Prairie Island 1

Initiating Events

Significance: G Feb 20, 2000
Identified By: NRC
Item Type: FIN Finding
POOR COORDINATION OF EMERGENCY DIESEL AND OFFSITE POWER LINE WORK.
GREEN. On February 21, 2000, the licensee removed one of the four 345,000-volt alternating current offsite power lines from service while the D1 emergency diesel generator was already out of service. The licensee received little advance notice from the licensee's offsite organization performing the work on the power line and did not have time to completely coordinate and evaluate the risk of the combination of degraded offsite power capability and degraded emergency onsite power capability before initiating the isolation of the offsite source. Although the licensee's offsite organization characterized the work to the plant operators as emergency work, the inspectors and plant staff later determined that the work was not an emergency and had apparently been planned by the licensee's offsite organization for some time. Using draft NRC Inspection Manual 0609, "Significance Determination Process," the NRC determined that the issue was of very low risk significance because of the robust nature of the offsite power sources and capabilities for cross feeding electrical power from one unit's diesel generators to the opposite unit's emergency buses. Therefore, the issue was determined to be within the licensee response band. The finding was assigned to Unit 1.
Inspection Report# : 2000004*(pdf)*

Mitigating Systems

Significance: W Feb 01, 2002
Identified By: NRC
Item Type: VIO Violation
NON-SAFETY RELATED LUBRICATION WATER SOURCE RESULTING IN PUMP INOPERABILITY.
[Event date was changed so that this item would show up during this ROP year (2002). The original date was 12/4/2000] The original design and installation of the three safety related deep draft cooling water (service water) pumps failed to require safety related electrical power for the filter backwash system for the water source for bearing lubrication and cooling of the drive shaft bearings. During a loss of offsite electrical power, this could have resulted in the clogging of the filters after a short time and, with the loss of shaft bearing lubrication water, inoperable cooling pumps. In addition, a design change in 1977 inappropriately reclassified the safety related bearing lubricating water source for the pumps from safety related to non-safety related. This resulted in the installation of non-safety related bearing lubrication water sources for the safety related drive shaft bearings. Licensee personnel investigated the issue on November 1, 2000, and declared all three of the safety related cooling water pumps inoperable. In February 2001, the NRC discovered an error in the initial Phase 3 analysis of the issue which contributed to the issue being characterized as a YELLOW finding in the inspection report. Upon reevaluation of the Phase 3 analysis, the NRC determined that the issue was more appropriately characterized as a WHITE finding. The NRC documented the reanalysis results in a letter to the licensee dated February 20, 2001. [Updated 09/25/2001] In June 2001, the NRC completed a supplemental inspection of the licensee's root cause evaluation and corrective actions for the WHITE finding. Results of the supplemental inspection indicated that the licensee's root cause evaluation did not identify all of the root causes and did not propose corrective actions to preclude recurrence. As a result, the WHITE performance issue could not be closed at that time. [Updated 02/12/2002] In April 2002, the NRC completed a second supplemental inspection [IR 2002-03] of the licensee's revised root cause evaluation and corrective actions for the WHITE finding. Results of the supplemental inspection indicated that the licensee had appropriately identified root causes associated with the finding and had proposed or implemented corrective actions to preclude recurrence. Therefore, the WHITE performance issue was closed. [Updated 07/08/2002]
Inspection Report# : 2000013*(pdf)*

Significance: TBD Jun 30, 2001
Identified By: NRC
Item Type: URI Unresolved item
ABILITY OF D1 AND D2 EXHAUST LINES TO SURVIVE A DESIGN BASIS TORNADO OR SEISMIC EVENT

Inspection Report# : 2001010*(pdf)*

Significance: N/A Jun 29, 2001
Identified By: NRC

Item Type: NCV NonCited Violation
FAILURE TO IDENTIFY ALL ROOT CAUSES FOR INOPERABLE COOLING WATER PUMPS
The inspectors determined that the licensee's evaluation of the White finding, involving an inoperability of the safeguards cooling water (service water) pumps due to the absence of a qualified source of lubricating water supply to the line shaft bearings, did not identify all of the root causes for the finding and did not propose corrective actions to preclude recurrence. Specifically, the evaluation did not identify root causes associated with inadequate staff and management knowledge of the cooling water pump design and did not identify process and procedure inadequacies which allowed the condition to continue for 25 years. As a result, the licensee did not propose corrective actions for these root causes. The White finding was initially documented in NRC Inspection Report 50-282/00-13; 50-306/00-13. The White inspection finding will remain open. The failure to identify all of the root causes for the White finding and to develop and implement corrective actions to prevent recurrence was determined to be a violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action. As of the end of the inspection, the licensee had initiated a condition report (CR #2001-5343) to address this issue and the violation was being treated as a Non-Cited Violation.
Inspection Report# : 2001014*(pdf)*

Significance: G Feb 22, 2001
Identified By: NRC
Item Type: FIN Finding
COOLING WATER LINE WAS NOT ADEQUATELY PROTECTED FROM FREEZING.
The inspectors identified that ice blockage was forming in the cooling water emergency dump-to-grade line due to a leaking isolation valve. The problem was discovered and resolved before the piping became substantially blocked, so no regulatory concerns were identified. The finding was of very low safety significance because the issue would have only been a problem in the extremely unlikely event that the line had become completely blocked by ice at the same time that both of the normal discharge lines were blocked due to a seismic or similar event.
Inspection Report# : 2001002*(pdf)*

