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 Y00029, )
Installation of Telecommunications )
Systems & Network. )

DECISION AND ORDER NO. 20407

Filed August 29, 2003
At 1:00 o'clock P.M.

Karen Hoest
Chief Clerk of the Commission

ATTEST: A True Copy
KAREN HIGASHI
Chief Clerk, Public Utilities
Commission, State of Hawaii.
BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
HAWAIIAN ELECTRIC COMPANY, INC. )
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Excess of $500,000 for Item Y00029,)
Installation of Telecommunications )
Systems & Network. )

Docket No. 03-0124
Decision and Order No. 20407

DECISION AND ORDER

I.

On May 8, 2003, HAWAIIAN ELECTRIC COMPANY, INC. ("HECO") filed an application for approval to commit an estimated $4,522,927 for Item Y00029, the Installation of its Telecommunications Systems and Network project ("proposed project"). HECO makes its request under Rule 2.3.g.2 of General Order No. 7, Standards for Electric Utility Service in the State of Hawaii ("G.O. No. 7").

Copies of the application were served on the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate"). On May 29, 2003, the Consumer Advocate filed its preliminary statement of position indicating its participation in this docket and its intention to

1For the purposes of this decision and order, "Rule" and "Paragraph" are synonymous.
serve HECO with information requests ("IRs"). On June 13, 2003, the Consumer Advocate served HECO with IRs. HECO filed responses to the IRs on June 30 and July 9 and 11, 2003. On July 3, 2003, the Consumer Advocate served HECO with supplemental IRs ("SIRs"). On July 15, 2003, HECO filed its response to the SIRs.

On July 11, 2003, HECO filed a letter requesting an extension of the Rule 2.3.g.2 G.O. No. 7 requirement that the commission act on a utility's application filed under the rule within 90 days ("Review Period") to August 22, 2003 ("Extension Request"). By Order No. 20339, filed on July 18, 2003, the commission approved HECO's Extension Request and concurrently required the Consumer Advocate to file its statement of position on the matters of this docket by August 13, 2003.

On July 25, 2003, HECO filed responses to additional questions posed by the Consumer Advocate, and responded to more Consumer Advocate IRs on August 6 and 19, 2003.

By letter dated and filed on August 13, 2003, HECO, on behalf of the Consumer Advocate and itself, requested that the Review Period for the application in this docket be further extended to August 29, 2003, and that the Consumer Advocate be allowed to file its statement of position by August 20, 2003 ("Second Extension Request"). By Order No. 20379, filed on

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2On June 18, 2003, HECO and the Consumer Advocate filed a stipulated protective order to govern the treatment of certain materials filed in this docket for the commission's review and consideration. On June 24, 2003, the commission issued Protective Order No. 20253.

3The Review Period for the commission to act on HECO's application in this docket would have expired on August 6, 2003.
August 18, 2003, the commission approved the Second Extension Request.

On August 20, 2003, the Consumer Advocate filed its statement of position informing the commission that it does not object to the approval of HECO's application in this docket provided that HECO is required to submit annual reports on certain costs ("Statement of Position").

II.
A.

Through this proposed project, HECO intends to install new telecommunications systems and network to provide support for its administrative offices and generating stations at the following facilities:

- Ward Avenue Complex ("Ward")
- Main/King Street Office
- Central Pacific Plaza
- Kahe Power Plant
- Waiau Power Plant
- Honolulu Power Plant
- Koolau Baseyard

HECO projects to install approximately 1,649 stations in these facilities. HECO represents that "[t]he new systems and network will provide enhanced telecommunications services and a state-of-the-art technology platform accommodating future growth in
capacity, open connectivity, and varying degrees of automation for special applications."

This proposed project includes the installation of Avaya’s MultiVantage Software running on two Avaya Communications ECLIPS S8700 Media Servers with seven S600 Media Gateways at Ward, and a Avaya S8300 Media Server with a G700 Media Gateway at each of HECO’s other designated facilities in an effort to provide HECO with a “campus-type” solution with a central processing center.

