

October 10, 2022

VIA EMAIL

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Re: Comments of Friends of Māhā'ulepu and Kia'i Wai o Wai'ale'ale on the Second Draft Environmental Assessment and Anticipated Finding of No Significant Impact for the Proposed West Kaua'i Energy Project, Waimea District, Kaua'i, noticed September 8, 2022

I serve as President of the Board of Directors of Friends of Māhā'ulepū, a non-profit corporation and Kia'i Wai o Wai'ale'ale, an unincorporated association. Please find our comments on the above-referenced Second Draft Environmental Assessment (2d DEA) below. Please do not approve KIUC's second DEA, it is premature, it fails to include an adequate environmental assessment of the source waters without which their proposed projects could not operate. Their 2d DEA appears to be seeking project approval as leverage to obtain a 65-year water lease without first establishing the impact to the environment. They are putting the cart before the horse and their 2d DEA must be denied.

1. Long-term commitment to pumped storage/ hydropower has significant impacts on natural streams, the historic landscape, and cultural resources.

a. *Project prolongs development of natural streams and forestalls restoration*

Applicants Kaua'i Island Utility Cooperative (KIUC) and AES West Kaua'i Energy Project, LLC (AES) (collectively, "Applicants") rely heavily on a mediation agreement that arose from a water wasting complaint filed by Pō'ai Wai Ola and West Kaua'i Watershed Alliance. The whole point of that initial complaint was that there was no reason for Waimea stream to continue to be diverted while many of the former-plantation lands lay fallow.

Upwards of 20 million gallons per day (mgd) were being diverted from the Waimea watershed, much more than what was needed for Kekaha Agricultural Association (KAA) and the Agribusiness Development Corporation (ADC) to operate. Much of the water was being diverted for existing hydropower plants instead of being allowed to sustain natural streams. This includes an older hydroplant near the Waimea tunnel, then entering the Kekaha ditch, as well as another existing hydroplant on the Mānā plain. Now, Applicants are proposing an even larger hydropower project to monopolize much of Waimea watershed water.

Applicants' project would prolong the historical and existing interbasin transfer of water into ditches and pumps and defers, for at least 65 years, restoring the, much-longer historied, landscape of wetland agriculture and well-watered Waimea valley and delta. 2d DEA at 1-5. Project lands include "B" grade agricultural lands that will be used for industrial solar panels instead of growing food. The bounty of streams will be, again, channelized from their natural courses. Generational knowledge of the Mānā plain, Kekaha, and Waimea areas as a natural wetland will not be sustained through the continued deformation of the landscape. The potential future full restoration of West Kaua'i to its pre-diversion state will be forestalled in order to utilize the lands and waters for this project for

another lifetime. These are significant impacts.

*b. No disclosure of foreseeable impacts of failure to meet interim instream flow standards.*

The 2d DEA assumes all operations will achieve compliance with Phases I and II of the interim instream flow standards (IIFSs). However, mediation parties including KIUC have not been complying with the relatively less restrictive Phase I IIFSs. In their recent September 20, 2022 report on implementation of the mediation agreement, Pō'ai Wai Ola and West Kaua'i Watershed Alliance attorneys cited 173 days of IIFS violations for the lower Waimea river between October 1, 2020 and July 31, 2022. This means IIFSs were not being met 61% of the time during low-flow conditions.<sup>1</sup>

Phase I IIFSs are not being met most of the time. Thus, it is reasonably foreseeable that IIFSs will continue not to be met under the more complicated controls imposed by the project. The 2d DEA fails to consider potential significant impacts to instream uses under scenarios including delayed repairs, persistent drought, and whatever other reasons KIUC, Kekaha Agricultural Association, and other diverters have been putting forth to excuse their noncompliance with the existing IIFSs.

Foreseeable impacts on instream habitat are not disclosed. The Stream Habitat Assessment notes it was "difficult to apply" modeling to the current condition scenario. 2d DEA V. 4, Appx. G at 79-80. Further, such assessment would only review stream habitat and not other impacts of failure to implement IIFSs (e.g. sand incursion and sand bar buildup at the Waimea River mouth, increasing silt island formation in the Waimea River from lack of adequate flushing, etc.).

