## **Environment: Academic Review for Impact Statements**

Something akin to the academic peer review system will be extended, selectively, to federal environmental impact statements under a 2-year project sponsored by The Institute of Ecology (TIE) and funded by the Ford Foundation. A major aim of this prototype effort is to see such academic review widely adopted and carried on beyond the life of the project itself.

The new TIE program, known as the Environmental Impact Assessment Project, involves the assignment of interdisciplinary teams of "public interest scientists" to prepare critiques of impact statements by agencies such as the U.S. Forest Service, the Environmental Protection Agency, and the Federal Highway Administration. Impact statements for all federal activities having substantial effect on the environment are required under the National Environmental Policy Act (NEPA) of 1969.

Arthur D. Hasler, director of TIE and professor of limnology at the University of Wisconsin, has appointed Malcolm F. Baldwin, a lawyer formerly with the Conservation Foundation, as director of the project. The assistant director is Robert B. Smythe, an ecologist. Thomas C. Jorling, director of the Center for Environmental Studies at Williams College, is chairman of the project's policy board, on which a mix of disciplines are represented, namely, law, engineering, ecology, and economics.\*

Some 20 to 25 impact statements will be reviewed during the course of the project, these to pertain to federal activities in five areas selected by the policy board—coal and oil shale leasing and development on public lands, forest management, highway construction, and waste treatment. An assessment already under way of the impact statement on the Department of the Interior's proposed program of oil shale leasing in Utah, Wyoming, and Colorado illustrates how the project is to be carried out.

This assessment will be a final impact statement of several hundred pages already issued by Interior (usually the statements to be reviewed will be in preliminary form). The two largest institutions near the oil shale region are the University of Colorado and Colorado State University, both being among TIE's 80 "member" institutions, which means that they are willing for their faculty members to give time to TIE-sponsored activities, at least selectively.

Therefore, nearly all of the dozen members of the interdisciplinary team formed in September for this assessment are from these two universities. Included are people trained in disciplines such as hydrology, geology, soils science, botany, law, economics, and sociology. A landscape architect and a geologist from the University of California at Berkeley and a botanist from Arizona State University are the only team members from institutions far removed from the oil shale region. A goal of the assessment project is to encourage institutions within

\* In addition to Jorling, the members of the board are F. Herbert Bormann, Yale School of Forestry and Environmental Studies; Allen V. Kneese, Resources for the Future, Inc.; William H. Matthews, Department of Civil Engineering, Massachusetts Institute of Technology; Laurence I. Moss, executive secretary of the Committee of Public Engineering Policy, National Academy of Engineering, and president of the Sierra Club; John M. Neuhold, director of the Ecology Center, Utah State University; James G. Speth, Natural Resources Defense Council; and George M. Woodwell, Brookhaven National Laboratories.

a region to become involved in reviewing developmental activities that can alter the regional environment.

Altogether, the assessment of the oil shale impact statement is expected to take about a month, with individual team members working on it as their time permits and as the project requires. The guidelines and format for the assessment has been established by the project staff and policy board, and, before being submitted to Interior and released to the public, the assessment report will be subject to editing by the staff.

Thus far, some 400 persons have volunteered to take part in the overall 2-year assessment project. Normally, those assigned to serve on project teams will receive only such funds as required to cover the cost of site visits and other expenses, although honoraria may be given in exceptional circumstances. With a total 2-year budget of only \$220,000, the project necessarily relies on institutions and faculty members freely contributing their time, in keeping with the peer review system.

A key question as to the project's ultimate significance is, Will the federal agencies find sufficient advantage in the critiques made by the project to want academic reviews made of all their more important impact statements, as a regular part of the impact statement review process? Even today, the statements prepared by any particular agency are circulated for comment among other interested agencies and parties. In 1972 the total number of statements prepared ran to nearly 1500, and, while many were brief documents for small, noncontroversial projects, a sizable number were voluminous documents for major projects.

Leaders of the assessment project foresee three possible ways the project might prove influential beyond the 2 years it is scheduled to run: (i) The federal agencies might adopt substantive guidelines for impact statements that special teams are to prepare in a later phase of the project with insights gained from the various impact statement assessments; (ii) the agencies might themselves wish to make a practice of calling on appropriate institutions to have interdisciplinary teams review their impact statement; (iii) the agencies might even wish to see the present assessment project continued and expanded, with federal funds provided for that purpose.

Academic review of impact statements, should it become the common thing, could represent still another important step toward opening up the formulation and planning of federal projects to participation by highly qualified people who are not a part of an agency's usual "constituency." The enactment of NEPA 4 years ago was the first big step. The establishment in 1970 of the Environmental Protection Agency, as a bureaucratic entity separate from Interior and all other agencies having programs that alter the environment, was also calculated to provide more independent review of federal activities that affect the environment. The almost eager willingness of the federal courts to entertain law suits brought under NEPA-and to insist that impact statements more adequately meet that statute's full disclosure requirementswas another move in that direction. Academic review, done systematically according to carefully developed standards, could further extend the trend.-L.J.C.