Mr. J. Sorensen Site Vice-President Prairie Island Nuclear Generating Plant Nuclear Management Company, LLC 1717 Wakonade Drive East Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT

NRC INSPECTION REPORT 50-282/01-11(DRP); 50-306/01-11(DRP)

Dear Mr. Sorensen:

On June 29, 2001, the NRC completed a team inspection at the Prairie Island Nuclear Generating Plant. The enclosed report documents the inspection findings which were discussed with you and members of your staff at the conclusion of the inspection.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and with the conditions of your operating license. Within these areas, the inspection involved selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of the inspection, the inspectors concluded that the overall corrective action program was a complete program containing all the necessary attributes and was successfully identifying and correcting issues.

One No Color finding that was a violation of NRC requirements was identified for ineffective corrective actions for persistent problems with equipment configuration control. However, because of its very low safety significance and because it has been entered into your corrective action program, the NRC is treating this issue as a Non-Cited Violation (NCV), consistent with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this Non-Cited Violation, you should provide a response, with the basis for your denial, within 30 days of the date of this inspection report to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-001; and the NRC Resident Inspector at the Prairie Island facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

/RA by Michael J. Jordan Acting for/

Roger D. Lanksbury, Chief Projects Branch 5 **Division of Reactor Projects**

Docket Nos. 50-282; 50-306 License Nos. DPR-42; DPR-60

Enclosure: Inspection Report 50-282/01-11(DRP);

50-306/01-11(DRP)

cc w/encl: Plant Manager, Prairie Island

R. Anderson. Executive Vice President

and Chief Nuclear Officer Site Licensing Manager **Nuclear Asset Manager**

J. Malcolm, Commissioner, Minnesota

Department of Health

State Liaison Officer. State of Wisconsin

Tribal Council, Prairie Island Indian Community

J. Silberg, Esquire

Shawn, Pittman, Potts, and Trowbridge A. Neblett, Assistant Attorney General

Office of the Attorney General

S. Bloom, Administrator

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

Docket Nos: 50-282; 50-306 License Nos: DPR-42; DPR-60

Report No: 50-282/01-11(DRP); 50-306/01-11(DRP)

Licensee: Nuclear Management Company, LLC

Facility: Prairie Island Nuclear Generating Plant

Location: 1717 Wakonade Drive East

Welch, MN 55089

Dates: June 11 through 29, 2001

Inspectors: M. Kunowski, Project Engineer (Lead Inspector)

S. Thomas, Resident Inspector, Prairie Island M. Kurth, Resident Inspector, Duane Arnold

Approved by: Roger D. Lanksbury, Chief

Projects Branch 5

Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000282-01-11; 05000306-01-11, on 06/11 - 29/2001. Nuclear Management Company, LLC, Prairie Island Nuclear Generating Plant, annual baseline inspection of the identification and resolution of problems.

The inspection was conducted by a regional inspector and two resident inspectors. One No Color finding and an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," were identified during this inspection for the failure to correct previously identified foreign material exclusion and equipment configuration control problems. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/NRR/OVERSIGHT/index.html.

Identification and Resolution of Problems

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.

Finding

No Color. 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.

Report Details

4. OTHER ACTIVITIES (OA)

4OA2 Identification and Resolution of Problems

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors conducted plant tours, observed surveillance tests in progress; interviewed plant personnel; and reviewed inspection reports issued over the last year, condition reports (CRs) and associated corrective action program documents, and selected maintenance work orders (WOs) for the two Unit 1 emergency diesel generators, D1 and D2, to determine if problems were being properly identified, characterized, and entered into the corrective action program for evaluation and resolution. The inspectors also reviewed several licensee audits and self-assessments. The effectiveness of the audits and assessments was evaluated by comparing the audit and assessment results against self-revealing and NRC-identified issues. In addition, to CRs, the licensee's corrective action program included APRs (Actions to Prevent Recurrence), actions planned to prevent recurrence of problems identified in Level 1 CRs. the most significant CRs on a scale of 1 to 3; ACCs (Actions to Correct the Condition), actions planned to correct problems identified in CRs; and 2DOs (To-Do Items), stand alone actions which are not related to a CR but are initiated to track a management action. A listing of the documents requested by the inspectors prior to the inspection and those documents reviewed during the inspection is included at the end of this report.

(2) Issues and Findings

In general, problems were properly identified, characterized, and entered into the corrective action program for evaluation and resolution. There has been strong management emphasis in the past two years on plant staff to document problems in CRs. Plant staff, overall, has been very responsive. In 1999, there were 2442 issues documented in CRs for assessment; in 2000, there were 4394; and by mid-June 2001, there were 3173.

