



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

October 28, 2010

Mr. Michael J. Pacilio  
Senior Vice President, Exelon Generation Company, LLC  
President and Chief Nuclear Officer, Exelon Nuclear  
4300 Winfield Rd.  
Warrenville, IL 60555

**SUBJECT: THREE MILE ISLAND NUCLEAR STATION, UNIT 1 – NOTIFICATION OF  
CONDUCT OF A TRIENNIAL FIRE PROTECTION BASELINE INSPECTION**

Dear Mr. Pacilio:

The purpose of this letter is to notify you that the U.S. Nuclear Regulatory Commission (NRC) Region I staff will conduct a triennial fire protection baseline inspection at Three Mile Island Nuclear Station, Unit 1 in January 2011. The inspection team will be led by Jon Lilliendahl from the NRC Region I office. The team will be composed of personnel from the NRC Region I. The inspection will be conducted in accordance with NRC inspection procedure 71111.05T, the NRC's baseline fire protection inspection procedure.

The schedule for the inspection is as follows:

- Information gathering visit – Week of January 3, 2011
- Weeks of onsite inspection – Weeks of January 24 and February 7, 2011

The purposes of the information gathering visit are to obtain information and documentation needed to support the inspection, to become familiar with the station fire protection programs, fire protection features, post-fire safe shutdown capabilities and plant layout, mitigating strategies to address Section B.5.b of the Interim Compensatory Measures Order, EA-02-026, of February 25, 2002, 10 CFR 50.54(hh)(2); and, as necessary, obtain plant specific site access training and badging for unescorted access. A list of the types of documents the team may be interested in reviewing and possibly obtaining, are listed in Enclosures 1 and 2. The team leader will contact you with specific document requests prior to the information gathering visit.

During the information gathering visit, the team will also discuss the following inspection support administrative details: office space size and location; specific documents requested to be made available to the team in their office spaces; arrangements for reactor site access, including radiation protection training, security, safety, and fitness for duty requirements; and the availability of knowledgeable plant engineering and licensing organization personnel to serve as points of contact during the inspection.

We request that during the onsite inspection week you ensure that copies of analyses, evaluations, or documentation regarding the implementation and maintenance of the Three Mile Island Nuclear Station fire protection program, including post-fire safe shutdown capability, be

readily accessible to the team for their review. Of specific interest for the fire protection portion of the inspection are those documents which establish that your fire protection program satisfies NRC regulatory requirements and conforms to applicable NRC and industry fire protection guidance. For the B.5.b portion of the inspection, those documents implementing your mitigating strategies and demonstrating the management of your commitments for the strategies are of specific interest. Also, personnel should be available at the site during the inspection who are knowledgeable regarding those plant systems required to achieve and maintain safe shutdown conditions from inside and outside the control room, including the electrical aspects of the relevant post-fire safe shutdown analyses, reactor plant fire protection systems and features, and the Three Mile Island Nuclear Station fire protection program and its implementation.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

Your cooperation and support during this inspection will be appreciated. If you have questions concerning this inspection, or the inspection team's information or logistical needs, please contact Jon Lilliendahl, the team leader in the Region I Office at (610) 337-5129.

Sincerely,



John F. Rogge, Chief  
Engineering Branch 3  
Division of Reactor Safety

Docket Nos.: 50-289  
License No.: DPR-50

Enclosures: 1) List of Reactor Fire Protection Program Supporting Documentation  
2) Mitigating Strategies Supporting Documentation

cc: Distribution via ListServ

readily accessible to the team for their review. Of specific interest for the fire protection portion of the inspection are those documents which establish that your fire protection program satisfies NRC regulatory requirements and conforms to applicable NRC and industry fire protection guidance. For the B.5.b portion of the inspection, those documents implementing your mitigating strategies and demonstrating the management of your commitments for the strategies are of specific interest. Also, personnel should be available at the site during the inspection who are knowledgeable regarding those plant systems required to achieve and maintain safe shutdown conditions from inside and outside the control room, including the electrical aspects of the relevant post-fire safe shutdown analyses, reactor plant fire protection systems and features, and the Three Mile Island Nuclear Station fire protection program and its implementation.

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Sincerely,

/RA/

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SUNSI Review Complete: JFR (Reviewer's Initials)

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OFFICE	RI/DRS	RI/DRS						
NAME	JLilliendahl	JRogge						
DATE	10/20/2010	10/27/2010						

## ENCLOSURE 1

### Reactor Fire Protection Program Supporting Documentation

[Note: This is a broad list of the documents the NRC inspection team may be interested in reviewing, and possibly obtaining, during the information gathering site visit.]

