1 Rec

From: Sharon Fiveash NRR
To: RidsNrrDssa
Date: 4/16/04 12:18PM
Subject: STATUS OF REACTOR FIRE PROTECTION PROJECTS - MARCH 2004

NOTE TO: Suzanne Black, Director, DSSA/NRR

THRU: John Hannon, Chief, Fire Protection Section, SPLB/DSSA/NRR

SUBJECT: STATUS OF REACTOR FIRE PROTECTION PROJECTS - MARCH 2004

The subject report is attached.

CC: Birmingham, Joe; Bongarra, James; Brown, Eva; Chyu, Doris; Coe, Doug; Diec, David; Dipert, Richard; Downs, James; Dreisbach, Jason; Dudley, Richard; Frumkin, Daniel; Fuhrmeister, Roy; Gallucci, Ray; Hyslop, J. S.; IQBAL, Naeem; Klein, Alex; Koltay, Peter; Lain, Paul; Lara, Julio; Lew, David; Lois, Erasmia; Nease, Rebecca; Ogle, Charles R.; Payne, Charlie; Qualls, Phil; Radlinski, Robert; Reinhart, F. Mark; Reyes-Maldonado, Ruth; RidsNrrAdip; RidsNrrAdpt; RidsNrrDipm; RidsNrrDripRprp; RidsNrrDssaSplb; RidsOeMailCenter; RidsRgn1MailCenter; Rogge, John; Salley, Mark; Smith, Linda; Weerakkody, Sunil

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Creation Date: 4/16/04 12:18PM
From: Sharon Fiveash

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April 13, 2004

NOTE TO: Suzanne Black, Director, DSSA/NRR

THRU: John Hannon, Chief, SPLB/DSSA/NRR **//RA//**

FROM: Sunil Weerakkody, Chief, Fire Protection Section, SPLB/DSSA/NRR **//RA//**

SUBJECT: STATUS OF REACTOR FIRE PROTECTION PROJECTS - MARCH 2004

The attached report provides the status of the significant reactor fire protection projects that are assigned to the Fire Protection Engineering and Special Projects Section. The report does not contain allegation-related material, but may contain pre-decisional information.

Changes from the previous status report are in bold text.

Attachment: As stated

CONTACT: Bob Radlinski, SPLB/DSSA/NRR
301-415-3174

ML 040990532

PRE-DECISIONAL INFORMATION - NOT FOR PUBLIC DISCLOSURE

April 13, 2004

NOTE TO: Suzanne Black, Director, DSSA/NRR

THRU: John Hannon, Chief, SPLB/DSSA/NRR //RA//

FROM: Sunil Weerakkody, Chief, Fire Protection Section, SPLB/DSSA/NRR //RA//

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301-415-3174

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PRE-DECISIONAL INFORMATION - NOT FOR PUBLIC DISCLOSURE

ATTACHMENT

STATUS REPORT
SIGNIFICANT REACTOR FIRE PROTECTION PROJECTS

Fire Protection Engineering and Special Projects Section
Plant Systems Branch
Division of Systems Safety And Analysis
Office of Nuclear Reactor Regulation

March 2004

PRE-DECISIONAL INFORMATION - NOT FOR PUBLIC DISCLOSURE

POST-FIRE SAFE-SHUTDOWN ASSOCIATED CIRCUIT INSPECTION

TASK DESCRIPTION: Provide guidance to licensees and inspectors on a risk-informed approach to inspection of post-fire safe-shutdown spurious actuations resulting from failure of associated circuits. The guidance documents, developed in cooperation with industry, will be combined with operator training to bring clarity to a long-standing unresolved issue.

CURRENT STATUS: The final Regulatory Issue Summary (RIS) , "Risk-Informed Approach for Post-Fire Safe-Shutdown Associated Circuit Inspections" **was issued** this month. Draft NUREG–1778, "Knowledge Base of Post-Fire Safe-Shutdown Analysis" was issued for comment in January 2004. These documents provide the required guidance to allow risk-informed inspections of associated circuits. The approach to enforcement of the regulatory requirements is currently being evaluated - a SECY is being prepared that will present options for enforcement to the Commission and request their direction.

MILESTONES:

Completed Activities

- Issued draft NUREG-1778 (January 2004)
- **Issued final RIS for use (March 2004)**

To-Go Activities

- Form internal staff expert panel to address outstanding URI's and industry self assessment findings (April 2004)
- Draft revised inspection procedures for Regions' review (**May** 2004)
- Issue SECY to Commission requesting direction on enforcement options (May 2004)
- Issue revised inspection procedures (**June** 2004)
- Conduct inspector training sessions (**June** 2004)
- Conduct public meeting (**July** 2004)
- Issue final NUREG-1778 (**November** 2004)
- Issue additional regulations and guidance, as required for enforcement, and guidance for enforcement discretion (**December** 2004)
- Withdraw associated circuit analysis inspection moratorium memo (**December** 2004)

