

Public Comment

November 8, 2022
Community Advisory Committee
Regular Meeting

Agenda Item #4 - Biomass Discussion

From: [REDACTED]
To: [Public Comment](#)
Subject: biomass, item 4
Date: Sunday, November 6, 2022 4:15:49 PM

Dear RCEA,

I'm with Wendy on this issue. We shouldn't contract with any more dirty biomass. We SHOULD ONLY CONTRACT FOR BIOMASS IF IT'S GASIFICATION USING PYROLYSIS.

John Schaefer,

Arcata

From: [Sue Parsons](#)
To: [Public Comment](#)
Subject: Reject future biomass combustion contracts
Date: Sunday, November 6, 2022 9:37:04 PM

Agenda Item #4 - Biomass Discussion

Dear RCEA Community Advisory Committee,

I urge you to support a resolution calling on RCEA not to pursue further contracts for biomass combustion.

We are in a climate crisis. Humboldt Sawmill's biomass plant releases 300,000 MT of CO₂e each year which will warm the planet for decades. This is unacceptable.

Biomass is dirty energy. EPA impact modeling shows that the Scotia plant's reported emissions result in millions of dollars in health care costs annually.

Rejecting biomass incineration will help even if someone else picks up the contract. How? 1) it could stop the potential biomass plant at Korbel or enforce its cleaner use of non-combustion technology; and 2) Biomass combustion has no future; it's on its way out. The Scotia plant is one of the oldest in the state. Ten California CCAs recently rejected bids for biomass as a source of firm power. A shrinking market for this archaic technology will eventually lead to lower prices, less economic viability, and faster adoption of alternatives.

Finally, the Community Advisory Committee should not give up its voice on biomass to an expert committee. RCEA staff (who are steadfast biomass advocates) will pick the experts and include those who feed their own interests. The community's interests need representation because we are the ones paying with our health and our families' futures.

Respectfully Submitted,
Susan Parsons, PhD
Bayside, CA 95524

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"A book, too, can be a star, explosive material capable of stirring up fresh life endlessly, a living fire to brighten the darkness, leading out into the expanding universe." - Madeleine L'Engle

Agenda Item #4 - Biomass Discussion

From: [Emily Siegel LCSW](#)
To: [Public Comment](#)
Subject: 11/7/22 CAC agenda item 4 public comment
Date: Monday, November 7, 2022 1:10:20 PM

I am writing to urge the RCEA Community Advisory Committee to pass a resolution calling on RCEA to make no further contracts for biomass combustion. We are in a climate crisis that is already affecting us. I live in King Salmon, where sea level rise is a real concern. Biomass is dirty energy. It makes no sense for us to pay for a process that pollutes us and harms our health and our future. EPA impact modeling shows that the Scotia plant's current reported emissions lead to millions of dollars of health costs annually. Humboldt Sawmill's biomass plant emits 300,000 MT of CO2 each year, something that will harm the planet for decades to come. Biomass combustion is an outdated technology that other, California CCA's have already rejected. It is also very important that the Community Advisory Committee should not give up. It's say on biomass to an expert committee. The community needs is interest represented, because we are the ones paying with our health and the effects of the climate crisis. We need voice and sticking up for clean energy and clean air.--Emily Siegel LCSW, [REDACTED] Eureka,,CA 95503 [REDACTED]



Agenda Items #5 - PG&E S. Humboldt Grid Issues
#6 - CAC Work Goals & Annual Report
#7 - RCEA Policy Platform
#8 - Local Major Projects

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Comments
Agenda items 5-8

Widespread Distributed Solar (WDS) on the Horizon

Given the problems with PG&E supply (inadequate in SoHum, fires, applications of poisons to protect poles, habitat degradation, fracked fuel) and in the overwhelming context of climate change, how can we supply our electricity needs now and into the future without contributing to the biodiversity crisis?

