

Japan-U.S. Cooperation on Energy R & D Agreed to

The state visit by Japanese Prime Minister Masayoshi Ohira in Washington in early May was the occasion for announcement of a new bilateral agreement on cooperation in energy R & D. Initially, the two countries will emphasize work on fusion and coal conversion, with the Japanese indicating they will join a partnership on a major coal liquefaction project.

During his stay the Prime Minister also announced four grants of \$1 million each to American educational and cultural institutions, including one to MIT for an endowment to fund research on international energy policy. (Grants to assist construction projects were made to the Asia Society for a new headquarters in New York; to the New York Metropolitan Museum of Art for a Japanese Gallery, and the Smithsonian Institution for a new oriental art gallery.)

Cooperation on energy R & D was proposed by the Japanese at summit talks a year ago in Washington. An agreement was subsequently negotiated in sufficient detail to be signed on 2 May by Department of Energy Secretary James R. Schlesinger and Japan's Minister for Foreign Affairs Sunao Sonoda.

U.S. sources say that the Japanese were particularly interested in cooperation on fusion research and that the United States wanted Japanese participation in coal conversion work. Other areas of energy R & D designated for cooperation are geothermal, solar, photosynthesis, and high-energy physics. The agreement supplants a 1974 Japan-U.S. energy accord that stressed fusion and geothermal research but had not been broadly implemented. Now being explored are possibilities for Japanese-American cooperation in other fields of science and technology. The President's Science Adviser Frank Press is taking the lead on the U.S. side in the discussions.

As a result of the new bilateral agreement, the Japanese government is expected to assume a 25 percent share of the cost of the so-called SRC II project for a coal liquefaction plant. The projected cost is about \$700 million. The West German gov-

ernment is also a partner with a 25 percent share.

The \$1-million grant to MIT specifies that the money is to be used as an endowment to fund research on international aspects of energy policy. The research will be done by scholars from MIT's Center for Energy Policy Research and from other parts of the institute. The stricture that the money go into endowment and not direct support of research could indicate that the Japanese expect energy problems to be around for a long time.

The bilateral energy agreement was overshadowed by the main business of the Carter-Ohira meeting—Japan-U.S. trade relations. A general atmosphere of strained cordiality persisted through the meeting which apparently ended with the Japanese saying little more than they would try harder to reduce their whopping trade surplus. The energy R & D accord allowed the two countries to strike one harmonious note during the proceedings and the grants seemed to be thrown in rather as a good will gesture.

Different Route Accepted as Way to New Department

The Carter Administration is sticking to its intentions to create a full-fledged Department of Natural Resources, but has bowed to senatorial sensibilities and changed the way it will go about it.

In a meeting at the end of April President Carter told Senator Abraham Ribicoff (D-Conn.) that he was dropping his design to create the department by means of a reorganization plan. Under such a plan, a reorganization proposal sent by the White House to the Congress becomes effective after 90 days unless Congress votes specifically to reject it. Carter said that, instead, the Administration would employ the regular legislative process which involves introduction of legislation in both houses, full committee consideration, and formal voting, and is regarded as giving Congress a stronger hand in such plans.

Ribicoff, chairman of the Senate Governmental Affairs Committee, which has jurisdiction over realignments of the bureaucracy, had taken

the lead in expressing discontent over the Administration's strategy. In addition, Senate Majority Leader Robert Byrd (D-W. Va.) had recently written to the White House expressing similar sentiments, and other members of the Government Affairs Committee were also understood to be opposed to use of the reorganization plan.

Ribicoff has made clear that he was opposed only to the Administration's way of proceeding in the matter and is a firm supporter of the concept of a Cabinet niche for natural resources.

The major components of the proposed department would be the National Oceanic and Atmospheric Administration, now lodged in the Commerce Department, and the Forest Service, which is currently part of the Agriculture Department. Early this year, the Administration dropped its scheme to give the agency the authority of the Army Corps of Engineers and other agencies over civil water projects. Conservationists deplored the decision not to consolidate water policy authority. The Administration action was interpreted as a practical recognition that the attempt to transfer control of water projects would incite the same powerful opposition in Congress that the Administration encountered earlier in attempting to cut back on water projects. Observers say that the two concessions by the Administration clear the worst hurdles from the path of a new department.

U.S. Geological Survey— On the Map for 100 Years

On the list of '79 centennials—Einstein, Stalin, Standard Oil, the electric light—is the Interior Department's U.S. Geological Survey (USGS). The USGS was not the first federal science agency. A forerunner agency of the Coast and Geodetic Survey, for example, was established in 1807. But the Survey seems to have a fair claim to being the first formally charged to do basic research. The original act, in addition to assigning USGS to carry out topographic mapping, examine geological structures, and locate mineral resources, also authorized it to do chemical and physical research in support of its mission.

The USGS was a product of in-

fighting among federal agencies, Gilded Age politicians, and scientists of the National Academy of Sciences. John Wesley Powell, explorer, multidisciplinary scientist, and no mean science politician, became the Survey's second director.

