

**FINDING OF NO SIGNIFICANT IMPACT  
UPGRADE AND RELOCATE POWER LINES BETWEEN KĪLAUEA SWITCHING  
STATION AND VOLCANO SUBSTATION, HAWAI‘I VOLCANOES NATIONAL  
PARK**

**National Park Service, U.S. Department of the Interior  
Hawai‘i Volcanoes National Park  
September 2019**

***INTRODUCTION***

The National Park Service (NPS) has prepared this Finding of No Significant Impact (FONSI) in accordance with the National Environmental Protection Act (NEPA), for the project, Upgrade and Relocate Power Lines between Kīlauea Switching Station and Volcano Substation, Hawai‘i Volcanoes National Park, Hawai‘i County, Hawai‘i. The FONSI, along with the Environmental Assessment (EA) comprise the complete record of environmental impact analysis for the project. In addition, as required by NPS *Management Policies 2006*, a Determination of Non-Impairment rendered by the park superintendent has been prepared. The EA and associated compliance documentation were prepared according to the requirements of the NPS 2015 Director’s Order (DO) 12 and DO-12 Handbook.

The Environmental Assessment (EA) was prepared by Hawai‘i Electric Light (HEL) after discussions with Hawai‘i Volcanoes National Park (HVNP) and determining an environmental assessment would be necessary for the project. HVNP worked closely with Big Island Natural Resources Assistance (BINRA) and HEL on developing and analyzing alternatives, developing mitigation measures, and conducting consultations. The project spans approximately 10 miles to include the electrical infrastructure from the Kīlauea Switching Station outside HVNP to the Volcano Substation within HVNP. Since the majority of the project is to occur within the park, the environmental assessment was prepared according to NEPA and NPS DO-12 guidelines to meet requirements for environmental compliance for the NPS. This FONSI approves project activities within Hawai‘i Volcanoes National Park and this FONSI does not constrain ancillary project work outside of HVNP. Project work outside HVNP is subject to a separate decision document.

The NPS is currently working with HEL to develop a right-of-way (ROW) permit for the electrical infrastructure that occurs within the park. While the environmental assessment did not explicitly state that a ROW permit will be required and completed, the actions analyzed within the environmental assessment include the installation, operation, and maintenance of the electrical infrastructure which is consistent with what is required under a ROW permit and is currently covered under a Special Use Permit. The EA and FONSI constitute the environmental compliance record for the ROW permit. Communication wires co-located on the proposed poles would be installed by others (not HEL) and would require a separate ROW permit from the park for each company prior to installation.

## ***PURPOSE AND NEED FOR PROPOSED ACTION***

The primary purpose of the project from the HVNP perspective is to provide consistent electrical transmission capacity to sufficiently supply power to the national park area through updating aging infrastructure. Another purpose of the project is to establish accessible electrical infrastructure that can be efficiently and safely repaired and maintained without impact to park resources. The project will also complete the internet and telephone communication network for the island providing consistent internet and telephone service to the park.

### ***Selected Alternative***

The Preferred Action Alternative as described in the EA and selected in the HEL decision record, will be implemented for the segment of line outside of Hawai'i Volcanoes National Park. For the segment of line within the park, the selected alternative includes modifications to the mitigation measures to ensure protection of park resources. The NPS FONSI does not constrain HEL activities outside the park and the HEL FONSI does not impact NPS actions.

The alignment of poles and wires will alternate between the Mauna Loa and Kīlauea sides of Highway 11, replicating the general placement of the current alignment from the park's Ka'ū entrance to Pi'i Mauna Drive. The alignment will be located on the Mauna Loa side of the highway from the park's Ka'ū entrance for approximately three miles, then crossing to the Kīlauea side of the Highway 11 between mile markers (MMs) 36 and 37. After crossing the roadway, the alignment will follow the Kīlauea side of Highway 11 for approximately three miles, crossing back to the Mauna Loa side between MMs 33 and 34. It remains on the Mauna Loa side of Highway 11 to the Nāmakaniāpaio substation and Pi'i Mauna Drive, a distance of approximately three and one-half miles. Similar to the existing alignment, the two highway crossings will be oriented on the diagonal, rather than at 90 degrees to the roadway. Project work may occur in two phases over the course of two or more years.

