BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of HAWAIIAN ELECTRIC COMPANY, INC. For Approval of Rate Increases and Revised Rate Schedules and Rules.	DOCKET NO. 04-0113

DECISION AND ORDER NO. 24171

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KAREN HIGASHI
Chief Clerk, Public Utilities Commission, State of Hawaii

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DECISION AND ORDER

By this Decision and Order, the commission approves the request by HAWAIIAN ELECTRIC COMPANY, INC. ("HECO") to increase its rates to such levels as will produce, in the aggregate, $44,862,000 in additional revenues for the 2005 calendar test year, or a 3.67 percent increase over revenues at present rates. This increase is less than the interim increase of $53,288,000 approved by the commission in Interim Decision and Order No. 22050, filed on September 27, 2005. Accordingly, HECO is required to refund to its ratepayers any amount that it has collected pursuant to Interim Decision and Order No. 22050 that is in excess of the increase authorized herein, together with interest, pursuant to Hawaii Revised Statutes ("HRS") § 269-16(d).

I.

Introduction

A.

Procedural Background

On November 12, 2004, HECO filed its Application and Certificate of Service ("Application"), requesting approval of rate increases and revised rate schedules and rules, and for approval and/or modification of demand-side and load management programs and recovery of program costs and demand-side management ("DSM") utility incentives.[1] HECO filed its Application pursuant to HAR Title 6, Chapter 61, Subchapters 2, 6, and 8, Rules of Practice and Procedure before the Public Utilities Commission. HECO seeks the commission's approval of the proposed rate increase and revised rate schedules pursuant to HRS § 269-16.

HECO served copies of the Application on the DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS ("Consumer Advocate"), an ex officio party to this docket, pursuant to HRS § 269-51 and HAR § 6-61-62. On December 2, 2004, the Consumer Advocate informed the commission that, following its initial review, it did not object to the completeness of the Application, pursuant to the requirements set forth in HRS § 269-16(d).[2]

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[1]On May 18, 2004, HECO filed a Notice of Intent, pursuant to Hawaii Administrative Rules ("HAR") § 6-61-85, stating that it planned to request rate relief based on a 2005 calendar year test period and file an application on or after July 18, 2004.

[2]Consumer Advocate's Statement of Position Regarding Completeness of Application, filed on December 2, 2004.

On January 12, 2005, the commission held a public hearing at the Kaimuki High School Auditorium, 2705 Kaimuki Avenue, Honolulu, HI 96816, to gather public comments on this docket.

On January 19, 2005, the DEPARTMENT OF THE NAVY, ON BEHALF OF THE DEPARTMENT OF DEFENSE ("DoD") filed a motion to intervene.[3] On January 26, 2005, the Consumer Advocate submitted a memorandum in support of DoD's Motion to Intervene.[4] HECO filed a letter on January 28, 2005 indicating that it "does not oppose the granting of intervenor status to [DoD]."[5]

By Order No. 21698, filed on March 16, 2005, the commission: (1) separated HECO's requests for approval and/or modification of demand-side and load management programs and recovery of program costs and DSM utility incentives (collectively referred to as the "Proposed DSM Programs") from Docket No. 04-0113; (2) opened Docket No. 05-0069 (the "Energy Efficiency Docket"), in which to consider the Proposed DSM Program matters; and (3) determined the parties and participants for Docket Nos. 04-0113 and 05-0069, respectively.

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[3]DoD's Motion to Intervene and Become a Party and Certificate of Service, filed on January 19, 2005 ("DoD's Motion to Intervene").

[4]Consumer Advocate's Memorandum in Support of Department of Defense's Motion to Intervene, filed on January 26, 2005.

[5]Letter from HECO to the commission, dated January 28, 2005, at 1.

In particular, the commission granted DoD's request to intervene in the instant docket.[6]

By Order No. 21727, filed on April 8, 2005, as amended, the commission approved, with modification, the Parties' Stipulated Prehearing Order.[7] Pursuant thereto, the Parties engaged in settlement discussions, in an attempt to resolve the issues established for this docket.

On September 15 and 16, 2005, the commission held an evidentiary hearing on HECO's Application. On September 16, 2005, the Parties submitted a letter describing the settlement agreement reached by the Parties ("Settlement Agreement"). The Parties were able to settle all but three issues: prepaid pension asset, conservation informational advertising, and interest synchronization.

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[6]HECO, the Consumer Advocate and DoD are collectively referred to as the "Parties."

[7]On June 22, 2005, the commission approved the Parties' April 29, 2005 and June 17, 2005 requests to amend the schedule for this docket. On September 7, 2005, the commission approved the Parties' request for extension of time to file the Parties' settlement letter from September 2, 2005 until September 9, 2005, and to reschedule the prehearing conference from September 7, 2005 until September 9, 2005. On September 12, 2005, and September 13, 2005, the commission approved the Parties' requests to reschedule the evidentiary hearing from September 13, 2005 until September 14, 2005, and from September 14, 2005 until September 15, 2005, respectively.

On September 19, 2005, the commission heard oral arguments relating to the probable entitlement of HECO to its interim rate increase.[8]

By Interim Decision and Order No. 22050, filed on September 27, 2005, the commission allowed HECO to increase its rates to such levels to produce, in the aggregate, $53,288,000 in additional revenues for the 2005 test year, or a 4.36 percent increase over revenues at present rates. The commission found that, for interim purposes, pending a final decision, it was appropriate and reasonable to adopt an average depreciated rate base of $1,109,232,000 and a rate of return on the rate base of 8.66 percent. The commission granted this interim increase, effective from September 27, 2005, until the issuance of the commission's final decision and order.

On September 28, 2005, the tariff changes implementing the interim rate increase were filed and made effective.

On December 2, 2005, the Parties filed their post-hearing opening briefs,[9] and on December 19, 2005, they filed their post-hearing reply briefs.[10]

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[8]On September 19, 2005, HECO filed its revenue requirements and accompanying workpapers. HECO labeled its first September 19, 2005 filing as its "Final Position Revenue Requirements" (hereinafter "HECO's 1st September 19 filing") and its second September 19, 2005 filing as "Final Position Revenue Requirements with Adjustment to Kalaeloa Capacity" (hereinafter "HECO's 2nd September 19 filing").

[9]Opening Brief of Hawaiian Electric Company, Inc. and Certificate of Service, filed on December 2, 2005 ("HECO's Opening Brief"); Consumer Advocate's Opening Brief and Certificate of Service, filed on December 2, 2005 ("Consumer Advocate's Opening Brief"); Post-Hearing Brief of the

By Order No. 23377, filed on April 23, 2007, the commission denied HECO's request to recover the fuel and trucking costs associated with the operation of the distributed generation ("DG") units that are located at certain of HECO's substations, and the trucking costs to transport low sulfur fuel oil ("LSFO") for use at HECO's Honolulu power plant (hereinafter, "Additional DG and LSFO Costs"), but allowed HECO to seek an interim surcharge to recover future Additional DG and LSFO Costs, subject to certain restrictions.

On October 22, 2007, the commission issued Proposed Decision and Order No. 23748.

On October 25, 2007, the commission issued Amended Proposed Decision and Order No. 23768, which superseded Proposed Decision and Order No. 23748.

On November 1, 2007, DoD filed an exception to the commission's decision on interest synchronization in Amended Proposed Decision and Order No. 23768.[11] HECO and the

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Department of Defense; Exhibits "1" to "4" and Certificate of Service, filed on December 2, 2005 ("DoD's Opening Brief").

[10]Reply Brief of Hawaiian Electric Company, Inc.; Exhibit A; and Certificate of Service, filed on December 19, 2005 ("HECO's Reply Brief"); Consumer Advocate's Reply Brief and Certificate of Service, filed on December 19, 2005 ("Consumer Advocate's Reply Brief"); Post-Hearing Reply Brief of the Department of Defense and Certificate of Service, filed on December 19, 2005 ("DoD's Reply Brief").

[11]Department of Defense's Exception to Amended Proposed Decision and Order No. 23768, filed on November 1, 2007 ("DoD's Exception"). DoD inadvertently filed its Exception in Docket No. 2006-0386 ("HECO's 2007 test year rate case), but timely refiled its Exception in this docket on November 1, 2007.

Consumer Advocate did not file exceptions to Amended Proposed Decision and Order No. 23768.

By Order No. 24069, filed on March 4, 2008, in response to DoD's Exception, the commission officially adopted the interest synchronization method as the mechanism for computing interest expense in this case. The commission also directed the Parties to submit stipulated (or proposed) revised results of operation schedules, which reflect amounts consistent with the commission's decisions in Order No. 24069 and Amended Proposed Decision and Order No. 23768.

On March 28, 2008, in accordance with Order No. 24069, the Parties submitted their stipulated revised results of operations schedules.[12] In their Stipulated Revised Schedules, the Parties made adjustments in three categories -- interest synchronization, DSM expense, and field collection charge, all of which are incorporated herein, and in Exhibits A and B, attached hereto.

B.

HECO's Requests

HECO's Application requests an increase in revenues of $98,614,000, or 9.9 percent, over present rates. HECO subsequently revised its request in light of the commission's decision to separate HECO's requests for rate increase and for approval or modification of its demand-side and

[12]See Letter filed on March 28, 2008, from the Parties, to the commission ("Stipulated Revised Schedules").

load management programs into two dockets by Order No. 21698, described below. By its rebuttal testimonies, HECO requests revenue requirements of $1,284,637,000 (based on May 1, 2005 fuel and purchased energy prices, and an 8.83 percent return on average rate base and an 11.0 percent return on common equity).[13] Given HECO's estimated revenues at present rates of $1,221,602,000, the amount of the total rate increase that HECO requests in its rebuttal testimonies is $63,035,000, or 5.20 percent, over present rates for the normalized 2005 test year.[14]

C.

Issues

All Parties accept the 2005 calendar year as the appropriate test year in this rate proceeding. The issues set forth in Stipulated Prehearing Order No. 21727 are as follows:

1. Is HECO's proposed rate increase reasonable?

    a. Are the proposed tariffs, rates, charges, and rules just and reasonable?

    b. Are the revenue forecasts for test year 2005 at present rates and proposed rates reasonable?

    c. Are the projected operating expenses for the test year 2005 reasonable?

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[13] See HECO-R-2201.

[14] See HECO-R-2201.

d. Is the projected rate base for test year 2005 reasonable, and are the properties included in rate base used or useful for public utility purposes?

e. Is the requested rate of return fair?

2. What is the amount of the Interim Rate Increase, if any, to which HECO is probably entitled under HRS § 269-16(d)?

By Interim Decision and Order No. 22050, the commission determined probable entitlement (the second issue). The instant Decision and Order addresses the proposed rate increase requested by HECO (the first issue).

II.

Discussion

A.

Outstanding Issues

By the Settlement Agreement, the Parties negotiated a compromise on certain matters "for purposes of simplifying and expediting this proceeding."[15] The Parties state that "the rate changes specifically set forth in [the Settlement Agreement] result in just and reasonable rates for HECO's regulated electric operations."[16] The Parties disagreed on three issues: (1) whether to include a prepaid pension asset in rate base (net of an adjustment to accumulated deferred income tax ("ADIT") reserve); (2) whether to include conservation informational advertising in

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[15]Settlement Agreement at 1.

[16]Settlement Agreement at 2.

HECO's customer service expense; and (3) whether to utilize an interest synchronization method for calculating interest expense.

In addition, by Order No. 22537, filed on June 19, 2006, the commission required the Parties to determine whether additional steps are necessary in light of the changes made by Act 162, Hawaii Session Laws 2006 ("Act 162"), to chapter 269, HRS, with respect to the analysis for approval of public utilities' fuel adjustment clauses. In particular, the commission required the Parties to determine whether amendment of the procedural schedule for this proceeding was necessary to provide additional briefing to the commission related to this issue.

1.

Prepaid Pension Asset

The issue presented for the commission's determination is whether HECO's $78,791,000 prepaid pension asset should be included in rate base.[17] The Parties disagree on this issue.

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[17]The prepaid pension asset is the balance of the pension fund in excess of the accumulated net periodic pension cost ("NPPC"). Standard Financial Accounting Statement ("SFAS") No. 87, "Employers' Accounting for Pensions," define NPPC as the sum of five components:

a. "Service cost" is calculated by an actuary based on the pension plan's benefit formula. Service cost is the present value of amount to be paid in the future to employees as compensation for current services.

b. "Interest expense" is the discount rate used to compute future pension expense.

c. "Return on assets" is the amount by which plan value is expected to increase. This amount has a

To include the prepaid pension asset in rate base, the commission must find that the asset was funded by HECO's investors, and is used and useful in providing electric utility service.[18]

HECO's 2005 test year rate base includes the $78,791,000 prepaid pension asset balance in rate base.[19] Although the Consumer Advocate and DoD do not dispute the prudence of the $78,791,000 prepaid pension asset, they argue that the $78,791,000 prepaid pension asset does not meet either of the requirements for inclusion in rate base.[20] However, all Parties "agree that the exclusion of all or a portion of the prepaid pension [asset] from rate base will also require a

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negative effect on NPPC since the higher the expected return, the less money must be contributed now to produce a defined benefit in the future.

d. "Prior service cost" is an adjustment relating to additional benefits due to employees for their service in prior years, which adjustment is necessary when a plan begins or is altered. The adjustment is usually amortized over a period of years to create a "smoothing" effect.

e. "Gains and losses" include unforeseen events resulting in (i) deviations in the current period between actual experience and the assumptions used and (ii) changes in the assumptions about the future.

<u>See</u> HECO T-15 at 5-6; <u>see also</u> Transcript of Proceedings ("Transcript") (Sept. 15, 2005) at 13 (Sekimura).

[18]<u>See</u> HRS § 269-16(b)(3) (requiring that rates "provide a fair return on the property of the utility actually used or useful for public utility purposes").

[19]<u>See</u> HECO's Opening Brief at 76.

[20]<u>See</u> Consumer Advocate's Opening Brief at 12-13; DoD's Opening Brief at 1-4.

corresponding adjustment to [the ADIT] reserve. The portion of the ADIT related to the [$78,791,000] prepaid pension asset amounts to $28,483,000."[21] Therefore, exclusion of the $78,791,000 prepaid pension asset from rate base would result in a net exclusion of $50,308,000 from rate base.[22]

HECO states: "It is a fundamental principle of accounting that all assets must be funded either by debt or equity. [Shareholders], not ratepayers, provide the funds for a corporation's debt and equity."[23] HECO contends that under SFAS 87, the prepaid pension "is the recognized pension funding in excess of the pension obligation," and "reflects an investment that the Company has made in the pension plan."[24] HECO explains:

> Ratepayers pay for electric utility service. The pension component of the cost of providing that service is based on the NPPC. [Shareholders] provide the funds contributed to the pension fund. The prepaid pension asset is the difference between the accumulated NPPC and funds contributed to the pension fund. Since the test year estimates forecast that the difference between the accumulated NPPC and accumulated fund contributions will result in a net asset, [shareholders] are providing that amount. Since [shareholders] are entitled to earn a fair and reasonable return on these funds, this asset is appropriately included as an addition to rate base.[25]

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[21]Settlement Agreement, Exhibit I at 1.

[22]The $78,791,000 prepaid pension asset, net of the corresponding $28,483,000 adjustment for the ADIT reserve, is $50,308,000 ($78,791,000 - $28,483,000 = $50,308,000).

[23]HECO's Opening Brief at 94.

[24]HECO's Opening Brief at 103.

[25]HECO's Opening Brief at 77.

