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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ESTHER KIA'AINA
FIRST DEPUTY

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CONSERVATION AND RESOURCES ENFORCEMENT
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF: OCCL: AJR

Schofield Generating Station Project

Herman Tuiolosega, Acting Director
Office of Environmental Quality Control
Department of Health, State of Hawai'i
235 S. Beretania St., Rm. 702
Honolulu, HI 96813

FILE COPY

JAN 08 2014

DEC 23 2013
OFFICE OF ENVIRONMENTAL
QUALITY CONTROL
RECEIVED
DEC 23 P 1:56

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE (EISPN) FOR THE PROPOSED SCHOFIELD GENERATING STATION PROJECT

Wahiawā District, Island of Oahu

TMKs: (1) 77001001, 002; (1) 73001001, 002, 006, 007, 008, 009, 011, 012, 013, 019, 022 & 024; (1) 76001001 & 006; (1) 94012001, 003 & 011

Dear Mr. Tuiolosega,

With this letter, the Department of Land and Natural Resources (DLNR) hereby transmits the environmental impact statement preparation notice (EISPN) for the proposed Schofield Generating Station Project (SGSP) situated on TMK(s): (1) 77001001, 002; (1) 73001001, 002, 006, 007, 008, 009, 011, 012, 013, 019, 022 & 024; (1) 76001001 & 006; (1) 94012001, 003 & 011, in the Wahiawā District on the Island of Oahu for publication in the next available edition of the Office of Environmental Quality Control (OEQC) Environmental Notice (EN).

We understand that publication of the EISPN in the Environmental Notice will initiate a 30-day public consultation period for parties to comment on the action and to request to become consulted parties in the preparation of the Draft Environmental Impact Statement (DEIS).

Enclosed is a completed OEQC publication form, two (2) copies of the EISPN, and PDF file of the same, and an electronic copy of the publication form in MS Word. Simultaneous with this letter, we have submitted the summary of the proposed land use in a text file by electronic mail to your office.

If there are any questions please contact Alex J. Roy, M.Sc. of the Office of Conservation and Coastal Lands at 808-587-0316.

Sincerely,



William J. Aila, Jr., Chairperson
Department of Land and Natural Resources

CC: *Ian C. Hirokawa - DLNR*
Hawaiian Electric Company, Attn: Jack Shriver
Tetra Tech, Inc., Attn: John Bock

Attachments: *OEQC Publication form (1 hard copy)*
EISPN (2 hard copies)
1 CD/R w/ PDF of EISPN and MSWord Document of OEQC Publication Form

APPLICANT ACTIONS

SECTION 343-5(C), HRS

PUBLICATION FORM (JANUARY 2013 REVISION)

Project Name: Schofield Generating Station Project (SGSP)
Island: O'ahu
District: Wahiawā
TMK: (1) 77001001, 002; (1) 73001001, 002, 006, 007, 008, 009, 011, 012, 013, 019, 022 & 024; (1) 76001001 & 006; (1) 94012001, 003 & 011
Permits/Approvals:

REC'D
DEC 23 11:57
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

- a. Easements for use of State lands - DLNR
- b. Conservation District authorization - OCCL
- c. Air Permit (Covered Source and Prevention of Significant Deterioration) – EPA/DOH
- d. Notice of Proposed Construction or Alteration - FAA
- e. Decision and Order - PUC
- f. Excavation Permit - Army
- g. Site Plan Review - Army
- h. Hazardous Waste Generator ID number (construction and operation)
- i. Spill Prevention, Control, and Countermeasure Plan (construction and operation)
- j. Equipment and Materials Handling, including materials disposal - DOT
- k. Energy Information Administration registration
- l. NPDES for storm water (construction and operation)
- m. Variance for noise during construction
- n. Emergency and Hazardous Chemical Inventory
- o. Airport Hazard Area Zone Permit
- p. Pressure Vessel Installation Permit
- q. Street Usage Permit - DOT
- r. Use and Occupancy Agreement (UOA) – DOT
- s. Approval to Cross State Water – Army Corps of Engineers
- t. Building Permit

Approving Agency: State of Hawai'i Department of Land and Natural Resources
1151 Punchbowl St., Room 131, Honolulu, HI 96813
Attn: William Aila, Chairperson
(808) 587-0400

