633 3rd Street, Eureka, CA 95501

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Web: www.redwoodenergv.org E-mail: info@redwoodenergy.org

## **COMMUNITY ADVISORY COMMITTEE MEETING**

**Jefferson Community Center Auditorium** 1000 B Street, Eureka, CA 95501

May 9, 2023 Tuesday, 6 - 7:30 p.m.

Any member of the public needing special accommodation to participate in this meeting or access the meeting materials should email *LTaketa* @redwoodenergy.org or call (707) 269-1700 at least 3 business days before the meeting. Assistive listening devices are available.

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 Community Advisory Committee, including those received less than 72 hours prior to the Committee's meeting, will be made available to the public at www.RedwoodEnergy.org.

NOTE: Speakers wishing to distribute materials to the Committee at the meeting, please provide 17 copies to the Board Clerk.

## THIS IS A HYBRID IN-PERSON AND VIRTUAL MEETING.

The Community Advisory Committee has returned to in-person hybrid meetings. When attending CAC meetings, please socially distance as much as possible and be courteous to those who choose to wear a mask.

To participate in the meeting by phone, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 822 2338 1610. To participate in the meeting online, join the Zoom webinar at https://us02web.zoom.us/j/82223381610.

To comment by phone or online 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 ask you to unmute your phone or computer. You will have 3 minutes to speak.

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

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

## **COMMUNITY ADVISORY COMMITTEE MEETING AGENDA**

Agenda Item / What	How / Action Underlined actions indicate that a vote is needed.	When	
1. Open	Roll Call:  Norman Bell Richard Johnson Elizabeth Burks Luna Latimer Colin Fiske Ethan Lawton Catherine Gurin, Dennis Leonardi, Vice Chair Chair Larry Goldberg Kit Mann Roger Hess Emily Morris Chris Honar Jeff Trirogoff Kris Mobley, Board Liaison  Remote member participation:  Action (if needed): Approve teleconference participation request for this meeting by committee member pursuant to Brown Act revisions of AB 2449 due to an emergency circumstance to be briefly described.  Review meeting agenda and goals.	6-6:05 p.m. (5 min.)	
Non-Agenda     Item Public     Comment	This item is provided for the public to address the Committee on matters not on the agenda. At the end of public comments, the Committee may respond to statements, or refer requests requiring action to the Executive Director or the Board of Directors.	6:00 – 6:05 p.m. (5 min.)	
3. Consent Calendar	All matters on the Consent Calendar are considered to be routine by the CAC 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, CAC members or members of the public can request that an item be removed for separate discussion.  Action:  3.1. Approve March 14, 2023, CAC Meeting Minutes.	6:05 – 6:10 p.m. (5 min.)	
4. Items Removed from Consent Calendar	This time is set aside for discussion of items removed from the Consent Calendar.	6:10 – 6:15 p.m. (5 min.)	

Agenda Item / What		How / Action Underlined actions indicate that a vote is needed.	When	
5.	Major Project Review	Action: Accept Local Major Projects Staff Notification List and Form an Ad Hoc Local Major Project Subcommittee.	6:15 – 6:25 p.m. (10 min.)	
6.	Humboldt's Electric Future Community Engagement Planning	Actions:  • Form an ad hoc Humboldt's Electric Future subcommittee of up to 7 CAC member volunteers. • Decide whether to:  • Conduct the June 5 workshop as a noticed meeting of the full CAC pursuant to the Brown Act, or  • Delegate community workshop participation to the ad hoc Humboldt's Electric Future subcommittee.	6:25 – 7:10 p.m. (45 min.)	
7.	Member and Board Liaison Reports	This time is provided for Committee members and the Board Liaison to share information on topics not on the agenda. At the end of member reports, the Executive Director will set requests requiring action to a future agenda or refer requests to staff or the Board.  7.1. Board Liaison  7.2. Committee Members	7:10 – 7:25 p.m. (15 min.)	
8.	Close & Adjourn		7:30 p.m.	

**NEXT REGULAR CAC MEETING** – Tuesday, July 11, 2023, 6 - 7:30 p.m. Jefferson Community Center Auditorium, 1000 B Street, Eureka, CA 95501.

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Phone: (707) 269-1700 Toll-Free (800) 931-7323 Fax: (707) 269-1777 E-mail: <a href="mailto:info@redwoodenergy.org">info@redwoodenergy.org</a> Web: <a href="https://www.redwoodenergy.org">www.redwoodenergy.org</a>

# COMMUNITY ADVISORY COMMITTEE MEETING DRAFT MINUTES

March 14, 2023 - Tuesday, 6 - 7:30 p.m.

Community Advisory Committee Chair Dennis Leonardi called the hybrid in-person and teleconference meeting to order on the above date at 6:03 p.m. at the Jefferson Community Center auditorium, 1000 B Street, Eureka, CA. The agenda for this meeting was posted on March 10, 2023.

## Members present:

Norman Bell Ethan Lawton

Colin Fiske Dennis Leonardi, Chair

Larry Goldberg (arrived 6:14 p.m.) Kit Mann

Roger Hess Emily Morris (participated remotely with

Christopher Honar just cause, a medical issue)

Richard Johnson Jeff Trirogoff
Luna Latimer Jerome Qiriazi

Kris Mobley, Board Liaison (non-voting)

Members absent: Elizabeth Burks, Catherine Gurin

## Staff present:

Aisha Cissna, Regulatory & Legislative Policy Manager Richard Engel, Power Resources Director Matthew Marshall, Executive Director Nancy Stephenson, Community Strategies Manager Lori Taketa, Board Clerk

## Non-Agenda Item Public Comment

No member of the public commented. Chair Leonardi closed the non-agenda public comment period.

## **Consent Calendar**

- **4.1.** Approve January 10, 2023, CAC Meeting Minutes.
- **4.2.** Accept Local Major Projects Staff Notification List None as of agenda publication.

Member Fiske requested item 4.2 be removed from the Consent Calendar. No member of the public requested item removal. Chair Leonardi closed the public comment period.

Motion Qiriazi, Second Bell: Approve January 10, 2023, CAC Meeting Minutes.

<u>The motion passed with a roll call vote. Ayes: Bell, Fiske, Hess, Honar, Latimer, Lawton, Leonardi, Mann, Morris, Qiriazi, Trirogoff. Noes: None. Abstain: Johnson. Absent: Burks, Goldberg, Gurin.</u>

**5. Items Removed from Consent Calendar** – <u>Local Major Projects Staff Notification</u> Member Fiske noted that the McKinleyville Town Center and the Arcata Gateway projects will be going through the CEQA process soon, and that Eureka Housing Element implementation requests for proposals for city property development will be issued this summer. Staff will request project update presentations by the different jurisdictions at upcoming meetings. Member Qiriazi requested, per Board-recommended process, that staff evaluate the projects in relation to RePower strategic plan goals, determine how those projects are relevant to RCEA goals and how RCEA should proceed and report back to the CAC at the next meeting.

## 6. Q4 CAPE Status Update

Executive Director Marshall reported on agency progress toward RePower strategic plan goals in the four areas of Regional Planning, Low-Carbon Transportation, Energy Generation Procurement and Customer Programs. Customer energy use management programs, run by RCEA's largest staff team, were described in detail. The airport microgrid's performance through the recent earthquake and winter storm outages was highlighted, and national press coverage described. Staff reported on upcoming efforts to gather community input on RCEA's energy procurement, the Yurok Tribe's RCEA membership and upcoming plans for Yurok Tribe CAC participation.

