



# NRC NEWS

**U.S. NUCLEAR REGULATORY COMMISSION**

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## **NRC GRANTS TVA LICENSE AMENDMENTS TO PRODUCE TRITIUM AT SEQUOYAH NUCLEAR POWER PLANT IN TENNESSEE**

The Nuclear Regulatory Commission has granted the Tennessee Valley Authority (TVA) license amendments to produce tritium at Units 1 and 2 of its Sequoyah nuclear power plant for use by the Department of Energy (DOE). A similar license amendment was granted earlier to TVA for the Watts Bar facility.

The license amendments grant TVA permission to use tritium-producing burnable absorber rods at the Sequoyah facility, located near Chattanooga, Tenn. DOE has developed technology to produce tritium using lithium, rather than boron, in burnable absorber rods to be installed in the Sequoyah reactors. The irradiated rods are to be removed from the reactors and shipped to the Savannah River Site, near Aiken, S.C., where DOE plans to extract the tritium.

The NRC staff held public meetings on the issue in Rockville, Md. , in February 1997, and in Sweetwater, Tenn., in August 1997. The NRC staff determined in September 1997 that TVA could place 32 of the burnable absorber rods in the Watts Bar nuclear power plant reactor core to test the technology. TVA irradiated the rods until the spring of 1999 and removed them from the reactor. DOE has examined the rods and confirmed that the technology worked.

A public meeting to discuss the tritium production, as well as NRC's process to determine the safety of producing the tritium and for reviewing the TVA license amendment requests for Watts Bar and Sequoyah, was held in Evensville, Tenn., last October.

The license amendments permit TVA to install up to 2,256 of the rods into each Sequoyah reactor and irradiate them for one fuel cycle, which lasts about 18 months. TVA will then remove the irradiated rods for shipment to DOE's tritium extraction facility at the Savannah River Site. DOE subsequently plans to have TVA install new rods in the Sequoyah reactors to repeat the process for the life of the plant.

An NRC public meeting discussing the staff's safety reviews supporting these license amendments will be held on October 30, from 6:30 to 9:30 p.m., in the Rhea County Welcome Center's Community Room, located at 107 Main Street in Dayton, Tennessee. An open house will start at 6 p.m.

The TVA Sequoyah license amendments will be publicly accessible from the NRC's Agencywide Documents Access and Management Systems (ADAMS) Public Electronic Room sometime in October. Help in using ADAMS is available from the NRC Public Document Room at 301-415-4737, or 800-397-4209.

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