



# Redwood Coast Energy Authority

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**Redwood Coast Energy Authority Office**  
**633 3<sup>rd</sup> St., Eureka, CA 95501**

**January 11, 2022**  
**Tuesday, 6 - 7:30 p.m.**

## **COMMUNITY ADVISORY COMMITTEE MEETING**

### **COVID-19 NOTICE: RCEA OFFICES ARE NOT OPEN TO THE PUBLIC**

Pursuant to the AB 361 Brown Act open public meeting law revisions signed into law on September 17, 2021, Governor Newsom's State of Emergency Proclamation of March 4, 2020, and Resolution 2021-7 of the RCEA Board of Directors adopted on October 28, 2021, and extended on December 16, 2021, this meeting will not be convened in a physical location. CAC members will meet via an online Zoom video conference.

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

**You may submit written public comment** before and during the meeting by email to [PublicComment@redwoodenergy.org](mailto:PublicComment@redwoodenergy.org). Please identify the agenda item number in the subject line. Comments received before the agenda item is heard will be read into the record, with a maximum allowance of approximately 500 words per comment. Comments received after the agenda item is heard and before the meeting's end will be included in the meeting record but not read aloud during the meeting.

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

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

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

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Community Advisory Committee, including those received less than 72 hours prior to the Committee's meeting, will be made available to the public at [www.redwoodenergy.org](http://www.redwoodenergy.org).

## **COMMUNITY ADVISORY COMMITTEE MEETING AGENDA**

<b>Agenda Item</b>	<b>What / Action</b>	<b>When</b>
1. Open	<u>Roll Call:</u> <div style="display: flex; justify-content: space-between;"> <div> Norman Bell  Elizabeth Burks  Jerome Carman  Colin Fiske  Catherine Gurin  Larry Goldberg, Chair  Pam Halstead  Chris Curran, Board liaison </div> <div> Roger Hess  Richard Johnson  Luna Latimer  Chris Honar  Ethan Lawton  Dennis Leonardi,  Vice Chair  Kit Mann </div> </div> <b>Review meeting agenda and goals.</b>	6:00 p.m.
2. Approval of Minutes	<b>Action: Approve minutes of November 9, 2021, CAC meeting.</b>	6:00 - 6:05 (5 min.)
3. Non-Agenda Item Public Comment	This item is provided for the public to address the Committee on matters not on the agenda. At the end of public comments, the Committee will respond to statements, set requests requiring action to a future agenda, or refer requests to staff.	6:05 – 6:10 (5 min.)
4. Humboldt Area Foundation CORE Hub	<b>Hear presentation on the Redwood Region Climate &amp; Community Resilience (CORE) Hub. (Information only)</b>	6:10 – 6:40 (30 min.)
5. CAC 2022 Goals, 2021 Annual Report	<b>Action: Approve 2022 CAC work goals to recommend for Board approval.</b>	6:40 – 7:00 (20 min.)
6. North McKay Ranch Project – RCEA Comments	<b>Hear report from Ad Hoc Major Projects Subcommittee on Board Recommendations. (Information only)</b>	7:00 – 7:05 (5 min.)
7. Net Energy Metering Update	<b>Discuss impending regulatory changes in net energy metering. (Information only)</b>	7:05-7:20 (15 min.)
8. Member Reports	This time is provided for Committee members to share information on topics not on the agenda. At the end of member reports, the Executive Director will set requests requiring action to a future agenda or refer requests to staff or the Board.	7:20 – 7:30 (10 min.)
9. Close & Adjourn		7:30 p.m.

**NEXT REGULAR CAC MEETING** – Tuesday, March 8, 2022, 6 - 7:30 p.m.  
Location to be determined.



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## **COMMUNITY ADVISORY COMMITTEE MEETING**

### **DRAFT MINUTES**

**November 9, 2021 - Tuesday, 6 - 7:30 p.m.**

The agenda for this meeting was posted on November 5, 2021. Community Advisory Committee Chair Larry Goldberg called the meeting to order at 6:02 p.m., stating that the meeting was being conducted by teleconference pursuant to revised Brown Act provisions signed into law on September 16. Chair Goldberg stated that the posted agenda outlined instructions for public participation in this meeting.

#### **Members present:**

Norman Bell  
Colin Fiske  
Larry Goldberg, Chair  
Catherine Gurin  
Pam Halstead  
Roger Hess

Christopher Honar  
Richard Johnson  
Luna Latimer  
Ethan Lawton  
Dennis Leonardi, Vice Chair  
Jerome (Carman) Qiriaz

#### **Members absent:**

Elizabeth Burks

Kit Mann

#### **Staff and others present:**

Keith Brennan, RCEA Staff  
Aisha Cissna, Leg. & Reg. Pol. Mgr.  
Chris Curran, Board Liaison  
Matthew Marshall, Executive Director  
Connor McGuigan, Humboldt County

Michael Richardson, Humboldt County  
Nancy Stephenson, Comm. Strategies Mgr.  
Lori Taketa, Board Clerk  
Eileen Verbeck, Deputy Executive Director

#### **Minutes Approval**

Member Bell inquired whether, given changed financial and climate conditions, RCEA is engaging in local wave energy development efforts after PG&E's initial feasibility studies. There was discussion of how previous funding for regional planning went to Oregon and Washington. Discussion at a future meeting was requested on how to catalyze wave energy development locally. It was noted that Humboldt State University's transition to a polytechnic institute may present an opportunity for this work.

**Motion Johnson, Second Lawton: Approve minutes of September 14, 2021, CAC meeting.**

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

### **Non-Agenda Item Public Comment**

Executive Director Matthew Marshall introduced RCEA's new Deputy Executive Director Eileen Verbeck. Deputy Executive Director Verbeck worked at the City of Arcata for 14 years in the Redevelopment and Police Departments.

There was no public comment on non-agenda items and Chair Goldberg closed the public comment period.

### **Countywide Climate Action Plan**

County Planner Connor McGuigan reported on the Countywide Climate Action Plan's status. A three-year effort to collect data, perform analysis and coordinate planning efforts between the County, cities and RCEA is nearing completion. A draft for public review, containing a regional blueprint for greenhouse gas (GHG) emission reduction with implementation measures selected by each jurisdiction, is expected to be released in January 2022. A CEQA review will follow, then plan implementation.

The plan is based on a 2015 countywide greenhouse gas inventory. Transportation accounts for 53% of greenhouse gases emitted in the region, followed by smaller percentages from livestock, combustion of propane and natural gas in buildings, pre-Community Choice Energy program electricity consumption and the industrial sector. The countywide climate action plan is consistent with the state goal of reducing greenhouse gas emissions to 40% below 1990 levels by 2030. Reduction methods vary by sector and can include changing development design to deemphasize vehicle use and reduce vehicle miles traveled, promoting low-carbon transportation using alternative fuels, building electrification and replacing propane and natural gas appliances with electric ones. Many measures also match those of RCEA's RePower Humboldt Comprehensive Action Plan for Energy.

There was discussion of adding telecommuting support into the plan's measures and the need to review studies on effective strategies for reducing vehicle miles traveled.

No member of the public commented on this item. Chair Goldberg closed the public comment period.

### **Community Advisory Committee 2022 Goals**

Executive Director Marshall presented six proposed CAC work focus areas for 2022 based on the agency's overall 2022 work plan. The group supported the list of focus areas and expressed much interest in reviewing and providing input on energy-specific considerations for large development projects that may impact the RePower Humboldt strategic plan. It was suggested that RCEA also participate in updates of General Plans, Housing Elements and economic development plans, incentivizing greenhouse gas and energy reduction. An ad hoc subcommittee with members Carman, Fiske, Hess and Johnson was formed to meet and suggest comments to the RCEA Board for

projects with imminent due dates while the CAC and Board determine the committee's 2022 work focus areas. This ad hoc Major Projects Subcommittee will meet to recommend comments on the North McKay Ranch Subdivision project, as the environmental impact report comment period closes on December 1, prior to the CAC's next meeting. The subcommittee will present their recommendations to the Board at next week's Board meeting. Members would also like to see the Board comment on energy-related aspects of the Nordic Aquafarm development.

Members expressed interest in helping to identify and prioritize critical community facilities for enhanced renewable energy resilience infrastructure work. A member requested clarifying the goal's language to include supporting community-scale microgrids. Members also supported finalizing recommendations to the RCEA Board and County Board of Supervisors for energy projects for bond or alternative financing and facilitating community input on the Humboldt Regional Climate Action Plan completion and adoption. A request was made to list goal timeframes so committee work can be planned through this and coming years.

Members Mann and Honar asked to join the CAC ad hoc Annual Report Subcommittee, joining Chair Goldberg, Member Gurin and Vice Chair Leonardi.

Chair Goldberg invited public comment. No member of the public made comment.

### **Member Reports**

Member Latimer reported that PG&E's Community Wildfire Safety Program is implementing an enhanced vegetation management program. Eastern county agencies and tribal departments of natural resources are concerned that the tree cutting approach will increase fire fuel loads. A public meeting on this topic will be held in Orleans on Monday.

Chair Goldberg requested a report from RCEA's Regulatory and Legislative Policy Manager on shovel-ready projects that could be funded by Congress' infrastructure and Build Back Better bills.

Member Fiske reported that the Arcata Energy Committee will discuss how to use COVID stimulus funds that the City of Arcata set aside for climate crisis efforts.

Member Carman encouraged people to review and comment on HCAOG's Regional Transportation Plan which contains very aggressive sustainability and greenhouse gas reduction targets. The Plan's public comment period is open through November 21.

Chair Goldberg adjourned the meeting at 7:14 p.m.

Lori Taketa  
Board Clerk



**COMMUNITY ADVISORY COMMITTEE  
STAFF REPORT  
Agenda Item # 4**

AGENDA DATE:	January 11, 2022
TO:	RCEA Community Advisory Committee
PREPARED BY:	Matthew Marshall, RCEA Executive Director
SUBJECT:	Humboldt Area Foundation CORE Hub presentation

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**SUMMARY**

A new initiative, the Redwood Region Climate and Community Resilience Hub (“CORE Hub” - <https://redwoodcorehub.org/>), has launched from the Humboldt Area Foundation/Wild Rivers Community Foundation to help improve local resilience across built and natural systems. By deepening regional cooperation, the CORE Hub will work to develop equitable solutions to address growing climate emergencies.

The CORE Hub formed to help bring new resources to this region to reduce the many impacts of the climate emergency and lower the emissions that cause climate change at the same time. An overall goal of the CORE Hub is to investigate how the Redwood Region can become the first proven carbon-sequestering rural area in the U.S. by 2030, while increasing equitable outcomes as progress is made. This eight-year initiative will align emission reductions across tribal and local governments’ activities, public and private land and resource use, built and natural systems, and other sectors.

By prioritizing communities that are under-resourced to more fully participate in solutions and decisions, the CORE Hub hopes to accelerate broad resilience across the Redwood Region, including transitions to clean energy and transportation.

An overview of the CORE Hub initiative will be presented at the meeting by Amy Jester, Humboldt Area Foundation Health and Nonprofit Resources Program Manager, and Jana Ganion, Blue Lake Rancheria Sustainability and Government Affairs Director.

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**RECOMMENDED ACTION**

None. (Information only)

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**ATTACHMENTS**

- Redwood Region Climate & Community Resilience (CORE) Hub overview factsheet.

# COREHub

Redwood Region Climate & Community Resilience (CORE) Hub

## Supporting Transitions to Resilient and Decarbonized Communities

### CORE Goal

By 2030, the Redwood Region will become the first proven carbon-sequestering rural area in the U.S., with improved decarbonized resilience across built and natural systems, using trusted, replicable community engagement that delivers equitable outcomes and benefits.

