BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of)
)
HAWAIIAN ELECTRIC COMPANY, INC.)
)
For Approval of a Commercial and)
Industrial Direct Load Control)
Program, and Recovery of Program)
Costs.)
)

DOCKET NO. 03-0415

DECISION AND ORDER NO. 21421

Filed Oct. 19, 2004

At 2 o'clock P .M.

Karen Higashi

Chief Clerk of the Commission

ATTEST: A True Copy
KAREN HIGASHI
Chief Clerk, Public Utilities
Commission, State of Hawaii.

K. Higashi

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of)) HAWAIIAN ELECTRIC COMPANY, INC.)) For Approval of a Commercial and Industrial Direct Load Control Program, and Recovery of Program Costs.)	Docket No. 03-0415 Decision and Order No. 21421

DECISION AND ORDER

I.

Introduction

HAWAIIAN ELECTRIC COMPANY, INC. ("HECO") filed an application ("Application") requesting that the commission: (1) approve its proposed Commercial and Industrial Direct Load Control ("CIDLC") Program; (2) approve recovery of its program costs for the first five years of the program, which are estimated to be approximately $5,481,460 (and associated revenue taxes, if applicable), using HECO's Integrated Resource Plan ("IRP") Cost Recovery Provision and incorporated into rates as a result of the next rate case if Demand Side Management ("DSM") costs are not recovered through the IRP Cost Recovery Provision after the next rate case; (3) approve its standard CIDLC Program Contract for use with participating customers; (4) approve its request for program flexibility as described within the Application; and (5) grant such other and further relief as may be just and equitable.[1] HECO

[1]HECO's Application, filed December 11, 2003.

submits its Application pursuant to paragraphs II.B.7., III.F., and V. of the commission's Framework for IRP (revised May 22, 1992), which was issued pursuant to Decision and Order No. 11523, filed on March 12, 1992, and Decision and Order No. 11630, filed on May 22, 1992, in Docket No. 6617.

HECO served copies of its Application on the DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS ("Consumer Advocate") and the UNITED STATES DEPARTMENT OF THE NAVY (HECO and the Consumer Advocate are collectively referred to as the "Parties"). On April 30, 2004, the commission issued Order No. 20945 requiring the Parties to meet informally to determine the procedures and schedule with respect to this proceeding, to be set forth in a stipulated prehearing order filed by June 1, 2004. On June 1, 2004, HECO submitted a letter on behalf of the Parties requesting additional time until July 1, 2004 to allow the Parties to reach a stipulated prehearing order. On July 1, 2004, the Parties filed a stipulated procedural order requesting an additional extension of time until July 23, 2004 to submit a settlement agreement in place of a stipulated prehearing order for this docket.[2] On July 15, 2004, the Parties filed their settlement agreement ("Settlement Agreement") with the commission, jointly requesting commission approvals of their agreement and approval of

[2]The commission enlarged the deadline by which the Parties were to submit either their stipulated prehearing order or settlement agreement to the commission from June 1, 2004 to July 1, 2004, and July 1, 2004 to July 23, 2004 by Order No. 21113, filed on July 12, 2004.

HECO's proposed CIDLC Program as modified by the Settlement Agreement.

II.

Background

A.

CIDLC Program Description

The CIDLC Program will offer eligible commercial and industrial electric customers the opportunity to nominate all or a portion of their demand as directly controllable or "Controlled" (i.e., able to be controlled or interrupted by HECO under specific circumstances). HECO considers the remaining demand to be the customer's "Firm Service Level." The Firm Service Level is the amount of electricity a customer determines is necessary for it to meet its operational requirements during an interruption event. In exchange for agreeing to reduce electrical usage to their designated Firm Service Level when required, HECO will provide participating customers with a monthly Controlled Demand Incentive based on recorded usage above their Firm Service Level, whether or not an interruption of load occurs. In order to participate in the program, a customer will enter into a contract with HECO. The customer will then install, at its cost, the relays and associated equipment necessary to participate in the program.

