

NARRATIVE STATEMENT

By this application, the Powerline LV Group of Motorola, Inc. ("Motorola"), respectfully requests expedited special temporary authority ("STA"), beginning not later than **March 3, 2006**, to test, evaluate and demonstrate low voltage broadband over power line ("BPL") prototype equipment operating in the 4 to 21 MHz band at a limited number of residential locations. The following information is provided in support of this request:

Purpose of Operation:

Motorola proposes to evaluate and demonstrate the functionality and user acceptability of prototype low voltage BPL devices before they are certified or verified and shipped commercially in high volumes to communications providers and users. These devices are subject to Federal Communications Commission ("FCC") Part 15 rules governing unintentional radiators. Specifically, Motorola seeks to test the performance, capacity, signal quality, data rates, and interference potential of such equipment. By evaluating these products before obtaining FCC equipment approvals, Motorola will be able to identify and make needed enhancements to the equipment and, thus, improve customer satisfaction.

Request for Expedited Treatment:

Motorola respectfully requests expedited treatment of its application for STA so that it may commence experimental operations beginning as soon as possible, but not later than March 3, 2006. It regrets any inconvenience caused by the submission of this request on short notice. Motorola staff was required to wait for necessary information regarding the location and technical specifications of the testing and development under the STA before it could complete and submit the application. Nevertheless, it has now implemented procedures to ensure that similar, related requests are filed not less than 30 days before any scheduled test. It has also advised persons responsible for obtaining FCC authority about this requirement.

As stated in the accompanying narrative, Motorola seeks to test, evaluate and demonstrate low voltage broadband over power line ("BPL") prototype equipment operating in the 4 to 21 MHz band at a limited number of residential and locations. The test has been scheduled so that Motorola may meet its commitments with entities seeking to evaluate the performance and acceptability of equipment designed, among other things, to support broadband communications capabilities in underserved areas, including rural and insular areas. The test will also allow Motorola to evaluate prototype equipment before such equipment is certified or verified for unconditional sale, as required by Section 2.803 of the Commission's rules, 47 C.F.R. § 2.803 (2004). Specifically, it must test performance, capacity, signal quality, and data rates of such equipment to identify and make needed enhancements to ensure its products comply with company and agency standards before Motorola seeks FCC approvals for the equipment.

Motorola must commence testing and data collection on schedule to avoid subsequent delays in finalizing development and FCC equipment certification. Given the need to implement alternative and robust communications capabilities as quickly as possible, a delay in testing could jeopardize the provision of communications capabilities that the installation of new and innovative equipment developed by Motorola, once approved, would support. For example, entities engaged in public safety activities require immediate, reliable, and ubiquitous communications capabilities in order to perform their responsibilities effectively. Delays in communications could result in injuries to the public and damage to property. Thus, a grant of the requested application would clearly be in the “public interest.”

Proposed Locations:

Motorola seeks authority to test and demonstrate equipment at approximately 60 locations, including residential locations, within a 30-mile radius of the city of two separate locations:

(1) Gaffney (Cherokee), South Carolina, with an approximate city center point at the coordinates 35-04-20N; 081-39-22W (NAD83); and

(2) Grand Ledge (Eaton), Michigan, with a center point at the coordinates 42-45-22N; 84-44-40W (NAD83).

Technical Specifications:

Frequencies:	4 - 21 MHz
Effective Radiated Power:	Complies with Part 15 emissions limits
Necessary Bandwidth:	12.5 MHz
Modulation:	Orthogonal Frequency Division Multiplexing
Emissions Designators:	17M0D2D, 17M0D2E, 17M0D2F

Other emission modes may be utilized, but in no event will the emissions extend beyond the frequency bands requested. All power levels will comply with the limits set forth in the FCC’s rules, including those relating to human exposure to radiation. CISPR quasi-peak measurements are to be taken in the linear mode only.