HECO further states: "[Shareholders] have provided the funds for contribution to the pension plan just as [shareholders] provide funds for any of the Company's investments."[26] Finally, HECO argues that "[t]he pension plan is an integral part of the Company's compensation package to its employees, and is necessary to attract and retain quality employees that are engaged in . . . providing electric service to the public."[27]

The Consumer Advocate and DoD seek to exclude the prepaid pension asset from rate base on the basis that HECO's ratepayers, not shareholders, funded the prepaid pension asset.[28] The Consumer Advocate and DoD argue that the annual revenue requirement attributed to NPPC in the 1995 rate case represents HECO's annual ratepayer contribution.[29] Based on an annual ratepayer contribution of $9.5 million since HECO's 1995 rate case, DoD calculates a total ratepayer contribution of $95 million for the 1996-2005 period.[30] DoD seeks to compare the $95 million from ratepayers against "HECO's actual cash

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[26]HECO's Opening Brief at 91; see also id. at 95 ("Investor funds are used to fund the pension plan just as investor funds are used to construct or purchase the gross plant assets.").

[27]HECO's Opening Brief at 95; HECO's Reply Brief at 23.

[28]Consumer Advocate's Opening Brief at 14 ("[I]t is HECO's ratepayers, not its shareholders, who have essentially provided the monies representing the difference between the pension cost accruals recorded on HECO's annual financial statements and the monies contributed to the pension trust fund."); DoD's Opening Brief at 4 ("[R]atepayers, not [shareholders], funded HECO's pension asset.").

[29]See Consumer Advocate's Opening Brief at 13; DoD's Opening Brief at 2.

[30]See DoD's Opening Brief at 2.

contributions to the trust fund,"[31] which DoD calculates as $43.6 million for the 1996-2005 period.[32] Based on this comparison, DoD concludes that "HECO's current pension asset has been more than fully funded by ratepayers, and ratepayers should not be charged with an additional return by including HECO's pension asset in rate base."[33]

The Consumer Advocate calculates ratepayer contributions for the prepaid pension asset as $9.5 million per year, which leads the Consumer Advocate to conclude that ratepayers, not shareholders, funded the pension trust fund.[34] In addition, the Consumer Advocate also argues that including the prepaid pension balance in rate base results in intergenerational inequities because "current and future ratepayers may reap benefits in the form of lower calculated NPPC accruals as a result of the prior contributions to the pension trust fund."[35] Thus, both the Consumer Advocate and DoD conclude that the prepaid pension asset should be excluded from the rate base.[36]

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[31]DoD's Opening Brief at 2.

[32]See DoD's Reply Brief at 2; 4-5. DoD appears to arrive at $43.6 million by totaling the "Actual Contributions to Trust" (i.e., $6,972,000 + $5,876,000 + $2,206,000 + $13,394,000 + $15,186,000 = $43,600,000, or $43.6 million).

[33]DoD's Opening Brief at 3.

[34]See Consumer Advocate's Opening Brief at 13.

[35]Consumer Advocate's Opening Brief at 18.

[36]Consumer Advocate's Opening Brief at 8; DoD's Opening Brief at 3.

In the alternative, the Consumer Advocate calculates shareholder contributions as, at most, the portion of the prepaid pension asset that is created by totaling HECO's actual cash contributions to the trust fund that are greater than the NPPC accrual in any given year.[37] Thus, the Consumer Advocate calculates that at most, "only $25,671,000 of the recorded prepaid pension asset balance may support HECO's claim that shareholder funds comprise the prepaid pension asset balance recorded on the Company's financial statements."[38] Under the Consumer Advocate's alternative calculation, "the Company should only be allowed to include a maximum of $25,671,000 in the test year rate base, not the $78,791,000 which HECO proposes."[39]

Upon review of the entire record herein, the commission finds that the $78,791,000 of prepaid pension asset should be excluded from rate base. The commission makes this determination based on the specific facts pertaining to the accounting and ratemaking treatment of HECO's NPPC, consistent with the 2005 test year calculations in this proceeding.

The specific facts in this record do not adequately demonstrate that HECO's shareholders, in fact, provided the funds

[37] See Consumer Advocate's Opening Brief at 11.

[38] Consumer Advocate's Opening Brief at 11. The Consumer Advocate appears to arrive at the $25,671,000 figure by totaling the years in which the "Actual Contributions to Trust" are greater than the NPPC accrual (i.e., $2,650,000 + $335,000 + $7,500,000 + $15,186,000 = $25,671,000). See id. In addition, the Consumer Advocate states that "[t]his amount should be reduced by a pro-rated allocation of the related ADIT reserve balance of $28,483,000." See id. at 11 n.14.

[39] Consumer Advocate's Opening Brief at 11.

represented in the prepaid pension asset, such that HECO's shareholders should now be entitled to earn a return on the asset. Rather, it appears that that the majority of the funds constituting the prepaid pension asset resulted from favorable market conditions during 1999 to 2002, and not from investor contributions. In particular, from 1999 through 2002, HECO recorded negative pension costs and made no contributions to the pension trust fund.[40] This resulted in the addition of $56,517,000 to the pension asset,[41] as required by SFAS 87, which represents approximately 74% of the estimated pension asset balance at the end of the 2005 test year.[42] Thus, the favorable market conditions and the SFAS 87 pension accounting requirements resulted in a reduced NPPC, a growing asset, and presumably less expense and greater investor return for HECO's shareholders. Under these circumstances, the commission will not require HECO's ratepayers to pay for a return on such an asset by placing the asset in rate base.

Because the commission finds that, under the facts of this docket, shareholders did not fund the prepaid pension asset to warrant its inclusion in rate base, the commission need not consider whether the prepaid pension asset is used and useful in providing electric utility service.

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[40] _See_ HECO-R-1609.

[41] $1,074,000 + $19,322,000 + $20,465,000 + $15,656,000 = $56,517,000.

[42] $56,517,000 ÷ 76,497,000 = 74%

The commission again notes that its decision on this issue is limited to the specific facts of this docket, and recognizes that different facts might warrant a different conclusion. Based on the facts presented in this docket, the commission determines that HECO is not entitled to earn a return on the prepaid pension asset. Accordingly, the $78,791,000 prepaid pension asset, adjusted by $28,483,000 for the related portion of the ADIT reserve, shall be excluded from rate base.

2.

Conservation Informational Advertising

HECO includes $750,000 for the costs of a conservation and energy efficiency advertising message to inform customers about ways they can save energy and reduce their peak demands.[43] The Consumer Advocate and DoD counter that the $750,000 in conservation and energy efficiency advertising expense should be excluded from HECO's customer service expense.

HECO states that it revised the informational advertising expense amount by including an additional $750,000 in Account 911 after learning that the commission denied, without prejudice, HECO's request for approval of a Residential Customer Energy Awareness pilot program ("RCEA").[44] HECO explains that it developed plans for, and has begun implementing, a three-layered conservation and energy efficiency message that stresses the

[43]See HECO RT-10 at 10; HECO-R-1001.

[44]See HECO's Opening Brief at 61.

importance of using energy wisely at all times, emphasizes that it makes sense to reduce energy use at peak times, and creates a basis for dramatically cutting the use of electricity during an emergency.[45] By Interim Decision and Order No. 22050, the commission questioned whether it was appropriate for HECO to include such an expense, for the first time, in its rebuttal testimony, and recognized that HECO's delay effectively limited the Consumer Advocate's and DoD's abilities to fully review, investigate, and comment on such an expense during pre-rebuttal discovery. In addition, the Consumer Advocate opposes HECO's proposal because it believes that HECO failed to meet its burden of demonstrating the cost-effectiveness of the additional amount.[46] Moreover, DoD suggests that since this expense relates to energy conservation and efficiency awareness, it should be addressed in Docket No. 05-0069, the Energy Efficiency Docket.[47]

By Decision and Order No. 23258, filed on February 13, 2007, in Docket No. 05-0069, the commission approved HECO's RCEA program, subject to certain modifications and requirements. Because the commission approved HECO's RCEA program in Docket No. 05-0069, the commission determines that HECO's request in the present docket is moot. Accordingly, the commission will disallow HECO's present request to include an additional $750,000 in Account 911 for HECO's informational advertising expenses.

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[45]<u>See</u> HECO's Opening Brief at 62.

[46]<u>See</u> Consumer Advocate's Opening Brief at 26.

[47]<u>See</u> DoD's Opening Brief at 9.

3.

Interest Synchronization

As explained in Order No. 24068, filed on March 4, 2008, DoD and HECO dispute the issue of interest synchronization. In DoD's Exception and briefs, it proposes the interest synchronization method for calculating HECO's interest expense.[48] HECO, however, maintains that "[HECO's current] method for determining the interest expense deduction is consistent with prior [c]ommission decisions[.]"[49]

HECO's 2005 test year interest expense is $27,911,000.[50] HECO estimates the interest expense by calculating the interest on long-term debt and hybrid securities actually in place and on estimated additional long-term debt and short-term debt to be required in the test year.[51] This total interest is then reduced by the debt portion of the allowance for funds used during construction ("AFUDC") for the year.[52] In accordance with SFAS 109, HECO computes AFUDC on a pretax basis, and consequently, the debt portion of AFUDC reflects interest related to construction on a pretax basis.[53] The pretax debt portion of

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[48]See generally DoD's Exception; DoD's Opening Brief at 12.

[49]Settlement Agreement, Exhibit II at 8.

[50]See HECO-R-1702; HECO's 2nd September 19 filing, Attachment 3 at 5.

[51]See HECO T-17 at 8-9; HECO-WP-1702 at 2.

[52]See HECO T-17 at 9; HECO-WP-1702 at 2.

[53]See HECO T-17 at 9.

AFUDC represents the amount of estimated interest expense related to construction of capital assets and, according to HECO, should not impact the test year results of operations.[54] This AFUDC is capitalized as part of the construction cost of those capital assets.[55] The capitalized costs, including AFUDC, are subsequently recovered by HECO through depreciation expense and the related tax benefits are similarly passed to the customers in future years.[56]

HECO opposes interest synchronization. HECO explains that its current method of calculating interest expense is the same method used by HECO and the Consumer Advocate in Docket Nos. 7700 and 7766.[57] HECO notes that the commission already twice rejected DoD's previous proposals to adopt the interest synchronization method in Docket Nos. 6531 and 6998.[58] HECO also adds that DoD admits that HECO's methodology for estimating interest expense is adequate.[59] HECO states that if the commission adopts the interest synchronization method, the

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[54]See HECO T-17 at 9.

[55]See HECO T-17 at 9.

[56]See HECO T-17 at 9.

[57]See HECO's Opening Brief at 73-74.

[58]See HECO's Opening Brief at 74-75.

[59]See HECO's Reply Brief at 41 (citing DoD's Opening Brief at 12).

rate base amount must reflect the commission's decision on whether a prepaid pension asset is included in rate base.[60]

DoD proposes that the interest expense be calculated using the interest synchronization method.[61] Under the interest synchronization method, "the authorized weighted cost of debt [is multiplied by] the authorized rate base, to determine [the] interest expense[.]"[62] DoD explains that the interest synchronization method is "theoretically sound because it will harmonize the interest deduction for calculating taxable income with the interest expense included in [the] cost of capital and [will] simplify the ratemaking process."[63] DoD asserts that the interest synchronization method "is consistent from case to case and balances the concerns of all stakeholders in an impartial and equitable way."[64]

In addition, in DoD's Exception, DoD asserts that the vast majority of state utility regulatory commissions have adopted the interest synchronization method.[65] Moreover, DoD contends that any uncertainties surrounding the use of interest

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[60]See HECO's Opening Brief at 75-76.

[61]See DoD's Opening Brief at 12.

[62]DoD's Opening Brief at 10.

[63]DoD's Opening Brief at 12.

[64]DoD's Opening Brief at 12.

[65]DoD's Exception at 4.

synchronization that existed in the 1980s have been resolved overwhelmingly in favor of using interest synchronization.[66]

The Consumer Advocate "takes no position on interest synchronization."[67] The Consumer Advocate explains that it "stated its preference for using interest synchronization, but did not recommend its use in Direct Testimony in light of prior [c]ommission rulings on the matter."[68]

Based on a full review of the entire record, as decided in Order No. 24068, the commission determines that the interest synchronization method for calculating interest expense should be adopted in this case. In doing so, the commission finds that interest synchronization will improve the ratemaking process and has several advantages over the method traditionally used by HECO. In particular, interest synchronization simplifies rate case proceedings by reducing the calculation of the interest expense to a single mathematical formula where the amounts in the formula (i.e., rate base and weighted cost of debt) have already been determined in the ratemaking process. Thus, interest synchronization serves to narrow the potential for disputes over the interest expense calculation in rate cases.

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[66]DoD's Exception at 2-4.

[67]Consumer Advocate's Opening Brief at 35.

[68]Consumer Advocate's Opening Brief at 35; <u>see also</u> Settlement Agreement, Exhibit II at 8 ("Although [the Consumer Advocate's direct testimony] discusses the Consumer Advocate's preference for use of the interest synchronization method for ratemaking purposes, the Consumer Advocate's filing did not use this methodology in deference to prior [c]ommission decisions.").

Moreover, interest synchronization has the advantage of providing symmetry, certainty, and consistency in ratemaking. As asserted by DoD, "the interest synchronization method is necessary in order to properly match and coordinate the components of the ratemaking process."[69] "HECO's method is dependent upon such varying items as interest on long-term debt and hybrid securities and the estimated interest on short-term debt, as well as the pretax debt portion of [AFUDC]. Any of these items can change from year-to-year. . . . Ultimately, HECO's method is inferior to interest synchronization because it does not coordinate and match the capital structure, rate base and statement of net operating income."[70]

The commission acknowledges that it has declined to adopt interest synchronization in prior rate cases due to "uncertainties surrounding its use."[71] Those decisions, however, were issued over a decade ago, and since then, it appears that the uncertainties referenced in the commission's prior decisions have been resolved in favor of using interest synchronization. In fact, the Federal Energy Regulatory Commission and many state commissions now consistently apply interest synchronization as a legitimate and appropriate ratemaking method.

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[69]DoD's Exception at 4.

[70]DoD's Exception at 2.

[71]See In re Hawaiian Elec. Co., Inc., Decision and Order No. 11317, filed on October 17, 1991, in Docket No. 6531; In re Hawaiian Elec. Co., Inc., Decision and Order No. 11699, filed on June 30, 1992, in Docket No. 6998.

Accordingly, as concluded in Order No. 24068, for all of the reasons addressed above, and given the general widespread acceptance of interest synchronization since the commission's prior decisions rejecting interest synchronization, the commission finds it reasonable to depart from its prior decisions on interest synchronization, and instead, officially adopt it as the mechanism for computing interest expense in this case.[72]

4.

Energy Cost Adjustment Clause ("ECAC")

a.

Description of ECAC

The ECAC is an automatic adjustment provision in HECO's rate schedules that allows HECO to automatically increase or decrease rates or charges to customers to reflect changes in its energy costs of fuel, DG energy and purchased energy above or below the levels included in the base charges, without a rate case proceeding.[73]

According to HECO, the ECAC works as follows: a rate case proceeding determines the base electricity rates into which

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[72]An administrative agency may depart from past precedent as long as it provides a reasoned explanation. See Ramaprakash v. FAA, 346 F.3d 1121, 1124 (D.C. Cir. 2003) ("Agencies are free to change course as their expertise and experience may suggest or require, but when they do so they must provide a reasoned analysis") (quotation omitted); see also Kahale v. City and County of Honolulu, 104 Hawai`i 341, 348, 90 P.3d 233, 240 (S.Ct. 2004) ("[G]reat consideration should always be accorded precedent . . . Yet, it does not necessarily follow that a rule established by precedent is infallible.").

[73]See HECO's Opening Brief at 116.

are embedded test year levels of fuel prices, payment rates for purchased energy and a test year resource mix. An energy cost adjustment factor ("ECA Factor"), expressed in cents per kilowatt hour ("kWh"), allows HECO to recover costs due to subsequent changes in: (1) fuel and purchased power costs; (2) the resource mix between utility-owned generation, utility-DG and purchased energy; (3) the resource mix among the utility plants; and (4) the resource mix among purchased energy producers. The commission receives monthly filings from HECO detailing the ECA Factor changes for the coming month. The fixed efficiency factor, or sales heat rate, for the central station generation, is also established during a rate case proceeding. HECO notes that this sales heat rate provides it with an incentive to operate the units as efficiently as possible.[74]

HECO asserts that it needs the ECAC because fuel costs are a large portion of its expenses and because fuel price levels are "largely beyond the Company's control."[75] HECO states that ECAC benefits HECO and its shareholders by: (1) limiting the swings in cash flow and earnings; (2) reducing the cost of capital; (3) improving HECO's ability to earn a fair return on investor capital; and (4) providing a more timely recovery of fuel and purchased energy costs.[76]

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[74]See HECO's Opening Brief at 116.

