Redwood Coast Energy Authority
633 3rd Street, Eureka, CA 95501
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BOARD OF DIRECTORS MEETING AGENDA

Humboldt Bay Municipal Water District Office **January 23, 2020**
828 7th Street, Eureka, CA 95501 **Thursday, 3:30 p.m.**

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact the Clerk of the Board at the phone number, email or physical address listed above at least 72 hours in advance.

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 in the agenda binder located in the RCEA lobby during normal business hours, and at *https://redwoodenergy.org/about/board-of-directors/*.

PLEASE NOTE: Speakers wishing to distribute materials to the Board at the meeting are asked to provide 12 copies to the Clerk of the Board.

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 December 21, 2019, Board Meeting.
3.2 Approve Disbursements Report.
3.3 Accept Financial Reports.
3.4 Approve the 2020 RCEA Board Meeting Calendar.

4. REMOVED FROM CONSENT CALENDAR ITEMS

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

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

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

5. OLD CCE BUSINESS

5.1. Energy Risk Management Quarterly Report

Accept Energy Risk Management quarterly report.

5.2. CCE Program Rate Adjustment (Information only)

5.3. Report from Public Safety Power Shutoff Ad Hoc Subcommittee (Information only)

6. NEW CCE BUSINESS

6.1. Energy Risk Management Policy

Adopt Resolution 2020-1 of the Redwood Coast Energy Authority adopting updates to the Energy Risk Management Policy.

6.2. Development of New Local Utility-Scale Renewable Energy Projects

Provide direction to staff on priorities for new local utility-scale renewable energy projects among the alternatives identified in RCEA's RePower strategic plan.

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

7. OLD BUSINESS

7.1 Airport Microgrid Critical Facility Islanding Project Update (Information only)

8. NEW BUSINESS

8.1 Election of Officers

Select the RCEA Board Chair and Vice Chair and authorize them as signers on RCEA bank accounts.

8.2 Finance Subcommittee

Appoint up to four Directors to the Finance Subcommittee for one-year terms ending on the first regular Board meeting of each year.

8.3 Community Advisory Committee

Appoint a Board Liaison, and an alternate liaison if desired, to the Community Advisory Committee to serve through December 2020.

9. STAFF REPORTS

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. Closed Session to meet with legal counsel per Government Code Section 54956.9(d)(4), in re PG&E, Bankruptcy Court, 19-30088, Northern District of California.

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
Tentative Date Pending the Board's Meeting Calendar Approval
Thursday, February 27, 2020, 3:30 p.m.
Humboldt Bay Municipal Water District Office
828 7th Street, Eureka, CA 95501

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BOARD OF DIRECTORS MEETING DRAFT MINUTES

Humboldt Bay Municipal Water District Office **December 19, 2019**
828 7th Street, Eureka, CA 95501 **Thursday, 3:30 p.m.**

Chair Michael Winkler called a regular meeting of the Board of Directors of the Redwood Coast Energy Authority to order on the above date at 3:34 p.m. Notice of this meeting was posted on December 15, 2019. PRESENT: Vice Chair Austin Allison, Chris Curran, Estelle Fennell (arrived 3:36 p.m., departed 5:02 p.m.), Dwight Miller, Robin Smith, Frank Wilson, Chair Michael Winkler, Sheri Woo. ABSENT: Dean Glaser. STAFF AND CONSULTANTS PRESENT: Business Planning and Finance Director Lori Biondini, RCEA General Counsel Nancy Diamond, Power Resources Director Richard Engel, Executive Director Matthew Marshall, Clerk of the Board Lori Taketa.

REORDERING AGENDA ITEMS

Chair Winkler requested that agenda item 11.1 be addressed after the consent calendar. Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

M/S: Allison, Woo: Address agenda item 11.1 Carbon Free/Renewable Power Purchase Target Review/2020 Power Procurement after voting on the consent calendar.

The motion passed on a unanimous voice vote. Ayes: Allison, Curran, Fennell, Miller, Smith, Wilson, Winkler, Woo. Absent: Glaser.

REPORTS FROM MEMBER ENTITIES

Director Chris Curran reported that he is now the Blue Lake City Council's primary RCEA representative. Summer Daugherty is the city's alternate representative.

Director Woo reported that Ruth Lake was at 66% capacity earlier in the week, which is low for this time of year.

Director Allison reported that Eureka is working on updating its building standards code to reduce natural gas heater use in new buildings and transition towards more electrification. The propane industry is lobbying Director Allison, representing propane as a clean energy source.

Director Fennell arrived at 3:36 p.m.

The directors began discussing the Humboldt County Board of Supervisors' decision to reject the Humboldt Wind Project until General Counsel Diamond recommended the Board vote to take up agenda item 6.1 to allow for more complete discussion and public comment.

REORDERING AGENDA ITEMS

M/S: Allison, Wilson: Address agenda item 6.1 Renewable Energy Power Purchase Agreement with Humboldt Wind, LLC.

The motion passed on a unanimous voice vote. Ayes: Allison, Curran, Fennell, Miller, Smith, Wilson, Winkler, Woo. Absent: Glaser.

6.1 Renewable Energy Power Purchase Agreement with Humboldt Wind, LLC

The directors expressed disappointment about the project's failure, an urgent need to come to agreement on and to commit to local renewable energy projects to address the climate crisis, and the need to begin engaging impacted communities early in project development.

Director Fennell described the difficulties caused by Terra-Gen's short timeline to obtain project approval to qualify for a sunsetting federal subsidy. She stated that many Humboldt Wind Project opponents offered her commitments of support for the upcoming offshore wind project and for finding supportable climate change solutions.

The directors discussed these potential actions:

- Streamline the solar energy project permitting process
- Streamline the environmental review process without cutting corners
- Conduct a community discussion on climate actions Humboldt County can take
- Focus on transportation and heating electrification to address fossil fuel consumption
- Consider thorium reactors to complement variable renewable energy output
- Work closely and formally with the County on local renewable energy projects

The directors expressed concern about:

- Public perception of RCEA supporting projects prior to approval
- Understanding clearly the location of Native American sacred sites
- How Humboldt County's anti-development reputation hurts the community's future and energy independence
- A strong community focus on solar as Humboldt County's primary renewable energy solution despite seasonality, battery storage's high expense, and the likely expense for private citizens

Chair Winkler invited public comment:

Blue Lake resident Scott Fraser asked RCEA to be open-minded about climate change solutions and to consider supporting solar energy, adding that the community will not want to talk with the agency about new initiatives until RCEA has considered all possible solutions.

Member of the public Dr. Ken Miller stated that solar generators are an inexpensive alternative to gas-powered generators, and that the public would like RCEA to be a solar energy production leader, send staff to solar conferences and promote low-impact renewable energy solutions. Dr. Miller stated that dismissing solar energy hurts RCEA's credibility.

Deborah Dukes of 350 Humboldt stated that she would have accepted the Supervisors' decision if it were based on reasoned dialog. Ms. Dukes stated that her testimony in support

of the Humboldt Wind Project was met with insults and intimidation and that she disagreed with the way the meetings were conducted.

Ferndale resident Ellin Beltz stated that conservation must be foremost in action, especially in public buildings, and that by lowering the 50% national rate of energy waste the overall electricity load can be reduced.

Arcata resident Angelina Lasko suggested that RCEA focus on storage and follow Southern California Edison's example of finding 220 MW of storage within their grid. Ms. Lasko suggested that the County own renewable power infrastructure and become a microgrid.

Hoopa Valley Tribe and RCEA staff member Lori Biondini stated that most people do not understand the severity of the historical and current trauma, marginalization and alienation experienced by native communities. Ms. Biondini stated that she looked forward to participating in more projects employing early and frequent communication.

Chair Winkler closed public comment.

Executive Director Marshall stated that of the concerns raised about the Humboldt Wind Project, staff felt the Wiyot Tribe's concerns were the most challenging to address or mitigate. He stated that RCEA would continue to include the community in decision-making and to engage in early and frequent project discussions with impacted groups. The CPUC requires RCEA to provide a large percentage of the County's electricity through long term contracts, Mr. Marshall continued, and without the Terra-Gen project, RCEA's Kern County solar project contract may require revision, or contracts with companies that responded to the earlier renewable request for proposals may need reconsideration.

Executive Director Marshall reminded the directors that more than half of RCEA's staff work focuses on energy efficiency, that staff is working with businesses and public agencies on energy storage, that RCEA launched a feed-in tariff program to develop community-scale solar projects, and that with the current airport microgrid project the agency will own and operate Humboldt County's largest solar array and battery system and may have more storage as a percentage of customer load than any other California load-serving entity, once this project is completed.

The directors discussed:

- How RCEA is well-positioned to bring together community members willing to discuss the county's energy sources and foster a respectful discussion of all options so a common base of facts and agreement on action can be reached.
- How commitments need to be gathered from people for the RePower strategic plan's ambitious goals.
- How despite efforts by the county to instill respectful dialog, it was not possible to control the actions of people who were passionate about the issue.
- How every County Supervisor must redouble efforts to develop sustainable energy and how every citizen must learn as much as possible about the climate emergency
- How making exceptions of too many proposed renewable energy projects prevents meaningful climate action.

ORAL COMMUNICATIONS

Chair Winkler invited public comment. Member of the public Dr. Ken Miller stated that Humboldt County helped start the solar revolution in the 1970s as a leading solar panel adopter and has an opportunity to continue to be a model solar energy implementer. Chair Winkler closed public comment.

CONSENT CALENDAR

3.1 Approve Minutes of November 21, 2019, Board Meeting.
3.2 Approve Disbursements Report.
3.3 Accept Financial Reports.
3.4 Reappoint Jerome Carman, Colin Fiske, Larry Goldberg, Pam Halstead, Tom Hofweber and Dennis Leonardi to the Community Advisory Committee for Terms Expiring April 12, 2022.
3.5 Approve Changes to Feed-In Tariff Power Purchase Agreement as Amended to Address Local Developer Incentive and Energy Curtailment Calculation Concerns.
3.6 Consent to Assignment of the Existing Biomass Power Purchase Agreement from DG Fairhaven Power, LLC to DG Fairhaven, LLC, and Authorize the Executive Director to Execute All Necessary Documents.

Director Woo stated she would abstain from voting on item 3.6 because of a remote conflict of interest. DG Fairhaven is a client of Director Woo's employer, SHN. Director Woo is a minority SHN shareholder, although the Board's decision will not affect SHN's shareholder price. Director Woo does not supervise any SHN employee working with DG Fairhaven.

Chair Winkler invited public comment. Dr. Ken Miller, member of the public requested item 3.4 be removed from the consent calendar. Chair Winkler closed public comment.

M/S: Allison, Miller: Approve consent calendar items 3.1, 3.2, 3.3, 3.5 and 3.6.

The motion passed with a voice vote. Ayes: Allison, Curran, Fennell, Miller, Smith, Wilson, Winkler, Woo. Absent: Glaser. Abstain: Woo for item 3.6.

Chair Winkler invited public comment.

Dr. Miller stated that some Community Advisory Committee nominees were not open-minded regarding distributed energy production and recommended the Board change the committee's membership as the body presents community input to the Board.

A member of the public suggested the Board consider adding seats for tribal member representatives to the CAC.

Member of the public Angelina Lasko stated that she was not aware of the committee and that the community needs more access to the Committee and Board.

Chair Winkler closed public comment.

The Board discussed the current Rio Dell and Fortuna committee member vacancies, Rio Dell community members' awareness of the importance of proactive involvement, how tribal

members are welcome to apply for committee seats, the challenges of achieving equitable representation of the many tribal governments in the county and of finding engaged committee member-volunteers, notification challenges given the dispersed way in which the community gathers information, how all board members are accessible via email, and the possibility of setting preferences for different at-large committee seats.

M/S: Fennell, Miller: Approve consent calendar item 3.4.

The motion passed on a unanimous voice vote. Ayes: Allison, Curran, Fennell, Miller, Smith, Wilson, Winkler, Woo. Absent: Glaser.

COMMUNITY CHOICE ENERGY (CCE) BUSINESS - Chair Winkler confirmed that a CCE quorum was present.

NEW CCE BUSINESS

Carbon Free/Renewable Power Purchase Target Review/2020 Power Procurement

Power Resources Director Engel presented a staff report on the carbon free energy procured for 2019 and some of 2020 and which staff is proposing to procure again for the rest of 2020 within set price parameters. Staff proposes redirecting funds to local investment should this power source be too expensive or unavailable although higher greenhouse gas emissions from the CCE program's power content may result. The Board's previous approval of this power source was based on the source's relatively low cost.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

M/S: Allison, Fennell: Authorize staff to expend up to $1.5 million for procurement of carbon-free power for calendar year 2020, at a unit price not to exceed 160% of 2020 carbon-free power procured to date, redirecting any portion of these funds not committed by May 1, 2020 to an incentive program for energy storage at critical public facilities.

The motion passed on a unanimous voice vote. Ayes: Allison, Curran, Fennell, Miller, Smith, Wilson, Winkler. Absent: Glaser. Non-voting: Woo.

REORDERING AGENDA ITEMS

M/S: Allison, Fennell: Address agenda item 5.1 Approve Updated RePower Humboldt/Comprehensive Action Plan for Energy Planning Document Draft.

The motion passed on a unanimous voice vote. Ayes: Allison, Curran, Fennell, Miller, Smith, Wilson, Winkler, Woo. Absent: Glaser.

OLD BUSINESS

5.1 - Approve Updated RePower Humboldt/Comprehensive Action Plan for Energy Planning Document Draft

Executive Director Marshall described revisions in the final RePower Humboldt/ Comprehensive Action Plan for Energy document prompted by comments during recent Board and Community Advisory Committee meetings. The long-term planning document sets out goals for the next 10 years which the Board may review and update periodically. The directors discussed the challenge of balancing conflicting desires for shortened biomass contracts which hasten carbon emission reduction and for longer contracts which enable emission-reducing infrastructure investment. A request was made for a California Air Resources Board presentation on air quality impacts of biomass plants and wood burning stoves. There was further discussion about how biomass energy emits less than 2% of California's carbon emissions during the evening, how the remainder result from natural gas and coal, and how mentioning sequestration in the document enables work in that arena.

Director Fennell left at 5:02 p.m. Chair Winkler invited public comment.

Bob Marino of DG Fairhaven spoke of the need for long-term contracts to make equipment investments and expressed a willingness to serve on the biomass technical advisory committee.

Member of the public Martha Walden expressed support for a technical advisory committee to investigate mill waste burning impacts and how other communities balance grids without fossil fuel and biomass use. Ms. Walden expressed concern that energy independence emphasis leads to more biomass energy production and the primary importance of finding the most rapid way to draw down atmospheric greenhouse gases.

Member of the public Ellen Golla expressed her disappointment with the RePower document's emphasis on biomass energy use which she stated goes against RCEA's mission to advance the use of clean, renewable and efficient resources.

Arcata resident Walt Paniak stated that biomass remains an expensive, inefficient and unhealthy energy source and adding forest waste as fuel continues ratepayer subsidies. He stated the need to reward the growth and retention of as many big trees as possible.

Chair Winkler closed public comment.

M/S: Allison, Miller: Adopt the 2019 RePower Humboldt Comprehensive Action Plan for Energy.

The motion passed on a unanimous voice vote. Ayes: Allison, Curran, Miller, Smith, Wilson, Winkler, Woo. Absent: Fennell, Glaser.

CLOSED SESSION

Chair Winkler invited public comment on the closed session items. No one came forward to speak. Chair Winkler closed public comment.

The directors adjourned to closed session at 5:10 p.m. to meet with legal counsel per Government Code Section 54956.9(d)(4), in re PG&E, Bankruptcy Court, 19-30088, Northern District of California, and regarding Public Employee Performance Evaluation, pursuant to Government Code Section 54957(b)(1): Executive Director.

The directors reconvened to open session at 5:57 p.m. Chair Winkler stated that there was nothing to report from closed session.

NEW BUSINESS

Fiscal Year 2019-2020 1st Quarter Budget Summary (Information only)

Executive Director Marshall presented the budget summary staff report, noting that because RCEA's CCE program mirrors PG&E's rates, average net revenues are higher when summer rates are in effect and dip when winter rates are implemented. The fluctuations are projected to balance out in the second half of the fiscal year.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

CCE Program Update (Information only)

California Public Utilities Commission Decision Requiring Electric System Reliability Procurement for 2021-2023

Executive Director Marshall reported that in anticipation of some natural gas plants being decommissioned, the CPUC identified gaps when energy production will be inadequate to meet growing demand, factoring solar energy production's nonalignment with peak energy use periods. The CPUC divided the shortfall into renewable energy shares from new sources that each California load-serving entity must procure. RCEA's airport solar microgrid will fulfill some of the agency's 2021 share, and the agency may need to do targeted procurement to fulfil requirements through 2023. The new energy sources may be located anywhere in California and the offshore wind project will not be online in time to meet the requirements.

Postponement of annual review and update of RCEA's Energy Risk Management Policy

Executive Director Marshall stated that the annual risk management policy review would take place during the following meeting.

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

Chair Winkler adjourned the meeting at 6:02 p.m.

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Redwood Coast Energy Authority
Disbursements Report
As of November 30, 2019

Type	Date	Num	Name	Memo	Amount
Liability Check	11/05/2019	E-pay	EDD	499-0864-3 QB Tracking # 197192734	-3,882.21
Liability Check	11/05/2019	E-pay	Internal Revenue Service	74-3104616 QB Tracking # 197264734	-19,481.28
Liability Check	11/05/2019	E-pay	EDD	499-0864-3 QB Tracking # 197299734	-148.59
Liability Check	11/05/2019	E-pay	Internal Revenue Service	74-3104616 QB Tracking # 197339734	-157.06
Liability Check	11/05/2019	10175	Calvert	VOID: 74-3104616	0.00
Liability Check	11/05/2019	10176	Calvert	VOID: 74-3104616	0.00
Liability Check	11/05/2019	10177	Umpqua Bank	74-3104616	-551.88
Liability Check	11/08/2019	E-pay	EDD	499-0864-3 QB Tracking # 389289734	-4,065.53
Liability Check	11/08/2019	E-pay	Internal Revenue Service	74-3104616 QB Tracking # 392105734	-20,302.26
Liability Check	11/08/2019	E-pay	EDD	499-0864-3 QB Tracking # 392122734	-71.54
Bill Pmt -Check	11/08/2019	10173	City of Arcata	October Utility User Tax	-10,922.58
Bill Pmt -Check	11/08/2019	10174	FedEx	Residential box mailing	-18.07
Bill Pmt -Check	11/08/2019	10178	ABC Office Equipment	Copier service visit	-160.00
Bill Pmt -Check	11/08/2019	10179	Allen's Commercial Appliance	Prop 39 schools appliance delivery service	-100.00
Bill Pmt -Check	11/08/2019	10180	AM Conservation	LED Stock	-192.46
Bill Pmt -Check	11/08/2019	10181	Best Cleaners	Coverall & linens laundering	-15.00
Bill Pmt -Check	11/08/2019	10182	Bishop, M.	Expense & mileage reimbursement - October	-310.02
Bill Pmt -Check	11/08/2019	10183	Braun Blaising Smith Wynne	Legal Services - Regulatory - August	-10,966.90
Bill Pmt -Check	11/08/2019	10184	Brennan, K.	Mileage reimbursement - October	-213.56
Bill Pmt -Check	11/08/2019	10185	Central Office	Printing services	-289.03
Bill Pmt -Check	11/08/2019	10186	City of Arcata	October High Energy Use Tax	-3,693.52
Bill Pmt -Check	11/08/2019	10187	City of Blue Lake	October Utility User Tax	-843.41
Bill Pmt -Check	11/08/2019	10188	City of Eureka-Water	Water service, 9/25-10/25/19	-159.74
Bill Pmt -Check	11/08/2019	10189	Diamond, Nancy	Legal services	-13,746.70
Bill Pmt -Check	11/08/2019	10190	Donald Dame	Professional Services	-276.50
Bill Pmt -Check	11/08/2019	10191	Enterprise	Car rentals	-356.82
Bill Pmt -Check	11/08/2019	10192	FedEx	Residential box mailing	-18.07
Bill Pmt -Check	11/08/2019	10193	Fetters, Jake	Mileage reimbursement - October	-32.89
Bill Pmt -Check	11/08/2019	10194	Hilson, D.	Mileage reimbursement - October	-6.61
Bill Pmt -Check	11/08/2019	10195	Humboldt Bay Coffee Co.	Office coffee	-43.25
Bill Pmt -Check	11/08/2019	10196	Humboldt Builders' Exchange	Annual Planroom service fee for affiliates	-100.00
Bill Pmt -Check	11/08/2019	10197	HWMA	CFL & flourescent disposal	-36.48
Bill Pmt -Check	11/08/2019	10198	Lee, Ali O.	CAPE Workshop facilitation	-375.00
Bill Pmt -Check	11/08/2019	10199	Means, M.	Mileage reimbursement - October	-30.28
Bill Pmt -Check	11/08/2019	10200	Mission Uniform & Linen	Oct. mat service, janitorial supplies	-7.09
Bill Pmt -Check	11/08/2019	10201	North Coast Journal	full page ad - EV charging map- page 85	-900.00
Bill Pmt -Check	11/08/2019	10202	PG&E Utility Account	09/17-10/15/19 utilities/lighting upgrade financing	-755.85
Bill Pmt -Check	11/08/2019	10203	Pierson's Home Ctr	Program and facility supplies	-72.79
Bill Pmt -Check	11/08/2019	10204	Platt/Rexel	LED stock	-6,060.34
Bill Pmt -Check	11/08/2019	10205	Ray Morgan Company	Printer Charges: 10/6-11/5/19	-180.19
Bill Pmt -Check	11/08/2019	10206	SDRMA Medical	December Premium	-23,845.56
Bill Pmt -Check	11/08/2019	10207	Settelmayer, Matt	Mileage reimbursement - October	-157.88
Bill Pmt -Check	11/08/2019	10208	Slackerelli, M.	Travel reimbursement	-1,212.51
Bill Pmt -Check	11/08/2019	10209	Sonoma County Office of Education	May 2019 Professional Services	-78.00
Bill Pmt -Check	11/08/2019	10210	Suddenlink Communications	Phone & Internet access - November	-1,091.80
Bill Pmt -Check	11/08/2019	10211	Times Printing Company	Mailing services	-20,179.92
Bill Pmt -Check	11/08/2019	10212	Verizon Wireless	October tablet/cell service for field staff/mobile broa	-202.46
Bill Pmt -Check	11/08/2019	10213	VISA	October Statement 09/20/19-10/22/19	-12,317.08
Bill Pmt -Check	11/08/2019	10214	Winkler, Michael	M. Winkler travel reimbursement: Pacific Rim Confe	-1,576.46
Bill Pmt -Check	11/08/2019	10215	Winzler, John	Office Lease - November	-4,524.00
Check	11/08/2019	10216	NEM Customers	NEM Account Closeout	-600.87
Bill Pmt -Check	11/08/2019	10220	Greenlots	(19) SKY 1 year per port	-5,700.00