The alignment will be located adjacent to the Highway 11 roadway. The distance of the poles from the solid white line delineating the traffic lane from the adjacent paved shoulder will be approximately 20 feet. The distance from the edge of the pavement will typically vary from approximately 14 to 17 feet, mostly depending on the width of the paved shoulder. Poles may be located closer to the pavement margin in some locations such as in turns of the alignment.

Approximately 185 new, pressure-treated 50-55 foot poles (about 45 feet above grade) will be installed on average 150-300 feet apart. Pole height and location will depend on local topography. For example, where the topography drops abruptly away from the road edge, taller poles may be needed to maintain height above grade. In long stretches of level ground, shorter poles with wider spans may be used.

Three, 0.66 inch diameter, non-insulated, braided aluminum transmission wires (total 33 kV which the utility considers to be a subtransmission line) will be installed near or at the top of the poles. The two outer wires will be fastened with porcelain insulators near the ends of 8 foot

horizontal cross-arms attached approximately two feet below the top of the pole; the center wire will be attached to an insulator at the top of the pole.

anchors/deadman and guy wires will be installed to stabilize a small number of poles to distribute the horizontal stress/load caused by the overhead wires and the angle between adjacent wire spans, e.g., where the direction of the alignment changes. Vertical depth of the anchors will vary between 7-9 feet below grade. These anchors are to be located approximately 5-35 feet away from the center of the pole. Anchor depth and distance will also depend on local topography.

Within the park, distribution wires will also be installed only on the segment of poles between Nāmakanipaio Campground and Pi‘i Mauna Drive. The smaller diameter distribution wires will be installed to porcelain insulators on 8 foot cross-arms, approximately 10 feet below the upper cross-arms.

Two black, insulated communication wires, for telephone and internet, will be attached to the poles at approximately 20-24 feet above grade, from the Ka‘ū entrance of the park to Pi‘i Mauna Drive.

All poles and wires will be removed from the alignments to be abandoned between the park’s Ka‘ū entrance and Pi‘i Mauna Drive (within the park). In addition, all existing poles and wires would be removed between Kīlauea Military Camp and the Volcano substation, which is located approximately one-quarter mile west of Kīlauea Visitor Center at HVNP’s rainshed facility. Abandoned poles will be left in the ground and cut off at three feet above grade; the distal or cut-off end will be removed from the site by helicopter. In some cases, poles may be cut at ground level.

A one-half mile long, separate alignment containing only communication wires is currently located adjacent to Highway 11 between Kīlauea Military Camp and Nāmkanipaio Campground. The alignment consists of 23 poles and alternates once between the Kīlauea and Mauna Loa sides of the highway. The communication wires from this alignment will eventually be moved to the new poles on the north side of Highway 11 by the companies that currently own the wires as part of the required ROW permit. The old poles supporting communication wires will be cut near or at ground level and be removed by vehicle or helicopter, depending on proximity to road edge.

### *Mitigation Measures*

Mitigation measures are required for implementation of the selected action. As documented in the EA, the park has determined that there will be no significant impacts, however these measures have been developed to lessen the adverse effects of the selected action. These mitigation measures have been revised from the EA to include additional measures as determined through consultation and public review.

The HEL Project Manager will be required to implement the following mitigation measures and the NPS will monitor the project to verify compliance. HEL may contract biologist, archeologist, etc. to implement the mitigation measures. NPS will approve any contractors used within the park to implement the measures.

1. Follow all invasive species prevention standard operating protocols (SOPs) developed by HVNP, including measures to reduce the risk of introducing the Rapid ‘Ōhi‘a Death (ROD) fungus, little fire ants, and Argentine ants.

A. Particular care must be taken when trimming trees to minimize or avoid injury to ‘ōhi‘a as much as possible to reduce the risk of spreading ROD.

B. Any fill material brought into the park may include rocks, gravel, and sand (inspected as per SOPs), but will exclude clay- or volcanic ash-sized particles to further prevent potential dispersal of invasive ants.