### CORE Mission

To solve the climate emergency, we act with urgency to help transition our built and natural systems to become both decarbonized and resilient at the same time. We do this by:

- ▶ **COMMUNITY ENGAGEMENT** Funding and resourcing community convenings and dialogue for education, decision-making, and implementation with a strong, trusted, and replicable engagement process focused on tangible and beneficial outcomes
- ▶ **PRIORITIZING EQUITY** Centering equity and justice; ensuring benefits accrue to underrepresented, historically and currently marginalized communities first and to the greatest extent
- ▶ **TECHNICAL ASSISTANCE** Facilitating broad access to trusted experts, data, and research to build capacity, answer questions, address concerns, and increase knowledge sharing



Photos courtesy of CK Cookman



# COREHub

Redwood Region Climate & Community Resilience (CORE) Hub

Supporting Transitions to Resilient and Decarbonized Communities

## CORE Opportunity

**By transitioning our built systems to lowest-emission operations and optimizing natural systems' regenerative and carbon 'sink' (sequestration) potentials, rural areas can adapt and manage against impacts, improve local economies and quality of life, zero out their own carbon footprint, and help the planet cool.** Tribal and rural regions contain leadership, knowledge and innovative solutions that are crucial to reducing emergencies and achieving local, state, national, and global climate and resilience goals.

**At the same time, rural and Tribal areas are stretched for capacity.** Tribal and other local governments have major gaps in data, technical analysis, skills, policy assistance, and staff time to learn and engage. This lack of capacity limits regional teamwork and contributions to solutions. Fast capacity-building is needed to meet the extent and impacts of the climate crisis, now and over time.

Regional, de-siloed capacity is needed to achieve decarbonized resilience across the systems that matter most—air, water, food, energy, land use, transportation, and communication, among others. Supports for meaningful participation, leadership, and authentic engagement—particularly for the most vulnerable—are critical for the next decade.

**Decarbonized resilience measures must be understandable, transparent, and beneficial to local communities.** Rural and Tribal communities have experienced exploitation with large-scale infrastructure and/or irresponsible extractive industries. Added dynamics include the politicization of climate change, land use friction, inaccessible information, and financial pressures—these dynamics and others can erode confidence and progress. We must change these dynamics. Facilitating knowledge exchange in rural jurisdictions and sovereign Native American Tribal Nations to enable informed decisions, particularly to benefit those most in need, is crucial work at a crucial moment in time.

Community engagement, public information strategies, and comprehensive and enforceable community benefits, coordinated by trusted facilitators—*creating tangible benefits as we decarbonize*—is the work of today, and indeed may be the ultimate test of human cooperation. **To achieve robust capacity to manage the enormous climate emergency, we have to design, fund, and maintain community leadership, engagement, and education, particularly for the next decade.**

“By 2030, the Redwood Region will become the first proven carbon-sequestering rural area in the U.S.”



The City of Arcata during an exceptionally high tide, sometimes referred to as a 'king tide,' in Feb. 2020  
Photo courtesy of Humboldt State University



# COREHub

Redwood Region Climate & Community Resilience (CORE) Hub

Supporting Transitions to Resilient and Decarbonized Communities

## CORE Actions

In far northwest California, the CORE Hub formed as an answer to regional requests to achieve decarbonized resilience, by supporting initiatives, evidence-based information and analysis, technical assistance, equitable community participation and benefits, and planning and policy guidance. Our actions broadly include but are not limited to the following:

- ▶ **Convene and facilitate healthy civic dialogues**, with financial and technical supports for underrepresented communities to participate and achieve demonstrable, beneficial outcomes.
- ▶ **Take action for equity**, elevate the interests of the historically and currently marginalized, and promote a climate-smart future that also leads to a just economy.
- ▶ **Promote accurate, accessible public information** to help our local communities make informed decisions.
- ▶ **Provide research, analysis, and technical assistance** that enables smart public-policy and supports public officials; support the development of local/regional expertise, leadership, and knowledge.
- ▶ **Promote the traditional knowledge and multi-generational values** of the region's Native American cultures and sovereign Tribal Nations in dialogues and solutions.
- ▶ **Conduct rigorous tracking to document progress and ensure accountability** (e.g., carbon accounting and carbon lifecycle analysis; relevant metrics to assess progress toward improved resilience and equity), evaluate the work of the CORE Hub itself, and provide transparency and evidence about initiatives and outcomes related to the goal, mission, and projects.

## The Redwood Region Context

One of the world's most significant ecosystems, the Redwood Coast of Northwestern California, is truly exceptional. Ancient old growth and second growth redwood forests—including a UNESCO heritage site and Indigenous Tribal lands—are estimated to absorb more than 600 million metric tons of carbon, or the capacity to sequester almost 10% of the United States' carbon emissions. Now in jeopardy due to heat gain, fires, and other climate amplified threats, this forest embodies our

global challenge: the need to mitigate, adapt, and absorb in recognition that climate change is upon us, and that our natural and human-made systems require fast action. **Our shared global climate change battle relies on local teamwork and timely implementation, and this region has demonstrated success doing just that: combining built and natural systems with human capacity to achieve accelerated climate-smart resilience.**



Photo courtesy of CK Cookman

# COREHub

Redwood Region Climate & Community Resilience (CORE) Hub

Supporting Transitions to Resilient and Decarbonized Communities

## ■ Offshore Wind Energy: An Immediate Focus

The Pacific Coast of the U.S. is the latest international location for the development of offshore wind energy. The Department of Interior, through its Bureau of Ocean Energy Management (BOEM), recently began the process to license offshore wind production on the Pacific Coast. Areas offshore from two California regions are under assessment, including sites near Humboldt Bay in the Redwood Region/North Coast—which has one of the country’s best wind resources approximately 20 miles offshore—and Morro Bay on the Central Coast.

If designed and implemented appropriately, offshore wind has potential to be a relatively clean and resilient energy source within the Redwood Region that can improve local power reliability and reduce dependence on fossil fuels.

Offshore wind’s potential is being explored within contexts of precious wildlife, Tribal Nations’ traditions and community resilience, and local mariculture and tourism economies, among many other considerations. Local shaping of this new industry, including strong, equitable partnerships between any offshore wind energy developer and the region, is essential given the region’s history with resource and human exploitation.

**The CORE Hub has been requested by federal, Tribal, state, and local governments, agencies, and community organizations to facilitate community engagement on offshore wind. This engagement will include discussions about “community benefits” strategies that will ultimately guide and shape this new industry as it develops within the region.**

In this work, we will seek to reduce conflicts, avoid maladaptation, and create enduring human, environmental, and economic resilience.



8.4 MW floating wind turbine for Portugal’s WindFloat Atlantic project being towed from assembly dock in North-western Spain. Photo courtesy of Principle Power



Two 9.5 MW floating wind turbines deployed at Kincardine Offshore Wind project off coast of Aberdeen, Scotland. Photo courtesy of Principle Power



9.5 MW floating wind turbine for Scotland’s Kincardine Offshore Wind project at assembly dock in The Netherlands. Photo courtesy of Principle Power

# COREHub

Redwood Region Climate & Community Resilience (CORE) Hub

Supporting Transitions to Resilient and Decarbonized Communities

## ■ Decarbonized Resilience by 2030: A Wider Focus

The Redwood Region has work to do—the fastest net sea level rise on the Pacific Coast and groundwater inundation are transforming our low-elevation coastlands and we have major critical infrastructure to reorganize and relocate. A decade of serious drought has turned our usually temperate coastal communities into high-risk wildfire zones, with hazardous air quality due to frequent wildfires burning. Our own senses, confirmed by traditional ecological knowledge and other sciences, are telling us it is time for serious action to improve our overall resilience and reduce emissions to cool and calm the planet.

The CORE Hub is helping the region pair mitigations and adaptations for these cascading conditions with research and data to prove we are—or will become—optimized as a carbon sink: no climate emissions, sequestering far more climate-forcing elements than our systems generate—with the goal of slowing the rate of temperature change, and reducing the number and severity of emergencies. **The Redwood Region has the local expertise, willingness, and attributes to become the first proven carbon-sequestering rural area by 2030.**

The CORE Hub helps convene dialogues and distribute resources to communities as they work to reorganize and relocate built and natural systems in better alignment with human needs, and to document the processes so local communities and other rural regions and Tribal Nations have a recipe for their own decarbonized resilience.



The Blue Lake Rancheria microgrid integrates a solar array, battery storage, and control systems to allow the Rancheria campus to operate in tandem with or islanded from the main utility grid. It generates renewable energy and provides approximately \$150,000 in annual electricity savings. The Blue Lake Rancheria is a founding partner of CORE Hub.  
Photo courtesy the Blue Lake Rancheria



Solar array at the Blue Lake Rancheria.  
Photo Courtesy Schatz Energy Research Center.

### Contact Us

Please contact [info@redwoodcorehub.org](mailto:info@redwoodcorehub.org) for more information.

# COREHub

Redwood Region Climate & Community Resilience (CORE) Hub

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## Introductory Briefing

1.2022



# Overview – Context, Why?

## What is Climate and Community Resilience?

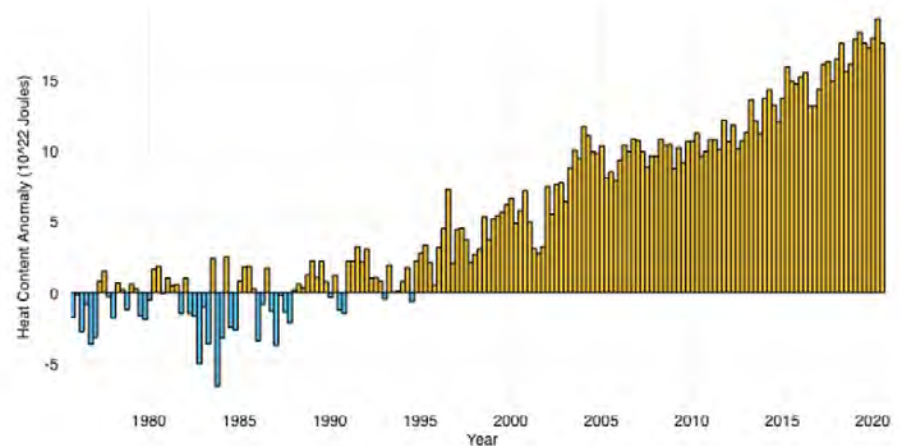
- Each nation, region, community will have their own definition
- Clean air, clean water
- Rewarding jobs and thriving economy
- Strong social services (education, health, help)
- Equity is centered
- Able to withstand issues, and recover swiftly

## Redwood Region / Humboldt County

- Eight (8) federally recognized tribal nations with lands within Humboldt County boundary
- ~140,000 people
- Rural, geographically isolated, 'behind the Redwood Curtain'

# Resilience Rationale

- **Global climate change amplifies and cascades into local conditions**
- Increasing temperatures on land and in oceans
  - Pacific ocean “warm blobs” in 2014, 2019
  - Oceans absorbed ~90% of warming between 1971-2010
- Unpredictable, volatile weather, extreme storms
  - Power outages are worsening
  - Emergency-scale flooding a ~monthly occurrence by 2030



Graph: differences from long-term average global ocean heat content (1955-2006) in the top 700 meters of the ocean. Image credit: NOAA climate.gov





*This map denotes the approximate location for each of the 22 separate billion-dollar weather and climate disasters that impacted the United States during 2020.*

