

I. General

Steps have been taken to correct specific weaknesses in the areas of radiation protection, reporting and management control as identified in non-compliances and escalated enforcement actions referenced below. Licensee corrective actions have been reviewed and onsite inspection performed where necessary. Enforcement conferences were held with senior licensee management to discuss specific problems and corrective actions. Additionally, the Regional Director has discussed, in depth, the licensee's weaknesses from the senior management level during meetings with and speeches to, licensee management.

II. Specific

A. Contention

"The Browns Ferry facility displayed evidence of weaknesses in the areas of radiation protection, reporting, and management control."

The basis, NRC actions, and licensee corrective actions for this contention are discussed in contentions B-E below.

B. Contention

"Radiation protection weaknesses were characterized by numerous noncompliance, weaknesses in exposure control, and instances where licensee personnel failed to follow procedures."

1. Basis

Reference

Examples of radiation protection noncompliances and weaknesses in exposure control include violations concerning a shipment of radioactive waste on April 21, 1980. Radiation levels on the external surface of the transport vehicle exceeded Department of Transportation levels. In addition, an adequate survey was not performed prior to the shipment.

IE Rpt. 50-259/80-21

Inspection findings (including a Health Physics appraisal conducted in October, 1980) identified several items of noncompliance related to failures to follow 10CFR20 (Standards for Protection Against Radiation), Technical Specifications, and radiation protection procedures. These findings, though not significant when taken individually, were indicative of weaknesses in management attention to adherence to radiation protection requirements.

IE Rpt. 50-259/79-41,
80-36
IE Rpt. 50-260/79-41
80-30
IE Rpt. 50-295/79-41,
80-30

2. NRC Action

These and related topics were discussed at meetings with senior licensee management on October 23, 1980, and December 4, 1980. A special inspection was conducted on May 1, 1980 regarding the radioactive waste shipment. On May 21, 1980 an enforcement conference was held to discuss NRC concerns over the shipment. On June 16, 1980 the licensee was issued a civil penalty relating to the waste shipment.

IE Rpt. 50-259/80-21
NRC letter of 6/18/80

Notices of Violation were issued for the remaining items of noncompliance.

IE Rpt. 259/79-41, 80-36
IE Rpt. 260/79-41, 80-30
IE Rpt. 296/79-41, 80-30

3. Licensee Corrective Action

The licensee has taken specific corrective action in response to the identified items of noncompliance.

259/81-17

C. Contention

"Reporting weaknesses were characterized by instances of licensee event reports that were incomplete and failed to consider generic implications."

1. Basis

Reviews of licensee event reports (LERs) have identified many instances where the reports have been incomplete or in error. The majority of incomplete reports were due to a failure to adequately discuss recurrence control. Errors appeared to be due to a lack of attention in completing forms and an inadequate review prior to issuance of the reports. Other errors included a stated corrective action that did not address the failure in question, improper coding, a lack of other required information or a slowness to take corrective action.

Reference

IE Rpt. 50-259/79-27,
80-13, 80-20, 80-43
IE Rpt. 50-260/79-27,
80-11, 80-15, 80-40
IE Rpt. 50-296/79-27,
80-12, 80-16, 80-39

2. NRC Action

Deficiencies in LERs were identified to TVA and revised LERs, where appropriate, were requested. Revised LERs received were subsequently reviewed. These and related topics were discussed in a meeting with senior licensee management on October 23, 1980.

IE Rpt. 50-259/79-27,
80-13, 80-20, 80-43
IE Rpt. 50-260/79-27,
80-11, 80-15, 80-40
IE Rpt. 50-296/79-27,
80-12, 80-16, 80-39

3. License Corrective Action

- TVA submitted revised LERs as requested.

D. Contention

"Management control weaknesses contributed to a loss of Unit 3 primary containment integrity on December 6-9, 1979, while the reactor was at power. This violation of technical specifications resulted in escalated enforcement action."

1. Basis

The loss of primary containment integrity was noted during startup and return of Unit 3 to power operation and was due to excessive leakage of a drywell equipment hatch that had not been properly secured prior to startup. The licensee had not provided written approved procedures for the removal and installation of primary containment hatches. Dependence on state-of-the-art knowledge and verbal instructions resulted in an inadequate sealing of the hatch. Essential work steps such as inspection of sealing surfaces, sequence and fit-up of bolts and torque limits were not clearly understood by workers involved nor were independent verifications made of work activities.

