September 22, 2021

Mr. Ian Hirokawa
State of Hawai‘i, Department of Land and Natural Resources
Via email: ian.c.hirokawa@hawaii.gov

Subject: Hawai‘i State Energy Office Comments on the Draft Environmental Assessment for the West Kaua‘i Energy Project

Dear Mr. Hirokawa:

The Hawai‘i State Energy Office (HSEO) offers the following comments on the Draft Environmental Assessment (DEA) for the proposed West Kaua‘i Energy Project (Project) on the west side of Kaua‘i in the Waimea ahupua‘a and Kona moku on lands owned by the Department of Hawaiian Home Lands (DHHL), Department of Land and Natural Resources (DNLR), and the Agribusiness Development Corporation (ADC), including lands within the Conservation District. The Project would generate electricity during the day from its solar photovoltaic (PV) array and battery energy storage system (BESS) in the Mānā Plain that would be provided to the grid and used to pump water from the lower Mānā Reservoir to the elevated Pu‘u ‘Ōpae Reservoir. The water stored in the Pu‘u ‘Ōpae Reservoir and even higher Pu‘u Lua Reservoir would be released to generate hydropower primarily during peak energy needs and when PV cannot generate electricity, including evenings, early mornings, and during cloudy or rainy weather. The Project would provide a dispatchable source of renewable energy that would strengthen grid reliability as Kaua‘i transitions away from the use of fossil fuels for electricity generation. It would also include the installation of new water and other infrastructure for long-term agricultural and homestead use.

The Project would provide 18-24% of Kaua‘i’s electricity needs with renewable energy instead of fossil fuels. The Project developer, AES West Kaua‘i Energy Project, LLC (AES) would sell power from the Project to the Kaua‘i Island Utility Cooperative (KIUC) at a set price, subject to approval from the Hawai‘i Public Utilities Commission (PUC), expected to save KIUC members between $157 million and $172 million (net present value using a 5% discount rate) over the 25-year term of the PV and BESS facility.¹

HSEO’s comments are guided by its statutory purpose under Hawai‘i Revised Statutes (HRS) Section 196-71 and its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, and ultimately carbon negative economy. As an island community currently dependent on imported fossil fuels for over 60% of its electrical power, ¹

Hawai’i is particularly vulnerable to fuel and energy supply disruptions, unpredictable fuel cost fluctuations, unintended fuel releases impacting both marine and terrestrial environments, and the many impacts associated with climate change. However, Hawai’i’s clean energy goals should be attained in ways that do not compromise the health, safety, and well-being of Hawai’i’s residents, natural resources, culture, and environment.

HSEO believes this Project offers long-term benefits to residents of Kaua’i in the form of: stabilized electricity costs resulting from reduced reliance on fuel which exhibits high price volatility; increased renewable energy integration; electrical grid reliability; and greenhouse gas (GHG) emission reduction. For these reasons, HSEO believes this Project is beneficial for Kaua’i and the State and supports the Project. HSEO acknowledges the need for the Project to receive regulatory approvals in a timely manner to ensure it can qualify for available federal tax credits that would lower costs and enable the Project’s financial viability. HSEO also appreciates the many environmental factors that must be considered in the environmental review process, but limits its comments to areas specific to its statutory kuleana. HSEO’s suggestions for the EA are underlined within. In general, the information in the EA and the most current information in the PUC docket for the Project (No. 2020-0218) should be consistent; where there is a discrepancy the EA should clearly explain why the discrepancy exists and which information is more accurate.

Description of Energy Components

The Project can be divided into three (3) major energy generation and storage components which differ in terms of the energy produced, physical footprint, and potential impacts.

Solar PV Field with Battery Storage and Substation: A 35-megawatt (MW) capacity PV array would be located on the Mānā Plain southwest of the Mānā Reservoir. The PV array would be equipped with single-axis tracking and paired with a 70 megawatt-hour (MWh) lithium-ion BESS occupying approximately 350 acres of agricultural land owned by ADC. The BESS is intended to dispatch power to the pumped storage pumps and/or provide energy to the grid as needed.

Section 2.2.3, Proposed New Construction, describes the Solar Field and Substation(s) that make up the Project, but warrants more detail. HSEO recommends Section 2.2.3 provide further detail on the number of PV panels to be used for the Project, which will help to inform potential impacts and future decommissioning. HSEO also recommends Section 2.2.3 describe the size and placement of the BESS, including the number of BESS containers and the estimated footprint of the BESS. A map should show the placement of the BESS and the PV panels in the site layout. HSEO also suggests adding another map after Figure 4 to show a more detailed view of the proposed PV array, BESS, and substation location at a larger scale.

