FILED

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

2013 MAR 28 P 4: 12

In the Matter of the Application of

PUBLIC UTILITIES COMMISSION

MAUI ELECTRIC COMPANY, LIMITED

For approval to modify the RBA Rate Adjustment in its Revenue Balancing Account Provision Tariff Transmittal No. 13-01 (Decoupling)

Effective Date: June 1, 2013

I

Maui Electric Company, Limited ("MECO," "Applicant" or "Company") files this transmittal to revise paragraph E (Tariff Sheet Nos. 97C, 108C and 152C for Maui, Lanai and Molokai Divisions) of its Revenue Balancing Account ("RBA") Provision tariffs ("RBA Tariffs"). In particular, this transmittal proposes to establish the RBA Rate Adjustment at \$0.008684 per kilowatt-hour ("kWh") for all divisions, effective June 1, 2013 through May 31, 2014. The RBA Rate Adjustment is based on the Company's RBA balance at the end of 2012 and the Company's Rate Adjustment Mechanism ("RAM") Revenue Adjustment for calendar year 2013. It also incorporates the RAM Revenue Adjustments resulting from the Commission's *Order. No. 31126 Approving, with Clarifications, Stipulated Settlement Agreement, Filed on January 28, 2013* ("Order No. 31126"), dated March 19, 2013 in Docket No. 2008-0083 (Hawaiian Electric Company, Inc.'s ("Hawaiian Electric") 2009 test year rate case). While the Commission approved the implementation of decoupling for MECO in 2012, this is MECO's first decoupling tariff filing requesting an RBA Rate Adjustment.¹

¹ The Commission issued *Decision and Order No. 30365* on May 2, 2012 in MECO's 2010 test year rate case, Docket No. 2009-0163, authorizing MECO to implement the decoupling mechanism.

MECO, whose principal place of business and whose administrative offices are located at 210 West Kamehameha Avenue, Kahului, Hawaii, is a corporation duly organized under the laws of the Territory of Hawaii on or about April 28, 1921, and is now existing under and by virtue of the laws of the State of Hawaii. MECO is an operating public utility engaged in the production, purchase, transmission, distribution and sale of electricity on the Islands of Maui, Lanai and Molokai.

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Correspondence and communications in regard to this Transmittal No. 13-01 are to be addressed to:

Dean K. Matsuura Manager, Regulatory Affairs Hawaiian Electric Company, Inc. P. O. Box 2750 Honolulu, Hawaii 96840

IV

MECO seeks Commission authorization of this tariff transmittal pursuant to

Sections 6-61-111, 6-61-74, 6-61-75, and 6-61-86 of the Rules of Practice and Procedure before

the Public Utilities Commission, Hawaii Administrative Rules ("HAR"), Title 6, Chapter 61.

V

MECO's latest available balance sheet and income statement for the twelve months

ending February 28, 2013 were filed with the Commission on March 28, 2013, and are

incorporated by reference pursuant to HAR §6-61-76.

On May 2, 2012, the Commission issued Decision and Order No. 30365 ("Order No. 30365") in MECO's 2010 test year rate case, Docket No. 2009-0163, authorizing MECO to implement the decoupling mechanism that the Commission approved in the Final Decoupling Order in Docket No. 2008-0274, and allowing the Company's revised tariff sheets and rate schedules to go into effect within two business days (May 4, 2012).² On May 10, 2012, MECO filed a letter informing the Commission that it was not proposing a 2012 RBA Rate Adjustment at that time as it was anticipated that, according to the approved procedural schedule in MECO's 2012 test year rate case (Docket No. 2011-0092),³ the Commission would shortly issue an interim decision in that rate case that would reset the 2012 RBA target revenue and set the RBA Rate Adjustment to zero.⁴ Instead, MECO submitted schedules and workpapers in support of a 2012 RBA Rate Adjustment for informational purposes only and stated that it intended to file an RBA Rate Adjustment starting in 2013.⁵ Therefore, this transmittal is the Company's first tariff filing to establish an RBA Rate Adjustment. On May 21, 2012, the Commission issued Interim Decision and Order No. 30396 ("Interim D&O 30396") in MECO's 2012 test year rate case which granted interim rate relief as set forth in Attachment 1A of the Parties' revised Updated Joint Statement of Probable Entitlement, filed on May 14, 2012. The interim rates authorized in Interim D&O 30396 became effective on June 1, 2012.⁶

 $^{^2}$ In Order No. 30365, page 110, the Commission conditioned the approved revised tariff sheets and rate schedules on MECO filing its revised tariffs sheets and rate schedules with the applicable issued and effective dates, which MECO filed on May 3, 2012 and May 4, 2012 (corrected tariff sheet).

³ Refer to Order No. 30328 Approving Parties' Request for Extension of Time to File Joint Settlement Letter and Statement of Probably Entitlement, April 16, 2012 in Docket No. 2011-0092.

⁴ On May 21, 2012 the Commission issued Interim Decision and Order No. 30396 in Docket No. 2011-0092 in MECO's 2012 test year rate case.

⁵ Refer to MECO's letter, Docket No. 2009-0163 – MECO 2010 Test Year Rate Case MECO 2012 RBA Rate Adjustment (for Informational Purposes Only), dated May 10, 2012.

⁶ Refer to MECO's letter, Docket No. 2011-0092 – MECO 2012 Test Year Rate Case MECO Revised Tariff Sheets for Interim Rate Increase, dated May 29, 2012.

On January 28, 2013, the Hawaiian Electric Companies⁷ and the Consumer Advocate filed their *Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of Consumer Advocacy regarding Certain Regulatory Matters* ("Stipulated Settlement") in Docket No. 2008-0083 on a number of regulatory matters which, among others, included the following⁸:

The Hawaiian Electric Companies will write-off, for accounting and ratemaking purposes, \$40 million of costs in lieu of conducting the regulatory audits of the Campbell Industrial Park Combustion Turbine Unit 1 ("CIP CT-1") and the Customer Information System ("CIS") projects ordered in the Order Approving Consumer Advocate's Recommendations regarding Focused Regulatory Audits, issued on May 2, 2011 in Docket No. 2008-0083.⁹ For purposes of accounting for the Stipulated Settlement Agreement, the entire write-off (\$29 million for Hawaiian Electric, and \$5.5 million each for HELCO and MECO) will be adjusted as part of the cost of the CIS project. The remaining net recoverable costs of CIP CT-1 and the CIS projects would be included in rate base as of December 31, 2012.

⁷ "The "HECO Companies," "Hawaiian Electric Companies" or "Companies" include Hawaiian Electric, Hawaii Electric Light Company, Inc. ("HELCO") and MECO.

⁸ The Stipulated Settlement also provides that: (1) HELCO will withdraw its 2013 test year rate case (Docket No. 2012-0099) and will submit annual RBA/RAM rate adjustment filings rolling forward the base year information from the prior HELCO rate case (Docket No. 2009-0164) and will not file a rate case until its 2016 test year rate case; (2) Hawaiian Electric will delay the filing of its 2014 test year rate case to file no earlier than January 2, 2014, and the Consumer Advocate will recommend that Hawaiian Electric be granted a waiver of HAR §6-61-87(4) that would enable Hawaiian Electric to file in 2014 a rate case application using a 2014 test year and (3) for the 2014, 2015 and 2016 RAM periods, Hawaiian Electric will be allowed to record the 2014, 2015 and 2016 RAM revenue adjustments beginning from January 1 through December 31 calendar year (once Hawaiian Electric is able to assess the amount), and collect the RAM revenue adjustments through the RBA Rate Adjustment (which includes the RAM Revenue Adjustment) from June 1 of each year to May 31 of the following year. At the conclusion of that period, the current RAM provisions will again apply in accordance with the Amended Joint Proposal approved by the *Final Decision and Order* issued in the decoupling proceeding (Docket No. 2008-0274).

⁹ This write-off amount is in addition to all credits received from the Hawaiian Electric Companies' prior CIS vendor, which credits have already been used to reduce the capitalized costs of the CIS project.

- The Hawaiian Electric Companies will include the net recoverable costs of the CIP CT -1 and the CIS projects not already included in rates in their 2013 RAM Revenue Adjustments. The Consumer Advocate will support RAM recovery in 2013 and the subsequent years thereafter and in the Hawaiian Electric, HELCO and MECO rate cases for the allowed portion of the CIP CT-1 (Hawaiian Electric only) and CIS project costs in excess of the costs previously included in rate base, along with related accumulated depreciation, accumulated deferred income taxes, unamortized ITC, unamortized deferred CIS costs, the unamortized regulatory assets related to the carrying charges and deferred depreciation, as well as related project depreciation and regulatory asset amortization expenses. Recovery of the CIS costs through the RAM Revenue Adjustment mechanism was for the sole purpose of this Settlement Agreement and did not constitute a precedent for the recovery of software costs through the RAM Revenue Adjustment mechanism.
- MECO and the Consumer Advocate will continue to support the *Parties' Stipulated* Settlement Letter ("Parties' Stipulated Settlement Letter") filed on April 20, 2012 in the MECO 2012 test year rate case (Docket No. 2011-0092),¹⁰ including issues related to, among other things, decoupling.
- Through calendar year 2016, the Hawaiian Electric Companies and the Consumer Advocate will recommend and support continuation of the Companies' existing recovery mechanisms, including the decoupling RBA and RAM, as well as the temporary acceleration of Hawaiian Electric's RAM Revenue Adjustment and the agreement to recover CIS costs through the RAM Revenue Adjustment described above.

¹⁰ MECO's and the Consumer Advocate's stipulated settlement is reflected in the *Parties' Stipulated Settlement* Letter, filed on April 20, 2012 and the *Parties' Revised Updated Stipulated Settlement Letter*, filed on May 14, 2012.

On January 31, 2013, the Department of Defense stated that it does not object to this Stipulated Settlement.

On March 19, 2013, the Commission issued Order No. 31126 approving the Stipulated Settlement with the following clarifications: (1) the Commission reiterated its authority to examine and ascertain what post go-live CIS costs would be subject to regulatory review in future rate cases; (2) the Commission discouraged requesting single issue cost deferral accounting and/or cost recovery mechanisms during the period of rate case deferral; (3) the Commission approved the agreed-upon recovery of CIP CT-1 and CIS project costs through the RAM, as set forth in the Stipulated Settlement; however, this did not set a precedent for future projects; and (4) the Commission reaffirmed its right to rule on the substance of the MECO 2012 test year rate case in its ongoing rate case proceeding.¹¹

While recognizing that this will result in a rate increase to ratepayers,¹² the Commission approved the Stipulated Settlement as just and reasonable, stating that it terminates further accrual of carrying costs for those projects pending potentially long regulatory audits of these projects, and expects that this will free up the Companies' resources to enable greater focus on achieving Hawaii's statutory energy mandates and policies of increased energy efficiency and renewable generation and improve operational efficiencies.¹³

This tariff filing is consistent with the Stipulated Settlement and Order No. 31126.¹⁴

¹¹ Refer to pages 8-10 of the Stipulated Settlement.

¹² Order No. 31126 at page 10. The 2013 RAM revenue adjustment is based on the final project cost report for the CIS project to be filed with the Commission in Docket No. 04-0268 on April 1, 2013, and the \$40 million write-off and other provisions of the Stipulated Settlement approved by Order No. 31126. It reflects a slightly lower deferred CIS project cost from what was previously filed in the Stipulated Settlement. (Refer to Attachment 2, Schedules D1, D4 and E of this tariff transmittal.)

¹³ Refer to pages 8-9 of the Stipulated Settlement.

¹⁴ In addition, MECO will be filing shortly a transmittal to revise the decoupling language in its RBA and RAM tariff provisions to reflect Order No. 31126 and other clarifications.

VIII

In this transmittal, MECO proposes an RBA Rate Adjustment of \$0.008684 per kWh for the June 1, 2013 through May 31, 2014 recovery period. The Company calculated its RBA Rate Adjustment according to its RBA and RAM tariff provisions.¹⁵ Approximately 58 percent of the RBA Rate Adjustment includes the recovery of the RBA balance at year end 2012, and the remaining 42 percent is for the 2013 RAM Revenue Adjustment. In total, the MECO 2013 RBA Revenue Adjustment is \$10.0 million and consists of \$5.8 million for the reconciliation of the RBA revenue balance and \$4.2 million for the RAM revenue adjustment. There are no adjustments to the RBA Rate Adjustment for earnings sharing revenues credits or Commissionordered major capital project credits or baseline capital project credits. (Refer to Schedule A of Attachment 2 described in Section IX of this tariff transmittal.)

The RBA revenue balance represents the sales decoupling component of the Commission-approved decoupling mechanism, which breaks the linkage between the Company's sales and total electric revenue.¹⁶ This means that MECO is allowed to record revenues only at target revenue levels authorized in the test year rate case plus any RAM revenue adjustment identified in subsequent annual decoupling tariff transmittals, regardless of the level of sales experienced. The \$5.3 million for the RBA revenue balance identified in the 2013 RBA Revenue Adjustment (grossed-up to \$5.8 million to include revenue taxes) is the result of lower sales experienced from May 4, 2012 through December 31, 2012. MECO's 2012 annual

 ¹⁵ Maui, Lanai and Molokai Divisions have similar RBA and RAM tariff provisions. Refer to: Tariff Sheet Nos. 96, 96A – 96H, 97 and 97A – 97C for Maui Division; Tariff Sheet Nos. 107, 107A – 107H, 108 and 108A – 108C for Lanai Division; and Tariff Sheet Nos. 151, 151A – 151H, 152 and 152A – 152C for Molokai Division.
 ¹⁶ Refer to page 101 of Order No. 30365.

recorded sales totaled 1,144.8 gigwatt-hours ("GWh"), which were 56.9 GWh, or 4.7%, lower than the 1,201.7 GWh test year estimate identified in the MECO 2012 test year rate case.¹⁷

Several factors contributed to the lower than forecasted sales such as the significantly higher penetration of customer-sited renewable generation and energy efficient technologies, customer conservation efforts driven by higher than projected energy prices, and slower than assumed recovery of the economy.

The residential and commercial sectors both experienced lower than forecasted sales in 2012. The residential sector sustained the larger impact with sales decreasing by 7.7% as average monthly usage decreased by 7.4%. Commercial sales decreased by 3.1% (see Table 1 below which compares 2012 actual sales (and some other measurables) against the 2012 test year forecast).

¹⁷ Refer to Exhibit 1, page 14 of the Parties' Stipulated Settlement Letter in Docket No. 2011-0092.

	TY2012	2012	Difference	% Diff
Residential Sector				
Sales (GWh)	428.3	395.3	(32.9)	-7.7%
Customers	58,767	58,610	(157)	-0.3%
Average Monthly Use (kWh/Customer)	607	562	(45)	-7.4%
Renewable Generation GWh Impacts (NEM/SIA/FIT) 1	7.2	17.1	9.9	136.0%
Energy Efficiency Impacts (GWh) :	25.0	36.8	11.8	47.2%
Electricity Nominal Price c/kWh 3	35.0	38.7	3.7	10.6%
Commercial Sector				
Sales (GWh)	773.5	749.5	(24.0)	-3.1%
Customers	9,988	9,950	(38)	-0.4%
Renewable Generation GWh Impacts (NEM/SIA/FIT) ¹	8.5	10.6	2.2	25.5%
Energy Efficiency Impacts (GWh) ²	57.6	63.9	6.3	11.0%
Electricity Nominal Price c/kWh 3	33.0	37.4	4.4	13.5%
Weather	2011 Avg			
Cooling Degree Days (Maui) ⁴	3,883	3,905	22	0.6%
Average Dewpoint Temperature (degrees)	63.1	63.3	0.2	0.3%

Table 1 Comparison of 2012 Actuals to TY2012

1 Impacts are cumulative and assumes a 17% capacity factor for PV systems.

² 2012 includes impacts provided by Hawaii Energy.

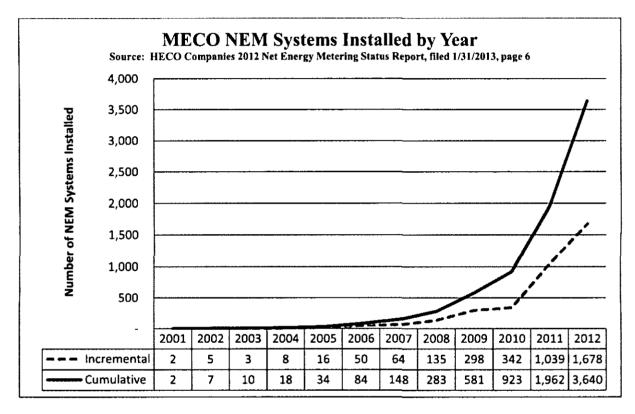
³ Maui Only - excludes Schedule F

⁴ A cooling degree day is a measurement designed to reflect the demand for energy to cool a home or business. It is calculated by subtracting 65 from the day's average temperature.

Higher energy prices coupled with federal and state incentives and utility tariffs such as Net Energy Metering ("NEM"), Standard Interconnection Agreements ("SIA") and Feed In Tariffs ("FIT") that support Hawaii's clean energy infrastructure led to higher penetrations of customer-sited renewable generation and energy efficient technologies which contributed to the lower than forecasted sales. The cumulative 2012 impacts attributed to the systems installed under NEM, SIA and FIT¹⁸ were significantly higher than the 136% assumed in the 2012 test year for the residential sector and 26% for the commercial sector. The projected 2012 volume of systems was based on historic levels when the forecast was being developed in the first quarter

¹⁸ The impacts to sales under F1T are associated with the output from the system that offsets a customer's load as opposed to what is sold to the Company.

2011. As shown in the 2012 Net Energy Metering Status Report filed January 31, 2013, page 6, the number of NEM installed systems on MECO's grid jumped from 298 in 2009, to 342 in 2010, 1,039 in 2011, and 1,678 in 2012, a 463% increase over three years. Refer to the graph below for the number of NEM systems installed by year.



The reduction to sales from the installation of energy efficient technologies was also underestimated. Forecasted impacts were consistent with those filed in the Integrated Resource Planning docket, Docket No. 04-0077, as information on future impacts was not available.

The 2012 test year sales were based on a preliminary Maui County economic outlook prepared by the University of Hawaii Economic Research Organization ("UHERO") in January 2011. At that time, continued recovery of the visitor industry, supported by continued recovery in the U.S. and global economies, was expected to drive Maui and Lanai's slow economic growth. Since tourism has played a limited role on the Molokai economy, improvements in the visitor industry were not projected to impact growth on Molokai. The positive impact of

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recovery in the visitor industry was expected to be dampened by the poor construction outlook for Maui County and rising energy costs.

Although the Hawaii economy saw higher visitor arrivals and expenditures in 2011 and again in 2012, economic improvement beyond tourism was still slow to materialize. The delayed start of a new large commercial customer in 2012 contributed to the lower than forecasted sales. Also, in 2011, the U.S. economic recovery slowed, and other global economies struggled following natural disasters such as the Tohoku earthquake and tsunami in Japan, political gridlocks and fiscal crises in the U.S. and Europe, and slowing growth in China.

The RAM Revenue Adjustment

The RAM revenue adjustment component of the decoupling mechanism is intended to compensate the Company for increases in utility costs and infrastructure investments between rate cases.¹⁹ MECO's approved 2012 test year is the basis for its RAM Revenue Adjustment which is comprised of three major components: 1) the operations and maintenance ("O&M") RAM, 2) the Rate Base RAM-Return on Investment, and 3) Depreciation & Amortization RAM Expense.

The O&M RAM calculations reflect such increases in utility bargaining unit labor and non-labor costs. The 2013 O&M RAM adjustment of \$1.0 million includes the 2012 test year bargaining unit labor costs and associated payroll tax increases that are based on the wage rate increase of 2.88%, provided for in the Company's currently effective collective bargaining agreement, less a labor productivity of $0.76\%^{20}$. Non-bargaining unit labor is not subject to

¹⁹ Refer to page 101 of Order No. 30365.

²⁰ In 2012, the Union and the Hawaiian Electric Companies held discussions that resulted in the execution of the Contract Negotiations 2012 IBEW 1260 – HECO, HELCO, MECO Tentative Settlement Agreement dated October 24, 2012 (the "Union Settlement Agreement"), subsequently ratified by the Union on November 1, 2012, and the Letters of Understanding between the Union and the Hawaiian Electric Companies, where certain eligible Union bargaining unit positions will receive a \$1 per hour wage increase in July 2013, and a \$0.50 per hour wage increase each year from July 2014 through July 2018. The wage increases in the Union Settlement Agreement and Letters of

escalation in the O&M RAM adjustment. Certain 2012 test year non-labor expense increases over interim 2012 test year levels approved by the Commission are also included, based on the Blue Chip Economic Indicators forecast of the GDPPI. (Refer to Attachment 2, Schedule C of this tariff transmittal.) The non-labor cost escalation rate does not apply to any fuel, purchased power, Integrated Resource Planning ("IRP")/demand side management ("DSM"), pension, Other Post-Employment Benefits ("OPEB"), or Clean Energy/Renewable Energy Infrastructure or any costs that are subject to recovery through separate rate tracking mechanisms.

The rate base RAM adjustment calculation of approximately \$2.5 million is the result of the Company's investments in plant to support reliability of the Company's electrical infrastructure and preventively replace aging plant.²¹ Based on the approved 2012 test year rate base for December 31, 2012, the Company updated the components of plant in service, ADIT, accumulated depreciation, and CIAC for actual December 31, 2012 balances (all other components of the rate base remain at the test year levels). Thus the Company reflects the additional approximately \$48.3 million²² in plant additions in 2012, which exceeded the \$43.5 million²³ included in the 2012 test year revenue requirements. The 2013 rate base RAM incorporates this additional investment and also includes baseline plant additions (based on an historical five-year average) and major project plant additions totaling \$38.2 million in 2013. In particular, the rate base RAM adjustment calculation included a major project to perform a major

Understanding are in addition to the general wage rate increase provided for in the Union Settlement Agreement. MECO has estimated that the 2013 O&M expense impact of this additional wage increase is approximately \$54,000, but the Company has not included this amount in its 2013 O&M RAM adjustment.

 ²¹ Exemption From and Modification of General Order No. 7, Paragraph 2.3(g), Relating to Capital Improvements, Capital Projects Completed in 2012, Exhibit 3, page 1 in Docket No. 03-0257, dated March 22, 2013.
 ²² Id.

²³ Docket No. 2011-0092 – MECO 2012 Test Year Rate Case Parties' Stipulated Settlement Letter, MECO T-17, Attachment 3, page 1 of 5, Final Settlement, line 5

overhaul of the Maalaea Unit 16²⁴ which is expected to be completed in May 2013 and was not included in the 2012 test year estimated balances. Also, deferred CIS project costs and related carrying charges previously excluded from the 2012 test year estimated balances were included in the Rate Base RAM adjustment calculation, as approved by the Commission and contributed to the increase in the rate base from the 2012 test year. Using these estimated 2013 additional changes to the rate base, the increase from the test year rate base of \$19,439 million (the estimated 2013 average rate base) was calculated and used to estimate the additional return required by the Company (based on the approved test year capitalization).

The Depreciation and Amortization calculated RAM adjustment of approximately \$676,000 reflects a corresponding increase to depreciation and amortization expense above amounts in current revenue due to the net plant additions in 2012 and the inclusion of CIS deferred project costs amortization.

IX

In Attachment 1 of this tariff transmittal, the Company submits its proposed RBA tariff revision reflecting MECO's RBA Rate Adjustment rate in Section E of Sheet Nos. 97C (Maui Division), 108C (Lanai Division) and 152C (Molokai Division). Attachment 1A provides the tariff sheet for the RBA tariff in blackline version.

Attachment 2 provides the calculation of the RBA Rate Adjustment in the following schedules, along with supporting workpapers:

Schedule A – Determination of 2013 RBA Rate Adjustment (Summary) Schedule B – Summary of Revenue Balancing Account

²⁴ In the Matter of the Application of Maui Electric Company, Limited For Approval to Commit Funds in Excess of \$2,500,000 for Item M0001282, Perform Major Overhaul on Maalaea Unit 16, Decision and Order No. 30874, Docket No. 2012-0038. In the Rate Base RAM calculation, MECO has reflected the project cost as most recently estimated which is lower than the amount authorized in Decision and Order No. 30874.

- Schedule B1 Determination of Target Revenues
- Schedule B2 Determination of Recorded Adjusted RBA Revenues
- Schedule C Determination of Operations and Maintenance ("O&M") RAM Adjustment
- Schedule C1 Summary of Operations and Maintenance Labor and Non-Labor Expense
- Schedule C2 Non-Labor Exclusion Adjustment of O&M RAM
- Schedule D Determination of Rate Base RAM Adjustment Return on Investment
- Schedule D1 Determination of Rate Base RAM Adjustment Change in Rate Base
- Schedule D2 Determination of Baseline Capital Projects Additions
- Schedule D3 Determination of Major Capital Project Additions
- Schedule D4 Determination of Adjusted Recorded Deferred Income Taxes
- Schedule E Determination of Depreciation and Amortization RAM Adjustment
- Schedule F Determination of Change in Deferred Income Taxes
- Schedule F1 Determination of Tax Depreciation
- Schedule F2 Tax Depreciation on Major Capital Projects Additions
- Schedule G CIAC (Contribution In Aid of Construction) Summary
- Schedule G1 Baseline Capital Projects CIAC Additions
- Schedule G2 Major Capital Project CIAC Additions
- Schedule G3 CIAC Amortization
- Schedule H Earnings Sharing Calculations²⁵
- Schedule I PUC-Ordered Adjustments
- The Company and the Consumer Advocate jointly developed the format of the schedules

in Attachment 2, which are similar to those filed in the 2012 annual RBA Rate Adjustment

²⁵ The Company has provided its calculated Return on Equity ("ROE") for year 2012 in Schedule H of this tariff transmittal as required by the Commission in its Final Decoupling Order.

submissions in Transmittal No. 12-02 for Hawaiian Electric filed March 30, 2012 (approved as revised in Order No. 30418 Approving HECO's Tariff Transmittal Filed on March 30, 2012, as Revised on May 23, 2012, dated May 31, 2012) and Transmittal No. 12-03 for HELCO filed April 11, 2012 (approved as revised in Order No. 30435 Approving HELCO's Tariff Transmittal Filed on April 11, 2012, as Revised on April 18, 2012, dated June 14, 2012), as well as MECO's 2012 informational filing in Docket No. 2009-0163 filed May 10, 2012.

WHEREFORE, MECO respectfully gives not less than 30 days' notice as required by law and requests that its proposed revisions to the RBA Provision be allowed to become effective on June 1, 2013.

