



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

July 20, 2006

Mr. Dale E. Young, Vice President  
Crystal River Nuclear Plant (NA1B)  
ATTN: Supervisor, Licensing &  
Regulatory Programs  
15760 West Power Line Street  
Crystal River, FL 34428-6708

SUBJECT: CRYSTAL RIVER UNIT 3 - NRC PROBLEM IDENTIFICATION AND  
RESOLUTION INSPECTION REPORT 050000302/2006009

Dear Mr. Young:

On June 23, 2006, the NRC completed a team inspection at your Crystal River Unit 3. The enclosed report documents the inspection findings which were discussed on June 23, 2006, with you and other members of your staff.

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 examination of selected procedures and representative records, observations of plant equipment and activities, and interviews with personnel.

On the basis of the samples selected for review, the inspectors concluded that in general, your corrective action program processes and procedures were effective; thresholds for identifying issues were appropriately low; and problems were properly evaluated and corrected within the problem identification and resolution program (PI&R). However, there was one Green finding identified during this inspection associated with a failure to conduct an extent of condition evaluation when three motor operated valves which were thought to not be susceptible to incorrect pinion gear installation were found with their pinion gears installed backwards. This finding was determined not to be a violation of NRC requirements.

In accordance with 10 CFR 2.390 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 (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

***/RA by Son Ninh Acting for/***

Joel T. Munday, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

Docket No. 50-302  
License No. DPR-72

Enclosure: Inspection Report 05000302/2006009  
w/Attachment: Supplemental Information

cc w/encl: (See page 3)

FPC

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DATE	07/17/2006	07/18/2006	07/12/2006	07/17/2006			
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Report to D. E. Young from Joel T. Munday dated July 20, 2006.

SUBJECT: CRYSTAL RIVER UNIT 3 - NRC PROBLEM IDENTIFICATION AND  
RESOLUTION INSPECTION REPORT 050000302/2006009

Distribution w/encl:

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No: 50-302

License No: DPR-72

Report No: 05000302/2006009

Licensee: Progress Energy Florida - Florida Power Corporation

Facility: Crystal River Unit 3

Location: 15760 West Power Line Street  
Crystal River, FL 34428-6708

Dates: June 5-9 and June 19-23, 2006

Inspectors: C. Patterson, Senior Resident Inspector, Team Leader  
T. Morrissey, Senior Resident Inspector  
T. Nazario, Project Engineer  
M. Speck, Resident Inspector

Approved by: Joel T. Munday, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

Enclosure

## SUMMARY OF FINDINGS

IR 05000302/2006009; 06/05/2006-06/09/2006 and 06/19/2006-06/23/2006; Crystal River Nuclear Plant, Unit 3; Identification and Resolution of Problems. A finding was identified in the area of effectiveness of corrective actions.

The inspection was conducted by two senior resident inspectors, a resident inspector and a project engineer. One Green finding of very low safety significance was identified during this inspection. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

### Identification and Resolution of Problems

The team concluded that in general, problems were properly identified, evaluated, prioritized, and corrected within the licensee's problem identification and resolution program. Evaluation of issues was generally comprehensive and technically adequate. Formal root cause evaluations for issues classified as significant conditions adverse to quality were comprehensive and detailed. Overall, corrective actions developed and implemented for issues were effective in correcting the problems. One exception was noted concerning corrective action for identified deficiencies with three motor-operated valves.

The processes and procedures of the licensee's corrective action program (CAP) were generally adequate; thresholds for identifying issues were appropriately low, and in most cases, corrective actions were adequate to address conditions adverse to quality. Nuclear Assessment Section audits and departmental self-assessments were effective in identifying issues and directing attention to areas that needed improvement. Licensee identified weaknesses and issues in self-assessments were appropriately entered into the CAP and addressed. However, the inspectors observed that several lower threshold issues had not been entered into the CAP.

Based on discussions and interviews conducted with plant employees from various departments, the inspectors did not identify any reluctance to report safety concerns.

