

## Carter's Energy Plan: A First Step

President Carter's national energy proposal, delivered to Congress on 20 April, is a step in the right direction but requires rethinking in some areas.

This was the general message delivered by speakers at the 17 May Conference on National Energy Policy, sponsored by AAAS, The MITRE Corporation, and the Carnegie Institution of Washington. The symposium was held on Capitol Hill in the Dirksen Senate Office Building and was attended by 300 invited guests.

The conference, keyed by Senator Henry M. Jackson (D-Wash) and Philip H. Abelson, Carnegie president and editor of *Science*, was convened as a forum for analysis of the President's proposal by experts in the field as well as members of Congress.

Chaired by Abelson, MITRE senior vice president Charles A. Zraket, and Emilio Q. Daddario, president of AAAS, the conference's 12-hour program included presentations by seven major speakers, whose points were questioned by a panel of inquiry.\*

Jackson, while applauding the Carter proposal for revealing "the hard facts about our energy shortages, our shameful waste of energy, and our precarious dependence," took issue with some facets of the plan. Its "marketplace philosophy," argued Jackson, assumes that "if the right economic incentives and disincentives are applied, consumption will drop, new sources will be developed, and we will all live happily ever after."

"Frankly," he concluded, "it isn't going to happen that way." The senator called for an aggressive role in energy production by the federal government and outlined its responsibilities: financing the first oil shale and coal gasification

plants; resolving the environmental problems involved in offshore oil development and energy facility siting; and playing "a new role" in developing and helping finance an energy transportation system that will bring oil, gas, and coal to the markets that need them. A point introduced by Jackson and disputed at times during the day was the necessity for creating new institutions to oversee the transition to new energy sources.

Abelson had a major reservation about the Carter plan in terms of its underestimation of the energy gap the nation will face. A program based on conservation and substitution of coal for oil

and gas, he said, will not suffice. Projecting "enormous economic dislocations and unemployment" if and when oil and gas supplies fail, Abelson found it "strange that in a 103-page plan there is no evidence that the many problems of substitution have been weighed or that the validity of estimates concerning future production of oil and gas has been argued." Another weakness of the national energy plan is its limited discussion of policy with respect to the outer continental shelf, Abelson contended. The *Science* editor pointed to the necessity for exploring for oil there, given the dwindling resources obtained from drilling in the contiguous 48 states. The Administration plan's restriction that allows premium prices only for oil and gas from wells at least 2½ miles from an existing site or 1000 feet deeper would "discourage drilling and hasten the attrition rate of reserves and production." Like

## AAAS Wins Energy Award

AAAS was cited for "outstanding achievement in bringing a heightened awareness of the . . . energy situation to the . . . scientific community" at the energy achievement awards dinner of the National Energy Foundation (NEF) on 1 June in New York City.

In presenting the award, Frank G. Zarb, former chief of the Federal Energy Administration, outlined several AAAS programs and projects, including the regional seminars program, the Conference on National Energy Policy held in Washington, D.C., in May, and coverage of energy issues in *Science*.

Accepting on behalf of AAAS was associate executive officer J. Thomas Ratchford.

Two other awards, symbolized by a crystal prism, were presented to Larry Grossman, president of the Public Broadcasting System, and Joanna Underwood, president of INFORM, a nonprofit public information organization.

In addition to Zarb, speakers at the awards ceremony included Office of Management and Budget director Bert Lance; Alan L. Smith, president of NEF; William F. May, chairman of the board of the American Can Company; Lorene L. Rogers, president of the University of Texas; and Jorge Diaz Serano, director of Petroleos Mexicanos.

Also in attendance was former Secretary of the Treasury William E. Simon, whose election as chairman of the NEF board of directors was announced during the evening.

The National Energy Foundation was organized for the purpose of stimulating interest in energy issues within the various levels of the nation's educational system. Winners of NEF's Student Exposition on Energy Resources (SEER) program, which invites junior and senior high school students in New York City to create mock-ups, dioramas, and actual working models of creative concepts relating to energy sources, utilization, and conservation, were also honored at the awards dinner. NEF has announced plans to expand the New York program to the nation. Vice president for school programs Harry Milgrom is coordinator for the SEER and other NEF education projects.

\*Members of the panel of inquiry were: Daniel A. Dreyfus, deputy staff director, Committee on Energy and Natural Resources, U.S. Senate; Richard S. Greeley, technical director, Energy, Resources, and the Environment, The MITRE Corporation/METREK Division; Llewellyn King, editor, *Energy Daily*; Hans H. Landsberg, codirector, Energy and Materials Division, Resources for the Future; J. Thomas Ratchford, associate executive officer, AAAS; and S. Fred Singer, professor of environmental sciences, University of Virginia.

other speakers, Abelson commended the provisions for deregulation of oil from stripper wells, from new tertiary recovery, and from shale. In closing, Abelson called for federal government support or guarantees for full-scale plants to obtain synthetic methane from coal, to solvent-refine coal, and to produce clean liquids from coal. "Such projects," he maintained, "would create many new jobs and would provide a practical basis for rapid expansion of fuel supplies."

