

# PUC Actions Regarding EMFs

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 [web.archive.org/web/20200305012100/https://www.cpuc.ca.gov/General.aspx](http://web.archive.org/web/20200305012100/https://www.cpuc.ca.gov/General.aspx)

A PUC decision on January 27, 2006, affirmed the Commission's November 1993 decision on low-cost/no-cost, policy to mitigate EMF exposure for new utility transmission and substation projects. As a measure of low-cost mitigation, we continue to use the benchmark of 4% of transmission and substation project costs for EMF mitigation, and combine linked transmission and substation projects in the calculation of this 4% benchmark. In addition, the Commission adopted rules and policies to improve utility design guidelines for reducing EMF, and called for a utility workshop to implement these policies and standardize design guidelines.

In order that utilities may proceed with a workshop, the Commission defined and adopted EMF mitigation polices and rules that address underground transmission lines, application of the 4% mitigation benchmark to EMF priority classes, EMF mitigation modeling techniques, and the locations for measuring EMF mitigation. The Commission also directed utilities to initiate standardized field reduction techniques and develop a table to reflect EMF reduction measures taken or rejected.

The Commission is unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences. However, the January 2006 decision directs the Commission's Energy Division to pursue and review all available studies regarding EMF, and to review scientific information and report on new findings. Should such studies indicate negative EMF health impacts, the Commission will reconsider its EMF policies, and open a new rulemaking if necessary.

There are seven measures that were ordered in the PUC's November 1993 decision and affirmed in the January 27, 2006 decision are:

- No-cost and low-cost steps to reduce EMF levels: When regulated utilities design new projects or upgrade existing facilities, approximately 4% of the project's budget may be used for reducing EMFs. The PUC did not set specific reduction levels for EMFs . It was inappropriate to set a specific numerical standard until a scientific basis for doing so exists
- New designs to reduce EMF levels: The PUC's Advisory and Compliance Division and Safety Division held workshops for utilities to develop EMF design guidelines for new and rebuilt facilities. The guidelines incorporate alternative sites, increase the size of rights-of-way, place facilities underground, and use other suggested methods for reducing EMF levels at transmission, distribution and substation facilities
- Measurement of EMFs: Uniform residential and workplace EMF measurement programs were also designed in the workshops; they are available to utilities and their customers. Other utilities are also encouraged to use them.
- Education and Research: The PUC wants the public and groups having a financial or basic

interest in EMFs to become involved in developing education and research programs; these programs are established and managed by the DHS. PUC-regulated utilities and municipal utilities use ratepayer funds to pay for their share of development costs for the following programs:

- **EMF Education:** This \$1.49 million program will provide credible, meaningful, consistent, and timely EMF information to electric utility customers, employees, and the public. DHS will coordinate a uniform EMF education program to supplement, but not duplicate, those that most electric utilities already have. Utilities without programs should implement one as soon as possible.

- **EMF Research:** A \$5.6 million four-year non-experimental research program will be directed by DHS. This program will provide utility participation in state, national, and international research to be pursued to the extent that it benefits ratepayers.

**Other Research:** Utilities are authorized to contribute to federal experimental research conducted under the National Energy Policy Act of 1992.

## History

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On January 15, 1991, the PUC began an investigation to consider the Commission's potential role in mitigating health effects, if any, of EMFs created by electric utility power lines and by cellular radiotelephone facilities. By this investigation, all interested parties were notified that the PUC would take appropriate action on EMFs in response to a conclusion, based on scientific evidence, which indicates that a health hazard actually exists, and that a clear cause and effect relationship between utility property or operations and public health is established.

Due to the lack of scientific or medical conclusions about potential health effects from utility electric facilities and power lines, the PUC adopted Seven Interim Measures that help to address public concern on this subject [D.93-11-013]. The interim EMF requirements apply to Pacific Gas & Electric, Southern California Edison, San Diego Gas & Electric, Sierra Pacific Power, and Pacific Power & Light. Municipal utilities, like the Sacramento Municipal Utilities District and the Los Angeles Department of Water and Power, are not under PUC jurisdiction, although they may voluntarily follow the same measures.