DATED: Honolulu, Hawaii, March 28, 2013.

MAUI ELECTRIC COMPANY, LIMITED

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Tayne S. Y. Sekimura Financial Vice President

ATTACHMENT 1

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Superseding Sheet No. 97C Effective May 4, 2012 REVISED SHEET NO. 97C Effective June 1, 2013

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

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. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2013 to May 31, 2014

RBA Rate Adjustment

All Rate Schedules 0.8684 ¢/kWh

F: COMMISSION'S AUTHORITY

The Commission may suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

G. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

MAUI ELECTRIC COMPANY, INC.

Transmittal Letter dated March 28, 2013.

Superseding Sheet No. 108C Effective May 4, 2012 REVISED SHEET NO. 108C Effective June 1, 2013

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

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. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2013 to May 31, 2014

RBA Rate Adjustment

All Rate Schedules 0.8684 ¢/kWh

F: COMMISSION'S AUTHORITY

The Commission may suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

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Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

MAUI ELECTRIC COMPANY, INC.

Transmittal Letter dated March 28, 2013.

Superseding Sheet No. 152C Effective May 4, 2012 REVISED SHEET NO. 152C Effective June 1, 2013

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (Continued) Maui, Lanai, and Molokai Divisions

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. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2013 to May 31, 2014 RBA Rate Adjustment All Rate Schedules 0.8684 ¢/kWh

F: COMMISSION'S AUTHORITY

The Commission may suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

G. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
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- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

MAUI ELECTRIC COMPANY, INC.

Transmittal Letter dated March 28, 2013.

ATTACHMENT 1A

Superseding Sheet No. 97C

REVISED SHEET NO. 97C Effective May 4,

Effective May 4, 2012 2012June 1, 2013

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

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. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2012-2013 to May 31, 20132014

RBA Rate Adjustment

All Rate Schedules 0-0.8684 ¢/kWh

F: COMMISSION'S AUTHORITY

The Commission may suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

G. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and

MAUI ELECTRIC COMPANY, INC.

Decket No. 2009-0163; Decision and Order No. 30365, Filed May 2, 2012. Transmittal Letter dated May 3, 2012March 28, 2013. Superseding Sheet No. 108C Effective May 4, 2012 2012June 1, 2013 REVISED SHEET NO. 108C Effective May 4,

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

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.

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Effective June 1, 2012 2013 to May 31, 20132014

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All Rate Schedules 0.8684 ¢/kWh

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MAUI ELECTRIC COMPANY, INC.

Docket No. 2009-0163; Decision and Order No. 30365, Filed May-2, 2012. Transmittal Letter dated May-3, 2012March 28, 2013. Superseding Sheet No. 152C Effective May 4, 2012 1, 2013 REVISED SHEET NO. 152C Effective May 4, 2012June

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (Continued) Maui, Lanai, and Molokai Divisions

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.

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Effective June 1, 2012 2013 to May 31, 20132014

RBA Rate Adjustment All Rate Schedules 0.8684 ¢/kWh

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1

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MAUI ELECTRIC COMPANY, INC.

Docket No. 2009-0163; Decision and Order No. 30365, Filed May 2, 2012. Transmittal Letter dated May 3, 2012 March 28, 2013.

ATTESTATION

Tayne S. Y. Sekimura, is the Financial Vice President of Maui Electric Company, Limited, and says that she certifies that the attached Schedules supporting the proposed changes in customer rates pursuant to the Revenue Balancing Account ("RBA") Provision have been prepared in compliance with the Rate Adjustment Mechanism Provision and the RBA Provision, and prior Commission rate orders and are true, correct and complete to the best of her knowledge and belief.

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Tayne S. Y. Sekimura

Attachment 2 - List of Schedules and Workpapers

Schedule A Schedule B Schedule B1 Schedule B2 Schedule C Schedule C1 Schedule C2 Schedule D Schedule D1 Schedule D2 Schedule D3 Schedule D4 Schedule E Schedule F Schedule F1 Schedule F2 Schedule G Schedule G1 Schedule G2 Schedule G3 Schedule H Schedule I

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MECO-WP-A-001 MECO-WP-B-001 MECO-WP-B-002 MECO-WP-B-003 MECO-WP-B-004 MECO-WP-B-005 MECO-WP-B-006 MECO-WP-C-001 MECO-WP-C-002 MECO-WP-D1-001 **MECO-WP-D1-002** MECO-WP-D3-001 MECO-WP-D4-001 MECO-WP-F-001 MECO-WP-F1-001 MECO-WP-F1-002 MECO-WP-H-001 MECO-WP-H-002 MECO-WP-H-003 MECO-WP-H-004

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF 2013 REVENUE BALANCING ACCOUNT RATE ADJUSTMENT

Line No.	Description	Reference	 Amount	Ra	ate Amount
	(a)	(b)	 (c)		(d)
	RECONCILIATION OF RBA BALANCE:				
1	RBA Prior calendar year-end balance	Schedule B	\$ 5,270,171		
2	Revenue Tax Factor	Schedule C	1.0975		
3	Revenue for RBA Balance			\$	5,784,013
	RATE ADJUSTMENT MECHANISM "RAM" AMOUNT:				
4	O&M RAM	Schedule C	\$ 1,019,952		
5	Rate Base RAM - Return on Investment	Schedule D	\$ 2,472,685		
6	Depreciation & Amortization RAM Expense	Schedule E, p. 3	\$ 676,567		
7	Total RAM Revenue Adjustment			\$	4,169,184
8	EARNINGS SHARING REVENUE CREDITS - 2012 ROE	Schedule H		\$	-
9	PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS:	Schedule I		\$	-
10	TOTAL RBA REVENUE ADJUSTMENT	Sum Col. (d)		\$	9,953,197
11	GWH SALES VOLUME ESTIMATE JUNE 1, 2013 - MAY 31, 2014 (see MECO-WP-A-001)				1,146.121
12	RBA RATE ADJUSTMENT - ¢ per kWh	Note (1)			0.8684
13	MONTHLY BILL IMPACT @ 600 KWH - Maui Division			\$	5.21
14	MONTHLY BILL IMPACT @ 400 KWH - Molokai and Lanai Divisions			\$	3.47

Note (1): 2013 RBA Rate Adjustment Breakdown		Col. (d)	Rate Adjustment cents per kWh	Percentage Share
RBA Balance	\$	5,784,013	0.50465987	58.11%
RAM Amount	\$	4,169,184	0.36376472	41.89%
Earnings Sharing Revenue Credits	5	-	0,00000000	0.00%
Major or Baseline Capital Projects Credits	5	-	0.00000000	0.00%
	\$	9,953,197	0.86842459	100.00%

MAUI ELECTRIC COMPANY. LIMITED DECOUPLING CALCULATION WORKBOOK SUMMARY OF ACCUMULATED REVENUE BALANCING ACCOUNT

Line No.	Month(a)		Beginning Balance (b)		Target Revenues (c)		Recorded Adjusted Revenue (d)		Variance to RBA (e)		Interest at <u>6%/year</u> (f)		Adjustment (g)		Ending Balance (h)
	Monthly RBA Balance a	ind Activi	ity (Monthly PUC	C Rpt	., Pg. 9A)										
1	2012 March	\$	-	\$		\$	-	\$	-	\$		\$		\$	-
2	April	š		š		ŝ		ŝ		ŝ	_	ŝ		š	
3	May	š	-	š	8,890,252	š	8,652,750	ŝ	237,502	š	594	š	-	š	238.095
4	June	ŝ	238,095	\$	11.012.872	ŝ	10,010,824	š	1,002,048	ŝ	26.204	š	(2,641)	ŝ	1,263,705
5	July	ŝ	1,263,705	ŝ	11,478,752	ŝ	10,559,619	ŝ	919,133	ŝ	8,504	\$	(22,522)	ŝ	2,168,819
6	August	Š	2,168,819	ŝ	11,646,986	ŝ	10,721,765	š	925,221	ŝ	13,157	š	(22,022)	ŝ	3,107,197
7	September	š	3,107,197	š	10,792,874	š	9,965,379	š	827,495	ŝ	17,594	š	(2,198)	š	3,950,087
8	October	š	3,950,087	ŝ	11,362,282	š	10,746,704	š	615,578	\$	21,289	š	(2,100)	š	4,586,955
9	November	ŝ	4,586,955	s	10,598,757	\$	10,037,724	ŝ	561,033	Ś	24,332	ŝ	(1,007)	ŝ	5,171,313
10	December	ŝ	5,171,313	\$	10,521,111	ŝ	10,446,078	\$	75,033	\$	26,024	ŝ	(4,005)	ŝ	5,268,365
11	January 2	013 Adiu	stment - Note (2			•		·		•		•	V -17	ŝ	1,806
12	REVISED 201			-,										5	5,270,171
13														<u> </u>	-,,
14	2013 January	\$	-	\$	10,728,168	\$		\$	-	\$	-			s	-
15	February	\$	-	ŝ	9.511,705	ŝ	-	ŝ	-	\$	-			ŝ	-
16	March	\$	-	\$	10,715,227	\$	-	\$	-	\$	-			Ś	-
17	April	\$	-	\$	10,197,583	\$	-	5	-	\$	-			s	-
18	May	\$	-	\$	10,844,638	\$	-	\$	-	5	-			S	-
19	June	5	-	5	11,336,146	\$		\$		\$	-			Ś	-
20	July	\$	-	\$	11,815,701	\$	-	\$		\$	-			\$	-
21	August	\$	•	\$	11,988,874	\$	-	\$	-	\$	-			\$	-
22	September	\$	-	\$	11,109,690	\$	-	\$	-	\$	-			\$	-
23	October	\$	-	\$	11,695,812	\$	-	\$	-	\$	-			\$	-
24	November	\$	-	\$	10,909,875	\$	-	\$		\$	-			\$	-
25	December	\$	-	\$	10,829,949	\$	-	\$	-	\$	-			\$	-
	Sources of Data:				Sch. B1		Sch. 82		Col (c) - (d)				Note 1		Cols b+e+f+q
	Note (1): <u>Adi</u>	ustment :	Summary:		RA True-up				(-, (-)						

Month	Workpaper Reference	RBA True-up Adjustment Sch B2, Line 18	RBA Interest Adjustments	Total Adjustment	Adjustment Description
June	MECO-WP-B-001	(2,634)	(7)	(2,641)	Error in May RBA calculation
July	MECO-WP-B-002	-	(22,522)	(22,522)	Calculation error for June interest
September	MECO-WP-B-003	(2,171)	(27)	(2,198)	Correction for misapplication of surcharge factors to June RBA
November	MECO-WP-B-004	(999)	(8)	(1,007)	Out of period billing adjustments
December	MECO-WP-B-005	(3,894)	(111)	(4,005)	Out of period billing adjustments

Note (2):

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In January 2013, the Company recorded an adjustment to the RBA related to an out of period customer billing adjustment that was processed in January 2013 for revenue related to the period of January - October 2012. The Company recalculated the RBA as of December 31, 2012, including interest, based on reflecting the billing adjustment in the proper month. See MECO-WP-8-006.

MAUI ELECTRIC COMPANY. LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF TARGET REVENUES

Line No		Reference			Docket No. 2009-0163 Amounts		Docket No. 2011-0092 Amounts		Docket No. 2011-0092 Amounts		Docket No. 2011-0092 Amounta		Docket No 2011-0092 Amounts
	(a)	(b)			(C)		(d)		(e)		(1)		(g)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1)	\$000s	5	318,240	5	424,570	\$	424,570	5	424,570	\$	424,570
2	Less: Fuel Expense	Note (1)	\$000s	5	(147,028)	5	(212,580)		(212,580)	\$	(212,580)	\$	(212,580)
з	Purchased Power Expense	Note (1)	\$000s	5	(25,763)	5	(44.856)	\$	(44,856)	\$	(44,856)	5	(44,856)
4	Revenue Taxes on Line 1 (8 885% statutory rates)		\$000s	5	(28,276)	<u> </u>	(37,723)	\$	(37,723)	<u> </u>	(37,723)	5	(37,723)
5	Last Rate Order Target Annual Revenues	Sum Lines 14	\$000s	5	117,176	\$	129,411	\$	129,411	\$	129,411	\$	129,411
6	Add Authorized RAM Revenues	Tariff Transmittal	\$000s			\$	-	\$	-	\$	-	5	
7	Less: Revenue Taxes on Line 6 at 8 885%		\$000s			\$	-	\$	-	\$	-	\$	-
8	Net RAM Adjustment - Test Year +1	Lines 6+7	\$000s			5	•	\$	•	\$	•	\$	-
9	Authorized RAM Revenues - Transmittal No. 13-01	Sch. A, line 7	\$000s			s		\$	-	\$	4,169	5	4,169
10	Less: Revenue Taxes on Line 9 at 8.885%		\$000s			3	-	\$	-	\$	(370)	5	(370)
11	Net RAM Adjustment - Test Year +1	Lines 9+10	\$000\$			\$	-	\$	•	\$	3,799	\$	3,799
12	Less EARNINGS SHARING REVENUE CREDITS - 2012 ROE:	Schedule H		\$	-	5	-	\$	•	\$	•	\$	-
13	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS	Schedule I		5	-	\$		\$	<u> </u>	5	<u> </u>	5	<u> </u>
14 15	Total Annual Target Revenues May 4 - 31, 2012 Annualized Revenues	Line 5	\$000s	s	117,176								
15	June 1, 2012 Annualized Revenues June 1, 2012 Annualized Revenues w/Interim Increase	Line 5 Lines 5 + 8	\$000s	•	117,170	\$	129,411	\$	129,411	\$		s	
17	June 1, 2013 Annualized Revenues + 2013 RAM Revenues	Lines 5 + 11	5000s			ŝ	129,411	ŝ	129,411	ŝ	133,210	š	133,210
		Chore in				•	-	, end	-	•	100,210	•	100,210
18	Distribution of Target Revenues by Month	Note (2)	Note (3)		2012		2012		2013	_	2013		2014
19	January	8 25%	8.29%		•		-		\$10,728,168		-		\$11,043,085
20	February	7.42%	7.35%		•		-		\$9,511,705		-		\$9,790,913
21	March	8 23%	826% 788%		-		-		\$10,715,227		•		\$11,029,764
22 23	April May - pronated 28/31 for 2012	7.90% 8 40%	7 88% 8.38%		\$8,690,252		•		\$10,197,583 \$10,844,638		-		\$10,496,925 \$11,162,973
23	May - promited 20/31 for 2012 June - June 1st is assumed effective date of RAM	8 48%	8.51%		30,090,252		\$11.012.872		\$10,844,036		\$11,336,146		\$11,102,875
24	July	8.90%	8 87%		-		5 11,478,752		-		\$11,815,701		
25	August	9.03%	9 00%		-		\$11,646,966		-		\$11,988,874		-
27	September	8.40%	8 34%				\$10,792,874				\$11,109,690		-
28	October	8,72%	8.78%				\$11,362,282		-		\$11,695,812		
29	November	8,17%	8.19%		-		\$10,598,757		-		\$10,909,875		-
30	December	8.10%	8.13%				\$10,521,111		-		\$10,829,949		
31	Total Distributed Target Revenues	100 00%	100.00%		\$8,890,252		\$77,413,634	_	\$51,997,321	_	\$79,685,047		\$53,523,660
		100 0010	100.0070		-0,000,202		÷.,,,,,,,,,,,,,,		42 (100 (10 E)				

Footnotes:

 Docket No. 2009-0163 amounts derived from Final Decision & Order, Results of Operations. Docket No. 2011-0092 amounts derived from Internm Decision & Order, Exhibit A, page 1

2 RBA Tanff effective May 4, 2012 based on 2010 test year

3 RBA Tanff effective June 1, 2012 based on 2012 test year

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF RECORDED ADJUSTED REVENUES

Note: MECO's implementation of decoupling began on May 4, 2012, pursuant to Decision and Order No. 30365, issued in Docket No. 2009-0163, on May 2, 2012, which approved the effective date of the final rates that reflected the approved ROE of 10:00 percent which reflects the Commissions approval of decoupling and other cost-recovery mechanisms.

Line No.	Description	May 2012	Prorated (2)	Jun-12	Jui-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
	(a)	(b)	(c)	(d)	(e)	(1)	(8)	(h)	(i)	0
	BILLED REVENUES:									
1	Current month's billed revenues	32,925,366	29,378,597	37,002,379	39,304,924	39,398,231	32,791,245	35,976,680	37,672,364	38,071,123
2	Remove non-electric revenues adjustments ⁽³⁾	(115,061)	(103,926)	-	•	-	-	-	-	
3	Remove PBF revenues	(363,062)	(325.037)	(404,067)	(425,949)	(446,478)	(386,672)	(415,880)	(412,996)	(398,640
4	Remove Solar Saver non-revenues	32,820	29,644	6	(2)		0	0	-	(1)
5 6 =	Other entries	(4,779)	(4,317)	38,222	(6,741)	(6,588)	(3,445)	(2,385)	(5,256)	(7,398)
sum 1-5	BILLED REVENUES	32,475,284	28,975,062	36,636,540	38,872,232	38,945,165	32,401,128	35,558,414	37,254,112	37,665,084
	UNBILLED REVENUES									
7	Current month's unbilled revenue	20,284,721	18,329,950	20,324,362	18,890,965	16,257,151	16,811,956	17,933,869	18,422,839	19,320,158
8	Reverse prior month's unbilled revenues	(16,561,495)	(14,727,141)	(20,284,721)	(20,324,362)	(18,890,965)	(16,257,151)	(16,811,956)	(17.933,869)	(18,422,839
9 ≖ 7+8	Unbilled revenues per Unbilled Sales and Revenue Estimate	3,723,225	3,602,809	39,642	(1,433,397)	(2,633,814)	554,804	1,121,913	488,970	897,319
10	Adjustment for ECAC accrual	(511,700)	(452,181)	(810,600)	(287,000)	(504,300)	166,200	732,500	(1,149,400)	(183,100)
11	Reversal of ECAC accrual	333,866	301,556	333,866	333,868	464,565	464,565	464,570	208,367	208,367
12	Adjustment for PPAC accrual	(62,700)	(62,700)	12,500	(43,800)	(28,300)	(68,400)	(79,900)	(75,100)	(74,900)
13	Reversal of PPAC accrual	-	-	-	•	16,734	16,734	16,732	46,833	46,833
14	IRP Non-Labor Adjustment	-	-	-	(83,545)	5,349	(2,455)	(9,095)	(4,916)	(26,528)
15	Accrual of customer refund									(82,587)
16	RBA gross up for revenue taxes	-	-	120,617	89,628	90.222	80,692	60,028	54,709	7,317
17	Accrual of current month's RBA (PUC Monthly Financial Report pg. 9A)	237,500	237,500	1,002,048	919,132	925,221	827,494	615,579	561,034	75,033
18	Adjust prior month RBA	-	-	(2,634)	-	-	(2,171)	•	(999)	(3,894)
19	Revenue taxes on prior month adjustment		-	-	•		(212)		(97)	(380
20 ≭ sum 10-										
19	Miscellaneous unbilled accruals	(3,034)	14,176	655,597	928,283	969,491	1,452,447	1,800,414	(359,589)	(33,839)
21 ≖ 9+20	UNBILLED REVENUES	3,720,192	3,616,985	695,239	(505,114)	(1,664,323)	2,037,251	2,922,327	129,401	863,480
22 = 6+21	TOTAL REVENUES PER G/L (PUC Monthly Financial Report pg. 3)	36,195,476	32,592,047	37,331,779	38,367,117	37,280,843	34,438,380	38,460,741	37,383,513	38,528,564
	To the the property of the last of the monoral the point party		02,002,041	51,001,770	00,001,111		04,450,000	00,400,741	01,000,010	
	Billed Adjustments to Determine Adjusted Revenues for RBA									
23	Remove 2010 interim increase	(376,180)	(371,180)	(6,762)	3	(29)	(2)	(1)	-	
24	Remove ECAC revenues	(7,882,694)	(7,038,159)	(11,166,223)	(11,244,136)	(9,996,445)	(7,388,064)	(8,440,160)	(10,576,845)	(11,757,114
25	ECAC surcharge adjustment	-	-	7,271,580	7,773,549	8,193,547	7,005,829	7,633,127	7,508,777	7,273,567
26	Remove PPAC revenues	(53,304)	(53,304)	(154,531)	(165,141)	(165,946)	(134,751)	(146,612)	(127,671)	(108,485
27 28	Remove DSM/IRP/SS revenues	(10,851)	(9,629)	(11,715)	(12,708)	(13,704)	(11,246)	(12,694)	(12,119)	(11,952)
28	Remove billing adjustments (net of revenue taxes) Remove revenue taxes of PBF revenues	(04 783)	(00.470)	(27 550)	(29,052)	7,111 (30,452)	(26.272)	(20.205)	9,136 (28,168)	(3,894) (27,189)
30	Remove revenue earned prior to decoupling (net of revenue taxes)	(24,763)	(22,170)	(27,559) (13,934)	(29,052) 13,055	[30,432)	(26,373)	(28,365) 131	(20, 100)	(27,108
31	Remove revenue taxes on billed revenues	- (2,143,728)	(1,908,553)	(2,891,297)	(3,127,053)	(3,281,420)	- (2,829,563)	(3,070,986)	(3,022,507)	(2,935,063)
32	Remove base fuel (adjusted for revenue taxes)	(10,310,053)	(9,312,306)	(16,591,823)		(18,688,850)	(16 006,777)	(17,415,675)	(17,157,120)	
33	Remove power purchase energy (adjusted for revenue taxes)	(1,683,328)	(1,520,425)	(3,356,074)	(3,579,440)	(3,789,837)	(3,227,964)	(3,531,520)	(3,457,892)	(3,361,635
	Unbilled Adjustments to Determine Adjusted Revenues for RBA;									
34	Remove 2010 interm increase	312,287	307,259	5,491	27		-			
35	Remove ECAC revenues	(2,994,013)	(2,745,397)	126,089	908,741	1,408,671	36,016	(704,696)	(1,302,241)	(229,565
36	ECAC surcharge adjustment	-	-	3,976,095	(156,849)	(355,571)	195,092	94,984	(201,762)	157,909
37 =										
10+11	Remove ECAC accrual	177,834	160,624	476,934	(46,858)	39,735	(630,765)	(1,197,070)	941,033	(25,267)
38	Remove PPAC revenues	(85,442)	(85,442)	1,311	2,577	14,881	(3,370)	(1,798)	19,351	(2,316)
39	Remove PPAC accrual	62,700	62,700	(12,500)	43,800	11,566	51,666	63,168	28,267	28,067
40 41 = 14	Remove DSM revenues	(1,053)	(1,065)	(43)	348	788	(646)	21	182	83
42 = 15	Remove IRP Non-labor adjustment Remove accrual of customer refund	-	-	-	83,545	(5,349)	2,455	9,095	4,916	26,528 82.587
43 = 17-										
19	Remove RBA accruais	(237,500)	(237,500)	(999,414)	(919,132)	(925,221)	(825,111)	(615,579)	(559,938)	(70,759)
44 = 16	Remove RBA gross up for revenue taxes	-	-	(120,617)	(89,628)	(90,222)	(80,692)	(60,028)	(54,709)	(7,317)
45	Remove revenue taxes on unbilled revenues	(84,852)	(95,795)	(368,602)	60,289	139,054	(59,471)	(45,351)	88,450	(73,162)
46	Remove base fuel (adjusted for revenue taxes)	(1,025,513)	(928.270)	(2.661 241)	369,677	799,230	(435,068)	(227,415)	465,933	(376,375)
47	Remove power purchase energy (adjusted for revenue taxes)	(157,975)	(142 687)	(786,120)	62,986	169,387	(94,195)	(36,615)	89,139	(65,744)
48 = sum 23-										
47	Total billed and unbilled adjustments to determine adjusted revenues for RBA	(26,518,428)	(23,939,299)	(27,320,955)	(27,807,500)	(26.559,077)	(24,473,001)	(27,734,039)	(27,345,789)	(28,082,485)
49 = 22+48	RECORDED ADJUSTED REVENUES FOR RBA DETERMINATION ⁽¹⁾	A -								
	(PUC Monthly Financial Report pg. 9A.1)	9,677,048	8,652,750	10,010,824	10,559,619	10 721 765	9,965,379	10,746,704	10,037,724	10 446 078

⁽¹⁾ Amounts may not add due to rounding

⁽²⁾ Revenue decoupling became effective for Maui Electric Company, Ltd. on May 4, 2012. The May balances were prorated for May 4 -31, 2012, as considered necessary based on the nature of the adjustment.

(3) June 2012 was the first full month in which the new SAP Monthly Electric Report was used. The new report does not included non-electric revenues, therefore adjustments are no longer necessary.

SCHEDULE C (WITH SETTLEMENT) PAGE 1 OF 1

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF O&M RAM ADJUSTMENT

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Line No.	Description (a)	Reference (b)	2011 Approv	(et No. 1-0092 (ed \$000 (c)	Ap	eviously aproved M \$000 (d)	Es	Subject to calation (c) + (d) (e)	Net Inflation Indices Note (2) (f)	Adjus	2013 &M RAM stment \$000 Di (e) * (f) (g)
1	Base BU Labor Expenses	Schedule C1	\$	14,330	\$	-	\$	14,330	2.12%	\$	304
2	Base Non-Labor Expense	Schedule C2		35,349		-		35,349	1.70%		601
3	Payroll Taxes	Note (1)		1,161				1,161	2.12%		25
4	Subtotal Expense Increase - RAM Adjustme	ent before revenue i	taxes							\$	929
5	Revenue Tax Factor (Note 3)										1.0975
6	O&M RAM (Subtotal Expenses x Rev Tax F	actor)								\$	1,020
	 Amounts may not add due to rounding 										
ſ	Footnotes: (1) Payroll Taxes per Interim D&O, dated M: Docket No. 2011-0092, Exhibit A, page Less: Portion of payroll taxes related to n Payroll Taxes related to Bargaining Unit I: ^A See Schedule C1 for calculation of p (2) Escalation Rates Labor: Bargaining Unit Wage Increase Less: Labor Productivity Offset Labor Cost Escalation Rate	∋ 4 ion-BU labor ^A (37.) abor	to non-B MECC Appro	U labor. D-WP-C-00	al D&O	ín Docket N	\$ <u>\$</u> \$	1,849 (688) 1,161 -0274, page	51, filed on		
	Non-Labor. GDP Price Index	2013 1.70%	See M	IECO-WP	-C-002,	page 2					
	 (3) Computation of Revenue Tax Factor Public Service Tax Rate PUC Fees Rate Franchise Tax Rate Total Revenue Tax Rate Revenue Tax Factor = 1 / (1 - Total Revenue Tax Rate) 		((0.05885 0.00500 0.02500 0.08885 1.0975							

MAUI ELECTRIC COMPANY, LIMITED <u>DECOUPLING CALCULATION WORKBOOK</u> <u>SUMMARY OF</u> <u>OPERATIONS AND MAINTENANCE LABOR AND NON-LABOR EXPENSE</u> Interim D&O - Docket No. 2011-0092 ('000)

			(000)			
	(a)	(b)	(c)	(d)	(e)	(f)
Line No.	DESCRIPTION	BU LABOR (Note 1)	Non-BU LABOR (Note 1)	TOTAL LABOR	NON-LABOR (Note 2)	TOTAL (Note 3)
1	Operation and Maintenance	14,330	8,496	22,826	41,954	64,780
2	Percentage of Total O&M Labor	62.78%	37.22%	100%		

* amounts may not add due to rounding

Footnotes:

.