During the previous problem identification and resolution inspection in October 2000 (Inspection Report 50-282/00-15(DRP); 50-306/00-15(DRP)), the licensee was using two different forms (the "yellow" field observation cards and the "buff" employee observation reports) for workers who were not adept at computer-use to document problems for later entry into the CR tracking system. As of the current inspection, the licensee had settled on using the yellow card and had discontinued use of the buff cards.

Also during the previous problem identification and resolution inspection, the inspectors noted that the corrective actions taken for a number of Level 3 CRs were not documented and for an occasional Level 2 CR were incompletely documented. Although some improvement in the quality of the documentation for low level CRs was

noted during the current inspection, the inspectors identified several CRs where a definitive statement of the problem being documented or the corrective action taken was lacking. Some examples are:

- FME [foreign material exclusion] cover on 13B heater found rolled up (not in place) with no work in progress (CR 20011820). There was no information in the CR as to what the corrective action was, such as, whether the cover was put in place and the work crew counseled.
- At the current rate, CRs will exceed the capacity of the numbering system before the end of the year (CR 20014142). There was no information in the CR as to how the concern would be addressed, although according to the licensee, this problem was expected to be resolved with the implementation of a new Webbased corrective action management system near the end of the year.
- 121 cooling water pump replacement: Two pipe wrenches were knocked in pit when crane shifted (CR 20014334). There was no information in the CR on the FME control issue with wrenches, just the evaluation of the potential for the wrenches to affect the pump. However, other corrective action included a strong counseling of the individuals responsible on the schedular and economic impact of retrieving the wrenches.

Regarding audits and assessments, the licensee's quality assurance group and the corrective action group have conducted several probing and critical audits and self-assessments of the corrective action area. Inspection results were not inconsistent with the results of the audits and self-assessments.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors assessed the prioritization and evaluation of a selected sample of CRs to verify the appropriateness of the category assigned, operability and reportability determinations, extent of condition evaluations, root and apparent cause investigations, and of the assigned corrective actions. As part of this assessment, the inspectors attended the station's daily meeting where newly generated CRs were reviewed.

(2) Issues and Findings

In general, issues were appropriately categorized, prioritized, and evaluated; however, there were several important exceptions. A problem with the evaluation of a recurring equipment configuration control issue is discussed below in Section c. A problem with the adequacy of a root cause evaluation for the incorrect seismic classification of the bearing cooling water system for the cooling water (service water) system was identified by NRC regional inspectors and is discussed in Inspection Report 50-282/01-14; 50-306/01-14. A problem with the adequacy of an evaluation conducted because of licensee-identified shortcomings in the risk assessment of the tornadic and seismic vulnerabilities of the Unit 1 emergency diesel generators was identified by the NRC resident inspectors and is discussed in Inspection Report 50-282/01-10; 50-306/01-10.

Other root cause evaluations reviewed by the inspectors during the present problem identification and resolution inspection were adequate.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors interviewed plant personnel and reviewed CRs to verify that corrective actions commensurate with the issues were identified and implemented in a timely manner, including corrective actions to address common cause or generic concerns. Specifically, the inspectors reviewed the licensee's progress on improving plant staff timeliness in implementing various aspects of the corrective action program, such as timeliness of initially screening new written CRs, conducting assessments of and assigning ACCs and APRs for issues documented in CRs, and completion of corrective actions. As documented in the report of the previous problem identification and resolution inspection in October 2000 (Inspection Report 50-282/00-15(DRP); 50-306/00-15(DRP)), the licensee had had extensive problems with program timeliness. The inspectors also reviewed the licensee's efforts to address an equipment configuration control problem that was identified by the inspectors during the previous problem identification and resolution inspection.

Also as part of the present inspection, the inspectors evaluated approximately 32 CRs documenting configuration control issues. All of the CRs evaluated were generated within the past seven months. Approximately 29 of these CRs were generated since the completion of the "actions to prevent reoccurrence," stated in CR 20004323, "Trending of Condition Reports Related to Mis-Positionings Did Not Identify a Negative Trend," which had been written in response to inspectors' observation during the previous problem identification and resolution inspection.

(2) Issues and Findings

For most issues reviewed by the inspectors, the corrective actions were effective in addressing the problems and reducing the likelihood of the problems reoccurring. In addition, the inspectors noted that significant progress had been made in improving corrective action program timeliness and that management was continuing to place strong attention on this area. The inspectors identified one Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take effective corrective actions for the a problem with equipment configuration control. Using Inspection Manual Chapter 0609, "Significance Determination Process" (SDP), the inspector determined that this problem was a "No Color" finding in the cross-cutting area of problem identification and resolution.