Committee members requested annual greenhouse gas output information in RePower updates; a "Procurement 101" presentation; sharing of microgrid press coverage for broader circulation; inclusion of transportation demand management in RCEA's energy audits for businesses, residences and agencies; and consideration of broader microgrid deployment at critical facilities. Staff requested the committee's help in informing smaller public agencies of RCEA's energy management services. The CAC ad hoc Critical Facilities and Off-Grid Cannabis Greenhouse Gas Impacts subcommittees will be discussing potential microgrid deployment. RCEA regulatory advocacy and discussions with PG&E for grid modernization in Southern and northeast Humboldt were described.

Member of the public Ken Miller submitted written comments supporting distributed rooftop solar and battery storage as a viable complement to large power plants, informing the CAC about a French law requiring solar panels on parking lots over a specific size, and encouraging RCEA participation in the May Microgrid Knowledge conference. No other comments were received. Chair Leonardi closed the public comment period.

## 7. Net Energy Metering Successor Tariff Update

Regulatory and Legislative Policy Manager Cissna reviewed the history of CPUC net energy metering tariffs and recent net billing tariff changes to address equity issues and incentivize battery storage. RCEA joined other Community Choice Aggregators to advocate on this issue and determine how to implement the new tariffs. The CCAs are waiting for more information about how the investor-owned utilities will calculate export compensation before determining next steps.

The members clarified net billing tariff rules and expressed concern that the new tariff structure disincentivizes solar system installation. Staff will ask the RCEA Board whether RCEA's NEM compensation rates should be changed and will report back to the committee. There were no responses from the public to Chair Leonardi's invitation to comment.

## 8. CAC Chair/Vice-Chair Selection

The Committee members commended the current Chair and Vice-Chair for their capable service. No member of the public commented on this item.

Motion Bell, Second Lawton: Reappoint Dennis Leonardi and Catherine Gurin as Community Advisory Committee Chair and Vice-Chair, respectively, for terms beginning April 1, 2023, and ending March 31, 2024.

The motion passed with a roll call vote. Ayes: Bell, Fiske, Goldberg, Hess, Honar, Johnson, Latimer, Lawton, Leonardi, Mann, Morris, Qiriazi, Trirogoff. Noes: None. Abstain: None. Absent: Burks, Gurin.

## 9. Member and Board Liaison Reports

Director Mobley will share CAC member concerns with the Board at the next meeting.

Member Mann reported on his meetings with the new Blue Lake City Councilmember now serving as an RCEA Board Director. Member Mann encouraged CAC members to help the new Board directors by sharing information about RCEA's work.

Member Goldberg reported to the Board Liaison about the \$2.5 million County renewable energy grant program that off-grid cannabis growers may not be able to access before going out of business. Member Goldberg expressed a desire for the CAC ad hoc Off-Grid Cannabis GHG Impact Subcommittee to collaborate with the Schatz Energy Research Center and Cal Poly Humboldt to seek funding to monitor the County-funded renewable energy systems to help manage the program and quantify fossil fuel savings, if any. Member Trirogoff stated that fleetwide solar system monitoring equipment is available that could potentially monitor cannabis grant recipients' power generation.

Chair Leonardi adjourned the meeting at 7:48 p.m.

Lori Taketa Clerk of the Board

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# COMMUNITY ADVISORY COMMITTEE STAFF REPORT Agenda Item # 5

AGENDA DATE:	May 9, 2023
TO:	RCEA Community Advisory Committee
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	Local Major Projects

## **BACKGROUND**

Prior to the adoption of the CAC goals in February 2022, the CAC formed a Major Project Ad Hoc Subcommittee to draft and present recommended comments on the North McKay Ranch Development project's draft environmental impact report. The evaluation and input provided by the CAC focused on the proposed project's impact on RePower Humboldt strategic plan goals. The CAC Major Project Ad Hoc Subcommittee sunset date coincided with the approval of the comment letter by the Board and the designation of a process for the CAC to provide input for local projects moving forward.

Based on the feedback from this process the CAC created work goal B, monitor and advocate for implementation of RePower Humboldt Comprehensive Action Plan for Energy goals and notify staff of community activities and projects that may have significant impact on the ability to reach these goals.

Further clarification from the Board outlines the process for the CAC to discuss local major projects as it relates to work goal B as follows:

- 1. If CAC members see a need to comment on or engage with a local project in development in ways that are within RCEA's scope, they notify the RCEA Executive Director.
- If staff agrees that engaging with project developers is appropriate for RCEA, then staff will follow up or request volunteers for an ad hoc CAC Major Projects Subcommittee specific to a particular project for assistance in drafting comments.
- 3. If it is unclear whether engagement falls within RCEA's scope, staff will ask the Board for direction.
- 4. It is more productive for RCEA to engage and provide input early in the development process, rather than when the project is soliciting public comment (e.g. RCEA provided the County with technical input related to Nordic Aquafarms prior to the solicitation for public comments).
- 5. If RCEA has not been invited to provide input and RePower strategies are not accounted for in project plans, then it is appropriate for RCEA to comment during the public comment phase.

## SUMMARY

Staff proposed a standing agenda item at each CAC meeting to provide an opportunity for CAC members to bring forward any upcoming projects or plans that may impact RCEA's ability to meet the Repower goals. If staff agrees that a project is within RCEA's scope, staff will engage with developers of the project in early stages or a project-specific CAC ad hoc subcommittee will be formed to develop comments to present to the Board if the project is in the public comment phase.

During the March 2023 CAC meeting it was requested to discuss the following local major projects:

- McKinleyville Town Center
- Arcata Gateway Project
- Eureka Housing Element Development on City-Owned Property
- Auxiliary Dwelling Unit inclusion in jurisdictions General Plans

Staff recommends that the Community Advisory Committee form an ad hoc Local Major Project subcommittee to assist staff in the evaluation of the McKinleyville Town Center and Arcata Gateway Project in relation to the RePower strategic plan goals. The ad hoc Local Major Project subcommittee would then report back to the CAC on possible ways RCEA can provide feedback for these projects.

## **STAFF RECOMMENDATION**

Accept Local Major Projects Staff Notification List and Form an Ad Hoc Local Major Project Subcommittee.



## STAFF REPORT Agenda Item # 6

AGENDA DATE:	May 9, 2023
TO:	Community Advisory Committee
PREPARED BY:	Richard Engel, Director of Power Resources
	Colin Mateer, Power Resources Specialist
SUBJECT:	Humboldt's Electric Future Planning Process

## **BACKGROUND**

Every two years, California's load-serving entities including RCEA are required to submit an Integrated Resource Plan (IRP) to the California Public Utilities Commission (CPUC). RCEA filed its most recent IRP on November 1, 2022. In each IRP cycle, staff present alternative energy portfolios to the Board and ask for a Board recommendation, with the public having the opportunity to comment.