Other major speakers of the conference were Walter J. Mead, professor of economics, University of California, Santa Barbara; Robert A. Charpie, president, Cabot Corporation; John H. Gibbons, director, Environment Center, University of Tennessee; Chauncey Starr, president, Electric Power Research Institute; Lester B. Lave, professor of economics, Carnegie-Mellon University; Henry R. Linden, president, Institute of Gas Technology; and Milton Russell, Resources for the Future. S. Fred Singer, professor of environmental sciences at the University of Virginia, presented a summary for the panel of inquiry.

The participants were unanimous in praising the Carter energy proposal as an essential first step, but each outlined various areas in which changes or further study were needed. The proposal's emphasis on conservation and on strategic storage was widely approved. The speakers differed chiefly in their feelings on regulation; some argued for price controls of energy sources, while others insisted that prices should be set by free market factors. Other discussions included the responsibilities and organization of a centralized energy office; the role of nuclear technology, especially the fast breeder reactor; the implications of energy policy on national security; usage of coal and synthetic fuels; and environmental considerations in energy production. Several speakers iterated one historical point: the current energy problems can be traced directly to bad management of energy by the federal government.

The evening session of the conference, chaired by AAAS president Emilio Q. Daddario, included a roundtable discussion among the panel, conference chairmen, and six members of Congress: Representatives Clarence J. Brown of Ohio, Mike McCormack of Washington, James G. Martin of North Carolina, and J. J. Pickle of Texas, and Senators Harrison Schmitt of New Mexico and Richard Stone of Florida. The congressmen reported that the proposals for gas and "gas-guzzler" taxes generated a large

### Pardon Us . . .

As the AAAS membership recruitment campaign continues, we are still running into the problem of people who are already members receiving invitations to join. Although we are purging lists whenever possible, errors still do slip by. We hope that members will bear with us and remain assured that we value their affiliation. Thank you.

amount of mail from constituents. These, however, were not felt to be the most important areas for work. Major goals, specific objectives, and how to achieve these were of concern to the congressional representatives. Supply problems; the ratio of gross national product growth to energy demand growth; and government regulation versus market price-setting were other areas that the congressmen considered important.

AAAS is currently preparing proceedings of the meeting. Their availability will be announced in a later edition of AAAS News.

NANCY CAHILL JOYCE  
*Office of Public Information*

## AAAS Workshop on Scientific Freedom and Human Rights

Scientists in foreign countries who are victims of human rights violations or who experience restrictions on their scientific freedom deserve support from their American colleagues principally because of their shared professional identities. This was the consensus of a workshop on scientific freedom and human rights sponsored by the AAAS Committee on Scientific Freedom and Responsibility (CSFR). The workshop was held in Washington, D.C., on 6 June. Twenty-two representatives from scientific and other professional organizations participated in the meeting, along with six representatives from human rights organizations and two international lawyers.

The workshop was convened to share information about ongoing activities in the scientific and human rights groups and to develop ideas about potential actions that would be relevant to the area

of scientific freedom and human rights in foreign countries. CSFR members John T. Edsall of Harvard University and Joel Primack of the University of California at Santa Cruz, and Rosemary Chalk, CSFR staff officer, chaired the workshop. Primack stated in his opening remarks that the participants should not expect to sign a particular statement or resolution as a result of the meeting. Instead, he indicated that this was an exploratory meeting, the first of its kind, designed to highlight what the scientists want to do in this emerging area of human rights concerns.

The scientific society representatives described the human rights activities already under way in their organizations, including official resolutions of concern about particular repressions, assistance to individual victims, correspondence with U.S. and foreign government officials, and job placement for refugee scientists. Several members expressed a desire to use more active forms of support for foreign colleagues, including on-site visits to the countries where violations occur. Others indicated that their organizational policies restricted them from intervening in any foreign government's politics. They noted, however, that they might assist refugees who were able to leave a foreign country.

Alexsandr Voronel, a Russian émigré physicist who was responsible for initiating the "refusenik" science seminars in Moscow (now called the "Azbel Seminars") described the difficulties of maintaining a professional identity as a scientist when political restrictions are imposed. ("Refusenik" has become the nickname for persons who have been harassed after being denied an exit visa from the Soviet Union.) He stated that signs of support from American colleagues who visit the Soviet Union are critically necessary for the refusenik scientists who have been ostracized by their government.

Argentina and the Soviet Union were the two primary examples of repressions against foreign scientists offered by the workshop participants. The participants were concerned that some actions taken in support of oppressed colleagues might be counterproductive. Nathan Jacobson from Yale University stated, however, that his organization (the American Mathematical Society) had initiated a series of support actions, including letters of protest to foreign government officials, and that none of these had stimulated a counterproductive reaction.

Some scientific society representatives indicated that their human rights activities were the result of strong con-