(1) See Parties' Stipulated Settlement Letter, filed April, 20, 2012 in Docket No. 2011-0092, MECO T-11, Attachment 8, page 2. Only the breakdown of 2012 test year labor expense between BU and non-BU is required.

(2) See MECO O&M Expense Breakdown for RAM Calculation, filed April 26, 2012 in Docket No. 2011-0092, Attachment 2, page 11.

(3) See MECO O&M Expense Breakdown for RAM Calculation, filed April 26, 2012 in Docket No. 2011-0092, Attachment 2, page 3.

SCHEDULE C2 (WITH SETTLEMENT) PAGE 1 OF 1

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MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK Non-Labor Exclusion Adjustment for O&M RAM (\$ thousands)

(\$ thousands)

Line No.	Description	Amount	Reference
	(a)	(b)	(c)
1	Pension Expense	8,969	See Final Settlement filed April 20, 2012
2			MECO T-12, Attachment 1, page 1
3			Docket No. 2011-0092
4			
5	OPEB Expense	507	See Final Settlement filed April 20, 2012
6			MECO T-12, Attachment 1, page 1
7			Docket No. 2011-0092
8	Total before amounts transferred	9,476	
9			
10	O&M %	69.70%	See Interim Decision & Order No. 30396
11	(1- transfer rate of 30.3%)		page 24, Docket No. 2011-0092
12			
13			
14	Adjustment to Non-Labor O&M Expense		
15	for O&M RAM base	6,605	
16			
17			
18	Non-Labor O&M Expense per Interim D&O	41,954	Schedule C1
19			
20			
21	Non-Labor O&M Expense Base for		
22	O&M RAM base	35,349	

SCHEDULE D (WITH SETTLEMENT) PAGE 1 OF 1

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF RATE BASE RAM ADJUSTMENT - RETURN ON INVESTMENT

						POST TAX	INCOME	P	RETAX
		AM	JOUNTS	PERCENT		WEIGHTED	TAX	WE	IGHTED
			(IN	OF	COST	EARNINGS	FACTOR	EA	RNINGS
Line No.	Description	THC	USANDS)	TOTAL	RATE	REQMTS	Note (1)	RE	OMTS
	(a)		(b)	(c)	(ď)	(e)	(f)		(g)
1	PUC APPROVED CAPITAL STRUCTURE & COSTS (R	evised	d Updated Joi	nt Statement of Prol	bable Entitlem	ent, Docket No.	2011-0092, 1	vlay 1	4, 2012,
		Att.	1A, page 2):						
2	Short-Term Debt	\$	5,003	1.23%	1.25%	0.02%	1.000000		0.02%
3	Long-Term Debt		156,370	38 44%	5.06%	1.95%	1.000000		1.95%
4	Hybrid Securities		9,373	2.30%	7.32%	0.17%	1.000000		0.17%
5	Preferred Stock		4,744	1.17%	8.25%	0.10%	1.636929		0.16%
6	Common Equity	<u> </u>	231,310	56.86%	10.00%	5.69%	1.636929		9.31%
7	Total Capitalization	_\$	406,800	100.00%		7.91%	1		11.59%
8	RAM CHANGE IN RATE BASE \$000 (From Schedu	le D1)						\$	19,439
9	PRETAX RATE OF RETURN (Line 7, Colig)						•		11,59%
10	PRETAX RETURN REQUIREMENT							\$	2,253.0
11	REVENUE TAX FACTOR (1/(1-8.885%))								1.0975
12	RATE BASE RAM - RETURN ON INVESTMENT \$000							\$	2,472.7
•	Amounts may not add due to rounding.								

Footnote:

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

SCHEDULE DI (WITH SETTLEMENT) PAGE 1 OF 1

MAULELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF RATE BASE RAM ADJUSTMENT - CHANGE IN RATE BASE (000's)

		MECO	2012 Test	Voar D	ate Bace	·····	MECO	1 2013 B	AM Rate	Rase		
			Note		ale base		diusted	20101		5635		
		Beg. B	alance		geted Balance		corded at	RAM P	Projected	Est	imated at	
Line No.	Description		/2011		2/31/2012		/31/2012		ounts	12	/31/2013	
	(8)	(1	b)		(C)	N	(d) lote (1)		(e) tail Below		(f)	
1	Net Cost of Plant in Service	\$	465,783	\$	493,298	5	497,813		16,200	\$	513,812	
2	Property Held for Future Use		1,303		1,303	1000		a - «), gj 1,		, 69. j		
3	Fuel Inventory		18,577		18,577				Elements			
4	Materials & Supplies Inventories		13,387		13,387				මිෂාවෙක	49. j		
5	Unamort Net SFAS 109 Reg Asset		8,405		8,642			NotUp	dated for	99 <u>-</u> 1	2.6	
6	Pension Asset		3,453		4,377	e reper		1 (ji 1		÷.	i La vanik	
7	Unamort OPEB Reg Asset		344		261		24	RAM	urposes	1.1	y nî a cirkî	
8	Unamort Sys Dev Costs		1,240		1,487			1, 25	2	1		
9	Contrib in Excess of NPPC		3,101		8,400		<u></u>		and the second		N 6 2 30	
10	CIS Deferred Cost						2,797		(136)		2,661	MECO-WP-D1-002, Page
11	not used						<u>.</u> <u>E</u> P.		Jpdated 🕷			
12	Total Additions	\$	515,593	\$	549,732	\$	553,531	\$	16,064	\$	569,595	
13	Unamortized CIAC	\$	(74,766)	\$	(83,821)	\$	(82,211)	s	(5,110)	\$	(87,321)	
14	Customer Advances		(4,649)		(4 599)	WOOK	5 10 D.			14. No		
15	Customer Deposits		(4,346)		(4,812)	199		Not L	Ipdated			
16	Accumulated Def Income Taxes		(42,143)		(55,718)		(50,148)		(5,542)		(55,690)	
17	Unamortized State ITC (Gross)		(12, 150)		(12,752)	SOM				1607		
18	Unearned interest Income		-		-	in.	de seconda de la com		5,			
19	Unamortized Gain on Sale		-		-	1.00	La Miniá	Not	Jpdated 😹	a-tau	0003407038	
20	Total Deductions	\$	(138,054)	\$	(161,702)	\$	(154,013)	\$	(10,652)	\$	(164,665)	
21	Working Cash		10,657		10,657	3420	10,657	Notil	Jpdated 25		10,857	
22	Rate Base at Proposed Rates	\$	388,196		398,687	\$	410,175			\$	415,587	
23	Average Rate Base			\$	393,442					\$	412,881	
24	Change in Rate Base									\$	19,439	
25	Column (e) Projected Changes to Rate Base:				Reference	,	Incom					
26	Plant - Baseline Capital Project Additions				dule D2		36,040	-				
27	Major CIP Project Additions				dule D3		2,156					
28	Accumulated Depreciation/Amortization Chang	e			dule E		(21,996)					
29	Net Plant			Sum I	Lines 26-28		16,200	-				
30	Accum. Deferred Income Taxes - Baseline and	Major Capita	al Projects	Sche	dule F		(5,542)					
31	Projected CIAC Additions - Baseline				dule G1		(6,844)					
32	Projected CIAC Additions - Major CIP				dule D3							
33	Less: Amortization of CIAC				dule G		1,734	-				
34	Total Change in CIAC in Rate Base			Sum:	Lines 31-33		(5,110)					

* Amounts may not add due to rounding

Notes

(1)	Amounts are recorded, except for the following adjustments:								Schedule D4		
			Plan	it in Service		Acc. Depr.		CIAC Net		ADIT	
(A	(A) Unadjusted Balance - recorded (A) Add: Asset Retirement Obligation			954,203	\$ 5	(423,762) (256)		(82,211)	\$	(50,182)	
•											
(A)	Reg Liab-Cost of Removal (net salvage)				\$	(35,750)					
	Adjustment:										
	Lanai CHP*	MECO-WP-D1-001, p. 1		3,500		(322)		-		-	
	Total Adjustment		\$	3,500	\$	(322)	\$	-	\$	•	
	CIS Adjustment (Note 3)	Sch. D4 Iste 6		<u></u>					\$	35	
	Adjusted Balance		\$	957,703	\$	(460,090)	\$	(82,211)	\$	(50,148)	

* Lanal CHP; As discussed in the Stipulated Settlement Letter in Docket No. 2009-0163, filed on 06/21/2010, MECO accepted the Consumer Advocate's recommendation that the ratemaking treatment for the Lanai CHP Agreement follow traditional utility plant asset accounting rather than direct financing lease treatment as required for public financial reporting. MECO agreed to permanently adjust the original cost of the CHP system to \$3.5 million.

(A) Source: Maui Electric Company, Limited Monthly Financial Report - December 2012, filed February 19, 2013.

(2) Column (b) & (c) from Docket No. 2011-0092, Interim D&O No. 30396, Exhibit B, filed May 21, 2012.

(3) 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.

MAUI ELECTRIC COMPANY, LIMITED 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:

				5/28/2009	5/28/2010	3/31/2011	3/30/2012	3/22/2013
Line No.	Description	2008	2009	2010	2011	2012		
	(a)			(b)	(c)	(d)	(0)	(1)
1 2	Total Plant Additions (Sum of Exhs. 1, 2, and 3 of Reports)			40,091,987	37,477,811	30,311,101	36,439,290	48,276,242
3	Less Major Projects: (+\$2.5 Million)	Dkt No.	ltem No.					
4	A FEF WAAFLY I KIKENALY KALK MUNAHII	<u></u>						
5	2006 In-service:							
6	Maalaea Dual-Train Combined Cycle No. 2-Unit No. 18	7744	PN-314 M3141001	(196,573) ⁽¹⁾	5,473 (1)	20,513 (1)		
7								
8 9								
10	2007 In-service:							
11	None							
12								
13								
14	2008 In-service:							
15	None							
16 17								
18	2009 In-service: (3)							
19	CHP Manele Bay Hotel	2006-0186	M0000540		(4,664,190)	(101,942) (1)	564 (1)	
20	Chr Wallele bay hole	2000-0100	M0000340		(4,004,190)	(101,942)	004	
21								
22								
23	2010 In-Service:							
24	6th Increment Distribution Rebuild	01-0148	M0000266			(904,737)	(2,867,104)	
25								
26								
27								
28	2011 In-Service:							
29	M14 Capital Overhauf	(2)	M0001275				(3,688,795)	
30 31								
31	2012 In-service:							
33	None							
34								
35	Total Net Plant Additions (excluding major projects)			39,895,414	32,819,094	29,324,935	29,883,955	48,276,242
36					, .			
37	Last Five-Year Average							\$ 36,039,928

NOTE (1):

Amounts were included in the "Cost of Less Than \$1 Million" plant addition section of the respective year's GO7 plant addition annual report. Included amounts for the purposes of this baseline five-year average calculation.

NOTE (2):

A separate application was not filed with the Hawali Public Utilities Commission for the M14 Capital Overhaul. This project was reported in the 2011 Third Quarter Capital Project Status Report filed on January 4, 2012. In the report, MECO identified that project costs had unexpectedly exceeded \$2.5M and provided an explanation for the higher costs. See Attachment 12, pages 1-2, of the Third Quarter 2011 Capital Project Status Report.

NOTE (3):

Maui Lani & Kuikahi Underground Distribution System Extension (M0000917) and Maui Lani VMX (M0001126) are listed as completed projects with total costs of \$2.5M or greater on the G.O.7 plant addition annual reports for 2009 and 2010, respectively. However, separate applications were not filed with the Hawaii Public Utilities Commission for these projects as the amount of CIAC received for each project reduced its project costs to below the \$2.5M threshold. As such, these capital projects are not considered Major Capital Projects for the purpose of decoupling.

SCHEDULE D3 (WITH SETTLEMENT) PAGE 1 OF 1

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF MAJOR CAPITAL PROJECT ADDITIONS

Line No.	Oescription (a)	PUC Docket Reference (b)	Estimated In Service Date (C)	Amount (d)	
1 2 3	2013 Major Capital Project Plant Additions by Project: Major Overhaul of M16 (Note 1)	Docket No. 2012-0038, MECO-WP-D3-001	May-13	\$	2,155,700
4 5					
6					
7					
9					
10 11					
12					
13	Total Major Capital Projects Qualifying for 2013 RA	N		<u>\$</u>	2,155,700

See Schedule G2 for related CIAC (if applicable)

Note 1

.

Application was filed with the Hawaii Public Utilities Commission under Docket No. 2012-0038 as project costs were estimated to exceed \$2.5 million. Decision and Order No. 30874 was issued on December 5, 2012 approving \$3,640,000 in funds to overhaul the M16 unit. The amount included above reflects the most recent estimate received in early March 2013 from the vendor.

•

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF ADJUSTED RECORDED DEFERRED INCOME TAXES

Line No.	NARUC Account(a)	Reference (b)	Federal ADIT (c)	State ADIT (d)	Total ADIT (e)
1	Recorded Deferred Income Tax Balances December 31, 2012 Recorded Balances				
2	Depreciation Related Account 282	MECO-WP-D4-001	(33,215,171)	(2,079,626)	(35,294,797)
3	Other Deferred Income Taxes	MECO-WP-D4-001	(12,047,682)	(2,839,943)	(14,887,625)
4	Total Recorded Deferred Income Taxes - Utility		(45,262,853)	(4,919,569)	\$ (50,182,422)
5	Less: Adjustments to Recorded Balances:				
6	ADIT Relating to CIS adjustments for carrying costs	Note (1)	29,217	5,342	34,559
7	Total Adjustments to Recorded ADIT Balances		29,217	5,342	34,559
8	Adjusted Recorded Deferred Income Taxes - 12/31/12		(45,233,636)	(4,914,227)	\$ (50,147,863) To Schedule D1

Footnotes:

(1)	ADIT Computation:	AFUDC Debt	32.8947% FED	6.0150% STATE	TOTAL
А В	Reversal of 2012 Carrying Charge at Incremental Full Debt AFUDC Debt (Jan-May 2013)	(113,472) 24,651	37,326 (8,109)	6,825 (1,483)	44,151 (9,592)
	Total	(88,821)	29,217	5,342	34,559
	Adjustments from recorded to regulatory bases:	AFUDC Equity (C)	AFUDC Debt	TOTAL	
A B	CIS Reg Asset Reserve CIS carrying charge (Jan May 2013)	64,283	(113,472) 24,651	156,700 88,934	
	Total	334,455	(88,821)	245,634	

SOURCE:

A See MECO-WP-D1-002 CIS, page 5

B See MECO-WP-D1-002 CIS, page 4

.

NOTES:

A Differential between regular AFUDC debt incurred or allowed for regulatory purposes and AFUDC using full debt rate on allowed base (required for financial accounting, per PwC). Represents incremental AFUDC at full debt rate.

	<u>2012</u>
AFUDC Debt - full debt	214,458
Less: AFUDC Debt	100,986
Base on which ADIT is calculated	113,472

B Cumulative AFUDC debt for 1/1/13 - 5/31/13; NOT full debt differential since 2013 full debt was not recorded as of 12/31/12.

C Adjustments to AFUDC Equity did not impact ADIT. Settlement did not provide for the tax gross up of AFUDC Equity, which would have increased Reg Asset with an offsetting increase in ADIT. This gross up adjustment, although generally recorded for financial purposes, has no impact on rate base.

SCHEDULE E (WITH SETTLEMENT) PAGE I OF 4

MAULELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF DEPRECIATION & AMORTIZATION RAM ADJUSTMENT

		Recorded Depreciable/Amort.	Adjugensore	Adjusted Depreciable/Amort. Balance	PUC Approved Accrual Rate Dkt. 2009-0286	Annual Annual
Line No.	NARUC Account	Balance	Adjustments			Annual Accrual
	(a)	(b) Footnote (1)	(c) Footnote (2)	(d)	(e)	(f)
1	Plant Accounts					
2	310.00	-		-	0.0000	-
3	311 00	6,062,183		6,062,183	0 0289	175,197
4	312.00	50,600,361		50,600,361	0.0375	1,697,514
5	314.00	48,255,972		48,255,972	0.0589	2,842,277
6	315 00	8,641,838		8 641,838	0.0419	362,093
7	MAUL STEAM PRODUCTION	113,560,355		113,560,355	0.0465	5,277,080
8						
9	340 00			-	0.0000	-
10	341.00	33,775,081		33,775,081	0.0117	395,168
11	342.00	3,845,994		3,845,994	0 0097	37,308
12	343 00	35,822,764		35,822,764	0.0080	286,582
13	344.00	105,983,123		105,983,123	0 0164	1,738,123
14	345 00	24,244,125		24,244,125	0 0157	380,633
15	MAULOTHER PRODUCTION	203.671.087		- 203,671,087	D.0139	2,837.813
16						-
17	MAULTOTAL PRODUCTION	317,231,442		- 317,231,442	0.0256	8,114,893
18						·····
19	350.20			-	0 0000	-
20	350.00	2,445,989		2,445,989	0 0158	38,647
21	352.00	7,255,043		7,255,043	0 0202	146,552
22	353.00	47,384,473		47,384,473	0 0158	748,675
23	355.00	30,702,064		30,702,064	0.0167	512,724
24	356.00	26,450,604		26,450,604	0 0175	462,886
25	357.00	714,085		714,085	0 0159	11,354
26	358.00	892,692		892,692	0.0198	17.675
27	MAULTRANSMISSION	115,844,949		- 115,844,949	0 0167	1,938,512
28						
29	360 20			-	0 0000	-
30	360.00	1,189,681		1,189,681	0.0203	24,151
31	361.00	1,463,312		1,463,312	0.0120	17,560
32	362.00	40,203,809		40,203,809	0 0 1 3 4	538,731
33	364 00	31,161,954		31,161,954	0.0170	529,753
34	365 00	45,814,957		45,814,957	0.0165	755,947
35	366.00	57,045,311		57,045,311	0.0203	1,158,020
36	367.00	56,083,531		56,083,531	0.0117	656,177
37	368 00	52,198,561		52,198,561	0.0222	1,158,808
38	369.10	20,772,295		20,772,295	0.0378	785,193
39	369 20	48,720,121		48,720,121	0.0232	1,130,307
40	370 00	14,058,906		14,058,906	0.0192	269,931
41	373 00	11,298,720		11,298,720	0.0187	211,286
42	MAUL DISTRIBUTION	380,011,156		380,011,156	0.0190	7.235,863
43						-
44	. 389 20	-		-	0.0000	-
45	390.00	10,819,762		10,819,762	0 0106	114 689
46	MAUI GENERAL	10.819.762		- 10.819,762	0 0106	114,689
47 48	392.10	5.025.422		5.025.422	0 0538	269,363
49	392.20	4,127,433		4,127,433	0 0305	125,887
49 50	MAULTRANSPORTATION	9,152,855			0.0432	395.249
50 51	MAULINANSPURIATION	9,132,855		- 9,152,855	0.0432	395,249
52	TOTAL MAULDIVISION	833,060,166		- 833,060,166	0.0214	17,799.207
53						

SCHEDULE E (WITH SETTLEMENT) PAGE 2 OF 4

		Recorded Depreciable/Amort.		Adjusted Depreciable/Amort.	PUC Approved Accrual Rate	
ine No.	NARUC Account	Balance	Adjustments	Balance	Dkt. 2009-0286	Annual Accr
	(a)	(b)	(c)	(d)	(e)	(f)
		Footnole (1)	Footnote (2)			
54	LANAI					
55	340 OL				0.0000	
56	341.0L	4,020,333		4,020,333	0 0454	182,5
57	342.0L	1,852,076		1,852,076	0.0304	56,3
58	343 OL	1,057,680		1,057,680	0 0360	38,0
59	344 OL	8,060,068		8,060,068	0.0234	188,6
60	345 OL	3,332,016		3.332,016	0.0253	84,3
61	LANAI OTHER PRODUCTION	18,322,173	-	18 322,173	0 0300	549.8
62						
63	360.1L	152,538		152,538	0.0203	3,0
64	362.0L	1,995,649		1,995,649	0 0165	32,1
65	364 OL	2,055,948		2,055,948	0.0185	38,
66	365 OL	2,729,872		2,729,872	0.0165	45.
67	366 OL	1,280,128		1,280,128	0.0211	27,
68	367.0L	2,315,459		2,315,459	0.0122	28,
69	368.0L	796,849		796,849	0.0208	16,
70	369.1L	437,896		437,896	0.0380	16,
71	369 2L	990,196		990,196	0 0256	25,
72	370 OL	382,877		382,877	0.0195	7,
73	373 OL		· · · · · ·	264,349	0.0166	4
74	LANAI DISTRIBUTION	13,401,762	<u> </u>	13 401,762	0.0183	244
75						
76	389 2L	-		-	0.0000	
77	390 OL	695,501		695,501	0 0138	
78	LANAI GENERAL	695,501	-	695,501	0.0138	9,
79						
80	392.1L	635,940		635,940	0.0086	5,
81	392.2L	173,157		173,157	0.0875	15,
82	LANAI TRANSPORTATION	809.097		809,097	0.0255	20,
83	CANAL UNANSPORTATION			008,087	0.0235	<u>2V,</u>
	Lanai CHP - Production		2 040 002	2 040 000	0.0000	
84		-	3,010,000	3,010,000	0.0300	90,
85	Lanai CHP - Distribution		490,000	490,000	0.0183	
86	LANAL RATEMAKING ADJUSTMENT	·	3,500,000	3,500,000	0.0284	99,
87						
88	TOTAL LANAI DIVISION	33,228,532	3,500,000	36,728,532	0.0252	924.
89						
90	MOLOKAI					
91	302.0M	-		-	0 0000	
92	INTANGIBLE PLANT		-	-	0 0000	
93						
94	340 OM	-			0.0000	
95	341.0M	2,576,437		2,576,437	0 0447	115,
96	342 OM	1,824,310		1,824,310	0.0452	82
97	343.0M	1,253,690		1,253,690	0.0256	32.
98	344 OM	11,039,473		11,039,473	0.0354	390.
99	345 OM	3.863.115		3,863,115	0.0266	102
100	MOLOKAI OTHER PRODUCTION	20.557,025	<u> </u>	20,557,025	0 0352	723.
101						
102	350.1M	•		-	0 0000	
103	353 DM	602,975		602,975	0.0232	13,
104	354 OM	38,669		38,669	0.0233	
105	355.0M	117,065		117,065	0.0077	
106	356 OM	260,337		260.337	0.0097	2,
107	MOLOKAI TRANSMISSION	1.019,046		1,019.046	0 0180	18
108	WERE TRUE FOR THE WORKS WINTS		<u> </u>	1,010.040		10,
109	360 1M	25,883		25,883	0.0202	
110	361.1M	59,259		59,259	0.0262	
111	362.0M	1,265,254			0 0163	20
				1,265,254		
112	364 OM	2,603,918		2,603,918	0.0224	58,
	365.0M	2,639,368		2,639,368	0 0177	46
113	366 OM	136,064		136,064	0.0227	3,
114				2,784,882	0.0174	48.
114 115	367.0M	2,764,882			0 0225	30
114 115 116	368.0M	1,366,616		1,366,616		
114 115				1,366,616 1,420,680	0.0406	57,
114 115 116	368.0M	1,366,616				
114 115 116 117	368.0M 369 1M	1,366,616 1,420,680 1,027,483		1,420,680 1,027,483	0.0406 0.0261	26.
114 115 116 117 118 119	368.0M 369 1M 369.2M 370.0M	1.366,616 1,420,680 1,027,483 591,509		1,420,680 1,027,483 591,509	0.0406 0 0261 0 0121	26. 7,
114 115 116 117 118 119 120	368.0M 369.1M 369.2M 370.0M 373.0M	1,366,616 1,420,680 1,027,483 591,509 330,608		1,420,680 1,027,483 591,509 330,608	0.0406 0 0261 0 0121 0.0152	26. 7. 5.
114 115 116 117 118 119 120 121	368.0M 369 1M 369.2M 370.0M	1.366,616 1,420,680 1,027,483 591,509	<u> </u>	1,420,680 1,027,483 591,509	0.0406 0 0261 0 0121	26. 7. 5.
114 115 116 117 118 119 120 121 122	368.0M 369.1M 359.2M 370.0M 373.0M <u>MQLOKAI DISTRIBUTION</u>	1.366,616 1,420,680 1,027,483 591,509 330,608 14,251,526	<u> </u>	1,420,680 1,027,483 591,509 <u>330,608</u> 14,251,526	0.0406 0 0261 0 0121 <u>0.0152</u> 0 0214	26. 7. 5.
114 115 116 117 118 119 120 121 122 123	368.0M 369.1M 369.2M 370.0M 373.0M <u>MOLOKAI DISTRIBUTION</u> 389.2M	1.366,616 1.420,680 1,027,483 591,509 330,608 14,251,526 56,383	<u>.</u>	1,420,680 1,027,483 591,509 330,608 14,251,526 56,383	0.0406 0 0261 0 0121 0.0152 0 0214 0.0003	26, 7, 5, 305
114 115 116 117 118 119 120 121 122 123 124	368.0M 369.1M 359.2M 370.0M 373.0M <u>MQLOKAI DISTRIBUTION</u> 369.2M 390.0M	1.366,616 1,420,880 1,027,483 591,509 330,608 14,251,526 56,383 592,074		1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074	0.0406 0 0261 0 0121 0.0152 0 0214 0.0003 0 0085	26. 7, 5. 305
114 115 116 117 118 119 120 121 122 123 124 125	368.0M 369.1M 369.2M 370.0M 373.0M <u>MOLOKAI DISTRIBUTION</u> 389.2M	1.366,616 1.420,680 1,027,483 591,509 330,608 14,251,526 56,383	<u> </u>	1,420,680 1,027,483 591,509 330,608 14,251,526 56,383	0.0406 0 0261 0 0121 0.0152 0 0214 0.0003	26, 7, <u>5</u> , 305
114 115 116 117 118 119 120 121 122 123 124	368.0M 369.1M 359.2M 370.0M 373.0M <u>MQLOKAI DISTRIBUTION</u> 369.2M 390.0M	1.366,616 1,420,880 1,027,483 591,509 330,608 14,251,526 56,383 592,074	<u> </u>	1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074	0.0406 0 0261 0 0121 0.0152 0 0214 0.0003 0 0085	26, 7, <u>5</u> , 305
114 115 116 117 118 119 120 121 122 123 124 125	368.0M 369.1M 359.2M 370.0M 373.0M <u>MQLOKAI DISTRIBUTION</u> 369.2M 390.0M	1.366,616 1.420,680 1,027,483 591,509 <u>330,608</u> <u>14,251,526</u> <u>56,383</u> <u>592,074</u> <u>648,457</u>		1,420,680 1,027,483 591,509 330.608 14.251.526 56,383 592,074 648,457	0.0406 0 0261 0 0121 0 0214 0 0214 0 0214 0 0003 0 0085 0 0078	26, 7, <u>5</u> , 305
114 115 116 117 118 120 121 122 123 124 125 126 127	368.0M 369.1M 359.2M 370.0M 373.0M <u>MQLOKAI DISTRIBUTION</u> 389.2M 390.0M <u>MQLOKAI TOTAL GENERAL</u> 392.1M	1.366,616 1.420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274		1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274	0.0406 0.0261 0.0152 0.0152 0.0214 0.0003 0.0003 0.0005 0.0078 0.0000	26, 7, <u>5</u> , 305
114 115 116 117 118 119 120 121 122 123 124 125 126 127 128	368.0M 369.1M 359.2M 370.0M 373.0M <u>MQLOKAI DISTRIBUTION</u> 389.2M 390.0M <u>MQLOKAI TOTAL GENERAL</u> 392.1M 392.2M	1.366,616 1,420,680 1,027,483 561,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754		1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754	0.0406 0.0261 0.0152 0.0214 0.0003 0.0003 0.00085 0.0078 0.00078	26, 7, <u>5</u> , 305
114 115 116 117 118 120 121 122 123 124 125 126 127 128 129	368.0M 369.1M 359.2M 370.0M 373.0M <u>MQLOKAI DISTRIBUTION</u> 389.2M 390.0M <u>MQLOKAI TOTAL GENERAL</u> 392.1M	1.366,616 1.420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274		1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274	0.0406 0.0261 0.0152 0.0152 0.0214 0.0003 0.0003 0.0005 0.0078 0.0000	26, 7, <u>5</u> , 305
114 115 116 117 118 120 121 122 123 124 125 126 127 128 129 130	368.0M 369.1M 369.2M 370.0M 373.0M <u>MOLOKAI DISTRIBUTION</u> 389.2M 390.0M <u>MOLOKAI TOTAL GENERAL</u> 392.1M 392.2M <u>MOLOKAI TRANSPORTATION</u>	1.366,616 1.420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754 954,029		1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754 954,029	0.0406 0.0261 0.0152 0.0152 0.0003 0.0003 0.0005 0.00078 0.0000 0.0000 0.0000	26, 7, 5, 305
114 115 116 117 118 120 121 122 123 124 125 126 127 126 127 128 130 131	368.0M 369.1M 359.2M 370.0M 373.0M <u>MQLOKAI DISTRIBUTION</u> 389.2M 390.0M <u>MQLOKAI TOTAL GENERAL</u> 392.1M 392.2M	1.366,616 1,420,680 1,027,483 561,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754		1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754	0.0406 0.0261 0.0152 0.0214 0.0003 0.0003 0.00085 0.0078 0.00078	26, 7, 5, 305
114 115 116 117 118 120 121 122 123 124 125 126 127 128 129 130 131 132	368.0M 369.1M 369.2M 370.0M 373.0M <u>MOLOKAI DISTRIBUTION</u> 389.2M 390.0M <u>MOLOKAI TOTAL GENERAL</u> 392.1M 392.2M <u>MOLOKAI TRANSPORTATION</u>	1.366,616 1.420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754 954,029		1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754 954,029	0.0406 0.0261 0.0152 0.0152 0.0003 0.0003 0.0005 0.00078 0.0000 0.0000 0.0000	26, 7, 5, 305
114 115 116 117 118 120 121 122 123 124 125 126 127 126 127 128 129 130 131	368.0M 369.1M 369.2M 370.0M 373.0M <u>MOLOKAI DISTRIBUTION</u> 389.2M 390.0M <u>MOLOKAI TOTAL GENERAL</u> 392.1M 392.2M <u>MOLOKAI TRANSPORTATION</u>	1.366,616 1.420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754 954,029		1,420,680 1,027,483 591,509 330,608 14,251,526 56,383 592,074 648,457 613,274 340,754 954,029	0.0406 0.0261 0.0152 0.0152 0.0003 0.0003 0.0005 0.00078 0.0000 0.0000 0.0000	57, 266, 77, 266, 77, 5, 305 305 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5

