

environmental • failure analysis & prevention • health • technology development

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Exponent®

United States Policy

**Recent Developments
and Trends in Context**

Policies to Address Public Concern and Residual Scientific Uncertainty

- **Standards and guidelines**
- **'Prudent avoidance'**
- **Precautionary principle**
- **Scientific weight-of-evidence reviews**

Prudent Avoidance

Defined as:

“Limiting exposures which can be avoided with small investments of money and effort.”

“...because our understanding of the science of the problem is still very incomplete, there is a real chance that some or all of the expense and associated trouble that would result from ‘aggressive action’ taken now, would ultimately turn out to have been ineffective.

There are two ways this could happen. First, it could turn out that there are no health risks from fields or that there are risks but they are very small. Second, it could turn out that while there are risks, we’ve done the wrong things to control them and gotten little or no improvement for our money...”

Precautionary Principle

- “[W]here there are threats of serious or irrevocable damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”

Applications of Prudent Avoidance or the Precautionary Principle

- **European Commission**
- **Individual European countries**
 - e.g., Netherlands, Italy, Switzerland
- **Health Canada**
- **WHO**
- **California Public Utilities Commission/
Connecticut Siting Council**
 - Expenditures up to 4 percent of project cost that achieve at least a 15 percent reduction in magnetic field

Policies to Address Public Concern and Residual Scientific Uncertainty

- **Standards and guidelines**
 - No U.S. standards or regulations
 - Voluntary guidance/recommendations (IEEE, ICNIRP)
(acute versus chronic effect)
- **‘Prudent avoidance’ or Precautionary Principle***
 - Status quo standards in some U.S. states (~150 mG)
 - Routing decisions – open house meetings
 - Wiring configurations

* *These steps require clear and specific communications to the general public*