BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of
HAWAIIAN ELECTRIC COMPANY, INC.

For approval to commit funds in Excess of $500,000 for
Item P0000064, the Waiau Fuel Pipeline Project

DOCKET NO. 01-0444

DECISION AND ORDER NO. 21104

Filed July 2, 2004
At 2:30 o’clock P.M.

Chief Clerk of the Commission

ATTEST: A True Copy
KAREN HIGASHI
BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
)
HAWAIIAN ELECTRIC COMPANY, INC. ) Docket No. 01-0444
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For approval to commit funds in ) Decision and Order No. 21104
Excess of $500,000 for )
Item P0000064, the Waiau Fuel )
Pipeline Project )

DECISION AND ORDER

I.
Introduction

On November 6, 2001, HAWAIIAN ELECTRIC COMPANY, INC. ("HECO" or "Company") requested commission approval to commit an estimated $26.9 million for the construction of a new Company-owned 8-inch fuel pipeline connecting the Barber's Point Tank Farm ("BPTF") and the Waiau generating station new system ("Waiau Fuel Pipeline Project").\(^1\) The Waiau Fuel Pipeline Project also included the construction and modification of other ancillary facilities at the BPTF, Waiau generating station and the Iwilei Tank Farm, which would allow: (1) the operation of the new pipeline; and (2) trucking of fuel from the BPTF to the Iwilei Tank Farm for the Honolulu Power Plant.

On December 16, 2002, the commission issued Decision and Order No. 19875, which approved HECO's request to expend the estimated $26.9 million, with the qualifications that:

\(^1\)HECO's Application, filed on November 6, 2001.
(1) no part of the project be included in HECO's rate base unless and until the project is installed and is used and useful for utility purposes; and (2) the filing of the stipulated reporting requirements agreed to by HECO and the Division of Consumer Advocacy, Department of Commerce and Consumer Affairs ("Consumer Advocate").

On October 24, 2003 and February 18, 2004, HECO filed letters with the commission indicating that a further engineering review found that the estimated additional 5.7 megawatts ("MW") to 8.2 MW load at the Barber's Point Tank Farm ("BPTF") for the new ancillary facilities to support the pipeline project could not be served by the existing 12 kilovolts ("kV") circuits, and a new 46 kV primary feeder (and a 46 kV back-up) would be required.2 Thus, HECO requests that the commission determine that it be allowed to construct the 46 kV line extension related to the Waiau Fuel Pipeline project above the surface of the ground, pursuant to Hawaii Revised Statutes ("HRS") § 269-27.6 ("Supplemental request").

On April 29, 2004, the Consumer Advocate filed a letter recommending the commission approve HECO's supplemental request and allow the construction of the 46 kV line extensions above the surface of the ground.3

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2HECO's February 18, 2004 letter amended the design of the new 46 kV overhead line extension, described in the October 24, 2004 letter.

3The Consumer Advocate's comments were limited to the decision regarding the overhead or underground placement of the proposed 46 kV line extensions.
II.

46 kV Overhead Line Extensions

The 46 kV overhead line work for the Waiau Fuel Pipeline Project will consist of two (2) 46 kV line extensions to serve the proposed new load at HECO's BPTF. The primary 46 kV feeder involves tapping the existing Kahe-Standard Oil #1 46 kV circuit on wood pole P.13 on Hanau Street, attaching the primary feeder to the existing AES-CEIP #1 138 kV steel poles P.3A and P.2A, installing and attaching the primary feeder to two new steel poles and one new wood pole, and terminating the primary feeder at the BPTF substation.

The 46 kV overhead line work for the primary feeder requires the replacement of one existing 60-foot wood pole with a 65-foot (was 70-foot) wood pole to accommodate the line tap, and the installation of one new 55-foot (was 60-foot) steel pole (P.2/2A), and one (1) new 110-foot (remains the same) steel pole (P.1/2A), and approximately 800 circuit feet of three-phase 336.4 KCM 46 kV conductors.

At the corner of Hanua Street and the turnoff to the BPTF substation, HECO planned to have the 46 kV back-up feeder cross over primary property owned by Hanua Property LLC ("Hanua") between poles P.4 and P.3A. HECO has modified its design in this area to extend the 46 kV line to Pole P.4X, and mid-span tap between poles P.4X and P.4.

At the intersection of Malakole Road and Hanua Street, HECO planned a mid-span tap to the CEIP#3-CEIP#45 46 kV circuit between poles JP.1/35X and JP.35X. However, HECO will be
replacing the existing 50-foot pole JP.1/35X with a 55-foot pole and converting to a vertical line configuration on the pole. HECO will install a new 65-foot wood pole P.1/9 to aid in the mid-span tap.

