

LETTERS

Access to Grant Applications

Recently the National Institutes of Health (NIH) notified me by phone that a copy of one of my grant applications had been requested under the Freedom of Information Act. I was told that the scientist requesting this grant, or any other person who made such a request, had the legal right to any information included in the application, except for budgetary or other personal data. I talked to a number of my colleagues and found that some of them had already had similar experiences.

My immediate reaction was anger. I felt that my confidential relationship with NIH was about to be breached. After 2 days I calmed down and placed a phone call to the person who had made the request. We had a very friendly conversation. As a result, I offered to provide him with the information he had wanted from the grant application and whatever help I could give. In return, he canceled his request for the grant application.

I am concerned about the implications of this episode. It could very well have ended differently. The Freedom of Information Act was passed because of the potential for the government to conceal its proceedings from the public. It would not be unreasonable for a citizen to request information about the use of radio isotopes or hazardous biological agents insofar as these experiments might affect the welfare of the population or the environment. Citizens should also have the right to know how their money is being spent. In contrast, it is hard to imagine an advantage to our government or to the people of a breakdown of the privacy of the grant review and grant administration processes. Information provided in reviews is vital to the administration of grants, but full availability of that information to other investigators, before publication, is likely to provide a negative incentive to principal investigators. Similarly, the danger of plagiarism or pirating of ideas presented in grant applications is apparent.

There are a number of ways to keep this from becoming a serious problem. Major scientific journals could take an editorial stand against use of the access privilege by scientists. Review agencies could require investigators to submit a list of grant applications they have reviewed under the Freedom of Information Act during the previous 2 years. As NIH already informs investigators when their grant applications have been requested, it would seem possible for

NIH to simply make that same information available to grant review bodies. The knowledge that this information is available to the review bodies should serve as a sufficient deterrent to abuse of the system.

STEPHEN M. SCHWARTZ

Department of Pathology, School of Medicine, University of Washington, Seattle 98195

Nuclear Power Potential

George L. Weil (Letters, 1 Aug., p. 544) comments on my paper, "The potential contribution of nuclear power in an energy emergency."

He first cites Eliot Marshall's comment (News and Comment, 11 July, p. 246) that the "catch" in my projection was assuming "an extraordinary degree of governmental and financial support." My paper was presented at a colloquium on "Contingency Planning for an Energy Emergency" at Stanford University last June. The scenario being discussed assumed a prolonged interruption of Persian Gulf oil, causing a 45 percent reduction in oil supplies to the industrial democracies of the world. I addressed the potential for nuclear power in such an emergency. In a national emergency with priority on energy projects, we concluded it was quite practical to increase nuclear electric power production by 60 percent within 6 months (equal to the energy equivalent of 0.7 million barrels of oil per day) and by 340 percent within 5 years (the energy equivalent of 3.8 million barrels of oil per day) by finishing the nuclear plants already authorized. The support required is to forego the luxury of unnecessarily protracted licensing delays in a national emergency entailing widespread economic dislocation and human suffering.

Weil correctly notes that nuclear plant capacity factors were quite low in 1979 (largely as a result of revaluations and backfitting requirements stemming from the Three Mile Island accident). We believe a substantial improvement can be made in nuclear plant capacity factors. Our study concluded that, in a protracted energy emergency, an 80 percent capacity factor is achievable as an industry average with close cooperation between regulators and utilities, managed maintenance programs, and capital improvements. My conclusions are based on this figure and not on "a capacity factor close to 100 percent," as Weil alleges. In addition, we found that both existing and new nuclear power plants could be up-

rated; that is, increased in nameplate capacity, by an average of 5 percent. Such upratings have already been achieved in some nuclear plants and give credence to this conclusion.

Regarding the potential of nuclear electric power to substitute for oil and in accordance with the theme of the colloquium at Stanford, we tabulated potential nuclear energy production in terms of the energy equivalent of millions of barrels of oil per day. This does not necessarily imply that a one-for-one oil displacement directly results. In fact, however, there are numerous opportunities for replacement of oil with nuclear or coal-generated electricity. For example, 3.3 million barrels of fuel oil per day are now being burned for residential and commercial heating that could also be done with electricity or natural gas. Further, the United States is burning natural gas at the rate of 1.7 million barrels per day (oil equivalent) to generate electricity. This natural gas could be substituted for oil elsewhere in the economy if the electricity were generated with coal or nuclear power. These areas are in addition to the 1.7 million barrels of residual fuel oil per day (most of which is imported) that is burned to produce electricity.

J. J. TAYLOR

Nuclear Center, Water Reactor Divisions, Westinghouse Electric Corporation, Box 355, Pittsburgh, Pennsylvania 15230

Dutch or Deutsch?

The legend for the cover of the 15 August issue reads: "The Dardanelles and Sea of Marmara as seen by a German cartographer in 1694." However, the script on the reproduction reads "het ghesicht van den Hellespont en van de propontide . . ." and is plain old Dutch, not Deutsch.

I. M. KOLTHOFF

Department of Chemistry, University of Minnesota, Minneapolis 55455

According to the best sources available to me at the time, indications were that a German made the drawing in 1694. After further research, I find that in fact the cover illustration was engraved about 1686 by Jacques Peeters (1637-1695) of Antwerp and was published around 1692. The identity of the cartographer is unknown.

JOHN C. KRAFT

Department of Geology, University of Delaware, Newark 19711