[75]HECO's Opening Brief at 117.

[76]See HECO T-10 at 68-69; HECO's 2nd September 19 filing, Attachment 2 at 2; HECO-R-401 at 1.

HECO states that ECAC benefits its customers as well by: (1) reducing HECO's financial risk and lowering the cost of capital, with the resulting savings being passed on to customers through lower base rates in rate case proceedings; and (2) passing through to customers the savings incurred when fuel prices fall below the prices embedded in base rates (to the same extent that they incur additional costs when fuel prices are above the embedded fuel prices). HECO claims that it returned more than $273 million to its customers between January 1984 and September 2004.[77]

b.

ECA Factor

HECO's ECA Factors for present and proposed rates are equal to the difference between test year energy costs and base composite costs. At present rates, the base composite costs are those established in the last rate case. At proposed rates, the base composite costs are based on the test year fuel price, including trucking and inspection costs, the fuel resource mix, test year DG energy expense, test year purchased energy expense, and test year fuel efficiency.[78]

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[77] See HECO T-10 at 69.

[78] See HECO T-10 at 69. HECO notes that for both current and proposed rates, only the fuel and fuel additive components of Kalaeloa's energy charge and the fuel component of AES Hawaii's energy charge are included in the ECAC. See HECO's Opening Brief at 118.

HECO proposes to include a DG component to allow it to recover the fuel, transportation costs, and related revenue taxes, for utility owned or operated DG units, to the extent that those costs are not recovered in the base charges.[79]

c.

Continuation of the ECAC

All of the Parties agree that: (1) the ECAC should be continued; (2) a DG component should be added to the ECAC; and (3) the ECA Factor at proposed rates should be reset to zero.[80]

The Parties object to applying the new criteria for consideration of fuel adjustment clauses set forth in Act 162 for many reasons. First, the Parties assert that the instant Application was filed more than eighteen months prior to the effective date of Act 162, and Order No. 22537 was filed more than eight months following the closure of the evidentiary record in this proceeding subsequent to the evidentiary hearings held in September 2005.[81]

Second, the Parties acknowledge that fuel prices under the current amended fuel contracts have historically fluctuated both above and below the levels included in base rates, and will

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[79] See HECO's Opening Brief at 119.

[80] See Amended and Restated Stipulation, filed on August 7, 2006, at 5.

[81] See Amended and Restated Stipulation, filed on August 7, 2006, at 5.

continue to vary based on fluctuations in international and domestic indices.[82]

Third, HECO asserts that the ECAC benefits both it and its customers, as detailed above.

Fourth, the record in this proceeding does not fully address the utility's ability to mitigate the risk of sudden or frequent fuel cost changes that cannot otherwise reasonably be mitigated through other commercially available means. HECO states that it "could take significant additional time to develop this type of information, since hedging instruments for [LSFO] (the primary fuel burned by HECO in its power plants) are not readily available."[83] HECO offers that it could develop this type of information for its next rate case, or in other proceedings, like Hawaii Electric Light Company, Inc.'s ("HELCO") pending rate case application.[84]

Fifth, the Parties state that holding open this proceeding to review the ECAC may jeopardize the Settlement Agreement and further delay the issuance of a final decision and order. The Parties state that it would be more efficient to address the Act 162 factors in the context of HECO's ECAC in HECO's next general rate case, given the need to develop

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[82]<u>See</u> Amended and Restated Stipulation, filed on August 7, 2006, at 6.

[83]Amended and Restated Stipulation, filed on August 7, 2006, at 9.

[84]<u>See</u> Amended and Restated Stipulation, filed on August 7, 2006, at 6.

the hedging information, the opportunity to address the factors in the context of HELCO's pending rate case, and the status of the record development in this proceeding.[85]

Finally, HECO requests that the requirement that the Parties file a stipulated procedural schedule within forty-five days of the date of Order No. 22537 be extended to three weeks from the date that the commission rules on the Amended and Restated Stipulation.[86]

The commission acknowledges that the Parties have utilized significant resources to develop the record in this proceeding. Indeed, the record contains information relating to all of the Act 162 factors, except the factor examining HECO's ability to mitigate the risk of sudden or frequent fuel cost changes that cannot otherwise be reasonably mitigated through other commercially available means, such as through fuel hedging. The record is clear that benefits exist for both HECO and its customers, and that eliminating or changing the ECAC at this time is not necessary to encourage renewable resource use. Because the record is well-developed concerning the methodology and necessity for HECO's ECAC, the commission will not require the Parties to file a stipulated procedural schedule on this issue in this docket. Rather, the commission expects that HECO

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[85]See Amended and Restated Stipulation, filed on August 7, 2006, at 9-11.

[86]See Letter from William A. Bonnet, Vice President, Government and Community Affairs, to the commission, dated August 7, 2006, at 1.

and HELCO will develop information relating to the Act 162 factors for examination during their next rate case proceedings.

B.

Revenues

1.

Test Year Estimated Electricity Sales and Customers

HECO estimates total electricity sales for the 2005 test year to be 7,856.0 gigawatthours ("GWh"), and its average number of total customers for the 2005 test year to be 291,765.[87] The Consumer Advocate and DoD agree to HECO's estimated total electricity sales and average number of total customers.[88]

The commission finds reasonable HECO's estimates of 7,856.0 GWh and 291,765 customers.[89]

2.

Electric Sales Revenues and Other Operating Revenues

HECO's test year total electric sales revenues, based on the test year total electricity sales and average number of

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[87]See HECO-R-201; HECO RT-2 at 1-2.

[88]See Settlement Agreement, Exhibit II at 1.

[89]The commission generally notes that, for purposes of its review of the Parties' settlement in this docket, the commission accepts as sufficient the information provided in the Parties' Settlement Agreement. The Parties are, however, advised that in future rate cases, the commission may require additional documentation to support settlement amounts as just and reasonable.

total customers estimates, are $1,218,267,000 at present rates and $1,262,619,000 at proposed rates, for an increase of $44,352,000.[90] The Consumer Advocate and DoD adopt HECO's 2005 test year total electric sales revenues at present rates.[91]

HECO estimates its test year other operating revenues (including gain on sale of land) to be $3,330,000 at present rates and $3,840,000 at proposed rates.[92] The Parties agree to other operating revenues at present rates of $3,330,000.[93]

The commission finds reasonable the Parties' agreed-upon estimates of $1,218,267,000 for electric sales revenues at present rates, and $3,330,000 for other operating revenues at present rates.[94]

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[90]See HECO's 2nd September 19 filing, Attachment 3 at 1; HECO-R-301 (showing the 2005 test year total electric sales revenues at present rates as $1,218,266,800); see also Stipulated Revised Schedules, Exhibit 1 at 1.

[91]See Settlement Agreement, Exhibit II at 1 ("The Consumer Advocate and [DoD] adopt HECO's values as revenues at present rates as shown on HECO-R-301."); see also Stipulated Revised Schedules.

[92]See HECO's 2nd September 19 filing, Attachment 3 at 1; see also Stipulated Revised Schedules, Exhibit 1 at 1.

[93]See Settlement Agreement, Exhibit II at 1. For purposes of settlement, the Consumer Advocate and DoD adopt HECO's late payment charge projection, which is based on 0.1 percent of the test year sales. See id. In addition, HECO and DoD accept the Consumer Advocate's normalization of the Lilipuna expiring amortization. See id.; see also Stipulated Revised Schedules.

[94]These amounts are reflected on Exhibit A, attached hereto, at 1, as $1,218,267,000 for electric sales revenues, and $2,967,000 for other revenues and $363,000 for gain on sale of land (or $3,330,000 for other operating revenues).

C.

Expenses

1.

Fuel Expense, Purchased Power Expense, Generation Heat Rate, and ECA Factor

a.

Fuel Expense

The fuel expense for the 2005 test year represents the cost of fuel required by HECO to produce the energy required, less purchased energy, to meet the projected needs of HECO's customers. HECO explains that the two primary factors in the determination of the test year fuel expense are fuel price and projected fuel consumption (i.e., the quantity of fuel needed to produce the required energy).

HECO's 2005 test year estimate of fuel expense is $449,447,000, to which the Consumer Advocate and DoD agree.[95] The Consumer Advocate and DoD agree with HECO's proposal to incorporate use of the 2004 calibration factor in determining the test year fuel expense, for purposes of settlement.[96] HECO agrees to use the same calibration reporting requirements required of HELCO in Docket No. 99-0207.[97]

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[95]See Settlement Agreement, Exhibit II at 1; HECO's 2nd September 19 filing, Attachment 3 at 1; HECO RT-4 at 2; HECO-R-401.

[96]See Settlement Agreement, Exhibit II at 1.

[97]See Settlement Agreement, Exhibit II at 1.

The commission finds reasonable HECO's estimate of $449,447,000 for fuel expense.

b.

Purchased Power Expense

HECO's purchased power expense is based on the projected amount of energy to be purchased by, or made available to, HECO in the test year and the contract pricing terms for the various purchased power producers. The energy terms vary for different purchased power producers.[98]

HECO's rebuttal testimony estimates a test year purchased power expense of $345,434,080, which the Consumer Advocate and DoD adopted.[99] However, HECO subsequently reduced its test year purchased power expense by $112,000 to account for lower capacity payments that will be made to one the energy power producers - Kalaeloa Partners, L.P. ("Kalaeloa").[100]

The commission accepts HECO's 2005 test year estimate for the purchased power expense, as reduced by $112,000 to reflect the anticipated lower capacity payments. Thus, the commission finds that the purchased power expense of $345,321,000 is reasonable.

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[98]See HECO T-5 at 1.

[99]Settlement Agreement, Exhibit II at 2.

[100]HECO's 2nd September 19 filing, Attachment 2 at 2.

c.

Generation Heat Rate

The net generation heat rate is a measure of generation efficiency, and represents the heat content of the fuel consumed in British thermal units per net kilowatt hour ("Btu/kWh") generated. HECO's 2005 test year net generation heat rates are 10,602 Btu/kWh for central station generation, 10,583 Btu/kWh for steam generation, 25,070 Btu/kWh for combustion turbines, and 9,833 Btu/kWh for substation DG.[101] The 2005 test year composite generation heat rate is 10,601 Btu/kWh.[102]

HECO states that the net generation heat rate directly affects the sales heat rate. The sales heat rate is calculated in a manner similar to the net heat rate, except the sales heat rate is the heat content of the fuel consumed per kWh of sales.[103] The sales heat rate, in the form of a generation efficiency factor, is used in the ECAC to translate the base generation cost in cents per million Btu ("MBtu") to the weighted base generation cost in cents per kWh of sales.[104] HECO is using a generation efficiency factor of 0.011140 MBtu/kWh.[105]

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[101]See HECO-R-406; HECO-R-407.

[102]See HECO-R-406.

[103]See HECO's Opening Brief at 27.

[104]See HECO T-4 at 32.

[105]See HECO RT-4 at 2; HECO-R-406.

The Consumer Advocate and DoD agree with HECO's use of its production simulation model and with the results of the model as reflected in HECO RT-4.[106]

The commission finds that HECO's heat rates are reasonable.

d.

ECA Factor

HECO proposes an ECA Factor of 5.414 cents/kWh at present rates and 0.00 cents/kWh at proposed rates.[107] The Parties agree that the ECAC should continue and that the ECA Factor at present rates is 5.414 cents/kWh.[108] In addition, the Parties agree to HECO's methodology to calculate the ECA Factor, including the DG component proposed by HECO at HECO RT-10.[109]

Upon review of the record, and in light of the commission's decision to allow the continuance of the ECAC, the commission finds HECO's ECA Factors to be reasonable.

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[106]See Settlement Agreement, Exhibit II at 1.

[107]See HECO RT-10 at 28; HECO-R-1012 at 1.

[108]See Settlement Agreement, Exhibit II at 1.

[109]See Settlement Agreement, Exhibit II at 1.

2.

Labor Adjustment

HECO proposes a labor adjustment to more accurately reflect the proportionate mix of 2005 test year productive overtime and regular time hours in the base standard labor rates and in the test year labor costs. HECO proposes a total downward labor adjustment of $246,000.[110] This $246,000 is discussed below as follows:

Labor Adjustment in Expense	(in thousands)
Other production operations & maintenance ("O&M") expense	$ 96
Transmission and distribution O&M expense	$ 49
Customer accounts expense	$ 25
Customer service expense	$ 14
A&G expense	$ 61
Total Labor Adjustment	$246[111]

The Consumer Advocate agrees with HECO's labor adjustment.[112] The commission finds the labor adjustment to be reasonable, and incorporates the labor adjustments for each expense in the discussion that follows.

[110]See HECO's 2nd September 19 filing, Attachment 3 at 1.

[111]Due to rounding, the total labor adjustment is $246,000, rather than $245,000.

[112]See HECO's 2nd September 19 filing, Attachment 3 at 1.

3.

Other Production O&M Expense and Transmission and Distribution O&M Expenses

a.

Other Production O&M Expense

HECO states that the other production O&M expense "includes expenses incurred to ensure reliable, efficient, safe and compliant operation maintenance of HECO's [fourteen] steam and [two] combustion turbine generating units at [its] three power plants and [the] associated support facilities."[113]

HECO's 2005 test year estimate for the other production O&M expense, based on its Settlement Agreement with the Consumer Advocate and DoD, is $53,365,000, before taking into account the labor adjustment that was agreed to by the Parties.[114] With the $96,000 labor adjustment agreed to by the Parties, the estimate for the other production O&M expense is $53,269,000.[115]

In their Settlement Agreement, the Parties agree to the following components of the other production O&M expense:

i. Substation DG expenses equivalent to one-half of the annual costs for the nine DG units to be installed at three HECO substations, or $733,000.[116]

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[113] See HECO T-6 at 18.

[114] See HECO's 2nd September 19 filing, Attachment 3 at 1.

[115] See Settlement Agreement, Exhibit II at 3-4; HECO's 1st September 19 filing, Attachment C at 16; HECO's 2nd September 19 filing, Attachment 3 at 1; HECO RT-6 at 1-3; HECO-R-603; HECO-R-604.

[116] See Settlement Agreement, Exhibit II at 2.

ii. Emission Fees of $505,000, as suggested by the Consumer Advocate.[117]

iii. Electronic Shock Absorber research and development expenses of $171,000.[118]

iv. Amortization of Kahe Unit 7 project costs of $321,000, by taking the average of the remaining unamortized balance as of December 31, 2004 of $1,575,000 and the unamortized balance as of December 31, 2005 of $675,000 and amortizing it over 3.5 years (beginning July 1, 2005).[119]

iv. The resolution of differences related to production O&M labor expense and production non-labor maintenance expenses.[120]

The commission finds the other production O&M expense of $53,269,000 ($53,365,000 less the labor adjustment of $96,000) to be reasonable.

b.

Transmission and Distribution O&M Expenses

HECO's transmission operation expense includes labor and non-labor costs for load dispatching and transmission switching operations, transmission substation inspections and operations, communications systems operations and inspections,

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[117]See Settlement Agreement, Exhibit II at 2-3.

[118]See Settlement Agreement, Exhibit II at 2-3.

[119]See Settlement Agreement, Exhibit II at 3.

