

Federal Communications Commission

§ 15.611

Subpart G—Access Broadband Over Power Line (Access BPL)

SOURCE: 70 FR 1374, Jan. 7, 2005, unless otherwise noted.

§ 15.601 Scope.

This subpart sets out the regulations for Access Broadband over Power Line (Access BPL) devices operating in the 1.705–80 MHz band over medium or low voltage lines.

§ 15.603 Definitions.

(a) *Excluded Band*: A band of frequencies within which Access BPL operations are not permitted.

(b) *Exclusion Zone*: A geographical area within which Access BPL operations are not permitted in certain frequency bands.

(c) *Consultation*. The process of communication between an entity operating Access BPL and a licensed public safety or other designated point of contact for the purpose of avoiding potential harmful interference.

(d) *Consultation area*: A designated geographical area within which consultation with public safety users or other designated point of contact is required before an Access BPL may be operated at designated frequencies.

(e) *Low Voltage power line*. A power line carrying low voltage, *e.g.*, 240/120 volts from a distribution transformer to a customer's premises.

(f) *Medium Voltage power line*. A power line carrying between 1,000 to 40,000 volts from a power substation to neighborhoods. Medium voltage lines may be overhead or underground, depending on the power grid network topology.

(g) *Access BPL Database*. A database operated by an industry-sponsored entity, recognized by the Federal Communications Commission and the National Telecommunications and Information Administration (NTIA), containing information regarding existing and planned Access BPL systems, as required in § 15.615(a) of this chapter.

§ 15.605 Cross reference.

(a) The provisions of subparts A and B of this part apply to Access BPL devices, except where specifically noted. The provisions of subparts C through F

of this part do not apply to Access BPL devices except where specifically noted.

(b) The requirements of this subpart apply only to the radio circuitry that is used to provide carrier current operation for the Access BPL device. Other aspects of the operation of an Access BPL device may be subject to requirements contained elsewhere in this chapter. In particular, an Access BPL device that includes digital circuitry that is not used solely to enable the operation of the radio frequency circuitry used to provide carrier current operation also is subject to the requirements for unintentional radiators in subpart B of this part.

§ 15.607 Equipment authorization of Access BPL equipment.

Access BPL equipment shall be subject to Certification as specified in § 15.101.

§ 15.609 Marketing of Access BPL equipment.

The marketing of Access BPL equipment must be directed solely to parties eligible to operate the equipment. Eligible parties consist of AC power line public utilities, Access BPL service providers and associates of Access BPL service providers. The responsible party, as defined in § 2.909 of this chapter, is responsible for ensuring that the equipment is marketed only to eligible parties. Marketing of the equipment in any other manner may be considered grounds for revocation of the grant of certification issued for the equipment.

§ 15.611 General technical requirements.

(a) *Conducted emission limits*. Access BPL is not subject to the conducted emission limits of § 15.107.

(b) *Radiated emission limits*—(1) *Medium voltage power lines*. (i) Access BPL systems that operate in the frequency range of 1.705 kHz to 30 MHz over medium voltage power lines shall comply with the radiated emission limits for intentional radiators provided in § 15.209.

(ii) Access BPL systems that operate in the frequency range above 30 MHz over medium voltage power lines shall

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comply with the radiated emission limits provided in §15.109(b).

(2) *Low voltage power lines.* Access BPL systems that operate over low-voltage power lines, including those that operate over low-voltage lines that are connected to the in-building wiring, shall comply with the radiated emission limits provided in §15.109(a) and (e).

(c) *Interference Mitigation and Avoidance.* (1) Access BPL systems shall incorporate adaptive interference mitigation techniques to remotely reduce power and adjust operating frequencies, in order to avoid site-specific, local use of the same spectrum by licensed services. These techniques may include adaptive or “notch” filtering, or complete avoidance of frequencies, or bands of frequencies, locally used by licensed radio operations.

(i) For frequencies below 30 MHz, when a notch filter is used to avoid interference to a specific frequency band, the Access BPL system shall be capable of attenuating emissions within that band to a level at least 20 dB below the applicable part 15 limits.

(ii) For frequencies above 30 MHz, when a notch filter is used to avoid interference to a specific frequency band, the Access BPL system shall be capable of attenuating emissions within that band to a level at least 10 dB below the applicable part 15 limits.

(iii) At locations where an Access BPL operator attenuates radiated emissions from its operations in accordance with the above required capabilities, we will not require that operator to take further actions to resolve complaints of harmful interference to mobile operations.

(2) Access BPL systems shall comply with applicable radiated emission limits upon power-up following a fault condition, or during a start-up operation after a shut-off procedure, by the use of a non-volatile memory, or some other method, to immediately restore previous settings with programmed notches and excluded bands, to avoid time delay caused by the need for manual re-programming during which protected services may be vulnerable.

(3) Access BPL systems shall incorporate a remote-controllable shut-down feature to deactivate, from a cen-

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tral location, any unit found to cause harmful interference, if other interference mitigation techniques do not resolve the interference problem.

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§ 15.613 Measurement procedures.

Compliance measurements for Access BPL shall be made in accordance with the Guidelines for Access BPL systems specified by the Commission.

§ 15.615 General administrative requirements.

(a) *Access BPL Database.* Entities operating Access BPL systems shall supply to an industry-recognized entity, information on all existing Access BPL systems and all proposed Access BPL systems for inclusion into a publicly available data base, within 30 days prior to initiation of service. Such information shall include the following:

(1) The name of the Access BPL provider.

(2) The frequencies of the Access BPL operation.

(3) The postal zip codes served by the specific Access BPL operation.

(4) The manufacturer and type of Access BPL equipment and its associated FCC ID number, or, in the case of Access BPL equipment that has been subject to verification, the Trade Name and Model Number, as specified on the equipment label.

(5) The contact information, including both phone number and e-mail address of a person at, or associated with, the BPL operator’s company, to facilitate the resolution of any interference complaint.

(6) The proposed/or actual date of Access BPL operation.

(b) The Access BPL database manager shall enter this information into the publicly accessible database within three (3) business days of receipt.

(c) No notification to the Commission is required.

(d) A licensed spectrum user experiencing harmful interference that is suspected to be caused by an Access BPL system shall inform the local BPL operator’s contact person designated in the Access BPL database. The investigation of the reported interference