SCHEDULE E (WITH SETTLEMENT) PAGE 3 OF 4

					PAGE 3 OF 4	
Line No.	NARUC Account	Recorded Depreciable/Amort. Balance	Adjustments	Adjusted Depreciable/Amort. Balance	PUC Approved Accrual Rate Dkt 2009-0285	Annual Accrual
LING (19.	(a)	(b)	(C)	(d)	(e)	(f)
	Amortization Amounts	• *				
137 138	MAIN					
139	<u>MAUI</u> 316.00	3,783,113		\$ 3,783,113	0 0500	\$ 189,156
140	346.00	14,523,883		14,523,683 03	0.0500	726,194 15
141	MAUL PRODUCTION	18,306,996		18,306,996	0 0500	915,350
142 143	391.10	1,206,369		1,206,369 45	0.2000	241,273 89
144	391.20	496,657		496,657.34	0.1000	49,665.73
145	391.30	1,109,271		1,109,271.44	0.0667	73,988 41
146	393.00 394.00	551,033 5,132,162		551,032.70 5,132,161.93	0.0400 0.0400	22,041.31 205,286.48
147 148	395.00	336,021		336,020 80	0.0667	203,205,48
149	396.00	120,136		120,136.04	0.0556	6,679.56
150	397.00	15,571,610		15,571,609 62	0 0667	1,038,626 36
151	398 00	<u>955,779</u> 25,479,038		<u>955,778 81</u> 25,479,038	0.0667	63,750 45
152 153	MAUI GENERAL	23,479,036	-	23,479,038	0.0011	1.723,725
154	TOTAL MAUL DIVISION	43,786,034		43,786,034	0 0603	2,639,075
155		· · · · · · · · · · · · · · · · · · ·				
156	LANAI			4 7 47 474 00	0.0600	C7 460 60
157 158	346 OL LANALOTHER PRODUCTION	1,343,171		<u>1,343,171.28</u> 1,343,171	0.0500	67,158 56 67,159
159	HUNDLO MIRAL ROPOSITION					
160	391.1L	-			0.2000	•
161	391.2L	123		123 27	0.1000	12.33
162 163	391.3L 394.0L	1,091 31,314		1,091.26 31,314 41	0.0667 0.0400	72.79 1,252.58
164	397.0L	694,567		694,566.79	0 0667	46,327.60
165	398.0L	20,102		20.101.53	0.0667	1.340.77
166	LANAI GENERAL	747,197	<u> </u>	747,197	0.0656	49,006
167 168	TOTAL LANAL DIVISION	2,090,369	<u> </u>	2,090,369	0.0558	116,165
169		2,000,000		2,000,000		110,700
170						
171	MOLOKAI					
172 173	346 0M MOLOKAI OTHER PRODUCTION	1,947,726		<u>1,947,726.18</u> 1,947,726	0.0500	97,386.31 97,386
174	MOLETINE OTHER FREEPENDER		······			
175	391.1M	-		•	0.2000	-
176	391.2M	123		123.26	0.1000	12.33
177 178	391 3M 394 0M	10,387 76,699		10,386 67 76,699 45	0.0667 0.0400	692.79 3,067.98
179	397.0M	825,824		825,824.30	0.0667	55,082.48
180	398 CM	32,143		32,142 52	0,0667	2,143 91
181 182	MOLOKAI GENERAL	945,176		945.176	0 0645	60.999
183	TOTAL MOLOKAL DIVISION	2.892,902		2,892,902	0 0547	158.386
184						
185	Net Unrecovered Amortization - Footnot	e (3)				(693,021)
186 187	UTILITY TOTAL AMORTIZATION	48,769,305		48,769.305	0 0455	2.220 604
188	STERT TOTAL SMORTIZATION	45,705,500	·	40,708.300		2.220 004
189	TOTAL RAM DEPRECIATION / AMORTIZA	ATION				\$ 21,996,090
190	LESS: Vehicle Depreciation (A/C 392 abov	· ·				\$ (415,870)
191 192	LESS: Depreciation & Amortization in Curre	ent Revenues			Footnote (4)	\$ (20,933,000)
192	RAM Adjustment for Depreciation & Amorti	zation				\$ 647,220
194	RAM Adjustment for CIAC Amortization				Sch. G	\$ (166,766)
195	RAM Adjustment for CIS Amortization			MECO-W	P-D1-002, page 1	\$ 136,000
196 197	Total RAM Adjustment for Depreciation & A Times: Factor for Revenue Taxes	anouzaour				\$ 616,454 1.0975
198						
199	RAM DEPRECIATION & AMORTIZATION					\$ 676,567
Footnote	5:					
(1)		\$ 903,718,780	Line 134			
	Amortizable Balance Total Utility Plant per Schedule	48,769.305 \$ 952,488,085	Line 187			
	Total Culty Flain per Schedule	3 832,400,000				
	Add: Land, Land Rights, Franchises &					
	Consents as of 12/31/12 not included in					
	Schedule Total Litity Plant per Ga	1,714,890	December 2012 Manifek For	apprial Report filed 3/40/41	,	
	Total Utility Plant per G/L	\$ 954,202,976	December 2012 Monthly Fir	anual Report filed 2/19/1.	2	
(2)	Amounts are recorded, except for the					
	following adjustment:					
	Lanai CHP	3,500,000	MECO-RWP-1401 (Revise	ed 3/28/12), Dkt No 2011-	0092, page 10	
	Total Adjustment	\$ 3.500,000				

(3) Net Unrecovered Amortization;

	Net Unrecovered	Annual Recovery
Account	Amortization (c)*	(c) / 5 years
316 00	297,187	59,437
346.00	(1,793,299)	(358,660)
391.10	243 160	48,632
391 20	281 487	56.297
391.30	163,845	32,769
393 00	(100.913)	(20,183)
394 20	331,090	66,218
394.30	90,755	18,151
395.10	201,529	40,306
395 20	-	-
395 40	(2,856)	(571)
396 00	(6,091)	(1,218)
397.00	(3,100,803)	(620,161)
398.00	(70.196 <u>)</u>	(14,039)
Over-recovered Amortization	(3,465,105)	
Annual Recovery (increases emortization expense annually for five years)		(693,021)

* Source: MECO 2012 Test Year Rate Case, Docket No. 2011-0092, CA-IR-181, Attachment 1, columns (E) & (F)

(4)	Depreciation & Amortization in Current Revenues*;	Depr//	mort Expense
	Total Depreciation	\$	21,347,000
	LESS: Vehicle Depreciation (A/C 392)		(414,000)
	Net Depreciation in Current Revenues	\$	20,933,000
	*Amounts are per MECO Revised Workpaper MECO-RWP-1401, page 1 dated March 28, 2012 in ME case (Docket No. 2011-0092).	CO's 20	12 test year rate

SCHEDULE F (WITH SETTLEMENT) PAGE 1 OF 1

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK DETERMINATION OF CHANGE IN DEFERRED INCOME TAXES

Line No.	NARUC Account	Reference	Projected ADIT Change
Line No.			
	(a)	(b)	(C)
1	State Tax Depreciation	Schedule F1	1,332,314
2	Effective Federal Tax Rate	32.8947368%	
3	Federal Deferred Tax on State Tax Depreciation		438,261
4	Add back State Tax Depreciation		(1,332,314)
5	Federal Tax Depreciation	Schedule F1	15,684,998
6	Federal/State Difference		14,352,684
7	Tax Rate on Federal Only Adjustment	MECO-WP-F-001	35%
8	Federal Deferred Tax Adjustment		5,023,439
9	Total Federal Deferred Taxes		5,461,701
	STATE DEFERRED TAXES		
10	State Tax Depreciation	Schedule F1	1,332,314
11	Effective State Tax Rate	MECO-WP-F-001	6.0150376%
12	Total State Deferred Taxes		80,139
13	TOTAL FED AND STATE DEFERRED TAXES		5,541,840
			To Schedule D1

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.

MAUI ELECTRIC COMPANY, LTD. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF TAX DEPRECIATION

			MECO-WP-F1-002										
Line No.	LIFE	PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL						
1 Computer Data	5	386.273	82,852	469,125	1.07%	0.23%	1.30%						
2 Comp/Off/Fum/Tools	7		6,198	16,366	0.03%	0 02%	0 05%						
3 Street Lights	7	123,727	92,080	215,807	0.34%	0 26%	0 60%						
4 Non-Steam Production	15		99,620 31,207	3,982,585	10.77%	0 28%	11.05% 2,01%						
5 Communication 6 Steam Production	20 20	693,488 785,587	54,673	724,695 840,260	1.92% 2.18%	0 09% 0.15%	2.33% 2.33%						
7 General	20	2.030,807	352,421	2,383,228	5.64%	0.13%	6 61%						
8 Transmission	20	2,533,893	1,035,313	3,569,206	7.03%	2.87%	9,90%						
9 Distribution	20		11,148,907	21,636,528	29.10%	30.94%	60.04%						
10 Structural	39	992,326	208,649	1,200,975	2.75%	0.58%	3 33%						
11 ROW	50	4,464	42,506	46,970	0 01%	0.12%	0.13%						
12 Land	-	-	-	-	0 00%	0.00%	0.00%						
13 Vehicles	•	73.507	880,676	954,183	0 20%	2.44%	2 65%						
14 TOTAL		22,004,828	14,035,100	36,039,928	61.06%	38.94%	100.00%						
				ram % Totals by D- 5 yr	epreciable Lite. 1 07%	0.23%	1.30%						
				зун 7ут	0 37%	0.23%	0.64%						
				15 yr	10.77%	0.28%	11.05%						
,				20 yr	45 87%	35.03%	80.90%						
				39 yr	2.75%	0 58%	3.33%						
				50 yr	0.01%	0 12%	0.13%						
				Land	0.00%	0.00%	0 00%			FED	FED	STATE	STATE
				Vehicles	0 20%	2.44%	2.65%			YR 1	YR 1	YR 1	YR 1
				Total	61.06%	38.94%	100.00%		BASIS	TAX RATE	TAX DEPR	TAX RATE	TAX DEPR
								Vintag	e 2013 - 50% bor	IUS			
		NOTE (1)	Basis subject to 5	0% banus	94%	100%							
				5 yr	1.01%	0.23%	1.24%	5 yr	36D,907	60.000%	228,544	20 00%	76,181
				7 yr	0 35%	0.27%	0 62%	7 yr	191,038	57.145%	109,169	14.29%	27,299
				15 уг 20 уг	10.13% 43.12%	0.28% 35.03%	10 40% 78 14%	15 yr	3,201,787	52.500%	1,680,938	5 00% 3.75%	160,089
				20 yr 39 yr	43.1276 n/a	35.03 % n/a	/014% n/a	20 yr	24,049,130	51.875%	12,475,486	3./376	901,842
				50 yr	n/a	г/а	n/a						
				Land	n/a	n/a	n/a						
				Vehicles	n/a	n/a	n/a						
				Total	54 60%	35 80%	90 40%						
								Vi⊓tao	e 2013 - regular				
			Basis subject to r	egular depr.	(Total less amo	unts subject to 50	% bonus)						·
				5 ут	0.06%	0.00%	0.06%	5 yr	19,795	20.00%	3,959	20 00%	3,959
				7 yr	0.02%	0.00%	0 02%	7 yr	6,851	14 29%	979	14.29%	979
				15 yr	0.65%	0 00%	0.65%	15 yr	198,948	5 00%	9,947	5.00%	9,947
				20 yr	2.75%	0.00%	2.75%	20 yr	847,014	3 75%	31,763	3 75%	31,763
				39 yr	2.75%	0.58%	3 33%	39 yr	1,025,452	1 177%	12,070	1.177%	12,070
				50 yr	0.01%	0.12%	0 13%	50 ут	40,009	1 000%	400	1.000%	400
				Land Vehicles	n/a n/a	n/a n/a	ា/a ក/a						
				V GI IIICIGS	6.25%	0 70%	6.95%						
				TOTAL ASSETS	60.85%	36.50%	97.35%						
					Net Depreciable	Baseline Plant A	dds		29,960,931	-	14,553,255		1.224.529
					Maior Candol D	rojects from Sche	dule E2		2.155.700	. •	1,131.743		107.785
					Total Depreciab				32,116,631		15,684,998		1,332,314
					Deselie - Dii -		anabia Olana ta'a	40-		F	d Tax Depreciati	on St	Tax Depreciation
				Reconciliation from		dds to Net Deprei Il Projects Plant A		15.	36,039,928		To Schedule F		To Schedule F
					Less: Repairs d		MECO-WP-F1	-001. Dot		< <supported< td=""><td>by Special St</td><td>udv each ves</td><td>r.</td></supported<>	by Special St	udv each ves	r.
					Net plant add bi				30,775,875				
						Vehicles (2 65%	x 30,775.875)		814,944				
									29,960,931				

NOTE (1) The American Taxpayer Relief Act of 2012 allows 50% bonus depreciation for assets placed in service in 2013. 100% bonus depreciation is no longer available for property placed in service after 12/31/12. This Schedule was modified from the template that was previously provided to the Commission to eliminate the section related to 100% bonus depreciation.

MAUI ELECTRIC COMPANY, LIMITED 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)	
	MECO Note: There were no Major Capital Projects in 2012.					
1	Assumed Value of 2013 Major Capital Projects Plant Items	Sch. D3			\$ 2,155,700	
2	Assumed Value of 2013 Major Capital Projects - CIAC nontaxable	Sch. G2			\$ -	
3	Assumed Value of 2013 Major Capital Projects - Total			-	\$ 2,155,700	
			FED	FED	STATE	STATE
			YR 1	YR 1	YR 1	YR 1
4	Tax Classification of Major Capital Project Additions	Tax Basis Distribution	TAX RATE	TAX DEPR	TAX RATE	TAX DEPR
5	7 yr		57.145%		14.29%	-
6	15 yr	2,155,700	52.500%	1,131,743	5.00%	107,785
7	20 yr	-	51.875%	-	3.75%	-
8	39 yr	n/a				
9	Land	n/a				
10	Vehicles	n/a				
11	Total	\$ 2,155,700		\$ 1,131,743 To Schedule F1		\$ 107,785 To Schedule F

SCHEDULE G (WITH SETTLEMENT) PAGE | OF |

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK CIAC SUMMARY

Line No.	Description	Reference	Unamortized CIAC	CIAC Amortization
	(a)	(b)	(c)	(d)
1 2 3	12/31/12 Beginning Balance Less: Adjustments Less: Adjustments	Sch. G1	\$ (82,211,127) 	
4	Adjusted Balance at 12/31/12		(82,211,127)	
5 6	2013 CIAC Additions:			
7	Average Baseline	Sch. G1	(6,844,098)	
8 9	Major Projects Net Additions	Sch. G2	- (6,844,098)	
10				
11 12 13 14	2013 CIAC Amortization: Estimated Amortization (Sch. G3) Less: Adjustments Less: Adjustments	Sch. G3	1,733,766 - -	\$ (1,733,766)
15	Net Amortization		1,733,766	(1,733,766)
16 17			\$ (87,321,459)	(1,733,766)
18	12/31/13 Ending Balance		a (87,521,455)	(1,733,700)
19 20	LESS: CIAC Amortization in Current Revenues - NOTE	(1)		(1,567,000)
21	RAM Adjustment for CIAC Amortization			\$ (166,766)

Note (1):

Per Attachment 1A, page 62, of MECO-DCA Revised Updated Joint Statement of Probable Entitlement, dated May 14, 2012 in MECO's 2012 Test Year Rate Case (Docket No. 2011-0092).

MAUI ELECTRIC COMPANY, LIMITED 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; Note (A)

			_	2/27/2009	3/1/2010	2/22/2011	2/21/2012	2/19/2013
line No.	Description			2008	2009	2010	2011	2012
	(a)			(c)	(d)	(e)	(f)	(g)
1 2 3	CIAC Balance, January 1 (Dec Rpt. pg. 10) - Note (B) Less: CIAC Amortization (Dec Rpt. pg. 2) Less: CIAC Balance, December 31 (Dec Rpt. pg. 10) - Note	e (B)	_	(60,310,281) 2,754,699 66,961,264	(66,961,264) 3,063,868 72,393,407	(72,393,407) 2,743,432 73,969,015	(73,969,015) 2,018,844 74,765,860	(74,765,86 1,738,80 82,211,12
4 5 6	Total CIAC Additions			9,405,682	8,496,011	4,319,040	2,815,689	9,184,06
8 7 8	Less Major Projects:	Dkt No.	ltem No.					
9 10 11 12	<u>2006 In-service:</u> Maalaea Dual-Train Combined Cycle No. 2-Unit No. 18	7744	PN-314					
13 14 15 16 17	<u>2007 in-service:</u> None							
18 19 20 21	2008 In-service: None							
22 23 24 25	2009 In-service: CHP Manele Bay Hotel	2006-0186	M0000540		-			
26 27 28 29 30	2010 In-service: 6th Increment Distribution Rebuikl	01-0148	MD000266			-	-	
31 32 33 34								
35 36 37 38	<u>2011 In-Service:</u> M14 Capilal Overhaul	(C)	M0001275				-	
39 40 41	<u>2012 In-Service;</u> None							
42 43	Total Net CIAC Additions		-	9,405,682	8,496,011	4,319,040	2,815,689	9,184,00
44	Last Five-Year Average						=	6,844,09

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 workpaper 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.

NOTE (B):

The CIAC balances are shown on page 9 of the December Monthly Reports for years 2007 and 2008.

NOTE (C):

A separate application was not filed with the Hawaii Public Utilities Commission for the M14 Capital Overhaul. This project was reported in the 2011 Third Quarter Capital Project Status Report filed on January 4, 2012. In the report, MECO identified that project costs had unexpectedly exceeded \$2.5M and provided an explanation for the higher costs. See Attachment 12, pages 1-2, of the Third Quarter 2011 Capital Project Status Report.

