# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC.

DOCKET NO. 02-0129

For Approval to Commit Funds in Excess of \$500,000 for Project Y-00028 Camp Smith #2 Substation: P0000577 - 46kV Line Extension; P0000578 - 5/6.25MVA Transformer; and P0000602 - 12kV Line Extension.)

DECISION AND ORDER NO. 19653

Chief Clerk of the dommission

ATTEST: A True Copy

KAREN HIGASHI

Chief Clerk, Public Utilities

Compission | State of Hawaii.

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### DECISION AND ORDER

I.

By application filed on May 14, 2002, HAWAIIAN ELECTRIC COMPANY, INC. (HECO) requests commission approval to undertake complete the proposed Project Y-00028, involving the Camp Smith #2 substation (project). Specifically, HECO seeks to: estimated \$1,308,039 (1)for the project; (2) remove, re-locate, and extend 46 kilovolt (kV) overhead subtransmission lines at Camp Smith, adjacent to a residential area, i.e., Halawa Heights, island of Oahu. HECO makes its requests in accordance with Section 2.3.g.2 of General Order No. 7, Standards for Electric Utility Service in the State of Hawaii, and Hawaii Revised Statutes (HRS) 88 269-27.5 and 269-27.6.

Copies of the application were served on the Department of Commerce and Consumer Affairs, Division of Consumer Advocacy (Consumer Advocate).

On July 19, 2002, the commission held a public hearing at Gus Webling Elementary School, Halawa Heights, on HECO's application, in accordance with HRS § 269-27.5.

On August 22, 2002, HECO responded to the Consumer Advocate's information requests. By position statement filed on September 10, 2002, the Consumer Advocate does not object to the approval of HECO's application.

II.

Α.

The United States Department of Navy (U.S. Navy) plans to construct a new Pacific Command Headquarters facility at its Camp Smith base in Halawa. The new headquarters: (1) will serve as a base of operations for Pacific Command and Special Operations personnel; and (2) is scheduled for completion in the year 2004. With this new facility, Camp Smith's electrical load is projected to increase from 3.95 megavoltampere (MVA) to 6.33 MVA.

Currently, HECO provides electricity to Camp Smith by a dedicated 46-12kV, 7.5 MVA transformer, supported by concrete beams, located at HECO's Camp Smith #2 substation.

The U.S. Navy "has requested redundant backup of [HECO's] electrical facilities for increased reliability." To accommodate the U.S. Navy's request, HECO intends to undertake and complete the proposed project.

¹Representatives from HECO, the Consumer Advocate, and Life of the Land, appeared and testified at the public hearing. Representatives from the United States government appeared but did not testify. By letter dated August 1, 2002, HECO submitted its responses to the questions Life of the Land raised at the public hearing.

The project will consist of four components: (1) the expansion of HECO's Camp Smith #2 substation; (2) 46 kV overhead subtransmission line work; (3) 12 kV underground line work; and (4) communications work. The estimated cost of the project is \$1,308,039, of which approximately \$1,085,057 will funded by the U.S. Navy in the form of cash contributions-in-aid-of-construction. HECO's share of the project's cost is approximately \$222,982.

#### Camp Smith #2 Substation Expansion

HECO intends to expand the existing substation by:

- 1. Constructing: (A) two concrete pads for two transformers; (B) a concrete pad for a self-contained building; (C) an asphalt concrete driveway; and (D) a self-contained building for panels, communication equipment, and a 48 VDC battery bank.
- 2. Installing: (A) three 46 kV 800 amp group-operated disconnect switches; (B) two 12 kV 500 amp group-operated disconnect switches; (C) related equipment; and (D) approximately 60-feet of 4" ducts, 50-feet of 4 5" ducts, foundations and steel structures to support the disconnect switches, insulators, and lightning arrestors.
- 3. Relocating the existing 7.5 MVA transformer onto the new concrete pad.
- 4. Installing: (A) a second 5/6.25 MVA transformer onto the other, new concrete pad; and (B) related 46 kV and 12 kV structures and associated equipment.

<sup>&</sup>lt;sup>2</sup>In addition, the U.S. Navy will contribute approximately \$54,493 for the general excise tax.

In addition, the expanded substation "will be surrounded by an 8-foot high galvanized chain link fence and the entire site will have a ground grid buried 1-foot deep and covered with 4" thick rockfill."

#### 46 kV Overhead Line Work

Currently, the existing substation is connected to a single 46 kV overhead subtransmission line. Following the substation's expansion:

1. The existing 46 kV subtransmission line will be re-located in part and removed in part.

In particular, subject to design or other changes, the re-location of the 46 kV feeder serving the substation will involve the installation of: (A) one 70-foot wood pole; (B) two 55-foot wood poles; and (C) approximately 400 circuit feet of three-phase 556.5 KCM AL 46 kV conductors and associated materials. The 70-foot pole will replace the existing pole P79.

Following the completion of the re-location, a section of the 46 kV subtransmission line will be removed.

2. The existing overhead Halawa #4 46 kV subtransmission line will be: (A) tapped between existing poles P79 and P80; and (B) extended to the newly installed transformer, located at the expanded Camp Smith #2 substation.

Specifically, subject to design or other changes, the overhead line extension will involve the installation of: (A) one 70-foot wood pole; (B) one 55-foot wood pole; and (C) approximately 300 circuit feet of three-phase 556.5 KCM AL 46 kV conductors and associated materials.

Following the completion of the extension, a section of the 46 kV subtransmission line will be removed.

As a result of the above-described 46 kV overhead line work, the expanded substation will be served by two overhead

46 kV subtransmission lines, one for each transformer. The removal, re-location, and extension of the overhead subtransmission lines will occur on Camp Smith, near its property line that runs adjacent to Halawa Heights homes.