For about 15 CRs regarding mispositioned switches or components, the inspectors noted that these events resulted primarily from operations personnel not performing procedures or checklists correctly or maintenance personnel not placing valves in positions required by maintenance procedures. For some instances where valves and switches were found in the incorrect position, the cause was unknown. The inspectors also noted that a licensee effectiveness review, dated May 11, 2001, of the corrective actions taken after the configuration issue was identified during the last problem

identification and resolution inspection concluded that corrective actions associated with CR 20004323 did not correct the problem.

Several CRs regarding self-revealing configuration control issues that have occurred within the last seven months were also reviewed by the inspectors and are discussed below:

- Unplanned draining of the reactor coolant system [RCS] to containment sump "A" during refueling outage (CRs 20011257 and 2001259). In January 2001, during the reflood of the refueling cavity for a Unit 1 refueling outage, about 4224 gallons of water were inadvertently drained from the cavity because a boundary valve was inappropriately disassembled and a temporary change was made to a WO without engineering and work control personnel properly taking into consideration the effect on other work activities.
- Unplanned addition to and draining from the RCS during refueling outage (CRs 20011638, 20011601, and 20011587). During the January 2001 Unit 1 refueling outage, water was inadvertently added to the RCS from the refueling waste storage tank (RWST) and was drained from the RCS for about 23 hours because of a sticky check valve and after a valve was left open when a work supervisor inappropriately released an equipment isolation on an incomplete work package. Also contributing to this event was a temporary change to a procedure for a work activity which plant staff had not recognized as having an impact on other outage work and an operator's inattention to detail while performing a post-test valve lineup checklist.
- Inadvertent spraying of 11 RCP [reactor coolant pump] seal maintenance area during December 2, 2000, maintenance outage (CR 20005873). Adjustment of boron concentration in a pressurized accumulator resulted in the inadvertent spraying of slightly contaminated water into the work area where the RCP seal was being replaced. This event was the result of poor engineering in the preparation of the procedure which drained and refilled the accumulator combined with poor operator knowledge of the piping configuration in place for the seal replacement.
- Inadvertent tripping of spent fuel pool normal ventilation and in-service purge (CR 20011055). An operator did not perform the procedure associated with a WO (0013500) procedure correctly while a transferring electrical distribution panel from its alternate to its normal power supply, resulting in the temporary loss of spent fuel pool normal ventilation and in-service purge.
- Work initiated on the wrong Unit (CR 20013780). After personnel were thoroughly briefed on a WO to investigate a malfunctioning relay, they commenced work on the wrong Unit.

The inspectors concluded that the configuration control problem, as discussed above, was widespread, encompassing the operations, maintenance, engineering and scheduling groups.

The individual events occurred after the NRC identified the configuration control problem in the previous problem identification and resolution inspection (50-282/00-15(DRP); 50-306/00-15(DRP)). The problem was considered more than a minor issue, because, if left uncorrected, it could become a more significant safety concern. Since no specific cornerstone was affected, this issue is considered a No Color finding. Because the events involved most of the major work groups and involved a variety of licensee administrative controls, this finding is considered a substantive cross-cutting issue. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires in part, that measures be established to assure conditions adverse to quality are promptly identified and corrected. Contrary to this, the licensee failed to correct a configuration control problem, a condition adverse to quality, identified by the NRC. This is characterized as a Non-Cited Violation (NCV 50-282/01-11-01; 50-306/01-11-01). This violation has been entered into the licensee's corrective action program as CR 20014211.

d. Assessment of Safety Conscious Work Environment

(1) Inspection Scope

The inspectors reviewed CRs and interviewed plant staff to assess whether there were impediments to the establishment of a safety conscious work environment.

(2) Issues and Findings

From the interviews and record reviews, the inspectors identified no impediments to a safety conscious work environment. As discussed earlier in Sections a and c., plant personnel had responded positively to increased emphasis by plant management on the use of the condition reporting process to document problems and on the timeliness of problem evaluation and correction. The licensee's planned conversion for the end of 2001 of the condition reporting process to a Web-based system was intended, in part, to address worker complaints about the relatively user-unfriendly and out-dated current system.

4OA6 Meeting(s)

.1 Exit Meeting

The inspectors presented the inspection results to Mr. J. Sorensen and other members of licensee management in an exit meeting on July 29, 2001. Licensee management acknowledged the findings presented and indicated that no proprietary information was provided to the inspectors.