Additionally, this proposed project includes upgrades to HECO’s existing voice infrastructure and cabling, and the replacement and addition of the following automated applications: (1) Automatic Call Distribution (“ACD”); (2) Call Reporting; (3) Call Accounting; (4) Call Recording; (5) Interactive Voice Response; (6) Voice Mail System; (7) Audio Teleconferencing; and (8) Computer Telephony Integration. HECO represents that these automated applications and many of its functions are non-existent, limited, or maximized in its current telecommunications network. For example, ACD is currently provide through HECO’s exiting ROLM 9751 Model 70 system and available only for its Customer Assistance Center and Customer Installations Department. Through the application of its proposed software program (i.e., the Avaya Call Center Elite) ACD service will also be made available to numerous other HECO

"Application at 2.

'Personnel at stations in this type of network would access each other through four-digit dialing.
departments including, but not limited to, its departments for Dispatch, Customer Care, and Customer Field Services. HECO contends that there are over 200 stations within its operations that could benefit from ACD features and functionality. Features under the new ACD system include call distribution, call vectoring, music on queue delay, overflow, intraflow, interflow, priority queuing, service observing, supervisor assist, call prompting, expected wait time, and expert agent selection. HECO represents that the implementation of its new ACD program will, among other things, eliminate the 40-second call transfer delay its customers are currently experiencing and allow it to more efficiently respond to its customers' problems and concerns. HECO also contends that its existing ROLM voicemail system has been operating at maximum capacity for a number of years. It represents that storage of voicemail in its current system is limited and that no new users are assigned voicemail service. Under the proposed project, Avaya's Unified Messenger Solutions will provide voicemail service that is compatible with HECO's current e-mail system.  

HECO represents that this proposed project would be implemented in phases, starting in July 2003 with a target completion date of December 2005. It contends that each of the new applications and systems will be fully developed and tested.

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'See Application at 4 through 11 and referenced exhibits for a detailed explanation of each application.'
before they are moved into production, and states that it anticipates no service interruptions.

B.

HECO cites the following factors, among many others, as reasons for its decision to proceed with the proposed project:

- HECO’s main telecommunications systems supporting its administrative offices and other facilities are aged and considered technologically obsolete.

- In May 2001, HECO was advised that manufacturing support for many of its current telecommunications systems (ROLM 9750, Release 9004, and ROLM 9751, Release 9004) will be discontinued in June 2001.

- Its current ROLM and NEAX systems, which use analog trunk facilities, do not have the ability to support other types of connections and peripheral devices (i.e., systems that are digital or IP-based).

- Currently, all of HECO’s system administration must be conducted in the switch room. With no remote or LAN/WAN access, all station and feature programming must be performed on-site, causing delays in system changes and upgrades.

- HECO’s telecommunications system in Ward, the ROLM 9751, Model 70, R9004, is operating at its maximum capacity.
• HECO's ability to conduct business and serve its customers will be negatively impacted if its existing system becomes inoperable.

• Continued use of its existing telecommunications technology limits HECO's choices for replacement, acquisition, and development of new technologies and applications to serve its customers and support its business operations.

Before selecting Progressive Communications' Avaya IP-Enabled platform proposal, HECO researched and considered other technological options. It considered utilizing "pure" IP systems and traditional TDM technology with digital and analog connectivity. However, it found "pure" IP systems to have certain feature and functionality limitations and learned that vendors anticipate ceasing the development of traditional technology systems in the near future. Upon examining IP-Enabled systems of Avaya and Nortel, it found IP-Enabled systems to provide flexible communications platforms that allow multiple types of endpoints, allowing for the direct connection of digital, analog, IP, and ISDN Basic Rate Interface telephones into the same equipment. While both Avaya and Nortel platforms support a matrix that offers both voice and Internet protocol and TDM technology, HECO found the Avaya platform to be a complete solution of servers and gateways as oppose to Nortel's, which is an add-on to a traditional platform.

Aside from examining various types of technological solutions, HECO also initially evaluated two scenarios for
implementation. Under Scenario 1, HECO would replace its existing telecommunications systems and infrastructure over three years, while in Scenario 2, it would meet its telecommunications needs through separate projects under a six year period based on that perceived risk related to obsolescence of its equipment. Under Scenario 2, HECO would utilize traditional telephony systems and add no new applications or features apart from those currently in use. HECO represents that it selected Scenario 1, as proffered and advanced in this application, since it found this solution be more economical and cost effective; and a solution that better fulfills its current and future telecommunications needs. HECO represents that while Scenario 1 initially has a slightly higher revenue requirement then Scenario 2, in the long run (over a ten year period) the total revenue requirements of Scenario 1 are estimated to be $705,000 less than that of Scenario 2.  

