

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

05 APR 26 All: 15 April 16, 1985
U.S. Nuclear Regulatory Commission
Region II
Attn: Dr. J. Nelson Grace, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Dr. Grace:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - RESPONSE TO NRC REGION II
INSPECTION REPORT 50-390/85-16 AND 50-391/85-15

This is in response to R. D. Walker's letter dated March 19, 1985 concerning a previously identified deficiency that had not been satisfactorily addressed, a new deficiency in our emergency preparedness program, and other issues raised by the NRC-OIE Inspector. Enclosed is our response to these matters.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. W. Hufham
by *phl*
J. W. Hufham, Manager
Licensing and Regulations

Enclosure

cc (Enclosure):

Mr. James Taylor, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Records Center
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

8506210439 850416
PDR ADOCK 05000390
Q PDR

ENCLOSURE

TVA RESPONSE TO NRC-OIE
INSPECTION REPORT
390/85-16 AND 391/85-15
WATTS BAR NUCLEAR PLANT

Deficiency 390/85-16-01 and 391/85-15-01

The licensee's procedure (IP-5) for determining appropriate protective action recommendations during an emergency was not consistent with Federal guidance because of failure to specify sheltering as the immediate protective action associated with a General Emergency declaration. In addition, the three protective action recommendations contained in Attachment 1 (Rev. 3) to IP-5 were at variance with the four recommendations delineated in Figure 6, Rev. 6 ("Operations Duty Specialist Incident Form"), of the Radiological Emergency Plan. [Reference: 10 CFR 50.47(b)(10), criterion II.J.7 and Appendix 1 of NUREG-0654, and IE Information Notice 83-28.]

Response

Attachment 1 to IP-5 will be revised to include sheltering as an immediate protective action recommendation associated with a General Emergency declaration. Figure 6 to the Watts Bar Nuclear Plant REP will be revised so as to be consistent with the protective action recommendations in IP-5, Attachment 1. These corrective actions will be completed before operation above 5% power.

Deficiency 390/84-22-27 and 391/84-17-27

- a. (Open) Deficiency (DEF) [5] (390/84-22-27, 391/84-17-27): The licensee's emergency plan, implementing instructions, and implementing procedures (IPs) must provide an adequate emergency classification and emergency action level (EAL) scheme based upon facility parameters as required by 10 CFR 50.47(b)(4); 10 CFR 50.47(d); and 10 CFR 50, Appendix E, Paragraph IV.B, as defined by the criteria in NUREG-0654, Appendix 1. Of the three deficiency elements documented in paragraph 5.3 of the emergency preparedness appraisal report, the "NRC Review of EALs" and two of the three examples under "REP vs. NUREG-0654" were closed by NRC Report Nos. 50-390/84-71 and 50-391/84-47. That report left open one item and added eleven new items under "REP vs. NUREG-0654". The referenced report also introduced five new items under "WBN IP-1 vs. NUREG-0654". The results of the inspector's review of those 17 items are summarized below in the same order as presented in the above-referenced report...
- (3) The EAL corresponding to REP IC-15 required declaration of an NOUE for any condition which has the potential for escalating into an NOUE. This wording, which has not been changed, is overly restrictive and should be reviewed by the licensee. This portion of the deficiency remains open...

- (7) REP IC-13 EAL (Alert) was contingent upon the unit not being in a stable condition; however, stability is not a part of the NUREG-0654 definition. The inspector reviewed the licensee's response and understood the reasoning therefore. However, the inspector found that the EAL, as structured, was inconsistent with the NUREG-0654 guideline. This portion of the deficiency remains open...
- (11) REP IC-9 EAL (SAE) was identical to the IC-11A EAL (Alert): "Notification by fuel handling SRO of dropped or damaged fuel assembly as indicated by AOI-29". The licensee indicated a change would be made to insert the word "spent" in the EAL column of IC-9 (SAE) between the words "damaged" and "fuel". This would differentiate IC-9 (SAE) from IC-11A (Alert) and bring the IC-9 wording into agreement with the wording in the IP-1 "Fuel Handling Incident" section. Pending such a change, this portion of the deficiency remains open...
- (13) REP IC-11 EAL (SAE) required a semicolon before "based" to ensure the correct meaning. The licensee agreed to correct the ambiguity. This portion of the deficiency is closed...
- (15) WBN IP-2 "Annunciators, Instruments and Controls" section (Alert): The qualification, "...with unit not in stable condition", was inconsistent with NUREG-0654 Alert IC-14. See subitem (7) above. This portion of the deficiency remains open...
- (19) WBN IP-1, page 29, "Failed Fuel Monitor": The block for Alert contained the words: "1 X 10⁵ cpm Increase". The block for NOUE contained the words: "2 X 10⁴ cpm Increase". The licensee agreed to clarify these statements to include a reference to the period of time over which the stated increase occurs.
- (20) WBN-REP Section 5.2.1, EAL for IC-3(b); and Section 5.2.2, EAL for IC-1(b): The inspector noted that these EALs did not agree with the corresponding page in WBN IP-1 (page 29).
- (21) WBN IP-1, "Annunciators, Instruments and Controls" section: The SAE EAL contained three elements. The first element was gated by "and" to the second, and the second was gated by "or" to the third. It was not clear whether the EAL intended: 1 "and" (2 "or" 3), or (1 "and" 2) "or" 3. The licensee agreed to clarify this matter. Additionally, the wording used in the blocks for this IP-1 section was not consistent with the IC and EAL columnar descriptions in the WBN-REP relating to the loss of alarms/annunciators under IC-12 (NOUE), IC-13 (Alert), and IC-11 (SAE).

