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PUBLIC UTILITIES
COMMISSION

SHARON M. SUZUKI
President

January 29, 2018

The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
Kekuanao'a Building, First Floor
465 South King Street
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Maui Electric Energy Cost Adjustment Factor for February 2018

Maui Electric Company, Limited's ("Maui Electric" or "Company") February 2018 Energy Cost Adjustment factor for our Maui Division is -5.747 cents per kilowatt-hour ("kWh"), an increase of 0.368 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$156.16, an increase of \$1.88 compared to rates effective January 1, 2018. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor (+\$1.85) and the increase in the Purchase Power Adjustment Clause rate (+\$0.03).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 52.81 cents per million BTU to 1,362.37 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.131 cents per kWh to 20.091 cents per kWh.

The Energy Cost Adjustment factor for our Lāna'i Division for February 2018 is -8.395 cents per kWh, a decrease of 0.037 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$153.54, a decrease of \$0.15 compared to rates effective January 1, 2018. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other increased 11.64 cents per million BTU to 1,961.69 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 30.00 cents per kWh.

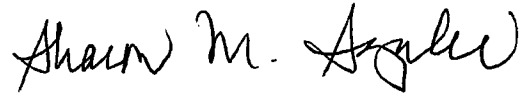
The Energy Cost Adjustment factor for our Moloka'i Division for February 2018 is -6.275 cents per kWh, an increase of 0.025 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$147.78, an increase of \$0.10 compared to rates effective January 1, 2018. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor.

The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
January 29, 2018
Page 2

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 14.17 cents per million BTU to 1,648.00 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 21.80 cents per kWh.

The attached sheets set forth the fuel adjustment in cents per kWh for each rate schedule that is applicable for pro rata use beginning February 1, 2018.

Sincerely,



Sharon M. Suzuki
President

Attachments

cc: Division of Consumer Advocacy

**MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION**

ENERGY COST ADJUSTMENT FACTOR

| | EFFECTIVE DATES | | <u>Change</u> |
|---|-------------------|-------------------|---------------|
| | <u>01/01/2018</u> | <u>02/01/2018</u> | |
| <u>COMPOSITE COSTS</u> | | | |
| Generation, Central Station & Other, ¢/mbtu | 1,415.18 | 1,362.37 | (52.81) |
| DG Energy, ¢/kWh | 0.00 | 0.00 | 0.000 |
| Purchased Energy, ¢/kWh | 20.222 | 20.091 | (0.131) |
| <u>Residential Schedule "R"</u> | | | |
| Energy Cost Adjustment, ¢/kWh | (6.115) | (5.747) | 0.368 |
| <u>Others - "G,H,P,F"</u> | | | |
| Energy Cost Adjustment, ¢/kWh | (6.115) | (5.747) | 0.368 |
| <u>Residential Customer with</u> | | | |
| 500 KWH Consumption, \$/Bill | 154.28 | 156.16 | 1.88 |
| 600 KWH Consumption, \$/Bill | 184.75 | 187.00 | 2.25 |

Supersedes Sheet Effective:

January 1, 2018

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - February 1, 2018 (page 1 of 2)

| Line | | |
|------|-----------------------|------------------|
| 1 | Effective Date | February 1, 2018 |
| 2 | Supercedes Factors of | January 1, 2018 |

