

MAUI DIVISION

ENERGY COST RECOVERY CLAUSE

Applicable To

| | |
|-------------------|--|
| Schedule "R" | - Residential Service |
| Schedule "G" | - General Service - Non Demand |
| Schedule "J" | - General Service - Demand |
| Schedule "P" | - Large Power Service |
| Schedule "F" | - Public Street Lighting |
| Schedule "TOU EV" | - Residential Time-of-Use Service with Electric Vehicle |
| Schedule "TOU-R" | - Residential Time-of-Use Service |
| Schedule "TOU-G" | - Small Commercial Time-of-Use Service |
| Schedule "TOU-J" | - Medium Commercial Time-of-Use Service |
| Schedule "TOU-P" | - Large Power Time-of-Use Service |
| Schedule "SS" | - Standby Service |
| Schedule EV-F | - Commercial Public Electric Vehicle Charging Facility Service Pilot |
| Schedule TOU-RI | - Residential Interim Time-of-Use Service |
| Schedule E-BUS-J | - Commercial Electric Bus Charging Facility Service Pilot |
| Schedule E-BUS-P | - Commercial Electric Bus Charging Facility Service Pilot |

All terms and provisions of the above listed rate schedules are applicable, except that the Monthly Energy Cost Recovery Factor described below will be multiplied by the billed kWh and added to the customer bill.

All base rate schedule discounts, surcharges, and all other adjustments will not apply to the Energy Cost Recovery Clause.

The Energy Cost Recovery Clause shall be consistent with the terms of fuel contracts, distributed generation contracts, and purchased energy contracts. Changes to the Energy Cost Recovery Clause may be proposed by application to the Commission.

Monthly Energy Cost Recovery Factor

The Monthly Energy Cost Recovery Factor shall be the sum of the Company Composite Central Station With Other Generation Component, the Purchased Energy Component, the Distributed Generation Energy Component, the Non-Adjustable Component, and the Monthly Fossil Fuel Cost Risk Sharing Component.

The Monthly Energy Cost Recovery Factor shall normally be effective on the 1st day of the month. When a customer's billing period includes more than one applicable Monthly Energy Cost Recovery Factor, each Monthly Energy Cost Recovery Factor will be prorated to the customer bill for the number of days each factor was in effect.

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MAUI DIVISION
Energy Cost Recovery Clause (Continued)

COMPANY COMPOSITE CENTRAL STATION WITH OTHER GENERATION COMPONENT - The Company Composite Central Station with Other Generation Component shall be the current Weighted Composite Central Station + Other Generation cost. The current Weighted Composite Central Station + Other Generation cost shall be determined by the current Composite Cost of Generation in cents per million BTU weighted by the proportion of current company-owned Central Station + Other generation to total system net energy, multiplied by the 2020 efficiency factors of 0.015786 million BTU per kWh for industrial fuel, 0.009938 million BTU per kWh for diesel fuel, and 0.011072 million BTU per kWh for other company generation sources, weighted by the current proportion of generation produced by each generation source to the total company-owned generation, and adjusted for revenue taxes.

PURCHASED ENERGY COMPONENT - The Purchased Energy Component shall be the current Composite Cost of Purchased Energy, in cents per kWh, weighted by the proportion of current purchased energy to the total system net energy, adjusted to the sales delivery level and adjusted for revenue taxes. The Company shall also show the composite cost of fossil fuel purchased energy and the composite cost of renewable purchased energy that comprise the composite cost of purchased energy.

DISTRIBUTED GENERATION ENERGY COMPONENT - The Distributed Generation Energy Component shall be the current Composite Cost of DG Energy, in cents per kWh, weighted by the proportion of current DG energy to total system net energy, adjusted to the sales delivery level and adjusted for revenue taxes.

NON-ADJUSTABLE COMPONENT - The Non-Adjustable Component is the sum of the Maalaea startup biodiesel fuel expense, Hana Ultra Low Sulfur Diesel fuel expense, and Ignition Start Up and Fuel Handling Expenses per kWh established in the Company's rate case, adjusted for revenue taxes. The Non-Adjustable Component is excluded from the Reconciliation Adjustment described below.

MONTHLY FOSSIL FUEL COST RISK SHARING COMPONENT - The Monthly Fossil Fuel Cost Risk Sharing Component shall equal 2% of the difference of the Monthly Fossil Cost for all fossil fuel types less the Monthly Base Fossil Recovery Target for all fossil fuel types, divided by the forecast sales for the month, multiplied by negative one (-1), and adjusted for revenue taxes. The year-to-date sum of the Monthly Fossil Fuel Cost Risk Sharing Components shall be subject to a calendar year maximum of ±\$570,000, provided that if this provision first becomes effective on a date other than January 1, the above maximum shall be pro-rated for the remainder of the initial calendar year based on the number of days remaining in the calendar year from the date this section becomes effective.