Redwood Coast Energy Authority
Disbursements Report
As of November 30, 2019

Type	Date	Num	Name	Memo	Amount
Bill Pmt -Check	11/08/2019	10221	Local Worm Guy	Weekly compost pickup	-30.00
Bill Pmt -Check	11/08/2019	10222	NGI, Inc.	Statewide Triffic Safety & Signs- contractor rebate/A	-1,534.69
Bill Pmt -Check	11/08/2019	10223	North Coast Cleaning	October monthly cleaning service	-438.00
Liability Check	11/08/2019	10224	Calvert	74-3104616	-11,977.92
Check	11/08/2019	10225	Humboldt Bay MWD	Copay refund for #NR5563	-107.27
Paycheck	11/08/2019	ACH	Employees	Payroll 10/16-10/31/19	-52,967.60
Liability Check	11/21/2019	E-pay	Internal Revenue Service	74-3104616 QB Tracking # -644007366	-19,491.92
Liability Check	11/21/2019	E-pay	EDD	499-0864-3 QB Tracking # -643956366	-3,756.85
Liability Check	11/21/2019	E-pay	EDD	499-0864-3 QB Tracking # -643934366	-34.57
Bill Pmt -Check	11/25/2019	ACH	CalPine Corporation	Calpine October 2019 Costs	-72,979.00
Bill Pmt -Check	11/25/2019	ACH	DG Fairhaven Power, LLC	DG Fairhaven October 2019	-379,242.48
Bill Pmt -Check	11/25/2019	ACH	Humboldt Redwood Company	Humboldt Redwood Co. October 2019	-461,578.31
Paycheck	11/25/2019	ACH	Employees	Payroll 11/1-11/15/19	-51,208.40
Bill Pmt -Check	11/25/2019	10226	AT&T	November - Phone and fax	-101.35
Bill Pmt -Check	11/25/2019	10227	Biondini, L.	Purchase & Travel reimbursement. APPA Business	-345.11
Bill Pmt -Check	11/25/2019	10228	Bithell, M.	Mileage reimbursement	-82.94
Bill Pmt -Check	11/25/2019	10229	Boudreau, D.	Travel reimbursement	-27.84
Bill Pmt -Check	11/25/2019	10230	Braun Blaising Smith Wynne	Legal Services - Regulatory - September	-8,069.19
Bill Pmt -Check	11/25/2019	10231	CoPower	December premium	-331.10
Bill Pmt -Check	11/25/2019	10232	Developed Employment Services, LLC.	Facilities maintenance work	-21.17
Bill Pmt -Check	11/25/2019	10233	FedEx	Residential box mailing	-23.05
Bill Pmt -Check	11/25/2019	10234	Fischer, A.	Purchase Reimbursment	-173.59
Bill Pmt -Check	11/25/2019	10235	Gwynn, J.	Travel reimbursement: Hydro and Wind tours in Sha	-76.70
Check	11/25/2019	10236	NEM Customers	NEM account closeouts	-337.05
Bill Pmt -Check	11/25/2019	10238	BC Ferreira Construction	ACV site: brush removal services	-7,200.00
Bill Pmt -Check	11/25/2019	10239	Enterprise	Car rentals	-168.02
Bill Pmt -Check	11/25/2019	10240	Loleta Fire Dept.	LED Buydown Program, Audit #4496	-1,490.88
Bill Pmt -Check	11/25/2019	10241	McKeever Energy & Electric, Inc.	LED Buydown project installs	-6,943.00
Bill Pmt -Check	11/25/2019	10242	McKinleyville CSD	LED Buydown Program: Audit #s 5221 and 5226	-998.95
Bill Pmt -Check	11/25/2019	10243	Mission Uniform & Linen	Nov. mat service, janitorial supplies	-7.09
Bill Pmt -Check	11/25/2019	10244	Morse Media	Website Hosting Services	-97.20
Bill Pmt -Check	11/25/2019	10245	NYLEX.net, Inc.	Onsite network support services - December	-3,200.00
Bill Pmt -Check	11/25/2019	10246	Owen, P.	Travel & purchase reimbursements	-122.99
Bill Pmt -Check	11/25/2019	10247	PG&E CCA	October CCE Charges	-22,029.84
Bill Pmt -Check	11/25/2019	10248	SDRMA Dental	December Premium	-1,670.46
Bill Pmt -Check	11/25/2019	10249	Stephenson, Nancy	Travel & purchase reimbursements	-1,159.08
Bill Pmt -Check	11/25/2019	10250	Taketa, L.	Travel reimbursement: CSDA training	-58.94
Bill Pmt -Check	11/25/2019	10251	Times Printing Company	printing & mailing services	-2,186.16
Bill Pmt -Check	11/25/2019	10252	Winzler, John	Office Lease - December	-4,524.00
Check	11/25/2019	10253	Hamel Renewables	Short list deposit refund: Luna project	-150,000.00
Liability Check	11/25/2019	10254	Calvert	74-3104616	-12,259.16
Bill Pmt -Check	11/25/2019	10255	Marshall, M.	Travel reimbursement	-144.82
Liability Check	11/25/2019	10256	Calvert	74-3104616	-193.40
TOTAL					**-1,450,420.13**

Redwood Coast Energy Authority
Profit & Loss Budget vs. Actual
July through November 2019

	Jul - Nov 19	Budget	% of Budget
Ordinary Income/Expense			
Income			
Total 4 GRANTS AND DONATIONS	270.00	0.00	100.0%
5 REVENUE EARNED			
Total 5000 · Revenue - government agencies	58,384.12	125,000.00	46.71%
Total 5100 · Revenue - program related sales	9,735.79	16,000.00	60.85%
Total 5400 · Revenue-nongovernment agencies	500,888.65	2,576,300.00	19.44%
Total 5500 · Revenue - Electricity Sales	23,119,884.06	53,482,965.00	43.23%
Total 5 REVENUE EARNED	23,688,892.62	56,200,265.00	42.15%
49900 · Debt Proceeds	0.00	2,730,300.00	0.0%
Total Income	23,689,162.62	58,930,565.00	40.2%
Gross Profit	23,689,162.62	58,930,565.00	40.2%
Expense			
Total 6 WHOLESALE POWER SUPPLY	16,132,744.56	42,295,190.00	38.14%
Total 7 PERSONNEL EXPENSES	974,902.36	3,026,492.00	32.21%
Total 8.1 FACILITIES AND OPERATIONS	1,562,716.34	4,539,920.00	34.42%
Total 8.2 COMMUNICATIONS AND OUTREACH	76,340.50	115,000.00	66.38%
Total 8.3 TRAVEL AND MEETINGS	32,273.38	68,000.00	47.46%
8.4 PROFESSIONAL & PROGRAM SRVS			
8400 · Regulatory	81,450.01	184,000.00	44.27%
8410 · Contracts - Program Related Ser	49,715.95	435,000.00	11.43%
8420 · Accounting	7,546.34	68,950.00	10.95%
8430 · Legal	63,349.72	125,000.00	50.68%
8450 · Wholesale Services - TEA	249,751.75	602,401.00	41.46%
8460 · Procurement Credit - TEA	270,058.07	753,809.00	35.83%
8470 · Data Management - Calpine	366,314.46	882,348.00	41.52%
Total 8.4 PROFESSIONAL & PROGRAM SRVS	1,088,186.30	3,051,508.00	35.66%
Total 8.5 PROGRAM EXPENSES	230,923.26	555,786.00	41.55%
Total 8.6 INCENTIVES & REBATES	153,863.96	881,500.00	17.46%
Total 9 NON OPERATING COSTS	24,805.96	169,518.00	14.63%
Total Expense	20,276,756.62	54,702,914.00	37.07%
Net Ordinary Income	3,412,406.00	4,227,651.00	80.72%
Net Income	**3,412,406.00**	**4,227,651.00**	**80.72%**

Redwood Coast Energy Authority
Balance Sheet
As of November 30, 2019

	Nov 30, 19
ASSETS	
Current Assets	
Checking/Savings	
1010 · Petty Cash	414.35
1050 · GRANTS & DONATIONS 3840	15,204.58
1060 · Umpqua Checking Acct 0560	-39,094.28
1071 · Umpqua Deposit Cntrol Acct 8215	7,456,228.50
1075 · Umpqua Reserve Account 2300	2,000,000.00
8413 · COUNTY TREASURY 3839	5,065.52
Total Checking/Savings	9,437,818.67
Accounts Receivable	
1100 · Accounts Receivable	211,512.34
Total Accounts Receivable	211,512.34
Other Current Assets	
1101 · Allowance for Doubtful Accounts	-366,235.54
1103 · Accounts Receivable-Other	3,827,728.84
1120 · Inventory Asset	21,715.00
1202 · Prepaid Expenses	-37,252.10
1210 · Retentions Receivable	11,965.49
1499 · Undeposited Funds	69,497.96
Total Other Current Assets	3,527,419.65
Total Current Assets	13,176,750.66
Total Fixed Assets	151,725.39
Total Other Assets	4,100.00
TOTAL ASSETS	**13,332,576.05**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Total Accounts Payable	3,330,568.46
Total Credit Cards	-3,918.99
Total Other Current Liabilities	120,385.85
Total Current Liabilities	3,447,035.32
Long Term Liabilities	
2703 · TEA Phase I & II	54,645.56
Total Long Term Liabilities	54,645.56
Total Liabilities	3,501,680.88
Equity	
2320 · Investment in Capital Assets	151,725.38
3203 · LTD - TEA Phase I & II	-54,645.56
3900 · Fund Balance	6,321,409.35
Net Income	3,412,406.00
Total Equity	9,830,895.17
TOTAL LIABILITIES & EQUITY	**13,332,576.05**

REDWOOD COAST Energy Authority

STAFF REPORT
Agenda Item # 3.4

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Lori Taketa, Clerk of the Board
SUBJECT:	2020 Board Meeting Calendar

SUMMARY

In November 2018, the RCEA Board agreed to meet on the fourth Thursday of each month at 3:30 p.m. The attached proposed 2020 meeting calendar follows this meeting schedule. The proposed November and December 2020 meetings are on the third Thursdays to adjust for holidays.

If the current meeting schedule meets the directors' needs, staff recommends approval of the proposed 2020 RCEA Board meeting calendar.

STAFF RECOMMENDATION

Approve the 2020 RCEA Board of Directors meeting calendar.

ATTACHMENT:

- Proposed 2020 RCEA Board of Directors meeting dates

Redwood Coast Energy Authority

Board of Directors

PROPOSED 2020 REGULAR MEETING SCHEDULE

Meetings scheduled to start at 3:30 p.m.

February 27	(4th Thursday)
March 26	(4th Thursday)
April 23	(4th Thursday)
May 28	(4th Thursday)
June 25	(4th Thursday)
July 23	(4th Thursday)
August 27	(4th Thursday)
September 24	(4th Thursday)
October 22	(4th Thursday)
November 19	(3rd Thursday, 4th Thursday is Thanksgiving Day)
December 17	(3rd Thursday, 4th Thursday is Christmas Eve)
January 28, 2021	(4th Thursday)

REDWOOD COAST EnergyAuthority

STAFF REPORT
Agenda Item # 5.1

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources Jaclyn Harr, TEA Client Services Specialist
SUBJECT:	Energy Risk Management Quarterly Report

BACKGROUND

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

SUMMARY

TEA Client Services Specialist Jaclyn Harr and RCEA staff will provide an Energy Risk Management quarterly program update.

RECOMMENDED ACTION

Accept Energy Risk Management Quarterly Report.

ATTACHMENTS

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

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RCEA Energy Risk Management Plan Quarterly Report

January 2020

Outline

- Program Outlook for RCEA CCE
- 2020 Emerging Risk Factors to RCEA CCE

Overall Program Outlook

Revenues

- PG&E generation and PCIA rates in 2020 came in more favorably than forecast, improving the outlook for 2020
- Additional PCIA changes expected in February

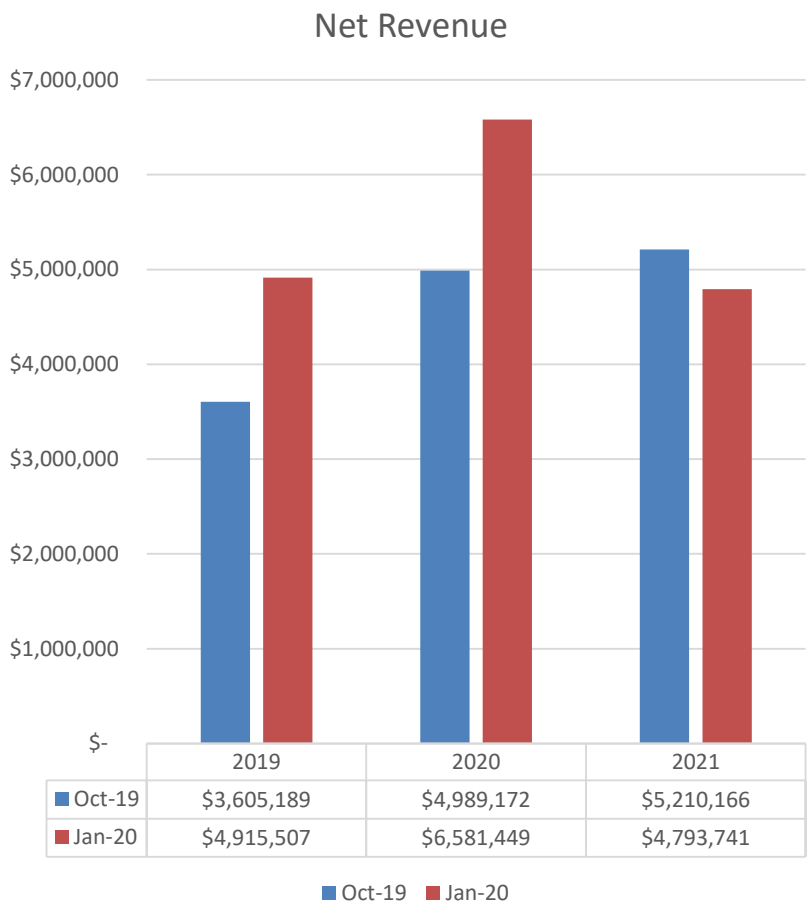
Costs

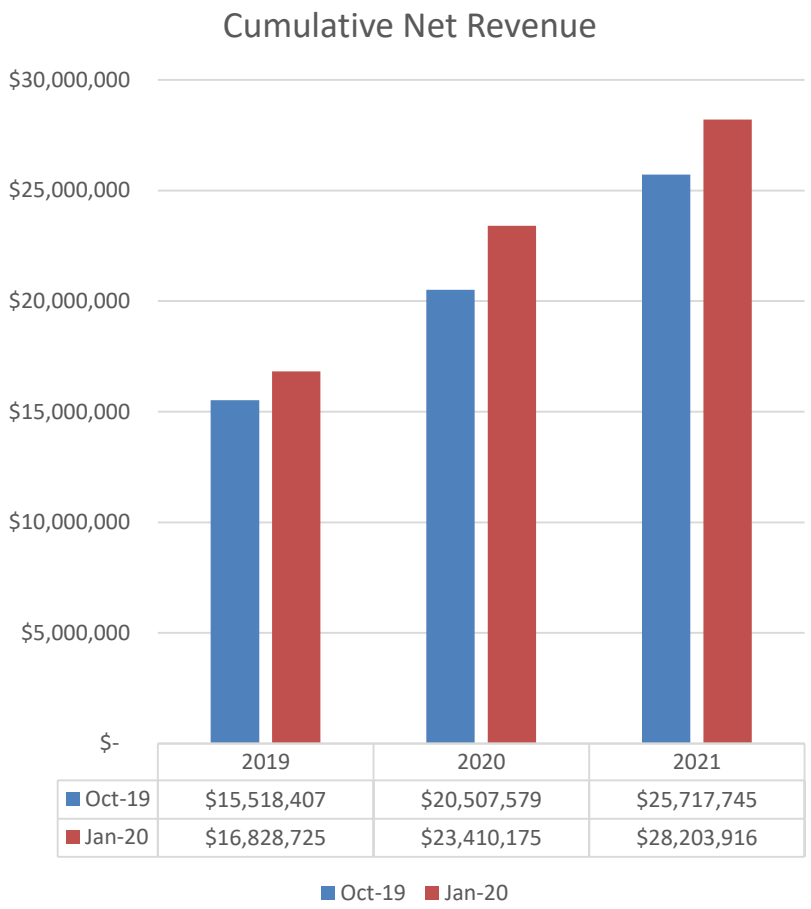
- 2019 energy costs came in under forecast, improving net revenue for the year vs. October forecast

Net Revenue

- 2019 increased $1.3M vs. October forecast
- 2020 increased $1.6M vs. October forecast
- 2021 decreased $400k vs. October forecast (increased market forward prices)

RCEA Net Revenues



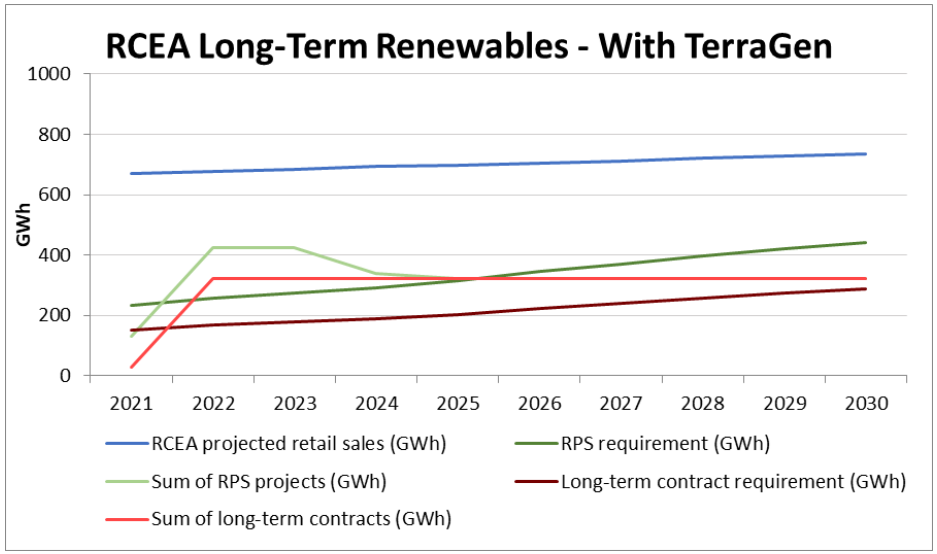


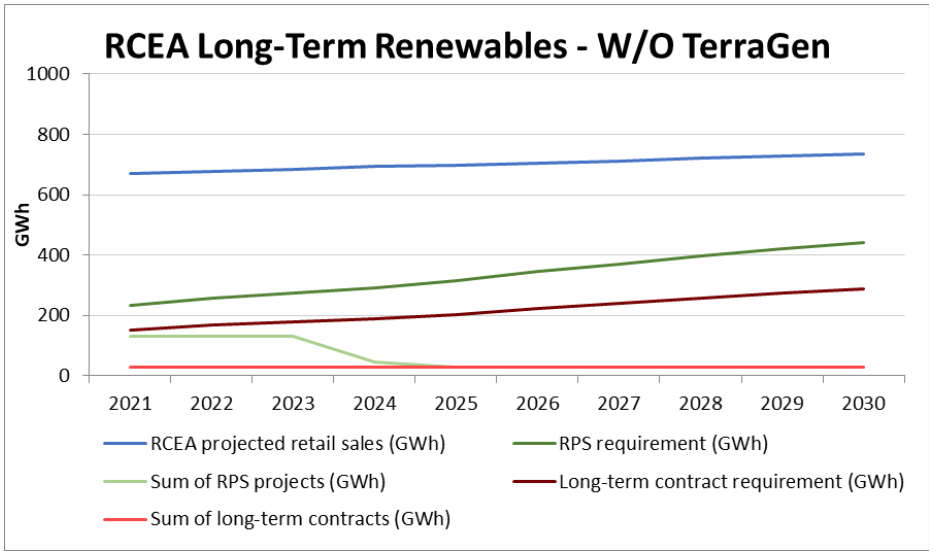
Overview of Emerging Risk Factors

- California's RPS requirements
  - Compliance Period 3 (2017 – 2020)
  - Compliance Period 4 (2021 – 2024)
- California's Integrated Resource Planning mandated procurement
- CCE revenue uncertainty
  - Direct Access load departure
  - PG&E rate changes
- Meeting long-term RePower Humboldt goals

California RPS Requirements

- Compliance Period 3 (2017 – 2020):
  - RCEA comfortably on track to meet overall compliance requirement
  - Monitoring the requirement for 0.25% of 2017 retail sales to come from long-term procurement
- Compliance Period 4 (2021 – 2024):
  - 42% of load served by renewables
  - 65% of renewables under long-term contracts





California IRP-Mandated Incremental RA Procurement

- D.19-11-016 from the Integrated Resource Planning proceeding requires 3,300 MW of "incremental" system RA procurement
  - Caused by once-through-cooling plant retirements
- RCEA's share of the incremental procurement is 10.7 MW
  - 50% (5.4 MW) operational by 8/1/21
  - 75% (8.0 MW) operational by 8/1/22
  - 100% (10.7 MW) operational by 8/1/23
- First deadline quickly approaching: **18 months!**
- Seller's market for resources qualified as "incremental"

RCEA CCE Revenue Uncertainty

- Like any business, revenue driven by two factors:
  1. Amount of customers supplied (number and load)
  2. Price charged customers (rates)
- Direct access reopening increases uncertainty around first
- Reoccurring PG&E rate changes, particularly PCIA impacts, increase uncertainty around second

RCEA RePower Humboldt Goals

Energy Generation & Utility Services

- 2025: 100% power from RPS and existing large hydro
- 2030: 100% power from local net-zero-carbon-emission renewables
- Modernization of the local grid and DER & microgrid deployment to minimize energy supply disruptions

Other Target Areas

- Regional Planning & Coordination
- Integrated Demand Side Management
- Low-Carbon Transportation

What RCEA procures in 2020 will significantly impact 2025 & 2030 supply-side goals

Longer term, regional planning, DSM, and low-carbon transportation goals will significantly impact RCEA's load

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REDWOOD COAST EnergyAuthority

STAFF REPORT
Agenda Item # 5.2

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Mahayla Slackerelli, Account Services Manager
SUBJECT:	CCE Program Rate Adjustment

SUMMARY

January Rate Adjustment

On January 1, PG&E implemented new rates for all classes of customers. Once those rates were published, staff created an updated sheet for RCEA's rates. These new RCEA rates were calculated by applying the Board approved 1% discount to PG&E's rates, while taking the Power Charge Indifference Adjustment and the Franchise Fee into account (See Attachment A and B). The new RCEA rates were implemented January 15. This rate adjustment constitutes a minor increase in generation rates. The PG&E rate adjustment was primarily on the transmission and distribution side of the bill. On average, customer generation rates are increasing by $0.00001/kWh.

