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NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
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DEPUTY DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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2011:0720091659

July 20, 2011

Mr. Wren Wescoatt
Development Manager
First Wind, LLC
810 Richards Street, Suite 650
Honolulu, Hawai'i 96813

Subject: Acceptance of Kawailoa Wind Farm Project Final Environmental Impact Statement

Dear Mr. Wescoatt:

On behalf of the Hawai'i Department of Business, Economic Development & Tourism (DBEDT), I hereby accept the Final Environmental Impact Statement (FEIS) for the Kawailoa Wind Farm Project, as satisfactory fulfillment of the requirements of Chapter 343, Hawai'i Revised Statutes. The environmental, economic, and social impacts which will likely occur should this project be built are adequately described in the Statement. The analysis, together with the comments made by reviewers, provides useful information to decision-makers and the public.

Acceptance of the Statement is an affirmation of the adequacy of said Statement under the applicable laws. DBEDT finds that the mitigation measures proposed in the FEIS will minimize the potential negative impacts of the project.

In implementing this project, I hereby direct First Wind, LLC and/or its agent(s) to perform these or comparable mitigation measures at the discretion of the permitting agencies. The mitigation measures identified in the FEIS are described in the attached document.

Sincerely,

Richard C. Lim

Attachment

cc: Office of Environmental Quality Control
Mr. Paul Luerson, CH2M Hill

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July 20, 2011

Mr. Gary Hooser, Director
Office of Environmental Quality Control
State of Hawaii Department of Health
235 South Beretania Street, Suite 702
Honolulu, Hawai`i 96813

Dear Mr. Hooser:

Subject:	ACCEPTANCE REPORT Chapter 343, Hawaii Revised Statutes Final Environmental Impact Statement
Project:	Kawailoa Wind Farm Project
Applicant:	First Wind, LLC (dba Kawailoa Wind, LLC)
Agent:	CH2MHill
Location:	Wind Farm: Kawailoa Plantation, North Shore, Island of O'ahu Communication Site: Mt. Ka'ala, Waianae, Island of O'ahu
TMK:	Wind farm: 61005001, 61006001, 61007001, 62011001 Traversed by existing onsite access roads: 61005003, 61005007, 61005014, 61005015, 61005016, 61005019, 61005020, 61005021, 61005022, 61008025, 62002001, 62002002, 62002025, 62009001 Communication site: 67003024

A. BACKGROUND

The Proposed Action is to construct and operate a 70-megawatt wind farm on Kamehameha Schools' Kawailoa Plantation lands. In addition to wind turbine generators and appurtenant facilities at the wind farm site, the project will require installation of communication equipment on existing structures at existing communication sites on Mt. Ka'ala. The Final EIS discloses and evaluates the ecological, aesthetic, historic, cultural, military training, economic, social, and health effects that could result from the Proposed Action and its alternatives. This evaluation indicates that the adverse impacts will be relatively small in comparison to the benefits provided by the generation of additional renewable energy for Oahu consumers. To the extent possible, the Proposed Action has been developed so as to avoid or minimize potential adverse impacts; in those cases where impacts cannot be avoided or minimized, mitigation measures have been

identified. The Proposed Action has the potential for incidental take of six Federally and/or State listed threatened or endangered species. The cumulative effects of other existing and proposed wind farms on O'ahu's North Shore were considered in the analysis of potential take. The proposed mitigation is expected to more than offset the anticipated take and provide a net benefit to the listed species.

B. PROCEDURE

1. An EIS Preparation Notice (EISPN) for this project was published in the September 23, 2010, issue of The Environmental Notice.
2. The 30-day consultation period for this project expired on October 30, 2010. During this period, 7 letters were received which offered comments. The substantive comment letters as well as the responses to them are included in the Final EIS.
3. The Draft EIS for this project was published in the February 23, 2011, issue of The Environmental Notice.
4. The 45-day review period for this project expired on April 9, 2011. The Applicant responded to 27 comment letters. These letters and the responses are included in the Final EIS.
5. The Final EIS for this project was published in the July 9, 2011 issue of The Environmental Notice.

C. AGENCY & PUBLIC CONSULTATION

Over an 18-month period beginning in 2007, Kamehameha Schools (landowner) conducted a broad community outreach and communication effort as part of their master planning process. This process used a community dialogue structure and provided interested stakeholders and members of the general public with multiple opportunities to learn about the Plan. The structure was based on a variety of meeting formats, including small-group stakeholder meetings (6 to 12 stakeholders), community liaison meetings (with recognized community leaders), large-group public meetings, neighborhood board presentations, and briefings with elected officials. They consulted with more than 30 small and large community groups that included *kūpuna* (elders), local farmers, business owners, community associations, schools and churches. The Master Plan and the catalyst project described therein were developed based on input and feedback obtained through the community outreach process. The Plan received significant community support by virtue of the transparent methodology used in its development and its responsive integration of community values into an overall framework of regional sustainability. As one of the seven catalyst projects identified in the Master Plan, development of a wind project in the Kawailoa region has received broad exposure and was well supported in nearly every one of the more than 30 community meetings convened during the master planning process.

Subsequent to purchasing the rights to the project, Kawailoa Wind began consultations with a variety of agencies, public entities and community members. The purpose of the consultations was to provide information about the status of the project and request input on project development. The list of parties consulted to date is presented below.

Agencies and Other Parties Consulted To Date

Agency/Entity	Contact Name	Date of Consultation
US Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office	Mr. James Kwon	June 2009
	Mr. Aaron Nadig Ms. Megan Laut	October 4, 2010 October 13, 2010 January 20, 2011 March 4, 2011 April 20, 2011 June 7, 2011
State of Hawai'i Department of Land and Natural Resources, Office of Coastal and Conservation Lands	Ms. Tiger Mills, Planner	June 24, 2010
	Mr. Sam Lemmo, Administrator	July 15, 2010
State of Hawai'i, DLNR, Division of Forestry and Wildlife (DOFAW)	Ms. Lauren Goodmiller	July 2010
	Ms. Sandee Hufana	August 12, 2010 October 4, 2010 January 20, 2011 March 4, 2011 April 20, 2011 June 7, 2011
State of Hawai'i Department of Business and Economic Development and Tourism	Ms. Malama Minn Mr. Cameron Black	January 21, 2010 August 16, 2010 September 9, 2010 March 29, 2011
	Mr. Josh Strickler	September 14, 2010
Outdoor Circle	Mr. Robert Leinau	September 13, 2010 February 8, 2011
Sierra Club	Robert Harris, Executive Director	April 14, 2011
Endangered Species Recovery Committee (ESRC)	ESRC members	September 23, 2010 December 6, 2010 December 7, 2010
North Shore Neighborhood Board	Mr. Mike Lyons, Chair	Februray 23, 2010 October 26, 2010 February 22, 2011
Office of Deputy Assistant Secretary of the Army	Mr. Howard Killian, Hawai'i Environmental and Sustainability Coordinator	July 29, 2010 October 22, 2010
Aviation Operations Planning Board	Mr. Howard Killian, Hawai'i Environmental and Sustainability Coordinator	October 27, 2010

