



Department of Energy
Western Area Power Administration
Desert Southwest Customer Service Region
P.O. Box 6457
Phoenix, AZ 85005-6457

Dennis J. Roehler
Director of Facilities and Construction
Cave Creek Unified School District
PO Box 426
Cave Creek, AZ 85327

September, 25, 2006

Dear Mr. Roehler,

Thank you for your Sept. 12 e-mail concerning electric and magnetic fields from transmission lines near Sonoran Trails Middle School. You asked about Western's ability to guarantee electric field levels, minimize fields, other possible ways to minimize fields, the potential to share in the costs of moving the transmission lines and delaying a decision on moving the lines.

For reasons of physics, Western cannot provide written assurance that field strength on any transmission line—ours or another utility's—will be at or under any specific level. Nor can we assure the interconnected transmission grid in Arizona will operate so that the field levels comply with California guidelines for EMF levels.

Electric fields are strongest closest to the source and at higher voltages, but decrease rapidly within a short distance from the source. Electric fields from power lines are relatively stable because voltage does not change. Magnetic fields are strongest closest to the source, and increase with higher current flow; they also decrease with distance from the source. Unlike electric fields, magnetic fields are not affected by walls or trees, and primarily depend on distance from and strength of the source. Magnetic fields fluctuate greatly as current changes in response to changing load. Because all electrical equipment and appliances have electric and magnetic fields, and even the Earth itself has a magnetic field, there is no possible way to reduce fields to zero.

The best time to minimize exposure to EMF is when a business or facility considers locating close to an existing power line. Building layouts, site plans, and actual design can limit or reduce exposure to EMF of an existing line. When mitigating actions are not considered as a part of initial site plans and design, limited options are available after construction is complete. Accommodating sensitivities of the shareholders to issues such as EMF are best handled prior to construction of a facility close to an existing power line.

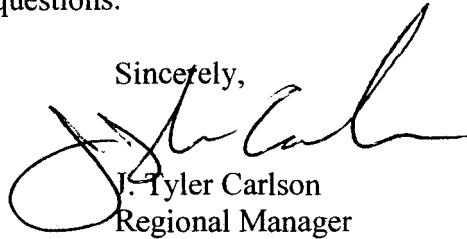
Western's completed study evaluated options to move the transmission lines and reconfigure them in a way that would cause the fields to have some self-canceling effects and reduce field levels due to the increased distance from school facilities. Western's line has been in place for several decades and we do not have the ability to pass the cost of moving it to the

power customers. The cost would need to be born by the entity requesting we move it. We cannot move the line during the hottest months of the year May through September because of the need to deliver power over the line.

Western will continue to work with the district in this matter.

Please contact David Radosevich on my staff at 602-605-2605 if you need additional information or have further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Tyler Carlson". The signature is fluid and cursive, with a large initial "J" and "C".

J. Tyler Carlson
Regional Manager