Applicant: Hawaiian Electric Company
820 Ward Ave
Honolulu, HI 96814
Attn: Jack Shriver
(808) 543-4088

Consultant:

Tetra Tech, Inc.
1999 Harrison St. Ste. 500, Oakland, CA 94612
Attn: John Bock
(510) 302-6249

Status (check one only):

- DEA-AFNSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day comment period ensues upon publication in the periodic bulletin.
- FEA-FONSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
- FEA-EISPN** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day consultation period ensues upon publication in the periodic bulletin.
- Act 172-12 EISPN** Submit the proposing agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov). NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
- DEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.
- FEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
- Section 11-200-23 Determination** The accepting authority simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the proposing agency. No comment period ensues upon publication in the periodic bulletin.
- Section 11-200-27 Determination** The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.
- Withdrawal (explain)**

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page):

The proposed action is the granting of a lease and easement of Army land on Schofield Barracks, and granting of an easement and conservation district authorization to cross state land, to Hawaiian Electric for the construction, ownership, operation, and maintenance of a 50 MW biofuel-capable power generation plant (the Schofield Generating Station or SGS) and sub-transmission line to connect the plant to the Hawaiian Electric grid.

For Hawaiian Electric, the SGSP would provide a quick-starting facility to help maintain grid stability and compensate for increasing network penetration by variable power generation, such as wind and solar; provide a facility at a higher elevation and away from coastlines, which contributes to grid reliability and continuity if a natural disaster occurs; provide a physically secure facility on a military installation, contributing to grid continuity of operation in cases of a manmade threat; and make progress towards the State Renewable Portfolio Standards.

For the Army the SGSP would provide energy security for its three installations if loss of service occurs from the normal sources of electricity supporting these installations. It would also to help achieve the Army goals of producing renewable energy on Army-owned real property and increasing installation use of electricity from renewable energy sources.

1 **Notice of Intent to Prepare an Environmental Impact Statement for the**
2 **Schofield Generating Station Project (SGSP)**

3 **APPLICANT:**

4 Hawaiian Electric Company, Inc.
5 P.O. Box 3978
6 Honolulu, HI 96812-3978
7 Contact: Jack Shriver, (808) 543-4088

8
9 **APPROVING AGENCY:**

10 Department of Land and Natural Resources
11 1151 Punchbowl St., Room 131
12 Honolulu, HI 96813
13 Contact: William Aila, Chairperson (808) 587-0400

14
15 **DATES:**

16 All comments on this notice will be considered if received or postmarked on or before February 22,
17 2014.

18 All comments received are a part of the public record. All personal identifying information (for
19 example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible.
20 Do not submit confidential business information or otherwise sensitive or protected information.

21 **ADDRESSES:**

22 Please submit copies of your comments to both DLNR and the EIS Consultant (Tetra Tech, Inc).
23 Please send comments with the subject line of *SGSP EISPN* and include your email address if
24 possible. Transmission of comments to DLNR must be via U.S. Mail to DLNR at the address below,
25 as DLNR will only accept comments via mail:

26 Department of Land and Natural Resources
27 1151 Punchbowl St., Room 131
28 Honolulu, HI 96813
29 Attention: William Aila, Chairperson

30 Transmission of comments to Tetra Tech, Inc may be via any of the means listed below (email, fax,
31 or U.S. Mail). However, attachments to electronic comments will be accepted in Microsoft Word,
32 Excel, WordPerfect, or Adobe PDF file formats only:

33 Email: sgspcomments@tetratech.com.

34 Facsimile (fax): 703-385-6007 (Attention: SGSP EISPN).

35 U.S. Mail: Melissa DeSantis, Tetra Tech, Inc. (Attention: SGSP EISPN, 10306 Eaton Place, Suite 340,
36 Fairfax VA 22030).

37 Your comments will be forwarded to the Applicant (Hawaiian Electric).

38
39 **FOR FURTHER INFORMATION CONTACT:**

40 For more information on the project, please contact Mr. Jack Shriver, Senior Engineer,
41 Generation Project Development, Hawaiian Electric Company. Mr. Shriver can be reached
42 by phone at (808) 543-4088, Monday through Friday from 8:00 a.m. to 5:00 p.m. (Hawai'i
43 Standard Time), or by email at jack.shriver@hawaiianelectric.com.