Significance: G Dec 04, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE OF THE AIR/VACUUM VALVES COULD RESULT IN FLOODING OF THE COOLING WATER PUMP AREA.
A potential failure of one of the air/vacuum valves associated with the cooling water pumps could have resulted in possible flooding in the area of the three safety related cooling water pumps. As a result the three safety related cooling water pumps would become inoperable. After reviewing this issue licensee personnel declared all three of the cooling water pumps to be inoperable. The issue was identified as a design violation of Criterion III of 10 CFR 50, Appendix B. Because of mitigating actions the two units continued to run.
Inspection Report# : 2000013*(pdf)*

Significance: N/A Dec 04, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
MODIFICATION INCREASED THE POSSIBLE FAILURE RATE OF THE AUXILIARY FEEDWATER SYSTEM.
A design change did not consider the increased failure rate of the the auxiliary feedwater system due to the probability that the AFW pumps could trip on low suction pressure with the modification installed. The failure to determine the effect of a design change on system performance was a violation of Criterion III of 10 CFR Part 50, Appendix B.
Inspection Report# : 2000013*(pdf)*

Significance: G Nov 12, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY IMPLEMENT THE TEMPORARY PROCEDURE CHANGE PROCESS.
The inspectors identified a Non-Cited Violation of Appendix B, Criterion V, "Instructions, Procedures, and Drawings," of 10 CFR Part 50, for the improper implementation of the temporary change procedure. The improper implementation resulted in the deletion from an operating procedure of instructions on how to restore the operability of the 121-cooling water pump by providing a safety-related backup source of cooling water to pump bearings should normal cooling water be lost. The finding was of very low safety significance because it only affected one train of the redundant cooling water system and the condition only existed for a short period of time. (Section 1R23.1) [The tracking number for this NCV is 50-282/00-16-01(DRP); 50-306/00-16-01(DRP).]
Inspection Report# : 2000016*(pdf)*

Significance: G Sep 30, 2000
Identified By: Licensee

Item Type: NCV NonCited Violation
FAILURE TO FOLLOW PROCEDURES DURING UNIT 1 REACTOR COOLANT SYSTEM OVERDRAINING EVENT.
Operators failed to follow procedures in two instances during the draining of the Unit 1 reactor coolant system (RCS) in April 20, 1999, resulting in a Non-Cited Violation. Specifically, operators did not verify RCS level had stopped decreasing before proceeding to subsequent procedure steps. The inspectors determined the examples of not following procedure to be of very low safety significance because the residual heat removal was not impacted and the amount of water that could have been drained from the RCS was limited by system configuration and alignment. [The tracking number for this NCV is 50-282/00-12-01(DRP).]
Inspection Report# : 2000012*(pdf)*

Significance: G Nov 08, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE CORRECTIVE ACTION FOR HOT SHORT ISSUE WITH VALVES MV-32064 AND MV-32065.
GREEN. The inspectors identified that the corrective actions to address the hot short issue for the residual heat removal vessel injection valves was inadequate, which resulted in a noncited violation [(NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."] The modification did not address the potential for both a hot short and a ground that could allow a fire-induced spurious energization of the valves. This condition could have prevented the valves from performing their safety function. This issue was determined to be of low risk significance because the valves were still considered operable based on the compensatory measures in place to address a potential hot short event. [The tracking number for this NCV is 50-282/99015(DRS); 50-306/99015-01(DRS).]
Inspection Report# : 1999015*(pdf)*

Significance: G Oct 13, 1999
Identified By: Licensee
Item Type: FIN Finding
CONTROL ROOM VENTILATION SYSTEM INOPERABLE DUE TO FAULTY DOOR LATCHES.
GREEN. On June 25, 1999, the licensee discovered that the door into the 122 control room chiller room was inoperable as a high-energy line break barrier because of broken latch pins. The pins were repaired within 1 hour of the discovery. On July 27, 1999, the licensee again discovered the same condition and repaired the latch pins within 1 hour. On August 12, 1999, the licensee determined that the latch pins on both the 121 and 122 control room chiller room doors, even when intact, may never have been able to perform their safety function because of inadequate material strength. As discussed in previous inspection reports, the NRC considered the issues to be potentially risk significant because of the possibility of a main steamline break introducing a steam environment into the control room and affecting multiple mitigation systems on both units simultaneously. Using Phase 3 of the Significance Determination Process, the NRC reviewed licensee-supplied calculations and determined that the issues were of very low risk significance because of a low initiating event frequency and a high-energy line break re-analysis that showed that compartment pressures would be lower than originally assumed. Therefore, the issues were determined to be within the licensee response band.
Inspection Report# : 1999013*(pdf)*