The objective of this program is to provide HECO with approximately twenty-one (21) megawatts ("MW") of interruptible load, beyond that provided by the existing customers on Rider I. HECO has four (4) customers on Rider I providing for approximately eight (8) MW of interruptible load. Participants will be signed up through the fifth year of the program and HECO will then work to maintain the approximately twenty-one (21) MW of peak load reduction by replacing any subscribed loads lost in any program year. HECO states that this will benefit it by helping it to meet system reserve capacity, and will help defer the need for future capacity additions.

HECO asserts that its System Operation Department will rely on the CIDLC system in three (3) ways:

> 1. If the HECO system experiences a sudden loss of a major generating unit, the under-frequency relay contained in the auxiliary load switch will remove the Controlled Load on that circuit from the system at a frequency level set above the frequency setting of [HECO's] distribution relays. Following the interruption, the switches will be used to restore service to the Controlled Loads in a staged manner to avoid creating a new system spike.
>
> 2. If HECO system resources appear unable to meet requirements, the System Operation Department will initiate a staged shedding of the Controlled Loads. This is accomplished by first sending a one hour notice of dispatch requirements to each participant. Then at the time HECO's System Operations Department determines that load relief is required it will send a second radio signal to all or any portion of the auxiliary load switches controlling Controlled Load within this program. Alpha/numeric information coded in the signal will instruct each switch to turn off for a predetermined amount of time or until a restore signal is sent by the System Operations Department.

3. If a HECO system outage or regional outage occurs, the switches are designed to detect when power is restored and continue to keep the Controlled Loads off the system for some predetermined time period ("Cold Load Pickup" logic). This "Cold Load Pickup" feature can minimize the feeder in rush current and can reduce the duration of the outage. This allows for a staged reconnection and reduces the possibility of spikes or payback loads occurring during the reconnection. This feature is also remotely programmable. Therefore, if necessary, the System Operation Department can send a signal to the auxiliary load switches override or extend the predetermined time delay period.[3]

HECO states that it may develop variations of these strategies as its experience with the CIDLC system grows and, if implemented, will be reported in the Annual Program Modification and Evaluation Report.

All commercial and industrial customers with Controlled Loads between 200 kilowatts ("kW") and 10,000 kW, which are normally served by HECO during the system's on-peak period, will be eligible to participate, subject to the following eligibility criteria:

1. Loads served under Schedule U or the load management Riders M, T, and I are not eligible for nomination as Controlled Loads under the CIDLC Program. However, customers who elect to move from Riders M, T, and I to the CIDLC Program will be eligible.

[3]Application at 7-8 (footnote omitted).

2. Participants must maintain HECO as their sole source of energy and demand supply for the duration of the contract term, except to the extent provided by existing customer facilities, or by facilities designed exclusively as the customer's emergency supply.

3. Nominated Controlled Load must be reasonably expected to be energized during HECO's on-peak period of 7:00 a.m. to 9:00 p.m. weekdays.

4. HECO reserves the right to make the final determination of eligibility for all program participants.

HECO will track and monitor the program implementation to ensure prudent expenditures and to quantify program benefits. HECO will evaluate the CIDLC Program within twelve (12) months after implementation to examine its organization of the program, program implementation procedures, communications, and service delivery with the objective of identifying changes that can positively affect the performance of the program. HECO proposes to provide the commission with information relating to this program through two (2) filings annually: the Annual Program Modification and Evaluation Report and the Accomplishments and Surcharge Report.[4]

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[4]The Annual Program Modification and Evaluation Report will be submitted to the commission in November of each year, to become effective on January 1 of the following year and the Annual Program Accomplishments and Surcharge Report will be filed in March following the receipt of the prior year's final financial information.

B.

HECO's Generating System Status

HECO explains that it is necessary to expeditiously approve the CIDLC Program to enable it to realize the anticipated peak reduction benefits of the CIDLC Program, and to help mitigate the effect of HECO's higher peak forecast on its generating system reliability. HECO also asserts that implementation of proposed load management programs, including the CIDLC Program, in 2004 is necessary to continue the deferral of the need for its next central-station generating capacity until 2009. HECO estimates that based on its new, higher forecast for peak demand, HECO expects generation system reliability to fall below its 4.5 years per day reliability guideline beginning in 2006.[5]

C.