2. Implement all mitigation measures for listed species developed through Section 7 consultation with USFWS:

A. No trees taller than 15 feet may be removed or trimmed between June 1 and September 15 to protect ‘ōpe‘ape‘a (Hawaiian hoary bat), except with prior Park approval. Following approval, thermal imaging just prior to cutting is required to ensure no bats are present.

B. Construction will be restricted or prohibited in areas of nesting and brooding nēnē (Hawaiian goose), as necessary. Avoid work in known nesting and brooding areas from October through March. These areas include Quarry Road to the South end of project (Ka‘ū Switching Station), approximately 0.8 miles; the Nāmakaniāpaio substation to MM 34, approximately 2 miles; and the Nāmakaniāpaio substation to Pi‘i Mauna Drive, approximately 2 miles.

C. If a nēnē appears within 100 feet of ongoing work, notify NPS and all activity may be temporarily suspended until the bird leaves the area of its own accord. Biological monitor on site during work can assist with any necessary action or follow up needed.

D. If a nēnē nest is discovered within a radius of 150 feet of proposed work, or a previously undiscovered nest is found within said radius after work begins, all work will cease immediately and the NPS will consult with USFWS for further guidance, as necessary.

E. Collaboration between the park and the Hawai‘i Department of Land and Natural Resources (DLNR) will continue to protect federally and state listed or rare species immediately outside the park’s Ka‘ū entrance.

F. Construction will be prohibited within 2,000 feet of nesting ‘io (Hawaiian hawk) to protect this endangered species.

G. Strike deterrents (e.g. FireFly HW) will be required on the transmission lines along the high nēnē use areas to reduce the likelihood of nēnē, from striking wires. HEL will be responsible for regular monitoring, maintenance, and replacement of the strike deterrents. These areas include Quarry Road to the South end of project (Ka‘ū Switching Station), approximately 0.8 miles; the Nāmakaniāpaio substation to MM 34, approximately 2 miles; and the Nāmakaniāpaio substation to Pi‘i Mauna Drive, approximately 2 miles.

1. Spacing will be a staggered placement of 32 feet on front and back line for horizontal alignment so that the overall visual spacing is 16 feet. Deterrents will be placed at intervals of 16 feet for both triangular and horizontal arrays. For triangular

arrays, deterrents will alternate across all three wires (left – center – right – center – left...). For horizontal arrays, deterrents will alternate on the outer two wires.

2. All levels of line must be marked where lines are above tree line (deterrents are still required for sparse or intermittent tree line, but not required if the tree cover is continuous along and above the line). Much of the Nāmakaniapaio to Pi‘i Mauna section may not need strike deterrents.

3. Strike deterrents will be installed on the overhead lines the day of installation or no later than the following day unless otherwise authorized in writing by the NPS, regardless of whether or not it is energized, to alert birds to the new location.

4. HEL cannot monitor intensively enough to determine if bird strikes are an issue with powerlines due to time and effort that would be required. Therefore, HEL will monitor all lines regularly (e.g. during line checks, outages, etc.) and report to the Park any birds (not just nēnē) that are observed injured or dead on or in proximity to the power lines and poles. HEL will provide the park with location, photos and any other additional information to assist the park in determining if additional mitigation measures are necessary.

H. Forest bird surveys, preferably also using a thermal imaging scanner, will need to be completed on all trees that will be impacted, just prior to trimming or removal.

I. ‘Io and other large birds will be protected from electrocution by ensuring proper spacing of wires and spacing phase conductors a minimum of 40” inches apart. In addition, a minimum spacing of 24" between grounded hardware and energized components is recommended to ensure electrocution does not occur. To obtain this distance, insulation should be placed as appropriate where grounded hardware and/or energized components occur less than 24" apart.

1. Based on the design drawings and lack of data regarding ‘io electrocutions, HEL will monitor regularly (e.g. during line checks, outages, etc.) and report to the Park any outages or issues that are related to possible wildlife interactions with poles or energized components.

2. Due to forest along most of the underbuild section of power poles, HEL will monitor regularly (e.g. during line checks, outages, etc.) and report to the Park any outages or issues that are related to possible wildlife interactions with poles or energized components.