[120]See Settlement Agreement, Exhibit II at 2-3.

and transmission line, pole, and structure inspections.[121] HECO's transmission maintenance expense includes labor and non-labor costs for maintenance and repairs related to transmission substation equipment and facilities, communications equipment, transmission lines and cables, and tree trimming.[122]

HECO distribution operation expense includes labor and non-labor costs for trouble dispatching and distribution switching operations, distribution substation inspections and operations, distribution line, pole, and structure inspections, connecting, disconnecting, and locking meters, investigating customer complaints, and testing and treating wood distribution poles.[123] HECO's distribution maintenance expense includes labor and non-labor costs to support maintenance and repairs to distribution substation equipment and facilities, distribution lines and cables, and tree trimming.[124]

HECO estimates its transmission and distribution O&M expenses to be $27,844,000, before taking into account the labor adjustment that was agreed to by the Parties.[125] With the $49,000 labor adjustment agreed to by the Parties, the estimate

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[121] See HECO T-8 at 6.

[122] See HECO T-8 at 7.

[123] See HECO T-8 at 8.

[124] See HECO T-8 at 9.

[125] See HECO's 2nd September 19 filing, Attachment 3 at 1.

for the transmission and distribution O&M expenses is $27,795,000, which the Consumer Advocate and DoD do not oppose.[126]

The commission finds the transmission and distribution O&M expense of $27,795,000 ($27,844,000 less the labor adjustment of $49,000) to be reasonable.

4.

Customer Accounts Expense, Allowance for Uncollectibles, and Customer Service Expense

a.

Customer Accounts Expense and Allowance for Uncollectibles

The customer accounts expense is primarily related to providing, managing, and maintaining services and information relating to customer account services and customer account management, including monthly billing, meter reading, managing delinquent accounts, and collecting and processing payments.[127]

Based on its Settlement Agreement with the Consumer Advocate and DoD, HECO estimates the customer accounts expense, excluding uncollectibles, to be $11,232,000, before taking into account the labor adjustment that was agreed to by the Parties.[128] With the $25,000 labor adjustment agreed to by the Parties, the estimate for the customer accounts expense, excluding uncollectibles, is $11,207,000, which the

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[126]See Settlement Agreement, Exhibit II at 4.

[127]See HECO T-9 at 2.

[128]See HECO's 2nd September 19 filing, Attachment 3 at 1.

Consumer Advocate and DoD do not oppose.[129] HECO proposes to use an uncollectible account factor of 0.0946 percent of electric sales revenues, to which the Consumer Advocate and DoD agree.[130] Thus, HECO estimates the allowance for uncollectibles to be $1,152,000.[131]

In reaching the agreement on the customer accounts expense, the Parties also agree upon the following components by taking the following actions:

i. HECO revised its uncollectible account factor to 0.0946 percent of electric sales revenues in its rebuttal testimony to agree with the Consumer Advocate's proposal.[132]

ii. The Consumer Advocate and DoD, for purposes of settlement, accepted HECO's methodology (e.g., utilizing an overall revenue conversion factor that includes an allowance for uncollectible accounts) to calculate uncollectible accounts expense.[133]

iii. HECO accepted the Consumer Advocate's and DoD's proposed revenue lag of thirty-seven days to measure the time between the date that electricity is used by the customer and the date that HECO is paid for such use.[134]

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[129]See Settlement Agreement, Exhibit II at 4.

[130]See Settlement Agreement, Exhibit II at 4.

[131]See HECO's 2nd September 19 filing, Attachment 3 at 1.

[132]See Settlement Agreement, Exhibit II at 4.

[133]See Settlement Agreement, Exhibit II at 4.

[134]See Settlement Agreement, Exhibit II at 4.

iv. The Parties resolved their differences relating to the employee count.[135]

The commission finds the customer accounts expense (excluding uncollectibles) of $11,207,000 ($11,232,000 less the labor adjustment of $25,000) and the allowance for uncollectibles account factor of 0.0946 percent to be reasonable.

b.

Customer Service Expense

HECO categorizes the following expenses as customer service expenses:

Account 909	Supervision - customer service expense;
Account 910	Customer assistance expense;
Account 911	Informational advertising expense; and
Account 912	Miscellaneous customer service expense.[136]

HECO estimates its customer service expense to be $5,012,000, before taking into account the labor adjustment that was agreed to by the Parties.[137] With the $14,000 labor adjustment agreed to by the Parties, the estimate for the

[135] See Settlement Agreement, Exhibit II at 4.

[136] See HECO T-10 at 2.

[137] See HECO's 1st September 19 filing, Attachment C at 19; HECO's 2nd September 19 filing, Attachment 3 at 1.

customer service expense is $4,998,000, of which $750,000 for informational advertising is disputed.[138]

As discussed above, HECO's request for $750,000 for informational advertising is moot and the commission disallows the inclusion of these costs in the customer service expense.

In reaching their agreement to $4,248,000, the undisputed portion of the customer service expense, the Parties agree to the following components of customer service expense:

i. The Consumer Advocate and DoD accepted HECO's reorganization costs.[139]

ii. HECO removed $29,223,000 of DSM expense from the customer service expense to account for the bifurcation of the DSM programs from the instant docket by Order No. 21698, filed on March 16, 2005. HECO, however, continues to include the DSM program base labor costs in base rates in order to recover these costs in the manner currently employed, pursuant to Order No. 21698.[140]

iii. HECO included $338,000 of DSM program base labor costs for its existing energy efficiency DSM programs in its rebuttal test year estimates.[141] The Consumer Advocate and DoD agreed that HECO could include these test year expenses in base rates, and that an appropriate true-up adjustment can be used if there is a change in the mechanism used to recover these costs, or the amount of these

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[138]See Settlement Agreement, Exhibit II at 5.

[139]See Settlement Agreement, Exhibit II at 4.

[140]See Settlement Agreement, Exhibit II at 4-5.

[141]See HECO-R-1004.

costs, as a result of the Energy Efficiency Docket.[142]

iv. HECO included $392,000 of load management program costs in base rates (for the residential direct load control and commercial and industrial load control programs). HECO agreed with the Consumer Advocate not to recover these costs through the DSM component of the Integrated Resource Planning ("IRP") clause, and to use a true-up adjustment mechanism described in paragraph 10.b. of the Settlement Agreement.[143]

v. HECO included $300,000 of additional marketing expenses for the load control programs in base rates after agreeing with the Consumer Advocate not to recover these amounts through the IRP Cost Recovery Provision ("IRP Clause"). HECO notes that its Final Revenue Requirements filed on September 19, 2005 include these advertising expenses. HECO agrees that if the commission does not approve the program modifications, HECO will refund with interest the $300,000 included in the interim rates using the Reconciliation Adjustment of the IRP Clause.[144]

The commission finds the customer service expense of $3,386,000 ($3,400,000 less the labor adjustment of $14,000) to be reasonable.[145] Further, while the commission finds reasonable and does not dispute the amounts of the above-mentioned DSM expenses, the commission is not convinced that base rate recovery is the clearest means of tracking and monitoring these

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[142]See Settlement Agreement, Exhibit II at 4-5.

[143]See Settlement Agreement, Exhibit II at 5.

[144]See Settlement Agreement, Exhibit II at 5; HECO's Opening Brief at 38.

[145]See Stipulated Revised Schedules, Exhibit 1 at 1.

costs. Thus, HECO shall recover the DSM incremental labor costs, the load management program costs, and the load control program advertising costs through the existing IRP surcharge mechanism, and shall provide updated filings demonstrating the omission of these amounts from base rates and their recovery through the existing IRP surcharge mechanism.

5.

Administrative and General Expense

Administrative and general ("A&G") expenses represent a diverse group of expenses under the uniform system of accounts developed by the National Association of Regulatory Utility Commissioners ("NARUC"), which the commission directed HECO to follow. Under the NARUC uniform system of accounts, A&G expenses often represent operating expenses not provided for in other functional areas. HECO accounts for these expenses using five groups of accounts as follows:

Administrative (Accounts 920-922);
Outside Services (Accounts 923010 and 923020);
Insurance (Accounts 924 and 925);
Employee Benefits (Accounts 926000-926020); and
Miscellaneous (Accounts 928-932).[146]

[146] See HECO T-13 at 5-6.

HECO estimates the total A&G expense to be $54,141,000, before taking into account the labor adjustment that was agreed to by the Parties.[147] With the $61,000 labor adjustment agreed to by the Parties, the final A&G expense estimate is $54,080,000, to which the Consumer Advocate and DoD agree.[148]

a.

Administrative Expenses

The administrative group of expenses represents the expenses incurred in connection with the general administration of HECO's operations that are not chargeable against other specific functional accounts. Administrative expenses include the labor and related non-labor costs of company officers, as well as employees in diverse functional areas such as accounting and finance, internal audit, purchasing, human resources, office services, legal, government relations, regulatory affairs, environmental, information technology, safety and security, risk management, energy services, and corporate communications.[149]

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[147] See HECO's 1st September 19 filing, Attachment C at 1; HECO's 2nd September 19 filing, Attachment 3 at 1; see also Stipulated Revised Schedules, Exhibit 1 at 1.

[148] See Settlement Agreement, Exhibit II at 6-8; see also Stipulated Revised Schedules, Exhibit 1 at 1.

[149] See HECO T-13 at 6-7.

HECO estimates its administrative expenses as follows:

Acct. No.	Description	(in thousands)
920	A&G Expense - Labor	$13,713
921	A&G Expense - Non-labor	$11,138
922	A&G Expense - Transferred	($2,186)
Total Administrative Expenses		$22,665[150]
Parties' Stipulated Adjustment		(27)[151]
Revised Administrative Expenses		$22,638

The Consumer Advocate and DoD agree that HECO's administrative expense estimates are reasonable.[152]

b.

Outside Services

Outside services expenses include amounts paid by HECO for the services of attorneys and for the services of auditors, consultants, etc.[153] HECO estimates its outside service expenses as follows:

Acct. No.	Description	(in thousands)
923010	Outside Services - Legal	$ 154
923020	Outside Services - Other	$1,279
Total Outside Services Expenses		$1,433[154]

[150]See HECO's 1st September 19 filing, Attachment C at 20.

[151]See Stipulated Revised Schedules, Exhibit 2 at 3.

[152]See Settlement Agreement, Exhibit II at 6-8.

[153]See HECO T-13 at 33.

[154]See HECO's 1st September 19 filing, Attachment C at 20.

HECO states that the Consumer Advocate and DoD agree that HECO's outside services expense estimates are reasonable.[155]

c.

Insurance

The insurance group of accounts consists of expenses relating to insurance premiums, insurance claims reserves to protect the company against injuries to, and damage claims of, members of the public, and costs for safety and accident prevention programs and activities. HECO asserts that incurring these expenses is necessary to prevent or control the financial impact of accidental losses on the company's performance.[156] HECO estimates its insurance expenses as follows:

Acct. No.	Description	(in thousands)
924	Property Insurance	\$ 2,428
925	Injuries & Damage - Employees	\$ 6,031
Total Insurance Expenses		\$ 8,459[157]

HECO states that the Consumer Advocate and DoD agree that HECO's insurance expense estimate is reasonable.[158]

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[155]See HECO's Opening Brief at 39 (citing Settlement Agreement, Exhibit II at 6-8).

[156]See HECO T-13 at 40-41.

[157]See HECO's 1st September 19 filing, Attachment C at 20.

[158]See HECO's Opening Brief at 40 (citing Settlement Agreement, Exhibit II at 6-8).

d.

Employee Benefits

The employee benefits expense includes the total cost of employee benefits less the amount transferred to plant construction or billed to affiliated companies and outside third parties for services rendered.[159] HECO estimates the employee benefits expense as follows:

Acct. No.	Description	(in thousands)
926000	Employee Pensions and Benefits	$13,088
926010	Employee Benefits - Flex Credits	$ 9,861
926020	Employee Benefits Transfers	($7,380)
	Total Employee Benefits	$15,569[160]
	Parties' Stipulated Adjustment	(99)[161]
	Revised Employee Benefits	$15,470

The Consumer Advocate and DoD agree with HECO's test year estimates for employee benefits costs.[162] In reaching this agreement, the Parties agree to an employee count of 1,485 employees for the test year average and 1,490 employees for the test year end for purposes of determining the employees benefits expense and payroll taxes, and HECO accepts the Consumer Advocate's proposed benefit adjustment shown on CA-101, Schedules C-8, line 1, C-9, line 1, and C-21.[163]

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[159]See HECO T-13 at 43.

[160]See HECO's 1st September 19 filing, Attachment C at 20; HECO RT-15 at 2-5; HECO-R-1501; HECO RT-13 at 18-19; HECO-R-1301; HECO-R-1305.

[161]See Stipulated Revised Schedules, Exhibit 2 at 3.

[162]See Settlement Agreement, Exhibit II at 7-8.

[163]See Settlement Agreement, Exhibit II at 2.

e.

Miscellaneous A&G Expenses

The miscellaneous A&G expenses include a variety of unrelated costs that are necessary for company operations, but which are not provided for in other functional accounts.[164] HECO estimates the miscellaneous A&G expenses as follows:

Acct. No.	Description	(in thousands)
928	Regulatory commission expense	$ 198
9301	Inst. or goodwill advertising	$ 73
9302	Misc. general expense	$2,972
931	Rents expense - A&G	$2,158
932	Admin. and general maintenance	$ 740
Total Miscellaneous A&G Expenses		$6,141[165]

The Consumer Advocate and DoD agree to HECO's miscellaneous A&G expense estimate of $6,141,000.[166] In reaching their agreement to the $6,141,000, the Parties agree to the following components of A&G expenses:

i. The Parties agree to include $618,000 for IRP planning costs in base rates. In addition, HECO and the Consumer Advocate agree to work on IRP on an on-going basis, taking into account normal variations in the year-to-year IRP expenses to be expected based on the planning cycles in the IRP Framework.[167]

[164] See HECO T-16 at 2.

[165] See HECO's 1st September 19 filing, Attachment C at 20; HECO RT-13 at 19-28; HECO-R-1301; HECO-R-1306; HECO-R-1307.

[166] See Settlement Agreement, Exhibit II at 6-8.

[167] See Settlement Agreement, Exhibit II at 6.

ii. HECO adjusts its test year estimates in rebuttal testimony to reflect a reduction of $69,000 to the customer solutions process area, which the Consumer Advocate and DoD accept.[168]

iii. The Parties agree to exclude HECO's proposed normalization adjustment of $161,000 for its Ellipse business software system.[169]

iv. HECO paid a $1.1 million fee to its Ellipse software vendor in return for reduced future annual software maintenance fees, which it records as a prepaid expense. The Parties agree to include $144,000 for the amortization expense of the maintenance buy-down fee in test year expenses.[170]

v. HECO revises its test year estimate to include only the cost of a new telephone system and not the old and the new systems. The Consumer Advocate and DoD agree with HECO's revised estimate.[171]

vi. The Parties agree to a total amount of regulatory costs of $595,000, an amortization period of three years, and an amortization expense of such regulatory costs of $198,000.[172]

vii. The Parties agree that the test year estimates for HECO's King Street operating lease will be based on the lease payment amount, rather than the

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[168] See Settlement Agreement, Exhibit II at 6.

[169] See Settlement Agreement, Exhibit II at 6.

[170] See Settlement Agreement, Exhibit II at 6-7; see also Settlement Agreement, Exhibit IV.

[171] See Settlement Agreement, Exhibit II at 7.

[172] See Settlement Agreement, Exhibit II at 7; see also HECO RT-13 at 19-20; HECO-R-1306.

straight-line amount for the term of the lease.[173]

viii. HECO makes an adjustment to reduce the amount of A&G expenses transferred by $17,000 for Accounts 920 and 921, to which the Consumer Advocate and DoD agree.[174]

The commission finds all of the A&G expenses described above to be reasonable.

6.

Depreciation and Amortization Expenses

HECO estimates the depreciation and amortization expense to be $70,731,000.[175] The Consumer Advocate's estimated depreciation expense did not include adjustments related to vehicles, as a result of the update to the depreciation accrual provided in response to CA-IR-514, and related to combined heat and power. The Parties agree to utilize HECO's depreciation and amortization expense estimate.[176]

The commission finds the depreciation and amortization expense to be reasonable.

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[173] See Settlement Agreement, Exhibit II at 7.