1 BRIEF DESCRIPTION OF PROPOSED ACTION

2 Overview of the Proposed Action

3 The proposed action, referred to as the Schofield Generating Station Project (SGSP) consists of the
4 following:

5 • The U.S. Army’s lease of 10.3 acres of land, and the related granting of a 2.5 acre
6 interconnection easement, on Schofield Barracks and Wheeler Army Airfield to the
7 Hawaiian Electric Company, Inc. (Hawaiian Electric).

8 • The State of Hawai’i Department of Land and Natural Resources granting of a 1.28 acre
9 easement and a 0.7 acre conservation district authorization allowing for the construction of
10 a 46 kV electrical power transmission line between the SGSP site and the existing Wahiawa
11 Substation.

12 • Hawaiian Electric’s construction, ownership, operation, and maintenance of a 50 megawatt
13 capacity biofuel-capable power generation plant and 46 kilovolt sub-transmission line
14 required to connect the Schofield Generating Station to the Hawaiian Electric grid. Hawaiian
15 Electric would be the sole owner of the plant and the electrical power transmission facilities.

16 Figure 1 shows the location of the SGSP site relative to other existing uses in the region. The
17 drawing reproduced in Figure 2 depicts the conceptual layout of facilities that comprise the SGSP.
18 Figure 3 depicts the conceptual alignment of the electrical power transmission facilities that would
19 link the proposed project to Hawaiian Electric’s existing electrical power transmission and
20 distribution system.

21 The lease of federal property would be under the authority of 10 United States Code (USC) 2667,
22 “Leases: non-excess property of military departments.” The easement on federal property would
23 be under the authority of 10 USC 2668, “Easements for rights-of-way.” The easement over State
24 land would be as provided for under §171-95, Hawai’i Revised Statutes (HRS). The conservations
25 district use authorization would be pursuant to Chapter 183C, HRS, and related regulations. The
26 proposed facilities would be constructed and operated in accordance with all applicable laws and
27 regulations.

28 Purpose of and Need for the Proposed Action

29 The purpose of the project is to meet the common needs of Hawaiian Electric and the U.S. Army
30 Garrison—Hawaii for secure, reliable, and renewable power generation.

31 Hawaiian Electric would operate the SGSP as a peaking/cycling unit to meet load and reliability
32 requirements of the O’ahu grid; as such, under normal conditions, it would serve all Hawaiian
33 Electric customers. The SGSP would benefit Hawaiian Electric and the residents of O’ahu in a
34 number of ways. The six biofuel-capable reciprocating engine-generator sets would add 50 MW of
35 firm, utility-owned renewable energy capacity to the O’ahu electrical grid. These load-
36 following/peaking/cycling generating units are quick starting, which makes them particularly
37 helpful for maintaining grid stability as the amount of power from variable renewable sources
38 (wind and solar) increases over time. In short, they complement, rather than compete with, other
39 existing and anticipated renewable energy sources in the system. The SGSP would benefit
40 Hawaiian Electric’s system in other ways as well: (i) its location away from the coastline protects it
41 from natural disasters that could affect many of the electrical power sources on the island; (ii) its

1 ability to provide power directly to Wheeler Army Airfield (a FEMA designated relief airfield and
2 Hawaii National Guard site) will enhance disaster relief capacity on Oahu; (iii) its central O'ahu
3 location places it closer to users who are now relatively far from generating sources, thereby
4 enhancing grid stability and reducing power restoration times for the Wahiawa community in the
5 event of an outage; (iv) its position within a guarded military installation reduces its exposure to
6 man-made threats.; and (v) its use of renewable biofuels will contribute to State Renewable
7 Portfolio Standard goals.

8 The proposed action meets two needs for the Army. The SGSP would be a source of renewable
9 power that would enhance energy security for Schofield Barracks, Wheeler Army Airfield, and Field
10 Station Kunia if loss of service occurs from the normal sources of electricity supporting these
11 installations. It would also help achieve the Army goals of producing renewable energy on Army-
12 owned real property.