Significance: G Oct 13, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW PROCEDURE FOR CROSS-CONNECTING DIESEL STARTING AIR RECEIVERS.
GREEN. On September 30, 1999, during post-maintenance testing activities on the Unit 1, D2 emergency diesel generator, an operator cross-connected the D1 and D2 starting air receivers. The inspectors identified that the operator failed to correctly follow the applicable operating procedure and allowed the D1 air receiver pressure to fall to about 185 pounds per square inch gauge (psig). This was below the minimum value of 200 psig specified in the procedure. Had initial pressures in either of the air receivers been lower, the final pressure for D1 might have fallen below the operability limit of 175 psig, resulting in both Unit 1 diesel generators being simultaneously inoperable. This finding was entered into the licensee's corrective action process after the inspectors notified licensee management that it originally had not been entered. Using the Significance Determination Process, the NRC determined that the issue was of very low risk significance since the operator error did not result in the D1 emergency diesel generator actually becoming inoperable. Therefore, this issue was determined to be within the licensee response band. This issue was determined to be a Non-Cited Violation (NCV) for improper procedure implementation [, contrary to Technical Specification 6.4.A.]. The tracking number for this NCV is 50-282/99013-01(DRP).
Inspection Report# : 1999013*(pdf)*

Significance: G Sep 22, 1999
Identified By: NRC
Item Type: FIN Finding

DEGRADED HEAT EXCHANGER TUBE NOT IN CORRECTIVE ACTION PROGRAM.
GREEN. The inspectors identified that a degraded heat exchanger tube on one of the emergency diesel generators had not been documented within the licensee's corrective action program. Although the licensee plugged the tube and corrected the specific deficiency, the lack of documentation within the corrective action program limited the licensee's ability to identify and trend a condition that had previously affected the diesel generator design function. In utilizing the SDP, this was determined to have very low risk significance because it only affected one of the emergency diesel generators on one unit.
Inspection Report# : 1999014*(pdf)*

Significance: N/A Sep 22, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
VIOLATION OF 10 CFR 50.59 FOR MANUAL ACTIONS DURING LOSS OF INSTRUMENT AIR.
A noncited violation of 10 CFR 50.59 was identified during closeout of an unresolved item from the 1997 System Operational Performance Inspection. It was determined that prior NRC approval should have been sought for the modification requiring manual actions to connect a nitrogen bottle on loss of instrument air. This issue had minimal impactd on safety because corrective actions were taken when the issue was originally identified. This issue involved 50.59 and therefore is not wthin the SDP. [The tracking number for this noncited violation is 50-282/99014-01(DRS); 50-306/99014-01(DRS).]
Inspection Report# : 1999014*(pdf)*

Significance: G Aug 31, 1999
Identified By: NRC
Item Type: FIN Finding
EXCESSIVE OUT-OF-SERVICE TIME ON D2 DIESEL GENERATOR.
GREEN. The inspectors identified that inadequate planning and control of Unit 1, D2 diesel generator work performed on August 23, 1999, resulted in the diesel being out of service for 2 hours and 20 minutes when the work should have taken only about 30 minutes. While the diesel was out of service, the core damage frequency was estimated to have increased slightly from 2.07E-5 per year to 3.01E-5 per year due to the increased probability of a loss of alternating current power. Thunderstorms passed through the area during the time the diesel was inoperable increasing the possibility of a loss of offsite power. While the overall change in risk was not significant, the increase was the result of a lack of risk sensitivity by the licensee's staff on the impact of work on safety-related equipment and inadequate planning. [The inspectors performed a risk significance screening using the Significance Determination Process.] This finding was considered to be of low risk significance because only one train was affected and it was out of service for a shorter time than allowed by Technical Specifications. [Therefore, this issue was determined to be within the licensee response band.]
Inspection Report# : 1999007*(pdf)*

Significance: G Aug 31, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
PROCEDURE VIOLATION FOR CONTROL ROOM CHILLER ROOM DOOR DEADBOLT INSTALLATION.
GREEN. The inspectors identified that an inadequate review of the temporary procedure change regarding the installation of deadbolts on the 121 and 122 control room chiller room doors resulted in the approval and incorporation of the change into a procedure on July 30, 1999. The procedure change could have led to a violation of Technical Specifications or operability requirements and the false belief that the doors would perform their intended safety function of withstanding a high-energy line break. Reliance on the deadbolts for operability could have resulted in the control room special ventilation system being unable to maintain a habitable environment in the control room, requiring a control room evacuation, and in spurious operation or disabling of mitigating system equipment. [A risk determination of this finding was performed by NRC personnel using the Significance Determination Process.] The finding was considered to be of low risk significance because the inspectors questioned the licensee's basis for the use of the deadbolts prior to the use of the temporary procedure change to establish operability. [Therefore, this issue was determined to be within the licensee response band.] The inspectors identified an NCV, assigned to both Units, in the area of inadequate implementation of the licensee's temporary procedure change process. [The tracking number for this issue is 50-282/99007-02(DRP); 50-306/99007-02(DRP).]
Inspection Report# : 1999007*(pdf)*