#### A. Inspector Identified Findings

##### Cornerstone: Mitigating Systems

- C Green. A Green finding was identified by the inspectors for failure to conduct an extent of condition evaluation when three motor operated valves (MOV's) which were thought to not be susceptible to incorrect pinion gear installation were found with their pinion gears installed backwards.

This finding is more than minor because it affected the equipment performance attribute of the mitigating system cornerstone and affected the cornerstone objective of ensuring reliability of a mitigating system. Using NRC Manual Chapter 0609, "Significance Determination Process," Appendix A, Phase 1, this finding was determined to be of very low significance (Green), because the

finding has not resulted in a loss of safety function and was not screened as potentially risk significant due to external events. The primary cause of the finding was related to the cross cutting area of Problem Identification and Resolution, in that station personnel failed to determine the need for additional MOV inspections when three MOVs which were initially thought to not be susceptible to incorrect pinion gear installation were found with reversed pinion gears, one of which was also discovered with an improperly staked pinion key.

B. Licensee Identified Violations

None.



## Report Details

### 4. OTHER ACTIVITIES (OA)

#### 4OA2 Problem Identification and Resolution

The team based the following conclusions, in part, on issues identified during the period, July 2, 2004 (The last biennial problem identification and resolution inspection) to the end of the inspection on June 23, 2006. In addition, the team reviewed problems for selected systems, which were identified outside this assessment period whose significance may be age dependent.

##### a. Effectiveness of Problem Identification

##### (1) Inspection Scope

The inspectors reviewed the licensee's corrective action program (CAP) procedures which described the administrative process for initiating and resolving problems primarily through the use of nuclear condition reports (NCRs). The inspectors reviewed selected NCRs, and attended meetings where NCRs were screened for significance, to determine whether the licensee was identifying, accurately characterizing, and entering problems into the CAP at an appropriate threshold.

The inspectors selected NCRs for review which involved issues covering the seven cornerstones of safety identified in the NRC's Reactor Oversight Process (ROP). The selected samples involved various licensee classified severity levels and assigned site departments. The inspectors also conducted a detailed review of NCRs for several risk significant systems. These systems were selected based on equipment performance history, Maintenance Rule (MR) considerations, and risk significance insights from the licensee's probabilistic safety assessment. The systems selected for review were the Emergency Diesel Generators (EGDGs) and Diesel Fuel Tanks; Decay Heat Removal, Decay Heat Closed Cycle (DC); Decay Heat Raw Water (RW); and Emergency and Auxiliary Feedwater systems. The inspectors reviewed NCRs, maintenance history, and selected completed work orders (WOs) for the systems and reviewed associated system health reports. The inspectors also reviewed NRC inspection reports dating back two years which documented NCRs. These reviews were performed to verify that problems were being properly identified, appropriately characterized, and entered into the CAP. Items reviewed generally covered a two year period of time, however, in accordance with the inspection procedure, a five year review was performed for selected systems for age dependent issues.

The inspectors conducted plant walkdowns of equipment associated with the selected systems to assess the material condition and to look for any deficiencies that had not been entered into the CAP. Control Room walkdowns were performed by the inspectors to verify the accuracy of the main control room (MCR) deficiency list and to ascertain whether deficiencies were entered into the CAP. Control room operator logs and site observation items were also reviewed to verify that issues identified were properly entered into the CAP.



The inspectors reviewed selected industry operating experience items associated with the selected systems, including NRC generic communications, to verify that these were appropriately evaluated for applicability and whether issues identified through these reviews were entered into the CAP.

The inspectors reviewed licensee Nuclear Assurance Section (NAS) audits, NAS quality reports, and department self-assessments including those which focused on problem identification and resolution to verify that findings were entered into the CAP and to verify that these findings were consistent with the NRC's assessment of the licensee's CAP.

The inspectors attended various plant meetings to observe management oversight functions of the corrective action process. These included plan of the day meetings, a Plant Nuclear Safety Committee (PNSC) meeting, shift operations turnover meeting, and department CAP rollup meetings. Documents reviewed are listed in the Attachment.

