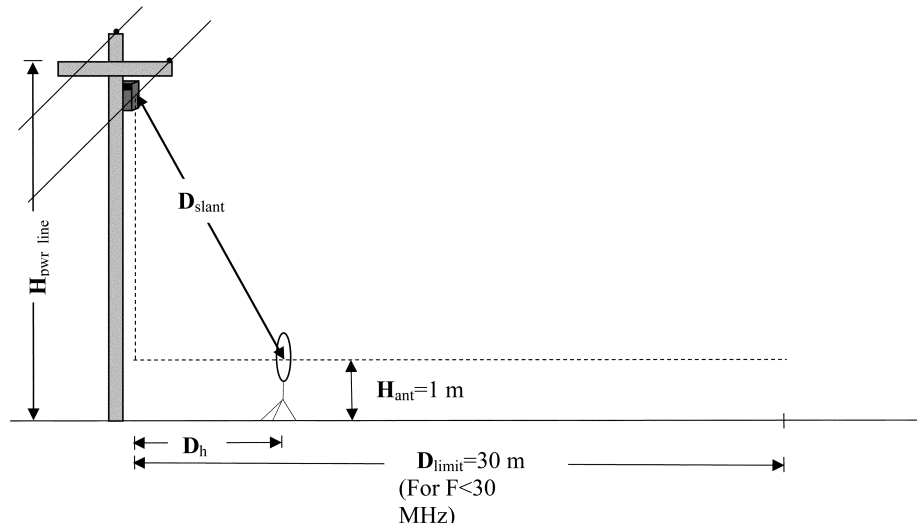


Figure 1 – Illustration of Slant-Range Distance



$D_{\text{slant}}$  is the slant-range distance, in meters;

$D_h$  is the horizontal (lateral) distance between the center of the measurement antenna and the vertical projection of the overhead power line carrying the BPL signals down to the height of the measurement antenna, in meters;

$D_{\text{limit}}$  is the distance at which the emission limit is specified in Part 15 (e.g., 30 meters for frequencies below 30 MHz);

$H_{\text{pwr-line}}$  is the height of the power line, in meters; and

$H_{\text{ant}}$  is the measurement antenna height, in meters.

(ii) *Level Probing Radar (LPR)*: A short-range radar transmitter used in a wide range of applications to measure the amount of various substances, mostly liquids or granulates. LPR equipment may operate in open-air environments or inside an enclosure containing the substance being measured.

[54 FR 17714, Apr. 25, 1989, as amended at 55 FR 18340, May 2, 1990; 57 FR 33448, July 29, 1992; 59 FR 25340, May 16, 1994; 61 FR 31048, June 19, 1996; 62 FR 26242, May 13, 1997; 64 FR 22561, Apr. 27, 1999; 65 FR 64391, Oct. 27, 2000; 66 FR 32582, June 15, 2001; 67 FR 48993, July 29, 2002; 70 FR 1373, Jan. 7, 2005; 76 FR 71907, Nov. 21, 2011; 78 FR 34927, June 11, 2013; 79 FR 12677, Mar. 6, 2014]

#### § 15.5 General conditions of operation.

(a) Persons operating intentional or unintentional radiators shall not be deemed to have any vested or recognizable right to continued use of any given frequency by virtue of prior registration or certification of equipment, or, for power line carrier systems, on the basis of prior notification of use pursuant to § 90.35(g) of this chapter.

(b) Operation of an intentional, unintentional, or incidental radiator is subject to the conditions that no harmful interference is caused and that interference must be accepted that may be caused by the operation of an authorized radio station, by another intentional or unintentional radiator, by industrial, scientific and medical (ISM) equipment, or by an incidental radiator.

(c) The operator of a radio frequency device shall be required to cease operating the device upon notification by a Commission representative that the device is causing harmful interference. Operation shall not resume until the condition causing the harmful interference has been corrected.

## § 15.7

(d) Intentional radiators that produce Class B emissions (damped wave) are prohibited.

[54 FR 17714, Apr. 25, 1989, as amended at 75 FR 63031, Oct. 13, 2010]

## § 15.7 [Reserved]

### § 15.9 Prohibition against eavesdropping.

Except for the operations of law enforcement officers conducted under lawful authority, no person shall use, either directly or indirectly, a device operated pursuant to the provisions of this part for the purpose of overhearing or recording the private conversations of others unless such use is authorized by all of the parties engaging in the conversation.

### § 15.11 Cross reference.

The provisions of subparts A, H, I, J and K of part 2 apply to intentional and unintentional radiators, in addition to the provisions of this part. Also, a cable system terminal device and a cable input selector switch shall be subject to the relevant provisions of part 76 of this chapter.

### § 15.13 Incidental radiators.

Manufacturers of these devices shall employ good engineering practices to minimize the risk of harmful interference.

### § 15.15 General technical requirements.

(a) An intentional or unintentional radiator shall be constructed in accordance with good engineering design and manufacturing practice. Emanations from the device shall be suppressed as much as practicable, but in no case shall the emanations exceed the levels specified in these rules.

(b) Except as follows, an intentional or unintentional radiator must be constructed such that the adjustments of any control that is readily accessible by or intended to be accessible to the user will not cause operation of the device in violation of the regulations. Access BPL equipment shall comply with the applicable standards at the control adjustment that is employed. The measurement report used in support of an application for Certification and the

## 47 CFR Ch. I (10–1–16 Edition)

user instructions for Access BPL equipment shall clearly specify the user-or installer-control settings that are required for conformance with these regulations.

(c) Parties responsible for equipment compliance should note that the limits specified in this part will not prevent harmful interference under all circumstances. Since the operators of part 15 devices are required to cease operation should harmful interference occur to authorized users of the radio frequency spectrum, the parties responsible for equipment compliance are encouraged to employ the minimum field strength necessary for communications, to provide greater attenuation of unwanted emissions than required by these regulations, and to advise the user as to how to resolve harmful interference problems (for example, see §15.105(b)).

[54 FR 17714, Apr. 25, 1989, as amended at 70 FR 1373, Jan. 7, 2005]

### § 15.17 Susceptibility to interference.

(a) Parties responsible for equipment compliance are advised to consider the proximity and the high power of non-Government licensed radio stations, such as broadcast, amateur, land mobile, and non-geostationary mobile satellite feeder link earth stations, and of U.S. Government radio stations, which could include high-powered radar systems, when choosing operating frequencies during the design of their equipment so as to reduce the susceptibility for receiving harmful interference. Information on non-Government use of the spectrum can be obtained by consulting the Table of Frequency Allocations in §2.106 of this chapter.

(b) Information on U.S. Government operations can be obtained by contacting: Director, Spectrum Plans and Policy, National Telecommunications and Information Administration, Department of Commerce, Room 4096, Washington, DC 20230.

[54 FR 17714, Apr. 25, 1989, as amended at 62 FR 4655, Jan. 31, 1997; 63 FR 40835, July 31, 1998]