BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of
HAWAII ELECTRIC LIGHT COMPANY, INC.

For Approval to Commit Funds in Excess
of $2,500,000 for Item H0001004,
Waimea-Keamuku 7200 Line Reconductoring

DOCKET NO. 2008-0060

ORDER GRANTING INTERIM APPROVAL

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of

HAWAII ELECTRIC LIGHT COMPANY, INC. Docket No. 2008-0060
For Approval to Commit Funds in Excess of $2,500,000 for Item H0001004, Waimea-Keamuku 7200 Line Reconductoring

ORDER GRANTING INTERIM APPROVAL

By this Interim Order, the commission approves HAWAII ELECTRIC LIGHT COMPANY, INC.'s ("HELCO") request for interim approval to permit HELCO to commit funds and, if necessary, to start installation in connection with Item H0001004, Waimea-Keamuku 7200 Line Reconductoring Project ("Project").

I.

Background

On April 2, 2008, HELCO filed an Application for commission approval to construct an overhead 69 kilovolt ("kV") transmission line, pursuant to Hawaii Revised Statutes ("HRS") § 269-27.6(a).¹ Specifically, HELCO seeks a commission determination that the reconductored and reinforced

¹HELCO served a copy of the Application on the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate"), an ex officio party to this docket pursuant to HRS § 269-51 and Hawaii Administrative Rules § 6-61-62. HELCO and the Consumer Advocate will be referred to herein as "the Parties."
69 kV transmission line for the Project be constructed above the surface of the ground, pursuant to HRS § 269-27.6(a). HELCO also requests that the commission conduct a public hearing, as required by HRS § 269-27.5.²

In the Application, HELCO also requests interim approval "immediately after the [c]ommission holds the public hearing for the Waimea-Keamuku 7200 Line Reconductoring project to permit HELCO to commit funds and, if necessary, to start the installation for [the Project] prior to receiving a [c]ommission determination that the reconducted and reinforced 69 kV transmission line be constructed above the surface of the ground pursuant to HRS § 269-27.6(a)."³

By letter dated and filed on June 18, 2008, HELCO notified the commission that, since the public hearing will be held on July 16, 2008, it "will be proceeding with the ordering of long lead time materials required in the [Project] prior to receiving interim approval and the public hearing scheduled for July 16, 2008 . . . . However, construction of the 7200 Line project will not begin until interim approval is received. Therefore, interim approval immediately after the public hearing is still requested to allow HELCO to start construction of the 7200 Line project in July 2008.

²In its Application, HELCO states that a public hearing is required under HRS § 269-27.5 because "[t]here are residential homes in the Lalamilo Farm Lots and one residence along Mamalahoa Highway that are in proximity to the proposed 69 kV line work." Application, at 19.

³Application at 19-20.
This will allow [HELCO] to stay on schedule and complete construction by approximately December 2008."

II.

Request For Interim Approval

In support of its request for interim approval, HELCO states that, "[n]ormally, [it] would wait for a [c]ommission decision pursuant to Paragraph 2.3(g)(2) of General Order No. 7, HRS § 269-27.5 and HRS § 269-27.6 before ordering materials or starting construction for a 69 kV overhead line project. However, . . . there is a system need to complete the 7200 Line project as soon as possible."5

In support of its request for interim relief, HELCO represents:

1. The Waimea-Keamuku (7200) and Waimea-Ouli (7300) 69kV Transmission Overload Study, Final Report, dated July 2006 (the "Study"), found that "[b]oth the 7200 and 7300 lines are presently at risk for overloads of about 20% of their emergency ratings."6

2. The installation of ST-7 at Keahole, in conjunction with the existing CT-4 and CT-5 in combined cycle mode, will provide base loaded generation at Keahole and

---

5Letter from HELCO to the commission dated June 18, 2008, at 1-2.

6Application, at 20.

5Application, at 3
will reduce, but not eliminate the overload risk for both the 7200 and 7300 lines.\textsuperscript{7}

3. Installation of additional generation in the east (e.g., Hilo, Puna) and in the north (e.g., Waimea, Haina) "will worsen the present overload risks, while installation of based loaded west side generation will help to alleviate the present overload risks."\textsuperscript{8}

4. "Since both transmission lines are presently at risk for overload conditions, and because the addition of ST-7 at Keahole does not resolve these risks, there are both immediate and long term needs to eliminate the overload risks on the 7200 and 7300 lines."\textsuperscript{9}

5. Future generation expansion would worsen the overload risks for the 7200 and 7300 lines and "increase the required current carrying capacity of the 7200 and 7300 lines to about 810 amps."\textsuperscript{10}

6. "Long range generation expansion (following the installation of ST-7 at Keahole) in the west can help to mitigate the overload risks on the 7200 and 7300 lines."\textsuperscript{11}

