NSF Lends a Hand with DOD Award

Unusual aspects of transfer of funds prompt questions by House panel on effect of action on policy, precedent

F it were sports, a recent National Science Foundation award of \$3 million would be scored as an assist. The \$3 million to help plan a major semiconductor manufacturing technology project is Department of Defense money and NSF made the award at the Pentagon's request. The unusual arrangement has prompted some concern on Capitol Hill.

The chairman and ranking Republican of the House subcommittee on science, research, and technology have written to NSF asking for an explanation. The letter signed by representatives Doug Walgren (D–PA) and Sherwood Boehlert (R–NY), which has not been made public, apparently expresses concern that the award could set a precedent under which DOD and other agencies might use NSF to bypass regular funding procedures. The suspending of peer review by the foundation in making the award is also said to have been questioned.

NSF was asked to lend its good offices because of its award-making machinery rather than its technical expertise. NSF staff sources say the foundation acted as an expediter and, in bureaucratic parlance, performed a "pass through" of funds. The incident seems to have caused some discomfort at NSF and, in an exchange of letters between DOD and NSF on the subject, officials in both agencies refer pointedly to the award as a "one-time task."

Recipient of the \$3-million award is the Semiconductor Research Corporation (SRC), a semiconductor industry research cooperative. SRC is carrying out analysis and planning on a proposal to spend \$1.5 billion over 6 years for research on semiconductor manufacturing technology and construction of a state-of-the-art manufacturing facility to demonstrate the technology. Dubbed SEMATECH, the project involves an unusual collaboration between the federal government and a semiconductor industry consortium formed for the purpose-the government would help fund the project and participate in project decisions. The \$3 million amounts to the federal ante for planning expenses.

The SRC award took NSF out of its ordinary routine. There was no competition

for the award since the winner, SRC, which is acting as SEMATECH's research arm, was designated by DOD. NSF deputy director John H. Moore oversaw the award process after NSF director Erich Bloch disqualified himself from participating in the process because he owns stock in companies that are members of both SRC and SEMA-TECH. Six members of the National Science Board, NSF's policy-making body, did not participate in the board vote on the award on conflict-of-interest grounds because of institutional affiliations.

An NSF spokesman said DOD made the request to the foundation when it found itself under heavy time pressure in making the planning award. Secretary of Defense Caspar W. Weinberger gave final approval to DOD participation in SEMATECH only in mid-September. A letter dated 7 October to Moore from Ronald L. Kerber, deputy under secretary of defense for research and advanced technology, formally requested NSF to act as DOD's agent, apparently after an agreement had been reached informally. The letter to Moore emphasized that to initiate the SEMATECH program in the current fiscal year, "we need to complete detailed technical plans within the next several months," and that handling it internally would cause "unacceptable delays."

The Pentagon would have taken an estimated 6 to 9 months to make the award, which NSF was able to complete in a matter of weeks. DOD's procurement process is pitched to the acquisition of weapons, supplies, and services on a massive scale through contracts that require cumbersome contracting procedures. NSF, on the other hand, operates with funding authority designed to fit its main function of awarding research grants to universities. This makes the agency a more agile funder.

An NSF grants-and-contracts official described the award to SRC as "sort of a hybrid, in between a grant and a contract." So-called cooperative agreements have a statutory basis that enables the foundation to employ the mechanism when transactions differ from those with ordinary grants.

In a letter dated 19 October, NSF deputy director Moore confirmed that NSF would



John H. Moore. NSF deputy director asked the Pentagon to make its own arrangements on such awards in future.

go ahead with the award and noted that "We understand that DOD will make its own arrangements for direct funding of any subsequent award to SEMATECH."

SEMATECH is a three-part program calling for research on advanced semiconductor techniques directed by SRC, construction of a plant production line incorporating the technology developed in the research program, and dissemination of the new technology to member companies and, ultimately, to the rest of the semiconductor industry.

Present plans call for annual funding of \$225 million for the project with the federal government and industry providing \$100 million each and state and local governments in whose jurisdiction the production facility is located contributing the other \$25 million. A skeleton SEMATECH already exists and selection of a site for the production facility is expected by year's end.

Legislation to provide the federal share in SEMATECH funding was introduced last spring. The Senate Defense authorization bill contains \$100 million for SEMATECH in the coming year while the House version authorizes \$25 million. A House-Senate conference to reconcile the differences is in progress.

SEMATECH is in part a reaction to fears that U.S. security could be compromised if the military had to rely on foreign manufacturers for electronics components. DOD's decision on whether to join SEMATECH was apparently delayed by a debate within the Administration over direct financial and policy involvement by the government in an industry project. **JOHN WALSH**