The PV array would be located on land with soils rated as Class B under the Land Study Bureau (LSB) rating system; however, the DEA states these lands were selected based on recommendations made through collaborative discussions with local farmers because they are less suited for agricultural production due to water retention issues and heavy clay content, and these areas have only been in
limited use in recent years. Section 4.2.2, HRS Chapter 205, State Land Use Law, discusses the requirements for solar energy facilities on B-rated lands and how the overall Project would benefit local agricultural operations. To show the Project’s location relative to agriculture soils, HSEO recommends the EA include large scale maps of Project areas relative to LSB designations. HSEO also recommends the EA provide more discussion on how the Project will comply with HRS 205 by meeting “certain conditions relating to agricultural activities and decommissioning.”

Adjacent to the PV array would be a 69 kilovolt (kV) rated / 12.47 kV substation (WKEP Substation), new overhead circuit, and conductor work. Page 27 of the DEA states, “The Proposed Action does not involve any new overhead lines.” However, this is inconsistent with the PPA Application which states that the Project will require the construction of “an approximately 1.5 mile new transmission line (“New Overhead Circuit”) and [will involve] (b) reconductor approximately 1.0 mile of existing transmission line and install approximately 2.65 miles of single mode fiber optic line along KIUC’s existing transmission system (“Conductor Work”), so that all electrical output from the West Kauai Energy Project can be delivered to KIUC’s system and in a dispatchable manner through the existing 57.1 kilovolt (“kV”) transmission line.” While the conductor work is expected entirely on existing lines and utility poles, the location of the new transmission line is not discussed within the DEA. HSEO recommends the EA discuss the transmission line and the construction requirements for this component of the Project, including the potential direct, indirect, and cumulative impacts. HSEO recommends including this component in Section 2.2, Proposed Action, and Section 2.2.3, Proposed New Construction. The Project details discussed in Section 2.2.3, Proposed New Construction, should be consistent with those in the PPA Application.

Mānā Reservoir hydroelectric powerhouse (Mānā Powerhouse) 20 MW and 35 MW pumphouse: The powerhouse would operate in pumping mode during solar generation periods, pumping water from Mānā Reservoir located on lands owned by ADC to Pu’u ‘Ōpae Reservoir located on lands owned by DHHL. During non-solar and evening peak load periods, the powerhouse would operate in turbine mode utilizing the stored water from Pu’u ‘Ōpae Reservoir to generate and deliver power to KIUC grid. Output is anticipated to range from 65,600 to 75,100 MWh with the lower output anticipated during a dry year and the higher output anticipated during a wet year. Generation output is expected to decrease over the life of the proposed action due to gradually increasing irrigation demands.

Pu’u ‘Ōpae Reservoir hydroelectric powerhouse with 4 MW production capacity: The flows available for power generation at the 4 MW Pu’u ‘Ōpae Powerhouse would consist of water diverted, stored, and

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2 DEA, Page 27.
3 Land Study Bureau’s Detailed Agricultural land productivity ratings for Kaua‘i, O‘ahu, Maui, Moloka‘i, Lāna‘i, and Hawai‘i. Land Study Bureau’s Detailed Land Classification, 1965-1972. Aerial Photos hand drafted onto paper overlays of the U.S.G.S., 1:24,000 topographic and orthophoto quads. Ratings were developed for both over-all productivity, and for specific crops. This layer represents only the over-all productivity ratings. https://geoportal.hawaii.gov/datasets/HIStateGIS::lsb/explore?location=20.563150%2C-157.260700%2C7.80
4 DEA, Page 65.
5 PPA Application, Page 2.
6 PPA Application, Page 2.
7 DEA, Page 36.
subsequently released from the Pu’u Lua Reservoir located on lands owned by DLNR. There is no pumped storage between these two reservoirs, and the new upper penstock will only conduct water flow in the downstream direction.\(^8\)

The DEA states the Project would be one of the most efficient and modern generation facilities in Hawai’i with its hydropower capable of an overall efficiency of 85% due to the 3,000 elevation drop from Pu’u Moe Divide to Mānā Reservoir, making this the highest head hydroelectric facility in Hawai’i.\(^9\) Under the proposed conditions, the reservoirs will be able to store a total 1,500 MWh of recoverable energy or bulk energy storage with 300 MWh of daily storage.\(^10\) This provides a renewable solution during cloudy and rainy periods, common on Kaua’i, when the battery storage alternative can be depleted and solar generation is not readily available. HSEO supports the longer duration storage capability of pumped hydropower when compared to traditional BESS. The DEA state’s the Project’s 1,500 MWh of storage can be achieved at significantly lower costs than any battery-based alternative.\(^11\) Further, HSEO notes the black start\(^12\) and microgrid capability of the Project is a potential benefit for Kaua’i’s energy resilience and emergency response.