**COREHub**

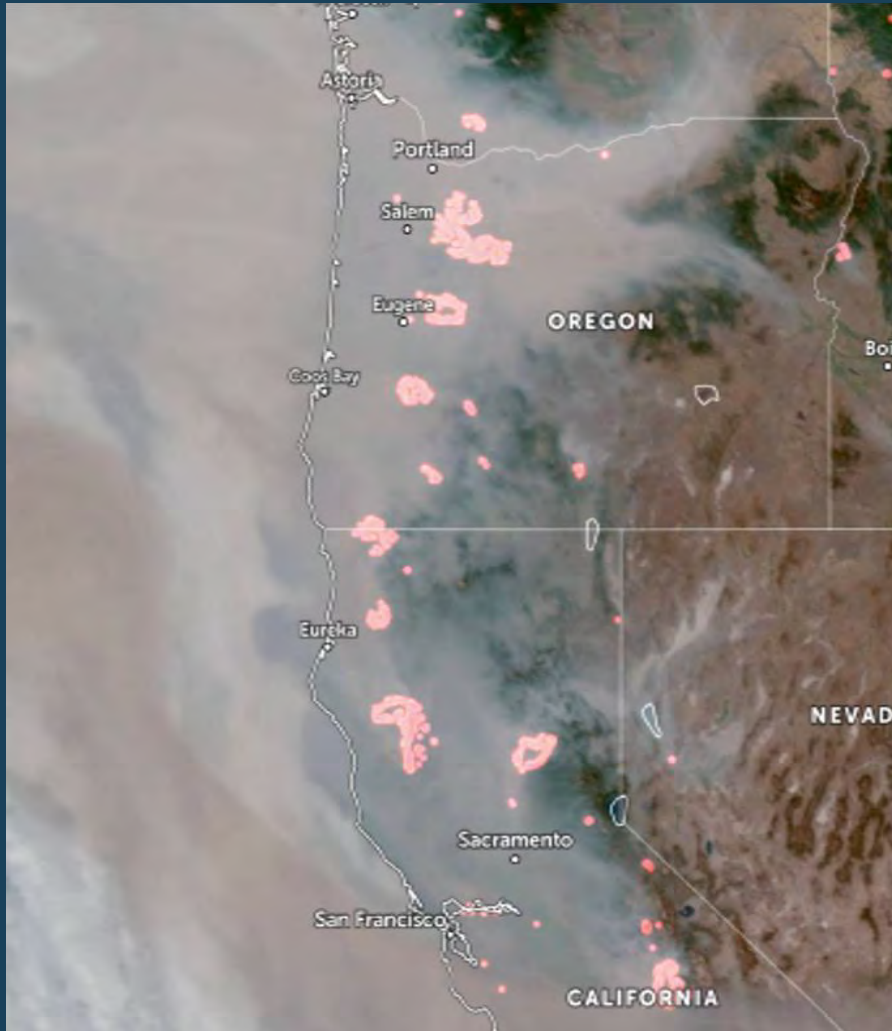


Image credit: zoom.earth 9/11/2020

# Impacts

- Increased wildfires and air pollution
- Amplified by climate emergency
  - Historically Low Fuel Moisture Content
  - In forests, at woodland/urban interface (WUI)
- Public Safety Power Shutoffs (PSPSs)
  - Planned outages to prevent wildfires from electrical grid; projected to last 2-10 days; two PSPS events in 2019, 2020; predicted to be needed for the next decade
- Seeing drought, wildfire, wildfire smoke – persistent and in new areas
- 'Heat dome' over entire western U.S. in 2020, 2021 – extreme heat, rolling power outages

# Impacts

- Sea Level Rise (SLR)
- Groundwater Inundation and Flooding

**Humboldt County is experiencing the fastest rate of sea level rise on the Pacific Coast.**

- Combination of land subsidence and ocean expansion from warming temperatures
- Impacts to local infrastructure
  - Water and wastewater systems
  - Threatens anchor natural gas power plant
  - Threatens local nuclear waste repository

Photo Credit: Tim and Rose Hanan



King Tide  
2020



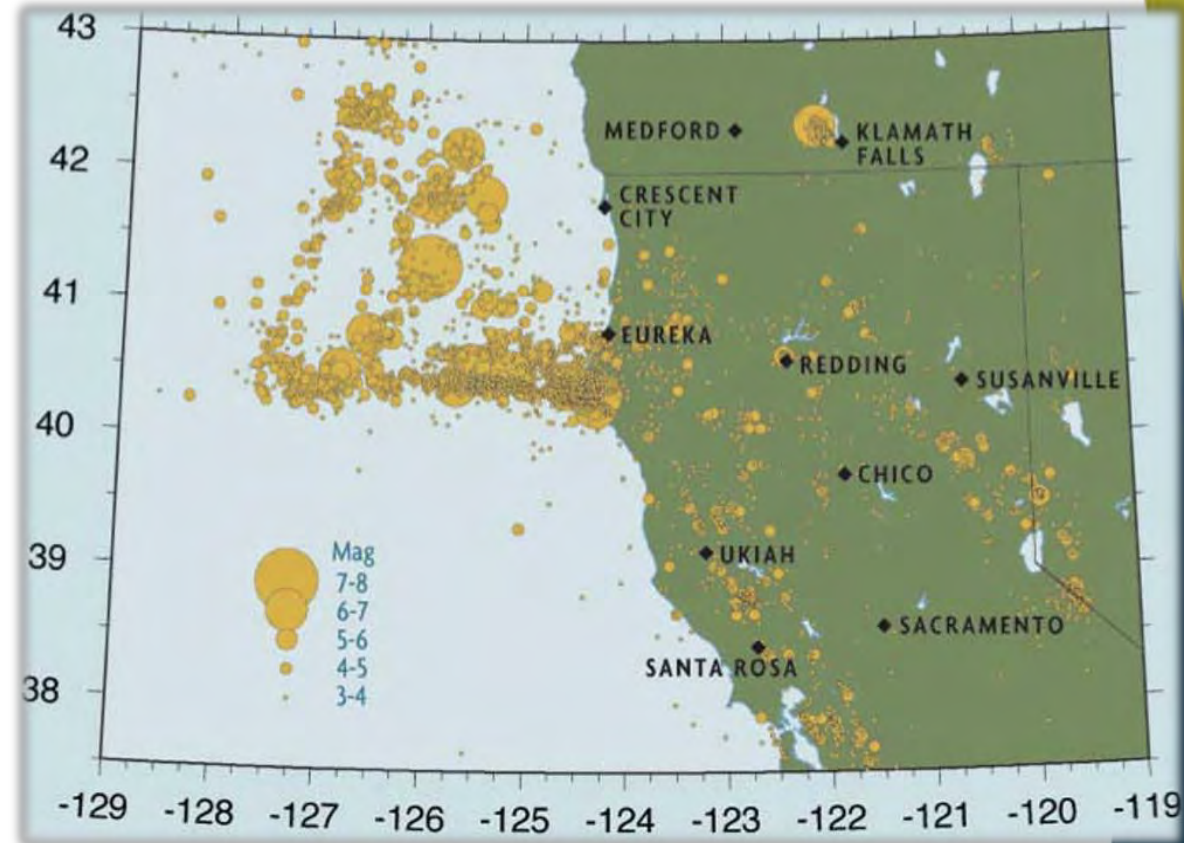
Photo Credit: J. Ganion



# Seismic/Tsunami Risk

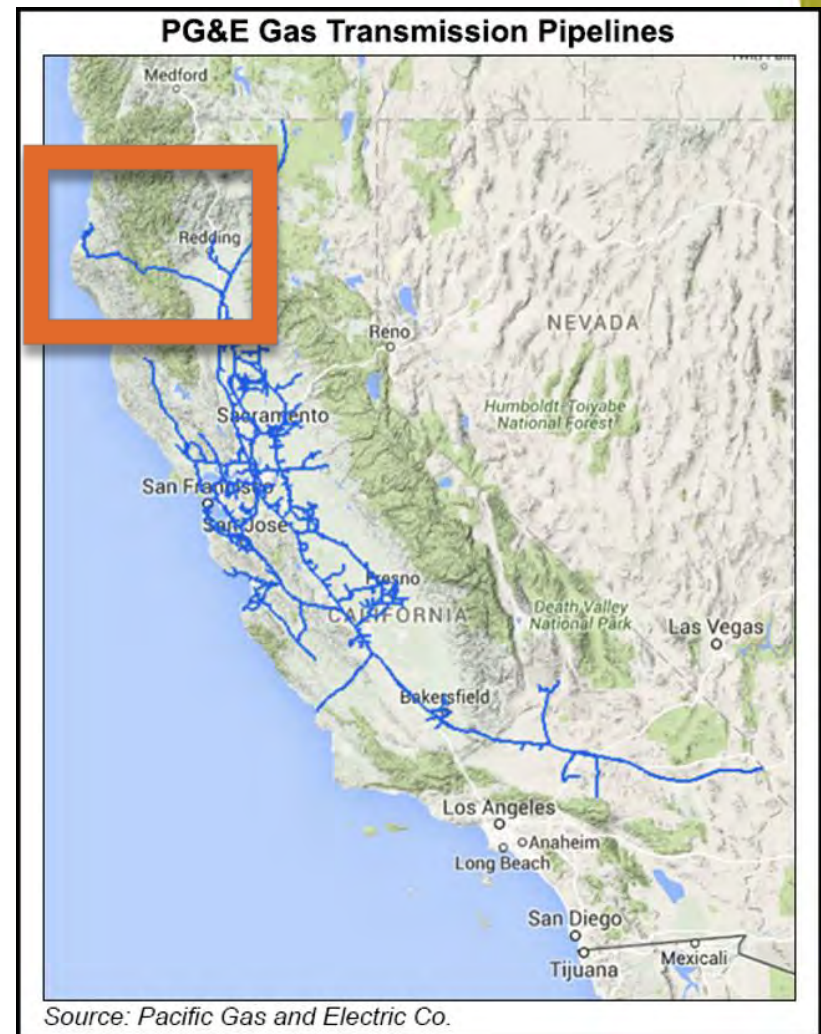
- Serious earthquake / tsunami risk
- Cascadia Subduction Zone, Mendocino Fault, Gorda Plate, Pacific Plate, North American Plate all converge at the 'triple junction,' directly offshore from Humboldt County.
- Can achieve >9.0 earthquake
- Most of the Pacific Coast can be simultaneously impacted
- Due to relatively low population, our region may be lower priority for response

Image Credit: Humboldt State University



# Tenuous Natural Gas Grid

- Region is served by a single 10-inch natural gas pipeline
  - Runs through seismically unstable landscape
  - Risk of rupture and lengthy service restoration (~weeks)
- Serves region's anchor natural gas power plant
  - Provides most of our *actual* electrons used here
  - Located directly across from the mouth of Humboldt Bay, vulnerable to tsunami
  - Plant site will be inundated by sea level rise *and* groundwater intrusion from sea level rise by ~2050-2070
- Serves all our natural gas uses (cooking, heating)
- PG&E / CA studies to prune natural gas infrastructure
  - CA SB 100 - Renewable and zero-carbon energy resources supply 100% of electric retail sales by 2045



# Tenuous Electrical Grid

- Region is served by a single transmission line
  - With one redundant line
- Runs through wildfire country
- Import restricted to 70 megawatts, less than half the local use
  - Humboldt's typical use is 140-180 megawatts
  - Anchor natural gas plant provides most *actual* electrons
  - Clean energy use is largely contractual, not actual
- Need cleaner and more resilient local grid
  - Humboldt "island" created in 2020 is welcome >>>
    - A temporary fix
    - Inequities outside the island's reach