The answer: locally distributed, networked solar microgrids, called Widespread Distributed Solar (WDS), ready for installation NOW, *while we await offshore wind*.

The problem: RCEA not only fails to embrace WDS (it commits to “one solar rooftop per day”), but doesn’t even send staff to Microgrid22 or other industry conventions where WDS experts and technologies are featured. These companies are eager to invest.

With WDS, every appropriately available rooftop and parking space is outfitted with solar arrays that are networked in islandable Microgrids with storage, and connected to the grid.

WDS does not change existing land or sea uses (i.e. habitat), and produces electricity where it is used, obviating extra transmission lines, and raising users’ energy IQ. It can be installed in a matter of months, with available technology, by local workers, producing more local jobs, more revenue for the producer, more resilience in emergencies, and less ecological harm per kilowatt, than any other source.

According to the U.S. Department of Energy, WDS could supply a huge percent of our electricity needs just from rooftops, not including public spaces: “To determine the amount of solar rooftop potential for the United States is to determine the number of rooftops across the nation that are suitable for solar panels. Rooftop potential depends on the size of the roof, the amount of shade it gets, the direction it faces, and the general location,” concludes the DOE.

The DOE’s National Renewable Energy Laboratory (NREL) reports that there are more than 8 billion square meters of rooftops on which solar panels could be installed in the United States, representing over 1 terawatt of potential solar capacity. Residential and

other small rooftops represent about 65% of national rooftop potential, and 42% of residential rooftops are households with low-to-moderate income. NREL estimates that an average of 3.3 million homes per year will be built or will require roof replacement—representing a potential of roughly 30 gigawatts (GW) of solar capacity annually. If even a small fraction of these new roofs had solar installations, it could have a significant impact on U.S. solar power generation.

energy.gov

Has Humboldt done these inventories with an eye towards WDS?

Humboldt could model intelligent distributed solar as the least impactful and most democratic energy source—the best *local* job creator that also incentivizes and powers the *sustainable* transition to electric vehicles and tools, heat pumps, and induction stoves, while adding beneficial shade to parking areas, irrigation canals, and some limited agriculture. Nation-wide, WDS could supply 40-80% of our electrical needs, according to DOE, precluding the “need” for nuclear, habitat-degrading renewables, and more fossil fueled power plants.

At the same time, the end-user’s energy autonomy will grow significantly: whether for the benefit of private or public entities, generating electricity becomes a valuable resource that provides invaluable resilience during emergencies.

Long-lived solar panels produce energy the way living systems do: silent electron transfer with negligible heat, no CO² production, and no need for petrochemicals.

NONE of our current “renewable” electricity sources are green. Biodiversity requires healthy habitat. Currently, our electricity comes from distant solar and wind farms, and hydroelectric and geothermal sources, all of which degrade habitat. Transmission over incendiary lines and poison poles is another hit. PG&E’s plant uses fracked natural gas, and our local source, biomass, is not only one of the most polluting fuels, but it accelerates deforestation, converting what’s left of our forests into instant CO₂, and worse.

Then there is offshore wind with its massive habitat-ruining infrastructure: Samoa and it’s marine habitat would become fully industrialized. A local news source reports, “The new [facility](#) – which would become the second-largest wind terminal in the United States – will support the manufacturing, installation and operation of offshore wind floating platforms.”

Aside from terrestrial traffic, the wide sea lane from platforms to shore, extending 25 miles into our richly inhabited, and poorly studied ocean, will be a traffic corridor to maintain turbines that could tower over 800 feet with blades the length of a football field, networked with a minefield of cables. Eventually, all that electricity will have to be transmitted over terrestrial wires, undersea cables, or used to create, store and transport hydrogen, or charge batteries, all of which expand the industrializing of our shoreline, terrestrial and marine habitats.

Our precious forest habitats depend on fog drip, and our local climate, agriculture, and way of life are intimately and complexly intertwined, poorly understood, and changing, as atmospheric/oceanic CO2 accumulates.