3. The Park will consult with USFWS if any listed species are injured or killed related to the poles or powerlines and may require insulation or other electrocution protection to be retrofitted if necessary.

J. If any changes to the project or new information reveals that the effects of the proposed action may affect listed species or critical habitat in a manner or to an extent not considered previously (including species not considered previously), the NPS will re-open consultation with USFWS.

H. If the park or partners detect injured or dead birds that are reasonably suspected to be due to powerline or pole interactions, additional mitigation measures may be developed.

3. All staked pole locations and construction easements will be surveyed by an archeologist and biologist prior to construction. Pole locations will be moved if archeological features are vulnerable to impact. Pole locations will also be moved if special status plant species or plant species of special concern may be impacted.

4. Archeological monitors will be required during all ground disturbing activities to protect cultural resources.
5. Biological monitors may be necessary in specific areas or during specific times of year. Biological monitors will mark any sensitive resources that are to be avoided during construction.
6. If lava tubes are encountered during drilling, the archeological and biological monitors will determine if protective measures need to be taken.
7. Heavy equipment may only travel on the existing roadway. No metal-tracked vehicles will be allowed. No vehicle use may occur between poles off the existing road surface (i.e., no travelling parallel to highway).
8. All new pole locations will be accessed in the most direct path from the existing roadway to the pole location (perpendicular access route from pole to road). The excavator will proceed only as far as necessary to auger holes and will exit the construction easement by reversing over the route used to enter the easement. The temporary construction easement for the excavator will be 15 feet from the edge of the pavement and 20 feet wide.
9. If a pole or anchor location cannot be reached by the excavator's boom and auger, e.g., because of a guard rail, terrain features, or unacceptable impacts, those holes will be dug with a portable drill.
10. The excavator will be used only to drill holes, with no grubbing or clearing of vegetation, and no digging, filling, and removal of spoils will be conducted by excavator.
11. Abandoned poles will be cut at three feet above grade and the upper (cut) section will be removed.
12. Cut poles will be removed by helicopter to reduce ground disturbance and potential impact to natural and cultural resources. Removal will be coordinated with NPS to avoid sensitive times of year for listed species.
13. Rock, gravel, and sand spoils excavated from the holes drilled for the new poles and all other unused construction materials will be removed from the park and properly disposed of.
14. No night work and no night lighting will be allowed to protect night-flying animals.
15. No barbed wire may be used at facilities unless no reasonable alternative exists. If used, all barbed wire must be marked with bird strike deterrents employed at five foot spacing and staggered if there are multiple levels of barbed wire so that the overall spacing remains no greater than five feet apart.

## ***DECISION RATIONALE FOR SELECTED ALTERNATIVE***

The alternatives were developed collaboratively by HEL project managers and an interdisciplinary team of HVNP cultural and natural resource specialists, along with the national park's facilities engineer and environmental protection specialist. In addition, public input on alternatives was also considered, based on comments received in public scoping prior to preparation of the Environmental Assessment. HVNP staff approved the proposed pole alignment (selected alternative) and worked with HEL project managers to adjust specific proposed pole locations to ensure no significant natural or cultural resources would be impacted.

All action alternatives were very similar in the scope and quality of impacts on resources in the project area, including geology and soil, vegetation, wildlife, special status species, soundscapes, and archeological resources. With implementation of prescribed mitigating measures, impacts to these resources can be largely avoided or the impacts will be short-term. The selected alternative not only protects the natural and cultural resources of the project area, it best protects the most scenic portions of the viewsheds of Mauna Loa and Kīlauea Volcanoes. While the new pole alignment is more visible than the existing alignment, it is along a highway where this kind of development is expected and alternating sides will protect key viewsheds. The proposed alignment will also result in reduced long term impacts to natural and cultural resources during routine and emergency maintenance due to the proximity to the highway.