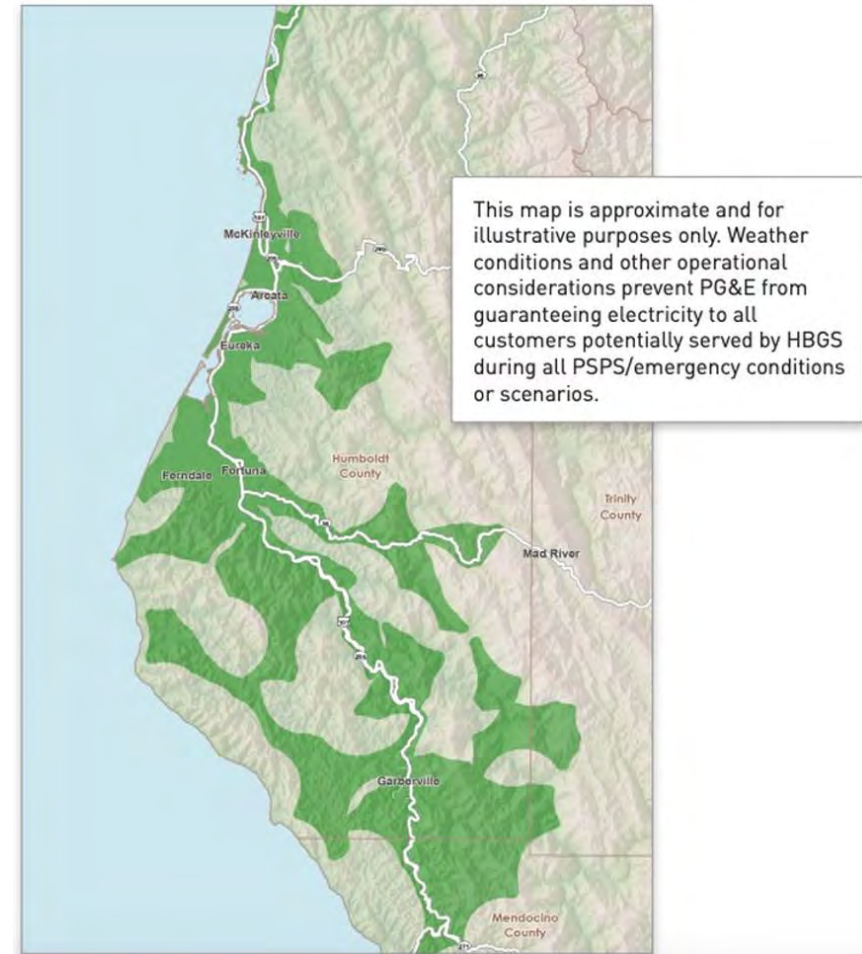


Image source: PG&E



# Humboldt Bay in 100 Years (2121)



Image Credit: Aldaron Laird (used by permission)

Image Credit: Aldaron Laird (used by permission)





# CORE Hub Summary

Redwood Region is well-positioned  
as a leader in climate and  
community resilience

Resilience work is siloed

Governments and communities  
need more resources for the  
climate crisis

Decarbonized resilience is the work  
of the day

**GOAL: By 2030, the Redwood Region could become the first proven carbon-sequestering rural area in the U.S.**

The CORE Hub provides community engagement, technical assistance and an equity lens to help our region transition built / natural systems to a decarbonized and resilient future.

- Transition our built systems to lowest-emission operations
- Optimize natural systems' regenerative, carbon 'sink' (sequestration) potentials
- Land management strategies and collaborations
- Manage against impacts, improve local economies and quality of life
- Zero out carbon footprints
- Sequester more carbon than we emit and help the entire planet calm and cool.

By de-siloing climate resilience efforts across governments and communities, we will make accelerated progress.

<https://redwoodcorehub.org/>

## CORE Hub Projects

- Offshore Wind Community Benefits Strategy
- Tribal Convenings
- 8-year effort to design and deploy decarbonization accounting recipe
- Track equity: benefits to marginalized constituencies

**COREHub**  
Redwood Region Climate & Community Resilience (CORE) Hub

# First Proven Carbon-sequestering Rural Region in U.S. by 2030

## Why?

- NASA <https://climate.nasa.gov/>
- NOAA <https://www.noaa.gov/climate>
- Intergovernmental Panel on Climate Change (IPCC)  
Special Report: <https://www.ipcc.ch/sr15/>
- Our economy depends on making climate progress.
- Early actor advantage

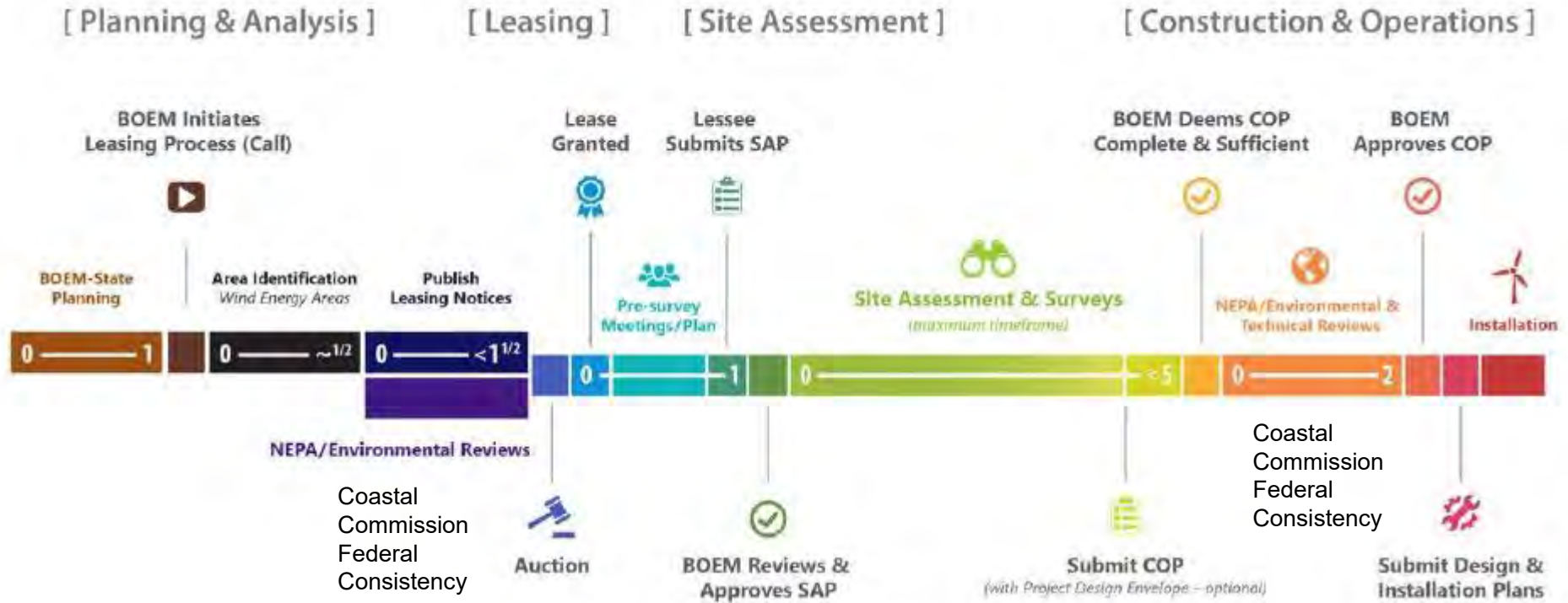
## How?

- Survey existing carbon accounting and research – mandatory, voluntary (e.g., business GHG reduction goals), Scope 1 (direct combustion energy use), Scope 2 (electricity), etc.
- Develop a recipe that is simple to implement, prevents gaps and leaks and de-silos communities and decisionmakers
- Scope 3 – complicated, not yet included in most accounting
- Includes public, private sectors
- Regional 'landscape' scale – e.g., natural and built systems, land and ocean environments
- Centers and builds outward from regional expertise and includes CA and Tribal expertise
- Centers marginalized, frontline, under-resourced and under-represented communities
- Carbon lifecycle accounting
- Circular economy principles

# Offshore Wind Community Benefits

- Humboldt Call Area
- Adjacent regions (Morro Bay; Crescent City; other CA; OR; WA)
- First federal and state processes are moving
- Environmental and industry points of intersection
- Economic opportunities (e.g., port revitalization)
- Electricity and other infrastructure improvements
- Alignment with regional developments (e.g., Great Redwood Trail, eco/tech tourism, broadband, HSU to polytechnic)
- Helps reach 2030 climate goals for region, state, nation, globe

# Offshore Wind (OSW) Timeline



<https://documents.commerce.gov/DocumentDetails.aspx?docid=123456789> (image source)



# OSW Community Benefits Example Terms

## Regional

- Existing ecosystem and industry intersections with offshore and onshore components
- Economic opportunities (port, jobs, tax base, West Coast offshore wind energy hub)
- Research
- Monitoring
- Social considerations – equity; financial equity
- Illustrative cases

## Energy

- Phase 1 ~150MW / 10 turbines
- Reorganization of on-land electrical systems (e.g., out of flood zone)
- Improve energy reliability, independence
- Coordinate with other existing and developing systems (storage, solar, H2)
- Upgrade transmission and distribution lines regionally (improve existing, add new grids)
- Transmission upgrades and new grid



## Community Benefits in Processes

- Multi-factor auction (BOEM) – e.g., require CBAs with region as >25% of auction scoring criteria
- Within BOEM : Wind Developer Lease Stipulations
- Single- and/or Multi-party : Developer Community Benefits Agreements (CBAs) (legal contracts)



## Near-term Offshore Wind Actions

- **BOEM Environmental Assessment (EA)** – consultation, written comments. Humboldt EA draft out for comment ~1/4/2022 until ~2/18/2021

\* BOEM & Tribes can enter “cooperating agency” MOU

- **CA Coastal Commission Consistency Determination** (with BOEM EA) – consultation, written comments ~Jan 2022

<https://www.coastal.ca.gov/upcoming-projects/offshore-wind/>

- **West Coast Tribal Cultural Landscape Studies** (BOEM and Udall Foundation) – in design more information soon

# COREHub

Redwood Region Climate & Community Resilience (CORE) Hub

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Thank you.

