
ENVIRONMENTAL COMPLIANCE PLAN

VARIABLE RENEWABLE DISPATCHABLE GENERATION AND ENERGY STORAGE AT THE WAENA SITE



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CHAPTER 1 INTRODUCTION

1.1 OVERVIEW OF THE PROPOSED BESS PROJECT

The proposed project involves the construction and operation of a Battery Energy Storage System (BESS) on an approximately 1.8-acre portion of TMK No. 3-8-003:023 & 024, Maui, Hawai'i. These facilities would deliver power to the adjacent 3.0-acre electrical switchyard that Maui Electric Company, Ltd. (Maui Electric) will construct. The switchyard will then distribute the electrical power through the island-wide transmission and distribution grid. The general location of the proposed project is shown on Figure 1.1. The proposed facilities' relationship with the adjacent area is depicted on Figure 1.2.

The proposed project consists of batteries and related equipment with an aggregate of 40 megawatts (MW) capacity and 160 megawatt-hours (MWH energy storage ("40MW/160MWH") to be procured, owned, and maintained by Maui Electric. In addition to the batteries, the Waena BESS project will include inverters and transformers, concrete pads, 480V/34.5kV underground cables and ductlines, 480 V to 34.5kV pad-mounted transformers, ground grid, 34.5kV switchgear, protective relays, 34.5kV to 69 kV step-up transformer(s), and 69kV disconnect switch. There will be a direct electrical interconnect from the BESS site into Maui Electric's Waena Switchyard at the 69 kV level along with a fiber cable communication link.¹ Vehicular access to the Waena site, will be via a driveway off Pulehu Road.²

¹ The Company is building this switchyard to allow either Company or privately-owned facilities to interconnect to this switchyard. According to the RFP, this will offer a less costly and simpler interconnection than would otherwise be possible as the Proposer will just be responsible for its interconnection from its facility into the switchyard, both located on the Waena Site.

² The Waena Site is currently part of two adjoining parcels owned by the Maui Electric Company; the total area of the two parcels is 65.7 acres. The current plan anticipates that the Waena BESS Site will be subdivided from the rest of the Company land at the time a contract is awarded. Up to 33.2 acres have been allocated for the variable dispatchable Facility and the location at Waena is shown in Exhibit C to this Appendix G. Proposer shall only be permitted to lease as much acreage as is necessary for its project.

Figure 1.1 Location Map



Source: Planning Solutions, Inc.

Figure 1.2 Vicinity Map



Source: Planning Solutions, Inc.

1.2 PURPOSE OF THE REPORT

This document is intended to provide all the information Hawaiian Electric will need to respond to portions of Appendix B, Sections 2.6, 2.7, and 2.8.1 of Hawaiian Electric Company, Inc.'s (Hawaiian Electric) *Request for Proposals for Variable Renewable Dispatchable Generation and Energy Storage, Island of Maui* (RFP) dated August 22, 2019 [Docket No. 2017-0352] that relate to the Waena Site.

1.3 ORGANIZATION OF THE REPORT

The remainder of the report is divided into the following main parts:

- Chapter 2 outlines an overall land use and environmental permits and approvals strategy as called for in Section 2.6.1 of the RFP.
- Chapter 3 summarizes topics related to the existing County Zoning and State Land Use District classifications as called for in Section 2.6.2 of the RFP.
- Chapter 4 provides details regarding the specific environmental permits and approvals that will be needed as called for in Section 2.6.3 of the RFP.
- Chapter 5 contains a Preliminary Environmental Assessment (PEA) for the site as called for in Section 2.6.4 of the RFP.
- Chapter 6 discusses potential cultural effects as called for in Section 2.7 of the RFP.
- Chapter 7 identified communities and stakeholders that may be affected as called for in Section 2.8.1 of the RFP.

CHAPTER 2 OVERALL LAND USE/ENVIRONMENTAL PERMIT STRATEGY

Hawaiian Electric's overall strategy for obtaining all required approvals in a timely and cost-efficient manner has involved:

- Siting the proposed facilities in an area with which it is familiar because they have considered other developments at the site and completed environmental studies at that time;
- Laying them out in a way that is intended to minimize the amount of ground disturbance that is required, taking advantage of existing infrastructure to the greatest extent practicable so as to minimize the need for new construction;
- Interfacing with permitting authorities at the earliest possible time so as to fully understand (and be able to address) their concerns;
- Collecting, reviewing, and extracting information from available reports and studies containing relevant information about the site;
- Conducting reconnaissance-level site visits to confirm that conditions have not changed visibly since earlier studies and/or databases were prepared;
- Siting the proposed facilities in a way that recognizes site limitations and attempts to avoid unnecessary impacts; and
- Providing for site investigations sufficient to minimize the probability of encountering previously unknown adverse conditions late in the design/development process.

The proposed project, at 1.8 acres, can be positioned within the 65-acre parcels and provide for the needs of the BESS system while minimizing effects on surrounding areas.

2.1 AGENCIES AND AUTHORITIES HAVING JURISDICTION

As indicated above, the property on which the BESS facilities would be developed consists of an approximately 1.8-acre portion of TMK No. 3-8-003:023 & 024. The site is within the State's Urban Land Use District. Land use in the Urban District is regulated by the County of Maui in accordance with its zoning ordinance, contained in Title 19 of the Maui County Code (MCC) of Ordinances.

The State of Hawai'i Department of Land and Natural Resources (DLNR) State Historic Preservation Division (SHPD) has jurisdiction over the historic resources via HRS Chapter 6E.

As discussed in Chapter 4, the Maui Department of Public Works (DPW) and the State of Hawai'i Department of Health (HDOH) are responsible for additional regulatory approvals that are needed.

2.2 EXISTING STUDIES AND ASSESSMENTS

While site-specific geotechnical or environmental studies for the project site have not been conducted as part of the current effort, a substantial amount of information is available as a result

of site studies and impact assessments conducted in the late 1990s when electrical power generation on the property was first being planned. Most of those studies were reproduced in appendices to the *Final Environmental Impact Statement (FEIS) for the Waena Generating Station* (Maui Electric Company, Ltd., November 1997). Those include:

