



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

September 29, 2006

Duke Power Company LLC.  
ATTN: Mr. D. M. Jamil  
Site Vice President  
Catawba Site  
4800 Concord Road  
York, SC 29745-9635

SUBJECT: CATAWBA NUCLEAR STATION, UNIT 1 - NOTIFICATION OF INSPECTION  
AND REQUEST FOR INFORMATION

Dear Mr. Jamil:

On or about November 20 - 24, 2006, the NRC will perform the baseline inservice inspection (ISI) at the Catawba Nuclear Station, Unit 1 (NRC Inspection Procedure 71111.08). In addition, the NRC will perform inspection activities in accordance with Temporary Instruction TI 2515/150, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC Order EA-03-009). Experience has shown that this inspection is resource intensive both for the NRC inspector and your staff. In order to minimize the impact to your on-site resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. These documents have been divided into two groups. The first group identifies information to be provided prior to the inspection to ensure that the inspector is adequately prepared. The second group identifies the information the inspector will need upon arrival at the site. It is important that all of these documents are up to date and complete, in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be George Strickland, of your organization. Our inspection dates are subject to change based on your updated schedule of outage activities. If there are any questions about this inspection or the material requested, please contact the lead inspector, Eric Michel, at (404) 562-4555 ([ecm2@nrc.gov](mailto:ecm2@nrc.gov)).

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 By Caudle Julian For/**  
George T. Hopper, Chief  
Engineering Branch 3  
Division of Reactor Safety

Docket No. 50-413  
License No. NPF-35

Enclosure: See next page

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☐ PUBLICLY AVAILABLE☐ NON-SENSITIVEADAMS: ☐ Yes

ACCESSION NUMBER: \_\_\_\_\_

OFFICE	RII:DRS	RII:DRS	RII:DRS	RII:DRP			
SIGNATURE	/RA By CJulian for/	/RA By CJulian for/	/RA By CJulian for/	/RA/			
NAME	EMichel	JRiviera	GHopper	MErnstes			
DATE	9/27/06	9/27/06	9/27/06	9/28/06			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

DOCUMENT NAME: C:\MyFiles\Copies\Catawba - ISI Request For Information ECM.wpd

Enclosure: Inservice Inspection Document Request

cc w/encl:

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## INSERVICE INSPECTION DOCUMENT REQUEST

Inspection Dates: November 20 - 24, 2006

Inspection Procedures: IP 71111.08 "Inservice Inspection (ISI) Activities"  
TI 2515/150 "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles"

Inspectors: Eric Michel (IP 71111.08)  
Joel Rivera-Ortiz (TI 2515/150)

### A. Information Requested for the In-Office Preparation Week

The following information should be sent to the Region II office in hard copy (or electronic format CD - preferred), in care of Eric Michel by October 30, 2006, to facilitate the selection of specific items that will be reviewed during the onsite inspection week. The inspector will select specific items from the information requested below and then request from your staff additional documents needed during the onsite inspection week. We ask that the specific items selected from the lists be available and ready for review on the first day of inspection. All information requests relate to Unit 1 unless otherwise stated. **\*Please provide requested documentation electronically if possible. If requested documents are large and only hard copy formats are available, please inform the inspectors, and provide subject documentation during the first day of the onsite inspection.** If you have any questions regarding this information request, please call the lead inspector as soon as possible.

#### A.1 ISI / Welding Programs and Schedule Information

a) A detailed schedule of:

- i) Nondestructive examinations (NDE) planned for Class 1 & 2 systems and containment, performed as part of your ASME Section XI, Risk Informed (if applicable), and augmented ISI Programs during the upcoming outage.
  - 1. Provide a status summary of the NDE inspection activities vs. the required inspection period percentages for this Interval by category per ASME Section XI, IWX-2400. *(Do not provide separately if other documentation requested contains this information)*
- ii) Reactor vessel head (RPVH) examinations planned for the upcoming outage. (If applicable)
- iii) Examinations planned for Alloy 82/182/600 components that are not included in the Section XI scope. (If applicable)
- iv) Examinations performed as part of your Boric Acid Corrosion Control Program (Mode 3 walkdowns, bolted connection walkdowns, etc.).

