



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

June 20, 2012

Mr. Joseph W. Shea
Manager, Corp. Nuclear Licensing Programs
Tennessee Valley Authority
1101 Market Street, LP 4B-C
Chattanooga, TN 37402-2801

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

Dear Mr. Shea:

On August 13-17, 2012, the NRC will perform a baseline Radiation Safety Inspection at Watts Bar Nuclear Plant, (NRC Inspection Procedures 71124.06, 71124.07, 71124.08, and Radiation Safety Sections of 71151). Additionally, on September 10-14, 2012, the NRC will perform the outage portion of the inspection using NRC Inspection procedure 71124.01.

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 on-site resources and to ensure a productive inspection, we have enclosed a request for documents needed for this activity. It is important that all of these documents are up to date and complete, thereby minimizing the number of additional documents requested during the preparation and/or the onsite portions of the inspection. The inspector has requested that the subject informational material be provided in CD format on or before July 23, 2012.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection is Tommy Morgan of your organization. If there are any questions about this inspection or the material requested, please contact the lead inspector, Ruben Hamilton at (404) 997-4672, or the Chief of Plant Support Branch 1, Brian Bonser at (404) 997-4653.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if any, 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 Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Brian R. Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

Docket No. 50-390
License No. NPF-90

Enclosure:
Pre-Inspection Document Request

cc w/encl: (See page 3)

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cc w/encl: (See page 3)

Distribution w/encl:

C. Evans, RII EICS (Part 72 Only)
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OE Mail (email address if applicable)
RIDSNNRRDIRS
PUBLIC
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RidsNrrPMWattsBar2 Resource

X PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE X NON-SENSITIVE
ADAMS: X Yes ACCESSION NUMBER: **ML12174A277** SUNSI REVIEW COMPLETE X FORM 665 ATTACHED

OFFICE	RII: DRS/PSB1	RII: DRS/PSB1			
SIGNATURE	RA/RH	RA/BB			
NAME	R. HAMILTON	B. BONSER			
DATE	06/18/2012	06/19/2012			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: \\NRC.GOV\NRC\R2\OFFICE\DRS\IPSB1\INFORMATION REQUEST LETTERS\WATTS BAR\WATTS BAR 2012 RP DOCUMENT REQUEST REV1.DOCX

cc w/encl:

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Pre-Inspection Document Request
Public Radiation Safety Cornerstone

Licensee: Watts Bar Nuclear Plant

Docket Numbers: 05000390

Inspection Dates: August 13-17, 2012, and September 10-14, 2012

Inspection Procedures:

IP71124.01	Radiological Hazard Assessment (9/10-14/12)
IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment
IP 71124.07	Radiological Environmental Monitoring Program
IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation
IP 71151	Performance Indicator Verification

Note: This is a broad list of the documents the NRC inspectors will be interested in obtaining and reviewing prior to the on-site inspection visit. The current version of these documents is expected unless specified otherwise. Electronic media is preferred, if readily available. (The preferred file format is Word or searchable "pdf" files on CDROM. Please provide three copies of each electronic media device submitted.) Information in the "document lists" should contain enough information to be easily understood by someone who has knowledge of the subject. The lead inspector can answer questions regarding questions on specific information needs with licensee staff and may request additional documents.

Documentation for the inspection procedures from July 12, 2010, to the present is requested unless otherwise specified in the request. We would prefer as much of the information as possible in electronic form. An index to the CD contents is also helpful. For those items requesting a list of documents/areas, the inspector will select documents/areas from the list for on-site review.

If you have any questions, please call Ruben Hamilton at (404) 997-4672. Thank you in advance for all of your effort in putting together this material.

General Information Needed

- Contact Phone Numbers for:
 - Radiation Protection contacts
 - Chemistry contacts
- Procedure for issuing Nuclear Condition Reports (SR and PER) and assessing issues for risk significance and follow-up actions.
- Updated Final Safety Analysis Report Chapters 11, Effluents/Radwaste; and Chapter 12 Radiation Protection.

Enclosure

- Current version/revision of the Offsite Dose Calculation Manual (ODCM).
- Annual Radiological Environmental Operating Report (AREOR) for Calendar Year (CY) 2010, and CY 2011.
- Annual Radiological Effluent Release Report (ARERR) documents for CY 2010, and CY 2011.
- Current Part 61 Analysis Results for Dry Active Waste (DAW).
- Plant Management, Radiation Protection, and Chemistry organizational charts with contact numbers.
- Corrective action program procedure.
- Outage schedule of major activities (Gantt chart if available).
- Audits and self-assessments performed since the last inspection that encompasses the areas of (1) radiation protection, (2) access controls, (3) radiological effluents, (4) radiological environmental monitoring to include meteorological tower (5) solid radioactive waste processing and (6) shipping and transportation of radioactive material.

71124.01 - Radiological Hazard Assessment and Exposure Controls

(Last Inspected 6/6/11)

- List of outage RWPs.
- Plant maps of all Locked HRAs and VHRA's. Include areas with the potential to become a LHRA during routine operations or outages.
- Procedures related to HP controls (e.g. Posting, labeling, surveys, RWPs, contamination control, HRA/LHRA/VHRA control, key control, control of divers, special controls during fuel offload, hot spots, etc.).
- List of the 10 most exposure significant work areas within radiation areas, high radiation areas (<1R/hr), or airborne radioactivity areas in the plant. This may include areas with low dose rates but high collective dose. Identify any high radiation areas with significant dose gradients (factor of five or more), including underwater diving activities.
- Procedures related to release of personnel and materials (e.g. release surveys, decontamination, guidance for alarm follow up, etc.).
- List of Nationally Tracked Sources and any change-of-ownership transactions.
- List of all non-fuel items stored in spent fuel pool.
- All self-assessments or audits covering HP controls since June 6, 2011, (if none, then provide the most recent) LIST of CRs related to HP controls where the cause was listed as human performance (radworker error) or human performance (HP technician error) issued since June 6, 2011. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*
- All CRs related to Nationally Tracked Sources since June 6, 2011.

