Kaawanui Solar Project

SPECIAL PERMIT/USE PERMIT/ CLASS IV PERMIT APPLICATION

MAKAWELI, ISLAND OF KAUAʻI, HAWAIʻI

aes Hawaiʻi

JANUARY 2026

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Abbreviations

AAQS	Ambient Air Quality Standards
AC	alternating current
AES Hawai‘i Substation	Project substation
AGL	above ground level
AIS	Archaeological Inventory Study
ALISH	Agricultural Lands of Importance to the State of Hawai‘i
AST	aboveground storage tank
ASYA	Aquifer System Area
Applicant	Kaawanui Solar, LLC
BESS	battery energy storage system
BFE	Base Flood Elevation
BMP	best management practice
CIA	Cultural Impact Assessment
CSH	Cultural Surveys Hawai‘i, Inc.
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Area
CZO	Comprehensive Zoning Ordinance
dBA	decibels
DC	direct current
DLNR	Department of Land and Natural Resources
DOFAW	Department of Fish and Wildlife
DOH	Hawai‘i Department of Health
ERCP	Emergency Response and Communication Plan
ESA	Environmental Site Assessment
ETC	EnviroServices & Training Center, LLC
FTE	full-time equivalent
GCP	Grid Connection Point
GHG	greenhouse gas
G&R	Gay & Robinson, Inc.
HAR	Hawai‘i Administrative Rules
HDOT	Hawai‘i Department of Transportation

HRS	Hawai‘i Revised Statutes
KDP	Kaua‘i Department of Planning
KFD	Kaua‘i Fire Department
KIUC	Kaua‘i Island Utility Cooperative
LOS	level of service
LRFI	literature review and field inspection
LSB	Land Study Bureau
LUC	Land Use Commission
MASON	Mason Architects, Inc.
mgd	million gallons per day
MW	megawatt
MWh	megawatt-hour
µg/m^3	micrograms per cubic meter
NAAQS	National Ambient Air Quality Standards
NWI	National Wetlands Inventory
O&M	operations and maintenance
PCB	polychlorinated biphenyls
PCS	Power Conversion System
PPA	Power Purchase Agreement
ppm	parts per million
PV	photovoltaic
REC	recognized environmental conditions
RFP	Robinson Family Partners
RLS	Reconnaissance Level Survey
RPW	relatively permanent water
SHPD	State Historic Preservation Division, DLNR
SIHP	State Inventory of Historic Properties
SLR	sea level rise
Stantec	Stantec Consulting Services Inc.
State	State of Hawai‘i
TCP	Traditional Cultural Property
TIAR	Traffic Impact Analysis Report
TMK	Tax Map Key
TNW	traditionally navigable waters

U.S.	United States
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WKCP	West Kauai Community Plan
WOTUS	Waters of the U.S.
WUDP	Water Use and Development Plan

Section 1

Introduction

Section 1

Introduction

1.1 Applicant

The Applicant, Kaawanui Solar, LLC (AES), a Delaware limited liability company, is proposing the construction and operation of a ground-mounted solar photovoltaic ("PV") facility paired with a battery energy storage system ("BESS"), as well as an electrical substation, utility switchyard and other ancillary support facilities (the "Project"). The Applicant has authorized Max W. J. Graham, Jr., Michael J. Belles, and Ian K. Jung of Belles Graham LLP, and Benjamin M. Matsubara and Curtis T. Tabata of Matsubara, Kotake & Tabata, Attorneys at Law, to file this Application pursuant to the Authorization of Applicant attached hereto as ***Exhibit A1*** in support of a request for a State Special Permit ("Special Permit"), County Use Permit ("Use Permit") and County District IV Zoning Permit ("Class IV Permit"). See ***Section 5*** for details regarding the grounds for requiring each permit.

The Applicant is an affiliate of AES Clean Energy Development Company, LLC, which is a subsidiary of The AES Corporation. The AES Corporation has a long history of developing and operating solar-powered electric facilities, battery energy storage systems, and other renewable and conventional power generation facilities in Hawai'i and globally. Since 1992, AES has provided low-cost energy to the islands, partnering with Hawaiian Electric and the Kaua'i Island Utility Cooperative (KIUC) to deliver the energy and infrastructure solutions Hawai'i needs. AES clean energy projects in Hawai'i can collectively produce more than 400 MW. In 2019, AES and KIUC made history together by bringing online the Lāwa'i Solar + Storage Project, the world's largest operational solar and energy storage system at the time. In 2021, in collaboration with the U.S. Navy, AES also brought Kekaha Solar + Storage online (also known as the AES PMRF Project). The AES Corporation is a Fortune 500 global energy company with over 37,000 MW of generating capacity, seven utility companies, and 19,000 employees in 17 countries.

1.2 Project

AES proposes to sell the electric power generated by the Project to Kauai Island Utility Cooperative ("KIUC"). AES will develop and construct a utility switchyard ("Kaawanui Substation"), on approximately 2-acres adjacent to the solar Project site. Ownership of the Kaawanui Substation will be transferred to KIUC upon commercial operational of the solar project. The Kaawanui Substation will not only inject the energy produced by the Project into KIUC's island-wide electric grid, but also transmit and distribute power to the west side of Kaua'i. The Project will produce approximately 43 megawatts ("MW") alternating current ("AC")/ 52 MW direct current ("DC") of electrical power. The Applicant and KIUC have entered into a twenty-five (25) year Power Purchase Agreement ("PPA") under which KIUC will purchase electrical power generated by the Project from the Applicant. The system will feed the electrical power into a 172 MWh BESS, which will discharge the stored power into the KIUC grid during non-daylight, peak hours, as needed.

1.3 Purpose and Need

Hawai‘i is the most petroleum-dependent state in the United States. Due to this dependency, the State of Hawai‘i has the highest average electricity prices compared to the rest of the United States (BFS, 2025). In response, the State of Hawai‘i created the Hawai‘i Clean Energy Initiative in 2008, and in 2015, established by state law that 100% of the state's energy portfolio must come from renewable sources by 2045. In 2024, 67% of the State's energy portfolio was attributed to fossil fuels, while approximately 33% was attributed to renewable energy, still far from the 100% goal (USEIA, 2025).

KIUC's strategic plan has identified a goal of reaching 100% renewable generation by 2033, a more ambitious goal than the 2045 date mandated by the State. In 2024, renewable resources accounted for over 50.6% of KIUC's energy generation (KIUC, 2025a).

1.3.1 Grid Stability

The proposed Project is expected to provide approximately 17.5% of KIUC's total electric generation. One of its key benefits will be to improve electric grid stability by enabling KIUC to utilize stored solar energy from the BESS at any time KIUC desires. This will help KIUC to meet its evening peak demand, along with other supporting ancillary services on the grid. KIUC intends to use the stored energy in the BESS system to: (1) provide energy as the sun sets and into the evening to offset KIUC's evening peak demand; (2) provide energy in the morning to offset KIUC's morning peak; and (3) respond to low-frequency events by supplying additional power automatically, all of which will help KIUC reduce its dependence on more expensive and inefficient conventional oil-fired units. It is anticipated that the Project will reduce KIUC's fossil fuel usage by over 179 million gallons over the 25-year PPA term.

1.3.2 Green Energy

The Project will also provide benefits to human health and the environment through the use of an alternative "green" energy source that does not generate greenhouse gases and does not result in environmental impacts often associated with fossil fuel production. KIUC and its members/customers will use approximately 7,150,000 fewer gallons of oil annually. The amount of clean, renewable green energy expected to be generated from the Project per year is enough to power almost 16,000 homes. The energy generated will also assist KIUC in achieving the State of Hawai‘i's Renewable Portfolio Standard (RPS), as set forth in HRS §269-91 et seq., and its own more ambitious goal of 100% renewable RPS by 2033.

1.3.3 Public Benefits

The construction and maintenance of the Project will benefit the public as a whole and support the local economy by increasing tax revenues, providing jobs, and increasing the sale of local goods and services (***Exhibit B***). The Project will deliver power at a low, fixed price over its 25-year lifespan at a cheaper cost than current fossil fuel prices.

1.3.4 Federal Environment

Between July 2024, when AES bid this Project to KIUC, and December 2025, federal legislation and policymaking have created an unprecedented urgency to bring solar projects online. Under current rules, AES must place the Project into service no later than December 31, 2029, to qualify for the federal solar tax credits assumed in the PPA price negotiated with KIUC. These federal tax credits allow AES to sell energy to KIUC at a lower rate. The Project schedule currently targets commercial operation

in 2028, but any permitting delay could have compounding effects on the Project schedule and jeopardize obtaining the federal tax credits before their sunset in 2029.

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Section 2

Location and Land Use Designations of Property

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2.1 Location

The Project Site is located in Makaweli, Kauaʻi, approximately two miles north of the town of Kaumakani and two miles south of the town of Waimea *(**Exhibit C1**).* It lies within the traditional moku of Kona and the Makaweli Ahupuaʻa, which extends broadly north and eastward from Kaumakani, tapering to a northeastern point at Kawaikini *(**Exhibit C2**).* Līhuʻe Airport is approximately 23 miles east of the site, and Port Allen is approximately 5 miles east of the site.

Robinson Family Partners ("RFP" or "Landowner") owns the "Project Site", which is located in Kauaʻi Tax Map Key Nos. (4) 1-7-006:006 ("Parcel 6") and (4) 1-7-006:010 ("Parcel 10"). The two parcels on which the Project is situated total 5,006.740 acres. These parcels are owned by RFP and managed by Gay & Robinson, Inc., a Hawaiʻi corporation ("G&R" or "Land Manager"). The Project Site encompasses 269.195 acres within these parcels, occupying the southwestern portion of tax map key ("TMK") (4) 1-7-006:006 and the northwestern portion of TMK (4) 1-7-006:010 (***Exhibit C3***).

KIUC selected the Project Site for their 2024 Request for Proposal for Firm Solar Energy due to the land's flat terrain, open fields, favorable climate, ample sunlight, and proximity to the grid. The Project will serve KIUC's goal of achieving 100% renewable energy by 2033 while maintaining the land's long-term viability for continued agricultural use. After KIUC selected the Project, AES and the Landowner negotiated the terms of long-term site control for the Project Site.

RFP has agreed to grant the Applicant an exclusive easement ("Solar Project Easement") to use the Project Site to operate the Project; and a non-exclusive easement for the roads within the Project Site for access purposes. RFP has authorized the Applicant to file this Application pursuant to the Landowner's Authorization attached hereto as ***Exhibit A2***. G&R has authorized the Applicant to file this Application pursuant to the Authorization of Lessee attached hereto as ***Exhibit A3.***

The Project Site has been designed to accommodate the area's natural topography, positioning solar arrays between ʻAʻakukui Stream and Kekupua Valley along the northern boundary, and Kaʻawanui Gulch along the southern boundary. The property is bounded to the southwest by Kaumualiʻi Highway, with Pākalā Village located to the southwest and Kaʻawanui Village bordering the northwestern edge of the Project Site. Agricultural operations are present in the mauka areas surrounding the Project.

2.2 Land Use Designations

The respective State Land Use Commission ("LUC"), Kauaʻi Kā Kou (Kauaʻi County General Plan) ("Kauaʻi General Plan"), County of Kauaʻi Comprehensive Zoning Ordinance ("CZO"), and other relevant land use designations for the Project Site are as follows:

2.2.1 State LUC

As shown on the State Land Use District Boundary map in ***Exhibit C4*** the Project Site is located in the LUC Agricultural District.

[Note: The area around Ka‘awanui Village was recently amended by the County Council into the LUC Urban District; the Kaua‘i General Plan Plantation Camp designation; the West Kaua‘i Community Plan Special Planning Area Q (SPA-Q)/Ka‘awanui Plantation Camp Walkable Mixed-Use District; and the CZO Plantation Camp (PC) Zoning District. None of these changes affects or includes any portion of the Project Site.]

2.2.2 Kaua‘i General Plan

The Project Site is subject to the provisions of the Kaua‘i General Plan. As shown in ***Exhibit C5***, the Project Site is located in the Kaua‘i General Plan Agriculture Land Use Designation. The Project complies with the General Plan, as further discussed in ***Section 9.3***.

2.2.3 Comprehensive Zoning Ordinance

As shown on the Zoning Map in ***Exhibit C6***, the Project Site is located primarily in the CZO Agriculture District. However, a small portion of the Project Site along its eastern and western sides is also located in the CZO Open District.

2.2.4 Community Plan Area

The Project Site is located within the West Kaua‘i Community Plan (“WKCP”) Area. The Project Site has been designated as Agriculture on the Makaweli Town Plan Map (***Exhibit C7***). The Project complies with the WKCP, as further discussed in ***Section 12***.

2.2.5 Coastal Zone Management Area/Special Management Area

As set forth in Hawai‘i Revised Statutes (“HRS”) §205A (Part I), all lands in the State of Hawai‘i, including Project Site are located in the Coastal Zone Management Area (“CZMA”) and are subject to the objectives and policies of the Coastal Zone Management (“CZM”) Program, as described in HRS §205A-2. None of the Project Site is located within the Special Management Area of the County of Kaua‘i as shown in ***Exhibit C8***. The Project complies with the CZM's objectives and policies, as further discussed in ***Section 8.7***.

2.2.6 Violations

There are no existing violations of any land use laws or regulations on the Project Site.

2.2.7 Land Use Conditions

The Project Site is not subject to any land use conditions.

2.2.8 Land Study Bureau

The Land Study Bureau ("LSB") of the University of Hawai'i prepared an inventory and evaluation of the State's land resources during the 1960's and 1970's. Ratings were developed for overall productivity, with a rating of "A", very good to "E", not suitable. As shown in ***Exhibit C9***, the solar energy facilities will occupy areas with primarily LSB B-rated soils and some LSB E-rated soils. Pursuant to HRS §205-4.5, solar energy facilities are a permitted use on LSB B-rated soils with issuance of the State Special Permit, which allows the county Planning Commission to permit unusual and reasonable uses within the Agricultural District, per HRS §205-6 (***Section 8***).

2.2.9 Important Agricultural Lands

The Project Site has not been designated as Important Agricultural Lands pursuant to HRS §205, Part III *(**Exhibit C10**)*. Lands situated east of the Site contain Important Agricultural Lands DR16-56.

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Section 3

Past, Existing, and Proposed Uses of Project Site

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3.1 Past and Existing Land Uses

The Project Site is located within the ahupua‘a of Makaweli, and immediately west lies the ahupua‘a of Waimea, the largest on the island of Kaua‘i. Makaweli’s pre-Contact land-use patterns likely mirrored those of Waimea, but on a smaller scale. Early accounts from Waimea indicate a well-established coastal settlement pattern. Cultural layers and burials have been recorded along the shoreline, consistent with traditional habitation patterns throughout the Hawaiian Islands. The fertile Waimea River Valley supported substantial populations and extensive agricultural activity. Similarly, it is assumed Makaweli was home to coastal settlements, and river-valley agriculture served as a focal point of habitation and cultivation.

By the time of the Māhele in 1848, Makaweli supported a sizable population. Lands were distributed among the monarchy, chiefs, and commoners. Intensive agricultural use was prevalent, particularly taro cultivation within the Waimea River basin. Waimea was the most densely populated district on Kaua‘i at the time, and Makaweli’s land use remained closely linked to Waimea’s, sharing its reliance on fertile valley lands for food production. In 1865, the Sinclair family, which married into the Robinson family, purchased the ahupua‘a of Makaweli from Queen Ka‘ahumanu.

During the post-Contact period, agriculture within the Project Site shifted toward plantation-era activities. The Hawaiian Sugar Company was founded in the Makaweli Ahupua‘a in 1876, establishing sugarcane fields and plantation camps that operated successfully for over a century under various management entities. The most recent sugar plantation, operated by G&R, closed in 2009. Following the closure of the sugar operations, G&R transitioned the lands to diversified agricultural and commercial uses. Land within and adjacent to the Project Site was also used for grazing horses, cattle, bison, and water buffalo. The Project Site comprises pastureland and fallow agricultural fields, with surrounding areas consisting of former plantation lands repurposed for grazing or left in open pasture.

Due to its relatively flat topography, easy accessibility, high solar irradiance, and proximity to existing KIUC grid infrastructure, the Project area proposed for development by G&R and selected by KIUC is considered well-suited for solar energy development, minimizing the need for excessive additional transmission infrastructure and reducing potential impacts on surrounding agricultural and residential areas.

Representative photographs of the Project Site are provided in ***Exhibit D***.

3.2 Proposed Solar Project

The Project involves the construction and operation of an approximately 43 MW ground-mounted solar PV system coupled with a 172-MWh BESS, a Project substation ("AES Hawai'i Substation"), associated interconnection lines, and other ancillary facilities. Additionally, AES will construct a new switchyard for the utility ("Kaawanui Substation"), adjacent to the solar Project. Ownership of the new Kaawanui Substation will be transferred to KIUC upon completion (see ***Exhibit E*** for Site Development Plan Set).

The area proposed for the Project is approximately 269 acres of RFP's land holdings, inclusive of the existing on-site road network. AES proactively engaged in an iterative siting and design process to minimize potential impacts to the surrounding environment and nearby communities. This process was initiated with due diligence studies and incorporated stakeholder input to date. An iterative approach provided increased flexibility to responsibly site the Project, avoid meaningful features, and minimize potential Project impacts. Through this process, the Project was sited to 1) maximize the setback from Kaumuali'i Highway, 2) avoid Ka'awanui Gulch and 'A'akukui Stream, 3) avoid other sensitive environmental areas such as flood hazard zones, 4) preserve maximum compatible agriculture uses, and 5) mitigate traffic with multiple ingress and egress points. Project siting efforts also sought to minimize visibility of Project equipment from nearby roadways and other publicly accessible locations, resulting in a preliminary landscaping plan to help shield the visible project components from Kaumuali'i Highway. Subsequent refinement of the Project design involved a detailed analysis and integration of the existing site topography, hydrologic conditions, and the existing on-site road network, with a focus on minimizing the extent of grading and other ground disturbances required for Project construction. Furthermore, design refinement efforts sought to strategically site the solar photovoltaic modules, batteries, and interconnection facilities to maximize Project output (based on energy capture and transmission losses) and minimize overall footprint (based on layout efficiency).

The Project design and layout reflect the anticipated component specifications, based on the best available information derived from AES's long-standing relationships with equipment vendors. However, it is important to note that future generations of equipment are introduced regularly; equally important are the influences of macroeconomic forces and governmental actions on the solar and battery industries, along with their supply chains. As such, the component specifications may evolve over the course of Project development to incorporate technological advances in safety and efficiency, as well as to reflect equipment availability and compliance with the law. While the general characteristics of the components are not expected to change, exact dimensions, materials and/or quantities may vary, which in turn will affect the Project configuration and layout. In any case, refinements to the Project layout are expected to be relatively minor, with the overall dimensions and footprint substantially similar to those described herein and shown in the site development plan set.

3.3 Proposed Project Components

The Project consists of primary generation, transmission, and storage components integrated into a cohesive renewable energy system. These include the following major elements: (1) solar PV system, (2) power conversion stations, (3) BESS, (4) network of electrical collector lines, (5) AES Hawai'i Substation, (6) utility switchyard and interconnection lines, (7) onsite operations and maintenance ("O&M") shed, (8) communication equipment, (9) internal access routes and fencing, and (10) irrigation infrastructure for landscaping and compatible agriculture activities. Each of these components is described below and is generally illustrated in ***Exhibit C11***; additional details are provided in the site development plan set, which is included in ***Exhibit E.***

3.3.1 Major Components

Solar PV System

The solar PV system will consist of a series of 545-watt or larger modules mounted on a racking system with single-axis trackers, which will rotate along a fixed horizontal axis from east to west as the sun moves across the sky. Based on the current site layout, it is anticipated that the Project will include six fenced solar array areas, ranging in size from approximately 5 to 63 acres. Within each solar array area, the modules will be organized in rows. Each row will be mounted on a racking system installed using steel posts, spaced approximately every 15 to 19 feet apart (varies) at depths of up to 6 feet (depending on specific soil conditions). The row-to-row spacing (measured from post to post) will be approximately 34.5 feet in the central array, and 16 feet in the surrounding arrays. The increased row spacing for the central array will allow for maximum compatible agricultural uses (further discussed in *Section 3.6*), with sufficient space around row groupings in all other arrays to allow for maintenance access, compatible agricultural uses such as grazing, and non-vegetated fire breaks. The maximum height of the system will be approximately 5 feet above the ground surface when the panels are in the flat stow position. As the panel rotates, its highest point will reach a maximum of approximately 8 feet above ground surface; during daylight hours, the maximum tilt height will only occur for a brief time at dawn and dusk.

The modules will produce low-voltage, direct current ("DC") electricity. Within each solar array area, the DC electricity from the modules will be transmitted via DC electrical wiring to central PV inverters (rated 4.4 MW), where it will be converted to alternating current ("AC") electricity. The PV inverters will connect to step-up transformers, which will convert the PV inverters' output to medium-voltage electricity. The PV inverters and transformers will be located at a series of 11 power conversion stations ("PCS") distributed throughout the Project Site. The DC electrical wiring extending from the modules will be integrated into the above-ground portion of the trackers; at the terminus of each array, the wiring will be consolidated and directed to the power conversion stations via underground trenching. The trenches will be approximately 5.5 feet wide and 3.5 feet deep, with some sections up to 10 feet wide to accommodate multiple circuits of electrical and communications wiring. Approximately 26,500 linear feet of trenching is anticipated for the low-voltage electrical wiring.

Safety features incorporated into the solar PV system will include mechanisms to allow for disconnection and rapid shutdown of the system, if needed; these will be installed throughout the solar arrays and will include DC disconnects (which will allow the DC current between the modules to be interrupted before reaching the inverters) and AC disconnects (which will separate the inverters from the electrical grid).

Representative photographs of the solar PV system are provided in *Exhibit F1*.

Power Conversion Stations

Each PCS will be located on a concrete or pile foundation to support the PV inverter and transformer, surrounded by a gravel perimeter. Various auxiliary and communication equipment will also be co-located at the PCSs. Additionally, meteorological monitoring stations and security monitoring equipment will be installed in the vicinity. The meteorological stations, which will provide real-time meteorological data needed to optimize energy generation, will consist of equipment mounted on a steel pole. The security monitoring equipment, consisting of security cameras, radar motion sensors, and audio alarm systems, will also be mounted on a steel pole.

Representative photographs of a typical power conversion station are provided in *Exhibit F2*.

BESS

The BESS will include a total of up to 44 battery containers, each housing a series of lithium-ion batteries (arranged in up to 16 horizontal strings, with 9 modules per string), collectively providing approximately 237 MWh DC STC (standard test conditions) of total energy storage. These battery containers will be centrally located in the BESS yard atop a single concrete pad, adjacent to the AES Hawai‘i Substation. The batteries will be charged with energy generated by the solar PV system. They will allow the energy to be dispatched as needed to offset customer demand and help stabilize the grid. Each battery unit will be housed in containers with dimensions of approximately 10 feet (height) by 8 feet (width) by 20 feet (length). Each battery container will incorporate multiple layers of protection to prevent failures and contain potentially hazardous substances (further detailed in the ***Fire Prevention and Other Safety Features*** subheading below.

Representative photographs of a typical centralized BESS are provided in ***Exhibit F2***.

Electrical Collector System

The electricity generated and stored within each of the solar array areas will be transmitted from the power conversion stations to either the AES Hawai‘i Substation via a network of medium-voltage electrical collector lines. Subsequently, the electricity generated can also be transmitted to the BESS power conversion systems via a network of medium-voltage electrical collector lines that charge the batteries if power is not needed by the Utility immediately. The BESS will also be able to charge from the grid, in which case electricity will flow from the grid through our main power transformer and then to the BESS power conversion systems via a network of medium-voltage electrical collector lines. Similar to the DC electrical wiring from the solar modules, the medium-voltage electrical collector lines will be installed via underground trenching to mitigate potential fire risks. The trenches for the electrical collector lines will be approximately 4 to 7 feet wide and 4 feet deep, with some sections up to 16 feet wide to accommodate multiple wiring circuits. In total, it is anticipated that the Project will include approximately 13,700 linear feet of trenching for the medium-voltage electrical collector lines.

AES Hawai‘i Substation

The Project will include the AES Hawai‘i Substation, which will function to further increase the voltage of electricity to allow for integration into KIUC’s island-wide electrical grid. The AES Hawai‘i Substation will occupy approximately 35,000 square feet (0.8 acres). Substation equipment will include free-standing steel switch structures, two generation step-up (GSU) transformers, circuit breakers, pole structures, shield wiring, concrete foundations, a containerized enclosure to house centralized controls for facility operation and monitoring, and various communication equipment, all of which will be underlaid with gravel and enclosed within security fencing. The tallest structure in the substation will be the shield wire mast (approximately 45 feet tall).

A representative photograph of the AES Hawai‘i Substation is provided in ***Exhibit F3***.

Kaawanui Substation and Interconnection Lines

From the AES Hawai‘i Substation, two underground generation-tie lines will connect to the adjacent Kaawanui Substation to facilitate the transfer of electricity from the generation (AES) to the transmission (KIUC) facility. The Kaawanui Substation will house the two physical points of interconnection (i.e., the physical/electrical/legal demarcation between the generation facility and KIUC’s transmission infrastructure) and as the location where electricity is transferred into KIUC’s electrical grid. The Kaawanui Substation will be approximately 87,120 square feet (2 acres). It will

contain electrical equipment, steel structures, circuit breakers, switches, pole structures, shield wiring, concrete foundations, communications and utility metering equipment, fiber-optic communications lines, a station service line for auxiliary plant power, and an equipment enclosure, all underlaid with gravel and enclosed with security fencing.

