

I. General

The intensive NRC investigation performed subsequent to the flooding event of October 1980 identified most of the specific weaknesses discussed in the SALP evaluation.

Subsequent to the flooding event, the licensee reorganized the onsite management and completed equipment modifications in the systems designed to detect and prevent a recurrence of a similar event. A Vice President was stationed onsite and a new staff position, designed to improve the interface between the licensee and the NRC, was established. The licensee installed new containment fan cooler units, improved containment water level indicating systems, improved the systems designed to detect steam and nonradioactive water leakage and upgraded the containment pumping systems.

A special NRC review of Management Structure was performed after the evaluation period to assess the capabilities of the new organization. The results of this review indicate that the licensee's onsite management organization structure provides a higher management level onsite and that management structural weaknesses identified as a result of the flooding event have been corrected. The NRC also reviewed the designs used in the modifications made subsequent to the event and verified, through inspection, the acceptability of the plant changes.

In addition to the reorganization discussed above, the licensee took other actions designed to improve performance in each of the functional areas in which weaknesses were identified. These actions include an active recruitment effort to expand the plant staff by approximately 40 positions, revision of administrative, operational and emergency planning procedures and directives, increased emphasis placed on the role of the Station Nuclear Safety Committee (SNSC) in plant operations and the addition of systematic maintenance review programs to be conducted by both the SNSC and the Quality Assurance and Reliability Department.

II. Specific

Contention

"The Indian Point 2 facility displayed evidence of weaknesses in five functional areas. These areas were plant operations, maintenance, reporting, committee activities, and management controls."

These contentions are addressed as follows:

- Plant Operation (See Contention A)
- Maintenance (See Contention B)
- Reporting (See Contention C)
- Committee Activities (See Contention D)
- Management Controls (See Contentions A-E)

### Contention A

"The plant operations area was characterized by instances where the licensee made improper assignments of supervisory personnel and failed to follow procedures."

#### 1. Basis

The NRC investigation conducted subsequent to the October, 1980 containment flooding event, identified the fact that for eight hours on October 17, 1980, the Chief Operating Engineer, who is the immediate supervisor to the licensee's equivalent of the Shift Supervisor, was assigned the duties of the Shift Technical Advisor. This action is contrary to the requirements of the TMI Lessons Learned Action Plan.

Also, during the flooding event, the failure of the licensee's operators to follow the procedure covering malfunction of a nuclear instrument resulted in a turbine runback and a plant trip on October 17, 1980.

#### Reference

IE Report  
50-247/80-19;  
12/11/80 NRC  
letter, EA 81-11

IE Report  
50-247/80-19;  
12/11/80 NRC  
letter, EA 81-11

#### 2. NRC Actions

Following the October, 1980 flooding event, NRC Region I issued IAL 80-41 to confirm the commitments made by the licensee with respect to determining the causes and results of the flooding. Additionally, the NRC imposed a \$215,000 civil penalty for the event, \$10,000 of which was assessed because of the assignment of the Chief Operating Engineer as STA. This civil penalty is being contested by the licensee.

The NRC continues to monitor plant operations with emphasis placed on procedural adherence by the licensee's staff.

12/11/80 NRC  
letter, EA 81-11;

10/22/80 NRC  
Region I letter  
(IAL 80-41)

#### 3. Licensee Corrective Action

The licensee discontinued the practice of assigning the Chief Operating Engineer as the STA. The licensee also established a new Administrative Directive to define

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50-247/81-05

the duties of the STA and revised the management structure so that the STA reports to the Technical Engineering Director vice the Chief Operating Engineer.

To prevent recurrence of the failure to follow procedures, the operators were retrained in the station's procedural adherence policies. Also, the nuclear instrument malfunction procedure has been revised to better clarify the requirements in this case.

IE Report  
50-247/81-05

### Contention B

"Review of the maintenance area revealed instances where the licensee failed to determine the causes of repeated equipment malfunctions and instances of incomplete maintenance actions."

#### 1. Basis

Subsequent to the flooding event, NRC determined that the causes of malfunctions in the fan cooler units were not identified, evaluated and recorded despite repeated leaks in this system between 1973 and October 1980.

#### Reference

IE Report  
50-247/80-19;  
12/11/80 NRC  
letter, EA 81-11;  
LER 80-16

Also, a routine NRC inspection in December, 1980 identified that three different work requests written to replace missing handwheels on the RHR pump suction and discharge valves were not processed as required. Consequently, the necessary work on these valves was not accomplished.

IE Report  
50-247/80-22

#### 2. NRC Actions

The NRC took escalated enforcement action in the form of a civil penalty for the licensee's failure to determine the causes of failures in the fan cooler unit system. NRC continues to monitor the licensee's performance in regard to these issues.