(2) Assessment

The inspectors determined that the licensee's CAP was generally effective at identifying problems. Industry operating experience items were effectively evaluated for applicability and entered into the CAP. NAS audits and departmental self-assessments were effective in identifying issues and directing attention to areas that needed improvement. Licensee identified weaknesses and issues in self-assessments were appropriately entered into the corrective action program and addressed. Operator control room logs thoroughly documented problems giving very specific detail of conditions observed and actions taken to correct the problem. Trending was effective in monitoring programs' health.

However, the inspectors observed some cases where several lower threshold issues had not been identified or entered into the CAP. Examples include: not having a calculation to support operability of the EDGs with a flood flap raised at the air inlet structure; deficiencies identified during a walkdown on the emergency feed water (EFW) systems that were not previously identified (work orders were written); and no NCR for a long standing issue with a cycling service water check valve. Specific NCRs written are listed in the attachment.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors reviewed NCRs, including root and apparent cause evaluations, site and department trend reports, and observed other activities as discussed in Section 4OA2.a to verify that the licensee appropriately prioritized and evaluated problems in accordance with their risk significance. The inspection was intended to verify that the licensee adequately determined the cause of the problems, including root cause analysis where appropriate, and adequately addressed operability, reportability, common cause, generic concerns, extent of condition, and extent of cause.

The review included the appropriateness of the assigned significance, the timeliness of resolutions, level of effort in the investigation, and the scope and depth of the causal analysis. The review was also performed to verify that the licensee appropriately identified corrective actions to prevent recurrence and that those actions had been appropriately prioritized.

The inspectors also attended several plan of the day meetings and a PNSC meeting to determine if plant problems were being properly characterized, prioritized, assigned, and if appropriate, management attention was applied to significant plant issues.

(2) Assessment

The inspectors determined that overall, the licensee had appropriately assessed and prioritized issues. Each NCR written and priority level assigned was reviewed during the plan of the day meeting which was chaired by the superintendent shift operations and attended by upper management and department heads. Management reviews of NCRs were thorough and adequate consideration was given to system or component operability and associated plant risks. Additionally, the inspectors attended a PNSC meeting and reviewed meeting minutes from several other PNSC meetings and concluded that additional quality was added to the licensee's process by the PNSC. One example of being proactive was a recent modification to the main transformer to provide real time monitoring of gassing issues which provided a high degree of confidence for detecting any further degradation of the transformer. The inspectors concluded that evaluation of issues was generally comprehensive and technically adequate. Formal root cause evaluations for issues classified as significant conditions adverse to quality were comprehensive and detailed. However, several examples were identified where problem evaluations were not thorough or were narrowly focused:

- C NCR 197916 was written to address some valid NCRs which were cancelled by reference to another NCR, not in accordance with the administrative process. There was a potential for some trending data to be lost.
- C NCR 135880 contained information about RWV-59, Decay Heat Removal Heat Exchanger relief valve, failure but did not contain all of the history concerning other similar valve failures.
- C NCR 136908 documented a water hammer in the feedwater system and treated this as an equipment failure but did not address the cause of the water hammer.
- C NCR 138035 documented an instrument affected by a water hammer event. However, other instruments potentially affected in the system were not addressed.
- C NCRs 175671 and 175674, documented active boric acid leaks which were screened as priority level 3 instead of priority level 2, however, these NCRs were processed like level 2 NCRs.

- C Nonconformance Evaluation (NCON) concerning a MOV operability did not consider NRC IN 85-22, Failure of Limitorque Motor-Operated Valves Resulting from Incorrect Installation of Pinion Gear or other external operating experience items. The NCON only used operating experience from the plant.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed a sample of NCRs, selected licensee effectiveness reviews, and work orders initiated to resolve NCRs to verify the licensee had identified and implemented timely and appropriate corrective actions to address problems. The inspectors verified that the corrective actions were properly assigned, documented, and tracked to ensure completion. The review was also conducted to verify the adequacy of corrective actions to address equipment deficiencies and maintenance rule (MR) functional failures of risk significant plant safety systems.