13 The Schofield Generating Station would operate on a mix of biofuel and diesel as required to meet
14 Hawaiian Electric's Renewable Portfolio Standards and the US Army's renewable energy goals, as
15 well as sustain a local demand for biofuels. Being multi-fuel capable, it would be able to run on a
16 combination of fuels as necessary to ensure operations are economically viable and can continue
17 under adverse operating conditions.

18 As the penetration of as-available energy resources, particularly solar photovoltaics, increases on
19 Hawaiian Electric's grid, the load curve is expected to change in two ways. Firstly, during daylight
20 hours when photovoltaic production is high total energy demand served by the grid's firm
21 generation sources is likely to be reduced. This effect is expected to create a short morning peak
22 (before the sun rises) for the firm generation sources, and a more pronounced evening peak (after
23 sunset and coincident with peak total demand) for the firm generation sources. Secondly, as the
24 proportion of power and energy provided by wind and solar increases, the effects of clouds and
25 wind variability will have a correspondingly larger impact on grid stability throughout the day.

26 Schofield Generating Station's combination of quick-starting, flexible, and high efficiency
27 capabilities would combine traditional definitions of "cycling" and "peaking" units, and would
28 instead meet both of these needs as a peaking/cycling station. As such, it would allow the grid to
29 accommodate more fluctuating renewable energy than would otherwise be the case. Accordingly,
30 the EIS will analyze an intermittent operating scenario in which the facility would operate at loads
31 that vary between maximum continuous output (all six engines operating at full load) and
32 minimum load (one engine operating at roughly 50 percent load), for up to 2,200 hours per year
33 (approximately six (6) hours/day). If it were operated in such a fashion, it would consume up to
34 eight (8) million gallons of fuel per year.

35 If demand increases, operations of other generating facilities decline, and/or future renewable
36 resources do not develop, full-time (rather than intermittent) operation could become a viable
37 operating scenario. As the SGSP would be permitted to operate 7 days a week and 24 hours per
38 day, this EIS will also analyze the impacts of full (100%) operation as a reasonably foreseeable
39 upper bound of effects. Under full operation, each engine would operate 8,760 hours per year, and
40 the SGS would use up to 31.5 million gallons of fuel (a combination of biofuels and fossil fuels) per
41 year.

42 The agreement under which the SGSP would be constructed and operated would, under certain
43 conditions such as sustained outages or security threats, give the Army "first call" on the electrical
44 energy it produces, and the included transmission facilities would allow the power it produces to be
45 "islanded" to give priority to the Army facilities. SGSP will also shorten the time required to restore

1 power to the Wahiawa community, and have the capability and capacity to start up other Hawaiian
2 Electric generation units at Waiiau Power Plant, expediting the restoration of the grid in the event of
3 an island-wide outage. The 50 MW firm power capacity of the SGSP is sufficient to meet the three
4 Army installations' peak electrical power requirements for all operational needs, administrative
5 functions, logistics, and quality of life functions, thereby providing energy security for the
6 installations if power from the normal source of electricity supporting these Army installations (i.e.,
7 the Hawaiian Electric island-wide grid) is interrupted. Thus, the proposed action would help to
8 ensure that the Army's critical national security and first response missions can be carried on even
9 when the island wide utility grid has been compromised.

10 **DETERMINATION & REASONS SUPPORTING DETERMINATION:**

11 The Department of the Army has determined that the SGSP is an action that is subject to the
12 National Environmental Policy Act (NEPA), as amended, the Council on Environmental Quality
13 (CEQ) NEPA regulations (40 CFR Parts 1500 through 1508), and the Department of the Army's
14 NEPA implementing procedures (32 CFR Part 651). It has further determined that it will prepare
15 an environmental impact statement for the proposed undertaking.

16 The Department of Land and Natural Resources has determined that the SGSP is an action subject
17 to Chapter 343 and has further determined that an environmental impact statement should be
18 prepared. Hawaiian Electric's proposal calls for construction of a new 6-mile long overhead 46 kV
19 sub-transmission line that would allow power from the SGSP to be delivered to the existing
20 Hawaiian Electric 46 kV system. A segment of that route passes over State lands. The granting of
21 the easement for that land constitutes use of State land that is subject to Chapter 343, and Hawai'i
22 Administrative Rules §11-200.