# Resources

- <https://redwoodcorehub.org/> (CORE Hub website and resources)
- <http://schatzcenter.org/wind/> (Schatz Energy Research Center offshore wind studies)
- <https://documents.coastal.ca.gov/assets/slideshow/Th7a-9-2021-presentationslides.pdf> (Coastal Commission briefing on Offshore Wind – good federal and state agency overview and status, with links to other resources)
- NASA Climate Website  
<https://climate.nasa.gov/>



**COMMUNITY ADVISORY COMMITTEE  
STAFF REPORT  
Agenda Item # 5**

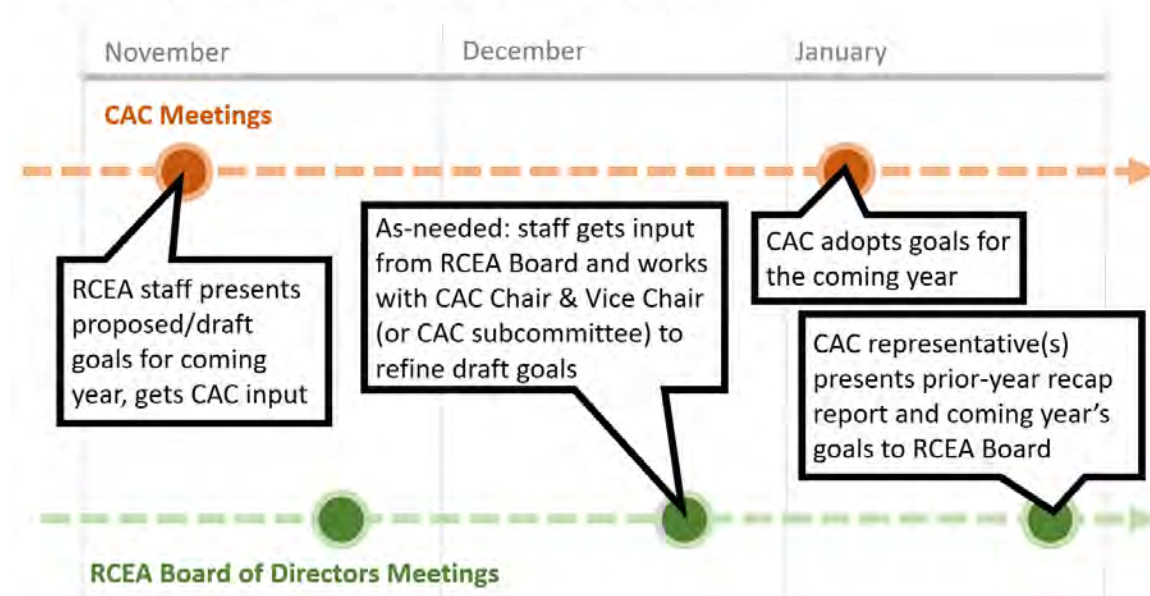
AGENDA DATE:	January 11, 2022
TO:	RCEA Community Advisory Committee
PREPARED BY:	Matthew Marshall, RCEA Executive Director
SUBJECT:	CAC Annual Report & 2022 Goals

**SUMMARY**

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

The group agreed to the schedule illustrated below:

**Community Advisory Committee  
Goal-setting & Board Reporting**  
Proposed Annual Timeline





Based on Board input to the proposed 2022 workplan received in December, the CAC Annual Report Subcommittee drafted this revised list of CAC activities and goals for the coming year:

- 1) Help guide community outreach and messaging for RCEA programs.
- 2) Monitor and advocate for implementation of RePower Humboldt Comprehensive Action Plan for Energy goals.
- 3) Support and help guide offshore wind energy community outreach.
- 4) Provide input on the development of new and expanding RCEA customer programs.
- 5) Assist with identifying and prioritizing critical facilities and at-risk communities that would benefit from enhanced energy resilience infrastructure, including future microgrid deployment and/or facility-level renewable back-up power systems.
- 6) Finalize recommendations to the RCEA Board and County Board of Supervisors for energy-project bond and/or alternative financing opportunities, support any resulting implementation efforts as appropriate.
- 7) Help facilitate community input on the finalization and adoption of the Humboldt Regional Climate Action Plan.

Pending adoption by the full CAC, the Annual Report Committee will present these goals to the RCEA Board in January as part of the committee's annual report.

#### **STAFF RECOMMENDATION**

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Discuss and adopt Community Advisory Committee goals for 2022.

#### **ATTACHMENTS**

---

Draft Community Advisory Committee Annual Report

**Redwood Coast Energy Authority**  
**COMMUNITY ADVISORY COMMITTEE**  
**ANNUAL REPORT TO THE RCEA BOARD OF DIRECTORS**  
**January 2022**

The Community Advisory Committee meets on the second Tuesday of odd-numbered months. The CAC supports RCEA public engagement efforts and provides decision-making support and input to the RCEA Board.

<b>2021 Committee Members</b>	<b>Representing Jurisdiction:</b>
<b>Norman Bell</b>	Arcata
<b>Elizabeth Burks</b>	Fortuna
<b>Colin Fiske</b>	At-Large
<b>Larry Goldberg, Chair</b>	At-Large
<b>Catherine Gurin</b>	Eureka
<b>Pam Halstead</b>	At-Large
<b>Roger Hess</b>	Rio Dell
<b>Christopher Honar</b>	County 2 (McKinleyville Area)
<b>Richard Johnson</b>	Trinidad
<b>Luna Latimer</b>	County 1 (Eastern Humboldt)
<b>Ethan Lawton</b>	Humboldt Bay Municipal Water District
<b>Dennis Leonardi, Vice Chair</b>	Ferndale
<b>Kit Mann</b>	Blue Lake
<b>Jerome (Carman) Qiriaz</b>	At-Large
<b>Vacancy</b>	County 3 (Southern Humboldt)
<b><u>Former Members:</u></b>	
<b>Matty Tittmann</b>	County 3 (Southern Humboldt), January-May
<b>Amin Younes</b>	HBMWD, January - May

**Committee Liaison:**

Matthew Marshall, Executive Director

**I. ACCOMPLISHMENTS**

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The CAC was involved in the following activities in 2021:

Larry Goldberg was re-elected to serve as Chair and Dennis Leonardi was re-elected to serve as Vice Chair. The Committee revised their regular meeting schedule from quarterly to every other month.

The Committee was updated on:

- a. RePower Humboldt Strategic Plan status (biannually)
- b. Countywide Climate Action Plan Development
- c. Offshore Wind Project
- d. Time of Use Billing
- e. HCAOG's 2021 Regional Transportation Plan
- f. "Exploring Humboldt County's Renewable Energy Futures," HSU Energy Technology & Policy Master's degree program thesis presentation by Amin Younes
- g. Wave Energy
- h. Potential Alternative Biomass Uses in Humboldt County
- i. Power Charge Indifference Adjustment (PCIA or exit fee) impacts on RCEA.

The CAC formed ad hoc subcommittees in 2021 that accomplished the following:

**Alternative Biomass Uses Subcommittee** (Power Resources Director Richard Engel, Staff Liaison)

- a. Reviewed/assessed alternative biomass uses for local development potential.
- b. Recommended creation of Alternative Biomass Uses Task Force, distinct from the CAC subcommittee, to continue to advise Board and staff.
- c. Reviewed and made recommendations on a Memorandum of Understanding between Humboldt Sawmill Company and RCEA to meet annually to assess alternative biomass uses for feasibility.

**Bond/Financing Subcommittee** (Matthew Marshall and Aisha Cissna, Legislative & Regulatory Policy Manager, Staff Liaisons)

- a. Developed an initial list of resilience projects that would likely be financially viable, gain community support, decrease greenhouse gas emissions, and contribute to energy resilience (Offshore wind, feed-in-tariff, customer financing program similar to PACE).
- b. Expanded the criteria to include assessing resilience projects that align with Humboldt County planning documents (HCAOG's Regional Transportation Plan, the County's Climate Action Plan, RCEA's RePower Plan, etc.).
- c. Explored other funding and financing streams including the state budget, stimulus funding, crowd funding/micro-bonds. Met with RaiseGreen to better understand micro-bond financing structure.
- d. Developed the following 2022 goals:
  - i. Provide subcommittee with a final list of projects that align with criteria developed in 2021 meetings
  - ii. Develop a list of projects that align with the criteria developed in the 2021 meetings, and financing options for said projects

- iii. Gather subcommittee input on this list to finalize recommendation to County

**Major Projects Subcommittee** (Matthew Marshall, Staff Liaison)

- a. Drafted RCEA recommendations for North McKay Ranch development project draft environmental impact report for Board approval, including recommendation to acknowledge and incorporate RePower Humboldt goals for building greenhouse gas emission reduction and vehicle miles traveled reduction in project design.

**Outreach Messaging Subcommittee** (Community Strategies Manager Nancy Stephenson, Staff Liaison)

- a. Reviewed and provided input on the website re-design.

Prior to 2021, these subcommittees performed the following work:

**Outreach Messaging Subcommittee** (2020)

- a. Provided ideas and strategies for general outreach activities; helped set priorities and tailored the content to be most public-friendly.

**CCE-Funded Customer Programs** (9/2018 – 3/2019)

- a. Helped develop community-sourced customer energy program idea assessment criteria
  - b. Reviewed and recommended customer programs for Board approval including:
    - i. E-bike, e-scooter rebates
    - ii. Grocery store refrigerant efficiency
    - iii. Green Your Grow – efficient cannabis grow lightingProgram status:
    - 1. Staff are reaching out to local industry stakeholders for ideas on greatest energy needs and program design.
  - iv. Solar on a Stick – mobile home pole-mounted solar
- Program status:
- 1. Staff coordinated with Schatz Energy Research Center on a turnkey mobile home solar plan set that can be shared with developers.
  - 2. Staff submitted plans to local and state building jurisdictions and other stakeholders and incorporated their comments.
  - 3. Staff is currently working with GRID Alternatives and Bear River Rancheria to implement test sites.

## II. GOALS FOR COMING YEAR

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At their January 11, 2022, meeting, the Community Advisory Committee approved the following goals for 2022:

- a. Help guide community outreach and messaging for RCEA programs.
- b. Monitor and advocate for implementation of RePower Humboldt Comprehensive Action Plan for Energy goals.
- c. Support and help guide offshore wind energy community outreach.
- d. Provide input on the development of new and expanding RCEA customer programs.
- e. Assist with identifying and prioritizing critical facilities and at-risk communities that would benefit from enhanced energy resilience infrastructure, including future microgrid deployment and/or facility-level renewable back-up power systems.
- f. Finalize recommendations to the RCEA Board and County Board of Supervisors for energy-project bond and/or alternative financing opportunities, support any resulting implementation efforts as appropriate.
- g. Help facilitate community input on the finalization and adoption of the Humboldt Regional Climate Action Plan.





**COMMUNITY ADVISORY COMMITTEE  
STAFF REPORT  
Agenda Item # 6**

AGENDA DATE:	January 11, 2022
TO:	RCEA Community Advisory Committee
PREPARED BY:	Matthew Marshall, RCEA Executive Director
SUBJECT:	RCEA Comments on North McKay Ranch Development Project DEIR

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**SUMMARY**

One CAC proposed 2022 work goal discussed at the November CAC meeting was reviewing and providing input on energy-specific considerations for large developments and local planning efforts. The evaluation and input would focus on the proposed project's impact on RePower Humboldt strategic plan goals.

The comment period for the North McKay Ranch development project's draft environmental impact report (DEIR) closed on December 1, before the approval process for the CAC 2022 work goals could be completed. An ad hoc CAC Major Project Subcommittee was formed to draft and present recommended DEIR comments to the RCEA Board for consideration and approval at the November Board meeting. Outcomes were to be reported to the full CAC at this CAC meeting.

In November, the RCEA Board expressed support for the draft DEIR comments, which called for plans that would facilitate meeting RePower Humboldt's greenhouse gas emission and vehicle miles traveled reduction goals. The Board unanimously voted to approve the subcommittee's comments and authorize the Executive Director to submit the comments to the Humboldt County Planning and Building Department by December 1. RCEA's comment letter is attached.

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**RECOMMENDED ACTION**

None. (Information only.)