KEY POINTS OF CONTACT

Nuclear Management Company (NMC)

- T. Allen, General Superintendent Engineering, Nuclear Generation Services
- T. Amundson, General Superintendent Engineering
- T. Breene, Manager Nuclear Performance Assessment
- K. Carlson, Corrective Action Process Owner
- L. Gard, General Superintendent Plant Maintenance
- A. Johnson, General Superintendent Radiation Protection and Chemistry
- C. Schrock, Senior Vice-President for Nuclear Operations
- T. Silverberg, General Superintendent Plant Operations
- J. Sorensen, Site Vice President
- M. Werner, Plant Manager

NRC

- S. Ray, Senior Resident Inspector
- R. Lanksbury, Chief, Reactor Projects Branch 5
- S. Reynolds, Deputy Director, Division of Reactor Program

LIST OF ACRONYMS USED

ACC Action to Correct the Condition

ANI Authorized Nuclear Inspector

APR Action to Prevent Recurrence

ASME American Society of Mechanical Engineers

AWI Administrative Work Instruction

CAP Corrective Action Process

CARB Corrective Action Review Board

CC Component Cooling Water

CCW Component Cooling Water

CHAMPS Work Order and Condition Report Database

CR Condition Report

CV Control Valve

DC Direct Current

DCLP Diesel Cooling Water Pump

DRP Division of Reactor Projects

EDG Emergency Diesel Generator

EOP Emergency Operating Procedure

EWR Engineering Work Request

FME Foreign Material Exclusion

FSAR Final Safety Analysis Report

INPO Institute of Nuclear Power Operations

IPP Integrated Planning Process

KV Kilovolt

LCO Limiting Condition for Operation

LER Licensee Event Report

LTA Less Than Adequate

MOV Motor-Operated Valve

MV Motor-Operated Valve

NCV Non-Cited Violation

NMC Nuclear Management Company, LLC

NP Nuclear Power Business Unit Procedure

OA Organizational Assessment

OE Operating Experience

OI Operating Instruction

OOS Out-Of-Service

PMT Post-Maintenance Testing

psi Pounds Per Square Inch

QA Quality Assurance

QCR Quality Condition Report

RCE Root Cause Evaluation

RCP Reactor Coolant Pump

RCS Reactor Coolant System

SDP Significance Determination Process

SFP Spent Fuel Pool

SI Safety Injection

SP Surveillance Test Procedure

SRO Senior Reactor Operator

SW Service Water

TS Technical Specification

2DO To-Do Item

V Volt

WO Work Order

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection. Inclusion of a document on this list does not imply that NRC inspectors reviewed the entire document, but, rather that selected sections or portions of the document were evaluated as part of the overall inspection effort. In addition, inclusion of a document on this list does not imply NRC acceptance of the document, unless specifically stated in the body of the inspection report.

Administrative Work Instructions (AWIs)

5AWI 1.10.0	Corrective Action Process	Revision 4
5AWI 1.10.1	Condition Reporting Process	Revision 4
5AWI 1.10.2	Actions to Correct Conditions or Prevent Recurrence	Revision 3
5AWI 1.10.3	Site Trending Program and Trend Analysis	Revision 0
5AWI 1.10.4	Management Assessment of Plant Performance	Revision 2
5AWI 1.10.5	Self Assessment	Revision 0
5AWI 1.10.6	Root Cause Investigations and Apparent Cause Evaluations	Revision 2
5AWI 1.10.7	Cause Coding	Revision 0
5AWI 1.11.8	Field Observation Program	Revision 1
5AWI 3.7.0	Operating Experience Assessment	Revision 3
5AWI 3.15.5	Operability Determinations	Revision 4

Other Procedures and Related Documents

H 5 Procedure	Motor Operated Valve Program	Revision 6

<u>Corrective Action Program Documents: Condition Reports (CRs), Actions to Correct Conditions (ACCs), Actions to Prevent Recurrence (APRs), and To-Do Items (2DOs)</u>

CR 19960725	Issue: 1996003 Action: Fires in emergency diesel generator exciters during operation following undetected fuse blowing.
CR 19970776	Action: 1 Potential failures of thermostatic control valves for diesel generator jacket cooling water.