(2) Assessment

The inspectors determined that overall, corrective actions were effective in correcting the problems. The effectiveness of corrective action was correlated to good material condition of the systems reviewed. The Diesel Generators, Service Water, EFW, Decay Heat Removal, Decay Heat DC, and Decay Heat RW areas were free of leaks and standing water. The policy of Zero Tolerance for Equipment Failure was seen as a proactive approach to increase equipment reliability and performance. Although the inspectors identified that most corrective actions implemented by the licensee were appropriate for the severity and risk significance of the problem identified, one exception was noted in the finding below:

(3) Finding

Introduction: A Green finding was identified by the inspectors for failure to conduct an extent of condition evaluation when three MOVs which were thought to not be susceptible to incorrect pinion gear installation were found with their pinion gears installed backwards.

Description: In September 2003, NRC Information Notice (IN) 2003-015, Importance of Followup Activities in Resolving Maintenance Issues, was issued and documented a need for followup activities to verify implementation of corrective actions to resolve maintenance issues for safety-related components at nuclear power plants. The IN discussed a number of instances concerning deficiencies associated with motor pinion gear installation.

The licensee assessed the IN as OPEX item 104270 and determined that six out of seventy-five MOVs were potentially susceptible to the condition identified in the IN. This determination was based on the fact that maintenance procedure revisions were made in 1989, in part, to ensure proper installation of the motor pinion gear. The licensee concluded that after the maintenance procedure was revised, the likelihood of installing the pinion gear incorrectly was low and therefore, chose to only inspect those valves that had undergone maintenance before the upgraded procedure was implemented.

As of the date of this report, five of the six susceptible MOVs had been inspected with no problems noted.

However, during the 2005 refueling outage, the licensee identified three valves which had undergone maintenance since the procedure was revised and had the motor pinion gears installed backwards. Those valves were the MOV FWV-31, FWV-32 (feedwater isolation valves) and DHV-35 (borated water storage tank (BWST) isolation valve) documented in NCRs 174467, 175291, and 173501. Additionally, the licensee determined that the motor pinion gear shaft key for the DHV-35 was improperly staked and extended beyond its normal location. All three valves were restored to their design configuration prior to being returned to service. The inspectors reviewed NCR 175291 which recommended that the scope of valves to be inspected be extended, however, the recommendation was rejected. The inspectors questioned the licensee on the adequacy of the initial determination of which MOVs to inspect under OPEX 104270 given that the three valves with the incorrectly installed pinion gears were initially determined to not need inspection. The licensee initiated NCR 196742 to provide a generic operability determination for installed MOVs that were susceptible to having the pinion gears installed backwards and to reevaluate the need to inspect MOVs that were initially thought to be not susceptible.

Analysis: The failure to conduct an extent of condition evaluation after three MOVs that were initially thought to not be susceptible to incorrect pinion gear and pinion key installation were found with the pinion gear installed backwards is a performance deficiency that could affect the reliability of MOVs associated with mitigating systems. This finding is more than minor because it affected the equipment performance attribute of the mitigating system cornerstone and affected the cornerstone objective of ensuring reliability of a mitigating system. Using NRC Manual Chapter 0609, "Significance Determination Process," Appendix A, Phase 1, this finding was determined to be of very low significance (Green), because the finding has not resulted in a loss of safety function and was not screened as potentially risk significant due to external events. The primary cause of the finding was related to the cross cutting area of Problem Identification and Resolution, in that station personnel failed to conduct an extent of condition evaluation when three MOVs which were initially thought to be not susceptible to incorrect pinion gear installation were found with reversed pinion gears, one of which was also discovered with an improperly staked pinion key.

Enforcement: The failure to conduct an extent of condition evaluation when three MOVs which were thought to not be susceptible to incorrect pinion gear installation were found with their pinion gears installed backwards did not constitute a violation of regulatory requirements. This finding is identified as FIN 05000302/2006-009-01, Failure to Conduct an Extent of Condition Review after Three Motor Operated Valves Were Found with Their Pinion Gears Installed Incorrectly. An evaluation is being performed to determine any necessary short and long term corrective actions.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

The team randomly interviewed on-site workers regarding their knowledge of the corrective action program at Crystal River and their threshold to write NCRs or raise safety concerns. Additionally during technical discussions with members of the plant staff, the inspectors conducted interviews to develop a general perspective of the safety-conscious work environment at the site. The interviews were also conducted to determine if any conditions existed that would cause employees to be reluctant to raise safety concerns. The inspectors reviewed the licensee's employee concerns program (ECP) and interviewed the ECP manager. Additionally, the inspectors reviewed a select number of completed ECP reports to verify that concerns were being properly reviewed and identified deficiencies were being resolved and entered into the CAP when appropriate.