Agencies and Other Parties Consulted To Date

Agency/Entity	Contact Name	Date of Consultation
Regional Mission Compatibility Review Team (RMCRT)	Mr. Howard Killian Representatives of affected DoD services (including the Army, Marine Corps, Navy and Air Force)	November 10, 2010 December 15, 2010 January 24, 2011 March 4, 2011 April 15, 2011 June 2, 2011
U.S. Army Garrison, PACOM and Hawai'i Army National Guard	COL Douglas Mulbury	October 1, 2010 October 15, 2010 October 29, 2010
North Shore Chamber of Commerce	Ms. Antya Miller	November 16, 2010
Waimea Valley (Hi'ipaka LLC)	Ms. Gail Ann Chew, Executive Director	January 5, 2011 April 8, 2011 May 18, 2011
State of Hawai'i Department of Transportation	Mr. George Abcede Mr. Scott Naleimaile	January 24, 2011
City and County of Honolulu, Department of Planning and Permitting (DPP)	Mr. Jamie Peirson	January 25, 2011 June 9, 2011
State of Hawai'i Land Use Commission	Mr. Dan Davidson Mr. Scott Derrickson	January 31, 2011
State of Hawai'i Department of Health, Office of Environmental Quality Control (OEQC)	Mr. Gary Hooser	March 22, 2011
	Mr. Leslie Segundo Mr. Herman Tuiolosega	January 31, 2011
	Ms. Kathy Kealoha	August 13, 2010
State of Hawai'i Department of Business, Economic Development, and Tourism (DBEDT) Office of Planning	Ms. Mary Lou Kobayashi Ms. Mary Alice Evans Ms. Ruby Edwards Mr. Shichao Lii	February 7, 2011
	Mr. Jesse Souki Ms. Mary Alice Evans	March 22, 2011
State of Hawai'i Department of Agriculture	Mr. Russell Kokubun	April 5, 2011
Office of Hawaiian Affairs	Ms. Esther Kia'aina, Chief Advocate	April 29, 2011
Friends of Waialua	Ms. Kathleen Pahinui, Chair	February 9, 2011
Office of U.S. Senator Daniel Inouye	Mr. Alan Yamamoto, Aide	February 15, 2011
Kōkua Hawai'i Foundation	Ms. Natalie McKinney, Director of Program Development	May 1, 2011
Kamehameha Schools (Community Open House, attended by many members of North Shore community)	Mr. Kalani Fronda, Land Manager	February 12, 2011
Sunset Beach Community Association and Pūpūkea Seniors	Ms. Jeanne Martinson	April 19, 2011

Accepting Agency, the Department of Business, Economic Development and Tourism (DBEDT), has determined that this document is in compliance with the filing requirements in accordance with Chapter 200 of Title 11, Administrative Rules, Environmental Impact Statement Rules and with Chapter 343, Hawaii Revised Statutes.

D. EIS CONTENT

The Final EIS consists of two volumes, the Final Environmental Impact Statement and Appendices. These documents contain, as required:

1. Summary sheet (Summary of Proposed Project & an Executive Summary)
2. Table of contents
3. Statement of purpose and need for action
4. Project description
5. Discussion of known alternatives to the proposed action
6. Description of the environmental setting
7. A statement of the proposed action's relationship to the land use plans, policies, and controls for the affected area(s)
8. A statement of probable impact on the environment
9. Relationship between local short-term uses and enhancement of long-term productivity
10. Disclosure of all irreversible and irretrievable commitments of resources
11. Addresses all probable unavoidable adverse environmental effects
12. Description of mitigation measures to minimize impacts
13. A summary of unresolved issues
14. List of organizations and individuals consulted in preparation of the Environmental Impact Statement
15. Reproduction of all substantive comments and responses made during the consultation process
16. A list of organizations and individuals commenting on the Draft EIS
17. Reproductions of all substantive comments and responses made during the EIS review period

Accepting Agency, DBEDT, has determined that the content requirements of the EIS, as specified in Section 11-200-17 of the EIS Rules, have been met.

E. RESPONSES TO COMMENTS

The Applicant has responded to all significant comments made during the review period of the Draft EIS. These comments and responses are included in the Final EIS. DBEDT has determined

that this EIS has fulfilled the public review requirement in accordance with Chapter 200 of Title 11, Hawaii Administrative Rules, Department of Health, Environmental Impact Statement Rules.

F. UNRESOLVED ISSUES

In general, there are no significant issues related to the design and implementation of the Kawailoa wind farm project that remain unresolved. Site constraints and other project-related concerns have been broadly addressed through an iterative planning and siting process, as well as focused stakeholder consultations.

- Military Operations
  In particular, potential conflicts with military operations are being addressed through the Regional Mission Compatibility Review Team (RMCRT), a working group comprised of affected Department of Defense (DoD) services, First Wind, and Kamehameha Schools. Discussions by RMCRT have resulted in modifications to the project layout, including the relocation of wind turbines away from the training areas and the undergrounding of proposed electrical lines to avoid and minimize potential impacts to flight and ground training. Other specific mitigation measures are being developed through ongoing coordination with the RMCRT. Permits and approvals must still be obtained from various agencies and it is possible issues may arise during the processing of applications. However, ongoing consultations with agencies and stakeholders as well as the technical evaluations of potential impacts have not identified issues that cannot be resolved.
- Habitat Conservation Plan
  The Applicant is preparing a Habitat Conservation Plan and an application for an Incidental Take Permit and Incidental Take License from the U.S. Fish and Wildlife Service (USFWS) and the State Department of Land and Natural Resources-Division of Forestry and Wildlife (DOFAW), respectively. The applicant has been in on-going consultation with the aforementioned agencies prior to the publication of the EIS Preparation Notice. The USFWS and DOFAW will ultimately determine what specific mitigation measures will be required of the applicant; therefore, for the purpose of this EIS, the applicant has provided for several robust alternatives in order to mitigate the taking of threatened and endangered species that would each satisfy the requirements of Chapter 343, Hawaii Revised Statutes and Chapter 200 of Title 11 of the Administrative Rules.

