



JOSEPH P VIOLA
Vice President
Regulatory Affairs

May 19, 2016

FILED

2016 MAY 19 PM 1:53

PUBLIC UTILITIES
COMMISSION

The Honorable Chair and Members of
the Hawai'i Public Utilities Commission
Kekuanaoa Building, 1st Floor
465 South King Street
Honolulu, Hawai'i 96813

Dear Commissioners

Subject Transmittal No 16-01 (Decoupling) Hawaiian Electric's RBA Rate
Adjustment Tariff Filing
Transmittal No 16-02 (Decoupling) Hawai'i Electric Light's RBA Rate
Adjustment Tariff Filing
Transmittal No 16-03 (Decoupling) Maui Electric's RBA Rate
Adjustment Tariff Filing
Hawaiian Electric Companies' Response to the Division of Consumer
Advocacy's Statement of Position

Enclosed for filing is the Hawaiian Electric Companies' ¹ response to the *Division of Consumer Advocacy's Statement of Position* ('Consumer Advocate's SOP ') filed on May 6, 2016 on Transmittal Nos 16-01, 16-02 and 16-03, the Companies' Revenue Balancing Account ("RBA ") Rate Adjustment tariff filing for 2016

This filing includes the following attachments

- 1 Response to the Consumer Advocate's SOP in Attachment 1,
- 2 Revised tariff sheet (in clean and blacklined versions) with Hawai'i Electric Light's revised proposed RBA Rate Adjustment rate in Attachment 2, and
- 3 Hawai'i Electric Light's Revised 2016 Decoupling Calculation Workbook (revised and new pages are noted and changes highlighted, but for convenience, all support has been provided in its entirety) in Attachment 3

As explained in Attachment 1, Hawai'i Electric Light has revised its Rate Adjustment Mechanism ("RAM") schedules to incorporate an adjustment regarding the impact of 2015 bonus depreciation for the 2015 RAM period, remove the CT-5 overhaul major project cost, and reduce the cost of the 6800 line reconstruction major project. These adjustments reduced Hawai'i Electric Light's proposed RBA Revenue Adjustment from \$14,857,673 to

¹ The "Hawaiian Electric Companies" or "Companies" are Hawaiian Electric Company, Inc ("Hawaiian Electric"), Hawai'i Electric Light Company, Inc ("Hawai'i Electric Light ") and Maui Electric Company, Limited ("Maui Electric")

The Honorable Chair and Members of
the Hawai'i Public Utilities Commission
May 19, 2016
Page 2

\$14 300.776 Based on the revised calculations, Hawai'i Electric Light's 2016 RBA Rate Adjustment rate decreased by 0.0554¢, from 1.4795¢ to 1.4241¢ per kilowatt-hour ("kWh") from the March 31, 2016 Transmittal No. 16-02 filing. The overall impact of the RBA Rate Adjustment proposed in this filing on a typical customer's monthly bill (based on an average usage of 500 kWh) decreased by \$0.28 from the March 31, 2016 filing, and results in an incremental impact of \$0.13 from the current 2015 RBA Rate Adjustment. The RBA Revenue Adjustments proposed by Hawaiian Electric and Maui Electric do not require adjustment.

If you have any questions, please call Dean Matsuura at 543-4622.

Very truly yours,



Joseph P. Viola
Vice President
Regulatory Affairs

Attachments

cc: Division of Consumer Advocacy

TRANSMITTAL NOs 16-01, 16-02, and 16-03
HAWAIIAN ELECTRIC COMPANIES
JOINT RESPONSE TO CONSUMER ADVOCATE'S STATEMENT OF POSITION

A REVIEW OF THE REVENUE BALANCING ACCOUNT ("RBA")

The Consumer Advocate¹ has not recommended changes to the RBA calculations in the Companies' 2016 decoupling filings. The Consumer Advocate is continuing to review the RBA calculations, the monthly information packets, and responses to informal information requests the Companies provide monthly and in the decoupling filings. The Consumer Advocate has not identified or proposed any adjustments to the December 31, 2015 recorded balances as submitted by the Hawaiian Electric Companies.

B REVIEW OF THE RATE ADJUSTMENT MECHANISM ("RAM") CALCULATION FOR THE 2016 RAM YEAR

The *Division of Consumer Advocacy's Statement of Position* on Transmittal Nos. 16-01, -02 and -03, filed on May 6, 2016, proposed only three matters requiring consideration by the Commission with respect to the Hawaiian Electric Companies' proposed RBA Rate Adjustment.

1. Hawaiian Electric Light 2015 Bonus Tax Depreciation

a) **Consumer Advocate's Position**

The Hawaiian Electric Light Rate Base RAM should be reduced to account for the value of the retroactive extension of bonus tax depreciation for the 2015 tax year, that was not recognized in last year's RAM adjustment. This is the same adjustment that

¹ The "Consumer Advocate" is the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs.

was imposed by Order No. 32866 under identical factual circumstances last year. The needed downward adjustment to the Hawaiian Electric Light Rate Base RAM arising for retroactive inclusion of 2015 bonus depreciation has been quantified by the Hawaiian Electric Companies, in their response to Informal CA-IR-44, as a \$373,000 reduction.

b) Hawaiian Electric Companies' Response

The Company has requested that the Commission not require a retroactive downward adjustment to Hawaiian Electric Light's 2016 RAM Revenue Adjustment to reflect on a retroactive basis the impact of 2015 bonus depreciation (enacted in December 2015) on ADIT as if tax savings benefits were realized in the calendar year 2015 (i.e., calculated by including the additional ADIT due to 2015 bonus depreciation in the end of 2015 rate base RAM balance).

In effect, Order No. 32866 equated "benefits" to the revenue requirements impact of ADIT related to 2014 bonus depreciation recorded in December 2014, without regard to the timing of enactment and the actual taxes paid or deferred during the RAM year. The benefit was calculated based on the return on rate base methodology employed in general rate cases and in the decoupling rate base RAM.

In both the general rate case and the decoupling filing, the assumption is that the computation of deferred income taxes is based on the law being in place throughout the applicable year. By doing so, ADIT is assumed to grow ratably and in concert with the taxes allowed to be deferred throughout the year and benefits realized through lower estimated tax payments during the test period of one year. This consistency results in a lower rate base balance reflecting the lower revenue

requirements as a result of the deferred taxes—i.e., taxes not required to be paid during the measuring period

This consistency is absent when bonus depreciation is enacted at the end of the year, after all the Company's taxes have been paid assuming no bonus depreciation

The bonus depreciation revenue benefit, as computed as a return on a lower rate base, is a function of time and the balance of ADIT. The benefit begins only when the applicable tax law is contemplated in the calculation of taxes due to be paid. In both 2014 and 2015, the allowance for bonus depreciation did not exist until December 19, 2014 and December 18, 2015, respectively, after all estimated taxes for the year were paid. Therefore, although the ADIT associated with bonus depreciation was recorded at year end, the benefit of tax deferral was not realized in each of those RAM years since realization only begins when, in this case, the tax refunds are received in the succeeding year for the bonus depreciation deduction. To retroactively adjust for bonus depreciation would remove a benefit that the Company never realized in the RAM year and could not realize because of compliance with the law as it existed during the RAM year. This benefit is realized and appropriately accounted for in the subsequent RAM year, when the Company actually received the refund.

The Company asserts that the determination of the "benefit derived" should consider all the facts and circumstances surrounding the enactment of bonus depreciation including the timing of enactment and whether the Company actually realized a benefit in the RAM year in which the law was enacted. If these factors are

considered, it becomes clear that the Company did not derive any benefit in each of the RAM years 2014 and 2015 from the bonus depreciation enacted in those respective years and a downward adjustment to the RAM Revenue Adjustment is not warranted in this case

However, in the interest of expediting the issuance of an order, the Company will incorporate an adjustment to its 2016 RAM Revenue Adjustment for the 2015 bonus depreciation The Company reserves the right to raise the issue of benefits received based on the enactment of tax changes in future proceedings

As stated in the Hawaiian Electric Companies' response to Informal CA-IR-44, if bonus depreciation had been assumed to be effective at the time the 2015 RAM Revenue Adjustment was calculated, the impact would have been a decrease of approximately \$373,000. Attachment 3 to this response shows the revised Hawaiian Electric Light decoupling workbook and RBA Rate Adjustment with the \$373,000 adjustment incorporated.

2 Hawaiian Electric Above the RAM Cap Recovery

a) Consumer Advocate's Position

The pending application of Hawaiian Electric for recovery of certain capital project costs through the RAM and Above the RAM Cap has created potential inconsistencies and the risk of double recovery of costs that should be clarified by the Commission in this tariff transmittal. Should the Commission allow some level of Above the RAM Cap revenue recovery effective in 2016, the Consumer Advocate would encourage the Commission to direct Hawaiian Electric to resubmit the 2016

RBA/RAM filing to completely remove any current impact of those projects and direct Hawaiian Electric to continue such exclusion from future RBA/RAM filings

b) Hawaiian Electric Companies' Response

As stated in Hawaiian Electric Company's Application for Approval to Recover Certain 2015 Plant Addition Costs through the Rate Adjustment Mechanism ("RAM") above the RAM Cap ("Above RAM Cap Application" or "Application").² recovery of project costs through the RAM above the RAM Cap will comply with Order No. 32735 and adhere to the principles in the proposed Above RAM Cap Standards and Guidelines filed on June 15, 2015.³ As explained below, the Company's proposed recovery of projects through the RAM above the RAM Cap will not result in double recovery of project costs. Further, because the Commission has not yet approved the Above RAM Cap Application, the Company has not added the revenue requirements for these projects to the RAM Cap to determine the RAM Revenue Adjustment for the 2016 RAM period in Transmittal No. 16-01. Approval of the Company's Above RAM Cap Application will affect the RAM Revenue Adjustment for RAM periods after 2016 and will not alter the calculation of the 2016 RAM Cap or the resulting RAM Revenue Adjustment for the 2016 RAM period.

If the Above RAM Cap Application is Approved, Recovery of the 2015 Major Baseline Projects Will Be through the RAM

The Consumer Advocate stated that if the Commission decides to provide Hawaiian Electric with additional revenue recovery above the RAM Cap for the

² See Hawaiian Electric's Above the RAM Cap Application, filed on October 29, 2015 in Docket No. 2015-0375, at 23-24.

³ See *Hawaiian Electric Companies Standards and Guidelines for Eligibility of Projects for Cost Recovery through the RAM above the RAM Cap*, filed on June 15, 2015 in Docket No. 2013-0141, Exhibit A at 4-5.

project proposed for such recovery in the Above RAM Cap Application, it should “require that those net capital project additions be excluded completely from all future calculations of the RAM.” It is not clear what the Consumer Advocate meant by this statement. If the Commission approves the Above RAM Cap Application, the recovery of the revenue requirements associated with those projects will be through the RAM until the investment for those projects are approved for inclusion in the test year rate base in a subsequent rate case. Therefore, the net plant additions for those projects will need to be included in calculations to derive the RAM Revenue Adjustment in future periods.

The Consumer Advocate then stated that it “has not quantified any adjustment to the current Hawaiian Electric RBA/RAM filing to isolate and remove Hawaiian Electric’s selected Above RAM Cap capital project costs.” Because the Consumer Advocate has not identified the adjustment it believes will be needed, the Company is unable to specifically respond to the adjustment the Consumer Advocate has referred to. However, the Company will explain below how it intends to reflect the investment for the projects requiring above RAM Cap recovery in its RAM filings should the Commission approve the Company’s Above RAM Cap Application. If the Company follows these procedures, there would be no double recovery.

Calculation of the RAM Cap

As required by Order No. 32735, the Company performs two calculations: 1) the RAM Cap and 2) the RAM Revenue Adjustment according to the Original

RAM Methodology,⁴ and then uses the lesser of the two for the RAM Revenue Adjustment for that RAM period. For both the 2015 and 2016 RAM periods (i.e., the RAM periods since the issuance of Order No. 32735), the RAM Cap was triggered for Hawaiian Electric.

As required by Order No. 32735, the RAM Cap is based on the 2014 adjusted target revenues times the cumulative annually compounded increase in the gross domestic product price index ("GDPPI") for intervening years, adjusted to include applicable revenue taxes.⁵ If the Commission approves the Above RAM Cap Application, there will be no change to this calculation. However, the Company will add the revenue requirement for the projects approved for above RAM Cap recovery as a separate line item, similar to the Exceptional and Other Matters line item on line 8 of Schedule A1 in Transmittal No. 16-01, to the RAM Cap to derive a total amount to compare against the RAM Revenue Adjustment calculated according to the Original RAM Methodology. This comparison will determine whether the RAM Cap will be triggered and what the RAM Revenue Adjustment for the RAM period will be.

Order No. 32735 explicitly allowed the Hawaiian Electric Companies to seek approval of recovery of capital projects above the RAM Cap. Therefore, the addition of the revenue requirements for approved above RAM Cap projects to the

⁴ "Original RAM Methodology" refers to the methodology approved in the Final Decision and Order in Docket No. 2008-0274 and specified in the Companies' Rate Adjustment Mechanism Provision tariffs prior to and at the time of issuance of Order No. 32735.

⁵ Order No. 32735 at 94.

RAM Cap to calculate the RAM Revenue Adjustment will be in accordance with Order No. 32735 and will not result in any double recovery.

The Company will keep separate records for the Major Projects and Major Baseline Projects approved by the Commission for cost recovery through the RAM above the RAM Cap and plans to reflect such projects in the annual decoupling tariff transmittal templates in a manner similar to that of the "Exceptional and Other Matters" category that the Company reflects on Schedule K and K1 of the 2016 annual decoupling tariff transmittals filed on March 31, 2016. The Company will separately track and include the costs of these projects in the RAM in the annual decoupling tariff transmittals, beginning with the tariff transmittal following approval of the Application, and for each RAM period thereafter until the Commission approves the inclusion of the costs for these projects in the test year rate base in a Hawaiian Electric rate case.

Calculation of the RAM Revenue Adjustment According to the Original RAM Methodology

In its calculation of the RAM Revenue Adjustment according to the Original RAM Methodology, the Company will treat the Major Projects and Major Baseline Projects approved for above RAM Cap recovery in the same way that it has treated Major Projects since the RAM was first implemented. If the project goes into service in the RAM period before September 30, the Company will separately identify and include the project (at the lesser of recorded or authorized cost) in Schedule D3 and include the associated ADIT in Schedule D4. The project will be added to the RAM period rate base in Schedule D1 as a major project. In RAM

periods after the project goes into service, the project investment will be embedded in the net cost of plant in service balance at the beginning and end of the RAM period in Schedule D1, thereby continuing the inclusion of this project in rate base as other major projects have been treated under the Original RAM Methodology⁶. The project will also be separately identified in Schedule D2 so that it will be excluded from the calculation of the five-year average of baseline capital project additions.

This process was developed in conjunction with the Consumer Advocate and has undergone extensive scrutiny by both the Consumer Advocate and the Commission since the implementation of the RAM. To calculate the RAM Revenue Adjustment according to the Original RAM Methodology, the Company will not add in separate revenue requirement amounts (i.e., for depreciation or return on investment) for the projects approved for above RAM Cap Recovery in addition to the major project treatment described above. Therefore, there will be no double recovery.

Even if the RAM changes from year to year between triggering the RAM Cap and utilizing the RAM calculation under the Original RAM Methodology, there will be no double recovery if the Company utilizes the procedures described above, and the Consumer Advocate has not specifically identified where any double recovery would occur.

⁶ Year 1 (year in which the project is placed into service) will have an estimated ending balance not to exceed the Commission authorized amount, and the Year 1 revenue requirement will incorporate estimated applicable CIAC and accumulated deferred income taxes but not include depreciation or amortization. The beginning balance of Year 2 will be true-up to actuals, not to exceed the Commission authorized amount and include an adjustment for accumulated deferred income taxes and accumulated depreciation and amortization.

Approval of the Above RAM Cap Application Will Not Alter the Calculation of the 2016 RAM Cap

Should the Commission approve the Application, the above the RAM Cap revenue recovery will not be incorporated into the 2016 RBA/RAM filing. In the Above RAM Cap Application, the Company explained that if it were to receive approval of the Application by March 15, 2016, it would be able to include the 2015 Major Baseline Project costs in the March 31, 2016 annual decoupling filing for inclusion in the 2016 RAM. However, it recognized that the time period for review was limited since it filed the Application on October 26, 2015, and requested that if the Company were unable to receive approval in time to include the project costs in the 2016 RAM, it be allowed to include the 2016 and 2017 revenue requirements for those projects in the 2017 RAM.⁷

Since the Application has not yet been approved and the 2016 RAM Revenue Adjustment does not include the revenue requirement associated with the Major Baseline Projects in the Application, no further adjustments presuming Application approval need to be made. The Consumer Advocate's statement of position states "Should the Commission allow some level of Above the RAM Cap revenue recovery effective in 2016, the Consumer Advocate would encourage the Commission to direct Hawaiian Electric to resubmit the 2016 RBA/RAM filing to completely remove any current impact of those projects and direct Hawaiian Electric to continue such exclusion from future RBA/RAM filings."⁸ [Emphasis added.] Thus, the Consumer Advocate evidently agrees that its recommended adjustment should not be

⁷ Application at 24-25

⁸ Division of Consumer Advocacy's Statement of Position at 21

made unless the Commission approves the Application for the above RAM Cap recovery to be effective in 2016. In addition, as explained above, a complete removal of the current impact of the above RAM Cap projects from the RBA/RAM filings would not be appropriate.

To address any remaining concern that the Consumer Advocate may have, the Company considered whether any adjustments (other than those described above to incorporate the revenue requirements of the above RAM Cap projects into the calculation of the RAM Revenue Adjustment) would need to be made to the 2016 RAM Revenue Adjustment calculations if the above RAM Cap recovery for the 2015 projects were made effective in 2016 or for a RAM period thereafter. The Company could identify only one other possible adjustment that the Consumer Advocate may have in mind. The Consumer Advocate may be concerned that should the Commission approve the Application and the above RAM Cap recovery, the projects identified for recovery in the Application were not removed from calculation of the five-year average of baseline capital project additions for the 2016 RAM period in Transmittal No. 16-01. Removal of these plant additions would reduce the five-year average of baseline additions and related ADIT and reduce the RAM Revenue Adjustment calculated under the Original RAM Methodology. However, this reduction would have to exceed \$19,533,376 of revenue requirement to cause the RAM Revenue Adjustment calculated according to the Original RAM Methodology (\$107,928,716) to be less than the RAM Cap (\$88,395,340) to reverse the triggering of the RAM Cap and cause a change in the RAM Revenue Adjustment.

charged to customers⁹ In Docket No 2015-0375. Hawaiian Electric is proposing to recover the revenue requirement associated with 2015 net plant additions totaling \$35,651,000 through the RAM above the RAM Cap¹⁰ Removing this investment from the five-year average of baseline plant additions, even when not considering the associated offsetting adjustment for ADIT, would result in a reduction in the 2016 RAM Revenue Adjustment under the Original RAM Methodology by approximately \$459,000¹¹ This amount is much less than \$19,533,376, and therefore, making such an adjustment would not reverse the triggering of the 2016 RAM Cap Also, the change to the calculation of the five-year average of baseline plant additions would not affect the calculation of the 2016 RAM Cap Thus, there would be no change to the 2016 RAM Revenue Adjustment

The Company acknowledges that the Above RAM Cap Application will not be approved in time to include the requested above RAM Cap recovery in the 2016 RAM Revenue Adjustment, and has requested Commission approval of the Application in time for the Company to include such recovery in the 2017 RAM Revenue Adjustment In such a case, the Company will implement the procedures described above and make the proper adjustments to the five-year average of baseline project plant additions for the 2017 and future RAM Revenue Adjustments until the projects are included in the test year rate base in a future rate case Further, if the Commission approves the Above RAM Cap Application, the Company will

⁹ $\$107,928,716 - \$88,395,340 = \$19,533,376$

¹⁰ See *Hawaiian Electric Modification to Application*, filed on April 18, 2016 in Docket No 2015-0375, at 1

¹¹ $\$35,651,000 - 5 \text{ year} - 2$ since these plant additions would only be in the end of year balance X 1174 pretax rate of return X 1.0975 revenue tax factor = \$459,351

carefully review the provisions of the decision and order to verify whether any adjustments will need to be made to the 2016 and/or future RAM Revenue Adjustments

Modifications to the Above RAM Cap Application Are Not Arbitrary

Finally, the Consumer Advocate's Statement of Position referred to the reduction of the amount of plant additions proposed for recovery through the RAM above the RAM Cap in Docket No 2015-0375 as being arbitrary¹². On the contrary, the modifications to the Above RAM Cap Application are not arbitrary. The Company has very clearly explained its modifications to the Application and has provided the underlying documentation and calculations in its *Hawaiian Electric Modification to Application* filed on April 18, 2016 in Docket No 2015-0375.

3. Hawai'i Electric Light Major Capital Project Costs

a) **Consumer Advocate's Position**

Major Capital Project costs for Hawai'i Electric Light require updating for reduced current cost estimates. Additionally, the Commission should clarify whether projects that are approved pursuant to General Order No. 7 review are entitled to Major Capital Project treatment within the RAM even when revised cost estimates fall below \$2.5 million.

¹² Division of Consumer Advocacy's Statement of Position at 20

b) Hawaiian Electric Companies' Response

The revised Schedule D3 in Attachment 3 excludes the revised estimate of \$2,031,530¹³ for the CT-5 overhaul (to be accomplished through an engine swap). As explained below, the engine swap has been delayed beyond September 30, 2016. Therefore, the Company has removed the CT-5 overhaul (engine swap) as a major project from the RAM schedules, which will render the issue raised by the Consumer Advocate on this project moot.

Hawai'i Electric Light clarifies that the project consists of two parts: 1) the overhaul, to be accomplished through an engine swap and 2) replacement of the hot section. The Company should have made this clear in its response to Informal CA-IR-46.¹⁴

As of May 16, 2016, Air New Zealand ("ANZ") informed Hawai'i Electric Light that the swap engine rebuild encountered a "balancing problem with the swap engine's compressor section." What was initially planned to be a depot overhaul of the swap engine now requires that the swap compressor be sent to GE on the mainland. This is estimated to delay the completion of the swap engine overhaul by eight weeks, which will cause it to miss the June 12, 2016 scheduled installation at the Keahole Power Plant. ANZ has proposed that a December 5-9, 2016 outage

¹³ Attachment 1 of the response to Informal CA-IR-46 included a formula error in the AFUDC calculation reflecting an incorrect final updated estimated project cost Without Hot Section of \$2,031,557. The correct updated estimate without Hot Section is \$2,031,530, a decrease of \$27. See Revised HELCO-WP-D3-001 included in Attachment 3 to this response for the revised calculation.

¹⁴ The response to Informal CA-IR-46, part b, stated the following: "The \$2,094,421 cost estimate for this project provided in Schedule D3, line 2, is \$2,087,679 lower than the \$4,182,100 estimate approved by the Commission in Docket No. 2013-0144." It should have compared the total cost of the project (i.e., the cost of both the engine swap and the hot section replacement) against the \$4,182,100 authorized amount. As stated previously, the updated cost estimate without the hot section replacement is \$2,031,530.

scheduled for the hot section replacement now be used to complete a delayed engine swap (including the hot section work) Thus, the Company now projects that both the engine swap and the hot section replacement portions of the project will go into plant in service in December 2016 Since both portions of the project will go into plant in service after September 30, 2016, the Company will exclude the engine swap portion of the project from the 2016 RAM Revenue Adjustment and include both portions of the project in the 2017 RAM

In the meantime, ANZ has offered at no cost (and Hawai'i Electric Light has accepted), the use of a temporary engine that the Company can use at Keahole from June 12 until the December 5-9, 2016 scheduled outage The use of the temporary engine will result in all components of the engine to be zero-timed as of December 2016, adding approximately 3,000 hours of useful life to the engine

The current estimated cost of the project is

	Plant Additions
Engine Swap	\$2,031,530
Hot Section Replacement	<u>\$1,195,694</u>
Total Project	<u>\$3,227,224</u>
Authorized Project Cost	<u>\$4,182,100</u>
Cost Reduction	<u>(\$954,876)</u>

Hence, the capital cost of the project is \$3,227,224 and still above \$2.5 million However, by pursuing the engine swap for the CT-5 overhaul project, the Company was able to reduce the cost to customers by \$954,876

In addition, the cost estimate of the Keamuku-Keahole 6800 Line Reconstruction Project, Phase 2 (Docket No. 2013-0153) has been updated, reducing

the estimated capital cost from \$4,211,952 to \$2,859,636¹⁵ The cost reduction was due to a number of factors, including (1) favorable archaeological and biological survey results which eliminated the need for mitigation measures and design revisions and resulted in lower engineering and labor costs, (2) competitive bidding of hole digging resulted in lower than expected cost, (3) the strategic designation of two staging area locations minimized material transport and equipment mobilization, and (4) an improved process for standing poles by utilizing a contracted hole digger operator and equipment to backfill which allowed Hawaiian Electric Light construction resources to erect more poles faster Hence, the Company has revised Schedule D3 accordingly as provided herein in Attachment 3

C CONCLUSION

As a result of the inclusion of the \$373,000 adjustment regarding the impact of 2015 bonus depreciation for the 2015 RAM period described in subpart 1 of this response the removal of the CT-5 overhaul project cost, and the revised estimate for the 6800 69 kV Line Reconstruction Phase 2 project described in subpart 3 of this response, Hawaiian Electric Light has decreased its proposed RBA Revenue Adjustment by \$556,897 from \$14,857,673 to \$14,300,776 The RBA Revenue Adjustments proposed by Hawaiian Electric and Maui Electric do not require adjustment

¹⁵ See HELCO-WP-D3-002 provided herein

ATTACHMENT 2

Superseding Sheet No 50D
Effective May 1, 2016

REVISED SHEET No 50D
Effective June 1, 2016

RATE SCHEDULES (Continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Effective Date</u>	<u>Character of Service</u>
89F	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
89G	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
89H	'RAM'	June 8, 2015	Rate Adjustment Mechanism Provision
90	"PPAC"	May 1, 2016	Purchased Power Adjustment Clause
90A	"PPAC"	May 1, 2016	Purchased Power Adjustment Clause
90B	"PPAC"	April 9, 2012	Purchased Power Adjustment Clause
91	"RBA"	June 1, 2013	Revenue Balancing Account Provision
91A	"RBA"	June 1, 2013	Revenue Balancing Account Provision
91B	"RBA"	March 1, 2014	Revenue Balancing Account Provision
91C	"RBA"	June 1, 2016	Revenue Balancing Account Provision
91D	"RBA"	June 1, 2013	Revenue Balancing Account Provision

HAWAII ELECTRIC LIGHT COMPANY, INC

Transmittal Letter Dated May 19, 2016

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (Cont)

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, coincident with the Annual Evaluation Date filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons. The Consumer Advocate, Other Rate Case Parties, and other interested persons may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT.