The Monthly Fossil Cost for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the forecasted cost per million Btu for that fossil fuel type.

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Energy Cost Recovery Clause (Continued)

The Monthly Base Fossil Recovery Target for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the Fossil Fuel Baseline Cost for that fossil fuel type.

The Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year, provided that if actual fossil fuel costs in the first applicable month of the year are not yet known, forecasted fossil fuel costs may be used in the above calculation, and provided that if actual million Btu in the first applicable month of the year are not yet known, forecasted million Btu may be used in the above calculation. The first applicable month shall be January of each year, provided that when this provision first becomes effective, the month this provision becomes effective shall be used as the first applicable month for the calculation of the Fossil Fuel Baseline Cost for the initial calendar year.

Revenue taxes shall be calculated using current rates of the Franchise Tax, Public Service Company Tax, and Public Utility Commission Fee.

TARGET HEAT RATES AND DEADBANDS

Target Heat Rates:

1. The target heat rates shall be the 2020 efficiency factors of 0.015786 million BTU per kWh for industrial fuel, 0.009938 million BTU per kWh for diesel fuel, and 0.011072 million BTU per kWh for other company generation sources. The overall target heat rate shall be the weighted average efficiency factor of all sources.
2. The target heat rates for industrial fuel and diesel may be reestablished each calendar year, beginning at January 1, 2020. If the prior year's actual sales heat rate for a fuel type is greater than or equal to the target sales heat rate applicable in that year, the target sales heat rate for that fuel type remains unchanged. If the prior year's actual sales heat rate for a fuel type is less than the target sales heat rate applicable in that year, the target sales heat rate for that fuel type shall be reduced by one-half of the difference between the prior year's actual sales heat rate and the target sales heat rate applicable in that year. For the potential reestablishment of target heat rates on January 1, 2020, the calculation of the applicable heat rates shall include only the months in 2019 in which the restored Kaheawa Wind Power 2, LLC ("KWP2") Battery Energy Storage System ("BESS") has been operating if less than the entire 2019 calendar year.

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Energy Cost Recovery Clause - (Continued)

Deadbands:

3. Application of the Deadbands

- a. The deadband shall be applied around its respective target heat rate for each fuel type where a target heat rate has been established. The deadband shall be ± 100 Btu/kWh-sales as of January 14, 2019, the date that the KWP II BESS retrofit passed acceptance testing. This deadband will apply to all fuel types used by the Company.
- b. If target heat rates are modified, the deadband levels described in Section 3.a above shall apply around the modified target heat rate.

Modifications to Target Heat Rates and Deadbands:

4. The deadband shall be -100 Btu/kWh-sales until the KWP2 BESS is completed and the BESS retrofit has successfully completed acceptance testing and meets the performance standards in the KWP2 Purchase Power Agreement ("PPA"). The deadband shall be ± 100 Btu/kWh-sales while the KWP2 BESS is operating and performing consistent with the KWP2 PPA performance standards. The deadband shall be -100 Btu/kWh-sales when the KWP2 BESS is not in compliance with the KWP2 PPA performance standards. The deadband will apply to all fuel types used by the Company.
5. Should there be a change in the deadband level as described in Section 4 above, the Company shall refile the applicable tariff sheets to indicate the current applicable deadband.
6. Modifications to target heat rates and/or deadbands may be determined in a rate case.
7. Modifications to target heat rates and/or deadbands may be made outside of a rate case proceeding by application by the Company or the Consumer Advocate, or by an investigation by the Commission on its own motion.
 - a. An applicant must make a separate request to the Commission, and provide appropriate justification and support.

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Energy Cost Recovery Clause - (Continued)

1. Sufficient basis for justification of a change in target heat rate and/or deadband may include but not be limited to the following:

- a. Addition or retirement of non-utility firm or non-utility non-firm renewable resources (such as wind or photovoltaics) from which the utility will purchase capacity and/or energy under a Power Purchase Agreement that exceed 5 MW;
- b. Addition or retirement of utility firm and non-firm renewable resources (such as wind or photovoltaics) that exceed 5 MW. Modifications to the target heat rate and/or deadband may be determined as part of the application for approval to expend funds (in accordance with General Order No. 7) for the resource that would cause the change;
- c. Additions, retirements or modifications to the generating systems, or modifications to the generating system operating procedures, that are expected to increase or decrease the target heat rates by more than the deadband amount; or
- d. The recorded heat rate is outside of the deadband around the target heat rate and is expected to remain outside of the deadband.

- b. Any proposed modification to target heat rates and/or deadbands under this provision shall not take effect until approved by the Commission.

