (PSP)



Portfolio Emissions Summary



Public Comment

RCEA Board of Directors
October 27, 2022
Regular Meeting

From: diane ryerson
To: Public Comment

Subject: No extension, expansion or new biomass contracts

Date: Tuesday, October 25, 2022 9:41:39 AM

Agenda Item 5.1

As a RCEA CCE ratepayer, I just found out about the Integrated Resource Plan that is on the agenda for a Board decision at the October 27, 2022 meeting. I strongly oppose burning biomass for electricity because it emits carbon dioxide, other wood contaminants, and particulates in the 2.5 micron range that are most damaging to our health.

I support a portfolio of solar, wind, geothermal and hydro, and maximizing development of local solar, wind, energy storage and distributed energy systems. Non-local solar, wind, geothermal and hydro is a better value for ratepayers than the more expensive, dirty biomass energy from Humboldt Sawmill Company. Nothing prevents HSC from investing in upgrades and repairs, using their own profits, other than greed. As a ratepayer, I don't want to pay for their upgrades and repairs. Please do not extend, expand or renew the HSC contract or engage in any other biomass contracts.

The actual source of our electrons is the PG&E natural gas plant, and I want us to do everything we can to free ourselves in the future from dependence on a for-profit investor owned utility. Electricity is now a necessity of life and, as a necessity, needs to be publicly owned to remove the profit motive. When we the voters own a utility, we are responsible for its control. Privatization of necessities is an effective way to transfer wealth from the many to the few, as evidenced by our enormous wealth gap. PG&E is applying for an 11% rate increase and lobbying the CPUC for a tax on rooftop solar.

Thank you for considering a ratepayer's perspective.

Diane Ryerson

Arcata, CA 95521

P.O. BOX 6457 EUREKA, CA 95502 (707) 442-2367 / FAX: (707) 442-8134

E-MAIL: hdncms@gmail.com WEB: www.hdncms.org

October 24, 2022

Humboldt County Board of Supervisors:

Rex Bohn, District 1 Michelle Bushnell, District 2 Mike Wilson, District 3 Virginia Bass, District 4 Steve Madrone, District 5

Redwood Coast Energy Authority

Sara Schaefer, Arcata Chris Curran, Blue Lake Rex Bohn, County of Humboldt Scott Bauer, Eureka Stephen Avis, Ferndale Mike Losey, Fortuna Sheri Woo, Humboldt Bay Water Frank Wilson, Rio Dell Jack Tuttle, Trinidad

RE: Humboldt RePower Plan

As an organization dedicated to improving the health of Humboldt County residents, we call on the Humboldt County Board of Supervisors and the Redwood Coast Energy Authority to move forward on its Humboldt RePower Plan to end biomass incineration by making a commitment not to expand, initiate, or renew biomass combustion contracts.

While biomass is renewable, it is neither clean, nor carbon free. Biomass plants are federally designated Major Sources of air pollution which emit fine particulates, nitrogen oxides, and toxic chemicals like benzene and formaldehyde. EPA emission standards for these plants are based, not on public safety, but on available affordable control technology. These standards, updated just this year, allow existing biomass plants like the one in Scotia to emit nearly as much fine particulates as coal fired power plants and 7 times more hazardous organic air pollutants. A recent study by researchers at Harvard's School of Public Health found that biomass energy is now responsible for more US deaths than coal (Buonocore, 2021).

Biomass pollution harms health throughout our county. Fine particulates stay suspended in the air for many days and travel hundreds of miles. Even low level exposures cause heart attacks, lung disease, hospitalizations, and premature death, especially for elders and others with heart and lung disease (Wei, 2019). Humboldt's most populated census tracts are in the 80th percentile for asthma compared with the rest of the state and in the 90th percentile for cardiovascular disease (CalEnviroScreen, 2022). The American Lung Association counts over 50,000 Humboldt residents who are especially vulnerable to biomass pollution due to age and medical conditions (ALA, 2022).

With climate change, Humboldt's air quality is worsening. The American Lung Association's State of the Air Report for 2022 gave Humboldt County a C for fine particulate pollution (ALA,

2022). Our annual average exposure is increasing and is only a few decimal points away from exceeding the new standard recommended by EPA's expert panel (EPA, 2021). Humboldt Sawmill's waste incinerator contributes to climate change by emitting 300,000 metric tons of greenhouse gas annually which warms the planet for decades before it can be reabsorbed by growing trees. Recent research suggests that methane emissions from piles of wood chips awaiting incineration may also contribute significantly to biomass lifecycle emissions (Geronimo, 2022). Natural gas power plants, throughout their entire life cycle, even with the highest estimates of fugitive methane, emit far less carbon than our local biomass plant.

The American Academy of Pediatrics, the American Lung Association, and the American Public Health Association have declared that biomass combustion plants are harmful to human health and should not be supported with public dollars. The Massachussetts Medical Society testified in support of the bill which removed biomass from its Renewable Portfolio Standard (MMS, 2021). With cleaner sources of energy available, and alternative uses for mill waste that can actually reduce emissions, our county should not use ratepayer dollars to support an archaic practice putting so many Humboldt residents at risk.

RCEA's procurement policy ranking local dirty energy above cleaner sources of power does not serve our county well. With a large increase in local electricity demand in our near future from Nordic Aquafarms, CalPoly, and electrification of buildings and vehicles, and the current pace of local clean energy development, this prioritization of biomass above cleaner sources of energy will inevitably lead to more pollution and more health harm. We ask that you place a higher value on protecting the health of current residents and future generations in your energy procurement policy by prioritizing non polluting, carbon-free power over biomass incineration.

There are numerous alternative uses for mill waste which pollute less and either sequester carbon or lower greenhouse gas emissions by substituting for virgin timber or fossil fuel products. Companies in the US are using mill waste to make compost, pressed wood pallets, bioplastic, and jet fuel. California has 2 wood waste to hydrogen projects in the works. Non combustion biomass plants with carbon capture are on the horizon. Developing these alternatives takes time and investment which mill owners will not make until they see it is necessary. With only 8 years remaining in RCEA's current biomass contract and another timber company talking about building a new biomass plant, you must send a clear signal now that mill waste incineration will not be in our future energy portfolio.

To that end, we ask the Board of Supervisors and the RCEA board to adopt the following policy:

No new, extended, or expanded contracts for biomass incineration.

REFERENCES

American Lung Association, 2022 State of the Air Report https://www.lung.org/research/sota/city-rankings/states/california/humboldt

Buonocore J. et al. A decade of the U.S. energy mix transitioning away from coal: historical reconstruction of the reductions in the public health burden of energy 2021 Environ. Res. Lett. 16 054030

CalEnviroScreen 4.0 https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

EPA Clean Air Scientific Advisory Committee, Review of the EPA's Policy Assessment for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter 2021

Geronimo, C, Vergara, S, Chamberlin, C, Fingerman, K.

Overlooked emissions: Influence of environmental variables on greenhouse gas generation from woody biomass storage, Fuel, Volume 319, 2022, doi.org/10.1016/j.fuel.2022.123839.

Massuchussetts Medical Society, Testimony in Support of H.3333 and S.2197, An Act to Prevent Biomass Energy to Protect the Air We Breathe
September 13, 2021 https://www.massmed.org/Advocacy/State-Advocacy/State-Advocacy/State-Testimony/Testimony-in-Support-of-H-3333-and-S-2197,-An-Act-to-Prevent-Biomass-Energy-to-Protect-the-Air-We-Breathe/

Wei, Y. et al. Short term exposure to fine particulate matter and hospital admission risks and costs in the Medicare population: time stratified, case crossover study 2019 BMJ (Clinical Research Edition)

367: 16258. ISSN: 0959-8138

Respectfully Submitted,

Humboldt-Del Norte County Medical Society Executive Board

Agenda Item 5.1: Integrated Resource Plan Power Portfolio Approval



10/26/22

RE: Board Agenda Item 5.1

Dear RCEA Board Members:

It was only a year and a half ago that the RCEA administration said they needed to have a ten year contract with Humboldt Sawmill for biomass power in order to meet SB 350 requirements. Staff presented the decision as one that with no real alternatives. So most Board members reluctantly agreed while putting in a condition that RCEA get a report from Humboldt Sawmill each year on the possibilities of other less climate-destructive ways of using sawmill waste.

So here we are again. Not surprisingly, you are being told there is an *immediate* deadline for an Integrated Resource Plan covering ten years plus in the future. The need for this plan must have been apparent for months if not years. Yet Board members only have a few days to decide to extend the use of biomass power to 2035 without a clear alternative being presented.

But you have a choice. You can tell the RCEA Administration you want an IRP with no extension of biomass even if it takes a separate meeting to approve it. Or just delegate to the Executive Director as long as it contains no biomass power after the current contract.

Unfortunately we no long believe in the good intentions of the RCEA administration regarding renewable energy. Not that they won't pursue it, but that is not a *first* priority. If you don't believe that look at the much lower carbon intensity of other CCAs such as Marin, Sonoma or Peninsula Clean Energy. RCEA is a laggard. If, as administrators imply, the reason for these unfortunate decisions is that the Board has put a priority on local and new renewable energy, then these policies need to be refined. There is nothing more important than cutting greenhouse gas emissions.

Biomass power, as described by Michael Furniss under contract with RCEA to present biomass options, produces "warming." There is no way around it. During the most crucial next 10 years and the crucial next 30 year when biomass is burned it goes into the atmosphere creating warming. It *may* be renewable in the sense that trees growing to replace the ones cut will absorb CO2, but that is not going to happen in the time period by which we need to reach net

zero worldwide. The ten year contract RCEA already signed will produce upwards of 2 million metric tons of CO2e in that time. In addition, for the same amount of energy produced, biomass power is dirtier than coal! RCEA hasn't even insisted on any equipment upgrades to reduce pollution the way that SB 1109 (Caballero) requires for all other biomass plants in the state.

There are other uses for mill waste and other woody biomass. Whether as compost, nano fibers, as a fuel source for hydrogen or other uses. However, with RCEA showing open arms to polluting power, why would Humboldt Sawmill invest in a less polluting use of its waste? The first step in developing an alternative use of mill waste is to close down the existing funding.

We ask the Board to pass a resolution a) removing any option for extending the use of biomass power beyond the current contract b) committing not to purchase biomass from another vendor, and c) instructing the RCEA administration to take every possible action to eliminate biomass power from its portfolio prior by 2025. RCEA's actions have kept market pressures from forcing Humboldt Sawmill and other mills from finding a low or zero carbon use for its biomass to the significant detriment of the planet.

Sincerely,

Daniel Chandler
350 Humboldt Steering Committee

350Humboldt@gmail.com

Daniel Chandler

¹ The IPCC says we need to be at net zero by 2050. Since it is mill waste, there is no actual plan to replace the trees that are burned for power over the next 80 years. And in California in the era of forest fires, such a plan would not be credible in any cases.

Agenda Item 5.1: Integrated Resource Plan Power Portfolio Approval

From: Walter Paniak
To: Public Comment

Subject: Comment concerning proposed Biomass Contract extension

Date: Wednesday, October 26, 2022 12:45:49 PM

I am opposed to an extension of the biomass contract to 2035.

I want the least cost option. Wood combustion is dirtier than coal. It is the most inefficient. The character of being renewable in the short term is laughable.

Page 26 and 27 of the staff report confirms that the staff recommendation is not the least cost option.

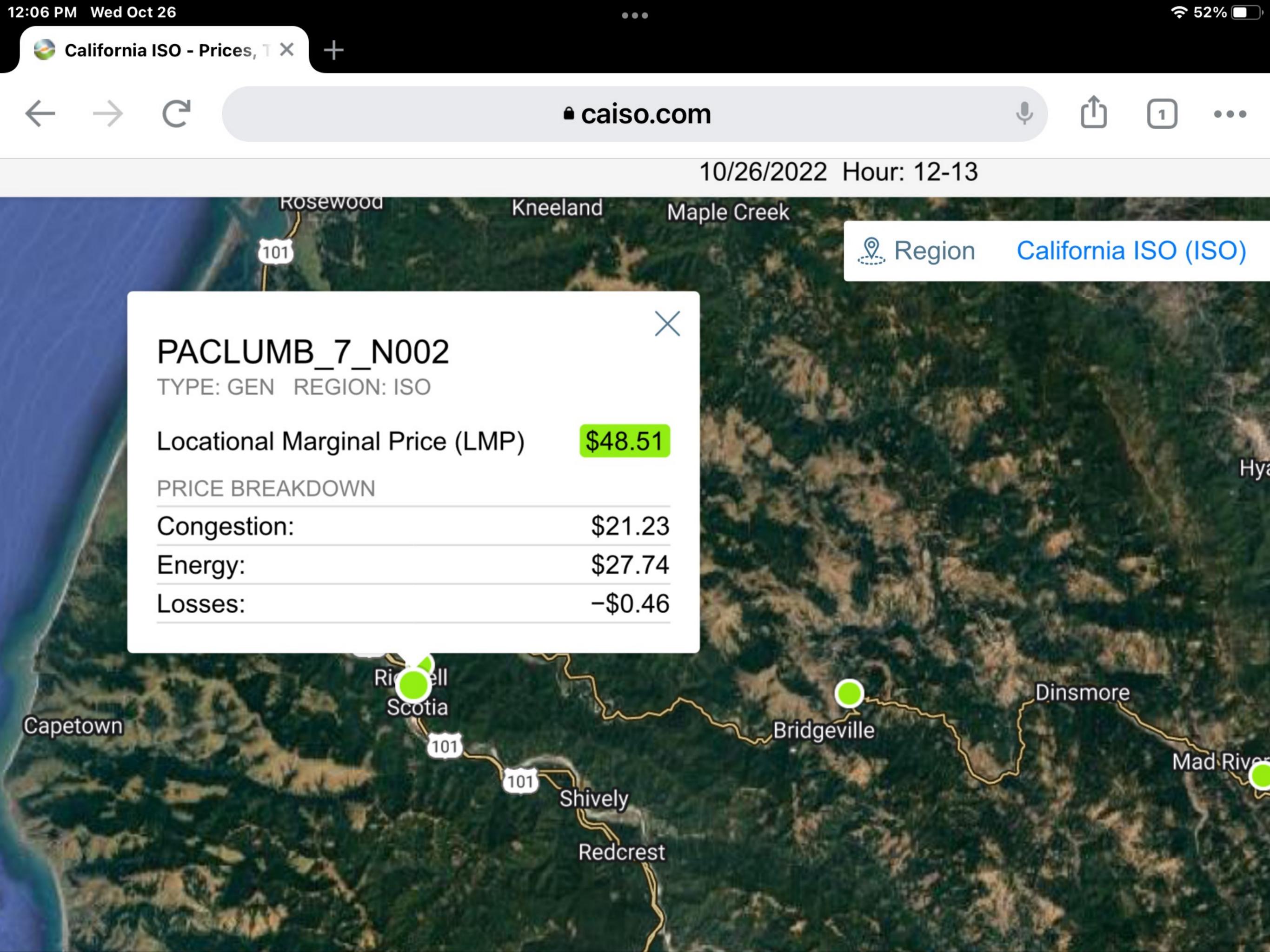
I think that the board has a fiduciary responsibility to rate payers. We should end the biomass contract as soon as possible. Saving should be applied to reserves, micro grids for first responders, health care centers and remote locations.