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

All Rate Schedules 1 4241 ¢/kWh

HAWAII ELECTRIC LIGHT COMPANY, INC.

ATTACHMENT 2A

Superseding Sheet No 50D

REVISED SHEET No 50D

Effective ~~April 1, 2016~~ May 1, 2016
2016

Effective June 1, 2016~~May 1,~~

RATE SCHEDULES (Continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Effective Date</u>	<u>Character of Service</u>
89F	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
89G	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
89H	'RAM'	June 8, 2015	Rate Adjustment Mechanism Provision
90	"PPAC"	May 1, 2016	Purchased Power Adjustment Clause
90A	"PPAC"	May 1, 2016	Purchased Power Adjustment Clause
90B	"PPAC"	April 9, 2012	Purchased Power Adjustment Clause
91	"RBA"	June 1, 2013	Revenue Balancing Account Provision
91A	"RBA"	June 1, 2013	Revenue Balancing Account Provision
91B	"RBA"	March 1, 2014	Revenue Balancing Account Provision
91C	"RBA"	June 8 <u>1</u> , 2015 6	Revenue Balancing Account Provision
91D	"RBA"	June 1, 2013	Revenue Balancing Account Provision

HAWAII ELECTRIC LIGHT COMPANY, INC

Transmittal Letter Dated ~~April 22,~~ May 19, 2016

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (Cont)

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, coincident with the Annual Evaluation Date filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons. The Consumer Advocate, Other Rate Case Parties, and other interested persons may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

| All Rate Schedules 1 ~~39714241~~ 4241 ¢/kWh

HAWAII ELECTRIC LIGHT COMPANY, INC.

| Transmittal Letter Dated ~~June 3, 2015~~ May 19, 2016

Hawai'i Electric Light's Revised 2016 Filing
Attachment 3 – List of Schedules and Workpapers

Schedule A (REVISED 5/19/16)	HELCO-WP-A-001
Schedule A1 (REVISED 5/19/16)	HELCO-WP-A1-001
Schedule B	HELCO-WP-B-001
Schedule B1 (REVISED 5/19/16)	HELCO-WP-B-002
Schedule B2	HELCO-WP-B-003
Schedule C	HELCO-WP-B-004
Schedule C1	HELCO-WP-B-005
Schedule C2	HELCO-WP-B-006
Schedule D (REVISED 5/19/16)	HELCO-WP-C-001
Schedule D1 (REVISED 5/19/16)	HELCO-WP-C-002
Schedule D2	HELCO-WP-C-003
Schedule D3 (REVISED 5/19/16)	HELCO-WP-D1-001
Schedule D4	HELCO-WP-D3-001 (REVISED 5/19/16)
Schedule E	HELCO-WP-D3-002 (NEW 5/19/16)
Schedule F (REVISED 5/19/16)	HELCO-WP-D4-001A
Schedule F1 (REVISED 5/19/16)	HELCO-WP-D4-001B
Schedule F2 (REVISED 5/19/16)	HELCO-WP-D4-002
Schedule G	HELCO-WP-F-001
Schedule G1	HELCO-WP-F1-001
Schedule G2	HELCO-WP-F1-002
Schedule G3	HELCO-WP-H-001
Schedule H	HELCO-WP-H-002
Schedule I	HELCO-WP-H-003
Schedule J	HELCO-WP-H-004
Schedule K	HELCO-WP-H-005
Schedule K1	HELCO-WP-H-006
	HELCO-WP-H-007
	HELCO-WP-K1-002
	HELCO-WP-K1-003

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF 2016 REVENUE BALANCING ACCOUNT RATE ADJUSTMENT

Line No	Description (a)	Reference (b)	Amount (c)	Rate Amount (d)
RECONCILIATION OF RBA BALANCE				
1	RBA Prior calendar year-end balance	Schedule B	\$ 5,254,911	
2	Revenue Tax Factor	Schedule C	1.0975	
3	Revenue for RBA Balance			\$ 5,767,265
RATE ADJUSTMENT MECHANISM "RAM" AMOUNT				
4	Total RAM Revenue Adjustment Allowed (Note 2)	Note (3)		\$ 8,533,511
5	EARNINGS SHARING REVENUE CREDITS - 2015 ROE	Schedule H		\$ -
6	PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS	Schedule I		\$ -
7	TOTAL RBA REVENUE ADJUSTMENT	Sum Col (d)		\$ 14,300,776
8	GWH SALES VOLUME ESTIMATE JUNE 2016 - MAY 2017	HELCO-WP-A-001		1,004,231
9	RBA RATE ADJUSTMENT - cents per kWh	Note (1)		1,424.1
10	MONTHLY BILL IMPACT @ 500 KWH			\$ 7.12

Note (1) 2016 RBA Rate Adjustment Breakdown

	Col (d)	Rate Adjustment cents per kWh	Percentage Share
RBA Balance	\$ 5,767,265	0.57429663	40.3283%
RAM Amount	\$ 8,533,511	0.84975583	59.6717%
Earnings Sharing Revenue Credits	\$ -	0.00000000	0.0000%
Major or Baseline Capital Projects Credits	\$ -	0.00000000	0.0000%
	\$ 14,300,776	1.42405246	100.0000%

Note (2) Total RAM Revenue Adjustment Allowed is the sum of the RAM Cap + Exceptional and Other Projects. See Order No. 32735, filed March 31, 2015, paragraph 107, page 94, which states that the Total RAM Revenue Adjustment is to be comprised of the RAM Cap plus recovery of Exceptional and Other Matters.

Note (3) Total RAM Revenue Adjustment Allowed		
Total RAM Revenue Adjustment Allowed before Adjustment	Schedule A1	8,908,511
Less: Adjustment for 2015 Bonus Tax Depreciation	Note (3a)	(373,000)
Total RAM Revenue Adjustment Allowed		8,533,511
(a) The Company is making a one-time adjustment related to the extension of 2015 bonus depreciation in the 2015 RAM period as identified by the Companies in response to CA-IR 44. As noted in part (a) of the response, the impact for Hawaii Electric is (\$373,000) to Total RAM Revenue including revenue taxes.		

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TOTAL RAM REVENUE ADJUSTMENT ALLOWED

Line No	Description (a)	Reference (b)	Amount (c)
RAM REVENUE ADJUSTMENT DETERMINED ACCORDING TO EXISTING TARIFFS AND PROCEDURES			
1	O&M RAM	Schedule C	\$ 4,760,013
2	Rate Base RAM - Return on Investment (Note 2)	Schedule D	\$ (2,918,499)
3	Depreciation & Amortization RAM Expense	Schedule E	\$ 7,276,329
4	Total RAM Revenue Adjustment		\$ 9,117,843
5	Less Adjustment for Change in On-cost Clearing Allocation	Note 3	\$ (211,331)
6	Total Adjusted RAM Revenue Adjustment		\$ 8,906,511
RAM REVENUE ADJUSTMENT CAP			
7	RAM Cap for 2016 RAM Revenue Adjustment	Schedule J	\$ 9,037,880
8	Plus Exceptional and Other Matters	Schedule K	388,914
9	2016 Cap - Total RAM Revenue Adjustment		\$ 9,426,794
10	Total RAM Revenue Adjustment Allowed (Note 1)	Lesser of Line 6 or Line 9	\$ 8,906,511 To Sch A

Note 1 RAM Revenue Adjustment Allowed

See Order No. 32735, filed March 31, 2015, paragraph 106, page 94

"The RAM Revenue Adjustment to be applied to determine effective Target Revenues will be the lesser of (a) the RAM Revenue Adjustment determined according to existing tariffs and procedures or (b) a RAM Revenue Adjustment Cap ("RAM Cap") to be calculated as specified "

Note 2 Total RAM Cap

See Order No. 32735, filed March 31, 2015, paragraph 110, page 96

"The RAM Cap will apply to the entire RAM Revenue Adjustment including the O&M RAM, Rate Base RAM (including Major Capital Projects and Baseline Projects) and the Depreciation and Amortization RAM "

Note 3

Order No. 32866, par. 18 required the Company to adjust its 2015 RAM Revenue Adjustment to reflect the O&M expense reduction impact associated with the change in on-cost clearing allocation identified by the Company. The adjustment made to the 2015 RAM revenue adjustment was based on the 2014 O&M expense impact of the change in on-cost clearing allocation. In calculating the 2016 RAM Cap, prior year's adjustment was incorporated in 2015 target revenues that has been escalated to compute the 2016 RAM Cap (See Schedule J). In calculating the 2016 RAM revenue adjustment determined according to existing tariffs and procedures, the adjustment has been updated to reflect the 2015 O&M impact of the change in on-cost clearing allocation. See HELCO-WP-A1-001 for the calculation.

Hawaii Electric Light Company, Inc.
DECOUPLING CALCULATION WORKBOOK
SUMMARY OF ACCUMULATED REVENUE BALANCING ACCOUNT

Line No	Month	Beginning Balance	Target Revenues	Recorded Adjusted Revenue	Variance to RBA	Adjustment for prior year RBA accrual	Adjustment	Tax-effected Balance Subject to interest	Interest at 3.25%/year	Ending Balance
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Monthly RBA Balance and Activity (Monthly PUC Rpt Pg 9A)										
1	2014 December	\$ 7 409 489	\$ 12 105 585	\$ 11 407 858	\$ 697 927	\$ (625 597)	\$	\$ 4 548 538	\$ 12 319	\$ 7 494 118
2	January 2015 Adjustment Note (1)									\$ 8 719
3	REVISED 2014 December									\$ 7 502 837
4										
5	2015 January	\$ 7 494 118	\$ 11 820 748	\$ 10 995 936	\$ 824 812	\$ (600 503)	\$ 8 719	\$ 4 651 998	\$ 12 599	\$ 7 739 745
6	February	\$ 7 739 745	\$ 10 781 092	\$ 10 403 650	\$ 377 442	\$ (566 216)	\$	\$ 4 670 549	\$ 12 649	\$ 7 563 620
7	March	\$ 7 563 620	\$ 11 906 199	\$ 11 426 484	\$ 479 735	\$ (515 975)	\$ (1 109)	\$ 4 578 323	\$ 12 400	\$ 7 438 671
8	April	\$ 7 438 671	\$ 11 393 492	\$ 11 190 874	\$ 202 618	\$ (603 738)	\$	\$ 4 421 762	\$ 11 976	\$ 7 049 527
9	May	\$ 7 049 527	\$ 11 920 441	\$ 11 150 332	\$ 770 109	\$ (608 585)	\$	\$ 4 355 894	\$ 11 797	\$ 7 222 848
10	June	\$ 7 222 848	\$ 11 642 774	\$ 11 065 115	\$ 577 659	\$ (484 725)	\$	\$ 4 440 825	\$ 12 027	\$ 7 327 809
11	July	\$ 7 327 809	\$ 12 429 089	\$ 12 214 270	\$ 214 819	\$ (689 932)	\$	\$ 4 331 435	\$ 11 731	\$ 6 864 427
12	August	\$ 6 864 427	\$ 12 716 008	\$ 12 404 230	\$ 311 778	\$ (698 959)	\$	\$ 4 075 214	\$ 11 037	\$ 6 488 283
13	September	\$ 6 488 283	\$ 12 069 162	\$ 11 740 743	\$ 328 419	\$ (665 561)	\$	\$ 3 860 712	\$ 10 456	\$ 6 161 597
14	October	\$ 6 161 597	\$ 12 371 592	\$ 12 075 236	\$ 296 356	\$ (879 031)	\$ 1 260	\$ 3 648 001	\$ 9 825	\$ 5 790 007
15	November	\$ 5 790 007	\$ 11 882 296	\$ 11 643 893	\$ 238 303	\$ (651 918)	\$ 55	\$ 3 410 810	\$ 9 238	\$ 5 385 685
16	December	\$ 5 385 685	\$ 12 227 848	\$ 11 717 628	\$ 510 220	\$ (656 372)	\$ 6 577	\$ 3 249 491	\$ 8 601	\$ 5 254 911
17										
18	2016 January	\$	\$ 11 939 793	\$	\$	\$	\$	\$	\$	\$
19	February	\$	\$ 10 889 898	\$	\$	\$	\$	\$	\$	\$
20	March	\$	\$ 12 026 039	\$	\$	\$	\$	\$	\$	\$
21	April	\$	\$ 11 508 563	\$	\$	\$	\$	\$	\$	\$
22	May	\$	\$ 12 040 414	\$	\$	\$	\$	\$	\$	\$
23	June	\$	\$ 11 915 194	\$	\$	\$	\$	\$	\$	\$
24	July	\$	\$ 12 600 646	\$	\$	\$	\$	\$	\$	\$
25	August	\$	\$ 12 892 327	\$	\$	\$	\$	\$	\$	\$
26	September	\$	\$ 12 236 044	\$	\$	\$	\$	\$	\$	\$
27	October	\$	\$ 12 542 309	\$	\$	\$	\$	\$	\$	\$
28	November	\$	\$ 12 046 450	\$	\$	\$	\$	\$	\$	\$
29	December	\$	\$ 12 396 468	\$	\$	\$	\$	\$	\$	\$
Sources of Data										
			Sch B1	Sch B2	Col (c) (d)	Note (2)	Note (1)	Cols (b)+(e)+(f)+(g)+(i)		
Composite Federal & State Income Tax Rate						38.91%	(k)			
Income Tax Factor (1/(1-tax rate))						1.636929121	(l)			

Note (1) Adjustment Summary

Year	Month	Worksheet Reference	RBA True-up Adjustment Sch B2 Line 18	RBA Interest Adjustments	Total Adjustment	Adjustment Description
2015	January	HELCO-WP-B-002	\$ 8 719	\$	\$ 8 719	Adj. to correct customer rate schedule based on kWh usage G to J
2015	March	HELCO-WP-B-003	\$ (1 109)	\$	\$ (1 109)	Adj. to correct for customer meter tampering
2015	October	HELCO-WP-B-004	\$ 1 260	\$	\$ 1 260	Adj. to correct customer rate schedule from G to R
2015	November	HELCO-WP-B-005	\$	\$ 55	\$ 55	Adj. to correct October 2015 interest calculation
2015	December	HELCO-WP-B-006	\$ 6 577	\$	\$ 6 577	Adj. to correct customer rate schedule from J to P

Note (2)

Amounts represent recovery of prior years' RBA balance through the RBA rate adjustment effective June 1, 2014 for the period June 1, 2014 through May 31, 2015 and June 3, 2015 for the period June 6, 2015 through May 31, 2016. See WP-B-001.

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description	Reference		Docket No 2009-0184 Amounts	Docket No 2009-0184 Amounts	Docket No 2009-0184 Amounts	Docket No 2009-0184 Amounts	Docket No 2009-0184 Amounts	Docket No 2009-0184 Amounts
	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1)	\$000s	\$ 355,605	\$ 355,605	\$ 355,605	\$ 355,605	\$ 355,605	\$ 355,605
2	Less: Fuel Expense	Note (1)	\$000s	\$ (80,078)	\$ (80,078)	\$ (80,078)	\$ (80,078)	\$ (80,078)	\$ (80,078)
3	Purchased Power Expense	Note (1)	\$000s	\$ (105,866)	\$ (105,866)	\$ (105,866)	\$ (105,866)	\$ (105,866)	\$ (105,866)
4	Revenue Taxes on Line 1 (8.885% statutory rates)		\$000s	\$ (31,596)	\$ (31,596)	\$ (31,596)	\$ (31,596)	\$ (31,596)	\$ (31,596)
5	Last Rate Order Target Annual Revenues	Sum Lines 1 thru 4	\$000s	\$ 138,065	\$ 138,065	\$ 138,065	\$ 138,065	\$ 138,065	\$ 138,065
6	Add: Authorized RAM Revenues: Transmittal No. 14-04	Note (2)	\$000s	\$ 4,778	\$ 4,778	\$	\$	\$	\$
7	Less: Revenue Taxes on Line 6 at 8.885%		\$000s	\$ (424)	\$ (424)	\$	\$	\$	\$
8	Net RAM Adjustment: Test Year +4	Line 6 + Line 7	\$000s	\$ 4,353	\$ 4,353	\$	\$	\$	\$
9	Authorized RAM Revenues: Transmittal No. 15-04	Note (3)		\$	\$	\$ 8,232	\$ 8,232	\$	\$
10	Less: Revenue Taxes on Line 9 at 8.885%			\$	\$	\$ (554)	\$ (554)	\$	\$
11	Net RAM Adjustment: Test Year +5	Line 9 + Line 10		\$	\$	\$ 5,678	\$ 5,678	\$	\$
12	Authorized RAM Revenues	Sch. A, Line 4		\$	\$	\$	\$	\$ 8,534	\$ 8,534
13	Less: Revenue Taxes on Line 12 at 8.885%			\$	\$	\$	\$	\$ (758)	\$ (758)
14	Net RAM Adjustment: Test Year +6	Line 12 + Line 13		\$	\$	\$	\$	\$ 7,775	\$ 7,775
15	Less: EARNINGS SHARING REVENUE CREDITS	Sch. A, Line 5 or Sch. H		\$	\$	\$	\$	\$	\$
16	Less: Revenue Taxes on Line 15 at 8.885%			\$	\$	\$	\$	\$	\$
17	Net Earnings Sharing Revenue Credit	Line 15: Line 16		\$	\$	\$	\$	\$	\$
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS	Sch. A, Line 6 or Sch. I		\$	\$	\$	\$	\$	\$
19	Total Annual Target Revenue:								
20	HELCO TY 2010 Final Annualized Revenue	Line 5	\$000s	\$ 138,065	\$ 138,065	\$ 138,065	\$ 138,065	\$ 138,065	\$ 138,065
21	HELCO TY 2010 + 2013 RAM Annualized Revenue	Line 5 + Line 8	\$000s	\$ 142,419	\$ 142,419	\$	\$	\$	\$
22	HELCO TY 2010 + 2014 RAM Annualized Revenue	Line 5: Line 11	\$000s			\$ 143,743	\$ 143,743		
23	HELCO TY 2010 + 2015 RAM Annualized Revenue	Line 5: Line 14	\$000s					\$ 145,841	\$ 145,841
24	Distribution of Target Revenues by Month	Note (4)	Note (5)	2014	2015	2015	2016	2016	2017
25	January	8.30%	8.48%		\$ 11,820,748		\$ 11,939,783		\$ 12,104,787
26	February	7.57%	7.72%		\$ 10,781,092		\$ 10,889,698		\$ 11,040,149
27	March	8.36%	8.52%		\$ 11,668,169		\$ 12,028,039		\$ 12,192,291
28	April	8.00%	8.16%		\$ 11,383,492		\$ 11,508,563		\$ 11,687,284
29	May	8.37%	8.53%		\$ 11,920,441		\$ 12,040,414		\$ 12,208,875
30	June - effective date of RAM Change is June 8, 2011	8.17%	8.39%	\$ 11,635,604		\$ 11,642,774		\$ 11,915,184	
31	July	8.84%	8.81%	\$ 12,304,871		\$ 12,420,089		\$ 12,600,948	
32	August	8.84%	9.00%	\$ 12,589,809		\$ 12,718,003		\$ 12,892,327	
33	September	8.39%	8.55%	\$ 11,948,925		\$ 12,089,182		\$ 12,295,044	
34	October	8.60%	8.77%	\$ 12,248,004		\$ 12,371,582		\$ 12,542,309	
35	November	8.26%	8.42%	\$ 11,763,781		\$ 11,882,296		\$ 12,048,450	
36	December	8.50%	8.67%	\$ 12,105,585		\$ 12,227,848		\$ 12,395,488	
37	Total Distributed Target Revenue	100.00%	100.00%	\$ 84,598,879	\$ 57,821,972	\$ 65,338,769	\$ 58,404,707	\$ 68,629,438	\$ 56,211,368

Footnotes:

- See Letter to Commission Subject HELCO Revised Schedules Resulting from Decision and Order No. 30168 Exhibit 1A, page 1 filed February 21, 2012 in Docket No. 2009-011.
- Transmittal 14-04 filed May 14, 2014 establishing 2014 RAM effective June 1, 2011.
- Transmittal 15-04 filed June 3, 2015 establishing 2014 RAM effective June 8, 2011.
- Source: HELCO RBA Provision Tariff effective June 1, 2013 based on 2010 test year.

5. Derivation of RAM Revenue Allocation for June 8, 2015 to May 31, 2016

	June is a partial month	Scale to total 100.00%
January	8.30%	8.48%
February	7.57%	7.72%
March	8.36%	8.52%
April	8.00%	8.16%
May	8.37%	8.53%
June - effective date of RAM Change is June 8, 2011	8.26%	8.39%
July	8.84%	8.81%
August	8.84%	9.00%
September	8.39%	8.55%
October	8.60%	8.77%
November	8.26%	8.42%
December	8.50%	8.67%
Total Distributed Target Revenue	68.00%	100.00%

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RECORDED ADJUSTED REVENUES

Line No	Description	January 2015	February 2015	March 2015	April 2015	May 2015	June 2015	July 2015	August 2015	September 2015	October 2015	November 2015	December 2015
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
BILLED REVENUES													
1	Current month's billed revenues (SAP014w)	32,753,163	29,694,655	27,720,520	28,431,675	27,388,913	29,481,284	30,918,978	30,384,348	31,825,010	29,784,692	27,585,933	28,728,214
2	Remove PBF revenues	(393,361)	(368,360)	(358,369)	(374,322)	(357,505)	(382,288)	(328,980)	(256,225)	(277,432)	(262,618)	(249,519)	(207,292)
3	Remove Solar Saver non-revenues				40,129								
4	Other electric revenues adjustments												
5 =													
sum 1-4	BILLED REVENUES	32,359,802	29,326,295	27,362,151	28,097,482	27,031,408	29,099,096	30,590,098	30,128,121	31,547,579	29,522,074	27,336,414	28,460,922
UNBILLED REVENUES													
6	Current month's unbilled revenues (Unbilled Sales and Revenue Est)	15,049,190	12,702,368	13,069,753	13,413,059	14,029,971	13,510,894	14,569,098	15,775,294	13,644,983	13,531,275	13,547,673	12,550,345
7	Reverse prior month's unbilled revenues (Unbilled Sales and Revenue Est)	(17,133,211)	(15,049,190)	(12,703,368)	(13,069,753)	(13,413,059)	(14,029,971)	(13,510,894)	(14,569,098)	(15,775,294)	(13,644,983)	(13,531,275)	(13,547,673)
8 = 6+7	Unbilled revenues per Unbilled Sales and Revenue Estimate	(2,084,021)	(2,346,822)	1,286,385	(575,795)	1,216,013	(1,119,077)	1,058,104	1,178,286	(2,130,301)	(113,708)	16,398	(697,328)
9	Recovery of 12-31 13 RBA balance through RBA Rate Adjustment beginning 6-1-14	(859,081)	(621,430)	(878,041)	(882,811)	(867,931)							
10	Recovery of 12-31 14 RBA balance through RBA Rate Adjustment beginning 6-6-15						(531,992)	(757,210)	(787,117)	(730,483)	(745,246)	(715,489)	(720,377)
11	Accrual of ECAC adjustment	(819,200)	(18,300)	1,865,400	47,600	152,900	262,400	(443,000)	(7,200)	(418,100)	(85,600)	656,800	(261,100)
12	Reversal of ECAC accrual	(136,532)	195,568	195,568	195,564	(409,300)	(409,300)	(409,300)	(154,300)	(154,300)	(154,300)	289,434	289,434
13	Accrual of PPAC adjustment	(74,200)	21,300	(254,200)	(147,300)	(173,400)	(172,300)	(189,700)	(154,300)	(174,400)	(384,400)	(242,900)	(229,900)
14	Reversal of PPAC accrual	132,464	205,267	205,267	205,268	102,367	102,367	102,368	164,334	164,334	164,332	172,800	172,800
15	Redress excess DSM revenues												
16	Adjust prior period RBA balance	8,719		(1,109)							1,280		6,577
17	Adjust prior period RBA related revenue taxes	850		(108)							123		841
18	Accrual of current month's RBA (PUC Monthly Financial Report pg. 8A)	824,812	377,442	479,735	202,818	770,109	577,659	214,819	311,778	328,419	298,356	238,303	510,220
19	RBA gross up for revenue taxes	80,431	36,809	46,781	19,758	75,096	50,330	20,948	30,403	32,025	28,899	23,238	49,754
20 =													
sum 9-19	Miscellaneous unbilled accruals	(441,817)	196,653	1,861,293	(139,105)	(150,159)	(114,836)	(1,481,077)	(578,402)	(952,485)	(878,576)	422,186	(181,051)
21 = 8 + 20	UNBILLED REVENUES	(2,525,838)	(2,149,169)	3,147,678	(714,900)	1,065,854	(1,233,913)	(374,973)	601,683	(3,062,786)	(992,284)	438,584	(1,179,279)
22 = 5 + 21	TOTAL REVENUES PER G/L (PUC Monthly Financial Report pg. 3)	29,833,964	27,177,127	30,509,829	27,382,582	28,097,262	27,865,082	30,217,025	30,727,004	28,484,792	28,529,790	27,774,999	27,281,643
Billed Adjustments to Determine Adjusted Revenues for RBA													
23	Add back other electric revenues adjustment - billing adjustment accrual/reversal	9,569		(1,217)							5,450		7,218
24	Remove ECAC revenues	(2,000,082)	(1,243,385)	41,797	646,939	587,776	449,181	112,321	165,842	741,606	1,238,579	1,853,401	2,821,722
25	Remove PPAC revenues	(1,825,452)	(1,682,237)	(1,808,928)	(1,698,097)	(1,678,031)	(1,859,724)	(1,920,632)	(1,862,906)	(1,973,534)	(1,869,035)	(1,768,130)	(1,878,583)
26	Remove DSM revenues		122		(309)	157	59		122	90	45		
27	Remove IRP revenues		(70)				322		261	344	724	1	
28	Remove revenue taxes of PBF revenues	(29,629)	(24,988)	(24,443)	(25,531)	(24,384)	(26,074)	(22,302)	(17,680)	(18,622)	(17,912)	(17,018)	(18,231)
29	Remove Solar Saver revenues		32	3	2,688	51,872	37	16	22	17	64	3	3
30	Remove revenue taxes on billed revenues	(2,453,771)	(2,343,645)	(2,289,802)	(2,401,009)	(2,307,328)	(2,456,083)	(2,555,433)	(2,524,298)	(2,691,922)	(2,585,987)	(2,443,790)	(2,593,802)
31	Remove base fuel (adjusted for revenue taxes)	(6,349,670)	(6,021,037)	(5,869,415)	(6,188,016)	(5,917,316)	(6,380,302)	(6,578,389)	(6,487,380)	(6,969,802)	(6,600,777)	(6,274,754)	(6,680,564)
32	Remove power purchase energy (adjusted for revenue taxes)	(6,776,063)	(6,425,362)	(6,283,558)	(6,582,211)	(6,314,676)	(6,806,752)	(7,020,141)	(6,923,021)	(7,437,839)	(7,044,033)	(6,698,118)	(7,138,782)
33	Other adjustments		1	(1)	(1)								
Unbilled Adjustments to Determine Adjusted Revenues for RBA													
34	Remove ECAC revenues	898,112	821,653	410,949	181,329	(225,342)	52,348	(355,878)	397,410	108,181	328,864	498,068	(37,543)
35	Remove ECAC accrual	755,832	(177,268)	(2,000,968)	(243,164)	256,400	146,900	852,300	181,500	572,400	239,900	(948,234)	(28,334)
36	Remove PPAC revenues	78,823	132,280	(109,176)	29,681	(105,852)	86,999	(52,440)	(74,925)	130,724	(17,981)	(20,497)	60,478
37	Remove PPAC accrual	(56,294)	(226,587)	48,933	(57,966)	71,033	69,833	87,334	(10,034)	10,066	220,068	70,100	57,100
38	Remove DSM revenues												
39	Remove excess DSM revenues												
40	Remove prior period RBA adjustments(a)	(9,569)		1,217							(1,383)		(7,218)
41	Remove RBA accruals	(824,812)	(377,442)	(479,735)	(202,818)	(770,109)	(577,659)	(214,819)	(311,778)	(328,419)	(298,356)	(238,303)	(510,220)
42	Remove RBA gross up for revenue taxes	(80,431)	(36,809)	(46,781)	(19,758)	(75,096)	(50,330)	(20,948)	(30,403)	(32,025)	(28,899)	(23,238)	(49,754)
43	Remove revenue taxes on unbilled revenues	156,940	178,580	(91,042)	90,684	(18,270)	136,984	7,057	(65,185)	232,952	48,874	19,857	150,581
44	Remove base fuel (adjusted for revenue taxes)	274,896	314,708	(363,481)	120,308	(230,638)	224,011	(155,064)	(358,133)	450,781	(44,873)	(117,256)	237,489
45	Remove power purchase energy (adjusted for revenue taxes)	293,142	335,841	(387,866)	128,385	(246,120)	239,054	(185,506)	(382,153)	481,052	(47,887)	(125,130)	253,437
46 =													
sum 23-45	Total billed and unbilled adjustments to determine adjusted revenues for RBA	(18,838,026)	(16,775,679)	(19,083,364)	(18,191,708)	(18,946,930)	(16,779,987)	(18,002,757)	(18,322,772)	(19,724,050)	(18,454,555)	(16,131,006)	(15,564,015)
47 =	RECORDED ADJUSTED REVENUES FOR RBA DETERMINATION												
22 = 46	(PUC Monthly Financial Report pg. 8A, 1)	10,995,938	10,401,448	11,426,464	11,190,874	11,150,332	11,085,115	12,214,270	12,404,230	11,740,743	12,075,238	11,643,993	11,717,628

NOTE: Totals may not add exactly due to rounding.

**HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF O&M RAM ADJUSTMENT
(\$ in Thousands)**

Line No	Description	Reference	Docket No 2009-0164 Approved	Footnote 4 Previously Approved RAM	O&M Subject to Escalation Col (c) + (d)	Net Inflation Indices Footnote 2	2016 O&M RAM Adjustment Col (e) * (f)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Base BU Labor Expenses	Schedule C1	\$ 12 930		\$ 12 930	12 07%	\$ 1 561
2	Base Non-Labor Expense	Schedule C2	\$ 28 371		\$ 28 371	9 34%	\$ 2 651
3	Payroll Taxes	Footnote 1	\$ 1 043		\$ 1 043	12 07%	\$ 128
4	Subtotal Expense Increase RAM Adjustment before revenue taxes						\$ 4 337
5	Revenue Tax Factor (Footnote 3)						1 0975
6	O&M RAM (Subtotal Expenses x Rev Tax Factor)						\$ 4,760

Footnotes

1 See Letter to Commission Subject: HELCO Revised schedules Resulting from Decision and Order No 30168 dated February 21 2012 in Docket No 2009-0164 Exhibit 1A p 11
Less Portion of payroll taxes related to non-BU labor* (31 55% 1 523)
Payroll Taxes related to Bargaining Unit labor

\$ 1 523
\$ (480)
\$ 1 043

* See Schedule C1 for calculation of percentage related to non-BU labor

2 Escalation Rates

Labor	2011	2012	2013	2014	2015	2016	
Bargaining Unit Wage Increase	1 75%	2 48%	2 88%	3 00%	2 91%	3 07%	(See HELCO-WP C-001)
Less Labor Productivity Offset	0 76%	0 76%	0 76%	0 76%	0 76%	0 76%	
Labor Cost Escalation Rate	0 99%	1 70%	2 12%	2 24%	2 15%	2 31%	

Approved in Final D&O in
Docket No 2008-0274
page 51 filed on August 31
2010

Calculation of 2011-2016 Compounded Labor Cost Escalation

2011 Labor Cost Escalation	1 0099	A (2011 labor escalation plus 1)
2012 Labor Cost Escalation	1 0170	B (2012 labor escalation plus 1)
2013 Labor Cost Escalation	1 0212	C (2013 labor escalation plus 1)
2014 Labor Cost Escalation	1 0224	D (2014 labor escalation plus 1)
2015 Labor Cost Escalation	1 0215	E (2015 labor escalation plus 1)
2016 Labor Cost Escalation	1 0231	F (2016 labor escalation plus 1)
2011-2016 Compounded Labor Cost Escalation	1 1207	G = A B C D E F
2011-2016 Compounded Labor Cost %	0 1207	H = G - 1

Non-Labor	2011	2012	2013	2014	2015	2016	
GDP Price Index	1 40%	1 70%	1 70%	1 60%	1 10%	1 50%	(See HELCO-WP C-002)

Calculation of 2011-2016 Compounded Non-Labor Cost Escalation

2011 Non-Labor Cost Escalation	1 0140	A (2011 non-labor escalation plus 1)
2012 Non-Labor Cost Escalation	1 0170	B (2012 non-labor escalation plus 1)
2013 Non-Labor Cost Escalation	1 0170	C (2013 non-labor escalation plus 1)
2014 Non-Labor Cost Escalation	1 0160	D (2014 non-labor escalation plus 1)
2015 Non-Labor Cost Escalation	1 0110	E (2015 non-labor escalation plus 1)
2016 Non-Labor Cost Escalation	1 0150	F (2016 non-labor escalation plus 1)
2011-2016 Compounded Non-Labor Cost Escalation	1 0934	G = A B C D E F
2011-2016 Compounded Non-Labor Cost %	0 0934	H = G - 1

3 Computation of Revenue Tax Factor

Public Service Tax Rate	0 05885
PUC Fees Rate	0 00500
Franchise Tax Rate	0 02500
Total Revenue Tax Rate	0 08885

Revenue Tax Factor
= 1 / (1 - Total Revenue Tax Rate) 1 0975

4 Column D "Previously Approved RAM" is not used as the labor and non-labor escalation is accomplished through the use of a compounded escalation rate in column f as shown in footnote 2

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKSHEET
RATE ADJUSTMENT MECHANISM
SUMMARY OF
OPERATIONS AND MAINTENANCE LABOR AND NON-LABOR EXPENSE
BY BLOCK OF ACCOUNTS
Final D&O - Docket No 2009-0164
(\$ in Thousands)

<u>Line No</u>	<u>DESCRIPTION</u>	(a)	(b)	(c)=(a)+(b)	(d)	(e)
		BU LABOR (Note 1)	Non-BU LABOR (Note 1)	Total LABOR	NON-LABOR (Note 1)	TOTAL (Note 1)
1	Production	\$ 6,456	\$ 1,764	\$ 8,220	\$ 11,475	\$ 19,695
2	Transmission	841	89	930	1,468	2,398
3	Distribution	2,895	143	3,038	4,948	7,986
4	Customer Accounts	2,017	328	2,346	1,386	3,732
5	Allowance for Uncoll Accounts	-	-	0	749	749
6	Customer Service	-	758	758	649	1,407
7	Administrative & General	721	2,877	3,598	12,378	15,976
8	Austerity Adjustment	-	-	0	-365	-365
9	Operation and Maintenance	\$ 12,930	\$ 5,959	\$ 18,890	\$ 32,689	\$ 51,579

Percentage of Total O&M Labor 68.45% 31.55% 100%

* amounts may not add due to rounding

(1) See HELCO Letter dated March 9, 2012, Subject: HELCO O&M Expenses Breakdown for RAM Calculation, filed in Docket No. 2009-0164, Attachment 2, p. 1 (Note: letter inadvertently shown as Docket No. 2010-0164)

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
Non-Labor Exclusion
Adjustment for O&M RAM
(\$ in Thousands)

<u>Line No</u>	<u>Description</u> (a)	<u>Amount</u> (b)	<u>Reference</u> (c)
1	Pension Expense	\$ 5,429	See Stipulated Settlement Letter filed
2			Sep 16, 2010, HELCO T-11
3			Attachment 5, page 1 Final Settlement
4			Docket No 2009-0164
5			
6	Other Post-Employment Benefits (OPEB) Expense	\$ 337	Id , HELCO T-11, Attachment 5, page 1,
7			Final Settlement
8			
9			
10	<i>Total before amounts transferred</i>	\$ 5,766	
11			
12	O&M %	74.88%	Id , HELCO T-11, Attachment 1, page 1,
13	(1- transfer rate of 25.12%)		Final Settlement
14			
15			
16	Adjustment to Non-Labor O&M Expense		
17	for O&M RAM base	\$ 4,317	
18			
19			
20	Non-Labor O&M Expense per Final D&O	\$ 32,689	Schedule C1
21			
22			
23	Non-Labor O&M Expense Base for		
24	O&M RAM base	<u>\$ 28,371</u>	

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RATE BASE RAM ADJUSTMENT - RETURN ON INVESTMENT
(\$ in Thousands)

Line No	Description (a)	AMOUNTS IN THOUSANDS (b)	PERCENT OF TOTAL (c)	COST RATE (d)	POST TAX WEIGHTED EARNINGS REQMTS (e)	INCOME TAX FACTOR Note (2) (f)	PRETAX WEIGHTED EARNINGS REQMTS (g)
1	<u>PUC APPROVED CAPITAL STRUCTURE & COSTS (Note 1)</u>						
2	Short-Term Debt	\$ 7,040	1.41%	3.25%	0.05%	1,000,000	0.05%
3	Long-Term Debt	196,838	39.48%	6.15%	2.43%	1,000,000	2.43%
4	Hybrid Securities	9,297	1.86%	7.38%	0.14%	1,000,000	0.14%
5	Preferred Stock	6,623	1.33%	8.29%	0.11%	1,636,93	0.18%
6	Common Equity	278,722	55.91%	10.00%	5.59%	1,636,93	9.15%
7	Total Capitalization	<u>\$ 498,520</u>	<u>100.00%</u>		<u>8.31%</u>		<u>11.94%</u>
8	RAM CHANGE IN RATE BASE (From Schedule D1)						<u>\$ (22,271)</u>
9	PRETAX RATE OF RETURN (Line 7, Col g)						<u>11.94%</u>
10	PRETAX RETURN REQUIREMENT						<u>\$ (2,659.2)</u>
11	REVENUE TAX FACTOR (1/(1-8.885%))						<u>1.0975</u>
12	RATE BASE RAM - RETURN ON INVESTMENT						<u>\$ (2,918.499)</u>

Footnotes

1 See Letter to Commission Subject HELCO Revised schedules Resulting from Decision and Order No 30168 dated February 21 2012 in Docket No 2009-0164 Exhibit 1A p 2

2 Composite Federal & State Income Tax Rate 38.91%
Income Tax Factor (1 / 1-tax rate) 1.636929121

See Letter to Commission Subject HELCO Revised schedules Resulting from Decision and Order No 30168 dated February 21 2012 in Docket No 2009-0164 Exhibit 1A p 12

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RATE BASE RAM ADJUSTMENT CHANGE IN RATE BASE
(\$ in Thousands)

Line No	Description (a)	HELCO 2010 Test Year Rate Base		HELCO 2016 RAM Rate Base		
		Beg Balance 12/31/2009 (b)	Budgeted Balance 12/31/2010 (c)	Adjusted Recorded at 12/31/2015 (d)	RAM Projected Amounts (e)	Estimated at 12/31/2016 (f)
1	Net Cost of Plant in Service	\$ 567 375	\$ 597 486	Note (1) \$ 646 733	See Detail Below \$ 6302	\$ 656 035
2	Property Held for Future Use	-	-	These Elements of Rate Base are Not Updated for RAM Purposes		
3	Fuel Inventory	8 848	8 848			
4	Materials & Supplies Inventories	3 944	3 944			
5	Unamort Net SFAS 109 Reg Asset	11 803	11 633			
6	Unamort Sys Dev Costs	1 184	1 455			
7	Pension Asset	4 888	2 668			
8	ARO Reg Asset	205	209			
9	CIS Deferred Costs	-	-			
10				2 010	(213)	1 797
11				Not Updated		
12						
13	Pension Reg Asset	4 156	4 916			
14	Total Additions	\$ 602 403	\$ 631 159	\$ 683 094	\$ 9 089	\$ 692 182
15	Unamortized CIAC	\$ (69 566)	\$ (73 019)	\$ (95 298)	\$ (4 165)	\$ (99 462)
16	Customer Advances	(27 912)	(29 995)	Not Updated		
17	Customer Deposits	(2 703)	(2 751)			
18	Accumulated Def Income Taxes	(31 776)	(46 003)	(102 338)	(7,190)	(109,526)
19	Unamortized State ITC (Gross)	(12 301)	(13 314)	Not Updated		
20	Unamortized Gain on Sale	-	-			
21	Pension Reg Liability	-	-			
22	OPEB Reg Liability	(100)	(319)			
23	Total Deductions	\$ (144 358)	\$ (165 401)	\$ (242 331)	\$ (11 355)	\$ (253 686)
24	Working Cash	\$ 3 238	\$ 3 238	\$ 3 238	Not Updated	\$ 3 238
25	Rate Base at Proposed Rates	\$ 461 283	\$ 468 996	\$ 444 000		\$ 441 734
26	Average Rate Base		\$ 465 139			\$ 442 867
27	Change in Rate Base					\$ (22,271)
28	Column (e) Projected Changes to Rate Base		Reference	Amount		
29	Plant - Baseline Capital Project Additions		Schedule D2	\$ 48 549		
30	Major CIP Project Additions		Schedule D3	2 860		
31	Accumulated Depreciation/Amortization Change		Schedule E	(42 107)		
32	Net Plant		Sum Lines 29-31	\$ 9,302		
33	Accum Deferred Income Taxes - Baseline and Major Capital Projects		Schedule F	\$ (7,190)		
34	Projected CIAC Additions - Baseline		Schedule G	\$ (7 397)		
35	Projected CIAC Additions - Major CIP		Schedule G	-		
36	Less Amortization of CIAC		Schedule G	3 232		
37	Total Change in CIAC in Rate Base		Sum Lines 34-36	\$ (4 165)		

Footnotes

1 Amounts are recorded, except for the following adjustments

	Plant in Service	Acc Depr	CIAC Net	ADIT
			Schedule G	Schedule D4
[A] Unadjusted Balance	\$ 1 217 428	\$ (488 563)	\$ (95 298)	\$ (102 336)
[A] Add Asset Retirement Obligation		\$ (215)		
[A] Reg Liab Cost of Removal (net salvage)		\$ (81 917)		
Major Project Adjustments				
NA				
Total Adjustments	\$ -	\$ -	\$ -	\$ -
Adjusted Balance	\$ 1 217 428	\$ (570 695)	\$ (95 298)	\$ (102 336)

[A] SOURCE Hawaii Electric Light Company Inc Monthly Financial Report - December 2015 pages 8 and 10 filed February 23 2016

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF BASELINE CAPITAL PROJECTS ADDITIONS

Source: Docket No. 03-0257 General Order No. 7 Plant Additions Annual Reports filed with the PUC dated.

Line No	Description (a)	3/30/2012		3/22/2013		3/31/2014		3/27/2015		3/29/2016	
		2011 (b)	2012 (c)	2013 (d)	2014 (e)	2015 (f)					
1	Total Plant Additions	\$ 39,242,658	\$ 45,983,990	\$ 59,016,572	\$ 51,615,842	\$ 51,663,728					
2	(Notes A, B, C, D & E)										
3											
4	<u>Less Major Projects, (+\$2.5 Million)</u>										
5											
6	2009 In service										
7	Keahole ST 7 Project Note A	7623	H0001383	(165,807)							
8	Keahole ST 7 SW Sub Addition Note A	7623	H0000596								
9											
10	2010 In-Service										
11	Puna Turbine Upgrade Note B	2009-0104	H0001750	(382,076)							
12											
13	2011 In-Service										
14	None										
15											
16	2012 In-Service										
17	None										
18											
19	2013 In-Service										
20	None										
21											
22	2014 In-Service										
23	Keamuku Keahole 6800 kV Line Recon Ph 1 Note C	2012-0392	H0002509		(2,730,442)	141,118					
24	Keahole CT-4 Major Overhaul Note D	2013-0144	H0002725		(1,622,930)	(19,335)					
25											
26	2015 In-Service										
27	None										
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41	Total Net Plant Additions (excluding major projects)	\$ 38,694,776	\$ 45,983,990	\$ 59,016,572	\$ 47,262,470	\$ 51,785,510					
42											
43	Last Five-Year Average					\$ 48,548,663					

NOTE (A)

Docket No. 7623 ST-7 Final Cost Report filed August 18, 2011 included removal costs \$14,538,731

NOTE (B)

Docket No. 2009 0104 Puna Turbine Upgrade Final Cost Report filed February 16, 2011 \$7,873,939 plus straggling costs of \$6,522

NOTE (C)

Docket No. 2012-0392 Keamuku-Keahole 6800 kV Line Reconstruction Phase 1 Final Cost Report filed September 29, 2014 \$2,659,753 plus straggling costs of \$70,689 in 2014 plus straggling costs of \$141,118 in 2015

NOTE (D)

Docket No. 2013-0144 Keahole CT-4 Major Overhaul Final Cost Report filed January 29, 2015 \$1,622,930 less straggling credits of \$19,335

NOTE (E)

HELCO's GQ 7 plant additions annual reports are shown as Exhibit 2 in 2010, 2011, 2012, and 2013 and as Attachment 2 in 2014 and 2015 reports

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF MAJOR CAPITAL PROJECT ADDITIONS

Line No	Description (a)	PUC Docket Reference (b)	Estimated In Service Date (c)	Amount (d)
	<u>2016 Major Capital Project Additions by Project</u>			
	Kearmuku-Keahole 6800 69 kV Line Reconstruction			
1	Phase 2 (Note 1)	Docket No. 2013-0153 HELCO-WP-D3-002	06/2016	\$ 2,859,636
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13	Total Major Capital Projects Qualifying for 2016 RAM			\$ 2,859,636

See Schedule G2 for related CIAC (if applicable)

Note 1

Application filed on June 13, 2013 under Docket No. 2013-0153 as project costs were estimated to exceed \$2.5 million. Decision and Order No. 32930 issued on June 24, 2015 approving \$4,211,952 in funds to reconstruct the Kearmuku-Keahole 6800 Line Phase 2 (at 45). The amount included above reflects the most recent budgeted cost as of May 2016.

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF ADJUSTED RECORDED DEFERRED INCOME TAXES

Line No	NARUC Account (a)	Reference (b)	DR/(CR)	DR/(CR)	DR/(CR)
			Federal ADIT (c)	State ADIT (d)	Total ADIT (e)
1	Recorded Deferred Income Tax Balances December 31 2015 Recorded Balances				
2	Depreciation Related Account 282	HELCO-WP-D4-001	\$ (61,753,961)	\$ (3,478,158)	\$ (65,232,119)
3	Other Deferred Income Taxes	HELCO-WP-D4-001	(30,061,927)	(7,041,779)	(37,103,706)
4	Total Recorded Deferred Income Taxes - Utility		(91,815,888)	(10,519,937)	(102,335,825)
					<i>To Schedule D1</i>

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF DEPRECIATION & AMORTIZATION RATE ADJUSTMENT

Line No	NARUC Account	Recorded Depreciable/Amort Balance (Footnote 3)	Adjustments (Footnote 5)	Adjusted Depreciable/Amort Balance	PUC Approved Accrual Rate in Dkt No. 2009-0321	Annual Accrual
	(a)	(b)	(c)	(d)	(e)	(f)
1	Plant Accounts					
2	311	18 390 658		\$ 18 390 658	0 02900	\$ 533,329
3	312	70 278 296	(651,642)	69 626 654	0 03080	2 144 501
4	314	48 168 201		48 168 201	0 02540	1 223 472
5	315	9 063 035		9 063 035	0 03350	303 612
6	316	-		-	-	-
7	Tot - Steam	145,900,190	(651 642)	145 248 548	0 02895	4 204 914
8						
9	331	103 272		103 272	0 00940	971
10	332	6,233,976		6 233 976	0 02030	126 550
11	333	2,107 816		2 107 816	0 02130	44 896
12	334	748 324		748 324	0 00620	4,640
13	336	121 311		121 311	0 00000	-
14	Tot - Hydro	9 314 699	-	9 314 699	0 01901	177,057
15						
16	341	23 763 494		23 763 494	0 02640	627 356
17	342	12 553 065		12,553,065	0 01990	249 806
18	343	67 334 327		67 334 327	0 02220	1,494 822
19	344	54,712,144		54,712,144	0 01910	1,045 002
20	345	7 678 952		7 678 952	0 01710	131 310
21	Tot - Other Prod	166 041 984	-	166 041 984	0 02137	3 548 296
22						
23	Tot - Prod	321 256 873	(651 642)	320,605 231		7 930 267
24						
25	3501	3 242 961		3 242 961	0 01460	47 347
26	352	3,008,433		3 008,433	0 00890	26,775
27	353	63,498 596		63 498 596	0 01980	1 257 272
28	354	60 041		60 041	0 02120	1 273
29	355	56 887 927		56 887 927	0 01750	995 539
30	356	41 438 154		41,438,154	0 04430	1 835 710
31	357	305 800		305 800	0 00000	-
32	358	672 020		672 020	0 00180	1 210
33	359	128 935		128 935	0 01350	1 741
34	Tot - Transm	169 242 867	-	169 242 867	0 02462	4 166 867
35						
36	3601	725 308		725 308	0 01990	14,434
37	361	3 232 978		3 232 978	0 01600	51 728
38	362	60 571,789		60 571 789	0 01820	1 102,407
39	363	1 194 003		1,194,003	0 03960	47 283
40	364	124 325 781		124 325 781	0 03780	4 699 515
41	365	105 670 657		105 670,657	0 03400	3 592 802
42	366	32,458 760		32 458 760	0 02870	931 566
43	367	113 547 633		113 547 633	0 04080	4 632,743
44	368	99 284,750		99 284 750	0 06870	6,820,862
45	369 1	41 903 635		41,903,635	0 03470	1 454,056
46	369 2	29 732 204		29 732 204	0 02850	847,368
47	370	19 500 686		19 500 686	0 04840	943 833
48	Tot - Distr	632 148 184	-	632,148,184	0 03977	25 138 597
49						
50	Tot - T & D	801 391 051	-	801 391,051		29 305 463
51						
52	390	19 836 252		19 836 252	0 01290	255 888
53	Tot - General	19 836 252	-	19 836 252	0 01290	255 888
54						
55	Sub-Total	1 142 484 176	(651 642)	1 141 832 534		37,491,618
56						
57	3902 (Kanoelehua)	778,563		778 563	0 01540	11 990
58	Tot - LH Impr	778 563	-	778 563	0 01540	11,990
59						
60	3921	7,230 304		7,230,304	0 15120	1 093 222
61	3922	15 156 532		15 156 532	0 02720	412 258
62	Tot - Vehicles	22 386 836	-	22 386 836	0 06725	1,505 480
63						
64						
65	Utility Total Depreciation	\$ 1 165 649 575	\$ (651 642)	\$ 1 164 997 933	0 03348	\$ 39,009,087

66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91

Amortization Amounts

316	2 010 720		\$ 2 010 720	0 05000	\$ 100 536
Tot - Steam	2 010 720	-	2 010 720	0 05000	100 536
335	129 501		129 501	0 05000	6 475
Tot - Hydro	129 501	-	129 501	0 05000	6 475
346	3 712 146		3 712 146	0 05000	185 607
Tot - Other Prod	3 712 146	-	3 712 146	0 05000	185,607
Tot - Prod	5 852 367	-	5 852 367	0 05000	292 618
3911	2,433 806		2 433 806	0 20000	486 761
3912	327 521		327,521	0 10000	32 752
3913	771 660		771 660	0 06670	51,470
393	877,490		877 490	0 04000	35 100
394	9 210 283		9 210 283	0 04000	368 411
395	367 483		367 483	0 06670	24,511
396	667		667	0 05560	37
397	22 429,257		22 429 257	0 06670	1 496 031
398	4 251 793		4 251 793	0 06670	283 595
Tot - General	\$ 40 669 959	\$ -	\$ 40 669 959	0 06832	\$ 2 778,668

92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110

Net Unrecovered Amortization (Footnote 1)

26 397

Utility Total Amortization \$ 46,522,326 \$ - \$ 46 522 326 0 06658 \$ 3,097,683

TOTAL RAM DEPRECIATION / AMORTIZATION

\$ 42,106,771

LESS Vehicle Depreciation (A/C 392 above)

\$ (1,505,480)

LESS Depreciation & Amortization in Current Revenues

Footnote 2 \$ (33,208,900)

RAM Adjustment for Depreciation & Amortization

\$ 7,392,391

RAM Adjustment for CIAC Amortization

Sch G \$ (976,026)

RAM Adjustment for CIS Deferred Cost Amortization (Footnote 4)

\$ 213,463

Total RAM Adjustment for Depreciation & Amortization

\$ 6,629,828

Times Factor for Revenue Taxes

1 0975

RAM DEPRECIATION & AMORTIZATION

\$ 7,276,329

Footnotes

1

Account	Net Unrecovered Amortization (i)	Annual Recovery Final Partial Year
316	\$ 146 914	\$ 1 026
335	24,160	169
346	63,071	439
3911	268 651	1,877
3912	(17 354)	(121)
3913	582 700	4 074
393	(62 302)	(402)
394	(176 472)	(1,234)
395	149 469	1,045
396	(7 654)	(52)
397	2 277 517	15 919
398	523 044	3 656
Unrecovered Amortization	\$ 3,771,742	
Annual Recovery (increases amortization expense annually for five years)		\$ 26 397

(i) Source Accounting Records

2	<u>Depreciation & Amortization in Current Revenues (ii)</u>	Depr/Amort Expense
	Total Depreciation	\$ 34,376 700
	LESS Vehicle Depreciation (A/C 392)	(1 167 800)
	Net Depreciation in Current Revenues	<u>\$ 33 208 900</u>
	(ii) HELCO Revised Schedules Resulting from Decision and Order No 30168 HELCO T-13 Attachment 1 page 1 Response to Final D&O filed 2/21/12, Docket No 2009-0164	
3	Utility Total Depreciable Plant Balance - Line 65	\$ 1 165 649,575
	Utility Total Amortizable Plant Balance - Line 98	<u>46 522 326</u>
	Total Utility Depreciation and Amortization Plant Balance	<u>\$ 1 212 171 901</u>
	Total Utility Plant in Service Balance (iii)	\$ 1 217 427 574
	less Land Balance (iv)	(5 232 304)
	less ARO Asset Balance (A/C 10100001)	<u>(23 369)</u>
	Total	<u>\$ 1 212 171 901</u>
	(iii) December 2015 Monthly Financial Report PUC page 8	
	(iv) Accounting Records	
4	See HELCO-WP-D1-001 page 1	
5	<u>Adjustments</u>	
	Additional plant retired for 12/31/2015 decommissioning of Shipman 3 and 4	(651 642)

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF CHANGE IN DEFERRED INCOME TAXES

<u>Line No</u>	<u>NARUC Account</u> (a)	<u>Reference</u> (b)	<u>Projected ADIT Change</u> (c)
1	State Tax Depreciation	Schedule F1	1,720,928
2	Effective Federal Tax Rate	HELCO-WP-F-001	32.8947%
3	Federal Deferred Tax on State Tax Depreciation		566,095
4	Addback State Tax Depreciation		(1,720,928)
5	Federal Tax Depreciation	Schedule F1	20,351,582
6	Federal/State Difference		18,630,654
7	Tax Rate on Federal Only Adjustment	HELCO-WP-F-001	35%
8	Federal Deferred Tax Adjustment		6,520,729
9	Total Federal Deferred Taxes		7,086,824
STATE DEFERRED TAXES			
10	State Tax Depreciation		1,720,928
11	Effective State Tax Rate	HELCO-WP-F-001	6.0150%
12	Total State Deferred Taxes		103,514
13	TOTAL FED AND STATE DEFERRED TAXES		7,190,338

NOTE In accordance with the tariff, the change in ADIT in the RAM year is based on the temporary book/tax depreciation differences associated with the RAM year plant additions (major capital projects and baseline plant additions). It does not include any estimated ADIT related to the repairs deduction or CIAC on RAM year plant additions.

