



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

January 27, 2010

Mr. J. R. Morris  
Site Vice President  
Duke Energy Carolinas, LLC  
Catawba Nuclear Station  
4800 Concord Road  
York, SC 29745-9635

**SUBJECT: CATAWBA NUCLEAR STATION, UNITS 1 AND 2 - NOTIFICATION OF CONDUCT OF A TRIENNIAL FIRE PROTECTION BASELINE INSPECTION WHILE TRANSITION TO 10 CFR PART 50.48(c) IS IN PROGRESS (NRC INSPECTION REPORT NOS. 05000413/2010006 AND 05000414/2010006)**

Dear Mr. Morris:

The purpose of this letter is to notify you that the U.S. Nuclear Regulatory Commission (NRC) Region II staff will conduct a triennial fire protection baseline inspection at Catawba Nuclear Station, Units 1 and 2, in April and May 2010. The inspection team will be led by Mr. McKenzie Thomas, NRC Senior Reactor Inspector, of the Region II Office. The team will be composed of personnel from the NRC Region II Office. The inspection will be conducted in accordance with Inspection Procedure 71111.05TTP, the NRC's baseline fire protection inspection procedure for plants in the process of implementing 10 CFR 50.48(c) and National Fire Protection Association Standard (NFPA) 805, dated December 24, 2009. The inspection guidance is different from the regular triennial inspections in that the inspectors will concentrate on the fire protection program infrastructure and the adequacy of compensatory measures implemented for identified departures from code requirements. Inspection of circuit analysis is not included in the inspection procedure; however, electrical topics will be addressed by the team.

On January 21, 2010, during a telephone conversation between Mr. Marc Sawicki (Catawba Regulatory Compliance Engineer) of your staff, and Mr. Thomas, our respective staffs confirmed arrangements for a three-day information gathering onsite visit and a two-week onsite inspection. The schedule for the inspection is as follows:

- Information gathering visit: April 6-8, 2010
- Week 1 of onsite inspection: April 26-30, 2010
- Week 2 of onsite inspection: May 10-14, 2010

The purposes of the information gathering visit are to obtain information and documentation needed to support the inspection, to become familiar with the Catawba Nuclear Station, Units 1 and 2 fire protection programs, fire protection features, post-fire safe shutdown capabilities and plant layout, and 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). The types of documents the team will be interested in reviewing, and possibly obtaining, are listed in Enclosures 1 and 2. Please contact Mr. Thomas prior to preparing copies of the materials listed in the Enclosures. The inspection team will try to minimize your administrative burden by specifically identifying those documents required for inspection preparation.

During the information gathering visit, the team will also discuss the following inspection support administrative details: office space; specific documents to be made available to the team in their office space; arrangements for unescorted 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 inspection weeks you ensure that copies of analyses, evaluations or documentation regarding the implementation and maintenance of the Catawba 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 Catawba 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 Mr. Thomas at (404) 562-4673, or me at (404) 562-4530.

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/*

Rebecca L. Nease, Chief  
Engineering Branch 2  
Division of Reactor Safety

Docket Nos.: 50-413, 50-414, 72-45  
License Nos.: NPF-35, NPF-52

Enclosures: 1. Triennial Fire Protection Inspection Support Documentation  
2. Mitigating Strategies Support Documentation

cc w/encl. (See page 3)

cc w/encl:

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Letter to J. R. Morris from Rebecca L. Nease dated January 27, 2010.

SUBJECT: CATAWBA NUCLEAR STATION, UNITS 1 AND 2 - NOTIFICATION OF CONDUCT OF A TRIENNIAL FIRE PROTECTION BASELINE INSPECTION WHILE TRANSITION TO 10 CFR PART 50.48(c) IS IN PROGRESS (NRC INSPECTION REPORT NOS. 05000413/2010006 AND 05000414/2010006)

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A. Adams, NRR

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XADAMS:  Yes      ACCESSION NUMBER: \_\_\_\_\_       SUNSI REVIEW COMPLETE

OFFICE	RII:DRS	RII:DRS	RII:DRP	RII:DRS			
SIGNATURE		RA	RA	RA			
NAME	MThomas	SWalker	JBartley	RNease			
DATE		1/26/2010	1/26/2010	1/27/2010			
E-MAIL COPY?	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO

OFFICIAL RECORD COPY      DOCUMENT NAME: S:\DRS\Eng Branch 2\REPORTS\Catawba\Notification Letter\CAT 2010-006 TFPI Notification Letter.doc

## Triennial Fire Protection Inspection Support 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. The current version of these documents is expected unless specified otherwise. Electronic media is preferred, if readily available. (The preferred file format on CD-ROM or DVD-ROM is “.pdf”). The CD/DVD-ROM should be indexed, hyperlinked, readable, and searchable to facilitate ease of use. Please provide 5 copies of each CD/DVD-ROM submitted). Information in “lists” should contain enough information to be easily understood by someone who has knowledge of the technology. The lead inspector will discuss specific information needs with the licensee staff and may request additional documents or electronic information.