CR 19971640	Issue: 2010891 Action: 1D1 oil leak on main oil pump discharge piping.
CR 19983640	Leaks in the emergency diesel generator lubricating oil and jacket cooling water piping.
CR 19990535	Stem factor increase observed on MV [Motor-Operated Valve]-32028 when tested with hot ambient environment vs a cool ambient environment.
APR 19990538	Test MV-32023 and MV-32024 with MPM at hot shutdown, and MV-32197 and MV-32198 during SP [Surveillance Test Procedure] 2265.
CR 20001100	NGS failure to implement the requirement of 5AWI 1.10.5 IAW [In accordance with] plant expectations, within 6 months of directive issuance.
CR 20001497	21A FW [feedwater] heaters. FME cover folded over. No workers around. No FME protection.
CR 20001711	No FME cover installed on open 23 charging pump motor. No workers or work package in area, so WCC [work control center] informed.
CR 20002019	Condenser emergency make-up MV-32041 and MV-32042. Investigate motor valve's use if auxiliary feedwater pumps are started.
CR 20003251	Evaluate how level of use and procedure adherence standards are used in operations. Recommend changes to procedures or standards.
2DO 20003264	To implement policy for no overdue corrective actions in operations, no authorized vacations if outstanding late items.
ACC 20003946	Re-evaluate the process by which Nuclear Network events are identified and reported including roles and responsibilities.
ACC 20003947	Revise 5AWI 3.15.5, "Operability Determinations," to provide a process for doing operability determinations.

ACC 20003948	Review and revise the corrective action instructions so that the level of detail is consistent.
ACC 20003949	Fully implement 5AWI 1.10.3 for the trending of condition report data in the area of human performance.
ACC 20003950	Fully implement 5AWI 1.10.3 for the trending of condition report data in the area of process performance.
ACC 20003951	Fully implement 5AWI 1.10.3 for the trending of condition report data in the area of equipment performance.
ACC 20003952	Include management expectations of the corrective action process into the CAP [corrective action process] instructions.
ACC 20003953	Assign responsibility for and a method to communicate significant events and corrective actions to the site.
ACC 20003954	Add automatic e-mail messages to CR initiators when a CR has been screened.
CR 20004324	Site training program (5AWI 1.10.03) has not been implemented by several functional areas.
2DO 20004513	Verify procedures on frequent tasks performed in field allow flexible sequencing when appropriate.
ACC 20004568	D5 engines 1&2 opacity greater than air emission permit No. 04900030-001 limit.
CR 20004830	Unplanned LCO [limiting condition for operation] entry due to failed conditioner display.
CR 20004863	D5 SAC [startup air compressor] first stage relief valves originally set at 160 psi (pounds per square inch) and vendor documents recommends 123 psi.
CR 20004910	IPP [Integrated Planning Process] process owner to assess the IPP process for effectiveness and perception of effectiveness.

APR 20004924	Evaluate need to protect fuel oil supply line for 22 DCLP [diesel cooling water pump] in 12 DCLP room. Refer to SE [safety evaluation] #307.
CR 20004999	D1 and D2 jacket coolant chromate specification not in accordance with EPRI [Electric Power Research Institute] closed cooling water guidelines.
ACC 20005098	Issue a TCN [Temporary Change Notice] to 5AWI 1.10.03 to clarify management's expectations until a new revision is issued to address [CR] 20004324.
APR 20005099	Designate an individual to benchmark and revise 5AWI 1.10.3.
APR 20005100	Establish a trends process owner per [CR] 20004324.
APR 20005101	Implement revision to 5AWI 1.10.3 using 5AWI 1.3.9 change management.
APR 20005103	Develop an instruction to implement benchmarking.
CR 20005666	Moisture is entering D6 fuel level transmitter housing for 2LT-5001 and 2LT-5002 causing corrosion. Conduit may need a seal.
CR 20005873	Decision to keep SI [safety injection] accumulators pressurized during 12/2/00 maintenance outage was not fully reviewed with respect to work plan.
2DO 20005957	Contact manufacturer of D1, D2 to determine the requirements for chromate concentration for closed cooling system.
CR 20006104	Inadvertently placed 11 cation bed IX into service due to communication gap and use of incorrect chemistry request.
CR 20006383	Safeguards hold tag #2-084 for MV-32208 was not installed correctly. Handwheel could be turned freely.
CR 20010011	MV-32189 packing tightened during SP 2201D. Caution In the procedure states, "Do Not Tighten Packing On Control Valves or Motor Valves."

CR 20010035	Failure to correctly complete the condition report form.
CR 20010157	Perform a self-assessment of foreign material exclusion.
CR 20010614	Trip switch 1/11-3 was found open during a PM [post-maintenance test]. Having the switch open would disable the UV [undervoltage voltage] trip of 11 FWP [feedwater pump].
CR 20010870	Foreign material found on #1 seal ring of reactor coolant pump #12.
CR 20011055	Found spent fuel pool ventilation and 121 inservice purge tripped. No apparent reason found. Restarted. See operations log entry on 1/30/01 @1209).
CR 20011256	Hold card was hung and IV'd on the wrong valve, CV-31440 11/12 accumulator nitrogen supply.
CR 20011257	Discovered RCS draining to the sump A via vent and drain valves opened for CV-31329 (aux spray) replacement.
CR 20011259	The actuator and valve internals were removed from CV-31224 (A loop pressurizer spray valve) while the valve was being used for boundary control.
CR 20011587	Three incidents involving SP 1366, Charging Pump Check Valve Test, WO 0004879.
CR 20011601	Loss of RCS inventory at 1-foot below the flange level. Found VC-16-7 (RCP seal water injection line drain) open.
CR 20011602	An unplanned orange condition was entered for containment closure during performance of WO 100707.
CR 20011608	Conduct a common cause analysis of outage configuration control.
CR 20011638	Valve found mispositioned. VC-1-1, MV-32060 charging pump suction from RWST [refueling water storage tank] bypass following SP 1366. Open, should have been closed.