HECO states that the re-located and extended 46 kV overhead subtransmission lines will be visible from: (1) military housing quarters located on Camp Smith; and (2) nearby homes located at Halawa Heights.

#### 12 kV Underground Line Work

HECO plans to install two short 12 kV underground connections from the Camp Smith #2 substation 12 kV bus structure to a handhole immediately outside the substation fence. There, the circuits will be spliced to customers' cables emanating from their switchboards. For the 12 kV underground lines, HECO will install approximately: (A) 50-feet of 5" ducts; (B) 50-feet of 3-1/C, 500KCM, aluminum, polyethylene cables; and (C) associated materials.

HECO also intends to install two 12 kV electrical feeders.

#### Communications

"to allow remote monitoring and control of Distribution Automation . . . functions and telemetering of power quality information between the new substation equipment and HECO's Ward Avenue Dispatch Center." The communications equipment will be housed in the substation's equipment cabinet. HECO will

install antennas on a fiberglass monopole structure to link the communications equipment to existing communications systems.

The communications work will also involve the installation of 25 feet of 1 - 2" concrete-encased duct for cabling between the communications equipment and antennas.

C.

At the outset, the Consumer Advocate notes that a portion of the work is to accommodate the U.S. Navy's request. This work includes the "installation of a second transformer, a second 46 kV line extension, and communications work." The remaining portion of the work is to "relocate the existing temporary 7.5 MVA transformer to make the installation of the existing transformer permanent."

The Consumer Advocate states that the installation of the second transformer, second 46 kV line extension, and communications work, appears reasonable. This portion of the project "will meet the Navy's requirements and it appears that the costs is not anticipated to have an impact on the general ratepayer as the Navy is paying for this portion of the work."

Meanwhile, the Consumer Advocate states that the remaining portion of the project -- the relocation of the existing temporary 7.5 MVA transformer -- is to correct an apparent oversight by HECO. Mainly, that the initial installation of the temporary transformer would be converted to a "permanent installation as soon as equipment for the permanent installation is [made] available[,]" at no cost to the

U.S. Navy. The cost for this portion of the project, approximately \$168,489, will be paid for by HECO.

The Consumer Advocate does not object to the relocation of the temporary transformer to make its installation permanent. At the same time, it states that HECO's decision "to not place a permanent transformer in a more timely manner raises questions about Company procedures and the Company's adherence to those procedures."

Lastly, the Consumer Advocate recognizes that the project's total costs are estimates. Thus, upon the filing of the project's final cost report, "the Consumer Advocate can review and better quantify the reasonableness of the actual costs incurred to complete the project and pursue issues, if any, regarding the reasonableness of the instant project's actual costs in HECO's next rate proceeding."

D.

Upon careful review, the commission finds that the project is reasonable and consistent with the public interest. The project will: (1) provide Camp Smith with back-up, redundant electrical service, consistent with the U. S. Navy's needs; and (2) convert the existing, temporary 7.5 MVA transformer into a permanent installation.

 $<sup>^3\</sup>underline{See}$  Exhibit IV to the application, HECO's letter, dated November 28, 1968, to the U.S. Navy.

The commission also finds that the re-location, removal, and extension of the subject 46 kV subtransmission lines, above ground, are reasonable and consistent with HRS § 269-27.6(a). Upon review, the commission is not convinced that a benefit exists that outweighs the costs of undergrounding the 46 kV subtransmission lines that will serve HECO's Camp Smith #2 substation.

In addition, the commission is unaware of any government policy either requiring the undergrounding or committal of funds for the costs of undergrounding. Furthermore, no governmental agency or other party has indicated a willingness to pay for the undergrounding. Lastly, the Consumer Advocate does not oppose the approval of the application, noting that "[t]he benefits of undergrounding the 46 kV line extensions do not appear to outweigh the additional costs that would be incurred to place the line underground." Also, "it appears that the visual impact of the proposed 46 kV line will be minimal."

Upon review, the commission concludes that the re-location, removal, and extension of the subject 46 kV subtransmission lines, above ground, should be approved.

#### III.

#### THE COMMISSION ORDERS:

1. HECO's request to expend an estimated \$1,308,039 for Project Y-00028, is approved; provided that no part of the project may be included in HECO's rate base unless and until the

project is in fact installed, and is used and useful for utility purposes.

- 2. HECO's request to remove, re-locate, and extend the Camp Smith #2 substation 46 kV subtransmission lines, above ground, is approved.
- 3. HECO shall submit a report within 60 days of the project's commercial operation, with an explanation of any deviation of 10 per cent or more in the project's costs from that estimated in the application. HECO's failure to submit this report will constitute cause to limit the cost of the project, for ratemaking purposes, to that estimated in the application.

DONE at Honolulu, Hawaii this 11th day of September, 2002.

PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

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Mary At Homers	1/-
VILLANDE STA TAMANA	WI

Wayne H. Kimura, Chairman

Janet E Kawelo Commissioner

APPROVED AS TO FORM:

Michael Azama

Commission Counsel

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By (RECUSED

Gregg J. Kinkley, Commissioner

#### CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing <u>Decision and Order No.19653</u> upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS DIVISION OF CONSUMER ADVOCACY P. O. Box 541 Honolulu, HI 96809

WILLIAM A. BONNET
VICE PRESIDENT, GOVERNMENT AND COMMUNITY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P. O. Box 2750
Honolulu, HI 96840-0001

LORIE ANN NAGATA
TREASURER
HAWAIIAN ELECTRIC COMPANY, INC.
P. O. Box 2750
Honolulu, HI 96840-0001

Catherine Sakato

DATED: September 11, 2002