However, the IRP's format as dictated by the CPUC, consisting of a jargon-filled report template and large, detailed spreadsheets, is not readily comprehensible to the layperson. Staff have developed the "Humboldt's Electric Future" project as a more accessible venue for informing the public about RCEA's long-term power procurement and for gathering public input that will inform the 2024 IRP.

## **SUMMARY**

As first steps in engaging the public, staff have prepared a Humboldt's Electric Future (HEF) <u>initial report</u> and created a <u>web page</u> where people can read a brief description of the project, download the report, and sign up for notifications of meetings and project milestones. Staff will give a brief presentation summarizing the initial report at the CAC meeting.

The initial HEF report describes RCEA's electric power portfolio and how it has been shaped both by direction from RCEA's own Board and legislative and regulatory mandates from the State of California. The report gives an overview of the CPUC's IRP process and describes how RCEA must balance its efforts to meet four key goals that each have important financial implications:

- Maximizing procurement of renewable and carbon-free energy resources
- Minimizing customer rates
- Maximizing funding for customer programs, such as rebates for electric vehicles and energy efficient home appliances
- Building cash reserves to ensure long-term financial stability for RCEA and its Community Choice Energy program despite volatile energy markets.

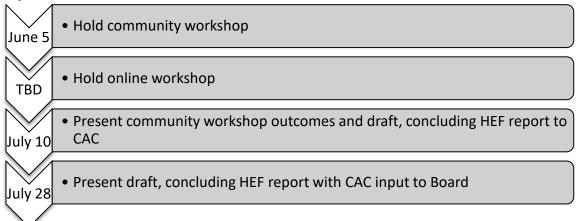
Staff invite the Community Advisory Committee (CAC) to form an ad hoc Humboldt's Electric Future subcommittee to help guide the project. Staff would consult with the subcommittee in the course of the project, and the subcommittee could potentially play a role in HEF public workshops as described below.

On June 5, RCEA will host a professionally-facilitated, public workshop at Jefferson Community Center using a format similar to our 2019 strategic plan update workshops. In those workshops, RCEA used brief presentations, interactive graphics and worksheets, and small group discussions to inform and query participants.

For the upcoming HEF workshop, staff will present community members with a set of questions aimed at balancing the key goals mentioned above. The questions will be framed in a way that qualitative responses from participants can be used to inform quantitative resource procurement decisions to be incorporated in the 2024 IRP. Staff are also planning to host a separate online-only workshop with a similar format for those who are unable to attend the in-person workshop. Details of the online workshop will be made available as soon as possible.

Outcomes from the workshops will be analyzed and incorporated into several portfolio scenarios that will be summarized in a draft, concluding HEF report. This report will be presented to the CAC in July, with CAC feedback incorporated in the draft, concluding report for presentation to the Board later that month.

Key HEF events are to be timed as follows:



Staff would like the CAC to play a supporting role for the June 5 community workshop, including planning for public engagement and interpreting the outcomes from that engagement. At the CAC's discretion, the June 5 workshop will be either a noticed meeting of the full CAC, or the CAC may delegate participation only to the proposed ad hoc HEF subcommittee. Due to Brown Act requirements, it will not be feasible to conduct the online-only workshop as a noticed meeting of the full CAC, but staff would welcome subcommittee participation.

## **ALIGNMENT WITH RCEA'S STRATEGIC PLAN**

The Humboldt's Electric Future project is intended to gather community input to support several of the RCEA Strategic Plan's highest-level goals:

## Regional Planning and Coordination

- Achieve net-zero greenhouse gas emissions county-wide by 2030.
- By 2030 fully establish Humboldt County as an energy secure community that can
  affordably and reliably meet its local energy needs with local renewable resources and
  has the robust local capabilities and infrastructure necessary to effectively respond to
  energy emergencies or disruptions in energy supply.

## **Energy Generation and Utility Services**

- 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 state-designated 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.

## **EQUITY IMPACTS**

The Humboldt's Electric Future report includes a discussion of equity considerations. Equity impacts will be incorporated in the discussion questions presented to the community in the planned Humboldt's Electric Future workshop. In addition, the last IRP cycle required load-serving entities to report on local air pollutants and their impacts on disadvantaged communities. Staff anticipates that the 2024 IRP, which is to be informed by the community input gathered through Humboldt's Electric Future, will similarly require RCEA to report on this equity-related issue.

## FINANCIAL IMPACT

The direct costs from the Humboldt's Electric Future project are minor and include staff time toward project administration and expenses for the rental facility and professional meeting facilitator for the community workshop. Outcomes of the project may ultimately have financial implications in the form of increased or decreased energy procurement costs and revenues resulting from long-term changes to RCEA's procurement and rate-setting strategies. Any such proposed changes would come before the Board for discussion and direction to staff before being implemented.

## **RECOMMENDED ACTIONS**

- Form an ad hoc Humboldt's Electric Future subcommittee
- Decide whether to 1) conduct the June 5 workshop as a noticed meeting of the full CAC pursuant to the Brown Act, or 2) delegate community workshop participation to the ad hoc HEF subcommittee

## **ATTACHMENTS**

Humboldt's Electric Future initial report

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# Humboldt's **Electric Future**

April 2023







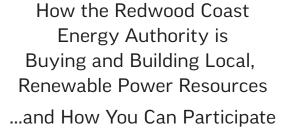


















## **Preface**

## Dear Community Member:

Redwood Coast Energy Authority is the public power provider for approximately 92% of Humboldt County's eligible homes and businesses. We are striving to provide 100% clean and renewable power by 2025, and get as much as possible of that power from local sources by 2030. We are looking for community input on how to get there.

During 2023 we are engaging the community in a process we call Humboldt's Electric Future. This report explains how we get our electricity today, what goals our Board of Directors has set, and what we need to do to comply with state regulations on power procurement. Within this framework, there is still ample opportunity for community members to have their voices heard on important decisions such as:

- Which clean and renewable resources should we maximize in our power portfolio?
- What criteria should we use in siting local renewable energy projects?
- How should we balance the community's priorities, such as clean energy, local economic development, and low utility rates?

We will be doing community engagement later this year to collect input on these and other questions. Please visit <a href="https://www.redwoodenergy.org/humboldts-electric-future">https://www.redwoodenergy.org/humboldts-electric-future</a> to sign up for event notifications and learn more about how you can participate in Humboldt's Electric Future.

Sincerely,

Matthew Marshall

Mother 12 Mashal/

**Executive Director** 

## RCEA as Humboldt County's Clean Energy Leader

Redwood Coast Energy Authority (RCEA) is a local government Joint Powers Agency whose members include the County of Humboldt; the Yurok Tribe; the Cities of Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, and Trinidad; and the Humboldt Bay Municipal Water District. RCEA's mission is to develop and implement sustainable energy initiatives that reduce energy demand, increase energy efficiency, and advance the use of clean, efficient, and renewable resources available in the region for the benefit of the member agencies and their constituents.

Beginning in May 2017, Humboldt County customers were automatically enrolled into RCEA's new Community Choice Energy (CCE) program and served by RCEA's default electricity service, REpower. RCEA customers interested in receiving electricity service with a higher renewable energy content can "opt up" into RCEA's 100% renewable electricity service option,

REpower+, costing an additional \$0.01 per kilowatt-hour (kWh).

