

Federal Communications Commission

§ 15.3

service's points of interconnection with customer premises. Access BPL does not include power line carrier systems as defined in §15.3(t) or In-House BPL as defined in §15.3(gg).

(gg) *In-House Broadband over Power Line (In-House BPL)*. A carrier current system, operating as an unintentional radiator, that sends radio frequency energy by conduction over electric power lines that are not owned, operated or controlled by an electric service provider. The electric power lines may be aerial (overhead), underground, or inside the walls, floors or ceilings of

user premises. In-House BPL devices may establish closed networks within a user's premises or provide connections to Access BPL networks, or both.

(hh) *Slant-Range distance*. Diagonal distance measured from the center of the measurement antenna to the nearest point of the overhead power line carrying the Access BPL signal being measured. This distance is equal to the hypotenuse of the right triangle as calculated in the formula below. The slant-range distance shall be calculated as follows:

$$d_{slant} = \sqrt{(h_{pwr\_line} - h_{ant})^2 + (d_h)^2}$$

Where:

$d_{slant}$  is the slant-range distance, in meters (see Figure 1, below);

$d_h$  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;

$h_{pwr\_line}$  is the height of the power line, in meters; and

$h_{ant}$  is the measurement antenna height, in meters.

Figure 1 – Illustration of Slant-Range Distance

