June 25, 2009

The Honorable Chairman and Members of
the Hawaii Public Utilities Commission
Kekuanaoa Building, 1st Floor
465 South King Street
Honolulu, Hawaii 96813

FILED
2009 JUN 25 P 4: 25
PUBLIC UTILITIES COMMISSION

Dear Commissioners:

Subject: Docket No. 2008-0274 – Decoupling Proceeding
Revised and New Exhibits for the Joint SOP

As discussed at the prehearing conference held on June 22, 2009, enclosed for filing are revised Exhibit C, revised Attachment 2, Exhibit C and new Attachments 5 – 7, Exhibit C for the *Joint Final Statement of Position of the HECO Companies and Consumer Advocate* ("Joint SOP") filed by the Hawaiian Electric Companies[1] and the Division of Consumer Advocacy ("Consumer Advocate") on May 11, 2009.[2]

Exhibit C and Attachment 2 of Exhibit C are updates to the exhibits filed in the Joint SOP. Attachment 5 of Exhibit C provides a simplified example of the Revenue Balancing Account ("RBA") to illustrate the accounting process for the RBA. Attachment 6 provides an illustrative estimate of the 2010 Revenue Adjustment Mechanism based on the Hawaiian Electric Company, Inc.'s recorded December 31, 2008 balances and the December 31, 2009 balances that are reflected as the Statement of Probable Entitlement balances filed in Docket No. 2008-0083. Attachment 7 is the Companies' and Consumer Advocate's Energy Cost

[1] The "Hawaiian Electric Companies" or "Companies" are Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited.

[2] The Companies and Consumer Advocate have agreed to include Attachment 6 of Exhibit C with the understanding that information provided in this filing was solely prepared and is sponsored by Hawaiian Electric Companies ("Companies"). Although the Consumer Advocate does not object to providing the Commission with an update, this submittal should not be construed to represent concurrence by the Consumer Advocate with regards to the reasonableness or applicability of the specified data. In this attachment, the Companies provided additional details in a modified format to reflect updated data. At this juncture, the Consumer Advocate has not had adequate opportunity to adequately review and validate the updated information provided by the Companies. The Consumer Advocate intends to focus on illustrating a methodology for the estimation of the RAM rather than trying to accurately estimate a future rate amount for purpose of proposing any such rates to the Commission.

Adjustment Clause ("ECAC") deadband proposal for Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited finalized after the Joint SOP was filed.

Very truly yours,

for DARCY L. ENDO-OMOTO
Vice President
Hawaiian Electric Company, Inc.
Hawaii Electric Light Company, Inc.
Maui Electric Company, Limited

CATHERINE P. AWAKUNI
Executive Director
Division of Consumer Advocacy
Department of Commerce and Consumer Affairs

Enclosures

cc: Division of Consumer Advocacy
Hawaii Renewable Energy Alliance
Haiku Design and Analysis
Hawaii Holdings, LLC, dba First Wind Hawaii
Department of Business, Economic Development, and Tourism
Hawaii Solar Energy Association
Blue Planet Foundation

EXHIBIT C

SUMMARY OF DECOUPLING PROPOSAL AGREEMENT

I. Implementation Process & Timeline

ITEM	HECO COMPANIES' PROPOSAL	CONSUMER ADVOCATE'S PROPOSAL	AGREEMENT
A. Annual Filing Date for Approval of RBA Adjustment rates to Reflect Revenue Adjustments that Conform with the RAM Provision	November 30th 1) Allows customers to anticipate billing change; 2) Allows Companies to use revenue estimate for budgeting & planning purposes.	February 28th 1) Have prior year actuals of RBA roll-over balance from prior year and for estimation of rate base RAM; 2) Have 1st quarter forecast for O&M RAM.	JSOP - February 28th. The parties agree to the Consumer Advocate's proposal to allow use of actual recorded data for rate base calculations and depreciation and CIAC amortization expenses. FSOP – March 31st.
B. Review Period	30 days	60 days	60 days
C. Effective Date	January 1st	May 1st	JSOP - May 1st FSOP – June 1st.
D. Monthly Allocations of Target Revenues	*Initial allocation will be based* on the approved 2009 rate case sales MWH forecast. Post test year allocations will be based on the most current sales forecast available.	*No position stated in* January 30, 2009 proposal.	Initial monthly allocation will be based on the 2009 approved MWH forecast in the pending rate case. Monthly allocations will be revised based on subsequent test year mWh forecasts.
E. Recovery of Authorized Base Revenue Adjustment	Recovery by the establishment of separate kwh rates *for residential and* commercial/industrial customers separately.	Rates should be determined by using kwh billing *determinants.* RAM formula-driven revenue changes to be allocated to rate super-classes using the percentage distribution of revenue changes from the Companies' most recent rate case.	Recovery by the establishment of separate RBA Adjustment rates per kwh for two classes; all residential and all *commercial/industrial* customers for each of the HECO Companies (MECO's Maui, Molokai, and Lanai divisions will not establish separate RBAs or RBA adjustment rates) for a total of six RBAs.

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EXHIBIT C
SUMMARY OF DECOUPLING PROPOSAL AGREEMENT

F. Period of Implementation of Rate Change	Decoupling of revenues from sales will begin with the establishment of the RBA with the issuance of interim orders in the Companies' 2009 rate cases. For the post test years, the RBA Adjustment rate changes will be in effect for 12 months – January 1st through December 31st – to recover the RBA balance from the preceding year and the RAM for the post test year.	Decoupling of revenues from sales will begin with the establishment of the RBA with the issuance of interim orders in the Companies' 2009 rate cases. For the post test years, RBA Adjustment rate changes will be in effect for 8 months, from May 1st through December 31st for recovery of the preceding year's RBA EOY balances, and for 12 months, May 1st through April 30th, for the recovery of incremental revenues derived from the RAM calculation.	JSOP - Decoupling of revenues from sales will begin with the establishment of the RBA with the issuance of interim orders in the Companies' 2009 rate cases. For the post test years, the revised RBA Adjustment rates will be effective on May 1st through April 30th of the following year. FSOP - Decoupling of revenues from sales will begin with the establishment of the RBA with the issuance of interim orders in HECO's 2009 rate case and MECO's and HELCO's 2009 or 2010 rate cases. For the post test years, the revised RBA Adjustment rates will be effective on June 1st through May 31st of the following year. Attachment 5 is a simplified example of the RBA process timeline.
G. Rate Case Cycle	Three years. For the initial cycle, in order to get the Companies on a staggered year filing schedule, the next rate cases will be for the following test years: HECO-2011, MECO or HELCO-2012, MECO or HELCO-2013. However, depending on circumstances, Companies may file rate cases out of cycle.	Agrees with HECO proposal on the staggered cycle and believes it is appropriate to establish a filing schedule guideline. Also agrees that "all parties reserve the right to initiate formal rate proceedings to replace and terminate RAM at any time on a schedule other than as planned."	Three year rate case cycle after initial cycle. At the end of the initial cycle, rate cases will be filed for the following test years: HECO-2011, MECO or HELCO-2012, MECO or HELCO-2013. However, depending on circumstances, Companies and other parties may file rate proceedings to replace and terminate RAM at any time on a schedule other than as planned.