CIDLC Program Costs and Capacity Savings

CIDLC Program costs include customer incentives, labor and administration, program promotion, evaluation expenses, and some equipment costs. HECO estimates the program costs dollars for the first five years will be:

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[5]HECO states that the 4.5 years per day benchmark is part of a reliability guideline that is included in HECO's capacity planning criteria.

Year	Costs
Year 1	$615,250
Year 2	$780,996
Year 3	$1,135,691
Year 4	$1,355,417
Year 5	$1,594,106
Total	**$5,481,460**

HECO estimates the capacity savings for the first five (5) years of the CIDLC Program to be:[6]

Year	Total Capacity Savings $
2004	$0
2005	$0
2006	$7,463,000
2007	$9,173,000
2008	$9,338,000
First 5 years	**$25,974,000**

D.

Cost Recovery

HECO requests the continuation of the use of the currently implemented and commission approved DSM Adjustment

[6]For this calculation, HECO assumed that the Residential Direct Load Control Program, Docket No. 03-0166, was also begun in 2004.

component of the IRP Cost Recovery Provision to recover program costs. It also requests that it be allowed to continue contemporaneous expense recovery. HECO is neither asking for the implementation of a lost margin mechanism, nor shareholder incentives for this program, since it will not experience lost sales as a result of the program.

HECO estimates the annual impact of the recovery of costs for this program on its rates as:

Year	**$/kWh**
2004	0.0001
2005	0.0002
2006	0.0002
2007	0.0003
2008	0.0003

E.

CIDLC Program Flexibility

HECO requests that the commission grant the following program flexibility during the initial five-year program:

1. The ability to carry unspent program funds forward into future program years. This will allow [HECO] to pursue the program's goals through the five-year implementation period if customers are slow to accept the concept of interruptible loads and participation in a load management DSM program.

2. The ability to exceed a yearly program budget, by not more than twenty-five [(25)] per[ ]cent. This ability would allow [HECO] to take advantage of opportunities that might otherwise be lost due to rapid changes in the number of customers wanting to

> participate in the program. If the rate of participation and [HECO's] related ability to install equipment, results in a faster rate of program implementation than initially forecasted, [HECO] requests this flexibility in order to not have to stop program implementation during the program year and then resume implementation of the program at the beginning of the following year. Application at 47.

III.

Settlement Agreement

In the interest of expediting this proceeding, HECO and the Consumer Advocate reached agreement on certain modifications to the CIDLC Program as described in the Settlement Agreement. The Settlement Agreement also explained HECO's current situation, the Consumer Advocate's concerns, and HECO's responses to those concerns.

The Consumer Advocate noted that it continues to have the same concerns with the CIDLC Program as it did with a similar program proposed in 1996, Docket No. 96-0194.[7] The Consumer Advocate stated that it is willing to support the implementation of the instant program as a pilot program, to allow the Parties with an opportunity to gather information that would be useful in assessing the impacts of such a program and determining whether such programs are cost-effective and should be continued in the long-term. The Consumer Advocate also stated concerns with the program budget if HECO is allowed to recover the proposed program

[7] Settlement Agreement at 2-3.

costs through the IRP Cost Recovery Provision. In addition, the Consumer Advocate questioned the extent to which certain administrative and other direct costs included by HECO in the program budget would be incremental costs that should be recovered through the IRP Cost Recovery Provision.

In addressing the Consumer Advocate's concerns and in the interest of expediting this proceeding, HECO agreed to exclude certain costs that it expects to incur from the program budgeted costs to be recovered through the IRP Cost Recovery Provision. Thus, HECO now estimates the five-year program costs to be recovered through the IRP Cost Recovery Provision to be $4.8 million instead of $5.5 million.

