(9)

February 17, 2004

INSPECTION SUMMARY - TRIENNIAL FIRE PROTECTION INSPECTION
AT TURKEY POINT NUCLEAR PLANT

Report Number: 50-250, 251/2004007
Onsite Inspection Dates: 1/26-30/04 and 2/9-13/04

Inspection Team: Charlie Payne (team lead, operations); Gerry Wiseman (fire protection); Paul Fillion (electrical)

Accompanying Personnel: Kathleen O'Donohue, Team Leader; Necota Staples (electrical-training); Esperanza Espana, Visiting Inspector (Spain)

Scope: Routine Triennial Fire Protection Inspection, per IP 71111.05, focusing on selected fire areas/zones listed below. Selected fire areas included:

1. **Fire Zone 63 (Fire Area T) - Unit 3 Rod Control Equipment/3B MCC Room, +18 ft. level.** Fire barriers in this area consist of 3-hour rated fire walls, the floor and the ceiling. Fire detection includes ionization smoke detectors. Manual suppression is provided by the fire brigade. A severe fire in this area would involve a shutdown of Unit 3 from the main control room.

2. **Fire Zone 67 (Fire Area U) - Unit 4 Train B 4160V Switchgear Room, +18 ft. level.** Fire barriers in this area consist of 3-hour rated fire walls, the floor and the ceiling. Fire detection includes ionization smoke detectors. Manual suppression is provided by the fire brigade. A severe fire in this area would involve a shutdown of Unit 4 from the main control room.

3. **Fire Zones 106 and 106R (Fire Area MM) - Unit 3 and Unit 4 Main Control Room, +42 ft. level.** Fire barriers in this area consist of 3-hour rated fire walls, the floor and the ceiling. Fire detection includes ionization smoke detectors. This is a normally occupied space with manual suppression initially provided by the control room operators and later by the fire brigade. A severe fire in this area would involve a shutdown of both Unit 3 and Unit 4 from the main control room.

There were six inspection findings and five other issues identified.

<u>FINDINGS</u>

1) Failure to periodically test the auto start feature (on loss of power) for the TD fire pump.

2) Height of the curbs for some oil-retention basins are not sufficient to contain the entire contents of storage tanks.

3) Failure to identify that the RWST suction valve (LCV-3/4-115B) was subject to spurious operation. Applies to both FZ 63 and FZ 67.

1R-9

4) Failure to prevent spurious operation of thermal barrier cooling suction valve (MOV-4-626). Applies to FZ 67. (Licensee identified, but failed to take timely corrective action)

5) Failure to maintain adequate fire detector capability to ensure fire detection at the incipient stage. Applies to FZ 67.

6) Local manual operator action to prevent spurious operation of a thermal barrier cooling water containment isolation valve (MOV-3/4-716A) was not timely to preclude RCP seal package damage. Applies to FZ 106.

7) Failure to install detection and fixed suppression in FZ 97. Part of the MCR envelope.

OTHER ISSUES

1) Assured operator access through security doors to various rooms and compartments during performance of local manual operator actions.

2) Assured operator access through specific locked security doors (no key card access available) during MCR evacuation local manual operator actions.

3) Unapproved local manual operator actions that were found to be feasible. (Licensee identified)

4) Procedure guidance allowing 20 minutes to complete local manual operator actions to restore RCP seal package cooling rather than 13 minutes as specified for similar condition during SBO events. (Licensee identified, but failed to take timely corrective action)

Inspection Successes:

1) Continue to experience a good synergistic working relationship between inspectors.

2) Developed new line of inquiry regarding operator access controls during fires.

Inspection Challenges:

1) Understanding the licensing basis in fire protection still continues to be problematic. Licensee is arguing that the are only committed to select sections of NFPA codes but have no record as to which sections they are.

2) Scope of inspection is greater than inspection resources. Reducing sample size (included in new revision to IP 71111.05) will assure thorough review of area(s) selected.

3) The licensee is committed to using the EOPs as overall operating guidance during response to fire. Fire response procedures are lower tier documents (off-normal procedures) used as guidance only. Where conflicts between these procedures occur, the EOPs would have priority - despite the need to take some actions to protect safe

shutdown at the cost of reducing normal redundancy and reliability of ECCS equipment. This leaves the licensee vulnerable to actions contrary to SSD analysis and places high reliance on operator training and decision-making. The team found no basis to refute the licensee's approach but noted it was contrary to nearly all the rest of the industry.

4) The licensee's Ignition Source Data Sheets (ISDS) from the IPEEE contain skimpy information and are not adequate to support an SDP analysis in the fire protection area. The licensee's risk analyst was aware of this and stated improvement plans would be implemented, within budget constraints.

Suggested areas of routine inspection focus:

- Consider effects of room and compartment access controls when evaluating an operator's ability to successfully perform local manual operator actions.