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JI. Revenue Balancing Account (RBA) Issues

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ITEM	HECO COMPANIES' PROPOSAL	CONSUMER ADVOCATE'S PROPOSAL	AGREEMENT
A. Revenues Reflected in RBA	Exclude revenues that are separately recovered and reconciled for ECAC, Purchased Power Adjustment, CEIS/DSM/IRP surcharge.or Pension/OPEB mechanisms.	Agree with HECO proposal.	JSOP - Target revenue is the Authorized Base Revenue approved in an interim or final decision and order in a rate case plus or minus any RAM Revenue Adjustment calculated *and approved under the RAM provision, excluding revenue* taxes. Target revenue will exclude revenue for fuel and purchased power expenses recovered either in base rates or in a purchased power adjustment clause and all revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism. FSOP - Target revenue is the Authorized Base Revenue for each of the HECO Companies approved in an interim or final decision and order in a rate case plus or minus any RAM Revenue Adjustment calculated and approved under the RAM provision, excluding revenue taxes, and less any refunds due to the Earnings Sharing Mechanism (as described in the illustrative Rate Adjustment Mechanism tariff). Target revenue will exclude revenue for fuel and purchased power expenses recovered either in base rates or in a purchased power adjustment clause and all revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism.
B. Revenue Taxes	Excluded from targeted and actual revenues.	Agree with HECO proposal.	Included in developing RAM Revenue Adjustment for the RAM period. Excluded from target and recorded adjusted revenues for RBA tracking purposes.
C. Interest Rate on Balances in RBA	Same as Rate of Return on Rate Base (RORB) – ECAC and	6% - same as that given on customer deposits and	*6% annual simple interest rate (i.e., will apply one-twelfth of* 6% per month). Interest will be restated for any Commission

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	IRP surcharges use the RORB for the estimation of interest.	noted in tariff.	ordered changes to RAM Revenue Adjustments.

III. Revenue Adjustment Mechanism (RAM) – O&M Expenses

ITEM	HECO COMPANIES' PROPOSAL	CONSUMER ADVOCATE'S POSITION	AGREEMENT
A. Labor Expense **Escalators**	*Three Global Insight indices:* 1) Generation, Transmission & Distribution workers; 2) Utility Service workers; and 3) Managers & Administrators. These indices are applied to the Companies' specific costs; no additional data manipulation is required since the indices align with the presentation and formatting of the Companies' costs provided in rate case filings; 3rd party forecast so little chance of "gaming". The indices from the forecast issued immediately prior to the filing of the RAM tariff will be used.	The Union contract wage escalation rate applied to both bargaining unit and non-bargaining unit wages and salaries, reduced by the proposed 0.76% productivity factor. For post test years that are not covered by the Union contract, the agreed-upon escalation rate for the last year of the Union contract will be used.	The Union contract wage escalation rate applied to both bargaining unit and non-bargaining unit wages and salaries, reduced by a 0.76% productivity factor. For post test years that are not covered by the Union contract, the last year's wage escalation rate agreed to by the Union and Companies will be used FSOP – Illustrative example provided as Attachment 1.
B. NonLabor Expense Escalators	The Companies' estimates of nonlabor expense escalation in the post test years are based on six Global Insight material and services' indices *for: 1) Steam Production;*	GDPPI forecast issued by the Blue Chip Economic Indicators forecast service, reduced by the proposed 0.76% productivity factor.	JSOP - The Blue Chip Economic Indicators Consensus forecast of GDPPI issued in January (immediately prior to the filing of the RAM tariff) will be used. No productivity factor will be applied. FSOP - The Blue Chip Economic Indicators Consensus

	2)Transmission Plant; 3)Distribution Plant; 4) Customer Accounts; 5)Customer Service & Information; 6)Administrative & General. These indices are applied to the Companies specific costs; no additional data manipulation is required since the indices align with the presentation and formatting of the Companies' costs with what is already provided in rate case filings; and is a 3rd party forecast so *there is little chance of* "gaming". The indices from the forecast issued immediately prior to the filing of the RAM tariff will be used for the calculation of the RAM associated with nonlabor expenses.		forecast of GDPPI issued in February of the year of the RAM filing will be used. No productivity factor will be applied. Illustrative exampled provided as Attachment 1.
C. True-Up of Escalators	*There should be no "true-up"* in the sense of having a retroactive refund/recovery of the prior year's RAM revenues. Because Global Insight will reflect the actual index as time moves forward, for the 2nd & 3rd post test years, by aggregating all the prior indices from the test	*No position.*	*No true-up.*

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	year forward, there is a self-correcting true-up.		

IV. Revenue Adjustment Mechanism (RAM) – Other Expenses

ITEM	HECO COMPANIES' *PROPOSAL*	CONSUMER ADVOCATE'S *POSITION*	AGREEMENT
A. Depreciation and Amortization Expenses	Estimated to grow at same rate as estimated rate base, i.e., trended rate base + specific significant projects' depreciation costs.	Based on Commission-approved accrual rates to the actual recorded Plant in Service balances at end of the preceding year.	Based on Commission-approved accrual rates applied to the actual recorded Plant in Service balances at end of the preceding year. (Note: Part of Consumer Advocate's RAM for rate base methodology. See item V.A. below)
B. Interest on Customer Deposits	Should be treated like other nonlabor expenses, i.e., escalated by GDPPI for RAM calculation purposes.	No escalator should be applied.	FSOP – No escalator will be applied to the approved test year amount.

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V. Revenue Adjustment Mechanism – Rate Base

ITEM	HECO COMPANIES' PROPOSAL	CONSUMER ADVOCATE'S PROPOSAL	AGREEMENT
A. Methodology	Trended Rate Base with an overlay of "significant projects" impacts.	Rate base for major elements reflect an average test year, including actual balances from prior year; plant additions comprised of baseline (5-year historical average) and major projects scheduled to be completed in first 6 months of RAM year,	JSOP - The parties agree to the Consumer Advocate's methodology as described in Exhibit B of the Joint Proposal. The 6-month period for major project completion has been extended to 9-months. The calculation of average rate base will include actual year-end balances for the preceding calendar year. FSOP – Illustrative example of calculation provided in Attachment 2.