Stream depletion, including that in violation of the IIFSs, is foreseeable consequent to the project's complicated integration of off-stream uses and ongoing record of violations. For instance, during non-solar hours, the project involves: (1) a 24.68 mgd release from the Pu'u Moe Divide into the Kōke'e ditch (with 0.5 mgd going to DHHL pastoral lots); (2) then a 24.18 mgd release to a new 4 MW Pu'u 'Ōpae hydroelectric plant (with 5.63 mgd going to satisfy DHHL's reservation); (3) then 18.55 mgd would enter a lower penstock going towards the new 20 MW Mānā Powerhouse, with the balance spilling into Mānā plain and the KAA irrigation system. 2d DEA at 2-4.

One impact to especially Waimea river consequent to the failure to implement sufficient IIFSs is the build up of a sand bar near the rivermouth. Chuck Blay, a geoscientist and sedimentologist who has been studying sand movement on Kauai's Westside has opined that diversion of stream flow reduces the number of "flushing" events that would otherwise reduce incidents of sandbar build up.<sup>2</sup> With the implementation of more regular streamflow at Kahoma stream, in Lahaina, Maui, under IIFSs in recent years, build-up of sediment and other blockages at the stream mouth no longer occurs, reducing the need for clearing with machinery. The 2d DEA does not assess significant impacts of reducing available water for flushing makai areas, including at the mouth of the Waimea river.

*c. A Long-term water lease constitutes a significant impact requiring an environmental impact statement.*

The claim that the project, which will deform an entire watershed, taking up hundreds of acres, and requiring millions of dollars to construct with many millions of gallons of water lost daily, not returned to the stream of origin or any stream will have *no* significant impacts defies common sense and insults the reader's intelligence. Applicants should be required to prepare a full environmental impact statement (EIS) in any case, but even more so because an EIS is required by State law.

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<sup>1</sup> See CWRM, Staff Submittal Item C-2, at 35 (Sep. 20, 2022) available at: [files.hawaii.gov/dlnr/cwrmsubmittal/2022/sb20220920C2.pdf](https://files.hawaii.gov/dlnr/cwrmsubmittal/2022/sb20220920C2.pdf).

<sup>2</sup> Jessica Else, "Sediment sentiment," *The Garden Isle* (Sep. 9, 2019) available at: [www.thegardenisland.com/2019/09/09/hawaii-news/sediment-sentiment/](http://www.thegardenisland.com/2019/09/09/hawaii-news/sediment-sentiment/)

The project proposes to seek a long-term 65 year lease from the Board of Land and Natural Resources. 2d DEA at 2-11. Hawai'i Revised Statutes (HRS) §171-58 provides in pertinent part:

“(c) Disposition of water rights may be made by lease at public auction as provided in this chapter or by permit for temporary use on a month-to-month basis under those conditions which will best serve the interests of the State and subject to a maximum term of one year and other restrictions under the law; provided that any disposition by lease shall be subject to disapproval by the legislature by two-thirds vote of either the senate or the house of representatives or by majority vote of both in any regular or special session next following the date of disposition; provided further that after a certain land or water use has been authorized by the board subsequent to public hearings and conservation district use application and environmental impact statement approvals, water used in nonpolluting ways, for nonconsumptive purposes because it is returned to the same stream or other body of water from which it was drawn, essentially not affecting the volume and quality of water or biota in the stream or other body of water, may also be leased by the board with the prior approval of the governor and the prior authorization of the legislature by concurrent resolution.”

*Id.* (emphasis added). The statute anticipates the preparation of an EIS even for leases of water for nonconsumptive uses. The open-loop pumped storage project is clearly consumptive. An EIS is all the more necessary for a long term lease for this even higher-impact project.