(2) Assessment

Based on this inspection and the NCR reviews, the inspectors concluded that licensee management emphasized the need for all employees to promptly identify and report problems using the appropriate methods established within the administrative programs. The inspectors did not identify any reluctance on the part of the licensee staff to report safety concerns.

4OA6 Exit Meeting

On June 23, 2006, the inspectors presented the inspection results to Mr. Dale Young and other members of his staff who acknowledged the finding. The inspectors confirmed that proprietary information was not provided or examined during the inspection. The inspector re-exited with Mr. Dale Young on July 18, 2006, who acknowledged the Green finding. The finding was determined not to be a violation of regulatory requirements.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee personnel:**

M. Annacone, Manager, Engineering  
W. Brewer, Manager, Maintenance  
R. Hons, Manager, Training  
J. Franke, Plant General Manager  
J. Hays, Manager, Outage and Scheduling  
J. Holt, Manager, Operations  
P. Infanger, Supervisor, Licensing  
M. Rigsby, Superintendent, Radiation Protection  
D. Roderick, Director, Site Operations  
J. Stephenson, Supervisor, Principal Nuclear Emergency Preparedness  
T. Hobbs, Manager, Nuclear Assessment  
D. Young, Vice President, Crystal River Nuclear Plant

### **ITEMS OPENED, CLOSED AND DISCUSSED**

#### **Opened and Closed**

05000302/2006009-01	FIN	Failure to Conduct an Extent of Condition Review after Three Motor Operated Valves Were Found with Their Pinion Gears Installed Incorrectly (4AO2.c).
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## **CRYSTAL RIVER PROBLEM IDENTIFICATION AND RESOLUTION DOCUMENT NEEDS**

1. A copy of all corporate and site level procedures associated with the corrective action process, operating experience program, risk assessment programs, maintenance rule program, employee concerns program, self-assessment programs, NRC reportability, operability determination process, and system health report program.
2. A list of all condition reports initiated (at least) since June, 2004 (corresponding to performance of last PI&R inspection). Also, provide a list of all condition reports specifically for the following risk significant systems initiated since June, 2004. The systems include: Emergency Diesel Generators (EDGs) and diesel fuel tanks; emergency and auxiliary feedwater; and decay heat removal and decay heat sea water. Ensure these lists include a brief description of the problem and the classification.
3. A listing of all condition report documents associated with LERs, Cited and Non-Cited NRC violations, NRC inspection report findings, issued since June 2004.
4. Corrective action program statistics such as the number initiated by department, backlogs, human performance errors by department, and others as may be available.
5. A list of industry operating experience documents entered into the "industry operating experience program" (i.e., NRC Bulletins, NRC Generic Letters, NRC RISE, NRC Information Notices, Part 21 reports, and vendor information letters and information from other sites etc. affecting the risk significant systems listed in Item #2 above).
6. Copy of all Corporate Nuclear Safety Review Board (CNSRB) and Plant Nuclear Safety Committee (PNSC) meeting minutes/documents issued since June 2004.
7. A list of all Employee Concern Program items received since June 2004.
8. A copy of System Health Reports issued since June 2004.
9. A list of systems which are or have been classified as (a) (1) in accordance with the Maintenance Rule since June 2004. Include applicable procedures for classifying systems or components as (a) (1), date and reason for being placed in (a) (1), and actions completed and current status.
10. Provide a list of Maintenance Preventable Functional Failures since June 2004. Include actions completed and current status.
11. Provide a list of all maintenance work requests generated on the systems discussed in Item #2. Include at least a general description to reasonably determine what maintenance problem involved
12. A list of Temporary Modifications and instrument calibration failure reports for the systems annotated in Item #2.