YEAR-TO-DATE FOSSIL FUEL COST RISK SHARING ADJUSTMENT

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be subject to an annual maximum of ±\$570,000 in aggregate across all Maui Division company-generation fossil fuel types subject to fossil fuel cost risk sharing. This section shall take effect as of September 1, 2019, and the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be included in the Reconciliation Adjustment, beginning with the Reconciliation Adjustment for the Third Quarter of 2019. The annual maximum sharing for the initial calendar year shall be pro-rated based on the number of days remaining in the calendar year from the date this section becomes effective in the initial calendar year.

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Energy Cost Recovery Clause - (Continued)

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be excluded from the determination of Earnings Sharing Revenue Credits provided for in the Rate Adjustment Mechanism Provision.

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall equal 2% of the difference between the sum of the Year-To-Date Fuel Filing Cost Recovery Amount across all fossil fuel types and the sum of the Year-To-Date Base Cost Recovery Target across all fossil fuel types.

The Year-To-Date Fuel Filing Cost Recovery Amount for a fossil fuel type shall be the sum of the Eligible Revenue for fuel for that fossil fuel type for all months, as determined in the Reconciliation Adjustment section below.

The Year-To-Date Base Cost Recovery Target for a fossil fuel type shall equal the applicable target heat rate, multiplied by the sales kWh for that fossil fuel type, multiplied by the Reconciliation Fossil Fuel Baseline Cost for that fossil fuel type.

The Reconciliation Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year. The first applicable month of the year for the initial calendar year shall be the month in which this provision takes effect.

RECONCILIATION ADJUSTMENT:

In order to reconcile any differences that may occur between recorded revenue and eligible revenue from the Energy Cost Recovery Clause, the year-to-date recorded revenue from the Energy Cost Recovery Clause will be compared with the year-to-date eligible revenue from the Energy Cost Recovery Clause on a quarterly basis. If there is a variance between the year-to-date recorded revenue from the Energy Cost Recovery Clause and the year-to-date eligible revenue from the Energy Cost Recovery Clause, a reconciliation adjustment shall be added to the rate calculated under the Energy Cost Recovery Clause to reconcile the revenue variance. This reconciliation adjustment shall be applied at the beginning of the second month after the end of the quarter, and shall be set to recover the revenue variance over the estimated sales for the subsequent three months.

The Non-Adjustable Component revenue will be excluded from the Energy Cost Recovery Clause revenue for the purposes of this reconciliation. The Non-Adjustable Component revenue is the Non-Adjustable Component multiplied by year-to-date sales kWh.

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Energy Cost Recovery Clause - (Continued)

The eligible revenue from the Energy Cost Recovery Clause shall be equal to the eligible revenue for fuel, DG, and purchased energy expenses, adjusted by the Year-to-Date Fossil Fuel Cost Risk Sharing Adjustment.

The eligible revenue for fuel is calculated for each fuel type each month as:

The sales kWh for that fuel type
multiplied by the adjusted target heat rate for that fuel type
multiplied by the average fuel cost per million Btu
and then summed across all fuel types.

When the KWP2 BESS is operating and performing consistent with the PPA performance standards, the adjusted target heat rate for each fuel type is established by comparing the applicable target heat rate, adjusted by a plus or minus 100 BTU/kWh sales heat rate deadband versus the year-to-date actual heat rate. The year-to-date actual heat rate is derived by dividing the fuel type's year-to-date MMbtu consumption by the fuel type's share of year-to-date recorded sales. If the year-to-date actual heat rate is greater than the applicable target heat rate plus 100 BTU/kWh, then the adjusted target heat rate is the applicable target heat rate plus 100 BTU/kWh. If the year-to-date actual heat rate is less than the applicable target heat rate less 100 BTU/kWh, then the adjusted target heat rate is the applicable target heat rate less 100 BTU/kWh. If the year-to-date actual heat rate falls between the applicable target heat rate adjusted by a plus or minus 100 BTU/kWh, then the adjusted target heat rate is the year-to-date actual heat rate.

When the KWP II BESS is not operational, or is not operating and performing consistent with the PPA performance standards, the adjusted target heat rate for each fuel type is established by comparing the applicable target heat rate, adjusted by a minus 100 BTU/kWh sales heat rate deadband versus the year-to-date actual heat rate. The year-to-date actual heat rate is derived by dividing the fuel type's year-to-date MMbtu consumption by the fuel type's share of year-to-date recorded sales. If the year-to-date actual heat rate is greater than the applicable target heat rate, then the adjusted target heat rate is the applicable target heat rate. If the year-to-date actual heat rate is less than the applicable target heat rate less 100 BTU/kWh, then the adjusted target heat rate is the applicable target heat rate less 100 BTU/kWh. If the year-to-date actual heat rate falls between the applicable target heat rate adjusted by minus 100 BTU/kWh, then the adjusted target heat rate is the year-to-date actual heat rate.

The eligible revenue for DG and purchased energy expenses is equal to the amount of their respective expenses.

Revenue from the Energy Cost Recovery Clause excludes revenue taxes for the purpose of this reconciliation.

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