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TAX DEPRECIATION

Line No	LIFE	PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1 Communication	20	\$ 1 842 527		\$ 1 842 527	3 38%		3 38%
2 Office Furniture	7	582 018	-	582 018	1 20%		1 20%
3 Distribution	20	31 074 236	-	31 074 236	84 01%		84 01%
4 Information Systems/Data Handling	5	509 153		509 153	1 05%		1 05%
5 Land	-	114 632	-	114 632	0 24%	-	0 24%
6 Other Production	15	2 488 434	-	2 488 434	5 13%		5 13%
7 Steam & Hydraulic Production	20	1 518 923	-	1 518 923	3 13%		3 13%
8 Structural	39	2 275 406	-	2 275 406	4 69%		4 69%
9 Transmission	15	5 489 384	-	5 489 384	11 31%		11 31%
10 Transmission	20	268 615		268 615	0 55%		0 55%
11 Vehicles	-	2 585 337	-	2 585 337	5 33%		5 33%
12 Baseline Plant Additions		<u>\$ 48 548 663</u>		<u>\$ 48 548 663</u>	<u>100 00%</u>	<u>0 00%</u>	<u>100 00%</u>

Projects and Program % Totals by Depreciable Life

5 yr	1 05%	1 05%
7 yr	1 20%	1 20%
15 yr	16 43%	16 43%
20 yr	71 07%	71 07%
39 yr	4 69%	4 69%
Land	0 24%	0 24%
Vehicles	5 33%	5 33%
Total	<u>100 00%</u>	<u>100 00%</u>

	FED YR 1	FED YR 1	STATE YR 1	STATE YR 1
BASIS	DEPR RATE	TAX DEPR	DEPR RATE	TAX DEPR

Note	Basis subject to 50% bonus	100 00%	100 00%	0 00%	Vintage 2016 50% Bonus Depreciation					
	5 yr	1 05%	-	1 05%	5 yr	421 833	60 000%	253 100	20 00%	84 367
	7 yr	1 20%	-	1 20%	7 yr	482 201	57 145%	275 554	14 29%	68 907
	15 yr	16 43%	-	16 43%	15 yr	6 609 611	52 500%	3 470 046	5 00%	330 481
	20 yr	71 07%	-	71 07%	20 yr	28 586 766	51 875%	14 829 385	3 75%	1 072 004
	39 yr	n/a	n/a	n/a						
	Land	n/a	n/a	n/a						
	Vehicles	n/a	n/a	n/a						
	Total	<u>89 75%</u>	<u>0 00%</u>	<u>89 75%</u>						

	Basis subject to regular depreciation	(Total less amounts subject to 50% bonus)	Vintage 2016 Regular Depreciation							
	5 yr	0 00%	0 00%	5 yr	\$	20 00%	\$	20 00%	\$	
	7 yr	0 00%	0 00%	7 yr		14 29%		14 29%		
	15 yr	0 00%	0 00%	15 yr		5 00%		5 00%		
	20 yr	0 00%	0 00%	20 yr		3 75%		3 75%		
	39 yr	4 69%	4 69%	39 yr	1 885 171	1 18%	22 188	1 18%	22 188	
	Land	n/a	n/a							
	Vehicles	n/a	n/a							
	Total	<u>4 69%</u>	<u>4 69%</u>							
	TOTAL ASSETS	<u>94 44%</u>	<u>94 44%</u>							

Net Depreciable Baseline Plant Adds	<u>\$ 37 885 582</u>	<u>\$ 18,850 273</u>	<u>\$ 1 577 946</u>
Major Capital Projects from Schedule F2	<u>2,859,636</u>	<u>1 501,309</u>	<u>142,982</u>
Total Depreciable Plant Adds	<u>\$ 40 645 218</u>	<u>\$ 20 351 582</u>	<u>\$ 1 720,928</u>
Reconciliation from Baseline Plant Adds to Net Depreciable Plant Adds		Fed Tax Depreciation To Schedule F	St. Tax Depreciation To Schedule F
Baseline Capital Projects Plant Adds	\$ 48 548 663		
Less Repairs deduction HELCO-WP-F1-001 pg 1	<u>8,326 162</u>		
Net plant add basis	40 222 501		
Less Land and Vehicles (5 56% x \$40 222 501)	<u>2 238 919</u>		
	<u>\$ 37 885 582</u>		

Schedule D2
 <<supported by Special Study each year

NOTE (1) The Protecting Americans from Tax Hikes (PATH) Act of 2015 extended bonus depreciation for property acquired and placed in service from 2015 through 2019. The bonus depreciation percentage is 50 percent for property placed in service during 2016.

SCHEDULE F1
 PAGE 1 OF 1
 (REVISED 5-19-16)

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
TAX DEPRECIATION ON MAJOR CAPITAL PROJECTS ADDITIONS

Line No	Description	PUC Docket	Estimated In Service Date	Amount	
	(a)	(b)	(c)	(d)	(e)
1	Assumed Value of 2016 Major Capital Projects - Plant Items			\$ 2,859,636	
2	Assumed Value of 2016 Major Capital Projects - CIAC nontaxable			\$ -	
3	Assumed Value of 2016 Major Capital Projects - Total			\$ 2,859,636	Schedule D3

4	Tax Classification of Major Capital Project Additions	Tax Basis Distribution	FED YR 1 DEPR RATE	FED YR 1 TAX DEPR	STATE YR 1 DEPR RATE	STATE YR 1 TAX DEPR
5	5 yr	\$ -	60.000%	\$ -	20.00%	\$ -
6	7 yr	-	57.145%	-	14.29%	-
7	15 yr	2,859,636	52.500%	1,501,309	5.00%	142,982
8	20 yr	-	51.875%	-	3.75%	-
9	39 yr	n/a				
10	Land	n/a				
11	Vehicles	n/a				
12	Total	\$ 2,859,636		\$ 1,501,309		\$ 142,982

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
CIAC SUMMARY

Line No	Description (a)	Reference (b)	Unamortized CIAC (c)	CIAC Amortization (d)
1	12/31/15 Beginning Balance	Sch G1	\$ (95,297,753)	
2				
3	<u>2016 CIAC Additions</u>			
4	Baseline 5-Yr Average	Sch G1	\$ (7,396,816)	
5	Major Projects	Sch G2	-	
6	Net Additions		<u>\$ (7,396,816)</u>	
7				
8	<u>2016 CIAC Amortization</u>			
9	Estimated Amortization	Sch G3	<u>\$ 3,232,226</u>	<u>\$ (3,232,226)</u>
10				
11	12/31/16 Ending Balance		<u><u>\$ (99,462,343)</u></u>	(3,232,226)
12				
13	LESS CIAC Amortization in Current Revenues	NOTE 1		<u>(2,256,200)</u>
14				
15	RAM Adjustment for CIAC Amortization			<u><u>\$ (976,026)</u></u>

NOTE 1 See HELCO Revised Schedules Resulting from Decision and Order No 30168, filed 2/21/2012,
Exhibit 1A, page 34 of 37, Docket No 2009-0164

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK

BASELINE CAPITAL PROJECTS CIAC ADDITIONS

Source of CIAC balance and amort December Monthly Reports filed (non-confidential basis) with the PUC dated.

Line No	Description (a)	<div> <div>02/21/2012</div> <div>2/19/2013</div> <div>2/21/2014</div> <div>2/26/2015</div> <div>2/23/2016</div> </div>				
		2011 (b)	2012 (c)	2013 (d)	2014 (e)	2015 (f)
1	CIAC Balance January 1 (Dec Rpt pg 10)	\$ (72,080,639)	\$ (76,641,653)	\$ (84,799,042)	\$ (89,762,888)	\$ (94,474,624)
2	Less CIAC Amortization (Dec Rpt pg 2)	2,397,013	2,506,398	2,766,490	2,955,035	3,142,029
3	Less CIAC Balance December 31 (Dec Rpt pg 10)	76,641,653	84,799,042	89,762,888	94,474,624	95,297,753
4						
5	Total CIAC Additions	\$ 6,958,027	\$ 10,663,787	\$ 7,730,336	\$ 7,666,771	\$ 3,965,158
6						
7	<u>Less Major Projects</u>	<u>Dkt No</u>	<u>Item No</u>			
8						
9	2009 In-service					
10	Keahole ST 7 Project	7623	H0001383			
11	Keahole ST-7 Sw Str Addition	7623	H0000596			
12						
13	2010 In-service					
14	Puna Turbines Upgrade	2009-0104	H0001750			
15						
16	2011 In service					
17	None					
18						
19	2012 In-service					
20	None					
21						
22	2013 In-service					
23	None					
24						
25	2014 In-Service					
26	Keamuku Keahole 6800 69 kV Line Phase 1	2012-0392	H0002509			
27	Keahole CT-4 Major Overhaul	2013-0144	H0002725			
28						
29	2015 In service					
30	None					
31						
32	Total Net CIAC Additions	<u>\$ 6,958,027</u>	<u>\$ 10,663,787</u>	<u>\$ 7,730,336</u>	<u>\$ 7,666,771</u>	<u>\$ 3,965,158</u>
33						
34	Last Five-Year Average					<u>\$ 7,396,816</u>

NOTE (A)

The CIAC amounts of the major projects are from the respective year's GO7 plant addition annual reports. Refer to the Baseline Plant Additions Calculation workbook for the dates of the report filings. The total CIAC additions reflect actual contributions received in the year, and therefore may not include the total major project CIAC from the GO 7 report to the extent that the CIAC was received in advance, or in multiple payments over a span of more than one year.

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
MAJOR CAPITAL PROJECT CIAC ADDITIONS

Line No	Description (a)	PUC Docket Reference (b)	Estimated In Service Date (c)	Amount (d)
1	<u>2016 Major Capital Project CIAC Additions by Project</u>			
2	None			\$ -
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13	Total Major Project CIAC Additions for 2016 RAM			<u>\$ -</u>

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
CIAC AMORTIZATION

Line No	Description	2014 Balance	2015 Amortization	2015 Balance	2016 Amortization
	(a)	(b)	(c)	(d)	
1	<u>CIAC by Vintage</u>				
2	1981	\$ 36 687 46	\$ (4 566 00)	\$ 32 121 46	\$ (4 566 00)
3	1982	47 379 11	(5 244 00)	42 135 11	(5,244 00)
4	1983	39 117 17	(3 898 00)	35 219 17	(3,898 00)
5	1984	270,892 75	(24 547 00)	246 345 75	(24,547 00)
6	1985	173,030 86	(14 376 00)	158 654 86	(14 376 00)
7	1986	284,011 24	(21 787 00)	262 224 24	(21,787 00)
8	1987	648 606 57	(46 211 00)	602 395 57	(46 211 00)
9	1988	349,656 17	(23 255 00)	326 401 17	(23 255 00)
10	1989	652 350 03	(40 681 00)	611 669 03	(40 681 00)
11	1990	1 897 532 18	(111 386 00)	1 786,146 18	(111,386 00)
12	1991	1 288 204 07	(71 425 00)	1 216 779 07	(71 425 00)
13	1992	2 726 873 84	(143 251 00)	2 583 622 84	(143,251 00)
14	1993	947 410 59	(47 286 00)	900 124 59	(47,286 00)
15	1994	1 377 309 01	(65 475 00)	1 311 834 01	(65 475 00)
16	1995	971 086 54	(44 069 00)	927 017 54	(44 069 00)
17	1996	1,466 257 10	(63,652 00)	1,402,605 10	(63,652 00)
18	1997	921 747 60	(38 349 00)	883 398 60	(38 349 00)
19	1998	468 872 06	(18,728 00)	450,144 06	(18,728 00)
20	1999	3 622 755 00	(139 146 00)	3 483 609 00	(139 146 00)
21	2000	2 715 254 29	(100 432 00)	2,614 822 29	(100,432 00)
22	2001	2,420,205 43	(86 326 00)	2 333 879 43	(86 326 00)
23	2002	2 377 232 38	(81 873 00)	2,295,359 38	(81,873 00)
24	2003	3 283 795 69	(109 330 00)	3 174 465 69	(109,330 00)
25	2004	1 980 587 91	(63 817 00)	1 916,770 91	(63 817 00)
26	2005	2 616 388 22	(81 671 00)	2 534,717 22	(81,671 00)
27	2006	4 681 256 69	(141,703 00)	4 539 553 69	(141,703 00)
28	2007	5,069,430 95	(148 945 00)	4 920 485 95	(148,945 00)
29	2008	5 379 417 91	(153 541 00)	5 225 876 91	(153,541 00)
30	2009	6 256,516 88	(173 620 00)	6 082 896 88	(173,620 00)
31	2010	5 737 073 11	(154 907 00)	5 582 166 11	(154 907 00)
32	2011	6 448 902 33	(169 708 00)	6 279 194 33	(169,708 00)
33	2012	10 143 603 00	(260 092 00)	9 883 511 00	(260,092 00)
34	2013	7,541 791 00	(188,545 00)	7 353 246 00	(188 545 00)
35	2014	7 666 771 00	(186 994 00)	7 479 777 00	(186 994 00)
36	2015			3 698 062 06	(90,197 00)
37	2015 - Land			267,096 00	
38					
39	<u>CIAC GET Adjustment</u>				
40	adj 92 96 GET				
41	adj 97 GET				
42	adj 98 GET				
43	adj 99 GET				
44	adj 00 GET				
45	adj 01 GET				
46	adj 02 GET				
47	adj 03 GET				
48	adj 04 GET				
49	adj 05 GET				
50	adj 06 GET				
51	-adj 07 GET				
52	adj 08 GET				
53	adj 09 GET				
54	adj 10 GET				
55	adj 11 GET				
56	adj 12 GET				
57					
58					
59	<u>In Kind CIAC</u>				
60	1988	155 490 95	(10 341 00)	145,149 95	(10,341 00)
61	1989	208 473 09	(13 001 00)	195,472 09	(13 001 00)
62	1990	640,263 64	(37,584 00)	602,679 64	(37,584 00)

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
CIAC AMORTIZATION

Line No	Description (e)	2014	2015		2016
		Balance (b)	Amortization (c)	Balance (d)	Amortization
60	1991	586,635 50	(32 527 00)	554,108 50	(32 527 00)
61	1992	375,754 26	(19 740 00)	356,014 26	(19 740 00)
62	1993				
63	1994				
64	1995				
65	1996				
66	1997				
67	1998				
68	1999				
69	2000				
70	2001				
71	2002				
72	2003				
73	2004				
74	2005				
75	2006				
76	2007				
77	2008				
78	2009				
79	2010				
80	2011				
81	2012				
82	2013				
83	2014				
84	2015				
85					
86	Total CIAC Amortization for 2016 RAM	\$ 94,474,624	\$ (3,142 029)	\$ 95,297,753	\$ (3,232,226)

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
EARNINGS SHARING CALCULATIONS
(\$ in Thousands)

Line No	Description (a)	Reference (b)	Ratemaking Basis Return on Equity		
			Operating Income (c)	Rate Base (d)	Rate of Return (e)
1	Reported Operating Income before ratemaking adj	Dec 2015 Monthly PUC Report p 2A filed 2/23/16 & HELCO-WP H-001	\$ 31 081	\$ 479 495	
2	<u>Ratemaking Adjustments to Line 1</u>				
2a	Incentive Compensation Expenses (net of tax)	HELCO-WP-H-002	289		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HELCO-WP-H-002	234		
2c	Amortization of investment income differential	HELCO-WP-H-003	24		
2d	Income tax on items to be replaced by synchronized interest	HELCO-WP-H-003	(4 060)		
2e	Remove Accrued Earnings Sharing Refund	HELCO-WP-H-005	0		
3	Ratemaking Basis Amounts Post Tax	Sum Lines 1 & 2	\$ 27 548	\$ 479 495	
4	<u>Ratemaking Capitalization</u>		Balances	Ratios	Cost Rate
5	Short Term Debt (12 mo Avg)		\$ 4 958	1 00%	0 93%
6	Long-Term Debt (Simple Avg)		\$ 189 592	38 07%	5 27%
7	Hybrid Securities (Simple Avg)		\$ 9 479	1 90%	7 24%
8	Preferred Stock (Simple Avg)		\$ 6 698	1 35%	8 19%
9	Common Equity (Simple Avg)		\$ 287 285	57 68%	10 00%
10	Total Capitalization	HELCO WP H-004	\$ 497 992	100 00%	8 04%
11	Line 3 Rate Base Amount			\$ 479 495	
12	Weighted Cost of Debt (Sum Lines 5-7)			2 15%	
13	Synchronized Interest Expense Income Tax Factor (Note 1)			\$ 10 329 1 636929121	
13a	Synchronized Interest Expense net of tax			\$ 8 310	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 21 238
15	Less Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				\$ 528
16	Income Available for Common Stock				\$ 20 710
17	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				\$ 276 595
18	Return on Equity for Decoupling Earnings Sharing (Line 16/Line 17)				7 49%
19	<u>Earnings Sharing Revenue Credits</u>		Basis Points		
20	Achieved ROE (basis points)		749		
21	Authorized Return (basis points) (D&O 30168 in Dkt No 2019-0164 filed on 2/8/2012)		1 000		
22	ROE for sharing (basis points)				
23	Sharing Gnd per RAM Provision		First 100 bp	Next 200 bp	All over 300 bp
24	Distribution of Excess ROE (basis points)		0	0	0
25	Ratepayer Share of Excess Earnings		25%	50%	90%
26	Ratepayer Earnings Share - Basis Points				
27	Revenue Credit per Basis Point (Note 2)				\$ 50
28	Earnings Sharing Revenue Credits (thousands)				\$

Footnotes

1	Composite Federal & State Income Tax Rate Income Tax Factor (1 / 1-tax rate)	38 91% 1 636929121
2	Ratemaking Equity Investment (line 19) Basis Point = 1/100 of a percent Earnings Required per Basis Point (thousands) Times Income Tax Conversion Factor Pretax Income Required per Basis Point (thousands) Times Revenue Tax Conversion Factor Revenue Requirement per Basis Point (thousands)	\$ 276 595 0 01% \$ 27 68 1 636929121 \$ 45 1 0975 \$ 50

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
PUC-ORDERED ADJUSTMENTS

Line No	Description	Reference		
	(a)	(b)	(c)	(d)

This Schedule has not been developed yet and will be developed only when/as needed

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RAM CAP

Line No	Description	Reference	Amount \$000	
	(a)	(b)	(c)	
1	Adjusted 2014 Target Revenues	6/3/2015 Decoupling, Sch J	157,448	
2	2015 RAM Cap Increase subject to escalation	Note 1	744	
3	2015 Target Revenues subject to escalation		158,192	
4	2016 GDP Price Index	Sch C	1.5%	
5	2016 RAM Cap Increase excluding Exceptional & Other Matters	Line 3 x Line 4	2,373	
6	RAM Cap for 2015 RAM Revenue Adjustment, Adjusted	Note 2	6,665	
7	RAM Cap for 2016 RAM Revenue Adjustment	Line 5 + Line 6	9,038	Sch A1
Note 1	2015 RAM Cap Increase before Adjustments per Order No. 32866	6/3/2015 Decoupling, Sch J	1,732	
	Less 2015 Depreciation & Amortization in excess of Actual	6/3/2015 Decoupling, Sch J	(472)	
	Less Adjustment for Change in On-cost Clearing Allocation	6/3/2015 Decoupling, Sch A	(516)	
	2015 RAM Cap Increase subject to escalation		744	
Note 2	RAM Cap for 2015 RAM Revenue Adjustment before Adjustments per Order No. 32866	6/3/2015 Decoupling, Sch J	7,653	
	Less 2015 Depreciation & Amortization in excess of Actual	6/3/2015 Decoupling, Sch J	(472)	
	Less Adjustment for Change in On-cost Clearing Allocation	6/3/2015 Decoupling, Sch A	(516)	
	RAM Cap for 2015 RAM Revenue Adjustment, Adjusted		6,665	

HAWAII ELECTRIC LIGHT COMPANY, INC
DECOUPLING CALCULATION WORKBOOK
EXCEPTIONAL & OTHER MATTERS

<u>Line No</u>	<u>Description</u> (a)	<u>Reference</u> (b)	<u>Amount \$000</u> (c)
1	CIS Deferred Cost	Schedule K1	<u>388.9</u>
2	2016 Revenue Adjustment for Exceptional & Other Matters		<u>\$ 388.9</u>

Note 1 Exceptional and Other Matters

See Order No. 32735, filed March 31, 2015, paragraph 107, page 94 - 95

"The Basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap."

Footnote 149 stipulates that such applicable matters include adjustments accounting for CT-1 costs (for Hawaiian Electric) and CIS costs (for all of the Hawaiian Electric Companies) as provided in a stipulated agreement approved by the Commission as amended in Order No. 31126 in Docket No. 2008-0083

HAWAII ELECTRIC LIGHT COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
EXCEPTIONAL & OTHER MATTERS CIS
\$ In thousands

Line No	Description (a)	Reference (b)	HELCO 2010 Test Year Rate Base		HELCO 2016 RAM Rate Base (Note 1)		
			Beg Balance 12/31/2009 (c)	Budgeted Balance 12/31/2010 (d)	Recorded at 12/31/2015 (e)	RAM Projected Amounts (f)	Estimated at 12/31/2016 (g)
1	CIS Def Cost	HELCO-WP-D1-001	\$ -	\$ -	2 010	(213)	1 797
2	CIS ADIT						
3	28532 - CIS Project	Note 2			(756)	80	(676)
4	28612 CIS Interest	Note 3			(18)	2	(16)
5	Adjustment	HELCO WP-D4-002			11	(1)	9
6	Total	Sum Line 1 Line 5	\$ -	\$ -	\$ 1 246	\$ (132)	\$ 1 114
7	2015 Average Balance						\$ 1 180.1
8	Change in Rate Base						\$ 1 180.1
9	Pretax Rate of Return	Schedule D					11.94%
10	Pretax Return Requirement	Line 8 x Line 9					\$ 140.9
11	Revenue Requirement \$000	Line 10 x Line 14					\$ 154.6
12	CIS Amortization	HELCO WP-D1-001					\$ 213.5
13	Revenue Requirement \$000	Line 12 x Line 14					\$ 234.3
14	Revenue Tax Factor (1/(1-8.885%))	Schedule D					1.0975
15	Revenue Requirement (Return on/of Investment)	Line 11 + Line 13					\$ 388.9

Note 1 See Order No. 32735 paragraph 107, Page 94-95 filed March 31, 2015 in which the commission noted that the basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission which shall in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap. Accordingly, adjustments for CT 1 costs (for Hawaiian Electric) and CIS costs (for all of the Hawaiian Electric Companies) as provided in a stipulated agreement approved by the Commission as amended in Order No. 31126 in Docket No. 2008-0083 are being treated as Exceptional & Other Matters not subject to the RAM Cap.