CR 20011686	Block of wood stuck on head flange (used as a soft pad). Removed prior to headset during FME inspection.
CR 20011736	Engineer did not inform the carpenters about FME controls in the SFP (spent fuel pool) area.
CR 20011784	Mispositioned switch on 11 auxiliary M/U [makeup] air handler. Worker positioned wrong switch causing alarm in control room.
CR 20011817	Observed FME barrier on new head vent valves not in place. Tape was on one side.
CR 20011820	FME cover on 13B feedwater heater found rolled up (not in place) with no work in progress.
CR 20011822	Does FME need to be established for accumulators 11 and 12 during outage?
CR 20011823	13 FCU [fan coil unit] upper fan panel was open with no covering. FME bag was there, but tape had let loose.
CR 20011866	Found RH-7-22 with hose attached and not capped. This valve and RH-7-23 are not found on any checklist other than C19.1.
CR 20011929	Work on steam generator FME inspection resulted in high dose rates to 12 RCP [reactor coolant pump] seal replacement crew.
CR 20011959	An oil absorbent pad got sucked into the unit one turbine oil reservoir during oil level inspection by maintenance.
APR 20011974	Determine if standard method of SFDGS [safeguards] application can be established and incorporate Std [standard] in SWI-0-3.
APR 20011978	Conduct training on what Is required during SP-1210, SFDGS [safeguards] hold tag verification. Include any new standard attachment methods.

APR 20011994 SS/SM [shift supervisor/shift manager] observe portion of SP 1210 per verbal discussion and provide feedback to Bruce Anderson. CR 20012084 C-5-1 was found open during Unit 1 start-up. The valve had previously been checked closed on system checklist. CR 20012100 SP 1093 interrupted due to smoke from penetration 472 Flammastic on asbestos insulation smoldered due to exhaust heat. CR 20012177 ANI [Authorized Nuclear Inspector] not getting special reviews on CRs involving ASME XI [American Society of Mechanical Engineers Section XII. Please add automatic ANI review when ASME XI =Yes. Revise CHAMPS [work order and condition ACC 20012207 report database] issues module to automatically initiate ANI special reviews on CRs where ASME Section XI is flagged YES. CR 20012216 Manway covers for fuel oil storage tanks. Water leakage onto FOST [fuel oil storage tank] motors causing motor/pump degradation. CR 20012218 Found CV-31819 WGDT [waste gas decay tank] condensate drain tank inlet shut. Checklist calls for the valve to be open. System engineer request open. Valve reopened. CR 20012503 Boric acid manual valves not locked per tech specs [technical specifications]. CR 20012645 There are some barriers that must be overcome to assure the effective use of corrective action program via CHAMPS data entry system. CR 20012775 FME could be improved by shutting doors on instrument cabinets when leaving for breaks and when no test leads are connected. CR 20012950 Use to mark clear plastic bags with orange X, noticed bags not marked, this is not conducive to good FME practices.

CR 20012995	Modification self-assessment actions: Recommended actions to improve modification process.
ACC 20013001	Add verification that all trip switches in breaker cubicle are closed to lesson plan for Procedure C20.5-1.
ACC 20013017	SP 1366 should be evaluated for the impacts of the performance of this test on heat tracing.
CR 20013035	Failure to correctly complete the Condition Report Form.
CR 20013132	SB-00 compensating spring packs may be assembled consistent with disk spring vendor guidance which differs from Limitorque.
ACC 20013242	Discuss results of FME self-assessment with maintenance and construction groups.
ACC 20013246	Use recent examples noted in self- assessment CR 20010157 to update OE [Operating Experience] in the lesson plans on FME.
ACC 20013247	Make different size plugs and have them readily available for grinding work.
APR 20013357	The work process for controlling plant conditions with work in progress should be modified.
APR 20013358	The safety tagging process for control valves should be revised to include the tagging of the valve body when position cannot be manipulated.
APR 20013359	5AWI 1.11.2.6.6 (Suspending Work Prior to Procedure Completion) needs to be evaluated for a supporting process to ensure implementation of intent.
ACC 20013360	Site communication standards for email communication involving plant operations should be developed.
ACC 20013361	The existing position to not tag vent and drain valves as part of isolations should be reevaluated.