## LIST OF DOCUMENTS REVIEWED

### **Procedures**

AI-1701, System Engineering Standards  
ADM-NGGC-0006, Online EEOS models for risk assessment  
REG-NGGC-0001, Employee concerns program  
CAP-NGGC-0201, Self-assessment program  
CAP-NGGC-0200, Corrective action program  
CAP-NGGC-0202, Operating experience program  
ADM-NGGC-0101, Maintenance rule program  
CP-153B, Monitoring the performance of systems structures and components under maintenance rule  
CAP-NGGC-0205, Significant adverse condition investigations  
CAP-NGGC-0206, Corrective Action Program Trending and Analysis  
MP-402C, Maintenance of Limitorque SMB -0-4  
OPS-NGGC-1305, Operability Determinations  
AI-500, Conduct of Operations Department Organization and Administration  
PM-275, General Preventive Maintenance Work  
ADM-NGGC-0107, Equipment Reliability Process Guideline  
PM-275, General Preventative Maintenance Work, Rev. 20  
SP-5206, Rev. 8, CR-3 Piping Specification, Specification for Progress Energy, Crystal River Unit 3

### **PNSC Minutes**

2004-40, 2005-12, 2005-24, 2005-27, 2005-42, 2006-04, 2006-05, 2006-06, 2006-07, 2006-08, 2006-09, 2006-11

### **NCRs priority 1**

108023, 110023, 122486, 123632, 125149, 136752, 136888, 149509, 152651, 152691, 154522, 169029, 174440, 174428, 175491, 175996, 177191, 178612, 179131, 183114

### **NCRs priority 2**

113185, 122648, 126195, 127002, 127520, 127521, 129933, 130384, 130666, 130907, 131530, 131567, 132238, 133077, 133187, 133275, 133510, 133687, 134171, 135232, 135606, 135833, 135834, 135836, 135880, 136018, 136305, 136336, 136397, 136583, 136773, 136908, 137086, 138035, 139269, 140914, 141890, 143450, 143484, 145881, 146127, 146166, 146865, 148225, 148764, 149219, 149380, 149426, 149507, 151818, 154024, 154651, 155599, 155682, 155892, 156573, 156649, 156692, 157144, 157172, 159013, 159522, 159552, 159694, 159784, 160188, 160449, 162292, 164021, 165025, 166376, 167426, 167646, 169752, 170139, 171501, 171986, 173501, 173747, 174467, 175040, 175072, 175082, 175240, 175291, 175559, 175926, 175987, 176598, 178271, 178313, 179127, 188885, 188942, 190038, 190142, 190986, 195121

**NRCs priority 3**

167513, 168541, 169932, 171745, 174497, 175671, 175674, 176265, 176428, 176429, 176606, 178313, 184715, 185181, 187714, 190333

**NCRs priority 5**

144642, 155884, 163727, 188906,

**Rejected/Cancelled NCRs (June 2004-June 2006)**

**Work Orders**

14148, 149038, 152042, 160191, 160832, 173543, 180377, 187594, 189277, 211609, 213772, 216659, 217051, 217052, 217792, 220939, 225688, 228636

**Reports**

List of Main Control Board Deficiencies/Discrepancies  
Site CAP Rollup & Trend Analysis - 1<sup>st</sup> Quarter 2006  
Self Evaluation CAP Program Status Report - NCR data (June 8, 2006)  
Chemistry CAP Rollup & trend analysis - 1<sup>st</sup> Quarter 2006  
Radiation Protection - Rollup & trend analysis - 1<sup>st</sup> Quarter 2006  
Maintenance - Rollup & trend analysis - 1<sup>st</sup> Quarter 2006  
Engineering - Rollup & trend analysis - 1<sup>st</sup> Quarter 2006  
Crystal River Self Evaluation Monthly Indicators - March 2006  
Nuclear Assessment Section Self Evaluation Report (C-SE-04-01) dated February 9, 2005.  
Self Assessment of the Corrective Action Program and Operating Experience Program conducted March 13-17, 2006.  
Self Assessment of the Corrective Action Program conducted February 16-20, 2004.  
Corporate CR seven day database dated 6/13/2006  
System Health Report (EFW)  
Equipment Performance Priority List dated 6/8/2006  
Self-Assessment 87180: Engineering Trending and Monitoring dated 7/21/2003  
Self-Assessment 143581: Cross-Functional Self-Assessment of the OE Program and Select SOER Recommendations dated 3/24/2005-9/30/2005  
Nuclear Assurance Assessment AR 15292 of System Health Status dated 2/2005  
System Health Report, January to June, 2005, Decay Heat Closed Cycle Cooling (DC) and Domestic Water (DO) System  
BACC Program Health Report, January, 2006