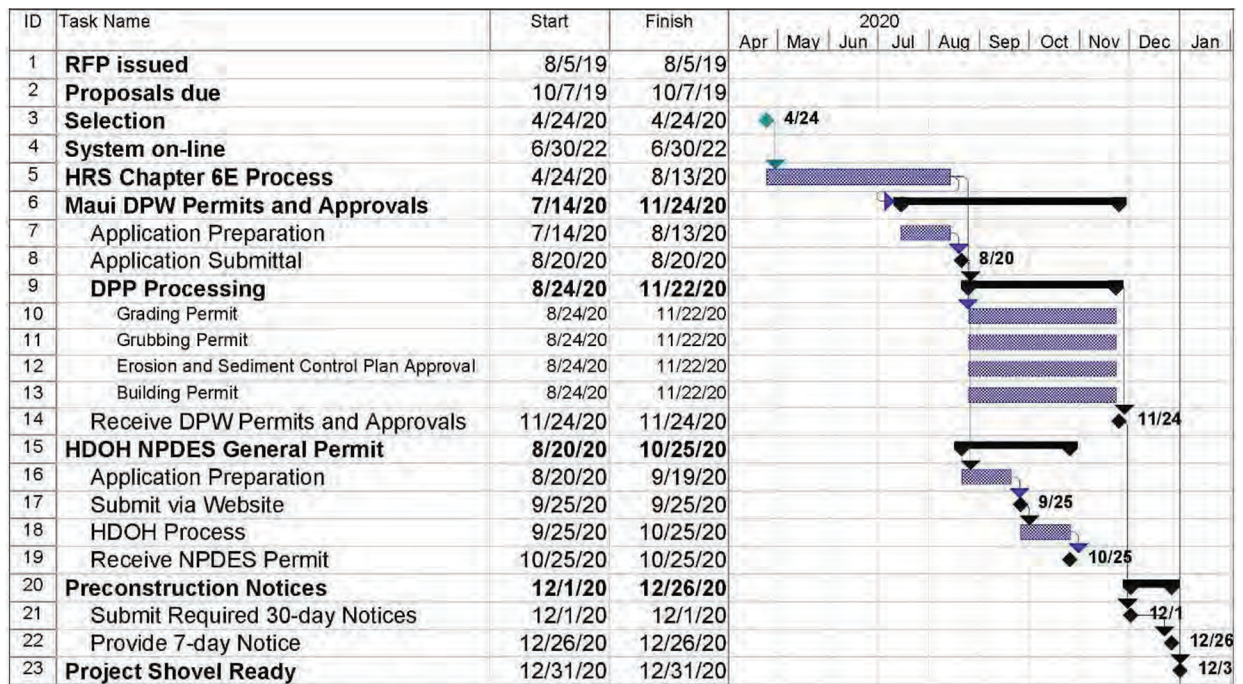
- Pacific Geotechnical Engineers, Inc., May 27, 1997, Geotechnical and Geological Consultation, PGE Job. No. 5000-013, for Environmental Impact Statement/Permitting [of the] MECO Waena Generating Station.
- Water Resource Associates, June 1997, Groundwater Resource Assessment for Maui Electric Company, Limited's Proposed Waena Generating Station.
- Evangeline J. Funk, Ph.D. Botanical Consultants, March 1997. Biological Resources Survey Report for Maui Electric Company, Limited's Proposed Waena Generating Station and Easements for Transmission Lines, Central Maui, Hawai'i.
- Burgett, Berdena, and Dr. Robert Speir, Ph.D., April 1997. An Archaeological Inventory Survey of the proposed Maui Electric Company, Limited's Proposed Waena Generating Station and Transmission Line Corridor, Wailuku and Makawao Districts, Island of Maui, Hawai'i (TMK:2-5, 3-8). Prepared by Scientific Consultant Services, Inc. for CH2M Hill.
- Y. Ebisu & Associates, May 1997. Acoustic Study of Potential Noise Impacts Associated with Maui Electric Company', Limited's Waena Generating Station, Wailuku, Maui. Prepared for CH2M Hill.
- Austin Tsutsumi & Associates, Inc., July 1997. Maui Electric Company, Limited's Proposed Waena Generating Station Traffic Study. Prepared for CH2M Hill.
- Jim Clary & Associates, November 15, 1995. Air Quality Screening Analysis for the Central Maui Generation Project.

Should development of the BESS move forward at this site, additional design and engineering studies would be conducted to inform construction permit applications.

2.3 OVERALL APPROVAL PROCESS

The overall approval process is depicted in Figure 2.1.

Figure 2.1 Overall Approval Process



CHAPTER 3 STATE AND COUNTY LAND USE DESIGNATION COMPLIANCE EVALUATION

This chapter summarizes the existing County Zoning and State Land Use classifications, assesses the extent to which the proposed use is allowable under the existing designations, and describes the process and approximate schedule for obtaining the required designation if a change appears to be necessary. This discussion is intended to provide the information called for in Section 2.6.2 of the RFP.

3.1 STATE LAND USE REGULATIONS

The property on which the BESS facilities that Maui Electric is proposing would be constructed is in the State Urban Land Use District. The facilities would be connected to the adjacent Waena Switchyard via power lines that would cross the joint property line. The Waena Switchyard is also in the State Urban District.

Chapter 205, Hawai'i Revised Statutes (HRS), establishes the State Land Use law. It provides for all lands in the state to be placed into one of four Land Use Districts (Urban, Rural, Agricultural, and Conservation). As provided for in HRS §205-2(b), activities and land use in areas within the State Urban District are regulated solely by the county in which they occur. Hence, the proposed Waena BESS project is a permissible use insofar as the state land use law is concerned.

3.2 MAUI COUNTY ZONING ORDINANCE

The Maui County Zoning regulations are contained in Chapter 19 of the MCC. The land on which the proposed BESS facilities would be constructed is in the "M-2 Heavy Industrial District". Utility installations (minor and major) such as the BESS and related electrical infrastructure are permitted in the M-2 heavy industrial district.³

MCC §19.26.030 states that building and structures are limited to a maximum of 90 feet. All of the proposed facilities are less than that height.

MCC §19.26.040 states that every lot within an M-2 district must meet certain minimum standards of lot size, front-, side-, and rear-yard setback, and other related requirements. All of the proposed facilities meet the requirements.

³ 19.04.040 of the MCC contains the following definitions of "Utility Facilities":

Utility facilities, major: "Major utility facilities" means uses or structures which provide utility services which have potential major impact, by virtue of their appearance, noise, size, traffic generation, or other operational characteristics which include, but which are not limited to, forty-six kilovolt transmission substations, power plants, base yards, water and wastewater treatment facilities, but not including private, individual cesspools, septic tanks, or individual household water supplies.

Utility facilities, minor: "Minor utility facilities" means transmission lines used directly in the distribution of utility services that have minor impact on adjacent land uses which include, but which are not limited to, twenty-three kilovolt transmission substations, vaults, water wells, tanks and distribution equipment, sewage pump stations, and other similar type uses.

At present, the BESS facilities are proposed for a lot that would be subdivided out of one of the two existing lots that comprise the property. Maui Electric will need to ensure that when the new lot is created it allows for the efficient design and layout of the new facilities and that easements (including road access) are provided. As the means of accomplishing this have not yet been identified, we are unable to assess the regulatory approval process associated with doing that.

CHAPTER 4 REQUIRED PERMITS AND REGULATORY APPROVALS

This section addresses permitting requirements specific to the proposed project. As used here, the terms "permit" and "approval" differ from the land use authorizations discussed in Section Chapter 3. For each of these, it lists: (i) the name of the permit; (ii) the agency and/or authorities having jurisdiction over its issuance; (iii) the anticipated timeline for obtaining the required permit, approval, and/or license; and (iv) the interrelationships/interdependencies with other required permits, approvals, and/or licenses.

The engineering and environmental permits and approvals that will be needed are listed in Table 4.1. In addition to the name, the table indicates the agency that grants the approval, the status and timeline, and the basis of the timeline. All of the County of Maui permits will be submitted and processed at the same time. A more detailed discussion of the regulatory requirements is presented in Sections 4.1, 4.2, and 4.3. The Gantt chart in Figure 2.1 indicates the interrelationship and dependencies of the various processes.

