



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

February 23, 2005

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: NOTIFICATION OF CRYSTAL RIVER NUCLEAR PLANT - SAFETY SYSTEM
DESIGN AND PERFORMANCE CAPABILITY INSPECTION - NRC
INSPECTION REPORT 05000302/20050006**

Dear Mr. Young:

The purpose of this letter is to notify you that the U.S. Nuclear Regulatory Commission (NRC) Region II staff will conduct a safety system design and performance capability inspection at your Crystal River Nuclear Plant during the weeks of April 25 - 29, 2005 and May 9 -13, 2005. A team of five inspectors will perform this inspection. The inspection team will be led by Mr. Larry Mellen, a Senior Reactor Inspector from the NRC Region II Office. This inspection will be conducted in accordance with baseline inspection program Attachment 71111.21, Safety System Design and Performance Capability.

The inspection will evaluate the capability of installed plant equipment to detect and respond to a loss of coolant accident. Procedures which direct the mitigating actions for this event will also be evaluated.

During a telephone conversation on February 23, 2005, Mr. Mellen of my staff, and Mr. Dennis Herrin, Lead Engineer, Licensing and Regulatory Programs, of your staff, confirmed arrangements for an information gathering site visit and the two-week onsite inspection. The schedule is as follows:

- Information gathering visit: Week of March 28, 2005
- Onsite inspection weeks: April 25 - 29, 2005 and May 9 -13, 2005

The purpose of the information gathering visit is to obtain information and documentation outlined in the Enclosure needed to support the inspection. Mr. Walter Rogers, a Region II Senior Reactor Analyst, may accompany Mr. Mellen during the information gathering visit to review probabilistic risk assessment data and identify risk significant components which will be examined during the inspection. Please contact Mr. Mellen prior to preparing copies of the materials listed in the Enclosure. The inspectors will try to minimize your administrative burden by specifically identifying only those documents required for inspection preparation.

During the information gathering visit, Mr. Mellen will also discuss the following inspection support administrative details: office space; specific documents requested to be made available to the team in their office space; arrangements for site access; and the availability of

knowledgeable plant engineering and licensing personnel to serve as points of contact during the inspection.

Thank you for your cooperation in this matter. If you have any questions regarding the information requested or the inspection, please contact Mr. Mellen at (404) 562-4531 or me at (404) 562-4605.

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 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\\

Charles R. Ogle, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos.: 50-302
License Nos.: DPR-72

Enclosure: Information Request for the Safety System Design and
Performance Capability Inspection

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cc w/encl cont'd: - (See page 3)

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PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE X NON-SENSITIVE

ADAMS: xYes ACCESSION NUMBER: _____

OFFICE	RII:DRS						
SIGNATURE	LSM						
NAME	LMellen						
DATE	2/23/2005	2/ /2005	2/ /2005	2/ /2005	2/ /2005	2/ /2005	2/ /2005
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

**INFORMATION REQUEST FOR THE CRYSTAL RIVER 3 SAFETY SYSTEM DESIGN
AND PERFORMANCE CAPABILITY INSPECTION
LOSS OF COOLANT ACCIDENT (Small Break, Large Break, Inter-System)**

(Please provide the information electronically in searchable “.pdf” files on CDROM. The CDROM should be indexed and hyperlinked to facilitate ease of use. Information in “lists” should contain enough information to be easily understood by someone who has a knowledge of pressurized water reactor technology.)

1. Design basis documents for the engineered safety features (ESF) and emergency core cooling systems (ECCS) used to mitigate the loss of coolant accident (LOCA) event. Design basis documents for the high, medium, and low voltage electrical systems that power the ESF and ECCS components/systems.
2. All procedures used to implement the mitigation strategy for the LOCA event. Include alarm response procedures as well as normal, abnormal, and emergency operating procedures (EOPs) as appropriate. Also include the EOP users guide and EOP setpoint document as well as calculations used to support the setpoints in EOPs for the LOCA event.
3. Piping and instrumentation drawings (P&IDs) for the ECCS and other systems used to mitigate the LOCA event. Two (2) paper copies are preferred for these.
4. List of surveillance procedures used to ensure the operability of equipment required by your Technical Specifications that is used during the mitigation of the LOCA event.
5. List of engineering calculations (electrical, mechanical/nuclear, instrumentation and controls) applicable to the ECCS components and other related systems used for a LOCA event.
6. List of temporary modifications and operator work-arounds involving any components required for mitigation of a LOCA event for the past 3 years
7. System descriptions and operator training modules for the LOCA event, the ECCS, and other systems used to mitigate the event. Include a brief overview of the LOCA event mitigation strategy, including operator actions and equipment used.
8. List of operating experience program evaluations of industry, vendor, or NRC generic issues related to a LOCA event.
9. A list of major modifications completed in the past five years to the ECCS and other systems used to mitigate a LOCA event.

Enclosure

10. Calibration and functional test procedures for instruments used to monitor Reactor Coolant System (RCS) pressure, pressurizer level, RCS hot and cold leg temperatures, RCS subcooling, high pressure coolant injection flow, low pressure coolant injection flow, borated water storage tank level, auxiliary feedwater flow, condensate storage tank level, and containment sump level.
11. Quality Assurance audits and/or self assessments performed on the ECCS and other systems used to mitigate a LOCA in the past 24 months.
12. Plant Technical Specifications, Bases, and Technical Requirements Manual.
13. A current copy of the Updated Final Safety Analysis Report.
14. Procedures that provide implementation guidance for the following programs: Corrective Action Program, Maintenance Rule Program, Design Control Program, and Operating Experience Program.
15. Probabilistic risk assessment (PRA) event tree for the LOCA event. A list of PRA identified system dependencies and success criteria for the ECCS and other systems used to mitigate a LOCA. Provide LOCA cutsets and risk achievement worths for those basic events (assuming only a LOCA initiating event).
16. System health reports and/or other performance monitoring information for the ECCS and other systems used to mitigate a LOCA event.
17. A list of condition reports and non-routine work requests initiated since 1999 affecting the ECCS and other systems used to detect and mitigate a LOCA event.
18. Maintenance Rule performance criteria for systems used to detect and mitigate a LOCA event. A list of maintenance rule failures of equipment used to detect or mitigate a LOCA event.
19. Key one line diagrams for the alternating current and the 125-volt direct current systems that provide power for the pumps, valves, and instrumentation and control circuits associated with the ECCS and other systems used to mitigate the LOCA. Also, include the one line diagrams for the Class 1E medium and low voltage switchgear and the 480 volt motor control centers. (Paper copies are preferred for these)
20. Provide a list of valves used to mitigate a LOCA that are required to change position or are manually manipulated during implementation of the LOCA mitigation strategy. Provide equipment failure rates over the past 10 years for these components.