

e-mail addresses, Web access to IEEE's database, and discounts for attending IEEE conferences. These and other benefits have not been reinstated. IEEE has 360 000 members worldwide. Most of the roughly 1800 in Iran have dropped their memberships.

The measures have angered IEEE members. By the time of the April ruling, more than 5300 IEEE members had signed a petition demanding that the institute "cease discrimination against IEEE members from countries that are embargoed by the US Government." Michel Gevers of Bel-

gium's Catholic University of Louvain, who launched the petition, says the ruling is "welcome news," but adds that he will continue to fight for the restoration of member benefits. "In my view, you cannot be an international organization if you discriminate against members in some countries."

The ruling is "half a victory," adds Fredun Hojabri, a former chemistry professor and president of the California-based international alumni association of Iran's Sharif University of Technology. "I am happy that the spe-

cific problem of IEEE publishing has been solved. But instead of admitting a mistake, OFAC has been very specific [in granting permission]. Can other publishers in the US print papers from sanctioned countries? And I am worried that IEEE will use the scary, magic word 'service' to continue restricting member benefits."

"We wanted to get one battle over at a time," says IEEE President Winston. Member benefits are next, he adds. "If the ball is in our court, we don't let too much grass grow under it."

Toni Feder

Marburger Refutes Claims That Bush Administration Misuses Science

White House rebuttal fails to persuade many in the science community.

"Wrong and misleading" is how Office of Science and Technology Policy Director John Marburger described a recent Union of Concerned Scientists report criticizing the scientific integrity of the Bush administration. In a detailed 20-page response to Congress and an accompanying summary released to the public on 2 April, the administration refuted point by point the UCS's claims (see <http://www.ostp.gov>). "I hope this response will correct errors, distortions, and misunderstandings in the Union of Concerned Scientists' document," he said. "The bottom line is that we have a strong and healthy science enterprise in this country of which I am proud to be a part."

The UCS report, which came out in February, cited scores of incidents in which the UCS claims the administration distorted science for political purposes (see *PHYSICS TODAY*, April 2004, page 30). Accompanying the report was a strongly worded statement signed by more than 60 scientists, including 20 Nobel laureates, charging the administration with manipulating and misrepresenting science for political gain.

Within days of the report's release, Marburger, who headed Brookhaven National Laboratory before becoming the president's science adviser, said that all of the UCS allegations were wrong. He promised a Senate committee a full written response that would refute each of the UCS allegations. "President Bush believes policies should be made with the best and most complete information possible, and expects his Administration to conduct its business with integrity and in a way that fulfills that belief," Marburger said in the opening statement

of his response. "I can attest from my personal experience and direct knowledge that this Administration is implementing the President's policy of strongly supporting science and applying the highest scientific standards in decision-making."

Climate change, one of the most contentious issues in the science-versus-politics debate, was addressed in the UCS report. The report said that "the Bush administration has consistently sought to undermine the public's understanding of the view held by the vast majority of climate scientists that human-caused emissions of carbon dioxide and other heat trapping gases are making a discernible contribution to global warming." The UCS report provides a list of references, including statements as recent as last December by Paula Dobriansky, undersecretary of state for global affairs, to support their case. Marburger countered those claims, arguing that "President Bush clearly acknowledged [in a Rose Garden 11 June 2001 speech] the role of human activity in increased atmospheric concentrations of greenhouse gases. And the National Academy of Sciences indicates that the increase is due in large part to human activity. . . . This administration has sought to strengthen, not undermine" the role of science, he said.

In addressing another controversial climate incident described in the UCS report, Marburger said the Environmental Protection Agency dropped a short chapter on global warming from its 2003 draft report on the environment because officials knew a much more detailed report would be coming out only a month later.

Marburger's explanation, said Kurt

Gottfried, chairman of the UCS board of directors, "is not plausible. Our report explains in detail why that chapter was dropped. The White House ordered the [EPA] officials to censor that chapter to an extent that the EPA refused to publish it." The incident first appeared in the *New York Times*, Gottfried said, and was based on a leaked EPA memorandum about the White House censorship efforts. Other government officials have since confirmed the events took place, he added.

"The climate scientists didn't have to be told [by the UCS] what was going on," said Gottfried. "They, of course, were on top of it. It was the same case with public health and nuclear weapons experts. The signers [of the statement] were very aware of the situation in their own field and neighboring fields." He added that the scientists' suspicions were supported by reports that first appeared either in the popular press or in scientific journals. What was striking, said Gottfried, was that the UCS report pulled together the claims of information manipulation and misuse of science into one document. Until that was done, he said, many scientists "may not have been fully aware of the extent and depth of this."

