

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Public-Interest and Level-of-Evidence Considerations in Cold Fusion Public Policy THOMAS GRINSHAW, LBJ School of Public Affairs, The University of Texas at Austin — Cold fusion (CF) protagonists and antagonists would no doubt agree that scientific processes have been challenged in the CF case. The public interest in CF turns on two questions: What are the potential benefits? What is the probability that CF is “real”? Potential benefits have been agreed on since CF announcement in 1989. The probability of CF reality may be assessed based on level of evidence (LoE): preponderance of evidence (PoE); clear and convincing evidence (CCE); and beyond a reasonable doubt (BRD). PoE, from civil law, indicates a probability of 50% or higher. BRD, from criminal law, has a probability approaching 90%. CCE, in between, thus has a 70-75% probability. CF experimental evidence, based on: 1) initial affirmations, 2) the large number of corroborations since marginalization, and 3) particularly demonstrative experiments, reasonably indicates at least a PoE level of evidence for excess heat. A case can also be made for a CCE (but probably not for a BRD) LoE. In either the PoE or CCE scenario a clear need is demonstrated for change in policy toward CR, given its potential benefits to humanity.

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Date submitted: 16 Dec 2007

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