Note 2 #28532 CIS Project costs

	Reference	Federal	State	Total
Balance at 12/31/15 As Adjusted	6/3/2015 Decoupling Sch K1	(639,332)	(116,905)	(756,237)
2016 Book Amortization	HELCO WP K1-002	206,413	206,413	
2016 Tax Amortization	HELCO WP K1-002	-	-	
Total 2016 Activity		206,413	206,413	
State Tax Deduction		12,416		
Tax Rate	Schedule F	193,997	6.02%	
2016 Deferred Taxes		67,899	12,416	80,315
Balance at 12/31/16		(571,434)	(104,491)	(675,924)

Note 3 #28612 CIS Interest

	Reference	Federal	State	Total
Balance at 12/31/15	HELCO-WP D4-001A&B	(15,239)	(2,787)	(18,026)
Amortization	HELCO-WP K1-003	4,920	4,920	
Tax Rate	Schedule F	32.89%	6.02%	
2016 Deferred Taxes		1,618	296	1,914
Balance at 12/31/16		(13,621)	(2,491)	(16,112)

Hawaii Electric Light Company, Inc
Sales Forecast for June 2016 to May 2017
in GWh

	2016							2017					Total
	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	
R	27 943	30 342	30 002	26 560	28 526	29 150	31 319	32 507	26 222	29 900	28 169	27 702	348 342
G/J	33 435	35 110	36 034	34 902	36 234	33 682	33 649	32 121	30 656	33 272	32 479	34 300	405 875
P	20 139	21 239	21 791	20 586	21 337	20 562	20 014	19 843	18 485	20 581	19 716	20 686	244 979
F	0 397	0 426	0 426	0 422	0 423	0 431	0 427	0 427	0 394	0 413	0 399	0 451	5 036
Total	81 914	87 117	88 254	82 470	86 520	83 825	85 409	84 898	75 757	84 165	80 764	83 138	1004 231

Source Hawaii Electric Light Company, Inc Sales Forecast completed in May 2015

Hawaii Electric Light Company, Inc
Energy Delivery Methodology Comparison

				A	B	C = A - B
Line	Account Group	Ind		Current Method	Old Method	Difference
1	G30	NE	Non-billable O&M expense other than supervision	3,415,273	3,625,728	(210,455)
2		NS	Non-billable O&M expense supervision	22,651	4,753	17,898
3	G50	NI	Non-billable Install (Capital)	6,313,937	5,406,731	907,207
4		NR	Non-billable Removal	869,186	1,440,942	(571,756)
5	G60	BE	Billable O&M expense	89,375	190,977	(101,603)
6	G70	BT	Billable O&M expense	24,869	50,569	(25,700)
7		BE	Billable Temporary Facilities	30,042	45,634	(15,592)
8	G80	NC	Non-billable Cleaning	-	-	-
9		NP	Non-billable Preliminary Engineering	-	-	-
10			Totals	10,765,333	10,765,333	(0)

Note 1 The total 2015 O&M impact of the change in on-cost clearing allocation amount is calculated as follows

O&M expense items	Line 1 + Line 2	(192,557)
Revenue Tax Factor	Schedule C	1,0975
		(211,331)
		To Sch A1

Hawaii Electric Light Company, Inc
Adjustment For Prior Year RBA Accrual
Recovery of 12/31/13 RBA Balance

		2015				
		January	February	March	April	May
Billed RBA Revenues	Note 1	1,090,679	1 036 971	1 009 460	1 063,236	1 022,765
Net Unbilled Revenues	Note 1	(46 771)	(52 667)	61,344	(13 706)	35 193
Total billed + Unbilled		1 043,908	984,304	1 070 804	1 049 530	1,057,958
x % Share for RBA	Note 2	63 1340%	63 1340%	63 1340%	63 1340%	63 1340%
RBA Revenues (Recovery of 12/31/13 RBA balance)		659 061	621 430	676,041	662 611	667 931
		Schedule B2				
Less Revenue Taxes	0 08885	(58 558)	(55 214)	(60 066)	(58 873)	(59 346)
RBA Revenues (Recovery of 12/31/13 RBA balance), net of Revenue Taxes		600 503	566 216	615 975	603 738	608,585
		Schedule B				

* Differences are due to rounding

Note 1 RBA rate adjustment revenues per the Billed reports and Unbilled reports include RBA revenues RAM revenues and ESM credits Therefore an allocation % is utilized to determine RBA revenues

Note 2 RBA Rate Adjustment Allocation for June 1, 2014 May 31 2015 is per Transmittal No 14-04 (Decoupling) RBA Rate Adjustment (Filed May 14 2014), Schedule A Note (1)

Hawaii Electric Light Company, Inc
Adjustment for Prior Year RBA Accrual
Recovery of 12/31/14 RBA Balance

		2015						
		June	July	August	September	October	November	December
Billed RBA Revenues	Note 1	\$ 934,659	\$ 1,265,526	\$ 1,278,489	\$ 1,372,376	\$ 1,300,212	\$ 1,234,680	\$ 1,313,179
Net Unbilled Revenues	Note 1	(62)	64,730	69,172	(89,107)	9,027	22,282	(47,629)
Total billed + Unbilled		934,596	1,330,256	1,347,661	1,283,269	1,309,239	1,256,962	1,265,550
x % Share for RBA	Note 2	56.9221%	56.9221%	56.9221%	56.9221%	56.9221%	56.9221%	56.9221%
RBA Revenues (Recovery of 12/31/14 RBA balance)		\$ 531,992	\$ 757,210	\$ 767,117	\$ 730,463	\$ 745,246	\$ 715,489	\$ 720,377
		Schedule B2						
Less Revenue Taxes	0.09885	(47,269)	(67,278)	(68,158)	(64,902)	(66,215)	(63,571)	(64,005)
RBA Revenues (Recovery of 12/31/14 RBA Balance), net of Revenue Taxes		\$ 484,725	\$ 689,932	\$ 698,959	\$ 665,561	\$ 679,031	\$ 651,918	\$ 656,372
		Schedule B						

* Differences are due to rounding

Note 1 RBA rate adjustment revenues per the Billed reports and Unbilled reports include both RBA and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2 RBA Rate Adjustment Allocation for June 8, 2015 - May 31, 2016 is per Transmittal No. 15-04 (Decoupling) RBA Rate Adjustment (Filed June 3, 2015) Schedule A, Note (1).

HELCO-WP B-002
HAWAII ELECTRIC LIGHT COMPANY, INC.
MONTHLY FINANCIAL REPORT
January 2015 Customer Correction for Incorrect Rate Schedule

REVENUE BALANCING ACCOUNT REVENUE TRACKER

Revised

	May 14	Jun-14	Jul-14	Aug 14	Sep 14	Oct-14	Nov-14	
L1 Monthly Target Revenue	11 554 261	11 835 604	12 304 971	12 589 809	11 948 925	12 248 004	11 783 781	
L2 Recorded Adjusted Revenue	11 017 902	11 051 166	11 811 811	11 772 385	11 243 213	11 751 782	11 160 679	
L3 L1 L2 Target vs Actual Revenue	536 359	584 438	493 160	817 424	705 712	496 222	603 102	
L4 Reversal of Previous Year Accrual	(357 105)	(605 866)	(654 645)	(653 039)	(624 827)	(653 264)	(816 455)	
L5 L4 + L3 Net RBA Change	179 254	(21 428)	(161 485)	164 385	80 885	(157 042)	(113 353)	
L6 Beginning RBA Balance	7 247 838	7 441 142	7 432 008	7 284 437	7 481 010	7 559 366	7 419 314	
L7 L6 + L5 End Balance Before Interest	7 427 092	7 419 714	7 270 523	7 448 822	7 541 895	7 402 324	7 405 961	
L8 (L6 + L7) + 2 or (L6 + L7) + 2 * [1] Balance Subject to Interest	4 482 457	4 539 248	4 490 888	4 500 274	4 582 638	4 570 048	4 528 381	
L9 L8 x (6% or 3.25%) + 12 Interest	12 140	12 294	12 163	12 188	12 411	12 377	12 284	
L10 L7 + L9 Ending RBA Balance	7 439 232	7 432 008	7 282 686	7 461 010	7 554 306	7 414 701	7 418 225	
Principal Portion 18670301	6 906 223	6 888 705	6 725 220	6 891 356	6 972 241	6 820 259	6 811 519	
Interest Portion 18670302	533 009	545 303	557 466	569 654	582 065	594 442	606 706	
Total	7 439 232	7 432 008	7 282 686	7 461 010	7 554 306	7 414 701	7 418 225	
revenues charged in incorrect period adjustment		136	1 661	1 787	1 777	2 426	1 783	9 569
tax rate	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	
net of tax		124	1 514	1 628	1 619	2 211	1 625	8 719
revenue tax adjustment		12	148	159	158	218	158	850
Target vs Actual Difference								
Per original calculation	11 017 902	11 051 290	11 813 325	11 774 013	11 244 832	11 753 993	11 162 304	
Adjustment for billing error		(124)	(1 514)	(1 628)	(1 619)	(2 211)	(1 625)	(8 719)
Revised Revenues	11 017 902	11 051 166	11 811 811	11 772 385	11 243 213	11 751 782	11 160 679	
Revised Adjustment	536 359	584 438	493 160	817 424	705 712	496 222	603 102	
RBA Adjustment Recorded	536 359	584 314	491 646	815 796	704 093	494 011	601 477	
RBA Adjustment		124	1 514	1 628	1 619	2 211	1 625	8 719 JE #H000057807

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation:

Income Tax Factor (1 / 1 tax rate) 1.636929121

Note [2]

Totals may not add exactly due to rounding.

Note [3]

A manual adjustment was made January 2015 to increase the RBA by \$8,719. During the account review process, the Company identified a customer on an incorrect rate schedule based on actual kWh usage. The customer was changed from rate schedule G to rate J November 2014. Customer Service recalculated the customer's billings from June 2014 through November 2014 based upon rate schedule J and the RBA was adjusted accordingly.

HELCO-WP-B-003
HAWAII ELECTRIC LIGHT COMPANY, INC.
MONTHLY FINANCIAL REPORT
March 2015 Customer Correction for Meter Tampering

REVENUE BALANCING ACCOUNT REVENUE TRACKER

Revised

	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	
L1 Monthly Target Revenue	11 581 870	11 871 782	11 402 413	11 733 718	11 457 830	10 448 911	11 540 457	11 043 499	11 554 281	11 635 604	12 304 971	12 589 808	11 948 925	12 248 004	11 783 781	12 105 585	
L2 Recorded Adjusted Revenue	10 984 448	11 258 586	10 984 115	11 250 391	11 097 640	10 149 184	11 245 696	10 877 183	11 017 876	11 051 361	11 813 411	11 774 062	11 244 933	11 754 081	11 182 385	11 407 833	
L3 L1 - L2 Target vs Actual Revenue	597 422	615 176	438 298	483 327	359 984	300 717	294 761	166 306	536 285	584 243	491 560	815 747	703 992	493 923	601 396	697 752	
L4 Reversal of Previous Year Accrual	(360 428)	(369 003)	(358 349)	(367 943)	(359 750)	(325 767)	(359 088)	(349 480)	(357 105)	(805 866)	(854 845)	(653 036)	(824 827)	(853 264)	(816 455)	(625 567)	
L5 L4 + L3 Net RBA Change	236 994	246 173	78 949	115 384	225	(25 050)	(64 327)	(183 174)	179 180	(21 623)	(163 085)	162 708	70 165	(159 341)	(15 059)	72 155	
L6 Beginning RBA Balance	8 523 786	8 694 493	7 190 344	7 288 694	7 454 847	7 492 347	7 509 951	7 456 440	7 247 449	7 440 678	7 431 348	7 282 174	7 457 085	7 553 693	7 411 331	7 408 322	
L7 L6 - L5 End Balance Before Interest	8 900 782	7 140 686	7 289 293	7 402 948	7 455 072	7 497 297	7 445 634	7 273 290	7 426 629	7 419 055	7 288 283	7 444 852	7 538 230	7 394 352	7 398 272	7 480 677	
L8 L8 = L7 - 2 or (L8 = L7) - 2 - (1) Balance Subject to Interest	6 742 265	7 017 580	7 229 619	7 364 358	7 454 980	7 479 822	7 477 798	7 394 853	4 482 197	4 538 906	4 489 996	4 498 379	4 578 702	4 545 860	4 522 982	4 547 906	
L9 L8 * (6% or 3.25%) - 12 Interest	33 711	35 088	36 149	36 722	37 275	37 399	20 252	19 648	12 139	12 293	12 180	12 183	12 403	12 386	12 250	12 317	
L10 L7 + L9 Ending RBA Balance	6 894 493	7 175 754	7 305 442	7 438 770	7 492 347	7 504 696	7 495 886	7 293 212	7 438 768	7 431 348	7 280 423	7 457 065	7 548 633	7 408 718	7 408 522	7 482 994	
Principal Portion 18670301	6 549 575	6 705 748	6 869 252	6 987 014	7 003 316	6 978 268	6 910 204	6 726 584	6 905 784	6 888 051	6 722 696	6 887 425	6 968 590	6 812 309	6 801 863	6 874 018	
Interest Portion 18670302	344 918	380 006	436 190	451 759	489 031	526 430	546 682	568 628	533 004	545 297	557 457	569 640	582 043	594 406	608 659	618 976	
Total	6 894 493	7 175 754	7 305 442	7 438 770	7 492 347	7 504 696	7 495 886	7 293 212	7 438 768	7 431 348	7 280 423	7 457 065	7 548 633	7 408 718	7 408 522	7 482 994	
revenues charged in incorrect period adjustment		(79)	(2)	(70)	(64)	(73)	(74)	(80)	(81)	(77)	(95)	(53)	(111)	(96)	(89)	(192)	(1 217)
tax rate	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	
net of tax		(72)	(2)	(64)	(58)	(66)	(68)	(55)	(74)	(71)	(86)	(49)	(101)	(88)	(81)	(175)	(1 109)
revenue tax adjustment		(7)	(0)	(6)	(6)	(6)	(7)	(5)	(7)	(7)	(8)	(5)	(10)	(9)	(6)	(17)	(108)
Target vs Actual Difference																	
Per original calculation	10 984 448	11 258 514	10 984 113	11 250 327	11 097 588	10 149 128	11 245 628	10 877 138	11 017 902	11 051 290	11 813 325	11 774 013	11 244 832	11 753 993	11 182 304	11 407 658	
Adjustment for billing error		72	2	64	58	66	68	55	74	71	86	49	101	88	81	175	1 109
Revised Revenues	10 984 448	11 258 586	10 984 115	11 250 391	11 097 646	10 149 194	11 245 696	10 877 193	11 017 976	11 051 361	11 813 411	11 774 062	11 244 933	11 754 081	11 182 385	11 407 833	
Revised Adjustment	597 422	615 176	438 298	483 327	359 984	300 717	294 761	166 306	536 285	584 243	491 560	815 747	703 992	493 923	601 396	697 752	
RBA Adjustment Recorded	597 422	615 248	438 300	483 391	360 042	300 783	294 829	166 361	536 359	584 314	491 648	815 795	704 093	494 011	601 477	697 827	(1 109)
RBA Adjustment		(72)	(2)	(64)	(58)	(66)	(68)	(55)	(74)	(71)	(86)	(49)	(101)	(88)	(81)	(175)	JE #H000058975

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation:

Income Tax Factor (1 / 1 tax rate) 1.636929121

Note [2]

Totals may not add exactly due to rounding

Note [3]

A manual adjustment was made March 2015 to decrease the RBA by \$1,109. Per Customer Service the customer was tampering with the meter to reduce actual kWh's used. The issue was discovered and documented by a field technician during a meter read. The Company changed the meter to an ERT meter so the customer will not be able to tamper with the meter again. Customer Service recalculated the customer billings from October 2013 through December 2014 and the RBA was adjusted accordingly.

HELCO-WP-B-004
HAWAII ELECTRIC LIGHT COMPANY, INC.
MONTHLY FINANCIAL REPORT
October 2015 Change of Rate Schedule from G to R

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

Revised		Pro-rated													
		Apr-12	May 12	Jun-12	Jul 12	Aug 12	Sep 12	Oct 12	Nov 12	Dec-12	Jan 13	Feb-13	Mar-13	Apr 13	
L1		Monthly Target Revenue	8 099 842	11 556 082	11 210 037	11 758 125	12 030 111	11 417 861	11 703 653	11 241 014	11 567 157	11 294 996	10 301 483	11 378 512	10 886 659
L2		Recorded Adjusted Revenue	8 170,219	11 274 730	10 458 510	11 223 268	11 330 134	10 601 843	11 226 659	10 791 968	11 156 417	11 163 938	9 931 581	11 215 915	10 715 585
L3	L1 - L2	Target vs. Actual Revenue	(70 377)	281 352	751 527	534 857	699 977	816 018	476 994	449 046	410 740	131 058	369 902	160 597	171 074
L4		Reversal of Previous Year Accrual													
L5	L4 + L3	Net RBA Change	(70 389)	281 352	751 527	534 857	699 977	816 018	476 994	449 046	410 740	131 058	369 902	160 597	171 074
L6		Beginning RBA Balance		(70 565)	211 138	965 600	1 506 622	2 215 882	3 062 247	3 555 745	4 017 982	4 486 207	4 871 172	5 070 689	5 257 008
L7	L6 + L5	End Balance Before Interest	(70 389)	210 787	962 665	1 500 457	2 206 599	3 031 900	3 539 241	4 004 791	4 428 722	4 617 265	5 041 074	5 231 253	5 428 082
L8	(L6 + L7) * 2 or (L6 + L7) * 2 + [1]	Balance Subject to Interest	(35 195)	70 111	566 902	1 233 029	1 856 611	2 623 891	3 300 744	3 780 268	4 223 352	4 551 738	4 858 123	5 150 971	5 342 545
L9	L8 x (8% or 3.25%) + 12	Interest	(176)	351	2 935	6 165	9 283	13 119	18 504	18 901	21 117	22 759	24 281	25 755	26 713
L10	L7 + L9	Ending RBA Balance	(70 565)	211 138	965 600	1 506 622	2 215 882	3 045 019	3 555 745	4 023 692	4 449 839	4 640 024	5 065 355	5 257 008	5 454 795
		Principal Portion 18670301	(70 389)	210 963	962 490	1 497 347	2 197 324	3 013 342	3 507 489	3 956 535	4 381 217	4 527 993	4 928 658	5 094 586	5 265 640
		Interest Portion 18670302	(176)	175	3 110	9 275	18 558	31 677	48 256	87 157	88 622	112 031	136 697	162 442	169 155
		Total	(70 565)	211 138	965 600	1 506 622	2 215 882	3 045 019	3 555 745	4 023 692	4 449 839	4 640 024	5 065 355	5 257 008	5 454 795
		revenues charged in incorrect period adjustment	13	36	35	34	34	35	34	34	34	34	35	36	36
		tax rate	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%
		net of tax	12	32	32	31	31	32	31	31	31	31	32	33	33
		revenue tax adjustment	1	3	3	3	3	3	3	3	3	3	3	3	3
		Target vs Actual Difference													
		Per original calculation	8 170 231	11 274 762	10 458 542	11 223 289	11 330 165	10 601 875	11 226 690	10 791 999	11 156 448	11 163 969	9 931 613	11 215 948	10 715 618
		Adjustment for billing error	(12)	(32)	(32)	(31)	(31)	(32)	(31)	(31)	(31)	(31)	(32)	(33)	(33)
		Revised Revenues	8 170 219	11 274 730	10 458 510	11 223 268	11 330 134	10 601 843	11 226 659	10 791 968	11 156 417	11 163 938	9 931 581	11 215 915	10 715 585
		Revised Adjustment	(70 377)	281 352	751 527	534 857	699 977	816 018	476 994	449 046	410 740	131 058	369 902	160 597	171 074
		RBA Adjustment Recorded	(70 389)	281 320	751 495	534 826	699 946	815 986	476 963	449 015	410 709	131 027	369 870	160 564	171 041
		RBA Adjustment	12	32	32	31	31	32	31	31	31	31	32	33	33

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation:
Income Tax Factor (1 / 1.1 tax rate) = 1.636929121

Note [2]

Totals may not add exactly due to rounding.

Note [3]

A manual adjustment was made October 2015 to increase the RBA by \$1,260. The customer's home was completed in March 2006, which is reflected on the Hawaii County completed building permit. The Company was notified by Hawaii County August 2015 that this customer's permit was complete and closed March 2006. When a permit is closed due to completion, the customer is changed to rate Schedule R instead of rate Schedule G, resulting in lower rates. Based on this, October 2015, the Company re-calculated the customer's billing from March 2006 and adjusted the RBA accordingly.

HELCO-WP B-004
HAWAII ELECTRIC LIGHT COMPANY, INC.
MONTHLY FINANCIAL REPORT
October 2015 Change of Rate Schedule from G to R

REVENUE BALANCING ACCOUNT REVENUE TRACKER

Revised

		May 13	Jun-13	Jul 13	Aug 13	Sep-13	Oct 13	Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr-14	May 14
L1	Monthly Target Revenue	11 390 130	11 278 173	11 926 979	12 203 067	11 581 870	11 871 762	11 402 413	11 733 718	11 457 630	10 449 911	11 540 457	11 043 499	11 554 261
L2	Recorded Adjusted Revenue	11 005 187	10 701 090	11 360 886	11 594 818	10 984 416	11 256 483	10 964 082	11 250 298	11 097 557	10 149 096	11 245 598	10 877 106	11 017 871
L3	L1 L2 Target vs Actual Revenue	384 963	577 083	565 993	608 249	597 454	615 279	438 331	483 422	360 073	300 815	294 861	166 393	536 390
L4	Reversal of Previous Year Accrual		(351 098)	(372 772)	(378 158)	(360 428)	(369 003)	(359 349)	(367 943)	(359 759)	(325 767)	(359 088)	(349 480)	(357 105)
L5	L4 + L3 Net RBA Change	384 963	225 985	193 221	230 091	237 026	246 276	78 982	115 479	314	(24 952)	(64 227)	(183 087)	179 285
L6	Beginning RBA Balance	5 455 710	5 875 157	6 129 656	6 354 008	6 623 949	6 894 687	7 190 642	7 286 997	7 455 277	7 492 868	7 510 583	7 457 164	7 248 263
L7	L6 + L5 End Balance Before Interest	5 840 673	6 101 142	6 322 877	6 584 099	6 860 975	7 140 963	7 269 624	7 402 476	7 455 591	7 467 918	7 446 356	7 274 077	7 427 548
L8	(L6 + L7) + 2 or (L6 + L7) + 2 - [1] Balance Subject to Interest	5 648 182	5 988 150	6 228 267	6 469 054	6 742 462	7 017 825	7 230 133	7 344 737	7 455 434	7 480 392	7 478 470	7 365 621	4 482 727
L9	L8 x (6% or 3.25%) + 12 Interest	28 241	29 941	31 131	32 345	33 712	35 089	36 151	36 724	37 277	37 402	20 254	19 949	12 141
L10	L7 + L9 Ending RBA Balance	5 868 914	6 131 083	6 354 008	6 616 444	6 894 687	7 176 052	7 305 775	7 439 200	7 492 868	7 505 318	7 466 610	7 294 026	7 439 689
	Principal Portion 18670301	5 651 518	5 883 746	6 075 540	6 305 631	6 549 767	6 796 043	6 889 580	6 987 437	7 003 828	6 978 876	6 919 914	6 727 381	6 806 666
	Interest Portion 18670302	217 396	247 337	278 468	310 813	344 920	380 009	416 195	451 763	489 040	526 442	546 696	566 645	533 023
	Total	5 868 914	6 131 083	6 354 008	6 616 444	6 894 687	7 176 052	7 305 775	7 439 200	7 492 868	7 505 318	7 466 610	7 294 026	7 439 689
	revenues charged in incorrect period adjustment	36	34	35	34	35	34	34	34	34	35	35	35	34
	tax rate	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%
	net of tax	33	31	32	31	32	31	31	31	31	32	32	32	31
	revenue tax adjustment	3	3	3	3	3	3	3	3	3	3	3	3	3
	Target vs Actual Difference													
	Per original calculation	11 005 200	10 701 121	11 361 018	11 549 849	10 984 448	11 256 514	10 964 113	11 250 327	11 097 588	10 149 128	11 245 628	10 877 138	11 017 902
	Adjustment for billing error	(33)	(31)	(32)	(31)	(32)	(31)	(31)	(31)	(31)	(32)	(32)	(32)	(31)
	Revised Revenues	11 005 187	10 701 090	11 360 886	11 549 818	10 984 416	11 256 483	10 964 082	11 250 298	11 097 557	10 149 096	11 245 598	10 877 106	11 017 871
	Revised Adjustment	384 963	577 083	565 993	608 249	597 454	615 279	438 331	483 422	360 073	300 815	294 861	166 393	536 390
	RBA Adjustment Recorded	384 930	577 052	565 961	608 218	597 422	615 248	438 300	483 391	360 042	300 783	294 829	166 361	536 359
	RBA Adjustment	33	31	32	31	32	31	31	31	31	32	32	32	31

HELCO-WP-B-004
HAWAII ELECTRIC LIGHT COMPANY, INC.
MONTHLY FINANCIAL REPORT
October 2015 Change of Rate Schedule from G to R