\textsuperscript{7}Application, at 3.
\textsuperscript{8}Application, at 4.
\textsuperscript{9}Application, at 4.
\textsuperscript{10}Application, at 4.
\textsuperscript{11}Application, at 4.
The Study's recommended solution was to reconductor both the 7200 and 7300 lines immediately with 556.5 MCM AAC (all aluminum conductor) or equivalent conductor.\textsuperscript{12} HELCO notes that the Study indicated that "the 7300 line would be overloaded earlier than the 7200 line [therefore], HELCO reinforced and reconducted the 7300 line first."\textsuperscript{13}

HELCO states:

[re]conductoring the 7200 line with 556.5 MCM AAC or equivalent conductor will also allow for increased acceptance of power from the as-available renewable energy resource Hawi Renewable Development ("HRD") and from the firm resource provider Hamakua Energy Partners, L.P. ("HEP"). HRD's wind farm generates up to 10.56 MW of power and feeds into the system at the Waimea Substation through the 3300 34.5 kV line. HEP, one of the largest power producers on the Big Island at 60 MW, transmits the bulk of its power through the 7700 69 kV transmission line through Waimea town to the Waimea Substation, then on to the 7200 and 7300 transmission lines along the Mamalahoa Highway and Kawaihae Road, respectively. It is in the area where the 7700 transmission line splits into the 7200 and 7300 transmission lines that transmission line congestion has been experienced. Under certain conditions, the 7200 transmission line could become overloaded. Increasing the normal line rating from 270 amps to 715 amps will create a safer operating condition and reduce the possibility of HRD curtailments if the 7300 line is out of service. Therefore, reconductoring the 7200 line will allow HELCO to accept more energy (by way of fewer curtailments of HRD).

Application, at 6.

HELCO requests interim approval immediately after the commission's public hearing in order "to permit HELCO to commit

\textsuperscript{12}Application, at 5.

\textsuperscript{13}Application, at 5.
funds and, if necessary, to start the installation for Item H0001004, Waimea-Keamuku 7200 Line Reconductoring, prior to receiving a [c]ommission determination that the reconducted and reinforced 69 kV transmission line be constructed above the surface of the ground pursuant to HRS § 269-27.6(a)."¹⁴ Moreover, "[t]he long lead-time for this project is for the ordering of the steel poles and 477 MCM ACSS/AW/TW (Hawk) 69 kV conductors. The normal lead times for ordering these two items are approximately 16 weeks. In addition, the construction of the 7200 line is expected to take approximately three months after receipt of the poles."¹⁵

HELCO understands that "it is ordering the steel poles, conductors, and other materials, and possibly starting construction, at its own risk, if the [c]ommission does not approve HELCO's request for the overhead 69 kV line reconductoring project. HELCO also understands that a [c]ommission interim approval will not affect the [c]ommission's final decision on this project."¹⁶

HELCO represents that the "Consumer Advocate does not object to this request for interim approval, and reserves its right to state its position with respect to HELCO's application."¹⁷

¹⁴Application, at 19-20.
¹⁵Application, at 20.
¹⁶Application, at 20.
¹⁷Application, at 20-21.
Based on HELCO's representations, the commission finds HELCO's request for interim approval to permit HELCO to commit funds and, if necessary, to start construction of the proposed Project, to be reasonable and in the public interest. Thus, the commission concludes that HELCO's request should be approved. Such approval, however, is conditioned upon HELCO's compliance with all applicable laws, rules and regulations relating to the Project and any other terms, conditions, and requirements imposed subsequent to the commission's and the Consumer Advocate's respective reviews of the merits of HELCO's Application.

III.

Orders

THE COMMISSION ORDERS:

1. HELCO's request for interim approval to commit funds to order materials for the Project and, if necessary, to commence construction, is approved.

2. HELCO shall comply with all applicable laws, rules and regulations relating to the Project and any other terms, conditions, and requirements imposed subsequent to the commission's and the Consumer Advocate's respective reviews of the merits of HELCO's Application.

3. In the event the commission ultimately does not approve HELCO's Application on the merits, HELCO shall not seek to recover its share of the costs for the Project from its ratepayers.
DONE at Honolulu, Hawaii JUL 24 2008

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By:                     Carlito P. Caliboso, Chairman
                        John E. Cole, Commissioner

By:                     Leslie H. Kondo, Commissioner

APPROVED AS TO FORM:

Jodi L. K. Yi
Commission Counsel

2008-0060.laa
CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

CATHERINE P. AWAKUNI, ESQ.
EXECUTIVE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
DIVISION OF CONSUMER ADVOCACY
P.O. Box 541
Honolulu, HI 96809

JAY M. IGNACIO, P.E.
PRESIDENT
HAWAII ELECTRIC LIGHT COMPANY, INC.
P.O. Box 1027
Hilo, HI 96721-1027

DEAN MATSUURA
DIRECTOR, REGULATORY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P.O. Box 2750
Honolulu, HI 96840-0001

THOMAS W. WILLIAMS, JR., ESQ.
PETER Y. KIKUTA, ESQ.
GOODSILL ANDERSON QUINN & STIFEL
Alii Place, Suite 1800
1099 Alakea Street
Honolulu, HI 96813

Counsel for HELCO