

National Institute of Standards and Technology acknowledges that PLC signals can travel between homes

Some utilities claim that the power line communication (PLC) signals do not travel into the home from the outside. Thus, they claim, there can be no problem with health effects from the dirty electricity that is another name for PLC signals.

The U.S. National Institute of Standards and Technology (NIST) thought otherwise and created the Smart Grid Interoperability Panel (SGIP), which in turn created the PAP-15 working group to look into the co-existence of various types of PLC systems. The problem of interest is that PLC signals from different vendors may interfere with each other, even if used in separate buildings.

In the write up for the PAP-15 working group, there is the following rationale under the heading of “Why is Coexistence Important”

... a user in one apartment or house may interfere with the signals generated in an adjacent house or apartment. Since it is difficult to contain locally the signals generated by the user, the more users in geographical proximity that use PLC technologies operating in the same frequency band, the more interference is generated on the power line both indoors and outdoors.

From the above, it is very clear that the NIST engineers fully accept that PLC signals can travel from house to house on the power lines.

Source: NIST Smart Grid Collaboration Wiki/Smart Grid Interoperability Panel Site, PAP-15. <http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP15PLCForLowBitRates>
(Scroll down to: Why Is Coexistence Important)