#### **Davis-Besse**

# **Initiating Events**



Significance: Aug 15, 2000

Identified By: NRC Item Type: FIN Finding

Licensee personnel did not appropriately evaluate the risk associated with breaker maintenance.

GREEN. The inspectors identified that licensee personnel did not appropriately evaluate the risk associated with conducting maintenance on electrical circuit breaker HAAC, which is a supply breaker to a 13.8kV - 4.16kV step-down transformer. This issue is of very low safety significance because it did not significantly increase the likelihood of an initiating event.

Inspection Report#: 2000009(pdf)

Significance: Jun 30. 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

Inadequate procedure resulted in the failure to perform a required surveillance test.

GREEN. Operators failed to perform a Technical Specification required surveillance test to verify one qualified A.C. power circuit existed when the other qualified circuit was not available. This was a Non-Cited Violation of Technical Specification surveillance requirement 4.8.1.1.a. This issue was of very low safety significance because no Technical Specification allowed outage times were exceeded.

Inspection Report#: 2000004(pdf)

Significance: May 20, 2000 Identified By: Self Disclosing Item Type: NCV NonCited Violation

Electrician inadvertently operated the wrong relay during offsite power testing, causing a loss-of-offsite-power while the core was offloaded

GREEN. During a 13.8 KV bus transfer test, which was performed during the low risk plant configuration of having the core offloaded into the spent fuel pool, an electrician checked the status of the wrong relay and inadvertently actuated the relay, resulting in a loss-of-offsite-power (LOOP). The failure to follow the applicable test procedure was a violation of 10 CFR 50, Appendix B, Criterion V. No loss of thermal margin or water inventory occurred. Therefore, this event was determined to have very low safety significance. (Section 1R22.1).

Inspection Report#: 2000003(pdf)

Significance:

May 20, 2000 Identified By: Self Disclosing

Item Type: FIN Finding

Poor work control during an outage.

GREEN. Poor work control resulted in 300 gallons of water from the core flood tanks (CFTs) being drained into the reactor coolant system (RCS) instead of the reactor coolant drain tank (RCDT). No loss of thermal margin or water inventory occurred. Therefore, this finding was determined to have very low safety significance (Section 1R20.1).

Inspection Report#: 2000003(pdf)

Significance:

Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to adequately perform risk assessment required by 10 CFR 50.65 paragraph (a)(4).

The licensee failed to adequately assess the risk to the plant from performing reactor protection system troubleshooting with one train of auxiliary feedwater unavailable. The issue, which was a Non-Cited Violation of 10 CFR 50.65 (a)(4), had very low risk significance because the change in core damage probability was very low. This was due to the short time duration that the auxiliary feedwater system train was unavailable.

Inspection Report#: 2001006(pdf)

# **Mitigating Systems**

Significance:

Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to adequately scope the Makeup Pump Room Air Conditioner into the Maintenance Rule Program.

GREEN. The licensee did not adequately scope the Makeup Pump Room Air Conditioner for entry into the Maintenance Rule Program. This was a Non-Cited Violation of 10 CFR 50.65, Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants. The risk significance of this issue was very low because redundant systems were available for decay heat removal purposes.

Inspection Report#: 2000010(pdf)

Significance:

Sep 30, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

Auxiliary Feedwater Pump Inoperable for Greater than the Technical Specification Allowed Outage Time.

GREEN. An equipment operator caused an auxiliary feedwater pump to be inoperable for about one week when he failed to close a trip throttle valve drain valve. This was a Non-Cited Violation of a technical specification allowed outage time. The risk significance of this issue was very low because redundant auxiliary feedwater equipment was available, resulting in a very low probability that auxiliary feedwater would not have been able to perform its design function when called upon.

Inspection Report#: 2000010(pdf)

Significance:

Aug 15, 2000

Identified By: NRC Item Type: FIN Finding

Licensee did not conduct post-maintenance testing following maintenance on the Startup Feedwater Pump.

GREEN. The licensee did not conduct post-maintenance testing following motor bearing removal and installation, a shaft alignment, and other adjustments on the Startup Feedwater Pump (SUFP). This issue was determined to have very low safety significance because, even if the SUFP failed post-maintenance testing, there are other secondary heat removal systems available to perform this safety function.

Inspection Report#: 2000009(pdf)

Significance:

Aug 15, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

Auxiliary feedwater system minimum flow line check valves failed reverse flow testing.

