

scribes himself as a free trader who feels it essential that U.S. "lead time" in strategic high technology not be eroded by uneconomic and unwise transfers.

Some of Bucy's peers in the electronics industry think that the Bucy report is oversolicitous in its concern about trans-

fer of technology, but applaud the report and DOD follow-up action on it because it at least offers the hope of clearer ground rules for the control system and, perhaps, some lifting of the secretiveness that surrounds it.

The DOD initiative, however, is

viewed as a small and still ambiguous one. And if there is one point agreed on by the disputatious partisans on all sides of the question, it is that any significant change in the system would require a very firm word from the White House.

—JOHN WALSH

McKelvey Ousted as Director of Geological Survey

In a move that is tantamount to a firing, Cecil D. Andrus, the Secretary of the Interior, has announced that on 1 January 1978 Vincent E. McKelvey will step down as director of the U.S. Geological Survey (USGS) to become a senior research geologist there. The move has alarmed prominent university geologists, survey scientists, and McKelvey himself, who worries that it is a first step toward "politicizing" USGS, whose excellent scientific reputation has been based partly on its independent character.

The cause for their alarm is that this will be the first time in USGS's 98-year history that an incoming Administration has asked to have its own director. McKelvey told *Science*, "One of the reasons for the quality of work by the Survey in the past has been the continuity of its leadership." He notes that the Survey has had only nine directors in the nearly 100 years of its existence.

However, it seems that McKelvey's job has been hanging by a thread since Andrus took office in January and promised sweeping changes and greater centralization of the sprawling department. According to two sources, at that time Andrus sought to get rid of McKelvey, but the dismissal was stayed by Frank Press, a fellow geologist who had just come to town as President Carter's science adviser. Press persuaded Andrus to follow the tradition of having the National Academy of Sciences duly certify qualified scientists as candidates for the job. The Academy acted in August, and Andrus announced McKelvey's exit almost immediately, on 6 September. Andrus is not bound to pick one of the five names the Academy has submitted to him, but the way that feeling in the geology community is running about McKelvey, the choice of a non-Academy candidate could stir the geologists' anger still more.

Since the Carter Administration has shown no particular hostility to science, or to the traditions governing federal science agencies, there has been considerable speculation about why the Administration decided to get rid of McKelvey at the risk of offending the geologists who have proprietary feelings about their "nonpolitical" Survey.

Two reasons have been suggested. One is that the Administration wants "its own man" in the job because estimates of domestic U.S. oil and gas reserves, the Survey's business, are a sensitive issue as it defends its energy plan ("the moral equivalent of war") which depends upon predictions of resource scarcity. The Survey's estimates are now in line with the Administration's, but, in the past, the Survey and McKelvey have been identified with figures now regarded as too high. In writing in the 1950's, McKelvey made some very optimistic estimates, and in recent years, as director, he has defended higher Survey figures against gloomier estimates of a dissident researcher, M. King Hubbert, whose views are enjoying a new vogue. So, the theory goes, the Administration may feel more

comfortable with someone unencumbered with this history.

A simpler theory is also being advanced, namely, that McKelvey's personal style is incompatible with that of the new Andrus team. McKelvey's fellow scientists, all of whom regard him as an outstanding scientist and director, note that his manner of speech is probably too scientific, some say too long-winded, for the crisp, fast-talking reformers whom Andrus is bringing in. "Vince tries to answer every question thoroughly—even the rhetorical ones—and I think they want someone more glib," says one colleague.

However, despite the fears expressed by some, it may not be necessary after McKelvey's departure, for the USGS to start skewing their resource estimates or talking newpeak. The name most frequently mentioned as a successor is Randolph Wilson Bromery, the 51-year-old executive vice president of the University of Massachusetts. Bromery's name is not on the list the Academy forwarded to the White House, but he may be nominated anyway. For one thing, he is part of the Survey "family," having been a researcher there for 18 years until going to the University of Massachusetts. Second, Bromery has shown political acumen, having started at the university in 1967 as a humble associate professor of geology, risen to full professor and department chairman in 1969, and become chancellor of the university's Amherst campus in 1972. Now, as executive vice president of the entire, three-campus system, Bromery is in line for the presidency which comes open next 1 January. Third, Bromery is one of few black scientist-administrators on the national scene, and would be attractive to the Administration, which is now under fire from the black community. But despite his assets, it is still not clear whether the geology community would judge Bromery acceptable.

Barely a week after the firing, the Administration appeared to be trying to soothe the geologists' ruffled feelings. Joan Davenport, the 34-year-old assistant secretary for energy and minerals, who had asked for McKelvey's resignation, told *Science*, "We have absolutely no intention of putting a political person in there. We're going to put in a geologist of excellence. We certainly ought to be able to find such a person on that [the Academy's] list." And Frank Press, in the White House, told *Science*, "Both Andrus and Davenport have a healthy respect for the USGS's professionalism. But they have different priorities and a different agenda, and they are going to reflect that in their appointments."

But some geologists are saying they may weigh in with the Senate, at confirmation time, if Andrus' nominee for the job is too "political" for their liking.

—DEBORAH SHAPLEY