I don't believe that HRC power would go away. They can handle market forces. Electrons are electrons they can sell power to someone else. The last draft contract that I saw shows \$62 per MW. My opinion is that they signed the contract because no one else would pay more. It's very complicated to understand what and when exactly the market price is. The attachment is an example of the LMP (locational marginal price) for our region. I used the next day LMP for the HRC generation plant. (CAISO a is still using the plant identification from many years ago.) That LMP is around 49 dollars. Let the market decide or let the rate payers know that RCEA is supplementing the income of a privately held billion dollars plus company. Walt Paniak

Arcata

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Walt Paniak





STAFF REPORT Agenda Item # 7.1

AGENDA DATE:	October 27, 2022	
TO:	Board of Directors	
PREPARED BY:	Eileen Verbeck, Deputy Executive Director	
SUBJECT:	Racial Justice Plan Progress Update	

SUMMARY

In June 2020, amid the resurgence of national and global discussion on racial justice, the RCEA Board of Directors adopted a resolution on racial justice (Attachment A). At that time, an ad hoc board subcommittee was assembled to work with staff to address the commitments with the resolution. This report is to update the Board and public on progress made in the last year on those commitments and to facilitate adoption of the Racial Justice Plan.

Internal Operations

1. Equity actions in job descriptions, staff work plans, and regular staff trainings:

- a) RCEA recently joined the Government Alliance on Race and Equity in the hopes of receiving expert advice on revising job descriptions and work plans.
- b) RCEA conducts quarterly trainings and discussions during all-staff meetings. Recent topics of these trainings have included *Why Diversity Matters*, *Implicit Bias*, *Cultural Humility* and *Tokenism*.
- c) RCEA has contacted Stepping Stone Consulting and Queer Humboldt to put on additional staff training on diversity, equity and inclusion in early 2023.

2. Diversity, equity and inclusion in hiring and promotion

- All participants in RCEA hiring committees receive training on implicit bias. The training includes how to overcome unconscious bias when interviewing and hiring.
- b. RCEA has compiled a list of organizations dedicated to underserved members of our community and emails job announcements to this list.
- c. RCEA established blind recruitment. Blind recruitment is the process of removing any and all identification details from potential candidate resumes and applications. RCEA's intention is to solely evaluate candidates on their skills and experience instead of factors that can lead to biased decisions.
- d. Job applicants are now asked questions on the topic of Diversity, Equity, and Inclusion (DEI) in interviews.

e. RCEA completes a survey each year tracking the number of women, minority, and disabled veteran employees and contracted staff as required by the CA Public Utilities Commission RPS program on an annual basis.

As a California government agency, RCEA is restricted by Proposition 209 regarding affirmative action in hiring or contracting, and cannot explicitly favor any groups based on race, sex, color, ethnicity, or national origin above another. In 2020, Proposition 16, which would have repealed the ban on affirmative action, was defeated. This prohibition constrains the options that RCEA has to promote policies to benefit historically underrepresented groups.

External Partnerships and Programs

1. Tribal engagement

- a. RCEA contracted with Lost Coast Wind to organize and facilitate meetings with Tribes and tribal organizations to discuss offshore wind development along the Humboldt coast with the goal of forming productive working relationships.
- b. RCEA has begun discussions with the Yurok Tribe on their interest in becoming a member of RCEA and serving on the RCEA Board of Directors.
- c. RCEA leadership has contacted the Tribal Chairmen's Association to gauge interest in enhanced participation with RCEA.
- d. RCEA is targeting the next round of microgrid development to address reliability issues at the Hoopa Substation, which serves tribal facilities and customers of three tribes (Hoopa, Yurok, and Karuk).
- e. Over the last several years RCEA has played a central role in establishing the Redwood Region Climate and Community Resilience Hub (CORE Hub) to help transition our region's built and natural systems to become both decarbonized and resilient to help solve the climate emergency. Now hosted and led by the Humboldt Area Foundation, one of CORE Hub's central objectives is to prioritize equity, ensuring benefits accrue to underrepresented, historically and currently marginalized communities first and to the greatest extent.

2. Diversity, equity and inclusion in program selection design and implementation

- a. After conducting community outreach to understand how other organizations are supporting inclusion in program development, staff was advised that RCEA needs to understand the demographics of who RCEA's programs have been serving so that we can determine who has been left out. Staff implemented a demographics surveys of program recipients including a pilot survey for net energy metering customers who receive an annual payout for their excess electricity generation. The response to the demographic surveys has been very limited. Since March of 2021 we have only had 5 customer energy solution and 6 NEM surveys completed.
- b. We are working to become part of a "Cross System Collaborative" with the Humboldt County Department of Health & Human Services – DHHS. This will connect RCEA with 17 local Family Resource Centers and four Native American Tribes to implement RCEA Services to disadvantaged households. With this,

RCEA will be able to serve and refer many households to programs that can best serve them.

3. Energy justice in power procurement and energy resource development

- a. RCEA strives to increase the diversity of suppliers with whom RCEA contracts and from whom RCEA makes purchases, per the requirements of the CPUC's Supplier Diversity program and the Board adopted Racial Justice Resolution. Annually, RCEA submits tracking information on progress and strategies to increase supplier diversity in the forthcoming year.
- b. The following supplier diversity language is included in all RCEA's power solicitations:

SUPPLIER DIVERSITY AND LABOR PRACTICES

- Consistent with the California Public Utilities Code and California Public Utilities Commission policy objectives, RCEA collects information regarding supplier diversity and labor practices from project developers and their subcontractors regarding past, current and/or planned efforts and policies. Pursuant to Public Utilities Code §§ 8281-8286 (through which the CPUC requires RCEA and its commission-regulated subsidiaries and affiliates to submit annual detailed and verifiable plans for increasing women-owned, minority-owned, disabled veteranowned and LGBT-owned business enterprises' procurement in all categories), respondents that execute a contract with RCEA will be required to complete a supplier diversity questionnaire at the time of execution, and/or periodically at later dates as specified by RCEA. Respondents that are women, minority, LGBT, and disabled veteran-owned businesses are encouraged to apply for certification by the CPUC's Supplier Diversity Clearinghouse Program http://www.thesupplierclearinghouse.com/. This certification is voluntary and will not be used as a criterion for evaluation. As required by law in California, RCEA as a public agency does not give preferential treatment based on race, sex, color, ethnicity, or national origin; providing such information as part of the offer package will not impact the selection process or good standing of executed contracts.
- c. The following questions to which developers are required to respond are included in RCEA's power solicitations. The answers to these are evaluated in the context of the 'Location & community benefit' scoring criterion, which represents 10% of possible points an offer can receive. Some of the questions are not directly related to racial justice but could be if the project is located within a Disadvantaged Community or otherwise minority community.
 - i. Is the project located within a Disadvantaged Community (DAC) or does it benefit DACs in some way? If yes, please describe.
 - ii. Have you conducted outreach to the communities around the project location? If yes or outreach is planned in the future, please describe the outreach effort, including methods, languages in which materials have been made available, nature and volume of community response, and any changes to the project that have been made in response to community concerns.

- iii. Do you believe this project in its current form is consistent with the local community's priorities? If yes, please describe why you believe this. If no, describe any changes you would consider making to bring the project more into alignment with community priorities.
- iv. Please describe any additional societal, health, economic, water saving, or environmental benefits the project may have beyond the climate and GHG reduction benefits of renewable energy.
- d. RCEA completes a survey each year tracking the number of women, minority, and disabled veteran employees and contracted staff for the CPUC RPS program.
- e. An equity impact section has been added to the staff report template for reports to the Board of Directors. The intention of this section is to answer the following questions:
 - i. Does the proposed action further RCEA's Racial Justice Plan initiatives or tracked goals (e.g. RCEA program dollar distribution equity, increased service to identified underserved population segments, etc.)?
 - ii. Does the recommended action potentially impact racially-diverse inclusion in energy infrastructure or policy decision making, structural economic racism, access to energy and energy efficiency services, or freedom from pollution?

4. Collaboration with CalCCA Environmental Justice and Equity Committee, and other external equity organizations

- a. RCEA staff has been working closely with the CalCCA Environmental Justice and Equity Committee to learn from other CCAs and share what RCEA has been doing. More than one CCA has passed a resolution citing RCEA's resolution as motivation.
- b. In addition to the CalCCA Equity group, RCEA is a member of the Equity Metrics Working Group of the California Energy Efficiency Coordinating Committee (CAEECC). CAEECC is a forum for stakeholders to discuss energy efficiency matters under the purview of the CPUC. The purpose of the working group is to identify and define metrics to track progress of CPUC-authorized programs that provide energy efficiency services to hard-to-reach or underserved customers and disadvantaged communities to further environmental and social justice. As of Q3 2022, the working group is still in the process of finalizing recommendations.

ALIGNMENT WITH RCEA'S STRATEGIC PLAN

Goal 1.4.8 – Develop Programs that Foster Social Equity.

EQUITY IMPACTS

The RCEA Board of Directors adopted a Resolution in 2020 that made a commitment to racial justice. The proposed adoption of the RCEA Racial Justice Plan establishes a plan of action for

upcoming work to ensure that we improve and continue to serve our community in an equitable manner.

FINANCIAL IMPACT

None.

STAFF RECOMMENDATION

Accept Racial Justice Plan progress report.

Adopt Racial Justice Plan.

ATTACHMENTS:

- A. Resolution 2020-3 of the Board of Directors of the Redwood Coast Energy Authority Adopting a Commitment to Racial Justice
- B. Racial Justice Plan
- C. Racial Justice Plan Schedule

RESOLUTION NO. 2020-3

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE REDWOOD COAST ENERGY AUTHORITY ADOPTING A COMMITMENT TO RACIAL JUSTICE

WHEREAS, the murder of George Floyd by a Minneapolis police officer on May 25, 2020, and many other such incidents have catalyzed a national movement against police brutality, racism and white supremacy more broadly; and

WHEREAS, RCEA endeavors to end structural and institutional racism; and

WHEREAS, Humboldt County has a history of racial injustice which continues through the present day, dating back to white settlers forcefully removing Indigenous peoples from their land through government-sanctioned murder and violence and the expulsion of the entire Chinese immigrant population; and

WHEREAS, Indigenous, Black, Latinx, Asian, and other people of color have experienced discrimination throughout the history of the United States including redlining policies that have resulted in them being disproportionately affected by environmental pollutants caused by energy generation among other sources; and

WHEREAS, Indigenous, Black, Latinx, Asian, and other people of color have been subject to structural economic racism resulting in substantial disparities in household wealth as compared to white families; and

WHEREAS, RCEA is committed to supporting the economic viability of Humboldt County; and

WHEREAS, RCEA is committed to environmental justice, which is integrally linked to racial justice.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of the Redwood Coast Energy Authority adopts a commitment to racial justice.

BE IT FURTHER RESOLVED that RCEA staff is directed to:

- 1. Increase RCEA's involvement in CalCCA's Environmental Justice and Equity Committee.
- Add equity and inclusion activities to new job descriptions, future revisions of existing job descriptions, and staff work plans.
- Seek ways to ensure diversity and inclusion in hiring and promotion, observing the legal limitations on such practices set by state and national statutes.
- Increase engagement with the local tribes and work directly with the tribes on a long-term plan for meaningful collaboration.
- Explicitly address inclusion in selection, design, and implementation of RCEA's programs and
 projects, and in our public outreach and education materials to ensure that communities and
 organizations of Indigenous, Black, Latinx, Asian, and other people of color are optimally served.
- 6. Create a racial justice action plan to bring back to the Board of Directors for approval.

Adopted this 25th day of June, 2020

ATTEST:

Austin Allison, RCEA Board Chair

Lori Taketa, Clerk of the Board

Date: 7/28/2020

Date: July 28, 2020

CLERK'S CERTIFICATE

I hereby certify that the foregoing is a true and correct copy of Resolution 2020-3 passed and adopted at a regular meeting of the Redwood Coast Energy Authority, County of Humboldt, State of California, held on the 25th day of _______, 2020, by the following vote:

AYES: Allison, Avis, Curran, Fennell, Miller, Wilson, Winkler, Woo

NOES: None.

ABSENT: None.

ABSTENTIONS: Glaser

Clerk of the Board, Redwood Coast Energy Authority

Lori Falceto

RACIAL JUSTICE PLAN OF THE REDWOOD COAST ENERGY AUTHORITY

Adopted by the RCEA Board of Directors on XX/XX/2022

Energy is a necessity in modern life. RCEA recognizes persistent racial disparities among communities in accessing energy services. Owing to both past and ongoing racial discrimination, many people have been left out of energy infrastructure decisions, program benefits, professional careers, and policy design. Humboldt County has a history of racial injustice that continues through the present day, dating back to 19th century, when white European settlers forcibly removed Indigenous peoples from their land through government-sanctioned murder and violence. The entire Chinese immigrant population was expelled from the region. Indigenous, Black, Latinx, Asian, and other people of color have been subjected to structural economic racism resulting in substantial disparities in household wealth as compared to white families. RCEA recognizes that access to energy, energy efficiency, freedom from pollution and a role in the renewable energy transition intimately affect economic and personal health outcomes. RCEA strives to serve everyone in the Humboldt County community more equitably. To that end, RCEA has adopted this Racial Justice Plan and commits to the following actions:

Internal Operations

- 1. Equity actions in job descriptions, staff work plans, and regular staff trainings: RCEA is committed to creating a supportive and affirming space for staff across all identities, particularly Black, Indigenous and People of Color and other marginalized groups. We will continue to look for ways that our agency can support authentic engagement.
 - a) Current job descriptions will be revised to include equity actions as follows:
 - Department Director position descriptions: "Lead the ongoing implementation of RCEA's Racial Justice Plan within the [Director's Department] and actively champion and support justice, equity, diversity, and inclusion efforts across the organization."
 - Promote regular staff training opportunities on the topic of diversity, equity and inclusion.
 - Promote outreach and service to historically disadvantaged community groups in design and implementation of customer programs.
 - Excellent written and verbal communication skills, and ability to present to diverse audiences, specifically racially, ethnically, and socioeconomically diverse communities.
 - Experience considering the impacts of the work on multiple communities, including communities of color, in technical analysis.
 - All other position descriptions: "Support the ongoing implementation of RCEA's Racial Justice Plan and actively engage in justice, equity, diversity, and inclusion efforts within the organization."