71124.06: Radioactive Gaseous and Liquid Effluent Treatment

(Last Inspected 7/12/10)

- Provide Procedures/Guidance Documents for:
 - collection, analysis, release and dose evaluations for gaseous and/or liquid effluents Include guidance for both batch and continuous modes
 - determination of set-points for main plant gaseous and liquid effluent discharge pathways

- Provide a list of any significant changes to the ODCM since July 12, 2010.
- Provide a list of significant changes to the radioactive effluent processing systems since July 12, 2010.
- Provide a list of any non-radioactive systems that have become contaminated since July 12, 2010.
- Provide a list of any abnormal gaseous or liquid releases identified since July 12, 2010.
- Provide last two gaseous effluent permits and last two liquid effluent permits.
- Provide a list of 10 CFR 50.75(g) entries made since July 12, 2010.
- Provide system health reports for radiological effluent/process monitoring systems since July 12, 2010.
- Provide a list of the main liquid and gaseous effluent pathway process monitors listed as out-of-service (OOS) since July 12, 2010. *[Note do not include monitors listed as OOS for less than 24 hours]*
- List of significant changes to the effluent monitoring program since July 12, 2010, as documented within the ODCM.
- Provide groundwater monitoring results since July 12, 2010.
- Inter-laboratory comparison program results (onsite count room) since July 12, 2010.
- Last 2 surveillance test results for Aux Building Ventilation and both upper and lower Containment Purge Ventilation systems on Unit 1. If advanced source term has not been adopted include last set of charcoal surveillances.
- Copies of all audits, self-assessments, and/or reviews of liquid and gaseous effluent monitoring program activities since July 12, 2010. The data should include any reviews conducted of vendor activities and their facilities.
- List of Nuclear Condition Report documents (SR and PER) generated since July 12, 2010, as a result of gaseous and liquid effluent processing and/or release activities including Engineered Safety Feature ventilation systems. *[Note: only titles/summary statement should be provide for use by the inspectors to select a sample of issues for in-depth review]*

71124.07: Radiological Environmental Monitoring Program (REMP)

(Last Inspected 7/12/10)

Prior to the Onsite Inspection

- Provide Procedures/Guidance Documents for:
 - collection and analysis of environmental samples
 - calibration and maintenance of REMP air and/or water samplers
 - calibration of meteorological monitoring instrument loop (wind speed & direction, air temperature sensors currently in use)
 - monthly/quarterly meteorological instrumentation surveillance requirements (control room and local tower activities)
- Records since July 12, 2010, for:
 - calibrations of REMP air and water sampling equipment (as applicable)
 - meteorological monitoring instrument calibrations (wind speed & direction, air temperature)
 - detailed inter-laboratory comparison program results (environmental lab)

Enclosure

- Copies of all audits, self-assessments, and/or reviews of REMP activities. The data should include any reviews conducted of vendor activities and their facilities.
- List of systems, structures, or components (SSCs), identified as credible mechanism(s) having the potential for release of licensed material to the groundwater environs.
- List of significant REMP changes documented within the ODCM since July 12, 2010.
- List of Nuclear Condition Reports (SR and PER) generated as a result of REMP activities since July 12, 2010. *[Note: only titles/summary statement should be provide for use by the inspectors to select a sample of issues for in-depth review]*

71124.08: Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation

(Last Inspected 7/12/10)

- Site and corporate procedures associated with radioactive waste processing and handling, storage, and transportation of radioactive material (RAM), including:
 - Storage and handling of RAM including non-RCA and satellite RCA locations
 - Waste stream mixing, sampling, concentration averaging, and use of scaling factors
 - Monitoring impact of long-term storage (e.g. build up of gases produced by waste decomposition, chemical reactions, container deformation, loss of container integrity, re-release of free-flowing water)
 - Transferring of resin and/or sludge into shipping/disposal containers; dewatering and waste stabilization
 - Preparing packages and documentation for shipping radioactive materials
 - List of RAM storage areas, including satellite RCAs
 - Process Control Program
- List of changes to the radioactive waste processing systems since July 12, 2010, and copies of the associated 50.59 screening documentation.
- Log of radioactive material shipments (LSA I, II, III; SCO I, II, Type A, or Type B) since July 12, 2010. (The inspectors will select 3-5 packages to review in detail.)
- List of condition reports (SR and PER) generated since July 12, 2010, related to radioactive solid waste processing and packaging, handling, storage, and shipping of radioactive materials.

71151 – Performance Indicator (PI) Verification

(Last Inspected 6/6/11)

- Monthly PI reports since June 6, 2011, and copies of associated condition reports for any RETS/ODCM Radiological Effluent occurrences.
- Liquid and gaseous effluent release permits, which specify the monthly, quarterly, and annual curies, released by isotope and associated public dose assessments since June 6, 2011.

Assistance Requested During On-Site Inspection

- An inspector will need to accompany the weekly environmental sample collection run.
- An inspector will need to tour the Meteorological Tower and will need to be able to discuss reliability and data recovery issues.
- An inspector will need to observe effluent sample collection and walk-down and discuss effluent monitors and processing.
- An inspector will need to observe any shipments or receipts of radioactive material.

Inspector Contact Information:

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Enclosure