Specifically, the Parties agreed to the following changes to the CIDLC Program:

1. HECO will modify the program budget for the five-year program. HECO will not seek to recover the following CIDLC Program operation and maintenance costs through the IRP Cost Recovery Provision: (1) Direct Labor (which is comprised of Administration, Annual Relay Service and Inspection, Tracking and Evaluation, and Clerical Support) and (2) Materials, Travel, and Miscellaneous.[8] Instead, the Parties agreed to allow HECO to seek the recovery of these operation and maintenance costs in base rates in HECO's next rate case. HECO shall be permitted to recover the following CIDLC Program costs through the IRP Cost Recovery

[8] _See_ Exhibit A to this decision and order.

Provision: (1) Dispatchable Demand Incentives; (2) Energy Reduction Incentive; (3) Equipment Purchases (which are comprised of Central equipment, Distributed equipment, and Communications Upgrades); and (4) Outside Services (which are comprised of Engineering support and Site assessments). The CIDLC Program costs incurred and recovered through the IRP Cost Recovery Provision will be subject to review in conjunction with the review of the Annual Program Modification and Evaluation ("M&E") Report and the Annual Accomplishments and Surcharge ("A&S") Report. Subsequent to the completion of the commission's and the Consumer Advocate's reviews, any costs determined to be inappropriate by the commission for cost recovery under the Settlement Agreement will be refunded with interest. The Parties agreed that recovery of these costs through the IRP Cost Recovery Provision will be allowed until such time that a different mechanism to recover the costs is established. The Parties further agree that HECO may recover the program costs for the CIDLC Program, as modified, accrued through the date that estimated program costs are incorporated into rates as a result of the next rate case through the IRP Cost Recovery Provision.

2. The Parties will work to discuss the specific information to be contained in the tracking, monitoring, and impact evaluation discussed in Section VII. of HECO's Application.

3. The Parties agreed to allow HECO the program flexibility it requested, provided that HECO, prior to making such amendments, requests commission approval by either filing an

application or letter agreement describing the modifications to be implemented.

IV.

Findings and Conclusion

We find that there is insufficient evidence in the record to support HECO's requirement that the participants in its CIDLC Program must maintain HECO as their sole source of energy and demand supply for the duration of the contract term, except to the extent provided by existing customer facilities, or by facilities designed exclusively as the customer's emergency supply customers participating in the CIDLC Program. Accordingly, we conclude that HECO's standard CIDLC Program contract should be approved, provided that the above-mentioned requirement is omitted. The commission further finds that the proposed CIDLC Program, as amended by the Settlement Agreement, is reasonable and in the public interest, and concludes that the proposed CIDLC Program, as amended by the Settlement Agreement, should be approved as a pilot program, effective upon the date of this decision and order, and subject to the terms and conditions stated in the Settlement Agreement and this decision and order.

V.

Orders

THE COMMISSION ORDERS:

1. The Parties' Settlement Agreement, filed on July 15, 2004, is approved in its entirety.

2. HECO's proposed CIDLC Program, as amended by the Settlement Agreement, is approved as a pilot program, effective from the date of this decision and order, and subject to the terms and conditions stated below and in the Settlement Agreement.

3. HECO's request to recover program costs, as modified by the Settlement Agreement, that are accrued through the date that estimated program costs are incorporated into rates as a result of the next rate case through the IRP Cost Recovery Provision, is approved.

4. HECO's request to allow the program flexibility described in its Application is approved, provided that it receives commission approval by either filing an application or a letter agreement describing the modifications to be implemented prior to effectuating any amendments to the pilot program.

5. HECO's request for approval of its standard CIDLC Program Contract is approved, provided that it omits the requirement that participants must maintain HECO as their sole source of energy and demand supply for the duration of the contract term, except to the extent provided by existing customer facilities, or by facilities designed exclusively as the customer's emergency supply.

DONE at Honolulu, Hawaii OCT 19 2004.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By ______________________
Carlito P. Caliboso, Chairman

By (EXCUSED)
Wayne H. Kimura, Commissioner

By ______________________
Janet E. Kawelo, Commissioner

APPROVED AS TO FORM:

____
Catherine P. Awakuni
Commission Counsel
03-0415.ac

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Order No. 21421 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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Karen Higashi

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DATED: OCT 19 2004