



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II**

245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

July 1, 2016

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3R
Chattanooga, TN 37402-2801

**SUBJECT: WATTS BAR NUCLEAR PLANT – NOTIFICATION OF INSPECTION AND
REQUEST FOR INFORMATION**

Dear Mr. Shea:

From July 26 through September 24, 2016, the U.S. Nuclear Regulatory Commission (NRC) will perform an inspection of the independent spent fuel storage installation (ISFSI) Dry Run and Initial Loading activities at the Watts Bar Nuclear Plant using NRC Inspection Procedures 60854, 60855, 60856, and 60857. Experience has shown that this inspection is resource-intensive both for the NRC inspectors and your staff. In order to minimize the impact to your onsite resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. These documents identify the information which the inspectors 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 Mr. Russell Stroud of your licensing organization. Our inspection dates are subject to change based on changes to your schedule for ISFSI activities. If there are any questions about this inspection or the material requested, please contact the lead inspector, Robert Carrion, at 404-997-4522 (Robert.Carrion@nrc.gov).

In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 2.390, "Public inspections, exemptions, requests for withholding," of the NRC's "Agency Rules of Practice and Procedure," 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 Agencywide Documents Access and Management System (ADAMS); accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Shakur A. Walker, Chief
Engineering Branch 3
Division of Reactor Safety

Docket Nos. 050-390, 050-391, and 072-1048
License Nos. NPF-90 and NPF-96

Enclosure:
Pre-Inspection Document Request

cc: Distribution via Listserv

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OFFICE	RII:DRS/EB3	RII:DRS/EB3					
SIGNATURE	RPC1	SAW4					
NAME	R. Carrion	S. Walker					
DATE	6/30/2016	7/1/2016					
E-MAIL COPY	YES NO	YES NO					

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PRE-INSPECTION DOCUMENT REQUEST

Inspection Dates:

July 26–28, 2016 (Tuesday - Thursday)

MPC Fluid Ops and Cask Drying Operations - Dry Run

August 8-12, 2016 (Monday-Friday)

Inspection of Upgraded Auxiliary Building Crane

August 30-31, 2016 (Tuesday - Wednesday) - TEAM INSPECTION

Outside Pad Operations – Dry Run

September 14–15, 2016 (Wednesday - Thursday)

Wet Operations – Dry Run

September 19–September 24, 2016 (Monday – Saturday)

Initial Loading Campaign

Dry Run Demonstration Inspection Procedures:

IP 60854, Preoperational Testing of an Independent Spent Fuel Storage Installation

IP 60856, Review of 10 CFR 72.212(b) Evaluations

IP 60857, Review of 10 CFR 72.48 Evaluations

Initial Loading Campaign:

IP 60855, Operation of an Independent Spent Fuel Storage Installation

A. Information Requested for the In-Office Preparation Week

The following information should be made available to the Region II office by July 15, 2016, to facilitate the selection of specific items that will be reviewed during the onsite inspection weeks. The inspectors will select specific items from the information requested and then request from your staff additional documents needed during the onsite inspection weeks (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 via your SharePoint web site, if possible. If the requested documents are large and/or only hard copy formats are available, please inform the lead inspector, Robert Carrion, and provide the subject documentation during the first day of the onsite inspection. We understand that any proprietary information reviewed by the inspectors will be appropriately protected against being released to the public. If you have any questions regarding this information request, please call Robert Carrion, as soon as possible.

Enclosure

Updated Schedules for Independent Spent Fuel Storage Installation Activities

Procedures and Programs

- Independent Spent Fuel Storage Installation (ISFSI) Operational Procedures (Welding, non-destructive examination (NDE), Loading, De-watering, Backfilling, etc.)
- Leak Testing Procedure for Canister
- Transient Combustible and Flammable Substances Program

ISFSI-Related Evaluations

- Fire Hazards Evaluation for ISFSI Cask Hauling and Storage
- Explosion Hazards Evaluations for the ISFSI Cask Hauling and Storage
- Cask Transport Path Evaluation of Buried Components
- 50.59 Evaluations for cask system use
- 72.212 Evaluation
- 72.48 evaluations applicable to Holtec at Watts Bar
- Safe Load Path Evaluation
- Emergency Preparedness Evaluation related to ISFSI
- Site-Specific Tornado Missile Evaluation for the Holtec HI-STORM FW System