## ***ALTERNATIVES AND ACTIONS CONSIDERED BUT DISMISSED***

### ***Other Alternatives Considered and Analyzed***

A no action alternative would leave poles and wires in the current alignment, 50 feet to one-half mile from Highway 11, from the Kīlauea switching station to Pi'i Mauna Drive and also to the Volcano substation at the park's rainshed facility, without creation of road access to or under the alignment. Pole height and the configuration and diameter of wires would remain the same. Based on need, there would inevitably be replacement of deteriorated poles and wire, typically in a piecemeal fashion. In addition, there would remain the potential for ground disturbance when emergency pole access would be necessary (as has happened in the past). The NPS determined that the no action alternative would result in greater impacts to natural and cultural resources due to the need for HEL to have an access road to replace and maintain lines. Currently the line crosses a historic unmaintained road (Peter Lee Road) several times and the existing electrical line is not accessible by vehicles along the majority of the current alignment. The NPS would not approve an access route to be installed under the existing alignment due to significant resource impacts and HEL needs a safe access route to maintain their infrastructure.

In the Kīlauea Side Alignment Alternative, poles and wires would be located along the highway margin, primarily on the Kīlauea side of Highway 11, from the Kīlauea switching station to the Nāmakanipaio substation. The alignment of poles and wires would cross Highway 11, northwest to the substation at this point. The alignment would be located along the Mauna Loa side of the highway from the Nāmakanipaio substation to Pi'i Mauna Drive. The NPS determined that this alternative would impact key Kīlauea viewsheds as proposed.

In the Mauna Loa Side Alternative, poles and lines would be located along the roadway margin, along the north or Mauna Loa side of Highway 11, from the Kīlauea switching station to the Nāmakanipaio substation and then to Pi‘i Mauna Drive. The NPS determined that this alternative would impact key Mauna Loa viewsheds as proposed.

#### *Preliminary Alternatives Considered but Dismissed*

Additional alternatives were considered but dismissed because they did not meet the objectives of the project or were not feasible because of impacts or costs. Running the lines underground would require an 8-10 foot wide shallow trench to provide the requisite separation of the high voltage transmission wires. This alternative was dismissed because of the unacceptable extensive impacts on geology, soil, vegetation, wildlife, and archeological resources from constructing a continuous trench of this width, with little opportunity for mitigation. The NPS agrees with most of this rationale for dismissing the alternative, but does not agree with the rationale associated with the cost as a reason for dismissing an alternative.

Other alternatives addressed reducing visual impacts by removing the alignment well away from Highway 11. One option considered was to utilize the existing alignment outside the park on Kapāpala Ranch from the Kīlauea Switching Station to park lands on the Mauna Loa Road at 4,600-4,900 foot elevation and beyond. This particular alignment supplies power to different communities than the alignment that is proposed for re-alignment and would require new electrical lines to join the two existing alignments. The Kapāpala Ranch alternative alignment was dismissed because several miles of new road would need to be constructed in the park to connect transmission wires from the existing Kapāpala Ranch alignment to the Nāmakanipaio substation or the proposed alignment would have to be located adjacent to the park’s Mauna Loa Road for several miles. The NPS determined that the impacts that would result from creating additional alignments and access routes to connect with the Kapāpala Ranch alignment would be significant and the NPS supports the dismissal of this alternative.

Another alternative considered but dismissed was installing new poles and wires on the current alignment inside HVNP. Installing and maintaining poles and wires would require construction of a permanent road, accessible to HEL vehicles, along the current alignment where no road currently exists. This alternative was dismissed because of its unacceptable level of impacts on geological, soil, vegetation, wildlife, and archeological resources throughout its length. In addition, it would impact park viewsheds because the new maintenance road under the lines would be visible from Highway 11 for much of its length through the project area. For most of the same reasons above, a final alternative considered but dismissed was to construct a different alignment inside the park away from the existing alignment and further from Highway 11. The NPS supports the dismissal of these alternatives due to unacceptable level of resource impacts.

## ***PUBLIC INVOLVEMENT AND AGENCY CONSULTATION***

### *Public Involvement*

Since the project is almost completely within HVNP, an initial scoping meeting for the proposed project took place between national park management, resource specialists and facilities



maintenance staff, HEL project engineers, along with representatives from Hawaiian Telcom and Oceanic Time Warner Cable, on May 9, 2014, in the very early stages of the project. The primary purpose of the meeting was to identify purpose and need, resource issues, and possible alternatives. Follow-up meetings between Hawai‘i Volcanoes National Park and HEL occurred to discuss details of the proposed project between August 2015 and April 2017.

