MEMORANDUM OF UNDERSTANDING

Between the

University of Hawai‘i and the Hawaiian Electric Companies

Regarding

Collaboration on a Green Tariff Rate and Program

This Memorandum of Understanding ("MOU") is entered into by and between the University of Hawai‘i ("University of Hawai‘i") and the Hawaiian Electric Company, Inc. ("Hawaiian Electric"), Maui Electric Company, Ltd. ("Maui Electric"), Hawai‘i Electric Light Company, Inc. ("Hawai‘i Electric") and is effective as of October 27, 2017 ("Effective Date"). Hawaiian Electric, Maui Electric and Hawai‘i Electric may be referred to as the "Hawaiian Electric Companies" or the "Companies." The Hawaiian Electric Companies and the University of Hawai‘i may be referred to individually as a "Party" and collectively referred to as the "Parties."

RECITALS

WHEREAS, the University of Hawai‘i, established in 1907, is a public system of higher education, with ten campuses and educational centers on six Hawaiian Islands (collectively, "campuses"), whose purpose is to serve the public by creating, preserving and transmitting knowledge in a multi-cultural environment;

WHEREAS, on June 8, 2015 Governor Ige signed Act 217 (2017), codified as section 304A-119, Hawai‘i Revised Statutes, "University of Hawai‘i; net-zero energy goal," which establishes a collective goal for the University of Hawai‘i of becoming net-zero with respect to energy use, producing as much energy as the system consumes across all campuses by January 1, 2035 ("Net-Zero Goal");

WHEREAS, the Hawaiian Electric Companies, established in 1891, provide electricity and services to 95% of the State’s 1.4 million residents and are a national leader in the integration of renewable energy resources on their respective island grids;

WHEREAS, on June 8, 2015, Governor Ige signed Act 97, amending section 269-92, Hawai‘i Revised Statutes, "Renewable portfolios," which requires electric utilities to establish a renewable portfolio standard of one-hundred percent of their sales by 2045 ("RPS Law");

WHEREAS, the Parties wish to actively explore innovative renewable energy programs intended to aid and support the University of Hawai‘i in achieving the Net-Zero Goal and the Hawaiian Electric Companies in complying with the RPS Law;

WHEREAS, the Parties have identified as a potentially viable option, and therefore wish to further consider and pursue, a certain renewable energy program, referred to and known generally as a "green tariff," under which an off-site renewable energy project is
developed in response to a utility green tariff competitive procurement process;

WHEREAS, University of Hawai‘i believes its participation in a green tariff rate and program through the Hawaiian Electric Companies ("Green Tariff"), under which an off-site renewable energy project would be developed in response to a utility green tariff competitive procurement process, has the potential to aid and support its efforts in achieving the Net-Zero Goal, and that such a Green Tariff further is not anticipated to foreclose or limit energy efficiency measures or other distributed energy resources located at the campuses, other renewable energy project development pursuant to utility competitive procurement processes, including other variations of green tariffs, or any other potential commercial, regulatory or legislative measures to aid its achievement of the Net-Zero Goal;

WHEREAS, the Hawaiian Electric Companies believe the Green Tariff will aid and support their efforts to achieve the RPS Law, and will benefit other utility customers by procuring renewable energy projects that provide system-wide benefits to the electric system, through battery energy storage systems and otherwise;

WHEREAS, accordingly, the Parties seek a collaborative relationship to explore the design, development, and potential use by the University of Hawai‘i of a Green Tariff;

NOW, THEREFORE, the Parties set forth these non-binding terms under this MOU:

1. **Purpose and Scope of Green Tariff Working Group**

   The Parties agree to establish a Green Tariff Working Group ("Working Group") comprised of staff selected by each Party. The Working Group’s purpose and scope is expected to include the following:

   (a) Development of a Green Tariff, including but not limited to consideration of the following:

   • Green Tariff model

   • Program design options, based in part on a review of green tariff rates and programs proposed or adopted in other jurisdictions

   • Eligibility requirements

   • Contract and cost structure

   • Banking of excess energy generated by project, or other similar mechanism, to ensure excess generation is used only or primarily by the Green Tariff participant

   • Potential methods to address situation where a customer experiences permanent decline in load requirements
(b) Development of a policy statement by the University of Hawai‘i concerning the suitability of the Green Tariff to achieve the Net-Zero Goal.

