



STAFF REPORT – CITY COUNCIL MEETING

February 07, 2024

TO: Honorable Mayor and City Council Members

FROM: Emily Sinkhorn, Director of Environmental Services

PREPARER: Brigitte Price, Administrative Specialist

DATE: January 30, 2024

TITLE: **Review Recommendations from the Energy and Forest Management Committees Pertaining to Humboldt County Coalition for Clean Energy's Request to Support Efforts to End Local Biomass Contracts, and Take Action as Appropriate.**

RECOMMENDATION:

It is recommended that the Council review the recommendations from the Energy and Forest Management Committees regarding the Humboldt Coalition for Clean Energy's request to support efforts (through a resolution or other means) to end the local biomass contracts and take action as appropriate.

INTRODUCTION:

On August 16, 2023, the City Council received a presentation from Dr. Wendy Ring representing Humboldt Coalition for Clean Energy and requesting the Council consider a resolution to call on Redwood Coast Energy Authority (RCEA) to terminate its biomass contract with Humboldt Sawmill Company as soon as clean energy is available to replace it and to permanently remove biomass incineration from its portfolio.

The Council received the presentation and asked that existing City Committees with a purview related to biomass provide recommendations to the Council on the proposed resolution. The Energy Committee agendaized this topic at its September 18, 2023, meeting, and due to scheduling conflicts the Forest Management Committee took up this topic on January 11, 2024. Each Committee received a presentation from Dr. Ring and representatives from RCEA before discussing potential recommendations. Both the Energy Committee and Forest Management Committee recommended not supporting adoption of the proposed resolution.

BACKGROUND:

RCEA is a joint powers authority of which the City of Arcata is a member agency. RCEA provides power to Humboldt County residents and businesses through the Community Choice Energy (CCE) program which was designed to offer lower rates on electricity and to keep local control over energy resource portfolios. Through the CCE, RCEA works to buy and build out an electricity supply portfolio while PG&E delivers the energy, maintains the energy delivery infrastructure and bills customers.

RCEA's default electricity service is REpower, which provides increasing renewable energy content each year with a goal of being 100% renewable by 2030. The REpower energy program portfolio includes energy generated via the Humboldt Sawmill Company (HSC) biomass power plant. The REpower+ energy portfolio includes power from 100% renewable sources including solar, wind and eligible hydroelectric power and does not include power generated from biomass. Many energy sources from the REpower+ portfolio are currently from out of the local area. Through 2023, the City had opted up to the REpower+ 100% renewable energy portfolio for over 97% of the City's 100+ facility electricity accounts.

During the formation of the CCE program, there was a lot of community interest in ensuring both renewable energy sources and local energy sources made up a large percentage of RCEA's energy portfolio. In 2016 three biomass plants were operating in Humboldt County when RCEA issued a biomass power solicitation. By 2018 25% of RCEA's total energy portfolio came from biomass contracts with both HSC (located in Scotia) and DG Fairhaven (located on the Samoa Peninsula). In 2020 DG Fairhaven ceased operations, and RCEA hired a consultant to evaluate alternative biomass feedstock uses. In 2021 a new state law, SB 350, required electricity suppliers to source at least 65% of State-required renewal energy from long-term (10 years or more) contracts. The RCEA board approved the extension of its contract with HSC to a ten-year term, noting the key regulatory importance of a long-term contract and also required exploration of alternative biomass uses. In 2023, RCEA established a Biomass Technical Advisory Group, which will continue to meet through 2024 to provide recommendations to the RCEA board on current and future biomass energy sources.

During Dr. Ring's August 16, 2023 presentation to the Council regarding the biomass resolution, Dr. Ring noted an imperative need to act quickly and locally to reduce impacts from climate change. The Humboldt Coalition for Clean Energy notes that woody biomass incineration emits more carbon emissions per unit of fuel combusted than other fuel sources including from fossil fuels. As an older biomass plant, the HSC, operating since 1989, operates less efficiently and has been cited for air pollution violations by the North Coast Unified Air Quality Management District (NCUAQMD) which may be hazardous to public health particularly for Scotia residents. The Humboldt Coalition for Clean Energy notes that making meaningful and urgent steps towards reducing carbon emissions could contribute to avoiding or delaying key global tipping points.