Future Rate Adjustments

PG&E sources indicate that there will be another rate adjustment with a somewhat more meaningful generation change in the end of January or the beginning of February. This may include an increase to the power charge indifference adjustment as well. However, uncertainty for PG&E rate adjustments continues to be high.

FINANCIAL IMPACTS

The financial impacts of this rate adjustment are negligible.

STAFF RECOMMENDATION

None – Information only.

ATTACHMENT:

Attachment A: RCEA Residential Rate Sheet Effective January 15, 2020

Attachment B: RCEA Commercial Rate Sheet Effective January 15, 2020

REDWOOD COAST EnergyAuthority

For 100% renewable REpower+ add $0.01/KWH

RCEA Community Choice Energy Program

Residential Generation Rates

Effective January 15th, 2020

Does not include transmission and distribution charges; see https://www.pge.com/tariffs/ERS.SHTML for complete PG&E rate schedules. PG&E rates are effective as of January 1, 2020 and subject to change

PG&E Equivalent Schedule	RCEA Rate Schedule	Time of Use Period	RCEA Rate	RCEA Rate Plus PG&E Fees[1]
E-1, EL-1, EM, EML, ES, ESL, ESR, ESRL, ET, ETL	E-1 Energy $/KWH	Total	0.08897	0.11660
E-6, EL-6	E-6 Energy $/KWH	Summer Peak	0.23289	0.26052
		Summer Part Peak	0.11189	0.13952
		Summer Off Peak	0.06250	0.09013
		Winter Part Peak	0.08991	0.11754
		Winter Off Peak	0.07634	0.10397
EV-A	EV-A Energy $/KWH	Summer Peak	0.24853	0.27616
		Summer Part Peak	0.10546	0.13309
		Summer Off Peak	0.03925	0.06688
		Winter On Peak	0.07557	0.10320
		Winter Part Peak	0.03684	0.06447
		Winter Off Peak	0.04164	0.06927
EV2-A	EV2-A Energy $/KWH	Summer Peak	0.15657	0.18420
		Summer Part Peak	0.11231	0.13994
		Summer Off Peak	0.07158	0.09921
		Winter On Peak	0.10026	0.12789
		Winter Part Peak	0.08789	0.11552
		Winter Off Peak	0.06465	0.09228
E-TOU-A	E-TOU-A Energy $/KWH	Summer On Peak	0.17182	0.19945
		Summer Off Peak	0.09699	0.12462
		Winter On Peak	0.08535	0.11298
		Winter Off Peak	0.07119	0.09882
E-TOU-B	E-TOU-B Energy $/KWH	Summer On Peak	0.19350	0.22113
		Summer Off Peak	0.09147	0.11910
		Winter On Peak	0.08773	0.11536
		Winter Off Peak	0.06912	0.09675
E-TOU-C3	E-TOU-C3 Energy $/KWH	Summer On Peak	0.14701	0.17464
		Summer Off Peak	0.08420	0.11183
		Winter On Peak	0.09111	0.11874
		Winter Off Peak	0.07395	0.10158

[1]PG&E fees include the Power Charge Indifference Adjustment and the Franchise Fee.

Voltage Discount - 4%

For rate schedules not segregated by service voltage, each component of the standard rate shall be discounted for primary or higher service voltage.

REDWOOD COAST EnergyAuthority

For 100% renewable REpower+ add $0.01/KWH

RCEA Community Choice Energy Program

Commercial, Industrial & Agricultural Generation Rates

Effective January 15th, 2020

Does not include transmission and distribution charges; see https://www.pge.com/tariffs/ERS.SHTML for complete PG&E rate schedules. PG&E rates are effective as of January 1, 2020 and subject to change

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
A-1	A-1-A	Energy ($/KWH)	Summer Total	0.10444	0.13202
		Energy ($/KWH)	Winter Total	0.06471	0.09229
A-1-X	A-1-B	Energy ($/KWH)	Summer On Peak	0.11892	0.14650
		Energy ($/KWH)	Summer Part Peak	0.09551	0.12309
		Energy ($/KWH)	Summer Off Peak	0.06842	0.09600
		Energy ($/KWH)	Winter Part Peak	0.09531	0.12289
		Energy ($/KWH)	Winter Off Peak	0.07461	0.10219
A-10-S	A-10-A	Energy ($/KWH)	Summer Total	0.09269	0.12141
		Demand ($/KW)	Summer Total	5.68	5.68
		Energy ($/KWH)	Winter Total	0.06566	0.09438
A-10-P	A-10-A-P	Energy ($/KWH)	Summer Total	0.08313	0.11185
		Demand ($/KW)	Summer Total	4.96	4.96
		Energy ($/KWH)	Winter Total	0.05962	0.08834
A-10-T	A-10-A-T	Energy ($/KWH)	Summer Total	0.07380	0.10252
		Demand ($/KW)	Summer Total	3.92	3.92
		Energy ($/KWH)	Winter Total	0.05324	0.08196
A-10-S-X	A-10-B	Energy ($/KWH)	Summer On Peak	0.14592	0.17464
		Energy ($/KWH)	Summer Part Peak	0.09134	0.12006
		Energy ($/KWH)	Summer Off Peak	0.06355	0.09227
		Demand ($/KW)	Summer Total	5.68	5.68
		Energy ($/KWH)	Winter Part Peak	0.07556	0.10428
		Energy ($/KWH)	Winter Off Peak	0.05867	0.08739
A-10-P-X	A-10-B-P	Energy ($/KWH)	Summer On Peak	0.13408	0.16280
		Energy ($/KWH)	Summer Part Peak	0.08402	0.11274
		Energy ($/KWH)	Summer Off Peak	0.05766	0.08638
		Demand ($/KW)	Summer Total	4.96	4.96
		Energy ($/KWH)	Winter Part Peak	0.07046	0.09918
		Energy ($/KWH)	Winter Off Peak	0.05474	0.08346
A-10-T-X	A-10-B-T	Energy ($/KWH)	Summer On Peak	0.12005	0.14877
		Energy ($/KWH)	Summer Part Peak	0.07365	0.10237
		Energy ($/KWH)	Summer Off Peak	0.04859	0.07731
		Demand ($/KW)	Summer Total	3.92	3.92
		Energy ($/KWH)	Winter Part Peak	0.06197	0.09069
		Energy ($/KWH)	Winter Off Peak	0.04754	0.07626

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
A-6	A-6	Energy ($/KWH)	Summer On Peak	0.35628	0.38386
		Energy ($/KWH)	Summer Part Peak	0.11909	0.14667
		Energy ($/KWH)	Summer Off Peak	0.06138	0.08896
		Energy ($/KWH)	Winter Part Peak	0.08659	0.11417
		Energy ($/KWH)	Winter Off Peak	0.06927	0.09685
E-19-S,V	E-19-S	Energy ($/KWH)	Summer On Peak	0.11923	0.14634
		Energy ($/KWH)	Summer Part Peak	0.07200	0.09911
		Energy ($/KWH)	Summer Off Peak	0.04072	0.06783
		Demand ($/KW)	Summer On Peak	14.73	14.73
		Demand ($/KW)	Summer Part Peak	3.64	3.64
		Energy ($/KWH)	Winter Part Peak	0.06553	0.09264
		Energy ($/KWH)	Winter Off Peak	0.04849	0.07560
E-19-S,R	E-19-R-S	Energy ($/KWH)	Summer On Peak	0.27801	0.30512
		Energy ($/KWH)	Summer Part Peak	0.11185	0.13896
		Energy ($/KWH)	Summer Off Peak	0.04511	0.07222
		Energy ($/KWH)	Winter Part Peak	0.06904	0.09615
		Energy ($/KWH)	Winter Off Peak	0.05259	0.07970
E-19-P,V	E-19-P	Energy ($/KWH)	Summer On Peak	0.10802	0.13513
		Energy ($/KWH)	Summer Part Peak	0.06347	0.09058
		Energy ($/KWH)	Summer Off Peak	0.03481	0.06192
		Demand ($/KW)	Summer On Peak	13.11	13.11
		Demand ($/KW)	Summer Part Peak	3.19	3.19
		Energy ($/KWH)	Winter Part Peak	0.05745	0.08456
		Energy ($/KWH)	Winter Off Peak	0.04189	0.06900
E-19-P,R	E-19-R-P	Energy ($/KWH)	Summer On Peak	0.26355	0.29066
		Energy ($/KWH)	Summer Part Peak	0.10198	0.12909
		Energy ($/KWH)	Summer Off Peak	0.03910	0.06621
		Energy ($/KWH)	Winter Part Peak	0.06093	0.08804
		Energy ($/KWH)	Winter Off Peak	0.04593	0.07304
E-19-T,V	E-19-T	Energy ($/KWH)	Summer On Peak	0.06610	0.09321
		Energy ($/KWH)	Summer Part Peak	0.05147	0.07858
		Energy ($/KWH)	Summer Off Peak	0.03212	0.05923
		Demand ($/KW)	Summer On Peak	14.41	14.41
		Demand ($/KW)	Summer Part Peak	3.61	3.61
		Energy ($/KWH)	Winter Part Peak	0.05377	0.08088
		Energy ($/KWH)	Winter Off Peak	0.03890	0.06601
E-19-T,R	E-19-R-T	Energy ($/KWH)	Summer On Peak	0.25543	0.28254
		Energy ($/KWH)	Summer Part Peak	0.10089	0.12800
		Energy ($/KWH)	Summer Off Peak	0.03886	0.06597
		Energy ($/KWH)	Winter Part Peak	0.05974	0.08685
		Energy ($/KWH)	Winter Off Peak	0.04541	0.07252

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
E-20-S,V	E-20-S	Energy ($/KWH)	Summer On Peak	0.11002	0.13618
		Energy ($/KWH)	Summer Part Peak	0.06703	0.09319
		Energy ($/KWH)	Summer Off Peak	0.03750	0.06366
		Demand ($/KW)	Summer On Peak	14.29	14.29
		Demand ($/KW)	Summer Part Peak	3.52	3.52
		Energy ($/KWH)	Winter Part Peak	0.06077	0.08693
		Energy ($/KWH)	Winter Off Peak	0.04478	0.07094
E-20-S,R	E-20-R-S	Energy ($/KWH)	Summer On Peak	0.25224	0.27840
		Energy ($/KWH)	Summer Part Peak	0.10381	0.12997
		Energy ($/KWH)	Summer Off Peak	0.04123	0.06739
		Energy ($/KWH)	Winter Part Peak	0.06368	0.08984
		Energy ($/KWH)	Winter Off Peak	0.04826	0.07442
E-20-P,V	E-20-P	Energy ($/KWH)	Summer On Peak	0.11444	0.13901
		Energy ($/KWH)	Summer Part Peak	0.06712	0.09169
		Energy ($/KWH)	Summer Off Peak	0.03802	0.06259
		Demand ($/KW)	Summer On Peak	15.65	15.65
		Demand ($/KW)	Summer Part Peak	3.70	3.70
		Energy ($/KWH)	Winter Part Peak	0.06089	0.08546
		Energy ($/KWH)	Winter Off Peak	0.04517	0.06974
E-20-P,R	E-20-R-P	Energy ($/KWH)	Summer On Peak	0.27030	0.29487
		Energy ($/KWH)	Summer Part Peak	0.10343	0.12800
		Energy ($/KWH)	Summer Off Peak	0.04119	0.06576
		Energy ($/KWH)	Winter Part Peak	0.06324	0.08781
		Energy ($/KWH)	Winter Off Peak	0.04809	0.07266
E-20-T,V	E-20-T	Energy ($/KWH)	Summer On Peak	0.06845	0.09160
		Energy ($/KWH)	Summer Part Peak	0.05408	0.07723
		Energy ($/KWH)	Summer Off Peak	0.03508	0.05823
		Demand ($/KW)	Summer On Peak	18.65	18.65
		Demand ($/KW)	Summer Part Peak	4.45	4.45
		Energy ($/KWH)	Winter Part Peak	0.05634	0.07949
		Energy ($/KWH)	Winter Off Peak	0.04175	0.06490
E-20-T,R	E-20-R-T	Energy ($/KWH)	Summer On Peak	0.26381	0.28696
		Energy ($/KWH)	Summer Part Peak	0.09686	0.12001
		Energy ($/KWH)	Summer Off Peak	0.0374	0.06055
		Energy ($/KWH)	Winter Part Peak	0.05790	0.08105
		Energy ($/KWH)	Winter Off Peak	0.04382	0.06697
Agricultural Rates					
AG-1-A	AG-1-A	Energy ($/KWH)	Summer Total	0.08765	0.11217
		Connected Load	Summer Total	1.54	1.54
		Energy ($/KWH)	Winter Total	0.06643	0.09095
AG-1-B	AG-1-B	Energy ($/KWH)	Summer Total	0.09137	0.11589
		Demand ($/KW)	Summer Total	2.33	2.33
		Energy ($/KWH)	Winter Total	0.06697	0.09149

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
AG-1-P-X	AG-1-B-P	Energy ($/KWH)	Summer Total	0.09137	0.11589
		Demand ($/KW)	Summer Total	1.81	1.81
		Energy ($/KWH)	Winter Total	0.06697	0.09149
AG-R-A	AG-R-A	Energy ($/KWH)	Summer On Peak	0.27529	0.29981
		Energy ($/KWH)	Summer Off Peak	0.05418	0.07870
		Connected Load	Summer Total	1.52	1.52
		Energy ($/KWH)	Winter Part Peak	0.06205	0.08657
		Energy ($/KWH)	Winter Off Peak	0.04980	0.07432
AG-V-A	AG-V-A	Energy ($/KWH)	Summer On Peak	0.23832	0.26284
		Energy ($/KWH)	Summer Off Peak	0.05115	0.07567
		Connected Load	Summer Total	1.59	1.59
		Energy ($/KWH)	Winter Part Peak	0.06034	0.08486
		Energy ($/KWH)	Winter Off Peak	0.04835	0.07287
AG-V-B	AG-V-B	Energy ($/KWH)	Summer On Peak	0.22118	0.24570
		Energy ($/KWH)	Summer Off Peak	0.05197	0.07649
		Demand ($/KW)	Summer Total	2.70	2.70
		Demand ($/KW)	Summer On Peak	2.10	2.10
		Energy ($/KWH)	Winter Part Peak	0.04807	0.07259
		Energy ($/KWH)	Winter Off Peak	0.03783	0.06235
AG-4-A	AG-4-A	Energy ($/KWH)	Summer On Peak	0.15506	0.17958
		Energy ($/KWH)	Summer Off Peak	0.05561	0.08013
		Connected Load	Summer Total	1.56	1.56
		Energy ($/KWH)	Winter Part Peak	0.06012	0.08464
		Energy ($/KWH)	Winter Off Peak	0.04827	0.07279
AG-4-B	AG-4-B	Energy ($/KWH)	Summer On Peak	0.11294	0.13746
		Energy ($/KWH)	Summer Off Peak	0.05694	0.08146
		Demand ($/KW)	Summer Total	2.75	2.75
		Demand ($/KW)	Summer On Peak	2.93	2.93
		Energy ($/KWH)	Winter Part Peak	0.05502	0.07954
		Energy ($/KWH)	Winter Off Peak	0.04376	0.06828
AG-4-B-X	AG-4-B-P	Energy ($/KWH)	Summer On Peak	0.11294	0.13746
		Energy ($/KWH)	Summer Off Peak	0.05694	0.08146
		Demand ($/KW)	Summer Total	2.07	2.07
		Demand ($/KW)	Summer On Peak	2.93	2.93
		Energy ($/KWH)	Winter Part Peak	0.05502	0.07954
		Energy ($/KWH)	Winter Off Peak	0.04376	0.06828
AG-4-C	AG-4-C	Energy ($/KWH)	Summer On Peak	0.13339	0.15791
		Energy ($/KWH)	Summer Part Peak	0.06643	0.09095
		Energy ($/KWH)	Summer Off Peak	0.04209	0.06661
		Demand ($/KW)	Summer On Peak	6.80	6.80
		Demand ($/KW)	Summer Part Peak	1.16	1.16
		Energy ($/KWH)	Winter Part Peak	0.04901	0.07353
		Energy ($/KWH)	Winter Off Peak	0.03855	0.06307

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
AG-5-A	AG-5-A	Energy ($/KWH)	Summer On Peak	0.14234	0.16686
		Energy ($/KWH)	Summer Off Peak	0.06025	0.08477
		Connected Load	Summer Total	4.25	4.25
		Energy ($/KWH)	Winter Part Peak	0.06405	0.08857
		Energy ($/KWH)	Winter Off Peak	0.05168	0.07620
AG-5-B	AG-5-B	Energy ($/KWH)	Summer On Peak	0.13948	0.16400
		Energy ($/KWH)	Summer Off Peak	0.03290	0.05742
		Demand ($/KW)	Summer Total	5.17	5.17
		Demand ($/KW)	Summer On Peak	6.46	6.46
		Energy ($/KWH)	Winter Part Peak	0.05512	0.07964
		Energy ($/KWH)	Winter Off Peak	0.02371	0.04823
AG-5-C	AG-5-C	Energy ($/KWH)	Summer On Peak	0.11197	0.13649
		Energy ($/KWH)	Summer Part Peak	0.05575	0.08027
		Energy ($/KWH)	Summer Off Peak	0.03482	0.05934
		Demand ($/KW)	Summer On Peak	11.99	11.99
		Demand ($/KW)	Summer Part Peak	2.26	2.26
		Energy ($/KWH)	Winter Part Peak	0.04109	0.06561
		Energy ($/KWH)	Winter Off Peak	0.03157	0.05609
AG-5-C-P	AG-5-C-P	Energy ($/KWH)	Summer On Peak	0.11197	0.13649
		Energy ($/KWH)	Summer Part Peak	0.05575	0.08027
		Energy ($/KWH)	Summer Off Peak	0.03482	0.05934
		Demand ($/KW)	Summer On Peak	9.52	9.52
		Demand ($/KW)	Summer Part Peak	2.26	2.26
		Energy ($/KWH)	Winter Part Peak	0.04109	0.06561
		Energy ($/KWH)	Winter Off Peak	0.03157	0.05609
Standby Service					
S-TOU-P	S-TOU-P	Energy ($/KWH)	Summer On Peak	0.09811	0.11925
		Energy ($/KWH)	Summer Part Peak	0.07921	0.10035
		Energy ($/KWH)	Summer Off Peak	0.05447	0.07561
		Reservation Charge ($/KW)	Summer Total	0.46530	0.46530
		Energy ($/KWH)	Winter Part Peak	0.08222	0.10336
		Energy ($/KWH)	Winter Off Peak	0.06305	0.08419
		Reservation Charge ($/KW)	Winter Total	0.46530	0.46530
S-TOU-T	S-TOU-T	Energy ($/KWH)	Summer On Peak	0.07822	0.09936
		Energy ($/KWH)	Summer Part Peak	0.06264	0.08378
		Energy ($/KWH)	Summer Off Peak	0.04204	0.06318
		Reservation Charge ($/KW)	Summer Total	0.38610	0.38610
		Energy ($/KWH)	Winter Part Peak	0.06510	0.08624
		Energy ($/KWH)	Winter Off Peak	0.04927	0.07041
		Reservation Charge ($/KW)	Winter Total	0.38610	0.38610