The station service line would connect from the Kaawanui Substation to the AES Hawai'i Substation to provide backup power to essential equipment within the solar facility (e.g., communications and control systems), ensuring they could operate even when the facility's generation is offline. The maximum structure height in the Kaawanui Substation will be the shield wire masts (approximately 60-70 feet tall). A representative photograph of the Kaawanui Substation is provided in ***Exhibit F3***.

The interconnection lines will extend out of the Kaawanui Substation to three self-supporting getaway structures resulting in three new Grid Connection Points (GCPs), the points at which AES' Project scope ends. KIUC will design and construct the network upgrades from PMRF Substation and Port Allen Substation to the GCPs required to interconnect the Project. The KIUC network updates, inclusive of transmission line reconductoring and the transmission line extensions will terminate at the GCPs.

Upon completion of construction, ownership of the Kaawanui Substation will be transferred to KIUC, along with responsibility for all associated maintenance, vegetation management, and operations. KIUC and AES will submit to Kaua'i Department of Planning ("KDP") and SLUC a letter confirming (1) the date of the transfer, and (2) that upon transfer, KIUC will comply with all CUP/SSP/Class IV permit terms and conditions applicable to the Kaawanui Substation and interconnection lines and will be solely responsible for compliance with such terms and conditions.

3.3.2 Support Facilities

Support facilities will include an O&M Shed, communication systems, and ancillary infrastructure.

Operations and Maintenance Shed

An O&M Shed will be installed in the vicinity of the BESS yard to provide dedicated space for Project-related storage, including spare materials/components, and for office work and remote site monitoring. The structure will comprise up to two shipping containers, measuring approximately 20 feet (width) by 42 feet (length) by 12 feet (height), situated on an underlying concrete pad. Additional spare materials and components may be stored in similar, re-utilized construction containers dispersed throughout the Project Site for safety and security. The shed will use electricity from the station service line for climate control and lighting. Lavatories for the shed will either be connected through private domestic water connections and a septic tank or serviced by specialized sanitation crews who will manage waste and water tanks and perform routine maintenance.

Communication Equipment

Communication equipment will be installed to interface with KIUC's supervisory control and data acquisition system so that the electricity generated and stored by the Project can be regulated and dispatched remotely; communication equipment will also be installed in the AES Hawai'i Substation and throughout the facility for operations and security purposes. Telecommunications connections to facilitate communication between the Project and KIUC will consist of redundant fiber lines from the Project facility to the Kaawanui Substation.

The Project will also include an emergency management system that will allow operations to be supervised and all system functions to be protected in response to real-time dispatch signals from KIUC, as well as report production data, energy forecasts, and other system health data. This equipment will be housed within the various inverters located on the power conversion stations, as well as within centralized control structure(s) within or adjacent to the AES Hawai‘i Substation and Kaawanui Substation.

Internal Access Routes and Perimeter Fence

The Project will be accessed via two existing privately owned roads (Road to Parcel 11 and Ka‘awanui Road) that extend to the Project Site from existing ingress/egress points on Kaumuali‘i Highway (***Exhibit C12***). Authorization to utilize these roadways has been provided by Robinson Family Partners, subject to the necessary land use approvals and execution of a final easement agreement. These existing roads are sufficiently wide and may require minor reinforcement when oversized and overweight equipment is delivered to site.

Located mauka of Kaumuali‘i Highway, between Hanapepe Town and the Waimea River, and surrounded by lands owned by RFP (including certain Robinson Family Members), are two former highway remnants owned by the State of Hawai‘i. These remnants are identified as Old Government Road A and Old Government Road B (the "Remnants"). A portion of Old Government Road A ("Road A Section") is located between Parcel 6 and Parcel 10. RFP has agreed to buy, and the State of Hawai‘i, through its Department of Transportation ("HDOT"), has agreed to sell, the Remnants, including the Road A Section. RFP will provide Applicant with a non-exclusive easement for access and utility purposes over the Road A Section, as well as Road to Parcel 11 and Ka‘awanui Road, as shown on ***Exhibit C12***. RFP intends to consolidate the Road A Section into Parcel 10.

Within the Project’s fenced arrays, a series of new internal access routes will be installed to accommodate construction vehicles and to allow ongoing access for O&M. These roads will generally have a compacted gravel and/or native material bed with a width of approximately 16 feet (plus 4-foot-wide shoulders on either side), as well as the required clearance and turning radius necessary for emergency response vehicles in accordance with fire code regulations.

The internal access routes for the AES Hawai‘i Substation and Kaawanui Substation will be approximately 20 to 25 feet wide (plus 4 to 5-foot shoulders); those portions within the switchyard will use AC pavement. The area adjacent to the AES Hawai‘i Substation and O&M Shed will also include compacted gravel (approximately 90 to 100 feet wide) to accommodate the turning radius of larger vehicles, equipment staging, and parking for Project operations and KIUC staff. The internal access routes will provide primary access to each of the solar array areas, power conversion stations, the AES Hawai‘i Substation, and interconnection lines. Ample spacing between the rows of modules will allow for localized access within each of the solar array areas.

Fencing will be installed around the perimeter of the Project for general security purposes. The fence is expected to be approximately 7 feet tall and made of chain link (or similar); no barbed wire will be installed on solar project fencing. The fenced area will include the entire solar PV system, BESS yard, and AES Hawai‘i Substation. The interconnection lines, as well as certain civil improvements (e.g., internal access routes and stormwater retention features), will be located outside the perimeter fence. An approximately 7-foot-tall chain link fence with 1-foot barbed wire mesh will surround the Kaawanui Substation in accordance with KIUC’s security specifications. Gates will be installed for pedestrian and vehicular access.

Fire Prevention and Other Safety Features

The Project design incorporates multiple layers of monitoring and safety features to ensure safe operation of the system, including fire prevention and suppression as well as other safety considerations. As noted in the preceding sections, the Project would include an energy management system monitored by automated systems, on-site personnel, and a 24/7 Remote Operations Control Center (ROCC). AES has three ROCCs that monitor and respond to emergencies based on regional and site-specific requirements. In the event of an emergency, the Project's designated ROCC would track notifications from multiple sources (e.g., SCADA alarms, internal/external phone calls, and third-party monitoring services) for emergencies originating both within and outside the Project site. The ROCC would coordinate support from field service personnel, local authorities, and other AES experts until the emergency is deemed under control. All system functions would be managed and protected in response to real-time dispatch signals from KIUC, as well as report production data, energy forecasts, and other system health data. The various components would include mechanisms to allow for disconnection and rapid shutdown of the system, if needed; these would be installed throughout both the solar arrays (with DC and AC disconnects to shut off the flow of current between the modules/inverters and inverters/electric grid, respectively) as well as the battery energy storage system (to isolate the battery units from the solar arrays and electrical grid).

Furthermore, the battery energy storage system design incorporates multiple and redundant layers of hazard controls, including passive and active measures that both inhibit and (when necessary) suppress hazardous conditions. The battery modules would be installed within fully contained, leak-proof steel enclosures equipped with fire-rated insulation, as well as temperature and smoke sensors and alarms, integrated monitoring and circuit protection, a self-contained thermal management system, an explosion prevention and mitigation system, and a fire detection and thermal runaway propagation protection system specifically designed for lithium-ion battery energy storage systems. Independent testing of the battery system would be conducted prior to commercial operation, and the battery energy storage design would achieve UL 9540 certification prior to commercial operation. UL 9540 is a comprehensive safety standard developed by Underwriters Laboratories (UL) with strict safety, performance, and reliability requirements specifically for battery energy storage systems.

Beyond the battery energy storage system design, the Project would also incorporate a variety of other fire prevention and suppression measures, including those listed below.

- The Project design would comply with National Fire Protection Association (NFPA) 1 and National Electric Code (NEC) requirements for fire prevention for utility-scale solar facilities, including installation of non-vegetated fire breaks.
- Electrical wiring would generally be elevated, underground, or enclosed, thus minimizing interaction between circuits and flammable materials.
- A minimum 30-foot non-vegetated fire break would be installed around the perimeter of the Project Site as well as the various electrical equipment (e.g., a 20-foot buffer within the fence line and 10-foot buffer outside the fence line). Vegetation within the remainder of the Project site would also be actively managed to control combustible materials, while still providing enough ground cover to prevent erosion and support compatible agricultural activities.
- Vegetation management practices would be consistent with applicable regulations, plans, and policies, including the Kaua‘i County Fire Code (KCC Chapter 15A), the Kaua‘i Community Wildfire Protection Plan (HWMO 2024), the Kaua‘i County Multi-Hazard Mitigation and Resilience Plan (KEMA 2020), and the State of Hawai‘i's priorities and recommendations for enhancing wildfire readiness (FSRI 2025).

- The Kaawanui Substation and interconnection lines, once transferred to KIUC, would be maintained by KIUC in accordance with applicable PUC and other regulatory requirements, as well as KIUC's system-wide standards, including their expanded Wildfire Mitigation Plan (KIUC 2025).
- The existing access roads and internal access routes used for the Project would provide the required clearance and turning radius needed for emergency response vehicles, in accordance with the fire code. In the event of an emergency, AES would support all forms of emergency or fire department access to the Project site.
- A Project-specific Emergency Response and Communication Plan (ERCP), detailing specific emergency response actions and procedures would be prepared and implemented over the course of Project construction and operations (see ***Section 3.7.1***).
- AES will actively engage and work with Kaua'i Fire Department (KFD). As part of this engagement, the Kaawanui Solar Project team will hold annual meetings with the Department to discuss project operations and site access protocols.

The KFD will be consulted through the Project development process, with review of relevant permit applications and design drawings prior to construction. On-site training and orientation will be offered prior to commercial operation, and annual meetings will be offered throughout the operational phase.

3.3.3 Construction Safety, Environmental Compliance, and Emergency Response

Prior to the start of construction, detailed plans addressing construction safety, environmental compliance, and emergency response will be prepared, as listed below. All workers will be trained on these topics, and the plans will be implemented throughout the Project's construction.

- **Health, Safety, and Security Plan:** Specific issues to be addressed in this plan include fire protection and response measures (including fire protection equipment), hazardous material control and spill prevention, safety and security procedures, emergencies, safety training, and orientation.
- **Environmental Compliance Plan:** This plan will include details regarding environmental compliance requirements for the Project, including stormwater runoff management, soil erosion, and sediment control, as required by the Project's Storm Water Pollution Prevention Plan (SWPPP) and drainage and erosion control plans. The plan will also include information related to hazardous substance management, waste management, environmental emergency planning, noise mitigation, transportation and traffic mitigation, fugitive dust control, land and water resource protection, and the protection of threatened and endangered species.
- **Emergency Response Plan:** This document will include a risk assessment policy and site-specific emergency response plan, including (1) potential emergencies and response actions, (2) emergency notification system, (3) communication methods and processes, (4) evacuation routes and muster points, (5) external emergency contacts, (6) contingency plan for specific onsite activities, (7) emergency medical facilities, including agreements, contacts, and transportation, and (8) onsite rescue equipment.

AES will employ a Safety Manager and Environmental Compliance Manager to oversee the contractor's environmental health and safety activities during construction. Weekly meetings and periodic site visits will be conducted over the course of the construction period to ensure that the Project complies with these plans as well as all applicable local, state, and federal regulations and associated permit requirements.

3.3.4 Site Preparation

Initial site preparation will involve grubbing and vegetation clearing as needed to prepare for construction of the Project facilities, along with the adoption of best management practices ("BMPs") as described below. Clearing and grubbing will be phased, with natural vegetation preserved as much as possible, and soil will be temporarily stabilized as appropriate. Internal access routes and staging areas will also be established. It is anticipated that approximately nine (9) non-contiguous acres of land within the Project Site will be required for Project staging. Staging areas for major project equipment will be located within the Project area and rotated as construction progresses around the site. For each staging area and work area, some minor grading may be conducted to level the ground surface. In addition, installation of new internal access routes will involve grading, smoothing and placement of geotextile material and compacted gravel. Clearing, grubbing, and grading will be conducted using equipment such as bulldozers, excavators, compactors, graders, and front-end loaders. Water trucks will be used to provide moisture for compaction as well as dust control during construction as needed.

Project implementation will incorporate BMPs as required by the relevant permitting and reviewing agencies to avoid and minimize potential impacts to the surrounding environment. BMPs will include various procedures, practices, treatments, structures and/or devices designed to eliminate and minimize the potential discharge of pollutants to downstream waters. The BMPs to be implemented will be determined in accordance with applicable regulatory requirements, including those associated with applicable grubbing and grading permits, which requires approval of a SWPPP and drainage and erosion control plans prior to construction (respectively), the National Pollution Discharge Elimination System program, and Kaua'i County's *Storm Water Runoff System Manual (2001).* Specific BMPs will address erosion prevention, sediment control, and good housekeeping. No ground-disturbing activities will occur until BMPs have been properly implemented and relevant permits/approvals have been secured.

Additionally, a series of stormwater management features (e.g., drainage basins) will be installed to capture and treat stormwater in areas with increased impervious surfaces associated with the Project facilities. As discussed above, the majority of the Project Site will require minimal grading such that the existing drainage patterns will not be altered. The stormwater retention features will be located within the limits of the Project site, particularly along the downgradient edge of new impervious surfaces (e.g., power conversion stations, the BESS, and substation and switchyard areas). These features will be designed to retain and allow for infiltration or evapotranspiration of stormwater, as needed to reduce peak flows to pre-development levels. The size and design of the features will be based on site-specific conditions as well as the requirements of Kaua'i County's *Storm Water Runoff System Manual* (2001). Additional details regarding the quantification of stormwater runoff and preliminary sizing/design of the infiltration features are provided in the Stormwater Management Design Memo contained in ***Exhibit G***.

3.3.5 Construction, Transport, and Delivery

The Project materials and equipment will be transported to Nawiliwili Harbor via freight shipping company and offloaded to standard transportation trucks. The trucks will deliver the equipment to the Project site via existing state and county roadways. Tractor-trailer loads will be required to transport Project materials and equipment; delivery of these loads will be spread over the 12 to 16-month construction period and will be timed to occur during off-peak traffic hours. Oversized trucks will be required for the delivery of the two GSU transformers and the control enclosure to the AES Hawai'i

Substation. These deliveries will also occur during off-peak traffic hours, and a permit for transporting oversized equipment and overweight loads on State and County roadways will be obtained as needed.

Over the course of the construction period, the average number of workers expected to be at the Project Site will range from approximately 80 to 100 workers per day. At the peak of construction, approximately 200 workers are estimated to be onsite each day. Parking for construction workers will be entirely within the Project Site.

No improvements or other construction will be required to accommodate equipment transport along State and County roadways. As further described in ***Section 6.10***, a Traffic Impact Analysis Report ("TIAR") concluded that neither construction nor operation of the Project will significantly increase traffic on the surrounding roadways. Regardless, measures to minimize traffic-related impacts as proposed in the TIAR will be implemented as needed.

3.3.6 Installation of Project Equipment

Following site preparation and equipment delivery, the general sequence for construction will involve installation of the following: (1) racking system, (2) electrical collector system, (3) solar PV modules and associated wiring, (4) concrete equipment pads and substation, BESS, and switchyard foundations, (5) battery units, and (6) electrical equipment. Given the design tolerances of these facilities and the relatively low gradient of the Project Site, a minimal amount of earthwork is expected to be needed for the installation of the Project equipment. As further detailed below, grading for installation of the Project equipment is expected to be limited to the areas comprising the equipment pads for the power conversion stations, substation, BESS yard, and switchyard foundations, as well as in localized areas within and adjacent to the solar arrays.

Overall, the extent of ground disturbance associated with the solar PV system is expected to be relatively minimal, as the racking system will be installed using structural posts and can tolerate much of the existing gradient within the Project Site (based on the manufacturer's specifications). Grading will be limited to localized areas and will primarily be performed through "track-walking" (i.e., the use of heavy machinery, such as bulldozers, to smooth out minor undulations in the existing topography). The posts for the racking system will be installed using a hydraulic pile driver with approximate depths of up to 6 feet (depending on soil conditions). The frames and other components of the racking system will be bolted to the posts, with the solar PV modules affixed to the frames.

Trenches will be excavated for both the DC electrical wiring, as well as some AC low-voltage wiring and communications wiring (running from the solar PV modules to the power conversion stations), and medium-voltage collector lines (running from the power conversion stations to the substation) using wheel- or track-mounted excavators (or similar). The trenches for the DC and low-voltage electrical wiring will be approximately 11.2 feet wide and 3.5 feet deep, the trenches for the PV medium-voltage collector lines will be approximately 4 feet wide and 4 feet deep, and the trenches for the BESS medium-voltage collector lines will be a maximum of 26.5 feet wide and 5 feet deep.

Following placement of the electrical lines, excavated soil will be backfilled into the trench, tamped back to the appropriate level of compaction per the design specifications and returned to existing grade. Although not anticipated, if the desired trench depth cannot be achieved (due to prohibitive subsurface conditions), the electrical wiring or collector lines will be covered with concrete slurry in accordance with the applicable electrical code requirements.

As described in ***Section 3.3.1***, the Project will include three high-voltage lines to facilitate interconnection with the KIUC grid. Installation of the high-voltage structures will generally be

performed using auguring equipment to create 3 to 6-foot diameter circular excavations to depths up to approximately 21 feet (for concrete/drilled pier foundations or direct embedment/concrete encased), followed by placement of grounding wire dead-ends, anti-corrosion anode bags, pole erection and installation of tensioned guywires where necessary. Boom trucks, man-lifts, and other specialized equipment will be utilized to string the conductor cabling and shield wiring from structure to structure. Cable stringing may be performed via slack stringing, where lines are manually pulled along the ground and threaded through temporary equipment on structures.

The equipment pads, AES Hawai'i Substation and Kaawanui Substation foundations will involve excavation, up to approximately 5 feet in depth, installation and compaction of subgrade engineered fill, placement of metal grounding grids, and installation of concrete or pile foundations. Certain substation, switchyard, and power conversion station equipment will be supported by concrete pier foundations, which will be installed to an approximate depth of 10-20 feet. Excavated soil will either be used elsewhere within the Project Site or hauled to an approved offsite facility. Subgrade engineered fill will be delivered and compacted in place. Concrete for the pads and foundations will be delivered in ready-mix concrete trucks; the Project will not include a concrete batch plant. Once the equipment pads and substation and switchyard foundations have been installed, the various electrical equipment will be installed. All electrical equipment and wiring will be installed and inspected in accordance with applicable code requirements and best industry practices.

Once installed, the Project components are expected to have a footprint (i.e., new impervious surfaces) comprising no more than approximately 9.842 acres, as summarized in ***Table 3.1***. As shown in the site development plan set (***Sheet 1, Exhibit E***), the 269-acre Project Site is comprised of these components and site access routes. It is important to note that these dimensions are estimates based on the current level of design. As described in ***Section 3.2***, the exact equipment dimensions and/or quantities will be refined through the final design process based on technological advancements and equipment procurement. Any refinements are expected to be relatively minor, with the resulting dimensions similar to (or less than) those listed in ***Table 3.1***.

Table 3.1 Approximate Extent of Project Components

Project Component[1]	Quantity/Dimensions (approximate)	Total Area[2] (approximate)	Footprint[2] (approximate)
Solar PV Modules[1]	Approximately 94,680 modules with approximately 19,163 structural piles	62.3 acres	0.1 acres
Power Conversion Stations	11 stations (each station totaling approximately 4286 square feet)	1.1 acres	1.1 acres
Substation	Approximately 168 feet by 205 feet (fenced)	0.8 acres	0.8 acres
Switchyard[3]	Approximately 425 feet by 205 feet (fenced)	2 acres	2 acres
BESS Yard	Approximately 335 feet by 265 feet (fenced)	2 acres	2 acres
Interconnection Lines	3 steel structures (3-6-foot diameter foundations); 3 work pads (approximately 500 square feet each)	0.04 acres	0.002 acres
O&M Shed/Office	Concrete pad (approximately 30 feet by 52 feet)	0.04 acres	0.04 acres

Trenching for Low-Voltage Electrical Wiring	26,500 linear feet (1-3 feet wide, with some sections up to 10 feet wide)	6.1 acres	0 acres
Trenching for Medium-Voltage Collector Lines	13,700 linear feet (2-4 feet wide)	1.3 acres	0 acres
Internal Access Routes[4]	5,615 linear feet of 16 feet wide; 3,820 linear feet of 20 feet wide (plus shoulders) as well as associated turn around areas	3.8 acres	3.8 acres
Staging and Laydown Areas	Installed adjacent to the Project Site area; up to 9 acres (non-contiguous)	9 acres	0 acres
	TOTAL	**88.48 acres**	**9.842 acres**

[1] The Project will also include features to provide stormwater retention and infiltration; however, these features would not constitute new impervious surface. The final design for these features, including the specific size and extent, will be finalized as part of the grading plans.

[2] Total area refers to the maximum areal extent of each component (including construction work areas), and footprint refers to the amount of ground surface that would be displaced by each component (i.e., new impervious surfaces) once installed. For the solar PV modules, the calculation of total area is based on the surface area of the panels (in stow position); the calculation of the footprint is based on the dimensions of the post foundations.

[3] The exact requirements for the Kaawanui Substation and interconnection equipment are still being determined by KIUC; design and engineering in process with KIUC oversight.

[4] The calculation of internal access routes does not include existing access roads; internal access routes are assumed to have a width of approximately 16 feet plus 4-foot shoulders on either side.

3.4 Post-Construction Site Stabilization

Following construction, areas that have been temporarily disturbed may be revegetated for soil stabilization and erosion control purposes; however, minimal revegetation is expected to be required as site preparation methods will limit impact to underlying root structures, thus encouraging regrowth of existing vegetation. Revegetation, if needed, is expected to involve application of hydroseeding with a suitable mix of native and/or non-invasive grass species. Any species used for revegetation will also be considered in terms of compatibility with onsite agricultural activities (e.g., forage for livestock and crop planting).

In addition to revegetation of temporarily disturbed areas, permanent BMPs will be implemented to address long-term stormwater requirements. The BMPs will comply with the requirements of the County of Kaua'i's *Storm Water Runoff System Manual* (2001). The specific strategies and measures will be identified as part of a Grading, Sedimentation, and Erosion Control Plan for relevant grubbing and grading permits, which will be submitted for approval prior to construction. BMPs will include detention ponds for the detention and infiltration of stormwater.

3.5 Landscaping

The Project Site is currently characterized by open grass cover and intermittent volunteer vegetation. Existing vegetation within the site includes low-lying Guinea grass *(Megathyrsus maximus)* and Koa haole *(Leucaena leucocephala)* trees, particularly along drainage corridors. No formal landscaping exists within the Project Site.

AES will implement a comprehensive landscaping plan to mitigate visual impacts. Native and drought-tolerant species will be planted along Kaumualiʻi Highway to screen project infrastructure. Visual simulations and feedback from community meetings informed landscaping design.

The AES Kaawanui Solar Landscape Draft plan set (September 2025), prepared by Umemoto Cassandro Design Corporation, is located in ***Exhibit H***. The plan uses native, indigenous, and endemic Hawaiian plant species to ensure compatibility with the site's dry coastal environment and to minimize irrigation requirements. The planting design follows a layered approach incorporating canopy trees, mid-story shrubs, and low-growing groundcovers. Planting follows along Kaumualiʻi Highway and the substation areas, emphasizing low-water and native-adapted vegetation. A temporary drip irrigation system will be installed by AES, and a small allocation of water secured through G&R, to ensure successful plant establishment and growth.

Outside the fenced areas, disturbed soils will be re-vegetated with native grasses to control erosion and visually blend with surrounding agricultural lands.

The combined landscape treatments will enhance the visual integration of the Project within the existing landscape context, improve ecological function through the use of native plants, and maintain an open agricultural character while achieving effective screening and erosion control.

3.6 Compatible Agriculture

HRS Chapter 205-4.5(a)(21)(A) requires that solar energy facilities on LSB Class B or C land in the state agricultural district, "the area occupied by the solar energy facilities is also made available for compatible agricultural activities at a lease rate that is at least fifty percent below the fair market rent for comparable properties." The Project Site comprises LSB Class B land. It thus requires compliance with this statute.

AES has consistently exceeded this statutory requirement for its previous projects in Hawaiʻi, including providing lease-free use of Project land, additional financial resources, and expert consultation services (e.g., agricultural consultation, marketing support, etc.). Specific resources committed by AES for compatible agricultural activities for Kaawanui Solar include the following:

- Project lands provided at no cost to local agricultural partners;
- Consultant resources for local agricultural partners (including but not limited to land use, agriculture, and research);
- Irrigation infrastructure installation for compatible agriculture;
- Design considerations maximizing central array inter-row spacing to create opportunities for growing planted crops.

The agricultural partner for the Kaawanui Solar project is Kawailana Inc., a Kauaʻi-based entity established by a branch of the Robinson family. With over 50 years of experience in agriculture and renewable energy, the Robinson family brings deep expertise in land stewardship, ranching, and sustainable practices. Kawailana Inc. was formed in 2009 following the closure of the family's sugar plantation operations, with a mission to perpetuate self-sufficiency and responsible land management across Kauaʻi and Niʻihau. Their proven track record includes pioneering solar-powered infrastructure and maintaining diverse agricultural operations, making them an ideal collaborator for integrating farming with renewable energy.

The agricultural plan (***Exhibit I***) for the Kaawanui Solar project is designed to maximize compatibility between solar infrastructure and productive land use. The initial phase centers on rotational sheep grazing within the 62.8-acre central solar array, leveraging sheep's natural ability to manage vegetation, stabilize soil, and reduce fire risk without damaging solar equipment. The plan anticipates a three- to five-year ramp-up period, starting with 100 sheep and expanding the herd annually. As the sheep population grows, grazing will extend into surrounding arrays, with the operation structured to support local farm-to-table sales and utilize existing slaughter and distribution channels.