The back-up 46 kV line involves mid-span tapping the CEIP#3-CEIP#45 46 kV circuit between existing wood poles P.1/35X and P.35X on Malakole Road, installing and attaching the back-up line to a new wood pole P.1/9, and then attaching to the existing AES-CEIP #1 138 kV steel poles P.9 through P.4X, mid-span tapping the back-up line between existing AES-CEIP #1 steel poles P.4X and P.4, and attaching to P.3A through P.2A, attaching the back-up line to the two new steel poles for the primary feeder, installing and attaching the back-up line two new wood poles, and terminating the back-up line at the BPTF Substation.

The 46 kV overhead line work for the back-up feeder requires the replacement of one existing 50-foot wood pole with a 55-foot wood pole (JP.1/35X) to accommodate the line tap, and the installation of one (1) new 65-foot wood pole (P.1/9), two (2) new 55-foot (was 60-foot) wood poles (P.4/2A, P.5/2A), double circuiting the new 55-foot and 110-foot steel poles installed with the primary feeder, and the installation of approximately 4,000 circuit feet (was 3,500 circuit feet) of three-phase 336.4 KCM 46 kV conductors.

The estimated cost to construct the two 46 kV line extensions overhead is $339,800.
III.

Discussion

Whenever a public utility applies to the commission for approval to construct, erect, or otherwise build a new 46 kV or greater high-voltage electrical transmission system, either above or below the surface of the ground, HRS § 269-27.6(a) requires the commission to consider certain factors: (1) Whether benefit exists that outweighs the costs of placing the electric transmission system underground; (2) Whether there is a governmental public policy requiring the electric transmission system to be constructed underground, and the governmental agency establishing the policy commits funds for the additional costs of undergrounding; (3) Whether any governmental agency or other parties are willing to pay for the additional costs of undergrounding; (4) The Consumer Advocate's recommendation; and (5) Any other relevant factors. Upon review and consideration of these factors, the commission finds that the construction of the 46 kV line extensions overhead is reasonable and consistent with HRS § 269-27.6(a). Specifically, the commission finds the following:

First, there are no compelling benefits to outweigh the additional costs of placing the proposed 46 kV line extensions in underground facilities. The estimated cost to place the 46 kV line extensions overhead is $339,800 while the estimated costs of an underground placement would be $1,357,400. As a result the estimated cost differential to place the 46 kV
line extensions above, as compared to below, the ground is approximately $1,017,600.

In addition, there are already two (2) overhead electric lines in the project area. Along Hanua Street, there are two (2) existing transmission lines, the Kahe-Standard Oil #1 46 kV line and the AES-CEIP #1 138 kV line. Along Malakole Road, there are two existing 46 kV lines, the CEIP #3 - CEIP #45 46 kV line and the Kahe Standard Oil #1 46 kV line. In addition, there are overhead 12 kV lines in the area along the same street and adjacent streets.

Although the proposed placement will increase the number of transmission lines in the area, most of the lines in the proposed project will use existing poles. Furthermore, the additional poles required for the project are expected to be the same height as the existing poles; thus, the visual impact of the new poles will be mitigated.

Furthermore, the Consumer Advocate notes that the project area is zoned "Industrial" and is not in sight of residential homes. Further, considering the other infrastructure and equipment located in the area, such as the Malakole Substation, the AES power plant and substation, it does not appear that the addition of two (2) other 46 kV line extensions will have an additional significant visual impact on the project area.

Moreover, the Consumer Advocate states that undergrounding the 46 kV line extensions does not appear to reduce HECO's operation and maintenance expense and/or increase
the life of the poles; accordingly, it does not appear that there are other factors or benefits to be considered.

Secondly, there does not appear to be any governmental policy requiring the placement, construction, erection, or building electric transmission systems underground.

Third, there is no governmental agency or other parties willing to pay for the additional costs of placing the 46 kV line extensions underground. HECO represents that the City and County of Honolulu ("City") is not willing to pay to underground the proposed 46 kV line extensions. In addition, the Consumer Advocates states it does not believe that any other party would be interested in contributing to place the line underground, since the proposed 46 kV lines are to be installed on the City road right-of-way.

Fourth, the Consumer Advocate does not object to the Company placing the proposed 46 kV line extensions overhead.

Finally, there are no other relevant factors to consider in placing the 46 kV line extensions overhead.

Based on the above findings, the commission concludes that HECO's supplemental request to place the 46 kV line extensions above ground should be approved, pursuant to HRS § 269-27.6. 4

4By this order, the commission only decides whether the 46kV line extensions should be placed overhead or underground. This order makes no determination as to the reasonableness of the additional costs or the increases or costs to the project.
IV.

Order

THE COMMISSION ORDERS that HECO's supplemental request to place the 46 kv line extensions above ground, is approved; pursuant to HRS § 269-27.6.

DONE at Honolulu, Hawaii this 2nd day of July, 2004.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By

Carlito P. Caliboso, Chairman

By

Wayne H. Kimura, Commissioner

By

Janet E. Kawelo, Commissioner

APPROVED AS TO FORM:

Kevin M. Katsura
Commission Counsel
CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Order No. 21104 upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

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DATED: July 2, 2004

Karen Higashi

Karen Higashi