

- 5) Instrument bus 6. Circuit 13 listed as blank, but powers two auxiliary feedwater (AFW) flow monitors installed in 1980 (Modification 504). Circuits 25 and 33 are disconnected.
- 6) Instrument bus 7. Circuit 10 does not reflect supply to reactor coolant head vent pressure circuitry. (CWD 137 Revision 0). Circuit 20 also supplies AFW flow monitor 'C' from the motor driven AFW pumps. Circuits 21 and 22 do not supply AFW flow monitors as they are disconnected. Circuit 19 also powers the fire door supervisory circuits.
- 7) Instrument bus 8. Circuit 20 also supplies AFW flow monitor 'B' from the steam driven AFW pump. Circuits 21 and 22 do not supply AFW flow monitors, as they are disconnected. Circuit 34 for the generator moisture analyzer is not listed.
- 8) Instrument bus 9. Circuit 22 shows no load but supplies the Unit 2 fire detection system (CWD 583, Revision 5). Circuit 23 shows no load but supplies steam generator blowdown containment isolation valves circuitry (CWD 629, Revision 6).

Based on the above, the inspector concluded that SD-16 Appendix A has not been maintained with respect to plant modifications. The inspector noted that the instrument bus load directory is the only list available to aid operators in the event of a loss of an instrument bus. Failure to maintain SD-16 Appendix A and controlled field copies is a violation. (261/83-12-01).

Additionally, during the inspection of the instrument bus cubicles, the inspector determined that housekeeping requirements had not been implemented. Specifically, cubicles had thick coatings of dust and debris and contained paper tags from unit startup in 1970. The cubicles appeared to have never been cleaned, despite circuit modifications in the cubicles over the last three years. Failure of plant maintenance personnel to implement housekeeping requirements to correct potential equipment degradation due to dirt and fire hazards is a further example of violation 261/83-12-01.

## 6. Technical Specification Compliance

- a. During this reporting interval, the inspector verified compliance with selected limiting conditions for operation (LCO) and reviewed results of selected surveillance tests. These verifications were accomplished by direct observation of monitoring instrumentation, valve positions, switch positions, and review of completed logs and records. The licensee's compliance with selected LCO action statements were reviewed as they happened.

b. Containment Air Recirculation Unit (HVH) Fan Cooler Leak

On April 10, 1983, with the plant at 95% power, an auxiliary operator identified a service water leak of approximately two gpm in a tube bundle on HVH-3. Such a leak is a degradation of containment integrity. HVH-3 service water supply and return lines to HVH-3 fan and motor coolers were promptly isolated to restore containment integrity. An unusual event was initially declared and then terminated when HVH-3 was isolated. The NRC and State of South Carolina were notified as required. Following removal of HVH-3 from service, both containment spray pumps were verified operable. The leak was repaired, and HVH-3 returned to service on April 11, 1983.

During the inspector's review of licensee's maintenance controls on HVH-3, it was determined that service water flow was restored on three occasions during maintenance. Specifically, the fan cooler inlet and outlet valves were partially opened and remained open for about ten minutes on each occasion in order to leak check the cooler. An operator was stationed at the valves to open and shut them during this post-maintenance testing. The inspector reviewed Operations Work Procedure (OWP) HVH-3 for control of post-maintenance testing due to the concern that if the cooler still leaked, containment integrity was being reviolated. The OWP only requires that the cooler be checked for leaks. It does not provide either formal controls addressing containment integrity or methodology and acceptance criteria for the post-maintenance testing. Failure to provide adequate procedural controls of post-maintenance testing of HVH-3 is a further example of violation 261/83-12-01.

c. Pipe Alley Fire Detection Instrumentation

On April 11, 1983, the licensee's Fire Protection Specialist, during his review of shift Fire Protection Technician documentation, determined that the Train A fire detectors in pipe alley (Zone 28) were out of service due to a locked in false alarm. An hourly fire inspection was immediately commenced as required by T.S. 3.14.1.2.b and continued until the defective alarm module was replaced on April 12.

The licensee's followup of the event determined that the alarm had actuated on April 9 and could not be reset after an inspection of Zone 28 determined the alarm to be false. Due to the system logic circuitry, an alarm on a fire detector train will block valid alarms from that train's detectors, and render the train inoperable. During the period that Train A was inoperable, all four Train B detectors for Zone 28 were operable, and at least daily tours by the Fire Protection Technician and shiftly tours by the Auxiliary Operator were conducted of the Zone 28 area.