GREEN. The licensee identified that check valves MS 145 and 146, which are installed in a 1-1/2 inch auxiliary feedwater system minimum flow line, had failed reverse flow testing. As a result, these valves were unable to perform their design function which is to prevent feeding a steam line break from an intact auxiliary feedwater pump turbine (AFPT) steam supply line following a steam line break in the opposite train. This rendered the auxiliary feedwater system inlet steam pressure interlocks inoperable for a period of greater than 7 days which was a Non-Cited Violation of Technical Specifications. This issue was determined to have very low safety significance because the failure of check valves MS 145 and 146 had no adverse affects on the operation of the AFPTs and the ability to provide auxiliary feedwater to the steam generators.

Inspection Report#: 2000009(pdf)

Significance:

Jul 28, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Two examples of a test control violation.

1) Green. An example of a Non-Cited Violation was identified for conducting a test following a modification to the component cooling water pump control circuitry that did not verify that the electronic circuitry affected by the modification would perform as required by the design. The risk significance of this issue was determined to be very low because other routine surveillance tests had since been performed which verified that the pump initiating circuits would perform during a design basis accident. 2) Green. An example of a Non-Cited Violation was identified for not having a design basis justifying the use of a leakage acceptance limit in a test for the component cooling water system. The risk significance of this issue was determined to be very low because the actual leakage found in the system was extremely low and after doing additional calculations the

licensee determined that the make-up system capacity could justify the use of the leakage limit.

Inspection Report# : 2000007(pdf)



Jul 28, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Four examples of a design control violation.

1) Green. An example of a Non-Cited Violation was identified because the design calculation justifying the degraded grid voltage setpoint had not included all the electrical loads that would start during a design basis accident and it was initially indeterminate whether offsite power could be relied upon under worst case conditions. The risk significance of this issue was determined to be very low because the preliminary results of the revised calculation indicated that the offsite power would be available under worst case conditions. 2) Green. An example of a Non-Cited Violation was identified because a design calculation justifying the allowable performance degradation of the component cooling water pumps did not consider the pumps' minimum flow requirements which would have allowed the pumps to operate without sufficient flow. The risk significance of this issue was determined to be very low because the current pump performances had not degraded to the extent allowed by the calculation and the licensee had decided to maintain the minimum flow valves in a normally open condition. 3) Green. An example of a Non-Cited Violation was identified because the original design of the component cooling water surge tank had not considered certain failures of unqualified systems which could collapse the tank by causing negative pressures for which it was not specifically designed. The risk significance of this issue was determined to be very low because the preliminary results of the licensee's evaluation indicated that the surge tank could withstand a negative pressure beyond a full vacuum. 4) Green. An example of a Non-Cited Violation was identified because the original sizing of the component cooling water surge tank relief valves had not considered the failure of a reactor coolant pressure boundary tube inside the decay heat removal coolers, which could burst the surge tank. The risk significance of this issue was determined to be very low because the preliminary results of the licensee's evaluation indicated that the relief valve had sufficient capacity to keep up with the in-leakage from the reactor coolant system and, therefore, would prevent the pressure from exceeding the design limit of the surge tank.

Inspection Report# : 2000007(pdf)

Significance:

Jul 28, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Maintenance Rule violation for not demonstrating performance of service water makeup to component cooling water system.

Green. The licensee failed to verify that the service water system could still provide sufficient make-up to the component cooling water system after more than 20 years without any preventative maintenance. A Non-Cited Violation was identified, in that, there was not an adequate basis to have excluded the CCW system from the monitoring requirement of the maintenance rule. The risk significance of this issue was determined to be very low because of the extremely remote possibility of the initiating event requiring this function and the high likelihood that an alternate source of

make-up could be used.

Inspection Report#: 2000007 (pdf)



Dec 21, 2001

Identified By: NRC Item Type: FIN Finding

#### POTENTIAL FOR LOSS OF MAKEUP PUMPS UNDER COLD WEATHER CONDITIONS

The inspectors identified a finding involving loss of the licensee's makeup pumps during a loss of offsite power under cold weather conditions. The issue was of very low safety significance due to other mitigating systems (auxiliary feedwater) being available, and because of the likelihood that operator would take action to restore the makeup pump lube oil circulation path).

