

The US Government Once Again Evaluates Cold Fusion

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The US government has once again made an effort to evaluate the reality of the phenomenon called cold fusion. The first effort was made in 1989 by the ERAB Panel (Energy Research Advisory Board) shortly after Profs. Fleischmann and Pons announced their discovery. The result was a mixed message in which no support for the claims was provided. Nevertheless, an implication was made to evaluate proposals by the normal peer review process. None were funded by the DOE (Department of Energy). Now a new evaluation has been undertaken by a panel of reviewers assembled by the DOE, mainly from the physics profession.

The DOE Review Panel was provided with written documents chosen or written largely by Michael McKubre (SRI) and Peter Hagelstein (MIT). In addition, oral presentations were made to eleven of the eighteen panel members by M. McKubre, P. Hagelstein, S. Jones, A. Lipson, G. Hubler, and V. Violante at a meeting in Washington held on August 23, 2004. The panel was then asked to address the following charges:

1. Evaluate the experimental evidence presented for the occurrences of nuclear reactions in condensed matter at low energies (less than a few electron volts)
2. Determine whether the evidence is sufficiently conclusive to demonstrate that such nuclear reactions occur.
3. Determine whether there is a scientific case for continued efforts in these studies and, if so, to identify the most promising areas to be pursued.

After a suitable delay, each reviewer submitted a written response. These documents can be found at www.LENR-CANR.org along with a response to the reviewers comments. The latter response is an effort to correct some of the misunderstanding and confusion shared by many reviewers.

A summary conclusion was made public by the DOE in which no support for the claims of nuclear reactions was provided, no special funding for the subject was authorized, but suggestion was made for people to submit focused proposals for a normal peer review process. In other words, the official attitude had not changed even though the subject had been studied for 15 years by laboratories all over the world and after numerous papers supporting the claims had been published.

In spite of the lukewarm summary, a majority of reviewers found reasons to believe some of claims, even though a few rejected the whole idea. At the other extreme, many reviewers even thought special attention should be directed toward investigating certain aspects of the phenomenon. Most reviewers were clearly distracted by the popular myth

that the claims have not been replicated, are easily explained by error, and are in conflict with current theory. Nevertheless, many acknowledged that something very strange is being observed.

If fault is to be assigned, the popular and scientific press need to be criticized for their failure to properly inform the public about the reality of the claims. This failure has created a poorly informed peer group that can not objectively evaluate the subject and a general population that is being denied the potential benefits from a pollution-free and inexpensive energy source. The reality is no longer obscured by obvious questions of error or by incomplete studies. Work is now being done in at least eight countries in major laboratories by hundreds of trained scientists. Books are available describing the scientific and social history of the field (*Excess Heat – Why Cold Fusion Research Prevailed*, by Charles Beaudette and *The Rebirth of Cold Fusion – Real Science, Real Hope, Real Energy* by Steven Krivit and Nadine Winocur). A website (www.LENR-CANR.org) can be accessed on which all of the facts are available. No excuse remains for reporters or journal editors to continue the false myth. Even though the exact nature of the phenomenon is still not understood, it is clear that something very strange and new has been discovered. The only issue that remains is who and which country will unlock the secret and make cold fusion energy available to a grateful world.