HSEO recommends the EA discuss in further detail the minimum precipitation requirements needed to ensure Project viability for the Project lifetime. Predictions from International Panel on Climate Change (IPCC) models and others suggest Pacific regions are more likely to anticipate prolonged droughts because of climate change, with increased frequency of heavy and extreme rainfall events because of a warmer atmosphere.\(^13,14\) HSEO also recommends the EA include a discussion on how various drought conditions could impact energy supply. For example, what will happen to energy supply if there is a prolonged drought and the leeward side of Kaua’i experiences prolonged periods of the year without rain. While this is partially addressed on page 143 of the DEA, which addresses economic loss and impacts to the natural stream flows, the discussion does not discuss the potential impact on energy supply. Section 2.2.1, Proposed Diversion and Intake Operations, discusses the expected flows anticipated during wet, average, and dry years based on flow modeling and nine years of stream flow data; however, HSEO recommends the EA discuss what operational changes will occur during dry years or periods of drought to ensure energy generation will remain dependable.\(^15\)

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8 DEA, Page 34.
9 DEA, Page 128.
10 DEA, Page 40.
11 DEA, Page 128.
12 Black start is the process of restoring an electric power station or a part of an electric grid to operation without relying on the external electric power transmission network to recover from a total or partial shutdown.
15 DEA, Pages 20-34.
Further, HSEO recommends the EA discuss the minimum amount of water in the reservoir required for the Project’s energy generating and storage operations. For example, HSEO recommends the EA include discussion on what will happen to energy generation if water levels drop below the required threshold for Project viability (if applicable) and KIUC’s plan of action to make up for the potential lost energy storage if insufficient water is in the reservoirs. HSEO suggests incorporating these concerns further in the analysis of Section 3.12, Climate Change and Sea Level Rise (SLR). To improve readability, HSEO recommends separating the impacts from climate change (e.g., SLR) from the analysis on contributions to climate change (e.g., GHG emissions) in Section 3.12.

Public Utilities Commission Approval of the Power Purchase Agreement

As discussed in Appendix H, Economic Impact Assessment for the Pu‘u ‘Opae Project, the Project requires a PPA approved by the PUC to sell electricity to KIUC and its members. The PPA Application between KIUC and Project developer AES West Kaua‘i Energy Project, LLC was filed on December 31, 2020, in PUC Docket 2020-0218. This docket is currently open and the PPA has not yet been approved by the PUC. There are multiple terms associated with the useful life of each system component: 25-years for the solar energy rate; 40-years for the pumped storage hydro monthly capacity charge; and, 50-years for the hydropower-only monthly capacity charge.\(^{16}\)

HSEO recommends discussion of the PPA be added in Chapter 1, Project Overview, including reference the PUC docket in which the PPA is being evaluated. HSEO also recommends the PPA be added to the lists of permits and approvals required for the Project and the EA.

Energy and Economic Benefit Summary and Impacts to KIUC Members

The Project construction and rehabilitation work is estimated to cost $230 million.\(^ {17}\) As discussed in Appendix H, Economic Impact Assessment for the Pu‘u ‘Opae Project, savings from the Project to KIUC members would come from the fossil fuel expenditures offset by the Project minus the expenditures for purchasing electricity from the Project and maintaining it over its useful lifetime.\(^ {18}\) Estimating the Project’s overall savings is challenging due to the unknown cost of fossil fuels in the future and the historic volatility of the global fossil fuel market; one of the significant benefits of a long-term set price contract. The PPA Application states savings to KIUC members are expected to be consistently delivered over the 25-year initial PPA term of the PV/BESS facility and KIUC estimates total member savings between $157 million and $172 million (net present value using a 5% discount rate) over the initial 25-year term.\(^ {19}\)

Section 3.8 of the DEA, Socioeconomics, discusses the potential socioeconomic impacts from the Project; however, the section does not clearly state the estimated cost savings to KIUC members over the possible 63-year Project lifetime. HSEO recommends the body of the EA (Project Purpose and/or Section 3.8) state the cost benefits of the Project in terms of the estimated annual and/or monthly cost

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16 PPA Application, Page 19.
17 DEA, Page 127.
19 PPA Application, Page 39.
savings to KIUC members for all energy components of the Project. HSEO also recommends the body of the EA summarize and include more of the energy savings analysis found in the PPA docket and Appendix H.