Enclosure

- v) Welding activities that are scheduled to be completed during the upcoming outage (ASME Class 1, 2, or 3 structures systems or components (SSCs)).
- b) A copy of ASME Section XI, Code Relief Requests and associated NRC Safety Evaluations applicable to the examinations identified above. Additionally, please provide documentation associated with ASME Code Cases that are being incorporated in work activities being performed this outage.
- c) A list of NDE reports (ultrasonic, radiography, magnetic particle, dye penetrant, visual VT-1, VT-2, and VT-3) which have identified recordable indications (geometric or flaw) on Code Class 1 & 2 systems since the beginning of the last refueling outage. Also, include in the list the NDE reports with recorded indications in the RPVH penetration nozzles which have been accepted for continued service.
- d) A list with a brief description of the welds in Code Class 1 and 2 systems which have been fabricated due to component repair/replacement activities since the beginning of the last refueling outage, or are planned to be fabricated this refueling outage. Please identify the system, weld number, and reference applicable documentation.
- e) If reactor vessel weld examinations required by the ASME Code are scheduled to occur during the upcoming outage, provide a detailed description of the welds to be examined, and the extent of the planned examination. Please also provide reference numbers for applicable procedures that will be used to conduct these examinations.
- f) Copy of any 10 CFR Part 21 reports applicable to your SSCs within the scope of Section XI of the ASME Code that have been identified since the beginning of the last refueling outage.
- g) A list of any temporary non-code repairs in service (e.g., pinhole leaks).
- h) Please provide copies of the most recent self assessments for the ISI, Welding, and Alloy 600 Programs.

#### A.2 Reactor Pressure Vessel Head (RPVH)

- a) Provide the detailed scope of the planned NDE of the RPVH which identifies the types of NDE methods to be used on each specific part of the vessel head to fulfill NRC commitments made in response to NRC Bulletin 2002-02 and NRC Order EA-03-009. Also, include examination scope expansion criteria and planned expansion sample sizes if relevant indications are identified.
- b) A list of the standards and/or requirements that will be used to evaluate indications identified during NDE of the reactor vessel head (e.g. the specific industry or procedural standards which will be used to evaluate potential leakage and/or flaw indications).

A.3 Boric Acid Corrosion Control Program

- a) Copy of the procedures that govern the scope, equipment and implementation of the inspections required to identify boric acid leakage and the procedures for boric acid leakage/corrosion evaluation.
- b) Please provide a list of leaks and the code class of the components that have been identified since the last refueling outage and associated corrective action documentation. If during the last cycle, the Unit was shutdown, please provide documentation of containment walk-down inspections performed as part of the BACCP.
- c) Please provide a copy of the most recent self-assessment performed for the BACCP.

A.4 Information related to Steam Generator (SG) inspections

Not inspected.

A.5 Additional information related to all ISI activities

- a) A list with a brief description of ISI related issues (e.g., condition reports) entered into your corrective action program since the beginning of the last refueling outage (for Unit 1). For example, a list based upon data base searches using key words related to piping such as: ISI, ASME Code, Section XI, NDE, cracks, wear, thinning, leakage, rust, corrosion, boric acid or errors in piping examinations.
- b) Please provide names and phone numbers for the following program leads:  
  
 ISI contacts (Examination, planning)  
 Containment Exams  
 RPVH Exams  
 Snubbers and Supports  
 Repair and Replacement program manager  
 Licensing Contact  
 Site Welding Engineer  
 Boric Acid Corrosion Control Program

**B. Information to be provided on-site to the inspector at the entrance meeting (November 20, 2006):**

B.1 ISI / Welding Programs and Schedule Information

- a) Updated schedules for ISI / NDE activities, including SG ISI, planned welding activities, and schedule showing contingency repair plans, if available.
- b) For ASME Class 1 and 2 welds selected by the inspector from the lists provided from part A of this enclosure, please provide copies of the following documentation for each subject weld:

