

AES Biomass Conversion Monthly Update  
November 2021

The Company is in receipt of the letter from the Commission dated November 3, 2021 (“November 3 Letter”) in Docket No. 2021-0024 regarding the Commission’s response to an October 18, 2021 letter from Chairs of the Senate Committees on Ways and Means and Energy, Economic Development, and Tourism requesting active engagement from AES US (“AES”) in the evaluation process to determine the feasibility of converting the AES coal plant to biomass, and to AES’ October 27, 2021 response letter regarding the same. In its November 3 Letter, the Commission provided guidance to Hawaiian Electric and AES should they elect to negotiate a power purchase agreement related to the potential conversion of the AES coal plant to biomass. The November 3 Letter also instructed Hawaiian Electric to provide status updates regarding the potential biomass conversion in the monthly updates filed in this docket, Docket No. 2021-0024. The following is the first monthly update as requested by the Commission.

The November 3 Letter stated that “[a]ny agreement submitted by Hawaiian Electric and AES must reflect terms that are just, reasonable, and in the public interest, which will be reviewed pursuant to the Commission’s statutory obligations under the applicable provisions of Chapter 269, Hawaii Revised Statutes.” The Commission then detailed some of the important factors it considers when evaluating power purchase agreements between the Company and independent power producers. In the case of a potential biomass conversion these include, (1) allowing appropriate time for Commission review; (2) demonstrating that the terms of any agreement meet the applicable conditions in Section II.A.3 of the Framework for Competitive Bidding;<sup>1</sup> (3) showing that the costs are just and reasonable; (4) providing clarity around the contemplated feedstock sourcing for any potential project, (5) completing a comprehensive review of the impacts to system reliability and economic grid operations, (6) completing a full life-cycle greenhouse gas emissions analysis, (7) giving consideration of risk of delays in achieving commercial operations, (8) including a quantification of total bill impacts, and (9) ensuring transparent stakeholder feedback and extensive community engagement.

After careful review of the November 3 Letter and the Commission’s guidance, Hawaiian Electric proposes an alternative approach in lieu of initiating negotiations with AES for conversion of its plant to biomass. In this instance a bilateral negotiation may not result in the best options for the Company’s customers and may make it difficult to show that the costs are just and reasonable outside of a competitive process. Furthermore, the technical and operational needs of the O’ahu electric system have evolved over the years and entering bilateral negotiations without considering how the AES plant stacks up against these needs is inadvisable.

The Company instead proposes to conduct a streamlined renewable firm generation RFP for O’ahu to address future grid needs. An RFP will help to ensure that the best solution or solutions are chosen for the island by allowing for competition and the consideration of multiple projects in making such determination. Firm generation must be able to deliver power when needed for as long as needed (e.g. a high capacity factor/availability). This means that the resource must not be energy limited or weather dependent, and must be a generating resource (i.e., not storage). Similar to what the PUC directed the Company to do for the Hawaii Island Stage 3 RFP, the Company would develop the O’ahu Firm

---

<sup>1</sup> Framework for Competitive Bidding, adopted by the Commission in Decision and Order No. 23121, issued December 8, 2006, in Docket No. 03-0372 (“Competitive Bidding Framework” or “Framework”).

Renewable RFP by leveraging information from the Integrated Grid Planning (“IGP”) process, but would not wait for the IGP process to be completed. Instead, the Company would use IGP information to develop a set of grid needs for the island of O’ahu for firm renewable, generation.

The RFP would have several objectives, including:

1. Allowing only firm renewable generation technologies to compete in a quick RFP allowing existing facilities to repower or fuel switch to compete with new facilities.
2. Increasing competition and therefore potentially lowering prices for customers.
3. Increasing the diversity of renewable energy sources for the island.
4. Improving the reliability and resilience of the O’ahu generation system.
5. Acquiring firm renewable capacity to potentially retire or deactivate additional fossil fuel generation.
6. Adding mechanical inertia and short-circuit current with new synchronous generation to the system. These functions are needed to provide greater stability of the electric system and ensure reliability and resilience when fossil-fuel generators are taken offline.
7. Increasing the ability to add variable generation such as wind and solar in the future, if more flexible firm renewable generation is procured through this RFP.

The following sets forth the proposed concept which the Company intends to refine through analysis and stakeholder and community outreach. The Company proposes to streamline the RFP process by limiting the RFP to firm, renewable generation. Consistent with the definition of renewable energy in HRS 269-91, this would include projects fueled by biogas, biomass, biofuels, and hydrogen produced from renewable energy sources, as well as waste-to-energy and geothermal projects. The RFP would not be open to variable renewables such as wind, solar, hydro, and ocean waves and current. This will allow a simplified evaluation process and allow for a more straightforward comparison of projects with similar attributes as opposed to projects that provide differing services and levels of such services. Variable renewable resources would be procured through the IGP process beginning in the second half of 2022.

The Company agrees with the Commission that stakeholder and community engagement is imperative to the success of any project. Therefore, Hawaiian Electric also intends to incorporate stakeholder and community engagement through the IGP stakeholder groups in development of the RFP and also through community meetings. The Company is still developing the specifics for this proposed RFP, including the term, but to allow both conversions/repowering of existing generating units as well as new construction projects to compete, the Company is proposing that projects could have in service dates as early as 2023/2024 (depending on length of contract negotiations and Commission approval) and potentially into 2031, to be determined based on the final assessment.

In order to streamline the RFP, the Company proposes to file the first draft of the firm renewable RFP for Commission and stakeholder input and feedback by February 28, 2022. A three-month approval and engagement process would follow, with the RFP being issued at the beginning of June 2022, with final selection of projects and the start of contract negotiations occurring in late 2022/early 2023.

The Company looks forward to engaging further with the Commission and others in embarking on this ambitious, yet necessary, process to ensure the best selection of firm, renewable generation project(s) for the Island of O’ahu.