Table 4.1 Required Permits and Regulatory Approvals

<i>Name</i>	<i>Discussion</i>	<i>Agency/ Authority</i>	<i>Status and Timeline</i>	<i>Basis of Timeline</i>
HRS Chapter 6E Historic Preservation	Assess the effects of the project on historic properties and develop mitigation measures, if necessary.	State of Hawai'i, Department of Land and Natural Resources, SHPD	AIS complete. Consultation to begin immediately upon selection. Four-month duration.	Experience with 6E process given site conditions.
Chapter 20.08 - Soil Erosion and Sedimentation Control: Grading Permit	A Grading Permit is required for excavation, fill or stockpiling which alters the general drainage pattern, exceeds 100 cubic yards of material, or exceeds four feet in vertical height at its highest point.	County of Maui, Department of Public Works, Development Services Administration Division	Application will be submitted after selection; timeline is estimated to be 3 months	Experience with agency and DBEDT renewable energy project permit brief, which indicates 3 to 6 months for grading and grubbing permit
Chapter 20.08 - Soil Erosion and Sedimentation Control: Grubbing Permit	A Grubbing Permit is required if vegetation, including trees, timber, shrubbery and plants, is uprooted and removed from the surface of the ground of an acre or more in extent.			
Building Permit	A Building Permit is needed for some of the facility elements that may be required for the proposed project. The application will be reviewed for compliance with a wide range of standards and requirements.			
NPDES Construction Stormwater Permit	An NPDES permit is required for discharge of stormwater from construction activities that disturb one acre or more.	State of Hawai'i Department of Health, Clean Water Branch	Application will be submitted after selection; timeline is 1 month	Experience with agency

4.1 GRADING, SOIL EROSION, AND SEDIMENT CONTROL

4.1.1 GENERAL PROVISIONS

MCC §20.08 (Soil Erosion and Sedimentation Control) stipulates that a Grading Permit is required for excavation or fill, or for the temporary storage of soil, sand, gravel, rock, or any similar material in excess of certain amounts. Specifically, MCC §20.08.040 states:

Unless otherwise provided in this chapter:

- A. No person shall commence or perform any grading or stockpiling without a grading permit; and*
- B. No person shall commence or perform any grubbing without a grubbing permit, except where grubbing concerns land for which a grading permit has been issued.*
- C. No person shall commence or perform any cut or fill activity on land located within any special management areas, as defined by chapter 205A, Hawaii Revised Statutes, which exceeds fifty cubic yards of material on any one site or exceeds two feet in the vertical height at its highest point, including but not limited to single-family residential construction, without a grading permit.*
- D. A permit or exclusion pursuant to this chapter does not obviate the need to obtain other permits or approvals.*

Other provisions of the Chapter contain exceptions to the requirement.

Sections 20.08.040 through 20.08.160 regarding permit applications and requirements shall not apply to the following, however all other provisions of this chapter, including the provision of minimum BMPs as required by section 20.08.035, shall remain applicable to all work performed, and the following shall not affect the applicability of section 20.08.040.C relating to cut or fill activity in special management areas:

- A. Subsurface excavations and backfill for buildings and other structures authorized by a valid building permit issued by the land use and codes administration or excavations and backfill for cesspools and septic tanks authorized by the state department of health. This exception shall not affect the applicability of this chapter to the placing of fill materials obtained from the excavations on other premises;*
- B. Excavation, fill or stockpiling which does not alter the general drainage pattern with respect to abutting properties and which does not exceed one hundred cubic yards of material on any one site and does not exceed four feet in vertical height at its highest point; provided that the slope face may not be steeper in slope and be located a minimum distance from neighboring properties, as enumerated in sections 20.08.170 through 20.08.210;*
- C. Grubbing which does not alter the general drainage pattern with respect to abutting properties and does not exceed one acre;*

D. Trenching for underground utilities when the trenches are backfilled, and the surface restored to its pre-existing grade and ground cover.

The proposed project does not appear to qualify for the exclusions that are provided for in MCC §28.08.030 or §28.08.031. Hence, a grading permit will be required.

4.1.2 REQUIRED BEST MANAGEMENT PRACTICES

MCC §20.08.035 establishes the required Best Management Practices (BMPs). It stipulates that regardless of whether a permit is required pursuant to this chapter, all grading, grubbing and stockpiling activities provide BMPs to the maximum extent practicable to prevent damage by sedimentation to streams, watercourses, natural areas and the property of others. Accordingly, it requires the following:

- On-site drainage must be handled in such a way to as to control erosion, prevent damage to downstream properties and to return waters to the natural drainage course in a manner which minimizes sedimentation or other pollution to the maximum extent practicable.
- Dust emissions from all areas disturbed by construction activities must be controlled to the maximum extent practicable through the application of BMPs.
- Whenever feasible, natural vegetation, especially grasses, must be retained and if trees, timber, plants, shrubbery and other woody vegetation, must be removed, they may not be stored in or deposited along the banks of any stream, river or natural watercourse.
- All disturbed areas must be stabilized using appropriate erosion control measures and measures capture sediment and limit the extent to which it leaves the site.
- Toxic materials must be stored properly and measures must be implemented to prevent the discharge of pollutants associated with construction materials and wastes.

4.1.3 GRADING, GRUBBING, AND STOCKPILING

MCC §20.08.050 requires applicants for grubbing and/or grading permits to apply in writing to the Department of Public Works. Applications must be accompanied by plans and specifications, including:

- A plot plan and grading plan showing the location of the grading limits, property lines, best management practices to prevent erosion and sedimentation, neighboring public ways, details and location of existing and proposed land drainage patterns, drainage structures, drainage pipes, and retaining walls.
- An erosion control plan demonstrating the use of best management practices to prevent or reduce pollutant discharges from the construction site. Where applicable, the erosion control plan must address such things as the stabilization of denuded areas; the protection/stabilization of soil stockpiles; permanent soil stabilization; and the establishment and maintenance of permanent vegetation.
- A drainage plan and report that provides hydrologic and hydraulic calculations and information in accordance with title 15, "Rules for the Design of Storm Drainage

Facilities in the County of Maui," and other standards approved by the Department of Public Works.

In situations where the proposed cut or fill is: (i) greater than fifteen feet in height; (ii) is in water (including wetlands and streams); or (iii) consists of a highly plastic clay, an engineer's soils report is also required. In situations where the proposed construction includes grading affecting an existing slope with a height greater than fifteen feet and with a grade steeper than thirty-five percent (10H:3.5V) an engineering slope hazard report may also be required. The situation of the proposed project does not appear to be such that these will be needed for it.

MCC §20.08.080 requires that drainage, engineering slope hazard report, and erosion control plans be submitted to the applicable soil and water conservation district(s) and to the Department of Land and Natural Resources' State Historic Preservation Division for review and comment. Specifically, applicants must provide information sufficient to enable the reviewing agencies to determine that the proposed work will be in conformance with the most current standards of the soil and water conservation district(s) and will meet the requirements of chapter 6E, Hawaii Revised Statutes, and related administrative rules.