23 In accordance with § 343-5(h), HRS, because this action is subject to both the NEPA and to Chapter
24 343, the Army, the Department of Land and Natural Resources and Hawaiian Electric are
25 cooperating to reduce duplication between federal and state requirements by preparing joint
26 environmental impact statement documents with concurrent public review.

27 In 2012, the State Legislature enacted Act 172, allowing the Chapter 343 process to begin with
28 preparation of an environmental impact statement preparation notice (EISPN) rather than a draft
29 environmental assessment (DEA) in cases where the agency determines that an EIS is likely to be
30 required. This brings the law into alignment with NEPA, which has always allowed for the
31 preparation of an EIS if a Federal agency believes that the action may have a significant impact on
32 the environment.

33 It is the Army's and DLNR's experience that actions with the size and scope of the SGSP have the
34 potential to have significant environmental effects and benefit from the public review that is
35 provided by the EIS process; therefore, they have decided to prepare an EIS without the
36 preparation of an EA. The Army expects to initiate the EIS scoping process in January 2014 with
37 publication of a Notice of Intent in the Federal Register coinciding with publication of the EISPN.

38 The Joint Federal/State EIS will examine in detail the potential beneficial and adverse effects of
39 implementing the proposed lease/easement action and the construction/operation of the SGSP.
40 The EIS will assess the potential for direct, indirect, and cumulative effects on the human, natural,
41 and cultural environment and identify mitigation measures for adverse effects.

42 The EIS will also report the effects of a No Action Alternative as prescribed by federal and state
43 regulations to serve as the baseline against which the proposed action and alternatives are
44 analyzed. Under the No Action Alternative, the Army would not execute the lease/easement, DLNR

1 would not grant the easement, and Hawaiian Electric would not construct the electrical power
2 generation and transmission facilities. Under normal conditions, Hawaiian Electric would continue
3 to use existing electrical generation facilities, fuels, and grid assets to supply power to its
4 customers, including the Army. During periods when the grid is unable to provide power to the
5 three Army installations, they would rely on their existing fossil fuel-powered backup generators.
6 Because those existing units are able to provide less than 10 percent of the amount needed, the vast
7 majority of the activities on the installations would be interrupted until normal power is restored.

8 Finally, in accordance with NEPA and Chapter 343 requirements, the EIS will also discuss whether
9 or not there are additional reasonable alternatives that could meet the purpose of the project and
10 the needs of both the Army and Hawaiian Electric. If such alternatives are found to exist through
11 the scoping process, they will be considered in the EIS.

12 The EIS will evaluate the full range of potential environmental, cultural, and socioeconomic impacts
13 associated with implementing the proposed action and alternatives, including short-term impacts
14 associated with construction. The following impact categories have been tentatively identified for
15 consideration in the EIS:

- 16 • Cultural and historical resources (including Native Hawaiian resources).
- 17 • Air quality (including climate change and greenhouse gas emissions).
- 18 • Water resources (including floodplain, wetlands, and stormwater management).
- 19 • Geology and soils.
- 20 • Land use.
- 21 • Biological resources (including threatened and endangered species, special status species,
22 and related sensitive resources).
- 23 • Traffic and transportation.
- 24 • Airspace management.
- 25 • Public health and safety.
- 26 • Noise.
- 27 • Hazardous materials and waste management.
- 28 • Visual resources.
- 29 • Socioeconomics.
- 30 • Environmental justice (disproportionately high and adverse impacts to minority and low-
31 income populations).
- 32 • Protection of children (from environmental health risks and safety hazards).
- 33 • Utilities and infrastructure.