(c) Determining appropriate sites for the development of renewable energy projects under the Green Tariff, including an initial focus on the Manoa campus, with the option to focus on other campuses in the future.

(d) Determining appropriate energy payment pricing for Green Tariff projects, subject to approval by the State of Hawai‘i Public Utilities Commission ("Commission"), that will benefit the University of Hawai‘i and also take into consideration potential impacts on other utility customers.

(e) Determining appropriate technical and interconnection technologies, such as combined solar photovoltaic and battery energy storage systems, which may provide cost-effective renewable energy to the University of Hawai‘i and may also benefit other utility customers by providing system-wide benefits to the utility’s electric system.

(f) Ensuring timely development, following Commission approval of the Green Tariff, of renewable energy projects serving the University of Hawai‘i, if any. For example, the Hawaiian Electric Companies anticipate issuing a Request for Proposals ("RFP") under the Green Tariff program within ninety days of approval of the request by the University of Hawai‘i, or other eligible customer, to participate in the Green Tariff program, and to complete the RFP process in a prompt and timely manner.

(g) Acknowledgement by the Parties that if the Green Tariff is ultimately approved by the Commission, participation in the Green Tariff by the University of Hawai‘i will be voluntary and that if the rate that results from a Green Tariff RFP is not acceptable, or if there is any other reason or objection, the University of Hawai‘i is not bound in any manner by the Green Tariff and may pursue any and all other approaches it deems appropriate to achieve its Net-Zero Goal.

(h) To reduce the energy rate from renewable energy projects developed to support green pricing, the University of Hawai‘i may consider making its land available at no or low cost to developers; provided, however, that any and all interests in land will be subject to final approval by the University of Hawai‘i Board of Regents.

(i) Consistent with the Parties’ commitment to explore development of a Green Tariff, subsequent to the Effective Date the parties intend to discuss a separate Memorandum of Understanding, or other similar agreement, pursuant to which the Parties would agree to collaborate on a broader and more comprehensive strategy, including a range of potential programs and initiatives, for achievement of the Net-Zero Goal, which programs and initiatives are expected to include, but not necessarily be limited to, optimization of a blend of tariffs to further the joint goal of lowering the total cost of purchased electricity for all campuses; expansion of distributed renewables; improved grid operations; increased energy resiliency and backup power; revision of existing tariffs for time of use rates; proposed tariffs and rates for demand response and distributed energy resources; and the creation of new alternative pricing
structures such as real-time pricing.

2. Green Tariff Working Group Tasks and Goals

The Working Group will collaborate to complete the following tasks and goals:

(a) Establishment of a timeline and schedule with key milestones, including but not limited to submission of an application to the Commission for approval of the Green Tariff ("Application"), which the Companies anticipate will be filed in the fourth quarter of 2017, and the issuance of a Green Tariff RFP for a University of Hawai‘i project within ninety days of Commission approval of the Application and the satisfaction of all participation requirements in connection with any such approval.

(b) Prioritization of renewable energy projects to be developed.

(c) To the extent it deems reasonable and appropriate, each Party will actively support approval of the Green Tariff concept, program and Application with a range of appropriate stakeholders, consistent with the Parties’ commitment to demonstrating a balance between policy, technical, economic, and community factors with regard to the Green Tariff; provided further that nothing in this Agreement shall bar or limit the University of Hawai‘i, in its sole discretion, from advocating for changes or modifications to the Application as filed with the Commission, or from seeking to intervene or participate in the regulatory proceeding before the Commission for approval of the Application.

(d) The Parties agree to seek opportunities beyond specific energy agreements, which may include education and participation opportunities for students and community groups, alternative financing for campus improvements, and the use of new innovative technologies that improve overall affordability, reliability and resilience for our communities.

(e) Monitor the progress projects implemented under the Green Tariff with data and analysis and identify any lessons learned for the University of Hawai‘i, and the Hawaiian Electric Companies.

3. Common Commitments of Collaboration

The Parties acknowledge that:

(a) No allocation or exchange of funds is required under this best efforts, good faith MOU.