DISCUSSION:

During the August 16, 2023 Council Meeting, the City Council asked for City Committee recommendations pertaining to the proposed biomass resolution. The City's Energy Committee makes recommendations and provides information to the City Council on topics related to energy efficiency, fossil fuel consumption, energy conservation, green energy conversion and developing sustainable energy supplies. The City's Forest Management Committee advises the City Council on topics related to forestry practices on City-owned forest land.

In the realm of greenhouse gas (GHG) emission accounting, biogenic GHG emissions from biomass energy production are technically attributed to the forestry sector, as the wood residuals are treated as a waste product from timber production, while the start-up fuels (e.g. diesel) get attributed to the energy sector. Due to this standard for GHG emission accounting, biomass is often considered a low-carbon fuel. Biomass is also often considered a "bridge solution" to utilize local resources for power generation until more renewable sources become available.

The combustion of biomass – whether at a power plant where energy is produced for the grid, as a heat source in residential wood stoves or during wildfires – releases GHGs as well as particulate matter and other air pollution. As research shows, catastrophic wildfires are occurring more frequently due to the long history of wildfire suppression and can have an outsized impact on air

quality and particulate matter compared to the regulated combustion of biomass for power generation.

Biomass power generation is currently a component of a comprehensive strategy for management of wood waste residuals on the North Coast. Ensuring options for utilization and disposal of wood waste from lumber production and forest restoration activities are essential to ensure a robust forest products economy in Humboldt County, the largest timber producer in the State. Forest thinning and fuels management are a proven strategy to shift forests to be more resilient when fire is introduced by storms or human activity. Some forestry sector experts note that any outlet for utilization and management of wood waste residuals resulting from forest restoration activities is essential to ensure a robust local forest restoration economy and to work towards more fire-resilient ecosystems.

While the City typically manages slash (e.g. branches and bark) from forest thinning and harvest operations on site within the Arcata Community Forest, wood waste is generated during the processing of logs into saleable lumber and becomes the responsibility of the lumber mill. As there are a limited number of lumber mills in the region, the City frequently has contracts with Humboldt Redwood Company, which through its affiliated company Humboldt Sawmill Company (HSC), operates the biomass power plant in Scotia. Approximately 31% of energy generated at the biomass plant powers the lumber mill while RCEA procures the rest of the energy for the local energy grid. Humboldt Redwood Company buys timber from landownerships and forest restoration activities across the North Coast and wood waste residuals from those operations are utilized at the biomass plant.

There has been interest across the County to encourage NCUAQMD to provide more detailed reports and exposure data related to potential air pollution from the HSC biomass plant, particularly following recent plant upgrades. RCEA has begun deploying air quality monitoring devices in Scotia to further understand localized background pollutant levels.

The Energy Committee passed a motion to not support the biomass resolution as currently written. Committee members did not disagree with points raised in the proposed resolution but also did not want to put RCEA at risk of SB 350 compliance regulations (i.e. terminating a long-term energy procurement contract with financial and reputational consequences at the State level). Additionally, the Committee noted a process has already been initiated by RCEA to evaluate the current contract and future potential biomass contracts. The Biomass Technical Advisory Group continues to meet and will provide RCEA staff with further expertise and recommendations on this topic.

The Forest Management Committee passed a motion to oppose the resolution citing opposition to removing or disincentivizing any forestry/wood products infrastructure on the North Coast which is vital to the local forest restoration economy.

Both Committees offer the Council additional technical expertise on this topic if desired. Staff concur with the Energy and Forest Management Committee's recommendations on this topic. Representatives from the Energy and Forest Management Committees are available for questions or to provide further clarity on the Committees' recommendations. Additionally, the City's representative on the RCEA Board of Directors, Councilmember Schaefer, will remain actively involved in RCEA's decision-making around energy procurement contracts.

POLICY IMPLICATIONS:

The City Council has a goal for Environmental Leadership which includes to provide leadership in environmental stewardship and climate change preparedness as well as to increase local energy independence. City Council policy objectives include to promote efficient use of energy and use of renewable energy in buildings, facilities and infrastructure in Arcata as well to address expanding land management needs including updating the Forest Management Plan and Non-industrial Timber

Management Plan. Related City Council priority projects include activities to advance climate adaptation. Potential Council action should consider these broad goals.

BUDGET/FISCAL IMPLICATIONS:

No fiscal impact on the City budget. If RCEA were to no longer meet the long-term energy procurement contracts requirements under SB 350, RCEA would be subject to financial penalties which could impact electricity customers.

ATTACHMENTS:

A. Arcata Resolution to End Biomass Contracts (PDF)