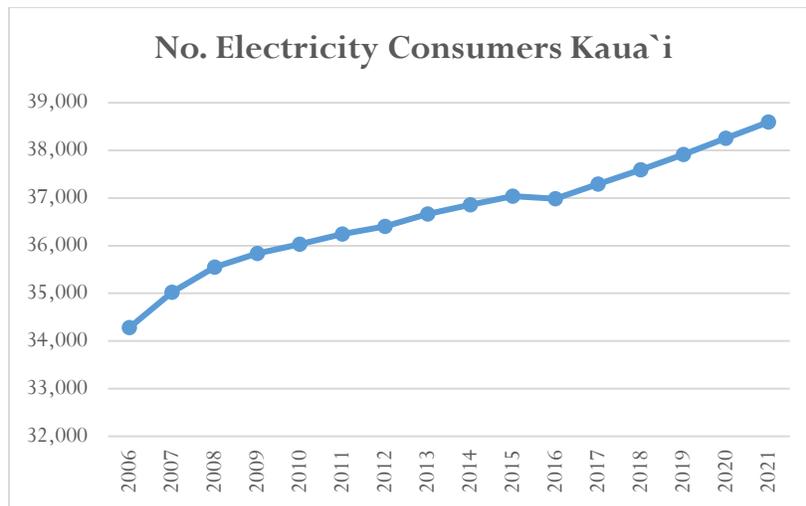
2. The Need for Project energy contribution is insufficiently described, thereby curtailing discussion and assessment of reasonable alternatives.

a. *No discussion of other renewable energy initiatives or integration of project into KIUC system.*

In their pre-consultation comments, Earthjustice requested the DEA: “explain the project's impacts on KIUC's island-wide power system, i.e., how the project would integrate into KIUC's grid planning and operations, including but not limited to how the project's contributions would enable the displacement, replacement, or retirement of other, less environmentally preferred resource options.” 2d DEA V.5 at PDF 654. Applicants affirmed they would do so but the 2d DEA again fails to include specifics of the project benefits. *Compare id.* at 656 and V.1 at 2-2. Disclosing the project will meet 23.6 % of KIUC's renewable portfolio standards is not meaningful without including other renewable energy projects *or* efforts to curtail energy *use* and energy-utilizing development.

b. *Without a ceiling to actual energy needs, project and alternatives cannot be meaningfully assessed*

The number of electricity consumers on Kaua'i has steadily risen since 2006. Without maintaining a ceiling on energy users, gains for each of KIUC's energy projects, including both the pumped storage and Pu'u 'Ōpae hydroelectric plant, may be “eaten away” by further build out. Reviewing their DEA does not reveal how much of the island power need is currently met by large solar farms that have been added in the last 2 years. Without an island wide ceiling or total required daily energy need the project need is speculative.



Source: Dep't of Business, Econ. Development, & Tourism, "Economic Data Warehouse" (accessed Sep. 26, 2022) available at: [dbedt.hawaii.gov/economic/datawarehouse/](http://dbedt.hawaii.gov/economic/datawarehouse/)

The "reliability" of KIUC power grid is generally beneficial, but also licenses *reliance* on regular, affordable electricity that may forestall behavioral, development planning, and other changes that would not rely on a centralized power grid. These include various kinds of conservation, rooftop solar, reductions in conventional housing subdivisions, and more careful consideration of larger energy-utilizing projects, such as surf wave pools previously planned for the island. These impacts are discussed further *infra* Part 3.

The issue is not only whether Applicants subscribe to voluntary conservation initiatives, but whether a ceiling, cap, or limitation on the number of consumers and amounts of energy used would also be a means of achieving the 24 MW/ 18% energy objectives described both in the 2d DEA and KIUC's other reports.<sup>3</sup>

*c. Significant impacts of building two new hydroplants outweigh their need.*

The necessity for both the pumped storage and Pu'u 'Ōpae hydroelectric plant in this project is unclear. Rather the pumped-storage portion of the project appears to be an attempt to "greenwash" the ongoing impacts of hydroplants in this area. As discussed *supra* Part 1.a and in the 2d DEA, the succession of hydroplants to plantation agriculture has been a primary culprit in the continued diversion of streams in the Waimea watershed area.

