In the Matter of the Application of

HAWAIIAN ELECTRIC COMPANY, INC.

For Approval to Commit Funds
in Excess of $500,000 for
Item P0000942, the Waiau Fuel
Oil Tank 4 Renovation Project.

DECISION AND ORDER NO. 21359

Filed Sept. 22, 2004
At 9 o'clock A.M.

Chief Clerk of the Commission

ATTEST: A True Copy
KAREN HIGASHI
Chief Clerk, Public Utilities
Commission, 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 P0000942, the Waiau Fuel Oil Tank 4 Renovation Project.)

DECISION AND ORDER

I.

Background

HAWAIIAN ELECTRIC COMPANY, INC. ("HECO") requests the commission's approval to commit approximately $702,487 for Item P0000942, the Waiau Fuel Oil Tank 4 ("Tank 4") Renovation Project ("Project").¹ HECO makes its request in accordance with Section 2.3.g.2 of General Order No. 7 ("G.O. No. 7"), Standards for Electric Utility Service in the State of Hawaii.²

HECO served copies of its application upon the Department of Commerce and Consumer Affairs, Division of


²At the time HECO filed its application in March 2004, the monetary threshold governing the electric utilities' filing of capital expenditure applications with the commission was $500,000. Effective July 1, 2004, the monetary threshold increased on a prospective basis to $2.5 million (exclusive of customer contributions), as applied to HECO and its affiliated electric utilities. See Decision and Order No. 21002, filed on May 27, 2004, in Docket No. 03-0257. HECO's application is governed by the former $500,000 threshold.

II. Waiau Fuel Oil Tank 4 and Tank 5

HECO's Waiau Generating Station has a total fuel storage capacity of 263,850 barrels, utilizing four (4) tanks, including Tank 4. The average daily fuel consumption of the Waiau Generating Station is approximately 6,800 barrels.

Tank 4 is a 120-foot diameter by 40-foot high, above ground, steel insulated tank used for the bulk storage of low sulfur fuel oil at HECO's Waiau Generating Station. Originally constructed in 1946, Tank 4 was retrofitted in 1992 with a double steel bottom, and leak detection at its perimeter. The capacity of Tank 4 is 76,350 barrels.

PEI's inspection revealed active soil-side corrosion throughout the bottom of Tank 4, "resulting in at least one thru

---

hole." PEI recommends replacing Tank 4's bottom, and identifies five (5) Action Items, which HECO intends to implement. The five (5) Action Items are:

1. Large holes on the roof deck from corrosion under insulation are present. To quantify the extent of corrosion and required repairs completely remove the roof insulation. If corrosion is active on the underside complete roof deck replacement should be considered. Repair or replace the damaged roof deck, top angle, support system and coatings are required. If the roof is re-insulated, install a modern 'water tight corrosive environment, resistant system'. The 'power plant/tropical/marine' environment found at this location will require frequent inspections and maintenance of the insulation cover to assure integrity.

2. Before the tank is returned to service, replace the corrosion damaged bottom and recoat. The inspection has identified active soil side corrosion thru out the bottom resulting in at least one thru hole.

3. Service or replace the two 8-in [polyvinyl] PV vents located on the roof. Damage to the roof deck can occur if these vents fail to operate. Also, consider a venting study of the roof to determine if adequate venting is provided by these vents.

4. Install [Occupational Safety and Health Administration] OSHA toe boards on the handrail extending from the top of the stairs to the level float access hatch. Also, repair or replace the grating along the elevated walk way in this area. The grating in this area is improperly fit and may pose a tripping or fall hazard.

5. Replace the 8-in under the bottom 'draw' piping with a standard [American Petroleum Institute] 'API' shell nozzle. The welds and piping are not visible for integrity inspection and may be leaking.

---

4PEI's Inspection Report, at 3.

5Id.
The Project's scope of work will also include the installation of a new water draw-off sump. HECO has selected a third contractor, Pacific Tank and Repair ("PTR"), to replace the bottom of Tank 4 and install the new water draw-off sump. HECO intends to place Tank 4 back into service before the new Waiau fuel pipeline is completed during the fourth quarter of 2004.

HECO states that the Project is consistent with its Integrated Resource Plan ("IRP") and specifically makes the following assertions:

1. Its IRP explicitly assumes that existing generating units and support infrastructure (including fuel delivery systems such as Tank 4), will continue to operate and supply reliable energy to HECO's system.

2. The Project pursues a cost-effective solution so that Tank 4 can continue to supply fuel to the Waiau Generating Station. Thus, the Project is also consistent with and should further the IRP objectives.