		accumulated depreciation includes annual depreciation on prior year-end actual plant in service balance, estimated ADIT, and estimated incremental CIAC and related depreciation impacts.	
B. Beginning Basis	Approved 2009 Rate Bases.	Prior Year Actual recorded balances for the Plant, Depreciation/Deferred Tax Reserve and CIAC elements of Rate Base	JSOP - Approved 2009 test year rate bases held constant except for the components of: 1) Plant in Service; 2) CIAC, 3) Accumulated Depreciation; and 4) Accumulated Deferred Income Tax Reserve which will be based on the prior year's *actual end-of-year balances as described in item V.* FSOP - Approved HECO 2009 test year rate base and MECO and HELCO 2009 or 2010 test year rate bases held constant except for the components of: 1) Plant in Service; 2) CIAC, 3) Accumulated Depreciation; and 4) Accumulated Deferred Income Tax Reserve which will be based on the prior year's actual end-of-year balances as described in item V.
C. Baseline Projection	Trended rate base, based on linear regression of 12 years of historical data, with significant projects removed.	Historical 5 year average of plant additions (without major projects) and CIAC (associated with baseline plant additions).	The parties agree to the Consumer Advocate's methodology as described in Exhibit B of the Joint Proposal.
D. Significant/Major Projects	Defined as projects (including software development projects) that are approved by the Commission that are >$20M for HECO & >$10M for MECO & HELCO. Project costs are limited to last authorized + 10%. Would be	Major projects are defined as CIP projects that are >$2.5M and are included in the RAM calculation if they are expected to close to the Plant in Service account in the first half of the RAM year.	Major projects are defined as CIP projects that are >$2.5M and are scheduled to be placed into service in the first nine *months of the RAM period and recorded as Plant in Service.* Major projects do not include software development projects. Major projects' costs, for the purposes of developing the RAM Revenue Adjustment will be limited to Commission-approved amounts. If a major project is not placed into service as scheduled, the RAM adjustment

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	reflected at full amount when put into service.	Inclusion of major CIP projects for RAM purposes does not foreclose any future review or evaluation of the reasonableness of the final cost of an individual project in future rate case proceedings and subsequent adjustments to the RBA to restate authorized revenue levels.	associated with it (including interest) will be refunded to customers as a credit through the RBA rate adjustment calculated for the following RAM period. Because reviews of the major projects' costs by the Commission, as actually incurred, may not occur until the rate case after the RAM revenue for the project is collected by the Companies, Authorized Base Revenues (including interest) associated with these projects would be subject to refund to the extent the Commission disallows any of the project's cost.
E. Accumulated Depreciation and Accumulated Deferred Income Taxes	Companies' proposal based on total rate base with no identification of specific components.	Since this method uses the prior year-end recorded plant-in-service balances, , depreciation expense can be calculated (based on the preceding EOY plant-in-service balance and approved depreciation rates.)	The parties agree to the Consumer Advocate's methodology as described in Exhibit B of the Joint Proposal.
F. RAM for the next rate case test years	The Companies should still be able to file and implement the RAM for a test year, given the regulatory lag that is inherent in the rate case process.	Agrees that all parties may reserve the right to initiate formal rate proceedings to replace and terminate RAM at any time on a schedule other than planned. However, "the RAM revenues authorized for that year should be deemed interim and subject to refund if later deem to be excessive....No further interim rate relief or	The Companies and Consumer Advocate agree that parties may initiate formal rate proceedings to replace and terminate RAM at any time on a schedule other than planned. Implementation of the RAM should continue in a test year, with any RAM increase in Base Authorized Revenues in the test year deemed interim and subject to refund if the Commission ultimately orders lower Base Authorized Revenues for that test year.

		Statement of Probable Entitlement is required...".	

VI. Revenue Adjustment Mechanism – Miscellaneous

A. 2010 RAM illustrative estimate for HECO	Attachment 6 contains the HECO Companies' illustrative version of the HECO 2010 RAM based on the Statement of Probable Entitlement filed in the HECO 2009 Rate Case.	The Consumer Advocate does not sponsor Attachment 6.	The Companies and Consumer Advocate agree that Attachment 6 may be included as part of Exhibit C with the understanding that Attachment 6 is ONLY sponsored by the HECO Companies and not the Consumer Advocate.

VII. Other Issues

ITEM	HECO COMPANIES' PROPOSAL	CONSUMER ADVOCATE' PROPOSAL	AGREEMENT
A. Changes in State & Federal Tax Rates	As stated in the HCEI Agreement, the RAMs will reflect changes to the State and Federal tax rates. This provision would be included in our RAM tariff.	To be reflected in calculations to revise the RAM for changes in tax legislation or regulation having an estimated prospective annual impact upon prior year recorded utility revenues in excess of one-half of one percent (0.5%) of such revenues.	Changes in tax laws or tax regulations that are estimated to impact Authorized Base Revenues by more than $2,000,000 (HECO) or $500,000 (HELCO and MECO) will be reflected in calculations to estimate authorized base revenues.
B. Return on Equity	This is an item that should be decided in the rate cases. The appropriate level of ROE must be reviewed in the	A "9%" ROE is the proposed ceiling before sharing begins.	To be decided in the Companies' rate cases.

	context of the additional risk that is being undertaken by the Companies for the HCEI initiatives.		
C. Earnings Sharing Mechanism	*If an earnings sharing* mechanism is required, it should have a dead band around the authorized return on equity to incent productivity or cost savings. Sharing bands should be symmetrical.	a. ROE<9%, earnings retained by Companies. b. 9-10% ROE, 25% share credit to customers. c. 10-12% ROE, 50% share credit to customers. d. >12% ROE, 90% share credit to customers.	If actual achieved ROE, calculated as prescribed in Exhibit B, is: a. Less than the authorized ROE, all such earnings to be retained by shareholders; b. Between authorized ROE and ROE + next 100 basis points (one percent), 25% share credit of the revenue equivalent of such additional earnings to customers by reduction of the RBA rate adjustment; c. Between authorized ROE + 100 basis points and next ROE + 200 basis points (two percent), 50% share credit of the revenue equivalent of such additional earnings to customers by reduction of the RBA rate adjustment; d. Above authorized ROE + next 300 basis points (three percent), 90% share credit of the revenue equivalent of such additional earnings to customers by reduction of the RBA rate adjustment.
D. RBA and RAM Continuation	No stated position.	The HECO 2011 rate case to serve as forum for any HECO-proposed extension or modification of the RAM, with the HECO Companies bearing the burden of proof regarding the potential continuation of RAM after the second round of base rate cases.	The parties agree that the RBA and RAM provisions will be subject to review and continuation, termination or modification in the utility's next base rate proceeding. The provisions will sunset when new base rates authorized in the next general rate case become effective, unless the Commission approves the continuation of the provisions (with or without modification).
E. ECAC Heat Rate	The HECO Companies believe that the fixed heat rate should still be maintained.	In recognition of the other parties' positions on this issue, the Consumer	Conceptually, deadbands around the Companies' authorized heat rates for each fuel type are appropriate with the ECAC operating as a full-cost pass-through when actual system