Looking ahead, Kawailana intends to diversify agricultural activities by introducing poultry operations and crop cultivation. Mobile chicken coops and egg-washing facilities will be acquired once the sheep operation is established and generating revenue, thereby further enhancing land productivity and soil health. Crop trials, informed by research conducted at the Hawai'i Agriculture Research Center, will focus on leafy greens and other varieties adapted to the solar microclimate. The plan includes significant investment in equipment and infrastructure, with crop cultivation scaling as livestock revenue allows. Overall, the partnership and plan exemplify a holistic approach to sustainable agriculture, supporting local employment and demonstrating how renewable energy projects can coexist with and enhance traditional farming practices.

As part of the Project development process, AES engaged the services of the former Hawai'i Department of Agriculture Chairperson Scott Enright (Enright Co.) to evaluate the compatible agricultural plan for the Project based on site-specific considerations, the current agricultural market conditions on Kaua'i, as well as AES resources and experience (***Exhibit J***). The analysis concluded that the proposed compatible agriculture plan has a strong likelihood of success, given Kawailana's local knowledge and expertise, water availability, and proximity to a slaughterhouse and marketing capabilities.

3.7 Operations and Maintenance

Following construction, ownership of the Kaawanui Substation and interconnection facilities from the Points of Interconnection to the Grid Connection Points will be transferred to KIUC along with responsibility for all associated O&M activities and vegetation management; these facilities will be maintained in accordance with applicable PUC and other regulatory requirements as well as KIUC's system-wide standards, including their expanded Wildfire Mitigation Plan (KIUC, 2025). The facility will be continuously monitored for safety, and local crews will manage the site and vegetation to reduce fire risk while also supporting compatible agricultural activities. As further detailed in ***Section 6***, the facility will not generate substantial noise, traffic, or other community impacts.

Routine monitoring and management of facility operations will be conducted by dedicated on-island field personnel employed by AES. In conjunction, the Project will also be monitored by a designated Remote Operations Control Center (ROCC), which will track notifications from multiple sources (e.g., onsite alarm systems, internal/external phone calls, and third-party monitoring services). Metering equipment will send system performance and production data to continuously monitored servers; electronic notification will be sent to the O&M team if this data indicates the system is underperforming. If necessary, a technician will be dispatched to the Project to address any issues. Periodic maintenance and inspection of the facilities will occur intermittently throughout Project operations and will include testing and replacement of component parts on inverters, transformers, and substation equipment. Decommissioned parts will be salvaged or recycled to the extent feasible or properly disposed of in accordance with applicable regulations, consistent with the approach described in ***Section 3.8***.

Vegetation within the Project Site will be actively managed throughout the Project's life as needed to facilitate operational reliability and reduce fuel for fire mitigation. Specifically, a 30-foot (minimum) non-vegetated fire break will be installed around the perimeter of the Project Site as well as the various electrical equipment (e.g., a 20-foot buffer within the fence line and a 10-foot buffer outside the fence line). Vegetation within the remainder of the Project Site will be managed to control combustible materials, while still providing enough ground cover to prevent erosion and support compatible agricultural activities. In addition to livestock grazing, vegetation management could include mowing, weed-whacking, and, if needed, localized herbicide application.

It is estimated that an average of 3 to 4 workers will visit the site per day to support ongoing operations on the Project Site; an additional 1 to 2 people will visit the site regularly to support compatible agricultural operations. Mobile trailer(s) located on a graveled pad adjacent to the substation will be used to provide on-site space for O&M staff, as well as telecommunications, security, and monitoring equipment. The trailer(s) will utilize electricity provided through the station service line; lavatories for the shed will either be connected through sanitary wastewater and private domestic water connection or serviced by specialized sanitation crews who will manage waste and water tanks and perform routine maintenance.

3.7.1 Emergency Response Planning

An Emergency Response and Communication Plan (ERCP) will be prepared and implemented to address unpreventable emergency situations that may arise during the Project's operational phase. The ERCP will contain guidance for determining the appropriate actions to prevent injury and property loss from the occurrence of emergency incidents in compliance with applicable federal, state, and local regulations related to emergency action planning. The ECRP will include a risk assessment matrix, roles and responsibilities, communication protocols, and training requirements for emergency response; an example ERCP from a similar solar and battery storage project operated by AES is contained in ***Exhibit K***. The Project will also submit annual Hawai'i Emergency Planning and Community-Right-To-Know Act Tier II chemical inventory reports to the State of Hawai'i Department of Health ("DOH"). The inventory will include the location and volume of all onsite hazardous substances, as well as the batteries. The information received will be used by the DOH Hazard Evaluation and Emergency Response Office, the Local Emergency Planning Committee, and local emergency agencies such as the fire department for emergency planning and response to accidents or releases of hazardous chemicals or substances.

3.8 Decommissioning

The Project will operate for the duration of the PPA and may be re-powered under a new PPA (with subsequent permits/approvals) or decommissioned. In accordance with the requirements of HRS §205-4.5(a)(21) as well as the terms of the land agreement with Robinson Family Partners, decommissioning will involve removal of the solar energy facility and returning the Project Site to substantially the same condition as existed prior to Project development. As further required by HRS §205-4.5(a)(21), proof of financial security for the cost of decommissioning will be provided to the Kaua'i Planning Commission prior to the commencement of commercial generation. The financial security will be in the form of a parent guaranty, bond, or letter of credit, with the security to remain in place for the duration of the Project. The activities expected during decommissioning are summarized below and further described in the Decommissioning Plan (***Exhibit L***).

Decommissioning activities will be conducted in accordance with all relevant ordinances and regulatory requirements that are in place at the time of decommissioning. Because decommissioning

is not expected to occur for many years, and given that regulatory requirements could change, the applicable permitting and regulatory requirements will be reviewed with the appropriate local and state agencies to ensure compliance prior to decommissioning activities.

Prior to the expiration of the PPA and the end of operations, AES will notify the Kaua'i County Planning Commission in writing of the proposed date of discontinued operations of the Project and, once available, provide plans for initiating facility decommissioning and site restoration work. Decommissioning will commence once the Project has been fully de-energized and isolated from all external electrical connections, in coordination with KIUC. Decommissioning of the Kaawanui Substation is not expected at the same time as decommissioning of the solar energy facility.

The AES-constructed, but KIUC-owned Kaawanui Substation, as described throughout this application, will be used not only to interconnect the Project to the KIUC grid but also to transmit and distribute power to the west side of Kaua'i. For many reasons, the new Kaawanui Substation will harden the island-grid, including the decommissioning of adjacent KIUC substations in Kaumakani and Kekaha. Kaawanui Substation is not anticipated to be decommissioned with the AES solar energy facility at the end of the operating term set forth in the Kaawanui Solar PPA. At the future point of the decommissioning of the Kaawanui Substation, decommissioning of these facilities would be subject to KIUC's standards and requirements.

Consistent with the measures described for construction and operation of the Project, BMPs will be implemented and maintained throughout the decommissioning phase as needed to avoid and minimize potential impacts to the surrounding environment, particularly those related to dust, erosion, and stormwater. Once the site has been adequately prepared for decommissioning, the solar energy facility will be removed which includes the following equipment: (1) solar PV modules and racking system, including steel posts, (2) power conversion stations (3) BESS, including battery units and battery modules, inverters and transformers, and other auxiliary equipment, (4) AES Hawai'i Substation and related components including communication, operations, and security equipment, (5) electrical wiring and connections, and (6) fencing and gates. Other Project components, such as the onsite storage containers and mobile operations trailer(s) will also be removed from the Project Site. All foundations will be removed to a depth of at least 24 inches below grade, and piles will be fully extracted.

Decommissioning will be conducted in accordance with industry standards, with all equipment and materials treated according to the highest and best use. Equipment and materials will be refurbished, salvaged, or recycled to the extent feasible in accordance with relevant regulations, and in partnership with sub-contractors, local waste haulers and/or other facilities that recycle construction/demolition waste or refurbish equipment or, where feasible, repurposed locally for community benefit. If necessary and as required, components that cannot be reused, salvaged, recycled, or repurposed will be disposed of off-island at a solid waste facility or landfill in accordance with relevant regulations. All waste requiring special disposal (e.g., transformers) will be handled according to regulations that are in effect at the time of disposal. Following removal of the solar energy facility, site restoration will be conducted such that the physical conditions of the Project Site are returned to substantially the same condition as existed prior to Project development; these activities will include (1) removal of gravel and other aggregate material, (2) localized grading and disking to match surrounding elevations and/or aerate soil, (3) replacement of topsoil where disturbed, and (4) revegetation of disturbed areas, where necessary, with an appropriate seed mix. AES will consult with the landowner to determine if they wish to leave access routes or fencing in place to support their operations. Decommissioning will occur within 12 months of the conclusion of Project operations. Decommissioning plans will be

communicated with the landowner, the public and the regulatory agencies, prior to and during the decommissioning phase, as appropriate.

3.9 Development Schedule

The estimated durations for achieving key Project milestones are listed in Table 3.2. Upon approval of discretionary permits and entitlements (i.e., CUP, SSP, and Class IV Zoning), the Project would seek necessary state and county ministerial permits (e.g., NPDES, grading, building, electrical, etc.). Once permit approvals are obtained, construction will commence, followed by facility commissioning. Thereafter, energization and final system testing would be required before commercial operations can begin in accordance with the PPA. The Project is currently anticipating a Commercial Operations Date in 2028. However, the Project schedule may be subject to delay.

Table 3.2 Duration of Anticipated Project Milestones[1]

Milestone	Anticipated Duration
Preliminary design and early community consultation	18-24 months
Discretionary entitlements and approval process (County Use Permit, State special Permits, Class IV Zoning Permit)	6-12 months
Final engineering and design	6-18 months
Ministerial permit approval process (NPDES, Plan Review, Grading, Building, Electrical, etc.)	6-18 months
Mobilization, component deliveries, and construction	16-24 months
Commissioning, energization, and final system testing	8-12 months
Target Commercial Operation Date	2028
Commercial Operation Period (“Initial Term”)	25 years
Optional PPA Extension (“Additional Term”)	10 years
Decommissioning	12 months

[1] *Certain durations may run concurrently.*

AES understands and recognizes that the County of Kaua‘i Planning Department and LUC grant State Special Permits for a specified duration. To ensure Project viability, a permit term of 39 years would be required. This permit duration is necessary to cover (1) the predevelopment of the Project, (2) the operational period per the PPA with KIUC, which is expected to be a minimum of 25 years (“Initial Term”), subject to PUC approval, (3) the optional 10 year extension of the Project’s operational life (“Additional Term”) per the PPA with KIUC, (4) decommissioning of the Project, and (5) unanticipated delays in any aforementioned project stage.

Project predevelopment is a multiyear process, which includes ministerial permit approvals, construction, commissioning, and system testing. Project decommissioning is a 12-month process, as described in ***Section 3.8***, with the site restored to pre-existing conditions immediately upon ceasing operations at the end of the PPA term (as early as the end of 2053 and no later than 38 years after the CUP/SSP approvals are granted).

As previously referenced, it is also necessary for the permit term to accommodate schedule uncertainty and risk of unanticipated delays, which utility-scale renewable energy projects throughout the state have often encountered. Examples of delays that have impacted similar past and current utility-scale renewable energy projects in Hawai‘i include:

- Construction stoppages and supply constraints due to Covid-19;
- Supply chain disruptions due to changes in federal policies for international importation of project components;
- Delays and diversion of governmental, utility, and developer resources in response to Maui wildfires;
- Federal tax credit policy changes for renewable energy arising from federal administration changes.

The 39-year permit would allow AES to fully commit to this Project's long-term success and provide flexibility to the PUC and KIUC to realize Project benefits for KIUC members, while also giving the County, State, and community confidence that the facility will be built, operated, and ultimately decommissioned in a safe and well-planned way. The permit term required for the Project is also consistent with State Special Permits granted for similar utility-scale projects such as Ho‘ohana Solar 1 (O‘ahu, 43 years), Mahi Solar (O‘ahu, 39 years), and Lāwa‘i Solar (Kaua‘i, 35 years), among others.

RFP and AES have executed an Option Agreement (see ***Exhibit A4)*** that provides AES the right to enter into an Easement Agreement for the above-referenced Property for the Construction Term of 3 years and two extensions of the Construction Term for 6 months each and an Operating Term of 25 years and three extensions of the Operating Term of 5 years each, for the total Easement Agreement term of 44 years.

3.10 Sustainable Strategies

Design of the Project will incorporate a variety of sustainable strategies, in addition to promoting sustainability by the generation of renewable energy. Private domestic water service for the Project will be required in very limited volumes (***Section 6.6.1***). Landscaping will include plants suitable for the Makaweli climate and should not require irrigation after the establishment period (***Section 3.5***). The design will incorporate BMPs for the construction and operation phases to limit stormwater runoff and direct it toward natural drainage features (***Section 6.5***). The Project is compatible with surrounding uses, and the existing ecosystem will be preserved throughout the design.

Section 4

Characteristics of Project Site

Section 4

Characteristics of Project Site

4.1 Climate

The Project Site is located in Makaweli, on the leeward coast of Kaua‘i. The area receives lower amounts of precipitation, averaging just over 20 inches in annual rainfall. During the winter months (October through March), tropical storms, generally from the south (Kona storms), may bring heavy rainfall to the entire island. Annual high temperature is 87˚F, with an annual low temperature of 65˚F. The mean annual temperature is approximately 79˚F (Longman, 2024).

4.2 Topography and Elevation

The Project Site is located between Kaumuali‘i Highway and Kaluakoi Valley, approximately one mile wide in the center, tapering to the east and south. The Project Site includes slopes of approximately 4%, reaching elevations ranging from 20 ft to 215 ft above mean sea level *(**Exhibit C13**)*.

In addition, the ALTA/NSPS Land Title Survey *(**Exhibit C14**)* provides surveyed property boundaries, easements, rights-of-way, and existing encumbrances that intersect the Project Site. The survey shows existing site conditions, parcel limits, and mapped easements across the varying slope areas, while the topographic map illustrates how elevation and drainage patterns shape the feasible development envelope within the Site.

4.3 Soil Types and Classifications

The Island of Kaua‘i was formed from a single deeply eroded shield volcano. The rocks from the eruption are divided into the Kōloa Volcanics and Waimea Canyon Volcanics Series. The Project is located within the Kōloa Volcanics geological unit. The term “Volcanics” is used for units that represent both shield stage and all or part of the post shield stage. The Kōloa specifically represents the rejuvenated stage of Kaua‘i’s formation (Langenheim et al., 1987).

Lavas of the Kōloa Volcanics include olivine basalt, picrite-asalt, basanite, nepheline basalt, melilite-nepheline basalt, and ankaratrite. The lava flows of the Kōloa Volcanics are poorly to moderately permeable. At sea water, they carry fresh or brackish water. Small bodies of fresh water are perched at high levels in the Kōloa lavas (Macdonald et al., 1960).

As shown in ***Exhibit C15***, the Project Site falls within the Makaweli soil series, including Makaweli stony silty clay loam (0 to 6% slopes and 6 to 12% slopes) and Makaweli silty clay loam (0 to 6% slopes). The Makaweli series consists of very deep, well-drained soils that form from basic igneous rock and volcanic ash (USDA, 2020). The Project Site also consists of Nonopahu clay (2 to 10% slopes), characterized as deep, moderately well drained soils (USDA, 2001), and small areas of rough broken land.

Atlas Geotechnical and Central Geotechnical Services, LLC performed a geotechnical site investigation for the Project Site in early 2025. Field investigations included geotechnical drilling and sampling, test pits, various geophysical field tests, and an extensive pile load testing program. Lab samples were sent to Cooper Labs in Palo Alto, California, for testing. Sampling and testing were focused on providing the information necessary to develop detailed recommendations for foundation design, corrosion protection, earthwork, stormwater control, pavements, and general earthwork.

The Project Site is generally favorable for the proposed construction. Very stiff, low plasticity silts and clays with low potential for corrosion, settlement, and expansion cover most of the site. The primary challenge associated with construction on the Project Site is the presence of shallow bedrock below the low-plasticity silt and clay. The rock depth has no apparent pattern. Explorations encountered bedrock and/or pile driving refusal from two to over 20 feet below ground surface with no obvious spatial pattern. This may significantly impact pile driving operations for the PV array foundations and excavations. The geotechnical engineering report contains recommendations that will guide the design and construction of the Project.

4.4 Agricultural Lands of Importance to the State of Hawai‘i

As shown in ***Exhibit C16***, the Project Site is located on lands designated as Agricultural Lands Important to the State of Hawai‘i (“ALISH”). The majority of the Project Site is rated as “Prime” agricultural lands in the ALISH rating system, with a small portion of the eastern corner rated as “Other”. The classification categorizes agricultural lands into three classes: Prime, Unique, and Other Important Agricultural Land. Based on the classification system, “Prime” land is defined as land best suited to produce food, feed, forage, and fiber crops due to the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed according to modern farming methods (Baker, 1977). “Other” land is defined as land other than Prime or Unique land that is of State or regional importance to agriculture, but may contain qualities that limit agricultural productivity, such as slope or doughtiness.

4.5 Rainfall

The Project Site receives approximately 21 inches of rainfall per year, which is low compared to other parts of the island.

4.6 Biological Resources

The following subsections provide an overview of the biological resources within the Project Site. AECOS, Inc. was contracted in March 2025, to conduct a Natural Resources Assessment for the Project Site, as provided in ***Exhibit M***. The assessment comprises a terrestrial and aquatic biological assessment, as well as a determination of jurisdictional waters within the Project Site. This section will discuss the fieldwork and results for the biological assessment.

Flora surveys were conducted to document vegetation types; plant species, including the potential for special-status plant species to occur in the Project Site; and areas designated as critical habitat. The presence of plants traditionally gathered for cultural use were also noted. Fauna surveys were conducted to document all birds, mammals, reptiles, amphibians, fish, and invertebrate species seen or heard. Any signs, such as scat or tracks, were also noted.

Vegetation

Vegetation within the Project Site is dominated by non-native species including guinea grass (*Megathrysus maximus*) and other herbaceous plants. Koa haole (*Leucaena leucocephala*) trees line the margins of the agricultural pens. Cultivated kalo (*Colocasia esculenta*) is present in the northern portion of the Project Site, between the active and remnant irrigation ditches. The Hawai'i Gap Analysis Project vegetation data layer describes three vegetation cover types in the overall 269-acre Project Site. The vast majority of the land is made up by the agricultural vegetation type. A small portion of the land is the introduced and semi-natural vegetation type on the east and northwest boundaries, and the developed and other human use type near Kaumuali'i Highway and Ka'awanui Village *(**Exhibit C17**)*.

Flora

The overall vegetation of the Project Site is highly disturbed pastureland. No plants proposed or listed as threatened or endangered species as set forth in the Endangered Species Act of 1973 as amended were seen in the survey area. It is not expected that the Project will cause any adverse impacts to the existing flora in the Project Site.

A total of 97 plant taxa were recorded during the survey, including one species of fern and 96 flowering plants (angiosperms). Native taxa comprise six indigenous species, representing 6% of the total number of species recorded. Another three species (3%) are regarded as Early Polynesian introductions ("canoe plants"). The remaining 91% of the plant species are recent human introduction to the Hawaiian Islands that have become naturalized. For disturbed lowlands on Kaua'i, 6% native representation and 9% combined native and Early Polynesian are typical.

Avifauna

A total of 25 species of birds were recorded in the avian survey, of which one (the Hawaiian duck) is a listed species under federal and state of Hawai'i endangered species statutes. Two other species (Black-crowned Night Heron and Pacific Golden-Plover) are native but not endangered or threatened. No suitable nesting habitats exist in the Preliminary Project Study Area for any endemic waterbirds, so the proposed project will not impact listed waterbird species.

Four species, Rose-ringed Parakeet *(Psittacula krameria)*, Common Myna *(Acridotheric tristis)*, Common Waxbill *(Estrilda astrild)*, and Red Junglefowl *(Gallus gallus)* accounted for 51% of the total number of birds recorded during the field survey. The Hawaiian Duck or koloa *(Anas wyvilliana)* was recorded and is an endemic species listed as endangered under federal and State of Hawai'i endangered species statutes. The Black-crowned Night Heron *(Nycticorax nycticorax hoactli)* was recorded and is an indigenous resident species found near almost any water feature in Hawai'i. The Pacific Golden-Plover *(Pluvialis fulva)* was also recorded and is an indigenous migratory species that spends the fall and winter months in the Hawaiian Islands, returning to the high Arctic to nest about the end of April every year. The remaining 22 species recorded are all alien to the Hawaiian Islands. Eight of the species are protected under the federal Migratory Bird Treaty Act. The avian diversity and densities observed during the survey were consistent with the environment at the Project Site and with current usage at this elevation range on the Island of Kaua'i.

No seabirds were recorded during the surveys, but at least two listed seabird species – Hawaiian Petrel *(Pterodroma sandwichensis)* and Newell's Shearwater *(Puffinus newelli)* – overfly the Project Site during the breeding season, which extends from roughly late April through the middle of December. Night-flying seabirds (especially fledglings) transiting from inland to the sea can become disoriented by exterior lighting. When disoriented, seabirds may collide with man-made structures or the ground. While no suitable nesting habitat for seabird species occurs in or near the Project Site, the Project can minimize or avoid risks to protect night-flying seabirds. Appropriate mitigation measures include avoiding night-time construction and fully shielding outdoor lighting.

Mammals

No native mammals were observed in the study area. Six terrestrial mammalian species were detected during the surveys. Horse *(Equus caballus)*, domestic cow *(Bos taurus)*, and water buffalo *(Bublais bubalis)* were seen throughout the Project Site in various pens. Feral pig *(Sus scrofa)* was also seen across the Project Site. Domestic dog *(Canis lupus familiaris)* and sign of domestic cat *(Felis catus)* were observed.

Special-Status Fauna and Critical Habitat

Special-status fauna refers to wildlife species listed by the United States Fish and Wildlife Service ("USFWS") and the State of Hawai'i as threatened, endangered, or candidate. The USFWS and the Department of Fish and Wildlife ("DOFAW") list nine special-status species that may occur in the study area: 'ōpe'ape'a (Hawaiian hoary bat), 'ua'u (Hawaiian petrel), 'alae 'ula (Hawaiian gallinule), 'a'o (Newell's shearwater), 'akē'akē (Band-rumped storm-petrel), nēnē (Hawaiian goose), kōloa (Hawaiian duck), 'alae ke'oke'o (Hawaiian coot), and 'ae'o (Hawaiian stilt). These species could either occur in or transit over, in the case of seabirds, the Project Site based on the wildlife habitats present.

None of the special-status species were detected during field surveys. It is possible that the endangered Hawaiian hoary bat *(Laisurus semotus)* uses resources in the area. This bat species is solitary and rare but has a widespread distribution in Hawai'i. The Hawaiian hoary bat uses multiple roosts within a home territory, so the disturbance associated with removal of any particular tree would be minimal. An exception might be during the pupping season if a female bat carrying pups, or an unattended pup, is in a tree being felled. Appropriate mitigation measures to prevent adverse impacts to the Hawaiian hoary bat include avoiding woody vegetation clearing taller than 15 ft during the bat pupping season (June 1 and September 15) and avoiding the use of barbed wire for fencing.

The Project Site is not within nor near a federally delineated Critical Habitat, and no equivalent designation exists under State law.

4.7 Wildfire Hazard

As described by the Multi-Hazard Mitigation and Resilience Plan for the County of Kaua'i 2020 update, a wildfire is any uncontrolled fire on undeveloped land that requires fire suppression. Wildfires can be ignited by lightning or by human activity such as smoking, campfires, equipment use, and arson. The potential for significant damage to life and property exists in areas designated as "wildland urban interface (WUI) areas," where development is adjacent to densely vegetated areas. Fires in WUI areas tend to be more damaging than urban structural fires, are often more difficult to control, and behave differently from structural fires. ***Exhibit C18*** shows communities at risk from wildfires on the Island of Kaua'i. The Project Site is not identified as having any risk of wildfire. DOFAW is responsible for co-responding with the Kaua'i Fire Department ("KFD") to wildland fires, brush fires, and wildfires.

To mitigate and plan for wildfire threats, the Hawai'i Wildfire Management Organization (HWMO) updated the Community Wildfire Protection Plan in 2024. The plan addresses elements of fire protection, hazard assessment, wildfire mitigation priorities, and community outreach and education (HWMO, 2024). Historical wildfire incidents are shown on ***Exhibit C19***.

To minimize damage to infrastructure in the event of a wildfire, the solar energy facility will have appropriate fire detection and protection measures in place. Areas with combustible vegetation around the solar energy facility will be cleared to slow or stop the spread of wildfire, creating buffer zones around equipment known as "clear areas". A minimum clear area of 10 feet around ground-mounted solar PV installations will be provided. Particular attention will be paid to clearing areas around transformers, under power lines, and around the BESS area. Fencing will also be provided around the perimeter of PV panel areas, at the AES Hawai'i Substation, KIUC switchyard, and BESS area.

Batteries will be installed in self-contained enclosures that are constructed across an open-air gravel pad. The self-contained enclosures are remotely monitored and are designed to contain/suppress fires with no active fire response necessary from KFD/DOFAW. Coordination with KFD will occur throughout the project design and permit process to ensure adequate access and fire code requirements are met. A vegetation management plan will be developed for the construction and operation period. Throughout the Project's life, clear areas and fuel breaks (areas that are frequently mowed) will be maintained. Livestock grazing and animal forage will be integrated as part of the Project's Agricultural Plan which will help contribute to the maintenance of vegetation.

