

Exhibit A

Narrative Statement

The applicant herein, Progress Energy Carolinas, Inc. ("Progress") is a subsidiary of Progress Energy, a Fortune 250 diversified energy company with more than 21,800 megawatts of generation capacity and \$8 billion in annual revenues. Progress Energy's holdings also include another electric utility (Progress Energy Florida)) and a local distribution natural gas company (North Carolina Natural Gas Corporation) serving more than 2.9 million customers across the Carolinas and Florida. Progress Energy also is involved in: non-regulated (Progress Ventures) electric merchant generation; energy marketing and trading; fuel extraction (Progress Fuels); rail services (Progress Rail); and telecommunications (Progress Telecom).

Progress is interested in the potential use of power line communications ("PLC") to provide needed communications to increase the reliability and efficiency of its electric transmission and distribution system and to provide broadband Internet access to its electric customers. Progress intends to test technology developed by Amperion, Inc., which is conducting compliance testing with respect to their equipment, but may test other suppliers during the test period. Accordingly, in order for Progress to test and evaluate this equipment, it hereby applies for this experimental license.

Geographic area: The area contemplated to test this equipment is the Progress service territory in the state of North Carolina.

Frequency range: 1.0 to 30 MHz.

Time Period: Two Years

Number of units of equipment: up to 1,000

Description of equipment: The Amperion 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. Amperion 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 distance to the subscriber.
- **Repeater**- Because the signal strength diminishes over distance, it is periodically necessary to repeat a data stream. To that end, Amperion'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. Amperion's repeaters ensure that there is minimal to no packet loss and only a nominal amount of delay.

Description of installations: The Amperion PLC equipment will be deployed and tested at several electric distribution grid locations within Progress' service territory in North Carolina. The injectors, extractors and repeaters will be installed only on the medium voltage portion of the electric grid. Amperion uses an architecture that does not send PLC signals over the low voltage portion of the electric grid, *i.e.*, does not pass the transformer or enter the trial participant premises by wire. Rather, a Wi-Fi device is connected to the PLC termination point on the medium voltage side of the transformer and the trial participant uses a Wi-Fi modem in their home to send and receive the signal. However, because Progress seeks authority to test equipment from other vendors who may not use this architecture, Progress seeks an experimental license that permits PLC signals to be transmitted on the low voltage lines and within trial participant premises. Residential and commercial trial participants will receive high-speed Internet services as a result of installing this equipment. Progress will utilize the equipment 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)(1) 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 rule parts: The tests involve carrier current systems as defined in Section 15.3(f). In order to create representative network configurations, Progress plans to conduct tests on networks providing high-speed Internet service to many participants phased at different areas on the electric distribution grid.