SCHEDULE "CBRE"

COMMUNITY-BASED RENEWABLE ENERGY PROGRAM

A. PURPOSE

The purpose of this program is to provide the Company's customers with the opportunity to participate in a community-based renewable energy ("CBRE") program in accordance with Act 100, Session Laws of Hawaii 2015, Community-Based Renewable Energy Tariff ("Act 100"). The CBRE, in accordance with Act 100, is designed to:

- (1) allow an eligible customer to participate in an eligible renewable energy project that is providing electricity and electric grid services to the Company;
- (2) allow the Company to implement a billing arrangement to compensate those customers for the electricity and electric grid services provided to the Company;
- (3) provide fair compensation for electricity, electric grid services, and other benefits provided to or by the Company, participating ratepayers, and non-participating ratepayers; and
- (4) to the extent possible, standardize and streamline the related interconnection processes for community-based renewable energy projects.

As noted in Act 100, many residents and businesses are currently unable to directly participate in renewable energy generation because of their location, building type, access to the electric utility grid, and other impediments. In accordance with Act 100, the CBRE program attempts to rectify this by expanding the market to participate in renewable energy resources to include residential and business renters, occupants of residential and commercial buildings with shaded or improperly oriented roofs, and other groups who are unable to access the benefits of onsite clean energy generation.

B. ELIGIBLE RENEWABLE ENERGY PROJECTS

This CBRE program shall be available only to an "Eligible Renewable Energy Project" (as defined below) that meets and complies with the provisions of this Schedule "CBRE." Acceptance into and participation in this CBRE program shall at all times be in accordance with, and subject to, the provisions of this Schedule "CBRE."

An "Eligible Renewable Energy Project" for purposes of this CBRE program is a generating facility that produces 100% renewable energy and that meets each of the following requirements:

- The generating facility shall be no less than 250 kilowatts (kW) in size. In the event there is more than one generating facility located on a single parcel of land (i.e., Tax Map Key) that are being considered for participation in this Schedule "CBRE," they shall be considered as a single generating facility for the purpose of determining whether the cumulative size of the facilities fall within the size limitations set forth in this Schedule "CBRE;"
- 2. The generating facility shall have been submitted in accordance with the solicitation process set forth in Section E (Solicitation Process for Eligible Renewable Energy Projects) below and selected for participation in this program by the Company;

- 3. A purchase power agreement ("PPA"), setting forth the terms governing the purchase of the energy produced by the generating facility and provided to the Company shall have been entered into with the Company and approved by the Commission. The PPA shall contain all of the terms and conditions set forth in the Company's standard form PPA for this CBRE program, together with the purchase power rate structure for the generating facility as determined in accordance with Section C (Purchase Power Rates) below;
- 4. An Interconnection Agreement, setting forth the terms governing the interconnection of the generating facility and its operation in parallel with the Company's transmission and/or distribution facilities, shall have been entered into with the Company in accordance with the Company's Tariff No. 2;
- 5. The owner/developer of the generating facility must agree to allow (a) the installation of curtailment devices, and (b) the Company to curtail the delivery of energy from the generating facility without payment for energy curtailed during a "curtailment condition." A "curtailment condition" exists when the cumulative output from the Company's existing supply of zero dispatch cost resources, take-or-pay power purchase agreements, and required spinning reserves exceed load. The Company's curtailment rights, including the Company's policies for determining the priority and level of curtailment that each Eligible Renewable Energy Project in this program will be subject to, are set forth in the standard form PPA;
- 6. The ownership, installation, and operation of the generating facility shall at all times be in compliance with all applicable statutes, rules, tariffs, and regulations (including without limitation, this Schedule "CBRE") governing the ownership and interconnection of such facility; and
- 7. The addition of the generating facility to the CBRE program shall not result in the total aggregate of all Eligible Renewable Energy Projects exceeding 3 megawatts (MW).

In addition, in order to have the generating facility qualify as an Eligible Renewable Energy Project under this Schedule "CBRE," the developer/owner/operator of the facility shall also be subject to additional program participation conditions and requirements that the Company may impose from time to time upon all Eligible Renewable Energy Projects in this CBRE program.

