



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

March 3, 2010

Mr. Jon A. Franke, Vice President  
Crystal River Nuclear Plant (NA1B)  
Supervisor, Licensing &  
Regulatory Programs  
15760 West Power Line Street  
Crystal River, FL 34428-6708

**SUBJECT: ANNUAL ASSESSMENT LETTER – CRYSTAL RIVER NUCLEAR PLANT  
(NRC INSPECTION REPORT 05000302/2010001)**

Dear Mr. Franke:

On February 10, 2010, the NRC staff completed its performance review of the Crystal River Nuclear Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2009. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only—Security-Related-Information" will include the security cornerstone review and resultant inspection plan.

Overall, Crystal River Unit 3 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

During this assessment period, a Special Inspection Team (SIT) was dispatched to Crystal River 3 to assess the circumstances associated with the concrete delamination in portions of the containment building. At the close of the period, the inspection had not yet been completed and no issues of significance identified for further review.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through June 30, 2011. In addition to ROP baseline inspection activities, we also plan on conducting several infrequently performed inspections, which include License Renewal; Steam Generator Replacement/Containment; and Temporary Instruction (TI) 2515/177, Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal & Containment Spray System. The inspection plan is provided to allow for the resolution of any scheduling

conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of 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).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at 404-562-4629 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Marvin D. Sykes, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

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

Enclosure: Crystal River Inspection/Activity Plan (03/01/2010 - 06/30/2011)

cc w/encl: (See page 3)

cc w/encl:  
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**Crystal River**  
**Inspection / Activity Plan**  
**03/01/2010 - 06/30/2011**

| Unit Number | Planned Dates |            | Inspection Activity                                     | Title  | No. of Staff on Site |
|-------------|---------------|------------|---|--|----------------------|
|             | Start         | End        |   |  |                      |
|             |               |            | <b>EB3CR - CONT DELAM DETENSION</b>                     |  | 1                    |
| 3           | 03/04/2010    | 03/11/2010 | IP 50001  | Steam Generator Replacement Inspection   |                      |
|             |               |            | <b>EB3CR - CONT DELAM CONCRETE REMOVAL</b>              |  | 1                    |
| 3           | 03/15/2010    | 03/19/2010 | IP 50001  | Steam Generator Replacement Inspection   |                      |
|             |               |            | <b>PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b> |  | 5                    |
| 3           | 04/05/2010    | 04/09/2010 | IP 71152B   | Identification and Resolution of Problems  |                      |
| 3           | 04/19/2010    | 04/23/2010 | IP 71152B   | Identification and Resolution of Problems  |                      |
|             |               |            | <b>EB3CR - CONT DELAM CONCRETE FORM POUR</b>            |  | 1                    |
| 3           | 04/05/2010    | 04/30/2010 | IP 50001  | Steam Generator Replacement Inspection   |                      |
|             |               |            | <b>EB3CR - CONT DELAM RETENSION</b>                     |  | 1                    |
| 3           | 05/10/2010    | 05/14/2010 | IP 50001  | Steam Generator Replacement Inspection   |                      |
|             |               |            | <b>EB1-CDBI - COMPONENT DESIGN BASES INSPECTION</b>     |  | 7                    |
| 3           | 05/10/2010    | 05/14/2010 | IP 7111121  | Component Design Bases Inspection  |                      |
| 3           | 05/24/2010    | 05/28/2010 | IP 7111121  | Component Design Bases Inspection  |                      |
| 3           | 06/07/2010    | 06/11/2010 | IP 7111121  | Component Design Bases Inspection  |                      |
| 3           | 06/21/2010    | 06/25/2010 | IP 7111121  | Component Design Bases Inspection  |                      |
|             |               |            | <b>EB3CR - CONT DELAM RETENSION &amp; DOC REVIEW</b>    |  | 1                    |
| 3           | 05/31/2010    | 06/04/2010 | IP 50001  | Steam Generator Replacement Inspection   |                      |
|             |               |            | <b>EB3CR - CONT DELAM CONCRETE SCAN BORING</b>          |  | 1                    |
| 3           | 06/07/2010    | 06/09/2010 | IP 50001  | Steam Generator Replacement Inspection   |                      |
|             |               |            | <b>EB3LR - EB3 LICENSE RENEWAL FOLLOWUP</b>             |  | 2                    |
| 3           | 06/07/2010    | 06/11/2010 | IP 71002  | License Renewal Inspection   |                      |
|             |               |            | <b>PSB1EP - EMERGENCY PREPAREDNESS EXERCISE</b>         |  | 3                    |
| 3           | 10/04/2010    | 10/08/2010 | IP 7111401  | Exercise Evaluation  |                      |
| 3           | 10/04/2010    | 10/08/2010 | IP 7111404  | Emergency Action Level and Emergency Plan Changes  |                      |
| 3           | 10/04/2010    | 10/08/2010 | IP 71151  | Performance Indicator Verification   |                      |
|             |               |            | <b>TI-177 - GASEOUS INTRUSION</b>                       |  | 3                    |
| 3           | 10/25/2010    | 10/29/2010 | IP 2515/177   | Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System |                      |
|             |               |            | <b>PSB1-RP - RP PUBLIC RADIATION PROTECTION</b>         |  | 4                    |
| 3           | 12/06/2010    | 12/10/2010 | IP 71124.01   | Radiological Hazard Assessment and Exposure Controls   |                      |
| 3           | 12/06/2010    | 12/10/2010 | IP 71124.04   | Occupational Dose Assessment   |                      |
| 3           | 12/06/2010    | 12/10/2010 | IP 71124.06   | Radioactive Gaseous and Liquid Effluent Treatment  |                      |
| 3           | 12/06/2010    | 12/10/2010 | IP 71124.07   | Public Radiation Safety  |                      |
| 3           | 12/06/2010    | 12/10/2010 | IP 71124.08   | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation  |                      |
| 3           | 12/06/2010    | 12/10/2010 | IP 71151  | Performance Indicator Verification   |                      |

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

Enclosure

Crystal River  
Inspection / Activity Plan  
03/01/2010 - 06/30/2011

| Unit Number | Planned Dates |            | Inspection Activity      | Title                       | No. of Staff on Site |
|-------------|---------------|------------|--------------------------|-----------------------------|----------------------|
|             | Start         | End        |                          |                             |                      |
|             |               |            | <b>TFPI - 805 TFPI</b>   |                             | <b>1</b>             |
| 3           | 04/04/2011    | 04/08/2011 | IP 7111105T              | Fire Protection [Triennial] |                      |
| 3           | 04/18/2011    | 04/22/2011 | IP 7111105T              | Fire Protection [Triennial] |                      |
|             |               |            | <b>EB3HS - HEAT SINK</b> |                             | <b>1</b>             |
| 3           | 06/20/2011    | 06/24/2011 | IP 7111107T              | Heat Sink Performance       |                      |

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Enclosure