must control all aspects of what they are doing. They can't allow it to be said the defense of the country depends on things the military can't control." So there are special problems in military applications of nuclear power-involving resources that have been kept under unique civilian controls in this country. In addition, Carpenter indicated, "It's hard to get a requirement out of the military until they are sure something will work. They will tell you: 'We won't fly it first.'"[5]

In the larger organizational environment surrounding the RTG program, dismantlement of the Department of Energy went forward under President Reagan, although slowed by compromises in Congress over issues of assignment of DOE functions to other agencies. For example, Senator John Tower of the Armed Services Committee expressed concern that weapons programs might be overshadowed if placed in the Commerce Department.[6] A changing climate regarding energy as a crucial problem further slowed plans to abolish the DOE. Outgoing Secretary of DOE James B. Edwards said in his farewell at the National Press Club in October 1982 that the era was behind us when energy was one of our most serious national problems. The in-coming Secretary, Donald Hodel, did not strongly advocate dismantlement of DOE although he expressed the view that the Department's functions could be performed by another existing agency.[7]

As he considered the future, Rock reviewed the many technical accomplishments of recent years:

> We have been making steady advances. Our heat sources are more advanced. The thermoelectric materials are more advanced. Some materials in the generator are more advanced. Our earlier converters were all low temperature devices. Today we have very high temperature converters—and this required advances in metallurgy .... Our efficiency [electrical output from heat input] levels are now up to 6 to 7 percent; and the future looks like 9 to 10 percent . . . . Solar-Polar will give us 2.3 watts per pound, while our earliest units only gave about 1 watt per pound. In the future, we expect to be up to 4.5 watts per pound.

Rock expected the dynamic systems using rotating equipment to play a large part in the future.[8]

The 1984 program plan of the Office of Special Nuclear Projects, Space and Special Radioisotope Systems Applications, set forth the two principal objec-