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
Street and Outdoor Lighting					
LS-1, LS-2, LS-3,	LS-1	Energy ($/KWH)	All Total	0.06924	0.09294
TC-1	TC-1	Energy ($/KWH)	All Total	0.07623	0.10368
B Commercial and Industrial Rates					
B-1	B-1	Energy ($/KWH)	Summer On Peak	0.14784	0.17543
		Energy ($/KWH)	Summer Part Peak	0.09910	0.12669
		Energy ($/KWH)	Summer Off Peak	0.07850	0.10609
		Energy ($/KWH)	Winter On Peak	0.09314	0.12073
		Energy ($/KWH)	Winter Off Peak	0.07718	0.10477
		Energy ($/KWH)	Winter Super Off Peak	0.06094	0.08853
B-6	B-6	Energy ($/KWH)	Summer On Peak	0.15279	0.18038
		Energy ($/KWH)	Summer Off Peak	0.08234	0.10993
		Energy ($/KWH)	Winter On Peak	0.08990	0.11749
		Energy ($/KWH)	Winter Off Peak	0.07302	0.10061
		Energy ($/KWH)	Winter Super Off Peak	0.05677	0.08436
B-10-S	B-10-S	Energy ($/KWH)	Summer On Peak	0.16973	0.19846
		Energy ($/KWH)	Summer Part Peak	0.10865	0.13738
		Energy ($/KWH)	Summer Off Peak	0.07642	0.10515
		Energy ($/KWH)	Winter On Peak	0.11227	0.14100
		Energy ($/KWH)	Winter Off Peak	0.07714	0.10587
		Energy ($/KWH)	Winter Super Off Peak	0.04116	0.06989
B-10-P	B-10-P	Energy ($/KWH)	Summer On Peak	0.15711	0.18584
		Energy ($/KWH)	Summer Part Peak	0.09940	0.12813
		Energy ($/KWH)	Summer Off Peak	0.06886	0.09759
		Energy ($/KWH)	Winter On Peak	0.10303	0.13176
		Energy ($/KWH)	Winter Off Peak	0.06974	0.09847
		Energy ($/KWH)	Winter Super Off Peak	0.03376	0.06249
B-10-T	B-10-T	Energy ($/KWH)	Summer On Peak	0.14925	0.17798
		Energy ($/KWH)	Summer Part Peak	0.09308	0.12181
		Energy ($/KWH)	Summer Off Peak	0.06331	0.09204
		Energy ($/KWH)	Winter On Peak	0.09673	0.12546
		Energy ($/KWH)	Winter Off Peak	0.06422	0.09295
		Energy ($/KWH)	Winter Super Off Peak	0.02824	0.05697
B-19-S,V	B-19-S	Energy ($/KWH)	Summer On Peak	0.11128	0.13840
		Energy ($/KWH)	Summer Part Peak	0.08157	0.10869
		Energy ($/KWH)	Summer Off Peak	0.06056	0.08768
		Demand ($/KW)	Summer On Peak	14.88	14.88
		Demand ($/KW)	Summer Part Peak	2.17	2.17
		Energy ($/KWH)	Winter On Peak	0.09241	0.11953
		Energy ($/KWH)	Winter Off Peak	0.06049	0.08761
		Energy ($/KWH)	Winter Super Off Peak	0.01764	0.04476
		Demand ($/KW)	Winter On Peak	1.77	1.77

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
B-19-P,V	B-19-P	Energy ($/KWH)	Summer On Peak	0.09477	0.12189
		Energy ($/KWH)	Summer Part Peak	0.07235	0.09947
		Energy ($/KWH)	Summer Off Peak	0.05285	0.07997
		Demand ($/KW)	Summer On Peak	12.64	12.64
		Demand ($/KW)	Summer Part Peak	1.85	1.85
		Energy ($/KWH)	Winter On Peak	0.08261	0.10973
		Energy ($/KWH)	Winter Off Peak	0.05298	0.08010
		Energy ($/KWH)	Winter Super Off Peak	0.01082	0.03794
		Demand ($/KW)	Winter On Peak	1.30	1.30
B-19-T,V	B-19-T	Energy ($/KWH)	Summer On Peak	0.08067	0.10779
		Energy ($/KWH)	Summer Part Peak	0.07161	0.09873
		Energy ($/KWH)	Summer Off Peak	0.05231	0.07943
		Demand ($/KW)	Summer On Peak	9.57	9.57
		Demand ($/KW)	Summer Part Peak	2.40	2.40
		Energy ($/KWH)	Winter On Peak	0.08188	0.10900
		Energy ($/KWH)	Winter Off Peak	0.05257	0.07969
		Energy ($/KWH)	Winter Super Off Peak	0.00943	0.03655
		Demand ($/KW)	Winter On Peak	0.92	0.92
B-19-S,R	B-19-R-S	Energy ($/KWH)	Summer On Peak	0.23697	0.26409
		Energy ($/KWH)	Summer Part Peak	0.10276	0.12988
		Energy ($/KWH)	Summer Off Peak	0.06464	0.09176
		Energy ($/KWH)	Winter On Peak	0.10646	0.13358
		Energy ($/KWH)	Winter Off Peak	0.06457	0.09169
		Energy ($/KWH)	Winter Super Off Peak	0.02911	0.05623
B-19-P,R	B-19-R-P	Energy ($/KWH)	Summer On Peak	0.21352	0.24064
		Energy ($/KWH)	Summer Part Peak	0.09121	0.11833
		Energy ($/KWH)	Summer Off Peak	0.05617	0.08329
		Energy ($/KWH)	Winter On Peak	0.09356	0.12068
		Energy ($/KWH)	Winter Off Peak	0.05628	0.08340
		Energy ($/KWH)	Winter Super Off Peak	0.02082	0.04794
B-19-T,R	B-19-R-T	Energy ($/KWH)	Summer On Peak	0.17858	0.20570
		Energy ($/KWH)	Summer Part Peak	0.09790	0.12502
		Energy ($/KWH)	Summer Off Peak	0.05617	0.08329
		Energy ($/KWH)	Winter On Peak	0.08972	0.11684
		Energy ($/KWH)	Winter Off Peak	0.05638	0.08350
		Energy ($/KWH)	Winter Super Off Peak	0.02091	0.04803

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
B-19-S,S	B-19-S-S	Energy ($/KWH)	Summer On Peak	0.23697	0.26409
		Energy ($/KWH)	Summer Part Peak	0.10276	0.12988
		Energy ($/KWH)	Summer Off Peak	0.06464	0.09176
		Energy ($/KWH)	Winter On Peak	0.10646	0.13358
		Energy ($/KWH)	Winter Off Peak	0.06457	0.09169
		Energy ($/KWH)	Winter Super Off Peak	0.02911	0.05623
B-19-P,S	B-19-S-P	Energy ($/KWH)	Summer On Peak	0.21352	0.24064
		Energy ($/KWH)	Summer Part Peak	0.09121	0.11833
		Energy ($/KWH)	Summer Off Peak	0.05617	0.08329
		Energy ($/KWH)	Winter On Peak	0.09356	0.12068
		Energy ($/KWH)	Winter Off Peak	0.05628	0.08340
		Energy ($/KWH)	Winter Super Off Peak	0.02082	0.04794
B-19-T,S	B-19-S-T	Energy ($/KWH)	Summer On Peak	0.17858	0.20570
		Energy ($/KWH)	Summer Part Peak	0.09790	0.12502
		Energy ($/KWH)	Summer Off Peak	0.05617	0.08329
		Energy ($/KWH)	Winter On Peak	0.08972	0.11684
		Energy ($/KWH)	Winter Off Peak	0.05638	0.08350
		Energy ($/KWH)	Winter Super Off Peak	0.02091	0.04803
B-20-S,V	B-20-S	Energy ($/KWH)	Summer On Peak	0.10725	0.13334
		Energy ($/KWH)	Summer Part Peak	0.08014	0.10623
		Energy ($/KWH)	Summer Off Peak	0.05872	0.08481
		Demand ($/KW)	Summer On Peak	14.72	14.72
		Demand ($/KW)	Summer Part Peak	2.14	2.14
		Energy ($/KWH)	Winter On Peak	0.09110	0.11719
		Energy ($/KWH)	Winter Off Peak	0.05856	0.08465
		Energy ($/KWH)	Winter Super Off Peak	0.01495	0.04104
		Demand ($/KW)	Winter On Peak	1.88	1.88
B-20-P,V	B-20-P	Energy ($/KWH)	Summer On Peak	0.10327	0.12777
		Energy ($/KWH)	Summer Part Peak	0.07496	0.09946
		Energy ($/KWH)	Summer Off Peak	0.05520	0.07970
		Demand ($/KW)	Summer On Peak	15.95	15.95
		Demand ($/KW)	Summer Part Peak	2.19	2.19
		Energy ($/KWH)	Winter On Peak	0.08525	0.10975
		Energy ($/KWH)	Winter Off Peak	0.05525	0.07975
		Energy ($/KWH)	Winter Super Off Peak	0.01270	0.03720
		Demand ($/KW)	Winter On Peak	1.83	1.83

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
B-20-T,V	B-20-T	Energy ($/KWH)	Summer On Peak	0.08532	0.10840
		Energy ($/KWH)	Summer Part Peak	0.06797	0.09105
		Energy ($/KWH)	Summer Off Peak	0.04860	0.07168
		Demand ($/KW)	Summer On Peak	17.93	17.93
		Demand ($/KW)	Summer Part Peak	4.27	4.27
		Energy ($/KWH)	Winter On Peak	0.08448	0.10756
		Energy ($/KWH)	Winter Off Peak	0.04509	0.06817
		Energy ($/KWH)	Winter Super Off Peak	0.00575	0.02883
		Demand ($/KW)	Winter On Peak	2.40	2.40
B-20-R-S	B-20-S,R	Energy ($/KWH)	Summer On Peak	0.23155	0.25764
		Energy ($/KWH)	Summer Part Peak	0.10013	0.12622
		Energy ($/KWH)	Summer Off Peak	0.06304	0.08913
		Energy ($/KWH)	Winter On Peak	0.1062	0.13229
		Energy ($/KWH)	Winter Off Peak	0.06291	0.08900
		Energy ($/KWH)	Winter Super Off Peak	0.02752	0.05361
B-20-R-P	B-20-P,R	Energy ($/KWH)	Summer On Peak	0.22078	0.24528
		Energy ($/KWH)	Summer Part Peak	0.09318	0.11768
		Energy ($/KWH)	Summer Off Peak	0.05882	0.08332
		Energy ($/KWH)	Winter On Peak	0.09854	0.12304
		Energy ($/KWH)	Winter Off Peak	0.05887	0.08337
		Energy ($/KWH)	Winter Super Off Peak	0.02348	0.04798
B-20-R-T	B-20-T,R	Energy ($/KWH)	Summer On Peak	0.22018	0.24326
		Energy ($/KWH)	Summer Part Peak	0.10275	0.12583
		Energy ($/KWH)	Summer Off Peak	0.05300	0.07608
		Energy ($/KWH)	Winter On Peak	0.10259	0.12567
		Energy ($/KWH)	Winter Off Peak	0.05011	0.07319
		Energy ($/KWH)	Winter Super Off Peak	0.01764	0.04072
B-20-S-S	B-20-S,S	Energy ($/KWH)	Summer On Peak	0.23155	0.25764
		Energy ($/KWH)	Summer Part Peak	0.10013	0.12622
		Energy ($/KWH)	Summer Off Peak	0.06304	0.08913
		Energy ($/KWH)	Winter On Peak	0.1062	0.13229
		Energy ($/KWH)	Winter Off Peak	0.06291	0.08900
		Energy ($/KWH)	Winter Super Off Peak	0.02752	0.05361
B-20-S-P	B-20-P,S	Energy ($/KWH)	Summer On Peak	0.22078	0.24528
		Energy ($/KWH)	Summer Part Peak	0.09318	0.11768
		Energy ($/KWH)	Summer Off Peak	0.05882	0.08332
		Energy ($/KWH)	Winter On Peak	0.09854	0.12304
		Energy ($/KWH)	Winter Off Peak	0.05887	0.08337
		Energy ($/KWH)	Winter Super Off Peak	0.02348	0.04798

PG&E Equivalent Rate	RCEA Rate Schedule	Charge Type	Time of Use Period	RCEA Rate Schedule	RCEA Rate plus PG&E Fees[1]
B-20-S-T	B-20-T,S	Energy ($/KWH)	Summer On Peak	0.22018	0.24326
		Energy ($/KWH)	Summer Part Peak	0.10275	0.12583
		Energy ($/KWH)	Summer Off Peak	0.05300	0.07608
		Energy ($/KWH)	Winter On Peak	0.10259	0.12567
		Energy ($/KWH)	Winter Off Peak	0.05011	0.07319
		Energy ($/KWH)	Winter Super Off Peak	0.01764	0.04072

Voltage Discount - 4%

For rate schedules not segregated by service voltage, each component of the standard rate shall be discounted for

[1]PG&E fees include the Power Charge Indifference Adjustment and the Franchise Fee.

REDWOOD COAST Energy Authority

STAFF REPORT
Agenda Item # 5.3

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources
SUBJECT:	Public Safety Power Shutoff Ad Hoc Subcommittee Report

SUMMARY

The RCEA Board's Public Safety Power Shutoff Ad Hoc Subcommittee will report out on their initial meeting, held January 9, 2020. The meeting was attended by all four subcommittee members: Estelle Fennell, Dwight Miller, Frank Wilson, and Board Chair Michael Winkler, as well as RCEA Executive Director Matthew Marshall and Board Clerk Lori Taketa.

ED Marshall provided an update to the subcommittee on available information regarding PG&E's efforts to enable the Humboldt Bay Generating Station (HBGS) to provide grid power to Humboldt County electric customers during future Public Safety Power Shutoff (PSPS) events. PG&E requested and received a variance from the North Coast Unified Air Quality Management District (NCUAQMD) in December, allowing them to perform tests related to black starting the plant. The variance was required because operating the plant in isolation from the rest of PG&E's grid would require modulating individual generating units below the 50% threshold at which they are currently permitted to operate.

ED Marshall provided a list of questions being posed to PG&E. At time of preparation of this report, these questions have not yet been answered.

1. What were the results of the black start tests?
2. Assuming the tests were successful, what other steps are needed to enable HBGS to support local electric loads during PSPS events or other events affecting Humboldt County's connection to the regional transmission grid?
3. Once independent operation of HBGS is possible, would the two local generating facilities with which RCEA has power purchase agreements (DG Fairhaven and Humboldt Redwood Company's Scotia plant) also be able to operate during PSPS events or other transmission grid interruptions?
4. If in an islanded mode due to PSPS events impacting neighboring counties, which substations in Humboldt County would be able to remain energized by local generation and be able to provide power to the distribution customers supported by those stations? In other words, what would be the approximate boundary of the area that could be energized by HBGS and other local generation?

In discussing these questions, the subcommittee asked for further information on the apparent inconsistency between original claims at time of permitting that HBGS was black start-capable, and the recent inability to perform such black start. They also asked whether PG&E plans to do a full test of black-start capability, entailing shutting off power countywide. Subcommittee members expressed interest in a tour of HBGS and an opportunity to meet with PG&E technical staff to better understand the abilities and constraints of PG&E's system under PSPS conditions.

The subcommittee also discussed community resiliency needs in PSPS events. ED Marshall gave an overview of the State's Self Generation Incentive Program (SGIP), which provides financial incentives for certain technologies including battery energy storage. The program is being modified to provide support for energy storage systems designed to operate independently of the grid during power outages. The "Equity Resiliency Decision" from September 18, 2019 increases incentives for customers based on equity eligibility and critical resiliency needs. A Proposed Decision from December 12, 2019 would expand the eligibility requirements for equity and resiliency customers. The updated program is expected to roll out in March for residential projects and in April for non-residential projects. RCEA staff are preparing for community outreach to raise awareness of this program.

The subcommittee concluded its meeting with discussion of small-scale neighborhood emergency resiliency solutions and the possibility of adapting them for PSPS applications, as well as a potential role for RCEA in publicly financing some local energy resiliency solutions.

STAFF RECOMMENDATION

None – Information only.

ATTACHMENTS

None

REDWOOD COAST Energy Authority

STAFF REPORT
Agenda Item # 6.1

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources Jocelyn Gwynn, Power Resources Manager
SUBJECT:	Energy Risk Management Policy Update

SUMMARY

Section 8 of RCEA's Energy Risk Management Policy (ERMP) directs that the risk management team review the policy at least annually and submit any proposed amendments to the Board for approval. The policy was initially adopted by the Board in December 2016 and is now due for review. The attached draft was updated by staff and includes the following substantive changes:

- Section 5: Transaction execution authorization limits are increased to accommodate changes in the regulatory framework and market value of resource adequacy[1] that have taken effect since the original limits were set
- Appendix D: The Energy Risk Hedging Strategy is re-published without sensitive information (hedging schedules for various energy and capacity products)

RCEA's Risk Management Team has reviewed the updated policy and recommends adoption by the Board.

FINANCIAL IMPACTS

RCEA's Energy Risk Management Policy protects the organization from financial risk that could be incurred through its community choice energy program. The proposed changes do not substantially affect risk to the organization.

RECOMMENDED ACTION

Adopt Resolution 2020-1 of the Redwood Coast Energy Authority Adopting Updates to the Energy Risk Management Policy.

ATTACHMENT

Resolution 2020-1, including updated Risk Management Policy with redlined changes as Appendix A

[1] As of 2019, the California Public Utilities Commission now requires that RCEA demonstrate local capacity procurement (resource adequacy) three years in advance, prompting the increase in maturity and term authorization limits. The prices for these products have also increased, prompting the increase in value limits.

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RESOLUTION NO. 2020-1
OF THE REDWOOD COAST ENERGY AUTHORITY
ADOPTING UPDATES TO THE ENERGY RISK MANAGEMENT POLICY

WHEREAS, the Redwood Coast Energy Authority (RCEA) operates a community choice energy program on behalf of participating jurisdictions in Humboldt County; and

WHEREAS, the Board of RCEA adopted a Risk Management Policy in December 2016 with the goal to put in place strong power-procurement risk management practices and to increase the likelihood of achieving its community choice energy program goals by specifying management responsibilities, organizational structures, risk management standards, and operating controls and limits necessary to properly identify and manage RCEA's exposure to risk; and

WHEREAS, certain updates and amendments to the Risk Management Policy are needed to address changes that have taken place since the community choice energy program was launched.

NOW, THEREFORE, BE IT RESOLVED, that the Board of the Redwood Coast Energy Authority hereby adopts an updated Energy Risk Management Policy as set forth in Appendix A with deletion of language as shown by strike through and addition of language as shown by underlining, attached hereto and incorporated herein.

Adopted this ___day of _____, 2020

ATTEST:

_____ _____
, RCEA Board Chair Clerk of the Board, RCEA

Date: _____ Date: _____

CLERK'S CERTIFICATE

I hereby certify that the foregoing is a true and correct copy of Resolution No. 2020-1 passed and adopted at a regular meeting of the Redwood Coast Energy Authority, County of Humboldt, State of California, held on the ____ day of _____, 2020, by the following vote:

AYES:
NOES:
ABSENT:
ABSTENTIONS:

_____
Clerk of the Board, Redwood Coast Energy Authority

APPENDIX A

REDWOOD COAST ENERGY AUTHORITY
UPDATED ENERGY RISK MANAGEMENT POLICY

REDWOOD COAST EnergyAuthority

Energy Risk Management Policy

~~Adopted December 12, 2016, Resolution 2016-6~~
~~Last Revised December 17, 2018, Resolution 2018-8~~Adopted December 12, 2016, Resolution 2016-6
Last Revised January 23, 2020, Resolution 2020-1

Table of Contents

Section 1: POLICY OVERVIEW

1.1 Background and Purpose

The Redwood Coast Energy Authority ("RCEA") is a public joint powers agency located within the geographic boundaries of Humboldt County. Member agencies of RCEA include the seven (7) incorporated cities located in Humboldt County, the County of Humboldt and the Humboldt Bay Municipal Water District. RCEA members ~~desire to implement and~~ administer and participate in a community choice aggregation ("CCA") program ~~for members that elect to become participants~~. The CCA program ~~will give~~allows its members ~~an opportunity to join together~~ to procure electricity supplies and utilize ratepayer revenue to implement local programs that meet the goals of the local community. Electricity procured to serve customers ~~will~~ continues to be delivered over PG&E's transmission and distribution system.

Presently, RCEA's CCA Members[1] include the following local government entities:

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

Providing retail electric generation service to customers enrolled in the CCA program exposes RCEA to risks such as retail load uncertainty (due to weather, customer opt-out, and other factors), energy market price, counterparty credit, PG&E generation and PCIA rate competitiveness and other regulatory risks.

This Energy Risk Management Policy ("Policy") establishes RCEA's Energy Risk Management Program ("Program") including risk management functions and procedures to manage the risks associated with power procurement activities.

The ultimate purpose of this Policy is to help RCEA increase the likelihood of achieving its goals by specifying management responsibilities, organizational structures, risk management standards, and operating controls and limits necessary to properly identify and manage RCEA's exposure to risk.

The RCEA Board of Directors is responsible for approving wholesale power procurement risk related policies, including delegations of authority and limits to the Executive Director, RCEA staff and, as warranted, third-party service providers. The Board understands and acknowledges that energy trading activities necessarily involve risk and a key Board objective is to quantify and balance value and risk within RCEA's resource portfolio without engaging in speculative trading activity. Within the guidelines of this policy, the Board recognizes that while the application of expertise must be employed in managing RCEA's

[1] The Humboldt Bay Municipal Water District is a customer of the CCA but does not participate as a voting member in CCA governance

resource portfolio, staff and third-party service providers may exercise some reasonable discretion in making commercial trading decisions.

1.2 Scope

Unless otherwise explicitly stated in this Policy, or other policies approved by the Board, this Policy applies to all power procurement and related business activities that may impact the risk profile of RCEA. This Policy documents the framework by which management, staff and The Energy Authority (TEA) will:

- Identify and quantify risk
- Develop and execute procurement strategies
- Create a framework of controls and oversight
- Monitor, measure and report on the effectiveness of the Program

To ensure successful operation of the CCA program, RCEA has partnered with experienced contractors to provide energy-related services. Specific to power procurement, RCEA has partnered with TEA. ~~At the outset of the CCA Program,~~ TEA ~~will be executing~~currently executes the preponderance of front- (transacting), middle- (monitoring) and back-office (settlement) related activities on RCEA's behalf. In providing these services, TEA ~~will~~ observes the policies outlined in this document. TEA maintains its own risk policies and procedures, following industry practices of segregation of duties, which will also govern activities executed on RCEA's behalf.

1.3 Energy Risk Management Objective

The objective of the Energy Risk Management Policy is to provide a framework for conducting procurement activities that maximizes the probability of RCEA meeting~~s~~ the goals listed in Section 2.1.

Pursuant to this Policy, RCEA will identify and measure the magnitude of the known risks to which it is exposed and that contribute to the potential for not meeting identified goals.

1.4 Policy Administration

This Policy document has been reviewed and approved by the RCEA Board of Directors ("Board"). The Risk Management Team ("RMT") and Board must approve amendments to this Policy, except for the appendices, which may be amended with approval of only the RMT. The RMT must give notice to the Board of any amendment it makes to an appendix or a reference policy or procedure document.

Section 2: GOALS AND RISK EXPOSURES

2.1 Policy Goals

To help ensure long term viability for the CCA, RCEA has outlined the following Policy Goals. These goals ~~will~~ establish metrics used for modeling and measuring risk exposures of the CCA.