REVENUE BALANCING ACCOUNT REVENUE TRACKER

Revised

		Jun 14	Jul 14	Aug 14	Sep-14	Oct-14	Nov 14	Dec 14	Jan 15	Feb 15	Mar 15	Apr-15	May 15	Jun-15
L1	Monthly Target Revenue	11 635 604	12 304 971	12 589 809	11 948 925	12 248 004	11 763 781	12 105 585	11 820 748	10 781 092	11 906 199	11 393 492	11 926 441	11 642 774
L2	Recorded Adjusted Revenue	11 051 258	11 813 293	11 773 983	11 244 802	11 753 964	11 162 273	11 407 627	10 995 906	10 403 619	11 426 432	11 190 843	11 150 302	11 065 085
L3	L1 - L2 Target vs. Actual Revenue	584 346	491 678	815 826	704 123	494 040	601 508	697 958	824 842	377 473	479 767	202 649	770 139	577 689
L4	Reversal of Previous Year Accrual	(805 866)	(654 845)	(653 039)	(624 827)	(653 264)	(618 455)	(625,597)	(600 503)	(566 216)	(615 975)	(603 738)	(608 585)	(484 725)
L5	L4 + L3 Net RBA Change	(21 520)	(162 967)	162 787	79 296	(159 224)	(14 947)	72 361	224 339	(188 743)	(136 208)	(401 089)	161 554	92 964
L6	Beginning RBA Balance	7 441 599	7 432 373	7,283 319	7 458 291	7 555 052	7 412 809	7 410,114	7 503 514	7 740 453	7 563 252	7 439 445	7 050 333	7,223 686
L7	L6 + L5 End Balance Before Interest	7 420 079	7 269 406	7 446 106	7 537 587	7 395 828	7 397 862	7 482,475	7 727 853	7 551 710	7 427 044	7 038 356	7 211 887	7 316 650
L8	(L6 + L7) - 2 or (L5 + L7) - 2 + [1] Balance Subject to Interest	4 539 500	4 490 659	4 499 103	4 580 491	4 566 746	4 523 920	4 548 942	4 652 421	4 670 891	4 578 786	4 422 245	4 356 395	4 441 346
L9	L8 x (6% or 3.25%) + 12 Interest	12 294	12 162	12 185	12 405	12 368	12 252	12 320	12 600	12 651	12 401	11 977	11 799	12 029
L10	L7 + L9 Ending RBA Balance	7 432 373	7 281 568	7 458 291	7 549 992	7 408 196	7 410 114	7 494,795	7 740 453	7 564 361	7 439 445	7 050 333	7 223 686	7 328 679
	Principal Portion 18670303	8 897 056	8 724 089	8 888 627	8 967 923	8 813 759	8,803 425	8 875,786	7 108 844	6 920 101	6 782 784	6 381 695	6 543 249	6 636,213
	Interest Portion 18670302	545 317	557 479	569 684	582 069	594 437	606 689	619 009	631 609	644 260	656 661	668 638	680 437	692 466
	Total	7 432 373	7 281 568	7 458 291	7 549 992	7 408 196	7 410 114	7 494 795	7 740 453	7 564 361	7 439 445	7 050 333	7 223 686	7 328 679
	revenues charged in incorrect period adjustment	35	35	33	33	32	34	34	33	34	35	34	33	33
	tax rate	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%
	net of tax	32	32	30	30	29	31	31	30	31	32	31	30	30
	revenue tax adjustment	3	3	3	3	3	3	3	3	3	3	3	3	3
	Target vs Actual Difference													
	Per original calculation	11 051 290	11 813 325	11 774 013	11 244 832	11 753 993	11 162 304	11 407 658	10 995 936	10 403 650	11 426 464	11 190 874	11 150 332	11 065 115
	Adjustment for billing error	(32)	(32)	(30)	(30)	(29)	(31)	(31)	(30)	(31)	(32)	(31)	(30)	(30)
	Revised Revenues	11 051 258	11 813,293	11 773 983	11 244 802	11 753 964	11 162 273	11 407 627	10,995 906	10 403 619	11 426 432	11 190 843	11 150 302	11 065 085
	Revised Adjustment	584 346	491 678	815 826	704 123	494 040	601 508	697 958	824 842	377 473	479 767	202 649	770 139	577 689
	RBA Adjustment Recorded	584 314	491 646	815 796	704 093	494 011	601 477	697 927	824 812	377 442	479 735	202 618	770 109	577 659
	RBA Adjustment	32	32	30	30	29	31	31	30	31	32	31	30	30

HELCO WP B-004
HAWAII ELECTRIC LIGHT COMPANY INC
MONTHLY FINANCIAL REPORT
October 2015 Change of Rate Schedule from G to R

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

Revised		Jul-15	Aug 15	
L1	Monthly Target Revenue	12 429 089	12 716 008	
L2	Recorded Adjusted Revenue	12 214 241	12 404 201	
L3	L1 L2 Target vs Actual Revenue	214 848	311 807	
L4	Reversal of Previous Year Accrual	(689 932)	(698 959)	
L5	L4 + L3 Net RBA Change	(475 084)	(387 152)	
L6	Beginning RBA Balance	7 328 879	6 865 327	
L7	L6 + L5 End Balance Before Interest	6 853 595	6 478 175	
L8	(L6 + L7) + 2 or (L6 + L7) + 2 + [1] Balance Subject to Interest	4 331 976	4 075 773	
L9	L8 x (6% or 3.25%) + 12 Interest	11 732	11 039	
L10	L7 + L9 Ending RBA Balance	6 865 327	6 489 214	
	Principal Portion 18670301	6 161 129	5 773 977	
	Interest Portion 18670302	704 198	715 237	
	Total	6 865 327	6 489 214	
	revenues charged in incorrect period adjustment	32	31	1 383
	tax rate	91.115%	91.115%	
	net of tax	29	29	1 260
	revenue tax adjustment	3	3	123
	Target vs Actual Difference			
	Per original calculation	12 214 270	12 404,230	
	Adjustment for billing error	(29)	(29)	(1 260)
	Revised Revenues	12 214,241	12 404 201	
	Revised Adjustment	214 848	311 807	
	RBA Adjustment Recorded	214 819	311 778	
	RBA Adjustment	29	29	1 260 JE #H000056588

HELCO WP B-005
HAWAII ELECTRIC LIGHT COMPANY, INC.
MONTHLY FINANCIAL REPORT
November 2015 Correction to Interest Calculation

REVENUE BALANCING ACCOUNT REVENUE TRACKER

Revised		As Booked		As Corrected	Difference
		Oct 15	Oct-15		
L1		Monthly Target Revenue	12 371 592	12 371 592	
L2		Recorded Adjusted Revenue	12 075 238	12 075 236	
L3	L1 - L2	Target vs. Actual Revenue	296 356	296 356	
L4		Reversal of Previous Year Accrual	(745 246)	(879 031)	68 215
L5	L4 + L3	Net RBA Change	(448 890)	(382 675)	68 215
L6		Beginning RBA Balance	6 182 857	6 182 857	
L7	L6 + L5	End Balance Before Interest	5 713 967	5 780 182	68 215
L8	(L6 + L7) ÷ 2 or (L6 + L7) ÷ 2 × [1]	Balance Subject to Interest	3 627 776	3 648 001	20 225
L9	L8 × (6% or 3.25%) ÷ 12	Interest	9 825	9 880	55
L10	L7 + L9	Ending RBA Balance	5 723 792	5 790 062	68 270
		Balance Subject to Interest			20 225
		Interest @ 3.25%			55
		Revenue Tax			5

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation:

Income Tax Factor (1 / (1 - tax rate)) = 1.636929121

Note [2]

Totals may not add exactly due to rounding.

Note [3]

A manual adjustment was made November 2015 to increase the RBA interest by \$55. October 2015, the company identified an error in the RBA interest calculation after the monthly financials were closed but prior to release of any financial reports. The error occurred when calculating the RBA balance subject to interest. The October 2015 RBA interest was calculated using the RBA reversal of previous year accrual principal and related revenue taxes of (\$745,246) instead of properly using RBA reversal principal only of (\$879,031), a difference of \$68,215. The error understated the RBA interest calculation by \$55 plus related revenue taxes of \$5. Due to immateriality, the error was corrected November 2015.

HELCO-WP B-006
HAWAII ELECTRIC LIGHT COMPANY, INC.
MONTHLY FINANCIAL REPORT
December 2015 Change of Rate Schedule from J to P

REVENUE BALANCING ACCOUNT REVENUE TRACKER

Revised

			Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	
L1		Monthly Target Revenue	10,781,082	11,908,199	11,393,492	11,920,441	11,642,774	12,429,089	12,718,008	
L2		Recorded Adjusted Revenue	10,403,650	11,425,527	11,189,581	11,149,238	11,063,862	12,213,248	12,403,254	
L3	L1 - L2	Target vs. Actual Revenue	377,442	480,672	203,911	771,203	578,912	215,843	312,754	
L4		Reversal of Previous Year's Accrual	(508,218)	(615,975)	(603,738)	(608,585)	(484,725)	(680,932)	(698,959)	
L5	L4 + L3	Net RBA Change	(130,776)	(135,303)	(399,827)	(162,618)	94,187	(474,089)	(386,205)	
L6		Beginning RBA Balance	7,739,745	7,562,511	7,439,608	7,051,759	7,228,179	7,332,400	6,870,050	
L7	L6 + L5	End Balance Before Interest	7,550,971	7,427,208	7,039,781	7,214,377	7,320,366	6,858,311	6,483,845	
L8	(L6 + L7) * 2 or (L6 + L7) - 2 * [1]	Balance Subject to Interest	470,549	4,578,610	4,422,730	4,357,591	4,443,242	4,334,553	4,078,948	
L9	L8 * (6% or 3.25%) * 12	Interest	12,649	12,400	11,678	11,802	12,034	11,739	11,047	
L10	L7 - L9	Ending RBA Balance	7,563,620	7,439,608	7,051,759	7,226,179	7,332,400	6,870,050	6,494,892	
		Principal Portion 18870301	6,918,470	6,782,058	6,382,231	6,544,849	6,639,036	6,164,947	5,778,742	
		Interest Portion 18870302	645,150	657,550	669,528	681,330	693,364	705,103	716,150	
		Total	7,563,620	7,439,608	7,051,759	7,226,179	7,332,400	6,870,050	6,494,892	
		revenues charged in incorrect period adjustment		1,028	1,419	1,201	1,375	1,124	1,071	7,218
		tax rate	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	91.115%	
		net of tax	937	1,293	1,094	1,253	1,024	976	657	6,577
		revenue tax adjustment	91	128	107	122	100	95	641	
		Target vs Actual Difference								
		Per original calculation	10,403,650	11,425,464	11,190,874	11,150,332	11,065,115	12,214,270	12,404,230	
		Adjustment for billing error	(937)	(1,293)	(1,094)	(1,253)	(1,024)	(976)	(657)	(6,577)
		Revised Revenues	10,403,650	11,425,527	11,189,581	11,149,238	11,063,862	12,213,248	12,403,254	
		Revised Adjustment	377,442	480,672	203,911	771,203	578,912	215,843	312,754	
		RBA Adjustment Recorded	377,442	479,735	202,818	770,109	577,850	214,619	311,778	
		RBA Adjustment	937	1,293	1,094	1,253	1,024	976	657	6,577 JE #H000064134

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation:

Income Tax Factor (1 / (1 + tax rate)) = 0.936929121

Note [2]

Totals may not add exactly due to rounding.

Note [3]

A manual adjustment was made December 2015 to increase the RBA by \$6,577. Based upon a review of the customers account, the customer no longer had the required usage to qualify for rate schedule J as of February 2015. The customer was changed to rate Schedule P August 2015 and the Company rebilled the customer under rate schedule P from February 2015 through August 2015.

Hawaii Electric Light Company, Inc

Bargaining Unit Wage Increase per Collective Bargaining Agreements - Effective January 1, 2011 and July 1, 2013

Wage Increases (non-compounded)		1/1/2011	1 75%	(Note 1)
		1/1/2012	2 50%	(Note 1)
		1/1/2013	3 00%	(Note 1)
		1/1/2014	3 00%	(Note 2)
		1/1/2015	3 00%	(Note 2)
		1/1/2016	3 25%	(Note 2)
<u>Increase effective</u>		<u>Increase Amount</u>	<u>Wage Rate With Increase</u>	<u>Labor Cost Escalation Rate</u>
		(a)	(b) prev (b) + (a)	(c) (b) / prev (b) -1
1 00	1 75% 1/1/2011	0 0175	1 0175	
	2 50% 1/1/2012	0 0250	1 0425	0 0246 2 46%
	3 00% 1/1/2013	0 0300	1 0725	0 0288 2 88%
1 00	3 00% 1/1/2014	0 0300	1 0300	
	3 00% 1/1/2015	0 0300	1 0600	0 0291 2 91%
	3 25% 1/1/2016	0 0325	1 0925	0 0307 3 07%

(1) Agreement ratified by the IBEW, Local 1260 on March 11, 2011, reflects a 1 75% increase effective 1/1/2011, 2 50% increase effective 1/1/2012, and 3 00% increase effective 1/1/2013 See HECO's Form 8-K dated March 11, 2011 filed with Securities and Exchange Commission at www.hei.com, under SEC filings

(2) Agreement ratified by the IBEW, Local 1260 on November 1, 2012, reflects a 3 00% increase effective 1/1/2014 and 1/1/2015 and a 3 25% increase effective 1/1/2016, based on 1/1/2013 rates See HECO's Form 10-Q dated November 8, 2012 filed with Securities and Exchange Commission at www.hei.com, under SEC filings See also HELCO-WP-C003

Blue Chip Economic Indicators®

Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead

Vol. 41, No. 2, February 10, 2016

2 ■ BLUE CHIP ECONOMIC INDICATORS ■ FEBRUARY 10, 2016

2016 Real GDP Forecast Sinks To 2.1%

FEBRUARY 2016 Forecast For 2016 SOURCE:		Percent Change 2016 From 2015 (Full Year-Over Prior Year)										Average For 2016 —			Total Units-2016 ----		-2016—
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
Real GDP (Chained) (2009\$)	GDP Price Index	Nominal GDP (Cur \$) Index	Consumer Price Index	Indust Prod (Total)	Dis Pers Income (2009\$)	Personal Cons Exp (2009\$)	Non-Res Fix Inv (2009\$)	Corp Profits (Cur \$)	Treas Bills 3-mo	Treas Notes 10-Year	Unempl Rate (Civ)	Housing Starts (Mil)	Auto&Light Truck Sales (Mil)	Net Exports (2009\$)			
Moody's Analytics	2.8 H	1.5	4.4	1.7	1.0	3.1	3.3 H	5.2	8.0	0.4	2.8	4.9	1.45 H	17.5	608.5		
Naroff Economic Advisors*	2.7	2.1 H	4.8 H	1.1	1.4	3.2	2.9	3.7	4.8	0.9	2.5	4.7	1.36	17.4	-595.0		
Standard & Poors Corp *	2.7	1.9	4.6	1.7	1.9	2.5	3.1	4.7	0.4	0.7	2.7	4.8	1.33	18.0	-612.0		
UCLA Business Forecasting Proj *	2.6	1.5	4.1	1.5	1.9	3.2	1.4 L	5.1	10.3 H	0.7	2.5	4.7	1.44	18.0	-610.0		
Inform - Univ of Maryland	2.5	1.4	3.9	1.4	1.3	2.9	2.8	3.1	3.7	0.8	2.7	4.9	1.23	17.6	-591.0		
Economist Intelligence Unit	2.4	1.8	4.4	1.6	1.8	2.6	2.7	2.0	na	0.7	2.4	4.8	1.27	18.0	-590.0		
Ford Motor Company *	2.4	1.7	4.1	1.8 H	2.2 H	2.0 L	2.9	6.9	na	na	2.6	5.1 H	1.27	na	635.8 L		
Georgia State University*	2.4	1.7	4.1	1.7	0.4	3.1	2.7	4.0	4.5	0.2 L	2.4	5.1 H	1.19	16.8	605.8		
IHS Global Insight	2.4	1.5	3.9	0.7	na	3.2	2.9	2.9	4.2	0.5	2.2	4.8	1.22	17.8	-598.5		
National Assn of Home Builders	2.4	1.4	3.8	1.5	1.5	2.6	2.6	2.2	na	0.8	2.7	4.9	1.25	17.4	-563.0		
RBC Capital Markets	2.4	1.7	4.1	1.1	na	na	2.7	2.6	na	1.0 H	3.1 H	4.5 L	1.20	na	-568.0		
Swiss Re	2.4	1.3	3.7	1.7	1.4	3.2	2.8	3.7	4.3	0.8	2.5	4.6	1.25	16.7	-601.0		
AIG	2.3	1.5	3.9	1.1	1.4	2.9	3.1	2.8	-1.3	0.8	2.5	4.9	1.26	17.7	-624.0		
MUFG Union Bank	2.3	1.7	4.0	1.6	1.7	na	2.7	5.5	7.0	0.6	2.6	4.6	1.35	17.9	-580.0		
PNC Financial Services Group	2.3	1.2	3.5	1.5	1.0	2.8	2.5	3.4	na	0.5	2.1	4.7	1.19	17.8	-565.7		
Societe Generale	2.3	1.8	4.2	1.2	1.6	3.8 H	2.7	2.4	3.9	0.9	2.6	4.5 L	1.26	18.1	-596.7		
Amherst Pierpont Securities	2.2	1.6	3.8	1.2	0.4	3.1	2.8	2.4	2.5	0.9	2.8	4.7	1.30	17.7	595.0		
Barclays*	2.2	1.3	3.5	0.9	na	na	2.8	2.8	na	na	2.5	4.5 L	1.22	na	607.7		
BMIO Capital Markets*	2.2	1.6	3.8	1.4	0.4	3.0	2.8	2.3	3.1	0.5	2.1	4.7	1.29	17.8	-602.0		
Eaton Corporation	2.2	1.4	3.5	1.5	2.2 H	2.9	3.1	2.9	2.7	0.7	2.6	4.7	1.24	17.6	-597.5		
FedEx Corporation	2.2	1.1	3.3	1.1	0.3	3.0	2.7	2.2	3.6	0.5	2.3	4.9	1.28	18.1	-599.8		
General Motors	2.2	1.7	3.9	1.6	1.2	3.0	2.9	2.6	-2.0	0.6	2.7	4.8	1.30	na	-613.3		
Macrofin Analytics	2.2	1.5	3.7	1.4	1.3	2.6	2.6	2.4	3.2	0.6	2.3	4.8	1.11 L	17.5	-553.8 H		
Northern Trust Company*	2.2	0.9 L	3.2	1.0	1.6	3.0	2.6	2.8	na	0.4	2.4	4.9	1.25	17.4	-597.0		
SOM Economics, Inc	2.2	1.3	3.6	1.1	0.3	2.7	2.7	0.6	-0.5	0.6	2.3	4.7	1.21	18.1	-576.0		
Wells Capital Management	2.2	1.7	3.9	1.6	0.9	2.9	2.7	2.6	2.0	0.6	2.2	4.8	1.14	17.5	-603.0		
Comerica*	2.1	1.3	3.4	1.7	1.2	3.7	2.4	2.6	na	0.6	2.4	4.7	1.19	17.5	617.3		
Daiwa Capital Markets America	2.1	1.7	3.8	1.3	0.6	2.9	2.6	3.9	5.0	0.8	2.4	4.8	1.17	17.4	610.0		
High Frequency Economics	2.1	1.3	3.4	1.5	0.2	2.9	2.8	2.5	-1.5	0.7	2.4	4.6	1.25	18.0	-605.3		
Moody's Capital Markets*	2.1	1.5	3.6	1.0	0.7	3.0	2.1	2.3	2.0	0.4	2.2	4.7	1.25	17.6	596.1		
Point72 Asset Management	2.1	1.6	3.7	1.5	0.7	2.9	2.6	3.1	0.6	0.6	2.3	4.5 L	1.25	17.5	-599.1		
RBS Securities	2.1	1.6	3.7	1.2	0.8	3.1	2.7	2.1	2.0	0.9	2.6	4.8	1.25	17.0	-588.0		
Regions Financial Corporation	2.1	1.5	3.6	1.1	1.2	2.6	2.7	2.3	3.4	0.5	2.2	4.9	1.18	17.3	-582.0		
Action Economics	2.0	1.3	3.2	0.8	-0.5 L	3.0	3.2	1.0	-2.9	0.6	2.3	4.8	1.24	18.0	-621.8		
Bank of America Merrill Lynch	2.0	1.4	3.4	1.0	-0.5 L	3.5	2.7	1.4	2.5	0.6	2.5	4.7	1.28	18.1	-610.5		
Conference Board*	2.0	1.3	3.4	1.1	1.1	2.9	2.6	2.4	-1.1	0.6	2.3	4.7	1.25	17.5	-594.4		
Credit Suisse	2.0	0.9 L	4.4	0.5 L	0.5	na	2.5	1.8	1.4	na	2.3	4.6	1.20	17.4	-615.0		
J.P. Morgan Chase	2.0	1.4	3.4	1.1	1.8	2.9	2.5	3.5	1.9	na	2.3	4.7	1.20	17.5	-608.7		
Oxford Economics	2.0	1.4	3.4	1.0	0.5 L	2.6	2.5	2.3	-2.7	0.4	2.3	4.8	1.27	17.8	-574.9		
RDQ Economics	2.0	1.7	3.7	1.6	1.1	2.6	2.4	3.1	3.1	0.9	2.8	4.5 L	1.15	17.5	603.4		
U.S. Chamber of Commerce	2.0	1.4	3.4	1.4	-0.1	2.8	2.5	1.3	2.5	0.6	2.2	4.8	1.24	na	-595.1		
ACT Research	1.9	1.3	3.2	1.1	0.3	2.7	2.5	1.2	na	0.5	2.3	4.7	1.26	18.3	-607.2		
Diane Swonk & Associates	1.9	1.5	3.4	1.3	0.5	3.3	2.8	-2.9 L	-5.6	0.4	2.3	4.6	1.29	17.3	-615.0		
Econoclast	1.9	1.7	3.6	1.7	0.6	2.8	2.6	2.6	3.3	0.5	2.3	4.8	1.24	17.5	-596.0		
Goldman Sachs & Co **	1.9	1.3	3.3	1.1	0.8	3.2	2.7	1.3	na	0.7	2.4	4.8	1.25	na	-625.6		
Macroeconomic Advisers LLC**	1.9	1.4	3.3	1.2	0.3	3.3	2.8	1.2	-7.5 L	0.4	2.3	4.7	1.29	17.2	-613.1		
Turning Points (Micrometrics)	1.9	1.7	3.6	0.9	0.2	2.9	2.5	2.8	3.0	0.5	2.2	4.8	1.23	17.6	-562.5		
Wells Fargo	1.9	1.3	3.2	1.3	0.1	2.8	2.7	2.5	2.5	0.8	2.1	4.7	1.20	17.3	-632.3		
BNP Paribas North America	1.8	na	na	1.1	0.0	2.3	2.4	7.6 H	4.4	na	2.2	4.8	na	na	-630.0		
Fannie Mae	1.8	1.4	3.3	1.5	0.4	3.2	2.6	1.2	3.9	0.5	2.1	4.8	1.23	17.3	599.3		
National Assn of Realtors	1.7	1.6	3.3	1.6	0.4	2.8	2.8	2.6	-2.0	0.8	2.6	4.9	1.24	17.3	-610.0		
Nomura Securities	1.7	1.4	3.2	0.7	0.3	3.2	2.6	1.6	na	na	2.4	4.7	1.23	17.5	624.3		
Morgan Stanley *	1.5 L	1.7	3.4	1.7	2.0	2.5	2.3	0.7	1.6	0.7	2.6	4.9	1.24	17.9	-614.6		
UBS	1.5 L	1.6	3.1 L	1.5	-0.4	3.0	2.5	0.8	na	0.5	2.0 L	4.9	1.31	na	-615.1		
2016 Consensus February Avg	2.1	1.5	3.7	1.3	0.8	2.9	2.7	2.6	1.5	0.6	2.4	4.8	1.25	17.6	-601.1		
Top 10 Avg.	2.5	1.8	4.3	1.7	1.9	3.4	3.0	5.0	5.5	0.9	2.7	4.9	1.34	18.0	-571.4		
Bottom 10 Avg.	1.8	1.2	3.2	0.9	-0.2	2.5	2.3	0.6	-3.5	0.4	2.1	4.6	1.17	17.2	-624.1		
January Avg.	2.5	1.7	4.2	1.6	1.6	2.9	2.8	3.9	2.8	0.7	2.6	4.8	1.25	17.7	-593.6		
Historical data 2012	2.2	1.8	4.1	2.1	2.8	3.2	1.5	9.0	10.0	0.1	1.8	8.1	0.78	14.4	-447.1		
2013	1.5	1.6	3.1	1.5	1.9	-1.4	1.7	3.0	2.0	0.1	2.4	7.4	0.92	15.5	-417.5		
2014	2.4	1.6	4.1	1.6	3.7	2.7	2.7	6.2	1.7	0.0	2.5	6.2	1.00	16.4	442.5		
2015	2.4	1.0	3.4	0.1	1.3	3.5	3.1	2.9	na	0.1	2.2	5.3	1.11	17.3	547.1		
Number Of Forecasts Changed From A Month Ago																	
Down	48	40	47	45	44	14	35	45	31	26	44	18	22	16	39		
Same	2	8	2	7	4	11	10	3	5	16	5	25	21	14	2		
Up	3	4	3	1	2	24	8	5	4	5	3	10	9	14	12		
February Median	2.1	1.5	3.6	1.3	0.8	2.9	2.7	2.6	2.5	0.6	2.4	4.8	1.25	17.5	-602.5		
February Diffusion Index	8 %	15 %	8 %	8 %	8 %	60 %	25 %	12 %	16 %	28 %	11 %	42 %	38 %	48 %	25 %		

*Former winner of annual Lawrence R. Klein Award for Blue Chip Forecast Accuracy **Denotes two-time winner ***Denotes three-time winner

HAWAII ELECTRIC LIGHT COMPANY, INC.