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**ATTACHMENTS**

RCEA comment letter on North McKay Ranch Subdivision DEIR



# REDWOOD COAST Energy Authority

Humboldt County • Arcata • Blue Lake • Eureka • Ferndale • Fortuna • Rio Dell • Trinidad • Humboldt Bay Municipal Water District

December 1, 2021

**BOARD OF  
DIRECTORS**

Sarah Schaefer  
CITY OF ARCATA

Desmond Johnston, Senior Planner  
Humboldt County Planning and Building Department  
3015 H Street  
Eureka, CA 95501

Chris Curran  
CITY OF BLUE LAKE

via email: [CEQAResponses@co.humboldt.ca.us](mailto:CEQAResponses@co.humboldt.ca.us)  
[djohnston@co.humboldt.ca.us](mailto:djohnston@co.humboldt.ca.us)

Scott Bauer  
CITY OF EUREKA

Stephen Avis  
CITY OF FERNDALE

Mike Losey  
CITY OF FORTUNA

Sheri Woo  
HUMBOLDT BAY  
MUNICIPAL WATER  
DISTRICT

Mike Wilson  
COUNTY OF HUMBOLDT

Frank Wilson  
CITY OF RIO DELL

Dave Grover  
CITY OF TRINIDAD

## **RE: North McKay Ranch Subdivision Partially Revised Draft Environmental Impact Report**

Mr. Johnston,

Redwood Coast Energy Authority, a joint powers agency, was formed in 2003 by the County of Humboldt and the cities of Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, and Trinidad, and the Humboldt Bay Municipal Water District. Through its activities since formation, RCEA has established Humboldt County and its communities as leaders in reducing energy demand, increasing energy efficiency, and advancing the use of clean, efficient, and renewable local resources to increase regional self-reliance. RCEA's goals include: "To lead, coordinate and integrate regional efforts that advance secure, sustainable, clean and affordable energy resources, and to develop a long-term sustainable energy strategy and implementation plan."

RCEA thanks the County for the opportunity to comment on the Revised Draft Environmental Impact Report (DEIR) and provides these comments to state how the County can ensure consistency between the North McKay Ranch Subdivision project, the General Plan's Energy Element, and the RePower Humboldt Comprehensive Action Plan for Energy (CAPE) strategic plan.

The Humboldt County General Plan Energy Element designates RCEA as the lead on countywide strategic energy planning, policy making and implementation.

The Energy Element details RCEA's role as follows:

As the regional energy authority, the Board of Supervisors has designated RCEA to implement Energy Element strategies on a regional basis through a Comprehensive Action Plan for Energy. This action plan will be maintained by

633 3<sup>rd</sup> Street  
Eureka, CA 95501  
(707) 269-1700

[info@redwoodenergy.org](mailto:info@redwoodenergy.org)

[www.RedwoodEnergy.org](http://www.RedwoodEnergy.org)

the RCEA Board and periodically presented to the Humboldt County Board of Supervisors for review. The County will also implement Energy Element strategies through policies, implementation measures, and standards contained in this Plan. (12-3)

**E-G1. Countywide Strategic Energy Planning.** An effective energy strategy based on self-sufficiency, development of renewable energy resources and energy conservation that is actively implemented countywide through Climate Action Plans, General Plans and the Redwood Coast Energy Authority's Comprehensive Energy Action Plan. (12-3)

**E-P5. Regional Energy Authority.** Recognize the Redwood Coast Energy Authority (RCEA) as the regional energy authority, which will foster, coordinate, and facilitate countywide strategic energy planning, implementation and education through a Comprehensive Action Plan for Energy. (12-4)

**E-IM2. Comprehensive Action Plan for Energy.** Support efforts to implement the Redwood Coast Energy Authority (RCEA) Comprehensive Action Plan for Energy. (12-9)

RCEA's RePower Humboldt Comprehensive Action Plan for Energy (CAPE) strategic plan, updated in December 2019, includes strategies to be implemented between 2020 and 2030. These updated strategies were formed after conducting public meetings over a period of three months with over 200 residents participating and approximately 1,200 written comments received.

At its November 18, 2021, meeting, the Redwood Coast Energy Authority Board of Directors voted unanimously to approve and submit comments on the North McKay Ranch Subdivision Draft Environmental Impact Report pertaining to RePower Humboldt strategic plan goals listed below.

1. Humboldt County General Plan Policy E-P5 recognizes RCEA's CAPE/RePower Humboldt plan as the governing document to "foster, coordinate, and facilitate countywide strategic energy planning, implementation and education." The DEIR therefore needs to assess the project's consistency with the RePower Humboldt plan.
2. The project is large and will be completed over the course of 20 years, so it will have a major impact on the region's ability to meet the RePower targets.
3. The project must show major net reductions in vehicle miles traveled (VMT) to be consistent with the RePower Humboldt target of a 25% reduction in countywide VMT by 2030, and a 65% reduction in greenhouse gas emissions from transportation by 2030.
  - a. Consistency with this target will require adoption of mitigation measures including completion of bicycle and pedestrian networks in the project area, transit improvements, and transportation demand management strategies.

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

Thank you for your consideration of these comments.

Sincerely,



Matthew Marshall  
Executive Director, Redwood Coast Energy Authority





**COMMUNITY ADVISORY COMMITTEE  
STAFF REPORT  
Agenda Item # 7**

AGENDA DATE:	January 11, 2022
TO:	RCEA Community Advisory Committee
PREPARED BY:	Aisha Cissna, Regulatory and Legislative Policy Manager
SUBJECT:	Net Energy Metering Update

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**SUMMARY**

California's Net Energy Metering ("NEM") program was established in 1997. NEM Allows customers who install small renewable electrical generation facilities (e.g., solar, wind, fuel cell, biogas, etc.) to serve onsite energy needs and receive credits on electric bills for surplus energy sent to the electric grid.

In August 2020, the California Public Utilities Commission (CPUC) initiated a proceeding to develop a successor tariff to replace the current net energy metering tariff (also known as "NEM 2.0"). On December 13, 2021, the CPUC issued a Proposed Decision describing the new tariff provisions. The Commission is expected to vote on this Proposed Decision on January 27. If this Proposed Decision passes on that date as written, the current NEM 2.0 tariff will sunset on May 27, 2022.

While the sunset date could change if the Proposed Decision is revised prior to the CPUC's vote, customers interested in installing rooftop solar (or other qualifying systems) are advised to submit their interconnection application as soon as possible if they wish to enroll in the current tariff. If the interconnection application is submitted prior to the sunset date, the customer can stay on the current NEM 2.0 tariff for 15 years from their interconnection date.

Other major changes proposed by the CPUC include a shift from net energy metering to net billing, a reduced export compensation rate, automatic enrollment in a time-of-use rate for imports, a market transition credit to help ensure a ten-year payback period, a non-bypassable grid participation charge, a rebate to incentivize storage installation, and an equity fund to expedite the installation of solar in communities.

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**RECOMMENDED ACTION**

None. (Information only)

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**ATTACHMENTS**

CPUC's Customer Explanation of Net Billing Tariff (from 12/13/21 CPUC Proposed Decision)

# **Appendix A**

## **Customer Explanation of Net Billing Tariff**

## How Electricity Bill Savings Work

If you go solar, the majority of your electricity bill savings will come from reducing the amount of electricity that you buy, or import, from your electricity provider. A minor additional amount of bill savings will come from your provider's Net Billing program. Net Billing provides you with financial credits on your bill when your solar system sends excess electricity to the electric grid after first powering the electricity needs at your home. The value of these credits varies by time of day and season depending on the current supply and demand for electricity on the grid. It will usually be lower than the rate that you pay for electricity, just as wholesale prices for other goods are lower than their retail prices. Finally, you will receive an additional bill credit if you interconnect your solar system while California has its Market Transition Credit in effect.

## Net Billing and Your Electricity Bill

### Importing and Exporting Electricity

Since the sun isn't always shining, most solar customers also rely on electricity from the electric grid. Pairing a battery with your solar system allows you to store your excess solar generation and then reduce the amount of electricity you need to import from the grid in the evening. After your solar system is interconnected to the grid, your monthly electricity bill will summarize how much electricity your home imported from and exported to the grid.

### Bill Charges

PG&E, SCE, and SDG&E solar customers are required to go on a time-of-use (TOU) rate plan. On a TOU rate plan, you will pay different prices for electricity at different times of the day (also called "TOU periods"). Prices for the energy you import from the electric grid are typically highest between 4 p.m. and 9 p.m.

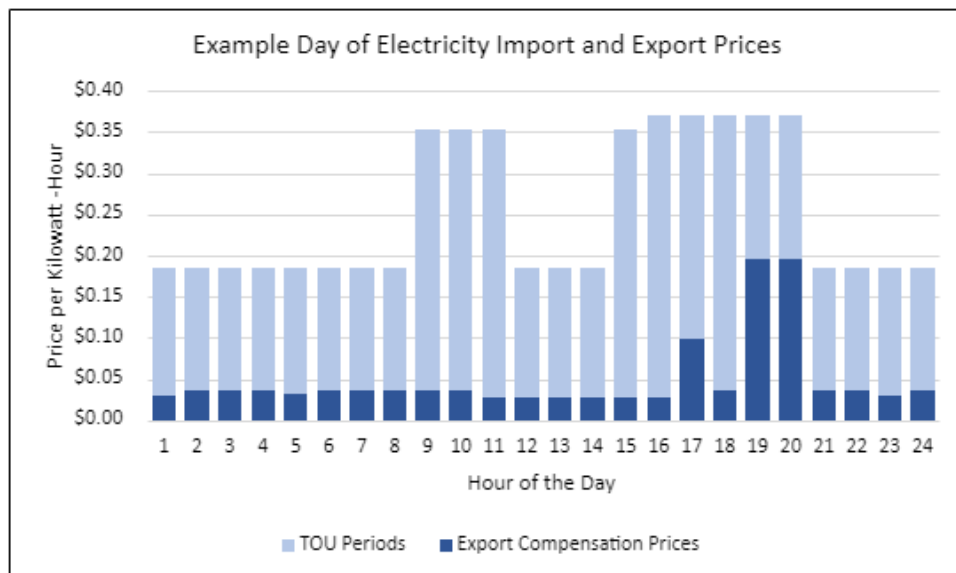
In addition, you will be responsible for paying a Grid Participation Charge in order to contribute your fair share of costs to maintain the grid and help low-income and disadvantaged Californians afford energy and access clean energy programs. The Grid Participation Charge is \$8 per kilowatt (kW) of solar installed per month. For example, if your solar system is 5 kW, your Grid Participation Charge will be \$40 per month. You cannot offset this charge using solar bill credits, but you can by using any Market Transition Credit and/or net surplus compensation you receive (see below).

You will not need to pay the Grid Participation Charge if you participate in the CARE or FERA programs, live in a disadvantaged community, or live in California Indian Country.

## Bill Credits

### Bill Credits for Exports

You will receive bill credits at a set price per unit of electricity (kilowatt-hour) exported, based on the value of the electricity to your provider in each hour of the day. The value generally follows TOU periods, meaning you will receive higher prices for energy exported during the most expensive TOU periods, and so on. If you want to maximize your bill credits, you can pay closer attention and use less energy (in order to export more) during the specific hours in a TOU period when prices are highest. If you have a battery, you may be able to program it to automatically store up energy produced by your solar panels during sunny hours, and then export energy during the most lucrative hours later in the day.



For the first five years after your solar system is interconnected to the grid, these prices will be based on what was predicted before you installed solar, in order to provide a measure of certainty for the purpose of predicting bill savings. After five years, the prices you receive will be set each year. They can rise or fall but are not expected to change drastically each year.

### Market Transition Credit

If you interconnect your system to the grid by the end of 2027, you will receive a Market Transition Credit (MTC) on your electricity bill for ten years. The MTC is determined based on the amount of solar generation expected from your system. If you have a low bill in a given month and part of the MTC is left over after reducing your bill to the minimum amount, that part of the MTC will roll over to future months as needed and will not expire.

### Monthly Payments and Net Surplus Compensation

Customers who are required to add solar (e.g. by California's building code) do not receive the MTC.

Your charges and credits will be "trued up" each month. Even though going solar can reduce your electricity costs, most customers still owe some money to their electricity provider at true-up time.

