

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of))	
HAWAIIAN ELECTRIC COMPANY, INC.)	Docket No. 02-0407
)	
For approval to commit funds in)	Order No. 19820
Excess of \$500,000 for Item)	
P0000739, the Waiiau 5 Generator)	
Stator Rewind Project; and for)	
Waiver of Paragraph 2.3(g)(2) of)	
General Order No. 7.)	
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ORDER

I.

On November 21, 2002, HAWAIIAN ELECTRIC COMPANY, INC. (HECO) filed an application for approval to commit \$986,988, an estimated amount, for Item P0000739, the Waiiau 5 Generator Stator Rewind project (proposed project). HECO makes its request in accordance with Rule 2.3.g.2 of General Order No. 7, *Standards for Electric Utility Service in the State of Hawaii* (G.O. No. 7).¹

Additionally, pursuant to Rule 1.2.b of G.O. No. 7,² HECO seeks a waiver (or temporary exemption) of the Rule 2.3.g.2 requirement that it submit its application for review at least 60 days before the "commencement of construction or commitment

¹For the purposes of this order, "Rule" and "Paragraph" are synonymous.

²Rule 1.2.b of G.O. No. 7 states:

If unreasonable hardship to a utility or to a customer results from the application of any rule herein prescribed, application may be made to the Commission for the modification of the rule or for temporary or permanent exemption from its requirement.

for expenditure, whichever is earlier" (waiver request). It requests that a commission decision on the waiver request be issued by December 2, 2002.

HECO served the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs (Consumer Advocate) with copies of its application.

By this order, the commission only addresses HECO's waiver request. A subsequent order addressing the merits of HECO's application will be issued at a later date.

II.

A.

Waiiau Unit 5 (Waiiau 5) is a nominal 54 MW non-reheat steam unit. It is a hydrogen-cooled generator and is one of the main cycling units on HECO's system used to meet daily peak demands. The main components of the generator are: (1) the rotor (the rotating portion of the generator); (2) the stator (the stationary portion of the generator); (3) the stator coils; and (4) the hydrogen cooling system.

In mid-October 2002, during a routine test performed to verify the integrity of Waiiau 5's stator core, a hot-spot within the stator core iron was found. The test was conducted during a scheduled overhaul of the generator, which began on September 14, 2002 (Waiiau 5 overhaul project). HECO contends that a hot-spot can eventually lead to a "potentially catastrophic generator failure" and informs us that removal of the stator coils is required to replace the damaged portion of the stator core.

B.

Under the proposed project, HECO proposes to install new generator stator coils after the damaged portion of the stator core iron is replaced. HECO's general consultant for the Waiiau 5 overhaul project, Advanced Generator Technology Services, recommended that new stator coils be installed during the current overhaul instead of re-installing the existing stator coils. This recommendation was based on: (1) the high probability of compromised strand insulations; (2) the potential for a catastrophic failure of the generator; (3) the age of the original stator coils; and (4) the present capacity of the system which can accommodate an extended outage of Waiiau 5. HECO states that it is highly probable that the integrity of the strand insulation system of the stator coils has been compromised since the stator coils are over 40 years old. Additionally, HECO contends that removal of the stator coils subjects them to stresses and that the strand insulation system of the stator coils cannot be visually inspected or tested. HECO, further, represents that failure of the stator coils would require a forced outage of approximately four months and contends that such an outage can adversely impact the reliability of HECO's system and the scheduled maintenance of its other generating units.

C.

The Waiiau 5 overhaul project has been extended to facilitate repair of the stator core and installation of new stator coils. HECO contends that Waiiau 5 will remain out of service until the new sector coils can be installed.

With approval of HECO's waiver request by December 2, 2002, as set forth in this application, HECO states that the outage of Waiiau 5, which was originally planned to be an eight-week outage, will be a 20-week outage. With approval of its waiver request, HECO states that it will be allowed to order the appropriate materials and install the new sector coils to return Waiiau 5 to service as soon as practicable. It contends that procurement and installation of the stator coils will take approximately 60 days from receiving commission approval of its waiver request.

As represented by HECO in its application, the Consumer Advocate does not object to HECO's waiver request, but reserves its right to state its position on the substance of HECO's application.

III.

Upon review, the commission finds good cause to approve HECO's waiver request. This order is not a decision on the merits of HECO's application. We note that HECO recognizes that it has the "burden of proof to justify the reasonableness of the capital expenditures in its next rate case[,]" if the commission does not approve its application.


IV.

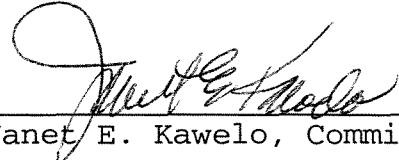
THE COMMISSION Orders that HECO's request for a waiver of the G.O. 7, Rule 2.3.g.2 requirement that its application be filed with the commission at least 60 days prior to the commencement of construction or commitment for expenditures, as


set forth in its application, filed on November 21, 2002, is approved.

DONE at Honolulu, Hawaii this 26th day of November, 2002.

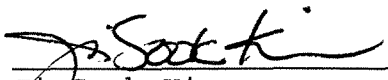
PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By 
Wayne H. Kimura, Chairman

By 
Janet E. Kawelo, Commissioner

By 
Gregg J. Kinkley, Commissioner

APPROVED AS TO FORM:


Ji Sook Kim
Commission Counsel

02-0407.eh

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Order No. 19820 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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DIVISION OF CONSUMER ADVOCACY
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Catherine Sakato
for _____
Karen Higashi

DATED: November 26, 2002