The pump-storage addition was intended to minimize the environmental drain on the watershed and the Waimea River and for that reason received community support. Most of the West side community and the island was unaware of the additional new hydropower plant planned for Pu'u 'Ōpae. Many of our members do not find adequate justification for such an enormous diversion of water which ultimately will cast the watershed as much or more than what was taken during the plantation era. At present, the Mānā plain is pumped out to sea because of a high-water table and the propensity for flooding. Directing more water from the Pu'u 'Ōpae to this location will only serve to increase the permanent loss to our freshwater resources.

3. Projects likely to adversely impact development of resilience to climate change

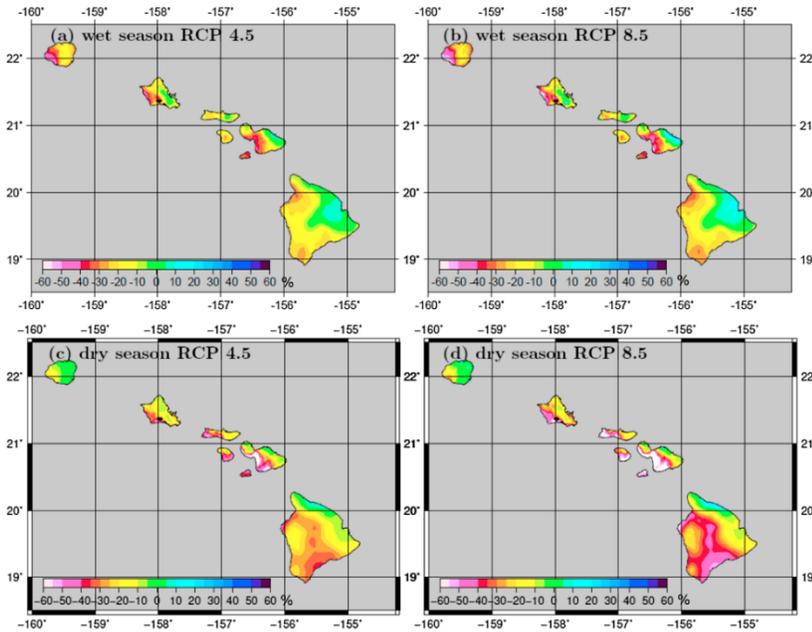
The 2d DEA failed to consider reasonably foreseeable significant impacts of the project in light of climate change including drying trends that may reduce streamflow availability and normalizing reliance on centralized

<sup>3</sup> Potential KIUC renewable energy projects in service in 2025, inclusive of the project, are predicted to provide 166.2 MW and 85% of total energy demand. KIUC *Currents* magazine, at 25 (Fall 2022) available at: [kiuc.coop/sites/default/files/documents/currents/2022/Currents\\_Fall22\\_web.pdf](http://kiuc.coop/sites/default/files/documents/currents/2022/Currents_Fall22_web.pdf). KIUC describes current renewable energy in service in 2022 as 142.2 MW and 67% of total energy demand, with only the Project pending.

power grids.

a. *No disclosure of reduced rainfall on Project operations.*

Under both dynamical and statistical downscaling models, West Kaua‘i will become drier during the 65 year lifespan of the project.



Source: Alison Timm, O., T. W. Giambelluca, and H. F. Diaz, “Statistical downscaling of rainfall changes in Hawai‘i based on the CMIP5 global model projections,” 120 *J. Geophys. Res. Atmos.* 92, 107 (2015).

Figure 13. Interpolated maps of the statistically downscaled rainfall scenarios RCP4.5 and RCP8.5 for the period 2041–2071 (31 year time mean). Shown is the ensemble median result from 32 members from CMIP5. Units are given in percent.

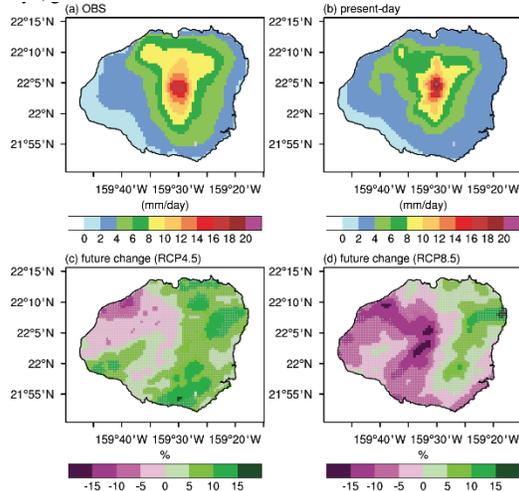


Figure 8. The observed (a) and simulated (b) 20-yr mean rainfall for Kauai. The projected future changes are shown in (c) for RCP4.5 and (d) for RCP8.5. The grey dots indicate the future changes are not statistically significant at the 95% confidence level.