EXHIBIT A

JOB CODE	JOB TITLE	1/1/2013	7/1/2013	1/1/2014	7/1/2014	1/1/2015	7/1/2015	1/1/2016	7/1/2016	1/1/2017	7/1/2017	1/1/2018	7/1/2018
CL5	CASHIER			3%		3% (2.91%)		3.25% (3.07%)					
CL49	DISTRICT CLERK I			INCREASE		INCREASE		INCREASE					
	1st 3 mos	20.39		21.00		21.61		22.27		22.88		23.49	
	Next 3 mos	21.32		21.96		22.60		23.29		23.93		24.57	
	Next 3 mos	22.42		23.09		23.76		24.49		25.16		25.83	
	Next 6 mos	23.50		24.21		24.92		25.68		26.39		27.10	
	Next 6 mos	24.65		25.39		26.13		26.93		27.67		28.41	
	Thereafter	25.86		26.64		27.42		28.26		29.04		29.82	
T8	(S) BOILER OPERATOR TRAINEE												
T55	(S) COMBUSTION TURBINE OPERATOR TRAINEE												
	1st 12 mos	23.44		24.14		24.84		25.60		26.30		27.00	
	Thereafter	26.38		27.17		27.96		28.82		29.61		30.40	
CL39	PLANNER AID												
	1st 3 mos	18.92		19.49		20.06		20.67		21.24		21.81	
	Next 3 mos	19.85		20.45		21.05		21.70		22.30		22.90	
	Next 3 mos	20.83		21.45		22.07		22.75		23.37		23.99	
	Next 6 mos	22.91		23.60		24.29		25.03		25.72		26.41	
	Next 6 mos	24.06		24.78		25.50		26.28		27.00		27.72	
	Next 6 mos	25.26		26.02		26.78		27.60		28.36		29.12	
	Next 6 mos	26.47		27.26		28.05		28.91		29.70		30.49	
	Thereafter	27.81		28.64		29.47		30.37		31.20		32.03	
CL7	METER READER												
CL21	METER READER			X 1.03=		X 1.0291=		X 1.0307=					
	1st 3 mos	20.83		21.45		22.07		22.75		23.37		23.99	
	Next 3 mos	21.84		22.50		23.16		23.87		24.53		25.19	
	Next 6 mos	24.06		24.78		25.50		26.28		27.00		27.72	
	Next 6 mos	25.26		26.02		26.78		27.60		28.36		29.12	
	Next 6 mos	26.47		27.26		28.05		28.91		29.70		30.49	
	Thereafter	27.81		28.64		29.47		30.37		31.20		32.03	
CL38	SURVEY AIDE												
	1st 3 mos	22.91		23.60		24.29		25.03		25.72		26.41	
	Next 3 mos	24.06		24.78		25.50		26.28		27.00		27.72	
	Next 6 mos	25.26		26.02		26.78		27.60		28.36		29.12	
	Next 6 mos	26.44		27.23		28.02		28.88		29.67		30.46	
	Next 6 mos	27.91		28.75		29.59		30.50		31.34		32.18	
	Thereafter	29.36		30.24		31.12		32.07		32.95		33.83	
CL9	FIELD REPRESENTATIVE												
CL22	FIELD REPRESENTATIVE												
CL78	MATERIAL & RECORDS KEEPER			X 1.03=		X 1.0291=		X 1.0307=					
	1st 6 mos	25.26		26.02		26.78		27.60		28.36		29.12	
	Next 6 mos	26.44		27.23		28.02		28.88		29.67		30.46	
	Next 6 mos	27.91		28.75		29.59		30.50		31.34		32.18	
	Thereafter	29.39		30.27		31.15		32.11		32.99		33.87	
C33	STOCK & PRICE CLERK TYPIST												
	1st 9 mos	26.44		27.23		28.02		28.88		29.67		30.46	
	Next 6 mos	27.91		28.75		29.59		30.50		31.34		32.18	
	Thereafter	29.39		30.27		31.15		32.11		32.99		33.87	
TL10	WAREHOUSE ATTENDANT												
	1st 3 mos	16.77		17.27		17.77		18.32		18.82		19.32	
	Next 3 mos	18.46		19.01		19.56		20.16		20.71		21.26	
	Next 6 mos	20.31		20.92		21.53		22.19		22.80		23.41	
	Next 6 mos	22.42		23.09		23.78		24.49		25.16		25.83	
	Next 6 mos	24.65		25.39		26.13		26.93		27.67		28.41	
	Next 6 mos	27.17		27.99		28.81		29.69		30.51		31.33	
	Thereafter	29.92		30.82		31.72		32.69		33.59		34.49	
T25	TRUCK DRIVER												
		29.92		30.82		31.72		32.69		33.59		34.49	
T26	TOOL ROOM ATTENDANT & REPAIRER												
	1st 12 mos	29.25		30.13		31.01		31.96		32.84		33.72	
	Thereafter	30.80		31.72		32.64		33.64		34.56		35.48	
T27	WAREHOUSE ATTENDANT/DRIVER												
		30.80		31.72		32.64		33.64		34.56		35.48	

Hawai Electric Light Company, Inc
CIS in 2016 RAM Calculations
HELCO Summary
(\$ in 000's)

Line	Description (Note 1)	Rate Base				Rate Base					
		CIS Deferred Costs		2016 Activities		CIS Deferred Costs					
		Recoverable at 12/31/15 (Note 2)		Additions (12 months)	Amortization (12 months) (Note 3)	Net Change	Recoverable at 12/31/16				
1	CIS Deferred Cost	\$	6,260	\$	-	\$	(664)	\$	(664)	\$	5,596
2	CIS Deferred O&M Reclass		-		-		-		-		-
3	Carrying charges		67		-		(7)		(7)		60
4	Write-Off (Note 2)		(4,317)		-		458		458		(3,859)
5 = sum 1 + 2 + 3 + 4	CIS deferred costs recoverable	\$	2,010	\$	-	\$	(213)	\$	(213)	\$	1,797

(1) See Hawaiian Electric 2009 Test Year Rate Case Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of Consumer Advocacy regarding Certain Regulatory Matters filed January 28, 2013 in Docket No. 2008-0083 ("2013 Stipulation") for the treatment of costs relating to the Customer Information System ("CIS")

(2) See Transmittal No. 15-04 (Decoupling) - Hawaiian Electric Light RBA Rate Adjustment HELCO-WP-D1-001, filed on April 15, 2015

(3) Amortized over 12 years per Exhibit 1, page 2 of 3, footnote 2 of the 2013 Stipulation referenced in note (1) above. Refer to CIS Amortization schedule included in pages 2 to 5 of this workpaper.

Hawaii Electric Light Company, Inc
CIS in 2016 RAM Calculations
CIS Amortization Schedule

		CIS Final Cost - Amort (Rate Base Impact)		Rounded (\$ in 000's)	
Amort Period		144 months			
Reg Asset Balance					
Bal 5/2013	\$	2,561,551			
1	Jun-13	\$ (17,788 55)	\$ 2,543,762 45		
2	Jul-13	(17,788 55)	2,525,973 90		
3	Aug-13	(17,788 55)	2,508,185 35		
4	Sep-13	(17,788 55)	2,490,396 81		
5	Oct-13	(17,788 55)	2,472,608 26		
6	Nov-13	(17,788 55)	2,454,819 71		
7	Dec-13	(17,788 55)	2,437,031 16	\$ (18)	\$ 2,437
8	Jan-14	(17,788 55)	2,419,242 61		
9	Feb-14	(17,788 55)	2,401,454 06		
10	Mar-14	(17,788 55)	2,383,665 51		
11	Apr-14	(17,788 55)	2,365,876 97		
12	May-14	(17,788 55)	2,348,088 42		Yearly Amortization
13	Jun-14	(17,788 55)	2,330,299 87	\$	(213)
14	Jul-14	(17,788 55)	2,312,511 32		
15	Aug-14	(17,788 55)	2,294,722 77		
16	Sep-14	(17,788 55)	2,276,934 22		
17	Oct-14	(17,788 55)	2,259,145 67		
18	Nov-14	(17,788 55)	2,241,357 13		
19	Dec-14	(17,788 55)	2,223,568 58	\$ (18)	\$ 2,224
20	Jan-15	(17,788 55)	2,205,780 03		
21	Feb-15	(17,788 55)	2,187,991 48		
22	Mar-15	(17,788 55)	2,170,202 93		
23	Apr-15	(17,788 55)	2,152,414 38		
24	May-15	(17,788 55)	2,134,625 83		Yearly Amortization
25	Jun-15	(17,788 55)	2,116,837 28	\$	(214)
26	Jul-15	(17,788 55)	2,099,048 74		
27	Aug-15	(17,788 55)	2,081,260 19		
28	Sep-15	(17,788 55)	2,063,471 64		
29	Oct-15	(17,788 55)	2,045,683 09		
30	Nov-15	(17,788 55)	2,027,894 54		
31	Dec-15	(17,788 55)	2,010,105 99		2,010
32	Jan-16	(17,788 55)	1,992,317 44		
33	Feb-16	(17,788 55)	1,974,528 90		
34	Mar-16	(17,788 55)	1,956,740 35		
35	Apr-16	(17,788 55)	1,938,951 80		
36	May-16	(17,788 55)	1,921,163 25		

Yearly Amortization
\$ (213)

Yearly Amortization
\$ (214)

2,010

Hawaii Electric Light Company, Inc
CIS in 2016 RAM Calculations
CIS Amortization Schedule (continued)

HELCO-WP-D1-001
PAGE 3 OF 5

		CIS Final Cost - Amort		Rounded (\$ in 000's)	
		(Rate Base Impact)		Yearly Amortization	
				\$	
37	Jun-16	(17,788 55)	1,903,374 70		
38	Jul-16	(17,788 55)	1,885,586 15		
39	Aug-16	(17,788 55)	1,867,797 60		
40	Sep-16	(17,788 55)	1,850,009 06		
41	Oct-16	(17,788 55)	1,832,220 51		
42	Nov-16	(17,788 55)	1,814,431 96		
43	Dec-16	(17,788 55)	1,796,643 41	(18)	1,797
44	Jan-17	(17,788 55)	1,778,854 86		
45	Feb-17	(17,788 55)	1,761,066 31		
46	Mar-17	(17,788 55)	1,743,277 76		
47	Apr-17	(17,788 55)	1,725,489 22		
48	May-17	(17,788 55)	1,707,700 67		
49	Jun-17	(17,788 55)	1,689,912 12		
50	Jul-17	(17,788 55)	1,672,123 57		
51	Aug-17	(17,788 55)	1,654,335 02		
52	Sep-17	(17,788 55)	1,636,546 47		
53	Oct-17	(17,788 55)	1,618,757 92		
54	Nov-17	(17,788 55)	1,600,969 38		
55	Dec-17	(17,788 55)	1,583,180 83		
56	Jan-18	(17,788 55)	1,565,392 28		
57	Feb-18	(17,788 55)	1,547,603 73		
58	Mar-18	(17,788 55)	1,529,815 18		
59	Apr-18	(17,788 55)	1,512,026 63		
60	May-18	(17,788 55)	1,494,238 08		
61	Jun-18	(17,788 55)	1,476,449 53		
62	Jul-18	(17,788 55)	1,458,660 99		
63	Aug-18	(17,788 55)	1,440,872 44		
64	Sep-18	(17,788 55)	1,423,083 89		
65	Oct-18	(17,788 55)	1,405,295 34		
66	Nov-18	(17,788 55)	1,387,506 79		
67	Dec-18	(17,788 55)	1,369,718 24		
68	Jan-19	(17,788 55)	1,351,929 69		
69	Feb-19	(17,788 55)	1,334,141 15		
70	Mar-19	(17,788 55)	1,316,352 60		
71	Apr-19	(17,788 55)	1,298,564 05		
72	May-19	(17,788 55)	1,280,775 50		
73	Jun-19	(17,788 55)	1,262,986 95		
74	Jul-19	(17,788 55)	1,245,198 40		
75	Aug-19	(17,788 55)	1,227,409 85		
76	Sep-19	(17,788 55)	1,209,621 31		
77	Oct-19	(17,788 55)	1,191,832 76		
78	Nov-19	(17,788 55)	1,174,044 21		
79	Dec-19	(17,788 55)	1,156,255 66		
80	Jan-20	(17,788 55)	1,138,467 11		

Hawaii Electric Light Company, Inc.
CIS in 2016 RAM Calculations
CIS Amortization Schedule (continued)

HELCO-WP-D1-001
PAGE 4 OF 5

		CIS Final Cost - Amort		Rounded (\$ in 000's)
		(Rate Base Impact)		
81	Feb-20	(17,788 55)	1,120,678 56	
82	Mar-20	(17,788 55)	1,102,890 01	
83	Apr-20	(17,788 55)	1,085,101 47	
84	May-20	(17,788 55)	1,067,312 92	
85	Jun-20	(17,788 55)	1,049,524 37	
86	Jul-20	(17,788 55)	1,031,735 82	
87	Aug-20	(17,788 55)	1,013,947 27	
88	Sep-20	(17,788 55)	996,158 72	
89	Oct-20	(17,788 55)	978,370 17	
90	Nov-20	(17,788 55)	960,581 63	
91	Dec-20	(17,788 55)	942,793 08	
92	Jan-21	(17,788 55)	925,004 53	
93	Feb-21	(17,788 55)	907,215 98	
94	Mar-21	(17,788 55)	889,427 43	
95	Apr-21	(17,788 55)	871,638 88	
96	May-21	(17,788 55)	853,850 33	
97	Jun-21	(17,788 55)	836,061 78	
98	Jul-21	(17,788 55)	818,273 24	
99	Aug-21	(17,788 55)	800,484 69	
100	Sep-21	(17,788 55)	782,696 14	
101	Oct-21	(17,788 55)	764,907 59	
102	Nov-21	(17,788 55)	747,119 04	
103	Dec-21	(17,788 55)	729,330 49	
104	Jan-22	(17,788 55)	711,541 94	
105	Feb-22	(17,788 55)	693,753 40	
106	Mar-22	(17,788 55)	675,964 85	
107	Apr-22	(17,788 55)	658,176 30	
108	May-22	(17,788 55)	640,387 75	
109	Jun-22	(17,788 55)	622,599 20	
110	Jul-22	(17,788 55)	604,810 65	
111	Aug-22	(17,788 55)	587,022 10	
112	Sep-22	(17,788 55)	569,233 56	
113	Oct-22	(17,788 55)	551,445 01	
114	Nov-22	(17,788 55)	533,656 46	
115	Dec-22	(17,788 55)	515,867 91	
116	Jan-23	(17,788 55)	498,079 36	
117	Feb-23	(17,788 55)	480,290 81	
118	Mar-23	(17,788 55)	462,502 26	
119	Apr-23	(17,788 55)	444,713 72	
120	May-23	(17,788 55)	426,925 17	
121	Jun-23	(17,788 55)	409,136 62	
122	Jul-23	(17,788 55)	391,348 07	
123	Aug-23	(17,788 55)	373,559 52	
124	Sep-23	(17,788 55)	355,770 97	

Hawaii Electric Light Company, Inc
CIS in 2016 RAM Calculations
CIS Amortization Schedule (continued)

HELCO-WP-D1-001
PAGE 5 OF 5

		CIS Final Cost - Amort		Rounded (\$ in 000's)
		(Rate Base Impact)		
125	Oct-23	(17,788 55)	337,982 42	
126	Nov-23	(17,788 55)	320,193 88	
127	Dec-23	(17,788 55)	302,405 33	
128	Jan-24	(17,788 55)	284,616 78	
129	Feb-24	(17,788 55)	266,828 23	
130	Mar-24	(17,788 55)	249,039 68	
131	Apr-24	(17,788 55)	231,251 13	
132	May-24	(17,788 55)	213,462 58	
133	Jun-24	(17,788 55)	195,674 03	
134	Jul-24	(17,788 55)	177,885 49	
135	Aug-24	(17,788 55)	160,096 94	
136	Sep-24	(17,788 55)	142,308 39	
137	Oct-24	(17,788 55)	124,519 84	
138	Nov-24	(17,788 55)	106,731 29	
139	Dec-24	(17,788 55)	88,942 74	
140	Jan-25	(17,788 55)	71,154 19	
141	Feb-25	(17,788 55)	53,365 65	
142	Mar-25	(17,788 55)	35,577 10	
143	Apr-25	(17,788 55)	17,788 55	
144	May-25	(17,788 55)	0 00	

Hawaii Electric Light Co
2016 Major Project - CT-5 Overhaul Costs
Capital Costs

Cost Category	PUC Authorized Amt ⁽¹⁾	Scope Of Work		Updated Estimate ⁽²⁾
		Overhaul ⁽²⁾	Hot Section ⁽²⁾	
Depot Overhaul Outside Services	\$ 3,674,400	\$ 1,952,762	\$ 1,172,540	\$ 3,125,302
Re-Installation	197,800	21,244	-	21,244
Third Party Inspection	124,800	-	-	-
Freight	91,500	-	-	-
In-House Labor	15,600	8,782	-	8,782
Overheads	11,400	5,296	-	5,296
AFUDC	66,600	43,446	23,154	66,600
Total	\$ 4,182,100	\$ 2,031,530	\$ 1,195,694	\$ 3,227,224

(1) See Decision & Order No. 31707, Docket No. 2013-0144 issued on 11/26/2013 For Approval to Commit Funds in excess of \$2,500,000 for Item H0002725 and H0002724, the Keahole CT-4 and CT-5 Major Overhaul Projects

(2) Updated estimates are as of April 22, 2016 and separately identify the costs associated with completing the Hot Section, which will be performed in 2017 subsequent to the Overhaul work, contingent on the run hours and condition of the hot section

Air New Zealand Bid	\$ 3,147,302	
Less Front Frame Compressor	(22,000)	
Revised Overhaul Outside Services		\$ 3,125,302
Less Hot Section Related Costs		
High Pressure Turbine Complete	(1,121,024)	
Hot Section Change Out	(51,516)	(1,172,540)
Total Overhaul Outside Services		\$ 1,952,762

(3) As of May 16, 2016, the Company was contacted by Air New Zealand that work on the overhaul portion of the project would be delayed and as a result, will miss the initial June 2016 schedule. The Company projects both portions of the project will go into plant in service after September 30, 2016, therefore will exclude this project from the 2016 RAM Revenue Adjustment and include both portions of the project in the 2017 RAM

Hawaii Electric Light Co
2016 Major Project - Keamuku-Keahole 6800 69 kV Line Reconstruction Phase 2
Capital Costs

Cost Category	<u>PUC</u> <u>Authorized Amt</u> ⁽¹⁾	<u>Updated</u> <u>Estimate</u> ⁽²⁾	<u>Diff</u>
Outside Services	\$ 1,097,380	\$ 739,267	\$ (358,113)
Materials	1,125,340	951,185	(174,155)
In-House Labor	534,879	352,247	(182,632)
Overheads	1,335,534	707,985	(627,549)
AFUDC	118,819	108,952	(9,867)
Total	<u>\$ 4,211,952</u>	<u>\$ 2,859,636</u>	<u>\$ (1,352,316)</u>

- 1) See Decision & Order No 32930, Docket No 2013-0153, issued on June 24, 2015 *For Approval to Commit Funds in excess of \$2,500,000 for Item H0002612 and H0002669, the Keamuku-Keahole 6800 69 kV Line Reconstruction Phases 2-4*
- 2) Updated estimates as of May 13, 2016

Hawai Electric Light Co Inc			
Accumulated Deferred Income Taxes by Activity			
FEDERAL			
DR(CR)			
		Actual	
	Description	12/31/2015	
	ACCOUNT 282 01		
1	Accelerated Depreciation	\$ (61 694 334)	
2	Excess AccDep	7 360	
3	Deficit AccDep	(66 987)	
4	Subtotal Utility Depreciation	\$ (61 753 961)	
5	TOTAL ACCOUNT 282 01 UTILITY	\$ (61 753 961)	
	ACCOUNT 283 01		
6	ACRS Retirements Gain/(Loss)	(4 886 111)	
7	Bad Debts	338 841	
8	Bonuses - non-executives	49 311	
9	Cap to Construction	(247 679)	
10	Capitalized Interest	3 042 001	
11	Capitalized Interest - Blankets	(174 704)	
12	Casualty Loss Deduction	0	
13	CIAC	16 715 216	
14	Cost of Removal	(18 077 476)	
15	Customer Advances	2,028 893	
16	CWIP Debt / (AFUDC Debt Incurred)	(2 591 814)	
17	CWIP Debt Transition	24 385	
18	Deferred Compensation (Rest Stock RSU)	22 561	
19	EICP LTIP	78 246	
20	Emissions Fees	84 466	
21	FIN 48 - Tax Component	286 171	
22	FIN 48 - Interest Component	4 097	
23	Franchise Taxes	406 294	
24	General/Legal Liability	34 146	
25	Interest - CIS	(15 239)	Schedule K1, Note 3
26	Interest - RAR	(583)	
27	Legal/Consulting Fees (PPA)	527 369	
28	OPEB & Trackers	914 841	
29	OPEB Executive Life	409 387	
30	Pension Pension Asset and Tracker	(8 538 858)	
31	Pension (Supplemental - Non-qualified)	16 108	
32	Percentage Repair Allowance (D&I)	(839 114)	
33	Prepaid Expenses	(17 523)	
34	Project Costs - Geothermal RTP	(36 928)	
35	Rate Case	-	
36	Repairs (PWC)	(12 130 476)	
37	RBA Revenues - §481(a) Adjustment	(2 447 009)	
38	RBA Revenues	718 420	
39	Rev Bond Differential	(79 761)	
40	Rev Bond Redemption Prem/Amort	(388 870)	
41	Software - CIS	(304 056)	
42	Software - ERP	758	
43	Software - IVR	(139 168)	
44	Software - Other	(365 508)	
45	Solar Saver	270 259	
46	State ITC	4 994 614	
47	SunPower for Schools	6 013	
48	Vacation Accrual	(101 630)	
49	Workers Compensation	120 163	

Hawaii Electric Light Co Inc			
Accumulated Deferred Income Taxes by Activity			
FEDERAL			
DR(CR)			
		Actual	
	Description	12/31/2015	
	FAS 109 Regulatory Assets/Liabilities		
50	Reg Asset - CWIP Equity Transition	(323 209)	
51	Reg Asset - SFAS 109 Flow Through	(745 759)	
52	Reg Asset - Plant Transition (AFUDC)	(49 206)	
53	CWIP Equity Net / (AFUDC Eqty Incurred)	(3 334 675)	
54	Reg Asset - CWIP/(AFUDC Eqty Gr Up)	(5 232 951)	
55	Fed ITC amort	(907 487)	
56	Fed ITC - Reg Liability	1 027 384	
57	Reg Asset - Deficit Def - Oth	(24 430)	
58	Reg Liab - Excess Def - Oth	12 090	
59	Reg Asset - RAR 88-89	2 921	
60	TOTAL ACCOUNT 283 01 - UTILITY	\$ (29 865 269)	
61	TOTAL FEDERAL ADIT BEFORE RATE CASE ADJUSTMENTS	\$ (91 619 230)	
	RATE CASE ADJUSTMENTS		
62	TOTAL ACCOUNT 283 01 - UTILITY	\$ (29 865 269)	
63	Bad Debts	338 841	
64	Bonuses - Non-executives	49 311	
65	Deferred Compensation (Rest Stock RSU)	22 561	
66	EICP	78 246	
67	FIN48 Tax and Interest	290 268	
68	Franchise Taxes	406 294	
69	General/Legal Liability Reserve	34 146	
70	Interest - CIS (Full Debt Portion)	(8 882)	HELCO-WP-D4-002
71	Interest - Nondeductible (RAR)	(583)	
72	OPEB - exec life	409 387	
73	Pension (Supplemental - Non-qualified)	16 108	
74	Rate Case Costs (included in rate base beginning 2009)		
75	RBA Revenues - §481(a) Adjustment	(2 447 009)	
76	RBA Revenues	718 420	
77	Software - ERP	758	
78	Solar Saver	270 259	
79	Vacation Accrual	(101 630)	
80	Workers Comp Reserve	120 163	
81	Total Adjustments Account 283	\$ 196 659	
82	TOTAL ACC 283 01 AFTER ADJUSTMENTS	(30 061 927)	
83	TOTAL ACC 282 01 - UTIL DEPR ONLY	(61 753 961)	
84	TOTAL FEDERAL ADIT AFTER RATE CASE ADJUSTMENTS	\$ (91 815 888)	
*	Amount should be excluded from rate base At year end it was inadvertently included in rate base		

Hawaii Electric Light Co. Inc.			
Accumulated Deferred Income Taxes by Activity			
STATE			
DR(CR)			
		Actual	
	Description	12/31/2015	
	ACCOUNT 282 01		
1	Accelerated Depreciation	\$ (3 467 299)	
2	Excess AccDep	1 432	
3	Deficit AccDep	(12 291)	
4	Subtotal Utility Depreciation	\$ (3 478 158)	
5	TOTAL ACCOUNT 282 01 - UTILITY	\$ (3 478 158)	
	ACCOUNT 283 01		
6	ACRS Retirements Gain/(Loss)	\$ (1 014 497)	
7	Bad Debts	61 958	
8	Bonuses - non-executives	9 017	
9	Cap to Construction	(45 158)	
10	Capitalized Interest	611 644	
11	Capitalized Interest - Blankets	(58 895)	
12	Casualty Loss Deduction	(0)	
13	CIAC	3 438 538	
14	Cost of Removal	(3 305 971)	
15	Customer Advances	370 999	
16	CWIP Debt / (AFUDC Debt Incurred)	(473 931)	
17	CWIP Debt Transition	4 459	
18	Deferred Compensation (Rest Stock RSU)	14 308	
19	EICP LTIP	4 126	
20	Emissions Fees	15 446	
21	FIN 48 - Tax Component	96 803	
22	FIN 48 - Interest Component	749	*
23	Franchise Taxes	74 293	
24	General/Legal Liability	6 245	
25	Interest - CIS	(2 787)	Schedule K1, Note 3
26	Interest - RAR	(106)	
27	Legal/Consulting Fees (PPA)	96 434	
28	OPEB & Trackers	167 251	
29	OPEB Executive Life	74 859	
30	Pension Pension Asset and Tracker	(1 561 392)	
31	Pension (Supplemental - Non-qualified)	2 946	
32	Percentage Repair Allowance (D&T)	(218 161)	
33	Prepaid Expenses	(3 205)	
34	Project Costs - Geothermal RFP	(6 753)	
35	Rate Case	-	
36	Repairs (PWC)	(3 981 679)	
37	RBA Revenues - §481(a) Adjustment	(447 453)	
38	RBA Revenues	131 368	
39	Rev Bond Differential	(14 584)	
40	Rev Bond Redemption Prem/Amort	(71 107)	
41	Software - CIS	(55 599)	
42	Software - ERP	138	
43	Software - IVR	(14 315)	
44	Software - Other	(87 493)	
45	Solar Saver	49 419	
46	State ITC	913 302	
47	SunPower for Schools	1 099	
48	Vacation Accrual	(18 584)	
49	Workers Compensation	21 972	

Hawaiian Electric Light Co - Inc			
Accumulated Deferred Income Taxes by Activity			
STATE			
DR(CR)			
		Actual	
	Description	12/31/2015	
	FAS 109 Regulatory Assets/Liabilities		
50	Reg Asset - CWIP Equity Transition	(59 101)	
51	Reg Asset - SFAS 109 Flow Through	(136 368)	
52	Reg Asset - Plant Transition (AFUDC)	(8 998)	
53	CWIP Equity Net / (AFUDC Eqty Incurred)	(609 769)	
54	Reg Asset - CWIP Eqty Gr Up / (AFUDC Eqty Gr Up)	(956 883)	
55	Fed IIC amort	(165 940)	
56	Fed IIC - Reg Liability	187 865	
57	Reg Asset - Deficit Def - Oth	(607)	
58	Reg Liab - Excess Def - Oth	2 222	
59	Reg Asset - RAR 88-89	534	
60	TOTAL ACCOUNT 283 01 - UTILITY	\$ (6 961 345)	
61	TOTAL STATE ADIT BEFORE RATE CASE ADJUSTMENTS	\$ (10 439 504)	
	RATE CASE ADJUSTMENTS		
62	TOTAL ACCOUNT 283 01 - UTILITY	\$ (6 961 345)	
63	Bad Debts	61 958	
64	Bonuses - Non-executives	9 017	
65	Deferred Compensation (Rest Stock RSU)	14 308	
66	EICP	4 126	
67	FIN48 Tax and Interest	97 552	
68	Franchise Taxes	74 293	
69	General/Legal Liability Reserve	6 245	
70	Interest - CIS (Full Debt Portion)	(1 624)	HELCO-WP-D4-002
71	Interest - RAR	(106)	
72	OPEB - exec life	74 859	
73	Pension (Supplemental - Non-qualified)	2 946	
74	Rate Case Costs (included in rate base beginning in 2009)	-	
75	RBA Revenues - §481(a) Adjustment	(447 453)	
76	RBA Revenues	131 368	
77	Software - ERP	138	
78	Solar Saver	49 419	
79	Vacation Accrual	(18 584)	
80	Workers Comp Reserve	21 972	
81	Total Adjustments Account 283	\$ 80 433	
82	TOTAL ACC 283 01 AFTER ADJUSTMENTS	(7 041 779)	
83	TOTAL ACC 282 01 - UTIL DEPR ONLY	(3 478 158)	
84	TOTAL STATE ADIT AFTER RATE CASE ADJUSTMENTS	\$ (10 519 937)	
*	Amount should be excluded from rate base At year end it was inadvertently included in rate base		

