**Section 730.525 Transmission Requirements**

Local exchange carriers shall furnish and maintain plant, equipment and facilities to meet the following minimum transmission standards. The transmission standards set forth in this Section are based upon measurements from the network interface at the customer premises through the local loop to a nominal 48-volt central office and measured at a frequency of 1004 hertz.

a) Local line analog loops shall have a loop resistance not exceeding the operating design of the associated central office equipment. Longer loops may be used by deployment of loop range extenders.

b) All analog loops are to be maintained to a minimum of 40,000 ohms insulation resistance.

c) Transmission loss of analog local loop shall be engineered not to exceed 10.0 dB when measured in accordance with subsection (a). The local loop transmission loss shall be adjusted to 10.0 dB or less if it exceeds 10.0 dB.

d) Transmission loss in analog interoffice trunks shall be engineered not to exceed 7 dB. If the loss exceeds expected design loss by + or - 3.5 dB, it shall be corrected to within 1 dB of the design loss.

e) Transmission loss on analog toll terminating trunks shall be engineered not to exceed 4 dB. If the loss exceeds expected design loss by + or - 3.5 dB, it shall be corrected to within 1 dB of the design loss.

f) Transmission loss on all digital interoffice trunks shall be engineered and maintained not to exceed 6 dB.

g) Loop current shall be maintained at 20 milliamperes or greater.

h) Power influence (Noise to Ground) shall not exceed 90 dBrnc.

i) Circuit noise (Noise Metallic) shall not exceed 30 dBrnc.

(Source: Amended at 35 Ill. Reg. 8808, effective June 1, 2011)