ACC 20013362	Additional automated indicators for unidentified RCS leakage should be developed.
APR 20013377	Procedure 1D15.1 and 2D15.1 should be revised to assure the RCDT [reactor coolant drain tank].
ACC 20013381	Procedure 1C18 (2C18) Section 5.1 should be evaluated for additional potential.
APR 20013384	Incorporate additional physical controls on the containment airlock door interlocks.
CR 20013393	GA-11 and GA-12 found in open position during SP-1232. Believe Step 7.25 was missed during previous month's SP.
ACC 20013396	Procedures should be revised to assure the SI accumulators are adequately isolated.
ACC 20013399	Evaluate the need to perform and document pre-job briefings on complex or critical work when new personnel are assigned to the task.
ACC 20013400	Review and revise Procedures C19.9, C19.10 and D58 to clarify the definition.
ACC 20013401	An active alarm should be installed to alert operations that two containment doors in one airlock are opened simultaneously.
ACC 20013402	The method to incorporate meaningful work order impact and condition codes is not adequately addressed in the work planning stages.
ACC 20013403	Review and revise applicable work control AWIs for consistent expectation of work control.
ACC 20013404	Improve outage work control methods to assure conflicting work is avoided.
ACC 20013405	Consider a method to assure TCNs are evaluated for their impact on the outage.
ACC 20013406	Consideration should be given to revise SP 1166 (2166) to minimize the time that drain valves are opened to provide additional barriers against unintentional leakage past open drain valves.

ACC 20013407	Outage surveillance procedures are generally not scheduled nor coordinated to the detail needed.
CR 20013449	Valve mispositioned by maintenance. Maintenance signed off 2EG-1-20 Closed, but did not close it.
CR 20013587	12 heater drain pump suction was open, unattended, and did not have an FME cover installed.
APR 20013653	Procedure change form for checklist C1.1.18-1 & C1.1.18-2 to provide two options for SI 8-1 and SI 8-2.
ACC 20013654	Have PITC [Prairie Island Training Center], in its operations training stress the importance of safeguards hold cards, and locks in general, and what they are protecting.
ACC 20013655	Have all operations crews review this condition report (20012503) investigation.
CR 20013662	SA-54-6, D2 diesel generator main air receiver relief, tested beyond its allowable set range during the D2 18-month preventive maintenance.
CR 20013780	Work initiated on wrong unit. After indepth discussion of possible consequences of the WO, work started on wrong unit.
CR 20013789	SFP cooling isolated to both heat exchangers.
APR 20013807	Dedicate a team of experienced personnel to thoroughly evaluate the effectiveness of the existing programs for outage work control.
ACC 20013808	Any further reductions in planned outage lengths should first consider an evaluation of the change per 5AWI 1.3.0, "Change Management Process," to assure adequate organizational and processes exist to support the proposed schedule reduction.
CR 20013825	Assess training on D1/D2 emergency shutdown and training needs following operator injury.

CR 20013854	During SP-1307 (WO 0105220) D2 RTS [return-to-service], exciter control switch was in manual rather than auto causing D2 up to speed and voltage >10 seconds.
CR 20013888	The leg of the spent fuel repair template unscrewed and fell into the SFP in location V-48 and is an FME concern.
CR 20013915	Found 2 devices out of position and uncontrolled during valve lineup check-preparation to run D6 after maintenance.
CR 20014142	At the current rate, CRs will exceed the capacity of the numbering system before the end of the year.
CR 20014183	Mispositioned valves during D5 oil change. Maintenance closed wrong valve.
CR 20014211	Effectiveness review for level 1 CR 20004323 determined corrective actions were ineffective in preventing recurrence.
ACC 20014220	Submit LER [Licensee Event Report] 1-01- 01, "Failure to Physically Lock Valves Associated with Tech Spec Required Safety Injection Flow Path."
CR 20014334	121 cooling water pump replacement. Two pipe wrenches were knocked in pit when crane shifted.
APR 20014336	Investigate 2EG-29-2 and 2EG-29-5 if their labeling led to mis-identifying and misposition on WO 0107061.
CR 20014497	During May 23 forced outage, FME control rag got sucked into valve body.
ACC 20014545	Assess training on D1/D2 emergency shutdown and training needs following operator injury.
2DO 20014549	Review the role of the Operations Committee in the design package review process and update procedures accordingly.
2DO 20014557	Review close-out process to prevent backlog of modifications.