CHALLENGE → RESPONSE

- While risk-informed approach would ensure safety, staff/industry differences on rule interpretation and licensing basis would continue absent further regulatory action → Staff preparing option paper for Commission consideration:
  - Delineates several options for path forward, with and without rulemaking process
  - Requests Commission's concurrence on recommended path

CONTACT: Mark Henry Salley, 415-2840, MXS3

Dan Frumkin, 415-2280, DXF1

~~PRE-DECISIONAL INFORMATION - NOT FOR PUBLIC DISCLOSURE~~

FIRE PROTECTION SIGNIFICANCE DETERMINATION PROCESS

TASK DESCRIPTION: Update the existing SDP to simplify the process of using risk-informed methodology to focus inspection **findings** on the most risk-significant fire protection issues. The revised SDP will facilitate communication among the stakeholders of the bases for significance.

CURRENT STATUS: The draft update was completed and issued for public comment in October 2003. Comments have been received and incorporated, as appropriate, and the final revised SDP will be issued in May 2004. **Conducted tabletop exercises and developed inspector training modules for workshop.** A multiple area screening tool is also being developed for incorporation in another revision in September 2004.

MILESTONES:

Completed Activities

- Issued draft fire protection SDP for public comment (October 2003)
- **Completed tabletop exercises (December 2003)**
- **Issued SDP for Regional comment (February 2004)**

To-Go Activities

- Issue final fire protection SDP- by SPSB (May 2004)
- Conduct training sessions for inspectors - by SPSB (**June** 2004)
- Public meeting to discuss fire protection SDP - by SPSB (**June** 2004)
- Incorporate multiple area screening tool into the fire protection SDP (September 2004)

CHALLENGE → RESPONSE

- Although revised fire protection SDP will simplify the significance determination process, the process will be new to inspectors and licensees → will solicit feedback from inspectors, regional managers, licensees and the public on the quality of the revised process

CONTACT: Paul W. Lain, 415-2346, PWL

Dan Frumkin, 415-2280, DXF1

OPERATOR MANUAL ACTIONS RULEMAKING

TASK DESCRIPTION: Revise Appendix R, Section III.G, "Fire protection of safe shutdown capability", to provide criteria for taking credit for operator manual actions following a fire. The revised rule will provide reasonable assurance that post-fire manual actions will be uniformly evaluated by licensees and inspectors.

CURRENT STATUS: The draft interim criteria for enforcement discretion were published for comment in November 2003. The final interim criteria for enforcement discretion will be submitted to EDO in **August** 2004. The proposed rule will go to the Commission for approval in **December** 2004.

MILESTONES:

Completed Activities

- Prepared proposed rulemaking plan (March 2003)
- Commission approved rulemaking plan (September 2003)
- Published interim criteria for enforcement discretion for public comment (November 2003)
- Public meeting to discuss draft interim criteria and solicit comments (November 2003)

To-Go Activities

- **Note: the public meeting on interim criteria for enforcement discretion previously scheduled for March 2004 was canceled. A SECY will be issued in lieu of the meeting to allow public comment on the criteria.**
- ACRS briefing on technical basis for interim operator manual actions criteria (April 2004)
- Issue draft revised inspection guidance (**May** 2004)
- Conduct inspector training sessions - combine with associated circuits training (**June** 2004)
- Submit draft interim criteria for enforcement discretion to EDO (**June** 2004)
- **Issue draft** revised Reg Guide 1.189 to include operator manual actions criteria (**July 2004**)
- Submit final interim criteria for enforcement discretion to EDO (**August** 2004)
- Submit Proposed Rule to Commission (**December** 2004)
- **Issue final revised Reg Guide 1.189 to include operator manual actions criteria (December 2004)**
- Issue proposed rule for public comment (**January 2005**)
- Publish final operator manual actions rule (**December** 2005)

CHALLENGES → RESPONSES

- Heightened stakeholder concerns for safety → Develop and communicate key messages
- Regulatory uncertainty due to Backfit Rule implications associated with previously approved manual actions that use less stringent acceptance criteria → Develop common understanding among program office/inspectors/licensee about backfit rule implications by

providing training and public workshops. (Note that even approved manual actions are subject to ROP for risk-significant safety related findings.)

- Potential regulatory uncertainty among inspectors and licensees due to limiting rule to III.G.2 → Issue regulatory guidance and inspection criteria to establish consistency for all of III.G and beyond
- **Congressman Markey letter questioning the proposed regulatory actions with respect to Operator Manual Actions → Detailed response is being prepared**

CONTACT: Ray Gallucci, 415-1255, RHG

Phil Qualls, 415-1849, PMQ

NFPA 805 RULEMAKING

TASK DESCRIPTION: Revise 10 CFR 50.48, "Fire Protection", to allow licensees to adopt a performance based approach to fire protection as described in the consensus standard NFPA 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants". The revised rule will provide a means to re-establish poorly defined fire protection licensing bases and enable licensees to manage their fire protection programs with minimal regulatory intervention. **NEI is developing implementation guidance, NEI 04-02, and the Staff plans to endorse this guidance within a regulatory guide.**