4.8 Jurisdictional Waters

AECOS completed a Natural Resources Assessment in August 2025 *(**Exhibit M**)* that included jurisdictional waters determination for the Project Site. The determination identified aquatic features in the Project Site. The report did not identify any bodies of water within the Project Site qualifying for federal jurisdiction.

Waters of the U.S. ("WOTUS") (also called "jurisdictional waters" or "federally jurisdictional waters") are surface waters that come under federal jurisdiction as authorized by the Clean Water Act and the Rivers and Harbors Act. Originally, the 1972 amendments to the Clean Water Act established federal jurisdiction over "navigable waters", defined in the act as WOTUS. A body of water qualifies as traditionally navigable waters if:

(a) The water body is subject to the ebb and flow of the tide, and/or

(b) The water body is presently used, or has been used in the past, or may be susceptible for use (with or without reasonable improvements) to transport interstate or foreign commerce.

Authority over these waters is granted to various federal agencies, including the U.S. Environmental Protection Agency, with the U.S. Army Corps of Engineers ("USACE") having permit authority for some actions that impact jurisdictional waters. Jurisdictional waters include all tidal waters and a subset of streams, lakes, reservoirs, and wetlands. On March 20, 2024, the final "Revised Definition of 'Waters of the United States'" took effect. Jurisdictional waters identified in the rule include:

- Tidal waters, also known as traditionally navigable waters ("TNWs");
- Impoundments of jurisdictional waters;
- Tributaries of TNWs that have relatively permanent water ("RPW");

- Tributaries of TNWs that have a significant effect on the chemical, physical, or biological integrity of a TNW;
- Wetlands adjacent to TNWs or wetlands adjacent to and with a continuous surface connection to RPW tributaries, or wetlands adjacent to tributaries, provided the wetlands significantly affect the chemical, physical, or biological integrity of a TNW;
- Other waters not identified above that have RPW and a surface connection to a TNW or RPW tributary or other waters not identified above that significantly affect the chemical, physical, or biological integrity of a TNW.

Hawai‘i does not have an independent permitting program for State waters that are not regulated as WOTUS, unlike many other states. Due to recent changes in the definition of WOTUS, Hawai‘i State agencies have begun to evaluate whether certain waterbodies are State waters, independent of whether they are considered WOTUS. State waters fall under jurisdiction authorized under HRS State Water Code (HRS §174C-3, 2021), and Water Pollution Chapter (HRS §342D-1, 2022). The State Water Code defines a “stream” as “… any river, creek, slough, or natural watercourse in which water usually flows in a defined bed or channel.” A watercourse means “… a stream or any canal, ditch, or other artificial watercourse in which water usually flows in a defined bed or channel.” State waters are defined in the Water Pollution Chapter as “all waters, fresh, brackish, or salt, around and within the State, including, but not limited to, coastal waters, streams, rivers, drainage ditches, ponds, reservoirs, canals, ground waters, and lakes; provided that drainage ditches, ponds, and reservoirs required as part of a water pollution control system are excluded.”

AECOS conducted the jurisdictional determination of the aquatic features in the Project Site on March 4 through March 6, 2025. To identify federal waters, AECOS searched for evidence of a stream bed in channels, standing bodies of water, wetlands, and flowing water in irrigation ditches. Water features within the Project Site are located in ***Exhibit C20***.

AECOS mapped an active irrigation ditch that was not depicted on the National Wetlands Inventory (“NWI”). The irrigation ditch runs through the Project Site crosses the ‘A‘akukui Stream on a modified road bridge, and terminates in an open field west of the Project Site. The active irrigation ditch does not have a surface connection to the Pacific Ocean or any other WOTUS and is therefore disqualified from federal jurisdiction.
The remnant irrigation ditch is classified in the NWI as a perennial stream with no surface connection to the Pacific Ocean. The AECOS survey indicated the remnant irrigation ditch does not have RPW, and the ditch shows no indication of a perennial segment either upstream or downstream of the survey area, in addition to a lack of surface water connection to the Pacific Ocean. This disqualifies the remnant irrigation ditch from federal jurisdiction.

Ka‘awanui Gulch is indicated in the NWI as a perennial stream with a surface connection to the Pacific Ocean. Ka‘awanui Gulch features a palustrine wetland extension or tributary that is partially located within the eastern boundary of the Project Site. The AECOS survey indicated Ka‘awanui Gulch and the palustrine wetland extension do not have RPW. This feature is better classified as an ephemeral stream that connects to the Pacific Ocean, and being ephemeral disqualifies Ka‘awanui Gulch from federal jurisdiction.

USACE may require a regulatory permit for work occurring in, over, or under jurisdictional waters or work that results in a discharge of dredged or fill material into jurisdictional waters. However, as the AECOS report did not identify any bodies of water within the Project Site qualifying for federal jurisdiction, a USACE regulatory permit is not required for the Project.

A request was submitted to USACE on August 25, 2025, to confirm that waters within the Project Site are not jurisdictional. Communication is ongoing.

To protect water quality during the construction phase of the Project, the following mitigation measures will be utilized:

- Use silt containment devices and stop work during flooding conditions.
- Avoid stockpiling construction-related materials in or near aquatic habitats and protect stockpiles from erosion.
- Avoid fueling vehicles and equipment near aquatic features.
- Protect exposed soil from erosion.

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Section 5

Permits Requested and Required

Section 5

Permits Requested and Required

This document has been prepared in support of the application for a Special Permit, a Use Permit, and a Class IV Permit for the Project. The Applicant, in agreement with the KIUC and the Landowner, proposes to construct and operate the Project, which is a solar energy facility that will utilize land for renewable energy production and storage via solar PV generation. The project will be located on State-zoned Agricultural land and County-zoned Agricultural and Open lands.

The Project will comply with all applicable requirements for solar energy facilities in the State agricultural district as specified in HRS §205-4.5(a)(20). The Project will also comply with all applicable requirements for solar energy facilities, as well as private and public utility facility development, on lands within the County Agricultural and Open districts, as specified in CZO §8-8 (Agriculture Districts) and CZO §8-9 (Open Districts).

5.1 Special Permit

Pursuant to HRS §205-6, a SLUC Special Permit may be sought for uses within the State agricultural or rural districts that are "certain unusual and reasonable uses other than those for which the district is classified." Permissible uses within the Agricultural District shall include solar energy facilities as described in §205-4.5(a)(20), as long as the solar energy facilities do not occupy more than 10% of the acreage of the parcel, or twenty acres of land, whichever is lesser, without obtaining a Special Permit. The total area of the parcels is 5,006.740 acres; therefore, the Project Site (269.195 acres) occupies approximately 5% of the parcels. However, the Project Site area is larger than twenty acres; thus, a Special Permit must be obtained.

Further, HRS §205-4.5(a)(20) details permitted uses on the LSB-A or -B rated land within the Agricultural District. The LSB assigned ratings to agricultural land, ranging from A to E, with A being the most productive and E being the least productive. The Project is located on LSB B and E-rated land. HRS §205-4.5 permits the use of solar energy facilities on LSB B- or C-rated Agricultural land with approval of a Special Permit.

The petition requirements and content for a Special Permit pursuant to Chapter 13 of the Rules of Practice and Procedures of the Commission are listed in §13-4. These requirements can be found in ***Exhibit N1,*** which also locates in which section of the application these requirements are fulfilled.

5.2 Use Permit

A Use Permit is required for private and public utility facility development on lands within the County agricultural district, pursuant to CZO §8-2.4(r)(15). A Use Permit is also required for utility installations, such as solar energy facilities, on lands within the Open District, according to CZO §8-2.4(t)(12). The Use Permit application checklist is included as ***Exhibit N2***. This application includes a list of declarations that are integral to the Use Permit review process, primarily relating to the Project Site's existing conditions and the design details of the Project.

5.3 Class IV Zoning Permit

According to CZO §8-2.4(q)(20), solar energy facilities placed within land with soil classified by the LSB's detailed land classification as overall (master) productivity rating B, C, D, or E are allowed within Agricultural zoned lands. However, those facilities placed within land with soil classified as overall productivity rating class B and C shall not occupy more than (10%) of the acreage of the parcel, or twenty (20) acres of land, whichever is less. The Project Site consists almost entirely of soils rated LSB-B (***Exhibit C9***), so solar energy facilities may be allowed. The Project will occupy 269 acres, which is less than 5% of the total acreage of the parcels, but more than 20 acres of land. Therefore, a zoning permit is required for the development of the Project.

Furthermore, according to CZO §8-8.4(d), construction or development within the Agriculture District that requires a Use permit also requires a Class IV Permit. The general requirements for Zoning Permits are listed in CZO §8-3.1(a) and CZO §8-3.1(b). Requirements specific to Class IV Permit are located in CZO §8-3.1(f). The Project will comply with the requirements of the Agriculture District as described in the CZO, as well as consult with the KDP Regulatory Planning Division to clarify the requirements for development. The general submittal requirements for Class IV Permits are included in ***Exhibit N3***, as well as how the Project addresses the requirements. The requirements are largely related to the existing conditions of the Project Site, details of the proposed development, anticipated impacts, and associated technical studies.

5.4 Other Permits

Construction of the Project will not proceed until all necessary permits and approvals have been obtained. Table 5.1 lists the permits and approvals that are expected to be required for the construction and operation of the Project.

Table 5.1 Anticipated Permits and Approvals Required for Project

Permit/Approval[1/]	Regulatory Agency
State Special Permit (SSP)	Kaua'i Planning Commission, State Land Use Commission
Kaua'i County Use Permit (CUP)	Kaua'i Planning Commission
Class IV Zoning Permit	Kaua'i Planning Commission
Historic Preservation Review (HRS Chapter 6E Compliance)	State Historic Preservation Division (SHPD)
National Pollutant Discharge Elimination System (NPDES) Permit	Department of Health (DOH), Clean Water Branch
Noise Permit (if needed)	DOH, Indoor and Radiological Health Branch
Building Permit	County of Kaua'i Department of Public Works Building Division
Grading and Grubbing Permit (including Drainage and Erosion Control Plan)	County of Kaua'i Department of Public Works Engineering Division
Stormwater Quality Best Management Practices Plan and Maintenance Plan	County of Kaua'i Department of Public Works Engineering Division

Table 5.1 Anticipated Permits and Approvals Required for Project	
Permit/Approval[1/]	
Permit to Perform Work on State Highways	State Department of Transportation (HDOT) Highways Division
Permit for Oversized and Overweight Vehicles (if needed)	State Department of Transportation (HDOT) Highways Division
Moving Permit (if needed)	County of Kauai Department of Public Works Engineering Division

[1] In addition to these permits and approvals required for Project construction, PUC approval would also be required for the PPA.

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Section 6

Impacts of Development

Section 6

Impacts of Development

6.1 Botanical Resources and Wildlife

The existing state of botanical resources and wildlife has been heavily compromised by past and present residential, agricultural, and botanical uses on the Project Site. As a result, there do not appear to be any mammalian or avian species or botanical resources that will be endangered by the Project. The habitat currently present on the Project Site comprises both improved and unimproved lands, which have been used for various agricultural purposes since the closure of sugarcane operations in the area. As described in the Natural Resource Assessment (***Section 4.6***), the vegetation is dominated almost to the exclusion of native species by alien introduced grasses and weedy species. Terrestrial mammals present on the Project Site and within the vicinity are likewise alien species. The endemic endangered Hawaiian hoary bat *(Lasiurus cinereus semotus)* may fly over the Project Site and possibly forages for insects on a seasonal basis above the Project Site. The Applicant will implement the recommendations contained in the Natural Resource Assessment (***Section 4.6***) to minimize impacts to the flora and fauna on the Project Site.

6.2 Historical Resources

Pursuant to the Environmental Review Program's Guidelines for Assessing Cultural Impacts, the Project's potential impacts to cultural beliefs, practices, and resources must be assessed, which may include traditional cultural properties. Traditional cultural properties may be significant historic properties under State of Hawai'i significance Criterion e, pursuant to Hawai'i Administrative Rules ("HAR") §13-284-6(b). Significance Criterion e refers to historic properties that "have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group's history and cultural identity".

The Literature Review and Field Inspection and Archaeological Inventory Study show that the Project Site contains only post-contact (1778 to present) historic properties. Background research indicates this portion of Makaweli was previously plains or forested lands *(**Section 3.1**)*. Cultural and historic resources are related to the 1876 founding and subsequent operations of the Hawaiian Sugar Company (also known as Makaweli Plantation). Sugar cultivation continued under different managements and owners until operations ceased the first decade of the twenty-first century. Identified post-contact features can be associated with transportation and sugarcane agriculture.

6.2.1 Literature Review and Field Inspection

Cultural Surveys Hawai'i, Inc. ("CSH") completed an archaeological Literature Review and Field Inspection ("LRFI") for the overall Project Site in April 2025 to determine the likelihood that archaeological historical properties may be affected by the Project. No pre-Contact archaeological features were observed during field work within the Project Site. Results from the background research

and the field inspection indicate a low potential of encountering surface or subsurface pre-Contact archaeological features within the Project Site, given the nature and extent of prior land alteration.

The purpose of the report *(**Exhibit O**)* is to facilitate the Project's planning and support the Project's historic preservation review compliance. The pedestrian inspection fieldwork was conducted on 22 and 23 January 2025. Findings from the fieldwork were supplemented by extensive background research of previous archaeological studies *(**Exhibit C21**)*, historical documents (including photographs, maps, and newspaper articles), and Māhele records.

Background research and the field inspection revealed that the Project Site has been extensively modified by operations related to historic sugar cultivation and subsequent agricultural activities. Numerous post-contact features associated with transportation and sugarcane agriculture were identified, including portions of plantation roads and the Old Government Road, rock walls, ditch systems, a railroad remnant, and a water tank *(**Exhibit C22**)*. Although historical properties have been identified to the west of the Project Site in previous archaeological studies *(**Exhibit C23**)*, no pre-Contact archaeological features were observed during field work within the Project Site.

Archaeological oversight for a geotechnical survey in the Project Site was conducted in early February 2025 by CSH. Field work involved observation and stratigraphic documentation of the test pit excavations. The geotechnical contractor was instructed to halt work upon any findings of cultural materials and report to the team. No subsurface archaeological features or deposits were encountered during the geotechnical survey boring and test pit excavations.

6.2.2 Archaeological Inventory Study

This subsequent AIS was completed by CSH in August 2025 (***Exhibit P***). The AIS investigation fulfills the requirements of HAR §13-276 and was conducted to identify, document, and assess the significance of any historic properties. The AIS is intended to support the Project's historic review under HRS §6E-42 and HAR §13-284. It is also intended to support any Project-related historic preservation consultation with stakeholders such as State and County agencies and interested Native Hawaiian Organizations and community groups. Fieldwork for the AIS was conducted on 14-16 July 2025.

Two previously documented historic property and five newly documented historic properties were identified as a result of the AIS:

- State Inventory of Historic Properties ("SIHP") # 50-30-09-02269 is a historic plantation ditch system. A portion of the ditch system located upslope of the Project Site was previously documented and assessed by Byerly and O'Day (2015) as significant under Criterion d for "its information related to historic sugarcane production in upland Kaua'i." The results of the current AIS support this prior assessment for SIHP # -02269.
- SIHP # 50-30-09-CSH-3 is the historic Old Government Road. The segment of this roadway within the Project Site is assessed as significant under Criterion d for the information it has provided about historic transportation within the study area.
- SIHP # 50-30-09-CSH-4 is the historic Ka'awanui Village Road. The segment of this roadway within the Project Site is under Criterion d for the information it has provided about historic plantation-related transportation within the study area.
- SIHP # 50-30-09-CSH-5 is a historic plantation road. The segment of this roadway within the Project Site is assessed as significant under Criterion d for the information it has provided about historic plantation-related transportation within the study area.

- SIHP # 50-30-09-CSH-6 is a railroad track remnant of indeterminate age. It is assessed as significant under Criterion d for the information it has provided about plantation-related activity within the Project Site.
- SIHP # 50-30-09-CSH-7 is a historic water tank facility. It is assessed as significant under Criterion d for the information it has provided about historic plantation-related water use within the Project Site.

In accordance with HAR §13-284-7, the Project effect is "effect, with agreed upon mitigation commitments." These six sites are assessed as significant under Criterion d of the State of Hawai'i significance criteria. Documentation of these historic properties in the AIS has included historical research, GPS data collection, photographs, plan view maps, representative profiles and cross section maps, written descriptions, and consultation with a knowledgeable party. The AIS adequately documents the location, extent, function, age, and construction methods of the six historic properties in the Project Site, mitigating Project-related impacts pursuant to HAR §13-284-8.

The AIS does not recommend further archaeological work, including archaeological monitoring. However, if subsurface features or deposits are encountered at any time during construction, construction activities shall cease in the area of the find and SHPD shall be contacted immediately. All development shall be within the limits of the Project Site.

6.2.3 Reconnaissance Level Survey

Mason Architects, Inc. ("MASON") was contracted to develop a Reconnaissance Level Survey ("RLS") for the Project (***Exhibit Q***). No resources were evaluated as meeting HAR §13-284-6 historic significance and integrity criteria, and as such, no mitigation measures were proposed.

The LRFI, completed by CSH in April 2025, identified the 14 architectural resources studied in the RLS (***Exhibit C24***). These consist of six culverts, one board-adjusted irrigation gate, one check and turnout, one settling box, three roadways, one remnant short section of railroad track, and one water tank. MASON surveyed these fourteen structures and evaluated them for historical significance. The survey is intended to fulfill historic property identification and significance evaluation requirements for HAR §13-284 related processes that will be undertaken by SHPD for their review of the Project. Fieldwork was completed July 15, 2025 to photograph and record the resources.

Seven of the resources surveyed in the RLS were built circa 1977 or later. These are less than 50 years in age and thus cannot be considered historic properties:

- Culvert -02269-CSH-2C, (ca. 2000)
- Ditch diversion -02269-CSH-1A, (ca. 1977)
- Culvert -02269-CSH-1B, (ca. 1977)
- Culvert -02269-CSH-1C, (ca. 1977)
- Culvert -02269-CSH-2D, (ca. 2000)
- Culvert -02269-CSH-2E, (ca. 2000)
- Railroad Track Remnant CSH-6, (ca. 1995)

The remaining seven resources are older than 50 years in age and were assessed for significance in keeping with HAR §13-284-6 significance and integrity criteria:

- Culvert -02269-CSH-2A (ca. 1910)
- Check and Turnout -02269-CSH-1D (ca. 1946)
- Settling Box -02269-CSH-1E (ca. 1946)
- Water Tank CSH-7 (ca. 1950)
- Ka‘awanui Village Road CSH-4 Feature A (ca. 1901)
- Government Road CSH-3 Feature A (ca. 1910)
- “Hangar Road” CSH-5 (ca. 1927)

Project construction workers and all other personnel involved in the construction and related activities of the Project should be informed of the possibility of inadvertent cultural finds, including human remains. Should any potential historic properties be identified during construction activities, all activities will cease and the SHPD will be notified pursuant to HAR §13-280-3. In the event that iwi kūpuna are identified, all earth moving activities in the area will stop, the area will be cordoned off, and the SHPD and the Police Department will be notified pursuant to HAR §13-300-40. In addition, in the event of an inadvertent discovery of human remains, the completion of a burial treatment plan, in compliance with HAR §13-300 and HRS §6E-43, is recommended.

Should iwi kūpuna and/or cultural finds be encountered during construction, project proponents should consult with cultural and lineal descendants of the area to develop a reinterment plan and cultural preservation plan for proper cultural protocol, curation, and long-term maintenance.

A preservation or mitigation plan will be developed, should this be a recommendation by SHPD in accordance with their approval of the AIS (pending as of the publication of this document).

Table 6.1 Significance Evaluation and Integrity Assessments

Name	Year Built	Evaluation of Significance (HAR §13-284-6 and Hawaii Register criteria)	Integrity Assessment (HAR §13-284-6)
Culvert -02269-CSH-2A on West Lateral Ditch	Ca. 1910	Does not meet requirements. Associated with Hawaiian Sugar Co. irrigation, but as a somewhat isolated and non-distinctive component on a lateral (not primary) irrigation ditch, it is evaluated as a non-significant structure that does not readily convey its historic period. Further, it has no known association with the lives of important persons and is not expected to yield information important in history.	Retains integrity of L, D, M, W, F, A. Integrity of S is only partially retained due to changes in surroundings.
Culvert -02269-CSH-2C on West Lateral Ditch	Ca. 2000	Less than 50 years in age and thus cannot be considered as a historic property.	N/A
Ditch diversion (Board-adjusted gate) -02269-	Ca. 1977	Less than 50 years in age and thus cannot be considered as a historic property.	N/A

Table 6.1 Significance Evaluation and Integrity Assessments			
Name		(HAR §13-284-6 and Hawaii Register criteria)	Integrity Assessment
CSH-1A on East Lateral Ditch			
Culvert -02269-CSH-1B	Ca. 1977	Less than 50 years in age and thus cannot be considered as a historic property.	N/A
Culvert -02269-CSH-1C	Ca. 1977	Less than 50 years in age and thus cannot be considered as a historic property.	N/A
Check and Turnout -02269-CSH-1D	Ca. 1946	Does not meet requirements. Associated with Olokele Sugar Co. irrigation, but as a somewhat isolated component on a lateral (not primary supply) irrigation ditch, it is evaluated as a non-significant structure that does not rise to a level necessary for eligibility. Further it has no known association with the lives of important persons, and is not expected to yield information important in history.	Retains integrity of L, D, M, W, F, A. Integrity of S is only partially retained due to changes to surroundings.
Settling Box -02269-CSH-1E	Ca. 1946	Does not meet requirements. Associated with Olokele Sugar Co. irrigation, but as a somewhat isolated component on a lateral (not primary supply) irrigation ditch, it is evaluated as a non-significant structure that does not rise to a level necessary for eligibility. Further it has no known association with the lives of important persons, and is not expected to yield information important in history	Retains integrity of L, D, F, A. Integrity of W and M are partially retained due to 1967 repairs. Integrity of S is only partially retained due to changes to surroundings.
Culvert -02269-CSH-2D on West Lateral Ditch	Ca. 2000	Less than 50 years in age and thus cannot be considered as a historic property.	N/A
Culvert -02269-CSH-2E on West Lateral Ditch	Ca. 2000	Less than 50 years in age and thus cannot be considered as a historic property.	N/A
Railroad Track Remnant CSH-6	Ca. 1995	Less than 50 years in age and thus cannot be considered as a historic property.	N/A
Water Tank CSH-7	Ca. 1950	Does not meet requirements. Possibly associated with Olokele Sugar, but as utilitarian water tank, it is evaluated as a non-significant structure that does not readily convey its historic period. Further it has no known association with the lives of important persons and is not expected to yield information important in history.	Retains integrity of L. Integrity of S, D, M, W, F, A are only partially retained due to changes in the surroundings and replacement of tank wall and roof.

Table 6.1 Significance Evaluation and Integrity Assessments			
Name	Year Built	Evaluation of Significance (HAR §13-284-6 and Hawaii Register criteria)	Integrity Assessment (HAR §13-284-6)
Ka‘awanui Village Road CSH-4 Feature A	Ca. 1901	Does not meet requirements. Although it is associated with the Hawaiian Sugar Co. as a road that provided direct access to plantation worker housing (Camp 6, later Ka‘awanui Camp/Village) from the coastline, it is not evaluated as a major or significant resource on its own and does not exhibit any distinctive features or engineering aspects. It is not associated with an important person, nor is it expected to yield information important in history.	Retains integrity of L. Integrity of S is only partially retained due to changes in the surroundings. Integrity of D, M, W, F, A are partially retained due to re-pavement and patching of the asphalt.
Old Government Road CSH-3 Feature A	Ca. 1910	Does not meet requirements. While this section of road was part of the main route to Līhu‘e from the Preliminary Project Study Area locality starting ca. 1910, and is a component of the Government Road that became part of the Kaua‘i Belt Road System, it represents less than half a mile of the original Kaua‘i Belt Road, and does not exhibit any notable or distinctive features or characteristics from that period. It is a relatively mundane and isolated section of the Belt Road and does not readily convey its historic period. (Note: A section of the Kaua‘i Belt Road on the North Shore between Princeville and Ha‘ena was added to the Hawai‘i Register in 2003 under SIHP # 50-30-02-02334, which is notable for its many distinctive historic bridges.)	Retains integrity of L. Integrity of S is only partially retained due to changes in the surroundings. Integrity of D, M, W, F, A are partially retained due to the degraded condition of the paving.
“Hangar Road” CSH-5	Ca. 1927	Does not meet requirements. Although it was likely built during the Hawaiian Sugar Co. era, it is not evaluated as a major or significant resource on its own, and does not exhibit any distinctive features or engineering aspects. It is not associated with an important person, nor is it expected to yield information important in history.	Retains integrity of L. Integrity of S, D, M, W, F, A are partially retained due to changes in the surroundings and patching of the asphalt.

Integrity assessments provided in the table are abbreviations for the aspects of integrity specified in Hawai‘i Administrative Rules Chapter 13-275-6. The seven aspects of integrity are: L = Location, D = Design, S = Setting, M = Materials, W = Workmanship, F = Feeling, and A = Association.

Source: MASON, 2025

6.2.4 6E Compliance

This Project is subject to the State historic preservation review process prescribed under HRS §6E-42 that essentially states that SHPD shall be afforded an opportunity to review and comment on the effect of a proposed private Project on known historic properties prior to the approval of permit or other applicable entitlements by a State or County agency.

Under HAR Chapter 13-284 "Rules Governing Procedures for Historic Preservation Review to Comment on §6E-42, HRS, Projects", which is applicable to the Project, criteria for determining effects on significant historic properties are defined under HAR §13-284-7 Under this section, one of two effect determinations must be concluded for a Project: (1) "No historic properties affected", indicating the Project will have no effect on significant historic properties; or (2) "Effect, with agreed-upon mitigation commitments," indicating that while effects are anticipated, they will be addressed through agreed-upon mitigation measures.