There is no statutory time limit on the processing of grading and/or grubbing permit applications. However, experience suggests that it would be best to allow two to three months for this process beginning the date on which the application and all supporting reports have been accepted. The length of time it has taken SHPD to complete its review has often been a controlling factor, and care should be taken to ensure that this proceeds in a timely manner.

4.2 NPDES CONSTRUCTION PERMIT

HAR §11-55 regulates activities that have the potential to pollute state waters. It provides that any industrial, public, or private project or development which could be considered a new source of pollution or an increased source of pollution shall, in its initial project design and subsequent construction, provide the highest and best degree of waste treatment practicable under existing technology.

HAR §11-55-04 provides that before discharging any pollutant, or beginning construction activities that disturb one or more acres of land, or substantially altering the quality of any discharges, or substantially increasing the quantity of any discharges, a person shall submit a complete NPDES Permit application. If the request is for coverage under a general permit, the application must comply with and will be regulated by HAR §11-55-34.08 through §11-55-34.10.

- §11-55-34.08 calls for submission of a notice of intent (NOI) and stipulates the information that must be included in it.
- §11-55-34.09 describes the actions that DOH can take once it receives an NOI.
- §11-55-34.10 deals with petitions that interested parties may file under Section 91-8, HRS, for a declaratory ruling on whether an individual permit is required for, or a general permit covers, a discharge.

Because construction of the proposed Waena BESS project will involve grading in excess of 1.0 acre, it will require an NPDES General Permit for the discharge of storm water associated with construction activities as provided for in HAR §11-55, Appendix C. This general permit covers

discharges composed entirely of storm water runoff associated with construction activities, including, but not limited to, clearing, grading, excavation, and construction support activities⁴ that result in the disturbance of one acre or more of total land area.⁵ That General Permit was recently renewed and does not expire until February 8, 2024.

If granted, the permit will include the standard conditions specified in Appendix A of HAR §11-55 and the effluent limitations that are applicable to all discharges from construction sites. Those include:

- Designing, installing, and maintaining erosion and sediment controls that minimize the discharge of pollutants from earth-disturbing activities.
- Minimizing the amount of soil exposed during construction activities.
- Minimizing the entrainment of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting the construction site.
- Controlling discharges from stockpiled sediment or soil.
- Minimizing the generation of dust through the appropriate application of water or other dust suppression techniques.
- Minimizing the disturbance of steep slopes.
- Minimizing unnecessary removal of native topsoil.
- Minimizing soil compaction in portions of the site where final vegetative stabilization will occur or where infiltration practices will be installed.
- Protecting storm drain inlets.

The General Permit prohibits the discharge of such things as: (i) wastewater from washout of concrete; (ii) washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials; (iii) fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; (iv) soaps, solvents, or detergents used in vehicle and equipment washing; and (v) toxic or hazardous substances from a spill or other release.

§5.3.3 of HAR §11-55, Appendix C establishes specific pollution prevention standards for certain construction activities. Those activities include fueling and maintenance of equipment or vehicles; washing of equipment and vehicles; storage, handling, and disposal of construction materials, products, and wastes; and washing of applicators and containers used for paint, concrete, or other materials. Section 7 of Appendix C requires applicants to develop a Storm Water Pollution Prevention Plan (SWPPP) prior to submitting an NOI.

The SWPPP must include, at a minimum, the information required in §7.2 of Appendix C. That includes: (i) information concerning the "stormwater team"; (ii) the nature of the construction

⁴ Construction support activities include, but are not limited to, concrete or asphalt batch plants, rock crushing plants, equipment staging yards/areas, material storage areas, excavated material disposal areas, borrow areas, etc.

⁵ Section 2.1.3 of Appendix C of the General Permit for stormwater discharges resulting from construction activities specifically excludes storm water discharges associated with construction activities that are regulated by existing individual permit. Hence, it may not apply if there is an existing permit for the substation and if some of the construction (e.g., access road) takes place on the substation site.

activities; (iii) contact information for the other contractors who will be engaged in activities on the site; (iv) the sequence and estimated dates of construction activities; (v) a detailed site map; (vi) a list and description of all the pollutant generating activities and an inventory of pollutants associated with that activity, which could be exposed to rainfall and could be discharged from the construction site; and (vii) a detailed description of all storm water control measures that will be installed and maintained at the site.

4.3 BUILDING PERMIT

Hawaiian Electric will need to obtain a Building Permit for the proposed facilities from the Development Services Administration of the Maui County Department of Public Works. Depending on the specifics, several approving agencies may need to review the application prior to final approval. These may include the Maui County Department of Environmental Management, Maui Fire Prevention Bureau, Department of Housing & Human Concerns, Department of Parks and Recreation, Planning Department, and Development Services Administration (Building Plan Review Section, Public Works, and Civil Construction Section). Work conducted under a building permit must be initiated within a year of the date of permit issuance.

The application for a building permit must be accompanied by eight sets of plans drawn to scale to include, but not limited to site plan, floor plan, foundation plan, roof framing plan, cross/wall section, and elevations. Other forms that it may be necessary to submit include: Owners Authorization; Design Professionals' Authorization; Contractor's or Owner/Builder Statement; Grading/Grubbing Check Form; and Historic Resources Form.

CHAPTER 5 PRELIMINARY ENVIRONMENTAL ASSESSMENT

The following summary of potential environmental effects is based on the data contained in past reports and publicly available environmental databases. It summarizes identifiable pre-existing environmental conditions and describe the kinds of short- and long-term direct, indirect, and cumulative environmental impacts likely to result from development, operation, and decommissioning of the proposed project.

5.1 NATURAL ENVIRONMENT

5.1.1 AIR QUALITY

5.1.1.1 *Existing Environment*

The HDOH monitors ambient air quality on Maui using two monitoring stations. The primary purpose of the monitoring network is to measure ambient air concentrations of particulate matter smaller than 2.5 micrometers (PM_{2.5}). PM_{2.5} is consistently considered "good" with levels below 15 micrograms per cubic meter (µg/m³).

5.1.1.2 *Potential Effects*

The proposed project is intended to increase Maui Electric's ability to use non-polluting renewable energy resources to meet its customers' needs. Their operation does not result in emissions which have the ability to affect air quality.

Site preparation will involve grading and limited grubbing, which have the potential to generate dust. However, the small area that would be disturbed, the short time that would pass between the original clearing of the ground and the placement of a stable surface on which the BESS units would be placed, and the absence of nearby development means that the potential effects are very limited so long as appropriate dust control measures are implemented during construction.

The operation of the proposed facilities does not result in emissions that have the ability to affect air quality. The project will have no negative effects on air quality, and we expect incorporation of this project into the Hawaii Electric Light grid to reduce overall emissions on the island. Assessment of these reductions will be assessed after production simulations are completed. If selected, the Company will perform the required GHG analyses.

5.1.2 BIOLOGICAL RESOURCES

5.1.2.1 *Flora*

5.1.2.1.1 *Overview*

In the late 1990s, when the site was surveyed for the Waena Generating Station project, sugar cane was being cultivated on most of the 65.7-acre site. Two major vegetation types were present.