## **Abbreviations**



CCE	Community Choice Energy
CEC	California Energy Commission
CPUC	California Public Utilities Commission
GHG	Greenhouse Gas
IRP	Integrated Resource Plan
kWh	Kilowatt-hour
MWh	Megawatt-hour (=1,000 kWh)
PG&E	Pacific Gas & Electric
RA	Resource Adequacy
RCAM	Redwood Coast Airport Microgrid
RCEA	Redwood Coast Energy Authority
REC	Renewable Energy Certificate
RPS	Renewables Portfolio Standard

RCEA works in partnership with the local utility company, Pacific Gas & Electric (PG&E). While RCEA assumes responsibility for procuring and developing power (the "generation" component of the PG&E bill) on behalf of participating customers, PG&E continues to deliver your electricity, maintain the power lines and electrical grid, and handle customer billing, including the charges for the generation procured by RCEA.



## RCEA's Strategic Plan and Community Choice Energy start-up procurement guidelines

*RePower Humboldt*, RCEA's Comprehensive Action Plan for Energy<sup>1</sup> (Strategic Plan), is intended to support achieving RCEA's mission through various strategies and initiatives. The Strategic Plan was last updated in 2019 and includes the following areas of emphasis:

Regional Energy Planning & Coordination: RCEA will take a leadership role to develop and advance strategic regional energy goals through economic development, funding, planning efforts, and education. This work will be done in coordination with RCEA's member governments, other local public agencies, local tribes, and other public and private stakeholders.

Integrated Demand Side Management: RCEA will use an Integrated Demand Side Management approach to develop distributed energy resources and reduce energy consumption in the residential, commercial, industrial, agricultural, and government sectors and to align customer energy use with variable clean and renewable energy supplies. RCEA will prioritize efforts that enhance local energy resiliency and independence.

**Low-Carbon Transportation:** RCEA will decarbonize regional transportation through efforts to reduce vehicle miles travelled, increase advanced fuel vehicles adoption and fuel efficiency, and expand advanced fuel infrastructure.

**Energy Generation & Utility Services:** RCEA will address Humboldt County's supply-side energy needs through our existing CCE program and development of new programs and initiatives.

2

<sup>&</sup>lt;sup>1</sup> https://redwoodenergy.org/wp-content/uploads/2020/06/RePower-2019-Update-FINAL-.pdf



## **How does RCEA buy power for our customers?**

RCEA buys power through a mix of short- and long-term contracts. However, we are moving toward having more of our procurement under long-term contracts as a means of managing risk. In a typical multi-year contract between RCEA and an owner/operator of an energy generator, the energy is sold to the buyer at a fixed or market-indexed price, along with any other power products the project is eligible to sell, such as renewable certificates that document the value of putting clean energy onto the grid, or capacity products such as resource adequacy (see next page).

## What is the Renewables Portfolio Standard?

The Renewables Portfolio Standard (RPS) is one of California's key programs for renewable energy advancement throughout the State. The program sets continuously escalating renewable energy procurement requirements for retail sellers of electricity, such as RCEA. The California Public Utilities Commission (CPUC) enforces the RPS program, while the California Energy Commission (CEC) is responsible for the certification of renewable generation facilities. Figure 1 shows what percentage of an electricity seller's portfolio must be made up of eligible renewable energy sources each year, which is demonstrated using Renewable Energy Certificates (RECs).

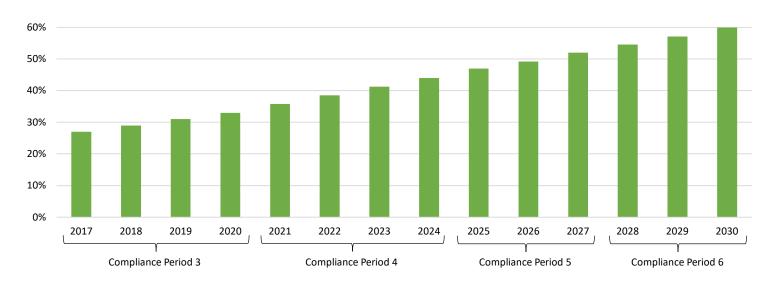


Figure 1. California's Renewables Portfolio Standard (RPS) Requirement Timeline

## What is Resource Adequacy?

Resource Adequacy (RA) is a compliance product that represents a power plant's ability to be turned on when needed for grid reliability. Procurement of RA is required by the CPUC to ensure that electricity providers across California have collectively acquired sufficient generating capacity to meet forecasted electricity demand plus a buffer for unpredictable circumstances. RCEA is obligated to purchase its proportional share of RA capacity to ensure the California Independent System Operator has sufficient capacity to maintain reliable grid operations at all times.

The amount of RA that can be sold by a generator – such as a solar or wind farm – is determined by the amount of power the generator can provide at times when the grid is most constrained. This is less than the generator's nameplate capacity, or the maximum amount of power a resource can produce. In the case of intermittently available resources such as wind and solar, this downgrading of the generator's RA value is substantial. RCEA purchases RA through many of our energy contracts, but also through other long- and short-term contracts that are exclusively for RA capacity.

## RCEA's Electric Portfolio

RCEA is committed to providing power that has more renewable energy and lower greenhouse gas (GHG) emissions than what local energy users would otherwise receive. RCEA has set out to provide our customers with 100% renewable and carbon-free energy by 2025 and 100% local renewable energy by 2030. Specifically, our Strategic Plan states that "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." In this context, RCEA defines "local" as resources located within the Humboldt Local Reliability Area, an area that roughly corresponds to Humboldt County, with some allowance for substations and hydropower plants that serve loads on both sides of the county line.

When our CCE program was first established, RCEA entered into a contract with Humboldt Sawmill Company to provide local biomass power generated by burning wood waste at its Humboldt Redwood plant in Scotia. The rest of our power initially came from short-term contracts for renewable and non-renewable resources across the western states. RCEA has issued at least one solicitation each year since 2019 targeted at procuring long-term renewable contracts to help meet RCEA's procurement requirements and the clean energy goals noted above. Table 1 is a breakdown of all the renewable energy projects RCEA currently has in our power portfolio, including operational projects and projects in varying stages of development.

Table 1. RCEA's Long-Term Contracted and Owned Generation Resources

Project Name	Resource Type	Project Location	Delivery Start	Contract Length	Capacity (MW)	Annual Energy (MWh)
Humboldt Redwood*	Biomass	Scotia, CA	2017	14 Years	18.0	125,000
Cove Hydroelectric	Small Hydro	Montgomery Creek, CA	2020	15 Years	5.5	14,800
Redwood Coast Airport Microgrid*	Hybrid <sup>2</sup>	McKinleyville, CA	2021	N/A	1.8	5,600
North Coast Highway Solar 1*	Solar	Hydesville, CA	2024	20 Years	0.99	2,100
North Coast Highway Solar 2*	Solar	Hydesville, CA	2024	20 Years	0.99	2,100
Sandrini Solar	Solar	Bakersfield, CA	2023	15 Years	100	307,500
Foster Clean Power A*	Hybrid	Arcata, CA	2023	20 Years	3.0	6,100
Fish Lake	Geothermal	Dyer, NV	2024	20 Years	0.4	3,000
Ormat Portfolio	Geothermal	CA & NV	2025	20 Years	4.0	TBD

<sup>\*</sup>local resource

RCEA also has agreements with PG&E to receive energy from two pools of resources, one comprised of hydroelectric plants and the other a mix of renewable energy sources. These resources are no longer needed by PG&E since a large portion of their former load is now served by RCEA and other community choice energy programs.