G. PERMITS REQUIRED

Federal

- Incidental Take Permit (Endangered Species Act, Section 10(a)(1)(B))
- Federal Aviation Administration (FAA) Determination of No Hazard to Air Navigation
- Federal Communications Commission (FCC) License
- National Environmental Policy Act (NEPA) Compliance

State

- Endangered Species Incidental Take License and Habitat Conservation Plan
- Request for Use of State Lands
- Conservation District Use Permit
- Forest Reserve System Special Use Permit (possible)
- Noise Permit (possible)
- Coastal Zone Management Act (CZMA) Federal Consistency Determination
- State Historic Preservation Division (SHPD) Notification and Review
- Permit to Operate or Transport Oversize and/or Overweight Vehicles and Loads
- National Pollutant Discharge Elimination System (NPDES) Construction Permit
- Power Purchase Agreement (PPA)

City and County of Honolulu

- Conditional Use Permit (minor)
- Conditional Use Permit (minor) for a Joint Development Agreement
- Grading/Grubbing/Stockpiling/Building and Other Construction Permits
- Permit for Movement of Oversize and/or Overweight Vehicles and Loads

Other

- Approval for Use of Mt. Ka'ala Access Road

H. DETERMINATION

DBEDT has determined this Final EIS to be acceptable under the procedures and requirements established in Chapter 343, Hawaii Revised Statutes. A report on the mitigation measures associated with this project is attached for your reference.

Should you have questions, please contact Malama Minn at 808-587-9000 or the Renewable Energy Branch at 808-587-3991.

Sincerely,

Richard C. Lim

Attachment

MITIGATION MEASURES
KAWAILOA WIND FARM PROJECT
FINAL ENVIRONMENTAL IMPACT STATEMENT
Attachment to Agency's Acceptance Letter

The permitting agencies are advised to pay attention to mitigation measures identified in the Final Environmental Impact Statement (FEIS). The Kawailoa Wind Farm Project FEIS identified the following mitigation measures for disclosure and compliance purposes. The project consists of two project sites, both of which are addressed in the FEIS: (1) Mt. Ka'ala Communication Site; and, (2) Wind Farm Site.

Due to the minimal impacts anticipated at the Mt. Ka'ala Communication Site, [the mitigation measures described herein apply only to the Wind Farm Site unless expressly indentified as a Communication Site mitigation measure]. If mitigation measures for the Communication Site are not expressly described in a section, it is because no mitigation under that section is being proposed at the Communication Site. In the instances where mitigation is warranted at the Communication Site, the section will clearly indicate which site the mitigation measures pertain to.

CLIMATE AND AIR QUALITY

Construction will be conducted in compliance with HAR Title 11 Chapter 60.1 (Air Pollution Control), which specifies that the best practical operation or treatment be implemented such that there is not discharge of visible fugitive dust beyond the property lot line. To comply with these requirements and to minimize any other adverse affects of air quality, the following BMPs would be implemented during construction:

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Fuel all off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, with motor vehicle diesel fuel.
- Maximize to the extent feasible the use of diesel construction equipment meeting the latest certification standard for off-road heavy-duty diesel engines.
- Minimize the extent of disturbed area where possible.
- Use water trucks or sprinkler systems (with no chemical additives) in sufficient quantities to minimize the amount of airborne dust leaving the site.
- Cover or continuously wet dirt stockpile areas (water with no chemical additives) containing more than 100 cubic yards (76.5 cubic meters) of material.
- Implement permanent dust control measures identified in the project landscape plans as soon as possible following completion of any soil disturbing activities.
- Stabilize all disturbed soil areas not subject to re-vegetation, paving, or development, using approved chemical soil binders, jute netting, or other methods.
- Lay building pads and foundations as soon as possible after grading unless seeding or soil binders are used.

- Limit vehicle speed for all construction vehicles moving on any unpaved surface at the construction site to 15 mph or less.
- Cover all trucks hauling dirt, sand, soil, or other loose materials.

GEOLOGY, TOPOGRAPHY AND SOILS

Construction of the project will require grading for both temporary and permanent project features. During the operations and maintenance phase of the project, grading is expected to be limited to replacement of the underground collector lines and/or maintenance of the onsite access roads. These events are expected to occur infrequently.

To the extent possible, the earthwork will be designed to minimize cut and fill, and to avoid impacts to the major topographic features (including the gullies and streams); some components of the project may result in localized topographic changes and increased potential for erosion. The BMPs outlined below will be implemented to avoid and minimize erosion associated with ground disturbing activities:

- Sequence construction activities to minimize the exposure time of cleared areas.
- Minimize the extent of disturbed areas, where possible.
- To avoid fugitive dust emissions, cover soil stockpile areas containing more than 100 cubic yards of material, or keep continuously wet.
- Stabilize all disturbed soil that is not subject to re-vegetation, paving, or development, using approved chemical soil binders, jute netting, or other methods.
- Lay building pads and foundations as soon as possible after grading, unless seeding or soil binders are used.
- Cover all trucks hauling dirt, sand, soil, or other loose materials.
- Install erosion and sediment control measures (for example, silt fences) before initiating earth moving activities, and properly maintain throughout the construction period.
- Minimize the extent of clearing and grubbing to only what is necessary for grading, site access, and equipment operation.
- Properly implement all stormwater runoff and erosion control BMPs, as specified in the Construction Stormwater Permit to be obtained from HDOH.
- During dry periods, inspect BMP features once weekly and repair as necessary. Inspect and repair features as needed within 24 hours after a rainfall event of 0.5 inches or greater in a 24-hour period. During periods of prolonged rainfall, inspect daily would occur.
- Maintain records for all inspections and repairs, on site.
- Apply permanent soil stabilization (that is, graveling or re-planting of vegetation) as soon as practical after final grading.