	However, with Commission approval in the instant proceeding, the Companies are willing to implement a conservative deadband of XX btu/kwh sales above and below the HECO heat rate(s) as most recently approved by the Commission for HECO.	Advocate is willing to consider deadbands (above and below) the Companies' heat rates by fuel types as authorized by the Commission.	heat rates are between the upper and lower deadband bounds. If the actual heat rates are above the deadband bound, the utility would not be able to recover any expenses and if the heat rates are lower than the lower deadband bound, the utility will be allowed to keep any expenses saved, resulting from the lower heat rate. A deadband of +/- 50 btu per kWh is proposed for HECO (based on an extrapolation of data provided in HECO's 2009 rate case) to be placed into effect with the issuance of an Order by the Commission in the instant proceeding, assuming that the Commission has issued its decision in HECO's 2009 rate case. For MECO's Maui Division, a deadband of +/- 100 btu per kWh is proposed. Deadbands of +/- 50 btu per kWh are proposed for Molokai and Lanai Divisions. For HELCO, a deadband of +/- 100 btu per kWh is proposed. Further discussion of the ECAC heat rate deadbands may be found in Exhibit D and Attachment 7.
F. HCEI Status Report	The Companies will provide a status report on certain HCEI initiatives (e.g., New Net Energy Metering (MW); New Net Energy Metering (No. of new installations); New Renewable Energy with approval and establishment of Feed-in Tariff (MW); RPS Goals achieved) as part of their next rate case filings.	The Consumer Advocate supports a thorough review of HECO's performance relative to its commitments in the HCEI Agreement as a condition of any continuation or modification of decoupling tariffs RBA and RAM, noting that the RAM is explicitly subject to review and continuation, termination or modification in the utility's next base rate case proceeding, upon a	The Consumer Advocate and Companies agree with the draft RAM tariff revision which states that the Companies will provide the HCEI status report as part of their base rate case filings that take place after the initial establishment and implementation of the RBA and RAM decoupling processes.

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		showing by the utility and finding by the Commission that continuation or modification is appropriate.	

Notice: For illustrative purposes only -- not intended to reflect actual RAM increase.

Hawaiian Electric Company, Inc.
Decoupling - Consumer Advocate Rate Base Illustration
(RATE BASE CHANGE)
Based on 2009 Test Year
($000's)

			HECO Rate Base -- Full CIP1 Annualized				
			12/31/08 (a)	2009 Changes	12/31/09 (a)	CA 2010 Changes (b)	Estimated 12/31/10
1	**Net Plant In Service**						
2	Plant in Service:						
3	Starting Balance		$ 2,615,937		$ 2,615,937		$ 2,615,937
4	Full Cost of CIP1		-		155,300		155,300
5	Additions (excl CIP1)			$ 133,034	133,034	$ 106,798	239,832
6	Retirements			(16,063)	(16,063)		(16,063)
7	Ending Balance		2,615,937	116,971	2,888,208	106,798	2,995,006
8	Accumulated Depreciation:						
9	Starting Balance		(1,242,678)		(1,242,678)		(1,242,678)
10	Cost of Removal			6,770	6,770		6,770
11	Salvage			(277)	(277)		(277)
12	Depreciation Accrual	(c)		(92,979)	(92,979)	(96,481)	(189,460)
13	Retirements			16,063	16,063		16,063
14	Ending Balance		(1,242,678)	(70,423)	(1,313,101)	(96,481)	(1,409,582)
15	Net Plant in Service		1,373,259	46,548	1,575,107	10,317	1,585,424
16	**Deductions**						
17	Unamortized CIAC		(180,184)	(3,143)	(183,327)	(10,000)	(193,327)
18	Accumulated Def Income Taxes		(130,002)	(3,098)	(133,100)	(1,555)	(134,655)
19	Total		(310,186)	(6,241)	(316,427)	(11,555)	(327,982)
20	Net Rate Base (before working cash)		$ 1,063,073	$ 40,307	1,258,680	$ (1,238)	$ 1,257,442
21	Average Rate Base			$ 1,160,877		$ 1,258,061	
22	Average Change in 2010 Rate Base:						
23	Baseline Additions	(b)	$ 90,000		45,000		
24	Major CIP Project Additions	(b)	16,798		8,399		
25	Accumulated Depreciation	(c)	(96,481)		(48,240)		
26	Net Plant	Line 20..25			1,263,839		
27	ADIT - Baseline	(b)	(1,310)		(655)		
28	ADIT - Major CIP	(b)	(245)		(123)		
29	CIAC - Baseline	(b)	(10,000)		(5,000)		
30	CIAC - Major CIP	(b)	-		-		
31	Total Change in Rate Base	Line 26..30			$ 1,258,061		
32	Effective Pre-Tax Return	(c)		13.35%		13.35%	
33	Gross Return on Rate Base	Line 21 x 32		**$ 155,016**		**$ 167,993**	$ 12,977
34	Income Statement Effects:						
35	Less: CIAC Amortization	(c)					(333)
36	Add: Annualized Prior Year Depreciation	(c)					3,502
37	Revenue Requirement on Plant Additions						$ 16,146

Change In Revenue Requirement

(a) The 2008 balances (lines 3-20) represent estimates from HECO's December Update (e.g., HECO T-18), as "actuals" not then available.
Assumed 2009 "actual" year-end rate base per December Update: Net Plant HECO-1802; CIAC HECO-1805; ADIT HECO-1605.

(b) Source: Original Consumer Advocate Decoupling Illustration distributed 2/27/09.

(c) Changes from Illustration submitted with Joint Final Statement of Position (HECO and CA):
CIAC: corrected amortization period to 30 years.
Depreciation Accrual: composite depreciation rate revised from original 3.101% to 3.341%.

Rate Case JSOPE Effective Pre-Tax Return:	Wtd. Cost	Multiplier	Pre-Tax Return
Long-Term Debt	2.41%	1.09751413	2.65%
Hybrid Securities	0.15%	1.09751413	0.16%
Preferred Stock	0.08%	1.09751413	0.09%
Common Equity	5.82%	1.79654549	10.46%
Total Capitalization	8.46%		13.35%

HECO Companies Decoupling Example
Docket No. 2008-0274
Simplified Example Revenue Balancing Account[1]
All Amounts $Millions

Assumptions:	PUC Authorized Illustrative Est.	Comments
Amounts from Rate Order (Interim or Permanent)		
Total Authorized Base Electric Sales Revenues	$ 1,800	Approved Electric Sales Revenues, Including Interim Award
Less: Revenue Taxes on Base Revenues	$ (175)	
Fuel/Energy Recovered in Base Rates	$ (825)	
Purchased Power Demand via PPA	$ (200)	
Authorized Base Revenues to Track	$ 600 <	
Revenue Distribution by Month Equal Percentages	$ 50 <	Actual authorized revenues need to be distributed by month
Assumed Annual Interest on RBA Balance	6.0% <	Rule 6 customer depout interest rate proxy assumed.