Carbon-Free: Since 2020, RCEA has been receiving carbon-free energy from PG&E's portfolio of large hydroelectric facilities. The contract is executed on an annual basis at RCEA's discretion. The amount of energy RCEA receives varies year to year depending on the hydrologic conditions throughout California, but in 2021 we received approximately 33,700 MWh of carbon-free energy.

Renewable Energy: Since 2023, RCEA has been receiving renewable energy from a variety of PG&E's eligible renewable sources, including biomass, digester gas, landfill gas, geothermal, small hydro, solar, and wind technologies. RCEA expects to receive approximately 51,300 MWh in 2023, with the amount gradually declining every year as resources retire until the contract expires in 2045.

<sup>&</sup>lt;sup>2</sup> Hybrid resources are a combination of energy generators and energy storage systems. In RCEA's case, all of our hybrid resources utilize solar as the energy generation.

In addition to our renewable energy contracts, RCEA has also entered into a number of contracts for aggregated customer demand response and standalone battery energy storage as shown in Table 2. While these do not generate additional energy, they provide RCEA with some of our required resource adequacy and allow us to strategically balance the above generation resources with customer demand in real time, helping ensure grid reliability as we transition to using more intermittently available renewable energy resources such as wind and solar.

Table 2. RCEA's Long-Term Resource Adequacy Agreements

Project Name	Resource Type	Project Location	Initial Operation Date	Contract Length	Capacity (MW)
			Date	Lengui	(IVIVV)
Leapfrog	Demand	CA	2021	10 Years	5.5
Leapilog	Response	statewide	2021	10 Tears	3.5
Tierra Buena Energy	Lithium Ion	Tierra	2022	10 Years	2.5
Storage	Battery	Buena, CA	2022	TO Tears	2.5
Fairhaven Energy	Lithium Ion	Fairhaven,	2024	10 Years	17.25
Storage*	Battery	CA	2024	10 rears	17.25
Goal Line Energy	Lithium Ion	Escondido,	2025	15 Years	2.0
Storage	Battery	CA	2025	15 fears	2.0
Tumbleweed Energy	Lithium Ion	Rosamond,	2026	15 Years	2.72
Storage	Battery	CA	2020	13 Teals	2.72

<sup>\*</sup>local resource

As shown in Tables 1 and 2, different resources enter RCEA's portfolio in different years and persist for longer or shorter terms, eventually needing to be extended or replaced with other resources. See Figures 2 and 3 for a conceptual illustration of how our various contracts make up our past, present, and future energy portfolio.

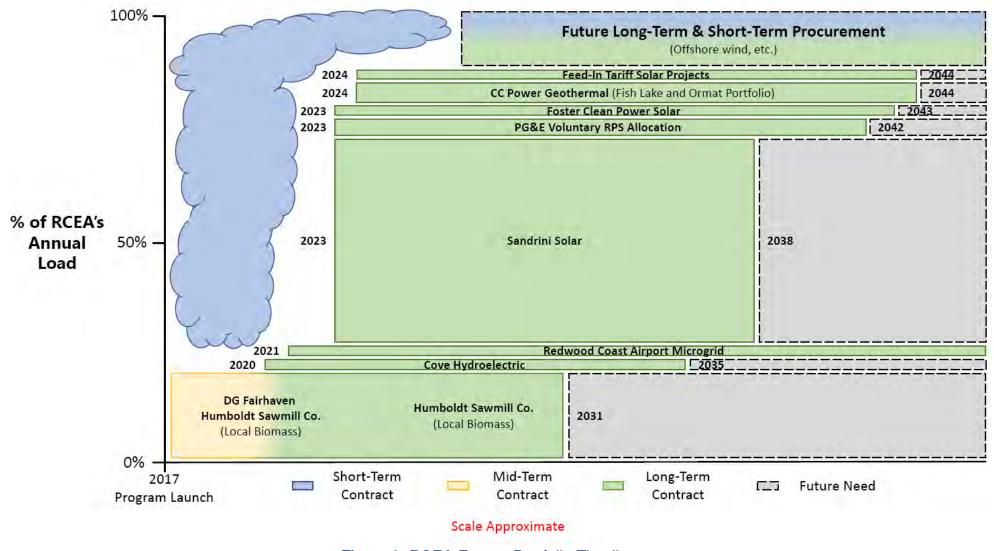


Figure 2. RCEA Energy Portfolio Timeline

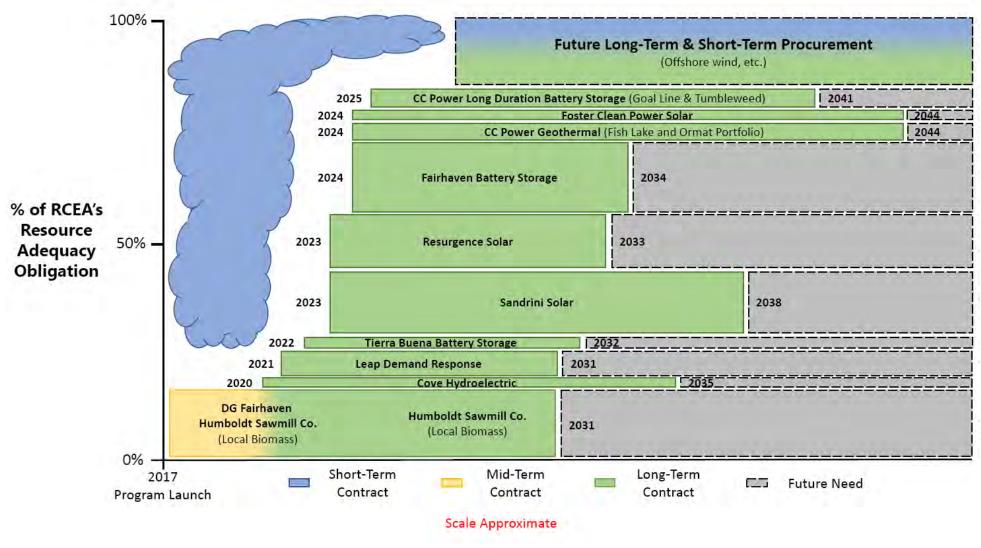


Figure 3. RCEA Resource Adequacy Timeline

Despite our Board's goal that all our energy come from local resources by 2030, RCEA has found it necessary for compliance with state laws and regulations to enter into some contracts for non-local resources that extend beyond 2030. One state law, Senate Bill 350, requires at least 65% of our renewable energy required under the CA Renewables Portfolio Standard to come from contracts of ten years' duration or longer, or from resources we own. In addition, the CPUC has issued a series of procurement orders aimed at ensuring grid reliability; contracts compliant with these orders also need to be of minimum ten years' duration. Figure 4 illustrates how RCEA is currently positioned to meet customer demand through a combination of short-term and long-term contracts.