[174] See Settlement Agreement, Exhibit II at 8.

[175] See HECO's 2nd September 19 filing, Attachment 3 at 1.

[176] See Settlement Agreement, Exhibit II at 8.

7.

Taxes

a.

Taxes Other than Income Taxes

The taxes included in taxes other than income taxes are payroll taxes for: (i) Federal Insurance Contribution Act and Medicare ("FICA/Medicare") tax; (ii) Federal Unemployment Tax; (iii) Hawaii State Employment Tax ("SUTA"); and (iv) revenue taxes consisting of the Hawaii State Public Service Company tax ("PSC"), the Hawaii State Public Utility ("PUC") fee, and the County Franchise Royalty ("Franchise") tax.[177] The Parties agree on the methodology, tax rates used to calculate taxes other than income taxes, and the estimated amounts for these taxes. This estimate is comprised of the following components:

PSC Tax	$ 71,870,000
Public Utility Fee	$ 6,106,000
Franchise Tax	$ 30,428,000
Payroll Tax	$ 5,546,000
Total	$113,950,000[178]

The commission finds the taxes other than income tax amount of $113,950,000 under present rates to be reasonable.

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[177]See HECO T-17 at 1-2.

[178]See HECO's 1st September 19 filing, Attachment 3 at 6; HECO-R-1701; Settlement Agreement, Exhibit II at 8; see also Stipulated Revised Schedules, Exhibit 1 at 1.

b.

Income Taxes

The income tax calculation is based on the "short form" method that has been consistently adopted by the commission in previous rate cases, including HECO's last general rate case (Decision and Order No. 14412, filed on December 11, 1995, in Docket No. 7766), HELCO's last general rate case (Decision and Order No. 18365, filed on February 8, 2001, in Docket No. 99-0207), and Maui Electric Company, Limited's last general rate case (Decision and Order No. 16922, filed on April 6, 1999, in Docket No. 97-0346). The "short form" method simplifies the calculation of income tax expense by utilizing net operating income before taxes, with certain adjustments. The resulting amount is taxable income for ratemaking purposes. Taxable income for ratemaking purposes is multiplied by the composite federal/state income tax rate of 38.9097744 percent. This product is then reduced by the test year amortization of State Capital Goods Excise Tax Credit, net of tax. The resulting amount is the income tax expense utilized in deriving net operating income for ratemaking purposes.[179]

HECO estimates the income tax expense to be $23,158,000,[180] the amortization amount for the State Capital Good

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[179]See HECO T-17 at 6-7.

[180]See HECO's 2nd September 19 filing, Attachment 3 at 1.

Excise Tax Credit to be $682,000,[181] and the interest expense to be $27,911,000.[182]

In light of the commission's decision to utilize the interest synchronization method in this proceeding, discussed above, the commission calculates HECO's income tax expense at present rates as $23,942,000, the amortization amount for the State Capital Good Excise Tax Credit as $682,000, and the interest expense as $27,664,000.[183]

c.

The American Jobs Creation Act of 2004

The Parties agree that no revenue requirement adjustment for the American Jobs Creation Act of 2004 is necessary for the 2005 test year.[184] The commission finds that no adjustment is necessary for the present rate case.

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[181]See HECO's 2nd September 19 filing, Attachment 3 at 5. The four percent credit is earned on qualifying equipment purchased and placed into service by businesses in Hawaii. For book and ratemaking purposes, the credit is deferred in the year earned, and subsequently amortized over the estimated useful life of the related assets. The amortization on new additions begins when the book depreciation commences on those additions. See HECO T-17 at 10-11.

[182]See HECO's 2nd September 19 filing, Attachment 3 at 5.

[183]See Exhibit A, attached hereto, at 4.

[184]See Settlement Agreement, Exhibit II at 14.

D.

Rate Base

1.

Introduction

The rate base is calculated as the sum of the average balances for the following investments in assets:

a. Net cost of plant in service;

b. Property held for future use;

c. Fuel inventory;

d. Materials and supplies inventories;

e. Unamortized net SFAS 109 regulatory asset;

f. Prepaid pension asset;[185]

g. Unamortized net OPEB regulatory asset;

h. Unamortized system development costs; and

i. Working cash;

less the sum of the average balances for the following funds from non-investors:

a. Unamortized contributions in aid of construction ("CIAC");

b. Customer advances for construction;

c. Customer deposits;

d. Accumulated deferred income taxes;

e. Unamortized investment tax credits;

f. Unamortized gain on sales;

g. OPEB liability; and

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[185]As set forth above, for purposes of this docket, the commission determines that HECO's prepaid pension asset should be excluded from rate base.

h. Deferred rent expense (King Street lease).[186]

HECO details its average rate base at present rates as follows:

2005 Average Rate Base

(in thousands)

Investments in Assets Serving Customers	**Beginning of Year 2005**	**End of Year 2005**	**Average for Test Year**
Net cost of plant in service	$1,241,908	$1,276,313	1,259,111
Property held for future use	599	599	599
Fuel inventory	44,484	44,484	44,484
Materials and supplies inventories	10,425	9,789	10,107
Unamort. Net SFAS 109 reg. asset	50,082	52,341	51,212
Prepaid pension asset	81,085	76,497	78,791
Unamort. OPEB reg. asset	10,415	9,113	9,764
Total investments in Assets	$1,438,998	$1,469,136	$1,454,068
Funds from Non-investors			
Unamort. CIAC	$ 144,322	$ 151,405	$ 147,864
Customer advances	1,519	1,476	1,498
Customer deposits	5,066	6,735	5,901
Accum. deferred income taxes	162,290	166,883	164,587
Unamort. ITC	15,166	16,309	15,738
Unamort. gain on sale	484	1,518	1,001
OPEB liability	10,390	9,088	9,739
Deferred rent exp. (King St. lease)	0	0	0
Total deductions	$ 339,237	$ 353,414	$ 346,328
Working cash at present rates			8,754
Average rate base at present rates			$1,116,494
Change in rate base - working cash			(7,261)
Rate base at proposed rates			$1,109,232[187]

[186]HECO T-19 at 1-2.

HECO states that the Parties agree to HECO's 2005 test year average rate base estimate, except with respect to the inclusion of the net prepaid pension asset.[188]

2.

Additions to Rate Base

a.

Net Cost of Plant in Service

HECO's average test year net cost of plant in service is $1,259,111,000.[189] The average test year net cost of plant in service is calculated by starting with the recorded net cost of plant in service at December 31, 2003 and adjusting for 2004 estimates for net plant additions, costs of removal, salvage value, and depreciation accrual. This net amount is the estimated net cost of plant in service at December 31, 2004. The process is then repeated for the 2005 test year. The average net cost of plant in service is calculated by dividing the sum of the estimated 2004 end of year balance and the 2005 end of year balance by two. The net cost of plant in service represents HECO's unrecovered investment in plant necessary to provide electric service.[190]

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[187]HECO's 1st September 19 filing, Attachment C at 3; HECO's 2nd September 19 filing, Attachment 3 at 1, 3.

[188]HECO's Opening Brief at 50.

[189]See HECO's 1st September 19 filing, Attachment C at 3; HECO's 2nd September 19 filing, Attachment 3 at 3.

[190]See HECO T-19 at 5-6.

During this proceeding, HECO revised its 2005 test year plant additions estimate to reflect more current information about the projects and to update its estimate for its Kuahua Substation project. In addition, HECO updated its estimates of retirements, removal cost, and gross salvage to reflect the latest five-year historical averages to determine the depreciation reserve. The Consumer Advocate and DoD corrected their calculations relating to DG and combined heat and power plant. After these adjustments were made, the Parties agreed upon the amount of $1,053,599,000 for HECO's depreciation reserve and $1,259,111,000 for HECO's average test year net cost of plant in service.[191]

b.

Property Held for Future Use

Property held for future use is property owned by HECO and held for future utility purposes. It represents HECO's investment in sites needed to provide electric service in the future.[192] HECO estimates its average property held for future use to be $599,000.

The Consumer Advocate and DoD question whether the cost of the Kalaeloa-Barber's Point Harbor Pipeline, approximately $517,000, should be excluded from the property held for future use. The Parties agree to include the investment in rate base in

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[191]See Settlement Agreement, Exhibit II at 9.

[192]See HECO T-19 at 6.

this rate case, and HECO agrees to prepare and present detailed cost/benefit analysis of this investment in its next rate case filing.[193]

c.

Fuel Inventory

Fuel inventory is HECO's investment in a supply of fuel held in inventory.[194] HECO estimates the average fuel inventory to be $44,484,000.[195] The Parties do not disagree on the methodology used to calculate the LSFO and diesel fuel inventories. The Parties agree to HECO's estimated test year fuel amounts and fuel prices. In addition, the Parties accept HECO's estimated fuel inventory amounts, including HECO's revised diesel fuel inventory based upon five-year data.[196]

d.

Materials and Supplies Inventories

Materials and supplies inventories include production inventory and transmission and distribution inventory.[197] HECO estimates the average materials and supplies inventories to

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[193]See Settlement Agreement, Exhibit II at 9.

[194]See HECO T-19 at 7.

[195]See HECO's 2nd September 19 filing, Attachment 3 at 3.

[196]See Settlement Agreement, Exhibit II at 9.

[197]See HECO T-19 at 7-8.

be $10,107,000.[198] The Consumer Advocate and DoD agree with HECO's average 2005 test year estimate.[199]

e.

Unamortized Net SFAS 109 Regulatory Asset

The net regulatory asset is an accounting asset that came about due to the reporting requirements of SFAS 109.[200] The Parties agree to accept HECO's estimate of the average unamortized net SFAS 109 regulatory asset amount of $51,212,000 for the 2005 test year.[201]

f.

Prepaid Pension Asset

The prepaid pension asset is an investment that results from the net impact of NPPC and the funds contributed to the pension fund.[202] HECO's prepaid pension asset is $78,791,000. However, as discussed above, the commission finds that HECO's $78,791,000 prepaid pension asset should be excluded from rate base.

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[198] See HECO's 2nd September 19 filing, Attachment 3 at 3.

[199] See Settlement Agreement, Exhibit II at 10.

[200] See HECO T-19 at 9-10.

[201] See Settlement Agreement, Exhibit II at 10.

[202] See HECO T-19 at 10.

g.

Unamortized OPEB Regulatory Asset

The unamortized OPEB regulatory asset arose from the issuance of SFAS 106, "Employer's Accounting for Postretirement Benefits Other than Pensions." Prior to SFAS 106, HECO recognized OPEB on a pay-as-you-go basis. SFAS 106, which applied to fiscal years beginning after December 15, 1992, changed expense recognition from pay-as-you-go to an accrual basis.[203]

HECO estimates the average unamortized OPEB to be $9,764,000.[204] The Consumer Advocate and DoD agree that this amount for average unamortized OPEB is reasonable.[205]

h.

Unamortized System Development Costs

HECO removes the unamortized system development costs from the test year 2005 in recognition of a delay in the implementation of the Human Resources Suite project.[206]

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[203]See HECO T-19 at 12.

[204]See HECO's 2nd September 19 filing, Attachment 3 at 3.

[205]See Settlement Agreement, Exhibit II at 10.

[206]See HECO RT-19 at 5.

i.

Working Cash

Working cash is the net cash needed for smooth fiscal operations. Working cash is comprised of sources and uses of cash from operations. Electric service provided before customers pay for services is a use of cash, and is referred to as the revenue collection lag. Goods and services received before suppliers are paid is a source of cash, and is referred to as a payment lag.[207]

HECO reflects a zero payment lag for pension and OPEB costs in its working cash study, based on its position that the cash paid to the pension fund in advance of the recognition of pension expense has been captured by the inclusion of a prepaid asset in rate base, and cash paid to the OPEB trust base has been captured in the OPEB liability in rate base.[208] HECO agrees to use the Consumer Advocate and DoD's thirty-day lag for pension and OPEB, which is the same number of lag days assigned to other, non-labor O&M expenses.[209] HECO estimates that working cash for the test year 2005 is $8,754,000 at present rates and $1,493,000 at proposed rates.[210]

In the attached Exhibit B, the commission reflects the level of expenses approved by this Decision and Order and the

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[207]See HECO T-19 at 14.

[208]See HECO's Opening Brief at 54.

[209]See Settlement Agreement, Exhibit II at 11.

[210]See HECO's 2nd September 19 filing, Attachment 3 at 3, 4.

net lag days. As presented there, the commission calculates working cash to be $9,033,000 at present rates and $2,992,000 at approved rates.[211]

3.

Deductions from Rate Base

Investors and non-investors provide the funds that are invested in the assets needed to provide reliable electric service. Funds provided by non-investors are deducted from investments in assets to determine the amount of investor-provided funds. The investor-funded portion of the investments in assets servicing customers is the amount on which investors are entitled to receive an opportunity to earn fair return (i.e., the rate base). Rate base therefore represents only the portion of investment in assets that is funded by investors.[212]

a.

Unamortized Contributions in Aid of Construction

CIAC is money or property contributed to HECO and not subject to refund. The average unamortized CIAC is calculated by estimating the beginning of the year balance in unamortized CIAC,

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[211] See Exhibit B, attached hereto, at 1-2.

[212] See HECO T-19 at 29.

then adding the estimated CIAC for the test year, then subtracting the amortization of CIAC to produce an estimated end of the year balance. The beginning of the year and the end of the year are summed and divided by two to estimate the average balance for the year.[213]

The Consumer Advocate and DoD agree with HECO's estimated average unamortized CIAC of $147,864,000 for the 2005 test year.[214]

b.

Customer Advances

Customer advances for construction are funds paid to HECO, which may be refunded, in whole or in part.[215] The Consumer Advocate and DoD accept HECO's estimated average of $1,498,000 for 2005 test year customer advances.[216]

c.

Customer Deposits

Customer deposits are monies collected from customers who do not meet HECO's criteria for establishing credit at the

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[213] See HECO T-19 at 30.

[214] See HECO's 2nd September 19 filing, Attachment 3 at 3; Settlement Agreement, Exhibit II at 10.

[215] See HECO T-19 at 31.

[216] See HECO's 2nd September 19 filing, Attachment 3 at 3; Settlement Agreement, Exhibit II at 10.

time they request service.[217] The Parties agree that HECO's average customer deposits amount of $5,901,000 for the test year is acceptable.[218]

d.

Accumulated Deferred Income Taxes

Accumulated deferred income taxes are the cumulative amount by which tax expense exceeded tax remittances.[219] HECO's estimated average ADIT are $164,587,000 for the 2005 test year.[220] HECO, the Consumer Advocate, and DoD disagree on the amount of ADIT as a result of their existing difference as to the inclusion of the prepaid pension asset in the rate base. The Parties agree, however, that if all or a portion of the prepaid pension expense is excluded from rate base, as proposed by the Consumer Advocate and DoD, a corresponding adjustment to ADIT would be required.[221] Because the commission determines herein that the prepaid pension asset should be excluded from rate base, the commission adjusted the ADIT, resulting in an average ADIT balance of $136,104,000.[222]

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[217]See HECO T-19 at 31.

[218]See HECO's 2nd September 19 filing, Attachment 3 at 3; Settlement Agreement, Exhibit II at 10.

[219]See HECO T-19 at 32.

[220]See HECO's 2nd September 19 filing, Attachment 3 at 3.

[221]See Settlement Agreement, Exhibit II at 10.

[222]See Exhibit B, attached hereto, at 1.

Additionally, the Parties agree that no adjustment to the ADIT balances for the 2005 test year and no deferral mechanism are necessary at this time as a result of HECO's application to the Internal Revenue Service for a change in accounting method for determining the deduction for mixed use costs.[223]

e.

Unamortized Investment Tax Credit

Unamortized investment tax credits are tax credits that reduce tax payments in the year the credit originates. For ratemaking purposes, the credits are amortized.[224] The Parties agree to use HECO's estimated average unamortized investment tax credit of $15,738,000 for the 2005 test year.[225]

f.