SCHEDULE G2 (WITH SETTLEMENT) PAGE 1 OF 1

MAULELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK MAJOR CAPTIAL PROJECT CIAC ADDITIONS

Líne			Estimated	
No.	Description	PUC Docket Reference	In Service Date	Amount
	(a)	(b)	(c)	(d)
1	2013 Major Capital Project CIAC Additions by Project:			
2	M16 Capital Overhaul	Docket No. 2012-0038 (D&O dated 12/05/2012)	May-13	\$ -
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13	Total Major Project CIAC Additions for 2013 RAM			<u>\$</u>

SCHEDULE G3 (WITH SETTLEMENT) PAGE 1 OF 2

MAUI ELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK CIAC AMORTIZATION

Line					2011		2012	2		2013
<u>No.</u>	Description				Balance	_	Amortization	_	Balance	Amortization
	(a)				(b)		(c)		(d)	(e)
4	CIAC by Vintage:						Note (1)			
1 2	CIAC by Vintage.	1980		\$	3,304	\$	(320)	\$	2,984	(138)
3		1981		\$	32,589	\$	(1,964)	\$	30,625	(130)
4		1981	٤.	ŝ	87	\$	(5)	\$	82	(1,001)
5		1982		\$	48,482	\$	(2,559)	\$	45,923	(1,865)
6		1982		\$	113,940	\$	(6.015)	\$	107,925	(4,382)
7		1982	L	\$	25	\$	(1)	\$	24	(1)
8		1983		Ş	17,998	\$	(874)	S	17,124	(667)
9		1983	L	\$	7	\$	(0)	\$	6	(0)
10 11		1984		S	55,612	\$	(2,530)	S	53,081	(1,986)
12		1984 1985	Ļ	\$ \$	6 133,576	\$ \$	(0) (5,747)	\$ \$	6 127,829	(0) (4,606)
13		1986		\$	178,534	\$	(7,305)	\$	171,230	(5,951)
14		1986	1	\$	100	\$	(4)	ŝ	96	(3,551)
15		1987	-	5	172,462	ŝ	(6,738)	Š	165,724	(5,563)
16		1987	L	\$	2,503	\$	(98)	S	2,405	(81)
17		1988		\$	235,317	\$	(8,806)	\$	226,511	(7,354)
18		1988	L	\$	35,043	\$	(1,311)	\$	33,732	(1.095)
19		1989		\$	422,935	\$	(15,204)	\$	407,731	(12,816)
20		1989		\$	66,518	\$	(2,391)	\$	64,128	(2,016)
21		1989	мо	\$	89,026	\$	(3,373)	\$	85,653	(2,698)
22 23		1990 1990	L	\$ \$	538,323 30,824	\$ \$	(18,617) (1,066)	\$ \$	519,706	(15,833)
24		1990		э \$	5,589	э \$	(1,000)	э \$	29,758 5,396	(907) (164)
25		1991	NIC	\$	720,421	\$	(24,020)	\$	696,401	(20,583)
26		1991	F	ŝ	29,229	Š	(975)	\$	28,254	(835)
27		1991		\$	10,054	\$	(335)	\$	9,718	(287)
28		1992		\$	552,992	\$	(17,804)	\$	535,188	(15,361)
29		1992		\$	65,361	\$	(2,104)	\$	63,256	(1,816)
30		1992		\$	28,962	\$	(932)	\$	28,030	(805)
31		1993	IK	\$	2,433,038	\$	(76,121)	\$	2,356,917	(65,758)
32		1993		\$	475,444	\$	(14,802)	\$	460,642	(12,850)
33 34		1993 1993		\$	69,487	\$	(2,163)	\$	67,324	(1,878)
34		1993	ΝÜ	\$ 5	19,812 473,810	\$ \$	(617) (14,282)	\$ \$	19,195 459,528	(535) (12,469)
36		1994	1	\$	(12,190)	\$	367	\$	(11,823)	(12,405) 321
37		1994		\$	8,608	\$	(259)	\$	8,349	(227)
38		1993		ŝ	295,825	\$	(9,210)	Š	286,615	(7,995)
39		1995		ŝ	493,208	\$	(14,411)	\$	478,797	(12,646)
40		1995	L	\$	3,775	\$	(110)	\$	3,665	(97)
41		1995	мо	\$	71,829	\$	(2,099)	\$	69,730	(1,842)
42		1996		\$	565,170	\$	(16,025)	S	549,145	(14,129)
43		1996		\$	11,439	\$	(324)	\$	11,115	(286)
44		1996		S	78,898	\$	(2.237)	\$	76,661	(1,972)
45		1996	IK	S	104,265	\$	(2,956)		101,309	(2,607)
46		1997		S	447,122	\$	(12,315)		434,807	(10,905)
47		1997		\$	67,568	\$	(1,861)		65,707	(1,648)
48		1997	MO	\$	58,381	\$	(1,608)	S	56,773	(1,424)
49		1998		S	796,123	\$	(21,318)		774,805	(18,955)
50 51		1998		Ş	24,758	S	(663)	\$	24,095	(589)
		1998	MQ	\$	18,007	\$	(482)	\$	17,524	(429)
52 53		1999 1999		S ¢	1,039,905	\$ ¢	(27,095)	\$ \$	1,012,810	(24,184)
54		1999		\$ \$	6,092 (826)	\$ \$	(159) 22	э \$	5,933 (804)	(142) 19
55		2000		3 5	936,443	\$	(23,760)	э \$	912,683	(21,283)
56		2000	L	ŝ	4,272	\$	(108)	\$	4,164	(21,203) (97)
57		2000		Š	23,429	Š	(594)	ŝ	22,834	(532)
58		2001		ŝ	1,459,768	\$	(36,096)	\$	1,423,672	(32,439)
59		2001		\$	101,947	\$	(2,521)	\$	99,426	(2,265)
60		2001	мо	\$	38,562	\$	(954)	\$	37,609	(857)

SCHEDULE G3 (WITH SETTLEMENT) PAGE 2 OF 2

Lìne					2011	2012	2		2013
No.	Description				Balance	 Amortization	Balance		Amortization
	(a)				(b)	 (C)	_	(d)	(e)
						Note (1)			
61		2002		\$	1,042,483	\$ (25,139)	\$	1,017,344	(22,663)
62		2002	L	\$	12,081	\$ (291)	\$	11,789	(263)
63		2002	MO	\$	9,388	\$ (226)	\$	9,162	(204)
64		2003		\$	6,733,424	\$ (158,451)	\$	6,574,973	(143,264)
65		2003	Ł	\$	535,004	\$ (12,590)	\$	522,414	(11,383)
66		2003	MO	\$	19,417	\$ (457)	\$	18,960	(413)
67		2004		\$	2,144,715	\$ (49,282)	\$	2,095,433	(44,682)
68		2004	L	\$	108,522	\$ (2,494)	\$	106,028	(2,261)
69		2004	MO	\$	35,111	\$ (807)	\$	34,304	(731)
70		2005		\$	6,312,049	\$ (141,709)	\$	6,170,340	(128,817)
71		2005	L	\$	366,959	\$ (8,238)	\$	358,721	(7,489)
72		2005	MO	\$	1,511,701	\$ (33,938)	\$	1,477,763	(30,851)
73		2006		\$	9,140,857	\$ (200,616)	\$	8,940,241	(182,817)
74		2006	L	\$	87,125	\$ (1,912)	\$	85,213	(1,743)
75		2006	MO	\$	418,691	\$ (9,189)	\$	409,502	(8,374)
76		2007		\$	8,509,770	\$ (182,674)	\$	8,327,095	(166,858)
77		2007	Ł	\$	36,493	\$ (783)	\$	35 710	(716)
78		2007	MO	\$	112,504	\$ (2,415)	\$	110,089	(2,206)
79		2008		\$	8,279,000	\$ (173,915)	\$	8,105,084	(159,212)
80		2008	L	\$	513,956	\$ (10,797)	\$	503,159	(9,884)
81		2008	MO	\$	38,986	\$ (819)	\$	38,167	(750)
82		2009		5	7,614,969	\$ (156,616)	\$	7,458,352	(143,679)
83		2009	L	\$	376,376	\$ (7,741)	\$	368,636	(7,101)
84		2009	MO	\$	65,924	\$ (1,356)	\$	64,569	(1,244)
85		2010		\$	4,209,895	\$ (84,609)	\$	4,125,286	(77,961)
86		2010	L	\$	(5,094)	\$ 102	\$	(4,991)	94
87		2010	MO	\$	16,077	\$ (323)	\$	15,753	(298)
88		2011		\$	2,756,325	\$ (54,291)	\$	2,702,033	(50,115)
89		2011	Ļ	\$	10,696	\$ (211)	\$	10,485	(194)
90		2011	MO	\$	48,667	\$ (959)	\$	47,709	(885)
91		2012				\$ -	\$	9,096,222	(165,386)
92		2012	L			\$ -	\$	56,215	(1,022)
93		2012	MO			\$ 	\$	31,632	(575)
94	Total CIAC Amortization for 2013 RAM				74,765,860	 (1,738,802)		82,211,127	(1,733,766)

Legend:

_

L - Lanai

MO - Molokai

IK - In-kind

.

Note (1):

A CIAC amortization period of 55 years was approved by the Commission in MECO's 2010 TY Rate Case, Docket No. 2009-0163, Final Decision and Order, May 2, 2012. As such, MECO's 2012 CIAC Amortization is calculated based on 4 months (Jan. - Apr.) at an amortization period of 44 years and 8 months (May - Dec.) at an amortization period of 55 years.

MAULELECTRIC COMPANY, LIMITED DECOUPLING CALCULATION WORKBOOK EARNINGS SHARING CALCULATIONS All Amounts \$000 (Except %)

No	Description	Refe	erence	Operating			is Return on ate Base		of Return	
	(a)		(b)	(0)			(d)	(e)		
			port, p. 2A							
			CO-WP+H-							
1	Reported Operating Income b/4 ratemaking adj.		001	s	24,150	s	402,974			
2	Ratemaking Adjustments to Line 1									
2a	Incentive Compensation Expenses (net of tax)	MECO-	WP-H-002		144					
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	MECO-	WP-H-002		58					
2c	Amortization of investment income differential		WP-H-003		9					
2d	Income tax on items to be replaced by synchronized interest	MECO-	WP-H-003		(3,303)					
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1	i & 2	\$	21,058	\$	402,974			
4	Ratemaking Capitalization	Bal	ances	Rate	os	Co	st Rate ⁽³⁾	Weigt	nted Co:	
			WP-H-004	MECO-W						
5	Short-Term Debt (12 mo. Avg)	\$	3,307		0 81%		1.25%		0.01	
6	Long-Term Debt (Simple Avg)	5	156,364		38 49%		5.06%		1.95	
7	Hybrid Securites (Simple Avg)	5	9,373		2.31%		7.32%		0.17	
8	Preferred Stock (Simple Avg)	s	4,744		1.17%		8.25%		0.10	
9	Common Equity (Simple Avg)	\$\$	232,430		57.22%		0.25% 10.00%		5.72	
10	Total Capitalization	\$	406,217		100 00%				7.94	
10			400,217		100 00%				7.84	
11	Line 3 Rate Base Amount					\$	402,974			
12	Weighted Cost of Debt						2 13%			
13	Synchronized Interest Expense					\$	8,570			
13a	Income Tax Factor Synchronized Interest Expense, net of tax					<u>1</u> \$	636929121 5,236			
14	Post Tax Income Available for Preferred & Common (Line 3 - Line	e 13a)						\$	15,82	
17	Less: Preferred income Requirement (Line 8 Weighted Cost time	s Rate Base	e)						38	
18	Income Available for Common Stock							\$	15,43	
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)								230,57	
20	Return on Equity for Decoupling Earnings Sharing								6 69	
21	Earnings Sharing Revenue Credits:	Basi	s Points							
22	Achieved ROE (basis points)		669							
23	Authorized Return (basis points)		1,000							
24	ROE for sharing (basis points)		-							
25	Sharing Gnd per RAM Provision	First	100 bp	Next 20	00 bp	All o	ver 300 bp	Ratepa	ayer Tot	
	Distribution of Excess ROE (basis points)		0		0		0			
26			25%		50%		90%			
	Ratepayer Share of Excess Earnings		2076	-						
26 27 28	Ratepayer Share of Excess Earnings Ratepayer Earnings Share - Basis Points		-		-		-		-	
27			-		-		-	\$	4	

Footnot	es:		
1	Composite Federal & State Income Tax Rate		38 91%
	Income Tax Factor (1/1-tax rate)		1 636929121
2	Ratemaking Equity Investment (line 19)	s	230,574
	Basis Point = 1/100 of a percent		0.01%
	Earnings Required per Basis Point (thousands)	\$	23 06
	Times: Income Tax Conversion Factor		1.635929121
	Pretax Income Required per Basis Point (thousands)	\$	38
	Times: Revenue Tax Conversion Factor		1.0975
	Revenue Requirement per Basis Point (thousands)	\$	41

3 Revised Updated Joint Statement of Probably Entitlement, Docket No. 2011-0092, Attachment 1A, page 2 (revised 5/14/12)

SCHEDULE I (WITH SETTLEMENT) PAGE 1 OF 1

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MAUI ELECTRIC COMPANY, LIMITED 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.

Maul Electric Company, Ltd. - Maul Division 2013 -2014 Revenue and Expense Forecast MWH SALES

		د	, »	2013 🖘				-		2014			
-	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Total
Maui	93.241	97.218	97.775	90.70 9	95.416	88.507	87.404	91.085	80.788	90.450	86.789	92.179	1,091.560
Lanaì	2.076	2.133	2.155	2.085	2.039	2.002	1.999	2.143	1.836	2.095	2.032	z.092	24.687
Molokai	2.513	2.562	2.656	2.556	2.587	2.436	2.486	2.435	2.217	2,453	2.423	2.550	29.874
	97.830	101.913	102.586	95.350	100.041	92.945	91.888	95.663	84.841	94.998	91.243	96.821	1,146.121

Source:

MECO June 2012 Sales Update

MECO-WP-B-001 MAUI ELECTRIC COMPANY, Ltd. June 2012 - Correction to May RBA calculation

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

Corrected

L1 - L2 L4 + L3 L6 + L5 (L6 + L7) + 2

Note (1):

Amounts may not add due to rounding.

Note (2):

The May RBA calculation was revised to remove Solar Saver revenue from the calculation of May's recorded adjusted revenue. The error was identified subsequent to recording and RBA entries. The amount was not material to the financial statements and recorded in June 2012.

MECO-WP-B-001 (WITH SETTLEMENT) PAGE 1 OF 1

MECO-WP-B-002 MAUI ELECTRIC COMPANY, Ltd. July 2012 - Correction to June Interest Calculation

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

Difference			\$0						(\$22,522) adjustment	
Jun-12 Recorded Difference			\$1,002,048						\$26,204	
Jun-12	\$11,012,872	\$10,010,824	\$1,002,048	\$0	\$1,002,048	\$235,453	\$1,237,501	\$736,477	\$3,682	\$1,241,183
	Monthly Target Revenue	Recorded Adjusted Revenue	Target vs. Actual Revenue	Reversal of Previous Year Accrual	Net RBA Change	Beginning RBA Balance	End Balance Before Interest	Balance Subject to Interest	Interest income/(expense)	Ending RBA Balance
			רו - ר2		L4 + L3		L6 + L5	(L6 + L7) + 2	L8 x 6% + 12	L7 + L9
	5	۲	L3	Γ4	L5	L6	L7	5	61	L10

Note (1):

Amounts may not add due to rounding.

Note (2):

An adjustment was recorded in July to correct the interest income for June 2012. The error in the calculation was identified prior to the June close, but as the amount was not significant to June 2012, the correction was made in July. The overstatement of the interest in June was due to an input error in calculation of interest income.

MECO-WP-B-002 (WITH SETTLEMENT) PAGE 1 OF 1

	Difference	<u>710</u>			(\$2,171) adjustment						(\$27) adjustment			(\$2,198)
sum of B	Revised	٩ <u>۲</u>			S2,844 231						\$25,316		1	
sum of A	-	Ę			\$2,846,401						\$25.343			
œ	Corrected	Aug-12	\$11,646,986	\$10,721,765	\$925,221	\$0	\$925,221	\$2,166,633	\$3,091,854	\$2,629,244	\$13,146	\$ 3,105,000		
۲		<u>Aug-12</u>	\$11,646,986	\$10,721,765	\$925,221	\$0	\$925,221	\$2,168,819	\$ 3,094,040	\$2,631,430	\$13,157	\$ 3,107,197		
8	Corrected	<u>Jul-12</u>	\$11,478,752	\$10,559,619	\$919,132	\$ 0	\$919,132	\$1,239,008	\$2.158,140	\$1,698,574	\$8,493	\$2,166,633		
۲		<u>Jul-12</u>	\$11,478,752	\$10,559,619	\$919,132	\$0	\$919,132	\$1,241,183	\$2,160,315	\$1,700,749	\$8,504	\$2,168,819		
æ	Corrected	Jun-12	\$11,012,872	\$10,012,994	\$999,878	80	\$999,878	\$235,453	\$1,235,331	\$735,392	\$3,677	\$1.239,008		
۲		Jun-12	\$11,012,872	\$10,010,824	\$1,002,048	\$0	\$1,002.048	\$235,453	\$1,237,501	\$736,477	\$3,682	\$1,241,183		
REVENUE BALANCING ACCOUNT - REVENUE TRACK			Monthly Target Revenue	Recorded Adjusted Revenue	Target vs. Actual Revenue	Reversal of Previous Year Accrual	Net RBA Change	Beginning RBA Balance	End Balance Before Interest	Balance Subject to Interest	Interest income/(expense)	Ending RBA Balance		
REVENUE BA					L1-L2		L4 + L3		1-6 + L.5	(L6 + L7) + 2	L8 x 6% + 12	L7 + L9		
			5	2	2	4	۲5	9 L	5	L 8	6	L10		

MECO-WP-B-003 MAUI ELECTRIC COMPANY, Ltd. September 2012 - Correction for misapplication of surcharge factors to June RBA calculation

Note (1): Amounts may not add due to rounding.

Note (2):

New fuel, purchased power and ECAC surcharge adjustment factors were applicable to the June RBA calculation due to the 2012 interim D&O issued in May 2012. When calculating the June RBA adjustment, the factors applied to the prior month unbilled revenue were not correct. The adjustment to correct the RBA adjustment for the appropriate factors was made in September.

MECO-WP-B-003 (WITH SETTLEMENT) PAGE 1 OF 1

MECO-WP-8-004 MAUI ELECTRIC COMPANY, Ltd. November 2013 - Addivetment to mine seconde due to out of seconde billion /Note 21
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	CB				\$999) adjustment						(\$8) adjustment		01)
	Difference	ДIХ			6 \$)						-		(\$1,007
sum of B	Revised	<u>470</u>			\$2,367,295						\$52,021		
sum of A		<u>YID</u>			\$2,368,294						\$52,029		
62	Corrected	<u>Oct-12</u>	\$11,362,282	\$10,747,017	\$615,265	3	\$615,265	\$3,949,398	\$4,564,663	\$4,257,031	\$21,285	\$4 ,585,948	
٩		Oct-12	\$11,362,282	\$10,746,703	\$615,579	8	\$615,579	\$3,950,087	\$4,565,666	\$4,257,876	\$21,289	\$4,586,955	
œ	Corrected	Sep-12	\$10,792,874	\$9,965,727	\$827,147	8	\$827,147	\$3,104,660	\$3,931,807	\$3,518,234	\$17,591	\$3,949,398	
¥		Sep-12	\$10,792,874	\$9,965,380	\$827,494	3	\$827,494	\$3,104,999	\$3,932,493	\$3,518,746	\$17,594	\$3,950,087	
æ	Corrected	<u>Aug-12</u>	\$11,646,986	\$10,722,103	\$924.883	3	\$924,883	\$2,166,632	\$3,091,515	\$2,629,074	\$13,145	\$3,104,660	
4		Aug-12	\$11,646,986	\$10,721,765	\$925,221	3	\$925,221	\$2,166,632	\$3,091,853	\$2,629,243	\$13,146	\$3,104,999	
REVENUE BALANCING ACCOUNT - REVENUE TRACKER			Monthly Target Revenue	Recorded Adjusted Revenue	Target vs. Actual Revenue	Reversal of Previous Year Accrual	Net RBA Change	Beginning RBA Balance	End Balance Before Interest	Balance Subject to Interest	Interest income/(expense)	Ending RBA Balance	
REVENUE BAL					11 - 12		L4 + L3		L6 + L5	(L6 + L7) + 2	L8 x 6% + 12	0 1.7 + 1.9	

Note (1): Amounts may not add due to rounding.

Note (2): In November, a Molokai customer was billed for its usage during the previous six months, as they had not been billed since May 2012. The RBA balance was adjusted to reflect the revenue in the period that it was earned. No adjustment was recorded to May - July, as the revenue was captured in the monthly unbilled revenue estimates.

MECO-WP-B-004 (WITH SETTLEMENT) PAGE 1 OF 1

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

MECO-WP-8-005 MAUI ELECTRIC COMPANY, Ltd. December 2012 - Adjustment to prior periods due to corrections to prior period billings (Note 2)

Aum of B Adjusted Difference				55,078,310 (\$3,894)						\$88,979 (\$131)		uary 2013 \$20	(54,005)
umrofA tu Adj	ely			\$5,002,203 \$ 5						\$89,110		difference to be corrected in January 2013.	
B Corrected	Nov-12	\$10,598,757	\$10,037,720	\$561.037	3	\$561,037	\$4,581,941	\$5,142,978	\$4,862,460	\$24,312	\$5,167,290	differenc	
۲	Nov-12	\$10,598,757	\$10,037,724	\$561,033	8	\$561,033	54,585,948	\$5,146,981	\$4,800,465	\$24,332	\$5,171,313		
B Corrected	Oct-12	511,362,282	\$10,746,651	\$615,631	3	\$615,631	53,945,046	\$4,560,677	\$4,252,862	\$21,264	\$4,581,941		
٩	Oct-12	\$11,362,282	\$10,747,017	\$615,265	8	\$615,265	\$3,949,396	54,564,663	M, 257, 031	\$21,285	54,585,948		
B Corrected	Sep-12	\$10,792,874	\$9,964,959	\$827,915	8	\$827,915	\$3,099,563	\$3,927,478	S3,513,521	\$17,568	\$3,945,046		
۲	Sep-12	\$10,792,874	\$9,965,727	\$827,147	3	\$827,147	\$3, 104,660	\$3,931,807	\$3,518.234	\$17,591	\$3,949,398		
B Corrected	Aug-12		•••			\$925,324							
۲	Aug-12					\$924,663							
E Corrected	<u>Jul-12</u>					\$917,308							
۲	21-104	\$11,478,752	\$10,559,619	\$919,132	3	3 \$919.132	\$1,239,007	\$2,158,139	\$1,698,573	\$8,493	\$2,166,632		
B Corrected	Jun-12	\$11,012,872 \$11,012,872 \$1	\$10,014,819	\$998,053	3	\$998,05	\$233,62	\$1,231,67	\$732,65	\$3,66	\$1,235,34		
۲	Jun-12	\$11,012,872	\$10,012,994	\$999,677	3	5999,877	\$235,453	\$1,235,330	\$735,392	\$3,677	\$1,239,007		
B Corrected	May-12		\$8,657,208	5233,D42	\$	\$233,042	5	\$233,043	\$116,522	\$583	\$233,626		
۲	Mav-12	\$8,890,250	\$8,655,384	\$234,866	3	\$234,868	8	\$234.866	\$117,433	\$587	\$235,453		
		Monthly Target Revenue	Recorded Adjusted Revenue	Target vs. Actual Revenue	Reversal of Previous Year Accrual	Net RBA Change	Beginning RBA Balance	End Balance Before interest	• 2 Batance Subject to Interest		Ending RBA Balance		
				11-U2		L4 + L3		16+15	(L6 + L7) + 2	LB x 6% + 12	0 L7+L9		
		5	3	n	4	5	9	5	63	5	5		

Note (1): Arriounts may not add due to rounding.

Note (2): In December, customer billing adjustments to the periods of May - November 2012 were recorded due to the failure to remove a meter and for the improper exclusion of fixture changes for streetlight customers. The RBA balance was adjusted to reflect the revenue in the period that it was eatmed.

MECO-WP-B-005 (WITH SETTLEMENT) PAGE 1 OF 1

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REVENUE BALANCING ACCOUNT - REVENUE TRACKER

MECO-WP-8-006 MAUI ELECTRIC COMPANY, Ltd. January 2013 - Adjustment to prior periods due to corrections to prior period bilings (Note 2)

		۲	۵	۲	æ	۲	ß	۲	Ð	4	£	۲	63	۲	80	۲	æ	A la mus	eum of B		
			Corrected		Corrected	,	Corrected	5	Corrected	5	Corrected	Ú	orrected	J	'orrected	7	Corrected			Difference	
		May-12	May-12 May-12	Jun-12 Jun-12	L-	Jui-12	<u>Jul-12</u>	Aug-12	Aug-12	Sep-12	Sep-12 0	Det-12 (Oct-12 [Nov-12	Nov-12	Dec-12	Dec-12	ЯШ	E,	Ê	
E	Monthly Target Revenue	\$8,890.250	\$8,890,250	\$11,012,872	\$11,012,872	\$11,478,752 \$		\$11,646,986 \$1		••	0,792,874 \$11				**	•	111.521.111				
2	Recorded Adjusted Revenue	\$8,657,208	\$8,656,892	\$10,014,819	\$10,014,470	\$10,561,443 \$					39,964,607 \$10	-			-		10,446,078				
L3 L1-L2	Target vs. Actual Revenue	\$233,042	\$233,358	\$998,052	\$998,402	\$233,042 \$233,358 \$998,052 \$998,402 \$917,308 \$917,668	\$917,668	\$925,324	\$925,684	\$827,915	\$628,267		\$615.670	\$561,037		\$75,033	\$75,033	\$5,153.342	\$5,155,119	\$1,777 adjustment	¥
3	Reversal of Previous Year Accruat	3	\$	9	3	\$ 0	3	~			2						5				
15 14・13	Net RBA Change	\$233,042	\$233,358	\$998,052	\$998,402	\$917,308											\$75,033				
L6	Begrynng RBA Balance	5	\$	\$233,625		\$1,235,340									"		55,169,104				
L7 L6+L5	End Balance Before Interest	\$233,042	\$233,359	\$1 231 677		\$2,152,648	- /								~		15,244,137				
L8 (L6 + L7) + 2	2 Balance Subject to Interest	\$116.521	\$116,680	\$732,651	\$733,143	\$1,693,994		\$2,623,780	\$2,624,994 \$	\$3,513,519 \$	\$3.515,095 \$4	34,252,860 \$4	54,254,638 S	\$4,862,458 \$	\$4, B64, 265 5	5.204.805 \$	\$5,206,621				
L9 L8 x 6% + 12	2 Interest income/(expense)	\$583	5583	\$3,663		\$8,470	\$18,474										\$26.033	\$115,003	\$115,050	547 adjustment	¥
L10 L7 + L9	Ending RBA Balance	\$233,625	\$233,942	\$1,235,340	\$1,236,010	\$2,161,118	\$2,162,152								~		5,270,170				
Note (1)																		Decen	becember correction misue monotect	(5 20)	
Amounts may not a	Amounts may not add the to rounding.																	1		\$1,806	

Note (2). In January 2013, a customer biling adjustment (retund/credit) for the period of January - October 31, 2012 was recorded due to biling errors associated with a malfunctioning meter. As revenue from the period of Jan - Oct 2012 was overstated for RBA purposes, an adjustment to each month's RBA balance (May-Oct) was made in January 2013, which treatled in a revised December 2012 ending RBA

MECO-WP-B-006 (WITH SETTLEMENT) PAGE I OF 1

MECO-WP-C-001 (WITH SETTLEMENT) PAGE 1 OF 1

Maui Electric Company, Ltd.

Bargaining Unit Wage Increase per Collective Bargaining Agreement - Effective January 1, 2011 Tentative Settlement Agreement- Effective January 1, 2014

	Wage Increases: (non-compounded)	1/1/2011 1/1/2012 1/1/2013	1.75% 2.50% 3.00%	(Note 1) (Note 1) (Note 1)
	Increase effective	Increase Amount (a)	Wage Rate <u>With Increase</u> (b) prev (b) + (a)	Labor Cost Escalation Rate (c) (b) / prev (b) -1
1.00	1.75% 1/1/2011 2.50% 1/1/2012 3.00% 1/1/2013	0.0175 0.0250 0.0300	1.0175 1.0425 1.0725	0.0246 2.46% 0.0288 2.88%

 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.