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- As an individual staff member or part of a team, assist in efforts to promote customer programs that serve racially diverse communities.
- b) Human resources staff will explicitly include equity actions in new job descriptions as appropriate to the position.
- c) Staff supervisors will add equity actions to yearly staff work plans. These additions will document any equity work that staff is already doing in work plans and add new tasks appropriate to the position as dictated by this Plan.
- d) RCEA staff will participate in regular trainings on implicit bias.

2. Diversity, equity and inclusion in hiring and promotion:

RCEA recognizes the benefits of building a diverse team, and how equitability and diversity can increase engagement and performance.

- a) RCEA will survey staff every two years to track staff demographics, equity and diversity in hiring and promotion and, to the extent feasible, compare and evaluate internal data to county-wide demographics.
- b) All participants in hiring committees will receive refresher training on implicit bias before the recruitment process begins.
- c) Human resources will actively promote open positions to historically underserved affinity groups, on local campuses in the community, and affinity trade groups.
- d) Recruitment will include skills testing as appropriate for the position in conjunction with a traditional oral interview to reduce likelihood for bias in applicant review.
- e) At least one question relating to diversity, equity, and inclusion (DEI) will be included in oral interviews in recruitments. This will allow the hiring committee to assess the candidate's ability to succeed in DEI responsibilities of the position as well as signaling to all candidates that this is a core RCEA value.

External Partnerships and Programs

1. Tribal engagement:

Humboldt County is home to many Tribes. The Wiyot, Hupa, Yurok, Karuk, as well as the Bear River Rancheria, the Blue Lake Rancheria, Trinidad Rancheria, and Big Lagoon Rancheria are several of them. Many of the programs RCEA implements in the community are on Tribal land, and, as such, seeks Tribal engagement.

- a) RCEA staff will continue and expand work with local Tribes on program development, customer outreach, and policy setting.
- b) RCEA staff will continue and expand efforts to identify opportunities to collaborate with local Tribes as partners on sustainable energy initiatives.
- c) The RCEA Board of Directors will strive to include Tribal representation on the RCEA Community Advisory Committee.
- d) RCEA will establish a formal "Tribal Liaison" position within the organization by either assigning the role to an appropriate staff member or engaging a qualified outside consultant. The Tribal Liaison will be responsible for fostering ongoing communication and collaboration with local Tribes as well as supporting internal compliance with the Tribal-engagement elements of this Plan.

- e) RCEA leadership will attend local Tribal Chairman's meetings as invited to better understand local energy-related priorities and needs.
- f) RCEA leadership will seek to meet with individual Tribal governments to determine interest in participation in RCEA's programs and governance.

2. Diversity, equity and inclusion in program selection design and implementation:

- a) To provide a baseline for how RCEA is serving all segments of our local community, when possible RCEA will issue a voluntary demographics survey to customers receiving program benefits such as rebates, technology or professional services.
- b) Using customer surveys that have been collected, RCEA will annually evaluate the distribution equity of RCEA's programmatic dollars using standard statistical methods to the extent feasible. If RCEA programs are found to underserve some segment of the population, staff will reach out to community-based organizations to learn how to connect with and support those communities.
- c) Every two years RCEA staff leadership will conduct a diversity, equity and inclusion review of all RCEA programs, which will include an evaluation of aggregated demographic survey results along with overall program design and implementation strategies. With input from the RCEA Community Advisory Committee, programmatic goals and strategies will be adjusted or reset as necessary to ensure that RCEA is equitably serving the entire community.

3. Energy justice in power procurement and energy resource development:

- **a)** RCEA staff will incorporate <u>energy justice best practices</u>¹ and affordability into renewable development and power purchase solicitations and resource planning.
- **b)** RCEA will continue to include project location and community benefit in its evaluation criteria for power solicitations, in an effort to contract for projects that benefit racially diverse communities and to avoid projects that are detrimental to those communities.
- **c)** RCEA will continue to participate in the California Public Utilities Commission's Supplier Diversity Program, which seeks to promote participation of Diverse Business Enterprises in the power industry, including encouraging qualified energy suppliers to register themselves in the CPUC's Supplier Clearinghouse².
- **d)** For energy projects in which RCEA takes an active role in inception, development, ownership and/or operation, staff will work with private partners to collaborate and inclusively engage with with local communities throughout the development process, rather than a "decide-announce-defend" approach.
- **e)** RCEA will seek partnerships with expert consultants-on racially diverse community engagement, especially for large-scale projects such as offshore wind.
- 4. Collaboration with the CalCCA Environmental Justice and Equity Committee, and other external equity organizations:

¹ https://iejusa.org/wp-content/uploads/2019/12/The-Energy-Justice-Workbook-2019-web.pdf

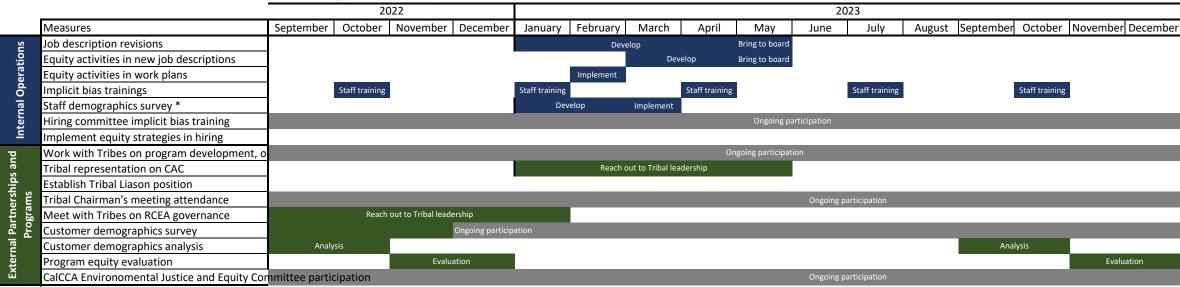
² https://sch.thesupplierclearinghouse.com/

As a member of CalCCA, who "share a commitment to inclusion and representation of our diverse communities through democratic governance and intensive community engagement," RCEA will represent Humboldt County in these endeavors.

- a) RCEA staff will continue to be active members of the CalCCA Environmental Justice and Equity Committee.
- b) RCEA staff will learn how other CCAs develop programs and policies to reach historically underserved community members in order to incorporate successful practices in RCEA's regular operations.
- c) Staff will share RCEA's successes in community engagement with other CCAs to promote improved practices throughout California.
- d) As of June 2021, RCEA is now a member of the Government Alliance on Race and Equity (GARE). RCEA will utilize GARE's member resources for opportunities related to staff training, assessment tools and discussion forums.
- e) As of July 2021, RCEA will participate as a member of the newly formed Equity Metrics Working Group of the California Energy Efficiency Coordinating Committee (CAEECC), which serves as an advisory group to the CPUC.

RCEA staff will provide an annual report to the Board of Directors and RCEA's Community Advisory Committee on the implementation of this Racial Justice Plan.

Redwood Coast Energy Authority Racial Justice Plan Schedule



^{*}recommend collecting this data through recruitment process



STAFF REPORT Agenda Item # 8.1

AGENDA DATE:	October 27, 2022		
TO:	Board of Directors		
PREPARED BY:	Stephen Kullmann, Director of Demand Side Management		
SUBJECT:	Regulatory and Legal Services Agreement with PefferLegal		

SUMMARY

In March 2022, RCEA, on behalf of itself and six partner organizations, filed a motion to form a new Regional Energy Network (REN). The proposed REN is the Rural Regional Energy Network (RuralREN) which would serve hard-to-reach and underserved customers in 31 rural counties across the state. RCEA is the designated Program Administrator for the proposed RuralREN.

In May 2021, staff evaluated legal and regulatory needs for the application phase of the RuralREN and issued a request for proposals for services that resulted in the selection of Braun, Blaising and Wynne (formerly Braun, Blaising, Smith and Wynne). The firm provided these services through the proposal phase of the RuralREN application. RCEA submitted its RuralREN proposal to the California Public Utilities Commission (CPUC) in March 2022, concurrently with other Program Administrators throughout California.

Following the submission of the RuralREN proposal, the CPUC established a regulatory timeline for an extended stakeholder process to consider all Program Administrator proposed programs and budgets. This process will inform the CPUC's ultimate decision on whether to approve the RuralREN proposal in quarter three of 2023.

Following the proposal submission, RCEA issued another competitive solicitation for legal and regulatory services to support RCEA through the stakeholder process up until the CPUC's issuance of a decision in 2023.

RCEA received proposals from two firms and both proposals were deemed responsive to the request in its entirety. Staff further evaluated the proposals on the following criteria:

- Prior experience in providing regulatory and legal services to Regional Energy Networks and government agencies comparable to RCEA.
- Qualifications of the firm and assigned staff, as well as the quality of management support.
- Cost and fees.

Staff is recommending entering into an agreement with PefferLegal as a well-qualified practice with direct experience with REN regulatory matters, and the lowest per hour rates of the two most qualified firms.

ALIGNMENT WITH RCEA'S STRATEGIC PLAN

Not applicable.

EQUITY IMPACTS

Not applicable.

FINANCIAL IMPACT

The hourly rates included in the PefferLegal proposal are \$310 per hour, 16% lower than the current billing rates for our retained regulatory consultant for CCA matters. Based on the estimation of legal and regulatory services needed, the not-to-exceed value of the contract will be \$90,000. RCEA's current fiscal year budget for regulatory services, the budget line item these services will be billed to, is \$180,000 and spending through August is at about \$4,000. Staff anticipates that the proposed budget line item for the 2022-23 fiscal year will accommodate the cost of legal services through the CPUC's 2023 decision.

The total proposed 5-year RuralREN budget is just over \$95.8M, with \$8.1M specified for RCEA to cover Administration costs separate from the amount to provide services to RCEA customers.

STAFF RECOMMENDATION

Authorize the Executive Director to execute a Legal Services Agreement with PefferLegal for RuralREN regulatory support and legal services through December 2023 for a not to exceed value of \$90,000, subject to sufficient budgetary allocations and pending RCEA General Counsel review.

ATTACHMENTS

1. PefferLegal Response to Request for Proposal for Regulatory and Legal Services

Proposal for Legal and Regulatory Services for Redwood Coast Energy Authority's RuralREN Program

Law Office of David Peffer

3424 Cook Street Rocklin, California 95765 (760) 715-0407 peffer@pefferlegal.com

October 14, 2022

COVER MATTERS

Introduction

Thank you for the opportunity to provide this proposal for regulatory and legal services for Redwood Coast Energy Authority's ("RCEA") Rural Regional Energy Network ("RuralREN") program. The Law Office of David Peffer ("PefferLegal") is a new solo law practice consisting of attorney David Peffer, a seasoned California Public Utilities Commission ("CPUC") practitioner with the experience and specialized skill set needed to help RuralREN navigate the REN formation process in CPUC proceeding A.22-02-005. PefferLegal welcomes the opportunity to serve RCEA and RuralREN.

Firm Information

Law Office of David Peffer 3424 Cook Street Rocklin, California 95765

Phone: (760) 715-0407

Email: peffer@pefferlegal.com

Firm Representative

The following person is authorized to represent, answer questions on behalf of, and enter binding agreements on behalf of PefferLegal:

David Peffer Attornev Law Office of David Peffer 3424 Cook Street Rocklin, California 95765

Phone: (760) 715-0407

Email: peffer@pefferlegal.com

This Proposal is provided in response to RCEA's September 2022 Request for Proposal for Legal and Regulatory Services (RFP-22-202).

Statement of Licensure

PefferLegal and all key staff to be assigned to this matter are properly licensed to practice in California. PefferLegal is a solo law practice, and attorney David Peffer (State Bar Number 270479) is an active member of the State Bar of California.

Disclosure of Professional Relationships Involving RCEA

From 2016 to September 2022 David Peffer was an attorney in Braun Blaising & Wynne's CCA practice. This work included the advising and representing RCEA, either individually or as part of a joint CCA group, in the following matters:

- Providing advice to RCEA on one-off regulatory matters and questions.
- Providing RCEA with support in preparing CPUC compliance filings and submissions.
- Representing a Joint CCA group that included RCEA in Phases 1 and 2 of the CPUC's Microgrids Rulemaking.
- Representing a Joint CCA De-Energization/PSPS group that, at times, included RCEA.
- Providing RCEA's RuralREN program with legal and regulatory support and representation in preparing its REN Formation Motion and advocating for approval of its Motion before the CPUC in R.13-11-005 and A.22-05-005.

This past representation does not create any conflicts of interest that would limit PefferLegal's ability to represent RCEA and RCEA's RuralREN program going forward. In his past representation of RCEA, Mr. Peffer acted in the furtherance of RCEA's interests and in accordance with the duty of loyalty owed by attorneys to their clients.

Notice of Potential Conflicts

PefferLegal places its highest priority on fulfilling its duties of loyalty and candor to its clients. PefferLegal does not have any potential conflicts to report at this time. In accordance with the California Bar's Ethics Rules, PefferLegal will will provide RCEA with immediate written notice of any professional or personal relationships entered into during the period of the agreement that could pose a potential conflict with the work RCEA is doing, the work RuralREN is doing, or RCEA's or RuralREN's interests generally. It is PefferLegal's policy to provide clients with the maximum possible level of transparency regarding potential conflicts, and the firm will err on the side of disclosure even if a relationship poses only a remote likelihood of creating a conflict.

QUALIFICATIONS

Firm Qualifications

PefferLegal is uniquely qualified to provide RCEA's RuralREN Program with the legal and regulatory services described in the RFP. From late-2021 to September 2022, David Peffer, then working at another firm, was RuralREN's lead outside attorney. In this role Mr. Peffer provided RuralREN with many of the services described in the RFP's scope of work. These services include:

- Providing the RuralREN team with legal advice and regulatory support in developing the RuralREN Business Plan.
- Drafting RuralREN's REN formation motion, originally submitted in the Energy Efficiency Rulemaking (R.13-11-005).
- Working with RuralREN to develop its litigation strategy in support of its Motion and adapting this strategy to procedural developments.
- Drafting RuralREN's A.22-02-005 Prehearing Conference Statement and representing RuralREN at the Prehearing Conference.
- Working with other parties, in particular the other RENs, to develop coordinated positions.
- Providing legal review of data requests submitted to RuralREN and RuralREN's draft responses.