For purposes of the CBRE program, an Eligible Renewable Energy Project shall fall into one of two classes, as follows:

- <u>Class I</u>: An Eligible Renewable Energy Project that generates at least 85% of its total output each calendar month between the hours of 4:00 p.m. and 9:00 a.m. (i.e., outside of the peak irradiance period).*
- <u>Class II</u>: Any Eligible Renewable Energy Project that is not a Class I project.

* When, in any given month, a Class I Eligible Renewable Energy Project generates more than 15% of its total output between the hours of 9:00 a.m. and 4:00 p.m. (i.e., during the peak irradiance period), the portion of such total output during the peak irradiance period that is above 15% shall be "Excess Class I Peak Irradiance Output." Class I Eligible Renewable Energy Projects will not receive any payment for Excess Class I Peak Irradiance Output.

C. PURCHASE POWER RATES

The purchase power rate that will be paid to an Eligible Renewable Energy Project will vary depending on the amount of capacity purchased (i.e., subscribed to) by customer participants in the CBRE program as further detailed below (Section D.3 below addresses the purchase/subscription of capacity by customer participants). This will be accomplished by utilizing two different rates for each Eligible Renewable Energy Project: (i) the <u>CBRE</u> <u>Subscription Rate</u> (as defined below), which will apply to the portion of the capacity purchased or subscribed to by customer participants in the CBRE program, and (ii) the <u>CBRE Unsubscribed</u> <u>Rate</u> (as defined below), which will apply to the remainder of the capacity (i.e., the capacity that has not been purchased or subscribed to by customer participants).

1. <u>CBRE Unsubscribed Rate</u>. As noted above, the CBRE Unsubscribed Rate will apply to the portion of the capacity of an Eligible Renewable Energy Project that has <u>not</u> been purchased or subscribed to by customer participants in accordance with Section D.3 below.

The CBRE Unsubscribed Rate for each class of Eligible Renewable Energy Projects is as follows:

- <u>Class I:</u> \$0.1108/kilowatt-hour (kWh) received by the Company
- Class II: \$0.08322/kWh received by the Company

The purpose of the CBRE Unsubscribed Rate is to provide each Eligible Renewable Energy Project a guaranteed minimum rate, regardless of the amount of program capacity purchased/subscribed to by customer participants.

The reason for the higher rate for Class I projects is to provide an incentive for the development of renewable generating facilities that can provide renewable energy to the Company outside of the peak irradiance period (i.e., between the hours of 4:00 p.m. and 9:00 a.m.). Without an increase in daytime load, the Company does not currently need additional intermittent generation resources during the peak irradiance period. It would not be in the interest of the Company's overall membership base to pay a premium for new resources that are not required for system needs – in those situations, a developer/owner/operator of an Eligible Renewable Energy Project should be paid no more than what the Company has paid for similar resources, or the avoided cost price at which the Company could self-develop a similar resource.

2. <u>CBRE Subscription Rate</u>. As noted above, the CBRE Subscription Rate will apply to the portion of the capacity of an Eligible Renewable Energy Project that has been purchased or subscribed to by customer participants in accordance with Section D.3 below.

The CBRE Subscription Rate for an Eligible Renewable Energy Project shall be the rate for the Eligible Renewable Energy Project resulting from the CBRE Project Solicitation process in accordance with Section E (Solicitation Process for Eligible Renewable Energy Projects) below and included in the PPA for that Eligible Renewable Energy Project. The CBRE Subscription Rate for an Eligible Renewable Energy Project may not exceed \$0.19143/kWh, which is the amount of the Company's Fuel & Purchase Power Energy Charge that was included in base rates in Docket No. 2009-0050.

3. <u>Purchase Power Rate</u>. The purchase power rate paid to an Eligible Renewable Energy Project shall be the weighted average of the applicable CBRE Subscription Rate and CBRE Unsubscribed Rate, with the weighting factor (*w*) defined as: *w* = the ratio of total program capacity purchased/subscribed to by customer participants to the total capacity of all Eligible Renewable Energy Projects in service and providing energy to the Company pursuant to an executed PPA

The weighting factor is calculated monthly.