- RCEA ~~will~~ target~~s~~ to maintain competitive retail rates with PG&E after adjusting for the PCIA and Franchise Fee.
- RCEA ~~will~~ target~~s~~ ~~during the initial years of operation~~ to fund financial reserves with the following objectives:
    - Establish long-term business sustainability
    - Build collateral for power procurement activities
    - Establish an investment grade credit rating
    - Develop a source of funds for investment in generation and other local programs
    - Stabilize rates and dampen year-to-year variability in procurement costs

The goals outlined above are incorporated into the financial models that are used in modeling and measuring risk exposures. It is important to note that the goals listed above are not intended to be a comprehensive list of goals for the CCA. Rather, the above reflect a subset of program goals that are critical to long-term business viability for the CCA.

2.2 Risk Exposures

The Program faces a range of risks during launch and ongoing operation:

- Customer Opt-Out risk
- Market risk
- Regulatory risk
- Volumetric risk
- Model risk
- Operational risk
- Counterparty credit risk
- Reputation risk

2.~~3~~2.1 Customer Opt-Out Risk

Customer opt-out risk is a significant CCA risk. Customer opt-out risk includes any conditions or events that create uncertainty in the CCA's customer base, thereby increasing the potential for the CCA to not meet its Policy goals. A CCA faces other risks, but the ultimate concern is often how these other risks will affect customer opt-outs. This Policy addresses this paramount risk and secondary risk types listed below. These risks are not all inclusive but are identified as the risk factors driving the success of the CCA.

The most relevant measures of the success of this Policy include:

- Retail rate competitiveness with PG&E;
- Financial reserve level;
- Percentage of customer opt-outs by customer count and by load.

For the purpose of this Policy, risk exposure is assessed on all transactions (energy, environmental attributes, capacity, etc.) executed by TEA on behalf of RCEA, or by RCEA on its own behalf, as well as the risk exposure of open positions and the impacts of these uncertainties on the CCA's load obligations. ~~The following are components of RCEA's energy risk that will be assessed, monitored and managed.~~

2.~~3~~2.~~1~~ 2 Market Risk

Market risk is the uncertainty of RCEA's financial performance due to variable commodity market prices (market price risk) and uncertain price relationships (basis risk). Variability in market prices creates uncertainty in RCEA's procurement costs and can materially impact RCEA's financial position. Market risk is managed by regular measurement, execution of approved procurement and Congestion Revenue Right strategies and the limit structure set forth in this Policy, as well as:

- ~~.~~ Regular monitoring and reporting of actual and projected financial results including probability-based and stressed financial results assuming a range of market and retail rate scenarios (both RCEA and PG&E);
- Structuring procurement strategies with the objective function of maintaining a favorable retail rate savings relative to PG&E~~;~~.

2.~~3~~2.~~2~~ 3 Regulatory Risk

CCAs remain a comparatively new legal entity in the state of California and are subject to an evolving legal and regulatory landscape. Additionally, CCAs are in direct competition with California's Investor Owned Utilities ("IOUs"), which face the risk of stranded investments in generating assets and power purchase agreements procured in the past to serve now departing CCA loads. The manner in which the stranded costs of these legacy power supplies are allocated to departing CCA loads is the subject of regulatory proceedings at the CPUC. The competitive and regulatory landscape results in retail rate competitiveness risks that are unique to CCAs. In addition, CCAs are subject to many of the same state-level regulatory policies that govern other load-serving entities, including the Renewable Portfolio Standard, Resource Adequacy Program, and Integrated Resource Planning process. RCEA will manage regulatory risk by:

- Regular monitoring and analysis of legislative and regulatory proceedings impacting CCAs;
- Ensuring timely submission of regulatory compliance filings and data request responses, and tracking changing requirements associated with these submissions;
- ~~Regular monitoring and reporting of actual and projected financial results including probability-based and stressed financial results assuming a range of market and retail rate scenarios (both RCEA and PG&E);~~
- ~~Structuring procurement strategies with the objective function of maintaining a favorable retail rate savings relative to PG&E;~~
- Actively participating in and representing CCA customer interests during regulatory and legislative proceedings.

2.~~3~~2.~~3~~ 4 Volumetric Risk

Volumetric risk is the uncertainty of RCEA's financial performance due to variability in the quantity of retail load served by RCEA. Retail load uncertainty results from customer opt-outs, temperature deviation from normal, unforeseen adoption of behind the meter generation by RCEA customers, as well as local, state and national economic conditions. Volume risk is managed by taking steps to:

- Quantify anticipated PG&E generation and PCIA rates, and variability therein;
- Quantify variability in procurement timing and costs;
- Monitor and adjust for non-regulatory factors driving volumetric uncertainty (e.g. weather);
- Adopt a formal procurement strategy;
- Implement a key accounts program and maintain strong relationships with the local community;
- Monitor trends in customer onsite generation, economic shifts, and other factors that affect electricity customer volume and composition;
- Expand the customer base of the CCA into neighboring counties and include direct access loads.

2.~~3~~2.~~4~~ 5 Model Risk

Model risk is the uncertainty of RCEA's financial performance due to potentially inaccurate or incomplete characterization of a transaction or power supply portfolio elements due to fundamental deficiencies in models and/or information systems. Model risk is managed by:

- TEA Risk Management Committee approval, and RCEA RMT ratification of, financial and risk models;
- Ongoing review of model outputs as part of controls framework;
- Ongoing RCEA and TEA staff education and participation in CCA industry forums;
- Ongoing update and improvement of models as additional information and expertise is acquired

2.~~3~~2.~~5~~ 6 Operational Risk

Operational risk is the uncertainty of RCEA's financial performance due to weaknesses in the quality, scope, content, or execution of human resources, technical resources, and/or operating procedures within RCEA. Operational risk can also be exacerbated by fraudulent actions by employees or third parties, ~~or~~ inadequate or ineffective controls, or unforeseen changes in our relationship with the incumbent utility.~~-~~ Operational risk is managed through:

- The controls set forth in this Policy;
- RMT oversight of procurement activity;
- Timely and effective management reporting;
- Staff resources, expertise and/or training reinforcing a culture of compliance;
- Ongoing and timely internal and external financial and operational audits;
- Enforcement of RCEA's CCA terms and conditions, including customer debt collection ;
- Adhering to data security requirements in RCEA's Information Security Policy and the CPUC's Customer Data Privacy Decision 12-08-045.

2.~~3~~2.~~6~~ 7 Counterparty Credit Risk

Counterparty credit risk is the potential that a Counterparty will fail to perform or meet its obligations in accordance with terms agreed to under contract. RCEA's exposure to counterparty credit risk is controlled by the limit controls set forth in the Credit Policy described in Section 6.

2.~~3~~2.~~7~~ 8 Reputation Risk

Reputation risk is the potential that the CCA's reputation is harmed, causing customers to opt-out of the CCA's service and migrate back to PG&E. Reputational risk is managed through:

- Implementation and adherence to this Energy Risk Management Policy;
- Establishment and adherence to industry best practices including both those adopted by other CCAs, as well as those adopted by traditional municipal electric utilities.

2.4 Risk Measurement Methodology

A vital element in RCEA's Energy Risk Management Policy is the regular identification, measurement and communication of risk. To effectively communicate risk, all risk management activities must be monitored on a frequent basis using risk measurement methodologies that quantify the risks associated with RCEA's procurement-related business activities and performance relative to goals.

Risk measurement of RCEA's position will be performed using a method that calculates projected procurement costs on an annual basis at various probabilities and that further provides a comparison of projected RCEA retail rates to those of PG&E. The rate comparison will be adjusted for actual and projected PCIA and Franchise Fee charges. Risk measurement methodologies shall be re-evaluated on a periodic basis to ensure RCEA and TEA adjust their methods to reflect the evolving regulatory and competitive landscape. The implementation of these methods shall be overseen and validated by TEA and ratified by the RMT.

Section 3: BUSINESS PRACTICES

3.1 General Conduct

It is the policy of RCEA that all personnel, including the Board, management, and agents, adhere to standards of integrity, ethics, conflicts of interest, compliance with statutory law and regulations and other applicable RCEA standards of personal conduct while employed by or affiliated with RCEA.

3.2 Trading for Personal Accounts

All RCEA Directors, management, employees and agents participating in any transaction or activity within the coverage of this Policy are obligated to give notice in writing to RCEA of any interest such person has in any counterparty that seeks to do business with RCEA, and to identify any real or potential conflict of interest such person has or may have with regard to any contract or transaction with RCEA. Further all persons are prohibited from personally participating in any transaction or similar activity that is within the coverage of this Policy and that is directly or indirectly related to the trading of electricity and/or environmental attributes as a commodity.

If there is any doubt as to whether a prohibited condition exists, then it is the employee's responsibility to discuss the possible prohibited condition with her/his manager or supervisor.

3.3 Adherence to Statutory Requirements

Compliance is required with rules promulgated by the state of California, California Public Utilities Commission, California Energy Commission, California Air Resources Board, California Independent System Operator, Federal Energy Regulatory Commission (FERC), Commodity Futures Trading Commission (CFTC), and other regulatory agencies.

Congress, FERC and CFTC have enacted laws, regulations and rules that prohibit, among other things, any action or course of conduct that actually or potentially operates as a fraud or deceit upon any person in connection with the purchase or sale of electric energy or transmission services. These laws also prohibit any person or entity from making any untrue statement of fact or omitting to state a material fact where the omission would make a statement misleading. Violation of these laws can lead to both civil and criminal actions against the individual involved, as well as RCEA. This Policy is intended to comply with these laws, regulations and rules and to avoid improper conduct on the part of anyone employed by RCEA. These procedures may be modified from time to time by legal requirements, auditor recommendations, RMT requests and other considerations.

In the event of an investigation or inquiry by a regulatory agency, RCEA will provide legal counsel to employees. However, RCEA will not appoint legal counsel to an employee if RCEA's General Counsel and Executive Director determine that the employee was not acting in good faith within the scope of employment.

RCEA employees are prohibited from working for another power supplier, CCA or utility in a related position while they are simultaneously employed by RCEA unless an exception is authorized by the Board. For clarity, this prohibition is not intended to prevent RCEA staff from performing non-CCA activities on behalf of RCEA in the normal course of its business.

3.4 Transaction Type, Regions and Markets

Authorized transaction types, regions and markets are listed in Appendix A to this Policy. These transaction types, regions and markets are and shall continue to be focused on supporting RCEA's financial policies, including approved procurement strategies. New or non-standard transaction types may provide RCEA with additional flexibility and opportunity but may also introduce new risks. Therefore, transaction types, regions and markets not included in Appendix A, or transactions within already approved transaction types that are substantially different from any prior transaction executed by RCEA, must be approved by the RMT prior to execution using the process defined below.

When seeking approval for a new or non-standard transaction type, region, and/or market, a New Transaction Approval Form, as shown in Appendix B, should be drafted describing all known significant elements of the proposed transaction. The proposal write-up will be prepared by TEA and should, at a minimum, include:

- A description of the benefit to RCEA, including the purpose, function and expected impact on costs (i.e.; decrease costs, manage volatility, control variances, etc.)
- Identification of the in-house or external expertise that will manage and support the new or non-standard transaction type
- Assessment of the transaction's risks, including any material legal, tax or regulatory issues
- How the exposures to the risks above will be managed by the limit structure
- Proposed valuation methodology (including pricing model, where appropriate)
- Proposed reporting requirements, including any changes to existing procedures and system requirements necessary to support the new transaction type
- Proposed accounting methodology
- Proposed work-flows/methodology (including systems)

It is the responsibility of TEA's Middle Office to ensure that relevant departments have reviewed the proposed transaction and that material issues are resolved prior to submittal to the RMT for approval. If approved, Appendix A to the Policy will be updated to reflect the new transaction type.

3.5 Counterparty Suitability

TEA's counterparty credit limits and approval processes will govern counterparty suitability for all transactions executed by TEA on behalf of RCEA. TEA will provide a credit review and recommendation, consistent with the credit policies described in Section 6, for any counterparty with whom RCEA contracts directly.

3.6 System of Record

TEA's Middle Office will maintain a set of records for all transactions executed in association with RCEA procurement activities. The records will be maintained in US dollars and transactions will be separately recorded and categorized by type of transaction. This system of record shall be auditable.

3.7 Transaction Valuation

Transaction valuation and reporting of positions shall be based on objective, market-observed prices. Open positions should be valued (marked-to-market) daily, based on consistent valuation methods and data sources. Whenever possible, mark-to-market valuations should be based on independent, publicly available market information and data sources.

3.8 Stress Testing

In addition to limiting and measuring risk using the methods described herein, stress testing shall also be used to examine performance of the RCEA portfolio under adverse conditions. Stress testing is used to understand the potential variability in RCEA's projected procurement costs, and resulting retail rate impacts and competitive positioning, associated with low probability events. The TEA Middle Office will perform stress-testing of the portfolio on a monthly basis and distribute results. The Risk Management Team will provide guidance to TEA on a monthly basis regarding what parameters should be stress tested and to what degree.

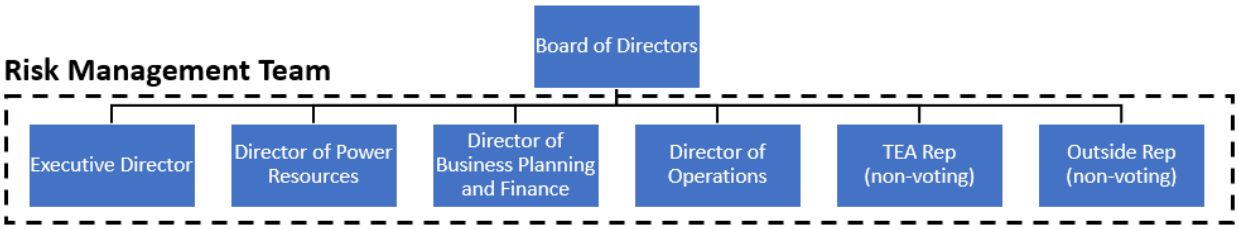
3.9 Trading Practices

The approved scope of market participation by RCEA is limited to those activities required to capture reasonably expected value and cost stability from RCEA's resource portfolio without engaging in speculative or unauthorized trading activities. Staff and third-party service providers may exercise some discretion on trade timing and volumes subject to existing conditions (such as unusual weather, load deviations and/or power system circumstances). RCEA procurement practices are intended to prohibit the acquisition of unwarranted or additional exposure to price and volume risk beyond that projected and associated within the efficient utilization and optimization of RCEA's resource portfolio. If any questions arise as to whether a particular transaction constitutes speculation, the RMT shall review the transaction(s) to determine whether the transaction would constitute speculation and document its finding in the meeting minutes.

Section 4: ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

4.1 Risk Management Organizational Structure

Below is a high-level organization chart describing RCEA's risk management governance.



4.2 Board of Directors

The RCEA Board of Directors has the responsibility to review and approve this Policy. With this approval, the Board assumes responsibility for understanding the risks RCEA is exposed to due to CCA Program activity and how the policies outlined in this document help RCEA manage the associated risks. The Board of Directors is also responsible to:

- Determine RCEA strategic direction
- Understand the procurement strategy employed
- Approve risk exposures beyond the RMT's authority
- Approve voting Members of the RMT

4.3 Risk Management Team (RMT)

The RMT is responsible for implementing, maintaining and overseeing compliance of this Policy. The voting members of the RMT shall be Board-approved RCEA staff members. Additionally, an independent outside third-party representative, and a representative from TEA, will serve as non-voting members. Each voting member will be assigned one vote. The current voting members of the RMT are:

- Executive Director
- Director of Power Resources
- Director of Operations
- Director of Business Planning and Finance

The primary goal of the RMT is to ensure that the procurement activities of RCEA are executed within the guidelines of this Policy and are consistent with Board directives. The RMT is also responsible to consider and propose recommendations to this Policy when conditions dictate.

Pursuant to direction from the Board of Directors and the limitations specified by this Policy, the RMT and the Executive Director maintain full authority over all procurement activities for RCEA. This authority includes, but is not limited to, taking any or all actions necessary to ensure compliance with this Policy.

The RMT is responsible for overseeing implementation of this Policy, procurement strategies, and the adoption of new product types. The RMT is also responsible for ensuring procurement strategies are consistent with RCEA's strategic objectives and for reviewing financial results. The RMT shall meet at least quarterly and record business in meeting minutes that will be approved by the RMT. No decision of the RMT is valid unless a majority of voting members has stated approval with a quorum of voting members participating in the vote, including the Executive Director. A quorum consists of a simple majority of RMT voting members, i.e. three of the four voting members. All decisions by the RMT, other than those made by common consent, shall be made by simple majority vote of the RMT members with the Executive Director having veto authority.

The RMT maintains the authority and responsibility to:

- Approve and ensure that all procurement strategies are consistent with this Policy;
- Determine if changes in procurement strategies are warranted;
- Approve new transaction types, regions, markets and delivery points;
- Understand financial and risk models used by TEA;
- Understand counterparty credit review models and methods for setting and monitoring credit limits;
- Receive and review reports as described in this Policy;
- Meet to review actual and projected financial results and potential risks;
- Authorize individual transactions that exceed the Executive Director's authority as indicated in Section 5 below;
- Escalate to the Board of Directors with any risks beyond the RMT's authority;
- Review summaries of limit violations;
- Review the effectiveness of RCEA's energy risk measurement methods;
- Maintain this Policy;
- Monitor regulatory and legislative activities

4.4 Power Manager

~~The CCA~~RCEA has partnered with TEA as its Power Manager. TEA, as outlined in its Risk Policy, maintains a strong segregation of duties, also referred to as "separation of function" that is fundamental to manage and control the risks outlined in this Policy. The Power Manager will provide education to the RMT on the risk and credit models, methods and processes ~~–~~that it uses to fulfill its obligations under this Policy. Individuals responsible for legally binding ~~the CCA~~RCEA to a transaction will not also perform confirmation, or settlement functions. With this in mind, TEA's responsibilities are divided into front-middle-back office activities, as described below.

4.4.1 Power Manager - Front Office

The Power Manager's Front Office has overall responsibility for (1) managing all commodity and transmission activities related to procuring and delivering resources needed to serve ~~CCA's~~ RCEA's load, (2) the analysis of fundamentals affecting load and supply factors that determine ~~CCA's~~ RCEA's net position, and (3) transacting within the limits of this Policy, and associated policies, to balance loads and

resources, and maximize the value of ~~CCA's~~ RCEA's assets through the exercise of approved optimization strategies. Other duties associated with ~~these responsibilities~~the Power Manager's Front Office include:

a. Assist in the development and analysis of risk management hedging products and strategies, and bring recommendations to the RMT

b. Prepare each month a monthly operating plan for the prompt months that gives direction to the day-ahead and real-time trading and scheduling staff regarding the bidding and scheduling of ~~CCA's~~ RCEA's resource portfolio in the CAISO market

c. Develop, price and negotiate hedging products

d. Forecast day-ahead and monitor/ forecast same-day loads

e. Keep accurate records of all executed transactions ~~they enter~~

4.4.2 Power Manager – Middle/Back Office

The Power Manager Middle Office provides independent market and credit risk oversight. The Power Manager Middle Office is functionally and organizationally separate from the Front Office. The Power Manager Back Office provides support with a wide range of administrative activities necessary to execute and settle transactions and to support the risk control efforts (e.g. transaction entry and/or checking, data collection, billing, etc.) consistent with this Policy. The Power Manager Back Office is also functionally and organizationally separate from the Front Office.

The Power Manager's Middle and Back Offices have primary responsibility for trading control and for ensuring agreement with counterparties regarding the terms of all trades, including forward trading. The Power Manager's Middle and Back Offices ~~has~~ have the primary responsibility for:

a. Estimating and publishing daily forward monthly power and natural gas price curves for a minimum of the balance of the current year through the next calendar year

b. Calculating and maintaining the net forward power positions of ~~CCA~~RCEA

c. Ensuring that ~~CCA~~ RCEA adheres to all risk policies and procedures of both ~~CCA~~ RCEA and the Power Manager in letter and in intent

d. Maintaining the overall financial security of transactions undertaken by the Power Manager on behalf of ~~CCA~~RCEA

e. Implementing and enforcing credit policies and limits

f. Handling confirmation of all transactions and reconciling differences with the trading counterparties

g. Reviewing trade tickets for adherence to approved limits

h. Ensuring all trades have been entered into the appropriate system of record

i. Ensuring that both pre-schedule and actual delivery volumes and prices are entered into the physical database

j. Carrying out month-end checkout of all transactions each month

k. Reviewing models and methodologies and recommending RMT approval

~~k.~~l. Providing supporting documentation for power supply audits

Section 5: DELEGATION OF AUTHORITY

~~With the approval of the~~By adopting this Policy, the RCEA Board is explicitly delegating operational control and oversight to the RMT and Power Manager, as outlined through this Policy. Specifically, to facilitate daily operations of the CCA, the Board is delegating transaction execution authorities shown in the table below.

Position	Maturity Limit	Term Limit	Volume Limit (MWh)[1]	Value Limit[2]
RCEA Board of Directors	Any transaction that exceeds the Risk Management Team limits			
Risk Management Team	~~30~~ 42 Months	~~24~~ 36 Months	500,000	$~~2~~3,000,000
Executive Director	~~24~~36 Months	~~18~~ 30 Months	375,000	$~~1~~2,000,000
TEA	~~18~~30 months	~~12~~24 Months	250,000	$~~5~~1,000,000

[1]Volume limit applies only to energy ~~purchases~~transactions, including index-based renewable and carbon-free energy ~~purchases~~transactions.

[2]Value limits apply to non-energy product transactions (e.g., Resource Adequacy).

These authorities will be applied to wholesale power activity executed outside of the California Independent System Operator ("CAISO") markets. These limits provide both RCEA and TEA needed authorities to manage risks as they arise. Transactions falling outside the delegations above require Board approval prior to execution. Activity with CAISO is excluded from this table due to the nature of the market, where prices for activity may not be known until after transactions are committed.

All procurement executed under the delegation above, must align with the RCEA's underlying risk exposure (load requirements, locational and temporal) that is being hedged consistent with the approved Guidelines for the Redwood Coast Energy Authority Community Energy Program Launch-Period Strategy and Targets, and the Energy Risk Hedging Strategy (Appendix D to this policy).

