BREAKING THROUGH



Vindication!?

by Eugene F. Mallove, Sc.D.

ews of the U.S. Department of Energy's recent commitment to review the past fifteen years of evidence for low-energy nuclear reactions (LENR) and associated excess heat phenomena has hit like a bombshell. It is almost like waking up, as many of us did, to find that Communism had toppled in Russia and that the Soviet Union was no more! So entrenched was the opposition at DOE and in academia against even publicly reviewing the LENR evidence (let alone accepting its stark implications), that many of us probably despaired that we would ever live to see the day of this turn-around. It is a truly astonishing reversal.

The details of how this DOE change came about appear in an accompanying article, "U.S. Department of Energy Commits to Re-examine 'Cold Fusion'—15 Years of Evidence for Excess Heat and Low-Energy Nuclear Reactions" (p. 9). But let's not get too carried away so that we ignore the implicit dangers of this review. We are not yet home-free at last, because there can be no doubt that just as in 1989, the pathological skeptics will be out in force with sharpened knives and all manner of dirty tricks to derail this review. They will try their best to kill it or make it much less than what it should be: A complete and unconditional acknowledgement that the DOE missed something very, very big beginning in 1989—two irrefutable classes of phenomena that are obviously related at some still not fully understood fundamental level: 1. Large magnitude excess energy far exceeding any conventional chemical explanation, in a variety of electrochemical and gaseous hydrogen-containing systems, and 2. An array of nuclear changes and emissions in what were previously thought to be purely chemically active systems containing hydrogen.

There is yet no public information available about just how this review is to be conducted, but that is not surprising. Also, the DOE has not trumpeted the review with a public press release. Perhaps this is its way of sneaking off like a defeated dog with its tail between its legs. A more sinister interpretation, which I do not think likely to be true, is that the pending review is actually a ruse to entrap the LENR community and then attempt to kill this work off once and for all. That could be attempted, of course, by insisting that an integrated theory for all of the claimed LENR effects be presented before the DOE will "bless" the field with a positive report. No such satisfactory, comprehensive theory exists in the LENR community, nor is one likely to be framed in the next few years. But theory-driven optimism is rampant in the LENR field, so there is a real danger that one or more theorists will try to push their theory too far and will put the field in a position from which it would be difficult to recover, by handing the opposition another straw man

that could be shot down.

To gauge the coming perils, consider the statements of one of the most vindictive and vicious LENR critics, Prof. William Happer of Princeton. This unrepentant person is still mouthing his ignorance. The hot fusioneer and former DOE Energy Research Advisory Board (ERAB) Cold Fusion Report panelist in 1989 is quoted in the April 2004 issue of *Physics Today*: "I think a review is a waste of time. . .But if you put together a credible committee, you can try to put the issue to bed for some time. It will come back. The believers never stop believing." In other words, Happer "knows" *a priori* that there is no science here, that the research must all be based on "belief." What a contemptible villain!

And note well Happer's assumption that the DOE review will inevitably draw a negative conclusion—a preordained result. Though Happer has not heretofore examined LENR papers objectively—or most likely even read them—he confidently wears his well-known bigotry on his sleeve. This is the man who concluded that Drs. Fleischmann and Pons were "incompetent boobs," simply by watching them on television in 1989. Don't think for one minute that Happer will not actively work toward the obfuscation of even a mildly supportive report that the DOE might wish to issue. People like Happer are, in a peculiar way, as dastardly as terrorists who hijack airplanes. The Happers of this world are always plotting to hijack science and kill ideas that could benefit civilization, simply because of their irresponsible fanaticism in defending shaky scientific turf.

The virtue of the DOE review process that has now been promised is that it brings the topic out into the open again; it gives the LENR research community a chance to contrast its solid evidentiary record with the irrational concepts and non-existent rationales of the pathological skeptics. It also allows the vast audience of potential good will that exists for "cold fusion" to become engaged and focussed again. It gives journalists "permission"—the all-important news peg (the DOE review as a hard news item)—to write about cold fusion again. Just as we had long predicted and therefore struggled to achieve, there has been an outpouring of general media articles about the DOE review. This is exciting news for young journalists, who may not even have been very aware of cold fusion, simply because they were too young when the story first appeared.

The entire LENR research community and interested supporters of that research, not just the heroic participants who solicited the review at DOE, deserve broad praise for helping to bring about this fantastically welcome change of heart. It is step one in our collective vindication. After putting out the news about the DOE reversal over e-mail, I have been impressed with many kind messages that have poured in from subscribers, acquaintances, and friends, who imagine

that with the DOE turn-around, "vindication" has already arrived, which it hasn't. That external vindication can only be said to have come when there is broad-based recognition of the proved reality of the newly discovered phenomena—by the scientific community, by educators, by the press, and even by that quirky barometer of popular culture, the entertainment industry. Above all, vindication will have arrived in force when the everyday assumptions shared by people everywhere are changed, when they can confidently look forward to a day—one hopes not far off—when New Energy, in whatever form, will become a practical utility in their lives.