Per the PPA, KIUC conservatively expects to purchase 110 gigawatt-hours (110,000 MWh) annually from the Project, resulting in an average annual cost of 15-16 cents per kilowatt-hour (kWh). Two components roll up into that overall cost: (1) the purchase of solar at 7.1 cents per kWh, which is at least 30% lower than any of KIUC’s existing solar facilities; and, (2) an annual capacity charge of $8.9 million that will be paid for maintaining firm renewable capacity, including the upkeep of the various elements of the system, including reservoirs, ditches, roads, and diversion structures. HSEO recommends Section 3.8 of the EA include the unit cost of electricity (price per kilowatt-hour) from the Project to be consistent with the PUC docket.

HSEO appreciates the Project’s significant beneficial economic impacts stated in the DEA; specifically, create a total of 27,320 person-years of employment over 78 years and $788.3 million of earnings in Kaua‘i throughout the life of the Project. HSEO also appreciates the other economic benefits associated with an improved water delivery system in the area, including housing and agriculture.

HSEO notes that the community expressed concerns about impacts on curtailment of their residential PV systems. HSEO recommends this be addressed in Section 2, Proposed Action and Alternatives, and Section 3.2, Socioeconomics, of the EA including an explanation of why residential systems would or would not be curtailed because of the Project. If the Project would enable the installation of more residential PV systems, this long-term benefit should be identified in the EA.

Contributions to Kaua‘i and Statewide Renewable Portfolio Standards

In 2020, KIUC achieved 67% renewable electricity generation on Kaua‘i: a significant achievement for an island with limited developable land and no wind energy. However, this means the remaining energy is generated by fossil fuels, which are primarily needed for nighttime electricity when existing solar panels are not actively generating electricity. While Kaua‘i regularly achieves 100% renewable energy during the day, the development of more renewable energy projects is needed to ensure future goal fulfillment and the anticipated increase in electricity demand resulting from increased use of electric vehicles, among other factors.

Attainment of 70% RPS or more by the year 2030, as this Project would enable, would be a significant achievement for Kaua‘i and put KIUC well ahead of the state’s RPS mandate of 40% by 2030. Section

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20 PPA Application, Page 12.
21 DEA, Appendix J, West Kaua‘i Energy Project Public Outreach Report, Appendix C – Virtual Community Meeting Summary, Question & Answer #49.
1.6.2 of the DEA, Need for the Project, states the Project would produce up to 25% of the total electrical energy requirements for Kaua‘i’s grid, thereby allowing KIUC to exceed its 2030 goal of 70% RPS by as much as five (5) years. 14 However, Section 3.8.1 of the DEA, Affected Environment – Socioeconomics, states the Project would amount to 20% of KIUC’s annual generation. 25 The PPA Application states the Project would contribute approximately 22.72% to KIUC’s RPS. 26 Further, KIUC’s August 19, 2021, filing with the PUC references statements by the Hawai‘i Consumer Advocate that the Project is expected to contribute approximately 23.6% to KIUC’s RPS in 2024 and 18.1% in 2048 based on KIUC’s most recent load forecast, which is expected to result in KIUC achieving a 79% RPS by 2030. 27 HSEO understands these estimates are fairly close and depend on forecasted data. HSEO recommends the EA be consistent with the PUC filings regarding the contributions the Project is forecasted to make towards Kaua‘i island’s RPS. HSEO also recommends the EA state the contributions the Project is forecasted to make towards Hawai‘i’s statewide RPS.

Greenhouse Gas Benefits and Hawai‘i Zero Emissions Clean Economy Target

Act 15 in 2018 established Hawai‘i zero emissions clean economy target, codified in HRS Section 225P-5, which set a statewide target to sequester more atmospheric carbon and GHG than emitted within the state as quickly as practicable, but no later than 2045. 28 HSEO recommends the EA include this relevant state goal and discuss how the Project will support its achievement.