This experience makes PefferLegal the ideal firm to provide the services sought in the RFP. PefferLegal is positioned to provide RuralREN with continuity of representation, with no ramp-up or extended learning period required. Mr. Peffer is deeply familiar with the CPUC's REN formation process, the key issues at play in A.22-02-005, RuralREN's interests, and RuralREN's litigation strategy.

This continuity of representation is especially important given the very complex procedural position that RuralREN currently finds itself in, having filed a REN formation Motion rather than an Application, but having its Motion considered in the Energy Efficiency Application proceeding.

PefferLegal already has solid working relationships with RuralREN team, the other RENs, the CPUC's energy division, and many of the other key parties in A.22-02-005.

More broadly, Mr. Peffer has the experience and professional qualifications needed to provide the legal and regulatory services that the RFP is seeking. These qualifications are discussed in the "Personnel Qualifications" section below.

Professional References

Regional Energy Network References:

Stephen Kullmann
Demand Side Management Director
Redwood Coast Energy Authority

Email: Skullmann@RedwoodEnergy.org

Phone: (707) 269-1700

References for Other CCA Energy Efficiency Work:

Neal Reardon
Director of Regulatory Affairs
Sonoma Clean Power

Email: nreardon@sonomacleanpower.org

Phone: (707) 890-8488

Jeremy Waen
Director of Regulatory Policy
Peninsula Clean Energy Authority

Email: jwaen@peninsulacleanenergy.com

Phone: (650) 257-8026

Personnel Qualifications

PefferLegal is a solo law practice, and David Peffer will be the only attorney working on this matter.

Mr. Peffer is a seasoned CPUC litigator with over 12 years of experience practicing at the CPUC. Mr. Peffer has deep experience in all aspects of CPUC advocacy, including:

- Developing CPUC litigation strategies and adapting them to changing procedural circumstances.
- Commenting on technical or policy rulings/proposals.
- Motion practice.
- Negotiating settlements in CPUC proceedings.
- Propounding and responding to Data Requests.
- Assisting witnesses in the preparation of expert testimony.
- Defending witnesses in evidentiary hearings.

- Cross-examining other parties' witnesses in evidentiary hearings.
- Briefing.
- Commenting on Proposed Decisions.
- Advocating on behalf of clients in ex parte meetings with CPUC Commissioners and staff.

Mr. Peffer has significant experience working on Energy Efficiency issues. Mr. Peffer has advised several CCAs, including Peninsula Clean Energy, Sonoma Clean Power, San Jose Community Energy, and Lancaster Choice Energy on various aspects of their CCA "elect to administer" energy efficiency programs. Mr. Peffer contributed significantly to the drafting of Sonoma Clean Power's and Peninsula Clean Energy's respective Elect to Administer Advice Letters and Business Plans. Most Importantly, from his previous representation of RuralREN Mr. Peffer brings a deep working knowledge of RuralREN's interests, the REN formation process, and the key issues of interest to RuralREN play in A.22-02-005.

Mr. Peffer has top-tier educational qualifications, possessing a B.A. from U.C. Berkeley, a J.D. from the University of Michigan, and an M.A. in Political Science from the University of Michigan.

COSTS AND FEES

As a streamlined solo law practice without significant overhead, PefferLegal can pass significant savings on to its clients. PefferLegal proposes to reduce his hourly rate by 16% compared to the rate RCEA previously paid for his RuralREN work.

Attorney Fees

PefferLegal proposes an attorney rate of \$310 an hour for work under this agreement performed by David Peffer.

Although it does not appear that travel for A.22-02-005 will be necessary, if travel is required PefferLegal proposes that travel time be billed at of 50% of the attorney rate, or \$155 an hour. Any time that Mr. Peffer spends working on other matters in transit will be subtracted from the time billed for travel.

Other Costs

PefferLegal is able and willing provide legal support services such as printing and mailing documents, filing and serving pleadings, and scheduling ex parte meetings. However, in many instances it may be more cost-effective for RCEA to handle these activities. PefferLegal proposes to work closely with the RCEA RuralREN team to identify efficiencies and avoid the use of attorney billable time for activities the team can handle.

PefferLegal proposes that it any legal support costs that it does incur, such as document printing or preparation, mailing, or messenger/service fees, be billed through to the client without markup.

If travel is necessary, PefferLegal proposes that reasonable transportation and accommodations costs be billed through to the client without markup. PefferLegal will secure client approval of airfare and accommodations before making purchases/reservations.

OTHER MATTERS

Insurance

PefferLegal is in the process of procuring both a professional liability policy with \$1 million in coverage and a comprehensive general liability policy with \$1 million in coverage. Both policies will be in place prior to October 21, 2022. If PefferLegal is selected, prior to executing the representation agreement PefferLegal will provide RCEA with certificates of insurance for both policies naming RCEA as additional insured.

CONCLUSION

Thank you for the opportunity to submit this proposal. I would love the opportunity to continue working with RCEA's amazing team on a project as significant, important, and challenging as RuralREN.



STAFF REPORT Agenda Item # 8.2

AGENDA DATE:	October 27, 2022
TO:	Board of Directors
FROM:	Matthew Marshall, Executive Director
SUBJECT:	PG&E's Southern Humboldt Transmission Issues

BACKGROUND

In September, local news outlets reported that PG&E had reached its capacity for electricity transmission in the Eel River Valley and Southern Humboldt County and is unable to provide promised electricity service to multiple development projects that are currently underway. Affected communities include Fortuna, Rio Dell and Garberville. Affected development projects include, among others, the Jerold Phelps Community Hospital in Garberville, Fortuna's Strong's Creek Plaza and Riverwalk development areas and the city's sewage lift back-up power system. PG&E representatives informed elected officials and staff from affected jurisdictions that distribution system upgrades to accommodate load growth will cost \$900 million and take between 7-10 years to complete, a timeline that prevents local jurisdictions from meeting county and state Climate Action Plan decarbonization requirements while also halting economic development. A September 20 PG&E press release stated that the utility's multi-year grid plan addresses the area's increasing capacity needs and that projects are already in progress.

In the wake of these reports, RCEA's Board of Directors requested a presentation at this meeting on measures PG&E is taking to upgrade and develop its power distribution infrastructure in Southern Humboldt County to meet increasing electricity load and measures PG&E is taking to improve communication with local government agencies.

SUMMARY

Executive Director Matthew Marshall will provide a brief update on:

- PG&E Southern Humboldt Grid Issues, and
- Other topics as needed.

RECOMMENDED ACTION

None. (Information only.)

ATTACHMENT

None.

PG&E's
Humboldt
County Grid
Issues



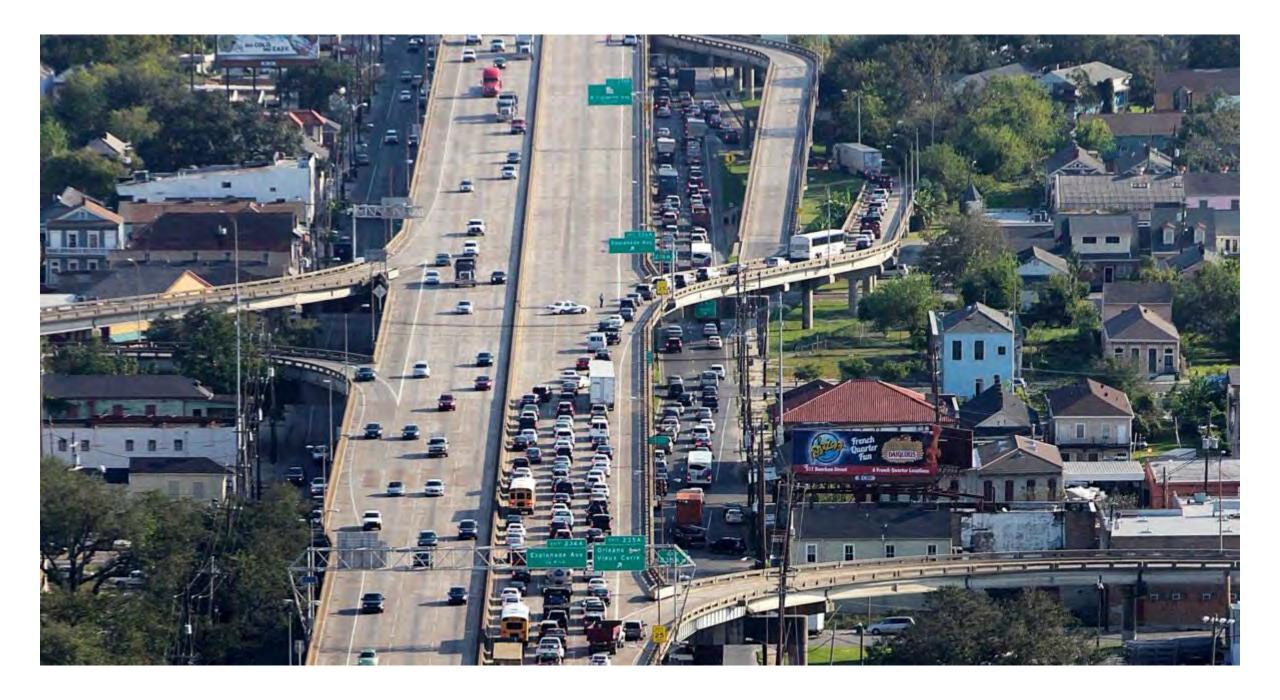
Grid infrastructure

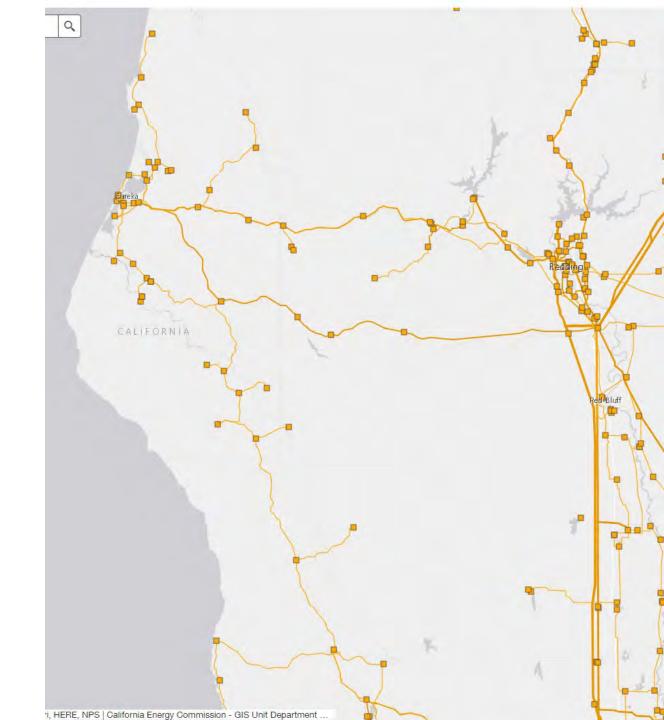
- Transmission = highways
- Substations = offramps/interchanges
- Distribution = city streets and county roads



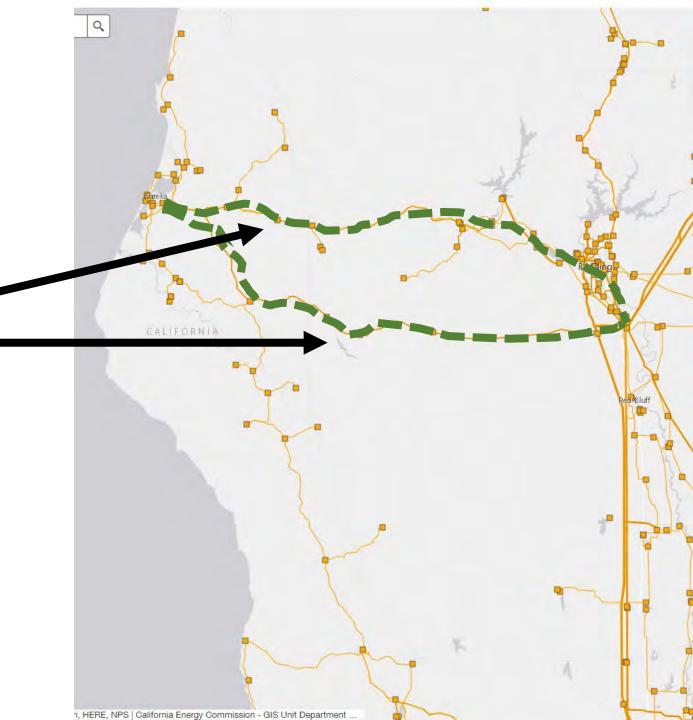




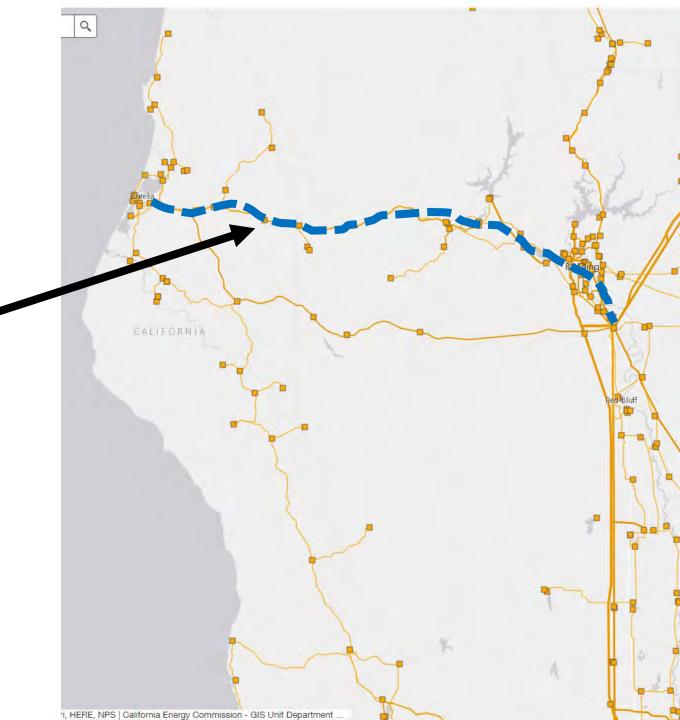




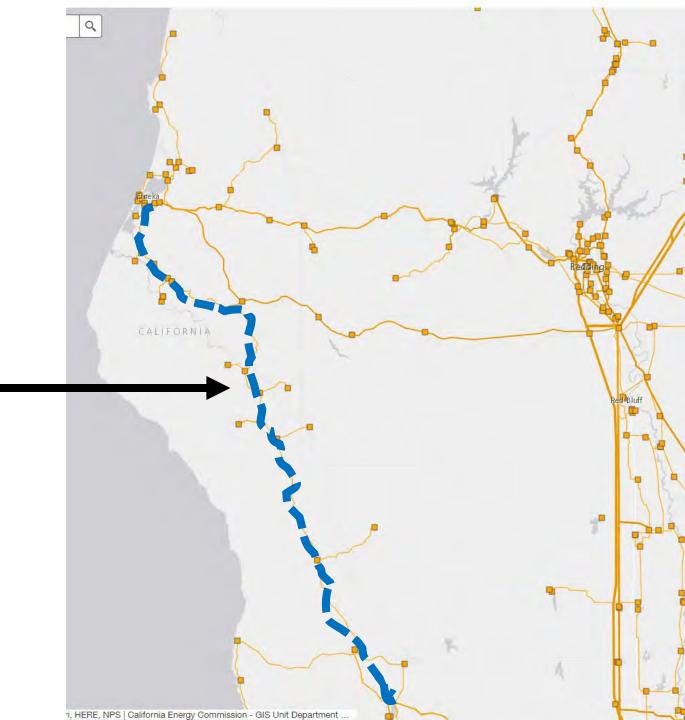
115kV lines from Eureka to Cottonwood - ~follow Hwy 299 and Hwy 36