Unamortized Gain on Sale of Land

Unamortized gain on sales is the gain on the sale of utility property, net of the amount that has been amortized.[226] The Parties agree to HECO's estimated average unamortized gain

[223]See Settlement Agreement, Exhibit II at 14.

[224]See HECO T-19 at 32.

[225]See HECO's 2nd September 19 filing, Attachment 3 at 3; Settlement Agreement, Exhibit II at 10.

[226]See HECO T-19 at 33.

on sale of land amount of $1,001,000 for the 2005 test year.[227] In particular, the Parties accept the Consumer Advocate's treatment of HECO's Lilipuna amortization of the gain on sale of land in other operating revenues.[228] To be consistent, the Consumer Advocate agrees to exclude the unamortized gain on sale of balance related to the Lilipuna transaction from rate base.[229]

g.

OPEB Liability

OPEB liability is an obligation that results from the net impact of net periodic OPEB cost and the funds contributed to the OPEB fund.[230] HECO estimates its average OPEB liability to be $9,739,000 for the 2005 test year.[231] The Consumer Advocate and DoD accept HECO's estimate for OPEB liability.[232]

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[227] See HECO's 2nd September 19 filing, Attachment 3 of 3; Settlement Agreement, Exhibit II at 10.

[228] See Settlement Agreement, Exhibit II at 10.

[229] See Settlement Agreement, Exhibit II at 10.

[230] See HECO T-19 at 34.

[231] See HECO's 1st September 19 filing, Attachment C at 3; HECO's 2nd September 19 filing, Attachment 3 at 3; HECO RT-19 at 8-9.

[232] See Settlement Agreement, Exhibit II at 11.

h.

Deferred Rent Expense (King Street Lease)

Based on the agreement that the test year estimates for the King Street lease be based on lease payments, the Parties agree that no deferred rent expense should be included in rate base.[233]

i.

Average Rate Base Amounts Are Reasonable

The commission concludes that HECO's average rate base at present rates of $1,066,465,000 and rate base at approved rates of $1,060,424,000 are reasonable.[234]

E.

Rate of Return

1.

Introduction

As in prior rate cases,[235] the commission shall adhere to the guidelines set forth in Bluefield Waterworks and

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[233]See Settlement Agreement, Exhibit II at 11.

[234]See Exhibit B, attached hereto, at 1.

[235]See e.g., In re Hawaiian Electric Co., Docket No. 7766, Decision and Order No. 14412, filed on December 11, 1995, at 47; In re Hawaiian Electric Co., Docket No. 7700, Decision and Order No. 13704, filed on December 28, 1994, at 60-61; In re Hawaiian Electric Co., Docket No. 6998, Decision and Order No. 11699, filed on June 30, 1992, at 139-140; In re Hawaii Electric Light Co., Docket No. 94-0140, Decision and Order No. 15480, filed on April 2, 1997, at 31.

Improvement Co. v. Pub. Serv. Comm'n, 262 U.S. 679 (1923), and Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944), in determining a fair rate of return. These guidelines prescribe that a fair return must:

> (1) Be commensurate with returns on investments in other enterprises having corresponding risks and uncertainties;
>
> (2) Provide a return sufficient to cover the capital costs of the business, including service on the debt and dividends on the stock; and
>
> (3) Provide a return sufficient to assure confidence in the financial integrity of the enterprise to maintain its credit and capital-attracting ability.

HECO maintains that in order to meet the foregoing criteria, the fair rate of return should at least be equal to HECO's composite cost of capital, because the cost of capital represents the carrying cost of the money received from investors to finance the net rate base.[236] Moreover, HECO asserts that a return on rate base equal to HECO's composite cost of capital would allow HECO to cover the capital costs of the business; would provide a return on investment commensurate with returns on other investments having corresponding risks; would provide assurances to the financial community of HECO's financial integrity; and would maintain HECO's creditworthiness and ability to attract capital on reasonable terms.[237]

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[236]See HECO's Opening Brief at 58.

[237]See HECO's Opening Brief at 58-59 (citing HECO T-20 at 9-10; HECO T-21 at 4).

2.

Stipulated Cost of Capital

The aggregate return required by investors is called the "cost of capital." The cost of capital is the opportunity cost, expressed in percentage terms, of the total pool of capital employed by HECO. It is the composite weighted cost of the various classes of capital (e.g., short-term debt bonds, preferred stock, hybrid securities, common stock) used by the utility, with the weights reflecting the proportions of the total capital that each class of capital represents.[238]

The Parties agree upon the amounts for capitalization for the test year for the costs of short-term debt, long-term debt, preferred stock, and hybrid securities. In addition, the Parties agree to the rate of return on common equity.[239] The Parties agree that the appropriate average capital structure for the 2005 test year, including the earnings requirements for the various components, is as follows:

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[238]See HECO T-20 at 10.

[239]See Settlement Agreement, Exhibit II at 11.

	(A) Amount (in thousands)	(B) Percentage of Total	(C) Earnings Requirements	(D) Weighted Earnings Requirements (B) x (C)
Short-term debt	$ 37,429	3.25%	3.50%	0.114%
Long-term debt	$ 423,565	36.81%	6.25%	2.301%
Hybrid securities	$ 27,303	2.37%	7.55%	0.179%
Preferred stock	$ 20,476	1.78%	5.54%	0.099%
Common Equity	$ 641,955	55.79%	10.70%	5.969%
Total	$1,150,728	100%		8.66%[240]

It is well-settled that an agreement between the parties in a rate case cannot bind the commission, as the commission has as independent obligation to set fair and just rates and arrive at its own conclusion.[241] With this mandate, the commission proceeds in reviewing whether the Parties' stipulated capital structure and the stipulated costs of the various components of the structure are reasonable. The commission accepts as reasonable the stipulated capital structure and the stipulated costs of HECO's short-term debt, long-term debt, hybrid securities, and preferred stock. However, the commission

[240] See HECO's 2nd September 19 filing, Attachment 3 at 2.

[241] See In re Hawaiian Elec. Co., Inc., 5 Haw. App. 445, 698 P.2d 304 (1985).

examines the Parties' stipulated return on common equity, as discussed below.

3.

Return on Common Equity

The cost of common equity is essentially the measurement of investor expectations. HECO reduced its proposed return on common equity of 11.5 percent, recommended in its direct testimony, to 11.0 percent in rebuttal testimony.[242] The Consumer Advocate recommends a return of common equity between 8.50 percent and 10.0 percent and utilizes a mid-point of 9.25 percent in its determination of revenue requirements.[243] DoD recommends a return on common equity of 9.0 percent, within a range of 8.75 percent to 9.5 percent.[244] The Parties agree upon a return on common equity of 10.7 percent in order to determine the revenue requirements in this proceeding.[245]

HECO notes that an appropriate return on common equity would: (1) be fair to the ratepayer; (2) allow HECO to attract capital on reasonable terms; (3) maintain HECO's financial integrity; and (4) be comparable to returns offered on comparable

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[242]See HECO T-21 at 44; HECO RT-21 at 21.

[243]See CA-T-4 at 4.

[244]See DoD T-2 at 2.

[245]See Settlement Agreement, Exhibit II at 11.

risk investments.[246] In determining its cost of common equity, HECO utilizes the discounted cash flow ("DCF") method, the capital asset pricing model ("CAPM") method, and risk premium ("RP") analyses.[247] Specifically, HECO performed two CAPM analyses, one using the "plain vanilla" CAPM and another using an empirical approximation of the CAPM, and three RP analyses: (1) a historical RP analysis on the electric utility industry; (2) a historical RP analysis on the natural gas distribution

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[246]See HECO T-20 at 3.

[247]The DCF method is a stock valuation technique for estimating the cost of common equity. Under the DCF method, the required rate of return is the sum of: (1) the current dividend yield, represented by the ratio of expected next-period dividends to current stock prices; and (2) the expected constant growth rate.

The RP analysis recognizes that common equity capital is riskier than debt, and investors require higher returns on stocks than on bonds to compensate for the additional risk. The required rate of return on common equity is the current yield to maturity on bond plus the RP. The RP is the difference between the returns on stocks and the returns on bonds, and is measured either on the basis of historical returns actually earned from investments in stocks and bonds or on the basis of expected returns projected by analysts. The most commonly used bonds in RP analyses are long-term United States Treasury bonds.

The CAPM method is a variation of the RP analysis. The required rate of return on common equity under the CAPM is the sum of: (1) the risk-free component (usually the return on long-term United States Treasury bonds); and (2) the RP to which is applied the appropriate beta to derive a value for the nondiversifiable risk. The beta is a measure of the relative risk of a security compared to the risk of the average market stock. The beta for the market is set equal to 1.0. Stock with a greater than 1.0 is riskier than the average market stock, and a stock with a beta less than 1.0 is less risky than the average market stock.

See In re Hawaii Electric Light Co., Docket No. 99-0207, Decision and Order No. 18365, filed on February 8, 2001, at 68.

utility industry; and (3) a study of the RPs reflected in return on equity amounts allowed in the electric utility industry.[248]

In calculating HECO's cost of common equity, the Consumer Advocate utilizes the DCF method, the CAPM method, and an examination of comparable earnings. The Consumer Advocate's suggested range for cost of common equity approximates the upper-end results for each of the ranges developed in its three methodologies. The Consumer Advocate recognizes that the commission has been reluctant in past decisions to incorporate the results of comparable earnings analyses in its findings for public utilities under its jurisdiction, and notes that even in the absence of its comparable earnings analysis, its recommended cost of common equity would be 8.5 percent to 10.0 percent.[249]

DoD evaluates the cost of common equity for similar-risk utility operations using the DCF, CAPM, Modified Earnings-Price Ratio, and Market-to-Book Ratio methods and analyses.[250] DoD estimates the cost of common equity for fully integrated electric utility companies to fall in a range of 8.75 percent to 9.5 percent.[251] DoD states that due to HECO's "relatively low financial risk," it estimates the cost of common

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[248]See HECO T-20 at 4.

[249]See CA-T-4 at 4-5.

[250]See DoD T-2 at 2.

[251]See DoD T-2 at 2.

equity to be below the mid-point of a reasonable range of costs for fully integrated electric utilities, or 9.0 percent.[252]

The commission recognizes that no single model or methodology can conclusively determine or estimate the fair return on common equity for an individual utility. The DCF method, the RP analysis, and the CAPM method are appropriate analyses for determining the cost of common equity.[253] However, individually, none of these methods can provide the necessary level of precision for determining a fair return. Instead, each method can provide useful evidence to facilitate the exercise of informed judgment. Thus, the commission has previously blended the results reached by the application of the DCF method, the RP analysis, and the CAPM method to estimate the fair return on common equity.

Because the cost of common equity attempts to assess the expectations of investors, the differences expressed between HECO and the Consumer Advocate and DoD center on the risks and operations of HECO. HECO disputes the Consumer Advocate's and DoD's contentions that HECO's financial risk is lower because its equity ratio is higher.[254] HECO asserts that the Consumer Advocate and DoD did not adequately consider HECO's

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[252]DoD T-2 at 2.

[253]The commission previously rejected the comparable earnings test as an appropriate method for estimating the cost of common equity, and again does not rely on its results here. See Decision and Order No. 18365, filed on February 8, 2001, in Docket No. 99-0207.

[254]See HECO RT-21 at 21.

purchased power obligations and their impact on the company's overall risk.[255] In particular, HECO asserts that since purchased power obligations impact how the rating agencies impute part of the capacity payments as fixed charges for HECO, they must be factored in to assess debt leverage.[256] HECO also states that the commission has previously recognized that HECO and its subsidiaries have greater risks than the proxy groups used for comparison purposes, and made adjustments to the allowed return on equity in each instance.[257] HECO contends that its corporate and senior unsecured debt ratings of BBB+ by Standard and Poors ("S&P") are already at a level where utility companies have experienced problems in attracting capital in the past, and that even with an earned 11.0 percent return on equity, the S&P financial ratio benchmarks for HECO will be weak.[258] In its rebuttal testimony, HECO argues that a cost of equity of 11.0 percent is necessary to maintain its credit quality, and to recognize its higher risk.[259]

Having considered the Parties' recommendations for the cost of common equity, the arguments made by HECO in favor of a higher rate, and the overall settlement reached by the Parties

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[255]See HECO RT-21 at 21.

[256]See HECO RT-21 at 21.

[257]See HECO RT-21 at 23.

[258]See HECO RT-21 at 25.

[259]See HECO RT-21 at 25.

with respect to the issues for this proceeding, the commission finds reasonable the stipulated cost of common equity amount of 10.7 percent.

4.

Fair Rate of Return

Based on our findings that the stipulated capital structure and the stipulated costs of the various components of the structure are reasonable, we find that the stipulated overall rate of return of 8.66 percent is reasonable.

F.

Cost of Service and Rate Design

1.

Cost of Service

A cost of service study is a tool used to determine the cost responsibility of the different rate classes served by HECO for ratemaking purposes.[260] HECO conducted two types of cost studies for this proceeding, one based on embedded or accounting costs, and the other based on marginal costs. The embedded cost of service study is a tool or process used to categorize and allocate the total utility costs of providing service (the utility's total revenue requirements) to the various rate classes in order to determine each class' costs responsibility. In contrast, the marginal cost study determines the change in the

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[260] See HECO T-22 at 1.

utility's costs of providing service due to a unit change in the system load in terms of kilowatts ("kW") or kWh, or in terms of the number of customers served by the utility.[261]

HECO provides its embedded cost of service studies in direct and rebuttal testimonies based on cost classifications and allocation methodologies previously approved by the commission.[262] DoD states its support for HECO's cost of service study methodologies.[263] The Consumer Advocate proposes to change the classification of certain distribution costs from customer-related to demand-related costs, corrected the treatment of losses, and questioned the classification of certain DSM-related costs.[264]

HECO, in its direct testimony, proposes that the rate increase be distributed as an equal, across-the-board increase for each class, given the amount of the proposed increase, but indicates that it could be appropriate to allocate the increase differently, in an attempt to move closer to the cost of service, if the increase were smaller.[265] DoD proposes that more of the rate increase be allocated to the classes with lower rates of

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[261] See HECO T-22 at 2.

[262] See HECO T-22 and HECO RT-22.

[263] See DoD-T-3 at 8.

[264] See CA-T-5 at 9-23.

[265] See HECO T-1 at 28; HECO-2204.

return, to move closer to the cost of service.[266] The Consumer Advocate maintains that the residential class, Schedule R, is already providing a return that is close to the system average. Accordingly, the Consumer Advocate proposes that the increase be obtained by eliminating the surcharge credit associated with HECO's agreement with AES Hawaii and the Schedule P and J power factor credits, and that HECO allocate the remainder of the increase across-the-board, while exempting Schedule G and Schedule PT from any rate increases.[267]

In its rebuttal testimony, HECO recommends amending the rate increase percentage for each class to move rates closer to the cost of service, based on HECO's rebuttal cost of service study and given the lower increase proposed by HECO in its rebuttal.[268]

The Parties settled this issue by agreeing that an allocation of the remaining revenue increase (after reflecting additional revenues due to rule changes) will be based on the class percentages specified in Exhibit VII to the Settlement Agreement.[269]

The approach adopted by the Parties, which generally attempts to allocate the revenue increase to rate classes in a way that moves each class closer to the cost of service, is

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[266]<u>See</u> DoD-T-3 at 15.

[267]<u>See</u> CA-T-5 at 26-29.

[268]<u>See</u> HECO RT-22 at 5-7; HECO-R-2204.

[269]<u>See</u> Settlement Agreement, Exhibit II at 12.

appropriate. Upon review of the cost of service studies, the Parties' positions with respect thereto, and Exhibit VII to the Settlement Agreement, which allocates the stipulated increase among the classes, the commission finds the stipulated distribution of rate increases to be reasonable.

2.