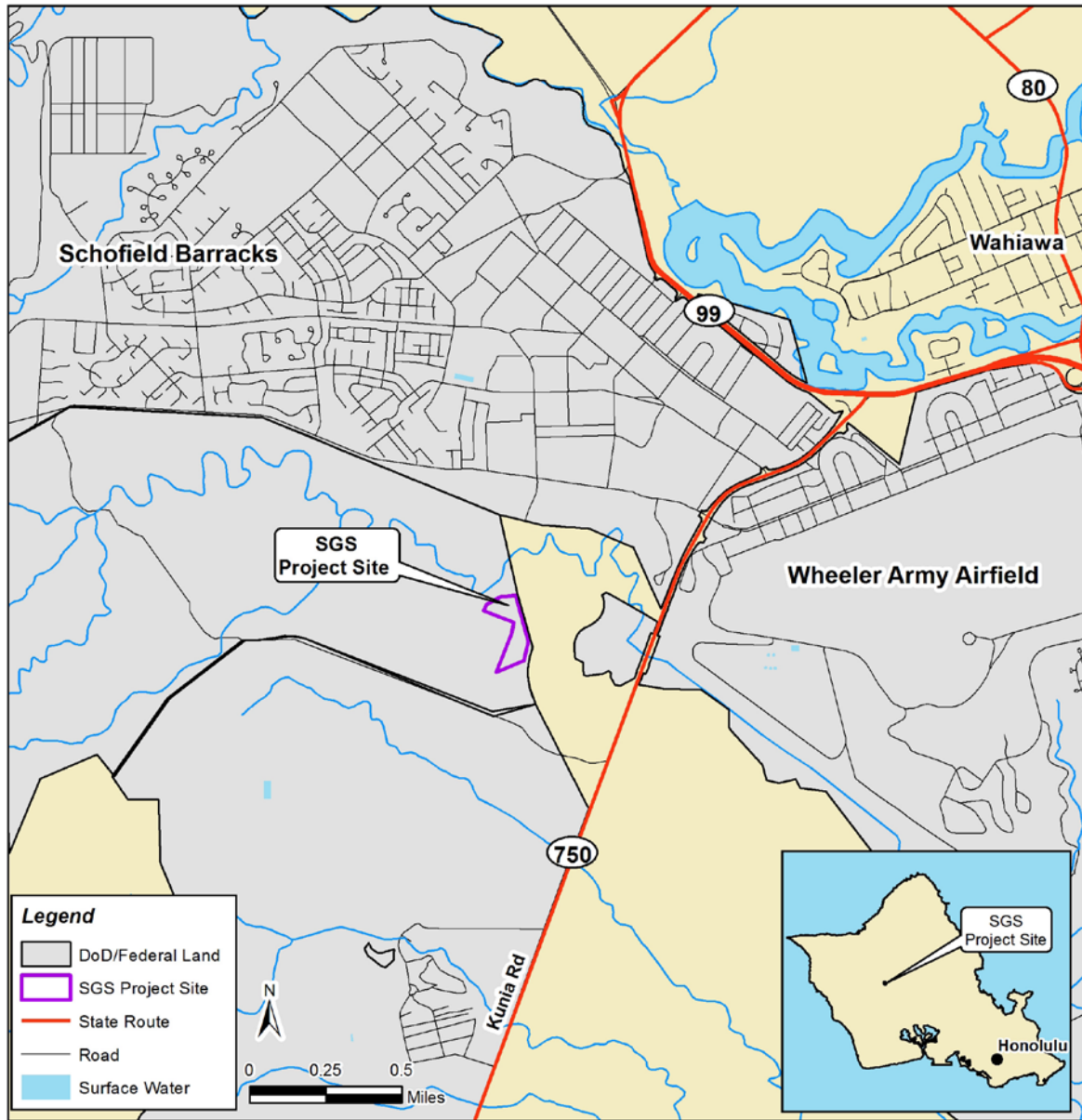
34 The Army and Hawaiian Electric anticipate that they will conduct several studies in support of the
35 environmental impact statement. These include:

- 36 (i) a traffic study to analyze the potential impacts to traffic flow during construction and
37 operation along Kunia Road and within Schofield Barracks;
- 38 (ii) an air quality impact study evaluating the effects of constructing and operating the
39 SGSP;
- 40 (iii) a stormwater characterization study for the SGSP site;
- 41 (iv) a Phase I cultural resources survey on the SGSP and transmission line properties; and
42 (v) a separate Cultural Impact Assessment (CIA) as required by HRS Chapter 343.

43 **GOVERNMENT AGENCIES RESPONSIBLE FOR APPROVALS:**

44 The EIS will be jointly approved by the Commander of the US Army Garrison—Hawaii and the
45 Department of Land and Natural Resources.

1 **Figure 1** Location of the Proposed Action.



2

1 Figure 3 Conceptual Alignment of the Proposed 46 kV Transmission Facilities