Public scoping on purpose and need and environmental issues occurred from June 25 to July 25, 2015. A scoping letter was mailed by Big Island Natural Resources Assistance, LLC to the congressional delegation, local non-government organizations, and individuals who are currently on the HVNP mailing list and live within specific zip codes that may be impacted by the project. The letter briefly outlined the purpose and need for the project and the project areas, and requested comments on the proposal. Two commenters recommended undergrounding the wires. Two other commenters expressed concern about the impacts on park scenery, without providing specific recommendations. A final comment expressed approval of installing the communication lines to complete the island-wide network.

The EA was made available for public review and comment by HEL from June 23 to July 24, 2017. Letters were mailed by Big Island Natural Resources Assistance, LLC to the congressional delegation, local non-government organizations, and individuals who are currently on the HVNP mailing list and live within specific zip codes that may be impacted by the project. A notice was published in the *Hawaii Tribune Herald* and in the *West Hawaii Today* on June 25, 2017. The information regarding the public review and comment period was also posted on the State of Hawai‘i Department of Health Office of Environmental Quality Control website and a link to the EA was posted on the HVNP website.

Three comments were received. Two commenters agreed with the HEL preferred action alternative and one commenter recommended an additional mitigation measure regarding exclusion of small particle size of fill material. The park incorporated this recommendation in mitigation measure 1.B.

#### *Agency and Native Hawaiian Consultation* *U.S. Fish and Wildlife Service*

In accordance with the *Endangered Species Act* of 1973, informal Section 7 consultation was initiated by Hawai‘i Volcanoes National Park with the USFWS Pacific Islands Fish and Wildlife Office on June 8, 2015 concerning potential impacts to proposed, threatened, or endangered species in the project area within the park. Further discussions with USFWS regarding the consultation occurred through a site visit, phone calls, and email communications between June 2015 and April 2017. A letter was sent to USFWS on March 16, 2017 requesting concurrence. USFWS provided additional clarification on the mitigation measures which have been incorporated into the required mitigation measures for the project. The USFWS concurred with the park’s determination of ‘*may affect, not likely to adversely affect*’ on April 12, 2017. Additional clarifications for the project description and mitigation measures were sent by USFWS via email December 19, 2017 and incorporated into the final mitigation measures included in this FONSI.

### *National Historic Preservation Act - Section 106 Compliance*

In accordance with Section 106 of the National Historic Preservation Act, Hawai‘i Volcanoes National Park initiated consultation on June 15, 2015. The NPS sent a letter to the park’s consultation mailing list and met with the park’s Kūpuna consultation group. An archeological study was completed by ASM Affiliates to inform HVNP and HEL of any features that may be impacted by the project. Any proposed pole locations with potential for impact were relocated to ensure all proposed pole locations would have no adverse effect on cultural resources.

The National Park Service has determined there would be *No Adverse Effect* due to the avoidance of features. Formal written consultation with the Hawai‘i State Historic Preservation Office (SHPO) occurred on May 17, 2017. The final report *Archeological Study in Compliance with Section 106 of the National Historic Preservation Act for the Proposed Hawai‘i Electric Light Project to Upgrade/Replace Poles and Lines in a Utility Corridor from the Kīlauea Switching Station to the Volcano Substation* (report dated May 2017) was provided to the SHPO’s office. The SHPO did not provide a response within 30 days of receipt of the consultation letter and no consulting party has objected. Therefore, the NPS can proceed in accordance with 36 CFR Part 800.5(c)(1).

### *Native Hawaiian Consultation*

The proposed plan was discussed with the park’s Kūpuna consultation group members from Ka‘ū and Puna on July 9, 2015 and May 20, 2016; the meetings were held at the park. In addition, letters and electronic communications were sent prior to the meeting dates. Comments received were in support of the project.

### ***WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE QUALITY OF THE HUMAN ENVIRONMENT***

CEQ regulations at 40 CFR §1508.27 identify ten criteria for determining whether the selected alternative would have a significant effect on the human environment. The NPS reviewed each of these criteria given the environmental impacts described in the EA and concluded there will be no significant impacts for any criteria.