Significance: G Aug 31, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
DESIGN CONTROL VIOLATION FOR CHILLER ROOM DOOR DEADBOLT INSTALLATION.
GREEN. The inspectors identified that the licensee installed a substitute deadbolt locking mechanism on the 121 and 122 control room chiller room doors on July 30, 1999, as a permanent modification and without preparing a formal design or modification package or performing calculations to verify that the deadbolts were the functional equivalent to the installed door locking mechanisms. Following questions by the inspectors on what engineering basis existed to demonstrate functional equivalence of the

door bolts analysis by the licensee revealed that the deadbolts, as installed, were inadequate to perform their intended function to withstand a high energy line break. Failure of the deadbolts could have resulted in the control room special ventilation system being unable to maintain a habitable environment in the control room, requiring a control room evacuation, and in spurious operation or disabling of mitigating system equipment. [A risk determination of this finding was performed by NRC personnel using the Significance Determination Process.] The finding was considered to be of low risk significance because the inspectors questioned the licensee's basis for the use of the deadbolts to establish operability of the doors prior to the need to do so. [Therefore, this issue was determined to be within the licensee response band.] The inspectors identified a non-cited violation (NCV), assigned to both units, in the area of design control. [The tracking number for this item is 50-282/99007-01(DRP); 50-306/99007-01(DRP).]
Inspection Report# : 1999007*(pdf)*

Significance: G Jul 20, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW PROCEDURE FOR SAFEGUARDS HOLD TAGS ON SUMP C HATCHES.
GREEN. During Unit 1 full power operations, the inspectors identified that two personnel access hatches to sump C, located directly under the reactor vessel, were not properly secured in the partially open position, as described in the Prairie Island Individual Plant Examination, NSPLMI-94001, Revision 1. [With these hatches partially blocked open, a flowpath was provided from the containment floor to the reactor cavity, through openings in the in-core instrument tunnel. In a post-accident scenario, the flooding of the reactor cavity facilitated direct cooling of the reactor vessel in order to prevent vessel failure after core melt, and also cooled the containment floor and corium debris to prevent basemat failure in case the vessel did fail. Since the bolts were not securely held in place, there was a high probability that under loss of coolant accident conditions the hatches would have closed, potentially impacting the failure of the both the reactor coolant system and containment boundaries.] A risk determination of this finding was performed by region- and headquarters-based risk analyst specialists [using the Significance Determination Process]. They determined that the small change in the containment early release frequency due to this issue did not impose a significant increase in risk. [Therefore, this issue was determined to be within the licensee response band.] The inspectors identified a Non-Cited Violation, assigned to Unit 1, regarding improper procedure implementation. The tracking number for this item is 50-282/99006-01 (DRP); 50-306/99006-01(DRP).
Inspection Report# : 1999006*(pdf)*

Barrier Integrity

Significance: G Aug 31, 1999
Identified By: Licensee
Item Type: NCV NonCited Violation
CONTAINMENT PURGE SYSTEM NOT ISOLATED WHILE HEAVY LOAD MOVED OVER REACTOR.
GREEN. The licensee had previously identified, as reported in Licensee Event Report 1-99-05, that maintenance workers had moved the reactor upper internals over the open, fueled reactor vessel without prior isolation of the containment inservice purge system as required by procedure. The error could have led to a radioactive material release to the environment in the event that the load dropped onto the fuel. [Using the Significance Determination Process,] the NRC determined that the finding was of low risk significance due to a low estimated initiating event frequency, short exposure time, operability of two trains of mitigating equipment, and credit for manual actions, if necessary. [Therefore, this issue was determined to be within the licensee response band.] The inspectors identified an NCV, assigned to Unit 1, regarding improper procedure implementation. [The tracking number for this issue is 50-282/99007-04(DRP).]
Inspection Report# : 1999007*(pdf)*

Significance: G Aug 31, 1999
Identified By: Licensee
Item Type: NCV NonCited Violation
ISOLATION OF CONTAINMENT PURGE FROM SPENT FUEL POOL VENTILATION SYSTEM NOT TESTED.
GREEN. The licensee had previously identified, as reported in Licensee Event Report 1-99-04, that surveillance testing of the spent fuel pool special ventilation system had been inadequate in that it did not verify that the containment inservice purge system would automatically isolate as required on high radiation from a fuel handling event in the spent fuel pool. Failure to isolate the system could have led to a radioactive material release to the environment in the case of a fuel handling event in the spent fuel pool. Later testing proved that the isolation function worked for Unit 1. The function had not yet been tested for Unit 2. [Using the Significance Determination Process,] the NRC determined that the finding was of low risk significance due to a low estimated initiating event frequency, high probability that the system will prove to be operable for Unit 2, and credit for manual actions, if necessary. [Therefore, this issue was determined to be within the licensee response band.] The inspectors identified an NCV, assigned to both units, regarding failure to meet the surveillance test requirements of Technical Specification 4.15. [The tracking number for this issue

is 50-282/99007-05(DRP); 50-306/99007-05(DRP).]
Inspection Report# : 1999007*(pdf)*

Emergency Preparedness

Significance: N/A Sep 15, 2000
Identified By: NRC
Item Type: FIN Finding
REHEARSED BIENNIAL EMERGENCY EXERCISE SCENARIO.
An issue was identified regarding the number of technical similarities in the accident scenarios that were used by licensee staff in the August 2, 2000 "practice drill" and the September 13, 2000 exercise. The use of the similar scenarios compromised the licensee's ability to effectively test its implementation of the Emergency Plan and limited the NRC's ability to assess the licensee's exercise performance and critque performance. The licensee's root cause analysis indicated two root causes were common to a previously identified issue in the licensed operator training program.
Inspection Report# : 2000011*(pdf)*