HYDROLOGY AND WATER RESOURCES

Ground water

No direct interaction with groundwater is anticipated. However, construction and operation activities will require the use of some hazardous materials, which if handled inappropriately, could affect groundwater quality. However, appropriate management practices, including preparation and

implementation of a Spill Prevention, Countermeasure, and Control (SPCC) Plan, will be in place throughout construction and operation to avoid and minimize impacts associated with these materials, as described in detail in Section 3.11 of the FEIS. With implementation of these measures, no impacts to groundwater quality are expected.

Surface water

The project footprint has been designed to avoid potentially jurisdictional features to the maximum extent possible; these features include Loko Ea, Laniākea, Kawailoa, Ka`alaea, and the unnamed tributary to Waimea River. The only locations where potentially jurisdictional features occur within the footprint are those areas where they intersect with the existing onsite roads. In general, the waterways are culverted under the roads, and road improvements will be conducted so as to avoid impacts to these features. The only unculverted road crossing within the project footprint is along Laniākea Stream, an intermittent waterway, where it washes over Cane Haul Road. Work that will be conducted in this area will be limited to repair and maintenance of the road surface; no work will be conducted outside the existing footprint of the road.

Although construction is not expected to directly impact any potentially jurisdictional features, ground disturbing activities during construction have the potential to increase the amount of sediment and other pollutants in stormwater runoff, which could adversely affect the water quality in the onsite waterways, as well as downstream receiving waters. Of all of the components of the project, the access roads are expected to have the greatest potential to contribute sediment (and associated pollutants) to stormwater runoff, primarily because dirt roadways function as both a source area and transport mechanism. The project has been designed to use the existing access roads to the extent possible, thereby minimizing construction of new roadways. To reduce the potential for sediment and pollutant delivery from both the existing and new roadways to be used for the project, gravel will be applied to the road surfaces and rock-lined swales would be installed along the edge of the roadways. Large rock (typically Surge-B) will be used to line each swale, helping to slow the flow and allowing sediment to settle out. Swales would generally be located in areas where conveyance of stormwater is focused, with dimensions based on anticipated flow volume. Each swale would also include "level spreaders," which will allow a portion of the runoff to flow from the swale and disperse onto an adjacent vegetated field (or other relatively flat area). The swales will be installed and maintained during construction and throughout the life of the project, such that impacts to water quality are expected to be minimal; given the large network of existing, unimproved dirt roads on the site, it is likely these features would decrease sediment delivery on a per-unit area basis below existing levels.

In addition to the roadway swales, other general best management practices (BMPs) will be implemented as part of construction to avoid and minimize impacts, as described in Section 3.3.2.1 of the FEIS. These BMPs include sequencing of activities to minimize the exposure time of cleared and excavated areas; in addition, to the extent possible, excavation for the turbines will be timed to avoid the wet winter months. Specific measures to avoid and minimize the input of pollutants to water features are listed in the table below. In addition, a Notice of General Permit Coverage for construction-related stormwater runoff will be obtained, pursuant to National Pollutant Discharge Elimination System (NPDES) regulations. With implementation of these measures, impacts to surface water quality are expected to be insignificant.

Potential Pollutants from Construction Activities and Proposed Avoidance and Minimization Measures

Pollutant	Source/Activity	Control Measure (BMP)
Vegetation/Rock	Excavation, grubbing, grading, stockpiling	Install silt fencing; temporary soil stabilization
Soil/Sediment	Excavation, grading, stockpiling, watering for dust control	Install silt fencing; protection of stockpiles; natural vegetation; sand bags; temporary soil stabilization; geotextile mats (internal access road slopes); avoid excess dust control watering
Oil and Gas	Construction equipment, vehicles	Regular vehicle and equipment inspection; prohibition of onsite fuel storage; drip pan for onsite tanker fueling; spill kits
Construction Waste	Construction debris, select fill, paint, chemicals, etc.	Protection of stockpiles; onsite dumpsters; periodic waste removal & disposal; compaction & swales (for rock fill); containment pallets (for chemicals)
Concrete Wash Water	Pouring of turbine foundations	Containment in wash water pits; install silt fences
Equipment & Vehicle Wash Water	Construction equipment	Containment berms around equipment washing area; offsite vehicle washing
Sanitary Waste	Portable toilets or septic tank	Sanitary/septic waste management

Note: BMPs are adopted from and defined in the City and County of Honolulu's *Best Management Practices Manual for Construction Sites in Honolulu* (May 1999).

BIOLOGICAL RESOURCES

Flora (Wind Farm Site)

Direct impacts to flora will occur primarily as a result of clearing and ground disturbance during the construction phase. However, the wind farm facilities will generally be constructed in areas that have been extensively disturbed as part of previous agricultural operations, with existing vegetation largely comprised of weedy species. No Federally or State listed endangered, threatened, or candidate plant species, nor species considered rare throughout the Hawaiian Islands, have been identified within the wind farm site, and no portion of the site has been designated as critical habitat for any listed plant species.

A few native species, notably *koa*, occur along the ridge tops and some trees may have to be removed as areas are cleared during construction. Removal of native trees would be kept to the minimum necessary to ensure safe conditions and satisfy construction requirements. To compensate for the loss of native trees because of construction, Kawailoa Wind Power has come to an agreement with the landowner (Kamehameha Schools) that at least an equal or greater number of native trees that are removed would be replanted in surrounding portions of the property. In addition to replacement of native trees, all temporarily disturbed areas would be revegetated immediately following construction using a hydroseed mixture of annual rye (*Lolium multiflorum*) or other suitable groundcover species to stabilize soil and prevent erosion.

Invasive plants, such as Java plum, strawberry guava, swamp mahogany, and albizia, are widespread within the wind farm site. In order to minimize the potential for introducing new invasive species to the project site, the following measures will be implemented:

- All construction equipment, materials and vehicles arriving from outside of the island of O`ahu will be washed and/or visually inspected (as appropriate) for excessive debris, plant materials, and invasive or harmful non-native species before transportation to the project site; import of materials that are known or likely to contain seeds or propagules of invasive species will be prohibited.
- All cleaning and inspection activities will be properly documented.
- Offsite sources of re-vegetation materials (such as seed mixes, gravel, and mulches) will be certified as weed-free or inspected before transport to the project area.
- All areas that are hydroseeded will be monitored for six months after hydroseeding to identify invasive plants that establish from seeds inadvertently introduced as part of the seed mix; all invasive plants identified within the hydroseeded areas will be removed.
- At the end of the construction period, areas impacted by construction of the project will be surveyed to confirm that no problematic and/or invasive species had been introduced and become established. Appropriate remedial actions will be undertaken to facilitate containment or eradication of the target species as soon as reasonably possible.