Intra-Class Rate Design

The Parties agreed that:

a. HECO will develop and submit a plan to freeze or cost justify Schedule H in HECO's next rate case in order to address the Consumer Advocate's proposal with respect to Schedule H;

b. HECO will conduct a cost study to support cost-based power factor credits or charges in HECO's next general rate case, in order to address the Consumer Advocate's concerns regarding the existing power factor credits for Classes J, PS, PP, and PT, and to establish a power factor penalty;

c. HECO will establish an $0.80/billed kW credit for Schedule PP customers served from a dedicated substation, and will conduct a cost study to support Schedule P (PP, PS, and PT) rate class/rate design, based on service equipment and service voltages, for its next general rate case, in order to address DoD's proposal to establish a $0.90/billed kW credit for Schedule PP customers served from a dedicated substation, given the difference in primary distribution cost causation;

d. HECO will set the class customer charges, minimum charges, and demand charges in the manner set forth in Exhibit VIII, in order to reach a compromise between the Parties on differences between HECO's proposed charges, and the Consumer Advocate's position; and

e. HECO will adjust the energy charges, as set forth in Exhibit VIII, to recover the total revenues assigned to each class after reflecting the specific changes set forth in Exhibit VIII.[270]

The commission finds the Parties' agreement to these requirements to be reasonable.

3.

Revisions to Rate Schedules and Rule Changes

Next, the commission discusses the proposed revisions to rate schedules and HECO's rules.

a.

Rate Schedules and Rule Changes

i.

Schedule R - Residential

Schedule R is for residential electric service applicable to individually metered residential dwelling units. To produce the allocated class revenue requirements, HECO proposes changes to this schedule to reflect increases to:

- The customer charge from $7.00 to $10.00 per month for single-phase service and from $15.00 to $20.00 per month for three-phase service;
- The non-fuel energy charge;
- The base fuel energy charge; and

[270]Settlement Agreement, Exhibit II at 13.

- The minimum charge from $16.00 to $20.00 per month for single-phase service and to $25.00 for three-phase service.[271]

In addition, HECO proposed to change the first paragraph of the Apartment House Collection Arrangement provision to clarify that the ten percent discount applies to the total monthly bills rendered for each apartment, and to define what the total bill includes.[272]

ii.

Schedule G - General Service Non-Demand

Schedule G is for general power service applicable to small commercial customers with use not exceeding 5,000 kWh per month or loads less than 25 kW. HECO proposes to increase:

- The customer charge from $20.00 to $35.00 per month for single-phase service and from $45.00 to $60.00 per month for three-phase service;
- The energy charge; and
- The minimum charge from $25.00 to $40.00 per month for single-phase service and from $45.00 to $60.00 per month for three-phase service.[273]

In addition, HECO proposes to change the primary voltage service.[274]

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[271] See HECO T-22 at 19.

[272] See HECO T-22 at 19.

[273] See HECO T-22 at 21; HECO RT-22 at 9-10.

[274] See HECO T-22 at 21; HECO RT-22 at 9-10.

iii.

Schedule J - General Service Demand

Schedule J is for general power service applicable to commercial customers with use greater than 5,000 kWh per month or loads of at least 25 kW. HECO proposes to increase:

- The customer charge from $35.00 to $50.00 per month for single-phase service and from $60.00 to $70.00 per month for three-phase service;
- The demand charge from $5.75 to $8.50 per kW; and
- The energy charge for the three load factor blocks.[275]

In addition, HECO requests to change:

- The availability clause to clarify the current load thresholds to add a maximum qualifying load of less than 300 kW to new customers, and to add a clause that would allow customers with loads equal or greater than 300 kW currently receiving service under Schedule J to remain under Schedule J;
- The demand ratchet in determining the billing demand under the determination of demand provision from the current seventy-five percent ratchet to the average demand ratchet;
- The supply voltage delivery provision to include a network adjustment to apply to customers who are served at the downtown underground network system;
- The supply voltage adjustments in the supply voltage delivery provision from 3.3 percent to 3.0 percent for transmission primary supply voltage, from 1.9 percent to 2.1 percent for distribution supply voltage, and from

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[275]See HECO T-22 at 24-25.

0.7 percent to 0.6 percent for distribution secondary supply voltage; and

- To include a minimum five-year term of contract clause for new service connection and a service termination charge equal to the total connection cost incurred by HECO to connect the customer to the system less any customer advance or contribution paid by the customer.[276]

iv.

Schedule H - Commercial Cooking and Water Heating

Schedule H is an end-use rate that applies to specific commercial electric loads including commercial cooking, heating, air conditioning, and refrigeration loads that are less than 600 volts. HECO proposes to change Schedule H to increase:

- The customer charge from \$20.00 to \$25.00 per month for single-phase service and from \$45.00 to \$60.00 per month for three-phase service; and

- The energy charge.[277]

v.

Schedule PS - Large Power Secondary Voltage

Schedule PS is for general power service applicable to commercial or industrial customers with large power loads of at least 300 kW that are served at the secondary voltage level. HECO proposes to amend Schedule PS to increase:

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[276] See HECO T-22 at 24-25.

[277] See HECO T-22 at 28.

- The customer charge from $320.00 to $350.00 per month; and

- The demand charge for the three-phase demand blocks from $10.00 per kW, $9.50 per kW, and $8.50 per kW to $16.35 per kW, $15.85 per kW, and $14.85 per kW, respectively.[278]

In addition, HECO requests to eliminate the 150 kW minimum power service under the minimum billing provision, to change the term of contract provision for new service connections from one year to five years, to be consistent with HECO's Rule 13 provision on the determination of the customer advance required from customers, and to add a service termination charge equal to the total connection cost incurred by HECO to connect the customer to the system, less any customer advance or contribution paid by the customer.[279]

vi.

Schedule PP - Large Power Primary Voltage Service

Schedule PP is for general power service applicable to commercial or industrial customers with large power loads of at least 300 kW served at primary voltage. HECO requests to increase:

- The customer charge from $320.00 to $400.00 per month;

- The demand charge for the three-phase demand blocks from $9.81 per kW, $9.32 per kW, and $8.34 kW to

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[278]See HECO T-22 at 28.

[279]See HECO T-22 at 29-30.

$16.15 per kW, $15.65 per kW, and $14.65 per kW, respectively; and

- The energy charge for the three-phase load factor blocks.[280]

Additionally, HECO seeks to:

- Amend the secondary metering adjustment;

- Eliminate the 150 kW minimum power service under the minimum billing provision, as in Schedule PS; and

- Amend the term of contract provision for new service connections from one year to five years, to be consistent with HECO's Rule 13 provision on the determination of the customer advance required from customer, and add a service termination charge equal to the total connection cost incurred by HECO to connect the customer to the system, less any customer advance or contribution paid by the customer.[281]

vii.

Schedule PT - Large Power Transmission Voltage

Schedule PT is for general power service applicable to commercial or industrial customers with large power loads of at least 300 kW served at transmission voltage level. HECO seeks approval to increase:

- The customer charge from $320.00 to $400.00 per month;

- The demand charge for the three-phase demand blocks from $9.67 per kW, $9.19 per kW, and $8.22 per kW to $16.00 per kW, $15.50 per kW, and $14.50 per kW, respectively; and

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[280]See HECO T-22 at 29-30.

[281]See HECO T-22 at 34-35.

- The energy charge for the three-phase load factor blocks.[282]

HECO also requests to:

- Amend the secondary metering adjustment;
- Eliminate the 150 kW minimum power service under the minimum billing provision, as in Schedule PS; and
- Amend the term of contract provision for new service connections from one year to five years, to be consistent with HECO's Rule 13 provision on the determination of the customer advance required from customers, and add a service termination charge equal to the total connection cost incurred by HECO to connect the customer to the system, less any customer advance or contribution paid by the customer.[283]

viii.

Schedule F - Public Street Lighting and Park and Playground Floodlighting Service

Schedule F is for public street and highway lighting and for parks and playground floodlighting. HECO proposes to:

- Increase the energy charge for the two load factor blocks;
- Add a customer charge of $20.00 per month;
- Change the secondary metering adjustment under the optional secondary metering for street and highway lighting provision from the current 2.0 percent to 1.5 percent, and clarify the "monthly bill" basis of the adjustment; and

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[282] See HECO T-22 at 34-35.

[283] See HECO T-22 at 35.

- Change the loss factor of 1.05 used in the determination of the billing demand for unmetered service to 1.02, under the special terms and conditions provision.[284]

ix.

Schedule U - Time-of-Use Service

Schedule U is an optimal time-of-use service for commercial or industrial customers with large power loads of at least 300 kW. Large power customers who are served under any of the large power rates (Schedules PS, Schedule PP, and Schedule PT) may choose to be served under Schedule U. HECO proposes to:

- Increase the customer charge from \$215.00 to \$350.00 per month;
- Increase the demand charge from \$17.00 to \$18.00 per kW if the customer's maximum demand occurs during the priority peak and \$16.00 per kW if the customer's maximum demand occurs during the mid-peak period;
- Increase the energy charge; and
- Amend the service voltage adjustments in the supply voltage delivery provision from the current 3.3 percent, 1.9 percent, and 0.7 percent from transmission primary, distribution primary, and distribution secondary, to 3.0 percent, 2.1 percent, and 0.6 percent, respectively.[285]

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[284]See HECO T-22 at 38.

[285]See HECO T-22 at 39-40; HECO RT-22 at 13.

x.

Rider T - Time-of-Day Rider

Rider T is an optional time-of-use service rider for commercial or industrial customers with power loads of at least 25 kW who are served under Schedule J, Schedule PS, Schedule PP, or Schedule PT. Rider T modifies or provides adjustments to the applicable rate schedule's demand and energy rates, which effectively results in time-of-use price signals. HECO proposes the following changes to Rider T:

- An amendment of Rider T's availability clause to appropriately reference the three separate Schedules PS, PP, and PT, as well as the new Schedule TOU-C; and

- The addition of terms and conditions that would allow customers to do emergency maintenance on their equipment without considering the impact on the customer's maximum on-peak demand in the determination of their billing demand.[286]

xi.

Rider M - Off-Peak and Curtailable Service

Rider M is an optional off-peak and curtailable service applicable to Schedule J customers with loads greater than 100 kW, and to customers served under Schedules PS, Schedule PP, or Schedule PT, with loads greater than 300 kW. Rider M provides load management incentives to customers by modifying the determination of the billing demand under Schedule J, Schedule PS, Schedule PP, or Schedule PT. It offers two load

[286]See HECO T-22 at 41.

management service options: Option A - off-peak service and Option B - curtailable service.

The Rider M off-peak service (Option A) encourages customers to shift their load to the off-peak hours by basing the determination of the billing demand on only the customers' kW demand during the on-peak period. The Rider M curtailable service (Option B) encourages customers to shift their load to off-peak hours by reducing the customers' billing demands by seventy-five percent of the kW load that they curtail during HECO's priority peak period, or by forty percent of the kW load that they curtail for a two-hour duration specified by HECO.

HECO proposes to modify Rider M in the following manner:

- Amend the availability clause to appropriately reference the three separate Schedules PS, PP, and PT, and the new Schedule TOU-C; and

- Amend the initial term of contract from three years to five years, consistent with the proposed change for the other rate schedules.[287]

xii.

Rider I - Interruptible Contract Service

Rider I is an optional interruptible service available to large power customers with interruptible kW load of at least 500 kW. Like Riders T and M, this Rider provides load management incentives to customers by modifying the determination of the

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[287] See HECO T-22 at 42.

customer's billing demand under Schedule J, Schedule PS, Schedule PP, or Schedule PT.

The customers electing an interruptible load under Rider I are required to sign a standard contract form with HECO specifying their interruptible kW load and firm load, if any, as well as the frequency and duration of service interruption. In exchange for allowing HECO to interrupt its service pursuant to the agreement, the participating customer's billing kW under the applicable rate schedule is reduced by some percentage of its interruptible kW load. The reduction in the customer's billing kW demand is specified in the agreement.

The only proposed change to Rider I is to reduce the minimum qualifying interruptible load from the current minimum of 500 kW to 100 kW in order to extend the availability of Rider I to smaller customers, and expand the potential customer base. HECO contends that the interruptible loads served under Rider I provide HECO with another form of supply resource that could help defer the need for additional capacity in the future.[288]

xiii.

Schedule Q - Purchases from Qualifying Facilities 100 kW or Less

Schedule Q applies to customers with small production facilities with design capacity of 100 kW or less, qualifying under HAR chapter 6-74, and who have a purchase power contract with HECO. Schedule Q provides the energy rates and energy cost

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[288] See HECO T-22 at 42-43.

adjustment that HECO pays for energy purchased by HECO from the customer, and the metering charge to the customer for the metering, billing, and administration of the purchase power contract. HECO proposes the following amendments to Schedule Q:

- An increase of the energy rates for energy delivered to HECO by the customer;
- A change of the metering charge to a service charge of $20.00 per month for both single-phase and three-phase service;
- An increase in the generation base fuel cost from 287.83 cents/Mbtu to 562.52 cents/Mbtu; and
- An amendment to the language to recognize the inclusion of the cost of fuel for HECO's DG resources in the composite generation base fuel cost.[289]

xiv.

ECAC

HECO proposes the following changes to its ECAC:

- Modification of the ECAC's applicability clause for clarity and to identify the three separate Schedules PS, PP, and PT, as well as the new Schedules TOU-R and TOU-C;
- Increase of the base fuel cost for HECO's generation;
- Modification of the generation efficiency factor;
- Amendment of the base purchased energy cost;

[289] See HECO T-22 at 43-44; HECO RT-22 at 14.

- Addition of a combined heat and power energy component in the clause as discussed in HECO-10.[290]

XV.

IRP Cost Recovery Provision

The IRP Cost Recovery Provision or IRP Clause is a cost recovery mechanism for the incremental costs incurred by HECO related to incremental IRP-related activities, and the recovery of the incremental DSM costs, including DSM program costs.[291] By Order No. 22921, filed on October 4, 2006, in Docket No. 05-0069, the commission discontinued HECO's recovery of lost margins and shareholder incentives under the IRP Cost Recovery Provision.

HECO, in its direct testimony, proposed to recover all IRP and DSM costs, including the incremental amounts, in base rates.[292] However, in its rebuttal testimony, HECO modified its position and is no longer proposing to recover all IRP and DSM costs in base rates.[293] Thus, HECO no longer proposes to eliminate the IRP Clause and instead proposes to retain the IRP Clause for reconciling the recovery of IRP costs and for recovering DSM program costs not otherwise recovered in base

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[290] See HECO T-22 at 45-46.

[291] The incremental IRP costs and the incremental DSM costs are recovered through the IRP Clause, and the remainder of the IRP and DSM costs are embedded in base rates. See HECO T-22 at 46-47.

[292] See HECO T-22 at 46-47.

[293] See HECO RT-22 at 17.

rates. In addition, HECO is withdrawing its proposal for a DSM reconciliation clause provision.[294]

xvi.

Service-Related Charges

In addition to the rate schedules and riders, there are service-related charges included in HECO's rules that are charged directly to the customers who caused the costs to be incurred by the utility. These service-related direct charges include the returned check charge, field collection charge, and service establishment charge specified in HECO's Rule 7, Sections C, D, and E, respectively. The late payment charge is found in Rule 8, Section D.[295]

HECO requests to:

- Change the returned charge to a returned payment charge and increase the amount from the current $7.50 to $16.00 per returned check or returned payment;

- Increase the field collection charge from $15.00 to $20.00 per field collection call, and modify its application so the customer will be charged the field charge even when a field call does not result in the successful collection of monies; and

- Increase the service establishment charge from $15.00 to $20.00, and increase the additional charge for the same day service or for service outside

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[294] See HECO RT-22 at 17.

[295] See HECO T-22 at 48.

of the normal business hours from the current \$10.00 to \$25.00.[296]

The commission finds reasonable HECO's requested modifications to its service-related direct charges, except for certain proposed changes to HECO's field collection charge. Specifically, the proposed increase of the field collection charge, from \$15.00 to \$20.00 per field collection call, is fair and reasonable. However, the commission determines that HECO's proposal to charge customers the field charge even when a field call does not result in the successful collection of monies, is not fair and reasonable. Accordingly, the commission approves the requested increase of the field collection charge, but denies HECO's request to modify its rules to charge customers the field charge even when a field call does not result in the successful collection of monies.

xvii.