Marburger also described as "highly offensive" the UCS report's suggestion that Richard Russell, OSTP deputy director for technology, is not qualified for his position. The UCS report says that although Russell has an undergraduate degree in biology, he has no graduate or professional training in science, nor any experience in a technology-related industry.

Marburger said that he nominated Russell and the American Association of Engineering Societies endorsed the selection. The UCS report included a

“highly unfortunate and totally unjustified personal attack on a Senate-confirmed official in my office,” Marburger said. “The attack appears to be based on a lack of understanding of the function of my office and the qualities that are required to perform them properly. Given the ease with which this ignorance could have been rectified, it is inexcusable.”

Many members of the scientific community wondered how Marburger could defend Bush’s science policy. Neal Lane, President Bill Clinton’s science adviser and a former director of

NSF, said Marburger has “done a good job of explaining the administration’s position on the issues we raised in the statement. He has no choice but to defend the administration’s actions.” Lane, one of the signatories of the statement accompanying the UCS report, said that the administration’s response “does raise some questions that will need further investigation. On the most serious matters, however, I did not see anything new in the administration’s response.”

Jim Dawson
Paul Guinnessy

Yucca Mountain Workers Exposed to Dangerous Dust

Digging techniques designed to protect the “scientific integrity” of a test tunnel at the US Department of Energy’s Yucca Mountain project exposed more than a thousand workers to dangerous silica dust between 1992 and 1996, according to a DOE safety official. As many as 1500 workers may have been exposed to the dust, which can cause silicosis, a progressive and potentially fatal lung disease.

The problem first came to light last September when a former worker at Yucca Mountain told DOE’s Office of the Inspector General that workers had been overexposed to silica dust during mining operations in the early to mid-1990s. An investigation found that for several years after digging began on the five-mile-long test tunnel, water suppression of dust was not routinely used. According to Gene Runkle, a safety official with DOE’s

Office of Civilian Radioactive Waste Management (OCRWM), “to ensure scientific integrity of the tests that would be performed there,” the suppression technique was not used.

Moisture is a critical issue in Yucca Mountain, which is slated to become the federal government’s permanent repository for tens of thousands of tons of high-level radioactive nuclear waste. Pending approval from the Nuclear Regulatory Commission—DOE plans to submit its license application in December—Yucca Mountain could begin to receive waste in 2010. Standards call for the waste to be isolated from the surrounding environment for at least 10 000 years—and that requires, among other things, an extremely dry facility.

Former employees have also claimed, and DOE officials have conceded, that tunnel workers weren’t re-

quired by the DOE mining contractor to wear respirators or even facemasks during the first several years of tunneling. After a 1996 safety review by OCRWM, respirators were made mandatory and ventilation was significantly improved in the tunnel, according to testimony Runkle gave at a recent hearing of the Senate Subcommittee on Energy and Water Development held in Las Vegas, Nevada. Runkle also said that a protection program established in 1998 has actively monitored workers and discovered only two confirmed cases of silicosis.

Gene Griego, the former tunnel worker who first alerted DOE to the problem, contends that there are scores of people affected by silicosis. He has filed a class-action lawsuit against the DOE contractors who oversaw the early tunneling.

DOE officials responded in January to complaints about the silica overexposure by setting up a medical screening program, which is run by the University of Cincinnati under the direction of OCRWM. Letters have been mailed to about 2400 current and former employees informing them of the program. Yucca Mountain workers who might have been exposed to high levels of silica dust and other potentially toxic materials are offered free silicosis screening. As of late March, 300 people had responded to the letter.

Senator Harry Reid (D-NV), a staunch opponent of the Yucca Mountain project since its inception in 1987, is highly critical of DOE’s handling of the silicosis issue. In announcing the Senate hearing in Las Vegas, Reid said DOE “sent workers into that mountain knowing full well of the presence of silica and knowing full well that exposure to silica can cause death.” He added that DOE knew the exposure was “100% preventable, but did nothing that would have protected these workers. At best, DOE’s actions are negligent and at worst criminal, and I intend to use this hearing to get to the bottom of this.” Reid is particularly passionate about the issue because, according to his staff, his father was a miner who suffered from silicosis.

At one point during the hearing, Reid interrupted Runkle and said, “DOE ignored the threat. What has taken place here is just absolutely wrong.”

Runkle later said project administrators were trying to “balance opera-



Early tunnel workers at Yucca Mountain are at risk of developing silicosis.