CSH filed a letter on April 23, 2025, on behalf of Kaawanui Solar, LLC to request early consultation with SHPD for the Project. The letter outlined the status of the historic preservation review process led by CSH, including an archaeological LRFI and archaeological observation of the Project's geotechnical survey. The letter requested SHPD's feedback regarding the necessity of completing an AIS for the Project. On October 9, 2025, SHPD confirmed the need for the Project to conduct an AIS (***Exhibit R***). To preserve the Project schedule, CSH proactively initiated and completed an AIS in August 2025. The AIS and RLS were submitted to SHPD via HICRIS on October 9, 2025, for review and determination.

6.3 Air Quality

The Project will comply with all air quality requirements and implement BMPs to minimize any adverse effects on air quality. The Clean Air Act of 1972 and its 1990 Amendments and subsequent legislation regulate air emissions from area, stationery, and mobile sources. Both the U.S. Environmental Protection Agency and the State of Hawai'i have instituted Ambient Air Quality Standards ("AAQS") to maintain air quality in the interest of public health and secondary public welfare.

The DOH regulates fugitive dust. HAR §11-60.1-33, Fugitive Dust, states that no person shall cause or permit visible fugitive dust to become airborne without taking reasonable precautions, and no person shall cause or permit the discharge of visible fugitive dust beyond the property lot line on which the fugitive dust originates (CAB, 2019). This rule applies to construction projects and would, therefore, be applicable to the Project. To comply with these requirements and to minimize any other adverse effects on air quality, the BMPs listed below will be implemented.

- All construction vehicles and equipment will be properly maintained according to the manufacturer's specifications.
- To the extent feasible, off-road and portable diesel-powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, will be fueled with motor vehicle diesel fuel.
- The number of vehicles accessing and moving within the Project site will be limited to the extent possible. Vehicle speed on unpaved roads within the Project site will be limited to 25 miles per hour or less.
- Vehicles and equipment will not be allowed to idle for extended periods of time (i.e., more than 20 minutes).

- All trucks hauling soil or other loose materials will be covered.
- Water trucks or sprinkler systems will be used to control fugitive dust within the Project site.
- Carpooling among construction workers will be encouraged to minimize construction-related traffic and associated emissions.

As previously described, areas that have been temporarily disturbed will be revegetated (with natural regrowth and/or hydroseeding) as needed, and the vegetation will be actively monitored and maintained at levels necessary to minimize the potential for erosion and fugitive dust. Operation of the Project will result in minor emissions associated with vehicle exhaust and fugitive dust from vehicles and equipment used to perform operation and maintenance activities, as well as those associated with compatible agricultural activities. None of the equipment associated with the solar arrays, battery units and ancillary facilities (e.g., inverters and control equipment, transformers, switches, etc.) emit air pollutants of any kind. Consequently, it is anticipated that emissions associated with Project operations and maintenance will be very low. At a broader scale, the Project will provide a net air quality benefit by replacing energy generated by burning fossil fuels with renewable energy, thereby reducing emissions of greenhouse gases.

There are no air quality monitoring stations on the west side of Kaua‘i. The only air quality monitoring station on the island is in Niumalu, which is a “Special Purpose Monitoring Station” that actively monitors source impacts from cruise ships (sulfur dioxide) (HDOH, 2025a). From a qualitative perspective, air quality on the west side of Kaua‘i is affected by pollutants from natural, vehicular, agricultural, and military sources. Air quality in the vicinity of the Project Site is likely considered to be good due to the low density of development in the area and relatively few point source air pollutants.

Construction-related impacts to air quality are anticipated with the implementation of the Project. During the short-term and temporary construction period, potential emission sources that may affect air quality at the construction sites include the following:

- Diesel and/or gasoline-powered construction equipment and motor vehicles may contribute to additional CO and CO_2 in the air.
- Fugitive dust emissions resulting from ground disturbing activities such as grading for pads and trenching. Because levels of criteria pollutants in Hawai‘i are consistently below Federal and State AAQS, the prevailing trade winds rapidly carry pollutants offshore, limiting the effect on receptors, and the BMPs implemented, increases in levels of criteria pollutants at the Project Site and adjacent areas from construction activities are not expected to be significant. It is not anticipated that Federal or State AAQS will be exceeded during construction activities.

Table 6.2 State of Hawai'i and National Ambient Air Quality Standards					
Pollutant	Units	Averaging Time	Maximum Allowable Concentration		
			National Primary	National Secondary	State of Hawai'i
Particulate Matter <10 microns (PM_{10})	µg/m³	Annual 24 Hours	- 150[a]	- 150[a]	50 150[b]
Particulate Matter <2.5 microns ($PM_{2.5}$)	µg/m³	Annual 24 Hours	12[c] 35[d]	15[c] 35[d]	- -
Sulfur Dioxide (SO_2)	ppm	Annual 24 Hours 3 Hours 1 Hour	- - - 0.075[e]	- - 0.5[b] -	0.03 0.14[b] 0.5[b] -
Nitrogen Dioxide (NO_2)	ppm	Annual 1 Hour	0.053 0.100[f]	0.053 -	0.04 -
Carbon Monoxide (CO)	ppm	8 Hours 1 Hour	9[b] 35[b]	- -	4.4[b] 9[b]
Ozone (O_3)	ppm	8 Hours	0.070[g]	0.070[g]	0.08[g]
Lead	µg/m³	3 Months Quarter	0.15[h] 1.5[i]	0.15[h] 1.5[i]	- 1.5[i]
Hydrogen Sulfide	ppb	1 Hour	-	-	25[b]

[a] Not to be exceeded more than once per year on average over three years.
[b] Not to be exceeded more than once per year.
[c] Three-year average of the weighted annual arithmetic mean.
[d] 98th percentile value averaged over three years.
[e] Three-year average of fourth-highest daily 1-hour maximum.
[f] 98th percentile value of the daily 1-hour maximum averaged over three years.
[g] Three-year average of annual fourth-highest daily 8-hour maximum.
[h] Rolling 3-month average.
[i] Quarterly average.
Source: DOH, 2015

6.3.1 Greenhouse Gas Emissions

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. Parts of Act 234 were codified in HRS §342B, and 2014 HAR §11-60.1 was amended to adopt the GHG Program. Act 238, enacted in 2022, established a goal for statewide GHG emissions to be at least 50% below 2005 levels by the year 2030. Additionally, Act 15 of 2018 established a statewide carbon net-negative goal, meaning more atmospheric carbon and GHGs be sequestered than emitted within the State no later than 2045.

The most recent GHG emissions report, *Hawai'i Greenhouse Gas Emissions Report for 2022* (HDOH, 2025b), indicates that the State continues to meet the 2007 GHG reduction goals; however, the 2022 GHG emissions report found that the State is not on track to meet the 2030 or 2045 statewide emission targets. Goal attainment is dependent on the continued reduction of emissions from the energy sector, which includes both transportation and stationary combustion sources. The 2022 GHG emissions report also indicates that the energy sector accounted for 88% of Hawai'i's emissions, which was estimated at 18.0 million metric tons carbon dioxide equivalent with 41.4% coming from stationary combustion sources.

Ramboll Americas Engineering Solutions, Inc. conducted a GHG Analysis (***Exhibit S***) to quantify the positive impact the Project would have on the State's GHG Emissions. The Net Lifecycle GHG Emissions Reduction resulting from this Project is estimated to be approximately 2,258,000 metric tons of CO_2 equivalent.

Development of the Project will move the State forward in achieving its 100% renewable energy goal while also improving Hawai'i's environment by reducing GHG emissions, dependency on foreign imports of fossil fuels and associated price variations, and the environmental risk of spills during the transport and storage of fossil fuel to the State.

6.4 Noise

Noise is defined as unwanted sound and is one of the most common environmental issues of concern to the public. A number of factors affect sound as it is perceived by the human ear. These include the actual level of the sound (i.e., noise), the frequencies involved, the period of exposure to the noise, and changes or fluctuations in the noise levels (HAR §12-200.1 – Occupational Noise Exposure).

The State of Hawai'i Community Noise Control Rule (HAR §11-46) defines three classes of zoning districts and specifies corresponding maximum permissible sound levels due to stationary noise sources such as air-conditioning units, exhaust systems, and generators. The accepted unit of measure for noise levels is the decibel ("dBA"). The Community Noise Control Rule does not address most moving sources, such as vehicular traffic noise, air traffic noise, or rail traffic noise. However, the Community Noise Control Rule does regulate noise related to construction activities, which may not be stationary.

The State of Hawai'i regulates noise exposure in the following statutes and rules:

- HRS §342F – Noise Pollution
- HAR §11-46 – Community Noise Control

The maximum permissible noise levels are enforced by the DOH for any location at or beyond the property line and shall not be exceeded for more than 10% of the time during any 20-minute period. The specified noise limits which apply are a function of the zoning and time of day as shown in ***Exhibit C25***. With respect to mixed zoning districts, the rule specifies that the primary land use designation shall be used to determine the applicable zoning district class and the maximum permissible sound level. In determining the maximum permissible sound level, the background noise level is taken into account by the DOH.

The Project is located in the Agriculture zoning designation. The proposed solar energy facility will be in a Class C Zoning District with a maximum permissible sound level of 70 dBA during both daytime (7 AM to 10 PM) and nighttime hours (10 PM to 7 AM). The Project is located in grassland areas on the

west side of Kaua‘i in a relatively undeveloped area. There are no adjacent noise producers to the Project Site, which creates a very quiet noise environment. Noise in the surrounding area is limited to typical ambient natural noises, as well as noise generated by traffic on the nearby Kaumuali‘i Highway. Since there are minimal sensitive receptors in the area, noise impacts aren’t expected.

Noise generated during construction of the Project will be short-term and limited to the areas of construction. Noise will be generated by construction equipment employed to develop the Project. Construction equipment will include excavators, trucks, and other heavy equipment. Earthmoving equipment (e.g., an excavator) will likely be the loudest piece of equipment used during construction. Typical noise emission levels for construction equipment are provided in *Table 6.3*. Noise levels may surpass the maximum permissible sound level of 70 dBA during the construction phase of the Project. Therefore, a Noise Permit may be required from the Indoor and Radiological Health Branch of the DOH.

Table 6.3 Typical Noise Emission Levels for Construction Equipment

Type of Equipment	Noise Level at 50 feet (dBA)
Air Compressor	81
Backhoe	80
Bulldozer	82
Chain Saw	85
Concrete/Grout Pumps	82
Crawler Service Crane (100-ton)	83
Dump Truck	88
Excavator	85
Front End Loader	80
Generator	81
Jackhammer (compressed air)	85
Lift Booms	85
Pick-Up Truck	55
Power-Actuated Hammer	88
Water Pump	76
Water Truck	55

During operation, the Project is estimated to have only negligible traffic going to the Project Site each day, have no adverse impacts to air quality, and only produce noise from the inverters, which emit a low hum or buzzing sound. There is a small neighborhood (Ka‘awanui Village) positioned within 100 yards of the Project Site. The Project will generate minimal noise impacts, as the sound produced is no higher than 38 dBA from a distance of 100 feet, which is lower than the most stringent acceptable sound level. Therefore, noise generated during the operation phase of the Project is not expected to have adverse impacts for Ka‘awanui Village.

Operation of the PV solar array will have no noise increase from the existing noise environment. The renewable energy created by the Project will offset energy that would otherwise be produced by loud existing legacy fossil generation units at either Port Allen or Kapaia, resulting in a net decrease in noise emissions for Kaua'i's electricity generation. Operation of the Project will provide positive regional noise impacts, minimal noise impacts in the immediate area of the solar energy facility, and negligible noise impacts across most of the Project footprint.

6.5 Flooding and Drainage

The Project Site is located in Flood Zone X as shown in ***Exhibit C26***. Zone X is the flood insurance rate zone that corresponds to areas outside the 1% annual chance floodplain and areas protected from the 1% annual chance flood by levees. No Base Flood Elevations ("BFEs") or depths are shown within this zone. The Project will meet all the requirements of the Floodplain Management Ordinance of the County of Kaua'i, as contained in Chapter 15, Article 1, of the Kaua'i County Code, 1987. The Project will have no impact on flooding on or around the Project Site.

No stormwater drainage infrastructure is currently located within the Project Site. In general, stormwater flows across the Project Site toward natural drainage features. Minor grading will occur throughout the solar energy facilities to ensure drainage from stormwater events is conveyed away from the energized equipment and substation. Stormwater retention features will be located within the Project fence line. The Project will incorporate stormwater BMPs during construction and throughout operation (see Stormwater Management Design Memo, ***Exhibit G***).

6.6 Public Utilities

6.6.1 Water

The County of Kaua'i Department of Water does not currently service the Project Site. The Project has secured an annual water allocation from G&R for compatible agricultural activities, landscaping, and facility use during construction and operation.

Water will be required during construction and operation for dust control, vehicle washdown, potential revegetation for erosion control or decommissioning, compatible agricultural uses (e.g., drinking water for sheep and irrigation for crops), and potable and non-potable water supplied to the O&M Shed for onsite employees. Regardless, total water consumption for both the construction and operation of the Project will be minimal, with water obtained through G&R.

Since photovoltaic generation requires no processed water and minimal quantities for construction and periodic operations, the Project avoids placing new burdens on the Makaweli Aquifer System Area's sustainable yield or on County water infrastructure. Compatible agricultural uses will rely exclusively on water already available onsite through G&R, preserving existing allocations and avoiding any increase in system demand. Accordingly, the Project is fully consistent with the Water Plan's policies encouraging efficient water use, protecting aquifer resources, and siting low-water-intensity land uses in areas with existing agricultural activity.

6.6.2 Electric/Communications

There are currently no electric distribution lines that service the Project. There is one telecommunications line that traverses the Project Site, which will be relocated. Electricity and telecommunication services for the Project will all be within the Project Site and either connect to

existing service lines or be delivered along the same route as the new Project Interconnection Line. The storage containers will utilize electricity provided through the station service line for climate control and lighting, and communication equipment will be installed in the AES Hawai'i Substation and throughout the facility for operations and security purposes. There will be no impacts associated with these new connections.

6.6.3 Wastewater Treatment and Disposal

The County of Kaua'i Public Works – Wastewater Management Division operates Kaua'i's wastewater infrastructure, and the wastewater system does not currently service the Project Site. Lavatories for the O&M shed will either have a septic tank or be serviced by specialized sanitation crews who will manage waste and water tanks and perform routine maintenance.

6.6.4 Solid Waste Disposal

Solid waste on Kaua'i is handled at the Kekaha Landfill. The Applicant is aware of the limited capacity at this landfill.

Construction of the Project is not anticipated to generate a significant amount of solid waste. During construction, all waste will be temporarily stored onsite and periodically transported by the construction contractor for recycling or disposal at Kekaha Landfill. Little to no waste will be generated during operation. Trash stored outdoors will be stored in trash cans or dumpsters with lids. The Applicant will contract for trash removal from the Project Site and will not rely on municipal services.

At the end of the operational period, the Project will be decommissioned, which will involve removal of all Project equipment from the Project site. As described in *Section 3.8*, decommissioning will be conducted in accordance with industry standards, with all equipment and materials treated according to the highest and best use. Equipment and materials will be refurbished, salvaged, or recycled to the extent feasible and in coordination with licensed sub-contractors, local waste haulers and/or other facilities that recycle construction/demolition waste or refurbish equipment or, where feasible, repurposed locally for community benefit. If necessary and as required, components that cannot be reused, salvaged, recycled, or repurposed will be disposed of off-island at an authorized solid waste facility or landfill.

In total, the construction, operation, and decommissioning of the Project are not expected to generate significant new demand for solid waste management services.

6.7 Government Services

6.7.1 Fire

The KFD has a total of eight fire stations spanning across Kaua'i Island. The Waimea Fire Station is in closest proximity to the Project, located 3.2 miles away, and would respond in the event of a fire or emergency at the Project Site. Additionally, DOFAW is responsible for co-responding with KFD to wildfire events with administrative approval upon Hawai'i Emergency Management Agency's request *(Exhibit C27).* DOFAW personnel are primarily natural resource managers, foresters, biologists, and technicians and are not full-time wildland firefighters. Firefighting is one of the many duties performed by DOFAW personnel.

KFD works with Emergency Medical Services ("EMS"), who dispatch the closest available unit. During an emergency, this may be either an EMS ambulance or a fire company, depending on the type of emergency and location.

As detailed in *Section 4.7*, the Project will incorporate multiple layers of fire prevention and suppression measures, consistent with applicable regulations, plans, and policies. Specifically, the Project will comply with National Fire Protection Association 1 and National Electric Code requirements for fire prevention for utility-scale solar facilities, including installation of non-vegetated fire breaks around various Project components as well as the perimeter of the Project Site. A minimum 30-foot non-vegetated fire break will be installed around the perimeter of the Project site as well as the various electrical equipment (e.g., a 20-foot buffer within the fence line and 10-foot buffer outside the fence line). Vegetation within the remainder of the Project site will be managed to control combustible materials, while still providing enough ground cover to prevent erosion and support compatible agricultural activities. In addition, the battery systems will be fully contained within temperature-controlled, leak-proof steel enclosures equipped with fire-rated insulation, as well as temperature and smoke sensors and alarms, integrated monitoring and circuit protection, a self-contained thermal management system, an explosion prevention and mitigation system, and a fire detection and thermal runaway propagation protection system specifically designed for lithium-ion battery energy storage system. Independent testing of the battery system will be conducted prior to commercial operation. The existing access roads as well as internal access routes within the Project Site will be able to accommodate fire apparatus and will meet the relevant specifications identified in the fire code.

The KFD will be consulted throughout the Project development process, with reviews of relevant permit applications and design drawings prior to construction, on-site training and orientation offered prior to commercial operation, and annual meetings offered throughout the operational phase. For these reasons, the Project is not expected to increase the need for fire response or otherwise impact fire protection services.

6.7.2 Police

The Project Site is served by the Kaua'i Police Department Waimea Sub-Station, which covers the area from the Halfway Bridge located on Kaumuali'i Highway to Polihale and includes Kōke'e State Park. The Waimea Sub-Station is located approximately 3.6 miles from the Project Site.

During construction, the Project Site will be staffed with security personnel on an as-needed basis to protect equipment and machinery used to construct the Project. During operations, the facilities will be adequately secured and are not expected to require additional security on a regular basis. A surveillance system will be incorporated at key areas (such as the substation and power conversion stations) and additional security measures (such as fence-top deterrents) will be added if the need arises. As such, the Project is not expected to increase the demand for or otherwise affect police services.

6.7.3 Educational Facilities

Educational facilities located near the Project Site include:

- Kamehameha Preschool-Kaumakani is located at 2201 Kaumakani Rd, approximately 1.8 miles away from the Project and is the closest preschool facility.
- 'Ele'ele Elementary School, located at 4750 Uliuli Rd, and approximately 5.1 miles away from the Project and is the closest elementary school facility.

- Waimea Canyon Middle School, located at 955 Huakai Road, is approximately 3.8 miles away from the Project and is the closest middle school facility.
- Waimea High School, located at 9707 Tsuchiya Road, is approximately 3.6 miles away from the Project and is the closest high school facility.
- Kekaha Elementary School, located at 8140 Kekaha Road, is approximately 5.6 miles away from the Project.
- Ke Kula Niʻihau O Kekaha Public Charter School, located at 8135 Kekaha Road, is approximately 6.5 miles away from the Project and is a Niʻihau Hawaiian language immersion school serving grades K-12.
- Kula Aupuni Niʻihau A Kahelelani Aloha Public Charter School, located at 8315 Kekaha Road, is approximately 6.2 miles away from the Project and is a Niʻihau Hawaiian language immersion school grades K-12.

There will be no impacts on educational facilities due to the construction or operation of the Project since this area will be located within a gated area and not accessible to the public.

6.7.4 Recreational Facilities

There are three public parks located in or near Makaweli: Kaumakani Park, Salt Pond Beach Park and Waimea Pier. Kaumakani Park is adjacent to Kamehameha Preschool and has a baseball field, basketball courts, and a comfort station. Salt Pond Beach Park has protected shallow pools that accommodate beach activities such as swimming and snorkeling. Waimea Pier is an ocean pier available for fishing and picnicking.

There will be no impacts on recreational areas due to the construction or operations of the Project since this area will be located within a gated area and not accessible to the public.

6.7.5 Emergency Medical Services

The nearest hospital to the Project is Kauaʻi Veterans Memorial Hospital, located approximately 3.7 miles from the Project Site. Kauaʻi Veterans Memorial Hospital is the only full-service hospital located in Waimea. The Project is not expected to increase the demand for or otherwise affect emergency medical services.

6.8 Economics

As discussed in ***Section 3.9***, the State of Hawaiʻi's dependency on imported fossil fuels for energy generation, as well as the consistently high price of oil combined with the high fixed price on infrastructure, has led to record-high electricity prices. Once completed, the Project could provide as much as 20% of KIUC's annual energy generation. KIUC and AES have signed a long-term PPA to provide pricing and timing certainty, which will further reduce the cost of energy for the general public. In addition, this Project will add to job creation, labor income, and economic output in the area.

6.8.1 Employment and Project Expenditures

Project implementation is expected to provide economic benefits associated with additional jobs, labor income, and economic output. These benefits were estimated using the IMPLAN economic model, which was fitted with data for the County of Kaua'i. IMPLAN is a commercially available economic modeling package widely used to assess the economic impacts of renewable energy and other types of projects. Separate analyses were conducted for multiple aspects of the Project including (1) predevelopment, (2) construction, (3) operations, (4) annual easement payments that will be made to the landowner to support economic activities elsewhere in the County of Kaua'i, and, (5) decommissioning of the project. Pre-development and construction aspects of the project are considered short-term; operations and easement payments are considered long-term; and decommissioning is considered individually as it will occur after other aspects of the project are complete. The results of the analysis are summarized below and in ***Table 6.4***, with financial-based results presented in Year 2025 dollar values; additional details are provided in ***Exhibit B***.

Considering all aspects of the Project, over its lifetime, including direct, indirect, and induced effects, the Project is estimated to generate or sustain up to approximately 1,064 total jobs in Hawai'i, $77.9 million in labor income, and a total economic output of $216.7 million.

In the short-term, including direct, indirect, and induced effects, pre-development and construction of the Project will generate or sustain a total of 747 jobs to be filled primarily by Hawai'i residents, with approximately $54.7 million in related labor income, and $130.7 million in economic output.

Considering only direct effects, pre-development and construction of the Project will generate or sustain approximately 542 jobs, $43.1 million in labor income, and $91.7 million in economic output. Direct jobs will include on-site employment (such as those associated with site work, foundations and electrical work), as well as engineering design, permitting and other similar types of in-state work. Select jobs may be filled by out-of-state workers such as specialty trade and/or professional staff that will be brought to Hawai'i for the Project; in many cases, these staff will serve to train the local workforce and commission certain components per manufacturer requirements.

Once operational, the Project will continue to contribute to the state economy over its lifetime, including Project-related employment and expenditures, annual easement payments that will support the landowner and manager (G&R), which will support economic activities elsewhere in the County of Kaua'i. It is estimated that on an annual basis, the Project will generate or sustain 4 total (direct, indirect, and induced) jobs in Hawai'i, approximately $0.4 million in labor income, and total economic output of approximately $1.6 million. Aggregated over its full lifespan, the Project will generate approximately 244 total jobs in Hawai'i, approximately $18.5 million in labor income, and total economic output of approximately $68.1 million.

Decommissioning of the Project will involve removing all facilities and returning the Project site to substantially the same condition as existed prior to Project development. Project decommissioning will directly employ workers from Hawai'i, as well as support additional secondary (indirect and induced) benefits in the County of Kauai. In-state expenditures on equipment and material recycling/salvage or disposal, remediation, and spending on household goods and services by workers living in the area, will all support additional economic activity elsewhere in the state economy. It is estimated that Project decommissioning will generate or sustain 73 total (direct, indirect, and induced) jobs in Hawai'i, approximately $4.7 million in labor income, and a total economic output of approximately $17.9 million.

Table 6.4 Estimated Economic Impacts			
Type of Impact[1, 2]	Employment (full-time equivalent [FTE])[3]	Labor Income ($000s)[4]	Economic Output ($000s)[3]
Short-Term (One-Time Impacts)			
Pre-Development			
Direct Impacts	13	760	2,047
Indirect Impacts	5	262	725
Induced Impacts	3	174	567
Total Impacts	**21**	**1,197**	**3,340**
Construction			
Direct Impacts	529	42,325	89,614
Indirect Impacts	57	3,436	12,525
Induced Impacts	140	7,735	25,198
Total Impacts	**726**	**53,497**	**127,337**
Long-Term (Over Project Lifetime)			
Operation			
Direct Impacts	53	7,410	31,201
Indirect Impacts	25	1,469	4,272
Induced Impacts	27	1,496	4,868
Total Impacts	**104**	**10,374**	**40,342**
Easement Payments			
Direct Impacts	77	4,698	16,500
Indirect Impacts	43	2,266	7,453
Induced Impacts	21	1,174	3,829
Total Impacts	**140**	**8,138**	**27,782**
Decommissioning (One-Time Impacts)			
Decommissioning			
Direct Impacts	40	2,827	12,000
Indirect Impacts	20	1,195	3,730
Induced Impacts	12	672	2,188
Total Impacts	**73**	**4,694**	**17,918**
TOTAL	**1,064**	**77,900**	**216,718**

[1] Numbers may not sum due to rounding.