Revenue Balancing Account: Month	Activity Changing Rates	Begin RBA Balance A = Prev G	Target Revenue[2] B	Base Revenue[3] C1	RAM Revenue C2	Amort RBA Bal Revenue C3	Total Credit Revenue Sum All C	Change in RBA D = B - C	RBA Balance Before Int E = A + D	Interest on RBA Balance F	Ending RBA Balance G = E + F	
Jun-09												
Jul-09	Interim Rate Order	$ -	$ 50.0	$ 49.0	$ -	$ -	$ 49.0	$ 1.0	$ 1.0	$0.0	$ 1.0	< Interim Order Sets Target
Aug-09		1.0	50.0	48.0		-	48.0	$ 2.0	$ 3.0	$0.0	$ 3.0	
Sep-09		3.0	50.0	47.0	-	-	47.0	$ 3.0	$ 6.0	$0.0	$ 6.0	
Oct-09	Permanent Rate Order	6.0	50.0	47.0	-	-	47.0	$ 3.0	$ 9.0	$0.0	$ 9.0	< Permanent Order = Interim
Nov-09		9.0	50.0	47.0	-	-	47.0	$ 3.0	$ 12.0	$0.1	$ 12.1	
Dec-09		12.1	50.0	49.0	-	-	49.0	$ 1.0	$ 13.1	$0.1	$ 13.2	< RBA Bal to be recovered in RBA Adj beginning 6/1/10
Jan-10		13.2	50.0	50.0	-	-	50.0	$	$ 13.2	$0.1	$ 13.3	
Feb-10		13.3	50.0	51.0	-	-	51.0	$ (1.0)	$ 12.3	$0.1	$ 12.4	
Mar-10	File RAM Application	12.4	50.0	51.0	-	-	51.0	$ (1.0)	$ 11.4	$0.1	$ 11.5	
Apr-10		11.5	50.0	49.0	-	-	49.0	$ 1.0	$ 12.5	$0.1	$ 12.6	
May-10		12.6	50.0	47.0	-	-	47.0	$ 3.0	$ 15.6	$0.1	$ 15.7	
Jun-10	Implement RAM	15.7	51.0	52.0	1.0	1.1	54.1	$ (3.1)	$ 12.6	$0.1	$ 12.7	<<RAM increase $12M or $1.0 per mo Target rev increases by $1.0 to $51.0
Jul-10		12.7	51.0	50.0	1.0	1.1	52.1	$ (1.1)	$ 11.6	$0.1	$ 11.7	
Aug-10		11.7	51.0	51.0	1.0	1.1	53.1	$ (2.1)	$ 9.6	$0.1	$ 9.7	
Sep-10		9.7	51.0	50.0	1.0	1.1	52.1	$ (1.1)	$ 8.6	$0.0	$ 8.6	
Oct-10		8.6	51.0	49.0	1.0	1.1	51.1	$ (0.1)	$ 8.5	$0.0	$ 8.5	
Nov-10		8.5	51.0	48.0	1.0	1.1	50.1	$ 0.9	$ 9.4	$0.0	$ 9.4	
Dec-10		9.4	51.0	48.0	1.0	1.1	50.1	$ 0.9	$ 10.3	$0.0	$ 10.3	< RBA Bal to be recovered in RBA Adj beginning 6/1/11 = $4.8 $10.3 - $5.5 (Jan May 2011 Amort)
Jan-11		10.3	51.0	51.0	1.0	1.1	53.1	$ (2.1)	$ 8.2	$0.0	$ 8.2	
Feb-11		8.2	51.0	50.0	1.0	1.1	52.1	$ (1.1)	$ 7.1	$0.0	$ 7.1	
Mar-11	File RAM Application	7.1	51.0	50.0	1.0	1.1	52.1	$ (1.1)	$ 6.0	$0.0	$ 6.0	
Apr-11		6.0	51.0	49.0	1.0	1.1	51.1	$ (0.1)	$ 5.9	$0.0	$ 5.9	
May-11		5.9	51.0	50.0	1.0	1.1	52.1	$ (1.1)	$ 4.8	$0.0	$ 4.8	
Jun-11	Implement RAM	4.8	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 4.4	$0.0	$ 4.4	<<RAM increase $18.5M or $1.5 per mo. Target rev increases by $1.5 to $52.5
Jul-11		4.4	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 4.0	$0.0	$ 4.0	
Aug-11		4.0	52.5	51.0	2.5	0.4	53.9	$ (1.4)	$ 2.6	$0.0	$ 2.6	
Sep-11		2.6	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 2.2	$0.0	$ 2.2	
Oct-11		2.2	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 1.8	$0.0	$ 1.8	
Nov-11		1.8	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 1.4	$0.0	$ 1.4	
Dec-11		1.4	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 1.0	$0.0	$ 1.0	
Jan-12		1.0	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 0.6	$0.0	$ 0.6	
Feb-12		0.6	52.5	49.0	2.5	0.4	52.9	$ 0.6	$ 1.2	$0.0	$ 1.2	
Mar-12		1.2	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 0.8	$0.0	$ 0.8	
Apr-12		0.8	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ 0.4	$0.0	$ 0.4	
May-12		0.4	52.5	50.0	2.5	0.4	52.9	$ (0.4)	$ (0.0)	$0.0	$ (0.0)	

NOTES.

[1] This simplified illustration would be separately applied to six RBA accounts: proposed residential RBA and commercial RBA at HECO, HELCO, and MECO (Consolidated)
Amounts shown herein are hypothetical and not intended to predict any future RAM calculation results or future sales revenue trends.

[2] This illustration assumes that the target revenue is the same every month until it is changed as a result of RAM implementation.
The actual distribution of target revenue by month will be as provided in the RBA Provision tariff.
Target Revenue is the approved revenue requirement for electric sales revenue plus all RAM adjustments since last approved rate case revenue requirement less revenue for revenue taxes, for fuel expense and for purchased power expense, and excludes surcharge revenues for ECAC, Public Benefits Fund, IRP, DSM, and Solar Saver

[3] Base revenue is total recorded revenue less revenue for surcharges other than interim rate increases (such as ECAC, Public Benefits Fund, IRP, DSM, Solar Saver), for fuel expense, for purchased power expense, and for revenue taxes.

JOINT FSOP O&M EXPENSES RAM ONLY - (EXCLUDES CHANGES IN RATE BASE)

Results of Operations - Illustration Only

Based on 2009 Test Year Statement of Probable Entitleme

($ Thousands)