**Operating experience items (screened documents reviewed)**

104270, 121708, 122987, 124998, 128756, 132054, 136923, 137310, 138667, 144516, 146650, 148845, 149148, 151255, 151458, 155028, 155052, 157457, 160623, 162949, 165080, 167520, 168350, 168361, 168380, 170814, 170822, 175716, 175191

**Non-cited Violations, Findings, and LERs**

NCV	50-302/2004-04-01	Failure to Follow Procedure in 10 CFR 50.59 Screening
NCV	50-302/2004-05-01	Failure to investigate deficient condition of boric acid leakage affecting the low pressure injection system as required by boric acid corrosion control procedure.
NCV	50-302/2004-05-02	Failure to establish adequate corrective actions for fire brigade response results in a recurrent problem.
NCV	50-302/2004-05-03	Redundant channels of a post accident monitoring function not operable due to reversed power supplies.
NCV	50-302/2005-03-01	Failure to establish appropriate quantitative acceptance criteria to assure Crystal River 3 Technical Specification 3.8.1 operability of the offsite power supply.
NCV	50-302/2005-03-02	Failure to properly evaluate and correct emergency diesel generator loss of fuel oil header prime condition caused by leakage past the fuel header check valves.
NCV	50-302/2005-04-01	Failure to properly assess and correct condition of water in the 1A diesel fuel tank.
FIN	50-302/2005-05-01	Inadequate procedure guidance resulted in a loss of condensate flow and a reactor trip.
NCV	50-302/2005-09-01	Failure to conduct adequate corrective action during review of Steam Generator Inspection results during R12 refueling outage inspection.
NCV	50-302/2005-09-02	Complete and accuracy of information provided to the NRC concerning steam generator inspection results.
LER	50-302/2004-001	Reactor Trip By Failed Circuit Card Board in the Main Feedwater Integrated Control System.
LER	50-302/2004-002	Emergency Diesel Generator Inoperable Due to Fuel Oil Header Outlet Check Valve Leaking Past Seat.
LER	50-302/2004-003	Reactor Trip and Emergency Feedwater Actuation Caused by 230 Kilovolt Switchyard/Transmission Faults.
LER	50-302/2005-001	Design Change Creates Engineered Safeguards Bus Protective Relay Scheme Single Failure Vulnerability.

LER	50-302/2005-002	Emergency Diesel Generator Inoperable Due to Fuel Oil Header Check Valve Leaking Past Their Seats.
LER	50-302/2005-003	Manual Reactor Trip and Subsequent Emergency Feedwater Actuation Due to Condensate Pump Loss.
LER	50-302/2005-004	Motor-Operated Feedwater Isolation Valve Inoperable Due to Motor Rotor Oxidation/corrosion.
LER	50-302/2005-005	Inadvertent B Train Engineered Safeguards Actuation Due to Inadequate Procedures.

**NCRs Initiated during CR-3 NRC PI&R Inspection**

196712, Newly Initiated NCR daily summary report improvement (Cancel and Reject)  
 196742, NRC PI&R MOV Motor Pinion Orientation may not be correct  
 196848, MRG-1 (EGDG Inlet Structure) Flap Position  
 196916, Unsecured ladder  
 197154, NRC PI&R Inspection: Corrective Action Inappropriately Closed (CORR to PMR)  
 197704, NRC PI&R Inspection Observation: SWV-10 Banging on Backstop  
 197887, Disable Annunciator not labeled per AI-500  
 197916, Some NCRs are given a cancelled status inappropriately  
 198289, Potential Finding