HAWAII ELECTRIC LIGHT CO., INC
ADIT RATE BASE ADJUSTMENT FOR ADDITIONAL CIS INTEREST

		DR / (CR)	DR / (CR)	DR / (CR)
		32.8947%	6.0150%	Total
<i>Interest on CIS Deferred Costs</i>	<i>Add'l Debt</i>	<i>Acc Def Fed</i>	<i>Acc Def State</i>	<i>Accum Def Tax</i>
1 CIS Interest (1/13/- 5/13)	\$ 34,408	\$ 11,318	\$ 2,070	\$ 13,388
2 CIS Interest Amort beg 6/13	(1,673)	(550)	(101)	(651)
3 Balance as of 12/31/13	\$ 32,735	\$ 10,768	\$ 1,969	\$ 12,737
4 2014 CIS Interest Amortization	(2,867)	(943)	(172)	(1,115)
5 Balance as of 12/31/14	<u>\$ 29,868</u>	<u>\$ 9,825</u>	<u>\$ 1,797</u>	<u>\$ 11,622</u>
6 2015 CIS Interest Amortization	(2,867)	(943)	(173)	(1,116)
7 Balance as of 12/31/2015	<u>\$ 27,001</u>	<u>\$ 8,882</u>	<u>\$ 1,624</u>	<u>\$ 10,506</u>
		HELCO-WP-D4 001a	HELCO-WP D4 001b	
8 2016 CIS Interest Amortization	(2,867)	(943)	(173)	(1,116)
9 Balance as of 12/31/2016	<u>\$ 24,133</u>	<u>\$ 7,939</u>	<u>\$ 1,451</u>	<u>\$ 9,390</u>

The GL balance includes the AFUDC debt and the AFUDC additional debt
The Rate base balance includes only the AFUDC debt
The difference between GL and Rate base balance is the AFUDC additional debt

HAWAII ELECTRIC LIGHT COMPANY, INC
 CALCULATION OF COMPOSITE EFFECTIVE INCOME TAX RATES
 FEDERAL AND STATE

COMPOSITE FEDERAL AND STATE EFFECTIVE INCOME TAX RATE

Federal Effective Income Tax Rate	32.8947368%
State Effective Income Tax Rate	6.0150376%
	<u>38.9097744%</u>

CALCULATION OF EFFECTIVE RATES

Assumptions: ST = State Income Tax Expense
 FT = Federal Income Tax Expense
 Pre-Tax Income = \$1.00
 State Statutory Income Tax Rate = 6.4% *
 Federal Statutory Income Tax Rate = 35% **

Calculation of State Effective Income Tax Rate

$$\begin{aligned}
 \text{State Income Tax Expense} &= \text{Statutory Rate} \times (\text{Pre-Tax Income} - \text{State Income Tax Expense}) \\
 ST &= 0.064 \times (1 - ST) \\
 ST &= 0.064 - 0.064(ST) \\
 1.064(ST) &= 0.064 \\
 ST &= 0.060150376 \text{ or } 6.0150376\% \text{ of Pre-Tax Income}
 \end{aligned}$$

Calculation of Federal Effective Income Tax Rate

$$\begin{aligned}
 \text{Federal Income Tax Expense} &= \text{Statutory Rate} \times (\text{Pre-Tax Income} - \text{State Income Tax Expense}) \\
 FT &= 0.35 \times (1 - ST) \\
 FT &= 0.35 \times (1 - 0.060150376) \\
 FT &= 0.35 - 0.0210526316 \\
 FT &= 0.328947368 \text{ or } 32.8947368\% \text{ of Pre-Tax Income}
 \end{aligned}$$

* Hawaii Revised Statutes §235-71 was amended for tax years beginning after 1986

** The Revenue Reconciliation Act of 1993 changed the federal tax rate for tax years beginning on or after January 1, 1993

HAWAII ELECTRIC LIGHT COMPANY, INC
TAX REPAIRS ADJUSTMENT
2016

			A	B	C = A x B	D = A - C
	HELCO-WP-F1-002			HELCO-WP-F1-001, pg 2		
	Life	5-Year Average	Allocated Plant Adds	Repairs Allocation	Repairs Deduction	Depreciable Basis
Information Systems/Data Handling	5	\$ 509,153				
Communication	20	1,642,527				
Office Furniture	7	582,018				
Distribution	20	31,074,236	31,074,236	16 91%	5,254,531	25,819,705
Land	-	114,632				
Other Production	15	2,488,434	2,488,434	30 62%	762,015	1,726,419
Steam & Hydraulic Production	20	1,518,923	1,518,923	50 81%	771,760	747,163
Structural	39	2,275,406				
Transmission	15	5,489,384	5,489,384	26 71%	1,466,114	4,023,270
Transmission	20	268,615	268,615	26 71%	71,742	196,873
Vehicles	-	2,585,337				
TOTAL		<u>\$ 48,548,663</u>	<u>\$ 40,839,592</u>		<u>\$ 8,326,162</u>	<u>\$ 32,513,430</u>
					Schedule F1	

NOTE 1> This schedule computes the estimated amount of deductible tax repairs related to the baseline plant additions for the RAM year. The deductible tax repairs amounts are carried forward to Schedule F1 and serve to reduce the depreciable tax basis for the baseline plant additions. The repairs percentages (Column B) are calculated on HELCO-WP-F1-001, page 2.

HAWAII ELECTRIC LIGHT COMPANY, INC
REPAIRS DEDUCTION
5-Year Average
2011-2015

			Distribution	Other Production	Steam & Hydro	Transmission
Repairs %	Note 1					
	Total Book Basis Repairs					
1	2011		3,725,094	2,493,838	1,308,349	3,520,487
2	2012		7,290,491	757,239	473,162	868,286
3	2013		5,858,939	727,153	381,488	1,728,539
4	2014		4,749,772	451,747	237,001	1,011,680
5	2015		4,648,361	-	1,543,043	1,251,849
6	Total		<u>\$ 26,272,657</u>	<u>\$ 4,429,976</u>	<u>\$ 3,943,044</u>	<u>\$ 8,380,841</u>
	Total Book Additions					
7	2011	HELCO WP-F1 002	22,501,376	2,868,284	2,321,466	5,350,783
8	2012	HELCO WP-F1 002	29,207,699	761,331	1,319,240	8,701,432
9	2013	HELCO WP-F1 002	38,092,777	5,742,083	1,744,506	5,903,639
10	2014	HELCO WP-F1-002	35,487,268	2,841,126	685,561	7,086,972
11	2015	HELCO-WP-F1-002	30,082,060	2,253,685	1,689,649	4,336,494
12	Total		<u>\$ 155,371,180</u>	<u>\$ 14,466,509</u>	<u>\$ 7,760,422</u>	<u>\$ 31,379,320</u>
AVERAGE % (Line 6 / Line 12)			16.91%	30.62%	50.81%	26.71%

NOTE 1> PricewaterhouseCoopers assisted Hawaii Electric Light in its analysis of identifying deductible repairs for tax accounting purposes. The repairs percentage for each functional group represents the five year weighted average of tax deductible repairs costs included in book additions. Note that for the 2014 tax returns, the generation repairs deductions were recomputed pursuant to the IRS guidance issued in Revenue Procedure 2013-24, with the assistance of PWC.

HAWAII ELECTRIC LIGHT COMPANY, INC
2011-2015 PLANT ADDITIONS
5-YEAR AVERAGE

	LIFE	2011	2012	2013	2014	2015	Less Major Projects	Total	5-Year Average	
Info Systems/Data Handling	5	490 625	622 056	544,157	599 976	288 951		2 545 764	509 153	HELCO-WP-F1-001 ↓
Communication	20	949 504	1 142 345	590 647	949 629	4 580,511		8 212 636	1 642 527	
Office Furniture	7	1,323,719	1 156,157	89 410	35 123	305 681		2 910,090	582 018	
Distribution	20	22 501 376	29 207 699	38 092 777	35 487 268	30 082 060		155 371 180	31 074 236	
Land	-	74 405		490 177	6,476	2,100		573 158	114 632	
Other Production	15	2 868,284	761 331	5 742 083	2 841 126	2 253 685	(2 024 341)	12 442,168	2 488 434	
Steam & Hydraulic Production	20	2,321,466	1 319,240	1 744 506	685 561	1 689 649	(165 807)	7,594 614	1,518 923	
Structural	39	225 736	1 222 905	3 380 393	1 920,479	4 627 515		11 377 028	2 275 406	
Transmission	15	5 350 783	8 701,432	5 903 639	7 086 972	2 993 419	(2 589 326)	27,446 919	5,489 384	
Transmission	20					1 343,075		1 343 075	268 615	
Vehicles	-	3 136 760	1 850,826	2 438 782	2 003 232	3 497 083		12,926 683	2,585 337	
TOTAL		39 242 658	45 983 990	59 016 572	51 615 842	51 663 728	(4 779 474)	242 743 316	48 548 663	
		Schedule D2 →							Schedule D2	

HAWAII ELECTRIC LIGHT COMPANY, INC
AVERAGE RATE BASE AND RATE OF RETURN
(\$ Thousands)

RATE BASE	REFERENCE	Month End	
		Dec-15	Dec-14
TOTAL UTILITY PLANT	Note 2	743,842	722,984
Adjustments			
Construction Work in Progress		(11,455)	(12,421)
Retirement Work in Progress		(2,535)	(2,000)
Asset Retirement Obligation		(215)	(208)
Regulatory Liability for Cost of Removal		(81,917)	(75,659)
DEPRECIATED COST OF UTILITY PLANT IN SERVICE	Note 1	647,720	632,696
REGULATORY ASSETS - SFAS 109	Note 2	11,462	11,495
REG ASSET- CONTRIB vs NPPC	GL#18676030	3,047	3,047
REGULATORY ASSET - PENSION NPPC vs Rates	GL#18676040	22,911	17,596
REGULATORY ASSET - PREPAID PENSION	GL#18676010	0	56
REGULATORY ASSET - OPEB NPBC vs Rates	GL#18677040	2	72
REGULATORY ASSET - Asset Retirement Obligation	Note 2	215	208
MATERIALS & SUPPLIES (Excluding Stores Expense)	Note 2	7,570	7,277
MATERIALS & SUPPLIES ADJUSTMENT	HELCO-WP-H-006	(291)	(334)
FUEL STOCK	Note 2	8,310	13,800
UNAMORTIZED DEFERRED HR SUITE-PHASE 1	GL#186060	978	1,080
UNAMORTIZED DEFERRED HR SUITE-PHASE 2	GL#186061	(202)	(169)
UNAMORTIZED DEFERRED BUDGET SYSTEM PROJECT	GL#186077	249	280
UNAMORTIZED DEFERRED IVR COSTS	GL#18670400	586	0
UNAMORTIZED DEFERRED CIS COSTS	HELCO-WP-D1-001	2,010	2,224
WORKING CASH	HELCO-WP-H-007	4,735	7,536
DEDUCTIONS			
Unamortized Contributions in Aid of Construction	Note 2	95,298	94,475
Customer Advances for Construction	Note 2	11,172	11,685
Deferred Income Taxes	Schedule D4	102,336	92,618
Unamortized Investment Tax Cr - 1962 Revenue Act & STC	GL#255200, #255030	15,184	14,657
Customer Deposits	GL#235	3,352	3,570
Regulatory Liability OPEB True-up	OPEB Recon	1,548	1,281
TOTAL DEDUCTIONS		228,890	218,286
MONTH ENDED RATE BASE		480,412	478,578
SIMPLE AVERAGE RATE BASE		479,495	

Footnotes

1 Includes Property Held for Future Use balance of \$986,923 for 2015 and \$231,881 for 2014

2 See Hawaii Electric Light Company Inc Monthly Financial Report - December 2015, page 8, 9 & 10, filed February 23, 2016

* Amounts may not add up due to rounding

HAWAII ELECTRIC LIGHT COMPANY, INC
Ratemaking Adjustments for Incentive Compensation and Other Non-Recoverable Expenses
2015

<u>Account/Activity No</u>	<u>Description</u>	<u>YTD</u>	<u>Net of Tax</u>	<u>Rounded 000s</u>		
H9P 723 HEL NE NHAPRESI 900	EICP expense (credit)	\$134 560				
H9P 700 HEL NE NHAPRESI 901	Other incentive awards	\$192,179				
H9P 723 HEL NE NHAPRESI 900	Manager Award	\$42 136				
PWO AD 0000024	SPOT Awards	\$4 280				
	Payroll Taxes related to incentive compensation	\$8 023				
Provided by HEI	HEI charges for incentive compensation	\$91 859	\$ 288 979	Incentive \$ 289	→	Line 2A
P#R0001202 & HECO P#R0005162	Executive life insurance	(\$32 826)				
	Company memberships	\$14 658				
	(portion of EEI dues related to EEI's Government Affairs group Communication Marketing Customer, and Employee Relations group)					
Provided by HEI	HEI charges for outside services (plan admin, legal fees audit fees) - Executives	\$ 10 135				
	HEIRS 401K	\$32 362				
	Service awards	\$8,808				
HNP 779 HEL NE NHNZZZZZ 501	Non-qual pension	(\$3 002)				
HNP 779 HEL NE NHNZZZZZ 501	OPEB (Executive life portion only)	\$40 890				
	Management Increase	\$291 000				
	Costs associated with restatement of financial statements	\$33 252	\$ 234 406	Other \$ 234	→	Line 2B
	Total adjustment to operating income	\$868 314				
	Tax on adjustments	\$ (344 928)				
	Net adjustment to operating income	\$ 523 386	\$ 523 386	\$ 523		

HAWAII ELECTRIC LIGHT COMPANY, INC
Income Tax On Items To Be Replaced By Synchronized Interest
2015

	Source	2015	Rounded 000s		
Total Interest Charges	PUC report, p 1	\$10,921,252			
Less Int on Customer Deposits	Account 43105000	(294,509)			
AFUDC-Debt	NARUC 420030	(215,684)			
Amort of Inv Inc Differential	NARUC 403030	<u>\$23,536</u>	\$ 24	⇒	Line 2c
		\$ 10,434,595			
		38 9097744%			
		<u>\$ 4,060,077</u>	\$ (4,060)	⇒	Line 2d
	Tax rate				

HAWAII ELECTRIC LIGHT COMPANY, INC
 Ratemaking Capitalization
 2015
 (\$ in Thousands)

	<u>Simple Average Balance*</u>	<u>Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost of Debt</u>
Short-Term Debt	4,958	1 00%	0 93%	0 01%
Long-Term Debt	189,592	38 07%	5 27%	2 01%
Hybrid Securities	9,479	1 90%	7 24%	0 14%
Preferred Stock	6,698	1 35%	8 19%	0 11%
Common Equity	287,265	57 68%	10 00%	5 77%
	<u>497,992</u>	<u>100 00%</u>		<u>8 04%</u>

	<u>NARUC/ GL Code</u>	<u>YTD Dec 2015 (\$000s)</u>	<u>Cost Rate</u>
Short-Term Debt			
430	430	51	
Less Interest on QUIDS		-	
Int Exp-Commercial Paper	43100000	-	
Int Exp-SCF Loans	43108000	-	
Int Inc-Assoc Cos	419300	(5)	
		<u>46</u>	0 93%
Long-Term Debt			
Amort of Debt Disc & Exp	428	434	
Less Hybrid Sec Amort of Iss Exp		(36)	
Interest on Long-Term Debt	427	9,574	
Amort Inv Inc Differential	403030	24	
		<u>9,995</u>	5 27%
Hybrid Securities			
Interest on QUIDS	43006000	650	
Amort Exp-QUID1 Iss Exp	428QUID1	13	
Amort Exp-QUID2 Iss Exp	428QUID2	13	
Amort Exp-QUID3 Iss Exp	428QUID3	10	
Equity in Net Inc of Trust	421070	-	
		<u>687</u>	7 24%
Preferred Stock			
Amort of Pfd Stk Iss Exp	42501000	15	
Preferred Stock dividends	437	534	
		<u>549</u>	8 19%

Common Equity D&O 30168 in Dkt No 2009-0164 filed February 8, 2012

* Short-Term Debt based on a 12 month average

HAWAII ELECTRIC LIGHT COMPANY, INC
Earning Sharing Credits Recorded (net of tax)
2015

Earnings Sharing Credits Recorded	\$ -
Revenue Taxes @ 8.885%	\$ -
	<hr/>
	\$ -
Income Taxes @ 38.9097744%	\$ -
	<hr/>
Reduction to operating income	\$ -

HAWAII ELECTRIC LIGHT COMPANY, INC
MATERIALS & SUPPLIES ADJUSTMENT
(\$ Thousands)

Beg Balance at November 30, 2015	Note (1)		7,596
Additions		a	298
Issues			(324)
Adjustments			-
Ending Balance at December 31, 2015			<u>7,570</u>
# of Days in December		b	31
Average Daily Additions to Inventory		c=a/b	9 61
Purchase Payment Lag Days	Note (2)	d	30 3
Estimated Unpaid Inventory at December 31, 2015	Note (3)	e=cxd	291

Footnotes

- 1 Source Hawaii Electric Light Company Inc Combined Inventory Report for December 2015
- 2 See Hawaii Electric Light Company Inc Docket No 2009-0164 Hawaii Electric Light Company Inc 's 2010 test year rate case, HELCO-WP-1603, pages 1 - 3
- 3 Material & Inventory Adjustment represents materials & supplies financed by accounts payable and is calculated in compliance with the Commission's D&O 14412 dated December 11, 1995, in Docket No 7766,

HAWAII ELECTRIC LIGHT COMPANY INC
WORKING CASH
2015

Line No	Description	Reference	2015	Net Collection Lag (Days)	Amount	
	(a)	(b)	(c)	(d) Note (1)	(e)=(c)/365x(d)	
1	Fuel Oil	Trial Balance B20	71 851	24 4	4 803	
2	Purchased Power	GL #555	97 503	1 5	401	
3	Current Income Taxes					
		Dec 2015 PUC Monthly				
4	Income Tax	Report Page 2	3 681			
5	Income Tax related to Disallowed Items	HECO WP-H-002	345			
6	Reversal of Tax Related to Int Synch Replacemen	Sch H-Line 2d	4 060			
7	Tax Related to Int Synch	Sch H-line 13 - 13a	(4 019)			
8	Total	Sum of Line 4-7	4 068	1 2	13	
9	Revenue Taxes					
10	Franchise	GL #408010	8 577			
11	PSC	GL #408020	20 489			
12	PUC Fee	GL #408030	1 741			
13	Total	Sum of Line 10-12	30 807	-29 3	(2 473)	
14	O&M Labor					
15	O&M labor	Acct Dept O&M report	19,060	19 060	27 6	1 441
16	O&M Non-Labor					
17	O&M Expense	Trial Balance G30	62 249			
18	O&M Labor Excl Fuel Labor	(see O&M Labor above)	(19 060)			
19	Bad Debt Expense	GL #904	(1 044)			
20	Pension Reg Asset/Liab Amort	HECO WP-H 007 pg 2	(804)			
21	OPEB Reg Asset/Liab Amort	HECO WP-H-007 pg 2	50			
22	Payroll Tax	GL #408050	1 452			
23	Sys Develop Amortization	HECO WP-H-007 pg 2	(135)			
24	Regulatory Asset Rate Case	HECO WP-H-007 pg 2	(3)			
25	Total	Sum of Line 17-24	42 705	4 7	550	
		Sum of Line 1 2 8 13 15				
26	Working Cash	25			4 735	

Footnotes

1 See Docket No 2009-0164 Order No 30301 Exhibit B page 2 filed April 5 2012

HAWAII ELECTRIC LIGHT COMPANY, INC
O&M Non-Labor
2015

Pension Regulatory Asset Amortization

	<u>2015</u>	O&M % Portion <u>74.88%</u> <i>Note 1</i>	Rounded <u>000s</u>
HNP 779 HEL NE NHN ZZZZZ 501	1,073,531	803,860	804

OPEB Regulatory Asset Amortization

	<u>2015</u>	O&M % Portion <u>74.88%</u> <i>Note 1</i>	Rounded <u>000s</u>
HNP 779 HEL NE NHN ZZZZZ 501	(66,271)	(49,624)	(50)

	<u>2015</u>	Rounded <u>000s</u>
System Development Amortization		
GL # 186060 & 186061	135,046	135
Regulatory Asset - Rate Case		
GL # 186720	2,686	3

Footnote

- 1 See Docket No. 2009-0164, Parties' Stipulated Settlement Letter, HELCO T-10 Attachment 3, filed September 16, 2010

HAWAII ELECTRIC LIGHT COMPANY INC.
DECOUPLING CALCULATION WORKBOOK
CIS PROJECT COSTS ADIT

	Book	Federal Tax Basis	State Tax Basis	Fed Book Tax Difference	State Book Tax Difference	ADIT		
						Federal 35.00%	State 6.01504%	Total
CIS Book Basis	8,071,054	8,071,054	8,071,054					
Book/Tax Differences								
AFUDC		(1,014,686)	(1,014,686)					
Book Writedown of CIS Costs	(5,500,000)	(5,500,000)	(5,500,000)					
	2,571,054	1,556,368	1,556,368					
Book/Tax bases differences	(94,249)	(63,229)	(63,229)					
AFUDC		(6,154)	(6,154)					
Amortization through 2012/2013	(120,408)	(1,167,365)	(847,745)					
Balance as of 12/31/13	2,356,397	319,620	639,240	2,036,777	1,717,157	(676,721)	(103,288)	(780,009)
2014 Amortization	(206,413)	(247,831)	(495,662)					
Balance as of 12/31/14	2,149,984	71,789	143,578	2,078,195	2,006,406	(685,128)	(120,686)	(805,814)
2015 Amortization	(206,413)	(71,789)	(143,578)	(134,624)	(62,835)	45,796	3,780	49,575
Balance as of 12/31/15	1,943,571			1,943,571	1,943,571	(639,333)	(116,907)	(756,239)
2016 Amortization	(206,413)			(206,413)	(206,413)	67,899	12,416	80,315
Balance as of 12/31/16	1,737,158	-		1,737,158	1,737,158	(571,434)	(104,491)	(675,924)

Note For tax purposes, CIS costs are amortized over 36 months and are fully amortized by 2015

HAWAII ELECTRIC LIGHT COMPANY, INC
Major Projects CIS Carrying Cost (amortize 12 years)
Amortization of CIS Assets

	CIS Def Post Go Live		CIS Final Cost - Amort	
Amort. Period	144 months		144 months	
Reg Asset Balance per GL				
Bal 6/2013	59,038		2,476,957	
Debit	40,330,021 00		40,330,021 00	
Credit	18,670 202 00		18,605,005 00	
Jun-13	(409 99)	58,627 86	(17,201 09)	2,459,756 31
Jul-13	(409 99)	58,217 87	(17 201 09)	2,442,555 21
Aug-13	(409 99)	57,807 89	(17 201 09)	2,425,354 12
Sep-13	(409 99)	57,397 90	(17,201 09)	2,408,153 03
Oct-13	(409 99)	56 987 92	(17,201 09)	2 390,951 93
Nov-13	(409 99)	56 577 93	(17,201 09)	2,373,750 84
Dec-13	(409 99)	56 167 95	(17,201 09)	2,356 549 75
Jan-14	(409 99)	55,757 96	(17,201 09)	2,339,348 66
Feb-14	(409 99)	55,347 98	(17,201 09)	2,322,147 56
Mar-14	(409 99)	54,937 99	(17 201 09)	2,304,946 47
Apr-14	(409 99)	54,528 01	(17 201 09)	2,287,745 38
May-14	(409 99)	54,118 02	(17 201 09)	2,270,544 28
Jun-14	(409 99)	53,708 04	(17,201 09)	2 253 343 19
Jul-14	(409 99)	53,298 05	(17,201 09)	2,236,142 10
Aug-14	(409 99)	52,888 07	(17,201 09)	2,218,941 00
Sep-14	(409 99)	52,478 08	(17,201 09)	2,201,739 91
Oct-14	(409 99)	52,068 10	(17,201 09)	2,184,538 82
Nov-14	(409 99)	51,658 11	(17 201 09)	2,167,337 73
Dec-14	(409 99)	51,248 13	(17 201 09)	2,150,136 63
Jan-15	(409 99)	50 838 14	(17,201 09)	2,132,935 54
Feb-15	(409 99)	50,428 16	(17,201 09)	2,115,734 45
Mar-15	(409 99)	50,018 17	(17,201 09)	2,098,533 35
Apr-15	(409 99)	49 608 19	(17,201 09)	2,081,332 26
May-15	(409 99)	49,198 20	(17,201 09)	2,064,131 17
Jun-15	(409 99)	48,788 22	(17,201 09)	2,046,930 07
Jul-15	(409 99)	48,378 23	(17,201 09)	2 029 728 98
Aug-15	(409 99)	47 968 25	(17,201 09)	2 012,527 89
Sep-15	(409 99)	47 558 26	(17,201 09)	1,995,326 79
Oct-15	(409 99)	47,148 28	(17 201 09)	1,978,125 70
Nov-15	(409 99)	46,738 29	(17,201 09)	1,960,924 61
Dec-15	(409 99)	46,328 31	(17,201 09)	1,943,723 52
Jan-16	(409 99)	45,918 32	(17,201 09)	1 926,522 42
Feb-16	(409 99)	45,508 34	(17,201 09)	1 909,321 33
Mar-16	(409 99)	45,098 35	(17,201 09)	1 892,120 24
Apr-16	(409 99)	44,688 37	(17,201 09)	1,874 919 14
May-16	(409 99)	44,278 38	(17 201 09)	1,857,718 05
Jun-16	(409 99)	43,868 40	(17,201 09)	1,840,516 96
Jul-16	(409 99)	43,458 41	(17,201 09)	1,823 315 86
Aug-16	(409 99)	43,048 43	(17,201 09)	1 806,114 77
Sep-16	(409 99)	42,638 44	(17 201 09)	1,788,913 68
Oct-16	(409 99)	42,228 46	(17,201 09)	1,771,712 58
Nov-16	(409 99)	41,818 47	(17,201 09)	1 754,511 49
Dec-16	(409 99)	41,408 49	(17,201 09)	1 737 310 40
2016 Activity	(4,919 82)		(206,413 12)	