Flora (Communication Site)

Similar to the wind farm site, neither of the Mt. Ka`ala communication sites support any protected species, although both sites are fringed by stands of nearly pure native forest. The communication equipment will be installed on existing structures at both of the sites, and no ground disturbance will occur. A limited amount of vegetation trimming may be required during installation, as well as during ongoing maintenance, to provide adequate line-of-sight between the antennae. A helicopter will be used to transport the antennae to the repeater station to minimize the need for vegetation trimming along the access trail. All vegetation trimming activities will be directly coordinated with DOFAW staff to minimize the potential for impacts to native species. To minimize the potential for introduction of new invasive species, control measures will be implemented, as described above. With implementation of these measures, installation of the communication equipment would not be expected to significantly affect botanical resources on Mt. Ka`ala.

Fauna (Wind Farm Site)

Construction and operation of the Kawailoa wind farm project will create the potential for Federally and State-listed bird and bat species to collide with project components, including the wind turbines, meteorological towers, and cranes used for construction of the turbines. In compliance with Section 10 of the ESA and HRS §195D-4(g), Kawailoa Wind is preparing a Habitat Conservation Plan (HCP) and application for an Incidental Take Permit (ITP) and Incidental Take License (ITL) from the USFWS and DOFAW, respectively, for the Kawailoa wind farm project. The purpose of an HCP is to ensure that measures to minimize and mitigate the adverse effects of the proposed activity for any listed species covered under the plan are adequate. The resulting permits allow "take" of those species,

provided that the "take" is incidental to otherwise lawful activities.1 The HCP will cover the seven species described in Section 3.5.2.3 of the FEIS: Newell's shearwater, Hawaiian duck, Hawaiian stilt, Hawaiian coot, Hawaiian moorhen, Hawaiian short-eared owl, and Hawaiian hoary bat (collectively referred to as the "covered species").

Because complete avoidance of risk to the covered species is impossible under the Proposed Action, several measures to avoid and minimize the risk to these and other wildlife species, and to minimize impact on the human environment, have been incorporated into the project. These measures include, but are not necessarily limited to, the following:

- Monopole steel tubular turbine towers will be used rather than lattice towers. Tubular towers are considerably more visible than lattice towers and should reduce collision risk.
- Unguyed meteorological towers will be used for the project site instead of guyed permanent meteorological towers.
- Guy wires on temporary meteorological towers will be marked with high visibility bird diverters made of spiraled polyvinyl chloride (PVC) and twin 12-inch white poly vinyl marking tape to improve the visibility of the wires.
- The rotors selected for use will have a significantly slower rotational speed (range of 6 to 18.7 rpm, depending on the turbine chosen) compared to older designs (28.5 to 34 rpm); this increases the visibility of turbine blades during operation and decreases collision risk.
- All new electrical collector lines will be placed underground to the extent practicable to minimize the risk of collision with new wires; overhead collector lines will be fitted with marker balls to increase visibility. All overhead collector lines will be spaced according to Avian Power Line Interaction Committee (APLIC) guidelines to prevent possible electrocution of native species. Species most at risk are those likely to perch on power poles or lines (APLIC, 2006); the only species identified to be at risk at the Kawailoa wind farm site is the Hawaiian short-eared owl. Using the barn owl as a surrogate species, the horizontal spacing will be more than 20 inches (51 centimeters) to accommodate the wrist-to-wrist distance of the owl. If a vertical arrangement is chosen, a vertical spacing of more than 15 inches (38 centimeters, head-to-foot length) will be used (APLIC, 2006). Any jumper wires will be insulated.
- Overhead collection lines will be parallel to treelines whenever possible.
- Drainage will be improved, as needed to eliminate the accumulation of standing water after periods of heavy rain to minimize potential of attracting waterbirds to the site.
- Where feasible, night-time construction activities will be minimized to avoid the use of lighting that could attract seabirds and possibly bats.

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1 "Take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect species listed as endangered or threatened, or to attempt to engage in any such conduct (50 CFR 17.3). "Harm" has been defined by USFWS to mean an act which actually kills or injures wildlife, and may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 CFR 17.3). "Harass" has been defined to mean an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering (50 CFR 17.3).

- A minimal amount of onsite lighting will be used at buildings and shielded fixtures will be used only on infrequent occasions when workers are at the site at night. Onsite lighting will be fitted with motion-sensors, automatic shut-off timers or similar devices to limit lighting to periods when personnel are actively working.
- Clearing of trees above 15 feet in height for construction will not be conducted between July 1 to August 15, which is the period when non-volent Hawaiian hoary bats juveniles may occur in the project area.
- Low wind speed curtailment will be implemented to reduce the risk of bat take: Recent studies on the mainland indicate that most bat fatalities occur at relatively low wind speeds, and consequently the risk of fatalities may be significantly reduced by curtailing operations on nights when winds are light and variable. Research suggests this may best be accomplished by increasing the cut-in speed of wind turbines from their normal levels (usually 3.5 or 4 m/s, depending on the model) to 5 m/s. Two years of research conducted by Arnett et al. (2009, 2010) found that bat fatalities were reduced by an average of 82 percent (95% CI: 52 to 93 percent) in 2008 and by 72 percent (95% CI: 44 to 86 percent) in 2009 when cut-in speed was increased to 5 m/s. Therefore, based on best available science, low wind speed curtailment will be implemented at night by raising the cut-in speed of the project's wind turbines to 5 m/s. The times of the year when curtailment is implemented (that is, year-round or seasonal) will be established based on bat detection data on site, seasonal distributions of observed fatalities on site, and best available science, with concurrence from USFWS and DLNR. Based on data collected to date, the curtailment would initially occur during the months of March through November, which is when bat activity has been consistently documented, for the duration of the night (from sunset to sunrise). Curtailment will also be extended if fatalities are found outside the initial proposed curtailment period with concurrence from USFWS and DLNR. Curtailment may also be reduced or shifted with the concurrence of DOFAW and USFWS if site-specific data demonstrate a lack of bat activity during certain periods, or if experimental trials are conducted that demonstrate that curtailment is not reducing collision risk at the project during the entire curtailment period.
- A speed limit of 15 mph will be observed while driving onsite, to minimize collision with covered species, in the event they are found to be injured or using habitat onsite.
- Vegetation clearing will be suspended within 300 feet (91 meters) of any area where distraction displays, vocalizations, or other indications of nesting by adult Hawaiian short-eared owls are seen or heard, and resumed when it is apparent that the young have fledged or other confirmation that nesting is no longer occurring.