GENERATION COMPONENT

| CENTRAL STATION | | | | | DG ENERGY COMPONENT | | |
|--|---|-------------------|--------------|-------------------|--------------------------------|--|-----------|
| FUEL PRICES, ¢/mmbtu | | | | | | | |
| 3 | Industrial | | | 917.80 | | | |
| 4 | Diesel | | | 1,478.13 | | | |
| 5 | Other | | | | | | |
| BTU MIX, % | | | | | | | |
| 6 | Industrial | | | 20.66% | 23 | COMPOSITE COST OF DG | |
| 7 | Diesel | | | 79.34% | | ENERGY, ¢/kWh | 0.000 |
| 8 | Other | | | 0.00% | 24 | % Input to System kWh Mix | 0.00% |
| | | | | 100.00% | | | |
| 9 | COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8)) | | | 1,362.37 | 25 | WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 23 x 24) | - |
| 10 | % Input to System kWh Mix | | | 81.84% | 26 | BASE DG ENERGY COMP COST | 0.000 |
| EFFICIENCY FACTOR, mmbtu/kWh | | | | | 27 | Base % Input to System kWh Mix | 0.01 |
| | (A) | (B) | (C) | (D) | 28 | WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 26 x 27) | 0.00000 |
| | | | Percent of | | 29 | Cost Less Base (Line 25 - 28) | 0.00000 |
| | | | Centrl Stn + | | 30 | Loss Factor | 1.063 |
| | <u>Fuel Type</u> | <u>Eff Factor</u> | <u>Other</u> | <u>Weighted</u> | 31 | Revenue Tax Req Multiplier | 1.0975 |
| | | <u>mmbtu/kwh</u> | | <u>Eff Factor</u> | 32 | DG FACTOR, ¢/kWh (Line 29 x 30 x 31) | 0.00000 |
| 11 | Industrial | 0.015126 | 19.37 | 0.002930 | | | |
| 12 | Diesel | 0.010026 | 80.63 | 0.008084 | | | |
| 13 | Other | 0.010951 | 0.00 | - | | | |
| (Lines 11, 12, 13): Col(B) x Col(C) = Col(D) | | | | | | | |
| 14 | Weighted Efficiency Factor, mmbtu/kWh [(lines 11(D) + 12(D) + 13(D))] | | | 0.011014 | | | |
| 15 | WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14)) | | | 12.28021 | | | |
| 16 | BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu | | | 2,019.39 | | | |
| 17 | Base % Input to Sys kWh Mix | | | 78.09 | | | |
| 18 | Efficiency Factor, mmbtu/kwh | | | 0.010951 | | | |
| 19 | WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (16 x 17 x 18)) | | | 17.26909 | | | |
| 20 | COST LESS BASE (line(15 - 19)) | | | (4.98888) | SUMMARY OF | | |
| 21 | Revenue Tax Req Multiplier | | | 1.0975 | TOTAL GENERATION FACTOR, ¢/kWh | | |
| 22 | CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21)) | | | (5.47530) | 33 | CNTRL STN + OTHER (line 22) | (5.47530) |
| | | | | | 34 | DG (line 32) | - |
| | | | | | 35 | TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34) | (5.47530) |

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - February 1, 2018 (page 2 of 2)

| Line | | |
|------|-----------------------|------------------|
| 1 | Effective Date | February 1, 2018 |
| 2 | Supercedes Factors of | January 1, 2018 |

| Line | <u>PURCHASED ENERGY COMPONENT</u> | |
|------|---|----------------|
| | PURCHASED ENERGY PRICE, ¢/kWh | |
| 36 | Kaheawa Wind I | 13.676 |
| 37 | - On Peak | |
| | - Off Peak | 12.841 |
| 38 | Kaheawa Wind II | 25.304 |
| 39 | Sempre Wind | 21.869 |
| 40 | Hydro & Other | 13.948 |
| 41 | - On Peak | |
| | - Off Peak | 13.187 |
| 42 | South Maui RR | 11.060 |
| 43 | Ku'ia Solar | 11.060 |
| 44 | | |
| 45 | | |
| 46 | FIT | 21.458 |
| | PURCHASED ENERGY KWH MIX, % | |
| 47 | Kaheawa Wind I | 14.94% |
| 48 | - On Peak | |
| | - Off Peak | 12.08% |
| 49 | Kaheawa Wind II | 29.18% |
| 50 | Sempre Wind | 33.98% |
| 51 | Hydro & Other | 0.44% |
| 52 | - On Peak | |
| | - Off Peak | 0.18% |
| 53 | South Maui RR | 3.63% |
| 54 | Ku'ia Solar | 0.00% |
| 55 | | |
| 56 | | |
| 57 | FIT | 5.57% |
| | | <u>100.00%</u> |
| 58 | COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh | 20.091 |
| | (Lines (36 x 47) + (37 x 48) + (38 x 49) + (39 x 50) + (40 x 51) + (41 x 52) + (42 x 53) + (43 x 54) + (46 x 57)) | |
| 59 | % Input to System kWh Mix | 18.16% |
| 60 | WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (58 x 59)) | 3.64853 |
| 61 | BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh | 15.847 |
| 62 | Base % Input to Sys kWh Mix | 21.90 |
| 63 | WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (61 x 62)) | 3.47049 |
| 64 | COST LESS BASE (lines (60 - 63)) | 0.17804 |
| 65 | Loss Factor | 1.063 |
| 66 | Revenue Tax Req Multiplier | 1.0975 |
| 67 | PURCHASED ENERGY FACTOR, ¢/kWh (lines (64 x 65 x 66)) | 0.20771 |

