

EXHIBIT A
DESCRIPTION OF HYBRID MICROGRID

1. Microgrid Operator Information

Name (print): _____

Property Address: _____

City: _____ State: _____ Zip: _____

Meter # (if applicable): _____ TMK: _____

Phone: _____ Cell: _____ Email: _____

Mailing Address is the same as the Property Address

Mailing Address: _____

City: _____ State: _____ Zip: _____

Name of Person Authorized to Sign on behalf of Microgrid Operator:

Hawaii Gross Excise Tax License Number of Microgrid Operator:

Description of the electrical boundaries of the Hybrid Microgrid:

_____ (use additional sheet if necessary)

2. Electrical Contractor

Electrical Contractor: _____ Hawai'i License #: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

HAWAIIAN ELECTRIC COMPANY, INC.

Phone: _____ Cell: _____ Email: _____

Supply certification that the generating system will be installed and inspected in compliance with the local Building/Electrical code of the County of: Honolulu Maui Hawai'i _____

Generating System Building Permit # (to be filled out by the Company upon the Company's approval and execution of Agreement): _____ To be filled out by the Company

Interconnection Date (to be filled out by the Company upon the Company's approval and execution of the Agreement): _____ To be filled out by the Company

3. Insurance

Insurance Carrier: _____

4. General Hybrid Microgrid Technical Information (Attached)

The attached technical information should clearly describe and illustrate the defined electrical boundaries of the proposed Hybrid Microgrid.

- Microgrid Single Line Diagram** **Microgrid Three Line Diagram** **Microgrid Relay List and Trip Scheme (if applicable)**
- Map Showing Defined Electrical Boundaries**

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5. Generator Qualifications

Generator Type(s) included in Hybrid Microgrid:

Photovoltaic with DC Inverter Non-Photovoltaic DC Generator Other: _____

Total aggregate rated capacity of the Hybrid Microgrid: Grid-Connected Mode _____ kW Island Mode: _____ kW

Total energy capability over a 24-hour period of the Hybrid Microgrid: Island Mode _____ kWh

Estimated peak demand of the Hybrid Microgrid: Grid-Connected _____ kW Island Mode _____ kW

6. Interconnecting Equipment Technical Data

Equipment Information:

Manufacturer: _____ Catalog #: _____

Type: _____ Rated Amps: _____ Rated Volts: _____

Fused *or* Non-Fused | Single Phase *or* Three Phase | Uses multiple disconnects

Mounting Location:

7. Generator Facility Technical Information for Generating Facilities utilized during Island Mode System Information:

Generator Technology	Manufacturer	Model	Interconnection Application No.	Location (Service Address)	Peak AC Output Rating (kW)
Total Rated Capacity (kW):					

8. Reserved

Not Applicable

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9. Interconnecting Equipment Technical Data

Transformer Data Not Applicable

A copy of transformer Nameplate and Manufacturer's Test Report may be substituted

Transformer Primary (Volts): _____ Transformer Secondary (Volts): _____
 Delta Wye Wye Grounded Delta Wye Wye Grounded

Size: _____ KVA Transformer Impedance: _____ % on _____ KVA Base

Transformer Fuse Data Not Applicable

Attach fuse manufacturer's Minimum Melt & Total Clearing Time-Current Curves

At Primary Voltage At Secondary Voltage

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Transformer Protection (if not fuse) Not Applicable

Please describe:

Generator Main Circuit Breaker Not Applicable

A copy of circuit breaker's Nameplate and Specification Sheet may be substituted

Manufacturer: _____ Type: _____

Continuous Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Feeder Circuit Breaker Not Applicable

Attach copy of any proposed Time-Overcurrent Coordination Curves

Manufacturer	Type	Style/Catalog No.	Proposed Setting

Current Transformer Data Not Applicable

Attach copy of Manufacturer's Excitation & Ratio Correction Curves

Manufacturer	Type	Accuracy Class	Proposed Ration
			/5
			/5
			/5
			/5
			/5

Protection Devices Not Applicable

Interconnection Location (Service Address)	Nearest Customer Protective Device Type	Manufacturer	Model

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Generator Reactive Capability Curve (if available) Not Applicable
Attach copy of Generator Reactive Capability Curve

10. Feasibility Analysis

Applicant elects to pursue a Feasibility Analysis with the Company pursuant to the Microgrid Services Tariff: Yes No

HAWAIIAN ELECTRIC COMPANY, INC.

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the date first set forth above.

[MICROGRID OPERATOR]

By: _____
Signature Date

Name (Print): _____

Company Name
(if applicable): _____

Title (if applicable): _____

[HAWAIIAN ELECTRIC COMPANY, INC., MAUI ELECTRIC COMPANY LTD., HAWAI'I ELECTRIC LIGHT COMPANY, INC.]

By: _____ To be filled out by the Company
Signature Date
To be filled out by the Company

Name (Print): _____ To be filled out by the Company

Title: _____ To be filled out by the Company

MAILING ADDRESS [select as appropriate]

[Hawaiian Electric Company, Inc.
_____ Division
P.O. Box 2750
Honolulu, HI 96840]

[Maui Electric Company, Ltd.
Attn: _____
P.O. Box 398
Kahului, HI 96733-6898]

[Hilo:
HELCO Engineering
Attn: Hybrid Microgrid Program
54 Halekauila Street
Hilo, HI 96720

Kona:
HELCO Engineering
Attn: Hybrid Microgrid Program
74-5519 Kaiwi Street
Kailua-Kona, HI 96740]

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