Additional mitigation measures that Kawailoa Wind will be required to carry out will be detailed in the Final HCP and will be monitored and enforced according to USFWS and DOFAW rules and regulations. As previously stated, the applicant has presented several proposed scenarios to mitigate take and provide a net benefit to listed species in the FEIS. The appropriate agencies will make a final determination as to which mitigation measures, or combination thereof, are required of Kawailoa Wind. Detailed mitigation proposals for each listed species are described in Section 3.5.4.1 of the FEIS.

Fauna (Communication Site)

The proposed antennas are static features attached to existing Hawaiian Telcom structures, therefore no ground disturbance is anticipated. Therefore, installation of the equipment is not expected to create a significant collision hazard to any non-listed or covered avian species, if they should happen to transit the tower location. Similarly, no impacts to mammalian species are anticipated.

A limited amount of tree trimming may be required during installation and ongoing maintenance, to provide adequate line-of-sight between the antennas. As previously described, a helicopter will be used to transport the antennae to the repeater station to minimize the need for vegetation trimming along the access trail. In addition, all vegetation trimming activities will be directly coordinated with DOFAW staff to minimize the potential for impacts to native vegetation. Because native vegetation at the site could potentially support native mollusc species (including at least one Federally and State listed species), additional mollusc surveys will be conducted before any vegetation trimming at either site, also in coordination with DOFAW staff. The vegetation will be trimmed by hand, and the cut materials would be placed near the trimmed plant, to allow any molluscs to move back onto the plant.

In addition to direct impacts associated with vegetation trimming, native invertebrate species may also be indirectly affected by introduction of non-native species, particularly non-native invasive ant species (DOFAW, 2011). To minimize the potential for introduction of non-native invasive ant species at either of the Hawaiian Telcom sites, baseline surveys of ant fauna will be conducted before and following installation of the antennas, in coordination with DOFAW staff. In addition, all materials and vehicles will be inspected for the presence of ants before transport to the site. With implementation of these measures, impacts to native invertebrate species will most likely be insignificant.

HISTORIC, ARCHEOLOGICAL, AND CULTURAL RESOURCES

A comprehensive Cultural Impact Analysis as well as an Archeological Inventory Survey have been completed and are included in the FEIS as appendices. The following is a list of cultural and environmental mitigation and community outreach that has been conducted on other First Wind projects; similar mitigation and outreach is ongoing or is planned for the Kawailoa wind farm project:

- **Monitoring and Inadvertent Discoveries:** Archaeological monitoring will be conducted during construction to help ensure that any inadvertently discovered resources will receive immediate attention and protection, while their ultimate disposition is determined by DLNR-State Historic Preservation Division (SHPD). In compliance with HAR 13§13-279, a monitoring plan will be prepared and submitted to SHPD for review and approval prior to construction.
- **Community Consultation:** Throughout project development, First Wind meets with community members and organizations to share information and seek input about the project. For the Kahuku project, the community asked for the project to be sited in a way to minimize project-related sound in Kahuku town; the project was adjusted accordingly. Similarly, residents in Mokulē'ia were concerned about a planned communications tower in their neighborhood, so an alternate location for the antennas was found on an existing facility at Mt. Ka'ala. In both cases, community feedback helped to improve the final project. First Wind also seeks input from

residents about community priorities and local efforts which the project can help support. For the Kahuku project, residents identified education, flood mitigation and agriculture as the most important priorities for their local community. In response, First Wind is working with schools, community associations and local ranchers to contribute to these priorities over the life of the Kahuku project. For the Kawailoa project, a wide range of community members has been engaged to share information and seek input on the project; the community will continue to be consulted as the project design and construction progresses.

- **Support for Native Hawaiian Organizations:** Since beginning operations in Hawai`i, First Wind has been a strong supporter of Native Hawaiian organizations and cultural events, including `Aha Punana Leo, Maui Cultural Lands, Hawaiian Homestead Associations on Moloka'i, Na Pua No'eau, Waimea Valley Music Festival, Waimea Valley Makahiki Festival, and the Council for Native Hawaiian Advancement's annual convention. For the Kawailoa project, First Wind intends to form a long-term partnership with Waimea Valley to support their efforts to promote Hawaiian culture and environmental awareness.

- **Continued Access for Traditional Activities:** In parallel with the wind farm project, Kamehameha Schools is planning to expand its access opportunities to allow for safe, legal and controlled access to and around the *mauka* portions of the Kawailoa property for hiking, hunting, gathering and cultural practices. As part of this effort, First Wind is coordinating with Kamehameha Schools to facilitate safe access in and around the wind farm site.

- **Continued Agricultural Use of Land**: Implementation of the proposed wind farm project will allow Kamehameha Schools to maintain the existing agricultural uses of the Kawailoa property, which is consistent with their North Shore Master Plan and Strategic Agricultural Plan. The turbines will be located on unirrigated land on the *mauka* sections of the Kawailoa property, which is currently being fenced for pasture by Kamehameha Schools. Lease revenues generated by the project can be used by Kamehameha Schools to improve the irrigation system and other infrastructure that directly benefits local farmers on the *makai* sections of the property. Not unlike the traditional concept of an *ahupua'a*, this arrangement will provide for productive, sustainable use of the land while not depleting resources.

- **Conservation of Native Species:** For each wind farm project, First Wind develops a habitat conservation plan to address endangered native wildlife species that may be impacted as a result of the project. Similar efforts are also made to conserve native plant species. For the Kaheawa Wind project on Maui, First Wind worked with community groups and others to plant native plants in areas that were cleared during construction; since 2006, First Wind staff and volunteers have replanted thousands of seedlings of native plants, including *pukiawe*, *a'ali'i* and *'ohia lehua*. Similarly, for the Kawailoa project, First Wind is working with Kamehameha Schools to identify native trees that should be avoided (for example, koa and sandalwood); any native trees that are removed will be replanted on a one-to-one basis.