- Sugarcane vegetation type (*Saccharum officinarum*) consists of a densely growing, large grass with individual plants attaining heights of from 8 to 12 feet. This vegetation type grows so densely that other plants cannot penetrate the fields.
- Ruderal, or weedy, vegetation is found around the edges of the proposed generating station site. The Ruderal fringe is generally mixed with grasses such as buffel grass (*Cenchrus ciliaris* (L.)), sour grass (*Digitaria isularis* (L.) Mez ex Ekman), star grass (*Chloris divaricata* R. Br.), and wiregrass (*Eleusine indica* (L.) Gaertn.) together with many species of seed bearing, thorny weeds. The most prominent among the latter were spiny amaranth (*Amaranthus spinosus* L.), *Bidens cynapiifolia* Kunth, sow thistle (*Sonchus oleraceus* L.), cheese weed (*Malva parviflora* L.) rattle box (*Crota/aria beneroana* DC), and apple of Peru (*Nicandra physalodes* (L.) Gaertn.).

No native Hawaiian plants were found on the site during the survey. Neither were any rare or endangered species or species listed as candidate for such status observed.

Sugarcane cultivation on the site ceased in 2016, and the fields have been fallow since that time. While no recent vegetation survey has been completed, it is likely that the land that would be affected by the proposed project is now composed largely of a mixture of the same ruderal vegetation types that were present at the time of the last formal vegetation survey and remnant sugarcane plants.

5.1.2.1.2 *Potential Effects*

The proposed project will result in the removal of all of the existing vegetation on the site. No plants or animals listed as endangered or threatened, or which are candidates for such status were present at the time of the previous survey, and there is no evidence that such species have become established on the property over the past three years. Consequently, no significant adverse impacts on flora are anticipated as a result of construction or operation of the proposed BESS project.

5.1.2.2 *Fauna*

5.1.2.2.1 *Overview*

A field survey for fauna was conducted in March 1997. Three fixed station observation points of 20 minutes each were carried out along the generating station site boundaries. Additional observation points were carried out along the preferred and alternative transmission line corridors. Observations were made during early day light hours in order to take advantage of the higher activity levels of both birds and mammals during cooler parts of the day. Mongooses (*Herpestes auropunctatus*) were the only species of mammal found during the survey period, with individuals being seen along Waiko Road and North Firebreak Road. This is a common introduced species found throughout Hawai'i. While none were seen during the field survey, it is virtually certain that numerous house mice (*Mus musculus*) and black rats (*Rattus rattus*) are also present.

Because of the extensive modification and cultivation of the project site, it has almost no value as native bird habitat. Several non-native species were observed in areas around the site. These include the House sparrow (*Passer domesticus*), Cattle egret (*Bubulcus ibis*), House Finch (*Carpodacus mexicanus*), and Northern Cardinal (*Cardinalis cardinalis*). Doves, pigeons, and the

Common Myna (*Acridotheres tristis*) were also observed. None of the species observed are listed as threatened or endangered, or as candidates for such status.

In addition, 45-minute observation periods were conducted from twilight to early darkness on two consecutive evenings to determine if the Hawaiian hoary bat or the Hawaiian owl are present in this area. None were heard during the course of the survey, a finding that is consistent with the nature of the existing habitat, which is generally unsuited as a resting or nesting location for the species.

5.1.2.2.2 *Potential Effects*

In view of the low value of the existing habitat and the absence of any known rare or endangered species, removal of the existing vegetation and other changes and activities associated with the proposed project are unlikely to have significant biological effects. In particular, the low vegetation (i.e., less than 15 feet tall) is unsuitable for use by bats during the pupping season when parents raising their young are vulnerable to tree-cutting.

5.1.2.3 Natural Habitats/Ecosystems, Especially if Threatened or Endangered

The nearest area that the USFWS has designated as Critical Habitat is several miles distant from the project site. Past surveys have shown that the site does not contain any rare or particularly valuable habitat, and no threatened or endangered species have been identified as using the site. Some protected avian species (birds and bats) may overfly the site, but the small size and low height of the proposed facilities is such that they do not have the potential to adversely affect them as they overfly it.

5.1.3 CLIMATE

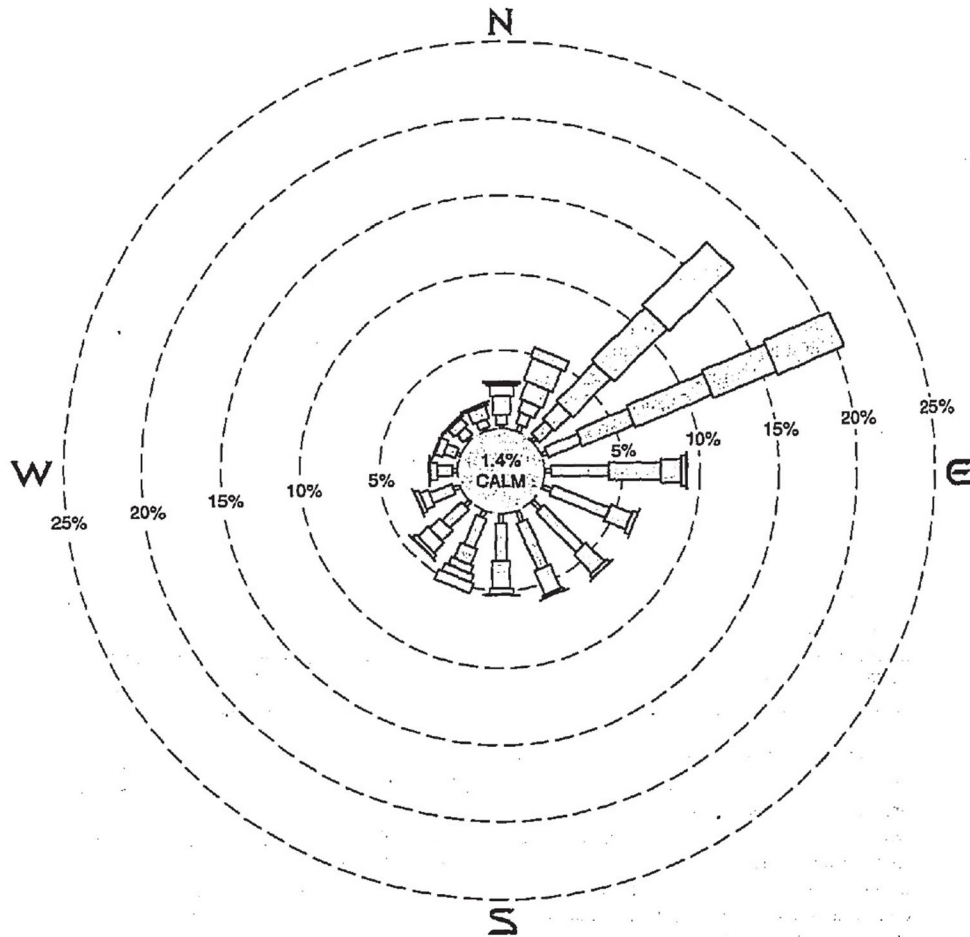
The climate of the project area is relatively uniform, characterized by moderate temperatures throughout the year. The average temperature in January, the coldest month, is 71.5° F; in August, the warmest month, it is 79.2° F. Average annual rainfall in the project area is about 20 inches, with the bulk of that occurring from November through April.

