Nuanced changes in procedure could result in success or failure. When Chalk River Laboratories was contracted to conduct experiments, they calibrated the cells with internal resistance heaters and changes in ambient temperatures and modeled the heat loss mathematically.

At first, they had difficulty getting excess power, but in consultation with Mills they were able to pinpoint subtle differences that were initially overlooked.

For instance, Mills's cell should not be electrolyzed above approximately 2.5 volts and 1 amp of current. The cell and anode should be washed in hydrochloric acid. And the hydrino gas should be allowed to escape the cell as it evolves. This tireless pursuit of detail allowed Chalk River to obtain a modest 28% excess energy balance with their cell.

Some were successful but unable to continue research, such as Michael Jacox, a research scientist working for the Department of Energy at the Idaho National Engineering and Environmental Laboratory. Jacox felt compelled to give Mills's cells a try, but kept the project in relative secrecy. He obtained three of Mills's large electrolytic cells and began operating them with a pulsed input current. His early results were encouraging, with a gain of 4 (Jacox, 1993; Baard 1999; Stolper 2006).

But in early 1993, as he and his team proceeded with the research, management discovered the operation: "there was a management decision that said we should pull the plug on the whole project and not disclose that we had been involved in the project at all," Jacox later told a reporter (Baard 1999). Despite this, Jacox and his team decided to continue work in what he called a "clandestine operation," to analyze the unusual materials being produced at BLP.

Laboratory	Work Performed	Reported Gain
Idaho National Engineering Lab	Electrolysis, XPS	8.5

SDIO–Wright Patterson US Air Force Base	Diffusion Cell	?
Chalk River National Lab (Canada)	Electrolysis	1.3
NASA – Lewis	Electrolysis	1.7
Brookhaven National Laboratory	Electrolysis	?
Lehigh University	XPS	N/A
MIT Lincoln Laboratory	Electrolysis	4.0
Pennsylvania State University	Gas Cell	20.0
Ursinus College	Electrolysis	?
Moscow Power Engineering Institute	Electrolysis	2.5
LEPGER[5]	Electrolysis	?
Thermacore, Inc.	Electrolysis	21.0
Air Products & Chemicals	Mass Spectroscopy	N/A
Westinghouse Electric Corp.	Electrolysis	1.5
Schrader Analytical & Consulting Lab	TOF–SIMS	N/A

Collaborators of BLP prior to 1997, with summary of maximum reported gain from calorimetry. (Jansson 1997)

Learning about Thermacore's success, Charles Haldeman, a top engineer at the US Air Force's Lincoln Laboratory at MIT, requested funding from the Advanced Concepts Committee to build and test a Mills cell in 1993. He was given $25,000 to start. Haldeman designed a careful experiment and even built a custom power source. His initial study found excess heat with a gain of 2, enough to convince management to commit another $75,000 to the effort. In the second phase, he found a gain of 10 from an input of 0.5 W.

When presenting his findings to management, he was told there must be some error he was overlooking. Haldeman had no suggestions for what the error could be, and neither did they. He wrote a preliminary report, but retired before it had passed the review process necessary to become final. This allowed the management at MIT to withhold the paper for six years; it didn't see the light of day until 2001 (Haldeman 1995).

Haldeman later told a reporter, "This area is not well understood. There's clearly incontrovertible evidence that there's something going on in the work of Mills and others that certainly deserves further study. It's a tragedy that the politics of cold fusion has prevented science from taking its course" (Baard 1999).

Some wanted to do research, but were disheartened from the get–go at their chances of securing any funding. Luke Setzer, a mechanical engineer at the Kennedy Space Center in Florida (who started the Hydrino Study Group), began talking to the physicists there, but it was clear they would not support it. "One of them kept referring to 'fictional energy' rather than 'theoretical energy.' That kind of language tells me they're already shutting their mind to the possibilities" (Baard 1999).

The bias against Mills's work (as, perhaps, with all bias) was self–sustaining; most feared to be associated with the work; those who had the courage and interest to pursue it were few, and those who obtained confirming results were often put under pressure to suppress the study and stop work; those who persisted in the research were ostracized; those who connected with BLP to collaborate, and especially those who sought to become business partners, became guilty by association.

Others took interest in Mills but maintained tight non–disclosure agreements;[6] a smart move, as these groups could dangle their feet without getting wet.