CR 20014684	Safety tag applied to incorrect device for WO 0106966. Found hold card incorrectly applied during restoration.
CR 20014717	Good peer check/FME bags not completely covering crank case. Magnetic coverings being installed instead of bag covering.
CR 20014740	During piston removal should use a lanyard to tie off tools that may drop into lube oil pump.
CR 20014779	Found 2RC-18-5 closed after checklist was signed that it was open.
ACC 20014782	Evaluate Delta T created by this condition to verify that system was maintained within design limits.
CR 20014835	Policy of assigning problem resolution responsibility to the problem identifier discourages issue identification.
CR 20014881	Previous CRs 19980129 and 19980131 were answered incorrectly. All information was not considered when completing actions.
CR 20015191	Valve Mis-positioned - 2TD-6-14 and 2TD-6-46.
CR 20015215	Valve Mis-positioned (CV-39062).
CR 20015237	Valve mispositioned. Found 12 BA [boric acid] transfer pump running with recirculation valve closed.
CR 20015243	2001 Emergency plan semi-annual health physics drill critique comments.
CR 20015263	Safety evaluation No. 97 and calculation No. ENG-ME-286 regarding hydrogen generation in containment do not appear to include polar crane galvanized rope.
CR 20015268	In fire cabinet PI 45 in fabrication weld shop, 11 Hilti HEA adhesive kits with no MSDS [material safety data sheets] labels.
CR 20015273	Arc/Flash safety requirements are inadequately addressed in the Prairie Island Safety Manual. Communication on issue is insufficient.

CR 20015283 An increase was noted on background and

low level samples on tritium analyzer,

Beckman LS5801. Need evaluation/resolution.

CR 20015312 2TD-15-4 found out of position.

CR 20015356 Actions described in CR 20013825 as being

taken have not been done. The CR

20015356 has been signed off as complete.

CR 20015860 Investigate negative trend in CR FME

events noted by Process Panel review.

Work Orders

9802243 1A52-57 Install Vacuum Breaker

Audits and Assessments

AG 2000-E-3 Operating Experience Assessment

AG 2000-E-4 Corrective Action

Other Documents Reviewed

CARB (Corrective Action Review Board) October 2000

Meeting Minutes through May 2001

Root Cause Evaluations (RCEs)

Root Cause Investigation Report, "RCS April 11, 2001

Inventory Loss Through PZR Spray Lines"

Root Cause Investigation Report for March 20, 2001 C20011587, "Unexpected RCS Level

Increase Due to VC-1-1 Being Inadvertently

Left In the Open Position"

Root Cause Investigation Report for CR March 21, 2001 20011587, "RCS Inventory Loss Through

RCP Seal Injection Line Drain"

Root Cause Investigation Report for CR April 26, 2001

20011608, "Outage Configuration Control

Common Cause Analysis"

Root Cause Investigation Report for CR 20012503, "Boric Acid Manual Valves Not Locked Per Tech Specs"

April 18, 2001

DOCUMENTS REQUESTED FROM THE LICENSEE PRIOR TO ONSITE INSPECTION

Administrative Work Instructions (AWIs)

5AWI 1.10.0	"Corrective Action Process"
5AWI 1.10.1	"Condition Reporting Process"
5AWI 1.10.2	"Actions to Correct Conditions or Prevent Recurrence"
5AWI 1.10.3	"Site Trending Program and Trend Analysis"
5AWI 1.10.4	"Management Assessment of Plant Performance"
5AWI 1.10.5	"Self Assessment"
5AWI 1.10.6	"Root Cause Investigations and Apparent Cause Evaluations"
5AWI 1.10.7	"Cause Coding"
5AWI 3.7.0	"Operating Experience Assessment"
5AWI 3.15.5	"Operability Determinations"
5AWI 3.15.7	"Prairie Island Field Observation Program"

Audits and self-assessments conducted since September 1, 2000, in the following areas:

corrective action/condition process maintenance/work control operations engineering

The 3rd and 4th quarter 2000 and 1st quarter 2001 maintenance rule reports

Corrective action effectiveness reviews conducted since September 1, 2000

<u>Corrective Action Review Board and Management Assessment Team Meetings Minutes since</u> <u>August 2000</u>

The Current Corrective Action Process Indicator Summary

A listing of:

- Error Reduction Task Force Reports (root cause evaluations) completed since September 2000
- condition reports generated since September 2000 related to corrective actions
- work order and condition reports generated since September 2000 related to D1, D2, D5, D6, and the MOV program (including related support equipment for the diesel generators)
- temporary modifications
- operability determinations