Of course, *scientific* vindication came long ago, simply from the preponderance of replicated results, which proved that LENR phenomena were not an illusory class of observations.

Let me share with you some of the good tidings that we have received in recent weeks, which I take as having been dispatched not just to me personally—though that's how they were addressed—or to *Infinite Energy*, but to the entire LENR community:

- ☐ What great news!!! Here I was beginning to think that physics would make no further progress until nature took its inevitable course, and the current generation of naysayers went to their just rewards for their outstanding contributions to humanity. . .Keep up your relentless work, and best of luck on the current reversal of fortune. —Steve R. O'Donnell
- ☐ The impending review is very good news indeed. I remember that when you visited Philadelphia, and we were chatting at the airport waiting for your plane to depart, that I asked you what you sought: in one word, it was "Vindication." I wish you well, and view your long struggle with respect and understanding. So now here are my continued and renewed good wishes that vindication shall be yours, along with all the others who have kept the faith all these years. —Mike Carrell
- ☐ So, we only wasted fifteen years? I guess better late than never. —Camille Grosdidier, VOA French
- \square Thanks, Gene. . .keep chugging. . .this train is seeing light, I think. —Vince Golubic
- ☐ Thank you for sharing this! It certainly sounds encouraging and hopeful; you know your time will come—this is all just a huge test of your patience! —Lisa Zakar
- ☐ C'est marvelliuex! I have forwarded your e-mail around! Momentum rolls along. Keep working on this vital project.

 —Pamela Munro

One of my greatest pleasures in recent weeks was to be quoted, again, in a *New York Times* article. Bill Broad had quoted me in 1991 and again in 1999. The present article announced the DOE turn-around (March 25, 2004, by Kenneth Chang, p. A16): "I am absolutely delighted that the D.O.E. is finally going to do the right thing,' Dr. Eugene F. Mallove, editor of *Infinite Energy* magazine said. 'There can be no other conclusion than a major new window has opened on physics.'" It was very pleasing to be able to voice my opinion in the "newspaper of record." A surprising and welcome outcome of that citation: an executive with an oil investment firm contacted New Energy Foundation and gave an immediate, generous contribution. He wrote, "Didn't know you [meaning cold fusion] were still around. Sorry for

not being a donor sooner. You can count on my support monthly." Now if that isn't a sign of something like a "Great Turn-Around," I don't know what is.

Even old Bob Park of the American Physical Society seemed to sense, grudgingly, that something Very Big was beginning to happen. He mentioned cold fusion "vindication" as the lead item in his "What's New" internet column of April 2, even though no one that I know from LENR was publicly using that term:

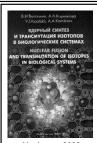
COLD FUSION: TRUE BELIEVERS SEE DOE REVIEW AS "VINDICATION."

There hasn't been much to celebrate in the fifteen years since the University of Utah held a press conference in Salt Lake City to announce the discovery of "cold fusion." Although a brave little band of true believers continued to trumpet cold fusion, the band leader was publishing *Infinite Energy* Magazine. That made it pretty hard to take this stuff seriously. Although there was no press release or announcement, DOE has apparently agreed to take a second look.

Sometimes even an insult can be an honor, when it comes from such an eternally misguided person. Poor Bob was probably most upset that the *New York Times* quoted this "band leader" and an out-to-lunch hot fusion physicist, and not him.

Other thoughts swirl like a hurricane around this still incomplete but emerging vindication. Why does it have to take so long? Why did this new science have to be so brutally victimized, and its researchers put through such prolonged abuse—just because they happened to make truly novel scientific findings? How many more months or years will the torment last? Will enough resources materialize in the near term so that work can really accelerate with or without DOE-provided funding? Furthermore, when will the LENR field itself realize that its findings are really part of a much larger problem that burdens modern physics: serious unrecognized foundational errors in its theories, which may make these theories unsuitable to provide a complete understanding of the LENR enigmas?

What will happen to tokamak hot fusion—will the DOE really be forced to see the light and get rid of that preposterous white elephant? Will the initial shock troops against cold fusion from MIT, Caltech, and elsewhere be exposed for their misdeeds? How will the pathological skeptics attempt to re-write the history of the past fifteen years to suit their malign purposes? The coming months will be very interesting times, that is for sure. Let's hope for some satisfying answers to these many questions. For now, let's just relax and try to think pleasant thoughts about the coming New Energy Age. It may be a bit closer than we had thought a few months ago.



Hardcover, 2003 In Russian and English

Nuclear Fusion and Transmutation of Isotopes in Biological Systems

by V.I. Vysotskii and A.A. Kornilova

\$32.00 North America \$38.00 Foreign

New Energy Foundation, Inc.

P.O. Box 2816 • Concord, NH 03302-2816 Website: www.infinite-energy.com Phone: 603-485-4700 • Fax: 603-485-4710