

ELECTRICAL PLAN REQUIREMENTS FOR COMMERCIAL SERVICE

In order to process requests for commercial electrical service as quickly as possible, Hawaiian Electric – Hawaii Island requires customers to submit electrical plans.

The electrical plans submitted must conform to Hawaiian Electric's tariff, ESIM, Electrical Utility Service Equipment Requirements (EUSERC), the National Electric Safety Code (NESC), the National Electric Code (NEC), and all State and County of Hawaii Ordinances. Hawaiian Electric's Tariff and Electric Service Installation Manual (ESIM) are available to consultants, contractors, and customers who apply for service from Hawaiian Electric.

THE ELECTRICAL PACKAGE MUST INCLUDE **ALL** OF THE FOLLOWING ITEMS:

1. One Line Diagram

- Show in standard electrical symbols, pertinent equipment from the utility's service to the customer's load.
- Specify the service voltage, point of delivery, service entrance conductors, meter socket standard and class, terminals, electric rate schedule, and grounding. A self-contained meter socket requires test bypass facilities. Instrument meter sockets require a test switch.
- Customer's utility meter must have Company's approval
- If applicable, switchgear factory drawings must be submitted to Company for approval *prior* to fabrication, in addition to consultant's drawings.
- If applicable, all emergency and/or parallel generators must be shown

2. Meter Elevation

- Show all metering/service equipment's elevation are compliance with ESIM requirements, including working clearances.
- If applicable, show splice can/instrument transformer cabinet's size
- 3. Panel Schedule(s)
 - Furnish panel schedules with individual loads in connected KVA and demand KVA.
- 4. Location Plan
 - A location plan indicating the location of metering/service equipment relative to the existing roadways and buildings. Include the tax map key (TMK).

5. Service Data

- Please provide a completed service data summary using the following format: Service Data
 - 1. Service voltage:
 PH, ____/___V., ___W

 2. Load Data: Connected ______ KVA, Estimated Demand ______
 - KVA
 - 3. Service Conductors: _____ set(s) of _____
 - 4. Metering: Hawaiian Electric Std. B-____; Rate _____
 - 5. Type: Overhead/Underground
 - 6. Billing Information: (Include Name, Address)
- Include nameplate load rating for wielding equipment, electric motors over 50 horsepower and other large electrical equipment that will be operated as part of the new load (needed to limit voltage disturbances to nearby customers)

HOW HAWAIIAN ELECTRIC – HAWAII ISLAND WILL USE THE ELECTRICAL PLAN **INFORMATION**

- 1. Overall Purpose
 - The overall purpose of the electrical plans is to safeguard people and property from hazards arising from the use of electricity.
- 2. Determination of Service Requirements
 - Information establishes the type of service, transformer, and meter needed
 - Confirms appropriate rate schedule
 - Verifies electrical service is in compliance with those stated above
 - Assignment to a project planner based on the KVA requirements and the Tax Map Key. Projects are grouped as follows: 0-10kva, 11-75kva, 76-500kva, and 501kva and greater loads

If you have any questions on these guidelines, please call our Customer Installations Department at (808) 969-0311.