60kV lines from Eureka to Cottonwood - ~follows 115kV line along Hwy 299

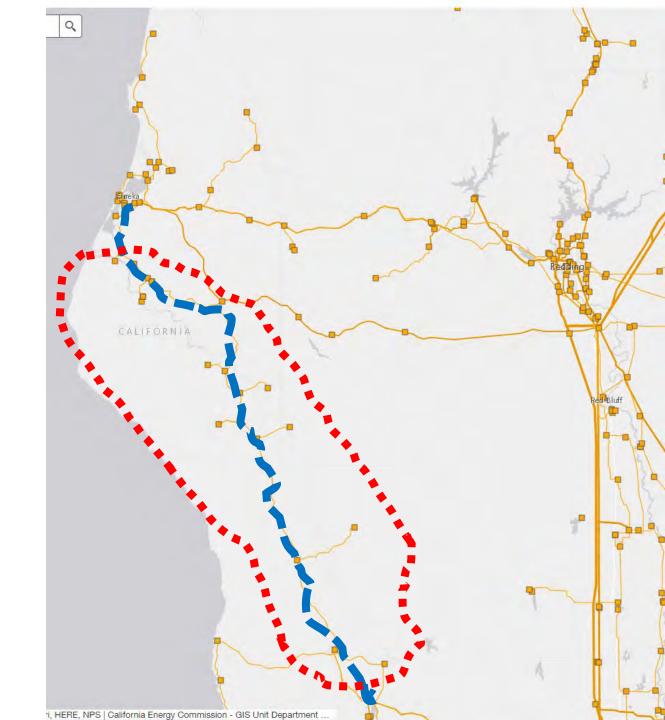


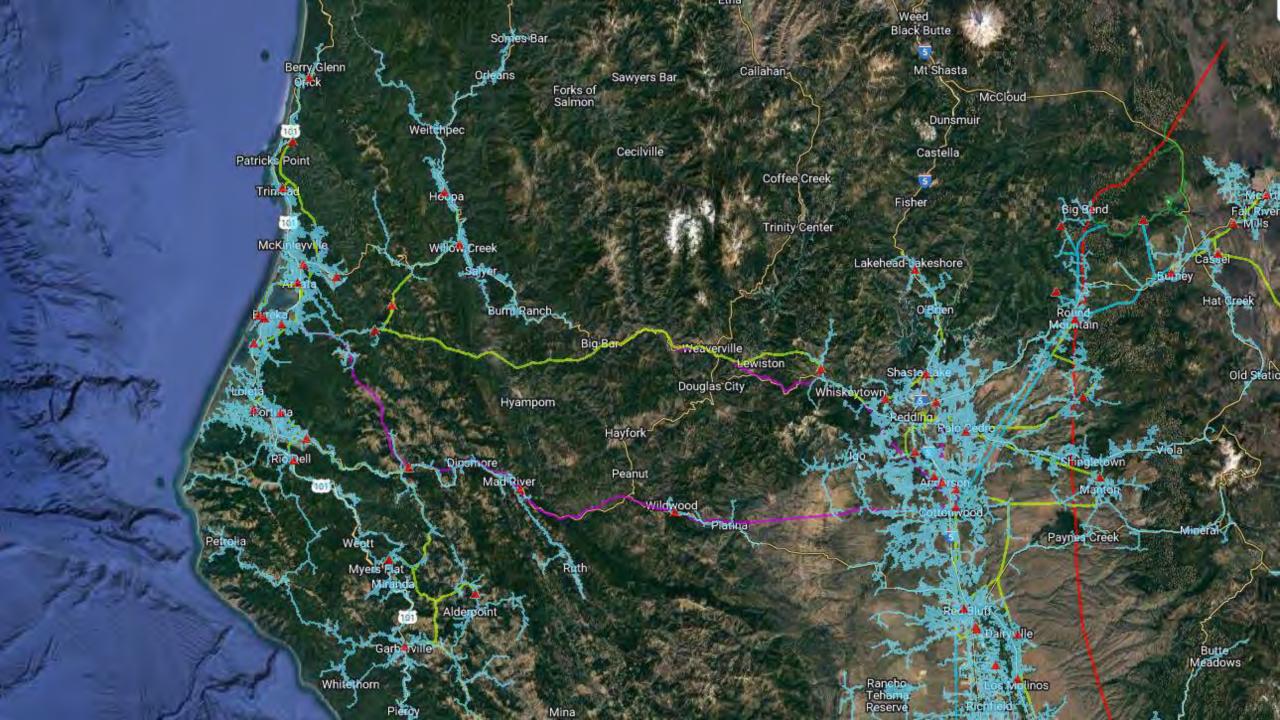
60kV lines (with spurs) from Eureka to Bridgeville, Bridgeville to Willits

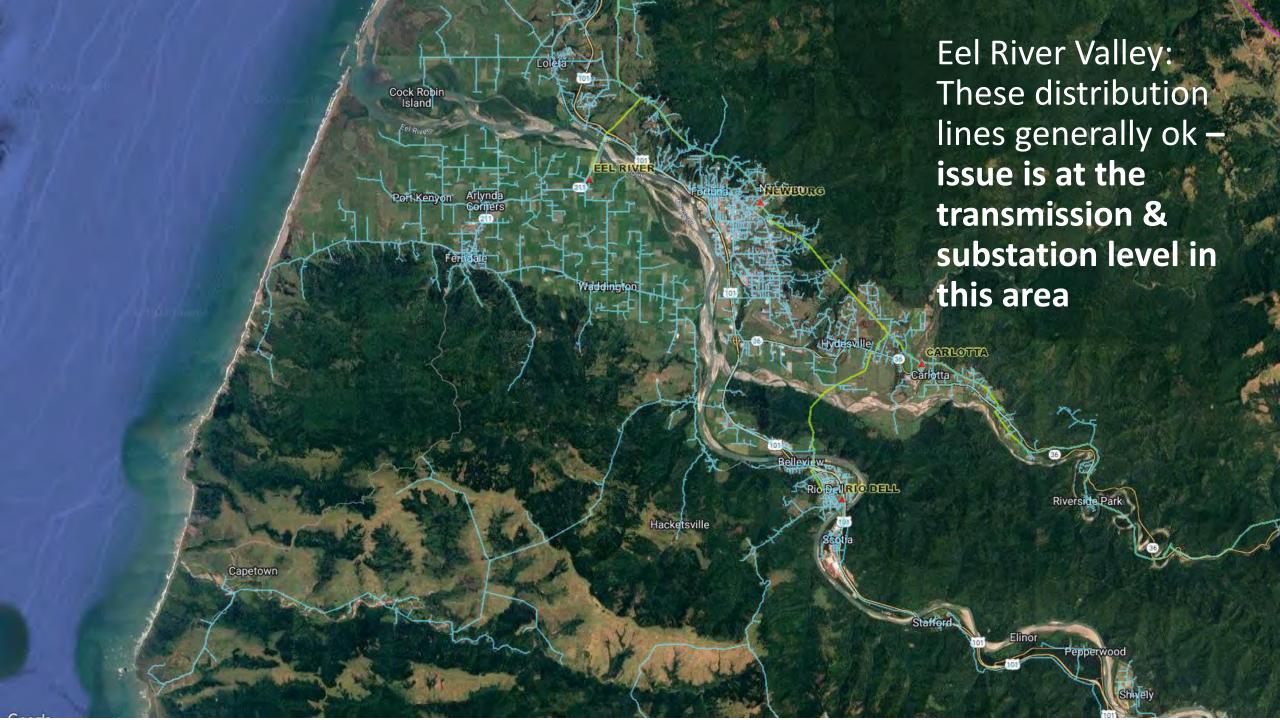


60kV lines (with spurs) from Eureka to Bridgeville, Bridgeville to Willits

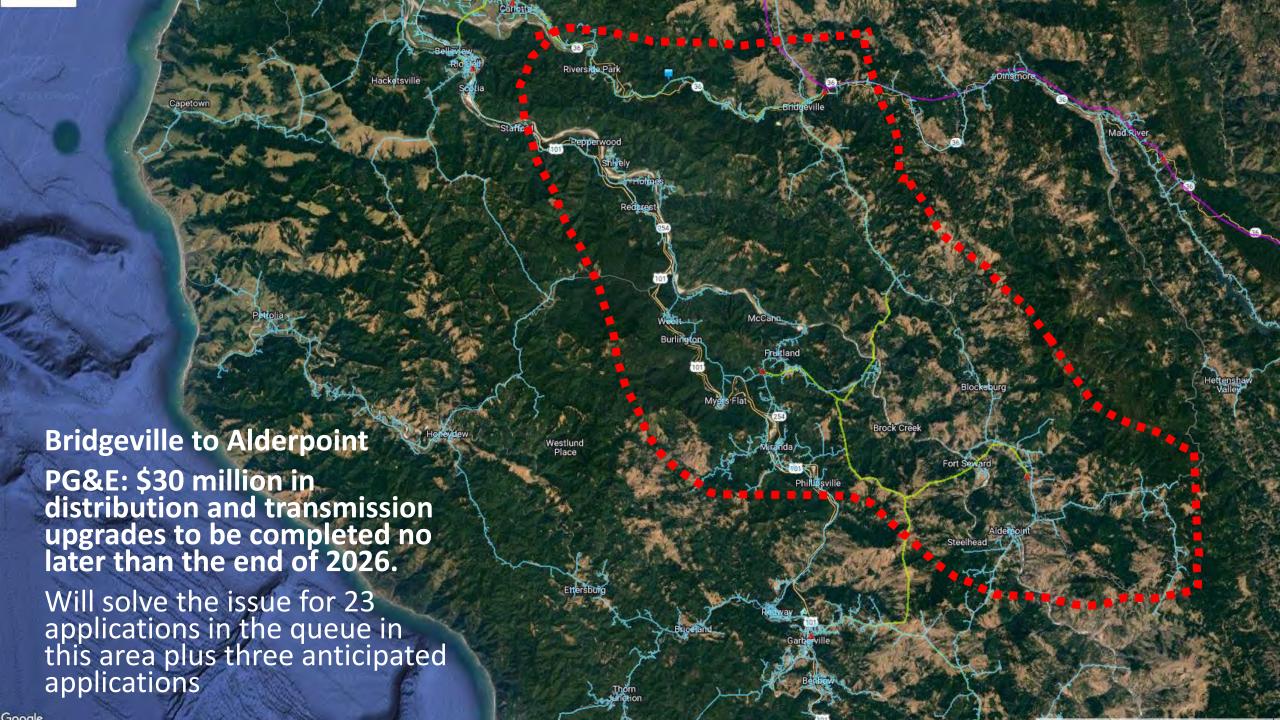
The transmission-level problems are this line and its substations — which impacts customers served by the distribution lines branching out from those substations