Source: Yuqing Wang, “Very Fine Resolution Dynamical Downscaling of Past and Future Climates for Assessment of Climate Change Impacts on the Islands of Oahu and Kauai,” Int’l Pacific Research Center, University of Hawai‘i (2015) available at: [pi-casc.soest.hawaii.edu/research/research-projects/dynamical-downscaling-climate-oahu-kauai/](http://pi-casc.soest.hawaii.edu/research/research-projects/dynamical-downscaling-climate-oahu-kauai/)

Though the 2d DEA refers to “changing rainfall patterns,” it does not discuss how these may impact the viability, operations, and especially impacts of the project. Will reduced streamflows consequent to climate change engender even greater non-compliance with the IIFSs in favor of the project operations?

b. *Increasing power and its reliability historically increases reliance and expansion of energy-consumption.*

Normalizing or increasing reliance on centralized power grids undermines resilience to climate change.

That is, the reliability of KIUC's energy services engenders an expectation of the availability of that energy as a matter of course and dissuades the development of non-energy utilizing alternatives, reduction of energy usage, and associated behavioral and policy changes.

Development of renewable energy projects, including the one at issue here, may mask or reduce the impact of climate change crises without materially changing natural processes that will anyway require increasingly drastic measures. The mere substitution of renewable energy projects for fossil fuel burning is akin to the "unintended consequence" of beach nourishment projects that, while mitigating impacts of sea level rise, also permit high-end development in places vulnerable to sea level rise.<sup>4</sup> The project will produce energy without consequences for most energy users and without entailing mandatory reductions in use or providing alternatives to energy use. That is, while Applicants profess a need for extensive land and water resources to meet a renewable energy mandate, there is no mandate to limit some of the most energy-intensive industries and operations on Kaua'i, including tourism and luxury housing outgrowth. The project also ignores the massive consumption of water and drastic changes proposed for the ditch system, draining the watershed allowing for and encouraging evasive species and a total upending of stream flora and fauna. There is no explanation/quantification of non-green energy that will be retired. Rather, the KIUC/AES proposed projects constitute an enormous land and water take that threatens the very sustainability of our most precious resource, water at a time of clear climate change.

The 2d DEA does not address the potential, damaging positive-feedback loop of increased power generation and increased usage foreseeably exacerbated by the project. One means of doing so would be to incorporate an environmental justice analysis into the assessment of economic impacts of burdening West Kaua'i communities with the impacts of the large-scale project and alienating the benefits towards other areas of the island. *See infra* Part 4. The impacts of renewable energy projects, including the instant one, should be more equitably distributed to prevent insulating the benefitting communities and thereby engendering a perception that further development can be endlessly supposed by more and more energy projects.