	Current Effective Rates	Additional Amount	Revenue Requirements to Produce 8.45% Return on Average Rate Base	2009 Nominal Amount (N.1)	2009 BAU Amount	2009 1 + Index	Notes	2010 BAU * Index Amount	2010 Nominal Amount (N.1)	2010 TOTAL RAM Amount	Notes
Electric Sales Revenue	1,291,619	79,690	1,371,309					0		1,376,674	N.6
Other Operating Revenue	4,140	121	4,261	4,261	0			0	4,261	4,261	
Gain on Sale of Land	615		615	615	0	100.0%	N.2	0	615	615	
TOTAL OPERATING REVENUES	1,296,374	79,811	1,376,185	4,876	0			0	4,876	1,381,550	
Fuel	438,348		438,348	438,348	0	100.0%	N 2	0	438,348	438,348	
Purchased Power	346,467		346,467	346,467	0	100.0%	N.2	0	346,467	346,467	
Production	78,973		78,973								
Production Labor *			33,131		33,131	103.7%	N.3a	34,370		34,370	
Production NonLabor *			45,842	0	45,842	101 2%	N.3b	46,392	0	46,392	
Transmission	13,859		13,859								
Transmission Labor *			4,877		4,877	103.7%	N.3a	5,059		5,059	
Transmission NonLabor *			8,983		8,983	101.2%	N.3b	9,091		9,091	
Distribution	29,844		29,844								
Distribution Labor *			12,415		12,415	103.7%	N.3a	12,879		12,879	
Distribution NonLabor *			17,429	0	17,429	101.2%	N.3b	17,638	0	17,638	
Customer Accounts	12,500		12,500								
Customer Accounts Labor *			4,211		4,211	103.7%	N.3a	4,368		4,368	
Customer Accounts NonLabor *			8,289	0	8,289	101.2%	N.3b	8,388	0	8,388	
Allowance for Uncoll. Accounts	1,302		1,302		1,302	101.2%	N.3b	1,318		1,318	
Customer Service	5,784		5,784								
Customer Service Labor *			3,271		3,271	103.7%	N.3a	3,393		3,393	
Customer Service NonLabor *			2,513		2,513	101.2%	N.3b	2,543		2,543	
Administration & General	88,948		88,948							0	
Admin & Gen Labor *			22,214		22,214	103.7%	N.3a	23,045		23,045	
Admin & Gen NonLabor *			66,734	27,620	39,114	101.2%	N.3b	39,583	27,620	67,203	
Operation and Maintenance	1,016,025	0	1,016,026	812,435	203,591			208,069		1,020,504	
Depreciation & Amortization	81,868		81,868	na	na	100.0%	N.7	na		81,868	
Amortization of State ITC	(1,453)		(1,453)		-1,453	100.0%	N 2	-1,453		-1,453	
Taxes Other Than Income	122,103	7,088	129,191	na	na			na		130,075	N.8
Interest on Customer Deposits	479		479		479	100.0%	N.2	479		479	
Income Taxes	15,909	28,296	44,205	na	na			na		44,205	N.9
TOTAL OPERATING EXPENSES	1,234,931	35,384	1,270,316	812,435	202,617			207,095		1,275,678	
OPERATING INCOME	61,443	44,427	105,869							105,869	N.5
								0		0	
AVERAGE RATE BASE	1,253,601	(718)	1,252,883	na	na			na		1,252,883	N.4
RATE OF RETURN ON AVERAGE RATE BASE	4.90%		8.45%							8.45%	
REVENUE ADJUSTMENT (DIFFERENCE IN TOTAL OPERATING REVENUES)										$5,365	

* Allocated Labor and Nonlabor of total O&M expenses based on Rate Case Update, revised for settlement changes

N.1 Operating Revenue and Gain on Sale Revenue held constant for RAM calculation. Fuel & Purchased Power expenses held constant due to recovery from ECAC & Purchased Power Adjustment Clause. Pension & OPEB expenses of $22,761K and $4,859K, respectively, per F.Horiuch-Shin worksheet based on HECO T-13, Attachment 2, Final Settlement.

N.2 No escalator used.

N.3a Based on 2010 Union Contract wage rate increase (4.5%) less productivity factor of 0.76%, for a net of 3.7%.

N 3b Based on Blue Chip Economic Indicators, Consensus GDP Price Index, 4/10/09, of 1 2%

N.4 No change in rate base for calculation of O&M RAM.

N 5 Based on 2009 TY RORB (Statement of Probable Entitlement) = 8.45%

N.6 (Total Operating Expenses less revenue taxes+Operating Income)/(1-PUC & PSC & Franchise Tax rates-Uncoll Factor) less Other Operating revenue & Gain on Sale of

N.7 Depreciation and Amortization Expenses are addressed as part of the Rate Base RAM

N.8 Sum of Payroll Taxes of $7,330K, escalated by labor expenses growth rate of 3.7% to $7,604K; PSC Tax (5.885%), PUC Fees (0.5%), and Franchise Tax (2 5%) multiplied by Electric Sales Revenues+Operating Revenues-Allowance for Uncollectibles for a total of $130,075K

N.9 Operating Income and corresponding Income Taxes are held constant in the O&M RAM calculations, but are modified as part of the Rate Base RAM.

Hawaiian Electric Company, Inc.
Decoupling - Rate Base RAM Illustration
(Rate Base Change)
Based on 2009 Test Year
($000s)

				2010 Rate Base RAM	
		Actual 12/31/08	2009 Changes	Estimated 12/31/09	2010 Changes	Estimated 12/31/10
1	**Net Plant In Service**					
2	Plant in Service:					
3	Starting Balance -Gen'l Accounting / Budget			$ 2,597,900		$ 2,886,234
4	CIP1 - TY Update * Revised		155,300	155,300		
5	Additions		$ 133,034	133,034	$ 111,371	111,371
6	*Retirements*			-	-	-
7	Ending Balance	2,597,900	288,334	2,886,234	111,371	2,997,605
8	Accumulated Depreciation:					
9	Starting Balance - Gen'l Accounting			(1,232,322)		(1,310,749)
10	Cost of Removal		6,770	6,770		6,770
11	Salvage		(277)	(277)		(277)
12	Depreciation Accrual		(84,920)	(84,920)	(89,473)	(89,473)
13	Retirements		-	-	-	-
14	Ending Balance	(1,232,322)	(78,427)	(1,310,749)	(89,473)	(1,400,222)
15	*Net Plant In Service*	*1,365,578*	*209,907*	*1,575,485*	*21,898*	*1,597,383*
16	**Deductions**					
17	Unamortized CIAC - Gen'l Accounting	(178,757)	(4,618)	(183,375)	(10,455)	(184,576)
17a	Adjustment for CIAC amortization - previous year's amortization portion				9,603	
17b	Adjustment for CIAC amortization - incremental portion				(349)	
18	Accumulated Def Income Taxes-Gen'l Acc	(132,510)	(24,041)	(156,551)	1,632	(154,919)
19	Total	(311,267)	(28,659)	(339,926)	432	(339,495)
20	Net Rate Base (before working cash)	$ 1,054,311	$ 181,248	1,235,559	$ 22,329	1,257,888
21	Average Rate Base		$ 1,144,935			$ 1,246,724

		CHANGE IN 2010 RATE BASE				Change In Revenue Requirement
22	Average Change in Rate Base:					
23	Baseline Additions	$ 86,394				
24	Major CIP Project Additions	24,977				
25	Accumulated Depreciation	(89,473)				
26	Net Plant					
27	ADIT - Baseline	930				
28	ADIT - Major CIP	(360)				
29	ADIT (CIAC) - Baseline	1,062				
30	ADIT (CIAC) - Major CIP	-				
31	CIAC - Baseline	(10,455)				
32	CIAC - Major CIP	-				
33	Total Change in Rate Base					
34	Effective Pre-Tax Return		13 37%		13.37%	
35	Gross Return on Rate Base		$ 153,078		$ 166,687	$ 13,609
36	*Income Statement Effects:*					
37	Less: CIAC Amortization					(349)
38	Add: Annualized Prior Year Depreciation					4,553
39	Revenue Requirement on Plant Additions					$ 17,814

Note: Lines 15, 17, & 18 of "Estimated 12/31/09" balances are based on the Statement of Probable Entitlement (Exhibit 1, page 3, "End of Year Balance") balances, filed in Docket No 2008-0083. The 10 50 % return on common equity to calculate the "Effective Pre-Tax Return" rate is also based on the Statement of Probable Entitlement, filed in Docket No 2008-0083.