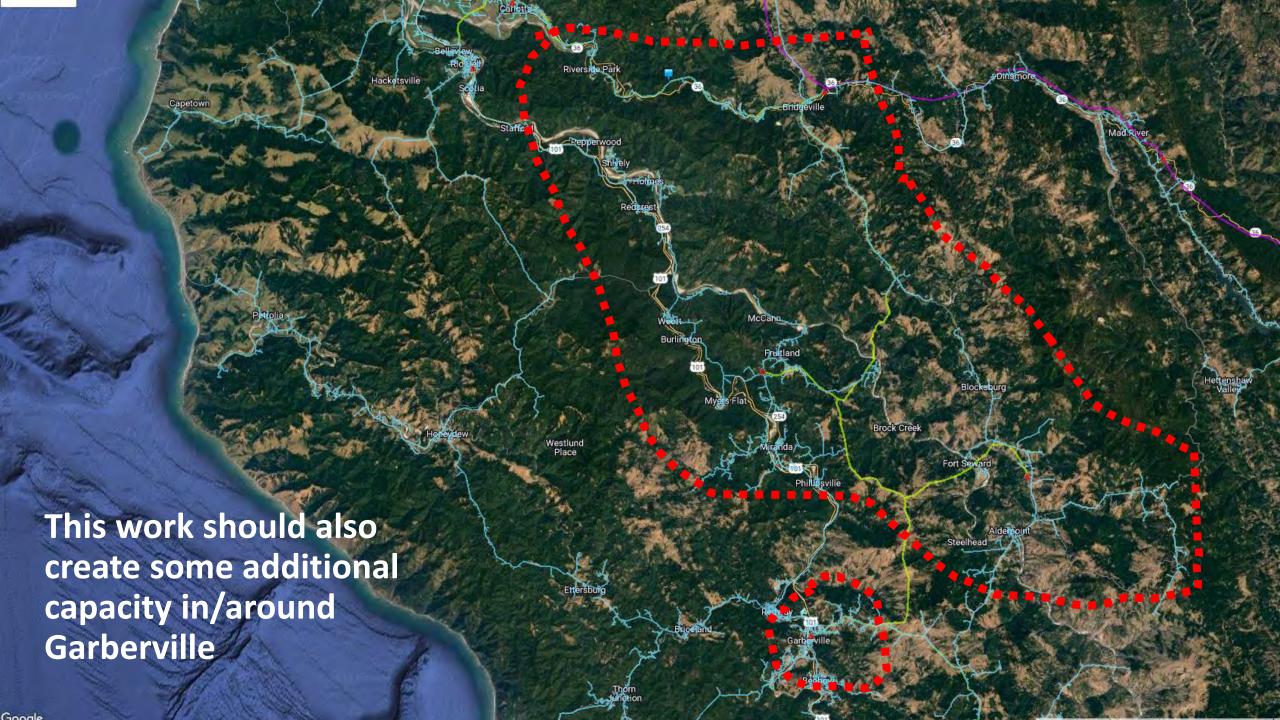


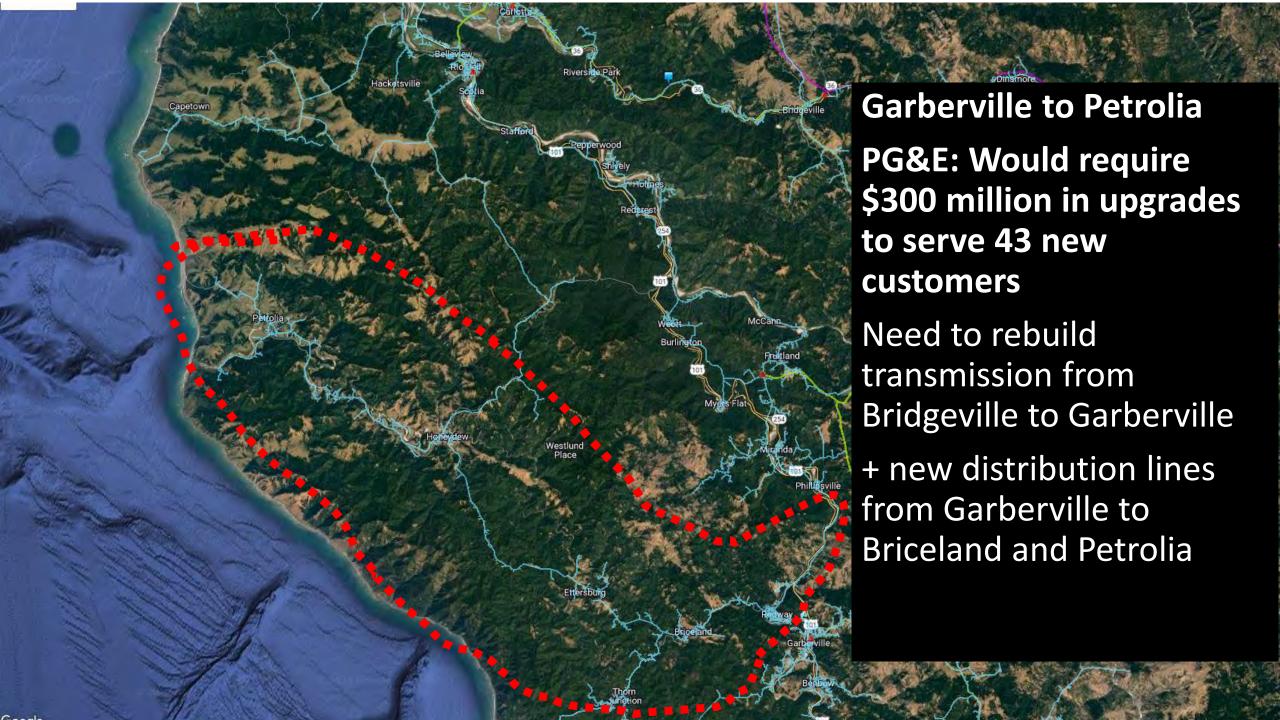


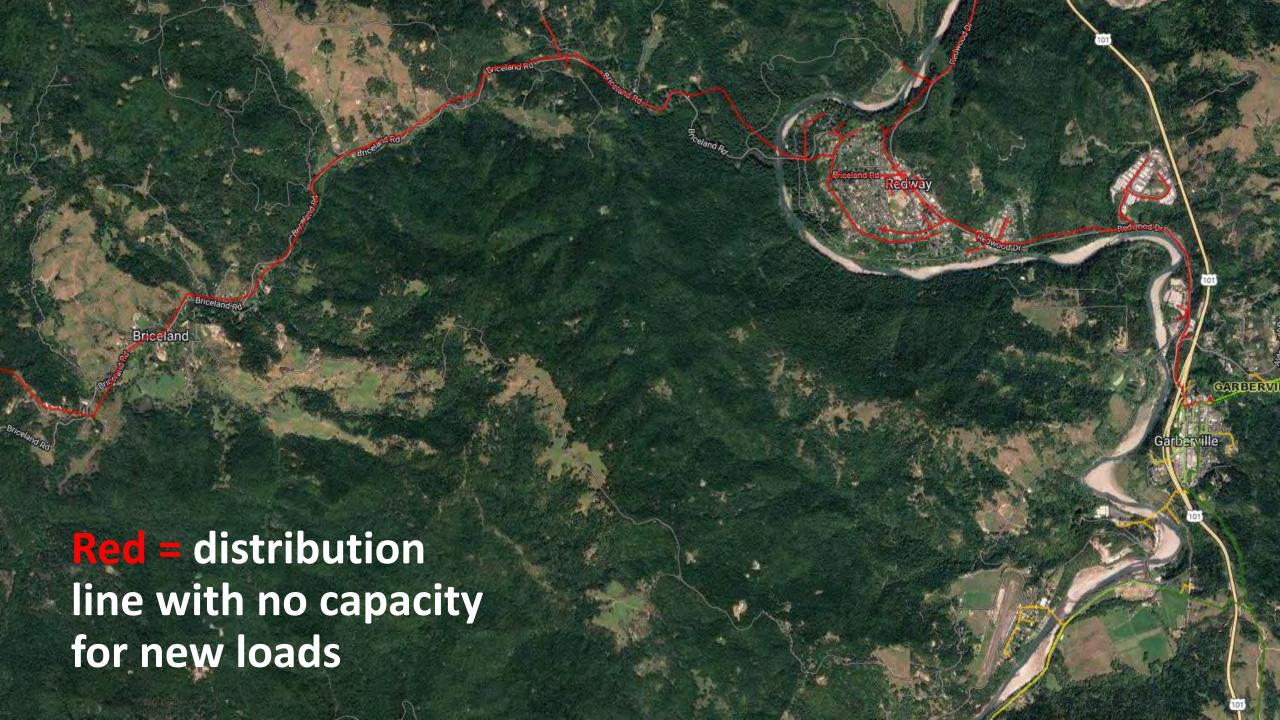


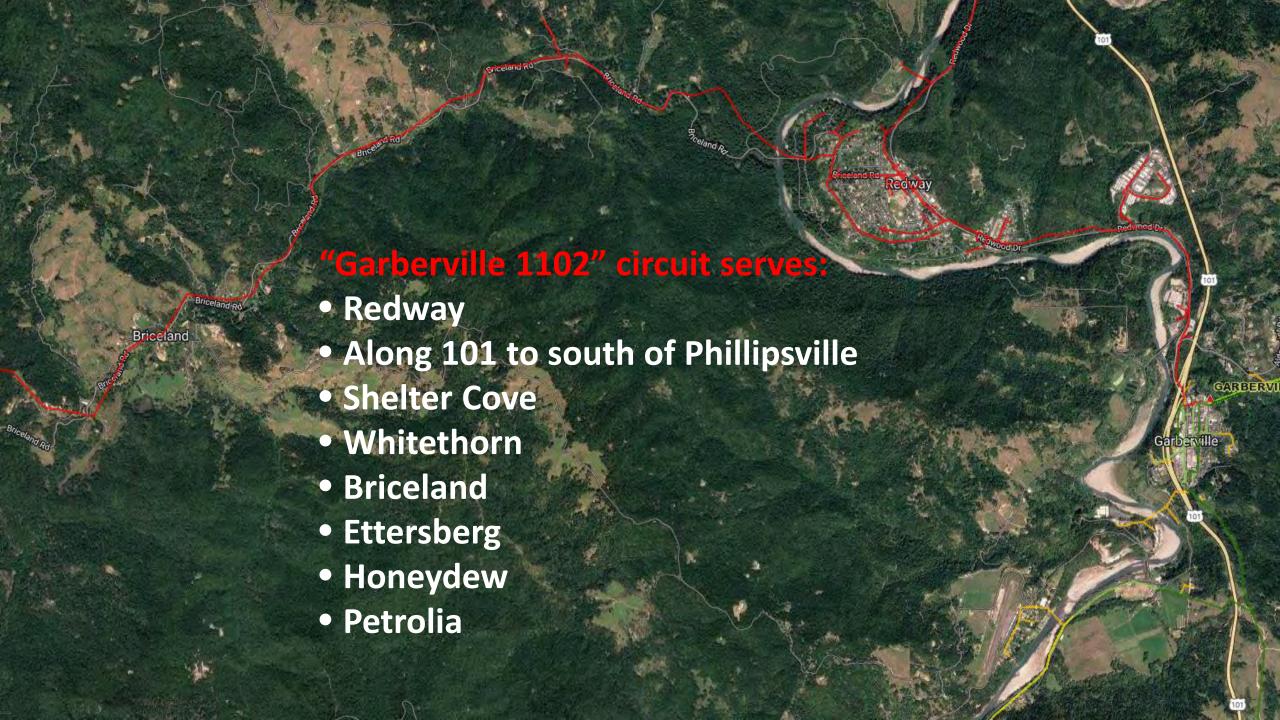


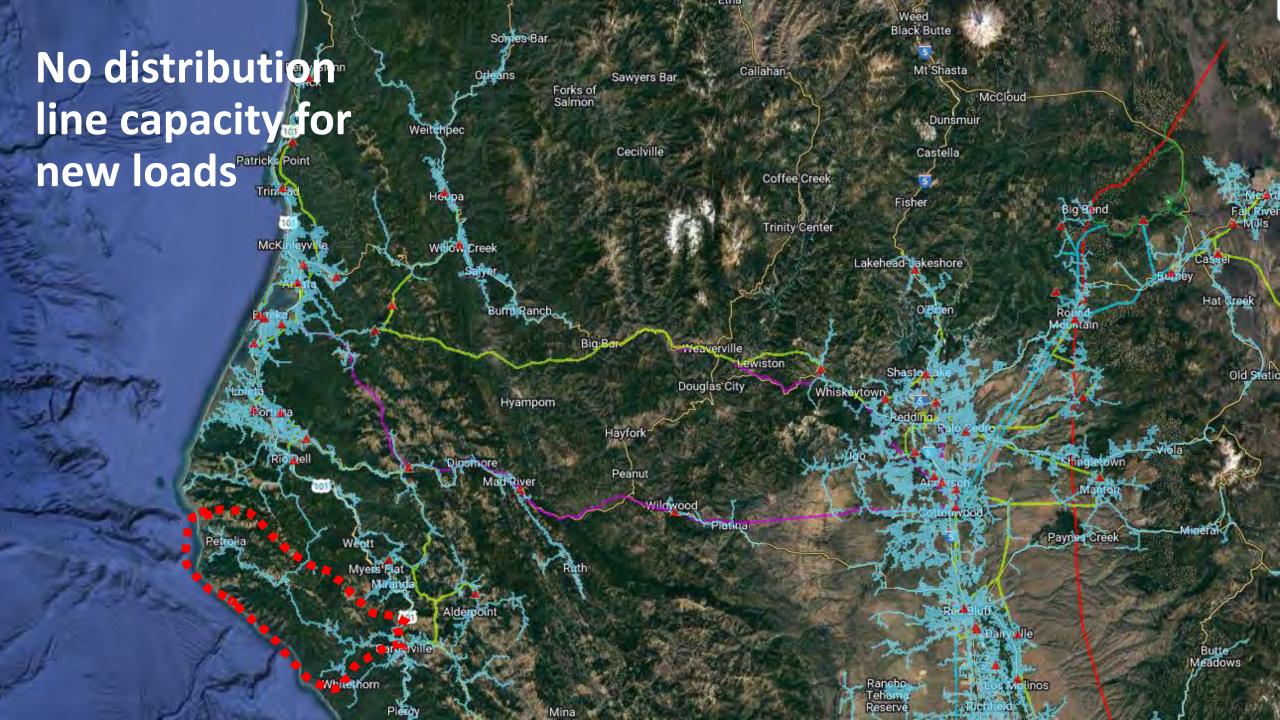


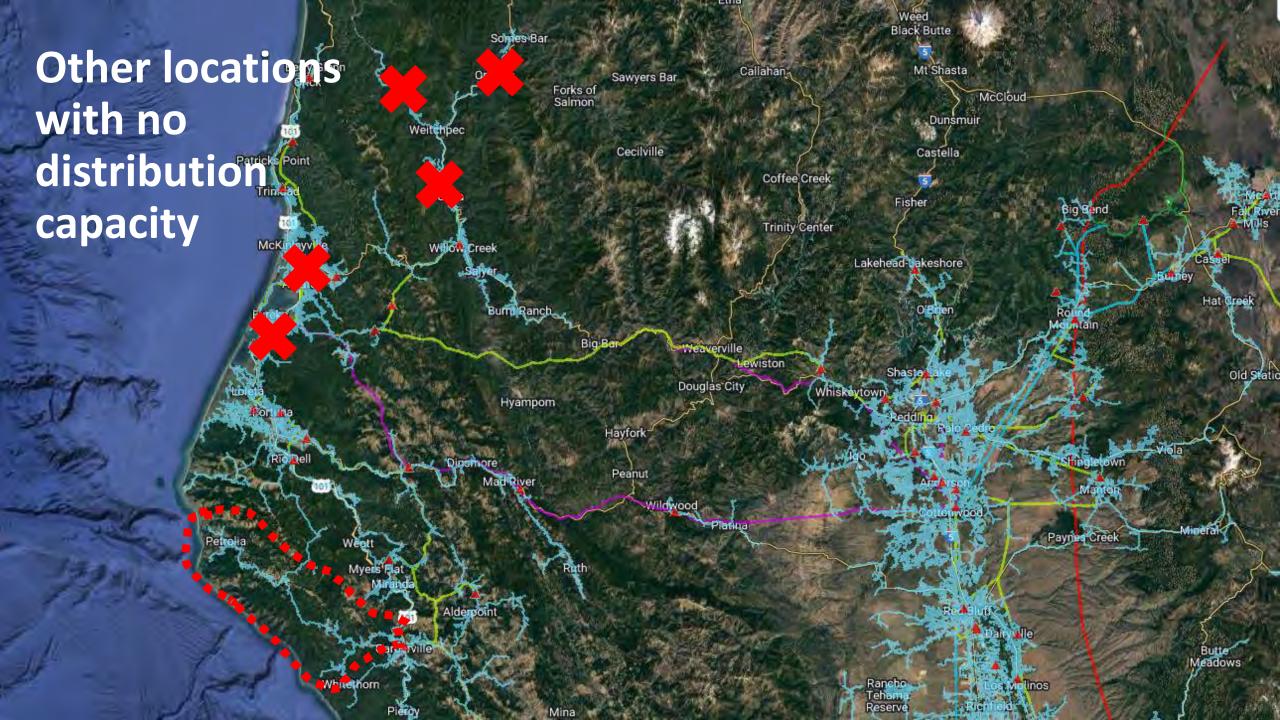


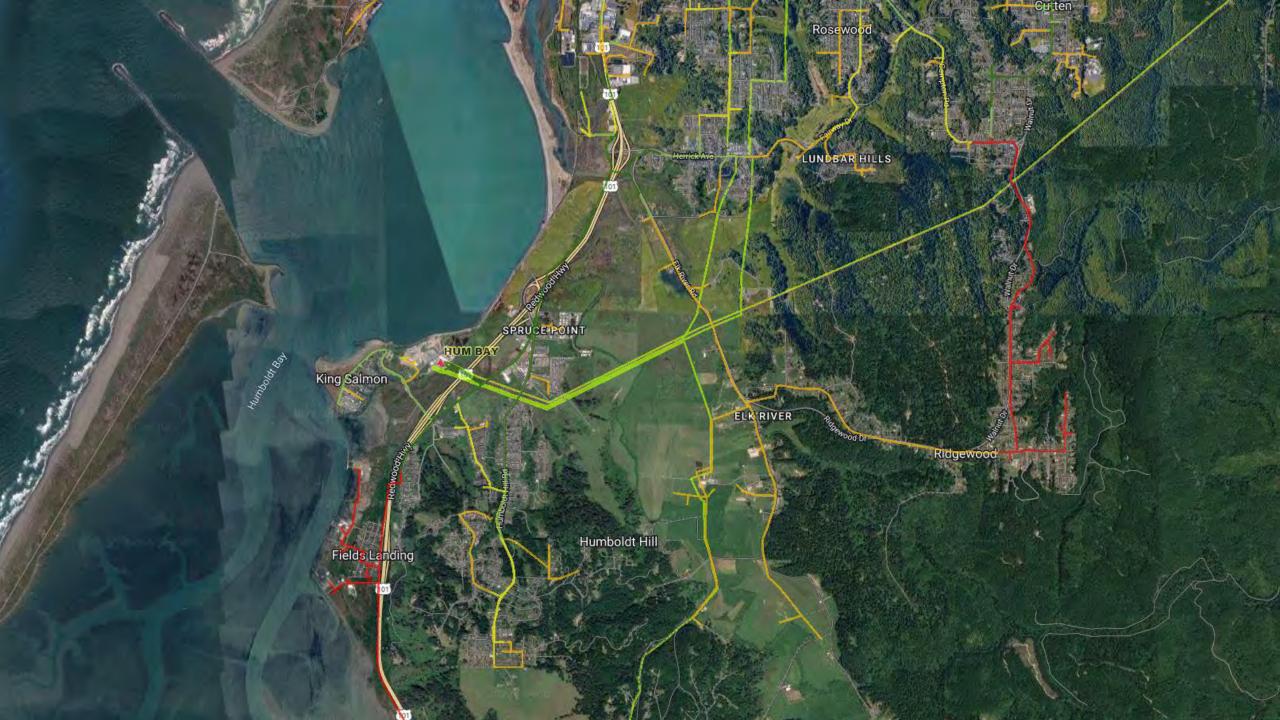


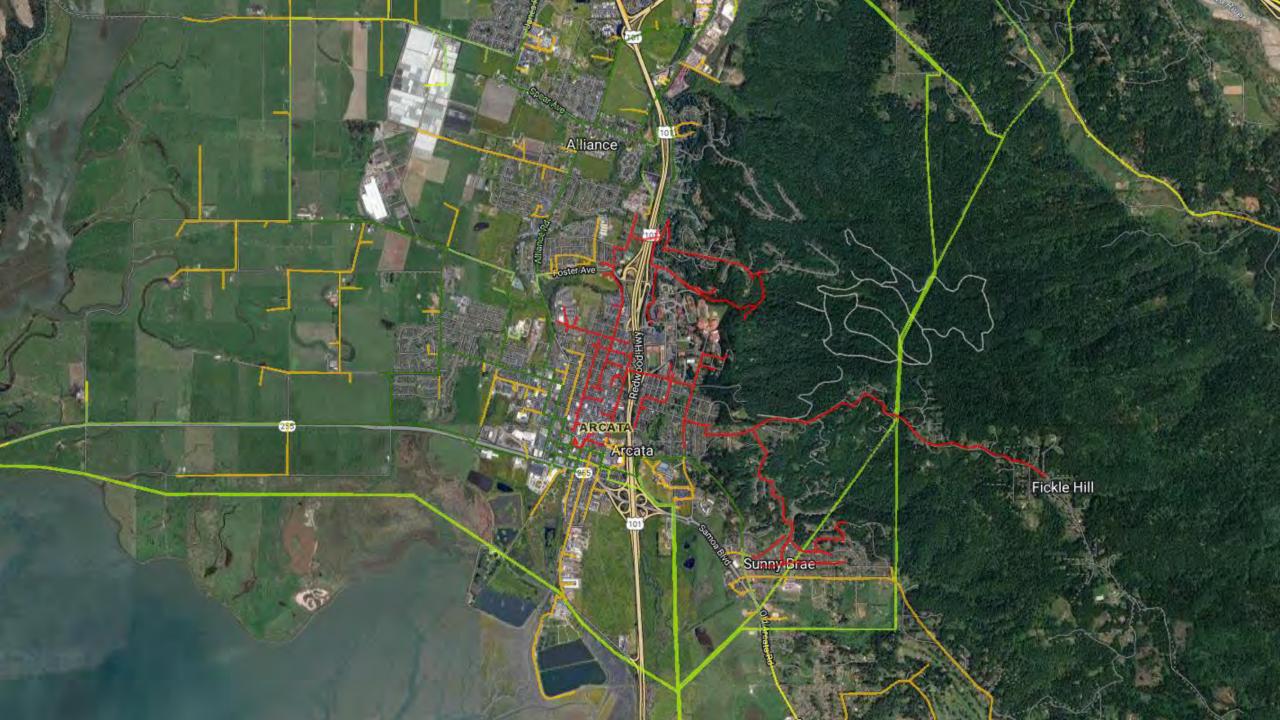


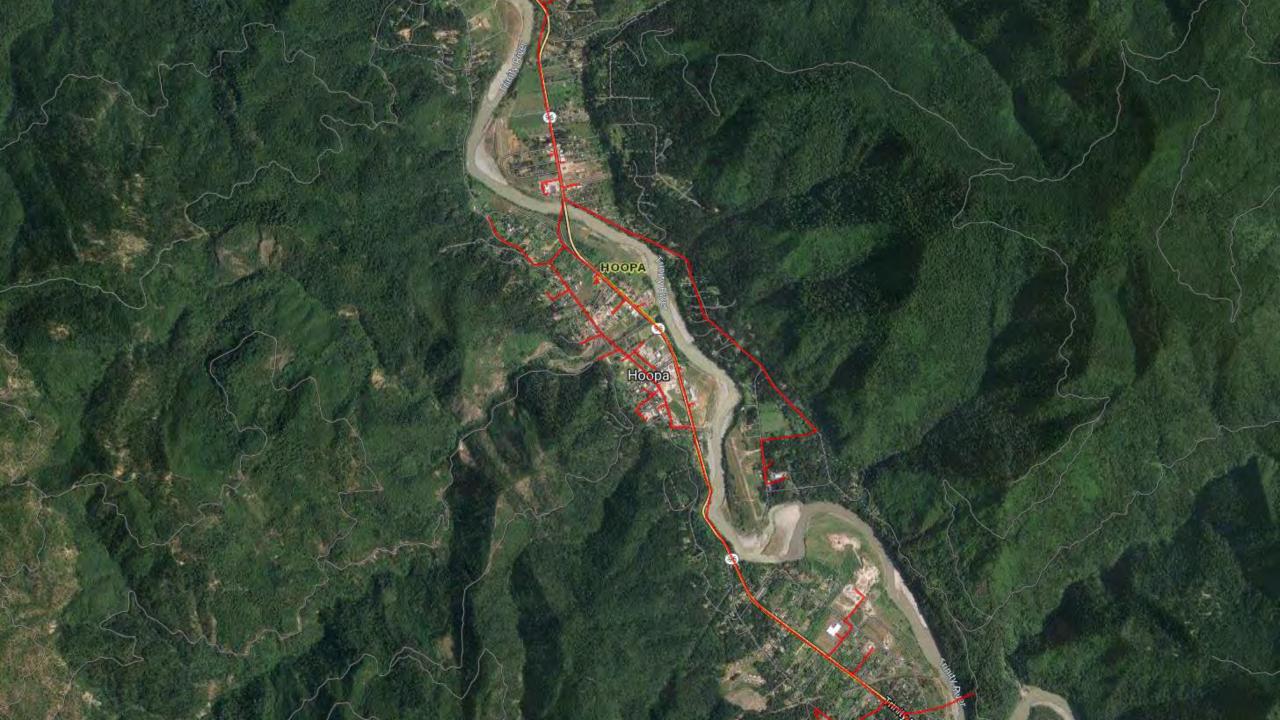


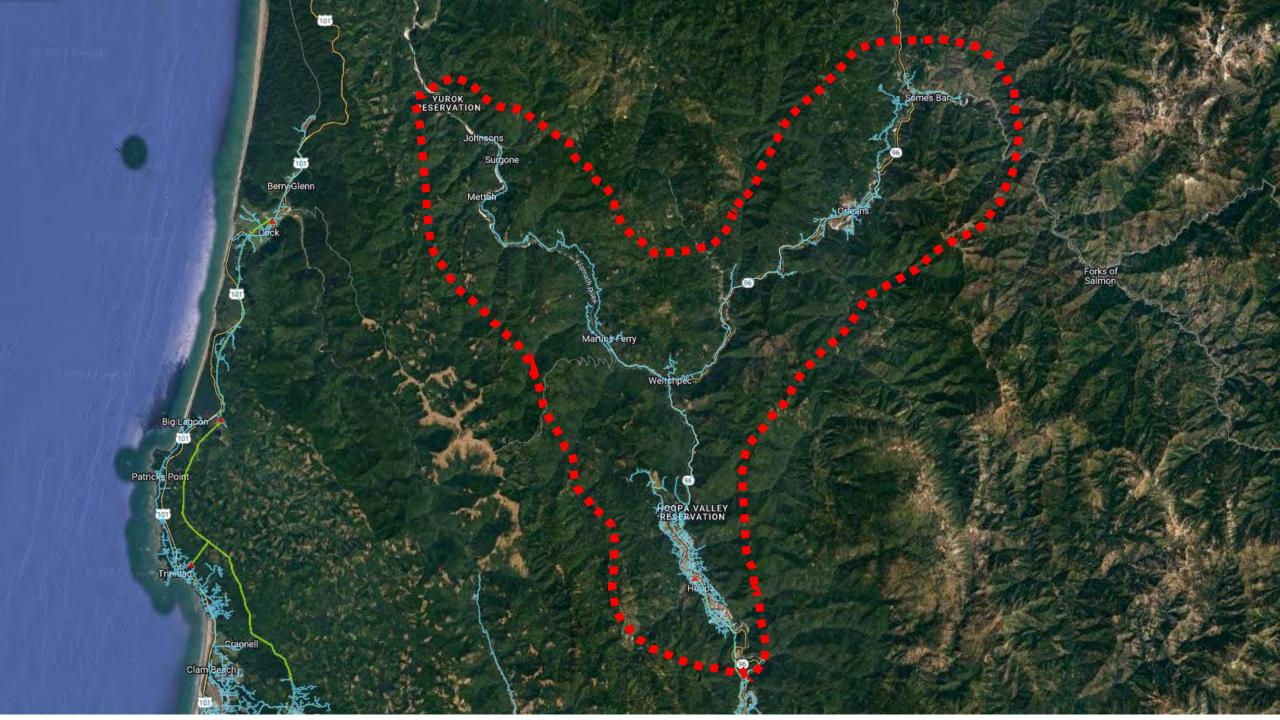






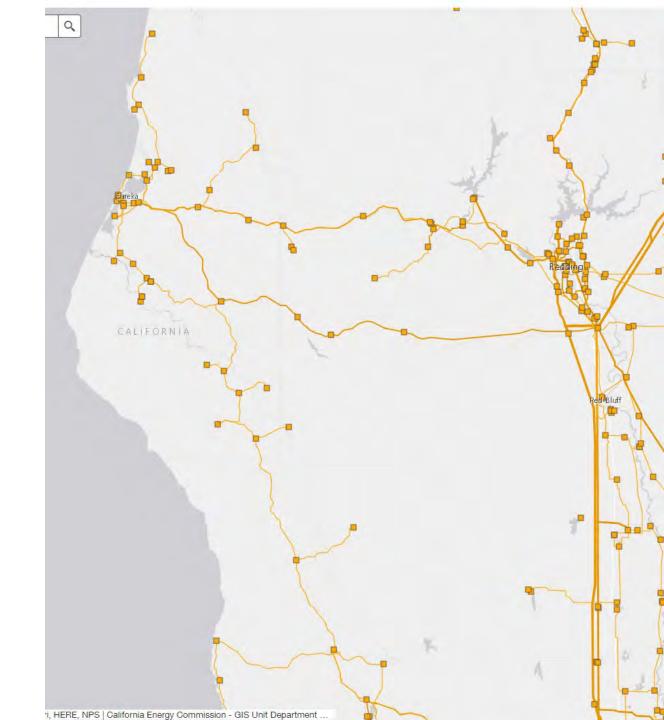




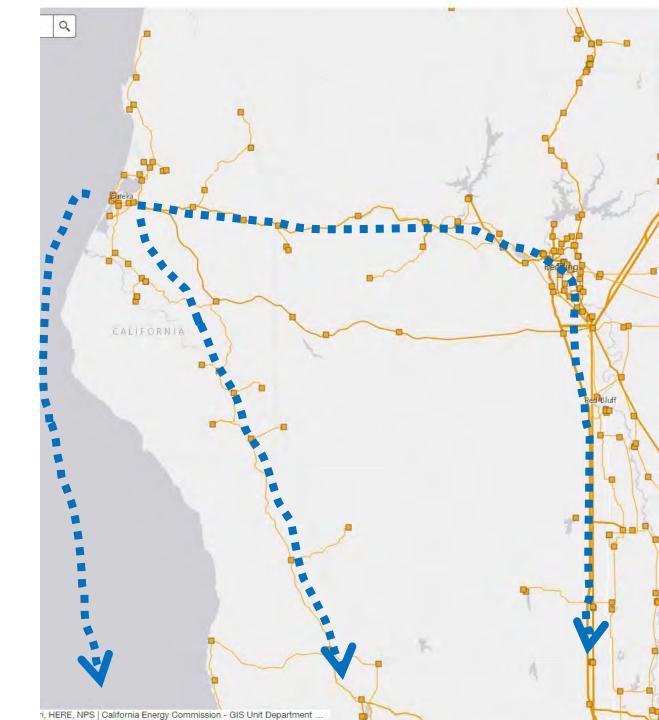


RCEA Options

- Assess with PG&E if battery storage and other distributed resources can be deployed to help accelerate new connections while Eel River Valley and Bridgeville to Alderpoint work is in progress 2023-2026
- Evaluate if/how/where distributed resources and/or microgrids might be implemented to address issue out of the scope of PG&E's proposed solutions
- Evaluate how future transmission upgrades for export of offshore wind could be leveraged to address local issues.



