SEABORG RELATES A CAUTIONARY TALE ABOUT GOVERNMENT

The Atomic Energy Commission Under Nixon: Adjusting to Troubled Times

Glenn T. Seaborg with Benjamin S. Loeb St. Martin's P., New York, 1993. 268 pp. \$39.95 hc ISBN 0-312-07899-4

Reviewed by Richard L. Garwin From its inception in 1947 to its replacement in 1975 by the Energy Research and Development Administration and the Nuclear Regulatory Commission, the Atomic Energy Commission had responsibility for nuclear weaponry, the development of nuclear reactors for civil use and research more or less related to energy, including high-energy physics. The AEC also had a regulatory role, balancing (or confounding) the protection of the public from radiation with the security and economic aspects of its programs.

In two previous books with Benjamin Loeb—Kennedy, Khrushchev and the Test Ban (U. of Calif. P., Berkeley, 1981) and Stemming the Tide: Arms Control and the Johnson Years (Lexington Books, Lexington, Mass., 1987)—Glenn Seaborg gave a personal view of his involvement in the AEC from the time he became chairman at the beginning of the Kennedy Administration in 1961 to the beginning of the Nixon Administration in 1969. Retained by President Nixon as AEC chairman, Seaborg resigned on 16 August 1971. In the current volume Seaborg presents a candid view of the changing role of the AEC. The five main parts of the book cover nuclear explosions

Richard Garwin, since 1952 at IBM Research, contributed to nuclear weapons development and testing at Los Alamos from 1950, and was a member of the President's Science Advisory Committee under Kennedy, Johnson and Nixon.

(peaceful uses and testing the antiballistic missile warhead), arms control, radiation standards, the breeder reactor and "administrative matters".

As chairman, Seaborg was the designated "official spokesman" for the AEC, but had "equal responsibility and authority" with other members of the commission in all actions. During his ten years as chairman. only 13 other commissioners served on the AEC. Among them was James T. Ramey, from 1956 to 1962 the executive director of the Joint Committee on Atomic Energy. The JCAE was a powerhouse of influence, and until the societal upheavals of 1968 and the changed Congress of 1969, it probably had as much influence on the AEC and the nuclear programs of the United States as any president.

A 1951 Nobel laureate in chemistry for his work on transuranic elements, Seaborg evidently strove to lead the AEC as a person of substance and principle. As AEC chairman, Seaborg accepted the need to implement policies and programs with which he might disagree, despite his self-characterization as a lifelong Democrat and, after leaving the AEC, his vigorous public advocacy of a comprehensive ban on nuclear tests.

Although his ideal was to express fully to the decision makers his personal and considered views of fact and proposed policy, Seaborg was explicitly denied this opportunity during the Nixon Administration. Seaborg's direct access on demand to Presidents Kennedy and Johnson was replaced under Nixon by access through a chain of four intermediaries. Seaborg writes "The ultimate course of the Nixon Administration might have been different had Nixon chosen to hear the opinions of a wider circle of advisers."

Seaborg now recognizes what he could not bring himself to believe at the time—that the school civics course concept of "government of law and not of person" stopped outside the door of the Nixon White House, to an extent unprecedented in modern times. Seaborg quotes Henry

Kissinger's own White House Years (Little, Brown and Co., Boston, 1979) in support of the recognition that Nixon Administration sessions on the Strategic Arms Limitation Talks "may have been to some extent a sham. . . . If the bureaucracy had become aware [that details bored Nixon and that he left the selection of options to Kissinger] all vestige of discipline would have disappeared. I therefore scheduled over Nixon's impatient protests a series of NSC [National Security Council] meetings where options were presented to a glassy-eyed and irritable President so that directives could be issued with some plausibility on his authority."

Seaborg recounts his own enthusiasm for Project Plowshare (underground nuclear explosions for civil engineering purposes) and the ill-conceived breeder reactor program—both, in my mind, examples of the lack of objective analysis in the AEC. While breeder reactors may well be important to our energy future, Seaborg now feels the urgent "demonstration" approach was the wrong way to proceed; "a slower and broader program" might have been better. Just so!

Adjusting to Troubled Times is a valuable record and a cautionary tale, with import beyond the nuclear energy field.

John von Neumann: The Scientific Genius Who Pioneered the Modern Computer, Game Theory, Nuclear Deterrence, and Much More

> Norman Macrae Pantheon, New York, 1992. 405 pp. \$25.00 hc ISBN 0-679-41308-1

John von Neumann was born in 1903 in Budapest into an affluent assimi-