[2] Direct impacts consist of expenditures made specifically for a project, such as construction labor and materials; direct jobs include on-site employment, as well as engineering design, permitting, and other similar project-related employment. Indirect impacts consist of expenditures by suppliers who provide goods and services to a project; these are often referred to as "supply-chain" impacts. Induced impacts are generated by the spending of households associated either directly or indirectly with a project.

[3] Jobs are full-time equivalent (FTE) for a period of one year (1 FTE = 2,080 hours). The calculation of FTE jobs to be directly generated by the Project incorporates the number of workers estimated to be onsite during construction and operations

[4] Labor income and economic output are expressed in thousands of dollars in Year 2025 dollars.

6.8.2 Housing

There are 1,278 total housing units in the Kaumakani-Hanapepe CCD, 91% of these being occupied with the other 9% being vacant. The median gross rent in the CCD is $1,092, about $800 lower than the median gross rent in the County of Kaua'i. The homeownership rate is 46.7% (USCB, 2023a). There are 521 owner-occupied housing units located within the Kaumakani-Hanapepe CCD. Around 46% of these units are valued between $500,00 to $749,999 and 41% are valued between $750,000 and $999,999. Less than 7% of these households are valued at over a million dollars, and less than 6% are valued at less than $500,000 (USCB, 2023b). The current County and State zoning of the Project Site is primarily agriculture, and no housing developments are expected to be built within the Project Site. The Project will not result in the need for any workforce housing units.

6.8.3 Property Values

Since the fair market value of real property is based on the value of the land and physical improvements, the completion of the Project will increase the value of the Project Site. This will result in increased real property taxes on the Project Site, which will directly benefit the County of Kaua'i. However, it will not, in and of itself, have a material impact on the value of, or real property taxes assessed against, surrounding properties.

6.9 Population

The Kaumakani-Hanapepe CCD has a total population of around 3,769 people. The median age is 40.6 years old, with 18.3% of the population being 65 years or older. The population within the Kaumakani-Hanapepe CCD is fairly diverse, with around 44% being Asian, 14% being Native Hawaiian and other Pacific Islander, and another 14% being white. 26% of the population identify with two or more races. English is the primary language spoken in households, with around 40% of the population speaking a language other than English at home. The median household income in the Kaumakani-Hanapepe CCD is $88,387, and less than 7% of the population lives in poverty (USCB, 2023a). The Project will have negligible to no impact on the population and demographics within the Kaumakani-Hanapepe CCD.

6.10 Traffic

A TIAR was completed by Fehr & Peers in April 2025 *(**Exhibit T**)* to assess the potential traffic impacts that may result from the construction and operation of the Project. No significant intersection impacts were identified during the construction phase of the proposed development. However, AES will follow all recommended traffic mitigation measures, such as onsite parking, off-peak deliveries, and staggered arrivals and departures, and will implement a Traffic Management Plan (TMP).

The Project's construction phase is not expected to have any significant impacts on the roadway network. Therefore, no state or county roadway improvements or other construction is expected to be required to accommodate construction-related transport. Furthermore, the Project's construction phase is not expected to conflict with any existing transit, pedestrian, or bicycle facilities. It will not preclude implementing any additional enhancements to walking, biking, or transit. All generated traffic will use existing turning movements at the study intersections, and no new conflicts with active transportation or transit users would occur. Accordingly, no significant impacts on active transportation or transit are anticipated.

Once fully operational, the Project is expected to generate fewer than 10 AM or PM peak-hour trips on a typical weekday. These trips will be made by maintenance personnel and others servicing the solar array. This volume is negligible and will have no appreciable effect on traffic operations. On-site parking will be provided to accommodate these vehicles.

6.11 View Study

The Project is consistent with the County of Kaua‘i CZO, the County of Kaua‘i General Plan, and the WKCP. As shown in the View Study in ***Exhibit U***, the project will likely be visible from Kaumuali‘i Highway or from higher elevations like Waimea Canyon Drive. Landscaping will be used to minimize the visual effect to the extent possible, and the Project solar panels and racking system will have a relatively low profile and is designed to run with the existing topography of the land.

The Project design will meet agricultural development standards of the CZO to the extent possible, and landscaping will be integrated to provide privacy and screening of views of the Project from Kaumuali‘i Highway to the extent practicable. Native trees and shrubs are proposed as a natural barrier between the southwest border of the solar energy facility and Kaumuali‘i Highway, and will provide height and canopy, blocking the view of the panels from the highway. Plants proposed include alahe‘e (*Psyrax Odorata*), koki‘o ke‘oke‘o (*Hibiscus arnottianus*), kou (*Cordia subcordata*), milo (*Thespesia populnea*), dwarf citrus (*Citrus spp.*), ‘a‘ali‘i (*Dodonaea viscosa*), and kulu‘i (*Nototrichium sandwicense*). See ***Exhibit H*** for the Landscaping Plan.

The Project Site is located away from coastal areas; therefore, coastal scenic view sheds are not accessible from this area. No impacts on existing ocean views and scenic resources are anticipated.

6.12 Airports

6.12.1 Location

The Project Site is located approximately 3.7 miles from the Port Allen Airport (a State facility) and 10.6 miles from the Barking Sands Airport (a U.S. Navy facility). The Project Site is not located near or beneath any flight paths for these airports.

6.12.2 Federal Aviation Administration/Wildlife

The U.S. Department of Transportation, Federal Aviation Administration has issued an Advisory Circular (ACNO: 150/5200-33b) entitled Hazardous Wildlife Attractants on or Near Airports. This Advisory Circular (“AC”) provides guidance on certain land uses that have the potential to attract hazardous wildlife (avian species) within a five (5) mile range of any airports (referred to as “Air Operation Areas”) Because the Project is located within the five (5) mile range of the Port Allen airport, it is subject to the AC. The Applicant does not anticipate that the Project will attract any additional wildlife beyond that already present on the Project Site in its current condition. It should be noted that “photovoltaic and solar farms” are not among the enumerated land-use practices in the AC that have the potential for attracting hazardous wildlife.

6.12.3 Glint-Glare

Stantec Consulting Services Inc. (“Stantec”) completed a glare hazard analysis report in September 2025 (***Exhibit V***). Stantec used the web-based ForgeSolar glare hazard analysis program to determine the potential for glint and glare from the Project’s PV solar panels to affect residents in the area, drivers

passing through the vicinity of the array, and aircraft flying or landing in the vicinity of the array. No red glare will be generated by the Project.

There are three types of glare:

- Green – low potential for temporary after-image
- Yellow – Potential for temporary after-image
- Red – Potential for permanent eye damage

No glare is predicted for the Port Allen Airport or for helicopters hovering 500 feet above the Mānāwaiopuna Falls Island Helicopters helipad. A small amount of green glare is predicted for one of the six road segments included in the analysis for 5-ft tall vehicles. A maximum of two to three minutes per day of green glare is predicted for 5-ft vehicles traveling on Ka‘awanui Village Road from May through July at sunrise. A small amount of green and yellow glare is predicted for Ka‘awanui Village Road for 9-ft tall vehicles. This glare is predicted to occur for a maximum of ten minutes per day from May through August. A small amount of green and yellow glare is also predicted for Hangar Road for 9-ft vehicles for a maximum of approximately three minutes per day from April through August. Glare is not predicted for the 39 structures included in the analysis and in the vicinity of the array.

6.13 Chemicals and Fertilizers

A limited area (1.5-acre area) along the southern boundary of the Project Site is used for truck parking and miscellaneous farm equipment storage. Several tank trucks reportedly used to store herbicides and pesticides, as well as aboveground storage tanks that appear to be no longer in use, are also present. Numerous 55-gallon drums, both empty and full, are also located in this area. Most of these containers lacked visible labels or markings to identify their contents; however, based on the types of equipment and the Project Site’s historical use, combined with inspections of several containers, it is reasonably believed that these containers currently or formerly held hazardous substances, including petroleum products. The drums that did have labels were typically labeled “used oil”.

All miscellaneous farming equipment currently stored at the Project Site, will be removed before construction begins.

During the construction and operational phases of the Project, oil-based products would be stored at the Project site, as the transformers use oil for insulation and cooling. Transformer oil is typically a mineral or seed oil and is considered nontoxic and a non-hazardous substance; it does not contain polychlorinated biphenyls. Transformers at the substation would be ground-mounted units installed on concrete pads, with secondary spill-containment traps designed to minimize the risk of accidental leakage. Furthermore, a Spill Prevention Control and Countermeasure (SPCC) Plan would be prepared, in accordance with the requirements of 40 CFR 112 (Oil Pollution Prevention). The plan would identify all oil storage containers, secondary containment and oil spill controls, inspection and testing protocols, training procedures, security measures, emergency response and notification procedures, key Project and regulatory contacts, and reporting requirements. Given the relatively small quantities and nature of the oil-based products, combined with secondary containment and other procedures established as part of the SPCC Plan, the potential for oil-related spills and their associated effects is expected to be minimal.

Section 7

Agency and Stakeholder Input

Section 7

Agency and Stakeholder Input

7.1 Outreach and Engagement

AES compiled a *Kaawanui Solar Community Outreach Report* (October 2025), detailing outreach activities conducted by AES and KIUC. The full report is provided in ***Exhibit W*** and is summarized below.

7.1.1 Community

Community engagement for the Kaawanui Solar Project has been ongoing since early 2025. It has been designed to ensure transparency, early input, and collaboration with West Kauaʻi residents, community leaders, and Native Hawaiian organizations. AES is deeply committed to engaging with the community early and often throughout the Project's lifespan. Being a responsible community partner is fundamental to AES's values and drives the approach to developing Kaawanui Solar. Early public awareness included KIUC's March 2025 news release and Summer 2025 Currents magazine coverage, reaching approximately 26,000 active members. Outreach efforts included a public meeting, small-group discussions, employee presentations, and open houses for Pākalā, Kaʻawanui, and Kaumakani villages. AES and KIUC maintained open communication channels through the project website (www.aes-hawaii.com/kaawanuisolar), email (kaawanuisolar@aes.com), and hotline (808-800-3942). Other outreach methods involved direct mail (postcards to nearby villages), paid print ads in *The Garden Island*, a media advisory to local and state outlets, social media campaigns, and stakeholder notification emails. Carrice Gardner, Senior Manager for Stakeholder Relations at AES, is the Community Outreach Representative for this Project.

Cultural impact reviews in Hawaiʻi are crucial because they protect Native Hawaiian traditions, ensure responsible development, and preserve cultural practices and resources. Although it was not required, AES elected to conduct a Cultural Impact Analysis ("CIA)". The study provided the cultural context of the traditions of the entire ahupuaʻa of Makaweli and included formal engagement with Native Hawaiian organizations and cultural practitioners. The CIA consultation was initiated in May 2025 and engaged 48 Native Hawaiian organizations and cultural practitioners. Six respondents participated in interviews, providing feedback on cultural preservation, land stewardship, and transparency. In July 2025, AES kicked off public community engagement with a Gay & Robinson employee presentation attended by over 60 participants collectively. After which, two open houses were held for residents of Kaʻawanui Village, Pākalā Village, and Kaumakani Village, attended by approximately 30 people. Throughout August and September 2025, individual or small-group meetings were held with eight elected officials and multiple community associations, culminating in a public community meeting on September 24, 2025, at the Hanapēpē Neighborhood Center, attended by approximately 46 people. Common discussion topics included electricity costs, visual impacts, safety, and cultural respect.

7.2 Agency

Early and recurring agency consultation has proven valuable to AES in the past. Coordination with federal, state, and county agencies has been continuous since the project planning stages. Agencies consulted include the U.S. Army Corps of Engineers, Pacific Missile Range Facility, Hawai‘i Department of Agriculture, and KDP.

In addition, the project team met with Mayor Derek Kawakami, Representative Daynette “Dee” Morikawa, and County Councilmembers Mel Rapozo, KipuKai Kuali‘i, Bernard Carvalho Jr., Arryl Kaneshiro, Felicia Cowden, and Addison Bulson. These meetings focused on disseminating project information on safety, visual impact mitigation, and agricultural compatibility. Written follow-up correspondence provided responses and documentation of AES’s commitments regarding fire prevention, hurricane resilience, decommissioning, and recycling plans.

7.2.1 Issues and Concerns

Major topics raised during outreach and agency consultations include visual impacts from highways, traffic and construction concerns, fire prevention and emergency planning, and long-term agricultural coexistence. Additional discussions addressed energy affordability, battery safety, and decommissioning practices.

AES responded by committing to landscape screening and low-profile panel designs, implementing traffic management plans, and establishing contained battery storage with fire suppression systems. Agricultural integration, such as sheep grazing, is being evaluated. End-of-life recycling and land restoration will occur post-decommissioning.

Table 7.1 below details the issues raised at these meetings and the Applicant's proposed mitigation measures to address them.

Table 7.1 Community Outreach Issues and Concerns

Topic / Concern	Summary of Issue or Discussion	AES Response / Mitigation Action
Project Design and Operations	• Scale and layout of the solar array and battery system • Long-term project timeline, including construction and decommissioning • Safety of the BESS and fire prevention measures • Storm and hurricane resilience of project infrastructure	• AES provided detailed maps and confirmed minimal grading; adherence to County design standards. • A Decommissioning and Land Restoration Plan will outline full removal and site restoration. • AES is installing a fully contained BESS with automatic fire suppression and 24/7 monitoring. A Fire Protection and Emergency Response Plan will be created and shared with KFD. • The project is designed to be low to the ground and withstand storms based on lender/insurance requirements; AES will maintain emergency response coordination to ensure readiness and safety. AES will also have insurance that would pay for damages if they occurred during a natural disaster.

Table 7.1 Community Outreach Issues and Concerns		
Topic / Concern		
Community Concerns	• Visual impacts of panels and substations • Traffic impacts during construction • Noise produced by the project	• The project uses a low-profile single-axis tracker design and native landscape screening to reduce visibility. Visual simulations were shared at public meetings. • AES prepared a Traffic Impact Analysis Report to help determine the best plan of action, including timing during non-peak hours and manual flagging for safety. • All of the noise during operations is minimal; substations emit a slight hum, but nothing louder than a window air conditioning unit.
Agriculture and Land Use	• Compatibility of solar development with existing and future agricultural uses • The biggest complaint about farming is the presence of dirt and dust.	• AES is exploring agrivoltaic practices such as sheep grazing and rotational cropping beneath panels, preserving agricultural access corridors. • AES will implement screening BMPs and maintain vegetative buffers.
Environmental and Resource Considerations	• Concerns about potential runoff and stream impacts from battery fires • Climate change resilience and contribution to renewable energy goals	• There is high confidence in the fire suppression systems. In the unlikely event of a fire in the battery enclosure, such a fire would be confined to the battery unit, and a non-toxic foam would neutralize it at the smallest level. • AES confirmed the project will supply 43 MW of renewable energy, displacing fossil fuels and reducing 2.35 million metric tons CO_2e over 25 years.
Economic and Social Benefits	• Electricity cost savings and rate stabilization for West Kauaʻi residents • Local job creation (construction and permanent operations) • Long-term community benefits	• AES clarified that the energy is being sold at a fixed, low PPA rate, less than the current cost of fossil fuels. This will stabilize KIUC member rates and save costs over fossil fuel alternatives. • AES projects over 1,000 total jobs (direct and indirect) with a priority on local hiring for construction and operations roles. • AES does its best to respond to community concerns, and emphasizes fair energy costs and equitable distribution island-wide.

7.3 Notice of Application

In alignment with §8-3.1(f)(4), the applicant is responsible for giving written notice of the proposed public hearing to the addresses within 300 feet of the nearest point of the premises involved in the application to the closest point of the affected property.

A Notice of Application and Location Map will be mailed to all owners and recorded lessees within 300 feet of the subject parcel boundaries. This will occur concurrently with the submittal of this Application to KDP. The notarized affidavit of mailing of the Notice of Application will be submitted along with the original Special Permit application.

All owners and recorded lessees within 300 feet of the Project Site boundaries are listed in the Adjacent Property Index, attached as ***Exhibit A5***.

7.4 Notice of Public Hearing

The Notice of Public Hearing will be mailed by certified or registered mail, return receipt requested, to the owners/lessees of record within 300 feet of the parcel boundaries at least 20 calendar days prior to the public hearing. A notarized affidavit of mailing of the Notice of Public Hearing, certified mail return receipts, and a list of people to whom such notices were sent will be submitted to KDP at least 7 business days prior to the public hearing.

A Notice of Public Hearing will be published once a week for three consecutive weeks prior to the public hearing date in a newspaper that is printed and issued at least twice weekly in the County and is generally circulated throughout the County. A certified copy of the published notice will be submitted to the Director of Planning at least six days prior to the date of the public hearing.

Section 8

State LUC Considerations

Section 8

State LUC Considerations

8.1 State LUC Agricultural District

The State of Hawai‘i Land Use Law (HRS §205) was adopted by the State Legislature in 1961 to establish an overall framework for land use management. Under HRS §205, all lands in the State of Hawai‘i are classified into one of four Districts: Urban, Rural, Agricultural, and Conservation. To administer this statewide land use law, the Legislature established the LUC. The LUC is responsible for preserving and protecting Hawai‘i’s lands and encouraging the uses best suited for those lands.

According to HRS §205-4.5, solar energy facilities are allowed within Agricultural District lands. HRS §205-4.5 further details permitted uses on the LSB A- or B- rated land within the Agricultural District. The LSB assigned ratings to agricultural land from A to E, with A being the most productive and E being the least productive. The Project is located on agricultural land with LSB B ratings. HRS §205-4.5 permits the use of solar energy facilities on LSB B- or C-rated Agricultural land with approval of a Special Permit, which allows the county Planning Commission to permit unusual and reasonable uses within the Agricultural District, per HRS §205-6.

HRS §205-4.5a(20) further limits the implementation of solar energy facilities on Agricultural lands, stating that solar energy facilities may not occupy more than 10 percent of the acreage of the parcel, or twenty acres of land, whichever is lesser, without obtaining a Special Permit. The total area of the parcel is 5,006.740 acres, and so the Project Site (269.195 acres) occupies only about 5 percent of the parcel. However, the Project Site is larger than twenty acres; therefore, a Special Permit must be obtained.

For solar energy facilities, a Special Permit may be granted provided that:

A. *The area occupied by the solar energy facilities is also made available for compatible agricultural activities at a lease rate that is at least 50% below the fair market rent for comparable properties;*

B. *Proof of financial security to decommission the facility is provided to the satisfaction of the appropriate county planning commission prior to date of commencement of commercial generation; and*

C. *Solar energy facilities shall be decommissioned at the owner’s expense according to the following requirements:*

   i. *Removal of all equipment related to the solar energy facility within twelve months of the conclusion of operation or useful life; and*

   Ii. *Restoration of the disturbed earth to substantially the same physical condition as existing prior to the development of the solar energy facility.*

8.2 Special Permit

The requirements for the issuance of a Special Permit are contained in HRS §205-6, which provides in relevant part as follows:

(a) Subject to this section, the county planning commission may permit certain unusual and reasonable uses within agricultural and rural districts other than those for which the district is classified. Any person who desires to use the person's land within an agricultural or rural district other than for an agricultural or rural use, as the case may be, may petition the planning commission of the county within which the person's land is located for permission to use the person's land in the manner desired … Copies of the special permit petition shall be forwarded to the land use commission, the office of planning, and the department of agriculture for their review and comment.

(c) The county planning commission may, under such protective restrictions as may be deemed necessary, permit the desired use, but only when the use would promote the effectiveness and objectives of this chapter;

(d) Special permits for land the area of which is greater than fifteen acres … shall be subject to approval by the land use commission. The land use commission may impose additional restrictions as may be necessary or appropriate in granting the approval, including the adherence to representations made by the applicant.

8.3 Compliance with Special Permit Requirements

The LUC Rules (HAR §15-15) were adopted in 1986 and updated in 2019 to preserve, protect, and encourage the development and preservation of lands in the State for those uses to which they are best suited in the interest of public health and welfare of the people of the State of Hawai'i. HAR §15-15 establishes State Land Use Districts and permissible land uses, in addition to providing guidance for a variety of Projects, including boundary amendments and Projects requiring petitioning processes, hearing procedures, and special permits.

HAR §15-15-95 describes the process for obtaining a Special Permit. Special Permits grant the use of land within an agricultural or rural district for purposes that are not permitted within those districts per HAR §15-15-25.

According to HAR §15-15-95:

(a) Any person who desires to use land within an agricultural or rural district for other than a permissible agricultural or rural use may petition the county planning commission of the county within which the land is located for a special permit to use the land in the manner desired; provided that if the person is not the owner or sole owner in fee simple of the land, the record shall include evidence that the person requesting the special permit has written authorization of all fee simple owners to file the petition, which authorization shall also include an acknowledgement that the owners and their successors shall be bound by the special permit and its conditions.

The Applicant is petitioning the Kaua'i Planning Commission for a Special Permit to allow development of a solar energy facility over 20 acres in area, which is an allowable use within Agricultural land, provided a Special Permit is obtained. A notarized letter of authorization from the legal landowner of the Project Site is included in this application as ***Exhibit A2***.

(b) Special permits for areas greater than fifteen acres require approval of both the county planning commission and the commission.

The Project Site is approximately 269 acres. Thus, approval from both the Kaua'i Planning Commission and the LUC is required for the Special Permit.

(c) Certain "unusual and reasonable" uses within agricultural and rural districts other than those for which the district is classified may be permitted. The following guidelines are established in determining an "unusual and reasonable use":

(1) The use shall not be contrary to the objectives sought to be accomplished by chapters 205 and 205A, HRS, and the rules of the commission;

According to HRS §205-4.5(a)(20), solar energy facilities are a permitted use within the Agricultural District. However, the Project exceeds the size of permitted solar energy facilities (more than 10% of the acreage of the parcel, or twenty acres of land, whichever is less). Further, HRS §205-4.5(a)(20) permits the implementation of solar energy facilities on Agricultural lands classified as LSB-B, provided that a Special Permit is obtained. As detailed in ***Section 8***, the Project aligns with the objectives of HRS §205 and §205A, and the rules of the Kaua'i Planning Commission (see ***Section 11***).

(2) The proposed use would not adversely affect surrounding property;

The Project is located on a portion of TMK 1-7-006:006 (approximately 4,850 acres) and a portion of :010 (approximately 160 acres), both owned by RFP and managed by G&R. Other uses within these parcels include cattle, horse, and water buffalo farming and residential uses, and these uses would not need to be changed due to the Project. Most of the adjacent TMK parcels are also owned by RFP, apart from State-owned lands to the east of the Project Site. The nearest residential property is within 100 yards. It is expected that the Project will not adversely affect surrounding properties.

(3) The proposed use would not unreasonably burden public agencies to provide roads and streets, sewers, water drainage and school improvements, and police and fire protection;

The Project will not unreasonably burden public agencies to provide roads and streets, sewers, water drainage and school improvements, and police and fire protection (see ***Sections 6.6*** and ***6.7***). The Project will provide all necessary road improvements for project development.

(4) Unusual conditions, trends, and needs have arisen since the district boundaries and rules were established; and

Since the district boundaries and rules were established, the anthropogenic release of greenhouse gases has caused unprecedented global climate change. These climate changes will continue into the foreseeable future and worsen with increasing greenhouse gas consumption. Greenhouse gases include fossil fuels, which have been the primary source of electricity generation in the State of Hawai'i. Recognizing this crisis, the State of Hawai'i issued Acts 97 (2015) and 240 (2022), which amended HRS §269-92. Under HRS §269-92, electric utility companies operating in Hawai'i are required to achieve 100% net electricity generation from renewable energy sources by 2045. The Project supports

the State's goal of 100% renewable electricity generation and contributes to the fight against the global climate crisis.

(5) The land upon which the proposed use is sought is unsuited for the uses permitted within the district.

The land upon which the Project is sought is unsuitable for uses within the Agricultural District, to the extent that the Project qualifies as a solar energy facility under HRS §205-4.5(a)(20). HRS §205-4.5(a)(20) permits the implementation of solar energy facilities on Agricultural lands classified as LSB-B, provided that a Special Permit is obtained. Similarly, while the size of the Project is limited by HRS §205-4.5(a)(20), as the Project will occupy more than 10% of the acreage of the parcel, the implementation of a solar energy facility of this size may be allowed with a Special Permit. Further, current land uses within the Project Site are agricultural, as outlined in the Agriculture Plan. The plan will detail the compatible agricultural activities that will coexist with the solar energy facility at the Project Site. Further detail regarding the compatible agricultural activities is included in ***Section 3.6***.

(d) Petitions for issuance of a special permit shall specify the proposed use and state concisely the nature of the petitioner's interest in the subject matter and the reasons for seeking the special permit, and shall include any facts, views, arguments, maps, plans, and relevant data in support of the petition.

The proposed use is described and the reasons for seeking the Special Permit are located in ***Section 5***. Remaining facts, views, arguments, maps, plans, and relevant data in support of the petition are located in the remaining sections and exhibits.

(e) The petitioner shall comply with all of the rules of practice and procedure of the county planning commission in which the subject property is located.

The Project will comply with all the rules of practice and procedure of the Kaua'i Planning Commission. Further discussion is located in ***Section 11***.

(f) The county planning commission may impose such protective conditions as it deems necessary in the issuance of a special permit. The county planning commission shall establish, among other conditions, a reasonable time limit suited to establishing the particular use proposed, and if appropriate, a time limit for the duration of the proposed use, which shall be a condition of the special permit; provided, however, that the commission for good cause shown, may specify or change the time period of the special permit. If the permitted use is not substantially established to the satisfaction of the county planning commission within the specified time, it may revoke the permit. The county planning commission, with the concurrence of the commission, may extend the time limit if it deems that circumstances warrant the granting of the extension.