| Line | <u>SYSTEM COMPOSITE CALCULATIONS</u> | |
|------|---|-----------|
| 68 | GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 67)) | (5.26759) |
| 69 | ADJUSTMENT, ¢/kWh | |
| 70 | ECA Reconciliation Adjustment | (0.479) |
| 71 | ECA FACTOR, ¢/kWh (lines (68 + 69 + 70)) | (5.747) |

**MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION**

Fuel Oil Inventory Prices for February 2018

| <u>TYPE OF OIL BURNED</u> | <u>PRICES \$/BBL</u> | <u>CONVERSION FACTORS</u> | | <u>PRICES ¢/MBTU</u> |
|-------------------------------|--------------------------|-------------------------------|----------|--------------------------|
| INDUSTRIAL | 57.8215 | 6.30 | MBTU/BBL | 917.80 |
| DIESEL/ULSD | 86.5587 | 5.86 | MBTU/BBL | 1,478.13 |

**Maui Electric Company, Ltd.
Maui Division**

Month End Fuel Oil Estimate

| <u>Kahului</u> | <u>Barrels</u> | <u>MBTU</u> | <u>(\$)</u> |
|-----------------------|-------------------------|--------------------------|----------------------------|
| 1/22/2018 | 41,000.63 | 258,303.97 | 2,388,875.55 |
| Estimated Use | 8,334.77 | 52,509.08 | 506,746.57 |
| Estimated Received | 11,000.00 | 69,300.00 | 642,696.13 |
| Estimated Additional | <u>0.00</u> | <u>0.00</u> | <u>0.00</u> |
| Estimated End | <u><u>43,665.86</u></u> | <u><u>275,094.89</u></u> | <u><u>2,524,825.11</u></u> |

Next month's expense (\$/bbl) = \$ 57.8215

| <u>Maalaea</u> | <u>Barrels</u> | <u>MBTU</u> | <u>(\$)</u> |
|-----------------------|-------------------------|--------------------------|----------------------------|
| 1/22/2018 | 84,631.09 | 495,596.31 | 7,460,269.94 |
| Estimated Use | 25,236.70 | 147,785.13 | 2,319,323.67 |
| Estimated Received | 31,000.00 | 181,534.77 | 2,660,649.23 |
| Estimated Additional | <u>3,818.81</u> | <u>22,378.21</u> | <u>353,373.97</u> |
| Estimated End | <u><u>94,213.20</u></u> | <u><u>551,724.16</u></u> | <u><u>8,154,969.47</u></u> |

Next month's expense (\$/bbl) = \$ 86.5587

**MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION**

Contract Prices effective January 1, 2018

| <u>TYPE OF OIL BURNED</u> | <u>\$/BBL</u> | <u>¢/MBTU</u> |
|---------------------------|---------------|---------------|
| INDUSTRIAL | | |
| Tax * | 3.6060 | 57.24 |
| Ocean Transportation | 1.7264 | 31.63 |
| Land Transportation | 0.0000 | 0.00 |
| Storage | 0.0000 | 0.00 |
| Wharfage | 0.3400 | 5.40 |
| DIESEL | | |
| Tax * | 5.2922 | 90.31 |
| Ocean Transportation | 1.7264 | 34.01 |
| Land Transportation | 0.9255 | 15.79 |
| Storage | 3.0781 | 52.53 |
| Wharfage | 0.3400 | 5.80 |

* Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST tax, Environmental Response Tax, Customs Duty Fee, and Fed Oil Spill Recovery Fee

Note: Since these components are not accounted for separately in inventory, contract prices for the current month are being provided. Contract prices are considered accurate pending actual delivery of the fuel.

Reference: Decision and Order No. 16134, Docket No. 96-0040.

**MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION**

PURCHASED POWER PRICE CALCULATIONS

KAHEAWA WIND POWER ENERGY RATE:

| | |
|-------------------------------|--------|
| Kaheawa Wind - On Peak, ¢/kWh | 13.676 |
| - Off Peak, ¢/kWh | 12.841 |

Kaheawa Wind Energy Rate Calculations:

Percent of Energy Payment Rate:

| | |
|---------------------------|-------------|
| Fixed energy payment rate | 70% |
| Flat payment rate | <u>30%</u> |
| | <u>100%</u> |

Fixed Energy Payment Rate (Table D-1) for 2018:

| | |
|-----------------|--------|
| On-peak, | 10.109 |
| Off-peak, ¢/kwh | 8.916 |

Flat Payment Rate Per Docket No. 2011-0192 D&O 30331:

| | |
|-----------------|--------|
| On-peak, ¢/kwh | 22.000 |
| Off-peak, ¢/kwh | 22.000 |

On-Peak Rate = $10.1090 \times 0.7 + 22.000 \times 0.3 = 13.676$

Off-Peak Rate = $8.916 \text{ ¢/kwh} \times 0.7 + 22.000 \text{ ¢/kwh} \times 0.3 = 12.841 \text{ ¢/kwh}$

MAUI ELECTRIC COMPANY, LTD.
Maui Division
ECA Reconciliation Adjustment
February 2018

| | |
|------------------------------------|---------------|
| 1. Amount to be Refunded | (\$994,600) |
| 2. Monthly amount (1 / 3 X Line 1) | (\$331,533) |
| 3. Revenue Tax Divisor | 0.91115 |
| 4. Total (Line 2 / Line 3) | (\$363,862) |
| 5. Estimated Sales (February 2018) | 75,996 mwh |
| 6. Adjustment (Line 4 ÷ Line 5) | (0.479) ¢/kwh |

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2017 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand \$)

| <u>Line</u> | W/O Deadband 4th Quarter <u>YTD Total</u> | collection by company* | Basis for Recon With Deadband 4th Quarter <u>YTD Total</u> | collection by company* |
|------------------|---|------------------------------|---|------------------------------|
| ACTUAL COSTS: | | | | |
| 1 | \$105,630.7 | | \$105,630.7 | |
| 2 | \$23.5 | | \$23.5 | |
| 3 | <u>\$44,232.0</u> | | <u>\$44,232.0</u> | |
| 4 | \$149,886.2 | | \$149,886.2 | |
| FUEL FILING COST | | | | |
| 5 | \$105,747.1 | | \$105,226.0 | |
| 6 | \$0.0 | | \$0.0 | |
| 7 | <u>\$44,232.0</u> | | <u>\$44,232.0</u> | |
| 8 | \$149,979.1 | | \$149,458.0 | |
| BASE FUEL COST | | | | |
| 9 | \$169,544.8 | | \$169,544.8 | |
| 10 | \$22.6 | | \$22.6 | |
| 11 | <u>\$47,693.6</u> | | <u>\$47,693.6</u> | |
| 12 | \$217,260.9 | | \$217,260.9 | |
| 13 | -\$67,281.7 | | -\$67,802.9 | |
| 14 | -\$67,892.7 | | -\$67,892.7 | |
| 15 | <u>-\$1,408.1</u> | | <u>-\$1,408.1</u> | |
| 16 | -\$66,484.6 | | -\$66,484.6 | |
| 17 | \$797.1 | Over | \$1,318.3 | Over |
| ADJUSTMENTS | | | | |
| 18 | \$2,540.0 | | \$2,540.0 | |
| 19 | \$0.0 | | \$0.0 | |
| 20 | <u>\$0.0</u> | | <u>\$0.0</u> | |
| 21 | \$3,337.1 | Over | \$3,858.3 | Over |
| 22 | | | <u>\$2,863.7</u> | Over |
| 23 | | | <u><u>-\$994.6</u></u> | To Be Refunded |

* Over means an over-collection by the company.
Under means an under-collection by the company.

**MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION**

Determination of Efficiency Factor to use for Cost-Recovery Purposes

Period: January 1, 2017 through December 31, 2017

| | <u>Notes</u> | <u>Jan 1 - Dec 31</u> |
|--|----------------|-----------------------|
| <u>Industrial Fuel Oil</u> | | |
| Industrial Fuel Oil Efficiency Factor (TY2012), BTU/kWh | f | 15,126 |
| Industrial Fuel Oil Deadband Definition, +/- BTU/kWh | d | 100 |
| Industrial Fuel Oil Portion of Recorded Sales, MWh | a | 152,372 |
| Industrial Fuel Oil Consumption (Recorded), MMBTU | b | 2,365,920 |
| Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh | c = (b/a)*1000 | 15,527 |
| Lower limit of Industrial Fuel Oil Deadband, BTU/kWh | e = f-d | 15,026 |
| Higher limit of Industrial Fuel Oil Deadband, BTU/kWh | g = f+d | 15,226 |
| Industrial Fuel Oil Efficiency Factor for cost-recovery, BTU/kWh | h = c, e, or g | 15,226 |
| <u>Diesel</u> | | |
| Diesel Efficiency Factor (TY2012), BTU/kWh | f | 10,026 |
| Diesel Deadband Definition, +/- BTU/kWh | d | 100 |
| Diesel Portion of Recorded Sales, MWh | a | 656,595 |
| Diesel Consumption (Recorded), MMBTU | b | 6,535,319 |
| Diesel Efficiency Factor (Recorded), BTU/kWh | c = (b/a)*1000 | 9,953 |
| Lower limit of Diesel Deadband, BTU/kWh | e = f-d | 9,926 |
| Higher limit of Diesel Deadband, BTU/kWh | g = f+d | 10,126 |
| Diesel Efficiency Factor for cost-recovery, BTU/kWh | h = c, e, or g | 9,953 |

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND
2017

| | <u>Without Deadband</u> <u>Jan 1 - Dec 31</u> | <u>With Deadband - AS FILED</u> <u>Jan 1 - Dec 31</u> |
|--|--|--|
| <u>INDUSTRIAL</u> | | |
| Industrial Portion of Recorded Sales , MWH | 152,372 | 152,372 |
| Industrial Sales Efficiency Factor (mmbtu/kwh) | 0.015126 | 0.015226 |
| Mmbtu adjusted for Sales Efficiency Factor | 2,304,774 | 2,320,011 |
| \$/mmbtu | <u>\$7.7706</u> | <u>\$7.7706</u> |
| TOTAL Industrial \$000s TO BE RECOVERED | \$17,909.5 | \$18,027.9 |
| <u>DIESEL FUEL FILING COST</u> | | |
| Diesel Portion of Recorded Sales, MWH | 656,595 | 656,595 |
| Diesel Sales Efficiency Factor (mmbtu/kwh) | 0.010026 | 0.009953 |
| Mmbtu adjusted for Sales Efficiency Factor | 6,583,026 | 6,535,094 |
| \$/mmbtu | <u>\$13.3430</u> | <u>\$13.3430</u> |
| TOTAL DIESEL \$000s TO BE RECOVERED | \$87,837.6 | \$87,198.0 |
| TOTAL GENERATION FUEL FILING COST, \$000s | \$105,747.1 | \$105,226.0 |
| TOTAL GENERATION BASE FUEL COST , \$000s YTD | \$169,544.8 | \$169,544.8 |
| TOTAL GENERATION FUEL FILING COST, \$000s YTD | \$105,747.1 | \$105,226.0 |
| TOTAL GENERATION BASE FUEL COST, \$000s YTD | \$169,544.8 | \$169,544.8 |

**MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2018 Cumulative Reconciliation Balance**

| <u>Month</u> | (1) <u>YTD FOA Reconciliation</u> | <u>Qtr</u> | (2) <u>FOA Rec Adjust Variance</u> | (3) <u>FOA Rec Less Variance</u> | (4) <u>Try to Collect</u> | (5) <u>Actual Collect</u> | (6) <u>Month-end Cumulative Balance</u> |
|--------------|--|------------|---|---|----------------------------------|----------------------------------|--|
| December '17 | | | | | (323,167) | (288,628) | 393,068 |
| January '18 | | | | | (323,167) | | |
| February | 994,600 | (4) | 69,895 | 924,705 | (331,533) | | |

NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 5)
A positive number is an over-collection. A negative number is an under-collection.
- Col(2): FOA reconciliation adjustment variance accumulated during the last three months, starting with the fourth prior month; the difference between the estimated recorded sales used to derive the \$/kwh adjustment and the actual recorded sales.
(Col(5) - Col(4))
- Col(3): FOA reconciliation generated in the current quarter. The YTD FOA reconciliation difference minus the adjustment variance. Col(1) - Col(2)
- Col(4): Amount that the FOA reconciliation adjustment is trying to collect. (Col(1) * 1/3)
- Col(5): Actual collected amount. (recorded sales * \$/kwh adjustment/1.09751)
- Col(6): Cumulative balance of the FOA reconciliation (Previous balance + Col(3) + Col(5))

**Maui Electric Company, Ltd.
Maui Division
Calculations of the Average Residential Customer Bill**

| | Rate | | Charge (\$) at 500 Kwh | | | |
|--|-----------------|----------|------------------------|----------|------------|------|
| | 01/01/18 | 02/01/18 | 01/01/18 | 02/01/18 | Difference | |
| Base Rates | effective date: | 08/01/13 | 08/01/13 | | | |
| Base Fuel/Energy Charge | ¢/kWh | 23.0016 | 23.0016 | 115.01 | 115.01 | 0.00 |
| Non-fuel Fuel Energy Charge | | | | | | |
| First 350 kWhr per month | ¢/kWh | 9.3393 | 9.3393 | 32.69 | 32.69 | 0.00 |
| Next 850 kWhr per month | ¢/kWh | 11.5993 | 11.5993 | 17.40 | 17.40 | 0.00 |
| Customer Charge | \$ | 8.50 | 8.50 | 8.50 | 8.50 | 0.00 |
| Total Base Charges | | | | 173.60 | 173.60 | 0.00 |
| RBA Rate Adjustment | ¢/kWh | 1.5654 | 1.5654 | 7.83 | 7.83 | 0.00 |
| PBF Surcharge | ¢/kWh | 0.4244 | 0.4244 | 2.12 | 2.12 | 0.00 |
| Renewable Energy Infrastructure Cost Recovery Provision | ¢/kWh | 0.0000 | 0.0000 | 0.00 | 0.00 | 0.00 |
| SolarSaver Adjustment | ¢/kWh | 0.0000 | 0.0000 | 0.00 | 0.00 | 0.00 |
| Purchased Power Adjustment | ¢/kWh | -0.0060 | 0.0003 | -0.03 | 0.00 | 0.03 |
| Energy Cost Adjustment | ¢/kWh | -6.115 | -5.747 | -30.58 | -28.73 | 1.85 |
| Green Infrastructure Fee | \$ | 1.34 | 1.34 | 1.34 | 1.34 | 0.00 |
| Avg Residential Bill at 500 kwh | | | | 154.28 | 156.16 | |

| | |
|-----------------------|-------|
| Increase (Decrease -) | 1.88 |
| % Change | 1.22% |

| | Rate | | Charge (\$) at 600 Kwh | | | |
|--|-----------------|----------|------------------------|----------|------------|------|
| | 01/01/18 | 02/01/18 | 01/01/18 | 02/01/18 | Difference | |
| Base Rates | effective date: | 08/01/13 | 08/01/13 | | | |
| Base Fuel/Energy Charge | ¢/kWh | 23.0016 | 23.0016 | 138.01 | 138.01 | 0.00 |
| Non-fuel Fuel Energy Charge | | | | | | |
| First 350 kWhr per month | ¢/kWh | 9.3393 | 9.3393 | 32.69 | 32.69 | 0.00 |
| Next 850 kWhr per month | ¢/kWh | 11.5993 | 11.5993 | 29.00 | 29.00 | 0.00 |
| Customer Charge | \$ | 8.50 | 8.50 | 8.50 | 8.50 | 0.00 |
| Total Base Charges | | | | 208.20 | 208.20 | 0.00 |
| RBA Rate Adjustment | ¢/kWh | 1.5654 | 1.5654 | 9.39 | 9.39 | 0.00 |
| PBF Surcharge | ¢/kWh | 0.4244 | 0.4244 | 2.55 | 2.55 | 0.00 |
| Renewable Energy Infrastructure Cost Recovery Provision | ¢/kWh | 0.0000 | 0.0000 | 0.00 | 0.00 | 0.00 |
| SolarSaver Adjustment | ¢/kWh | 0.0000 | 0.0000 | 0.00 | 0.00 | 0.00 |
| Purchased Power Adjustment | ¢/kWh | -0.0060 | 0.0003 | -0.04 | 0.00 | 0.04 |
| Energy Cost Adjustment | ¢/kWh | -6.115 | -5.747 | -36.69 | -34.48 | 2.21 |
| Green Infrastructure Fee | \$ | 1.34 | 1.34 | 1.34 | 1.34 | 0.00 |
| Avg Residential Bill at 600 kwh | | | | 184.75 | 187.00 | |

| | |
|-----------------------|-------|
| Increase (Decrease -) | 2.25 |
| % Change | 1.22% |

