

RESPONSES TO QUESTIONS OF THE SUBCOMMITTEE ON SCIENCE, RESEARCH
AND DEVELOPMENT BY THE TENNESSEE VALLEY AUTHORITY

Question 1: What would be your views on a demonstration bringing certain TVA electric generating plants and the chemical plant to an essentially nonpolluting status, regardless of cost, with present technology?

Answer: We would be glad to see certain TVA electric generating plants and our chemical plant used as demonstration facilities to develop pollution control methods as fully as possible. It is important to recognize, however, that present technology, even if costs should be disregarded, will not produce what the committee has described as an "essentially nonpolluting status" for all elements of operations of this kind. For some of the pollutants, further technology must first be developed.

In the case of coal-fired electric generating plants, the air pollutants involved are particulates and sulfur dioxide. The technological problem with respect to removal of particulates has been solved. This is not true of sulfur dioxide, however. Several recovery processes which would remove 80 to 90 percent of the sulfur dioxide are presently under consideration and development, but further pilot plant testing of these processes is necessary before a full-scale demonstration of any of them could be usefully undertaken.

Sulfur dioxide recovery has been subject to reviews by many different groups in and outside the United States within the past few years, and one or more of the processes so far studied may prove eventually to be technically feasible. The U.S. Public Health Service is planning to evaluate the processes which presently appear most promising by arranging for the construction of small-scale demonstration or pilot plants at which they can be applied and tested. TVA has agreed to cooperate by making one of our coal-fired electric generating plants available for the installation of some of these pilot plants. We have a meeting scheduled with the Public Health Service later this month with regard to selection of the processes to be used. Operational experience with these plants would provide information which is essential to the design and construction of equipment for full-scale application to large power units. As soon as a workable solution has been found, we would be glad to proceed with a demonstration involving such full-scale application to a large power unit.

At TVA's chemical plant, as pointed out by our witnesses in their testimony before the committee, we now have underway a multi-million-dollar program for improved pollution control. This program, which is scheduled for completion by the end of fiscal year 1968, will achieve very high standards. These standards are regarded by experts as more than adequate but they will not render the plant entirely pollution free.

The TVA chemical plant is basically a research facility. We are continually dropping old processes and facilities and adding new ones,