

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION II 101 MARIETTA ST., N.W., SUITE 3100 ATLANTA, GEORGIA 30303

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In Reply Refer To: RII:JPS 50-390 50-391

> Tennesee Valley Authority ATTN: H. G. Parris Manager of Power 500A Chestnut Street Tower II Chattanooga, TN 37401

Dear Mr. Parris:

We appreciate the cooperation and assistance provided by R. G. Wallace of the Radiological Hygiene Branch, Muscle Shoals in establishing the NRC Direct Radiation Monitoring Network (TLD program) in the environs of the Watts Bar Nuclear Plant. This program will provide independent measurements of radiation levels in the vicinity of the plant site and will aid in assuring the validity of measurements made by TVA. Descriptions of the 37 TLD stations which were placed around the site during the week of November 17, 1980, are contained in the enclosures. (Enclosures included only with the copies of this letter sent to C. C. Mason, R. G. Wallace and the NRC Resident Inspector.) The enclosures, including descriptions of the locations of the TLD stations, were not sent to other addresses lacking a "need to know" in order to minimize the probability of tampering and/or vandalism. It is requested that holders of these enclosures limit their distribution for the same reason.

Enclosure 1 is a listing of TLD station locations by direction and distance from the plant. Also included, is the NRC designation and siting criteria satisfied by the placement of each station. In general, the siting criteria provide for an inner ring (I) and an outer ring (O) of TLD stations at one to two and three to five miles from the site, respectively. One inner ring and one outer ring station is in each of the 16 sectors where practical. Provision is also made for locations of high public interest (HPI), population centers of 25,000 or more (P), populated areas of less than 25,000 (PA), sites co-located with TVA (C) and the nearest resident (NR). Upwind controls are ordinarily situated approximately 15 to 20 miles from the site in the least frequent wind direction.

Enclosure 2 is a proposed route for exchanging the TLDs and consists of detailed descriptions meant to allow persons unfamiliar with the Watts Bar vicinity to locate the TLD stations in a step by step manner.

Tennessee Valley Authority

I hope you find this information useful. Please direct any questions regarding the NRC TLD program to D. M. Montgomery of my staff at 404/221-5572.

Sincerely,

Philip Schohr, Chief

Fuel Facility and Materials Safety Branch

Enclosures:

- 1. Listing of TLD Stations
- 2. Proposed Route for Exchanging TLDs

cc w/encls. 1&2: C. C. Mason, Acting Plant Superintendent R. G. Wallace, Health Physicist

cc w/out encl: J. E. Wilkins, Project Manager P. O. Box 2000 Spring City, TN 37381

J. F. Cox, Supervisor, Nuclear Licensing Section 400 Commerce Street W10C131 C-K Knoxville, TN 37902

D. P. Ormsby, Project Engineer 400 Chestnut Street Tower II Chattanooga, TN 37401

H. N. Culver, Chief, Nuclear Safety Review Staff
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