

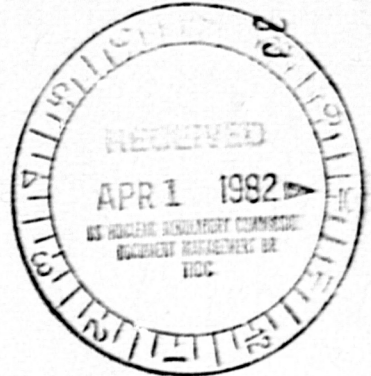
TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

March 22, 1982

WBRD-50-390/82-25

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303



Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNIT 1 - NUCLEAR INSTRUMENTATION SYSTEM (NIS)  
CONDUIT INSTALLATION - WBRD-50-390/82-25 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on February 18, 1982 in accordance with 10 CFR 50.55(e) as NCR 3836R. Enclosed is our first interim report. We expect to submit our next report by July 6, 1982.

If you have any questions, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager  
Nuclear Regulation and Safety

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

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## ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1  
NUCLEAR INSTRUMENTATION SYSTEM (NIS) CONDUIT INSTALLATION  
WBRD-50-390/82-25  
10 CFR 50.55(e)  
FIRST INTERIM REPORT

### Description of Deficiency

The electrical conduit system for the Nuclear Instrumentation System (NIS) cables was not installed per section 4.1 of the Westinghouse Electrical Corporation, Atomic Power Division, Instrumentation and Control Standards as noted on TVA conduit and grounding drawings.

In several instances, as specified in paragraph 2.3.5 of the above standard, minimum separation between the channel D NIS conduit system and potential electrical noise sources were not maintained.

The Westinghouse standard specifies a minimum separation of 2 feet from NIS conduits to electrical noise sources such as power circuits of 118 volts 10 amps and greater, fluorescent light fixtures, or circuits with switched loads such as relays or SCRs. A minimum separation of 6 feet from 4160-volt (or higher) circuits is specified.

Due to the extreme congestion in the areas through which the NIS conduit system must be routed, it is virtually impossible to comply with the Westinghouse specified minimum NIS conduit separation from potential electrical noise source requirements.

This appears to be a condition that will also affect NIS channels E, F, G, and nondivisional circuits. As specific deficiencies are identified, they will be appropriately documented.

### Interim Progress

TVA is in the process of investigating all NIS channels at Watts Bar in order to identify specific deviations to the Westinghouse Standard.

Paragraph 4.3 of the Westinghouse NIS Field Installation Standard provides information for obtaining Westinghouse approval for deviations. TVA will endeavor to obtain Westinghouse approval for the deviations that are found. Also, TVA is in the process of determining what, if any, corrective action may be required to eliminate noise-induced problems with the Nuclear Instrumentation System.