- i) The weld data sheet (traveler)
  - ii) Weld configuration and system location
  - iii) Applicable Code Edition and Addenda for weldment
  - iv) Applicable Code Edition and Addenda for welding procedures
  - v) Applicable weld procedures (WPS) used to fabricate the welds
  - vi) Copies of procedure qualification records (PQRs) supporting the WPS from B.1.b.v
  - vii) Copies of mechanical test reports identified in the PQRs above
  - viii) Copies of the nonconformance reports for the selected welds (If Applicable)
  - ix) Radiographs of the selected welds and access to equipment to allow viewing radiographs (If RT was performed)
  - x) Copies of the preservice examination records for the selected welds.
  - xi) Copies of welder performance qualifications records applicable to WPS, including documentation that welder maintained proficiency in the applicable welding processes specified in the WPS (At least six months prior to date subject work)
  - xii) Copies of Inspector Certifications (VT, PT, UT, RT) *As applicable*
- c) For the ISI related corrective action issues selected by the inspector from part A of this enclosure, provide a copy of the corrective actions and supporting documentation.
  - d) For the nondestructive examination reports with recordable indications on Code Class 1 & 2 systems selected by the inspector from section A above, provide a copy of the examination records, examiner qualification records, and associated corrective action documents.
  - e) A copy of (or ready access to) most current revision of the ISI Program Manual and Plan for this Interval.
  - f) Copy of the NDE procedures used to perform the examinations selected by the inspector from the activities identified in section A of this enclosure (including calibration and flaw characterization/sizing procedures). For ultrasonic examination procedures qualified in accordance with ASME Code, Section XI, Appendix VIII, provide documentation supporting the procedure qualification (e.g., the EPRI performance demonstration qualification summary sheets). Also, include documentation of the specific equipment to be used (e.g., ultrasonic unit, cables, and transducers including serial numbers).

## B.2 Reactor Pressure Vessel Head (RPVH)

- a) Provide the NDE personnel qualification records for the examiners who will perform examinations of the RPVH.
- b) Provide copy of the procedures that will be used to perform the bare metal visual examination, surface examination, and the volumetric examination of the RPVH Nozzles. (As applicable).
- c) Provide drawings showing the following: (If a visual examination is planned for the upcoming refueling outage)



- i) RVH and CRDM nozzle configuration
- ii) RVH insulation configuration

The drawings listed above should include fabrication drawings for the nozzle attachment welds as applicable.

- d) Copy of evaluation or calculation demonstrating that the scope of the visual examination of the upper head will meet the 95% minimum coverage required by NRC Order EA-03-009 (If a visual examination is planned for the upcoming refueling outage).
- e) If volumetric examinations are planned for the upcoming outage, please provide documentation that demonstrates the examination coverage meets the requirements of NRC Order EA-03-009.
- f) Provide a copy of the procedures that will be used to identify the source of any potential boric acid leaks from pressure retaining components above the RPVH. If no explicit procedures exist which govern this activity, provide a description of the process to be followed including personnel responsibilities and expectations. Please provide the results of any inspection performed during the upcoming outage to identify the source of potential boric acid leaks from pressure retaining components above the RPVH.
- g) Provide a copy of the updated calculation of effective degradation years (EDY) for the RPVH susceptibility ranking.
- h) Provide copy of (or access to) the vendor qualification report(s) that demonstrates the detection capability of the NDE equipment used for the RPVH examinations. Also, identify any changes in equipment configurations used for the RPVH examinations which differ from that used in the vendor qualification report(s).

### B.3 Boric Acid Corrosion Control Program (BACCP)

- a) Please provide boric acid walk down inspection results, an updated list of boric acid leaks identified so far this outage, associated corrective action documentation, and overall status of planned boric acid inspections.
- b) Please provide any engineering evaluations completed for boric acid leaks identified since the end of the last refueling outage. Please include a status of corrective actions to repair and/or clean these boric acid leaks. Please specifically indicate which known leaks, if any, have remained in service or will remain in service as active leaks.
- c) In accordance with NRC IP 71111.08, the inspectors would like to conduct an independent boric acid walk down of the Reactor Building early in the inspection week. Please have knowledgeable BACCP staff available to accompany the inspector during the walk down.

### B.4 Information related to Steam Generator (SG) inspections

Not inspected.

B.5 Codes and Standards

- a) Ready access to: (i.e., copies provided to the inspector to use for the duration of the inspection at the on-site inspection location, or room number and location where available)
  - i) Applicable editions of the ASME Code (Sections V, III, IX and XI) for the inservice inspection program and the repair/replacement program.

Inspectors Contact Information:

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Reactor Inspector  
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