1. The Fire Protection Program document and the Fire Hazards Analysis.
2. The Fire Protection Program implementing procedures (e.g., administrative controls, surveillance testing, fire brigade).
3. The fire brigade training program document and the pre-fire plans for the selected fire areas/zones (to be determined during information gathering visit).
4. The post-fire safe shutdown analysis, including system and separation analyses.
5. The alternative shutdown analysis.
6. Piping and instrumentation (flow) diagrams for the fire suppression systems.
7. Piping and instrumentation (flow) diagrams for the systems and components used to achieve and maintain hot standby, and cold shutdown, for fires involving shutdown from the control room.
8. Piping and instrumentation (flow) diagrams for the systems and components used to achieve and maintain hot standby, and cold shutdown, for fires in areas requiring alternative or dedicated shutdown capability.
9. Plant layout and equipment drawings which identify the physical plant locations of hot standby and cold shutdown equipment.
10. Plant layout drawings which identify plant fire area and/or fire zone delineation, areas protected by automatic fire suppression and detection, and the locations of fire protection equipment for the selected fire areas/zones (to be determined during information gathering visit).
11. Plant layout drawings which identify the general location of the post-fire emergency lighting units.
12. Plant operating procedures used to, and describing shutdown from inside the control room with a postulated fire occurring in any plant area outside the control room.
13. Plant operating procedures used to implement the alternative shutdown capability from outside the control room with a fire in either the control or cable spreading room (or any other alternative shutdown area).

14. Maintenance and surveillance testing procedures for alternative shutdown capability (including Appendix R emergency lights and communication systems) fire barriers, detectors, fire pumps and fire suppression systems.
15. Calculations and/or justifications that verify fuse/breaker coordination for the selected fire areas/zones (to be determined during information gathering visit) that are fed off the same electrical buses as components in the protected train. Also, a list of the maintenance procedures used to routinely verify fuse/breaker coordination in accordance with the post-fire safe shutdown coordination analysis.
16. A list of the significant fire protection and post-fire safe shutdown design change descriptions (including their associated 10 CFR 50.59 evaluations) and Generic Letter (GL) 86-10 evaluations.
17. A list of the protection methodologies (as identified in 10 CFR Part 50, Appendix R, Section III.G) used to achieve regulatory compliance for the selected fire areas/zones (to be determined during information gathering visit). That is, please specify whether 3-hour rated fire barriers (Section III.G.2.a), 20-foot separation along with detection and suppression (Section III.G.2.b), 1-hour rated fire barriers with detection and suppression (Section III.G.2.c), or alternative shutdown capability (Section III.G.3) is used for the selected fire areas/zones.
18. Procedures or instructions that govern the implementation of plant modifications, temporary modifications, maintenance, and special operations, and their impact on fire protection.
19. Organization chart(s) of site personnel down to the level of the fire protection staff.
20. Procedures or instructions that control the configuration of the fire protection program, features, and post-fire safe shutdown methodology and system design.
21. A list of applicable codes and standards related to the design of plant fire protection features and evaluations of code deviations (i.e., a listing of the NFPA code editions committed to (Code of Record)).
22. The three most recent fire protection QA audits and/or fire protection self-assessments.
23. A list of open and closed fire protection problem identification and resolution reports [also known as action reports/condition reports/problem investigation reports/NCRs/EARs] associated with fire protection or Appendix R safe shutdown for the past three years.
24. A list of plant fire protection licensing basis documents (i.e., a list of the SERs and change evaluations which form the licensing basis for the facility's post-fire safe shutdown configuration).
25. A list of fire protection or Appendix R calculations,
26. A list of fire impairments identified during the previous year.
27. A list of abbreviations/designators for plant systems.

## Mitigating Strategies Support 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 visit. The current version of these documents is expected unless specified otherwise. Electronic media is preferred, if readily available. (The preferred file format on CD-ROM or DVDROM is ".pdf"). The CD/DVD-ROM should be indexed, hyperlinked, readable, and searchable to facilitate ease of use. Please provide 5 copies of each CD/DVD-ROM submitted). The lead inspector will discuss specific information needs with the licensee staff and may request additional documents or electronic information.

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. 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.