ML18115A006

From:	Williams, Robert
To:	"david.haile@duke-energy.com"
Subject:	2018 Oconee Triennial Heat Sink Inspection Notification
Date:	Monday, April 23, 2018 10:27:00 AM
Attachments:	Oconee Heat Sink RFI 2018002 - REW.pdf

David Haile:

Attached is the inspection notification and initial information request for the upcoming NRC Triennial Heat Sink Inspection
currently scheduled to begin the week of June 18, 2018. Please confirm that you have received this request. If there are any questions about this inspection, or the material requested, please contact me via email, or at the phone number or address included below. Thanks,

Robert

Robert E. Williams Jr., PhD
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Oconee Nuclear Station – NOTIFICATION OF INSPECTION AND REQUEST FOR INFORMATION

David Haile:

From June 18 – 22, 2018, the Nuclear Regulatory Commission (NRC) will perform the triennial portion of the baseline heat sink inspection at the Oconee Nuclear Station in accordance with NRC inspection procedure IP 71111.07, “Heat Sink Performance.”

Experience has shown that this inspection is resource intensive for both the NRC inspectors and your staff. In order to minimize the impact to your onsite resources and to ensure a productive inspection, we are requesting in advance documents needed for this activity. Section A of the enclosure identifies information to be provided prior to the inspection to ensure adequate sample selection and preparation. The NRC requests that these documents be provided to the lead inspector no later than June 6, 2018. Section B of the enclosure identifies additional information the inspectors will need upon arrival at the site to complete the review of inspection samples. The inspection staff will appreciate if all the documents requested 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.

Please note that our inspection dates are subject to change based on your updated schedule of outage activities. If there are any questions about this inspection, changes to the schedule of activities, or the material requested, please contact the lead inspector, Robert Williams Jr., at (404) 997-4664 or Robert.Williams@nrc.gov or the Engineering Branch 3 Chief, Brian Bonser at (404) 997-4653.

In accordance with Title 10 of the Code of Federal Regulations 2.390, “Public Inspections, Exemptions, Requests for Withholding,” 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 component of NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

PAPERWORK REDUCTION ACT STATEMENT

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.

PUBLIC PROTECTION NOTIFICATION

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.

HEAT SINK PERFORMANCE DOCUMENT REQUEST

Inspection Dates: June 18 – 22, 2018

Inspection Procedures: IP 71111.07, "Heat Sink Performance" dated 12/08/16

Inspectors: Robert Williams Jr., Sr. Reactor Inspector

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 (preferred), in care of Robert Williams by June 6, 2018, 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 (Section B of this enclosure). We ask that the specific items selected from the lists be available and ready for review on the first day of inspection. *Please provide requested documentation electronically if possible. If requested documents are large and only hard copy formats are available, please inform the inspector, and provide subject documentation during the first day of the onsite inspection. If you have any questions regarding this information request, please call the inspector as soon as possible.

Heat Exchangers and Service Water Equipment

1. List of heat exchangers (HXs) or equipment cooled by service water (SW) directly or indirectly.

2. Include the risk ranking from the site specific risk assessment for each listed HX.

3. Detail whether any cleaning or inspection activities are planned during the proposed onsite inspection period for any of the listed HXs.

4. For HXs directly cooled by SW, provide the testing, inspection, maintenance, and monitoring of biotic fouling and macrofouling program documents.

5. Detail the HX performance inspection methods for HXs that are inspected/cleaned.

6. Response to Generic Letter 89-13 including any regulatory commitments made.

7. Design Basis documents associated with the SW system.

8. Design Basis documents associated with the Ultimate Heat Sink (UHS).

9. SW system flow diagrams.

10. Recent Health Reports associated with the SW System and systems that are cooled by SW.

11. List of SW system related corrective action documents (with a brief description) which have received a Root Cause Analysis or an elevated severity level in the last

three years.

12. Recent Operating Experience Events (last three years).

13. List of applicable Codes and Industry Guidelines.

14. List of findings and violations in the heat sink/heat exchanger performance area for the last three years.

15. List of redundant or infrequently used HXs.

16. Chemistry Program for safety-related HXs.

17. Detail whether the UHS is above ground encapsulated by embankments, weirs or excavated side slopes; underwater weir or excavation; or forced draft cooling tower or spray pond.

18. Provide a list of buried or inaccessible piping and the piping test program, inspection or monitoring program.

19. List of safety-related and non-safety related valve interfaces.

20. Most recent self-assessment reports performed on the UHS and SW systems.

B. Information to be provided on-site to the inspector at the entrance meeting (June 18, 2018):

Heat Exchangers and Service Water Equipment
The inspector will select two to four heat exchangers and/or heat sink samples as required by the inspection procedure during in-office preparation. The following items will be requested when the selections are made:

1. Updated list of System Engineers.

2. List of any through-wall leaks including completed or planned corrective actions and structural evaluations.

3. Provide a copy of the corrective actions and supporting documentation.

4. For the HXs that have Visual and/or Eddy Current Testing performed, provide a copy of the written procedures used, examination records, examiner qualification records, and associated corrective action documents.

5. Heat transfer calculations.

6. Evaluations for the potential of water hammer.

7. Documentation for controls and operational limits for excessive flow induced vibrations.

8. Periodic flow test results at/or near maximum design flow.

9. For an UHS that is encapsulated by embankments, weirs, or excavated side slopes, provide third party dam inspection results, and documentation showing that there is sufficient reservoir capacity.

10. For an UHS that is an underwater weir or excavation, provide documentation demonstrating:
    - Periodic monitoring and trending of sediment build-up
    - Sufficient reservoir capacity
    - Considerations for adjacent non-seismic and/or non-safety related structures of possible degradation or blocking of safety-related flow paths due to severe weather or seismic events
    - Performance monitoring of heat transfer capabilities
    - Performance monitoring of UHS structural integrity
    - SW flow balance test results

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