5.1 Monitoring, Reporting and Instances of Exceeding Risk Limits

The TEA Middle Office is responsible for monitoring, and reporting compliance with, all limits within this Policy. If a limit or control is violated, the TEA Middle Office will send notification to the trader responsible for the violation and the RMT. The RMT will discuss the cause and potential remediation of the exceedance to determine next steps for curing the exceedance. RCEA Power Resources staff are also responsible for monitoring transactions reported by TEA and bringing to the RMT's attention any violations of limits within this Policy that have not been noted by TEA.

Section 6: CREDIT POLICY

~~During startup of the CCA, it is expected that t~~Transactions ~~will be~~are executed on RCEA's behalf by TEA on TEA agreements, and with this activity RCEA is exposed to pass-through credit risk. As ~~the CCA~~RCEA builds its own counterparty master trading agreements, transactions executed on CCA agreements will carry direct credit risk. For activity on TEA and/or CCA agreements, RCEA will adopt a scaling methodology to adjust TEA's credit limits to RCEA's risk tolerance. TEA shall assist RCEA in setting its own risk tolerance and defining the scaling methodology, based on TEA's credit risk processes. For scaling with RCEA counterparties, where an agreement exists between RCEA and an entity, the RMT will approve changes to credit limits, otherwise TEA will automatically scale the TEA limit to the RCEA risk tolerance.

All procurement activities executed by TEA on behalf of RCEA, using TEA's counterparty agreements, will be subject to the credit policies and procedures outlined in TEA's Energy Risk Management Policy. TEA's credit policy requires that all Counterparties be evaluated for creditworthiness by the TEA Middle Office prior to execution of any transaction and no less than annually thereafter. Additionally, Counterparties shall be reviewed if a change has occurred, or perceived to have occurred, in market conditions or in a company's management or financial condition. This evaluation, including any recommended increase or decrease to a credit limit, shall be documented in writing and includes all information supporting such evaluation in a credit file for the counterparty. A credit limit for a Counterparty will not be recommended or approved without first confirming the Counterparty's senior unsecured or corporate credit rating from one of the nationally recognized rating agencies and/or performing a credit review or analysis of the Counterparty's or guarantor's financial statements. The TEA credit analysis shall include, at a minimum, current audited financial statements or other supplementary data that indicates financial strength commensurate with an investment grade rating. Trade and banking references, and any other pertinent information, may also be used in the review process.

Counterparties that do not qualify for a Credit Limit must post an acceptable form of credit support or Prepayment prior to the execution of any transaction. A Counterparty may choose to provide a guarantee from a third party, provided the third party satisfies the criteria for a Credit Limit as outlined in TEA's Energy Risk Management Policy.

6.1 Credit Limit and Monitoring

In executing transactions on RCEA's behalf, TEA will observe a pass-through counterparty credit maximum limit equal to $1.0 million.

The TEA Middle Office will establish continuous monitoring of the current credit exposure for each Counterparty with whom TEA transacts on behalf of RCEA and include such information in the Current Counterparty Credit Risk Report. This report will be made available, reviewed and communicated to the RMT pursuant to the reporting requirements outlined in Section 7.

Section 7: POSITION TRACKING AND MANAGEMENT REPORTING

Minimum reporting requirements are shown below. The reports outlined below will be made available to RMT members and TEA staff:

- **Daily Financial Model Forecast**

  Latest projected financial performance, marked to current market prices, and shown relative to financial goals.

- **Monthly Net Position Report**

  Prepare a forward net position report, not less frequently than monthly, and report the results to the RMT.

- **Monthly Pass-through Counterparty Credit Exposure**

  This report will show how the credit exposures for transactions that TEA executes on behalf of RCEA will pass-through TEA to RCEA.

- **Monthly Risk Analysis**

  This will include a Cash Flow at Risk and stress test of financial forecast relative to financial goals.

- **Quarterly Board Report**

  Update on activities and projected financial performance to be presented quarterly at RCEA Board meetings.

Section 8: POLICY REVISION PROCESS

RCEA's Energy Risk Management Policy will evolve over time as market and business factors change. At least on an annual basis, the RMT will review this Policy and associated procedures to determine if they should be amended, supplemented, or updated to account for changing business and/or regulatory requirements If an amendment is warranted, the Policy amendment will be submitted to the RCEA Board for approval. Changes to appendices to this Policy may be approved and implemented by the RMT.

8.1 Acknowledgement of Policy

Any RCEA employee participating in any activity or transaction within the scope of this Policy shall sign, on an annual basis or upon any revision, a statement approved by the RMT that such employee ~~has~~:

- ~~Read~~ Has read RCEA's Energy Risk Management Policy
- Understands the terms and agreements of said Policy
- Will comply with said Policy
- Understands that any violation of said Policy shall be subject to employee discipline up to and including termination of employment.

See Appendix E for a statement form.

8.2 Policy Interpretations

Questions about the interpretation of any matters of this Policy should be referred to the RMT.

All legal matters stemming from this Policy will be referred to RCEA's General Counsel.

Appendix A: AUTHORIZED TRANSACTION TYPES OR PRODUCTS

All transaction types listed below must be executed within the limits set forth in this Policy. *(The following transaction types can be 'nonstandard' at RCEA subject to RMT approval)*

Over the Counter Products

- CAISO Market Products
  - Day-ahead and Real-time Energy
  - Congestion Revenue Rights
  - Convergence
  - Inter Scheduling Coordinator Transactions
  - Tagging into and out of CAISO
  - Ancillary Services
- Physical Power Products
  - Short and Long-Term Power
  - Physical OTC Options
- Physical Resource Adequacy Capacity
- Physical Environmental Products
  - Renewable Energy Credits
  - Specified Source Power
  - Carbon Allowances and Obligations
- Transmission Access Charges
- Energy Storage, including time-based arbitrage (selling stored energy into the grid during peak hours and buying energy to store during off-peak hours)
- Any other products associated with energy generation, demand response, or other energy markets relevant to RCEA activities

The point of delivery for all products must be at a location ~~on~~ within the CAISO ~~transmission grid~~service area.

Appendix B: NEW TRANSACTION APPROVAL FORM

New or Non-Standard Transaction Approval Form

Prepared By:

Date:

New or Non-Standard Transaction Name:

Business Rationale and Risk Assessment:

- Product description – including the purpose, function, expected impact on net revenues (i.e. increase, manage volatility, control variances, etc.) and/or benefit to RCEA
- Identification of the in-house or external expertise that will be relied upon to manage and support the new or non-standard transaction
- Assessment of the transaction's risks, including any material legal, tax or regulatory issues
- How the exposures to the risks above will be managed by the limit structure
- Proposed valuation methodology (including pricing model, where appropriate)
- Proposed reporting requirements, including any changes to existing procedures and system requirements necessary to support the new product
- Proposed accounting methodology
- Proposed Middle Office work-flows/methodology, including systems
- Brief description of the responsibilities of various departments within RCEA who will have any manner of contact with the new or non-standard transaction

Reviewed by:

Director of Power Resources	**Date**
TEA Representative	**Date**
Executive Director	**Date**

Appendix C: DEFINITIONS

Back Office: That part of a trading organization which handles transaction accounting, confirmations, management reporting, and working capital management.

Bilateral Transaction: Any physical or financial transaction between two counterparties, neither of whom is an Exchange or market entity (e.g. CAISO).

Cash Flow at Risk: A probability-based measure of the extent to which future cash flows may deviate from expectations due to changes in load, generation and/or market prices of energy. (For RCEA, the most relevant Cash Flow at Risk metric is a measure of the potential for net revenues to deviate from the current forecast.)

CAISO: California Independent System Operator. CAISO operates a California bulk power transmission grid, administers the State's wholesale electricity markets, and provides reliability planning and generation dispatch.

CCA: Community Choice Aggregator. CCAs allow local government agencies such as cities and/or counties to purchase and/or develop generation supplies on behalf of their residents, businesses and municipal accounts.

CFTC: Commodity Futures Trading Commission. The CFTC is a U.S. federal agency that is responsible for regulating commodity futures and swap markets. Its goals include the promotion of competitive and efficient futures markets and the protection of investors against manipulation, abusive trade practices and fraud.

Commodity: A basic good used in commerce that is interchangeable with other goods of the same type. Commodities are most often used as inputs in the production of other goods or services. The quality of a given commodity may differ slightly, but it is essentially uniform across producers. When they are traded on an exchange, commodities must also meet specified minimum standards, also known as a basis grade.

Confirmation Letter: A letter agreement between two counterparties that details the specific commercial terms (e.g., price, quantity and point of delivery) of a transaction.

Congestion Revenue Right: A point-to-point financial instrument in the Day-Ahead Energy Market that entitles the holder to receive compensation for or requires the holder to pay certain congestion related transmission charges that arise when the transmission system is congested.

Counterparty Credit Risk: The risk of financial loss resulting from a counterparty to a transaction failing to fulfill its obligations.

Day-ahead Market: The short-~~-~~term forward market for efficiently allocating transmission capacity and facilitating purchases and sales of energy and scheduled bilateral transactions; conducted by an Organized Market prior to the operating day.

Delivery point: The point at which a commodity will be delivered and received.

Departing load: Load associated with a retail electricity consumer that elects to purchase generation services from an Energy Service ~~provider~~ Provider rather than the local Investor Owned Utility.

FERC: Federal Energy Regulatory Commission. FERC is a federal agency that regulates the interstate transmission of electricity, natural gas and oil. FERC also reviews proposals to build liquefied natural gas terminals, interstate natural gas pipelines, as well as licenses hydroelectric generation projects.

Front Office: That part of a trading organization which solicits customer business, services existing customers, executes trades and ensures the physical delivery of commodities.

Franchise Fee: A franchise fee is a percentage of gross receipts that an IOU pays cities and counties for the right to use public streets to provide gas and electric service. The franchise fee surcharge is a percentage of the transmission (transportation) and generation costs to customers choosing to buy their energy from third parties. IOUs collect the surcharges and pass them through to cities and counties.

Hedging products: Capacity, energy, renewable energy credits or other products related to a specific transaction.

Hedging Transaction: A transaction designed to reduce the exposure of a specific outstanding position or portfolio; "fully hedged" equates to complete elimination of the targeted risk and "partially hedged" implies a risk reduction of less than 100%.

Investor Owned Utility (IOU): A business organization providing electrical and/or natural gas services to both retail and wholesale consumers and is management as a private enterprise.

Limit structure: A set of constraints that are intended to limit procurement activities.

Limit violation: Any time a defined limit is violated.

Middle Office: That part of a trading organization that measures and reports on market risks, develops risk management policies and monitors compliance with those policies, manages contract administration and credit, and keeps management and the Board informed on risk management issues.

Net Forward Position: A forecast of the anticipated electric demands of a load serving entity compared to existing resource (generation and/or power purchase agreements) commitments.

Nonstandard: Any product that is not commonly transacted among market participants in forward markets. The nonstandard attribute of the product could be a function of a number of factors such as volume, delivery period and/or term.

Opt-out Rate: Typically expressed as a percentage, the Opt-out Rate measures the ratio of eligible customers of a CCA that have elected to remain a bundled service customer of the IOU rather than take generation services from the CCA.

PCIA: Power Cost Indifference Adjustment. The PCIA is intended to compensate IOUs for their stranded costs when a bundled customer departs and begins taking generation services from a CCA.

Prompt: period immediately following the current period, e.g. in February the prompt month is March.

Scheduling: The actions of the counterparts to a transaction, and/or their designated representatives, of notifying, requesting and confirming to each other the quantity and type of product to be delivered on a given day.

Separation of function: Also referred to as "segregation of duties," part of a complete risk control framework. Individuals responsible for legally binding the organization to a transaction should not also perform confirmation, clearance or accounting functions.

Settlement: Settlement is the process by which counterparties agree on the dollar value and quantity of a commodity exchanged between them during a particular time interval.

Speculation: The act of trading an asset with the expectation of realizing financial gain resulting from a change in price in the asset being transacted. (See discussion in sections 1.1 and 3.9 that elaborates on discretion staff and third-party service providers are allowed in conducting trading activities.)

Stranded cost: Generation costs that a load serving entity is allowed to collect from customers through retail rates but that will not be recovered if the generation is sold in wholesale electricity markets.

Stress testing: The process of simulating different financial outcomes to assess potential impacts on projected financial results. Stress testing typically evaluates the effect of negative events to help inform what actions may be taken to lessen the negative consequences should such an event occur.

Appendix D: ENERGY RISK HEDGING STRATEGY

Introduction

The Redwood Coast Energy Authority (RCEA) is routinely exposed to commodity price risk and volume variability risk in the normal conduct of serving the power supply requirements of its residential and business customers as part of its Community Choice Energy (CCE) program.

This Energy Risk Hedging Strategy (Strategy) describes the strategy and framework that RCEA ~~will~~ uses to hedge the power supply requirements of its customers during the current calendar year plus next two calendar years. Specific focus is on procurement of the following market-based products:

- Fixed ~~price~~ Price ~~energy~~ Block Energy (also known as system power)
- Portfolio Content Category 1 Renewable Energy
- Portfolio Content Category 2 Renewable Energy
- Carbon Free Energy
- Resource Adequacy Capacity

In addition to market-based transactions entered into pursuant to this Strategy, RCEA will also enter into long~~er~~-term power purchase agreements (PPAs) and resource adequacy (RA) contracts pursuant to statutory and regulatory requirements, including the ~~(e.g.,~~ SB350 mandate to procure a minimum of 65 percent of Renewable Portfolio Standard-required renewable energy under ~~a~~ 10-year or longer PPAs ~~power purchase agreement~~ or RCEA-owned resources beginning in 2021, and the CPUC's November 2019 IRP Procurement Track Decision Requiring Electric System Reliability Procurement for 2021-2023.~~), as well as~~ Additionally, RCEA may enter into voluntary long-term resource acquisitions ~~decisions made independently by RCEA~~ pursuant to its Integrated Resource Plan and policy goals established by its Board of Directors. Long-term PPAs will count as hedges as described later in this Strategy.

Governance

This Strategy shall be updated, as necessary, from time to time and governed by the Energy Risk Management Policy approved by the RCEA's Board of Directors in December 2016 and reviewed annually with updates as needed (Risk Policy).

Hedging Program Goals

The overall goals of the Strategy are to identify exposure to commodity prices, quantify the financial impact that variability in commodity prices, load requirements, and generation output may have on the ability of the RCEA to meet its financial program goals, and then manage the associated risk.

To help ensure long term viability for the CCE, RCEA has outlined the following Policy Goals. These goals will establish metrics used for modeling and measuring risk exposures of the CCE.

- RCEA will target to maintain competitive retail rates with PG&E after adjusting for the PCIA and Franchise Fee.

- RCEA will target during the initial years of operation to fund financial reserves with the following objectives:
    - Establish long-term business sustainability
    - Build collateral for power procurement activities
    - Establish an investment grade credit rating
    - Develop a source of funds for investment in local generation and ~~other local~~ customer programs
    - Stabilize rates and ~~dampen~~ buffer against year-to-year variability in procurement costs
- RCEA set an initial target to procure 40 percent of its power supply requirements from renewable energy and 80 percent of its power supply requirements from non-fossil fuel generation, with a goal of procuring 100 percent renewable power from local sources by 2030. This long-term goal was established in the RePower Humboldt study that formed the original impetus for developing RCEA's Community Choice Energy program.

All hedging activities will be conducted to achieve results consistent with the above goals and to meet the power supply requirements of RCEA's customers. Any transaction that cannot be directly linked to a requirement of serving RCEA's customers, or that does not serve to reduce risk as measured by the Cash Flow at Risk Metric described below, is prohibited.

Prohibited Generation Sources

In keeping with community values identified by RCEA in developing its CCE program, neither energy nor resource adequacy (RA) will be procured from the following generation sources:

- Nuclear generation
- Coal generation
- Hydro-electric generation from existing dams on the mainstem Klamath River

Exceptions to this prohibition may be needed for occasional short-term transactions, such as procurement of replacement RA.

Hedging Targets and Strategies

The time horizon for the hedging program will be the prompt three (3) years. RCEA and TEA will generally observe ~~set~~adopted hedge schedules for each of the following energy and capacity products, to provide discipline on the minimum hedge level side and as protection for over-hedging on the maximum hedge level side. Changes in regulatory, load, and market dynamics may require occasional over-hedging and subsequent remarketing of over-procured products.

Fixed Price Block Energy

A challenge in using renewable generating resources to meet the energy requirements of customers is that the generation profile of renewable resources often does not align with the consumption patterns of the residences and businesses consuming the electricity. Fixed Price Energy products, including Block Energy, Shaped Energy and Options, are used to manage the electricity commodity price risk that RCEA

faces as a result of this uncertainty. Fixed price energy provides for the supplier to deliver a predetermined volume of energy, at a constant delivery rate, for a fixed price. Specific to RCEA's customers, Fixed Price Energy hedges are used to provide cost certainty and rate stability.

When assessing its requirements for Fixed Price Block Energy, RCEA will forecast the monthly energy requirements of its customers during heavy and light load hours[2] each month as well as the forecasted output from resources in its portfolio. Forecast load will be determined through use of an econometric model that forecasts both total energy usage and peak demand by customer load class. The model will use historical data to estimate relationships between energy consumption and economic, demographic and/or weather variables. The econometric model will be refined through time as additional load data is acquired through actual program operation. Forecasted output from resources will be based on generation forecasts provided by counterparties and may be adjusted based on observed outcomes.

In the adopted hedge schedule for block energy, t~~T~~he minimum hedge level is ~~will be~~ achieved by implementing a time-driven programmatic strategy. Time-driven programmatic hedges are executed at a predetermined rate pursuant to a time schedule and without regard for market conditions. The purpose of these hedging transactions is to achieve a reduction in variability in power supply costs by gradually increasing the amount of energy hedged as the actual date of consumption approaches. Time driven strategies avoid the inherent impossibility of trying to consistently and accurately "time the market" when making hedging decisions. Additionally, a load serving entity the size of RCEA needs to spread its procurement efforts over time to effectively manage the potential negative price impacts of procuring a large volume of energy~~,~~ over a short period of time~~,~~ in an illiquid market.

Hedging decisions to reach targets between the minimum and maximum hedge levels are ~~will be~~ based on price-driven or opportunistic strategies. The purpose of price-driven or opportunistic strategies is to capitalize on market opportunities when conditions are favorable. RCEA ~~will~~ bases its decision to execute opportunistic hedges on the impact to projected power supply costs and the resulting reduction in cash flow at risk (CFaR).

Opportunistic hedges may be executed when energy price levels are favorable to lowering the cost of power relative to established program goals and financial projections; alternatively, opportunistic hedges can be executed in adverse market conditions relative to financial goals in order to reduce the potential negative impact of continued upward trending commodity prices relative to established goals.

In executing this strategy, Fixed Block Energy hedges may be purchased, sold, or moved from one month to another for the purpose of maintaining hedge coverage that matches changes in forecasted electric load. This includes the ability of the RCEA to purchase standard products to hedge average loads over a defined time period and then later modify its portfolio by purchasing or selling more granular products to more precisely match load.

[2] Heavy Load (On-peak) Hours in wholesale energy markets are 6am to 10pm, Monday through Saturday, excluding New Years, Memorial Day, 4th of July, Labor Day, Thanksgiving and Christmas. All other hours during the year are considered Light Load (Off-peak) Hours.

Power Charge Indifference Adjustment (PCIA) Exit Fee and Hedging with Fixed Price Block Energy. Under the current PCIA construct ~~of PCIA~~, departing load is responsible for costs associated with procurement that the ~~IOU~~ incumbent utility has already done on behalf of that load. At the time of departure, t~~T~~he applicable vintage portfolio[3] then serves as a hedge for the departing load in that as market prices increase, the departing load charges decrease, ~~i.e. the vintage portfolio is more "in the money" (i.e., more affordable for~~ thereby reducing costs to CCA customers relative to bundled customers~~.' rates) and s~~ Similarly, if market prices decrease, the departing load charges increase, due to ~~as~~ more of the vintage portfolio ~~is more "out of the money~~being above market costs~~."~~ One component of the exit fee that is established each year under the PCIA construct is a mark-to-market value for the system power component of PG&E's applicable vintage portfolio. This value is established each October prior to the start of the upcoming calendar year based on the simple average of forward prices for the calendar year and application of PG&E's specific load weights for peak and off-peak consumption. Daily settlement prices sourced from Platts during each business day of the month of October establish the forward prices used for purposes of this calculation (e.g., the value for calendar year 2020 was ~~will be~~ established during October 2019).

After ~~October when~~ all the inputs to determine the ~~system power~~ market price benchmark are known, the PG&E vintage portfolio no longer provides any hedging value to the departing load against market price movements. ~~The CCE~~ RCEA will treat the hedge volumes associated with the vintage portfolio as ~~if~~ part of its own portfolio from October prior to year start when implementing the adopted hedge schedule ~~shown in the table above until October prior to year start~~. PG&E's 201~~75~~ Power Content Label provides the ~~is our~~ best estimate of the percent of fixed price energy in PG&E's vintage portfolio associated with RCEA's vintage year of 2017, ~~and~~ which is approximately 60 percent (30% renewable, 6% large hydroelectric, 23% nuclear) ~~that was in~~

2017 POWER CONTENT LABEL Pacific Gas and Electric Company		
ENERGY RESOURCES	**Power Mix**	**2017 CA Power Mix****
Eligible Renewable	**33%**	**29%**
Biomass & biowaste	4%	2%
Geothermal	5%	4%
Eligible hydroelectric	3%	3%
Solar	13%	10%
Wind	8%	10%
Coal	**0%**	**4%**
Large Hydroelectric	**18%**	**15%**
Natural Gas	**20%**	**34%**
Nuclear	**27%**	**9%**
Other	**0%**	**<1%**
Unspecified sources of power*	**2%**	**9%**
TOTAL	**100%**	**100%**
* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources. ** Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the identified year.		
For specific information about this electricity product, contact:	**Pacific Gas and Electric Company** **415-973-0640**	
For general information about the Power Content Label, please visit:	http://www.energy.ca.gov/pcl/	
For additional questions, please contact the California Energy Commission at:	844-454-2906	

[3] The vintage portfolio is generally all contracts and utility-owned generation that was procured while the departing load was still receiving bundled service. The hedge level is defined as the (total fixed price supply)/(bundled + departed load). In 2015, the departed load was relatively small and hence the Power Content Label was a good estimate for the hedge level of the vintage portfolio.