The current status of the components of this deficiency (390/84-22-27, 391/84-17-27) is summarized as follows:

Subitems closed: (1), (2), (4), (5), (6), (8), (9), (10), (12), (13), (14), (16), (17), (18)

Subitems left open: (3), (7), (11), (15)

New open subitems: (19), (20), (21)

Response

- (3) The subject wording in the REP has been deleted by REP Revision 12 dated April 1, 1985.
- (7) The requirement that the unit not be in a stable condition was removed from REP IC-13 EAL (Alert) by Revision 12 to the REP.
- (11) REP IC-9 EAL (SAE) has been revised as indicated. This was included in REP revision 12.
- (13) REP revision 12 has corrected the ambiguity.
- (15) Revision 4 to IP-1 will delete the qualification, "...with the unit not in stable condition". This revision will be completed prior to operation above 5% power.
- (19) Revision 4 to IP-1 will add the words, "within 30 minutes".
- (20) The subject EALs have been changed, by REP revision 12, to agree with WBN IP-1 (page 29).
- (21) The subject wording in IP-1 will be clarified by revision 4 to IP-1. IC-13 (Alert) and IC-11 (SAE) were changed by REP revision 12. IC-11 (NOUE) will be revised in a future revision to the REP.

Followup Item 390/85-16-02 and 391/85-15-02

...the inspector found that REV. 9 of AI-10.1 changed the REP training requirement for the Assistant Shift Engineer (ASE) position from REP 1 to REP 2, suggesting that the ASE was not intended to be backup to the Shift Engineer (SE) as interim SED. Further investigation of the WBN-REP/IPD revealed this to be the case, notwithstanding that Chapter 6 of the Technical Specifications specified a requirement that the ASE be qualified in all respects to substitute for the SE in the absence of the latter from the Control Room. Licensee representatives agreed to change, by April 1, 1985, Sections 3.1.1 and 4.1 of the WBN-REP to designate the ASE as interim SED in the event of the SE's unavailability. Concomitant training requirements would also be changed. This commitment received concurrence from plant management during the exit meeting.

Inspector Follow-up Item (390/85-16-02, 391/85-15-02): Formal inclusion of ASE in line of succession for SED position.

Response

REP revision 12, dated April 1, 1985, included changes to sections 4.1 and 3.1.1, which state, "The Shift Engineer, or the Designated Assistant Shift Engineer, when acting as Shift Engineer, is designated the Site Emergency Director and acts for him until relieved by the Plant Superintendent or his alternate."

In addition revision 13 to AI 2.1, dated March 8, 1985, revised section 3.2, "Designated ASE Responsibilities and Authority" to state that the designated ASE, "Serves as Site Emergency Director in order to accommodate unexpected absence of the SE as described in the minimum shift crew composition of the Tech Specs".

Finally AI 10.1 revision 10, dated March 3, 1985, changed the REP training requirements such that the SE and ASE positions will receive the same REP training.

Incomplete Area

Item 390/84-22-22 and 391/84-17-22

(Open) IA [10] (390/84-22-22, 391/84-17-22): Damage control/corrective actions; maintenance equipment and supplies. This item included seven numbered inspector comments...

During the current visit, the inspector conducted a walk-through, concentrating on the seven areas previously noted. The comments which follow are numbered in correspondence with the seven appraisal findings in this area:

- (1) The reference to disabled/removed interlocks on the fire hose isolation stop valves in the appraisal report was erroneous. The items referenced are actually flanged pins designed to act as a valve stem riser limiting stop. All stations checked had them in place. However, some were loose and had possibly moved from the set position. All such settings should be rechecked and securely tightened...
- (4) There was no emergency locker dedicated to the OSC. Discussion with licensee representatives indicated that the proximity of the OSC to storerooms and the warehouse made a dedicated emergency locker unnecessary. Nevertheless, the convenience and reliability of a dedicated locker would appear to be well worth the cost and effort involved.
- (5) The fact that only one fire rescue suit was contained in an emergency equipment locker (Control Room) implied its use without a backup man. This should be reviewed to confirm that this is the intent. The reason for the fire suits was not known to the Fire Protection Engineer nor has any training been provided.
- (6) Equipment lockers should be reviewed to determine if requirements exist for additional equipment such as:
 - steam suit
 - high-dielectric floor mats
 - basic electrical test equipment
 - fuse pullers
 - cable/bolt cutters
 - basic radiation monitoring equipment

The licensee has not responded to this finding...

In summary, subitems (1), (4), (5), and (6) of this incomplete area remain open pending receipt of the licensee's written response and adequate resolution of the matters in question.

Response

- (1) Maintenance request MR 520618 was issued on 4/1/85 to check and tighten the valve stops.
- (4) We do not feel that any advantage would be gained by stocking the OSC with emergency cabinets. All materials and tools needed by OSC teams are readily available in their work areas. First aid, fire fighting equipment, SCBAs and other equipment that may be needed during an emergency are readily available and in close proximity. In addition as previously stated the Power Stores storeroom is also in close proximity to the OSC areas.
- (5) The fire rescue suits will be removed from the emergency equipment cabinets.
- (6) We do not feel that there is any need or requirement to add such things as steam suits and high-dielectric floor mats to emergency equipment cabinets. We will consider revising the equipment lists for the emergency cabinets to include a circuit tester, a fuse puller and a cable/bolt cutter.

Radiation monitoring equipment will not be added to emergency cabinets. Any needed Health Physics monitoring equipment will always be available from the Health Physics lab. Issuance of this equipment from a central location is essential to maintaining proper control over calibration, testing and record keeping.