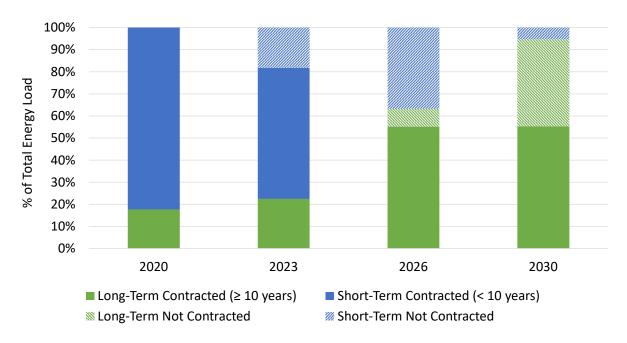


Figure 4: RCEA's Progress Towards Long-Term Procurement

Each solicitation issued by RCEA since 2019 has stated a preference for local projects, but the great majority of offers received have been for non-local projects. RCEA has had to weigh the importance of local procurement against several other factors, including cost, developer qualifications, and project risk. In addition, RCEA often finds itself competing for few available new resources when other energy providers across the state are working on the same schedule to fulfill the same CPUC-ordered procurement. At times, this has led to RCEA committing to non-local projects as the only alternative to non-compliance.

Some of RCEA's contractual commitments needed for compliance and risk management purposes are at odds with the goal of 100% local procurement by 2030. However, as noted above RCEA's strategic plan couples that goal with the aim that Humboldt County become a "net exporter of renewable electricity." That goal could be fulfilled if other power providers, such as RCEA's sister CCE agencies across the state, procure offshore wind or other Humboldt County renewable resources in sufficient

quantities to offset RCEA's purchase of non-local renewable energy. Given that the developable wind resource off the Humboldt coast is much larger than our local electricity demand, this scenario is very likely to come to pass within the coming decade.



Figure 5. Redwood Coast Airport Microgrid

Most of RCEA's power is procured through contracts with power project developers or operators. However, RCEA has invested in one important RCEA-owned energy project. In 2021, RCEA began commercial operation of the Redwood Coast Airport Microgrid (RCAM), a solar plus energy storage facility at the California Redwood Coast Airport in McKinleyville. RCAM is California's first 100% renewable energy, front-of-the-meter<sup>3</sup>, multi-customer microgrid. The microgrid provides energy resilience for the regional airport and U.S. Coast Guard Air Station and electricity to RCEA's customers. Tax provisions in the federal 2022 Inflation Reduction Act make it more financially attractive for public agencies like RCEA to develop their own renewable energy projects, which may lead to RCEA developing more projects of this type.

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<sup>&</sup>lt;sup>3</sup> "front-of-the-meter" means that this resource is serving the grid at large, rather than just offsetting load at one customer's site like a "behind the meter" rooftop solar system does.

Over the first six years of operating RCEA's CCE program, our power portfolio has evolved. While we have sought to advance gradually toward our 100% renewable goal, we have had to respond to external challenges by temporarily adjusting our procurement. During 2020 and 2021, short-term financial challenges required RCEA to temporarily reduce our renewable energy content to keep customer rates competitive. These financial challenges included increased wholesale power costs, lower than expected PG&E electric rates that are used to benchmark RCEA's own rates, and delayed or reduced customer revenues due to financial hardships during the pandemic.

The financial outlook in 2022 and future years has improved, allowing RCEA to resume our trajectory toward 100% renewable and carbon-free energy by 2025 and 100% local renewable energy by 2030. Figure 6 shows our power mix to date and our projected power mix to meet our 2025 and 2030 goals. Note RCEA's 2022 power mix is a preliminary estimate using data received as of the publication of this document.

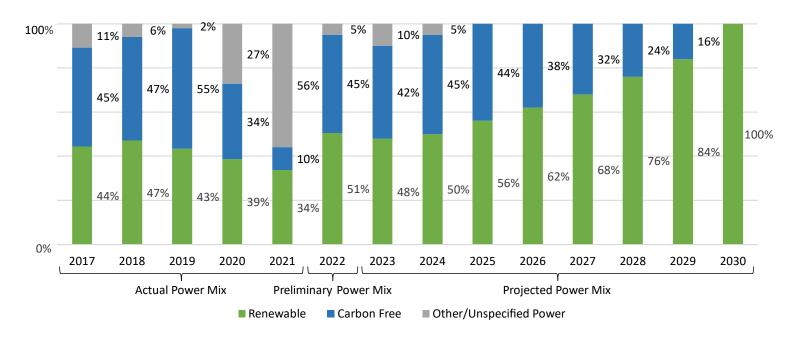


Figure 6. Past and Projected RCEA Power Mix

For the time being, RCEA's power mix includes unspecified power in addition to renewable and carbon-free resources. Unspecified power cannot be traced back to a specific source. It tends to be less expensive and have greater emissions than renewable and carbon-free power. RCEA currently includes some power from unspecified sources in its portfolio to keep customer rates affordable. As we continue to add long-term renewable energy contracts to RCEA's power portfolio, we plan to gradually phase out our reliance on unspecified sources of power.

## Greenhouse Gas Emissions

RCEA's GHG emissions have mostly been below the California utility average. However due to the short-term financial challenges in 2020 and 2021, the temporary reduction of our renewable and carbon-free energy procurement resulted in higher than usual GHG emissions. Also, a regulatory change took effect that ascribed GHG emissions to energy RCEA purchased from out-of-state renewables. As mentioned previously, RCEA's finances improved in 2022. This, along with procuring only in-state renewables in 2022, enabled us to get back on track to reducing GHG emissions associated with our energy mix, as shown in Figure 7. Please note that the 2022 GHG emissions shown in Figure 7 are a preliminary estimate. However, we will have RCEA's final GHG emissions for the 2022 calendar year published in summer 2023.

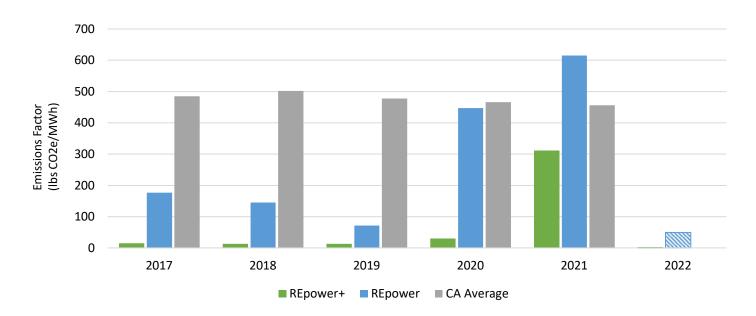


Figure 7. RCEA's Historic Greenhouse Gas Emissions (lbs CO2e/MWh)

## RCEA's Rate Structure

To date, RCEA has offered standard rates to our customers that parallel PG&E's generation rates with a Board-approved discount. Currently, RCEA customers receive a half a percent discount from what they would otherwise pay PG&E. This type of rate structure indexed to the local utility's rates is common among CCAs across California.

While RCEA's rate structure ensures that every customer will pay less than they would as a PG&E customer, it doesn't accurately represent the true cost of serving our customer base. This is because PG&E's rates reflect their cost to serve millions of customers across Northern California, plus an approved rate of return for their shareholders. Humboldt County has a unique climate, economy, and demography that determines our customers' energy consumption patterns. Most of RCEA's customer load is located on the temperate coast with more demand for winter heating than summer air conditioning, while PG&E's load is typically the opposite. Coupling RCEA's rate structure with PG&E's means our operational budget for power procurement and customer energy programs must fit within the confines of the current rate structure.