~~effect at the time RCEA launched CCA operations in May 2017~~.

Portfolio Content Category 1 Renewable Energy

In order to cost-effectively meet its GHG-reduction and renewable energy goals, RCEA intends to meet a growing share of its energy supply requirements with renewable energy, a large portion of which shall be Portfolio~~roduct~~ Content Category 1 (PCC1) renewable energy. PCC1 renewable energy is sourced from a renewable generator either located inside of California or from a generator that is directly interconnected to the California Independent System Operator (CAISO) or other California Balancing Authority. For example, energy procured from local biomass generators is a source of PCC1 renewable energy.

In order to manage price risk of long-term renewable energy, and to allow RCEA to prudently and methodically build a portfolio of long-term assets, RCEA intends to meet its PCC1 energy targets with a blend of short and long-term contracts. In the 2018/19 period, this balance ~~will~~ included a relatively higher share of short-term contracts, augmenting ~~existing renewable~~ purchases from local biomass facilities ~~generation~~ as RCEA focused~~s~~ on launching its CCE and establishing a strong financial foundation.

Beginning in ~~the second half of~~early 2019 and continuing through 2020~~, if not sooner,~~ RCEA ~~will begin~~ is shifting its focus to longer-term PCC1 contracts, particularly for Calendar Year 2021 and beyond. This shift is necessary to comply with the renewable procurement requirements of SB350, as well as the fact that new renewable generating facilities typically require long-term PPAs with terms that can range from ten to twenty-five years, most typically fifteen to twenty. As a result, RCEA's support of renewable generation may require voluntary execution of long-term PPAs beyond what is mandated by SB350.

RCEA's eventual goal is to reach a steady state of procurement in which it meets the majority of its state-mandated and internal voluntary RPS requirements with long-term contracts. In this state, RCEA will execute new contracts when existing ones expire ~~for 5-7 percent of its projected annual PCC1 requirements each year via long-term contract~~, based on an assumed average contract length of 15-20 years. Doing so will i) allow RCEA to steadily reduce its exposure to renewable energy and energy market price risks in a fashion similar to the time-driven, programmatic hedging approach for Fixed-Price Block Energy and ii) ensure that RCEA is in a position to make strategic procurement decisions and~~, if appropriate,~~ commitments ~~every year~~on a periodic basis.

When economically feasible, RCEA will give preference to renewable generation located in Humboldt County.

Portfolio Content Category 2 Renewable Energy

RCEA shall diversify its renewable energy portfolio further by incorporating Portfolio Content Category 2 (PCC2) renewable energy purchases. PCC2 renewable energy is sourced from renewable generators located outside the state of California and is "firmed and shaped" for reliable delivery into California. PCC2 purchases are typically less expensive and shorter in term than PCC1, so they provide a cost-effective and flexible method of augmenting RCEA's renewable energy purchases to meet renewable portfolio content commitments to customers.

It should be noted that there ~~is currently a proceeding underway at~~was recently a decision from the California Energy ~~Public Utility~~ Utilities Commission ~~to~~ on implementation of ~~California legislature's~~

Assemblying Bill 1110, that which may impacts the greenhouse gas reporting and accounting methodologyies that appliedy to PCC2 renewable energy., so t The hedging schedule above procurement strategy of this product is subject to change as RCEA gains clarity of the implications resulting from this changedecision, which will go into effect in 2021 for reporting year 2020 regarding any potential revised methodology.

Carbon Free Energy

In pursuit of its GHG-reduction and non-fossil fuel portfolio objectives, RCEA shall augment its renewable energy purchases outlined above with energy purchases from carbon-free energy generating facilities, which are typically hydro-electric resources located in California that are too large to qualify as Eligible Renewable Resources (greater than 30 MW) or located outside of California. Similar to PCC2 renewable energy contracts, carbon-free energy purchases are typically short-term, most frequently one to three years in length.

In setting the scheduled above targets, it is important to note that the purchase of Carbon--Free Energy is a voluntary goal set by the RCEA Board. RCEA's Board may elect to reduce the total quantity of Carbon-Free Energy included in RCEA's portfolio as it seeks to balance multiple program objectives, including financial targets for reserves and retail rates.

Resource Adequacy Capacity

As a Load-Serving Entity (LSE) in California, RCEA is required to demonstrate both annually and monthly that it has secured sufficient energy capacity to provide for its share of California's peak energy load; this capacity is referred to as Resource Adequacy (RA). RCEA has local RA requirements in some but not all of the Local Reliability Areasspecific to PG&E Bay Area and PG&E Other local areas, as well as general system RA requirements for Northern California ("North of Path 26 System"), a portion of which must be Flexible RA.

Additionally, pursuant to the recent CPUC Decision Requiring Electric System Reliability Procurement for 2021-2023, RCEA is required to procure resource adequacy capacity in the following quantities from resources that are incremental to the designated baseline list.

Procurement year (by August 1)	2021	2022	2023
Percent of total obligation	50%	75%	100%
Cumulative obligation (MW)	5.4	8.0	10.7

RA is typically transacted via contracts that vary in length from one month to three years, and it is currently bought and sold via a bilateral market, which can result in not only provide for cost-effective contracting opportunities but is also sometimes prove at times to be fragmented and volatile.

Hedge Program Metrics

The success of the Energy Risk Hedging Strategy will be measured by realizing power supply costs in line with the budgeted power supply costs used to set customer rates, as well as by reducing RCEA's exposure to commodity price risk. The following two metrics will be utilized to manage the Energy Risk Hedging Strategy:

- Current projected power supply costs will be compared to budgeted power supply costs where budgeted costs will be based on the assumptions used at the time customer generation rates are set. Current power supply costs shall use all fixed price contracts executed as of the date of the report. All open positions will be marked to market and compared to the budgeted power supply costs.
- Cash Flow at Risk (CFaR). CFaR represents a statistical view of what could happen to RCEA's power supply costs assuming that no action is taken to manage its portfolio from the date of the analysis through the end of the period of time being analyzed. The potential CFaR will be calculated using a historical sampling methodology that considers on- and off--peak periods separately over the remaining life of the transactions. The CFaR calculation will consider potential variability in load and generation supply. The CFaR will be calculated by rank ordering the portfolio cost and measuring the difference between the 95th percentile and the expected power cost outcome.

These metrics will be reviewed when making price-driven or opportunistic hedging decisions to ensure that the transactions are consistent with the goals of the Energy Risk Hedging Strategy. These metrics will be updated and reported by TEA to RCEA on a monthly basis.

Reporting Requirements

The following reports are required to manage the hedge program and to ensure its success:

- Net Position Report for each product
- Current Projected Power Supply Costs compared to budget
- Cash Flow at Risk
- Renewable and non-fossil fuel generation portfolio content

These reports will be produced and delivered by TEA staff on a monthly basis.

Appendix E: ACKNOWLEDGMENT OF ENERGY RISK MANAGEMENT POLICY

I, (print name and title of RCEA employee)

_____

hereby attest that I:

- Have read RCEA's Energy Risk Management Policy
- Understand the terms and agreements of said Policy
- Will comply with said Policy
- Understand that any violation of said Policy shall be subject to employee discipline up to and including termination of employment.

_____ _____

Employee signature **Date**

This form is to be completed and signed annually by any RCEA employee participating in any activity or transaction within the scope of RCEA's Energy Risk Management Policy.

REDWOOD COAST EnergyAuthority

STAFF REPORT
Agenda Item # 6.2

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources Jocelyn Gwynn, Manager of Power Resources
SUBJECT:	Development of New Local Utility-Scale Renewable Energy Projects

SUMMARY

At the December 2019 meeting, the Board approved the final update of RCEA's RePower strategic plan. Earlier that week, the Humboldt County Board of Supervisors voted to deny Terra-Gen, LLC a conditional use permit to build the proposed Humboldt Wind project. The RePower Plan anticipates the local onshore wind resource making up a significant portion of our renewable electricity mix in 2030.

Attachment A, from the RePower Plan appendix, shows the projected seasonal average electricity load that the onshore wind resource would have met (charts on the left), and the large gap in supply without the development of this resource (charts on the right) in 2030.The stacked areas show how much the resource mix would generate each hour of the day, while the lines show forecasted load each hour of the day. The augmented load (red line) accounts for increased electricity demand due to electrification of vehicles and building energy use, while the business-as-usual (BAU) load (blue line) shows the demand without the additional electrification. The customer solar (orange dashed line) shows how much load would be served in the middle of the day by net energy metered (NEM) systems, assuming RCEA's aggressive NEM targets are achieved. The charts on the left contemplate Humboldt County as a net exporter of renewable electricity.

As has been noted by staff, members of the Board, and members of the public, and discussed in a front-page local news article earlier this month[1], filling this gap with distributed rooftop solar alone is infeasible due to high cost and time of generation that is not well aligned with demand. Adding battery storage to address the time of generation issue further increases the cost. In addition, there are logistical and policy challenges to quickly implementing a strategy that depends on the willing participation of tens of thousands of property owners.

Below is a list of strategies from the RePower Humboldt Plan that relate to development of new local utility-scale renewable energy resources. Staff seek direction from the board on which strategies to emphasize as we work toward the goal of 100% local, net-zero emission renewable electricity supply by 2030.

[1] "Solar Can't Power All of Humboldt County, HSU Researchers Say," Times-Standard, January 11, 2020

Provide Feed-In-Tariff Power Procurement Program for Small Generators. Offer long-term contracts at a market-adjusting rate for Renewable Portfolio Standard eligible renewable energy generators.

Support Utility Scale Solar Energy Development. Support local efforts to develop solar electric systems in the county. Support development of local training programs for solar contractors and installers. Educate the public about the benefits of solar energy systems. Develop programs that facilitate an increase in the number of solar energy systems in the county.

Procure Local Solar Energy. Contract for local onshore solar energy as part of RCEA's community choice energy portfolio to the extent economically feasible and compatible with portfolio diversity needs.

Develop Offshore Wind Energy. Work with public and private entities to develop offshore wind energy off of the north coast region's coastline, and support establishing Humboldt Bay as a west-coast hub for the offshore wind industry.

Procure Local Offshore Wind Energy. Contract for local offshore wind energy as part of RCEA's community choice energy portfolio to the extent economically feasible and compatible with portfolio diversity needs.

Promote Large-Scale Wind Energy. Provide information about the potential for cost-effective, commercial-scale wind farms in the county. Educate the public about the benefits and impacts of wind energy systems. Work with utilities, local government, and private companies to develop onshore wind energy projects.

Procure Local Onshore Wind Energy. Contract for local onshore wind energy as part of RCEA's community choice energy portfolio to the extent economically feasible and compatible with portfolio diversity needs.

Promote Small-Scale Biomass Generation Sites. Monitor feasibility of smaller and/or mobile biomass electric generators fed with wood waste and very small diameter logs (e.g., from thinning for fire safety and timber harvest slash). If/when technology proves feasible and cost effective, promote its use in county areas where appropriate.

Pursue Wave and Tidal Energy Development. Build on the previous WaveConnect and CalWave projects to explore and evaluate opportunities for local wave and tidal energy research, development, and pilot deployment.

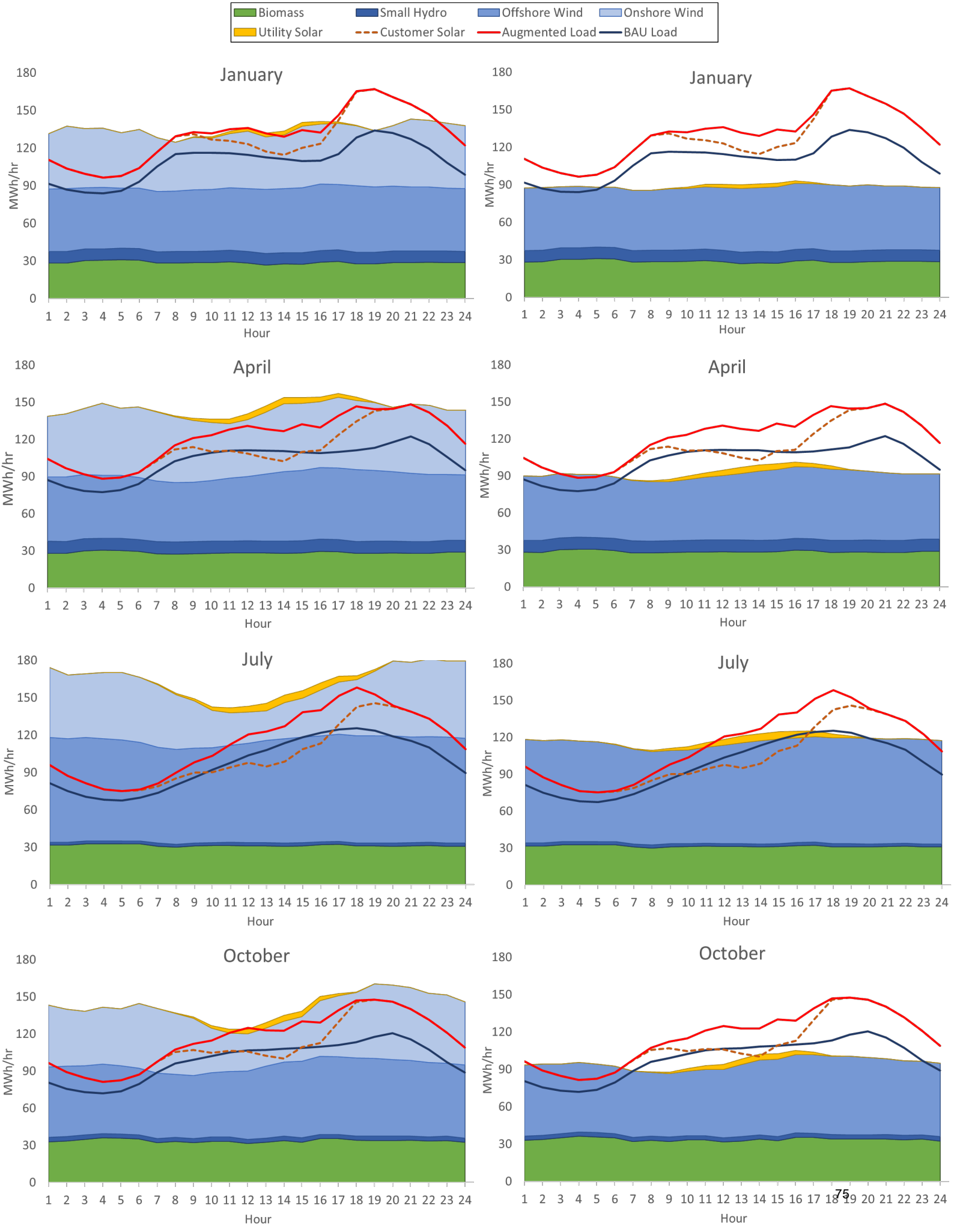
Support Existing and New Local Small-scale Hydroelectric Power. Evaluate options for contracting with existing small hydroelectric projects as well as the development of new run-of-river hydroelectric projects that would be eligible for Renewable Portfolio Standard designation and compatible with environmental and cultural priorities. Update the Oscar Larson and Associates' 1982 assessment of small hydroelectric resource potential in the county.

STAFF RECOMMENDATION

Provide direction to staff on priorities for new local utility-scale renewable energy projects among the alternatives identified in RCEA's RePower strategic plan.

ATTACHMENT:

- Attachment A: Seasonal hourly electricity supply and demand charts with and without the onshore wind project.


Biomass
Small Hydro
Offshore Wind
Onshore Wind
Utility Solar
Customer Solar
Augmented Load
BAU Load
January
April
July
October
MWh/hr
Hour

REDWOOD COAST
EnergyAuthority

STAFF REPORT
Agenda Item # 7.1

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
FROM:	Matthew Marshall, Executive Director
SUBJECT:	Airport Microgrid Critical Facility Islanding Project Update

SUMMARY

Schatz Energy Research Center staff will provide a report on the Airport Microgrid Project, which will include a 7-acre, 2.5 MW solar array with a battery storage system to enable critical facility islanding during emergencies and power disruptions. Construction on this project begins this year.

STAFF RECOMMENDATION

None – Information only.

ATTACHMENT:

Airport Microgrid Project slides will be presented at the meeting.

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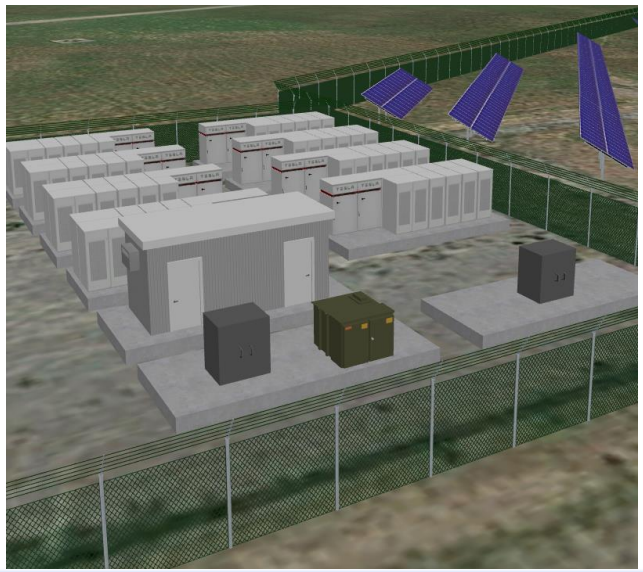
Redwood Coast Airport
Renewable Energy Microgrid

Redwood Coast Energy Authority Board of Directors
January 23, 2020

By: Jim Zoellick, Managing Research Engineer, Schatz Energy Research Center



What is a microgrid?

The USDOE and California Energy Commission define a microgrid as:

"A group of interconnected loads and distributed energy resources (DER) within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid. Additionally, a microgrid can connect and disconnect from the grid to enable it to operate in both grid-connected or island-mode. Finally, microgrids can also manage customer critical resources and provide the customers, utilities, and grid system operators different levels of critical services and support as needed."

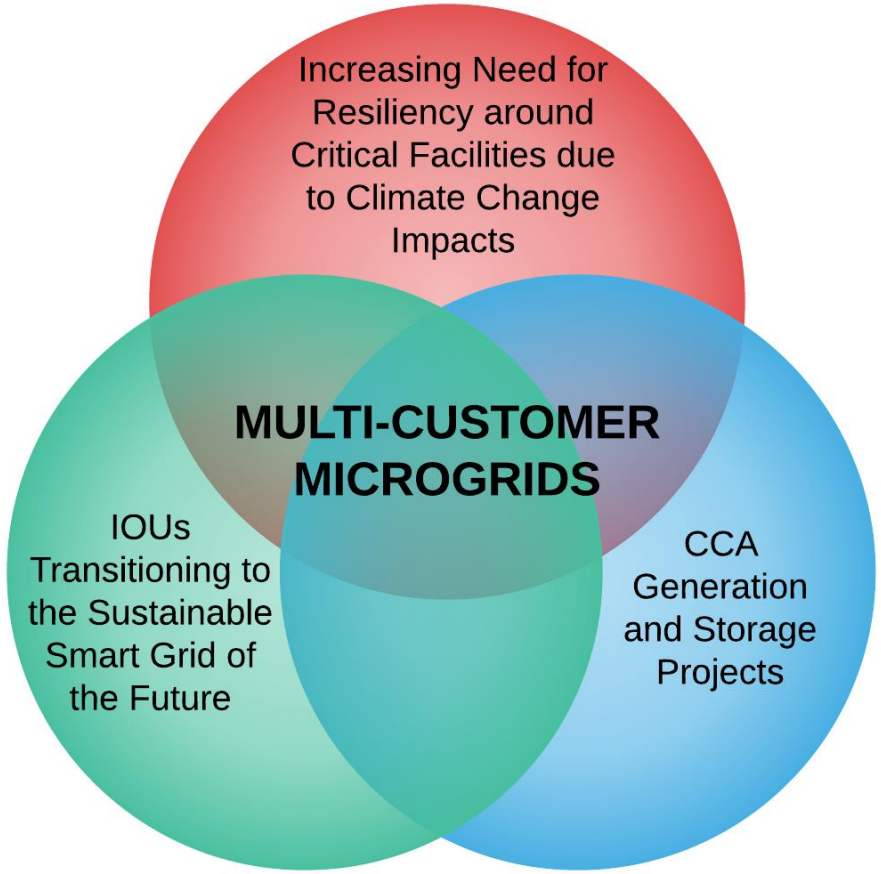
Redwood Coast Airport Microgrid Project

- Two PV arrays covering ~7 acres
  - 320 kW conventional PV array connected under Aggregated Net Energy Metering tariff to credit the airport's electricity accounts
  - 2,200 kW PV array DC Coupled to three Tesla Megapacks.
- 2,200 kW / 8,800 MWh battery energy storage system
- Microgrid controls designed and implemented by Schatz Center, Schweitzer Engineering Labs and PG&E
- Four controllable EV chargers at airport

Project Objective

Demonstrate a viable, replicable business model for a community scale microgrid that:

- provides resilience to critical community services,
- allows for greater penetration of distributed renewables,
- provides multiple local benefits, and
- reduces greenhouse gas emissions.