Over the years, USGS became engaged in resource management on a broad front and spun off the Bureau of Reclamation, Bureau of Mines, Federal Power Commission, and Bureau of Land Management. As a provider of information on mineral and water resources the Survey is a major contributor to the making of federal energy policy. Its scientific horizons have broadened steadily with the sophistication of the earth sciences. And a 1962 revision of the Survey's basic law allows it to carry out its examinations outside the "national domain." This it has done in a number of places including the moon.

On the Way to the Forum

As speechmakers, even U.S. presidents like to warm up their audiences with a laugh or two before going on to the serious stuff, and in his remarks to the National Academy of Sciences in late April President Carter got a rise out of the academicians by a reference to their counterparts in the Soviet Union. The transcript has it this way:

"I understand that in the Soviet Union when someone is chosen to their National Academy of Sciences, his or her salary immediately doubles—(laughter)—and a chauffeured car is made available for use. I understand there is a slight difference in our own country. (Laughter) You immediately get a bill for membership dues, and you are pledged voluntarily to give advice to your government free of charge. (Laughter) And I thank you for that."

The comparison was not in the original text of his address. Carter interpolated it after the perks of membership in the Soviet Academy were mentioned during the drive over to the Academy by President's Science Adviser Frank Press, himself a member of the NAS. For his own transportation on the job, incidentally, Press takes pot luck from the White House motor pool.

Endangered Review Body Seems to Be in the Clear

A Cabinet-level review committee designed to have the last word on species-endangering federal projects appears to have survived the disenchantment of an influential sponsor, Senator Howard Baker (R-Tenn.).

Baker, the Senate Minority Leader, was cosponsor last year with Senator John Culver (D-Iowa) of an amendment creating a review body with the power to grant exemptions allowing the government to proceed with projects that had been found to threaten flora and fauna protected by the Endangered Species Act (ESA).

Baker had been given a case of home-state pique by the halting of construction on the Tennessee Valley Authority's Tellico Dam, on which some \$100 million had already been spent. The action was taken under ESA provisions when the project was judged to threaten extinction to the snail darter, a tiny fish unique to the waters in the area where the dam was being built. The Culver-Baker amendment creating the review body was designed to provide flexibility for ESA when controversy arose over the law's extension last year. The review panel has six federal agency members and one vote is allowed to states involved. Five positive votes are required for an exemption.

In January, the review panel's first formal action was to deny an exemption to the Tellico project (*Science*, 23 February). Baker reacted by framing legislation to have the dam project exempted by direct congressional action and also to have the review council abolished by repeal of the appropriate section of the law.

At a 9 May final markup session of the Senate Environment and Public Works Committee on another extension of ESA, Baker offered an amendment to confer an exemption on the Tellico Dam project. The amendment failed by a final tally of 10 to 3. Baker did not put forward his amendment to abolish the review group. The committee reported out the bill extending ESA for 2½ years. Observers say that the decisiveness of the vote on the exemption in committee makes it unlikely that Baker will carry the fight to the Senate floor.

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for using them to assess carcinogenic potency and to determine the "most likely value" for potential human exposure and the estimate of overall risk.

Such estimates would be made in what the OSTP refers to as the scientific stage, or Stage I, in the control of carcinogens. According to its report, the regulators, or Stage II decision-makers, should be given the most accurate risk estimate possible and "informed clearly about uncertainties in existing scientific data and their impact upon the risk estimate." The regulators would then decide what the margin of safety should be, bearing in mind all other relevant factors, including the feasibility and cost of control.

By implication, at least, the report says that absolutist approaches to the control of carcinogens, as represented by the Delaney clause and the absolute ban it imposes on carcinogenic food additives, should yield to flexible approaches based on risk assessment. In this it appears at one with the National Academy of Sciences Committee on Saccharin and Food Safety Policy and its recommendation for the establishment of a hierarchy of risk categories—high, moderate, and low (while Commissioner Kennedy of the FDA thinks this recommendation by the academy committee goes much too far, he himself favors some relaxation of the Delaney clause). But another Academy body, the Board on Toxicology and Environmental Health Hazards, has observed that the OSTP report "adequately addresses neither the crudeness of these statistical manipulations nor the substantial uncertainties associated with their use" (although this group, too, favors use of risk quantification in regulatory decision-making).

What seems most significant about the OSTP report are not the views expressed on risk quantification but rather the recommendations for improving the decision-making framework. In the interest of ensuring that cancer risk assessment is characterized by "impartial scientific judgment," the OSTP argues that such assessments should not be under the authority of the regulatory agencies themselves, as is now the case, for instance, at EPA, which has its own carcinogen assessment group.

While no specific instances of bias are alleged, authors of the report are understood to feel that, so long as assessments are done on an agency by agency basis, there will be a danger of bias, probably on the side of overregulation of potential carcinogens that may pose little actual risk to humans. Ironically enough, some