**MAUI ELECTRIC COMPANY, LTD. -- Maui Division
FUEL OIL ADJUSTMENT FACTOR DATA**

| <u>EFFECTIVE DATE</u> | <u>FUEL FACTOR CENTS / KWH</u> | | <u>RESIDENTIAL BILL (\$)</u> | |
|-----------------------|---|--|------------------------------|------------------|
| | <u>RESIDENTIAL & COMMERCIAL</u> | | <u>@ 500 KWH</u> | <u>@ 600 KWH</u> |
| January 1, 2015 | -0.702 | | 183.85 | 220.24 |
| February 1, 2015 | -4.255 | | 165.96 | 198.78 |
| March 1, 2015 | -7.740 | | 148.62 | 177.96 |
| April 1, 2015 | -6.921 | | 151.30 | 181.18 |
| May 1, 2015 | -6.092 | | 157.06 | 188.10 |
| June 8, 2015 | -4.794 | | 163.43 | 195.74 |
| July 1, 2015 | -4.336 | | 164.44 | 196.93 |
| August 1, 2015 | -4.415 | | 164.11 | 196.54 |
| September 1, 2015 | -5.820 | | 157.12 | 188.14 |
| October 1, 2015 | -7.471 | | 148.88 | 178.26 |
| November 1, 2015 | -8.651 | | 141.57 | 169.49 |
| December 1, 2015 | -8.557 | | 142.07 | 170.10 |
| | | | | |
| January 1, 2016 | -8.649 | | 141.54 | 169.48 |
| February 1, 2016 | -10.511 | | 132.58 | 158.73 |
| March 1, 2016 | -9.196 | | 139.17 | 166.62 |
| April 1, 2016 | -8.768 | | 140.37 | 168.08 |
| May 1, 2016 | -10.483 | | 132.89 | 159.10 |
| June 1, 2016 | -8.170 | | 143.47 | 171.79 |
| July 1, 2016 | -7.334 | | 148.08 | 177.36 |
| August 1, 2016 | -6.973 | | 149.89 | 179.52 |
| September 1, 2016 | -7.866 | | 145.42 | 174.16 |
| October 1, 2016 | -8.162 | | 143.94 | 172.39 |
| November 1, 2016 | -9.782 | | 135.84 | 162.67 |
| December 1, 2016 | -9.069 | | 139.41 | 166.95 |
| | | | | |
| January 1, 2017 | -7.659 | | 146.59 | 175.55 |
| February 1, 2017 | -8.247 | | 143.65 | 172.02 |
| March 1, 2017 | -7.314 | | 148.32 | 177.61 |
| April 1, 2017 | -5.770 | | 155.35 | 186.05 |
| May 1, 2017 | -7.998 | | 144.79 | 173.38 |
| June 1, 2017 | -5.191 | | 159.61 | 191.16 |
| July 1, 2017 | -5.635 | | 157.32 | 188.42 |
| August 1, 2017 | -7.867 | | 145.30 | 174.01 |
| September 1, 2017 | -9.278 | | 138.19 | 165.47 |
| October 1, 2017 | -7.391 | | 147.64 | 176.80 |
| November 1, 2017 | -5.305 | | 158.18 | 189.46 |
| December 1, 2017 | -7.839 | | 145.51 | 174.26 |
| | | | | |
| January 1, 2018 | -6.115 | | 154.28 | 184.75 |
| February 1, 2018 | -5.747 | | 156.16 | 187.00 |