Though it's rare, if you export more electricity than you import in a month, you are typically eligible to be paid "net surplus compensation" for your excess electricity, which is around 2 to 3 cents per kilowatt-hour. Because this rate is lower than the rate you pay for electricity from the grid, it is generally not in your financial interest to install a solar system that produces much more energy than you use, unless you plan to make purchases that will increase your electricity usage, e.g., an electric vehicle.

**(END OF APPENDIX A)**

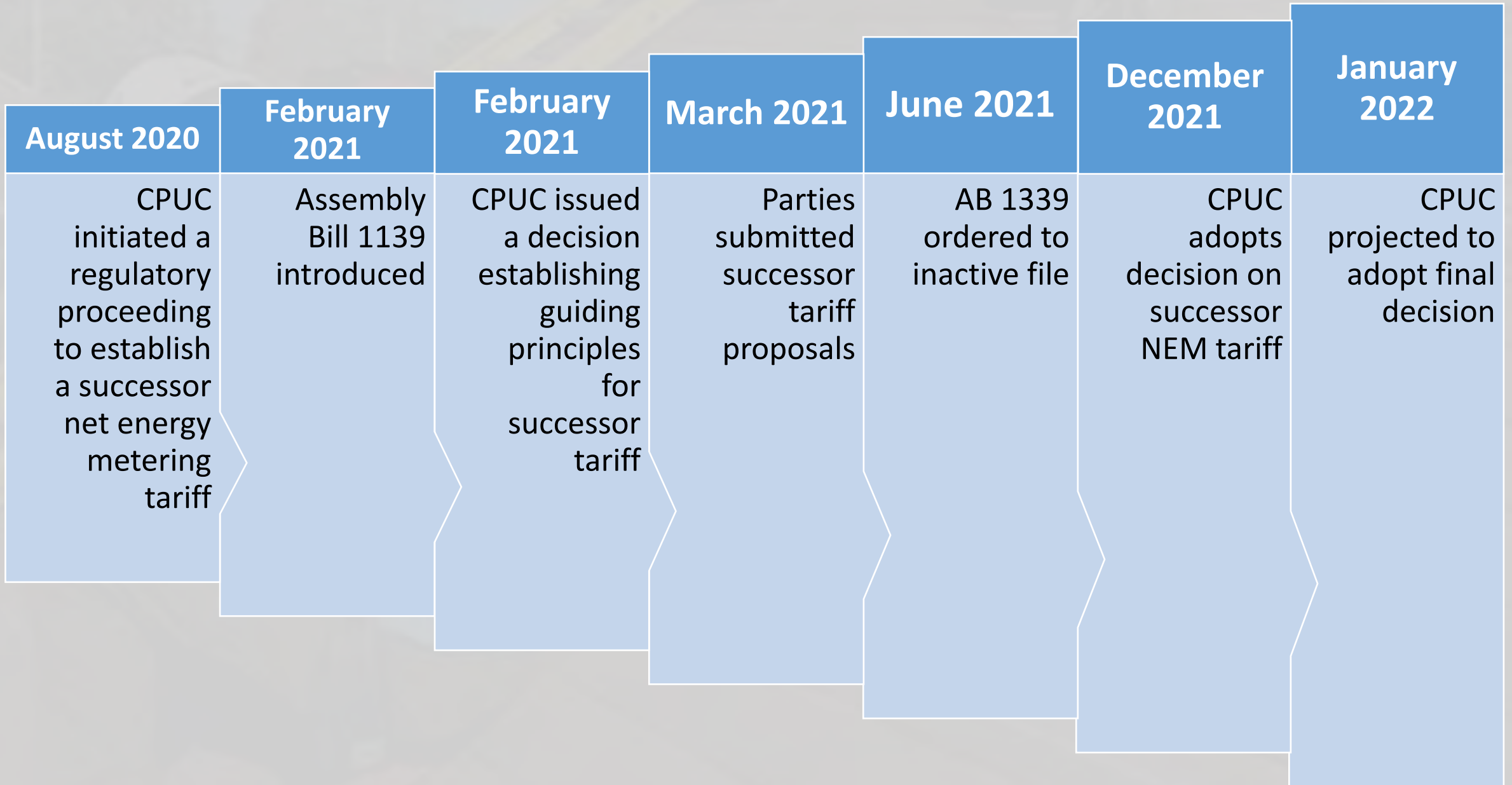


# Net Energy Metering Successor Tariff

Proposed Decision (12/13/21)

RCEA Community Advisory Committee Meeting  
January 11<sup>th</sup>, 2022

# Timeline

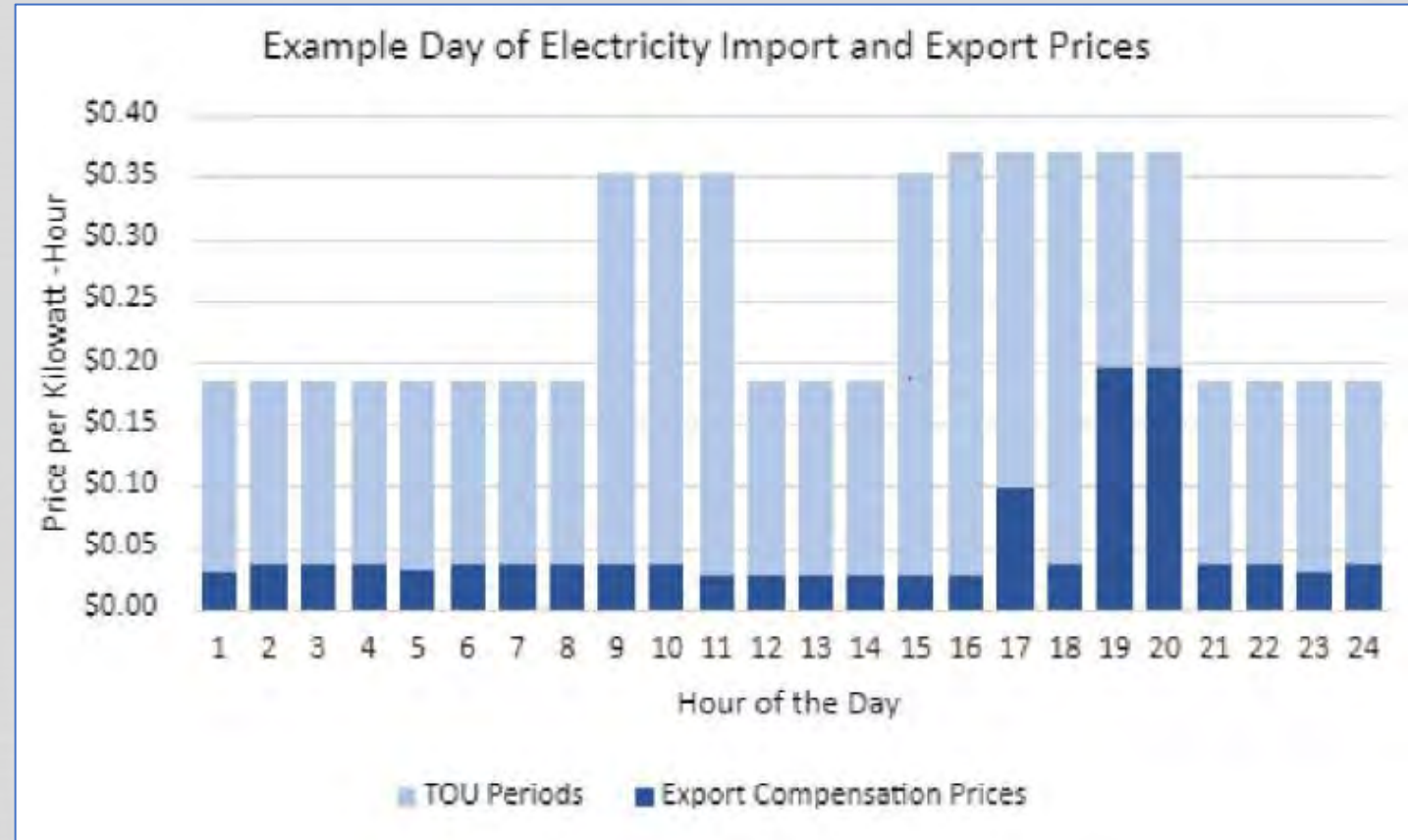


# Major Components of PD

- Net billing
- Export and import rates
- True-ups
- Market Transition Credit
- Grid Participation Charge
- Low-income customers
- Virtual NEM and NEMA customers
- Implementation

# Net Billing & Export Compensation

- NEM compensates customers for excess energy exported to the grid at the retail rate
- Net billing decouples export compensation from the retail rate, and instead customers sell excess energy to the utility at wholesale or “avoided cost” price
- Export compensation rates are based on the Avoided Cost Calculator
  - Estimated at ~5 cents/kWh, reduction from 20-30 cents/kWh for today’s res customers



# Import Rate Structure

- Highly differentiated TOU rates meant to spur electrification
  - EV2-A is the only electrification rate initially eligible for the successor tariff
- Customers can elect CPP or PDP rates on any rate option they select
- LI and VNEM customers can pick any TOU rate
- PD does not indicate whether there will be any import rate requirements for non-res customers
- Customers can oversize their loads by 50 percent, while maintaining the current net surplus compensation rate, to promote electrification



# True-Ups

- Annual true-ups maintained; credits will be carried forward to future months within a 12-month billing period
- Customers are to pay their bills monthly=they must pay all incurred charges every month

# Market Transition Credit

- Incentive for res solar customers; will be a discrete line on utility bill, will apply to all charges, and will apply to future bills until credit is used
- Designed to achieve a 10-year payback period
- Credit will decrease by 25 percent annually until the credit reaches zero
- No MTC for non-residential customers, or new home construction
- PG&E low-income
  - \$4.36/kW per month for 10 years. For a 6kW system, this is \$26/month
- PG&E non-LI
  - \$1.62/kW/month for 10 years. For a 6 kW system, this is \$10/month

# Grid Participation Charge

Table 8 Adopted Monthly Grid Participation Charge for Successor Tariff Customers			
Customer Segment	PG&E	SDG&E	SCE
Residential	\$8.00/kW	\$8.00 kW	\$8.00 kW
Low-Income	\$0/kW	\$0/kW	\$0/kW
Nonresidential	\$0/kW	\$0/kW	\$0/kW

- GPC: **\$48/month (PG&E res; 6kW system)**
- May fluctuate after 10 years
- Those temporarily billed on NEM 2.0 won't pay GPC until the successor tariff is fully operationalized

# Low-Income Considerations

- Low-income tariff
  - Eligibility: CARE/FERA, DACs, and CA Indian Country
  - Same export compensation as general market
  - CARE and FERA discounts are not applied to export compensation
  - Exempt from Grid Participation Charge
  - Eligible for any TOU rate

# Low-Income Considerations Cont'd

- Equity Fund
  - Goal: Create improved access to DER tech for low-income customers and those living in disadvantaged communities
  - Annual cap of \$150M over a 4-yr period (\$600M total)
  - Workshop to be held by 4/30/22 to finalize details of how to collect Equity Fund \$, who should pay into it and other implementation details



# Virtual Net Energy Metering & Net Energy Metering Aggregation

- Maintaining current tariff (NEM 2.0) for low-income MASH and SOMAH VNEM → declined
- Changes to non-CARE/FERA VNEM and NEMA tariffs → mostly declined
  - VNEM and NEMA tariffs will not be combined
- VNEM customers are not required to adopt the electrification TOU rates; can choose other current TOU rates
- Multiple arrays on a site (ex. Apt. complex) can now be aggregated to make one large system
- CPUC declines to adopt a successor tariff specifically for community DERs
- No consideration of Community Solar at this time