The purchase power rate for an Eligible Renewable Energy Project for a given calendar month shall be calculated by the following formula:

Purchase power rate = (CBRE Subscription Rate * w) + (CBRE Unsubscribed Rate * (1 – w))

Notwithstanding the above, and as stated in Section B above, Class I Eligible Renewable Energy Projects will not receive any payment for Excess Class I Peak Irradiance Output.

4. The applicable purchase power rate structure developed in accordance with this Section C shall be included in the applicable PPA for the Eligible Renewable Energy Project and shall apply for a period of twenty (20) years, which rate and/or PPA shall be subject to Commission approval.

D. CUSTOMER PARTICIPATION IN ELIGIBLE RENEWABLE ENERGY PROJECTS

An eligible customer may participate in the CBRE program by purchasing (also referred to as subscribing to) a portion of capacity of the Eligible Renewable Energy Projects that are then in service and providing energy to the Company. Through such purchase/subscription, the customer participant is not acquiring any actual ownership interest in the Eligible Renewable Energy Projects, and thus is not assuming any maintenance, operation, insurance or other obligations or liabilities under any applicable PPA or Interconnection Agreement. Instead, through the virtual purchase of capacity from the Eligible Renewable Energy Projects, the customer participant will receive credits applied to its electric bill in proportion to its purchase of/subscription to capacity.

Participation in this CBRE program shall at all times be in accordance with, and subject to, the provisions of this Schedule "CBRE."

1. <u>Eligibility Requirements</u>.

In order to be eligible to participate in the CBRE program (an "eligible customer participant"), the customer must (1) have a smart meter (which is necessary to provide the billing credits under this program), and (2) certify (in form and manner acceptable to the Company) that the customer is unable to install its own renewable distributed energy resource facility and access the benefits of onsite renewable energy generation on its owned or leased property, due to its location, building type, access to the electric utility grid, or other impediment such as the customer being a renter or that the customer's residential or commercial building has continuously shaded or improperly oriented roofs.

2. <u>Enrollment Process and Wait List</u>.

Eligible customer participants may enroll on a "first come, first served basis" until there is no remaining program capacity available, at which point a waiting list will be maintained by the Company. Each enrollment period is for twelve (12) months. If any existing customer participants choose not to re-enroll after the end of their respective 12-month periods, or if any additional program capacity becomes available, the available program capacity will be offered to the next customer on the waiting list. Existing customer participants wishing to enroll for additional capacity will be subject to the same waiting list process for their respective incremental capacity requests.

3. <u>Purchase/Subscription of Capacity</u>.

Once an eligible customer participant is enrolled and the Company confirms that there is capacity available under this program, the eligible customer participant may sign up to purchase/subscribe to (through payment of the Monthly Capacity Purchase Charge, as described in Section D.5, below) an amount of program capacity subject to the limits shows in the following table:

	Individual Minimum	Individual Maximum	Total Program
Residential	250 watts (W)	1 kW	Lesser of 1 MW or 33.3% of developed CBRE capacity
Commercial	1 kW	100 kW	Lesser of 1 MW or 33.3% of developed CBRE capacity
Large Power	100 kW	1 MW	Lesser of 1 MW or 33.3% of developed CBRE capacity

4. <u>Enrollment and Participation Period</u>.

Once an eligible customer participant enrolls and purchases/subscribes to capacity in accordance with the above, the eligible customer participant is enrolled to participate in the CBRE program for a period of twelve (12) months.

At the conclusion of a 12-month enrollment period, an eligible customer participant will be automatically re-enrolled for the successive 12-month period unless the customer participant provides written notice to the Company of its intention to opt out of the program at least fifteen (15) days prior to the commencement of the successive 12-month period. Not less than thirty (30) days before the expiration of an eligible customer participant's 12-month enrollment period, the Company shall send notice of the customer participant's right to opt out of re-enrollment.

5. Monthly Capacity Purchase Charge and Monthly Billing Credit.

While an eligible customer participant is enrolled in the CBRE program, the eligible customer participant will: (i) pay a Monthly Capacity Purchase Charge (i.e., the charge for the customer participant's purchase/subscription of CBRE capacity), as described below, and (ii) be entitled to a Monthly Billing Credit, as described below. The Monthly Capacity Purchase Charge and the Monthly Billing Credit will be posted to the eligible customer participant's electric bill in the month following the applicable calendar month.