Blue Chip Economic Indicators[®]

Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead Vol. 38, No. 2, February 10, 2013

Wolters Kluwer Law & Business

FEBRUARY 2013	[ver-Prior Ye				age For 2			Jnks-2013	2013
Forecast For 2013] Real GDP	2 GDP	3 Nominal (4 Consumer	5 Indust	6 Die Bere	7 Personal	8 Non-Ree	9 Corp.	10 Treas.	[] Treas.	12 Unempi.	13 Housing	14	15
	(Chaned)	Price	GDP	Price	Prod.		Cons. Exp.	Fix. Inv.	Profits	Bills	Notes	Rate	Starts	Auto&Light Truck Sales	Net Exports
SOURCE:	(2005 \$)	Index	(Cur. \$)	Index	(Total)	(2005 \$)	(2005 \$)	(2005 \$)	(Cur. \$)	3-тю.	10-Year		(Mil.)	(Mil.)	(2005 \$)
Standard & Poors Corp.*	3.0 H	16	4.6	1.5	3.6 H		2.7	9.0 H	na	0.1	2.1	7.3 L	1.11	15.6	-450.4
Naroff Economic Advisors* RBS	2.7 2.5	2.4 H 2.0	5.2 H 4.6	2.9 2.0	3.0 1.8	11 1.4	2.8 H 1.8	5,9 5.9	6.0 5.0	0.2	2.3 2.0	7.5 7.5	0.96	15.8	-455.0 L -400,0
Swiss Re	2.5	1.7	4.0	2.0	2.5	1.4	2.1	6.4	5.7	0.1	2.0	7.4	1.09	15.1 15.2	-414.5
Oxford Economics	2.3	1.8	4.1	2.0	2.5	1.0	2.3	5.5	3.2	0.1	2.1	79	0.94	150	-421.5
UBS	2.3	18	4.1	1.6	3.4	1.8	2.2	5.6	na	0.1	2.1	7.7	1.00	na	-405.0
AIG Turring Baints (Missenstaire)	2.2 2.2	1.5	3.5	1.4 1.8	2.7	1.3	2.0 2.2	4.1	3.6 7.0 Н	0.1	2.1	7.6	1.03	15.4	-391.4
Turning Points (Micrometrics) BMO Capital Markets*	2.2	1.6 1.6	3.8 3.8	1.8	2.2 2.6	na 1.6	2.2	3.0 5.2	7.0 Н 4.4	0.1	1.9 2.0	7.5 7.6	1.06 0.97	157 15.8	-405.5 -404.0
National Assn. of Realtors	2.2	2.1	4.3	2.5	na	1.2	2.0	5,1	5.0	0.1	2.2	7.8	1.11	15.1	-401.0
Ford Motor Company*	2.2	1.6	3.8	1.6	2.5	0.5	1.8	4.2	na	0,1	2.0	7.7	1.05	па	-373.0
Societe Generale	2.2	1.7	4.0	1.4	2.1	1.9	1.6	6, l	2.2	па	2.4 H	7.8	0.96	16.5 H	
Moody's Analytics Russell Investments	2.1 2.1	2.2 1.9	4.1 4.0	2.1 1.7	12 L 2.3	0.L 1.5	1.9 1.9	2.4 2.6	2.4 6.0	0.2 H 0.1	2.3 2.0	7.7 7.6	1.17 H 0.94		-414.9 -405.0
Economist Intelligence Unit	2.1	2.0	4.1	2.2	2.8	1.5	1.9	5.8	na.	0.1	2.0	7.6	0.94	15.0 15.2	-403.0
DuPont***	2.0	1.5	3.6	2.1	2.2	1.6	1.9	4.7	5.0	0.1	2.3	7.6	1.00	15.3	-402.0
Macroeconomic Advisers, LLC**	2.0	1.4	3.4	1.6	2.6	0.2	1.9	4.2	-0.8	0.1	ла	7.8	1.05	15.7	-398.3
National Assn. of Home Builders	2.0	1.6	3.6	1.9	20	1.0	2.0	1.9	7.0 H		2.2	7.8	0.98	15.1	-398.0
General Motors Corporation Credit Suisse	2.0 2.0	1.4 1.7	3.4 3.8	2.0 1.4	2.2 2.4	2.0 H na	1.8 1.7	4.6 5.5	3.5 4.7	0.2 na	22 2.0	7.7 7.6	1.05 0.94	па 15.3	-397.5 -396.0
RDQ Economics	2.0	2.1	3.a 4.1	2.2	2.4	1.8	1.7	5.2	5.0	0.1	2.0	7.0	1.00	15.3	-396.0
Mesirow Financial	2.0	1.4	3.4	1.6	2.6	0.1	1.8	4.6	-0.6	0.1	20	7.8	1 05	15.7	-392.3
Kellner Economic Advisers	2.0	1.8	3.8	2.0	22	1.1	1.6	3.9	4.1	0.1	2.0	7.8	0.98	15.3	-390.0
J.W. Coons Advisors	1.9	2.0	4.0	2.1	1.6	1.4	2.3	3.7	48	0.2 H		7.7	0.95	15.0	-440.0
Citigroup U.S. Economics Daiwa Capital Markets America	1.9 1.9	na 1.8	3.5 3.7	1.6 2.1	2.4 2.4	ла 0.0 L	1.9 2.2	2.7 4.5	na 6.0) na 0.1	2.1 2.2	7.7 7.7	na 0.87	ла 15.3	-424.0 -420.0
U.S. Chamber of Commerce	1.9	1.7	3.6	2.1	1.6	1.9	2.0	4,8	4 4	0.1	1.8	8.1 H	0.93	ла. ла	-414.7
Inforum - Univ. of Maryland	1.9	1.9	3.8	2.3	2.7	1.2	1.9	4.3	2.6	0.1	2.2	7.8	1.02	15.0	-409.0
Welts Capital Management	1.9	1.7	3.4	1.8	1.9	1.9	1.9	4,6	2.7	0.2	2.3	7.6	0.89	14.9	-408.0
Pierpont Securities	1.9 1.9	2.0 1.8	3,9 3.8	2.2 1.9	1.6	1.8 0,8	1.7 2.0	4.6	5.0	0.1	2.0	7.7	107	154	-406 0
Moody's Capital Markets Econoclast	1.9	1.5	3.6	2.0	3.4 2.5	1.0	1.8	3.2 4.1	4.2 4.5	0.1	2.0 2.2	7.7 7.7	0.94 0.98	15.2 15.1	-405.0 -396.0
Fannie Mae	1.9	16	3.5	16	2.5	0.3	1.7	3.8	2.4	0.1	2.1	7.7	0.95	15.9	-393.7
Eaton Corporation	1.9	1.7	3.6	1.9	2.1	1.1	1,7	4.0	5.6	0,1	2.1	8.0	1.01	15.0	-379.9
Bank of Tokyo-Mitsubishi UFJ	1.8	2.1	3.9	1.7	2.4	na	2.1	9.0 H	7.0 H		2.2	7.4	1.00	15.5	-430.0
Comerica MacroFin Analytics	1.8 1.8	1.7 1.4	3.5 3.2	1.9 1.3 L	3.1 2.3	0.2 1.4	1,7 1,8	4.7 4.5	ла 5,1	0,1	2.0 2.0	7.5 7.7	0.95	15.3	-410.0 -407.8
FedEx Corporation	1.8	1.4	36	1.9	2.3	0,9	1.9	4.5	4.8	0.1	2.0	7.8	0.85	15.3 15.0	-407.8
Goldman Sachs & Co.**	1.8	1.5	43	1.7	1.4	0,8	1.6	5.7	ла	0.1	2.0	7.7	1.01	na	-399.5
Wintrust Wealth Management*	1.8	1.9	3.8	3.0 H	3.0	1.2	1.9	4.2	4.7	0.1	2.0	7.7	0.99	15.1	-391.1
UCLA Business Forecasting Proj.*	1.7	1.5	3.2	1.5	1.8	па	2.0	5.2	0.0	0.1	2.1	7.8	0.99	14.9	-437.3
PNC Financial Services Group Nomura Securities	1.7 1.7	1.8 1.7	35 3.4	2.3 1.6	2.5 2.1	1.3 0.5	1.7 1.8	4.4 3.3	na 2.5	0.1 0.1	1.7 L 2.3	7.6 7.7	0.95	15.0 15.1	-417.9 -413.5
Wells Fargo	1.7	1.9	3.6	1.7	2.4	1.5	1.6	3.7	5.3	0.2	2.1	7.6	0.99	14.8	-366.3
Clear View Economics*	1.6	1.2 L	28 L	1.6	1.7	0.5	1.9	3.0	1.3	0.1	1.9	7.7	0.97	15.3	-422.0
Northern Trust Company*	1.6	1.6	3.3	1.6	na	ла	1.7	5.0	па	0.1	1.9	7.5	0.97	15.5	-421.2
Conference Board* Barclays Capital	1.6 1.6	1.6 1.7	3.2 3.3	2.0 1.8	1.3 3.0	1.9 0.5	1.8 1.8	4.9 5.7	4.6	0,1 0.1	2.1 1.7 L	7.6	1.00	15.4	-415.8
J P MorganChase	1.5	1.6	3.5	1.6	2.0	0.5	1.8 1.3 L	4.5	5.1 3.9	0.1	1.7 L 1.8	7.4 7.8	1.04 1.10	ла 15.0	-402.3 -417.3
RBC Capital Markets	1.5	1.6	3,1	1.6	па	ла	1.6	3.6	na	0.1	2.3	7.7	0.94	151	-399.0
Action Economics	1,4	16	3.0	1.9	2.5	1.9	2.6	4.2	3,4	0.1	2.3	7.8	0.98	15.8	-398.4
Bank of America Merrill Lynch	1.4	1.5	3.0	1.6	2.1	ла	1.4	4.4	na	0.0 L		7.6	0.98	15.0	-403.8
Morgan Stanley* Georgia State University*	1.4 1.2 L	1.7 1.5	3.1 2.8 L	1.8 1.4	1.7 1.7	0.9 09	L.4 L.7	1.1 L 1.6	-1.4 L 3.1	0.1	20 22	8.0 7.7	0.98 0.84 L	14.4 L	-370.9
2013 Consensus: February Ave.	1.2	1.7	3.7	1.9	2.3	1.1	1.9	4.5	4.0	0.1	2.1	7.7	0.99	14 7 15.2	-365.3 H -404.8
Top 10 Avg.	2.4	2.1	4.4	2.4	3.1	1.8	2.3	6,5	6.1	0.2	2.3	7.9	1.09	15.8	-378.8
Bottom 10 Avg.	1.5].4	3.1	1.5	16	03	1.6	2.5	1.1	0.1	1.9	7.5	0.91	14.8	-432.1
January Avg.	2.0	1.8	3.9	1.9	2.3	1.1	1.9	4.0	4.7	0.1	2.0	7.7	0.95	15.0	-397,8
Historical data: 2009	-3.1	0.9	-2.2	-0.4	-11.4	-2.8	-1.9	-18.1	7.5	0.2	3.2	9.3	0.55	10.4	-355 2
2010	2.4	1.3	3.8	1.6	5.4	1.8	1.8	0.7	26.8	0.1	3.2	9.6	0.59	116	-419.7
2011	1.8	2.1	4.0	3.2	4.1	1.3	2.5	8.6	7.3	0.1	2.8	9.0	061	12.7	-408.0
2012	2.2	1.8	4.0	2.1	3,6	1.5	1.9	7.7	ла	0.1	1.8	8.1	0.78	14.4	-405.6
Number Of Forecasts Changed From A Mon	nth Ago:														
Down	33	37	37	21	14	18	24	12	22	7	5	12	3	6	35
Same	10	11	10	21	11	10	15	8	13	44	20	24	17	11	6
Մբ	11	5	7	12	26	18	15	34	8	0	28	18	33	29	13
February Median	1.9	1.7	3.6	1.9	2.4	1.2	1.9	4.5	4.5	0,1	2.1	7.7	0.99	15.2	-404.5
February Diffusion Index	30 %	20 %	22 %	42 %	62 %	50 %	42 %	70 %	34 %	43 %	72 %	56 %	78 %	75 %	30 %
*Former winner of anount i	_														

2013 Real GDP Forecast Slips Back To 1.9%

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

				Cost:		Ra	te'			
			Total	Production	Distribution	Production	Distribution	Depreciation	A/D	<u>NBV</u>
1	Sept	2009	3,500,000	3,010,000	490,000	3.19%	2.30%	-	<u> </u>	3,500,000
2	Oct	2009	3,500,000	3,010,000	490,000	3.19%	2.30%	-	-	3,500,000
3	Nov	2009	3,500,000	3,010,000	490,000	3.19%	2.30%	-	-	3,500,000
4	Dec	2009	3,500,000	3,010,000	490,000	3.19%	2.30%	-	-	3,500,000
5	Jan	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	8,941	3,491,059
6	Feb	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	17,882	3,482,118
7 8	Mar	2010	3,500,000	3,010,000	490,000	3,19%	2.30% 2.30%	8,941 8,941	26,823 35,764	3,473,177 3,464,236
9	Apr May	2010 2010	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30%	8,941	44,705	3,455,295
10	Jun	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	53,646	3,446,354
11	Jul	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	62,587	3,437,413
12	Aug	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	71,528	3,428,472
13	Sep	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	80,469	3,419,531
14	Oct	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	89,410	3,410,590
15	Nov	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	98,351	3,401,649
16	Dec	2010	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	107,292	3,392,708
17	Jan	2011	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	116,233	3,383,767
18	Feb	2011	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	125,174	3,374,826
19	Mar	2011	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	134,115	3,365,885
20	Apr	2011	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	143,056	3,356,944
21	May	2011	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	151,997	3,348,003
22	Jun	2011	3,500,000	3,010,000	490,000	3.19%	2.30% 2.30%	8,941 8,941	160,938 169,879	3,339,062
23 24	Jul Aug	2011 2011	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3,19%	2.30%	8,941	178,820	3,330,121 3,321,180
24	Sep	2011	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	187,761	3,312,239
26	Oct	2011	3,500,000	3.010.000	490,000	3.19%	2.30%	8,941	196,702	3,303,298
27	Nov	2011	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	205,643	3,294,357
28	Dec	2011	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	214,584	3,285,416
29	Jan	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	223,525	3,276,475
30	Feb	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	232,466	3,267,534
31	Mar	2012	3,500,000	3,010,000	490,000	3,19%	2.30%	8, 9 41	241,407	3,258,593
32	Apr	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	250,348	3,249,652
33	May	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	259,289	3,240,711
34	Jun	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	268,230	3,231,770
35	lut.	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	277,171	3,222,829
36 37	Aug Sep	2012 2012	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	286,112 295,053	3,213,888 3,204,947
38	Oct	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	303,994	3,196,006
39	Nov	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	312,935	3,187,065
40	Dec	2012	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	321,876	3,178,124
41	Jan	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	330,817	3,169,183
42	Feb	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	339,758	3,160,242
43	Mar	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	348,699	3,151,301
44	Apr	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	357,640	3,142,360
45	May	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	366,581	3,133,419
46	Jun	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	375,522	3,124,478
47	Jul	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	384,463	3,115,537
48 49	Aug	2013 2013	3,500,000	3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	393,404 402,345	3,106,596 3,097,655
49 50	Sep Oct	2013	3,500,000 3,500,000	3,010,000 3,010,000	490,000	3.19%	2.30%	8,941	402,345	3,097,655
51	Nov	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	420,227	3,079,773
52	Dec	2013	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	429,168	3,070,832
53	Jan	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	438,109	3,061,891
54	Feb	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	447,050	3,052,950
55	Mar	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	455,991	3,044,009
56	Apr	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	464,932	3,035,068
57	May	2014	3,500,000	3,010,000	490,000	3.19%	2,30%	8,941	473,873	3,026,127
58	Jun	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	482,814	3,017,186
59	Jul	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	491,755	3,008,245
60	Aug	2014	3,500,000	3,010,000	490,000	3.19%	2,30%	8,941	500,696	2,999,304
61	Sep	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	509,637	2,990,363
62	Oct	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	518,578	2,981,422
63	Nov	2014	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	527,519	2,972,481
64 65	Dec Jan	2014 2015	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	536,460 545,401	2,963,540 2,954,599
00	5411	2010	3,500,000	3,010,000	490,000	3.1970	2.3076	0,341	545,401	2,004,000

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				Cost:		Rat	0:			
			Total	Production	Distribution	Production	e. Distribution	Depreciation	A/D	NBV
66	Feb	2015	3,500,000	3.010.000	490,000	3,19%	2.30%	8,941	554,342	2,945,658
67	Mar	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	563 283	2,936,717
68	Apr	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	572,224	2,927,776
69	May	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	581,165	2,918,835
70	Jun	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	590,106	2,909,894
71	Jul	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	599,047	2,900,953
72	Aug	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	607,988	2,892,012
73	Sep	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	616,929	2,883,071
74	Oct	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	625,870	2,874,130
75	Nov	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	634,811	2,865,189
76	Dec	2015	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	643,752	2,856,248
77	Jan	2016	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	652,693	2,847,307
78	Feb	2016	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	661,634	2,838,366
79	Mar	2016	3,500,000	3,010,000	490,000	3.19%	2.30% 2.30%	8,941	670,575	2,829,425
80	Apr	2016	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941 8,941	679,516	2,820,484
81 82	May Jun	2016 2016	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30%	8,941	688,457 697,398	2,811,543 2,802,602
83	Jui	2016	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	706,339	2,793,661
84	Aug	2016	3,500,000	3,010,000	490,000	3,19%	2.30%	8,941	715,280	2,784,720
85	Sep	2016	3,500,000	3,010,000	490,000	3,19%	2.30%	8,941	724,221	2,775,779
86	Oct	2016	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	733,162	2,766,838
87	Nov	2016	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	742,103	2,757,897
88	Dec	2016	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	751,044	2,748,956
89	Jan	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	759,985	2,740,015
90	Feb	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	768,926	2,731,074
91	Mar	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	777,867	2,722,133
92	Apr	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	786,808	2,713,192
93	May	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	795,749	2,704,251
94	Jun	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	804,690	2,695,310
95	Jul	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	813,631	2,686,369
96	Aug	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	822,572	2,677,428
97	Sep	2017	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	831,513	2,668,487
98 90	Oct	2017	3,500,000	3,010,000	490,000	3.19%	2.30% 2.30%	8,941	840,454 849,395	2,659,546
99 100	Nov Dec	2017 2017	3,500,000	3,010,000	490,000	3.19% 3.19%	2.30%	8,941 8,941	849,395 858,336	2,650,605
100	Jan	2017	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3,19%	2.30%	8,941	867,277	2,641,664 2,632,723
107	Feb	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	876,218	2,623,782
102	Mar	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	885,159	2,614,841
104	Apr	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	894,100	2,605,900
105	May	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	903,041	2,596,959
106	Jun	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	911,982	2,588,018
107	Jul	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	920,923	2,579,077
108	Aug	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	929,864	2,570,136
109	Sep	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	938,805	2,561,195
110	Oct	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	947,746	2,552,254
111	Nov	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	956,687	2,543,313
112	Dec	2018	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	965,628	2,534,372
113	Jan	2019	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	974,569	2,525,431
114	Feb	2019	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	983,510	2,516,490
115 116	Mar	2019	3,500,000 3,500,000	3,010,000	490,000 490,000	3.19%	2.30%	8,941 8,941	992,451 1,001,392	2,507,549
117	Apr May	2019 2019	3,500,000	3,010,000 3,010,000	490,000	3.19% 3.19%	2.30% 2.30%	8,941	1,010,333	2,498,608 2,489,667
118	Jun	2019	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,019,274	2,489,007
119	Jul	2019	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,028,215	2,471,785
120	Aug	2019	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,037,156	2,462,844
121	Sep	2019	3,500,000	3,010,000	490,000	3,19%	2.30%	8,941	1,046,097	2,453,903
122	Oct	2019	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,055,038	2,444,962
123	Nov	2019	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,063,979	2,436,021
124	Dec	2019	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,072,920	2,427,080
125	Jan	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,081,861	2,418,139
126	Feb	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8 941	1,090,802	2,409,198
127	Mar	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,099,743	2,400,257
128	Apr	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,108,684	2,391,316
129	May	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,117,625	2,382,375
130	Jun	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,126,566	2,373,434

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				Cost:		Rat	·e·			
			Total	Production	Distribution	Production	Distribution	Depreciation	<u>A/D</u>	<u>NBV</u>
131	Jul	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,135,507	2,364,493
132	Aug	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,144,448	2,355,552
133	Sep	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,153,389	2,346,611
134	Oct	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,162,330	2,337,670
135	Nov	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,171,271	2,328,729
136	Dec	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,180,212	2,319,788
137 138	Jan Feb	2021 2021	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	1,189,153 1,198,094	2,310,847 2,301,906
138	Feb Mar	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,207,035	2,292,965
140	Apr	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,215,976	2,284,024
141	May	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,224,917	2,275,083
142	Jun	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,233,858	2,266,142
143	Jul	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,242,799	2,257,201
144	Aug	2021	3,500,000	3,010,000	490,000	3 19%	2.30%	8,941	1,251,740	2,248,260
145	Sep	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,260,681	2,239,319
146	Oct	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,269,622	2,230,378
147	Nov	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,278,563	2,221,437
148	Dec	2021	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,287,504	2,212,496
149	Jan	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,296,445	2,203,555
150	Feb	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,305,386	2,194,614
151	Mar	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,314,327	2,185,673
152	Apr	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,323,268	2,176,732
153	May	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,332,209	2,167,791
154	Jun	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,341,150	2,158,850
155 156	Jul	2022 2022	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.1 9 %	2.30% 2.30%	8,941 8,941	1,350,091 1,359,032	2,149,909 2,140,968
157	Aug Sep	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,367,973	2,132,027
158	Oct	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,376,914	2,123,086
159	Nov	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,385,855	2,114,145
160	Dec	2022	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,394,796	2,105,204
161	Jan	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,403,737	2,096,263
162	Feb	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,412,678	2,087,322
163	Mar	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,421,619	2,078,381
164	Apr	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,430,560	2,069,440
165	May	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,439,501	2,060,499
166	Jun	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,448,442	2,051,558
167	Jul	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,457,383	2,042,617
168 169	Aug	2023 2023	3,500,000	3,010,000	490,000 490,000	3.19%	2.30% 2.30%	8,941 8,941	1,466,324 1,475,265	2,033,676
170	Sep Oct	2023	3,500,000 3,500,000	3,010,000 3,010,000	490,000	3.19% 3.19%	2.30%	8,941	1,484,206	2,024,735 2,015,794
170	Nov	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,493,147	2,006,853
172	Dec	2023	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,502,088	1,997,912
173	Jan	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,511,029	1,988,971
174	Feb	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,519,970	1,980,030
175	Mar	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,528,911	1,971,089
176	Apr	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,537,852	1,962,148
177	May	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,546,793	1,953,207
178	Jun	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,555,734	1,944,266
179	Jul	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,564,675	1,935,325
180	Aug	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,573,616	1,926,384
181 182	Sep	2024 2024	3,500,000 3,500,000	3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941	1,582,557 1,591,498	1,917,443 1,908,502
183	Oct Nov	2024	3,500,000	3,010,000 3,010,000	490,000	3.19%	2.30%	8,941 8,941	1,600,439	1,808,502
184	Dec	2024	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,609,380	1,890,620
185	Jan	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,618,321	1,881,679
186	Feb	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,627,262	1,872,738
187	Mar	2025	3 500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,636,203	1,863,797
188	Apr	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8 941	1,645,144	1,854,856
189	May	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,654,085	1,845,915
190	Jun	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,663,026	1,836,974
191	Jul	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,671,967	1,828,033
192	Aug	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,680,908	1,819,092
193	Sep	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,689,849	1,810,151
194	Oct	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,698,790	1,801,210
195	Nov	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,707,731	1,792,269

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				Cost:		Rat	e [.]			
			Totai	Production	Distribution	Production	Distribution	Depreciation	A/D	NBV
196	Dec	2025	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,716,672	1,783,328
197	Jan	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,725,613	1,774,387
198	Feb	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,734,554	1,765,446
199	Mar	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,743,495	1,756,505
200	Apr	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,752,436	1,747,564
201	May	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,761,377	1,738,623
202	Jun	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,770,318	1,729,682
203	Jul	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,779,259	1,720,741
204	Aug	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,788,200	1,711,800
205 206	Sep Oct	2026 2026	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	1,797,141 1,806,082	1,702,859 1,693,918
206	Nov	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,815,023	1,684,977
207	Dec	2026	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,823,964	1,676,036
209	Jan	2020	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,832,905	1,667,095
210	Feb	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,841,846	1,658,154
211	Mar	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,850,787	1,649,213
212	Apr	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,859,728	1,640,272
213	May	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,868,669	1,631,331
214	Jun	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,877,610	1,622,390
215	Jul	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,886,551	1,613,449
216	Aug	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,895,492	1,604,508
217	Sep	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,904,433	1,595,567
218	Oct	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,913,374	1,586,626
219	Nov	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,922,315	1,577,685
220	Dec	2027	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,931,256	1,568,744
221	Jan	2028	3,500,000	3,010,000	490,000	3 19%	2.30%	8,941	1,940,197	1,559,803
222	Feb	2028	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,949,138	1,550,862
223	Mar	2028	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,958,079	1,541,921
224	Apr	2028	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	1,967,020	1,532,980
225 226	May	2028 2028	3,500,000	3,010,000	490,000	3.19% 3.19%	2.30% 2.30%	8,941	1,975,961	1,524,039
220	Jun Jul	2028	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19%	2.30%	8,941 8,941	1,984,902 1,993,843	1,515,098 1,506,157
228	Aug	2028	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,002,784	1,497,216
229	Sep	2028	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,011,725	1,488,275
230	Oct	2028	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,020,666	1,479,334
231	Nov	2028	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,029,607	1,470,393
232	Dec	2028	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,038,548	1,461,452
233	Jan	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,047,489	1,452,511
234	Feb	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,056,430	1,443,570
235	Mar	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,065,371	1,434,629
236	Apr	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,074,312	1,425,688
237	May	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,083,253	1,416,747
238	Jun	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,092,194	1,407,806
239	Jul	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,101,135	1,398,865
240	Aug	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,110,076	1,389,924
241	Sep	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,119,017	1,380,983
242	Oct	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,127,958	1,372,042
243	Nov	2029	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,136,899	1,363,101
244 245	Dec Jan	2029 2030	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	2,145,840 2,154,781	1,354,160 1,345,219
246	Feb	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,163,722	1,336,278
247	Mar	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,172,663	1,327,337
248	Apr	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,181,604	1,318,396
249	May	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,190,545	1,309,455
250	Jun	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,199,486	1,300,514
251	Jul	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,208,427	1,291,573
252	Aug	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,217,368	1,282,632
253	Sep	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,226,309	1,273,691
254	Oct	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,235,250	1,264,750
255	Nov	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,244,191	1,255,809
256	Dec	2030	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,253,132	1,246,868
257	Jan	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,262,073	1,237,927
258	Feb	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,271,014	1,228,986
259	Mar	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,279,955	1,220,045
260	Apr	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,288,896	1,211,104