VISUAL RESOURCES

Characteristics of the proposed wind farm site, including the topography and vegetative cover, naturally limit views of the site, particularly those of the upper elevations. The turbines have been sited within previously disturbed fields that are vegetated with overgrown, weedy species, resulting in minimal disturbance of native vegetation and canopy coverage within the gulches. The turbines will all be of a single type and size, placed in an orderly fashion (that is, in a series of tightly grouped, straight lines), and rotating in the same direction. A shade of white paint will be used for all of the components, and the turbines would be marked with a minimal amount of turbine lighting (as required to meet FAA requirements). The result of these measures will be a series of uniform turbines with a consistent and balanced appearance, integrated into the natural environment in a sensitive manner.

NOISE

Construction noise levels are expected to exceed the State's maximum permissible property line noise levels and, as such, a permit will be obtained from the Hawaii Department of Health (HDOH) to allow the operation of vehicles, cranes, construction equipment, and power tools. This permit will place restrictions on the time of day when construction activities may emit noise in excess of the maximum permissible sound levels, but will not restrict the amount of noise that can be generated. The HDOH may also require the incorporation of noise mitigation into the construction plan and/or community meetings to discuss construction noise with the neighboring residents and business owners. BMPs will be implemented to mitigate construction noise, as needed. These will include the use of noise barriers, mufflers on diesel and gasoline engines, using properly tuned and balanced machines, and time of day usage limits for select construction activities.

During operation, the predicted wind turbine sounds are not expected to exceed the HDOH maximum permissible noise limit in the areas to the west of the project site that are zoned for agriculture. However, sounds from the wind turbines are expected to exceed the HDOH nighttime maximum permissible noise limit where the project borders preservation land (that is, to the north, east, and south). Because these areas are not easily accessible and are not inhabited, it is unlikely that there would be noise complaints from these areas. In addition, ambient noise measured along the preservation land boundaries to the north and south of the site indicate that average ambient noise levels are close to or exceed 45 dBA. However, to comply with the Community Noise Rule, the need for a variance will be coordinated with HDOH.

LAND USE

To minimize the potential impact of the proposed project on agricultural uses, the project components were sited to avoid areas that are currently being cultivated, which generally include the irrigated fields at the lower elevations of the Kawailoa plantation (that is, portions of TMKs 61005001 and 62009001). The existing onsite roads that will be used to access the wind farm site traverse these active agricultural fields, but use of the roads (including the proposed road improvements) are not expected to adversely affect these operations.

TRANSPORTATION & TRAFFIC

Impacts to transportation and traffic conditions will only occur during the construction phase of the project. The major components of the wind farm, such as the blades, towers, and nacelles, will be

transported by sea and offloaded at Kalaeloa Harbor. Temporary storage of these components will require the use of vacant areas at Kalaeloa Harbor for a minimal amount of time to conduct inspections of the equipment and to prepare them for transport to the Kawailoa Site.

- To minimize disruption to harbor operations, all activities related to the shipment, unloading, storage and transport of these components will be coordinated directly with the DOT Harbors Division Oahu District Office and/or engineering maintenance section.

Potential impacts associated with oversized equipment transport include traffic delays and delays in emergency services caused by periods where traffic flow must be stopped to allow oversized trailers to navigate turns. To mitigate these impacts, the following measures will be implemented, unless otherwise directed by the Honolulu Police Department, the State Department of Transportation, and/or the City & County of Honolulu:

- All tower and blade components will have a minimum of four police escorts per load, unless otherwise instructed by the Honolulu Police Department. Police escorts will direct traffic at intersections along each proposed route where necessary to allow oversized trailers to navigate turns.
- Police escorts and/or flagmen will provide traffic direction at the entrance to the wind farm site during construction.
- Hours of transport will be restricted to periods of the day when vehicular traffic is typically light, as follows:

– Monday through Saturday from 9:00 p.m. to 5:00 a.m.; loaded equipment must be off of the roadways between the hours of 5:00 a.m. and 9:00 p.m.

– No oversized loads will be transported on Sundays or holidays.

During operation, the amount of vehicular traffic associated with the proposed facilities will be minimal and the proposed project is not anticipated to noticeably increase traffic volumes on Kamehameha Highway or roadways in the area over the long-term. Operation of the wind farm will not impact access for other users who use or transit through Kamehameha School's Kawailoa properties.

MILITARY OPERATIONS

To address concerns of the wind farm's impacts on military training and to explore alternatives that could resolve those concerns while still allowing for a wind farm development at Kawailoa, the Department of Defense (DoD) services formed a working group composed of the affected DoD services, First Wind, and the site's landowner, Kamehameha Schools. The working group has met on five occasions (November 10, 2010, December 15, 2010, January 24, 2011, March 4, 2011, and June 2, 2011) to discuss potential impacts, alternative solutions and mitigation measures.

At the January 24 meeting, the group's name was changed to the Regional Mission Compatibility Review Team (RMCRT) to reflect recent Federal legislation (Section 358 of the 2011 National Defense Authorization Act). The DoD is developing an interim policy to enable a central clearinghouse, the Energy Siting Clearinghouse, in the Office of the Secretary of Defense, to evaluate whether proposed

renewable energy projects would interfere with mission capabilities across the DoD. Final determination of the project's impacts will be made by the DoD Renewable Energy Clearinghouse in accordance with Section 358.

Based on these discussions, potential conflicts and associated mitigation measures that were identified by the RMCRT are as follows (based on the notes from the March 4, 2011 meeting of the RMCRT):