The calculation of the Monthly Capacity Purchase Charge and the Monthly Billing Credit depend on the customer participant's Energy Share and the CBRE Average Realized Purchase Rate, both described below.

<u>Energy Share</u>: This represents the pro rata share of energy delivered by all Eligible Renewable Energy Projects proportional to the customer participant's share of total available program capacity. The calculation for determining a customer participant's Energy Share for a given calendar month is:

Eligible customer participant's enrolled/subscribed capacity ÷ *total program capacity* * *(total CBRE energy production of Eligible Renewable Energy Projects* - Excess Class I Peak Irradiance Output)

<u>CBRE Average Realized Purchase Rate</u>: This is the weighted average CBRE Subscription Rate realized by all Eligible Renewable Energy Projects that are in service and providing energy to the Company for a given calendar month, subject to the provisions set forth in Section C above. The calculation for determining the CBRE Average Realized Purchase Rate in a given calendar month is:

 Σ (Project i CBRE Subscription Rate * (Project i delivered kWh – Project i Excess Class I Peak Irradiance Output)) ÷ Σ (Project i delivered kWh – Project i Excess Class I Peak Irradiance Output)

The CBRE Average Realized Purchase Rate will vary from month to month based on the mix of delivered kWh from the Eligible Renewable Energy Projects. In no circumstances will the CBRE Average Realized Purchase Rate be greater than the maximum CBRE Subscription Rate of \$0.19143/kWh, nor will it be less than the Class II CBRE Unsubscribed Rate of \$0.08322/kWh.

<u>Monthly Capacity Purchase Charge</u>: This monthly charge is the customer participant's payment for its purchase/subscription of CBRE capacity. The calculation for determining the Monthly Capacity Purchase Charge for any given calendar month is:

Energy Share * CBRE Average Realized Purchase Rate

<u>Monthly Billing Credit</u>: This is the customer participant's credit for its Energy Share at the current Fuel and Purchased Power (F&PP) Energy Charge, as adjusted by the Energy Rate Adjustment Clause (ERAC). The F&PP Energy Charge, as adjusted by ERAC, represents the variable cost to the Company of providing system mix generation. Because a customer participant is effectively switching supply for its kWh from a Company system mix to a particular portfolio of renewable resources (i.e., the Eligible Renewable Energy Projects in the CBRE program), it is appropriate for the CBRE Average Realized Purchase Rate to replace the ERAC-adjusted F&PP rate. This will allow customer participants to use the CBRE program as a hedge against fossil fuel costs.

The calculation for determining the Monthly Billing Credit for any given calendar month is:

MINIMUM [Energy Share, Customer Usage] * (F&PP Energy Charge + ERAC)

In any given month, a customer participant's Monthly Billing Credit may be lower or equal to, but may never exceed, the customer's actual F&PP energy charge plus ERAC. No excess bill credits may be accrued, and thus no bill credits may be carried over to any subsequent calendar month.

E. SOLICITATION PROCESS FOR ELIGIBLE RENEWABLE ENERGY PROJECTS

- 1. Within thirty (30) days of the effective date of this Schedule "CBRE," the Company will give public notice of its intent to issue a CBRE Project Solicitation to accept offers for Eligible Renewable Energy Projects to participate in the CBRE program.
- 2. The CBRE Project Solicitation shall be a one-time event. Offerors of proposed Eligible Renewable Energy Projects shall submit bids on a designated date (to be determined by

the Company and set forth in the CBRE Project Solicitation) containing, at a minimum, projected Class I or Class II designation (per criteria in Section B above), renewable technology type, projected in-service date, size, and CBRE Subscription Rate (as defined in Section C.2 above).

- 3. The Company shall determine whether any offeror is qualified to participate in the CBRE program. The Company may require a performance bond or other form of security or guarantee from proposed and in-development projects to assure completion.
- 4. In the event that the aggregate capacity of qualified projects offered into the program exceeds the program maximum set forth above (i.e., a total aggregate of 3 MW), the Company shall remove projects following a consideration of each projects' renewable technology type and operating characteristics, projected class designation, offered CBRE Subscription Rate, projected in-service date, benefits to the Company's system, and other factors that are reasonably in furtherance of the provision of electric services, until the 3 MW maximum is no longer exceeded.