Act 234 enacted in 2007 established the foundation for Hawai‘i’s GHG Program, which aimed to reduce emissions in the state to 1990 levels by 2020, excluding aviation emissions. 29 The Act was codified in HRS Chapter 342B, and in 2014 HAR §11-60.1 was amended to adopt the GHG Program. 30 The most recent GHG emission report indicated that Hawai‘i is on target to meet GHG reduction goals; however, goal attainment is dependent on continued reduction of emissions from the energy sector, which includes both the transportation and stationary combustion sources. 31 Further, the 2017 GHG emission report, published in April 2021, indicated that the energy sector accounted for 86% of total Hawai‘i emissions, estimated at 17.7 million metric tons (MMT) ± 0.21 standard deviation CO₂equivalent (CO₂e), with 8.98 MMT coming from stationary combustion. 32 HSEO recommends EA incorporate the role the Project will play in Hawai‘i’s GHG Inventory in Section 3.12, Climate Change and Sea Level Rise, and

24 DEA, Page 11.
25 DEA, Page 127.
26 PPA Application, Page 18.
30 Hawai‘i Administrative Rules Chapter 11-60.1 Air Pollution Control: https://health.hawaii.gov/cab/files/2014/07/HAR_11-60_1-typed.pdf
Section, 4.2 State of Hawai‘i Planning Documents. As stated above, HSEO recommends Section 3.12 include a dedicated subsection for discussion on GHG emissions.

The Project ultimately means a reduction in GHG emissions as it would replace existing emissions sources in the form of electricity currently produced by fossil fuels. According to the PPA Application, the Project will result in an estimated 8.5 million fewer gallons of fuel consumption annually. This in turn will reduce GHG emissions by 80,000 metric tons of CO₂e annually. Over the 25-year term of the PV/BESS, the Project is estimated to offset an estimated 212 million gallons of fuel, which is estimated to be equivalent to 2.5 million metric tons of CO₂e.

HSEO strongly supports the GHG emission reduction benefits of the Project. HSEO recommends that the GHG life cycle analysis, completed as a part of the PPA Application, be included in the discussion in Section 3.12.2 (see Exhibit 5 in the PPA Application). Furthermore, this analysis should be cited when discussing the GHG emissions. The DEA uses different values throughout the document for reduced GHG emissions and fuel reductions. The HSEO recommends the EA be consistent with numbers for GHG emission reductions throughout the document and the values align with the values presented in the PUC docket.

Sea Level Rise and Flooding

The PV solar array is located in Flood Hazard Zone A, which is considered by the Federal Emergency Management Agency to be a high-risk area and has a “1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage.” Further, because the PV array is located in SLR exposure area 3.2 ft, in addition to a flood plain, the PV array may “be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, SLR exposure area, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal waters” if there are not adequate protection and mitigation measures in place to prevent damage to the PV panels, BESS, and substations. The DEA states that SLR will not impact the area because the “Mānā Plain is protected by an extensive series of channels and pumps that were installed by the Kekaha Sugar Company in 1923 to drain the low terrain to provide land for agriculture. These channels and pumps are managed as part of the long-term agricultural operations on the Mānā Plain.”

To ensure that there is no potential for permanent damage to the PV panels, HSEO recommends further discussion on the power source for the pumps, including what will happen in the event of a major power outage. For example, the EA should discuss what mechanisms are in place to ensure the pumps will drain the area effectively and whether there are backup generators powering the pumps. Further, the

34 DFA, Pages 134, 157-159, 163, and 188.
35 DFA, Pages 69, 159, and 188.
37 HAR 11-200.1.
38 DEA, Page 140.
EA should discuss the mechanisms and design criteria that exist to ensure the PV array is not permanently damaged in the event of a major flood in the Mānā Plain, which could result from both storm surge and/or heavy rain. The DEA states that the PV Solar Array would be designed to be compatible with its siting in Flood Hazard Zone A. However, HSEO recommends further discussing the design elements that ensure that Project components (including the BESS, substation, wiring, and panels) will not see severe damage if the area is flooded.

Decommissioning

Act 92 signed by Governor Ige on June 28, 2021, directed the Hawai‘i Natural Energy Institute, in consultation with the Hawai‘i Department of Health (DOH), to conduct a comprehensive study to determine best practices for disposal, recycling, or secondary use of clean energy products in the State of Hawai‘i. The study seeks to address, among other items: the amount of aging photovoltaic and solar water heater panels in the state that will need to be disposed of or recycled; other types of clean energy materials expected to be discarded in the state in significant quantities, including glass, frames, wiring, inverters, and batteries; and the type and chemical composition of those clean energy materials. In introducing this legislation, the Hawai‘i State Legislature recognized the potential harm to the environment if used clean energy products are not recycled or disposed of properly, as well as the potential market value of recovered materials and elements.