CURRENT STATUS: The proposed rule was published for public comment in November 2002 and the final rule was endorsed by the ACRS in December 2003. **On March 29, 2004, the SECY (final rule package) was forwarded to the Commission by the EDO. On April 5, 2004, NEI submitted the Revision E of the implementation Guidance, NEI 04-02. The NRC Staff is developing comments and a public meeting with NEI is planed for April 30, 2004..**

MILESTONES:

Completed Activities

- Proposed Rule published for public comment (November 2002)
- ACRS endorsed final rule (December 2003)
- Staff provided comments on draft NEI 04-01 (January 2004)
- **Submitted SECY for Final Rule to Commission (March 2004)**
- **Submitted revised enforcement policy to EDO (March 2004)**

To-Go Activities

- Submit revised enforcement policy to EDO (**April** 2004)
- Provide comments on NEI implementation guide, Rev E (May 2004)
- Issue Final Rule (June 2004)
- Issue draft Regulatory Guide (**July** 2004)
- **Receive** final NEI implementation guide (**August** 2004)
- Issue draft staff license amendment review guidance (September 2004)

- Issue final staff license amendment review guidance (December 2004)
- Issue final Regulatory Guide (December 2004)
- Validate and verify acceptable fire models (December 2004)
- Prepare inspection procedures and training materials; conduct workshops to train inspectors to perform inspections and audits (March 2005)
- Re-quantify fire PRA's - by RES (September 2005)
- Issue final inspection guidance (December 2005)

CHALLENGES → RESPONSES

- Licensees may not adopt revised rule because of the cost and resources required to make transitions → Multi-office effort to develop incentives (e.g., enforcement discretion within the ROP during transition to revised rule)
- Inspection of a performance-based risk-informed rule needs development; inspectors unfamiliar with application → Provide inspection procedures and training of inspectors to the extent needed to ensure proper inspections and audits
- Unapproved fire models and fire PSA methodologies → RES is verifying and validating fire models and developing fire PSA methodologies

CONTACT: Paul Lain, 415-2346, PWL

Alex Klein, 415-3477, ARK1

QUANTITATIVE FIRE HAZARD ANALYSIS TOOLS

TASK DESCRIPTION: Provide a simplified risk-informed methodology for use by inspectors to assess potential fire hazards that could cause critical damage to safe shutdown components.

CURRENT STATUS: The simplified risk-informed methodology was developed and issued for public comment as draft NUREG–1805, "Fire Dynamics Tools (FDT^s) Quantitative Fire Hazard Analysis Methods for the U. S. Regulatory Commission Fire Protection Inspection Program". Comments have been received and incorporated, as appropriate, and the final NUREG will be issued in April 2004.

MILESTONES:

Completed Activities

- Issued draft NUREG for public comment (June 2003)

To-Go Activities

- Issue final NUREG (April 2004)

CHALLENGE → RESPONSE

- Convince inspectors to use the tool → Provide adequate inspector training and communicate benefits of using the tool

CONTACTS: Naeem Iqbal, 415-3346, NXI

Mark Henry Salley, 415-2840, MXS3

STEERING GROUP FOR FIRE PROTECTION

TASK DESCRIPTION: Conduct steering group meetings that include representatives from DSSA, DIPM, DRIP, DLPM, RES, OE, OGC and the regions, whose purpose is to provide advice/support and management buy-in on fire protection policy and technical issues. The group will also provide for agency-wide coordination of fire protection regulatory activities.

CURRENT STATUS: The steering group was endorsed by the Leadership Team in January 2004. **The first two meetings have been held.**

MILESTONES:

Completed Activities

- Second meeting was conducted on March 25, 2004

To-Go Activities

- Finalize and issue charter for group (**April** 2004)

CHALLENGE → RESPONSE

- Achieve active participation by appropriate members of group → Encourage participation and schedule meetings to accommodate members' schedules

CONTACT: Naeem Iqbal, 415-3346, NXI

HEMYC FIRE BARRIER QUALIFICATION

TASK DESCRIPTION: Perform testing on multiple configurations of hemyc fire wrap material to determine if the material can be rated as a one-hour fire barrier based on approved test methods. In addition, models will be developed for configurations that are not included in the testing program. The work is being performed by RES and their contractors.

CURRENT STATUS: The contract has been let for the test program..

MILESTONES:

Completed Activities

- **Awarded contract for test program**

To-Go Activities

- **Complete testing and issue test report (December 2005)**
- **Develop computer models for configurations not included in test program (December 2005)**
- **Issue inspection guidance (April 2006)**
- **Conduct inspector training, if required (April 2006)**

CHALLENGE → RESPONSE

- Meeting or improving on the target completion date → monitor progress of program and make adjustments as required

CONTACT: Dan Frumkin, 415-2280, DXF1

Naeem Iqbal, 415-3346, NXI

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