HECO COMPANIES' VERSION ONLY - Illustrative Example Only

Estimated RAM Impact for Year 2010 - Typical Residential Monthly Bill

	In Thousands
1 O&M Expense Revenue Adjustment	$5,365
2 Rate Base Revenue Adjustment (n.1)	$17,814
3 Total Revenue Adjustment	$23,179
	In Cents
4 Rate Per KWH in Cents- Residential (n.2)	$0.3613
	In Dollars
5 Typical 600 kWh Usage Per Month	**$2.17**

n.1 Based on ROE of 10.5% as proposed in the Statement of Probable Entitlement, filed in the HECO 2009 test year rate case, Docket No. 2008-0083.

n.2 The residential class share of the RAM adjustment is equal to the estimated residential class share of TY 2009 electric revenue requirements at the settlement revenue requirement amount. The residential rate impact in cents per kWh is the residential class share of the RAM adjustment divided by the estimated residential kWh sales from June 2010 to May 2011.

Decoupling Docket (Docket No. 2008-0274)
ECAC Deadband Proposal

A. Background

In its Opening Statement of Position in this Decoupling docket, Haiku Design and Analysis ("HDA") proposed, among other things:

> (7) Convert the existing ECAC to a straight full cost pass through for fuel and purchased energy expenses.[1]

HDA also stated, among other things[2]:

> HDA argues here, for purposes of consideration by the Commission and other parties, that it is time to retire the ECAC mechanism and replace it with a straight full cost pass through. HDA offers the following arguments:
>
> (a) A straight cost pass through would considerably simplify administration of the fuel adjustments and the decoupling mechanisms. First, it is very simple compared to the existing ECAC. Second, it would simplify the administration of a decoupling mechanism. In fact, if there is going to be a revenue balancing account (RBA) for the decoupling mechanism, implementing a straight pass through could be done as part of the same set of calculations, adjustments and reconciliations. One set of lines in the RBA would match and adjust collected revenues for fixed costs to target revenues for fixed costs (the HECO proposed decoupling method). A second set of lines would match and adjust collected revenues for fuel and purchased energy to actual fuel and purchased energy expenses (a straight full cost pass through).
>
> (b) A straight pass through is consistent with the objectives of the RAM generally: reduction of risk and uncertainty in full recovery of utility expenses.
>
> (c) The existing ECAC incentives to the utility to operate its system efficiently from a thermodynamic standpoint (to minimize system heat rate) provides some convoluted incentives regarding commitment of purchased power generation units versus commitment of company generation units.[3] With substantial amounts of new renewable generation being added to the utility system, a straight fuel cost pass through would "decouple" utility earnings from resource commitment (and curtailment) decisions. The utility should not be at financial risk based on resource commitment and curtailment decisions that should be made according to policies (maximization of renewable generation) that

[1] HDA's Opening Statement of Position, dated March 28, 2009, page 7, Item (7).
[2] Ibid., pages 7 to 9.
[3] Commitment refers to the decisions made by a utility dispatcher to start generation units or take units off-line in order to maintain sufficient operating generation units to meet instant generation requirements.

conflict with the most efficient thermodynamic operation of the utilities' own generation units.

(d) Similarly, the existing ECAC provides an incentive for the utilities to minimize spinning operation reserve capacity and, in effect, penalizes utility earnings for providing additional operation reserve capacity. This is significant because maximizing the incorporation of intermittent renewable resources requires providing increased operating reserve capacity. The utilities should not be financially penalized for providing ample operation reserves in order to accommodate intermittent renewable generation. A straight fuel cost pass through would decouple utility earnings from operation reserve capacity decisions.

(e) Since the HECO Companies currently dispatch generation resources using AGC controls that are based on minimizing economic costs, regulators have a simple verifiable way to determine that resources are being operated economically. The efficiency incentive in the existing ECAC is not necessary to ensure economic dispatch of system resources.[4]

In Exhibit D to the Joint Final Statement of Position of the HECO Companies and Consumer Advocate, filed May 11, 2009, the HECO Companies agreed with "HDA that the fixed heat rate could result in the utilities recovering more or less than their fixed costs under sales decoupling, and that the fixed heat rate may incent the utilities to take less renewable energy under certain circumstances. The system heat rate worsens because utility generators must often be taken off of economic dispatch to accommodate increased levels of renewable energy."

The HECO Companies and the Consumer Advocate jointly proposed that a 50 Btu/kWh-sales deadband be established above and below each of the fixed sales heat rates by fuel-type in HECO's ECAC, and explained the basis for the proposal in Exhibit D. Should the Commission issue a final Decision and Order (D&O) in HECO's 2009 test year rate proceeding prior to a final D&O in the instant docket, the application of the deadband in HECO's ECAC would take effect upon the issuance of a final D&O by the Commission in the instant docket.. Should the Commission issue a final D&O in the instant docket prior to a final D&O in HECO's 2009 test year rate case, the ECAC deadbands would be implemented upon the effective date of the final HECO 2009 test year rate case D&O.

In Exhibit D, the HECO Companies and the Consumer Advocate noted that: "The concept of sales heat rate deadbands by fuel type also applies to HELCO and MECO. However, more analyses will be conducted by the Companies to determine the appropriate deadband widths for each company."

[4] Note that the utilities actually do not really dispatch resources directly according to ECAC revenue maximization in any case since resources are dispatched based on minimizing fuel expense, not based on minimizing BTU consumption.

B. HECO Proposal for HELCO and MECO sales heat rate deadbands

As noted above, the explanation for the HECO sales heat rate deadband was based on an assumption of the possible impact of decoupling to be equivalent to a 5% reduction in sales and assuming that the relationship between the change in sales and the change in efficiency factor is linear. This resulted in a deadband width of ±50 Btu/kWh-sales above and below the test year sales heat rate, which represents less than 1% of the system sales heat rate for HECO.

The relatively small deadband for HECO of ±50 Btu/kWh-sales takes into account the size of the HECO system (relative to those of MECO and HELCO), and the size of the Independent Power Producer ("IPP") facilities expected to be added prior to the resetting of HECO's rate case heat rate target in its next rate case, which is expected to use a 2011 test year.

1. For MECO – Maui Division, the deadband width shall be ±100 Btu/kWh-sales. The ±100 Btu/kWh-sales deadbands do not accommodate the impact of larger IPP additions on Maui. The proposed deadband is based on production simulation runs that indicate that MECO's diesel system heat rate could increase by 61 Btu/kWh-net based on a decrease in sales by 5%, and could decrease by 45 Btu/kWh-net based on an increase in sales by 5%. This deadband would apply to both fuel types (Industrial Fuel Oil and diesel fuel) used by the Maui Division. The ±100 Btu/kWh-sales deadbands are also intended to accommodate small IPP additions (such as photovoltaic additions sized below the competitive bidding threshold), as well as sales changes.