Section 3.14, Irretrievable and Irreversible Commitment of Resources, briefly discusses what would happen at the end of the Project life but does not discuss the plans to remove the PV panels and BESS and restore the PV array site to pre-Project condition. Recognizing the DEA states the Project would be on less desirable agricultural land, restoration of agricultural land has been a concern and condition of the Hawai‘i Land Use Commission for recent PV projects seeking to use Agricultural land with B and C soils. HSEO recommends the EA discuss the disposal or recycling plans for the solar panels, batteries, and other project components when they reach the end of their life. HSEO recommends listing the items (e.g., number of PV panels, amount of battery containers) that may require recycling and/or special disposal at the end of their life.

Given the multiple terms associated with the useful life of each system component – 25-years for the solar energy, 40-years for the pumped storage hydro, and 50-years for the hydropower-only – HSEO recommends the EA discuss what will happen at the end of each system component’s useful life.

HSEO understands a decommissioning plan will be most valuable when the Project is closer to the end of life; however, KIUC or AES should have funds set aside to ensure a decommissioning plan can be both completed and implemented. HSEO recommends the EA describe the funding that will be available to ensure the batteries and PV panels are properly recycled and/or disposed of at the end of their useful life.

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39 DEA, Page 142.
Furthermore, in June of 2021, DOH added solar panels as a category of universal waste under HAR Chapter 11-273.6.2. This rule establishes streamlined standards for handling hazardous waste solar panels under the universal waste program while maintaining the protection of human health and the environment. If any components of the panels are disposed of, rather than recycled, for any reason (e.g., damage, panel degradation, defects, etc.) during operations, the Project should treat panels as universal waste. HSEO recommends the EA discuss this in the solid and hazardous waste management section of the EA, which should be added to Chapter 3.41

Community Engagement

The Consumer Advocate’s (CA) July 2, 2021, Statement of Position for the Project states, “As community engagement should be ongoing, the CA recommends that KIUC and AES provide and/or support venues for community feedback and also compile past and ongoing outreach efforts, to the extent possible, into a single “living” document to reflect the concerns that have been raised, responses provided or changes made, and any ongoing dialogue between AES/KIUC and community members.”42 Appendix J, West Kaua’i Energy Project Public Outreach Report, includes the many comments and questions KIUC has received from community members and other stakeholders on this Project. HSEO concurs with the CA’s recommendation regarding the single “living” document and encourages this continued outreach effort. In addition to the feedback captured in the DEA, comments received by KIUC in other outreach venues should be categorized and responses readily available to all KIUC members and members of the public.

Additional Suggestions to Improve Readability and Document Comprehension

HSEO recommends the EA define a nameplate production capacity expressed in MW in the Project description. To increase community understanding, the homes-powered equivalent could also be included.

HSEO identified several technical terms and jargon, relating to energy, water, hydropower, and Project design that are undefined throughout the document. To increase community and stakeholder understanding, HSEO recommends the EA include a ‘Definitions’ section and/or define terms when they are first used. Examples include penstock, block dispatch, person-years of employment, peak load, firm generation, units of measurement (e.g., capacity vs. energy), substation, etc. It may be appropriate to have definitions at the beginning of each section, e.g., Section 1.3, Land Ownership.

To help readers better understand the Project, HSEO recommends showing figures at a more detailed larger scale throughout the EA. While showing the small scale extent representing the entire Project area is useful, more detailed views are needed to increase understanding of impacts for each Project component.

41 Hawai’i Administrative Rules Chapter 11-200.1 Environmental Impact Statement Rules (HAR 11-200.1).
42 Division of Consumer Advocacy’s Motion to Seal the Division of Consumer Advocacy’s Statement of Position (CA Statement of Position), Docket No. 2020-0218, Page 41, July 2, 2021:
In conclusion, HSEO supports the Project for the many benefits it offers to Kaua’i and the State of Hawai’i. To ensure questions are addressed, HSEO suggests further analysis or discussion for the subjects underlined above.

If there are any questions, please contact Monique Schafer at monique.m.schafer@hawaii.gov or at 808-349-3052.

Sincerely,

Scott J. Glenn
Chief Energy Officer

cc: Jennifer Scheffel, SSFM International
    Dawn Huff, KIUC
The foregoing document was electronically filed with the State of Hawaii Public Utilities Commission's Document Management System (DMS).