1. The current version of the Fire Protection Program and Fire Hazards Analysis.
2. Electronic copy of current versions of the Updated Final Safety Analysis Report (FSAR), Technical Specifications, Technical Requirements Manual, and Operating License.
3. The reactor plant's IPEEE, results of any post-IEEE reviews, and listings of actions taken/plant modifications conducted in response to IEEE information.
4. Listing of plant fire protection licensing basis documents.
5. SERs which form the licensing basis for the reactor plant's post-fire safe shutdown configuration.
6. A list of applicable codes and standards related to the design of plant fire protection features and evaluations of code deviations.
7. A listing of plant deviations from code commitments.
8. A list of fire protection and post-fire safe shutdown related design change packages completed in the last three years (including their associated 10 CFR 50.59 evaluations).
9. A list of all Generic Letter 86-10 evaluations.
10. Post-fire safe shutdown systems and separation analysis.
11. Post-fire alternative shutdown analysis.
12. Piping and instrumentation (flow) diagrams showing the systems and components used to achieve and maintain hot standby and cold shutdown for fires outside the control room and those components used for those areas requiring alternative shutdown capability.
13. Copies of AC and DC electrical system one line diagrams. (From offsite power grid connections down to the 120 volt level)
14. Plant layout drawings which identify the physical plant locations of hot standby and cold shutdown equipment.

15. Plant layout drawings which identify plant fire area delineation, areas protected by automatic fire suppression and detection, and the locations of fire protection equipment.
16. Plant layout drawings which identify the location of post-fire emergency lighting units.
17. Current versions of the fire protection program implementing procedures (e.g., administrative controls, surveillance testing, and fire brigade.)
18. Procedures/instructions that control the configuration of the reactor plant's fire protection program, features and post-fire safe shutdown methodology, and system design.
19. Maintenance procedures which routinely verify fuse and circuit breaker coordination in accordance with the post-fire safe shutdown coordination analysis.
20. Plant operating procedures which would be used for shutdown from the control room with a postulated fire, and procedures which would be used to implement alternative shutdown capability.
21. Fire brigade training program.
22. Lesson plans, job performance measures, and related training information for licensed and non-licensed operators for post-fire safe shutdown (including alternative shutdown).
23. Copy of two most recently completed fire pump pressure and flow tests and two most recent fire loop flow tests.
24. Organization charts of site personnel down to the level of fire protection staff personnel.
25. The three most recent fire protection QA audits and/or fire protection self-assessments.
26. Recent (last 12 months) QA surveillances of fire protection activities.
27. A listing of open fire protection and fire safe shutdown related condition reports and a listing of fire protection and fire safe shutdown condition reports closed in the past three years.
28. Impairment Log for fire protection features that are out of service
29. Fire protection system health reports (last two).
30. Corrective action closeouts as part of operator manual actions corrective actions.
31. Corrective actions for multiple spurious actuation fire-induced circuit failures.

## ENCLOSURE 2

### Mitigating Strategies Supporting Documentation

[Note: This is a broad list of the documents the NRC inspection team may be interested in reviewing, and possibly obtaining, during the information gathering site visit.]

1. A list of all modifications to regulatory commitments made to meet the requirements of Section B.5.b of the ICM Order, EA-02-026, dated February 25, 2002, the subsequently imposed license conditions, and 10 CFR 50.54(hh)(2).
2. Copies of procedures/guidelines that were revised or generated to implement the mitigation strategies. These could be extensive damage mitigation guidelines (EDMGs), severe accident management guidelines (SAMGs), emergency operating procedures (EOPs), abnormal operating procedures (AOPs), etc.
3. A matrix that shows the correlation between the mitigation strategies identified in Nuclear Energy Institute 06-12 and the site-specific procedures or guidelines that are used to implement each strategy.
4. Engineering evaluations/calculations that were used to verify engineering bases for the mitigation strategies.
5. Piping and instrumentation diagram (P&ID) or simplified flow diagrams for systems relied upon in the mitigation strategies. These could be the type used for training.
6. A modification package or simplified drawings/descriptions of modifications that were made to plant systems to implement the mitigation strategies.
7. Last completed copies of procedures used to inventory equipment (hoses, fittings, pumps, etc.) required to be used to implement the mitigation strategies.
8. A list of B.5.b strategies, if any, which have implementing details that differ from that documented in the submittals and the safety evaluation report.
9. A copy of site general arrangement drawing(s) that show the majority of buildings/areas referenced in B.5.b documents.
10. Training records/ training matrix/ lesson plans related to B.5.b.
11. Copies of Memoranda of Understanding (MOUs) (e.g., with local fire departments) required to implement any mitigating strategies.