				Cash		Dete				
			Total	Cost: Production	Distribution	Production	Distribution	Depreciation	A/D	<u>NBV</u>
261	May	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,297,837	1,202,163
262	Jun	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,306,778	1,193,222
263	Jul	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,315,719	1,184,281
264	Aug	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,324,660	1,175,340
265	Sep	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,333,601	1,166,399
266	Oct	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,342,542	1,157,458
267	Nov	2031	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,351,483	1,148,517
268	Dec	2031	3,500,000	3,010,000 3,010,000	490,000	3.19% 3.19%	2.30% 2.30%	8,941	2,360,424 2,369,365	1,139,576 1,130,635
269 270	Jan Feb	2032 2032	3,500,000 3,500,000	3,010,000	490,000 490,000	3.19%	2.30%	8,941 8,941	2,378,306	1,121,694
270	Mar	2032	3,500,000	3,010,000	490,000	3,19%	2.30%	8,941	2,387,247	1,112,753
272	Apr	2032	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,396,188	1,103,812
273	May	2032	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,405,129	1,094,871
274	Jun	2032	3,500,000	3,010,000	490,000	3,19%	2.30%	8,941	2,414,070	1,085,930
275	Jul	2032	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,423,011	1,076,989
276	Aug	2032	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,431,952	1,068,048
277	Sep	2032	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,440,893	1,059,107
278	Oct	2032	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,449,834	1,050,166
279	Nov	2032	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,458,775	1,041,225
280	Dec	2032	3,500,000	3,010,000	490,000	3,19%	2.30%	8,941	2,467,716	1,032,284
281	Jan	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,476,657	1,023,343
282	Feb	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,485,598	1,014,402
283	Mar	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,494,539	1,005,461
284 285	Apr	2033 2033	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	2,503,480 2,512,421	996,520 987,579
285	May Jun	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,521,362	978,638
287	Jut	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,530,303	969,697
288	Aug	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,539,244	960,756
289	Sep	2033	3,500,000	3.010.000	490.000	3.19%	2.30%	8,941	2,548,185	951,815
290	Oct	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,557,126	942,874
291	Nov	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,566,067	933,933
292	Dec	2033	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,575,008	924,992
293	Jan	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,583,949	916,051
294	Feb	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,592,890	907,110
295	Mar	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,601,831	898,169
296	Apr	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,610,772	889,228
297 298	May Jun	2034 2034	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	2,619,713 2,628,654	880,287 871,346
290	Jui	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,637,595	862,405
300	Aug	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,646,536	853,464
301	Sep	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,655,477	844,523
302	Öct	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,664,418	835,582
303	Nov	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,673,359	826,641
304	Dec	2034	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,682,300	817,700
305	Jan	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,691,241	808,759
306	Feb	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,700,182	799,818
307	Mar	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,709,123	790,877
308	Apr	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,718,064	781,936
309	May	2035	3,500,000 3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,727,005	772,995 764,054
310 311	Jun Jul	2035 2035	3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	2,735,946 2,744,887	755,113
312	Aug	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,753,828	746,172
313	Sep	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,762,769	737,231
314	Oct	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,771,710	728,290
315	Nov	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,780,651	719,349
316	Dec	2035	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,789,592	710,408
317	Jan	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,798,533	701,467
318	Feb	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,807,474	692,526
319	Mar	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,816,415	683,585
320	Apr	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,825,356	674,644
321	May	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,834,297	665,703
322	Jun	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,843,238	656,762
323	Jul	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,852,179	647,821
324 325	Aug	2036 20 36	3,500,000	3,010,000	490,000	3.19%	2.30% 2.30%	8,941 8,941	2,861,120	638,880 629,939
525	Sep	2000	3,500,000	3,010,000	490,000	3.19%	2.3070	0,341	2,870,061	029,939

				Cost:		Rate				
			Total	Production	Distribution	Production	Distribution	Depreciation	<u>A/D</u>	<u>NBV</u>
326	Oct	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,879,002	620,998
327	Nov	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,887,943	612,057
328	Dec	2036	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,896,884	603,116
329	Jan	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,905,825	594,175
330	Feb	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,914,766	585,234
331	Mar	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,923,707	576,293
332	Apr	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,932,648	567,352
333	May	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,941,589	558,411
334	Jun	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,950,530	549,470
335	Jul	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,959,471	540,529
336	Aug	2037	3,500,000	3,010,000	49 0,000	3.19%	2.30%	8,941	2,968,412	531,588
337	Sep	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8, 9 41	2,977,353	522,647
338	Oct	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,986,294	513,706
339	Nov	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	2,995,235	504,765
340	Dec	2037	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,004,176	495,824
341	Jan	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,013,117	486,883
342	Feb	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,022,058	477,942
343	Mar	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8, 9 41	3,030,999	469,001
344	Apr	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,039,940	460,060
345	May	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,048,881	451,119
346	Jun	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,057,822	442,178
347	Jul	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,066,763	433,237
348	Aug	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,075,704	424,296
349	Sep	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,084,645	415,355
350	Oct	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,093,586	406,414
351	Nov	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,102,527	397,473
352	Dec	2038	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,111,468	388,532
353	Jan	2039	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,120,409	379,591
354	Feb	2039	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,129,350	370,650
355	Mar	2039	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,138,291	361,709
356	Apr	2039	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,147,232	352,768
357	May	2039	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,156,173	343,827
358	Jun	2039	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,165,114	334,886
359	Jul	2039 2039	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,174,055	325,945
360	Aug		3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,182,996	317,004
361 362	Sep Oct	2039 2039	3,500,000	3,010,000	490,000 490,000	3.19%	2.30%	8,941	3,191,937	308,063
363	Nov	2039	3,500,000	3,010,000 3,010,000	490,000	3.19% 3.19%	2.30% 2.30%	8,941	3,200,878 3,209,819	299,122
364	Dec	2039	3,500,000 3,500,000	3,010,000	490,000	3.19%	2.30%	8,941 8,941	3,218,760	290,181 281,240
365	Jan	2039	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,227,701	272,299
366	Feb	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	,	3,236,642	263,358
367	Mar	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941 8,941	3,245,583	253,358
368		2040		3,010,000	490,000					,
369	Apr May	2040	3,500,000 3,500,000	3,010,000	490,000	3.19% 3.19%	2.30% 2.30%	8,941 8,941	3,254,524 3,263,465	245,476 236,535
309	Jun	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,272,406	230,535
371	Jul	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,281,347	218,653
372	Aug	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,290,288	209,712
373	Sep	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,299,229	200,771
374	Oct	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,308,170	191,830
375	Nov	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,317,111	182,889
376	Dec	2040	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,326,052	173,948
377	Jan	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,334,993	165,007
378	Feb	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,343,934	156,066
379	Mar	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,352,875	147,125
380	Apr	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	8,941	3,361,816	138,184
381	May	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	2,187	3,364,003	135,997
382	Jun	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,364,942	135,058
383	Jul	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,365,881	134,119
384	Aug	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,366,820	133,180
385	Sep	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,367,759	132,241
386	Oct	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,368,698	131,302
387	Nov	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,369,637	130,363
388	Dec	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,370,576	129,424
389	Jan	2041	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,370,576	129,424
390	Feb	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,372,454	120,400
630	1.60	2042	5,550,000	0,010,000	450,000	3,1970	2.3070	939	0,072,404	127,040

			·	Cost:		Rat	·•'			
			Total	Production	Distribution	Production	Distribution	Depreciation	<u>A/D</u>	<u>NBV</u>
391	Mar	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,373,393	126,607
392	Apr	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,374,332	125,668
3 9 3	May	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,375,271	124,729
394	Jun	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,376,210	123,790
395	Jul	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,377,149	122,851
396	Aug	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,378,088	121,912
397	Sep	2042	3,500,000	3,010,000	490,000	3.19%	2.30% 2.30%	939 939	3,379,027 3,379,966	120,973 120,034
398 399	Oct Nov	2042 2042	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30%	939	3,380,905	119,095
400	Dec	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,381,844	118,156
401	Jan	2042	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,382,783	117,217
402	Feb	2043	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,383,722	116,278
403	Mar	2043	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,384,661	115,339
404	Apr	2043	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,385,600	114,400
405	May	2043	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,386,539	113,461
406	Jun	2043	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,387,478	112,522
407	Jul	2043	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,388,417	111,583
408	Aug	2043	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,389,356	110,644
409	Sep	2043	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,390,295	109,705
410	Oct	2043	3,500,000	3,010,000	490,000	3.19%	2.30% 2.30%	939 939	3,391,234	108,766 107,827
411 412	Nov Dec	2043 2043	3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30%	939	3,392,173 3,393,112	106,888
412	Jan	2043	3,500,000 3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,394,051	105,949
414	Feb	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,394,990	105,010
415	Mar	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,395,929	104,071
416	Apr	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,396,868	103,132
417	May	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,397,807	102,193
418	Jun	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,398,746	101,254
419	Jul	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,399,685	100,315
420	Aug	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,400,624	99,376
421	Sep	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,401,563	98,437
422	Oct	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,402,502	97,498
423	Nov	2044	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,403,441	96,559
424 425	Dec Jan	2044 2045	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	939 939	3,404,380 3,405,319	95,620 94,681
425	Feb	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,406,258	93,742
427	Mar	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,407,197	92,803
428	Apr	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,408,136	91,864
429	May	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,409,075	90,925
430	Jun	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,410,014	89,986
431	Jul	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,410,953	89,047
432	Aug	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,411,892	88,108
433	Sep	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,412,831	87,169
434	Oct	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,413,770	86,230
435	Nov	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,414,709	85,291
436	Dec	2045	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,415,648	84,352 83,413
437 438	Jan Feb	2046 2046	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	939 939	3,416,587 3,417,526	83,413 82,474
438 439	Mar	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,417,526	82,474
440	Apr	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,419,404	80,596
441	May	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,420,343	79,657
442	Jun	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,421,282	78,718
443	Jul	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,422,221	77,779
444	Aug	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,423,160	76,840
445	Sep	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,424,099	75,901
446	Oct	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,425,038	74,962
447	Nov	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,425,977	74,023
448	Dec	2046	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,426,916	73,084
449	Jan Seb	2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,427,855	72,145
450	Feb	2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,428,794	71,206
451 452	Mar	2047 2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,429,733	70,267 69,328
452 453	Apr May	2047 2047	3,500,000 3,500,000	3,010,000 3,010,000	490,000 490,000	3.19% 3.19%	2.30% 2.30%	939 939	3,430,672 3,431,611	69,328 68,389
453	Jun	2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,432,550	67,450
455	Jul	2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,433,489	66,511
			0,000,000	0,010,000		0.1070	2.0070	000	0,100,100	00,011

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Docket No.	2009-0286	<u>Depreciation</u>	on Rates							·
				Cost:		Ra	te:			
			Total	Production	Distribution	Production	Distribution	Depreciation	<u>A/D</u>	<u>NBV</u>
456	Aug	2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,434,428	65,572
457	Sep	2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,435,367	64,633
458	Oct	2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,436,306	63,694
459	Nov	2047	3,500,000	3,010.000	490,000	3.19%	2.30%	939	3,437,245	62,755
460	Dec	2047	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,438,184	61,816
461	Jan	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,439,123	60,877
462	Feb	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3.440,062	59,938
463	Mar	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,441,001	58,999
464	Apr	2048	3,500,000	3,010,000	490,000	3,19%	2.30%	939	3,441,940	58,060
465	Мау	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,442,879	57,121
466	Jun	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,443,818	56,182
467	Jul	2048	3,500,000	3,010,000	490,000	3,19%	2.30%	939	3,444,757	55,243
468	Aug	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,445,696	54,304
469	Sep	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,446,635	53,365
470	Oct	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,447,574	52,426 51,487
471	Nov	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,448,513	50,548
472	Dec;	2048	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,449,452	50,548 49,609
473	Jan	2049	3,500,000	3,010,000	490,000	3.19%	2.30%	939 939	3.450,391 3.451,330	49,609
474	Feb	2049	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,452,269	48,670
475	Mar	2049	3,500,000	3,010,000	490,000	3.19%	2.30% 2.30%	939	3,453,208	46,792
476	Apr	2049	3,500.000	3,010,000	490,000	3.19% 3.19%	2.30%	939	3,454,147	45,853
477	May	2049	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,455,086	44,914
478	Jun	2049	3,500,000	3,010,000	490,000 490,000	3,19%	2.30%	939	3,456,025	43,975
479	Jul	2049	3,500,000	3,010,000	.,	3,19%	2.30%	939	3,456,964	43,036
480	Aug	2049	3,500,000	3,010,000	490,000 490,000	3.19%	2.30%	939	3,457,903	42,097
481	Sep	2049	3,500,000	3,010,000	490,000	3,19%	2.30%	939	3,458,842	41,158
482	Oct Nov	2049 2049	3,500,000 3,500,000	3,010,000 3,010,000	490,000	3,19%	2.30%	939	3,459,781	40,219
483 484	Dec	2049 2049	3,500,000	3,010,000	490,000	3,19%	2.30%	939	3,460,720	39,280
		2049	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,461,659	38,341
485 486	Jan Feb	2050	3,500,000	3,010.000	490,000	3,19%	2.30%	939	3,462,598	37,402
487	Mar	2050	3,500,000	3,010,000	490,000	3,19%	2.30%	939	3,463,537	36,463
488	Apr	2050	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,464,476	35,524
489	May	2050	3,500,000	3,010,000	490,000	3,19%	2.30%	939	3,465,415	34,585
490	Jun	2050	3,500,000	3,010,000	490,000	3.19%		939	3,466,354	33,646
491	Jul	2050	3,500,000	3,010,000	490,000	3.19%		939	3,467,293	32,707
492	Aug	2050	3,500,000	3,010,000	490,000	3,19%	2.30%	939	3,468,232	31.768
493	Sep	2050	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,469,171	30,829
494	Oct	2050	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,470,110	29,890
495	Nov	2050	3,500.000	3,010,000	490,000	3.19%		939	3,471,049	28,951
496	Dec	2050	3,500,000	3,010,000	490,000	3.19%		939	3,471,988	28,012
497	Jan	2051	3,500,000	3,010,000	490,000	3.19%		939	3,472,927	27,073
498	Feb	2051	3,500,000	3,010,000	490,000	3.19%		939	3,473,866	26,134
499	Mar	2051	3,500,000	3,010,000	490,000	3.19%		939	3,474,805	25,195
500	Apr	2051	3,500,000	3,010,000	490,000	3,19%		939	3,475,744	24,256
501	Мау	2051	3,500,000	3,010,000		3.19%		939	3,476,683	23,317
502	Jun	2051	3,500,000	3,010,000		3.19%		939	3,477,622	22,378
503	Jul	2051	3,500,000	3,010,000	490,000	3.19%		939	3.478.561	21,439
504	Aug	2051	3,500,000	3,010,000		3.19%		939	3,479,500	20,500
505	Sep	2051	3,500,000	3,010,000		3.19%		939	3,480,439	19,561
506	Oct	2051	3,500,000	3,010,000		3,19%		939	3,481,378	18,622
507	Nov	2051	3,500,000	3,010,000		3.19%		939	3,482,317	17,683 16,744
508	Dec	2051	3,500,000	3,010,000		3.19%		939	3,483,256	15,805
509	Jan	2052	3,500,000			3.19%		939 939	3,484,195	14,866
510	Feb	2052	3,500,000	3,010,000		3,19%		939	3,485,134 3,486,073	13,927
511	Mar	2052	3,500,000			3.19%		939	3,480,073	12,988
512	Apr	2052	3,500,000			3.19%		939	3,487,012	12,960
513	May	2052	3,500,000			3.19%		<i>838</i> 838	3,488,890	12,049
514	Jun	2052	3,500,000	3,010,000		3.19%		939	3,489,829	10,171
515	Jul	2052	3,500,000	3,010,000		3.19%		939	3,490,768	9,232
516	Aug	2052	3,500,000	3,010,000		3.19%		939 939	3,490,768	9,232 8,293
517	Sep	2052	3,500,000	3,010,000		3.19%		939	3,491,707	7,354
518	Oct	2052	3,500,000	3,010,000		3,19%		939	3,492,646	6,415
519	Nov	2052	3,500,000	3,010,000		3,19%		939	3,493,585	5,476
520	Dec	2052	3,500,000	3,010,000	490,000	3.19%	2.30%	909	0.707,024	3,470

			Cost			Ra	le:			
			Total	Production	Distribution	Production	Distribution	Depreciation	<u>A/D</u>	<u>NBV</u>
521	Jan	2053	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,495,463	4,537
522	Feb	2053	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,496,402	3,598
523	Mar	2053	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,497,341	2,659
524	Apr	2053	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,498,280	1,720
525	May	2053	3,500,000	3,010,000	490,000	3.19%	2.30%	939	3,499,219	781
526	Jun	2053	3,500,000	3,010,000	490,000	3.19%	2.30%	781	3,500,000	· -

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Maui Electric Company, Ltd. **CIS in 2013 RAM Calculations** MECO Summary (\$ in 000's)

Line	Description	CIS De Re	ate Base Iferred Costs coverable 12/31/12	Amortization (7 months) (Nate 3)	nonths) at 12/31/13			
1	CIS Deferred Cost (Note 1)	\$	7,268		\$	-		
2	CIS Deferred O&M Reclass (Note 1)		569			-		
3	Carrying charge since go-live (Note 1)		371			-		
4	Write-Off (Note 2)		(5,500)					
5 = sum 1 - 4	Total		2,708	(132)		2,576		
6	Carrying charge (AFUDC)							
7	January 1 - May 31, 2013 (Note 4)		-			-		
8 = 5 + 7	CIS deferred costs recoverable	\$	2,708 \$	6 (132)	\$	2,576		

 (1) See the CIS Project Final Cost Report that will be filed on April 1, 2013, in Docket No. 04-0268.
 (2) 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. See allocation at page 2.

(3) Amortized over 12 years, per Exhibit 1, page 2 of 3, footnote 1 of the 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. See calculation at page 3.

(4) See calculation at page 4.

Maui Electric Company, Ltd. Final CIS Cost Report (\$ in 000's)

Allocation of Total CIS Deferred Costs (in Thousands) Per CIS Project Final Cost Report (N.1)

<u>Line</u> 1 2 3	<u>Description</u> CIS Deferred Project Cost CIS Deferred Cost CIS Deferred O&M Reclass	\$ \$ \$	HECO 41,402 38,927 2,475	\$ \$	<u>HELCO</u> 7,977 7,977	\$ <u>MECO</u> 7,837 7,268 569	\$ <u>Total</u> 57,216
4	Carrying charge since go-live		<u>1,830</u> 43,232		7,977	<u> </u>	 2,201
			70,202		7,077	0,200	55,417
5	Percentage		72.8%		13.4%	13.8%	100.0%
6	Write-off amount		29,104		5,370	5,526	40,000
7	write-off amount rounded		29,000		5,500	 5,500	 40,000
8	CIS costs as of Final Cost Report	\$	14,232	\$	2,477	\$ 2,708	\$ 19,417

N.1 The CIS Project Final Cost Report will be filed on April 1, 2013, in Docket No. 04-0268.

MECO-WP-D1-002 (WITH SETTLEMENT) PAGE 3 OF 5

Maui Electric Company, Ltd. CIS in 2013 RAM Calculations Updated Exhibit 3 page 2 (\$ in 000's)

Rec	overable Costs:					Rate Ba	se RAM
						Rate Base 12/31/2012	Rate Base 12/31/2013
cis						12/51/2012	12,51,2015
		HECO	HELCO	MECO	Total		
	Total deferred cost						
	per Settlement	14,232	2,477	2,708	<u>19,417</u> b		
	Carrying charge (AFUDC)						
	January 1-May 31, 2013	405	85	89	579 c		
	CIS deferred costs recoverable	14,637	2,562	2,797	19,996	19,996	
		<u> </u>			<u> </u>		
	Additional amortization expense	1,220	213	233	1,666		
	Amortization in 2013 RAM						
	(7/12 of annual amortization)	712	125	136	972		
	CIS deferred costs -12-31-13	13,925	2,437	2,661	19,024		19,024
		30,000	_ ,	_,			

b Updated for Final CIS Cost Report that will be filed on April 1, 2013, in Docket No. 04-0268.

c See page 4

	Calculation of CIS C		Electric Company n of CIS Carrying anuary - May 201	g Charges	MECO-WI (WITH SE PAGE 4 O	TTLEMENT)	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)

Equity & Debt Carrying Charge based upon AFUDC rates:

Month/Yr	Monthly AFUDC Debt Rate	Monthly AFUDC Equity Rate	Principal Balance	Carrying Charge based upon AFUDC Debt Rate	Carrying Charge based upon AFUDC Equity Rate	Cumulative Balance		Monthly Carrying Charge
Dec-12	0.1755%	0.4843%	-			2.708.257	(1)	
Jan-13	0.1797%	0.4686%	-	4,867	12,691	2,725,815	()	17,558
Feb-13	0.1797%	0.4686%	-	4,898	12,773	2,743,486		17,671
Mar-13	0.1797%	0.4686%	-	4,930	12,856	2,761,272		17,786
Apr-13	0.1797%	0.4686%	-	4,962	12,939	2,779,173		17,901
May-13	0.1797%	0.4686%	-	4,994	13,023	2,797,191		18,017
			-	24,651	64,283			88,934

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(1) See the CIS Project Final Cost Report that will be filed on April 1, 2013, in Docket No. 04-0268.

MECO-WP-D1-002 (WITH SETTLEMENT) PAGE 5 OF 5

Maul Electric Company, Ltd. CIS Post Go-Live Carrying Charge June 2012 - December 2012

			🕐 Pre	-Settlement ⁽¹	()							
	a	b	C	d		8 = C + d		f HECO Incremental	Inc	g = d * f cremental full Debt		c + g
Line	Description	GL Account	 Oebt	Equity		Total		Full Debt % ⁽²⁾		Rate	To	otal Debt
1	CIS Post Go-Live Carrying Charge	18670202	\$ 94,210	\$ 252,010	\$	346,220		42%	\$	105,844	\$	200,054
2	CIS O&M Post Go-Live Carrying Charge	18670203	 6,776	18,162		24,938		42%		7,628		14,404
3 = 1 + 2			\$ 100,986	\$ 270,172	\$	371,158	(3)		\$	113,472	\$	214,458

(1) See Hawaiian Electric 2009 Test Year Rate Case Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of

(2) For financial reporting purposes, the estimated incremental debt was computed using HECO's incremental full debt rate percentage. See HECO-WP-D1-001B of the 2013 RAM filling for the calculation.

(source: HECO 2013 RAM filing)	Description	<u>Balance</u>	
HECO-WP-D1-001B, p.3	AFUDC Debt True-Up	\$ 512,072	42%
HECO-WP-D1-001B, p.3	AFUDC Equity	\$ 1,211,993	4276

(3) Agrees to the Final CIS Cost Report (MECO-WP-D1-002, page 2, MECO line 4)

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MECO-WP-D3-001 (WITH SETTLEMENT) PAGE 1 OF 1

Maui Electric Company, Ltd. 2013 Major Project - M16 Overhaul Costs Capital Costs

Cost Cotomony	PUC Authorized Amt. ⁽¹⁾	<u>Updated</u>	D:#
Cost Category	Authonzeu Antt.	<u>Estimate</u>	Diff
Materials			
Hot Section	1,300,000	729,400	(570,600)
Power Turbine	1,100,000	-	(1,100,000)
Bearings and Other Parts	900,000	1,227,500	327,500
Outside Services	172,000	78,200	(93,800)
Freight	88,000	49,800	(38,200)
In-House Labor	14,000	17,400	3,400
Overheads	11,000	23,900	12,900
AFUDC	55,000	29,500	(25,500)
Total	3,640,000	2,155,700	(1,484,300)

 See For Approval to Commit Funds in excess of \$2,500,000 for Item M0001282, Perform Major Overhaul on Maalaea Unit 16, Docket No. 2012-0038, Decision & Order No. 30874 issued on December 5, 2012

MAUI ELECTRIC COMPANY, Ltd. DEFERRED INCOME TAXES FEDERAL

Note 1

			Note 1
	00/00		FEDERAL
	DR(CR)	B	LIABILITY
<u>Line No.</u>	LIAB	Description	<u>12/31/2012</u>
	20242	0-1-00	(100 107 00)
1	28310	Rate Case Costs Rev Bond Diff	(196,197.00)
2	28311		(803,782.00)
3	28312	Prepaid Expenses	(282,348.00)
4	28313	Uncoll Accts	264,428 00 2,666 00
5	28314	Computer Software Costs	
6	28315	Cost of Removal	(10,885,274.00)
7	28316	Disc Wkrs Cmp	157,100.00
8	28317	Electric Disc Trust	(347,109.00)
9	28318	Pension Cst - Book Expense	8,766,753.00
10	28318	Pension Cst - Tax Deduction	(9,819,287.00)
11	2831B	Pension Cst - Excess (non-qual)	(1,569.00)
12	2831B	Pension Tracking	(1,427,485.00)
13	28319	Cap items Chg	(21,122.00)
14	28323	Cap Int	2,394,555 93
15	28324	CIAC	13,028,850 00
16	28324	CIAC §481(a) adjustment	400 012 00
17	28325	Cust Adv	480,613 00
18	28326	Int IRS Adj	75,416 00
19	28327	Exec Incen Comp	(1,380.00)
20	28327	Exec Incen Comp §481(a) adj.	61,843.00
21	28328	Vacation Accrual	(107,926.00)
22	28331	CWIP Debt Transition	(55,646.00)
23	28332	CWIP Equity Transition	(163,867.00)
24	28333	Plant Trans (AFUDC)	(288,537.00)
25	28334	FAS 109 Flow Through	(732 00)
26	28335	CWIP Equity Net	(4,308,202.00)
27	28336	CWIP Debt	(2,135,549.00)
28	28337	CWIP Equity Gross-Up	(2,744,120.00)
29	28338	Reg Liab Fed ITC	176,726 00
30	28339	OPE8 - Book Expense	7,819,526 00
31	28339	OPE8 - Tax Deduction	(7,071,239.00)
32	28339	OPE8 - Exec. Life	492,012 00
33	28339	OPE8 - Exec. Life Tax Deduction	(28,464 00)
34	28339	OPEB Tracking	(74,431.00)
35	28339	OPEB - Rabbi Trust	(23,764 00)
36	28340	IRP/DSM Costs	-
37	28342	Deficit Def Tax	8,984 00
38	28343	Gen Liab Reserve	1,255,854 00
39	28344	GI(L) on ACRS Retirals	(1,785,913 00)
40	28400	Customer Information System	(271,164.00)
41	28404	Emission Fees Accrued	158,737,00
42	28405	Hawaii R&D Credit	748 00
43	28406	Legal Fees Deferred for Tax	122,511.00
44	28407	Oil Spili Clean-Up	21,052.00
45	28408	Percentage Repair Allowance	(636,513.00)
46	28409	BPI Costs	(9,434 00)
47	28410	QUIPS Amortization	(127,989.00)
48	28412	Sun Power for Schools	(121,003,00)
40	28413	Other	(3 03)
		Deferred Comp-Restricted Stock	15,257.00
50	28414		
51 52	28415 28416	FIN 48 Interest	2,623.00
		SFAS 158 - AOCI	59,200 00
53 54	28417 28418	Manele Bay CHP Lease FIN 48 Tax	(2 00)
55 56	28419 28420	HR Suite Selar Saver Program	(346,034 00) 114,789 00
-		Solar Saver Program	(18,944 00)
57	28421	Reg Liab Fed Energy Credits	
58	26422	State Energy Tax Credits	16,785.00
59	28423	Percentage Repair Allowance 481(a)	(11,451,906.00)
60	28424	CHP Direct Lease vs. Book Depr.	16,680.00
61	26425	Reg Asset/Liability - SFAS 109	178,349 01
62	28427	Budget System	(70,999.00)
63	28-160	ERP/EAM Replacement Costs	31,013 00
64	28481	IVR Project	5,062 00
65	28482	Capital Loss Limited	4,370 00
66	28483	2011 NOL Benefit not Utilized	5,771,709 00
			-
67	FED ACCOUNT 28	33, excluding state ITC	(13,972,719.09)
68	28309	State ITC	4,159,745.00
69		FED ACCOUNT 2B3000	(9,812,974.09)
70	28210000	Accelerated Depreciation	(33,206,340.93)
71	28210100	Accel, Depr Excess	•
72	28210200	Accel, Depr Deficit	(8,830.00)
73		FED ACCOUNT 282100	(33,215,170.93)
74	TOTAL FED DEF I	NCOME TAX - UTILITY	(43,028,145.02)