Occupational Radiation Safety

Significance: G Feb 15, 2001
Identified By: NRC
Item Type: FIN Finding
FAILURE OF RADIATION BARRIER.
Radiation protection staff together with the NRC inspector identified that a radiation barrier failed when a radiation protection technician, providing job coverage, failed to immediately direct workers from an area of increasing radiation dose rates. The finding was of very low safety significance because the technician did direct the workers from the area after confirming the elevated dose rates and the delay did not cause significant unanticipated doses to the workers.
Inspection Report# : 2001003*(pdf)*

Significance: G Mar 27, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CONDUCT PROCEDURALLY REQUIRED RADIATION SURVEY.
GREEN. On March 27, 2000, the licensee sluiced resin from the 21 evaporator feed ion exchanger, the 21 evaporator condensate ion exchanger, and the 11 evaporator ion exchanger to a low-level resin liner located in the spent resin decontamination pit. The post-sluicing radiation surveys of the spent resin decontamination pit were not begun until 3 hours after the completion of the evolution, after a licensee intern engineer questioned whether a survey had been performed. A survey was completed approximately 4 hours after the sluicing evolution was finished and revealed radiation exposure levels between 1000 and 1100 millirem per hour at 30 centimeters from the spent resin liner. The inspectors performed a risk significance determination of this issue using the Occupational Radiation Safety Significance Determination Flowchart in accordance with draft NRC Inspection Manual 0609, "Significance Determination Process." Since no unintended personnel exposure occurred as a result and there was no substantial potential for overexposure to occur, this finding was considered to be of very low risk significance and within the licensee response band. The finding was assigned to both Unit 1 and Unit 2. This issue was determined to be a Non-Cited Violation (NCV) for improper procedure implementation. The tracking number for this NCV is 50-282/2000004-01(DRP); 50-306/2000004-01(DRP).
Inspection Report# : 2000004*(pdf)*

Significance: G Mar 27, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CONTROL ACCESS TO HIGH RADIATION AREA.
GREEN. On March 27, 2000, subsequent to a resin sluicing evolution, the licensee failed to properly control the access to the spent resin decontamination pit, which had become a high radiation area requiring locked or guarded doors, as a result of the sluicing operation. Access to this area remained unlocked and unguarded for approximately 20 hours after the survey results indicated that it had become a locked high radiation area until identified by the licensee. The inspectors performed a risk significance determination of this issue using the Occupational Radiation Safety Significance Determination Flowchart in accordance with draft NRC Inspection Manual 0609, "Significance Determination Process." Since no unintended personnel exposure occurred as a result and there was no

substantial potential for overexposure to occur, this finding was considered to be of very low risk significance and within the licensee response band. The finding was assigned to both Unit 1 and Unit 2. This issue was determined to be a Non-Cited Violation (NCV) for the failure to control the access to a high radiation area as required by Technical Specifications. The tracking number for this NCV is 50-282/2000004-02(DRP); 50-306/2000004-02(DRP).
Inspection Report# : 2000004*(pdf)*

Public Radiation Safety

Significance: G Aug 20, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
INCORRECT TELEPHONE NUMBER ON SHIPPING PAPERS.
GREEN. The inspectors identified a non-cited violation (NCV) for the failure to include an emergency response telephone number on shipping papers for radioactive material and waste shipments which satisfied the requirements contained in 49 CFR 172.604. The telephone number entered on the shipping papers was that of an electronic paging system, which did not provide the caller with direct contact with a person knowledgeable of the shipment or with a person who had access to an individual having that knowledge. In addition, the system did not provide any instructions to the caller on how to gain a response. Potentially, this failure could have resulted in delays obtaining emergency response information. [The inspectors determined, using the Significance Determination Process, that this finding was within the licensee response band for the public radiation safety cornerstone because the actual risk significance was low. Although the emergency response telephone contact did not fully meet the requirements of 49 CFR 172.604, the licensee provided appropriate emergency response information on the shipping papers in accordance with 49 CFR 172.602 that could have been used by emergency responders. Also, the inspectors did not identify any occasions in which the licensee failed to respond to an actual request for emergency response information.] Part 71.5 of Title 10 of the Code of Federal Regulations (CFR) states that each licensee who transports licensed material outside the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the DOT regulations in 49 CFR Parts 170 through 189 appropriate to the mode of transportation. Therefore, the failure to follow 49 CFR 172.604 is a violation of 10 CFR 71.5. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This NCV is in the licensee's corrective action program as Condition Report No. 19992389. The NRC tracking number for this NCV is 50-282/99011-01; 50-306/99011-01.
Inspection Report# : 1999011*(pdf)*

Physical Protection

Significance: G Aug 18, 2000
Identified By: NRC
Item Type: FIN Finding
PROCEDURE FOR REPORTING BELOW MINIMUM GUARD COMPLEMENT.
The Security Event Reporting procedure described incorrect reporting requirements when the minimum number of armed responders are not available. The issue is of low safety significance because it pertains to reporting requirements rather than an actual occurrence.
Inspection Report# : 2000010*(pdf)*