Building financial reserves over time will allow RCEA more short-term flexibility in setting its rates.

An accelerated timeline toward 100% renewable energy, or a decision to procure more premium priced renewable resources would drive up RCEA's operating costs. This could require RCEA to decouple our rates from PG&E's to appropriately cover the operational costs for meeting our procurement goals and serving our customers. Resulting rates could turn out to be lower or higher than PG&E's, depending on our comparative power procurement costs and other operating expenses.

Some CCE providers in California have begun to adopt rates based on their actual cost of service, rather than using a set discount relative to the investor-owned utility's rates. If RCEA were to adopt such a cost-of-service rate-making model and the resulting rates were higher than PG&E rates, we would face the risk of customers opting out of RCEA service. We would also need to consider all the challenges a utility faces in developing its own rates, including an added analytic burden and potential shifting of costs among customer classes.

## REpower and REpower+ Participation

In 2017, when RCEA began serving customers in Humboldt County, all customers<sup>4</sup> were automatically enrolled into RCEA's REpower electricity service. However, approximately 1.4% of customers have "opted-up" into REpower+, RCEA's 100% renewable electricity service. RCEA monitors the number and load of opted up customers and procures additional renewable energy to cover this load.

## The Customers We Serve

RCEA provides electricity to 92% of eligible customers in RCEA's service area. RCEA's customer base differs from what is typically seen across the State of California. In RCEA's service area, residential customers make up the largest electricity use sector, while for the state as a whole, commercial electricity use is dominant. Figures 8 and 9 are a comparison of how RCEA's customer base differs from the State as a whole.

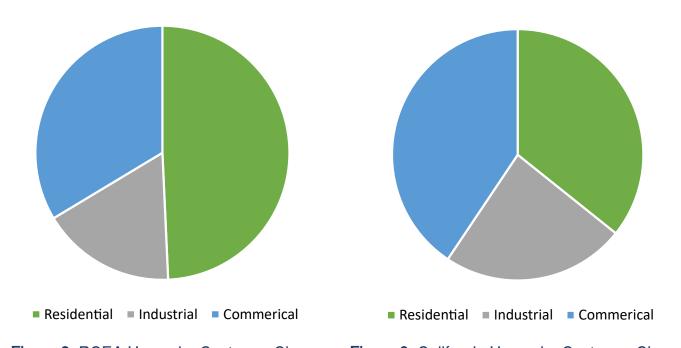


Figure 8. RCEA Usage by Customer Class

Figure 9. California Usage by Customer Class

<sup>&</sup>lt;sup>4</sup> Some large commercial and industrial customers who have special contracts with third-party electricity providers through a statewide program called Direct Access were not enrolled.

# Are the renewable electrons procured by RCEA actually delivered to my home or business?



Humboldt County is connected to a regional electric grid that spans across the western United States and has energy generators contributing electricity at various locations. When RCEA procures energy, we're paying a particular generator to put it into the grid at their plant, wherever it may be.

What electrons are actually delivered to our customers is not exactly the same as what we buy, since electricity flows by the path of least resistance to the customer load that's physically closest to the generation source. So, a unit of electricity used in Humboldt most likely originated at one of the plants here in the county, which are currently powered by natural gas, biomass, or solar. But electrons circulating on the grid are all the same, whether they are generated with renewable or non-renewable resources. It's similar to how your dollars can be deposited at a bank or credit union, then an equivalent amount of dollars can be withdrawn from an ATM thousands of miles away; it doesn't matter to you or the bank that those bills are different than the ones you deposited.

What's important in terms of cleaning up the grid is that we're gradually ensuring more of the energy going in comes from clean and renewable sources. In this way, Humboldt County ratepayer dollars are directly reducing total GHG emissions via renewable and carbon-free energy purchased by RCEA.

It is also RCEA's goal to generate as much of Humboldt's electricity as possible using local renewable resources, thereby reducing reliance on the Humboldt Bay Generating Station natural gas plant and imported fossil energy. As we make that transition, more of the electricity we buy will be what's consumed close to the source by our own customers. This is important for local economic development, and for local electric reliability as we transition away from natural gas in a grid constrained region. It's also important in terms of local air quality, as we gradually replace today's power plants that combust natural gas or biomass with non-emitting resources. But it's less important in terms of GHG emissions, for which the benefit is essentially the same wherever they can be reduced on the planet.

## California's Integrated Resource Planning (IRP) Process

Integrated resource planning is a standard long-term planning exercise conducted periodically by utilities to assess resources needed to meet customer energy demand at affordable rates. In California, load-serving entities including RCEA are required to submit an Integrated Resource Plan (IRP) to the CPUC every two years. These plans also address non-energy requirements that the LSE must meet, such as system reliability, dependence on unspecified system power, renewable resource integration, GHG emissions targets, and consideration of impacts that power plants may have on disadvantaged communities.

## RCEA's 2022 IRP

RCEA filed its biennial IRP with the CPUC on November 1, 2022. The plan details RCEA's electricity procurement plans through 2035 in keeping with statutory requirements for grid reliability and GHG emissions targets. RCEA is expected to submit its next IRP to the CPUC in 2024.

The CPUC requires load-serving entities like RCEA to submit a comprehensive package as part of the IRP process. The CPUC provides load-serving entities with spreadsheets to enter our proposed power portfolio(s) and demonstrate the portfolio's compliance with the State's grid reliability and GHG emissions targets. In 2022, RCEA submitted a detailed narrative describing our proposed portfolio, and two sets of spreadsheets, corresponding to two different 2030 and 2035 GHG emission scenarios.

RCEA's 2022 and prior IRP materials are available for viewing on our website. However, some of the information required by the CPUC to be included in the resource data templates is market-sensitive and therefore redacted from the public versions. Learn more by visiting: https://redwoodenergy.org/integrated-resource-plan/.

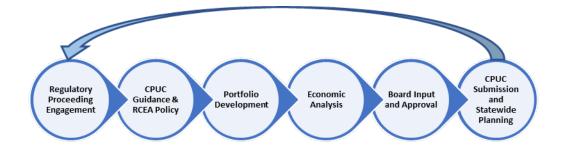


Figure 10. RCEA's Integrated Resource Planning Process

Figure 10 represents the cyclical IRP process that RCEA undertakes every two years. First, RCEA and other LSEs engage in the regulatory process via the CPUC's IRP proceeding to understand and critique state planning assumptions and analysis methods. From this, the CPUC issues final guidance, requirements, and templates for the compliance filing, which staff review along with RCEA policies, plans and programs that will all advise development of the IRP portfolio. To develop the portfolio, staff

review existing and planned resource commitments and consider new resources to fill out the portfolio over time in different configurations, referred to as candidate portfolios. Then, RCEA's consultant (in consultation with staff) analyzes the economic performance of each candidate portfolio, and the options are presented to the RCEA Board along with a portfolio recommendation. After Board input and approval, RCEA submits the IRP to the CPUC, whose staff combine all LSE IRPs into one statewide portfolio that is used for grid planning, and the cycle is then repeated two years later.