The Project will comply with all conditions in Section 13-6 of the Kaua'i Planning Commission in relation to the issuance of the Special Permit.

8.4 Compliance with State LUC Agricultural District Standards

The proposed uses include the development of solar energy facilities (within B-rated lands) and utilities. The AES Hawai'i Substation and the KIUC Substation are permitted uses pursuant to HRS §205-4.5(a)(7). The remainder of the Project is a use under HRS §205-2(d)(6)(B) and §205-4.5(a)(21) which may be permitted, subject to the issuance of a Special Permit pursuant to HRS §205-6. The Applicant will satisfy the special provisions applicable to solar energy facilities as follows:

8.4.1 Agricultural Activities

An Agricultural Plan detailing compatible agricultural activities has been prepared for the project (*Section 3.6*).

8.4.2 Decommissioning

A decommissioning plan has been prepared that details the plans for the removal of all solar energy facility equipment and restoration of the Project Site to its original or comparable condition. Further details regarding the decommissioning plan are included in *Section 3.7*. The Applicant will provide security as required to ensure the decommissioning and removal of the solar energy facility improvements at the end of the operating term.

8.5 State Planning Act

The State Planning Act contains Objectives and Policies to assist the State in attaining its long-range planning goals. Included in the Objectives and Policies are the following:

§226-18 Objectives and policies for facility systems energy.

(a) Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:

(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;

(2) Increased energy, self-sufficiency where the ratio of indigenous to imported energy use is increased;

(3) Greater energy security and diversification in the face of threats to Hawaii's energy supplies and systems; and

(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use.

(c) To further achieve the energy objectives, it shall be the policy of this State to:

(1) Support research and development as well as promote the use of renewable energy sources;

(7) Promote alternate fuels and transportation energy efficiency;

(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications;

(10) Provide priority handling and processing for all state and county permits required for renewable energy projects….

§226-108 Sustainability. Priority guidelines and principles to promote sustainability shall include:

(2) Encouraging planning that respects and promotes living within the natural resources and limits of the State ….

8.6 Compliance with State Plan

The proposed Project complies with the State Planning Act in that it will: provide dependable, efficient, and economical energy; increase energy self-sufficiency; promote energy security; reduce greenhouse gas emissions; and promote living within the natural resources and limits of the State.

8.7 Coastal Zone Management Area

Coastal states are authorized to develop and implement a state coastal zone management ("CZM") program through the Coastal Zone Management Act of 1972 (16 USC §1451), as amended through Public Law 104-150. The Hawai'i CZM Program is codified under HRS §205A. The objectives and policies of the Hawai'i CZM Program encompass a wide array of concerns, including impacts to recreational resources, historic and archaeological resources, coastal scenic resources and open space, coastal ecosystems, coastal hazards, and the management of development.

The Project is not located within the coastal zone. However, HRS §205A requires all State agencies to enforce CZM objectives and policies as set forth in HRS §205A-2. The Project's compliance with HRS §205A is therefore addressed as follows:

Recreational Resources:

a. *Provide coastal recreational opportunities accessible to the public.*

The Project Site is located mauka of any coastal recreational area. Therefore, the Project does not directly affect coastal recreation access to the public and will not impact coastal resources of significant value.

The Project will be constructed in accordance with applicable water quality and stormwater regulations and standards. There will be no discharge points into coastal waters.

Historic Resources:

a. *Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the CZM area that are significant in Hawaiian and American history and culture*

An LRFI was performed for the Project Site (***Exhibit O***). A Ka Pa'akai Analysis and a Cultural Impact Assessment ("CIA") (***Section 14***) and an AIS in compliance with HRS §6E-42 and in accordance with HAR §13-284 and §276 have been performed to document any historical resources within the Project Site. Six sites were identifies in the AIS and were assessed as significant under Criterion d of the State of Hawai'i significance criteria (***Section 6.2***). The AIS does not recommend further archaeological work, including archaeological monitoring or preservation. A Reconnaissance Level Survey (included as an Appendix in the AIS) was also conducted to investigate the presence of historic architecture. No historically significant architectural resources were identified in the study area. However, if subsurface features or deposits are encountered at any time during construction, construction activities shall cease in the area of the find and SHPD shall be contacted immediately. All development shall be within the limits of the Project Site.

Scenic and Open Space Resources

a. *Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.*

Development of the solar energy facility will result in minor effects on vistas and scenic resources, which will be mitigated to the extent possible with landscaping. The Project is consistent with the County of Kaua'i CZO, the County of Kaua'i General Plan, and the WKCP. As shown in the View Study provided in ***Exhibit U***, the Project will be visible from a few places on Kaumuali'i Highway and in areas having higher elevations, such as Waimea Canyon Drive. However, this visibility is minimal and is not expected to result in significant adverse impacts. The Project will have a relatively low profile and will run with the existing topography of the land. The design will meet agricultural development standards of the Land Use Ordinance to the extent possible, and landscaping will be integrated to provide privacy and screening of views of the project to the extent possible.

The Project Site is located away from coastal areas; therefore, coastal scenic view sheds are not accessible from this area. No impacts on existing ocean views and scenic resources are anticipated.

Coastal Ecosystems:

a. *Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.*

The Project will not affect coastal ecosystems or natural resource management. During construction, the Project will obtain the necessary permits to comply with state and federal stormwater management water quality standards. The Project will prepare a Storm Water Pollution Prevention Plan (SWPPP) and implement BMPs to prevent and minimize erosion and sediment runoff from the disturbed areas. Drainage patterns at the Project Site will not be altered. The Project Site is located well away from coastal areas and will not result in significant adverse impacts on coastal ecosystems.

Economic Uses:

a. *Provide public or private facilities and improvements important to the State's economy in suitable locations.*

The Project is consistent with State and County plans and land regulations. The location for the solar energy facility is ideal because of its relatively flat topography, cleared land, high solar irradiance, and proximity to the grid. The development of the Project will support the state's goal of 100% clean energy by the year 2045 through energy efficiency and renewable energy.

The investment in solar development in Hawai'i will support the state's economy by mainly using vacant agricultural lands, aside from pastureland, for an energy-generating project for the State. The Project will result in construction spending, collection of applicable state and county taxes, and the creation of short-term construction-related jobs and long-term operational positions.

Coastal Hazards:

a. *Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.*

The Project Site is located in Flood Zone X (***Exhibit C25***), indicating minimal to moderate flood risk with a 0.2% or less annual chance of flooding. Additionally, the Project Site is not in the tsunami inundation zone. Since the Project Site is located well away from the coastal area, the Project is secure from coastal inundation. Construction will maintain the general slope consistent with current site conditions, and drainage patterns will not be significantly altered. BMPs will be implemented to prevent and minimize erosion and sediment runoff from the disturbed areas.

Managing Development:

a. Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

The Project Site is located away from the coastal areas; therefore, the improvement of processes relating to the management of coastal resources and hazards is not applicable to the project. However, information about the Project has been shared with the community and government officials as detailed in ***Section 7***. The State and County regulatory review processes will provide another opportunity for engagement. These public meetings will provide a forum for communication and public participation relating to the Project.

Public Participation:

a. Stimulate public awareness, education, and participation in coastal management.

Information about the Project was shared with community and agency stakeholders through open houses, individual and small group meetings, and a public presentation, fostering opportunities for public awareness, education, and participation in coastal management. These community outreach efforts *(**Section 7**)* provided a forum for communication and public participation relating to the Project.

Beach Protection:

a. Protect beaches for public use and recreation.

The Project Site is located away from public beaches. No structures will be located near the shoreline areas. The Project will not impact public use and recreation of beaches near the Project Site. The Project will not involve any development within the beach or coastal area that would have any negative impact on marine or coastal resources. The Kekupua Fishpond and the Makaweli Landing are located on the makai side of Kaumualiʻi Highway, across from the Project Site. The Project will have no impacts on these features. The Project will have no negative impact on the CZMA and will be consistent with and non-violative of the objectives and policies of the CZM Program in the following respects:

a. The Project will be compatible with existing uses in areas on or around the Project Site.
b. The Project will not negatively impact scenic or open space resources within the CZMA.
c. The Project will not increase runoff or otherwise endanger the coastal ecosystem.
d. The Project on the Project Site will not be located in a coastal hazard area.
e. The Project will have no detrimental impact on recreational, historic, or economic resources.
f. The Project will not have detrimental impacts on beach or marine resources.
g. Approval of the Project will not result in the foreclosure of future management options for development in the area.
h. The design, siting, and landscaping of the Project as proposed will ensure that the proposed Project will recognize, preserve, maintain and contribute to the characteristics of the surrounding lands. In particular, the Project will be compatible with, and will protect, the unique natural forms of, biologic systems contained within, and aesthetic characteristic of, the CZMA.

8.8 Sea Level Rise

Sea levels are rising at increasing rates due to global warming of the atmosphere and oceans, as well as the melting of glaciers and ice sheets. Recent observations and projections suggest that up to 3.2 feet of sea level rise ("SLR") could occur as early as 2060. For this reason, the 2022 Hawai'i Sea Level Rise Vulnerability and Adaptation Report emphasizes the need to plan for 3.2 feet of SLR in current and ongoing projects to be prepared for the oncoming threat of SLR.

The Project Site is not located within the 3.2 feet of SLR exposure *(**Exhibit C28**)* and therefore will not be impacted by 3.2 feet of SLR. However, operation of the Project will have substantial beneficial impacts by reducing the State and County's reliance on fossil fuels and their contribution to global climate change by furthering both State and County goals for renewable energy production. The Project will have an overall positive effect on future climate conditions, thereby working to reduce the threat of SLR caused by global warming.

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Section 9

General Plan Considerations

Section 9

Kaua‘i General Plan Considerations

The County of Kaua‘i General Plan is the island’s primary policy document, guiding long-term growth, development, and conservation over a 20-year planning period. Adopted in 2018, the General Plan outlines a community-driven vision for the island’s future and provides a framework to manage change while protecting Kaua‘i’s unique rural character and natural resources.

The Plan also includes detailed maps and land use designations that direct where and how growth should occur. As shown in ***Exhibit C5***, the entirety of the Project is located in the “Agricultural” land use designation. Areas designated as “Agricultural” are to be held in reserve for agricultural purposes with little residential development.

9.1 Goals and Policies

The Plan is structured around four overarching goals that form the foundation for all policies, objectives, and actions: 1) A Sustainable Island, 2) A Unique and Healthy Place, 3) An Equitable Society, and 4) A Balanced Economy. These goals are further supported by 19 policies that articulate the county’s direction and priorities in accommodating and managing future growth. Ten sector-based objectives and actions cover topics such as housing, transportation, agriculture, economy, infrastructure, heritage resources, energy, and climate change.

The Project is consistent with the following policies of the County of Kaua‘i General Plan:

Policy #13: Complete Kaua‘i’s shift to clean energy

> *Mitigate climate change and reduce system-wide carbon emissions by at least 80 percent by 2050 through deep reductions in energy use and by transforming electricity, transportation, and infrastructure systems toward the use of clean energy.*

Response: The purpose of the Project is to utilize agricultural lands for the implementation of solar energy facilities for solar energy generation. The Project will assist KIUC in meeting the State of Hawai‘i’s mandate to achieve 100% renewable energy by 2045. In 2023, Kaua‘i achieved 58% renewable energy production. The Project will produce over 17% of the total energy requirements for Kaua‘i, and it will allow KIUC to make significant progress toward achieving 100% renewable energy. Additionally, with the upcoming sunsetting of federal tax credits for renewable energy projects, this is one of the last projects to qualify for those credits. These tax credits allow the Project to sell energy to KIUC at a low, fixed rate, and those savings get passed along to the customer. Other projects coming online after 2030 will not have that same opportunity.

Policy #14: Prepare for Climate Change

> *Prepare for impacts to the island economy, food systems, and infrastructure that will be caused by climate change.*

Response: Operation of the Project will not contribute to global GHG emissions and climate change. The operation of the Project will have substantial beneficial impacts by reducing the State and Kaua'i's reliance on fossil fuels and their contribution to global climate change by meeting the State of Hawai'i's mandate to achieve 100% renewable energy by 2045. The Project will produce renewable energy through the proposed solar energy generating infrastructures and facilities.

The Project is also consistent with the following objectives and actions of the County of Kaua'i General Plan:

Sector: VI. Economy

> *3.3 Fostering High Tech and Clean Tech Jobs – The momentum of KIUC in pursuing ambitious renewable energy targets, coupled with Kaua'i's goals for emissions reductions in transportation and energy, also provides opportunities for clean technology businesses and green jobs. Clean tech tends to be low- or non-polluting, provide higher wage jobs, and supports sustainability goals.*

Response: The Project is anticipated to provide a positive economic impact through local employment generation, labor income, and economic output (see ***Section 6.8***). Over the Project's lifetime, including direct, indirect, and induced effects, the Project is estimated to generate or sustain up to approximately 1,064 total jobs in Hawai'i, $77.9 million in local labor income, and a total local economic output of $216.7 million. The Project will generate significant employment during both the short-term construction and the long-term operation and maintenance stages of the Project. Jobs directly related to the construction and operation of the Project will be considered "green jobs," which are generally defined as jobs related to preserving or restoring the environment (U.S. Bureau of Labor Statistics, 2020). Furthermore, energy will be sold at a low, fixed rate less than the current cost of fossil fuels, resulting in reduced utility costs for the Island of Kaua'i as a whole.

Section: VIII. Energy Sustainability and Climate Change Mitigation

> *Objective 1. To increase energy sustainability and maintain a reliable, resilient, and cost-efficient energy system.*
>
> *1.1 Conserving Energy and Becoming Sustainable*

Response: Development of the Project will move the State forward in achieving its 100% renewable energy goal while also improving Hawai'i's environment by reducing GHG emissions and dependency on foreign imports of fossil fuels. KIUC has set an individual goal for the County for renewable resources to generate at least 70% of Kaua'i's energy by 2030. The solar energy facility's electricity generation and bulk storage will provide Kaua'i with a renewable solution to reduce dependency on fossil fuels for electricity generation. Therefore, the Project will help Kaua'i meet its energy goals and needs as a clean, renewable energy source.

Objective 2. To expand strategies and mechanisms to reduce greenhouse gas emissions on Kaua'i.

2.2 Setting an Example and Goal for Emissions Reductions

Response: The Project will aid in reaching the State's 100% renewable energy goal and Kaua'i's 70% renewable energy goal by 2030. In 2023, renewable resources accounted for 58% of KIUC's net electricity generation. The proposed solar energy and storage facility is anticipated to generate approximately 17.5% of Kaua'i's energy needs, making a significant contribution to both the State and County renewable energy goals. The Project is expected to prevent the consumption of more than 179 million gallons of fuel over its 25-year lifespan and avoid 2,350,000 metric tons of carbon dioxide equivalent. Development of the Project will therefore considerably further the reduction of greenhouse gas emissions on Kaua'i.

9.2 Objectives and Actions by Sectors

The ten (10) Sectors contained in Section 3.0 of the Kaua'i General Plan (which represent the areas that must be considered in policy implementation), and the Project's compliance therewith, are as follows:

I. **The Watershed.** It is believed the Project will have no negative impacts on the natural, historic, cultural, or environmental qualities of, or resources within, the Watershed areas, or access thereto.

II. **Housing.** Land easement payments will be made to a local land manager, G&R, which employs many people and provides housing through the Plantation Camps. These payments will give them the means to expand their business and upgrade infrastructure and housing. Additionally, the project will improve grid stability and reliability on the West side and increase renewable energy resources. This will allow for future population growth and expansion of the housing market.

III. **Transportation.** During construction, temporary traffic will be mitigated through a Traffic Management Plan. Once operational, the Project will not increase traffic and will have no negative impact on Kaua'i's transportation infrastructure.

IV. **Infrastructure & Services.** The Project will be an essential part of a stable and dependable alternative solar electric service which promotes lower-cost services in support of future growth. These benefits will accrue to all residents, including those living in low-income communities.

V. **Shared Spaces.** The Project will have no negative impacts on the county's efforts to maintain and utilize shared spaces.

VI. **Economy.** The Project will be an essential part of a stable, dependable, sustainable grid that will support the full range of economic activities (including agricultural activities) on Kaua'i. Although located in the Kaua'i General Plan Agricultural Land Use designation, the Project, it is not located on Important Agricultural Lands; represents a small percentage of the total available Agricultural lands on Kaua'i (268.4 acres of 136,908 acres); will have no impact on surrounding agricultural activities on surrounding lands; and will support its own agricultural activities with a local agricultural partner. Additionally, over the Project's lifetime, including direct, indirect, and induced effects, the Project is estimated to generate or sustain up to approximately 1,064 total jobs in Hawai'i, $77.9 million in local labor income, and a total local economic output of $216.7 million. The land easement payment will be made to a local landowner, ensuring the money stays in Kaua'i's economy.

VII. **Heritage Resources.** The Project will have minimal visual impacts on surrounding lands that will be mitigated with landscaping to the extent possible, and no substantial impacts on historic sites, Hawaiian cultural or traditional practices, or access to streams, shorelines, areas associated with Hawaiian cultural or traditional practices, recreational areas or other special places. The Project does not contain and will not negatively impact any special features or resources that are shown on the Waimea-Kekaha Heritage Resource Map (*Kaua'i General Plan Figure 5-9*).

VIII. **Energy Sustainability.** The Project will: reduce fossil fuel uses; promote the transition to renewable resources; encourage the use of alternative power sources; promote clean, green energy production; and reduce energy costs.

IX. **Public Safety & Hazards Resiliency.** The Project will provide alternative solar electric services during natural emergencies. The Project is not located near the shoreline and will not be subject to sea level rise.

X. **Opportunity & Health for All.** The Project will be part of a stable and dependable alternative solar electric service which is an essential component of maintaining and growing educational and healthcare services which benefit all residents.

9.3 Compliance with Kaua'i General Plan Standards

The Project itself will have no significant impact on the surrounding environment. The Project will include uses compatible with agricultural and other uses in the area and with the surrounding environment. The Project will help provide a stable, independent source of alternative solar electric services, which will assist agricultural activities on Kaua'i.

Section 10

CZO Agricultural District and Open District Considerations

Section 10

CZO Agricultural District and Open District Considerations

10.1 CZO Agricultural District

The County of Kaua‘i CZO provides regulations and standards for land development and the construction of buildings and other structures in the County of Kaua‘i. The CZO was first adopted in 1972 and recently underwent a comprehensive update in two phases. Phase 1 focused on organizational and format changes and was approved on December 3, 2012, through Ordinance No. 935. Phase 2 includes substantive changes to the code, including amendments to the general provisions, designation of districts, and zoning maps, and was approved on May 19, 2025, through Ordinance No. 1173.

The Project is located in the County of Kaua‘i Agriculture District. Under CZO §8-8.1, the Agriculture District establishes means by which land needs for existing and potential agriculture can be both protected and accommodated. The Agricultural District is also intended to provide opportunities for a wider range of the population to become involved in agriculture.

Uses within the Agricultural District that are permitted with the obtainment of a Use Permit, as detailed by CZO §8-2.4(r), include the following:

> *(12) Private and public utility facilities.*
> *(14) Any other use or structure which the Planning Director finds to be similar in nature to those listed in this section and appropriate to the District.*

The proposed Project is a utility installation, and therefore a Use Permit is required. Further, the Project promotes the purpose and objectives of CZO §8-3 and is a compatible use within the Agriculture District. A compatible use is defined in CZO §8-1.5 as “a use that, because of its manner of operation and characteristics, is or would be in harmony with uses on abutting properties in the same zoning district. In judging compatibility, the following shall be considered: intensity of occupancy as measured by dwelling units per acre, pedestrian or vehicular traffic generated, volume of goods handled, and other factors such as, but not limited to: vibration noise level, smoke, odor, or dust produced, or light or radiation emitted.” The Project is not expected to generate any adverse effects as described in CZO §8-1.5 (see ***Section 6***) and can therefore be considered a compatible use.

During construction, the Project is expected to generate increased traffic and noise due to short-term construction (see ***Sections 6.4*** and ***6.10***). Traffic impacts will be mitigated to the extent possible, as detailed in the TIAR, and a noise permit will be obtained for construction, with all rules and regulations followed. Construction traffic and noise are temporary, and will only exist for the ~12 month construction period. During operation, the Project will generate negligible traffic going to the Project Site each day, and there will be no adverse impacts on air quality. The Project will generate minimal noise impacts, as solar energy facilities are generally considered noiseless or produce only a slight

background hum. Additionally, the energy produced by the Project would offset energy generated from existing loud fossil fuel generation units, reducing the amount of noise and greenhouse gas emissions generated from Kaua'i's electricity generation.

The Project will adhere to residential densities, parcel, and other requirements as located in CZO §8-8.2 and §8-8.3. The total parcel size complies and is larger than the minimum average lot width of 150 feet and average length of greater than four (4) times its width. Development standards applicable in an Agriculture District are the same as those established in CZO §8-4.3 and 8-4.5, except that the maximum height of any building shall be fifty (50) feet. The AES Hawai'i Substation shield wire mast will be approximately 45 feet tall. Public utility poles are permitted an additional 20 feet above the zoning district's governing height limit, so poles within KIUC's Kaawanui Substation can be up to 70 feet tall. The 69kV transmission poles in the Kaawanui Substation are approximately 65 feet tall.

The proposed Project (including the AES Hawai'i Substation and the Kaawanui Substation) will require a Use Permit pursuant to CZO §8-2.4(q)(16) and §8-2.4(r)(12) and (14). The Project itself will have minimal impact on the surrounding environment. The Project will include uses that are compatible with other uses in the area, as well as with the surrounding environment. As such, the Project complies with CZO §8-8.1 in that it: assures a reasonable relationship between the availability of agricultural lands for various agricultural uses and the feasibility of those uses; and will be incidental to the agricultural uses and the agricultural character of the surrounding lands.

10.2 CZO Open District

A small portion of the Project Site is located within the County of Kaua'i Open District. Under CZO §8-9.1, the Open District was established and regulated to create and maintain an adequate and functional amount of open land. The purpose of the Open District is to provide for the recreational and aesthetic needs of the community or to provide for the effective functioning of land, air, water, plant, and animal systems or communities. CZO §8-2.4(t) dictates that utility installations are a permitted structure within the CZO Open District, with the obtainment of a Use Permit. Development requirements are located in CZO §8-9.2 and Open District development standards related to the Project are established in CZO §8-9.2(a), including:

(1) The amount of land coverage created, including buildings and pavement, shall not exceed 10% of the lot or parcel area.
(2) No existing structure, use or improvement shall be increased in size, or any new structure, use or improvement undertaken so as to exceed the 10% land coverage limitation.

The total area of the parcel is 5,006.740 acres, and the portion of the Project Site within the Open District encompasses about 10 acres, only about 0.2% of the total parcel. Therefore, the Project adheres to development standards as established in CZO §8-9.2.

The Project is a use and structure permitted with a Use Permit within the CZO Open District pursuant to CZO §8-2.4(t)(13). As discussed in ***Section 11***, the Project will comply with the CZO Use Permit Standards. The Land Coverage on the Project Site will not exceed ten percent (10%). The Project itself will have no significant impact on the surrounding environment. As such, the Project complies with CZO §8-9.1 in that it will help to preserve, maintain, and improve the natural characteristics of the area; will allow the area to remain predominantly free of development; and will be incidental to the use and open character of the surrounding lands.

Section 11

Use Permit and Zoning Permit Considerations

Section 11

Use Permit and Zoning Permit Considerations

11.1 Compliance with CZO Use Permit Standards

Per ***Section 5.2***, a Use Permit will be required for the Project. The requirements for Use Permits are found in CZO §8-3.2. ***Exhibit N2*** is the Project's Use Permit application checklist. This application includes a list of declarations that are integral to the Use Permit review process, primarily relating to the Project Site's existing conditions and the design details of the Project.

The Project complies with the standards for Use Permits as contained in CZO §8-20.S(a) in that the Project will be:

a. a compatible use;

b. not detrimental to health of persons residing or working in the neighborhood;

c. not detrimental to safety of persons residing or working in the neighborhood;

d. not detrimental to peace of persons residing or working in the neighborhood;

e. not detrimental to morals of persons residing or working in the neighborhood;

f. not detrimental to comfort and general welfare of persons residing or working in the neighborhood;

g. not detrimental or injurious to property or improvements in the neighborhood;

h. not detrimental to the general welfare of the community;

i. not a cause of substantial harmful environmental consequences to the Project Site, or to other lands or waters;

j. not inconsistent with the intent of Chapter 8, KCC; and

k. not inconsistent with the General Plan.

11.1.1 Compatibility with Surrounding Uses

The Project Site is surrounded by properties located within the SLUC Agricultural District, Urban District and Rural District, and the CZO Resort District, Agriculture District, Plantation Camp District, and Open District. Uses on the surrounding lands include farm dwelling uses, residential uses, and agricultural uses. The Project Site is similar in topography, character and nature with adjacent and surrounding properties, and the Project is consistent with such surrounding uses.

The Project Site is a portion within two parcels encompassing 5,006.740 acres owned by Robinson Family Partners. The Project parcels are bounded to the southwest by Kaumali'i Highway, and to the north and east of the Project parcels are valleys and ridges of rapidly increasing elevations. Ka'awanui Village, a small residential area, lies adjacent to the northeast portion of the Project Site. The remainder of the Project parcel contains land used for agricultural purposes, Ka'awanui Reservoir, and undeveloped open space. Pākalā Village lies to the southwest of the Project parcel. Other developed areas surrounding the Project parcel include Waimea town to the northwest and Hanapepe Town and Kaumakani Town to the southwest. Additional land uses include undeveloped open space and agricultural activities.

There are proposed plans for a resort development makai of the Kaumuali'i Highway across from the Project Site.