Significance: G Aug 12, 1999
Identified By: NRC
Item Type: FIN Finding
SECURITY SHIFT STAFFING.
GREEN. The licensee's security staff have not confirmed through procedures, training, or exercises and drills that the minimum number of immediately available armed response personnel identified in the security plan can counter the security design basis threat (DBT). Defensive strategy, training, and evaluation processes include at least one more person than the minimum number required by the security plan to respond to the DBT. The licensee has agreed to continue to maintain security shift manning at the higher level confirmed by their strategy, training, and evaluation processes as adequate to counter the DBT until an analysis is completed. [A risk determination of this finding was performed by NRC personnel using the Significance Determination Process and indicated that it did not represent an increase in the risk of radiological sabotage. Therefore, this issue was determined to be within the licensee response band.]
Inspection Report# : 1999010*(pdf)*

Significance: G Aug 12, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
SOME REQUIRED TRAINING WAS NOT COMPLETED (NIGHT FIRING).
GREEN. A weapon-related annual training requirement identified in the Security Training and Qualification Plan was not completed in 1998, as required by the Commission approved Security Plan for the Prairie Island plant. The licensee has entered this issue in their corrective action program. [A risk determination of this finding was performed by NRC personnel using the Significance Determination Process and indicated that it did not increase the risk of radiological sabotage. Therefore, this issue was determined to be within the licensee response band.] The inspectors identified this failure to meet a training requirement as a Non-Cited Violation. [The tracking number for this issue is 50-282/99010-01; 50-306/99010-01).]
Inspection Report# : 1999010*(pdf)*

Miscellaneous

Significance: N/A Jun 29, 2001
Identified By: NRC
Item Type: FIN Finding
CORRECTIVE ACTION PROGRAM IS ADEQUATE
The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis in the past two years on plant staff to document problems in the corrective action program, and overall, plant has been very responsive. Inspector concerns with corrective action program timeliness and level of detail in condition reports that were noted during the previous problem identification and resolution inspection have been addressed, but continued emphasis on level of detail was needed. Corrective actions have not been effective for a persistent problem with equipment configuration control, the latter a problem that was first identified by the inspectors during the previous problem identification and resolution inspection. Based on a review of records and discussions with plant staff, the inspectors concluded that workers at the site felt free to input safety issues into the corrective action program.
Inspection Report# : 2001011*(pdf)*

Significance: N/A Jun 29, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
INEFFECTIVE CORRECTIVE ACTIONS FOR CONFIGURATION CONTROL PROBLEMS
A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the failure of the licensee to take effective corrective action for a recurrent problem with equipment configuration control. The ineffective corrective action was more than a minor issue because if left uncorrected, the issue could become a more significant safety concern. However, since no specific cornerstone has been impacted, this finding is designated as No Color.
Inspection Report# : 2001011*(pdf)*

Significance: N/A Sep 30, 2000
Identified By: NRC
Item Type: FIN Finding
EFFECTIVE CORRECTIVE ACTION PROGRAM.
The inspectors concluded that the licensee's program effectively identified and resolved conditions adverse to quality in that the inspectors did not identify any issues that resulted in the operability of safety-related or risk significant plant equipment being questioned. The problem identification threshold within the condition report process was low. Issues were prioritized and evaluated properly, according to the significance of the problem. Operability and reportability evaluations were typically completed as required. Corrective actions were usually timely and effective in preventing recurrence. The inspectors, however, identified several examples where corrective action due dates were missed or untimely and where documentation of corrective actions was weak. In addition, the inspectors determined that the licensee had not identified a trend regarding 16 instances where valves or switches were found mispositioned. Problems with corrective action due dates and corrective action trending, in general, had been identified in licensee self-assessments. The inspectors conducted interviews with plant personnel to ascertain the existence of a safety conscious work environment and concluded that plant personnel communicated an acceptable level of responsibility in identifying and entering safety issues into the corrective action program. The inspectors noted that licensee management was undecided about which of two forms would be the written means for employees to document identified problems and submit to the corrective action program.
Inspection Report# : 2000015*(pdf)*

Significance: N/A May 18, 2000
Identified By: Licensee
Item Type: FIN Finding
SAFETY TAGGING PROCEDURE NOT CORRECTLY IMPLEMENTED ON SEVERAL OCCASIONS.
NO COLOR. The licensee identified that on four separate occasions, within a relatively short period of time, errors occurred in the

proper implementation of the safety tagging process. Individually, each of the deficiencies posed little or no increase in risk and were not evaluated using the Significance Determination Process due to their minor nature. However, the inspectors considered that these issues, in aggregate, constituted a human performance finding. The finding was assigned to Unit 1 and Unit 2.
Inspection Report# : 2000005*(pdf)*

Significance: N/A Nov 23, 1999
Identified By: Licensee
Item Type: FIN Finding
EMERGENCY RESPONSE ORGANIZATION DRILL PARTICIPATION.
The inspectors reviewed an issue previously documented as Unresolved Item 50-282/99009-01(DRS); 50-306/99009-01(DRS). The licensee had discovered an error in previously reported data that caused the PI to cross the WHITE-to-GREEN band threshold when it was corrected. Shortly after that NRC inspection, the licensee discovered another error that offset the first error and caused the PI to cross back into the WHITE band. Thus, overall, the errors did not cause the PI to cross the threshold out of the WHITE band, and the errors were not willful, so the issues were considered to be minor.
Inspection Report# : 1999016*(pdf)*

