

## BEAUTY AND A BEAST

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### EDITORIAL

In 1925, a broker was hired to sell a building in New York. Through a dummy corporation, the broker himself made an offer of \$80,000 and the client accepted. When the corporation resold the property a few weeks later for \$87,500, the client suspected hanky-panky and sued; ultimately, the case came before Justice Cardozo. First, Cardozo pointed to the obvious conflict-of-interest: A broker's duty is to get the highest price, but a buyer's goal is the opposite. The broker claimed that he revealed enough information when he told his client that the corporation was also a client. Not good enough, said Cardozo, and he laid down the rule regarding disclosure that applies to anyone who owes divided fealty: "If dual interests are to be served, the disclosure to be effective must lay bare the truth, without ambiguity or reservation, in all its stark significance."

Electric power companies must supply power and earn a profit-but also, they must safeguard those exposed to powerline electromagnetic fields (EMFs). In serving these dual interests, they are required to "lay bare the truth" regarding EMF bioeffects. Have they?

There was no disclosure about a \$0.5-million animal study (Johns Hopkins) that apparently corroborated Soviet EMF observations. Similarly, there was no disclosure about EMF epidemiological studies in 1976 (Equitable Environmental Health, Inc.) and 1980 (Tabershaw Occupational Medicine Associates). No results appeared from a \$4 million study (Southwest Research Institute) that related EMF effects in baboons to humans, or from rat studies (University of Rochester) designed to replicate reports that showed EMF bioeffects. In these and other cases, the records of the studies including the study plans, statistical design, results, and evaluation apparently got the deep six. The industry has argued that its secret research was unscientific, and hence not worth disclosing. The premise may be true, but the conclusion is a non sequitur. The concession that the industry bought poor science argues that all industry studies should be completely disclosed (so that we can make up our own minds about the scientific merit), not that some studies may be completely withheld. The Battelle studies, however, exemplify what usually happens—partial disclosure.

EMF work at Battelle commenced around 1975, and has probably cost more than \$50 million; its apparent purpose was to overcome animal studies cited against the industry in hearings in New York. The data obtained during the first several years of the work was either irrelevant or actually adverse to power-company interests, and in mid-stream the studies were retargeted to impeach themselves. The Pig Study had more false starts and design changes than one can sensibly analyze, the Three-Generation Mouse study became a four-generation experiment, and a Fracture Healing study in rats was repeatedly replicated. One can indeed find reports concerning the work at Battelle, but the truth in them thin. By making controlled partial disclosure, the industry sustained the appearance that the Battelle studies are unimportant and inconclusive.

The industry's off the-record argument is that disclosure "in all its stark significance" would cause panic. Not good enough: The benefit to the power company of someone living beside its powerline not getting cancer is a lot less than the benefit to that person of not getting cancer. This difference in risk-benefit status can affect one's view of EMF studies, but, banal as it may sound, one cannot consider undisclosed data.

Power companies and their EMF investigators are tightly linked by contractual privity. There is no revealed, disinterested peer group that judges scientific merit (as with NIH grants), and no freedom-of-information law requires disclosure of research plans or data. Power companies spend hundreds of millions of dollars for EMF research, but only the information they choose is released, usually after it has been treated by their spin doctors.

How do they get away with it? One afternoon, an industry spokesman told a court that he had been asked to do EMF research. The proposed work was grossly inconsistent with his testimony, and an exasperated judge asked for an explanation: "He who has the gold, makes the rules," was the reply. This beastly apophthegm, not the beauty of Cardozo, is the reigning rule regarding industry research. The industry product should therefore be properly labeled: **WARNING: RESEARCH PAID FOR BY THE ELECTRIC POWER INDUSTRY - THE RESULTS MAY BE HAZARDOUS TO YOUR HEALTH.**

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