Inspection Report#: 2001014(pdf)

Significance: G

Nov 13, 2001

Identified By: NRC Item Type: NCV NonCited Violation

FAILURE TO HAVE ADEQUATE PROCEDURES TO IDENTIFY AND CONTROL THE REMOVAL OF EXTERNAL FLOOD BARRIERS

The licensee failed to have procedures appropriate to the circumstances to identify and control the removal of external flood barriers. As a result, the external flood barriers to the service water intake structure were removed, providing a pathway which could have rendered the safety-related service water pumps inoperable in the event of a design basis external flooding event. One Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified. The issue was of very low safety significance due to the very low initiating event frequency and due to high probability of recovery for flood barriers, given the nature of the initiating event.

Inspection Report#: 2001013(pdf)



Feb 13, 2001

Identified By: NRC Item Type: FIN Finding

Risk Significant Equipment Not Available Following Return to Service After Maintenance

The failure to conduct post maintenance testing resulted in risk significant equipment (the spare component cooling water (CCW) pump and a station air compressor) being unavailable following their return to service after maintenance. This issue was of very low risk significance (Green)

because two other station air compressors and the running and standby CCW pumps were still available.

Inspection Report#: 2001003(pdf)

## **Barrier Integrity**

## **Emergency Preparedness**

### **Occupational Radiation Safety**

### **Public Radiation Safety**

Significance:

Feb 15, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

#### FAILURE TO PLACARD RADIOACTIVE SCO SHIPMENT

A finding and associated Non-Cited violation of 10 CFR 71.5(a) and the Department of Transportation regulations contained in 49 CFR 172.504 was identified for the failure to placard vehicles used to transport radioactive materials. This finding was determined to be of very low safety significance because the shipment was exclusive use, dose rates were minimal, the shipment was marked properly, and the shipping papers were correct.

Inspection Report#: 2001016(pdf)

### **Physical Protection**

#### **Miscellaneous**

Significance: N/A Jul 28, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

No corrective action taken to preclude repetition of design problem.

No color. The team identified that the corrective actions had not been taken to prevent recurrence of the root cause for a modification that installed ground fault protection relays on various pumps, which prevented the pumps from starting or running under normal conditions.

Inspection Report# : 2000007 (pdf)

Significance: N/A Jul 28, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

#### Appendix R exemption bases for CCW pump room no longer met.

No color. A Non-Cited Violation was identified for no longer complying with the bases of the exemption for the fire protection program requirements in the component cooling water pump room.

Inspection Report#: 2000007(pdf)

Significance: SL-IV Dec 31, 2001

Identified By: NRC
Item Type: VIO Violation

### SL IV VIOLATION OF 10 CFR 50.7

The NRC concluded that a security officer was discriminated against for engaging in protected activities within the scope of 10 CFR 50.7, "Employee Protection." A security supervisor subjected the officer to a fact-finding meeting on January 12, 2001, and placed a copy of the documentation from the meeting in the security officer's personnel file. The NRC determined that these actions were taken, at least in part, as a result of the security officer engaging in protected activity when he identified and documented in the condition report the potential security department training deficiency. The NRC issued a Notice of Violation by letter dated December 20, 2001, requiring a response by the licensee (VIO 50-346/01-15-01).

Inspection Report#: 2001015(pdf)

Significance: N/A May 16, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

### **VIOLATION OF 50.7, "EMPLOYEE PROTECTION"**

On March 29, 2001, the NRC issued Enforcement Action (EA) No. 00-183 relating to a violation of 10 CFR 50.7 that occurred on July 19, 1999, at the licensee's facility. The NRC concluded that the licensee took an adverse employment action against a Perry Nuclear Power Plant Radiation Protection Department employee by disclosing the employee's name during a training session on employee engagement in protected activities. During the training session, specific examples of violations were discussed including one in which the employee's name was used in connection with his engagement in protected activities. Based on the corrective actions taken by the licensee and the fact that the violation was not deliberate, the NRC categorized this matter as a non-cited violation.

Inspection Report# : 2001009(pdf)

Significance: N/A Mar 09, 2001

Identified By: NRC Item Type: FIN Finding

#### The licensee effectively identified, evaluated, and corrected plant problems.

The team concluded that the licensee effectively identified, evaluated, and corrected plant problems. Problem identification was determined to be effective based on a low condition report initiation threshold and effective Quality Assurance audits and self assessments. Trending and industry operating experience were two programs which could be used more broadly to identify issues with the potential to affect the plant. Root cause evaluations used structured techniques and were effective in identifying one or more root causes. Corrective actions specified appropriately matched the identified causes and were effective in preventing recurrence of significant conditions adverse to quality. Licensee staff indicated a willingness to identify safety issues.

Inspection Report# : 2001005(pdf)

Last modified: March 29, 2002