

Proximity to High-Voltage Power Transmission Lines

Electric power transmission lines maintained by power companies may or may not be hazardous to human health. Research continues on the affects of electromagnetic fields (EMF) on human beings. However, school districts should be cautious about the health and safety aspects relating to overhead transmission lines. School districts should take a conservative approach when reviewing sites situated near easements for power transmissions lines.

In consultation with the State Department of Health Services (DHS) and electric power companies, the Department has established the following limits for locating any part of a school site property line near the edge of easements for high-voltage power transmission lines:

1. 100 feet from the edge of an easement for a 50-133kV (kilo volts) line
2. 150 feet from the edge of an easement for a 220-230kV line
3. 350 feet from the edge of an easement for a 500-550kV line

These figures represent kV strengths of transmission lines used by utility companies in January 1993. Utility companies report that strengths for distribution lines are below 50kV.

The Department of Health Services completed a multiyear study of EMFs in schools. Results of the study were published at the end of 2000. The limits noted above for locating school sites near EMF-producing lines may be amended on the basis of the findings of the study.

When evaluating a potential site situated near a power line easement, the site selection team should ask the following questions:

1. Is it necessary for the school district to acquire a site near the easement?
2. Are other options available?
3. Has the school district contacted and discussed with the utility company any plans to (a) increase the voltage of the transmission lines; or (b) build other towers on the easement?
4. Is the line a transmission or distribution line?

Each site will be evaluated according to its own potential hazards by the Department consultant. (See *CCR, Title5, Section 14010(c).*)