2. For MECO – Lanai and Molokai Divisions, the Consumer Advocate and the Companies agree to a deadband width of ±50 Btu/kWh-sales, consistent with the width selected for HECO. Lanai and Molokai Division use only one fuel type – diesel fuel.

3. For HELCO, the deadband width shall be ±100 Btu/kWh-sales, consistent with the deadband width proposed for MECO – Maui Division. This deadband would apply to both fuel types (Industrial Fuel Oil and diesel fuel) used by HELCO. The proposed ±100 Btu/kWh-sales deadbands are intended to accommodate small IPP additions (such as photovoltaic additions sized below the competitive bidding threshold), as well as sales changes. The ±100 Btu/kWh-sales deadbands do not accommodate the impact of larger IPP additions on the Big Island.

C. Redetermination of Sales Heat Rate Proposal

Based on production simulation runs for scenarios where additional increments of renewable energy generation are integrated into the grids, HECO anticipates that changes in any of the utilities' heat rates could exceed the bounds of the deadbands described in Part B above. For example, using a production simulation model, HECO projected that Maui Division's diesel system heat rate could increase by 282 Btu/kWh-net if a 21 MW

windfarm is added to the Maui system and an additional 10.5 MW of regulating reserve is carried (over and above the existing 15 MW average amount of regulating reserve already carried).

In recognition of these potential occurrences, the Consumer Advocate proposed the following:

> Any new resources that require PPA approval by the PUC can trigger redetermination of system heat rates and/or bands outside of rate cases, based upon the characteristics of the project and contractual terms of operation, by revision to the test year simulation model most recently used to establish heat rates/bands.

The HECO Companies agree with the Consumer Advocate's proposal in concept and propose the following in an effort to specify the circumstances under which the redetermination of the sales heat rates would be undertaken in the future.

1. Triggers for Redetermination of Target Heat Rate

    a. Non-utility firm or non-utility non-firm renewable resources (such as wind or photovoltaics) from which the utility will purchase capacity and/or energy under a Power Purchase Agreement that exceed the threshold noted below may trigger a redetermination of the target heat rate. For HECO, the proposed threshold size of resource is 20 MW. For MECO – Maui Division and HELCO, the proposed threshold size of resource is 5 MW. For MECO – Lanai and Molokai Divisions, the proposed threshold size of resource is 500 kW.

    b. Utility firm and non-firm renewable resources (such as wind or photovoltaics) may also trigger a redetermination of the target heat rate. The proposed size thresholds would be the same as in paragraph C.1.a. above.

    c. The target heat rate set for HECO in its 2009 test year rate case and the target heat rates to be set in the upcoming 2010 test year rate cases for MECO and HELCO should be subject to adjustment if additions, retirements or modifications to their generating systems, or modifications to their generating system operating procedures, are expected to increase or decrease the target heat rates by more than the deadband amounts.

2. Timing for Seeking Changes in the Heat Rate Target

    a. The utility may seek a change in the target heat rate in a traditional rate case, as it currently does, when a resource will be added in a rate case test year.

    b. The utility may also seek a change in the target heat rate when resources identified in Section C.1. above will be added to the grid outside of a rate case test year.

3. Process for Utility to Seek a Change to the Heat Rate Target Outside of a Rate Case

a. In the case of a utility-built firm and non-firm resource, the utility may file a request to change the heat rate target as part of the application for approval to expend funds (in accordance with General Order No. 7) for the resource that would cause the change in heat rate.

b. If the utility anticipates that one of the triggers for redetermination of the heat rate target (as identified in Section C.1. above) will occur after a rate case test year, the utility should include in its rate case docket a proposal to change the heat rate target at some future time. The proposal to change the heat rate target outside of a test year should be evaluated as part of the rate case docket. The proposed change to the heat rate target should take effect when the addition, retirement or modification is made.

c. The proposal to change the heat rate target outside of a test year should also be reflected in the submittal of the new production simulation for short-run avoided energy costs in Docket No. 7310.

In Decision and Order No. 24086, filed March 11, 2008, Docket No. 7310, Avoided Costs Investigation, the Commission approved the Updated Stipulation of the parties establishing a new methodology for the calculation of short-run avoided energy costs for HECO, HELCO and MECO (the "HECO Companies") using the Qualifying Facility ("QF") in /QF out production simulation methodology. Pursuant to the Updated Stipulation, the HECO Companies redo and issue the production simulation results on an annual basis, with updates during the year if certain triggers occur. The model includes any changes anticipated in the amount of firm capacity available. Capacity additions (retirements) are included in the simulation on the date of the scheduled addition (retirement).[5] The data provided with each update includes the calibrated input data set, and the modeling assumptions used in the production costing model, as updated to reflect any changes in the actual operating conditions

4. Justification to Change Heat Rate Target

a. In its request to change the target heat rate, the utility would need to show that a change in the heat rate target is warranted by production simulation results with and without the proposed resource and the change in heat rate caused by the addition of the resource.

b. Where the change in the heat rate is caused at least in part by an increase in regulating reserve, the utility would need to show that carrying the additional regulating reserve is warranted to maintain system reliability.

[5] For example, a monthly change of more than 5% from the anticipated level of available firm capacity resources (due, for example, to an extended forced outage) if known one month prior to the beginning of that month, will require the re-execution of the production simulation for that month.

5. Effective Date of Change in Target Heat Rate

   a. The change in the target heat rate would be effective after (1) the Commission approves the change via the appropriate docket (see Section C.3. above) and (2) immediately after the resource is placed into service, or when the addition, retirement or modification is made.

   b. The heat rate targets may be reset in future rate cases at the time of any interim rate increase.

6. Application of the Deadbands

   a. For HECO, the initial deadband levels shall be applied around the target heat rates that would be effective upon the issuance of a final decision and order in the 2009 Test Year rate case if the Commission approves the deadband levels in a final decision and order in the instant docket prior to issuing a final decision and order in the 2009 Test Year rate case. If the Commission has already issued a final decision and order in the 2009 Test Year rate case, the application of the deadband in HECO's ECAC would take effect upon approval by the Commission in the instant docket.

   b. For MECO and HELCO, the initial deadband levels shall be applied around their respective target heat rates beginning with the issuance of the interim decision and orders in their respective next (2010) test year rate case, if the heat rate targets are changed from their current values in those decision and orders (see 5.b. above). If the heat rate targets are not changed in the MECO and HELCO Companies' respective interim decisions and orders, the deadbands will be applied beginning with the Commission's issuance of the final decision and orders in their respective 2010 test year rate cases.

   b. Once the revised target heat rates are in effect, the deadband levels described in Sections B.2 to B.5 above shall apply around the revised target heat rate.

7. Changes to the Deadband Levels

   Changes to the deadbands may be proposed in future rate cases (i.e., the rate cases after the 2009 test year rate case for HECO, and the 2010 test year rate cases for MECO and HELCO).