Significance: N/A Nov 23, 1999
Identified By: NRC
Item Type: FIN Finding
ERRORS NOTED IN PERFORMANCE INDICATOR (PI) DATA.
The inspectors identified a large number of errors in several of the PIs reported during the pilot period. The inspectors identified several contributing causes for the problems. One licensee staff person was usually relied on for the accuracy of the data. Independent technical review, quality assurance auditing, and management oversight of the process was lacking. Inconsistent record keeping, a lack of procedural guidance, misinterpretations of the guidance, and untimely incorporation of revised guidance were also contributors to errors. By the end of the period, the problems were in the licensee's corrective action program and were being addressed.
Inspection Report# : 1999016*(pdf)*

Significance: N/A Nov 23, 1999
Identified By: NRC
Item Type: FIN Finding
PROTECTED AREA SECURITY EQUIPMENT PERFORMANCE INDEX.
The inspectors reviewed an issue previously documented as Unresolved Item 50-282/99010-02(DRS); 50-306/99010-02(DRS). The NRC had discovered an error in previously reported Performance Indicator (PI) data but correction of the error did not cause the PI to cross the threshold out of the GREEN licensee response band. The error was not willful and was considered a minor issue.
Inspection Report# : 1999016*(pdf)*

Significance: N/A Nov 23, 1999
Identified By: NRC
Item Type: FIN Finding
SAFETY SYSTEM FUNCTIONAL FAILURES.
The inspectors reviewed an issue previously documented as Unresolved Item 50-282/99006-02(DRP); 50-306/99006-02(DRP). The inspectors had determined that two functional failures had not been initially reported and that correction of the error caused the Performance Indicator to cross the GREEN-to-WHITE threshold for the first quarter of 1999 for Unit 2. The error was considered a violation of 10 CFR 50.9, "Completeness and Accuracy of Information." However, the NRC exercised Discretion pursuant to Section VII.B.6 of the Enforcement Policy, not to issue a Notice of Violation.
Inspection Report# : 1999016*(pdf)*

Significance: N/A Nov 23, 1999
Identified By: NRC
Item Type: FIN Finding
SAFETY SYSTEM UNAVAILABILITY, AUXILIARY FEEDWATER SYSTEMS.
The inspectors verified the Unit 1 and Unit 2 Performance Indicator (PI) data for July 1998 through September 1999. The inspectors identified several errors and misinterpretations in the data reviewed including two periods of unavailability that were not reported. The inspectors identified that one period of unavailability for each train on Unit 1 was reported for the wrong quarter and one error in the number of required available hours in the second quarter of 1998 for Unit 2. The inspectors also identified that the licensee was not reporting unavailable time for the system when the reactor was subcritical but above the temperature where Technical Specifications required the system to be operable. Additionally, the inspectors determined that the licensee was not timely in incorporating into the data reported revised guidance on availability during testing. However, inclusion of the additional unavailable time would not cause the PI to cross the threshold out of the GREEN licensee response band, and the errors were not willful, so the issues were considered to be minor.
Inspection Report# : 1999016*(pdf)*

Significance: N/A Nov 23, 1999
Identified By: NRC
Item Type: FIN Finding

SAFETY SYSTEM UNAVAILABILITY, EMERGENCY AC [ALTERNATING CURRENT] POWER SYSTEMS.
The inspectors verified the Unit 1 and Unit 2 Performance Indicator (PI) data for October 1996 through September 1999. The inspectors identified several errors and misinterpretations in the data reviewed including six periods of unavailability that were not reported. The inspectors also determined that the licensee was not timely in incorporating into the data reported revised guidance on availability during testing. However, inclusion of the additional unavailable time would not cause the PI to cross the threshold out of the GREEN licensee response band, and the errors were not willful, so the issues were considered to be minor.
Inspection Report# : 1999016*(pdf)*

Significance: N/A Nov 23, 1999
Identified By: NRC
Item Type: FIN Finding
SAFETY SYSTEM UNAVAILABILITY, HIGH PRESSURE SAFETY INJECTION SYSTEMS.
The inspectors verified the Unit 1 and Unit 2 Performance Indicator (PI) data for April 1998 through September 1999. The inspectors identified one error in the number of required available hours in the second quarter of 1998 for Unit 2. The inspectors also identified that the licensee was not reporting unavailable time for the system when the reactor was subcritical but above the temperature where Technical Specifications required the system to be operable. Additionally, the inspectors determined that the licensee was not timely in incorporating into the data reported revised guidance on availability during testing. However, in all of the above instances, inclusion of the additional unavailable time would not cause the PI to cross the threshold out of the GREEN licensee response band, and the errors were not willful, so the issues were considered to be minor.
Inspection Report# : 1999016*(pdf)*

Significance: N/A Nov 23, 1999
Identified By: NRC
Item Type: FIN Finding
SAFETY SYSTEM UNAVAILABILITY, RESIDUAL HEAT REMOVAL SYSTEM.
The inspectors verified the Unit 1 and Unit 2 Performance Indicator (PI) data for October 1996 through September 1999. The inspectors determined that the licensee was inconsistent in reporting a train as unavailable during different performances of the same surveillance test. The inspectors also determined that the licensee was not timely in incorporating into the data reported revised guidance on availability during testing. However. inclusion of the additional unavailable time would not cause the PI to cross the threshold out of the GREEN licensee response band, and the errors were not willful, so the issues were considered to be minor.
Inspection Report# : 1999016*(pdf)*