Routes considered for offshore wind energy export in CA Independent System Operator's (CAISO) 2022 long-range transmission planning outlook





STAFF REPORT Agenda Item # 8.3

AGENDA DATE:	October 20, 2022
TO:	Board of Directors
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	MOU with the California Fishermen's Resiliency Association

SUMMARY

One of the core stakeholder groups relevant to the development of offshore wind energy is the commercial fishing industry, and RCEA has been working to actively engage and collaborate with local fishermen since RCEA's local offshore wind development efforts began to ramp up in 2017.

One key local fishing industry organizations is the Humboldt Fishermen's Marketing Association (HFMA). After ongoing engagement RCEA entered into a Memorandum of Understanding (MOU) with HFMA in 2018 to establish a shared understanding and set of goals around proceeding with the development of offshore wind energy in a manner that minimizes and mitigates impacts to commercial fishing as much as possible.

At the time that the MOU with HFMA was executed it was anticipated that other local/regional fishing organizations with an interest in the waters off Humboldt County would request similar agreements with RCEA. In 2020 RCEA provided a \$20,000 grant to HFMA to fund external costs necessary to their effective engagement in the offshore wind development process, and HFMA used a portion of that RCEA funding to establish the California Fishermen's Resiliency Association (CFRA).

CFRA is a new non-profit formed-by and representing the port associations from Crescent City south to San Francisco -- the ports of San Francisco, Bodega Bay, Fort Bragg, Shelter Cove, Humboldt Bay, Trinidad Bay, and Crescent City. The intended purpose of CFRA is to serve as a central "point of contact" for developers and projects intending to work in the ocean waters of the north coast, and particularly for the immediate purpose of negotiating a Fishing Community Benefit Agreement (FCBA) between commercial fishermen and offshore wind energy developers.

RCEA has received a request to enter into a MOU with CFRA similar to the one executed with HFMA in 2018. The MOU between RCEA and CFRA establishes an agreement to cooperate and work together in good faith for the purpose of ensuring that the development of floating

offshore wind energy off the coast of northern California proceeds in a way that effectively identifies, avoids, minimizes and mitigates impacts to the commercial fishing industry to the greatest extent possible so that commercial fishing and offshore wind energy can successfully coexist to the greater benefit of the community.

STAFF RECOMMENDATION

Approve a Memorandum of Understanding between the California Fishermen's Resiliency
Association and RCEA and authorize the Executive Director to execute the agreement
contingent on final review and approval by RCEA Legal Counsel.

ATTACHMENTS:

1. Draft MOU between RCEA and the California Fishermen's Resiliency Association

MEMORANDUM OF COOPERATION BETWEEN THE REDWOOD COAST ENERGY AUTHORITY AND THE CALIFORNIA FISHERMEN'S RESILIENCY ASSOCIATION

This Memorandum is entered into this the 31st day of October, 2022 ("Effective Date"), by and between:

- 1. REDWOOD COAST ENERGY AUTHORITY ("RCEA"), a California Joint Powers Authority, having an office at 633 3rd Street, Eureka, CA, 95501, whose members include the County of Humboldt, the Cities of Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, and Trinidad, and the Humboldt Bay Municipal Water District; and
- 2. The California Fishermen's Resiliency Association (CFRA), a California non-profit Mutual Benefit Corporation at 1118 6th Street, Eureka, California 95501. The CFRA serves as a "point of contact" for OSW developers and a Fishing Community Benefit Agreement (FCBA) negotiator for fishermen and OSW industry.

RCEA and CFRA are referred to herein either in singular as "Party" or in plural as the "Parties."

PREAMBLE:

By creating access to economically priced renewable energy, renewable resource diversification, and enhanced economic activity in coastal areas, floating offshore wind energy development represents tremendous opportunity for the State of California. This is especially true of Humboldt County, where the wind resource offshore is particularly strong and Humboldt Bay is endowed with characteristics that make it well suited for harbor investment and utilization to support the deployment of offshore wind power systems.

The North Coast region's fishing grounds, the site of the Humboldt Wind Energy lease areas, have been occupied by the West Coast fishing fleet since the early 1900's. The North Coast region, especially Eureka, Fort Bragg, Shelter Cove, Trinidad and Crescent City is home to a commercial fishing industry that provides sustainably caught seafood both for our community and for country wide distribution. For many generations, the North Coast community fishing grounds have provided a livelihood for fishermen and their families, as well as widespread employment in the seafood distribution economy. North Coast commercial fishing contributes to national food security.

The Parties recognize that a viable commercial fishing industry is integral to the economy and culture of the North Coast and that the development of offshore wind energy will permanently impact the commercial fishing industry economically and culturally. They recognize that such development should be pursued in a manner that avoids, minimizes and mitigates impacts to fishing so that both endeavors can sustainably coexist for the benefit of our community.

AGREEMENT

The Parties agree to cooperate and work together in good faith for the purpose of ensuring that efforts to develop floating offshore wind energy off the coast of Humboldt County by RCEA, its project partners, and any other offshore wind developers proceed in a way that effectively identifies, avoids, minimizes, and mitigates impacts to the commercial fishing industry to the greatest extent possible. As part of this agreement, the Parties agree to work together:

- 1. To maintain open and honest communication and to inform the other Party in a timely fashion of relevant developments that could affect or impact the goals of this agreement;
- 2. To identify and evaluate any potential impacts to commercial fishing interests associated with the offshore wind project's development, operation, and decommissioning, and to take reasonable steps to avoid and minimize those impacts;
- 3. To work together with RCEA's development partners to negotiate Fishing Community Benefit Agreements to address avoidance, minimization and long term mitigation of impacts to North Coast commercial fishing. These FCBA's will be broad based, democratic, and inclusive of all fishing gear types. These FCBA's will include the

- identification and contractual stipulation of sufficient permanent sourced funding to insure and enhance resiliency in California fisheries and fishing communities.
- 4. To seek out and cooperate as appropriate on mutually beneficial grant or public funding opportunities (such as for harbor infrastructure improvements) that are consistent with the goals of this agreement;
- 5. To coordinate and cooperate with state and other relevant officials in ways that advance the goals of this agreement;
- To identify and reasonably address, in a timely manner, the additional needs of either
 party that may arise during the offshore wind project development operation and
 decommissioning process.

This Memorandum does not establish a joint venture, partnership, or business unit of any kind between the Parties, nor does it necessarily create a financial or subsequent legal obligation on behalf of either Party. Further, the Memorandum does not grant or create an exclusive right to negotiate between RCEA and CFRA; and either party is free to negotiate or explore similar agreements with other persons and entities.

GOVERNING LAW

The substantive laws of the State of California shall govern this agreement and any questions concerning its validity, construction or performance, without regard to the conflicts of laws provisions thereof. The Parties agree to submit to the non-exclusive jurisdiction of the courts in California in relation to any dispute arising out of or in connection with this Agreement, whether based in contract, tort (including negligence) or otherwise.

TERM

This Agreement shall commence on the Effective Date and terminate on the first to occur of any of the following events: (a) the passage of five years from the Effective Date; (b) the Parties mutual agreement to terminate this Agreement; (c) the Parties mutual agreement to supersede this Agreement with another form of legal agreement; (d) if either Party is placed into

liquidation, bankruptcy, administration, receivership or any similar process; or (e) by material breach of a Party.

Signed (date): 10/28/2022

Matthew Marshall, Executive Director Redwood Coast Energy Authority 633 3rd Street Eureka, CA 95501

Ken Bates, President
California Fishermen's Resiliency Association
1118 6th Street
Eureka, California 95501

RB Pincombe, Secretary
California Fishermen's Resiliency Association
1118 6th Street
Eureka, California 95501



STAFF REPORT Agenda Item # 9.1

AGENDA DATE:	October 27, 2022
TO:	Board of Directors
FROM:	Matthew Marshall, Executive Director
SUBJECT:	Executive Director's Report

SUMMARY

Executive Director Matthew Marshall will provide a brief update on:

- RCEA recent activities, and
- Other topics as needed.

RECOMMENDED ACTION

None. (Information only.)

ATTACHMENT

RCEA Monthly Report



October 2022 News and Updates

from the Redwood Coast Energy Authority

Join us online







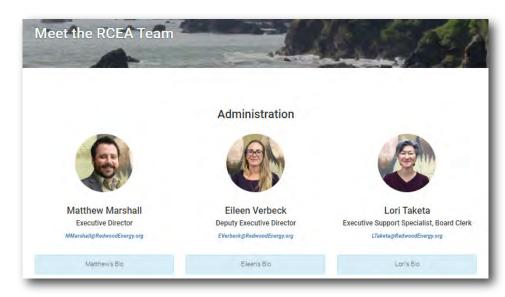
Community Choice Energy

Mid-Term Reliability Solicitation:

In August, the RCEA Board of Directors approved the launch of a solicitation for zero-emitting resources in response to the California Public Utilities Commission's Decision 21-06-035 to address the mid-term reliability (MTR) needs of the state's electric grid in 2023-2026. In response to its solicitation, RCEA did not receive any eligible offers that would meet its MTR procurement obligation. Staff are looking at alternatives to meet RCEA's procurement obligation, and plan to bring potential options to the Board ad hoc committee.

Fairhaven Energy Storage

The energy storage project at Fairhaven for which the Board approved a contract in June is moving forward. The site owner has removed stockpiled biomass to mitigate fire hazard risk. The project developer Broad Reach Power is working with PG&E on repowering the substation and has submitted final designs for needed modification of the site's grid interconnection.



New RCEA Staff page

We recently launched a page featuring the full RCEA team. including titles, bios, and contact information.

We also added a poster to our employment page illustrating the wide range of degrees our team holds. We created it for a Cal Poly Humboldt Sustainability Practitioners Mixer, to encourage diverse students to consider joining RCEA or to pursue a career in energy.



Current Employment Opportunities at RCEA

Manager/Senior Manager - Demand Side Management Programs

See our website for details

Rebate totals to date

Charging Equipment

approved

Electric **Vehicles** RCEA REBATE

37 approved

Heat **Pumps RCEA REBATE**

59 approved \widetilde{i} 7 reserved

Equipment & Appliance

39 approved

RCEA REBATE 5 in progress

2022 totals

0

Residential Services ASSESSMENTS

97 consultations 64 res kits

Non-Res Services ASSESSMENTS

132 Completed



Customer Energy Solutions updates

October 2022 News

Agency Projects - ongoing



Arcata School District - CalSHAPE HVAC and CO2 monitor projects are moving ahead

Burnt Ranch Elementary School - roof-mounted solar array is being installed

City of Arcata - energy efficiency project is being planned

City of Blue Lake - best use of OES funding and a possible solar project are being planned

City of Eureka - solar projects are being designed

City of Ferndale - solar and lighting project completed

City of Rio Dell - solar, storage and generator installed

City of Trinidad - solar and storage project completed

Coastal Grove Charter School - CalSHAPE HVAC and CO2 monitor projects are in progress

Eureka City Schools - solar, storage, and EV bus charger project is in progress

Loleta Union Elementary School - assisting with CalSHAPE program application

McKinleyville Union School District - assisting with CalSHAPE program application

Pine Hill Elementary - ECAA loan project kick-off meeting held in September

Redway Community Services District - revisiting possible solar project

Redwood Coast Montessori School - CalSHAPE plumbing application submitted, CalSHAPE HVAC and CO2 monitor projects in progress

Yurok Tribe - benchmarking and making connections for multiple project locations

Rural Regional Energy Network

The RuralREN group is shepherding the proposed customer energy efficiency program through the CPUC regulatory process. The RuralREN partners, representing hard-to-reach rural communities, held its first in-person meeting in September in conjunction with the California Climate and Energy Collaborative Conference.

Technology and Equipment for Clean Heating (TECH) Quick Start Grant

Through this grant, RCEA is providing rebates for unregulated fuel users (propane, kerosene, cordwood, etc) to switch to heat pump space and water heaters. RCEA has secured partnerships with area contractors and identified 11 projects so far. The grant will cover a total of 20 projects. RCEA is a finalist for a second round of funding, which will support an analysis of barriers to electrification in the more rural parts of the county and tribal lands.

Rio Dell's "Light the Night" Project

RCEA continues to reach out and provide residential energy efficiency kits to Rio Dell residents who bring in and dispose of old, inefficient light bulbs at Rio Dell City Hall. The project is part of the Rio Dell Police Department's "Light the Night" initiative aimed at encouraging residents to leave their porch lights on at night to deter crime. Rio Dell city staff approached RCEA to collaborate on this win-win community boosting project.

Rebates Mailer

On the flip side of our Power Content Label (one of our annual compliance mailings that goes out to all our customers) we included an invitation for our customers to take advantage of all the rebates we have now. The response was robust and the timing was good. The public is curious about fuel switching and is willing to upgrade if the cost is manageable.