Types and Number of Units To Be Tested:

As noted above, Motorola seeks to test prototype low voltage BPL equipment subject to FCC Part 15 rules governing unintentional radiators. The test does not involve high voltage BPL equipment or transmission over high voltage power lines or high voltage distribution systems. The prototype devices will be deployed in conjunction with a Motorola Canopy™ Wireless Broadband Network system. The Canopy system at each of the two locations in this test is comprised of three base stations (access points) and up to 20 subscriber modules installed near power line transformers at various locations. Motorola does not require an experimental license to deploy the Canopy equipment for this test, though, as the system will operate on a Part 15 unlicensed basis with equipment that is fully approved and compliant with FCC rules.

Operation of the prototype devices will require authorization, however. The prototype devices will be used to interconnect the Canopy system with user equipment. Prototype devices will be installed near the Canopy subscriber modules to connect the Canopy system to the low voltage power lines entering user locations. Prototype devices will also be used inside the user locations to interconnect the low power voltage lines with user equipment. Essentially, the prototype devices facilitate the transmission of broadband signals from the Canopy equipment near the power line transformers over the low voltage power lines to user equipment.

To obtain valid data and present an accurate demonstration of real-world operations, Motorola must deploy a sufficient number of units during its test to simulate actual usage. It expects that it will be able to conduct its experimentation with 100 or fewer unapproved units at each location and that it would not employ more than a total of 200 unapproved units overall for all of the locations combined under the requested authority. In other words, 200 units reflect the maximum number of unapproved units that would be placed in operation at any given time under this authorization. Motorola will also limit the power, area of operation, and transmitting times of these units to the minimum necessary to evaluate the equipment. If necessary, Motorola will seek separate and specific authority if more units were needed to conduct a particular experiment.

Restrictions on Operation:

Motorola understands that the FCC permits: (1) companies to enter into agreements and contracts to manufacture products before they are approved; and (2) manufacturers to sell—but not deliver—unapproved products on a conditional basis to wholesalers and retailers. Motorola also understands that the FCC permits the operation of equipment for, among other things: (1) compliance testing; (2) demonstration at trade shows and other exhibitions with appropriate notices displayed; and (3) evaluation of product performance and customer acceptability at the manufacturer's facilities or at certain non-residential sites during the developmental, design and pre-production stages. See Marketing Rule Revisions, § 2.803; Part 15 Revisions, 6 FCC Rcd 1683, 1685 (1991).

Notwithstanding these general rules, the FCC requires parties to seek authorization to use unapproved devices that will be operated at residential locations. Such authority may be granted under the FCC's experimental rules set forth in Part 5 of the Code of Federal Regulations, 47 C.F.R. Part 5 (2004). Accordingly, Motorola seeks this experimental license to conduct experimental operations at residential locations, as permitted under Part 5 of the Commission's rules. Those rules permit such operation provided that: (1) participants are advised that the service or device is granted under experimental authority and is strictly temporary; and (2) the devices are owned by the licensee.

Motorola does not propose to market, sell, or lease prototype equipment to end users or conduct a market study in conjunction with this test. Moreover, no fees will be charged to entities using the equipment during this test. After the experimentation ceases, Motorola will recall and recover all devices that do not comply with FCC regulations. If any different treatment becomes necessary during the course of its experimentation, Motorola will seek separate and additional authority from the agency.

Motorola also recognizes that the operation of any unapproved devices must not cause harmful interference to authorized facilities. It does not anticipate that such interference will occur, however, as the prototype equipment will operate at low power. Should interference occur, however, Motorola will immediately take reasonable steps to resolve the interference, including if necessary discontinuing operation. To that end, Motorola would advise entities using the equipment that permission to operate the equipment has been granted under experimental authority issued to Motorola, is strictly temporary and may be canceled at any time. Specifically, Motorola proposes to label the equipment or user information conspicuously as follows:

FCC STATEMENT

Permission to operate this device has been granted under experimental authority issued by the Federal Communications Commission to Motorola, Inc., is strictly temporary, and may be canceled at any time.

This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained. Thus, the user does not hold a property right in the device and may be required to return the device.

The prototype equipment to be deployed under this license will be installed in or on buildings or other structures in accordance with FCC and Federal Aviation Administration (“FAA”) rules and regulations.

Public Interest:

Motorola submits that issuance of an STA is in the public interest, convenience, and necessity, as it will permit Motorola to develop innovative equipment that will accommodate the communications needs of users.

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