---

6HECO's application, at 4. The draw-off sump removes water that may accumulate at the tank's bottom, and from a maintenance standpoint, "it serves as a means to pump the tank out once the pump loses suction." HECO's response to CA-IR-5(a).

7PTR recently completed the replacement of the tank bottom for the adjacent Tank 5.

8See Docket No. 01-0444, In re HECO (the Waiau Fuel Pipeline Project).
III.

Supplemental Filings

The Consumer Advocate, upon its review of PEI's Inspection Report, does not object to HECO proceeding with the five (5) recommended Action Items. With respect to Action Item No. 1, however, the Consumer Advocate states:

1. This Item involves the removal of the roof insulation on Tank 4 to visually inspect the roof deck for corrosion, followed by the repair or replacement of the roof, depending on the amount of damage uncovered.

2. If the costs for this Item are to be included in the Project costs for the present application, it requests "a copy of the scope of work for the repair or replacement of the roof deck along with a cost estimate for the record in this proceeding."³

3. It "reserves the right to take issue with the reasonableness of the final Project cost in the rate case following the Project's completion, should such cost deviate significantly from the estimates presented in the docket."⁴

Meanwhile, HECO, by its September 2, 2004 filing, amends its application by: (1) expanding the scope of the Project's work to include the replacement of the roof and installation of new insulation, i.e., Action Item No. 1; and thus (2) increasing the Project's total cost by approximately

---

⁴Id.
HECO's attachments to its amended filing include the expanded scope of work, various cost estimates, and the breakdown of the $374,400 in additional costs, as requested by the Consumer Advocate.

HECO explains:

1. After the roof insulation was removed, HECO discovered that water had collected under the insulation and that there was considerable corrosion of the roof.

2. It solicited cost estimates from PTR to repair and replace the roof, respectively, and PTR's difference in estimates is an additional $10,000 to replace the roof in lieu of repairing. HECO has opted to replace the roof, and has selected PTR to complete the replacement and installation of new insulation, since PTR is currently replacing the bottom of Tank 4.

3. The estimated cost includes an expedited schedule to replace the roof to allow for Tank 4 to be used in the testing of the new Waiau fuel pipeline scheduled for completion later this year.

On September 13, 2004, HECO, with the Consumer Advocate's concurrence, informed the commission that

---

11In addition to Action Items Nos. 1 and 2, HECO notes that PTR will also implement Action Items Nos. 3, 4, and 5. HECO explains: "Action Item #5 was included in the original scope of work for the tank bottom replacement. Action Items #3 and #4 are relatively 'minor' cost items, and no additional charges are anticipated." See HECO's letter, dated September 2, 2004, at 2, footnote 2.
this docket is now ready for decision-making, in accordance with Stipulated Procedural Order No. 20929, filed on April 29, 2004.\footnote{HECO's letter, dated September 13, 2004. Hence, the deadline for commission action on HECO's application, as amended, is "until 20 days after HECO provides notice that the proceeding is ready for decision making[,]" i.e., by October 4, 2004. See Stipulated Procedural Order No. 20929, at 3. The commission, thus, modifies Order No. 21213, filed on August 5, 2004, at pages 6 and 7, by changing the deadline date for commission action, from September 22, 2004 to October 4, 2004.}

IV. Discussion

PEI's recent inspection of Tank 4 reveals severe damage and corrosion to the roof and bottom areas, necessitating their replacement. The commission finds that the Project, as amended, is reasonable and consistent with the public interest and HECO's IRP. The commission, thus, will approve the expenditure of funds for the Project.

V. Orders

THE COMMISSION ORDERS:

1. Order No. 21213, filed on August 5, 2004, is modified at pages 6 and 7 by changing the deadline date for commission action on HECO's application, as amended, from September 22, 2004 to October 4, 2004. In all other respects, Order No. 21213 remains unchanged.

2. HECO's request to expend an estimated $1,076,900 for the Waiau Fuel Oil Tank 4 Renovation Project, as amended to include the replacement of the existing roof and
the installation of new insulation, 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 public utility purposes.

3. HECO shall submit a report within sixty (60) days of the Project's commercial operation, with an explanation of any deviation of ten (10) per cent or more in the Project's cost 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.

4. HECO shall conform to all of the commission's orders set forth above. Failure to adhere to the commission's orders shall constitute cause for the commission to void this decision and order, and may result in further regulatory action as authorized by law.

DONE at Honolulu, Hawaii SEP 22 2004

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By

Michael Azama
Commission Counsel

APPROVED AS TO FORM:

Michael Azama
Commission Counsel
CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Decision and Order No. 21359 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

PATSY H. NANBU
DIRECTOR, REGULATORY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P. O. Box 2750
Honolulu, HI 96840-0001

DATED: SEP 22 2004

Karen Higashi