**MAUI ELECTRIC COMPANY, LTD. -- Maui Division
RESIDENTIAL SURCHARGE DATA**

| EFFECTIVE DATE | DESCRIPTION OF SURCHARGE | RATE |
|---------------------|--|------------------------------|
| 06/01/11 | IRP RECOVERY REFUND | 0.000 PERCENT ON BASE |
| 08/01/13 | FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR | |
| 01/01/16 - 01/31/16 | PURCHASED POWER ADJUSTMENT | -0.1055 CENTS/KWH |
| 01/01/16 - 06/30/16 | GREEN INFRASTRUCTURE FEE | 1.30 DOLLARS/MONTH |
| 02/01/16 - 02/29/16 | PURCHASED POWER ADJUSTMENT | -0.0338 CENTS/KWH |
| 03/01/16 - 03/31/16 | PURCHASED POWER ADJUSTMENT | -0.0325 CENTS/KWH |
| 03/01/16 - 02/28/17 | RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION | 0.0099 CENTS/KWH |
| 04/01/16 - 04/30/16 | PURCHASED POWER ADJUSTMENT | -0.0355 CENTS/KWH |
| 04/01/16 - 04/30/16 | SOLARSAVER ADJUSTMENT | -0.1835 CENTS/KWH |
| 05/01/16 - 03/31/17 | SOLARSAVER ADJUSTMENT | 0.0000 CENTS/KWH |
| 05/01/16 - 05/31/16 | PURCHASED POWER ADJUSTMENT | 0.0000 CENTS/KWH |
| 06/01/16 - 06/30/16 | PURCHASED POWER ADJUSTMENT | -0.0081 CENTS/KWH |
| 06/01/16 - 05/31/17 | REVENUE BALANCING ACCOUNT RATE ADJUSTMENT | 1.4082 CENTS/KWH |
| 07/01/16 - 04/30/17 | PURCHASED POWER ADJUSTMENT | 0.0000 CENTS/KWH |
| 07/01/16 - 12/31/16 | GREEN INFRASTRUCTURE FEE | 1.13 DOLLARS/MONTH |
| 07/01/16 - 06/30/17 | RESID. PBF SURCHARGE ADJUSTMENT | 0.5865 CENTS/KWH |
| 01/01/17 - 06/30/17 | GREEN INFRASTRUCTURE FEE | 1.27 DOLLARS/MONTH |
| 03/01/17 | RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION | 0.0098 CENTS/KWH |
| 04/01/17 - 04/30/17 | SOLARSAVER ADJUSTMENT | -0.1378 CENTS/KWH |
| 05/01/17 | SOLARSAVER ADJUSTMENT | 0.0000 CENTS/KWH |
| 05/01/17 - 05/31/17 | PURCHASED POWER ADJUSTMENT | -0.0224 CENTS/KWH |
| 06/01/17 - 06/30/17 | PURCHASED POWER ADJUSTMENT | -0.0218 CENTS/KWH |
| 06/01/17 | REVENUE BALANCING ACCOUNT RATE ADJUSTMENT | 1.5654 CENTS/KWH |
| 07/01/17 - 12/31/17 | GREEN INFRASTRUCTURE FEE | 1.18 DOLLARS/MONTH |
| 07/01/17 - 07/31/17 | PURCHASED POWER ADJUSTMENT | -0.0202 CENTS/KWH |
| 07/01/17 | RESID. PBF SURCHARGE ADJUSTMENT | 0.4244 CENTS/KWH |
| 08/01/17 - 08/31/17 | PURCHASED POWER ADJUSTMENT | -0.0286 CENTS/KWH |
| 09/01/17 - 09/30/17 | PURCHASED POWER ADJUSTMENT | -0.0307 CENTS/KWH |
| 10/01/17 - 10/31/17 | PURCHASED POWER ADJUSTMENT | -0.0275 CENTS/KWH |
| 11/01/17 - 11/30/17 | PURCHASED POWER ADJUSTMENT | -0.0058 CENTS/KWH |
| 12/01/17 - 12/31/17 | PURCHASED POWER ADJUSTMENT | -0.0054 CENTS/KWH |
| 01/01/18 - 01/31/18 | PURCHASED POWER ADJUSTMENT | -0.0060 CENTS/KWH |
| 01/01/18 | GREEN INFRASTRUCTURE FEE | 1.34 DOLLARS/MONTH |
| 02/01/18 | PURCHASED POWER ADJUSTMENT | 0.0003 CENTS/KWH |

~ Surcharges currently in effect are in bold.

~ Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.

**Maui Electric Company, Ltd. - Maui Division
Residential Bill at 500 kWh/Month Consumption**