Line No.	DR(ČR) <u>LIAB</u>	Description	Note 1 FEDERAL LIABILITY 12/31/2012
1	RATE BASE CAL	CULATION	7
2	Total 283 Federa		(9,812,974.09)
3	Less		(
4	28326	Int IRS Adj	(75,416)
5	28327	Exec Incen Comp	1,380
6	28327	Exec Incen Comp §481(a) adj.	(61,843)
7	28328	Vacation Accrual	107,926
8	28313	Uncoll Accts Allow	(264,428)
9	28316	Disc Wkrs Cmp	(157,100)
10	28343	Gen Liab Reserve	(1,255,854)
11	28318	Pensn Cst (nonqual)	1,569
12	28310	Rate Case Costs	· · · · ·
13	28339	OPEB Exec Life	(492,012)
14	28340	IRP/DSM Costs	-
15	28407	Fuel/Oil Spill Liab Reserve	(21,052)
16	28414	Deferred Comp-Restricted Stock	(15,257)
17	28415	FIN 48 Interest	(2,623)
18	28418	FIN 48 Tax	2
. 19	28416	SFAS 158 - AOCI	-
20	Total Exclusions		(2,234,708 00)
21	283 Federal Defe	rred Tax for Rate Base	(12,047,682.09)
22	282 Federal Defe	rred Tax for Rate Base	(33,215,170.93)
23		erred Tax for Rate Base	(45,262,853.02)
-•	1000110000		(40,202,000.02)
24	Note 1 > Tie out	to trial balance:	
25		Fed Account #282100	(33,215,170.93)
26		Fed Account #283000	(9,812,974.09)
20		State Account #282200	(2,079,626.33)
28		State Account #283000	(2,453,550.64)
29		Total	(47,561,321,99)
30		Per Trial Balance	(47,561,321.99)
31		Difference	
51			

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MAUI ELECTRIC COMPANY, Ltd. DEFERRED INCOME TAXES STATE

			STATE
	DR(CR)		LIABILITY
<u>Line No</u>	LIAB	Description	<u>12/31/2012</u>
1	08240	Bata Casa Casta	(25 977 00)
2	28310 28311	Rate Case Costs Rev Bond Diff	(35,877.00) (162,482.00)
3	28312	Prepaid Expenses	(51,629.00)
4	28313	Uncoll Accts	48,353 00
5	28314	Computer Software Costs	(574 00)
6	28315	Cost of Removal	(1,989,110.00)
7	28316	Disc Wkrs Cmp	28,728.00
8	28317	Electric Disc Trust	(63,473,00)
9	28318	Pension Cst - Sook Expense	1,603,057.00
10 11	28318	Pension Cst - Tax Deduction Pension Cst - Excess (non-qual)	(1,795,526.00)
12	28318 28318	Pension Tracking	(286.00) (261,027.00)
13	28319	Cap Items Chg	(3,864.00)
14	28323	Cap Int	535,277,33
15	28324	CIAC	3,178,196.00
15	28324	CIAC §481(a) adjustment	(1.00)
17	28325	Cust Adv	87,883 00
18	28326	Int IRS Adj	(4,259.00)
19	28327	Exec Incen Comp	16,197 00
20	28327	Exec Incen Comp §481(a) adj.	11,308.00
21	28328	Vacation Accrual	(24,335.00)
22 23	28331	CWIP Debt Transition CWIP Equity Transition	(10,177.00)
23	28332 28333	Plant Trans (AFUDC)	(29,967.00) (52,761.00)
25	283334	FAS 109 Flow Through	(134 00)
26	28335	CWIP Equity Net	(787,787.00)
27	28336	CWIP Debt	(390,500.00)
28	28337	CWIP Equity Gross-Up	(501,782.00)
29	28338	Reg Liab Fed ITC	32,315 00
30	28339	OPEB - Book Expense	1,429,855 00
31	26339	OPEB - Tax Deduction	(1,293,026 00)
32 33	28339 28339	OPEB - Exec Life OPEB - Exec Life Tax Deduction	89,968 00 (5,205 00)
34	28339	OPEB Tracking	(13,610.00)
35	28339	OPEB - Rabbi Trust	(4,346 00)
36	28340	IRP/DSM Costs	(16,047.00)
37	28342	Deficit Def Tax	1,645 00
38	28343	Gen Liab Reserve	229,641.00
39	28344	G/(L) on ACRS Retirals	(328,796.00)
40	28400	Customer Information System	(22,807.00)
41	28404	Emission Fees Accrued	29,027.00
42	28405	Hawaii R&D Credit	137.00
43 44	28406	Legal Fees Deferred for Tax	22,402 00
45	28407 28408	Oil Spill Clean-Up Percentage Repair Allowance	3,850 00 (234,736 00)
46	28409	BPI Costs	(1,727.00)
47	28410	QUIPS Amortization	(23,403.00)
48	28412	Sun Power for Schools	-
49	28413	Other	(4 00)
50	28414	Deferred Comp-Restricted Stock	2,791.00
51	28415	FIN 48 Interest	480 00
52 53	28416	SFAS 158 - AOCI	40.010.00
54	28417 28418	Manele Bay CHP Lease FIN 48 Tax	16,312.00 3.00
55	28419	HR Suite	(64,634.00)
56	28420	Solar Saver Program	20,991.00
57	28421	Reg Liab Fed Energy Credits	(3,462.00)
58	28422	State Energy Tax Credits	3,071.00
59	28423	Percentage Repair Allowance 481(a)	(2,465,348 00)
60	28424	CHP Direct Lease vs. Book Depr.	3,049 00
61	28425	Reg Asset/Liability - SFAS 109	32,612 03
62 63	28427	Budget System	(4,721.00)
64	28480 28481	ERP/EAM Replacement Costs IVR Project	5,671.00 926.00
65	28482	Capital Loss Limited	488.00
66	28483	2011 NOL Benefit not Utilized	400,00
	200 - C 84		
67	STATE ACCOUNT	283, excluding state ITC	(3,214,189,64)
68	28309	State ITC	760,639 00
69		STATE ACCOUNT 283020	(2,453,550 64)
70	000-0000	Accelerated Deck, 212	10.070.010.001
70 71	28210000	Accelerated Depreciation	(2,078,010 33)
72	28210100 28210200	Accel. Depr Excess Accel. Depr Deficit	(1,616.00)
73	LOLIVEOU	STATE ACCOUNT 282020	(2,079,626 33)
74	TOTAL STATE DEP	INCOME TAX - UTILITY	(4.533,176.97)

<u>Line No</u>	DR(CR) <u>LIAB</u>	Description	STATE LIABILITY 12/31/2012
1	RATE BASE CAL	CULATION	7
2	Total 283 State D	eferred Tax	(2,453,550.64)
3	Less:		
4	28326	Int IRS Adj	4,259
5	28327	Exec Incen Comp	(15,197)
6	28327	Exec incen Comp §481(a) ad	(11 308)
7	28328	Vacation Accrual	24 335
8	28313	Uncoll Accts Allow	(48,353)
9	28316	Disc Wkrs Cmp	(28,728)
10	28343	Gen Liab Reserve	(229,641)
11	28318	Pensn Cst (nonqual)	286
12	28310	Rate Case Costs	-
13	28339	OPEB Exec Life	(89,968)
14	28340	IRP/DSM Costs	16,047
15	28407	Fuel/Oil Spill Liab Reserve	(3,850)
16	28414	Deferred Comp-Restricted Stock	(2,791)
17	28415	FIN 48 Interest	(480)
18	28418	FIN 48 Tax	(3)
19	28416	SFAS 158 - AOCI	-
20	Total Exclusions		(386,392.00)
21	283 State Deferre	d Tax for Rate Base	(2,839,942.64)
22	282 State Deferre	d Tax for Rate Base	(2,079,626.33)
23	Total State Deferr	(4,919,568.97)	

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MECO-WP-F-001 (WITH SETTLEMENT) PAGE 1 OF 1

Maui Electric Company, Ltd. 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%
	38.9097744%

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

State Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

1.064(ST) = .064

ST = .060150376 or 6.0150376% of Pre-Tax Income

Calculation of Federal Effective Income Tax Rate

Federal Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

FT = .35 x (1-ST)

FT = .35 x (1-.060150376)

FT = .35 - .0210526316

FT = .328947368 or 32.8947368% of Pre-Tax Income

MECO-WP-F1-001 (WITH SETTLEMENT) PAGE 1 OF 2

MAUI ELECTRIC COMPANY, Ltd. TAX REPAIRS ADJUSTMENT 2013

				А	В	C = A x B	D = A - C
		MECO-WP-			MECO-WP-F1-		
		F1-002	Note 2		001 pg.2		
		5-Year		Allocated	Repairs	Repairs	Depreciable
	LIFE	AVERAGE	Allocation	Plant Adds	Allocation	Deduction	Basis
Communication	20	724,695				1. S . 18 8 8 8 8	
Comp/Off/Furn/Tools	7	16,366					
Distribution	20	21,636,528		21,636,528	18.62%	4,027,814	17,608,714
Land	-						AN RALES
Non-Steam Production	15	3,982,585			C In Constant	်းပြီးစီးစီ	1 - 6 -
Steam Production	20	840,260		ି କିଳ୍		19 1 6 1	ССС
Structural	39	1,200,975			使动物的复数	机动力学家动力	
Transmission	20	3,569,206		3,569,206	34.64%	1,236,239	2,332,967
General	20	2,383,228				A BUNG ST	
Street Lights	7	215,807				182535	
ROW	50	46,970					1. A
Computer Data	5	469,125			2 4 S & S & S & S & S & S & S & S & S & S	A	
Vehicles	-	954,183		Society for the			动物 医脱离的
TOTAL		36,039,928	0.00%	25,205,734	-	5,264,053	19,941,681
		from Sch D2			-	to Sch F1	

NOTE 1> This schedule calculates the estimated amount of deductible tax repairs related to 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 MECO-WP-F1-001, page 2.

NOTE 2> This allocation is not required because the 5-year average of additions is MECO's baseline plant additions (excluding major additions.)

MAUI ELECTRIC COMPANY, LTD. REPAIRS DEDUCTION 2013

	Repairs %:		Distribution	Transmission		
	Book basis repa	irs				
1	2008		4,394,329	1,747,209		
2	2009		3,525,567	1,463,590		
3	2010		3,395,009	1,074,383		
4	2011		5,109,057	948,114		
5	2012		5,304,417	1,006,986		
6	Total book b	asis repairs	21,728,379	6,240,282		
	Book basis adds	i				
7	2008	MECO WP-F1-002	27,307,965	5,997,009		
8	2009	MECO WP-F1-002	23,671,076	2,772,345		
9	2010	MECO WP-F1-002	20,554,101	1,536,304		
10	2011	MECO WP-F1-002	15,730,888	2,095,102		
11	2012	MECO WP-F1-002	29,456,015	5,615,857		
12	12 Total book basis adds		116,720,045	18,016,617		
	Repairs % (Lin	e 6 / Line 12)	18.615807%	34.636257%		

NOTE 1> Price Waterhouse Coopers assisted MECO 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 repairs costs included in book additions.

Note 2> MECO calculates a repairs deduction for T & D only.

MAUI ELECTRIC COMPANY, Ltd. BASELINE PLANT ADDITIONS BY TAX CLASSIFICATION

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Programs:							Less: Major			
Description	Life	2012	2011	2010	2009	2008	Projects	Total	Average	% Average
Structural	39	165,830	173,243	187,592	261,249	255,332		1,043,246	208,649	1.499
Steam Production	20	52,160	25,739	85,209	40,926	69,332	-	273,366	54,673	0.39%
Other Production	15	94,925	119,553	63,683	103,936	116,005	•	498,102	99,620	0.71%
Right of Way	50	59,067	32,048	56,117	21,223	44,076	-	212,531	42,506	0.30%
Transmission	20	1,000,184	944,560	1,152,483	1,370,273	709,064	•	5,176,564	1,035,313	7.38%
Distribution	20	16,924,355	10,663,035	10,611,334	9,071,693	8,474,116	-	55,744,533	11,148,907	79.44%
Street Lights	7	84,551	54,011	70,254	93,315	158,268	-	460,399	92,080	0.66%
Computer Data	5	-	99,442	167,248	82,563	65,008	-	414,261	82,852	0.59%
Office Furniture & Eq	7	4,126	1,734	1,143	•	23,976	•	30,979	6,196	0.04%
Transportation		812,971	839,518	1,233,406	787,038	730,446	-	4,403,379	880,676	6.27%
General	20	226,832	806,977	374,418	220,423	133,457	•	1,762,107	352,421	2.51%
Communications	20	9,400	56,426	5,449	47,272	37,488	-	156,035	31,207	0.22%
Total - Programs		19,434,401	13,816,286	14,008,336	12,099,911	10,816,568	•	70,175,502	14,035,100	100.00%
Projects;							Less:			
Description	Life	2012	2011	2010	2009	2008	Major Projects	Total	Average	% Average
Description	Cile	2012	2011	2010	2003	2008	Fiojecia	10001	Attingu	
Structural	39	1,563,770	1,595,581	207,842	788,316	806,121	-	4,961,630	992,326	4.51%
Steam Production	20	140,627	294,534	1,136,016	177,250	2,179,509	-	3,927,936	785,587	3.57%
Other Production	15	7,948,379	7,429,492	3,726,919	2,641,568	1,357,261	(3,688,795) (1)	19,414,824	3,882,965	17.65%
Right of Way	50	15,616	381	3,395	195	2,730	-	22,317	4,464	0.02%
Transmission	20	4,615,673	1,150,542	383,821	1,402,072	5,287,945	(170,587) (2)	12,669,466	2,533,893	11.52%
Distribution	20	12,531,660	5,067,853	9,942,767	14,599,383	18,833,849	(8,537,409) (3)	52,438,103	10,487,621	47.66%
Street Lights	7	41,728	-	161,039	93,150	322,717	-	618,634	123,727	0.56%
Computer Data	5	206,134	533,637	134,594	961,306	95,692	•	1,931,363	386,273	1.76%
Office Furniture & Eq	7	-	50,852	-	-	-	-	50,852	10,170	0.05%
Transportation		230,213	84,595	52,103	626	•	-	367,537	73,507	0.33%
General	20	375,841	4,939,059	64,079	4,675,844	99,212	-	10,154,035	2,030,807	9.22%
Communication	20	1,172,199	1,476,477	490,190	38,192	290,383	-	3,467,441	693,488	3.15%
Total - Projects		28,841,840	22,623,003	16,302,765	25,377,902	29,275,419	(12,396,791)	110,024,138	22,004,828	100.00%
Total		48,276,241	36,439,289	30,311,101	37,477,813	40,091,987	(12,396,791)	180,199,640	36,039,928	-
Summary	Life	2012	2011	2010	2009	2008		_	Total Average	Allocation %
Structural	39	1,729,600	1,768,824	395,434	1,049,565	1.061.453	C+	iructural - 39 yrs	1,200,975	3.33%
Steam Production	20	192,787	320,273	1,221,225	218,176	2,248,841		duction - 20 yrs	840,260	2.33%
Other Production	15	8,043,304	7,549,045	3,790,602	2,745,504	1,473,266		oduction - 15 yrs	3,982,585	11.05%
Right of Way	50	74,683	32,429	59,512	21,418	46,806		of Way - 50 yrs	46,970	0.13%
Transmission	20	5,615,857	2,095,102	1,536,304	2,772,345			mission - 20 yrs	3,569,206	9.90%
Distribution	20	29,456,015	15,730,888	20,554,101	23,671,076			tribution - 20 yrs	21,636,528	60.03%
Street Lights	7	126,279	54,011	231,293	186,465	480,985		et Lights - 7 yrs	215,807	0.60%
Computer Data	5	206,134	633,079	301,842	1,043,869	160,700		outer Data - Syrs	469,125	1.30%
Office Furniture & Eq	7	4,126	52,586	1,143		23,976	Furniture, Fixtures	•	16,366	0.05%
Transportation	•	1,043,184	924,113	1,285,509	787,664	730,446		Transportation	954,183	2.65%
General	20	602,673	5,746,036	438,497	4,896,267	232,669	1	General - 20 yrs	2,383,228	6.62%
Communication	20	1,181,599	1,532,903	495,639	85,464	327,871		ications - 20 yrs	724,695	2.01%
Total - Programs & Projects	3	48,276,241	36,439,289	30,311,101	37,477,813	40.091,987	Total (net of	Major Projects)	36,039,928	100.00%
Notes									WP-F1-001 p. 1	
10103	Major Proje	ects			Plant Additions					
(1)	M14 Capita			Total	3,688,795 3,688,795	Schedule D2 (201	1)			
				-			<u></u>			
(2)		ual Train Combin ual Train Combin				Schedule D2 (200) Schedule D2 (200)				
						Schedule D2 (200				
	Maalaea D	ual Train Combin	ed Cycle -2010	Total	(20,513) 170,587	Schedule D2 (201	0)			
(2)	CHP Maga	le Bay Hotel - 200	19			Schedule D2 (200	9)			
(0,		le Bay Hotel - 201				Schedule D2 (201	,			
		ie Bay Hotel - 201				Schedule D2 (201				
		•	••		(554)		• /			
	- Gib loorane	oot Distribution 🖳	abudd - 2010		004 797	Cohodule D2 (204)	0)			
		ent Distribution Re				Schedule D2 (201) Schedule D2 (201				
		ent Distribution Re ent Distribution Re		Total		Schedule D2 (201) Schedule D2 (201				

MECO-WP-H-001 (WITH SETTLEMENT) PAGE 1 OF 1

Maui Electric Company, Ltd. Average Rate Base (\$ THOUSANDS)

Line	Description	12/31/12	12/31/11		
1	Investments in Assets Serving Customers				
2	Net Plant in Service	530,440.9	500,129.3		
3	Materials & Supplies (Excl stores)	13,978.2	13,740.5		
4	Fuel Oil inventory	22,743.3	24,276.3		
5	Property Held for Future Use	1,302.5	1,302.5		
6	Lease receivable - CHP	6,829.4	7,274.6		
7	Unamortized system development costs	4,008.3	1,240.4		
8	Regulatory Assets	16,485.4	12,624.2		
9	Total Investment in Assets	65,347.2	60,458.5		
10					
11	Funds from Non-Investors				
12	Unamortized Contributions	(82,211.1)	(74,765.9)		
13	Customer Advances	(5,259.3)	(4,648.4)		
14	Customer Deposits	(3,880.6)	(4,345.7)		
15	Deferred Income taxes	(49,950.3)	(41,370.4)		
16	Unamortized ITC	(12,696.7)	(12,149.6)		
17	Unearned interest - CHP	(3,600.6)	(3,955.9)		
18	Regulatory Liabilities	(36,278.1)	(38,015.8)		
19	Total Deductions	(193,876.7)	(179,251.6)		
20					
21 Working Cash		12,084.3	10,615.6		
22					
23 Rate Base		413,995.6	391,951.7		
24					
25 Simple Average Rate Base		402,973.7			

MECO-WP-H-002 (WITH SETTLEMENT) PAGE 1 OF 1

Maui Electric Company, Ltd. Ratemaking Adjustments for Incentive Compensation and Other Non-Recoverable Expenses

Line	Description	Account/Activity No.	2012	Net of Tax @ 38.91%	Rounded 000s	
1	Incentive Compensation			<u></u>		
2	LTIP and EICP expense	M8M723MAUNENMAZZZZZ900	236,115	144,243	144	Line 2a
3						
4	Discretionary and Other Expenses Not Recoverable					
5	Executive Life expense	HR000120	(35,318)			
6	Executive Life in OPEB	Provided by HEI	106,227			
7	HEIRS	HR000067, HR000089, HR000143	25,554			
8	EEI Dues (allowed portion)	Invoiced amount allocated to MECO	22,033			
9	HEI charges for incentive compensation	Provided by HEI	(23,291)			
10	Subtotal		95,205	58,161	58	Line 2b
11						
12	Total adjustment to operating income		331,320	202,404		

MECO-WP-H-003 (WITH SETTLEMENT) PAGE 1 OF 1

Maui Electric Company, Ltd. Income Tax on Items to be Replaced by Synchronized Interest

Line	Description	Source	 2012	Rounded 000s		
1 2	Total Interest Charges	Dec. 2012 PUC report	\$ 9,224,046			
3	Less:					
4	Interest on Customer Deposits	Account 43105000	(266,123)			
5	AFUDC-Debt	NARUC 420030	(478,149)			
6						
7	Add:					
8	Amort of Inv Inc Differential	NARUC 403030	 9,495	9		Line 2c
9						
10	Total		8,489,269			
11		Tax rate	 38.91%			
12						
13		Rounded	3,303,175	3,303	()	Line 2d

Maul Electric Company, Ltd. Rate Making Capitalization December 31, 2012

*Amounts are derived from the general ledger and monthly reconciliations of account activity.

Line	Description	Sha	rt-Term Debt	Lo	ng-Term Debt	Hyb	orid Securities	Pre	ferred Stock	C	ommon Equity	Total
1	12/31/2011 balance	\$	-	\$	164,720,000	\$	10,000,000	\$	5,000,000	\$	236,053,615	\$ 415,773,615
2	Unamortized debt expense		-		(3,620,701)		(645,579)		-		-	(4,266,280)
3	Investment income differential		-		(115,366)		-		-		-	(115,366)
4	Issuance Discount		-		(296,799)		-		-		-	(296,799)
5	Issuance & Redemption Costs		•		-		-		(261,418)		90,389	(171,029)
6	AOCI		-		-		-		-		(138,103)	(138,103)
7	12/31/11 Totals	\$	•	\$	160,687,134	\$	9,354,421	\$	4,738,582	\$	236,005,901	\$ 410,786,038
8												
9												
10		Sho	ort-Term Debt	Lo	ng-Term Debt	Hyb	orid Securities	Pre	ferred Stock	C	ommon Equity	Total
11	12/31/2012 balance	\$	9,400,000	\$	156,000,000	\$	10,000,000	\$	5,000,000	\$	228,927,514	\$ 409,327,514
12	Unamortized debt expense		-		(3,853,135)		(609,411)		-		-	(4,462,546)
13	Investment income differential		-		(105,664)		-		-		-	(105,664)
14	Issuance Discount		-		-		-		-		-	-
15	Issuance & Redemption Costs		-		-		-		(251,357)		90,389	(160,968)
16	AOCI		-		-		-		-		(163,836)	 (163,836)
17	12/31/12 Totais	\$	9,400,000	\$	152,041,201	\$	9,390,589	\$	4,748,643	\$	228,854,067	\$ 404,434,500
18	Average Balance ⁽¹⁾	\$	3,307,220	\$	156,364,168	\$	9,372.505	5	4,743,612	5	232,429,984	\$ 406,217,489
19	Ratios		0.81%		38.49%		2.31%		1.17%		57.22%	100.00%

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Note:

(1) Short-term debt is based on a 12 month average (i.e. average of balance at January 31, 2012 through December 31, 2012)
 All others are based on a simple average (i.e. December 31, 2011 balance + December 31, 2012 balance divided by 2)

Balance at	Short-Term Debt (net)
01/31/12	-
2/28/2012	-
03/31/12	-
4/30/2012	2,000,000
05/31/12	5,186,639
6/30/2012	8,700,000
07/31/12	10,700,000
8/31/2012	3,700,000
09/30/12	-
10/31/2012	•
11/30/2012	-
12/31/2012	9,400,000
Average	3,307,220

VERIFICATION

STATE OF HAWAII) ss. CITY AND COUNTY OF HONOLULU ì

Tayne S. Y. Sekimura, being first duly sworn, deposes and says: That she is the Financial Vice President of Maui Electric Company, Limited, Applicant in the above proceeding; that she makes this verification for and on behalf of Maui Electric Company, Limited, and is authorized so to do; that she has read the foregoing Application, and knows the contents thereof; and that the same are true of her own knowledge except as to matters stated on information or belief, and that as to those matters she believes them to be true.

Fairne & J Selecon Tayne S. Y. Sekimura

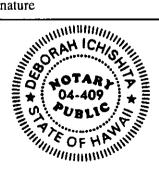
Subscribed and sworn to before me this 28th day of March, 2013.

Debrah Ochis hita

DEBORAH ICHISHITA Notary Public, State of Hawaii

My Commission expires _______

STATE OF H	AWAII NOTAR	Y CERTIFICATION				
Doc. Date: 3	/28/2013	# of pages <u>89</u>				
Notary Name:	DEBORAH ICH	ISHITA First Circuit				
Doc. Description: MECO Application						
Transmitta	1 No. 13-01 (Decoupling)				
Levenal Ichistita 3/28/13						
Notary Signatu		Date				



CERTIFICATE OF SERVICE

I hereby certify that the foregoing Transmittal No. 13-01 was served on the date of filing

by hand delivery, as indicated below.

Jeffrey T. Ono Executive Director Division of Consumer Advocacy Department of Commerce and Consumer Affairs 335 Merchant Street, Room 326 Honolulu, Hawaii 96813 2 copies via Hand Delivery

Dated: Honolulu, Hawaii, March 28, 2013.

HAWAIIAN ELECTRIC COMPANY, INC.