The second law of thermodynamics explains why “the climatic impacts from solar photovoltaic systems are about ten times smaller than wind systems,” according to a Harvard study. When energy is transferred from wind to turbine, some of that energy scatters, causing a desiccating turbulence in the wake and downstream of the blades, potentially affecting our entire coastal habitats. Temperature and humidity effects increase at night, when the turbines would be spinning.

Thanks to advanced technologies, including reliable grid connectivity and balancing, we now have the opportunity to embrace WDS. The WDS industry is anxiously awaiting an invitation to help deploy systems throughout the County, if only they were given a chance. Check out Microgrid 22 website to see what’s possible, irrespective of offshore wind or other habitat-wreckers.

From Microgrid Knowledge:

“After years of making little progress, community microgrids are rapidly innovating with the most recent example – a nested community microgrid – unveiled this week in Menifee, California.”

What is a nested community microgrid?

Still rare, a nested microgrid connects several separate distributed energy resources or microgrids that are on the same utility circuit. They are akin to shared microgrids or microgrid clusters. Some view these advanced connections as the future direction for the electric grid because of the level of electric reliability they afford. They see an eventual grid of connected microgrids.

This is the direction RCEA and our county should be heading, irrespective of offshore wind, or biomass.

Ken Miller
Director, Siskiyou Land Conservancy

Dear Community Advisory Committee,

Thank you for serving our community by representing our interests at RCEA. In your capacity as community representatives I hope you will tell the RCEA board to follow the RePower Plan's commitment to end biomass combustion and commit now to no new, expanded, or extended contracts for this dirty carbon intensive energy. .

You yourselves have studied alternative fates for mill waste and have concluded that they do exist. Compared with climate damaging combustion, many of these uses are climate beneficial. There are successful businesses turning mill waste into carbon negative compost, mulch for erosion protection and wildfire recovery, and products replacing virgin wood, plastic, and petrochemicals. Gasification plants in Bakersfield, Oroville and Madera will be turning wood waste into hydrogen. Some include carbon capture but even without it, they will emit less than a combustion plant while producing fuel which displaces dirtier diesel.

Humboldt Sawmill's owners looked at these options and decided they didn't want to spend the money. They were happy to spend millions, along with other timber companies, opposing Prop 30 so more forests would burn, opening them up to lucrative and unregulated salvage logging. Clearly community wellbeing is not HSC's priority and we shouldn't keep paying to pollute ourselves until they find something more profitable. RCEA's board members are politicians who won't take a dime away from the timber industry without strong and continued community pressure. That must begin with you.

Biomass costs more than true clean energy. The CAC should ask RCEA staff for documentation to support their assertion that biomass is a good value relative to other sources of power and Resource Adequacy. It looks to me like the average values for renewable power purchase agreements in CAISO reported by Level Ten and NREL are much lower than the price RCEA is paying for biomass. I'm no fan of fossil gas but as a local source of electrons PGE's load following gas plant far outperforms biomass, which emits 3 times more CO₂, 13 times more NO_x, 12 times more pm_{2.5}, and over 49 times as much SO₂ per megawatt hour.

Those emissions mean we pay more than what's in the contract. Our infants, our elders, people with heart disease and asthma, our children and future generations all have to pay for the pollution and carbon coming out of the Scotia plant's smokestack. The science on this is so well established that the Humboldt Del Norte Medical Society took less than 2 minutes of consideration to call for an end to local biomass combustion. The American Public Health Association, the American Lung Association, the American Academy of Pediatrics, and the National Association of City and County Health Officials all agree that public funds should not be used to support biomass because it is so unhealthy.

Entering the Scotia plant's reported emissions into an EPA model that monetizes local and regional health impacts yields total annual health costs in the range of 2-6 million dollars. And that's not counting the health impact of wildfires, extreme heat and drought from climate change as each year of operation adds more atmospheric carbon, which will warm the planet for 20-40 years before it is all reabsorbed.