4. Significant impacts of the project on social and economic welfare undisclosed.

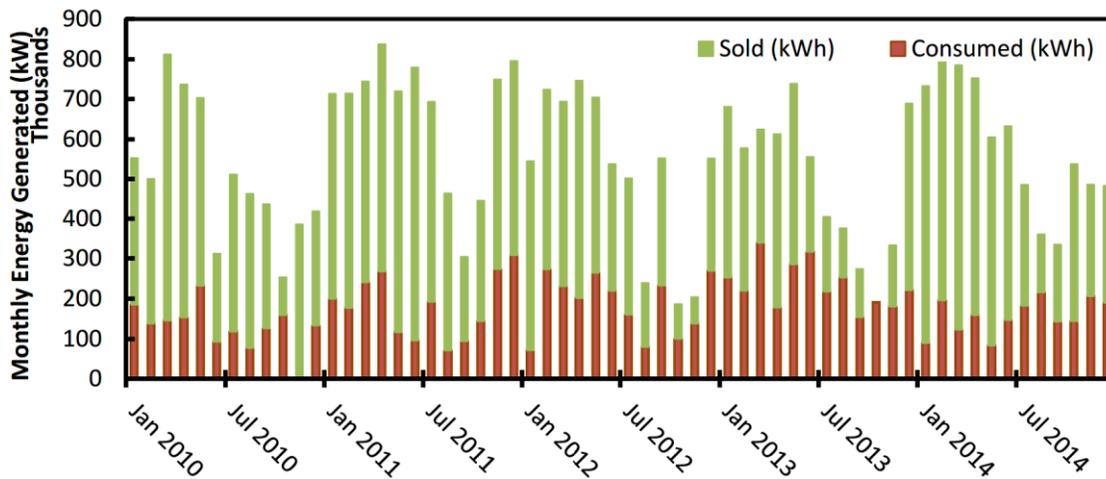
a. *Project displacement of impacts to West Kaua'i community is an environmental justice issue.*

The project will burden West Kaua'i communities with a land- and water-intensive project, while the surplus of the energy generation will be incorporated into the KIUC power grid for use elsewhere. Even without the project, most of the energy produced in the area is committed back to the KIUC grid instead of being used in West Kaua'i as shown in the below chart excerpted from the 2d DEA.

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<sup>4</sup> Armstrong et. al, "Indications of a positive feedback between coastal development and beach nourishment," 4 *Earth's Future* 626, 633 (2016) available at: <https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2016EF000425> (citations omitted).

**Figure 13-9.** Bar chart of total monthly energy produced and consumed by Kekaha Agriculture Association and their lessees and the total energy sold to Kauai Island Utility Cooperative. (Source: Kekaha Agriculture Association, 2015)



Source: 2d DEA V.2, Appx. B at 143 (IFSAR at 110).

West Kaua‘i residents responding to Applicants’ call for comments pointed out the absence of the specific benefits from KIUC existing projects on the local communities that host them. *See* 2d DEA V.5 at 858 (Malia Chun, Hawaiian homesteader: questioning “how any benefits KIUC’s existing solar farm on Anahola Hawaiian Homelands is directly and positively impacting DHHL beneficiaries. Where is the revenue going? Who and how is it directly benefiting homesteaders and our community?). The project exacerbates environmental injustice through the unequal distribution of the benefits and consequences of the project, with the latter burdening the lower-income communities of West Kaua‘i.

Similarly, Earthjustice’s comment requested that Applicants’ describe “all community benefits KIUC plans to provide in connection with the development of the project” with specific reference to “DHHL, homesteaders, and other stakeholder organizations” and “the broader West Side community where the project will be sited.” 2d DEA V.5 at 654. Applicant stated this information would be included in the DEA. However, despite that assurance, the 2d DEA includes no such particularized benefits for the most-burdened community. *Id.* V.1 at 2-1.

Urban planner Nanea Lo commented that Applicants’ DEA “does not provide facts to support ‘saving the Kaua‘i rate payers money by shifting those expenditures so that more of the dollars are retained locally.’” 2d DEA V.5 at 856. As currently proposed, the project does not even recognize the unequal burdens imposed on Kaua‘i’s most vulnerable communities. In fact, KIUC in their Board meeting, recently discussed their plan to increase their rates in a planned ratepayer hearing before the PUC.

The issue means more than providing funding for West Kaua‘i communities to compensate them for unequal economic burdens. As discussed *supra* Part 3.b, rendering the burdens and costs of renewable energy projects more visible and immediate to the benefitting communities elsewhere on Kaua‘i is one means of mitigating the false sense that energy can be endlessly manufactured to support unsustainable growth and energy consumption. One means of accomplishing this would be to develop other pumped storage projects in areas where the energy is most used, but not generated, such as Lihu‘e and Princeville. *See infra* Part 6.