(b) The Working Group will brief leadership among the Parties on a quarterly basis, identifying issues, challenges, and successes along the way and how leadership can best position resources to enable the success of the Green Tariff program.

(c) This MOU may be implemented through binding Memoranda of Agreements that will be separately negotiated and agreed to.
4. Lead Contacts for Each Party

For the University of Hawai‘i:

Matthew Lynch
System Sustainability Coordinator
Office: (808) 956-9437
Email: mklynch@hawaii.edu

Miles Topping
Director of Energy Management
Office: (808) 956-5202
Email: mtopping@hawaii.edu

For Hawaiian Electric Company:

Enrique Che
Manager, Field Services
Office: (808) 543-7281
Email: enrique.che@hawaiianelectric.com

Ruby Shimabukuro
Commercial Account Manager
Office: (808) 543-4617
Email: ruby.shimabukuro@hawaiianelectric.com

Michael Chang (Consultant)
Office: (808) 202-5283
Email: c-mchang@hawaiianelectric.com

5. Governing Law

This MOU is made under and shall be governed by and construed in accordance with the laws of the State of Hawai‘i.

6. Term of MOU

This MOU shall remain in effect for a period of three (3) years from the Effective Date, unless terminated earlier by either Party. Either Party may terminate this MOU, at its sole discretion and without cause, by providing written notice to the other Party ninety (90) days prior to the effective date of said termination.

7. Non-Binding Effect

Nothing in this MOU shall be deemed to constitute either Party hereto as partner, agent or representative of the other Party or to create any fiduciary relationship between the Parties.
Each Party shall be responsible for damages or injury caused by its respective officers and employees within the scope of their employment and performance under this MOU, to the extent that the liability for such damage or injury has been determined by a court or otherwise agreed to by the Parties, and the responsible party shall pay for such damage and injury to the extent permitted by law. Neither Party may claim any legal rights against the other by reason of any action taken in reliance on this MOU, including without limitation, any partial performance of the transactions contemplated herein or the expenditure of time and money in anticipation of entering into a contract. This MOU is neither transferable nor assignable, and any transfer or assignment shall be null and void. THE PARTIES HERETO EXPRESSLY ACKNOWLEDGE AND UNDERSTAND THAT THIS MOU DOES NOT CONSTITUTE, NOR IS IT INTENDED TO EVIDENCE, ANY LEGALLY BINDING AGREEMENT BETWEEN, OR OBLIGATION ON THE PART OF, EITHER PARTY HERETO, AND THAT NEITHER PARTY SHALL HAVE ANY LIABILITY OR OBLIGATION TO THE OTHER REGARDING THE SUBJECT MATTER HEREOF UNLESS AND UNTIL A FINAL, DEFINITIVE AGREEMENT, IF ANY, HAS BEEN EXECUTED AND DELIVERED BY AUTHORIZED REPRESENTATIVES OF EACH PARTY HERETO.

8. No Other Understandings

This MOU constitutes the only understandings between the Parties relating to the subject matter hereof, superseding all prior understandings or undertakings, oral or written. Each of the Parties confirms that in entering into this MOU, it has not relied on any statement, warranty or other representations made or information supplied by or on behalf of the other Party (other than those set forth in this MOU).

9. Counterpart Signatures

This MOU may be executed in as many counterparts as desired by the Parties, any one of which shall have the force and effect of an original but all of which together shall constitute the same instrument. This MOU may also be executed by exchange of executed copies via electronic means, such as PDF. A Party's signature transmitted by electronic means shall be considered as an "original" signature for purposes of this MOU.
IN WITNESS WHEREOF, the Parties have executed this MOU as of the date set forth above.

University of Hawai‘i

By ____________________________ Date: ____________________________
Dr. David Lassner
President and Interim UH Manoa Chancellor

By ____________________________ Date: ____________________________
Jan Gouveia
Vice President for Administration

Hawaiian Electric Companies

By ____________________________ Date: 10/30/2017
Alan Oshima
President & Chief Executive Officer
Hawaiian Electric Company, Inc.

By ____________________________ Date: 10/30/2017
Jim Alberts
Senior Vice President, Customer Service
Hawaiian Electric Company, Inc.