The selected alternative with the updated mitigation measures will not have a significant effect on the human environment. As described in the EA, the selected alternative has the potential for some adverse impacts on geology and soils, vegetation, wildlife, special status species, soundscapes, viewsheds, and archeological resources. The selected alternative will impact up to 1.7 acres of land in a discontinuous linear area adjacent to the state highway that traverses the park. The disturbance area is within 20 feet of the highway and the majority of the area has been disturbed in the past, such as during highway construction.

The selected alternative protects the most natural unobstructed, distant, and expansive views of Mauna Loa volcano. It also protects nearly two-thirds of the viewshed of Kīlauea volcano. In addition, the removal of the old poles and wires from Kīlauea Military Camp to Volcano Substation which are visible from a prime visitor use area in the park at Steaming Bluff, will directly benefit the natural quality of this largely forested viewshed.

**Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS.**

Impacts to the natural and cultural resources of the park were adequately analyzed in the EA. The project has no significant adverse impacts requiring further analysis.

**Degree of effect on Public Health or Safety.**

Public health and safety is not directly adversely affected by the selected alternative. The selected alternative will be beneficial to the public health and safety by establishing an accessible electrical infrastructure that can be efficiently and safely repaired and maintained. It also has the additional benefit of completing the communication network for the island which will also benefit public health and safety.

**Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.**

No wetlands or wild and scenic rivers exist in the park. The limited areas identified as potentially prime and unique farmlands are not currently in active production and the selected alternative will not impact those lands. With the implementation of mitigation measures, the selected alternative will not have a significant effect on historic or cultural resources, park lands, or ecologically critical areas. No wilderness occurs in the area affected by the selected alternative.

**Degree to which effects on the quality of the human environment are likely to be highly controversial.**

No controversial issues were identified during the public comment period and public response was minimal.

**Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.**

There are no highly uncertain or unknown risks that are anticipated to occur. The selected alternative has been described in enough detail to identify and mitigate risks to the human environment.

**Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.**

The selected alternative is consistent with current management methods, directives, and practices and therefore would not establish any precedent for future actions.

**Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.**

A connected action includes replacement of the poles from just outside the park's Ka'ū boundary to the Kīlauea switching station. The impacts for the segment outside the park were addressed in the HEL EA and the combined impacts of the two segments are not significant.

**Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.**

The selected alternative will not adversely affect or cause the loss or destruction of significant scientific, cultural, or historical resources. An archeological survey was completed and was used to determine the specific locations of the electrical infrastructure to ensure no significant resources would be impacted. The park's Section 106 Coordinator determined there would be *No Adverse Effect* due to the avoidance of features and a letter was sent to the Hawai'i State Historic Preservation Division on May 17, 2017 requesting concurrence. No response was received.

**Degree to which the action may adversely affect an endangered or threatened species or its critical habitat.**

As described in the EA, the selected alternative has the potential to impact special status wildlife species in the park. To minimize or eliminate potential impacts, the park developed mitigation measures through discussions with USFWS and the project lead, HEL. The USFWS concurred with the determination of *may affect, but not likely to adversely affect* on April 12, 2017. Additional clarifications for the project description and mitigation measures were sent by USFWS via email December 19, 2017 and incorporated into the final mitigation measures included in the FONSI.

**Whether the action threatens a violation of Federal, state, or local environmental protection law.**

The selected alternative will not violate federal, state, or local environmental protection laws.

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## CONCLUSION

Implementation of the selected alternative to Upgrade and Relocate Power Lines between Kīlauea Switching Station and Volcano Substation will not have significant impacts on the human environment. The determination is sustained by the analysis in the environmental assessment, agency consultations, the inclusion of public review, and the capability of mitigations to reduce or avoid impacts. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the selected alternative will not violate any federal, state, or local environmental law. Therefore, it has been determined that an environmental impact statement is not required for these actions, and the project will be implemented as soon as practicable.

Recommended:



Rhonda Loh, Acting Superintendent  
Hawai'i Volcanoes National Park

8/15/19

Date

Approved:



Stan Austin, Regional Director  
Pacific West Region, National Park Service

SEP 04 2019

Date