C.

The Consumer Advocate does not object to the approval of HECO's application in the instant docket. The Consumer Advocate recognizes that HECO needs to replace various aspects of its telecommunications system since manufacturing support for them will be or has ended. Nonetheless, the Consumer Advocate

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At the Consumer Advocate's prompting, HECO evaluated the revenue requirements of an additional scenario, the installation of an IP-enabled system based on the perceived risk related to obsolescence of its equipment. HECO did not pursue this alternative due the perceived risks and the increased cost for equipment and maintenance associated with this alternative, among other things.
conveys that it has certain concerns with the proposed project. For instance, the Consumer Advocate is concerned that HECO did not address concerns associated with the proposed IP-Enabled system and that HECO’s process in evaluating its selection may not be “entirely complete.” The Consumer Advocate also expressed concerns about the reasonableness of the cost of the proposed project since it believes that there may be “hidden” or “unknown” costs that may be incurred in the future. The Consumer Advocate’s underlying concern appears to be that HECO may incur costs associated with the proposed project in the future that could have been avoided. However, the Consumer Advocate did not oppose HECO’s selection of an IP-Enabled system or recommend any adjustments to the proposed project’s scope or costs, at this time.

Due to its concerns, the Consumer Advocate reserves its right to address the reasonableness of including future costs associated with the proposed project in HECO’s rate base, and recommends that HECO be required to report, on an annual basis, any costs it incurs over five per cent of the estimated project cost in capital or expenses that were not identified in its application and explain why the costs were incurred.

III.

Upon review of the record, the commission will approve the proposed expenditure of funds, in this instance.

*Statement of Position at 12.

'Statement of Position at 17.
Our decision is based on HECO's representations in this docket, and our understanding that many elements of its existing telecommunications network need to be replaced due to the discontinuation of certain manufacturing support and lack of capacity issues. However, we share many of the concerns articulated by the Consumer Advocate in its Statement of Position. For instance, we too are concerned about the level of planning conducted for the proposed project and whether it is technologically compatible with HECO's present network and other systems and with its future needs. In response to CA-IR-21, filed on August 19, 2003, HECO indicated that as its systems are upgraded or replaced, interface or integration costs would be included in the proposed upgrade/replacement projects, as necessary. However, upfront planning of HECO's overall communications and technological needs would logically reduce or even eliminate some of these future costs. Thus, we find it reasonable to adopt the Consumer Advocate's cost reporting recommendation, and also find it reasonable to require HECO to submit a report to the commission and the Consumer Advocate explaining how it plans to integrate its communications and technological systems and network as it addresses its future needs ("Planning Report").

Based on the above, the commission concludes that HECO's May 8, 2003 application to commit approximately $4,522,927 for Item Y00029, the Installation of Telecommunications Systems and Network project, should be approved. We also conclude that the Consumer Advocate's cost reporting recommendation should be
adopted and that HECO should be required to submit a Planning Report.

IV.

THE COMMISSION ORDERS:

1. HECO's application to expend approximately $4,522,927 for Item Y00029, the Installation of Telecommunications Systems and Network project, as described in its application filed on May 8, 2003, 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. Within 60 days of the completion of the proposed project, HECO shall submit an accounting report with an explanation of any deviation of 10 per cent or more of the projected costs for the proposed project. Failure to submit the report, as required in this decision and order, constitutes cause to limit the total cost of the proposed project for ratemaking purposes to that estimated in HECO's application.

3. On an annual basis, HECO shall report to the commission and the Consumer Advocate any costs incurred over five per cent of the estimated cost in capital or expenses of the proposed project not identified in its application and explain why the costs were incurred.

4. Within 60 days from the date of this decision and order, HECO shall submit its Planning Report, as described in
section III of this decision and order, to the commission and the Consumer Advocate.

DONE at Honolulu, Hawaii this 29th day of August, 2003.

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:

Ji Sook Kim
Commission Counsel
CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Decision and Order No. 20407 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: August 29, 2003

Karen Higashi