12/11/80 NRC  
letter, EA 81-11

#### 3. Licensee Corrective Actions

With respect to the failure to determine the causes of fan cooler-unit malfunctions,

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the licensee revised and upgraded the quality assurance activities in this regard. Further, the licensee established a system of periodic reviews of equipment malfunctions to be conducted by the Station Nuclear Safety Committee and the Quality Assurance and Reliability Department.

IE Report  
50-247/81-11

To assure that maintenance actions are followed to their completion, the licensee committed to make appropriate changes in the station's maintenance work request process. In addition, the licensee committed to retrain personnel in the administrative requirements associated with work requests and to emphasize the necessity to adhere to these requirements.

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### Contention C

"The licensee failed to submit several required reports to the NRC."

#### 1. Basis

During the investigation subsequent to the October, 1980 containment flooding event, the NRC determined that the licensee failed to comply with the reporting requirements of 10 CFR 50.72 and those of Technical Specifications. Specifically, the licensee failed to promptly notify the NRC Operations Center concerning the excessive amount of river water discovered in containment. The licensee further failed to report the abnormal degradation of primary containment resulting from the presence of this water.

#### Reference

IE Report  
50-247/80-19;  
12/11/80 NRC  
letter, EA 81-11;  
LER 80-16

#### 2. NRC Actions

The NRC took escalated enforcement action in the form of civil penalties for each of the specific failures regarding event reporting. The NRC also reviewed the corrective actions taken by the licensee to prevent the recurrence of similar violations.

12/11/80 NRC  
letter, EA 81-11;  
IE Report  
50-247/81-05

3. Licensee Corrective Actions

The licensee revised the station administrative directives regarding the reporting of events to the NRC. In addition, the licensee established a new staff position onsite titled "Director of Regulatory Affairs," the main function of which is timely correspondence with the NRC.

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Contention D

"The licensee's Station Nuclear Safety Committee failed to make reviews of several safety-related events and activities that involved the potential existence of an unreviewed safety question, as defined in 10 CFR 50.59(e)."

1. Basis

Reference

The NRC determined that, subsequent to the discovery of the excessive amount of river water within containment by the licensee, the Station Nuclear Safety Committee (SNSC) failed to review the potential impact of wetting the reactor vessel and various stainless steel components with cold, brackish river water.

IE Report  
50-247/80-19;  
12/11/80 NRC letter, EA 81-11;  
LER 80-16

In addition, during the NRC investigation, it was determined that past repairs were made to correct leaks in fan cooler units using an epoxy repair technique. The SNSC failed to review the use of epoxy in these repairs to ensure that an unreviewed safety question was not involved.

IE Report  
50-247/80-19;  
12/11/80 NRC letter, EA 81-11

2. NRC Actions

The NRC took escalated enforcement action in the form of civil penalties for each of the failures discussed above. The NRC continues to monitor the performance of the SNSC activities.

12/11/80 NRC letter, EA 81-11

3. Licensee Corrective Actions

The licensee revised administrative procedures to emphasize the role of the SNSC in the review of facility operations

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and to establish a systematic review of maintenance activities involving potential safety consequences. In addition, the role of the SNSC is addressed in the licensee's training and retraining programs.

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### Contention E

"Further indications of weaknesses in the management controls area were identified as a result of the health physics appraisal and the licensee's approval of a procedure which disabled the automatic start feature of the containment spray system."

#### 1. Basis

During March, 1980, the NRC performed a Health Physics Appraisal at the licensee's facility. The Appraisal identified eleven specific weaknesses associated with management controls in the Emergency Planning Area. The weaknesses relate to training and training records, functional descriptions and responsibilities of the radiation protection elements of the emergency organization and various procedural inadequacies.

#### Reference

IE Report  
50-247/80-02;  
8/7/80 NRC  
letter

Additionally, during a routine inspection conducted on September 24-25, 1980, the NRC determined that on May 10, 1977, licensee management had approved a procedure revision which disabled the automatic start feature of both containment spray pumps and thus involved an unreviewed safety question.

IE Report  
50-247/80-16;  
12/19/80 NRC  
letter, EA 81-04;  
LER 80-11

#### 2. NRC Actions

With regard to the containment spray pumps issue, the NRC conducted an enforcement conference on October 15, 1980 and assessed a \$5,000 civil penalty for failure to comply with the requirements of 10 CFR 50.59.

IE Report  
50-247/80-20;  
12/19/80 NRC  
letter, EA 81-04;  
4/29/81 NRC  
letter

NRC will review the licensee's corrective actions regarding both the containment spray pumps issue and the weaknesses identified during the Health Physics Appraisal.

3. Licensee Corrective Actions

The licensee revised the station procedure which resulted in the problem associated with the containment spray pumps.

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50-247/80-16

The licensee also committed to take specific corrective action addressing each of the eleven weaknesses identified by the Health Physics Appraisal. For example, additional administrative controls will be placed on the training program; the areas of responsibility of the radiation protection element in an emergency condition will be defined and reporting chains formalized; and procedure revisions will be made to address the inadequacies identified in the plan.

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