Project Goals

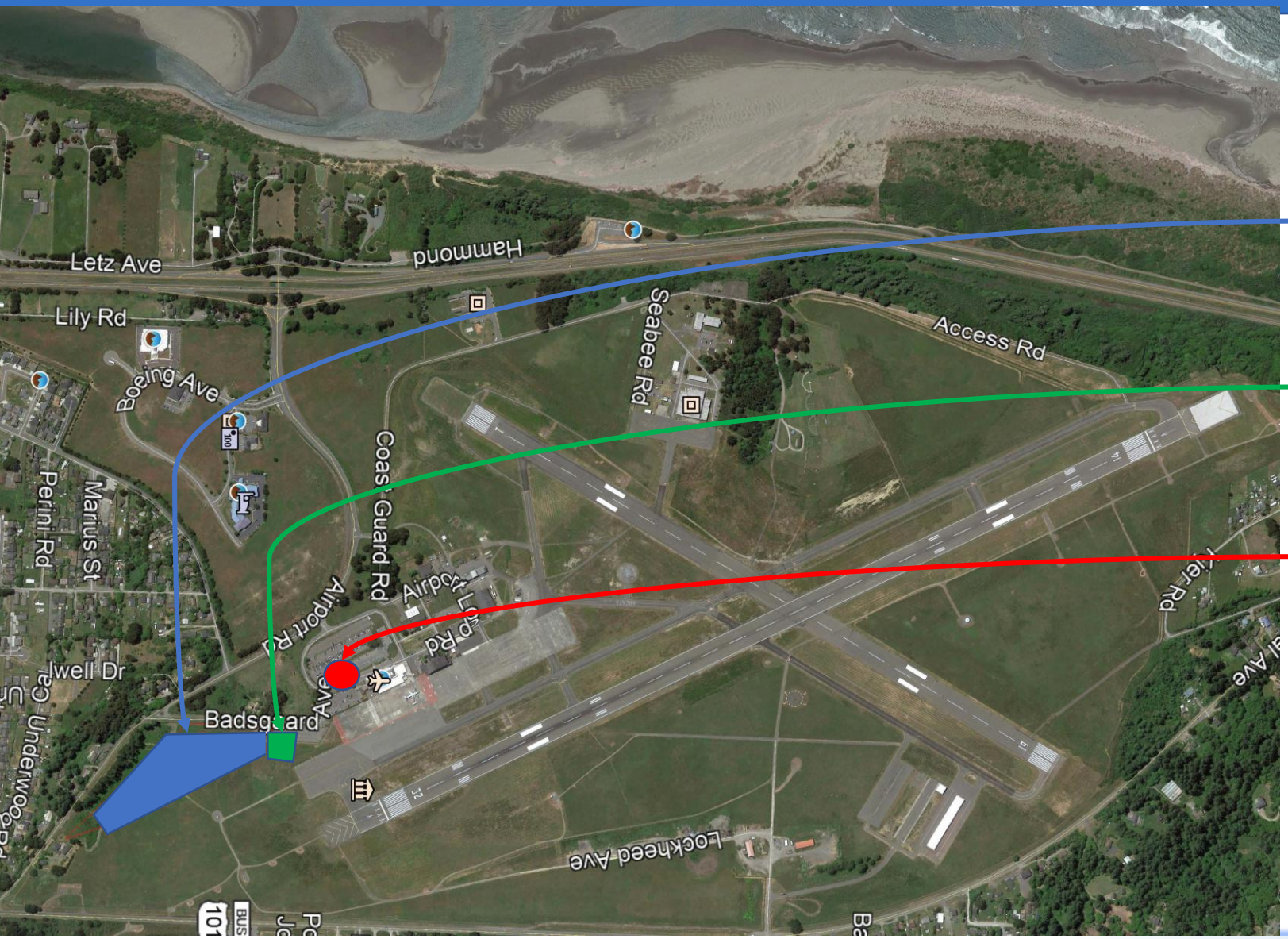
Source: USCG

1. Design, install, & operate Redwood Coast Airport Microgrid (RCAM)
2. Develop & implement necessary agreements and tariffs
3. Measure RCAM benefits & costs
4. Evaluate business case & assess opportunities for replication
5. Share results & lessons learned

Project Partners

- Schatz Energy Research Center: prime contractor
- CA Energy Commission: funder
- Redwood Coast Energy Authority: funder, local CCA & distributed generation owner
- Pacific Gas & Electric: distribution system operator
- County of Humboldt: property owner
- Schweitzer Engineering Labs: microgrid controls
- Tesla: turnkey PV and battery energy storage
- TRC Companies: cybersecurity review & business model evaluation
- The Energy Authority: CAISO scheduler

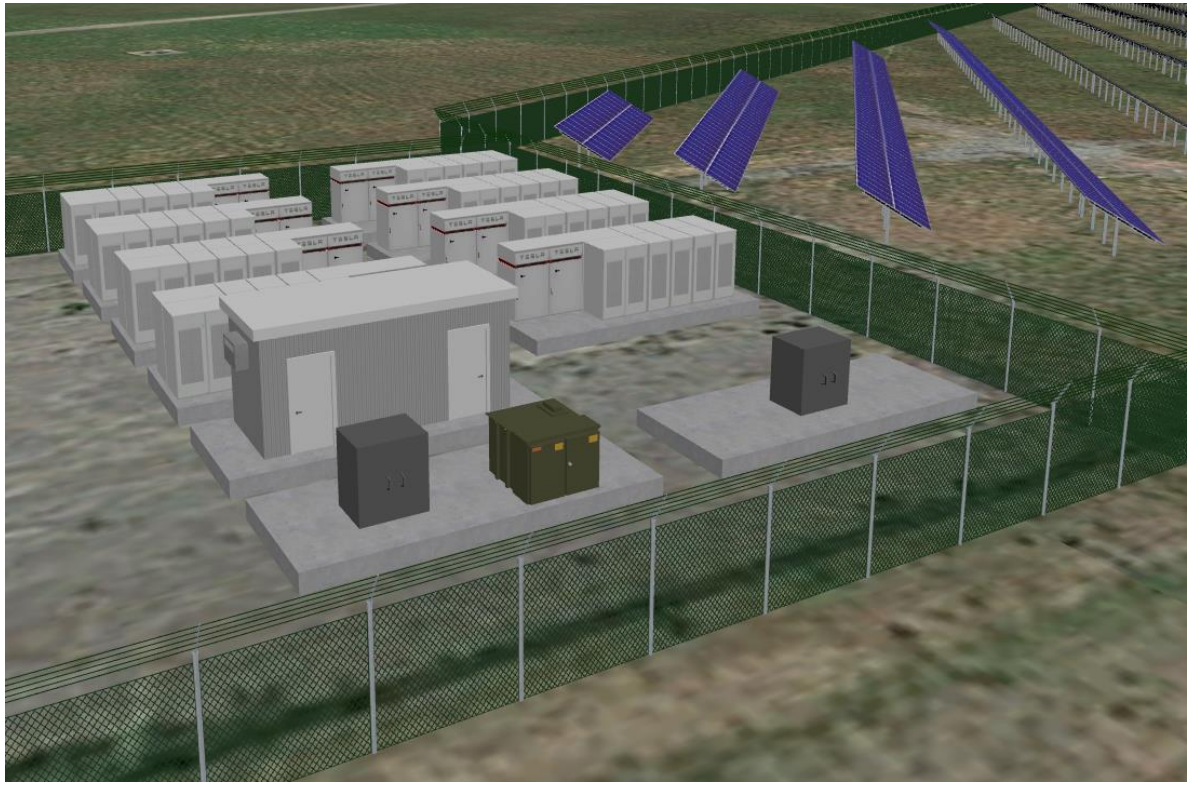
Microgrid Configuration - Site Map



1. Co-located BTM and FTM PV
2. Battery Energy Storage System
3. Electric Vehicle Charging Stations

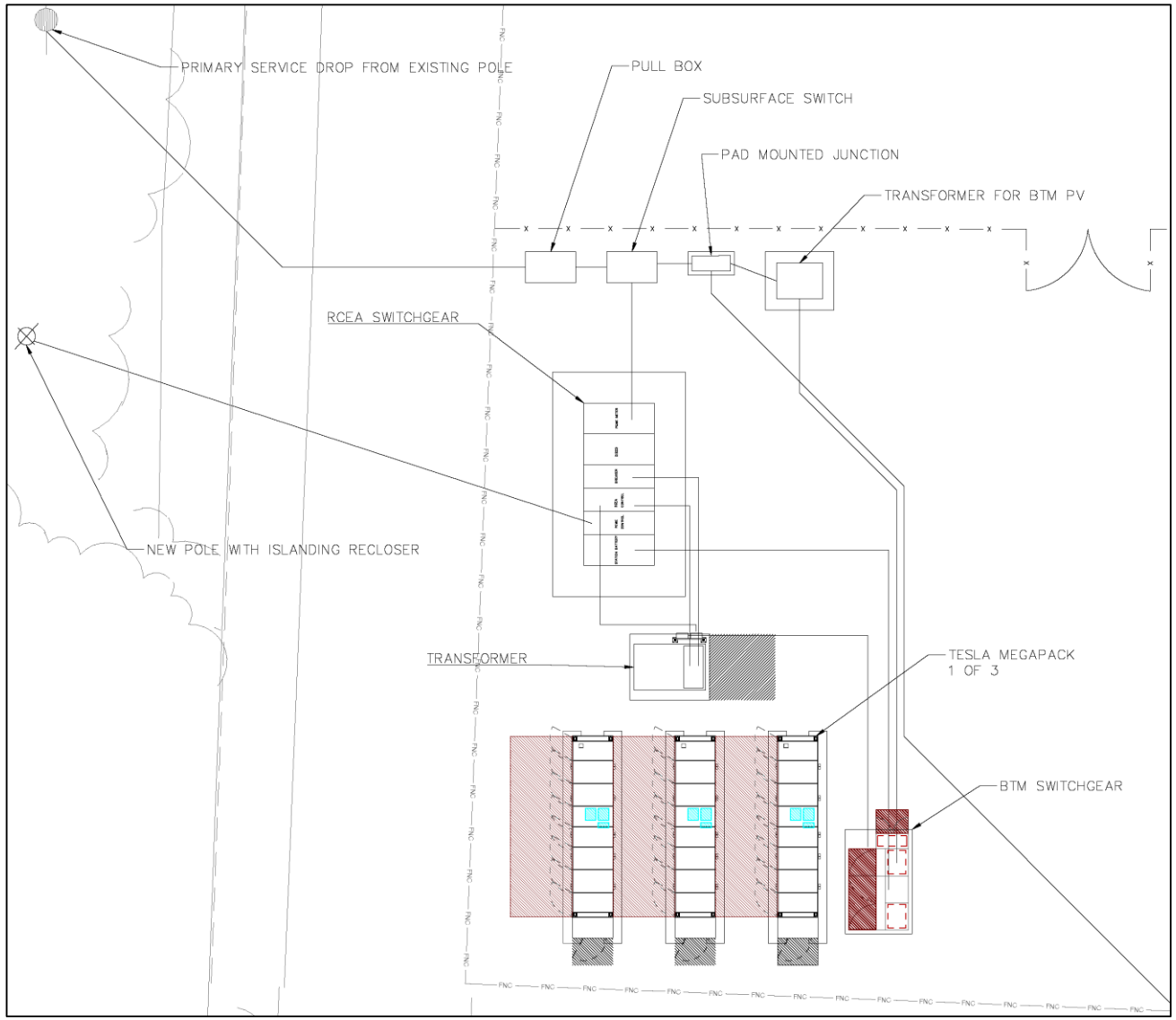
(Image Credit: Google Earth)

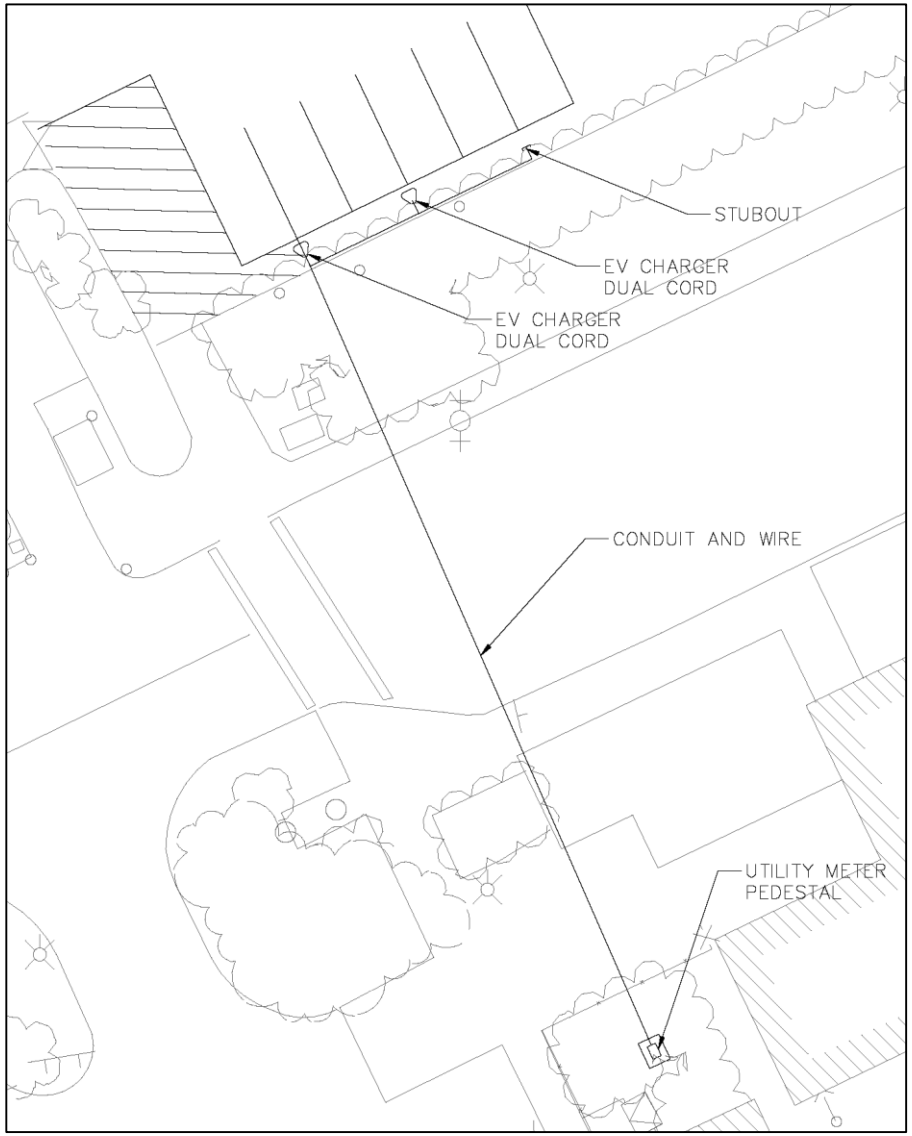
Microgrid Configuration – Artist's Rendition



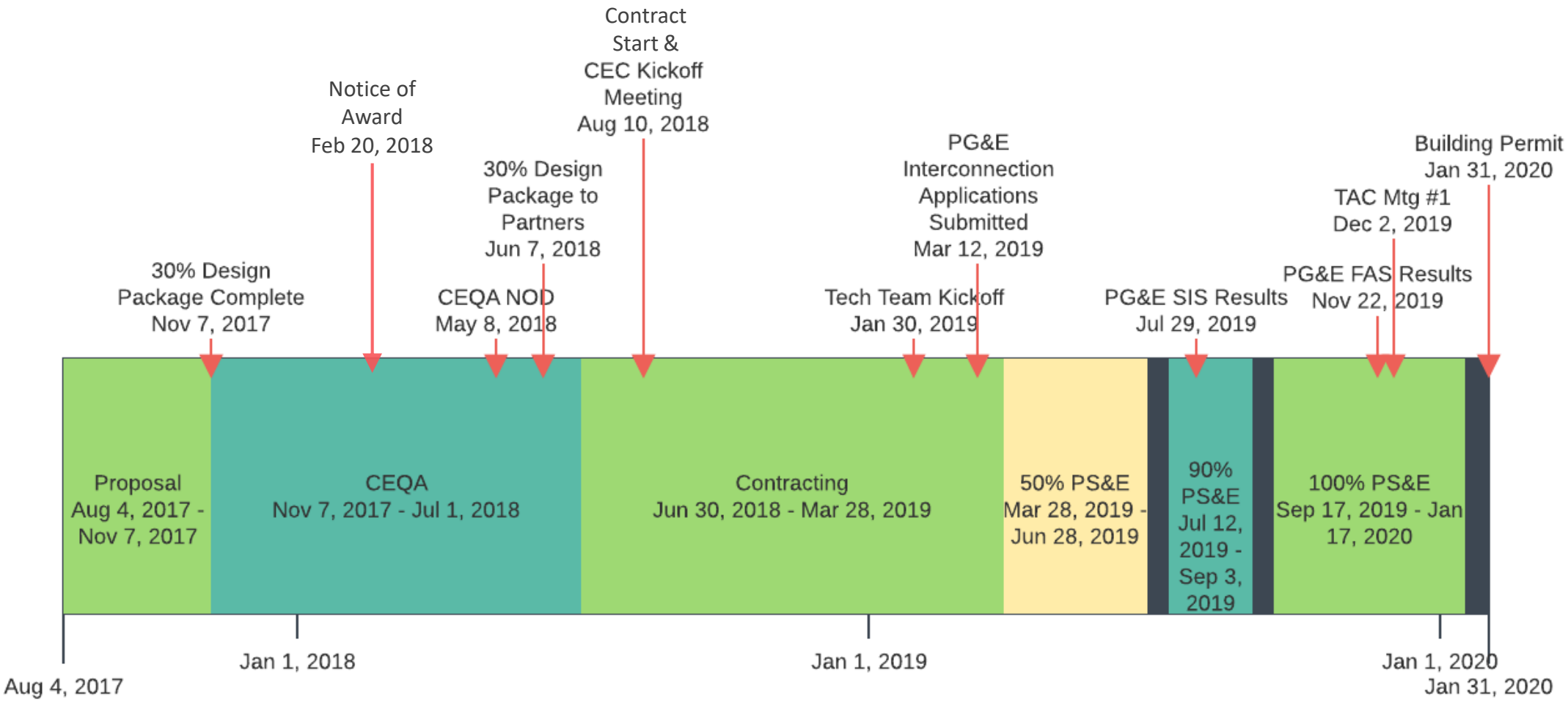
Microgrid Configuration – Equipment Layout

Microgrid Configuration – Equipment Layout





Summary of Activities to Date



Abbreviations:
NOD = Notice of Determination, PS&E = Plans Specs and Engineer's Cost Estimate, SIS = System Impact Study, FAS = Facilities Study

Current Status / Accomplishments

- Still waiting on USDA loan approval
- Working with County on lease agreement for airport property
- FAA approval process underway and expected by May 2020
- Operational agreements and tariffs with PG&E are under development
- Participating in the CPUC Microgrid Tariff Proceeding, presenting at DistribuTECH 2020
- Interconnection agreement for PV-battery system nearing execution
- Determination of CAISO market participation details in process
- Received 100% Tesla design drawings and provided Tesla with the Notice to Proceed
- SEL Functional Design Specification is complete, programming is starting
- EV charging station design is underway, innovative ability to control charging load during islanding events has been developed
- Brush has been removed from site, trees to be removed following approval of the EA
- Ground-breaking event → beginning to plan for this summer
- Construction expected to start by June 1, 2020; full operation expected by Jan. 1, 2021

Project Schedule

Redwood Coast Airport Microgrid Project Schedule

Project Activity Schedule	2018		2019				2020				2021				2022	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
FAA approval process																
PG&E interconnection process																
CAISO New Resource Implementation Process																
PV and battery design, procurement, installation & commissioning																
Microgrid controls development, testing, installation & commissioning																
Balance of system design, permitting, construction & commissioning																
Operation, monitoring and evaluation																
Experimental tariffs & operational agreements																
Business model evaluation & market replication assessment																
Technology & knowledge transfer																
TAC Meeting Schedule																
Meeting #1 - Introduction, design review, experimental tariff review						X										
Meeting #2 - Data collection plan, business model, market replication										X						
Meeting #3 - Performance results, knowledge transfer, final report															X	

Questions?

REDWOOD COAST Energy Authority

STAFF REPORT
Agenda Item # 8.1

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Lori Taketa, Clerk of the Board
SUBJECT:	Election of Officers

BACKGROUND

By simple majority vote, the RCEA Board selects its Chair and Vice Chair every year at its January meeting. The responsibilities of the Chair include:

- Conducting the monthly and special meetings
- Attending the monthly agenda review meeting
- Check signing and disbursement authority, including electronic funds disbursement.

The Vice Chair assumes these responsibilities when the Chair is unable to perform them.

The Chair and Vice Chair will need to complete the appropriate signature forms to be filed with RCEA's banking institution soon after the January meeting and be available to sign checks periodically when authorized staff are not available.

STAFF RECOMMENDATION

Select the RCEA Board Chair and Vice Chair and authorize them as signers on RCEA bank accounts.

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REDWOOD COAST Energy Authority

STAFF REPORT
Agenda Item # 8.2

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Lori Taketa, Clerk of the Board
FOR:	Matthew Marshall, Executive Director
SUBJECT:	Finance Subcommittee Member Assignment

SUMMARY

The Board created a standing Finance Subcommittee at its January 28, 2019 meeting to meet as needed to work with staff and advise the Board on matters relating to audit, finance and the budget.

The Board Finance Subcommittee is comprised of up to 4 Board Directors. Current Finance Subcommittee members are Chair Michael Winkler and Directors Sheri Woo and Summer Daugherty, who is now the Blue Lake Alternate Director. Member terms are one year long ending on the first regular Board meeting of each year.

As part of any committee or subcommittee discussion and review, the Board may choose to disband the body if it has completed its charter or is no longer needed.

RECOMMENDED ACTION

Appoint up to four Directors to the Finance Subcommittee for one-year terms ending on the first regular Board meeting of each year.

ATTACHMENT

None.

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REDWOOD COAST Energy Authority

STAFF REPORT
Agenda Item # 8.3

AGENDA DATE:	January 23, 2020
TO:	Board of Directors
PREPARED BY:	Lori Taketa, Clerk of the Board
SUBJECT:	Community Advisory Committee Liaison Appointment

BACKGROUND

RCEA's Community Advisory Committee (CAC) was established by the Board to support RCEA public engagement efforts and provide the Board with decision-making support and input.

The Board's Operating Guidelines state that the Board will appoint at least one RCEA Board member as a CAC liaison that will attend CAC meetings, but will not vote. The role of the Board liaison as outlined in the CAC Charter is to:

- Contribute content knowledge and Board perspective at CAC meetings;
- Encourage participation and help create a civil, collaborative environment;
- Communicate committee recommendations and perspectives to the Board; and
- Participate as a non-voting member.

The current Board liaison is Director Robin Smith. Director Estelle Fennell is the Board's alternate liaison. Their appointments expired in December 2019.

STAFF RECOMMENDATION

Appoint a Board Liaison, and an alternate liaison if desired, to the Community Advisory Committee to serve through December 2020.

ATTACHMENTS

None.

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