Maui is located in the trade wind belt, a region in the North Pacific dominated by a semi-permanent high-pressure center north of Hawai'i. Wind circulation around this high-pressure area is clockwise and outward from the center, producing generally northeasterly wind flow over the Hawaiian Islands. While these northeasterly trade winds occur over 70 percent of the time, during "Kona" conditions, the prevailing direction changes to a south/southwesterly direction. Winds also tend to vary over the course of the day, with trade winds generally being stronger in the afternoon and the direction tending to become more easterly in the night as "drainage" winds blow down from Haleakala. The wind rose in Figure 5.1 illustrates the wind patterns at the site.

Figure 5.1 Wind Rose: MECO Site 251

MECO SITE 251

(Winds measured at 37 meters above ground level. Wind direction is the direction wind is blowing from.)



WIND SPEED SCALE (in knots and percent of total)						Final Environmental Impact Statement Proposed Waena Generating Station Maui Electric Company, Limited		FIGURE 4-1
1-3 (7%)	4-6 (30%)	7-10 (22%)	11-16 (16%)	17-21 (12%)	22-99 (12%)	WIND ROSE		
Source: Jim Clary & Associates, 1997								

5.1.4 SOILS

5.1.4.1 Overview

The lava flows at the ground surface in the vicinity of the proposed facility and transmission corridors have weathered to form a mantle of clayey and silty soil over the flows. The United States Department of Agriculture Soil Conservation Service (SCS) has classified the soils at the site as the Waiakoa Series, silty clay loam occurring on 3 to 7 percent slopes (WeB). Soils in this series are generally stony, grading to hard bedrock within a depth of approximately 5 feet or so,

but this may vary significantly across the site. Runoff potential of this soil is slow to medium and the erosion hazard is slight to medium.

5.1.4.2 Potential Effects

The soils are physically well-suited to the proposed use and development will not create undue risk of erosion or loss of land that is likely to be used for agricultural purposes.

5.1.5 TOPOGRAPHY AND GEOLOGY

5.1.5.1 Topography

5.1.5.1.1 Overview

The project site consists of gently sloping land on the lower slopes of Haleakala. The elevation along the uphill side is approximately 355 feet above sea level; the lower side is approximately 330 feet above sea level. The average slope is approximately 5 percent.

5.1.5.1.2 Potential Effects

The site topography does not present any special construction challenges and the alterations that will be required will not require substantial alteration of significant landforms.

5.1.5.2 Geology/Geologic Hazards

5.1.5.2.1 Overview

The Haleakala Volcano, which rises 10,025 feet above sea level, is the youngest of the two large shield volcanoes that formed the island of Maui. It appears to be in a stage of post-erosional eruptions. On average, these have occurred once every 100 years during the last millennia, but the most recent known eruption was in 1790. The site of the Waena site is located on the west flank of the north rift zone of Haleakala on post caldera lava flows of the Kula Volcanic Series. The Kula flows are predominantly composed of the andesitic rock, Hawaiite, with lesser amounts of alkalic olivine basalt and ankaramite. As indicated in quarrying activities in the vicinity, the underlying bedrock can range from 25 to 35 feet thick and consist of clinker zones above and below a massive, highly to moderately fractured 'a'a core. Voids such as lava tubes and gas blisters in the near surface portions of the bedrock are probably relatively infrequent.

Volcanic Hazards. Volcanic hazards from lava flows and ash-fall in the Hawaiian Islands have been quantified on classification maps based on coverage of different areas during specific time periods (Mullineaux, et al., 1987).

- Lava Flows. There are five lava flow hazard zones, with Zone 1 having the highest lava flow risk and Zone 5 having the lowest risk. Because the project site has not been affected by lava flows for at least 20,000 years, it is located in Zone 5.
- Volcanic Ash-Fall. Maui is divided into 3 hazard zones for volcanic ash-fall, with Zone 1 having the highest risk and Zone 3 having the lowest risk. The project site is located in Zone 3, which means that ash fall is expected to average less than one centimeter per thousand years.

Seismic Risk. Since 1868, more than 40 Magnitude 6.0 or greater earthquakes have occurred on Hawai'i Island and 8 Magnitude 6.0 or larger events have occurred in the Maui to Moloka'i area. These have generally been associated with structural readjustment within the volcano. On Maui, the most likely area to experience structural readjustment would be in the region of the most recent volcanic activity along the southeast and east rift zones of Haleakala.

In historic time, two larger scale earthquakes felt on Maui have occurred as a result of tectonic rather than volcanic activity. These earthquakes, both having magnitudes in the range of 7 on the Richter scale, occurred in 1971 and 1938 and are believed to have originated in the Moloka'i fracture zone, which stretches from the Baja California coast towards the Hawaiian Islands.

The Uniform Building Code (UBC) is the accepted document by the County of Maui for the structural design of buildings and facilities to withstand earthquake forces. The Island of Maui is currently classified as seismic zone 2B according to the 1991 UBC.

5.1.5.2.2 Potential Effects

Because all of the facilities are in the lowest lava flow hazard zone and the lowest risk ash fall zone, and will be designed to the applicable standards established in the UBC, it is not expected to result in undue exposure to geologic risks/hazards.

5.2 LAND REGULATIONS

5.2.1 LAND USE AND LAND USE REGULATIONS

The project site is in the State Urban District on land that the County of Maui has zoned M-2 for Heavy Industrial use. Utility installations (minor and major) such as the BESS and related electrical infrastructure are permitted in the M-2 heavy industrial district.

The project site, like all of the land on the island, is situated in the State of Hawai'i Coastal Zone Management Area. However, it is not located within a Special Management Area (SMA) or Shoreline Setback Area. Hence, no additional land use permits or approvals are needed.

The project site is surrounded by undeveloped agricultural land, and there is no evidence of contamination from previous uses. Access will be from an existing roadway and will not interfere with the access rights of others. The nearest existing use is the County of Maui's Central Maui Landfill. Hence, the proposed use is consistent with the present uses in adjacent areas.

5.2.2 FLOOD AND TSUNAMI HAZARDS

The project site is outside the tsunami inundation zone. The project site is located within FEMA Flood Zone X. This means that there is minimal risk of flooding from surface water runoff or tsunami, and there is no regulatory design requirement related to flood safety/flood-proofing.

5.2.3 NOISE

5.2.3.1 *Existing Conditions*

In the mid-1990s when the most recent data were collected from the project site, the noise environment near the project site was considered quiet. The most significant noise sources noted at that time were dump trucks, helicopters, local vehicular traffic along Pulehu Road, and the rustling of sugar cane leaves. Short-term daytime background ambient noise levels in the vicinity of the proposed generating station were measured in previous studies (Dames & Moore, 1995; Belt Collins, 1992) with average values ranging from 54 to 60 dBA. It is unlikely that conditions have changed significantly since this study was conducted because land use has not changed significantly in the immediate vicinity of the site.