- b. *Financial benefits of the project will not remain in Kaua‘i and information disclosed appears inconsistent with Public Utilities Commission filings.*

Under Applicants’ proposal, significant amounts of Kaua’i land and water are proposed to be recruited into a power purchase agreement (PPA) that promises large financial awards to a Colorado-based corporation (AES). This is a significant impact to social and economic welfare because it deprives communities of Kaua’i and Hawai’i of an opportunity to utilize these place-based resources for community-based renewable energy initiatives. Instead, it increases the economic hold of foreign entities on Hawai’i. The 2d DEA fails to take a hard look at the basic financial structure imposed by the project.

It is also evident that AES may be obtaining greater economic benefits than that approved by the Public Utilities Commission (PUC). In approving the PPA for this project, the PUC found “the contract price for energy is \$71.60 per MWh, or \$81.00 per MWh in the event the State of Hawaii Refundable Tax Credit is not available” (or \$0.07-\$0.08/kWh) and “[w]ith or without the benefit of the State of Hawaii Refundable Tax Credit, the PPA at issue here provides a more favorable rate than either AES Lawai (at \$110.80 per MWh) or AES Kekaha (at \$108.50 per MWh)” (or \$0.11-\$0.10/kWh).<sup>5</sup> However, in this 2d DEA, Applicants’ “Economic Impact Assessment” states: “[u]nder the PPA, KIUC will purchase electricity from the developer at a levelized cost of \$0.14 per kWh.” 2d DEA V.5 Appx. N at 1. Elsewhere, the 2d DEA states: “[u]nder the PPA, KIUC conservatively expects to receive an annual total of 110 GWh (110,000 MWh), resulting in an average annual cost of \$156.44 (\$0.16 per kWh) with the State of Hawaii Refundable Tax Credit.” *Id.* V.1 at 5-140. These rates of payment to AES in the 2d DEA appear to be double what KIUC put before the PUC in obtaining approval for this project. So, how much is it that KIUC has actually contracted to pay AES and why are they reporting different numbers to the PUC from those of their 2d DEA??

5. Project water allocations significantly impact food production and agriculture.

The project is utilizing agricultural lands and reallocating water resources to industrial chemical development operations, none of which contribute to food security and sovereignty.

**Table 13-6.** Acreage and crop by year on the Mana Plain for the main leasees of the Kekaha Agriculture Association. (Source: Kekaha Agriculture Association, 2015) \*average provided applicable to all years

year	Pioneer Hi-Bred (seed corn)	Syngenta (seed corn)	Syngenta (soy)	BASF* (seed corn, canola)	BASF* (rice)	BASF* (cover crop)
2010	405.10	514.95	1.84	106	6	300
2011	246.37	562.82	18.62	106	6	300
2012	343.77	605.15	21.35	106	6	300
2013		543.81	27.89	106	6	300
2014		420.28	24.81	106	6	300

2d DEA v.2 at 138 (Appx. B, IFSAR).

The project facilitates offstream diversion of water to “ADC agricultural fields on the Mānā Plain” which fields are currently used by non-food producing operations including the above. *Id.* V.1 at 3-2. The solar portion of the project is proposed for valuable agricultural “B” lands. 2d DEA V.5 at PDF665.

6. Additional feasible alternatives should be considered

The 2d DEA does not consider a plethora of reasonable and feasible alternatives that *could* lack significant impacts, while addressing the coming climate crisis and Kaua’i island energy needs.

- a. *Develop several closed-loop pumped storage projects in areas across Kaua’i, including areas where most of*

<sup>5</sup> PUC, Decision and Order No. 38095, at 78 (Dec. 1, 2021) available at: [dms.puc.hawaii.gov/dms/DocumentViewer?pid=A1001001A21L01B63015G04672](https://dms.puc.hawaii.gov/dms/DocumentViewer?pid=A1001001A21L01B63015G04672) (approving the PPA between KIUC and AES).

*the energy need is generated.*

A relatively recent U.S. Department of Energy study compared the environmental impacts of open-loop and closed-loop pumped storage hydropower projects.<sup>6</sup> The report concluded closed-loop projects generally have fewer environmental impacts as compared to open-loop projects: (1) are located “off-stream,” potentially minimizing aquatic and terrestrial impacts, and; (2) often have greater siting flexibility than open-loop projects. Also, the impacts to aquatic resources are typically lower for closed-loop projects than for open-loop, as closed-loop projects are not continuously connected to any naturally-flowing body of water.

