

Exhibit A

Narrative Statement

The applicant herein, Hawaiian Electric Company, Inc. (“HECO”), is the power utility company located on the island of Oahu, in the State of Hawaii. HECO would like to conduct test with respect to advanced meter reading functions and the delivery of high-speed broadcast data over medium-voltage power lines. Accordingly, in order for HECO to test and evaluate this equipment, we hereby apply for this experimental license.

Geographic area: The area contemplated to test this equipment is the island of Oahu.

Frequency range: 1.7 to 50 MHz

Time period: Two years.

Number of units of equipment: 10

Description of equipment: The vendor equipment, which is fully compatible with both underground and overhead distribution lines, includes three major components:

- **Injector** – The injector is the interface between the network access connection (e.g. fiber ring) and a medium voltage (MV) distribution feeder. The injector, which is inductively coupled to the MV grid, injects an IP data stream on to a MV feeder. A customer typically installs one injector per MV feeder to broadband enable that feeder. The injection point can be at either a substation or anywhere the grid is in close proximity to backbone fiber.
- **Extractor** – These devices connect the MV data communications network to individual subscribers. The vendor has developed a unique architecture that does not have a fault path either to the customer’s premise or to other portions of the MV grid (e.g. other phase, neutral, etc.). Furthermore, extractors can utilize multiple options to bridge the final meters to the subscriber.
- **Repeater** – Because the signal strength diminishes over distance, it is periodically necessary to repeat a data stream. To that end, the vendor’s repeaters receive a signal from an injector (or another repeater), strip out the noise, regenerate the signal, and re-inject the original signal down the MV feeder. The vendor’s repeaters ensure that there is minimal to no packet loss, and only a nominal amount of delay.

Description of installations: The vendor's PLC equipment will be deployed and tested on the electric distribution grid on the island of Oahu. Residential and commercial trial participants will receive high-speed Internet services as a result of installing this equipment. The equipment may be utilized for various core utility applications in order to derive greater efficiencies from normal activities involved with providing electric service to its customers.

Description of technical tests: This equipment will be evaluated for both customer acceptability and FCC compliance. The performance of the equipment will be evaluated for customer acceptability as a means of sending and receiving broadband digital information over the Internet, comparable to presently available cable modem or DSL services. Such evaluation will include testing to examine the propagation characteristics of the PLC signal on the electric grid. The equipment will be operated under Section 2.803(e)(1)(I) of the Rules and compliance with Section 15.109(e) of the rules will be demonstrated by measurements taken in accordance with Section 15.31 of the Rules with particular attention paid to restricted bands described in Section 15.205.

Description of marketing tests: PLC access service will be offered at no charge to volunteer trial participants. Marketing information will be gathered regarding customer perceptions on ease of use and other system performance characteristics.

Applicable rules parts: The tests involve carrier current systems as defined in Section 15.3(f). In order to create representative network configurations, the vendor plans to conduct tests on networks providing high-speed Internet service to many participants from the electric distribution grid.