5.2.3.2 *Potential Effects*

The BESS and interconnection facilities that would be installed and operated as part of the proposed project are not significant noise sources. The audible noise of the battery modules, measured at 1 meter from any side surface of the enclosure, is <75 dBA at full performance. Assuming a 6 dBA decrease for each doubling of the distance, sound levels from them would be below 50 dBA at the nearest external property boundary. This is far below the 70-dBA maximum permissible property line sound limit specified in HAR §11-46-3.

It appears likely construction could be completed while adhering to all construction noise standards and work-hour limitations. Depending upon the exact type of equipment that is used and the hours during which construction, it is possible that a construction noise permit could be needed, but the site's distance from noise-sensitive receptors makes it likely that if it is needed it could readily be obtained.

5.2.4 ROADWAYS AND TRAFFIC

5.2.4.1 *Existing Conditions and Proposed Roadway Access*

The most direct access to the project site is from Waiko Road, an unimproved cane-haul road, that runs parallel to the site's uphill boundary. If access were to be constructed in accordance with the plans in effect at the time the Maui Electric's first obtained rezoning of the Waena Generating Station site, then access would be off of Pulehu Road, a two-lane County collector connecting the Upcountry area to Kahului.

The battery module units that are at the core of the design would be produced at our Battery Partner's facilities in Nevada. From there they would be transported on flatbed truck to the Port of Oakland, California, where they would be loaded into 40-foot High Cube shipping containers for ocean transport either directly to Kahului Harbor or transshipped through Honolulu Harbor. Once in Kahului Harbor, they would be removed from the containers, placed on flatbed trucks, and hauled to the project site. The last part of the journey would use portions of Pulehu Road and quite possibly Waiko Road. Other major equipment, such as transformers, will take a similar logistical route from their respective points of origin to the project site.

The proposed facilities will generate fewer than five (5) vehicle-trips per day once they are fully operational. Most of those trips will be made by passenger cars and light-duty utility vehicles.

Larger vehicles will only be needed on those occasions when battery packs and/or sub-elements must be swapped out.

Delivering the battery module units (59), small transformers (20), and large transformers/switchgear to the site will require fewer than 100 vehicle-round-trips. Their dimensions and mass are such that oversize vehicles will not be required.⁶ Construction workers will also travel to and from the site during the construction period, but the total number of project-related vehicle-round-trips is unlikely to exceed 50 per day and would generally be much lower than that.

5.2.4.2 *Impact on Transportation Service Levels*

The total number of containers needed to ship the equipment to Maui (fewer than 50) represents a tiny percentage of the -75,000 containers that arrive at Kahului Harbor each year. Hence, their delivery would not adversely affect the harbor.

Existing traffic volumes on Pulehu Road near the project site are quite low and the service level is high. The addition of the number of vehicle-trips that are forecast would not have a significant effect on the level of service of the roads.

5.2.5 UTILITIES

The proposed facilities would facilitate Maui Electric's delivery of reliable, economical electrical service to the people of the island. It would not use potable water or otherwise affect water supply facilities on the island. The facilities would use Maui Electric's own telecommunications network and would not, therefore, burden the island's existing telecommunication network.

While the site has not been surveyed for the presence of underground utility lines, the available information indicates that underground utility lines are not present.

5.3 SOCIO-ECONOMIC CHARACTERISTICS

The project site is currently vacant. The site is not used for agriculture or other productive economic endeavors. No existing uses will be displaced by the project. Therefore, there will be no direct adverse effects on socio-economic characteristics of the area. The project will not conflict with or otherwise interfere with adjacent land uses or economic activity. The proposed BESS is compatible with, and intended to support, existing use of the area and island. Aside from the temporary and relatively minor construction employment and expenditures, the project would not stimulate or otherwise promote population growth or economic activity. Thus, the project is not anticipated to have a significant effect on the socio-economic environment of the area and no mitigation is recommended.

5.4 AESTHETIC/VISUAL RESOURCES

The proposed project has limited potential to affect aesthetic or visual resources because:

⁶ Each battery module is 23'-5" long, 5'-3" wide, and 8'-3" tall. The standard shipping weight is approximately 43,500 pounds. The battery modules fit into ISO-668, 40-foot, high-cube containers for shipping.

- The proposed facilities are limited in areal extent (i.e., less than 2 acres) and less than 10-feet high.
- They are not out of context for other uses in the area, specifically the landfill.
- The site is located far away from public vantage points and would not be readily visible from any roadway that the scenic resources section of the heritage resources component of the Maui Island Plan identified as important.

Given the characteristics of the proposed facility and the points listed above, the project would not have a significant impact on aesthetic or visual resources.

5.5 SOLID WASTE

The batteries that are proposed have a life expectancy of ten (10) years. The battery modules are field-replaceable units that integrate twelve battery trays, an isolated AC/DC converter, fusing and battery management system functions. Our Battery Partner is developing facilities that will allow its batteries to be returned to its manufacturing facility so that many of the materials they contain can be reused. Where that is not possible, it is committed to disposing of waste materials in an environmentally responsible way.

The cells in the battery modules are composed mainly of lithium metal oxides. Our Battery Partner is utilizing Nickel Manganese Cobalt chemistry battery (NMC) technology in its battery module product. It takes up more space than the technology used in its electric car batteries, but has a longer cycle life.⁷ They are manufactured in the United States, where there are strict environmental laws. The cells meet the requirements set forth by the Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment 2002/95/EC (commonly referred to as the Restriction of Hazardous Substances Directive or RoHS). They do not contain hazardous materials such as Lead, Mercury, Cadmium, hexavalent Chromium (Cr6+), polybrominated biphenyls (PBB), or polybrominated diphenyl ether (PBDE). Our battery module's lithium ion cells contain no heavy metals, nor any toxic materials and could, therefore, be disposed of in landfills. However, our Battery Partner is committed to recycling and Maui Electric has indicated that it will recycle batteries that are used at this site. Based on the expected operation and design of the facility, battery modules are not anticipated to require disposal. If battery modules require replacement, our Battery Partner or a licensed battery disposal contractor will be used to remove the modules.

Day to day operation of the facility will not produce large volumes or unusual types of solid waste. All wastes generated will be collected and properly disposed.

The project, with the committed recycling of the batteries, will not have a significant impact on solid waste collection activities or landfills.

⁷The term "cycle life" is defined as the number of times a battery can charge/discharge before its maximum charging rate drops below 80%.

5.6 HAZARDOUS MATERIALS

5.6.1 EXISTING CONDITIONS

No site-specific investigations of subsurface conditions have been conducted. A review of State of HDOH databases indicates that (i) there are no facilities with reported releases listed within one mile upgradient of the site; and (ii) there are several listings associated with the Central Maui Sanitary Landfill and nearby business, which are all downgradient of the project site. None of these conditions suggest that the subject parcel has been adversely affected by hazardous materials or waste.

The site was formerly utilized by a sugar plantation. No contamination was identified on site or in the vicinity according to EPA's EnviroMapper database. The HDOH has found that elevated levels of arsenic have been identified in soils at some former sugar cane fields, former pesticide mixing areas, and former sugar cane plantation camps. The leaching of arsenic from former sugar cane fields is not considered a significant concern because arsenic associated with this historic use is relatively immobile. The presence of arsenic in the soil is not considered a human health risk provided dust is controlled appropriately.