## **Equity Considerations**

Many communities disproportionately lack access to clean, reliable, and affordable energy due to race, nationality, income, or geographic location. Currently the U.S. Department of Energy is working toward providing disadvantaged communities with 40% of the overall benefits from federal investments in climate and clean energy. When it comes to the energy system, many communities face serious challenges.

## **Energy Insecurity**

**Definition:** The hardships households face when meeting basic needs.

**Example:** Not using the air conditioning during a heatwave because of energy costs.

## **Energy Poverty**

**Definition:** The lack of access to reliable energy itself.

**Example:** Disproportionate exposure to power outages experienced by marginalized communities.

## **Energy Burden**

**Definition:** The percentage of household income spent on energy expenditures.

**Example:** Communities of color and low-income families direct a higher share of their income toward energy costs.

Energy justice is aimed at overcoming these challenges by reducing energy costs and burdens on low-income customers, avoiding disproportionate impacts, guaranteeing the equitable distribution of the benefits of energy generation and transmission, ensuring access to reliable and clean energy, and providing community participation in energy related decision-making and development.

To help overcome some of these challenges, RCEA's Board approved a Racial Justice Plan in 2022, which is designed to remove racial disparities among communities in accessing energy services, and increase access to clean energy, energy efficiency, and healthy communities. In relation to RCEA's CCE program, the Racial Justice Plan includes the following commitments:

- Tribal engagement
- Diversity, equity and inclusion in program selection design and implementation
- Energy justice in power procurement and energy resource development
- Collaboration with other California CCE providers and other external organizations on environmental justice and energy equity matters

## Achieving True Round-the-Clock Renewable Energy

In keeping with the current regulatory framework and common accounting methods for clean energy procurement, RCEA has set its procurement goals on an annual basis. If our goal is a 40% renewable portfolio, we purchase enough renewable energy over the course of a year to meet 40% of our customer load. This is an important step toward a truly clean energy portfolio, but it doesn't get us all the way there. For example, if we were to procure that 40% by buying only solar energy, we would not actually be providing renewable energy to our customers at night when the sun isn't shining, so we would need to purchase energy from other, potentially more polluting, sources to meet customer load round-the-clock.

Aiming for a 100% renewable portfolio on an annual basis is an ambitious goal RCEA and other electricity providers have set, but it does not ensure a completely clean portfolio every hour of the year. Years before launching our CCE program, RCEA in partnership with the Schatz Energy Research Center at Cal Poly Humboldt and PG&E performed a California Energy Commission-funded study on the feasibility of transitioning Humboldt County to a renewable energy-driven economy. The study used detailed computer modeling to identify a pathway to meeting loads in all seasons and times of day with renewable energy, using natural gas for generation only minimally to fill in gaps due to intermittency of wind and solar resources. At the time, battery energy storage at utility scale was not yet considered cost-effective. Inclusion of energy storage in the scenarios analyzed could further reduce dependency on fossil fuels.<sup>5</sup>

More recently, some clean energy leaders, notable among them Peninsula Clean Energy, the CCE agency serving San Mateo County, have set goals to serve their customers with 100% renewable energy around-the-clock, by carefully analyzing what renewable energy, energy storage, and other resources they would need to procure to meet their load in every hour of the year without having to call on fossil fuel power plants. Peninsula Clean Energy concluded that truly meeting a 100% renewable goal every hour of the year would be cost-prohibitive. Their study recommends procuring a portfolio

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<sup>&</sup>lt;sup>5</sup> http://schatzcenter.org/docs/RePower\_Humboldt\_Strategic\_Plan.pdf

that can meet the 100% renewable goal 99% of the time. In Peninsula Clean Energy's case, this is estimated to result in only a 2% cost increase over a portfolio that merely meets the goal of 100% renewable on an annual basis.<sup>6</sup>

RCEA has embarked on our own analysis to study the costs and benefits of a round-the-clock renewable energy portfolio. We will share our findings as they become available.

## **RCEA Goals vs Constraints**

As highlighted throughout this document, there are numerous factors for RCEA to consider when supplying our customers with energy. As we strive to achieve our various goals, we're required to strategically navigate various constraints, whether they be internally or externally imposed. As represented in Figure 11, there are times when our goals are in conflict with the constraints that we operate within, but we're determined to overcome these challenges through innovative solutions and adaptive strategic planning.

<sup>&</sup>lt;sup>6</sup> https://www.peninsulacleanenergy.com/achieving-24-7-renewable-energy-by-2025/

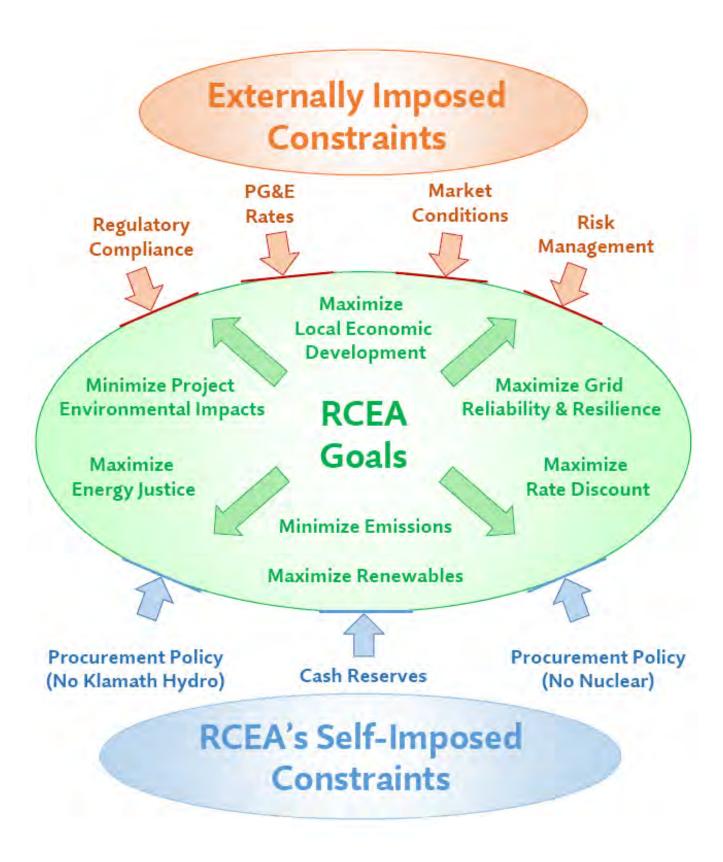


Figure 11. Goals & Constraints

## Conclusion

RCEA appreciates your interest in planning Humboldt County's clean electricity future. We will offer opportunities during 2023 for the public to provide input to be incorporated as feasible in RCEA's 2024 integrated resource plan.

Please visit <a href="https://www.redwoodenergy.org/humboldts-electric-future">https://www.redwoodenergy.org/humboldts-electric-future</a> to find updated information and to sign up for event notifications.

You can also email us at <a href="https://example.com/Humboldts-Electric-Future@RedwoodEnergy.org">https://example.com/Humboldts-Electric-Future@RedwoodEnergy.org</a> any time with comments or questions about RCEA's Community Choice Energy program.



Luna Latimer, RCEA Community Advisory Committee member, indicates her priorities during RCEA's 2019 Comprehensive Action Plan for Energy update



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