Significance: N/A Nov 05, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
LICENSED OPERATOR EXAMINATION SECURITY LAPSES (NO ACTUAL IMPACT ON THE EXAM).
The inspectors observed three examples involving licensed operator requalification examination security lapses. The examination itself was not impacted. This noncited violation [(NCV) of 10 CFR 55.49] included two instances in which personnel not on the security agreement were present during job performance measure administration on the simulator and one instance which allowed the possibility for additional unauthorized personnel to view job performance measure administration on the simulator. This violation had low safety significance because the examples did not result in invalidation of administered requalification examinations. [The tracking number for this NCV is 50-282/99018-01(DRS); 50-306/99018-01(DRS).]
Inspection Report# : 1999018*(pdf)*

Significance: N/A Oct 13, 1999
Identified By: NRC
Item Type: FIN Finding
PERFORMANCE INDICATOR DATA FOR UNPLANNED POWER CHANGES PER 7000 CRITICAL HOURS.
Unplanned Power Changes per 7000 Critical Hours. The inspectors evaluated the performance indicator data submitted for Unit 1 and Unit 2 covering the time period from the third quarter of 1998 through August 31, 1999. The inspectors identified one error in the second quarter of 1999 data for Unit 2. The reported critical hours for the second quarter showed 1 extra hour (1268 vs 1267) of critical operation. The error was in the conservative direction and attributed to incorrectly incorporating the loss of an hour due to the daylight savings time change. The licensee informed the inspectors that the error will be corrected in their next performance indicator data submittal. The calculation of the performance indicator using the correct number of critical hours did not result in the crossing of a response threshold and the performance indicator remained in the GREEN licensee response band.
Inspection Report# : 1999013*(pdf)*

Significance: N/A Sep 17, 1999
Identified By: NRC
Item Type: FIN Finding
CORRECTIVE ACTION PROGRAM EFFECTIVENESS.
The existing methods of identifying and resolving problems at Prairie Island were complicated with a number of different documents used to identify and track different types of problems. Licensee personnel implemented the program well and the program was effective. No risk significant problems or performance issues were identified during the inspection. The inspectors verified that licensee personnel were cognizant of and understood the existing corrective action process and that adequate communications existed in the prompt identification, cause determination, and resolution of problems.

Inspection Report# : 1999012*(pdf)*

Significance: G Aug 12, 1999
Identified By: NRC
Item Type: URI Unresolved item
INCOMPLETE DATA COLLECTED FOR SECURITY EQUIPMENT PERFORMANCE INDICATOR.
The inspectors identified that a licensee personnel error involving a failure to transfer data used to calculate and identify the index value for the Protected Area Security Equipment Performance Indicator (PI) resulted in a failure to capture all applicable PI related information. Subsequent calculation using the corrected data did not result in the crossing of a response threshold or lowering of the PI index number. The response band remained green. The licensee has entered this issue in their corrective action system. This unresolved item was closed in inspection report 50-282/99016(DRP); 50-306/99016(DRP). Because the error was not significant, in that no change in the NRC's action would have resulted from this data, and it was not willful, this is a minor violation not subject to formal enforcement action.
Inspection Report# : 1999010*(pdf)*
Inspection Report# : 1999016*(pdf)*

Significance: G Jul 20, 1999
Identified By: NRC
Item Type: URI Unresolved item
ERROR IN PERFORMANCE INDICATOR DATA FOR SAFETY SYSTEM FUNCTIONAL FAILURES.
The inspectors identified that the licensee had failed to count two reportable safety system failures (documented in Licensee Event Reports 1-98-12 and 1-98-14) in its performance indicator report submitted in May 1999. The licensee corrected the error in its June 1999 submittal and the additional failures caused that performance indicator for the first quarter of 1999 to change from the green band into the white band for Unit 2. The finding was assigned to both Units. The issues associated with LERs 1-98-12 and 1-98-14 had previously been assessed by the NRC during its Fire Protection Functional Inspection as discussed in Inspection Report 50-282/98016(DRS); 50-306/98016(DRS). Enforcement aspects of the issues were resolved as discussed in a letter to the licensee from the Regional Administrator, NRC Region III, dated March 30, 1999 (EA 98-526). The issues were assessed during the NRC's Plant Performance Review as reported in a letter to the licensee from the Director of Reactor Projects, NRC Region III, dated March 26, 1999. Thus, the failure to properly report the performance indicator data did not adversely affect the NRC's ability to assess licensee performance. Pending a final decision on how to resolve the failure to properly report the performance indicator data, this issue will be tracked as an unresolved item (50-282/99006-02(DRP); 50-306/99006-02(DRP)). This unresolved item was closed in inspection report 50-282/99016(DRP); 50-306/99016(DRP). It was considered a violation of 10 CFR 50.9, "Completeness and Accuracy of Information," but the NRC exercised Discretion pursuant to Section VII.B.6 of the Enforcement Policy not to issue a Notice of Violation because these errors were not willful and were associated with data submitted during the voluntary pilot plant porgram (Enforcement Action 99-295).
Inspection Report# : 1999006*(pdf)*
Inspection Report# : 1999016*(pdf)*

Last modified : July 22, 2002