Radiation Protection

- Procedures for Fuel Assembly Selection
- Radiological Emergency Plan
- Radiation Protection (ALARA) Work Plan for ISFSI-Related Work Activities
- Watts Bar ISFSI Dose Rate Evaluation for ISFSI
- Fuel Characterization and Verification Documents

Training and Qualifications

- Training Department Lesson Packages for ISFSI
- Personnel Training, Certifications, and Qualification Records

Corrective Action Program

- Watts Bar ISFSI Program Audit
- List of corrective action documents (Condition Reports, etc.) related to ISFSI issues

Audits and Self-Assessments

- QA audits for yoke, transfer cask, and any other components related to the ISFSI
- QA self-assessments for ISFSI
- Inspections of ISFSI Lifting Devices, including the spent fuel pool crane, sling, hooks, etc.

Information Specific for the Auxiliary Building Crane Upgrade to Single-Failure Proof:

- Copies of all NUREG 0612 Phase I and II correspondence between the licensee and the NRC.
- A list of any major modifications that were made to the crane after installation.
- 10 CFR 50.59 Screenings/Evaluations which established that the Auxiliary Building Crane has been designed/modified to safely handle the heavy loads associated with the Holtec International HI-STORM FW System.

- Drawings related to modifications made to the Auxiliary Building Crane.
- Specifications related to the Auxiliary Building Crane and associated hardware (slings, hooks, etc.).
- Procedures related to the operability of the crane, including designated safe load paths and interlocks which prevent travel over stored spent fuel assemblies.
- Maintenance procedures of the Auxiliary Building Crane used to perform the frequent and periodic inspections as required by ASME B30.2, Sections 2-2.1.2 and 2-2.1.3, and the results from the most recent periodic inspections.
- Compliance matrix of crane license basis requirements (if one already exists).
- Names and contact information for the Auxiliary Building Crane Modification program leads.

B. Information requested to be provided on site for the inspectors at the Entrance Meeting (July 25, 2016)

Please provide the information requested below in hard copy or electronic (preferred) format to the lead inspector at the entrance meeting in order to finalize the planning of inspection activities onsite. Prior to the onsite inspection, the inspector will select part of the inspection samples from the information provided in response to section A of this Enclosure, and then request additional information needed to complete the review. There is a possibility that some of the inspection samples for which direct observation is desired will not be selected until the inspector arrives onsite and confirms the current schedule of activities for that week.

- Updated schedules for ISFSI activities, including welding and NDE, if available.
- Copies of NDE personnel qualifications
- Welder Performance Qualifications
- Welding Operator Performance Qualifications
- Ready access (i.e., copies provided to the inspector to use for the duration of the inspection at the onsite inspection location, or room number and location where available) to applicable editions of the ASME Code and EPRI and industry standards referenced in the procedures used to perform the ISFSI activities.

Information Requested Specific to the Auxiliary Building Crane Upgrade Onsite Inspection Week – August 8-12

- Original crane installation package (or crane upgrade) including the welding requirements, rated load test of the bridge (125 percent of the rated load), inspection results after the load test, temperature at time of the load test, and vendor acceptance records for the crane. Provide additional information of most recent load test information with temperature at time of load test.
- Copy of crane manufacturer's operating manual/maintenance requirements.
- The licensee requirements for the crane operators (physicals, training, etc.).
- List of the condition reports written on the crane during the past two years.
- Last inspection results of structural steel, rails, rail hold-down attachments, etc., which support the crane.

- Manufacturer's specifications for the wire rope in use on the main hoist.
- Analysis of the building structure and the crane structure to support the crane during a design basis seismic event while a rated capacity load is suspended.

Inspector Contact Information:

Robert Carrion
Senior Reactor Inspector
404-997-4522
robert.carrion@nrc.gov

Mailing Address:

US NRC Region II
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Suite 1200
Atlanta, GA 30303