5.6.2 POTENTIAL EFFECTS

The cells in the battery modules are composed mainly of lithium metal oxides, utilizing Nickel Manganese Cobalt chemistry battery (NMC) technology. The cells meet the requirements set forth by the Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment 2002/95/EC (commonly referred to as the Restriction of Hazardous Substances Directive or RoHS). They do not contain hazardous materials such as Lead, Mercury, Cadmium, hexavalent Chromium (Cr6+), polybrominated biphenyls (PBB), or polybrominated diphenyl ether (PBDE). The battery module's lithium ion cells contain no heavy metals, nor any toxic materials. Therefore, the batteries themselves will not have an adverse effect on the subject property.

Limited quantities of cleansers and lubricants may be utilized during operation of the facility. These materials will not be stored on the site in large quantities and will be employed in compliance with safety data sheets (SDS) recommendations. Given these factors, the effects of utilizing cleansing materials will not be significant.

5.7 WATER QUALITY

There are no defined surface water features on or near the site. Because of its moderately elevated chloride levels, the groundwater beneath the site is not considered of potable quality and is not a potential drinking water source.⁸ Because of the absence of process water discharges and the incorporation of BMPs into the design, construction and operation of the proposed facilities do not have the potential to significantly affect water quality.

⁸ The site is below the HDOH Underground Injection Control (UIC) line as depicted on the State of Hawai'i GIS.

5.8 PUBLIC SAFETY SERVICES

5.8.1 FIRE PROTECTION

The battery module system proposed for this project portfolio is an evolution of our Battery Partner's field-proven and industry leading battery module system solution and is designed to meet NFPA 855, UL9540, and other important fire safety and testing protocols.

According to our Battery Partners, their battery modules undergo rigorous testing to standards such as UL 1973 and IEC 62619 that ensure the battery modules are resistant to single cell thermal runaway propagation. This virtually eliminates all likelihood of a thermal event originating from an internal product failure. The company reports that as of the end of 2018, our Battery Partner has deployed over 1.5 GWh of energy products globally without a single recorded thermal runaway event.

To create a significant fire, the enclosures would need to be subject to an extreme external event, such as direct exposure to a large prolonged fire or severe physical impact. The design of the proposed facility makes this extremely unlikely to occur at Waena. In the event there were to be a fire, full-scale fire testing has shown that the unit would burn in a safe and controlled manner, consuming itself slowly without explosive bursts or unexpected hazards, and without propagating to neighboring units. The battery module includes dedicated deflagration vents built into the thermal roof to mitigate damage to the equipment and surrounding personnel and exposures in case of hazardous thermal runaway or arc flash events. Hazards are vented upwards, ensuring the front doors remain closed to protect personnel and exposures. The cells used in our Battery Partner's products do not contain solid metallic lithium and thus do not react with water.

5.8.2 POLICE PROTECTION

The facilities will be in a fully fenced area with a locked gate. Their presence will not impose a measurable burden on the Maui Police Department. The site will be remotely monitored by Maui Electric which will dispatch security personnel if needed to investigate suspicious activity.

5.8.3 MEDICAL SERVICES

The proposed facilities do not constitute a significant health risk. Should an accident occur, those injured can receive emergency attention at the Maui Memorial Medical Center. Located at 221 Mahalani Street in Wailuku, the hospital is approximately ten miles from the project site.

5.9 RECREATIONAL RESOURCES

There are no parks or other significant recreational resources within three miles of the project site.

5.10 POTENTIAL CUMULATIVE AND SECONDARY IMPACTS

The additional electrical storage that the subject project will provide supports but does not necessarily accelerate or directly result in achieving the State of Hawai'i's renewable energy goals or increase the likelihood of either residential or commercial scale solar energy projects. The impacts associated future commercial scale solar energy projects or other related developments will be disclosed in separate documents, should they occur.

Similarly, the proposed project supports but does not directly result in Maui Electric's achieving its goals of decommissioning certain fossil fuel generating stations. The impacts associated with future decommissioning and potential alternative use of existing fossil fuel generating stations will be disclosed in separate documents, should they occur.

CHAPTER 6 CULTURAL RESOURCE IMPACTS

6.1 EXISTING CONDITIONS

A detailed Cultural Impact Assessment (CIA) and Archaeological Inventory Survey (AIS) has not yet been conducted to support the proposed project. In the mid-1990s, studies were performed to support another Maui Electric proposal for the site, these studies included an AIS that examined the entirety of the proposed project site. This section draws on that prior study.

The proposed project site is situated in Wailuku ahupua'a, Wailuku District. At the time of the survey (March 1997), the site was an active sugarcane field and had been under sugarcane cultivation for over 100 years. It was deemed unlikely that any historic resources, including archaeological sites, would be present as cane field cultivation often creates plow zones up to four feet below the surface. Indeed, no archaeological resources were identified during the survey.

Given its long history of sugarcane cultivation, the project area is unlikely to be associated with traditional cultural practices for subsistence and religious purposes, and does not appear to provide access to other areas used for exercising those practices (i.e., gather of plant and marine resources; presence of burials, historic properties and storied places; documentation of trails, etc.). There is no specific documentation of plant gathering within the project area during traditional Hawaiian times and no ongoing practices related to traditional gathering have been identified and are unlikely given the predominance of non-native vegetation at the site.

6.2 POTENTIAL IMPACTS

Hawaiian Electric will work to confirm the conditions outlined above and coordinate with SHPD to complete the HRS Chapter 6E Historic Preservation Review process. All evidence indicates that the project will not have an adverse effect on any historic or cultural resources or practices. The entire project site has been previously disturbed, and no historic resources are present. Therefore, the anticipated HRS Chapter 6E finding is that no historic properties are present or effected.

6.3 MITIGATION MEASURES

Although there have been archaeological explorations conducted in the area, it is noted that there still exists the potential to uncover archaeological artifacts or human remains during ground disturbing activities. There is a low potential for unrecorded subsurface deposits due to the extensive subsurface disturbance associated with sugarcane cultivation. Thus, archaeological construction monitoring is not deemed necessary, but the following mitigation measures would be implemented during the construction of the proposed project:

- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find and SHPD will be notified as soon as possible.

- If human remains are discovered, Hawaii Administrative Rules Title 13, Subtitle 13, Chapter 300 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and SHPD and Police Department will be contacted. If discovery occurs on Saturday, Sunday or a holiday, the Division of Conservation and Resource Enforcement will be notified.

CHAPTER 7 COMMUNITIES AND STAKEHOLDERS THAT MAY BE AFFECTED

No communities would be directly affected by the proposed project as there are no known existing developments, uses, or activities occurring on the project site currently.

Communities that would be indirectly affected include:

- Those able to see the facility from their homes, places of business, or when travelling in the area. As discussed, in Section 5.4, visual impacts would be nominal as the area is remote and does not appear in identified viewplanes.
- Travelling public on roads that would be utilized for delivering equipment to the site during construction. The impact will be temporary and not significant, as discussed in Section 5.2.4.
- Maui Electric rate payers. Rater payers may be indirectly affected as the project could assist Maui Electric achieve the renewable energy goals and decommissioning of fossil fuel powered generating stations.