# NEM 1 and NEM 2 Revisions

- Legacy treatment has been reduced to 15 years for non-CARE/FERA res customers
  - This includes res customers who take service under NEM 2 between the adoption of this decision and before the sunset date (~May 27<sup>th</sup>, 2022), as well as customers taking control of a res system interconnected under NEM 2
- All existing NEM 2 customers are offered a storage incentive if they voluntarily switch to the successor tariff w/in 4 years from the time the rebate becomes available (\$0.20/Wh storage rebate)

# Implementation of Successor Tariff

- Changes to IOU billing systems and supporting platforms to bill customers on the new tariff will take 12-24 months following the issuance of the final decision (CPUC mandates 12 months; ~January 27<sup>th</sup>, 2023)

# Implementation of Successor Tariff: Step 1

- ~Feb 27th, IOUs submit AL to provide details of the successor tariff, as adopted in this decision.
- AL will interpret how the tariff will be structured and include additional details on price components

# Implementation of Successor Tariff: Step 2

- ~March 14<sup>th</sup> , IOUs submit AL containing rate factors based on applicable revenue req'ts, as well as associated tariff sheets to provide the industry w/details necessary to inform customers about the tariff, including consumer protection elements like updated or new disclosure docs



# Implementation of Successor Tariff: Step 3

- ~April 6, ED will dispose of Step 1 and 2 ALs

# Implementation of Successor Tariff: Step 4

- **~May 27<sup>th</sup>**, Commission to implement sunset on NEM 2.0; after this date, no additional customers will be permitted to take permanent service under NEM 2.0
- Any delay in processing Step 1 and 2 ALs, will result in a day-to-day extension of the 120-day timeline for the sunset
- Customers signing an interconnection app, installation agreement, lease, or PPA contract after the sunset date will take service and be billed on NEM 2.0, then transitioned to the new tariff once it is operationalized

# Implementation of Successor Tariff: Step 5

- ~1/27/23, IOUs will have billing systems to allow full implementation of successor tariff



# Extra Slides

# Guiding Principles

A successor shall maximize the value of customer-sited renewable generation to all customers and to the electrical grid, where value is the sum of benefits customer-sited generation provides the electric grid; and

A successor to the net energy metering tariff shall ensure equal compensation for the same generation, equal collection of unavoidable and non-bypassable charges from participants and non-participants and require participants to pay a fair share for the grid services they use;

A successor shall enhance consumer protection measures for customer-generators providing net energy metering services;

A successor shall fairly consider all eligible technologies;

# Guiding Principles

A successor shall be coordinated with the Commission and California's energy policies, including but not limited to, Senate Bill 100 (2018, DeLeon), the Integrated Resource Planning process, Title 24 Building Energy Efficiency Standards, and California Executive Order B-55-18;

A successor shall be transparent and understandable to all customers and be uniform, to the extent possible, across all utilities;

A successor shall maximize the value of customer-sited renewable generation to all customers and to the electrical grid, where value is the sum of benefits customer-sited generation provides the electric grid; and

A successor shall consider competitive neutrality amongst Load Serving Entities.



# Proposal + Data Template Submissions

- 1. California Solar and Storage Association**
- 2. Cal Advocates**
- 3. Protect Our Communities Foundation**
- 4. Sierra Club**
- 5. The Utility Reform Network**
- 6. Natural Resources Defense Council**
- 7. Solar Energy Industries Association, Vote Solar**
- 8. Small Business Utilities Advocates**
- 9. Vote Solar, Sierra Club, Grid Alternatives**
- 10. PG&E, SDG&E, SCE**
- 11. Coalition for Community Solar Access**
- 12. CALifornians for Renewable Energy, Inc.**
13. Clean Coalition
14. Ivy Energy
15. California Energy Storage Alliance
16. California Wind Energy Association
17. American Association of Retired Persons
18. Foundation Windpower, LLC

# Opening Brief Submissions

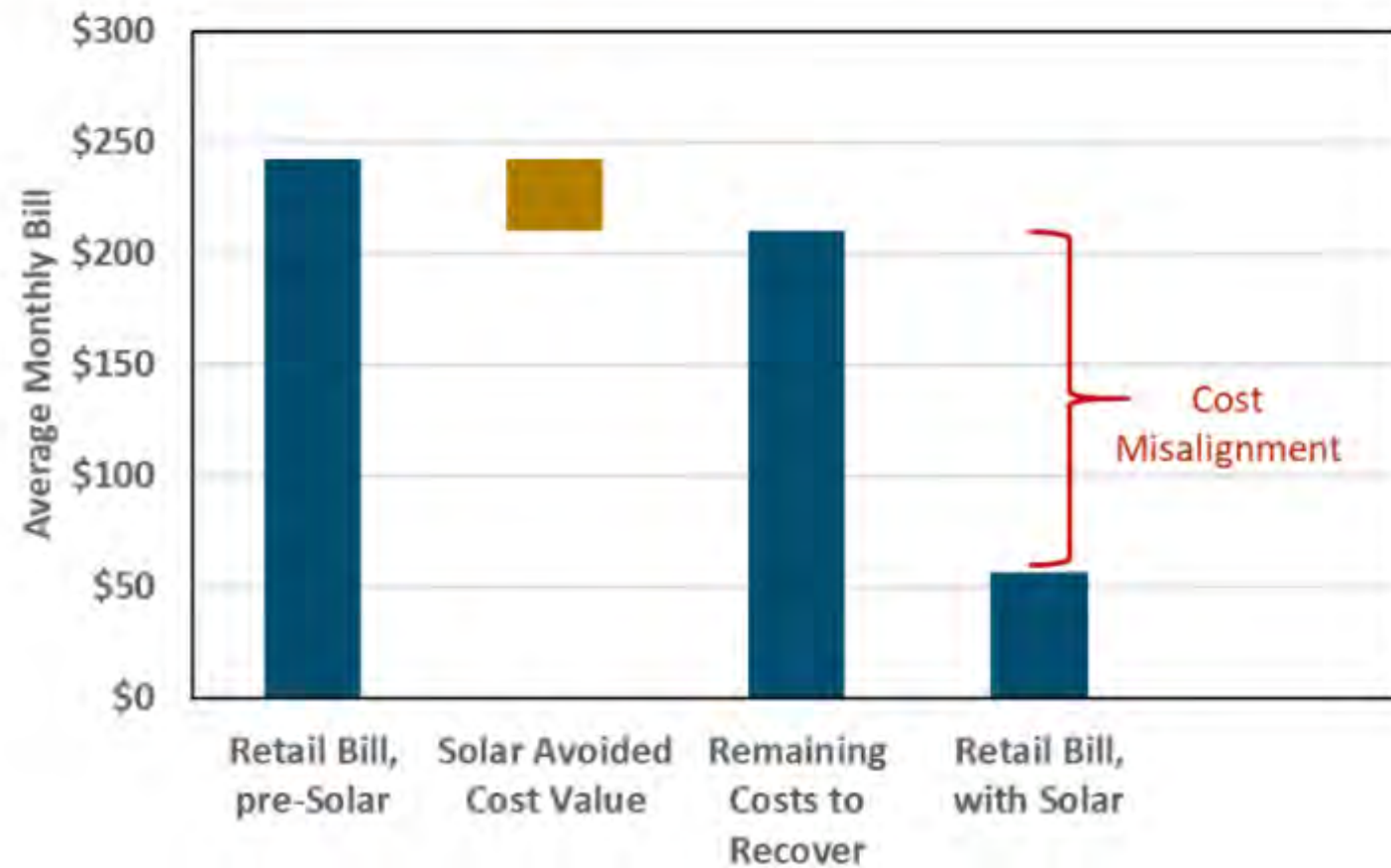
1. Albion Power Company
2. California Building Industries Association
3. Vote Solar, Solar Energy Industries Association
4. Walmart Inc.
5. Foundation Windpower, LLC
6. Ivy Energy
7. California Farm Bureau Federation, Agricultural Energy Consumer Association
8. California Solar and Storage Association
9. Cal Advocates
10. **Coalition for Community Solar Access**
11. Joint IOUs
12. **California Wind Energy Association**
13. California Energy Storage Alliance
14. TURN
15. Sierra Club, Grid Alternatives, Vote Solar
16. Californians for Renewable Energy, Inc.
17. Independent Energy Producers Association
18. **Protect Our Communities Foundation**
19. Coalition of California Utility Employees
20. **Sierra Club**
21. Natural Resources Defense Council

# Reply Brief Submissions

1. **California Building Industries Association**
2. **Vote Solar, Solar Energy Industries Association**
3. **Walmart Inc.**
4. **Ivy Energy**
5. **California Farm Bureau Federation, Agricultural Energy Consumer Association**
6. **California Solar and Storage Association**
7. **Cal Advocates**
8. **Coalition for Community Solar Access**
9. **Joint IOUs**
10. **California Wind Energy Association**
11. **TURN**
12. **Sierra Club, Grid Alternatives, Vote Solar**
13. **CALifornians for Renewable Energy, Inc.**
14. **Independent Energy Producers Association**
15. **Protect Our Communities Foundation**
16. **Coalition of California Utility Employees**
17. **Sierra Club**
18. **Natural Resources Defense Council**
19. **California Low-Income Consumer Coalition**
20. **Foundation Windpower, LLC**
21. **Small Business Utilities Advocates**
22. **San Diego Community Power, San Jose Clean Energy**
23. **Clean Coalition**
24. **Foundation Windpower, LLC**

# CPUC White Paper on Successor Tariff Options (2021)

*Figure 5. Average Residential Customer Annual Bill (With and Without Solar), and Remaining Non-Avoidable Costs After Accounting for Solar Value*



# Net Energy Metering (NEM) Rulemaking (R.) 20-08-020

## Proceeding Schedule

<u>Event</u>	<u>Date</u>
Comments on Guiding Principles Received	December 4, 2020
Reply Comments on Guiding Principles Received	December 11, 2020
Proposed Decision on Guiding Principles Issued	January 5, 2020
Issuance of NEM 2.0 Lookback Study	January 21, 2021
Workshop on E3 White Paper and Program Elements	February 8, 2021
Decision on Guiding Principles Issued	February 17, 2021
Party Proposals Served	March 15, 2021
Workshop Presenting Party Proposals	March 23-24
Second Workshop on Proposals	April 22, 2021
Cost Effectiveness Analysis Results Provided to Parties	May 28, 2021
Opening Testimony on Issues 2 -6	June 18, 2021
Rebuttal Testimony	July 16, 2021
Evidentiary Hearing on Issues 3 - 6	July 26 - August 6, 2021
Completion of Settlement Talks	August 27, 2021
Opening Briefs on Issues 2-6	August 27, 2021
Reply brief <i>[matter submitted]</i>	September 10, 2021
Proposed Decision on successor to current main NEM tariff and NEM tariff for fuel cells	<i>[no later than 90 days after reply briefs submission]</i>
Commission Decision	<i>[at least 30 days after PD]</i>

# NEM R.20-08-020

Under NEM 3.0, customers would be placed on solar-specific rates. IOUs propose an additional monthly charge:

- PG&E: \$20.66/month
- SCE: \$12.02/month
- SDG&E: \$24.10/month

IOUs propose a “solar fee” based on system size in kilowatts (kW):

- PG&E: \$10.93/kW
- SCE: \$7.39/kW
- SDG&E: \$11.09/kW

All charges would be settled on a monthly basis, rather than annually as in NEM 2.0.



# Considerations

- CalCCA position yet to be established