Reference

IE Rpt. 50-259/79-45,
260/79-45, and 296/79-45
LER 296/79-21, 79-22, and
79-24

2. NRC Actions

A prompt inspection was initiated on December 10, 1979. Several commitments to initiate corrective action were obtained from plant management to

IE Rpt. 50-259/79-45,
80-04, 80-06
IE Rpt. 50-260/79-45,
80-04, 80-06

assure proper containment closure including issuance of specific procedures pertaining to hatches. An Immediate Action Letter was issued to the licensee by Region II on December 12, 1979 to confirm certain action items taken or to be taken by the licensee. A letter was sent from the Director, IE to the licensee on January 4, 1980, including a Notice of Violation, Notice of Proposed Imposition of Civil Penalties and Order Modifying Licensee Effective Immediately. In addition an enforcement meeting was held with the licensee in January 1980. These and related topics were discussed with senior licensee management in meetings on October 23, 1980 and December 4, 1980.

IE Rpt. 50-296/79-45,
80-04, 80-06
NRC letter of 12/12/79
NRC letter of 1/4/80
licensee letter of 1/10/80

3. Licensee Corrective Action

The licensee made payment for the civil penalties and made a verbal report of corrective action to the NRC in the January 21, 1980 enforcement meeting.

E. Contention

"Management control weaknesses also included instances of missed surveillance, procedure adherence errors, and misorientated fuel assemblies that were not discovered during post-refueling core load verifications."

1. Basis

Procedural adherence errors included a May 29, 1979 Unit 2 startup in which a recently revised control rod withdrawal procedure was not followed; improper movement of the steam separator during an August, 1979 Unit 3 refueling which resulted in workers receiving high dose rates; and the improper completion of several maintenance reports. In addition, in September 1979 two main steam line temperature monitoring channels were "jumpered" without the required proce-

Reference

LER 259/79-26
LER 260/79-11
IE Rpt. 50-259/79-13,
79-16, 79-27, 79-30,
79-34, 79-48, 80-19
IE Rpt. 50-260/79-13,
79-16, 79-27, 79-30,
79-34, 79-47, 80-14
IE Rpt. 50-260/79-13,
79-16, 79-27, 79-30,
79-34, 79-47, 80-15

dural authorization; in December 1979 a leak test of a Unit 2 equipment hatch was performed using a superceded procedure; and in March, 1980, qualified procedures were not used in the heat treatment of the Unit 1 High Pressure Coolant Injection system piping.

Examples of missed surveillances include a Unit 3 High Pressure Coolant Injection system operability test in December, 1979 and scram discharge header ultrasonic level recordings in August, 1980.

IE Rpt. 50-259/80-13,
80-34
IE Rpt. 50-260/80-11,
80-27
IE Rpt. 50-296/80-12,
80-28

The misorientated fuel assemblies were discovered by the licensee in September, 1980, during a Unit 2 refueling outage. The two fuel bundles were rotated 90° and had been in this condition since the previous refueling. A review of Unit 1 and 3 fuel bundles revealed one Unit 1 bundle also misorientated by 90°.

IE Rpt. 50-259/80-35,
260/80-29 and 296/80-29

2. NRC Action

In all cases, notices of violation or deviation were issued and appropriate corrective action, as applicable, was verified by site inspection. These and related topics were discussed at meetings with senior licensee management on July 10, 1980, September 25, 1980, October 23, 1980, January 7, 1981, and February 2, 1981. In addition, the Regional Director discussed these general subjects in speeches to the licensee's senior management of the Office of Power and Office of Engineering Design and Construction.

IE Rpt. 50-259/79-13,
79-16, 79-26, 79-27,
79-30, 79-34, 79-48,
80-13, 80-19, 80-28,
80-34, 80-35, 80-43
IE Rpt. 50-260/79-13,
79-16, 79-26, 79-27,
79-30, 79-34, 79-47,
80-11, 80-14, 80-21,
80-27, 80-29, 80-40
IE Rpt. 50-296/79-13,
79-16, 79-26, 79-27,
79-30, 79-34, 79-47,
80-12, 80-15, 80-22,
80-28, 30-29, 80-39

3. Licensee Corrective Action

The licensee has taken specific corrective actions in response to identified items of noncompliance or deviation including retraining, procedural revision, additional auditing, and retesting.

IE Rpt. 50-259/79-34,
79-48, 80-34
IE Rpt. 50-260/79-34,
79-47, 80-27
IE Rpt. 50-296/79-34,
79-47, 80-28
Licensee letters of
7/30/79, 12/5/79,
12/17/79, 12/19/79,
4/15/80, 5/20/80, and
12/8/80.

F. Contention

"However, the licensee's below-average performance in areas where the facility received many items of noncompliance was considered to be an important contributor to the overall below-average performance rating".

Many noncompliances were received by the licensee in the areas of radiation protection, reporting, and management controls. These noncompliances resulted in a below-average performance in these areas and were the major contributor to the overall below-average rating. The basis, NRC actions, and licensee corrective actions for these items are discussed in contentions B-E above.