Withdrawal of Rider EV-R and EV-C

HECO proposes to withdraw Rider EV-R - Residential Electric Vehicle Charging Service and Rider EV-C - Commercial Electric Vehicle Charging Service. HECO is also terminating the temporary rate adjustment that became effective on July 1, 2004 for the reduction in capacity payments to AES Hawaii. This reduction in capacity payments is reflected in the test year

[296]See HECO T-22 at 48-49.

estimates of the purchased power expense and embedded in the new proposed rate changes.[297]

HECO's Rider EV-R and Rider EV-C became effective on July 6, 1998. On August 13, 1998, HECO agreed to defer implementation of the riders pursuant to the commission's request in August 3, 1998. HECO also stated that its proposed TOU-C will also apply to electric vehicles charging service. Thus, the proposed TOU-R and TOU-C will provide time-of-use service to electric vehicle charging without the need to separately meter the loads from the rest of the customers' electric loads, as required under Rider EV-R and Rider EV-C.[298]

xviii.

Schedule TOU-R - Residential Time-of-Use Service

HECO's residential time-of-use pilot program was approved by the commission on April 17, 2003. The three-year pilot program was limited to 200 residential customers. HECO proposes to convert the pilot program into a standard optional residential time-of-use service offering. In addition, HECO requests to implement this program on a phased basis until HECO's new customer information system is implemented, since the current billing system cannot bill time-of-use rates.

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[297]See HECO T-22 at 51-52.

[298]See HECO T-22 at 51-52.

HECO proposes changes to the pilot program to:

- Increase the customer charge from $8.00 to $11.50 per month for single-phase service, and from $16.00 to $20.50 per month for three-phase service;

- Provide one set of time-of-use energy rates as follows:

  Priority peak period - 22.3318 cents per kWh;

  Mid-peak period - 19.3318 cents per kWh; and

  Off-peak period - 13.8318 cents per kWh;

- Increase the current minimum charge from $16.00 per month to $21.50 for single-phase service and to $25.50 for three-phase service;

- Amend the time-of-use rating period to reclassify the hours between 7:00 a.m. to 5:00 p.m. on weekends and holidays as off-peak hours; and

- Limit the service to a maximum of 1,000 customers until the new customer service information system is implemented.[299]

xix.

Schedule TOU-C - Commercial Time-of-Use Service

HECO's proposed Schedule TOU-C is a time-of-use service applicable to commercial customers served under Schedule G or Schedule J. This new time-of-use service provides two options: (1) non-demand service for commercial customers with consumption not exceeding 5,000 kWh per month or 25 kW; and (2) demand service for customers with consumption greater than

[299]See HECO T-22 at 53-54; HECO RT-22 at 15.

5,000 kWh per month or at least 25 kW but less than 300 kW. The non-demand service provides the same customer and minimum charges as proposed for Schedule G and time-differentiated energy rates. The demand service provides the same customer charge by service phase as proposed for Schedule J, on-peak demand charge, and time-differentiated energy rates.[300]

b.

Approval of Rate Schedules and Rule Changes

The Parties agree to all of HECO's proposed changes to terms and conditions in the rate schedules and riders, HECO's proposed changes to Rule 4 (Standard Customer Retention Rate), the proposed changes to the non-sales related charges such as the returned checks charge, field collection charge, and service establishment charge, or HECO's proposed modification to the Schedule U demand charge.[301]

The commission finds HECO's requests for approval of its proposed rate schedules,[302] riders, rules, and charges are reasonable, and are therefore approved, except that, as discussed above: (1) HECO shall recover the DSM incremental labor costs, the load management program costs, and the load control program advertising costs through the existing IRP surcharge mechanism, and shall provide updated filings demonstrating the omission of

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[300]See HECO T-22 at 60-61.

[301]See Settlement Agreement, Exhibit II at 13.

[302]As modified by the Settlement Agreement, Exhibit VIII.

these amounts from base rates and their recovery through the existing IRP surcharge mechanism; and (2) HECO may increase its field collection charge from $15.00 to $20.00 per field collection call, but it shall not modify its rules to allow the field collection charge to be charged to customers when a field call does not result in the successful collection of monies.

III.

Ultimate Findings of Fact and Conclusions of Law

The commission makes the following findings of fact and conclusions of law.

1. The operating revenues, operating expenses, and operating income for the 2005 test year, as set forth in Exhibit A, are reasonable.

2. HECO shall not include $78,791,000 of its prepaid pension asset, net of an adjustment to ADIT reserve of $28,483,000, in its rate base.

3. HECO shall not include the disputed $750,000 for informational advertising in its informational advertising expense.

4. HECO shall be required to utilize the interest synchronization method to calculate its interest expense. Applying this method, HECO's interest expense of $27,664,000 is reasonable.

5. The test year average depreciated rate base under present rates is $1,066,465,000 and under approved rates is $1,060,424,000, as shown on Exhibit B.

6. The capital structure for the test year is as follows: 3.25 percent for short-term debt; 36.81 percent for long-term debt; 2.37 percent for hybrid securities; 1.78 percent for preferred stock; and 55.79 percent for common equity. The costs of capital are 3.5 percent for short-term debt; 6.25 percent for long-term debt; 7.55 percent for hybrid securities; 5.54 percent for preferred stock; and 10.7 percent for common equity. A fair rate of return for the 2005 test year is 8.66 percent.

7. HECO is entitled to a final total rate increase that will produce a revenue increase of $44,862,000 (or 3.67 percent over revenues at present rates).

8. Because the increase approved herein is less than the interim increase of $53,288,000, granted under Interim Decision and Order No. 22050, HECO shall refund to its ratepayers any amount that it has collected pursuant to Interim Decision and Order No. 22050 that is in excess of the increase authorized in this Decision and Order, together with interest, pursuant to HRS § 269-16(d). HECO shall provide to the commission within ten days from the date of this Decision and Order, a refund plan that includes the amount of interest to be paid, the proration of the refund among its ratepayers, and the amortization period of the refund.

9. HECO shall recover the DSM incremental labor costs, the load management program costs, and the load control program advertising costs through the existing IRP surcharge mechanism, and shall provide updated filings demonstrating the

omission of these amounts from base rates and their recovery through the existing IRP surcharge mechanism.

10. HECO may increase its field collection charge from $15.00 to $20.00 per field collection call, but it shall not modify its rules to allow the field collection charge to be charged to customers when a field call does not result in the successful collection of monies.

11. Except as discussed in paragraphs 9 and 10, supra, HECO's proposed cost of service, revenue allocation, and rate design are reasonable, and are therefore approved.

12. As soon as is reasonably practicable, HECO shall file its revised tariff sheets and rate schedules, which reflect the increase in rates allowed by this Decision and Order, for the commission's review and approval. HECO shall also serve a copy of the revised tariff sheets and rate schedules upon the Consumer Advocate and DoD. Said filing shall not take effect without the commission's affirmative approval.

13. The commission's request that the Parties file a stipulated procedural schedule, pursuant to Order No. 22537, filed on June 19, 2006, is withdrawn.

IV.

Orders

THE COMMISSION ORDERS:

1. HECO may increase its rates to such levels as will produce, in the aggregate, $44,862,000, in additional revenues for test year 2005 (3.67 percent more than at present rates).

This increase supplants the increase previously approved by the commission on an interim basis in this docket.

2. As soon as is reasonably practicable, HECO shall file its revised tariff sheets and rate schedules, which reflect the increase in rates allowed by this Decision and Order, for the commission's review and approval. HECO shall also serve a copy of the revised tariff sheets and rate schedules upon the Consumer Advocate and DoD. Said filing shall not take effect without the commission's affirmative approval.

3. HECO shall provide to the commission within ten days from the date of this Decision and Order, a refund plan that includes the amount of interest to be paid, the proration of the refund among its ratepayers, and the amortization period of the refund.

DONE at Honolulu, Hawaii MAY - 1 2008.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By Carlito P. Caliboso
Carlito P. Caliboso, Chairman

By: John E. Cole
John E. Cole, Commissioner

By: Leslie H. Kondo
Leslie H. Kondo, Commissioner

APPROVED AS TO FORM:

Kaiulani Kidani Shinsato
Kaiulani Kidani Shinsato
Commission Counsel

04-0113.sl

DOCKET NO. 04-0113
HAWAIIAN ELECTRIC COMPANY, INC.
RESULTS OF OPERATION
($ IN 000'S)

	PRESENT RATES	ADDITIONAL AMOUNT	APPROVED RATES
Operating Revenues			
Electric Sales	1,218,267	44,352	1,262,619
Other	2,967	510	3,477
Gain on Sale of Land	363		363
Total Operating Revenues	1,221,597	44,862	1,266,459
Operating Expenses			
Operations and Maintenance			
Fuel	449,447		449,447
Purchased Power	345,321		345,321
Production	53,365		53,365
Transmission	7,940		7,940
Distribution	19,904		19,904
Customer Accounts	11,232		11,232
Allowance for Uncollectibles	1,152	42	1,194
Customer Service	3,400		3,400
Administrative and General	54,141		54,141
Labor Adjustment	(246)		(246)
Total Operations and Maintenance	945,656	42	945,698
Depreciation and Amortization	70,731		70,731
Taxes, Other Than Income Taxes	113,950	3,972	117,922
Interest on Customer Deposits	378		378
Income Taxes	23,942	15,955	39,897
Total Operating Expenses	1,154,657	19,969	1,174,626
Net Operating Income	66,940	24,893	91,833
Average Depreciated Rate Base	1,066,465	(6,041)	1,060,424
Rate of Return	6.28%		8.66%

Docket No. 04-0113
HAWAIIAN ELECTRIC COMPANY, INC.
ANALYSIS OF RATE INCREASE
($ IN 000'S)

		Amount	% Increase
Rate Increase:			
	Final Rate Increase	44,862	3.67%
Less:			
	Interim Rate Increase (D&O No. 22050)	53,288	4.36%
Final Increase (Refund)		(8,426)	-0.69%

DOCKET NO. 04-0113
HAWAIIAN ELECTRIC COMPANY, INC.
TAXES OTHER THAN INCOME TAXES
($ IN 000'S)

	%	PRESENT RATES	ADJUSTMENT	APPROVED RATES
Electric Sales Revenue		1,218,267	44,352	1,262,619
Other Operating Revenue		2,967	510	3,477
Operating Revenues		1,221,234	44,862	1,266,096
Public Service Tax	5.885%	71,870	2,640	74,510
PUC Fees	0.500%	6,106	224	6,330
Franchise Tax	2.500%	30,428	1,108	31,536
Payroll Tax		5,546		5,546
TOTAL TAXES OTHER THAN INCOME TAX		113,950	3,972	117,922

DOCKET NO. 04-0113
HAWAIIAN ELECTRIC COMPANY, INC.
COMPUTATION OF INCOME TAX EXPENSE
($ IN 000'S)

		PRESENT RATES	ADDITIONAL AMOUNT	APPROVED RATES
Operating Revenues		1,221,597	44,862	1,266,459
Operating Expenses				
Fuel Oil and Purchased Power		794,768		794,768
Other Operation and Maintenance Expense		150,888	42	150,930
Depreciation		70,731		70,731
Taxes Other Than Income Tax		113,950	3,972	117,922
Interest on Customer Deposits		378		378
Total Operating Expenses		1,130,715	4,014	1,134,729
Operating Income Before Income Taxes		90,882	40,848	131,730
Taxes Adjustments				
Interest Expense		(27,664)	157	(27,507)
Meals and Entertainment		66		66
Total Tax Adjustments		(27,598)	157	(27,441)
Taxable Income		63,284	41,005	104,289
Income Tax				
Tax Rate	38.9098%	24,624	15,955	40,579
Less Amortization of:				
State Investment Tax Credit (net of taxes)		682		682
Total Income Tax Expense		23,942	15,955	39,897

DOCKET NO. 04-0113
HAWAIIAN ELECTRIC COMPANY, INC.
AVERAGE DEPRECIATED RATE BASE
($ IN 000'S)

	Beginning Balance	End of Year Balance	Average Balance
Investments in Assets Serving Customers			
Net Cost of Plant in Service	1,241,908	1,276,313	1,259,111
Property Held for Future Use	599	599	599
Fuel Inventory	44,484	44,484	44,484
Materials and Supplies Inventories	10,425	9,789	10,107
Unamortized Net SFAS 109 Regulatory Asset	50,082	52,341	51,212
Prepaid Pension Asset	-	-	-
Unamortized OPEB Regulatory Asset	10,415	9,113	9,764
Total Investments in Assets	1,357,913	1,392,639	1,375,277
Funds from Non-Investors			
Unamortized CIAC	144,322	151,405	147,864
Customer Advances	1,519	1,476	1,498
Customer Deposits	5,066	6,735	5,901
Accumulated Deferred Income Taxes	132,915	139,293	136,104
Unamortized ITC	15,166	16,309	15,738
Unamortized Gain on Sale	484	1,518	1,001
OPEB Liability	10,390	9,088	9,739
Deferred Rent Expense (King Street Lease)	0	0	-
Total Deductions	309,862	325,824	317,845
Difference			1,057,432
Working Cash at Present Rates			9,033
Rate Base at Present Rates			1,066,465
Change in Base Rates			(6,041)
Rate Base at Approved Rates			1,060,424

DOCKET NO. 04-0113
HAWAIIAN ELECTRIC COMPANY, INC.
COMPUTATION OF WORKING CASH ITEMS
($ IN 000'S)

	A COLLECTION LAG DAYS	B PAYMENT LAG DAYS	C NET COLLECTION LAG DAYS (A - B)	D ANNUAL AMOUNT
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	37	16	21	444,802
O&M - Labor	37	11	26	74,269
O&M - Nonlabor	37	31	6	85,658
ITEMS THAT PROVIDE WORKING CASH				
Purchased Power	37	39	(2)	345,321
Revenue Taxes - Present Rates	37	90	(53)	108,404
Revenue Taxes - Approved Rates	37	90	(53)	112,376
Income Taxes - Present Rates	37	162	(125)	16,420
Income Taxes - Approved Rates	37	162	(125)	32,375

	E AVERAGE DAILY AMOUNT (D/365)	F WORKING CASH (PRESENT RATES) (C X E)	G AVERAGE DAILY AMOUNT (APPROVED)	H WORKING CASH (APPROVED RATES) (C X G)
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	1,218.6	25,591	1,218.6	25,591
O&M - Labor	203.5	5,290	203.5	5,290
O&M - Nonlabor	234.7	1,408	234.7	1,408
ITEMS THAT PROVIDE WORKING CASH				
Purchased Power	946.1	(1,892)	946.1	(1,892)
Revenue Taxes - Present Rates	297.0	(15,741)		
Revenue Taxes - Approved Rates			307.9	(16,318)
Income Taxes - Present Rates	45.0	(5,623)		
Income Taxes - Approved Rates			88.7	(11,087)
TOTAL		9,033		2,992
CHANGE IN WORKING CASH				(6,041)

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Decision and Order No. 24171 upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

CATHERINE P. AWAKUNI
EXECUTIVE DIRECTOR
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
CONTROLLER
HAWAIIAN ELECTRIC COMPANY, INC.
P. O. Box 2750
Honolulu, HI 96840-0001

DEAN MATSUURA
MANAGER - REGULATORY AFFAIRS DIVISION
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 Hawaiian Electric Company, Inc.

DR. KAY DAVOODI
NAVFAC HQ ACQ-URASO
1322 Patterson Avenue, SE Suite 1000
Washington Navy Yard
Washington, DC 20374

RANDALL Y. K. YOUNG, ESQ.
NAVAL FACILITIES ENGINEERING COMMAND PACIFIC
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134

Counsel for Department of the Navy

Karen Higashi

Karen Higashi

DATED: MAY - 1 2008