Public Comment

RCEA Board of Directors
October 27, 2022
Regular Meeting
Agenda Item 5.1

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

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

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

Thank you for considering a ratepayer’s perspective.

Diane Ryerson
Arcata, CA 95521
October 24, 2022

Humboldt County Board of Supervisors:
  Rex Bohn, District 1
  Michelle Bushnell, District 2
  Mike Wilson, District 3
  Virginia Bass, District 4
  Steve Madrone, District 5

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

RE: Humboldt RePower Plan

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

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

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

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

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

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

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

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

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

**REFERENCES**

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

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

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

EPA Clean Air Scientific Advisory Committee, Review of the EPA’s Policy Assessment for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter 2021
Geronimo, C, Vergara, S, Chamberlin, C, Fingerman, K.

Massachusetts Medical Society, Testimony in Support of H.3333 and S.2197, An Act to Prevent Biomass Energy to Protect the Air We Breathe

Wei, Y. et al.  Short term exposure to fine particulate matter and hospital admission risks and costs in the Medicare population: time stratified, case crossover study 2019 BMJ (Clinical Research Edition) 367: 16258.  ISSN: 0959-8138

Respectfully Submitted,

Humboldt-Del Norte County Medical Society
Executive Board
10/26/22

RE: Board Agenda Item 5.1

Dear RCEA Board Members:

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

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

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

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

Biomass power, as described by Michael Furniss under contract with RCEA to present biomass options, produces “warming.” There is no way around it. During the most crucial next 10 years and the crucial next 30 year when biomass is burned it goes into the atmosphere creating warming. It may be renewable in the sense that trees growing to replace the ones cut will absorb CO2, but that is not going to happen in the time period by which we need to reach net
zero worldwide. The ten year contract RCEA already signed will produce upwards of 2 million metric tons of CO2e in that time. In addition, for the same amount of energy produced, biomass power is dirtier than coal! RCEA hasn’t even insisted on any equipment upgrades to reduce pollution the way that SB 1109 (Caballero) requires for all other biomass plants in the state.

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

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

Sincerely,

Daniel Chandler
350 Humboldt Steering Committee
350Humboldt@gmail.com

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1 The IPCC says we need to be at net zero by 2050. Since it is mill waste, there is no actual plan to replace the trees that are burned for power over the next 80 years. And in California in the era of forest fires, such a plan would not be credible in any cases.
I am opposed to an extension of the biomass contract to 2035. I want the least cost option. Wood combustion is dirtier than coal. It is the most inefficient. Th charade of being renewable in the short term is laughable. Page 26 and 27 of the staff report confirms that the staff recommendation is not the least cost option. I think that the board has a fiduciary responsibility to rate payers. We should end the biomass contract as soon as possible. Saving should be applied to reserves, micro grids for first responders, health care centers and remote locations. I don’t believe that HRC power would go away. They can handle market forces. Electrons are electrons they can sell power to someone else. The last draft contract that I saw shows $62 per MW. My opinion is that they signed the contract because no one else would pay more. It’s very complicated to understand what and when exactly the market price is. The attachment is an example of the LMP (locational marginal price) for our region. I used the next day LMP for the HRC generation plant. (CAISO a is still using the plant identification from many years ago.) That LMP is around 49 dollars. Let the market decide or let the rate payers know that RCEA is supplementing the income of a privately held billion dollars plus company.

Walt Paniak
Arcata

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Walt Paniak
**PACLUMB_7_N002**

**TYPE:** GEN  **REGION:** ISO

**Locational Marginal Price (LMP):** $48.51

**PRICE BREAKDOWN**

- **Congestion:** $21.23
- **Energy:** $27.74
- **Losses:** $0.46