- **Alert Area-311**: The proposed Kawailoa wind farm would impact Alert Area-311. The proximity of the turbines poses a high safety risk to helicopters operating in the low level training area. The proximity of the turbines would also require the closure of one of only four authorized nap of the earth (NOE) training routes on O`ahu. To mitigate for impacts to the Alert Area-311, Kawailoa Wind removed the 4 turbines that were closest to the yellow flight line. The 25th Combat Aviation Bridage (CAB) will create a new flight route for day, night, and night vision device (NVD) NOE flight training.
- **NVD Entry Control Point:** The proposed turbines will bound the NVD Entry Control Point C12 on both the east and west sides. To mitigate this impact, the 25th CAB will move or discontinue use of the NVD Control Point.
- **Landing Zones**: Pu`u Kapu is a high density LZ used for air assault, sling loading and helicopter landing zone operations. The turbines will be located approximately 5,900 feet (1,800 meters) from this landing zone (LZ) and would increase risk to flight operations in and around the LZ. To mitigate for impacts to the Pu`u Kapu LZ, Kamehameha Schools has agreed to identify a new area for training.
- **Copter NDB 152**: Wind turbines will overlap with the Copter NDB 152 instrument approach to Wheeler Army Airfield, which is used primarily for recovery to the airfield from the Tactical Flight Training Area (TFTA) and Kahuku Training Area. The FAA determination indicated that the turbines in the NDB 152 area would not pose a hazard to air navigation. While the FAA did not identify a significant impact, if other stakeholders identify this as a potential concern, the RMCRT can identify an appropriate solution in future meetings.
- **Turbine Marking or Lighting**: Not all turbines in the TFTA are marked. Unmarked turbines pose a flight hazard for pilots during day, night, and NVD flight operations. To mitigate for these impacts, Kawailoa Wind has agreed to put FAA-compliant red strobes on each turbine in the TFTA and to implement NVD-compatible blade marking or lighting.
- **Overhead Electrical Lines**: Overhead electrical lines pose a flight hazard for pilots during day, night, and NVD flight operations. To mitigate for these impacts, overhead electrical lines have been removed from the TFTA.
- **Construction Activities**: The crane used to install the turbines could pose a safety risk to helicopters operating in the low-level training area, particularly when left in a fully-extended, upright position. To mitigate this potential impact, Kawailoa Wind will notify the affected DoD services of the anticipated plans for crane position and transit across the site.

In general, the RMCRT has determined that the proposed mitigation for each of these potential conflicts will reduce the impact to a less-than-significant level. For several of the topics discussed by the

RMCRT, it was determined that impacts are not likely to occur; these include radar interference, electromagnetic interference and ground training. Radar interference was not identified as a concern by the FAA in their determination and information from the turbine manufacturer indicated that electromagnetic interference generated by the project would not be significant.

HAZARDOUS MATERIALS

Kawailoa Wind will obtain a NPDES permit for construction activities. Incorporated in the National Pollutant Discharge Elimination System (NPDES) permit for the wind farm construction will be effluent limitations guidelines (ELGs) and new source performance standards (NSPS) to control the discharge of pollutants from the construction site.

Operation of the proposed project will require the use of a possible Battery Energy Storage System (BESS), an emergency back-up generator, electrical transformers, and the potential need for heavy equipment for maintenance and replacement activities. These activities will involve the use of hazardous materials, including oil, diesel fuel, propane, mineral oil, petroleum-based lubricants and/or solvents, and coolants, as well as the contents of the battery system.

Because the wind farm will have aboveground oil storage (mineral oil in electrical transformers), and smaller quantities of other oils and hazardous materials, the wind farm facility will be designed in accordance with good engineering practices including applicable industry standards and applicable Federal Regulations.

In addition, Kawailoa Wind, pursuant to EPA regulations, will prepare and implement a Spill Prevention, Countermeasure, and Control (SPCC) Plan for the facility to prevent oil spills from occurring, and to perform safe, efficient and timely response in the event of a spill or leak. The SPCC Plan will identify the following:

- Where hazardous materials and wastes are stored or located onsite
- Volume of each type of hazardous material stored or located onsite
- Spill prevention measures to be implemented, training requirements during routine operations
- Periodic training requirements for facility operations personnel, and records of training completed
- Appropriate spill response actions for each material or waste
- Locations of spill response kits onsite
- A procedure for ensuring that the spill response kits are adequately stocked at all times
- Procedures for making timely notifications to authorities.

The plan will identify and address storage, use, transportation, and disposal of each hazardous material anticipated to be used at the facility. It will establish inspection procedures, storage requirements, storage quantity limits, inventory control, nonhazardous product substitutes, and disposition of excess materials, and will include material safety data sheets of hazardous materials. The SPCC plan will also identify key Kawailoa Wind management, State and Federal regulatory contacts, and

appropriate spill reporting requirements. The plan will provide instructions for notification of local emergency response authorities (Fire and Police) and include emergency response plans.

Facility operations personnel will receive periodic training, to include the following:

- An introduction to pollution control laws
- Rules and regulations pertaining to the use and storage of petroleum products
- BMPs during routine operations and maintenance procedures in order to prevent spills
- Periodic inspection of spill control or containment equipment to ensure it is adequately maintained and functional
- Periodic inspection and maintenance of spill response kits
- Spill response and cleanup
- Spill notification and recordkeeping

Additionally, in the event of a spill, Kawailoa Wind will provide the manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful to the environment. If waste management is required, Kawailoa Wind will hire licensed contractors to characterize, transport, and properly dispose of contaminated materials.

PUBLIC SAFETY

In general, the wind farm facilities are greater than 1 mile away from the nearest residence, and are not publicly accessible. As such, the unlikely event of a tower collapse, blade throw or stray voltage significantly impacting public safety is minimal.

During the construction phase of the project, ignition sources for accidental fires include errant sparks from a variety of vehicles, equipment and tools, and improperly discarded matches and cigarette butts. These are of limited intensity, and under most conditions are unlikely to spark a grass or other fire. Fire-fighting equipment would be maintained in work vehicles and staging areas of the project site and would be available if needed.

During operation of the project, as stated in Section 3.13.1.3 of the FEIS, petroleum-fueled mobile equipment (such as trucks and cranes), petroleum-based lubricants, and other flammable materials means will be present at the site. If a fire does occur, there is potential for equipment damage, but it is not expected to be significant. The towers supporting the turbines are of 3/4-inch plate steel, mounted on concrete foundations; the interconnecting electrical systems are below ground; and the operations and maintenance facilities will be constructed of noncombustible construction and exterior finishes. Damage from fire could occur to the onsite substation and could potentially disrupt the facility's provision of electricity to HECO, though it would not jeopardize HECO's ability to provide electricity services to its customers.

Basic onsite fire-fighting resources will include fire extinguishers in the maintenance facility, at the substation, and in all project vehicles, as well as shovels and backpack pumps in the maintenance facility and maintenance vehicles. During construction, firefighting resources will include the provision

of fire extinguishers in all construction vehicles and trailers. In addition, during some periods of construction, earthmoving equipment will be present onsite and able to assist in creating fire breaks. Lastly, water that is stored in water tanks during construction can also be used for firefighting.