The Project Site is currently utilized as pastureland for horses, cows, and water buffalos. The existing uses will be analyzed in an Agricultural Plan that will detail planned agricultural activities within the Project Site. The Project Site is designated as Agriculture under the State of Hawai'i, as Agriculture and Open Space by the County of Kaua'i, and is on LSB B-rated land (***Exhibits C4, C6,*** and ***C9***). The proposed solar energy facility will be visible at a distance from locations along Kaumali'i Highway. However, it will have a relatively low profile and run with the existing topography of the land. At peak elevation, solar panels will be no more than 12 feet above ground level. Pursuant to HRS §205-4.5, solar energy facilities are a permitted use on LSB B-rated soils with issuance of the State Special Permit, which allows the county Planning Commission to permit unusual and reasonable uses within the Agricultural District, per HRS §205-6. Further discussion regarding the Project's compliance with HRS §205 is in ***Section 8***. Overall, the Project is not anticipated to adversely impact surrounding persons, property, or the environment, and will be compatible with ongoing and future uses on the parcel.

11.2 Compliance with CZO Class IV Zoning Permit Standards

Per ***Section 5.3***, a Class IV Zoning Permit will be required for the Project. The general requirements for Zoning Permits are listed in CZO §8-3.1(a) and CZO §8-3.1(b). Requirements specific to Class IV Permit are located in CZO §8-3.1(f). The Project will comply with the requirements of the Agriculture District as described in the CZO, as well as consult with the KDP Regulatory Planning Division to clarify the requirements for development. The general submittal requirements for Class IV Permits are included in ***Exhibit N3***, as well as how the Project addresses the requirements. The requirements are largely related to the existing conditions of the Project Site, details of the proposed development, anticipated impacts, and associated technical studies. The Applicant has complied with the procedural provisions for a Class IV Zoning Permit by filing and processing this Application.

Section 12

Community Plan Considerations

Section 12

Community Plan Considerations

Kaua‘i’s Community Plans represent the County’s land use policy at the regional level. The West Kaua‘i Community Plan (“WKCP”) is one of five Kaua‘i Community Plans and was last updated in 2020. The WKCP outlines the area’s Regional Policies; the visions, goals, and objectives for West Kaua‘i’s historic town cores, and the goals and actions for communities and areas outside of the existing town cores.

12.1 Land Use

The WKCP provides individualized town plans for Kekaha, Waimea, Hanapēpē, ‘Ele‘ele, and Port Allen. Furthermore, the WKCP addresses agricultural communities and other significant areas within West Kaua‘i. The Project Site falls within the community of Makaweli (***Exhibit C7***) and is identified as an area for agriculture. The WKCP acknowledges the area’s agricultural history and emphasizes the need to preserve historical structures while accommodating future uses that are compatible with the region’s agricultural heritage. The Project aligns with the WKCP’s vision for the area, as it will utilize the area that has been historically and currently used for agricultural activities for the proposed solar energy and storage facilities. The Project will not impede the historic character of the existing plantation camps. Additionally, the development of the Project will provide local jobs and make a positive contribution to the county’s renewable energy goals.

12.2 Regional Policies

Through the public process, the community identified and prioritized six regional policies in the WKCP. The Project’s compliance with such policies is described in the following sections.

12.2.1 Town Design

(i) Town Design Policy #1. Focus development in existing towns to protect West Kaua‘i’s rural qualities and agricultural resources.

Response: The Project could not be placed next to an existing town because it is utility-scale and requires 200+ acres of land. However, the compatible agriculture plan (as detailed in ***Section 3.6***) will increase the amount of agriculture occurring on this land, expanding the agricultural resources in West Kaua‘i.

(ii) Town Design Policy #2. Strengthen and activate town centers through development that supports the unique character of each town.

Response: The Project is not applicable to this design policy.

(iii) Town Design Policy #3. Meet the housing needs of West Kaua‘i’s residents by expanding mixed-use communities that are walkable, bikeable, and resilient.

Response: Land easement payments will be made to a local land manager, G&R, which employs many people and provides housing through the Plantation Camps. These payments will give them the means to expand their business and upgrade infrastructure in the Plantation Camps. Additionally, the Project will improve grid stability and reliability on the West side and increase renewable energy resources. This will allow for future population growth and expansion of the housing market. .

(iv) Town Design Policy #4. Protect and support the unique Plantation Camps.

Response: Land easement payments will be made to a local land manager, G&R, which employs many people and provides housing through the Plantation Camps. These payments will give them the means to expand their business and upgrade infrastructure in the Plantation Camps. Additionally, during the early project design, land within the Ka‘awanui Village Plantation Camp Urban Zoning expansion area was considered for the Project. AES removed the Plantation Camp zoning expansion area from the Project footprint to protect and support the future growth of Ka‘awanui Village.

12.2.2 Land Transportation

(i) Land Transportation Policy #1. Work with the Hawai‘i Department of Transportation to identify congestion relief measures along Kaumuali‘i Highway.

Response: During construction, the Project will implement a Traffic Management Plan to mitigate traffic impacts along Kaumuali‘i Highway. During operation, the Project will not have any negative impact on this Policy.

(ii) Land Transportation Policy #2. Improve bus service by implementing the West Kaua‘i components of the Kaua‘i Short-Range Transit Plan.

Response: The Project will not have any negative impact on this Policy.

(iii) Land Transportation Policy #3. In each community, establish “safe routes” – primarily street networks that safely accommodate pedestrians and bicyclists to get from homes to schools, parks, shops, jobs, and services.

Response: The Project will not have any negative impact on this Policy.

(iv) Land Transportation Policy #4. Establish shared-use paths for bicyclists and pedestrians that connect Westside towns.

Response: The Project will not have any negative impact on this Policy.

12.2.3 Heritage Resources

(i) Heritage Resources Policy #1. Preserve and protect the integrity of sacred heritage resources for current and future generations.

Response: The Project has conducted an AIS (see ***Section 6.2.2***) and will follow the SHPD directive to preserve historic properties located within the Project Site as required. Additionally, AES has consulted with the landowner, who has owned the land since 1865 and has an intimate knowledge of its history and heritage resources. With their input, the Project is preserving historic properties significant to the family, such as the rock wall located on both sides of Ka‘awanui Road.

(ii) Heritage Resources Policy #2. Celebrate the cultural and historic features that represent West Kaua'i's diverse cultural influences.

Response: The Project will not have any negative impact on this Policy.

(iii) Heritage Resources Policy #3. Uphold traditional and customary rights.

Response: The Project has conducted a Cultural Impact Assessment with Ka Pa'akai Analysis (see ***Section 14***), which confirms that the Project will not negatively impact traditional and customary Native Hawaiian rights. Additionally, the Project has conducted extensive community outreach (see ***Section 7***), providing the public with multiple avenues to ask questions and share their feedback and knowledge of the area. The Project will continue to collect feedback throughout its life.

(iv) Heritage Resources Policy #4. Preserve West Kaua'i's historic structures and perpetuate its unique architecture.

Response: The Project will follow the SHPD directive to preserve historic properties located within the Project Site as required. Additionally, AES has consulted with the landowner, who has owned the land since 1865 and has an intimate knowledge of its history and heritage resources. With their input, the Project is preserving historic properties significant to the family, such as the rock wall located on both sides of Ka'awanui Road.

12.2.4 Resiliency

(i) Resiliency Policy #1. Adapt West Kaua'i's low-lying neighborhoods for climate change impacts and lay the groundwork for managed retreat.

Response: The Project, by generating energy from clean, renewable solar energy, will prevent the burning of oil and reduce Kaua'i's greenhouse gas emissions. This will ultimately help reduce the severity of climate change.

(ii) Resiliency Policy #2. Increase the resiliency of flood-prone neighborhoods through flood mitigation, drainage improvements, green infrastructure, and updated building standards.

Response: The Project, by generating energy from clean, renewable solar energy, will prevent the burning of oil and reduce Kaua'i's greenhouse gas emissions. This will ultimately help reduce the severity of climate change.

(iii) Resiliency Policy #3. Strengthen the resiliency of the region's critical infrastructure and public facilities.

Response: The Project will strengthen the electrical grid's resilience by increasing renewable energy production and modernizing critical grid infrastructure through the construction of the new Kaawanui Substation. The battery energy storage system component of the Project also creates firm, dispatchable energy that can be deployed when needed.

(iv) Resiliency Policy #4. Build on West Kaua'i's close-knit community networks to promote regional resiliency and grassroots disaster planning and preparedness.

This Project will build Kaua'i energy sovereignty, decreasing its reliance on foreign oil and insulating it from global disasters and supply disruptions. The Project will strengthen the electrical grid's resilience by increasing renewable energy production and modernizing critical grid infrastructure through the construction of the new Kaawanui Substation. The battery energy storage system component of the Project also creates firm, dispatchable energy that can be deployed when needed.

(v) Resiliency Policy #5. Ensure the long-term resiliency of the land transportation network.

Response: The Project will not have any negative impact on this Policy. There will be no alterations to the existing transportation network.

(vi) Resiliency Policy #6. Improve West Kaua'i's long-term food security and sustain vital self-reliant community food systems.

Response: The Project will contribute to West Kaua'i's long-term food security through its compatible agriculture plan with a local agriculture partner (see ***Section 3.6***). The agricultural partner's goal is to produce food for commercial sale.

12.2.5 Shared Spaces

(i) Shared Spaces Policy #1. Support community-led design, programming, and stewardship of shared spaces.

Response: The Project will not have any negative impact on this Policy.

(ii) Shared Spaces Policy #2. Protect the community's natural and recreational resources in perpetuity.

Response: The Project will not have any negative impact on this Policy.

12.2.6 Economic Development

(i) Economic Development Policy #1. Uphold Agriculture as an anchor industry.

Response: Through the compatible agriculture component of this Project (see ***Section 3.6***), more agriculture will occur because of the Project than what is currently occurring on the land. Recently, the land has mainly been used for rotational grazing. Under the compatible agriculture plan, the agricultural partner will work to produce food for commercial sale.

(ii) Economic Development Policy #2. Provide supportive environments for business success.

Response: The Project will increase grid stability and resilience, creating a dependable energy supply for businesses. It will also provide energy at a low, fixed cost, cheaper than the current cost of fossil fuels, contributing to a lower cost of energy for businesses.

(iii) Economic Development Policy #3. Grow science literacy and invest in a STREAM-ready workforce.

Response: Over the Project's lifetime, including direct, indirect, and induced effects, the Project is estimated to generate or sustain up to approximately 1,064 total jobs in Hawai'i, including local construction and Operations and Maintenance jobs on Kaua'i. Additionally, AES has been an active educational partner since 2019, supporting and participating in Kaua'i STREAM events and programs, including but not limited to: the Kaua'i Community Science Center, educational tours of Lāwa'i Solar + Storage, Career Fairs, Teacher Trainings, and Earth Day presentations. AES has also funded college scholarships for Kaua'i STEM majors through the Hawai'i Community Foundation.

(iii) Economic Development Policy #3. Grow science literacy and invest in a STREAM-ready workforce.

Response: Over the Project's lifetime, including direct, indirect, and induced effects, the Project is estimated to generate or sustain up to approximately 1,064 total jobs in Hawai'i, including local construction and Operations and Maintenance jobs on Kaua'i. Additionally, AES has been an active educational partner since 2019, supporting and participating in Kaua'i STREAM events and programs, including but not limited to: the Kaua'i Community Science Center, educational tours of Lāwa'i Solar + Storage, Career Fairs, Teacher Trainings, and Earth Day presentations. AES has also funded college scholarships for Kaua'i STEM majors through the Hawai'i Community Foundation.

Section 13

HRS Chapter 343 Considerations

Section 13

HRS Chapter 343 Considerations

The Project does not require completion of a HRS §343 Environmental Assessment or Environmental Impact Statement. The Project will not involve the development of items specified in the Applicability and requirements of HRS §343-5(a)(1) through (9):

a. Propose the use of state or county lands or the use of state or county funds;

b. Propose any use within any land classified as conservation district by the State Land Use Commission under HRS §205;

c. Propose any use within the shoreline area as defined in HRS §205A-41;

d. Propose any use within any historic site as designated in the National Register or Hawaii Register as provided for in the Historic Preservation Act of 1966, Public Law 89-665, or HRS Chapter 6E;

e. Propose any use within the Waikiki area of Oahu, the boundaries of which are delineated in the land use ordinance as amended, establishing the "Waikiki Special District";

f. Propose any amendments to existing county general plans where such amendment would result in designations other than agriculture, conservation, or preservation;

g. Propose any reclassification of any land classified as conservation district by the State Land Use Commission under HRS §205;

h. Propose the construction of new, or the expansion or modification of existing, helicopter facilities within the state; or

i. Propose the construction of a wastewater treatment unit, waste-to-energy facility, oil refinery, or power generating facility (which use petroleum based fuels).

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Section 14

Native Hawaiian Issues

Section 14

Native Hawaiian Issues

AES takes cultural resources review very seriously and is committed to being a good steward of the land. This Project underwent extensive cultural reviews to gain a comprehensive understanding of the land and any potential impacts resulting from the proposed development. In addition to the Ka Pa‘akai analysis, AES elected to conduct a Cultural Impact Analysis (CIA). The CIA provided the cultural context of the traditions of the entire ahupua‘a of Makaweli, creating a better understanding of the results of the Ka Pa‘akai Analysis, which was only focused on the Project Site. CSH completed a CIA and Ka Pa‘akai Analysis for the Project in September 2025 (***Exhibit X***).

14.1 Cultural Impact Assessment

The Project is not expected to have a negative impact on cultural resources in the Project Site or the greater Makaweli area.

The CIA supports compliance for the Project with:

- The mandate set forth by the Hawai‘i State Constitution (Articles IX and XII), courts, HRS, HAR, and other Hawai‘i State laws requiring government agencies to promote and preserve cultural beliefs, practices, and resources of Native Hawaiians and other ethnic groups.
- The State of Hawai‘i’s environmental review process under HRS §343, which requires consideration of the proposed project’s potential effects on cultural practices and cultural features in order to “promote responsible decision making” (HRS §343).
- The State of Hawai‘i’s historic preservation review process under HAR §13-275-6 and §13-284-6, which requires the identification and mitigation of adverse effects proposed by a potential project in order to “promote the use and conservation of historic properties for the education of the citizens of Hawai‘i” (HAR §13-275-6).

Unlike archaeological inventory survey reports, the study areas for cultural studies include the immediate Project Site and extend to the wider land regions, which can include the entire ahupua‘a and possibly the moku. Since Native Hawaiian traditions recognize and value the relationship with land from mauka to makai, the Project Site denotes the location of the Project, however, the term “study area” denotes the larger context of land that is critical in any cultural study.

CSH conducted a review of previous cultural studies in the vicinity of the Project Site, of which there was only one. In 1999, CSH conducted a *Hawaiian Traditional Customs and Practices Study for Kapalawai* (McGuire et al., 1999). CSH interviewed eight individuals from the communities of Makaweli, Waimea, and Hanapēpē to discuss traditional customs and practices which occurred within the 170-acre Kapalawai Resort project area located immediately west of the current Project Site. Traditional cultural practices identified in the 1999 study include agricultural practices, burial practices, freshwater resources, gathering practices, marine resources, mo‘olelo and wahi pana, and recreational activities (***Exhibit C29***).

For the CIA, an effort was made to locate community members with ties to Makaweli who live or had lived in the region or who, in the past, used the area for traditional and cultural purposes. CSH reached out to Native Hawaiian Organizations, agencies, and community members, including descendants of Makaweli. Community outreach letters were sent to 48 individuals or groups; six responded, one provided written testimony, and three met with CSH for interview(s).

Consultees in the CIA did not identify any traditional cultural practices within the Project Site. Cultural practices within the broader context of Makaweli, as communicated by consultees, include gathering of pa‘akai and limu along the shore near Pākalā Village, surfing the ocean off Pākalā, and fishing the ocean and adjacent fishponds and streams. A summary of key comments is provided below:

- Roslyn Cummings expressed concern regarding the “potential and actual impacts to wai (freshwater), kai (saltwater), and the sacred waiwai of the people.” She noted wai is “a living entity tied to Kanaloa, Lono ancestral fertility, food sovereignty, and Ku the integrity of ahupua‘a-based cultural systems as Kane the life giving force through ‘I‘O the creator and its creation.”
- Ms. Cummings emphasized that “I do not give blind consent for this project.” She stated the Project “directly threatens the spiritual, ecological, and cultural integrity of Makaweli.”
- Mr. Garma expressed concern regarding the potential impacts to the health of the residents living in the vicinity of the Project Site from chemicals such as pesticides that may be used during the construction and operation of the Project.
- Mr. Garma also asked how the community will benefit from the Project. He noted many of the families in Pākalā and Ka‘awanui villages are living on fixed incomes and struggle to afford the high costs of electricity. He wondered how this Project can ensure these families are taken care of.
- Ms. Bailey asked what kinds of waste will be produced during the construction and operation of the Project. She also expressed concern that waste not properly disposed of could run off into the ocean and negatively impact marine resources such as pa‘akai and limu.
- Ms. Kauka expressed her support for the Project stating it is a “fabulous idea” that will bring down the cost of electricity for the community.
- Mr. Garma expressed his support for the Project. He pointed out there are many parcels of land including the Project Site that were once thriving sugar fields that have been vacant for many years and have the potential to benefit the community.

AES responded to each consultee’s concerns via email, answering questions and providing additional information about the Project.

The majority of the concerns expressed by participants in the CIA concerned the health of local residents and potential impacts on freshwater and marine resources. The Project will not use any water in the generation of solar energy, and pesticides will not be used at any stage of the Project. Waste generated by the Project will primarily consist of construction and demolition waste at the beginning and end of the Project’s lifespan. All waste will be managed in accordance with County, State, and Federal regulations (see ***Sections 6.6.3*** and ***6.6.4***). BMPs will be followed to store waste and prevent it from leaving the Project Site. There are no natural springs or permanent streams that have been documented within the Project Site. As discussed in ***Section 4.8***, BMPs will be utilized when working over or around the documented active irrigation ditch. At the end of the Project’s lifespan, the Applicant will decommission the solar energy facility and restore the land to its existing condition or a comparable condition. Equipment and materials will be salvaged, recycled, or put to their best and

highest use in coordination with licensed subcontractors, recycling facilities, and local waste removers. Therefore, no adverse impacts on water resources are expected from the Project.

In support of the Project, an LRFI, AIS, RLS, CIA, and Ka Pa‘akai o ka ‘Āina analysis have all been conducted to gain a comprehensive understanding of the archaeological and cultural resources of the land. As described in ***Section 6.2*** and in this section, care will be taken to mitigate impacts on identified archaeological and cultural resources to the extent practicable.

Finally, consultees wanted to ensure that the community will benefit from the Project. One consultee noted many of the families in Pākalā and Ka‘awanui Villages are living on fixed incomes and struggle to afford the high costs of electricity, while another expressed staunch support for the Project, stating that it will bring down the cost of electricity for the community. As described in ***Section 3.10***, the Project will generate clean, renewable energy for Kaua‘i residents at a lower rate than imported fossil fuels. Further, the Applicant has conducted consultations with the residents of Pākalā, Ka‘awanui, and Kaumakani Villages and will continue to communicate with residents as the Project progresses. See ***Section 7*** for further details regarding community outreach.

14.2 Ka Pa‘akai Analysis

The Ka Pa‘akai Analysis conducted for this Project confirmed that the Project will not affect or impair valued cultural, historical, or natural resources in the Project Site, including traditional and customary Native Hawaiian rights.

A Ka Pa‘akai Analysis is a legal framework that requires government agencies to consider the impact of proposed land and water use on Native Hawaiian rights. The framework was established by the Hawai‘i State Supreme Court in 2000 in the case Ka Pa‘akai O Ka ‘Āina vs. Land Use Commission, State of Hawai‘i. KDP has indicated the need for a Ka Pa‘akai Analysis to be conducted for this Project. The purpose of the present Ka Pa‘akai Analysis is to 1) assist KDP and any other relevant agencies in their effort to ensure the applicant has sufficiently assessed that the proposed project/action will not harm traditional and customary practices exercised by Native Hawaiians; and 2) to provide sufficient documentation to support the Applicant’s assessment.

In Ka Pa‘akai O Ka ‘Āina v. Land Use Commission, the Hawai‘i Supreme Court articulated an analytical framework to assist state agencies in balancing the State’s obligation to protect traditional and customary practices against private property (as well as competing public) interests, by requiring specific findings and conclusions about:

1. the identity and scope of ‘valued cultural, historical, or natural resources’ in the relevant area, including the extent to which traditional and customary native Hawaiian rights are exercised in relevant area;
2. the extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and
3. the feasible action, if any, to be taken by the Land Use Commission to reasonably protect native Hawaiian rights if they are found to exist.

Consultation with cultural practitioners and knowledgeable individuals from the Makaweli ahupua‘a was initiated in May of 2025, specific to traditional cultural practices, beliefs, perspectives, and worldviews.

These consultations and a review of the cultural-historical background material have resulted in the identification of a few traditional cultural practices that previously took place within the general vicinity of the Project Site, including fishing in adjacent freshwater resources and the ocean, gathering of pa‘akai and limu along the shore near Pākalā Village, surfing, and riding horses. No wahi pana or mo‘olelo were identified within the Project Site, and no burials have been identified.

The Project Site has been used for various agricultural endeavors and ranching. Currently, the Project Site comprises fallow agricultural fields and fenced pens used for grazing cattle and water buffalo. The fields historically were used for sugarcane agriculture. Many of the native and indigenous plants that may have grown in the Project Site have been destroyed by agricultural industries, except for those grown intentionally by residents in their yards.

The Project will not impact freshwater resources within or in the vicinity of the Project Site. No natural springs or permanent streams have been documented within the Project Site. The solar energy facility will not use any water to generate energy; instead, it will utilize photovoltaic panels to harness the sun’s power.

The Project is designed and built to meet national safety standards and does not pose a risk to human health or the environment. Pesticides will not be used at any stage of the Project, including during development, construction, and operations.

Waste generated by the Project will not impact the ocean or pa‘akai and limu gathering along the shore. Waste generated by the Project will vary depending on the Project’s stage in either construction, operations, or decommissioning. The Project will mainly produce construction and demolition waste at the beginning and end of the project’s lifespan. All waste will be managed in accordance with County, State, and Federal regulations. BMPs will be followed to containerize and store waste and prevent it from leaving the Project Site and contaminating the environment.

At the end of the Project’s lifespan, the Applicant will decommission the solar energy facility and restore the land to its existing condition or a comparable condition. Equipment and materials will be salvaged, recycled, or put to their best and highest use in coordination with licensed sub-contractors, recycling facilities, and local waste removers.

Project construction workers and all other personnel involved in the construction and related activities of the Project will be informed of the possibility of inadvertent cultural finds, including human remains. Should any potential historic properties be identified during construction activities, all activities will cease and the SHPD will be notified pursuant to HAR §13-280-3. In the event that iwi kūpuna are identified, all earth moving activities in the area will stop, the area will be cordoned off, and the SHPD and Police Department will be notified pursuant to HAR §13-300-40.

In addition, in the event of an inadvertent discovery of human remains, the completion of a burial treatment plan, in compliance with HAR §13-300 and HRS §6E-43, will occur. Should iwi kūpuna and/or cultural finds be encountered during construction, consultation should occur with cultural and lineal descendants of the Makaweli area to develop a reinterment plan and cultural preservation plan for proper cultural protocol, curation, and long-term maintenance.

Considering the analysis required in the Ka Pa‘akai case, it is determined that the Project will not affect or impair valued cultural, historical, or natural resources in the Project Site, including traditional and customary Native Hawaiian rights. None of the above-identified traditional cultural practices are currently known to be taking place in the Project Site, and there are no identified archaeological sites within this area. While there may be no apparent adverse impact on the above-identified traditional

cultural practices and cultural resources, it is imperative to acknowledge and understand how past land use and certain historic events have adversely impacted the ability of Native Hawaiian communities to perpetuate their customary practices and traditions.

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Section 15

Conclusion

Section 15

Conclusion

The Applicant respectfully requests that the Planning Commission:

1. Find that the Project complies with standards for Use Permits contained in CZO §8-20.5(a).
2. Find that the Project meets the requirements contained in HRS §205-6 and HAR §15-15-95 for State LUC Special Permits.
3. Find that the Project is consistent with uses in the State LUC Agricultural District, the Kaua‘i General Plan, the West Kaua‘i Community Plan, and the CZO.
4. Find that the Project is in compliance with the provisions of HRS §6E and Title 13, Subtitle 13, Chapter 284 of the Hawaii Administrative Rules.
5. Find that the Project is consistent with the provisions of HRS §1-1 and §7-1 and Article 12, Section 7 of the Hawai‘i State Constitution and will have no negative impacts on any traditional or customary practices of Native Hawaiians.
6. Approve the issuance of a Use Permit for the Project on the Project Site as described herein, subject to such reasonable conditions as the Planning Commission shall impose.
7. Approve the issuance of a Class IV Zoning Permit for the Project on the Project Site.
8. Recommend approval of a Special Permit for the Project for a 39-year term.

DATED: Līhu‘e, Kaua‘i, Hawai‘i, _____.

_____

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KAA W ANDI SOLAR, LLC,
a Delaware limited liability company

In The Matter Of The Application Of KAAWANUI SOLAR, LLC, a Delaware limited liability company, for a Use Permit, a Class IV Zoning Permit, and a Special Permit for real property situated at Makaweli, Waimea, Kaua‘i, Hawai‘i, identified by Kaua‘i Tax Map Key Nos. (4) 1-7-006:006 (por.) and 010 (por.).; ***APPLICATION,· EXHIBITS "A" - "X" (KAAWANUI SOLAR PROJECT).***

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Section 16

References

Section 16

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