Biomass incineration is a source of environmental injustice. It is opposed by California environmental justice organizations as a false climate solution. This is not just an issue in

other parts of the state. The health impacts of biomass disproportionately affect people who are low income and/or people of color who have higher rates of chronic health problems and less resources to adapt. Children are also disproportionately affected and 39% of Humboldt's youth are non-white or Latino.

Won't emissions rise if the mills haul their waste to Anderson? Mill owners have said many times while advocating for renewed biomass contracts that long distance transport isn't a viable long term solution. Even if it was, transport to Anderson might still emit less carbon than local combustion since the Wheelabrator plant is newer and more efficient, emitting almost 30% less CO₂e per megawatt hour.

Won't someone else just contract for HSC's power? When HSC is forced to sell biomass power on the open market, it will soon encounter trends that are decreasing its desirability: 1) the growing preference for carbon free energy and 2) increasing commitments to location coincident clean energy. This is already starting. A consortium of 10 CCA's rejected bids from biomass plants for firm power this year, deciding on geothermal instead.

Age and time are also working against the Scotia plant, which is one of the oldest in the state. When the current contract expires, it will be 44 years old and buyers would have legitimate concerns about reliability. Despite the current price bump, the long term prices of wind, solar and storage are predicted to keep falling, while the price of biomass combustion is not. The lower the price HSC gets for its energy, the more motivation they will have to do something better with their mill waste.

Can Scotia make its plant cleaner? They could cut their particulate emissions by installing a bag house. That would be a significant improvement but would not decrease emissions of greenhouse gas emissions or other pollutants like NO_x, volatile organic chemicals and air toxics like benzene and formaldehyde.

Finally, please don't give up your authority to advise the board on biomass to a committee of experts, particularly one that is being convened after many years of inaction at the same time the CAC is considering an end to biomass contracts. Expert advice is valuable but experts often have a narrow view arising from the concentration which is the source of their expertise. In medicine, ophthalmologists don't know about pregnancy and psychiatrists don't know about sports medicine. You need a generalist to see the whole person and how their problems fit together. That's you. Experts also often have their own vested interests, while your job is to advocate for what's best for our community. You have a unique and irreplaceable role. Please don't give that power away.

Sincerely,

Wendy Ring MD, MPH

From: [Walter Paniak](#)
To: [Public Comment](#)
Subject: CAC item 4
Date: Tuesday, November 8, 2022 1:43:23 PM

Agenda Item #4 - Biomass Discussion

I oppose extending the Scotia Biomass contract. Wood burning is the most inefficient source of power. It is dirtier than coal.

We are in a climate crisis; releasing CO2 24/7 when the same money could be spent on clean sources of power is not sustainable.

The current Scotia contract will pay them about 9 million dollars over a 12 month period. Rate payers should not have to provide a profit center for a privately held billion dollar plus company.

The yearly cost of living increase of the current contract is highly problematic. The cost will keep escalating compared to solar and wind. The fuel is free for solar and wind. The maintenance cost for a complicated machine around 40 years old is just too much.

In the past HRC was complimented because they spend a million dollars on upgrades and repair. I would say that rate payers paid that amount.

I seem to remember from 2018 where Richard Engel said that the Biomass contract at that time were 2 million dollars over market rates. That money could have been better spent in other areas.

The RCEA board has a Fiduciary responsibility to make sure funds are handled wisely.

Is it wise to invest in 40 plus year old technology? Is HRC biomass your first choice for an investment for yourself or generations to follow?

The claim that biomass power is renewable in the short run is just wrong. Trees can't differentiate CO2 source as they sequester carbon.

The air pollution may be in regulatory compliance. The regulations limit the amount of damage to your health. Wind, solar and storage have no such problems.

The attachment discusses the EPA loopholes.

Thank you for your consideration.

Walt Paniak

Arcata

EPA Loopholes Allow Biomass to...

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Walt Paniak