Applicants could develop several closed-loop pumped storage projects in areas across Kaua‘i, including areas where most of the energy need is generated. These include areas where there are existing reservoirs and large expanses of developed properties, such as golf courses that would anyway require energy and could integrate the closed-loop storage projects into water features.

*b. An ocean reservoir closed-loop project would not remove freshwater from natural sources.*

From 1999-2016, the Yanbaru seawater pumped storage power station operated in Okinawa, producing electricity until the *lack* of need for energy in Okinawa, associated with reduction in military forces, made station operation unprofitable. There are also many closed-loop pumped hydropower projects operating throughout Japan that could be exemplary models for Kaua‘i because of their minimally consumptive use. Seawater is plentiful around Kaua‘i and could be a better substrate for storing energy as it would not compete with other needs for freshwater.

*c. Remove the Pu‘u ‘Ōpae hydroplant from the proposal.*

For reasons described *supra* Part 1, the project should remove at least one hydropower plant from its proposal. There is no clear need for this hydropower plant to be sited in this community. Installation of more infrastructure along the diversions and ditches, including the Pu‘u ‘Ōpae hydroplant, increases the risk that the water will not be returned to the stream, further competing with the IIFSs need.

*d. Implement mandatory energy usage reductions*

KIUC could develop mandatory energy cutbacks in order to phase out improper, wasteful, and unnecessary energy uses. These differ from elective efforts and public education campaigns in that these would initiate more effective behavioral and economic changes in KIUC users. Current practices have only facilitated further, energy consuming actions and developments. Addressing levels of consumption, instead of production, is a feasible alternative to at least part of the project.

## 7. Failure to Adequately Address Economic Impacts for the Proposed Project

In their 2d DEA there is a glaring failure by KIUC to consider the financial impact of these projects on the ratepayers of Kaua‘i. As the following table from their independent financial audit details, KIUC, not-for-profit COOP and its ratepayers have a current dept load (already incurred) of \$255,000,000. How much additional costs

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<sup>6</sup> Pacific Northwest National Laboratory, “A Comparison of the Environmental Effects of Open-Loop and Closed-Loop Pumped Storage Hydropower”, supported by U.S. Dep’t of Energy Water Power Technologies Office, Rep. No. PNNL-29157 (Apr. 2020) *available at*: [www.energy.gov/sites/prod/files/2020/04/f73/comparison-of-environmental-effects-open-loop-closed-loop-psh-1.pdf](http://www.energy.gov/sites/prod/files/2020/04/f73/comparison-of-environmental-effects-open-loop-closed-loop-psh-1.pdf)

for the development of these projects is it reasonable to require commercial and residential accounts to bear, particularly where the need for them is not clearly and quantifiably put forth. Kaua‘i is a small island and it is outrageous to feel that the 30 plus thousand commercial and residential accounts will ever be capable of retiring the existing debt load let alone a significant increase thereof for the proposed projects.

“Principal maturities of long-term debt for the next five years and thereafter are as follows:

2022	\$ 14,422,637
2023	13,356,576
2024	10,778,918
2025	11,061,139
2026	11,364,586
Thereafter	<u>194,627,082</u>
	<b><u>\$ 255,610,938</u></b> ”

KIUC Independent Audited Financial Statement 2021

[https://kiuc.coop/sites/default/files/documents/audited\\_financials/2021-AuditedFinancialStatements.pdf](https://kiuc.coop/sites/default/files/documents/audited_financials/2021-AuditedFinancialStatements.pdf)

When making a determination on KIUC’s 2d DEA/FONSI, shouldn’t KIUC have to explain how these projects are of no significant impact on an environment with significant limitation in solid waste (landfill on borrowed time from the EPA), five aging wastewater treatment, overcrowded roads and a limited water supply currently restricting development, all of which were not analyzed when addressing the need for these proposed power producing projects.

This Comment is filed on behalf of our 1,000 plus members.

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