



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

September 1, 2011

Mr. R. M. Krich
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3R-C
Chattanooga, TN 37402-2801

**SUBJECT: SEQUOYAH NUCLEAR PLANT - NOTIFICATION OF INSPECTION AND
REQUEST FOR INFORMATION**

Dear Mr. Krich:

On September 12-16, 2011, the NRC will conduct a baseline Radiation Safety Inspection at Sequoyah Nuclear Plant. The inspection will evaluate activities in the Occupational and Public Radiation Safety cornerstone using NRC Inspection Procedures 71124.04, 71124.05, 71124.06, 71124.07, and the Occupational and Public Radiation Safety Sections of 71151. 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 on-site resources and to ensure a productive inspection, we have enclosed a request for documents needed for this activity. The NRC requests that these documents be provided to the inspectors on site no later than September 12, 2011. This will increase the time available for plant staff to assemble the documents.

Most of these procedures went into effect at the beginning of 2010 and have not been performed at Sequoyah Nuclear Plant in their current form. Therefore, the base date for documentation requested is from January 1, 2010.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Don Sutton (423-843-6539) 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 Plant Support Branch 1 Chief, 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 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.html> (the Public Electronic Reading Room).

Sincerely,

/RA

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

Docket No.: 50-327, 328
License No.: DPR-77 and 79

Enclosure: Pre-Inspection Document Request

cc w/encl.: (See page 3)

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cc w/encl.: (See page 3)

☒ PUBLICLY AVAILABLE

☐ NON-PUBLICLY AVAILABLE

☐ SENSITIVE

☒ NON-SENSITIVE

ADAMS: ☐ Yes ACCESSION NUMBER: __ML112440650_____

☐ SUNSI REVIEW COMPLETE ☐ FORM 665

ATTACHED

OFFICE	RHAMILTON	BBONSER					
SIGNATURE	RA	RA					
NAME	RHAMILTON	BBONSER					
DATE	8/31/2011	9/1/2011					
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRSI\PSB1\INFORMATION REQUEST
LETTERS\SEQUOYAH\SEQUOYAH RP DOCUMENT REQUEST FOR 2011004.DOCX

cc w/encl:
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Site Vice President
Sequoyah Nuclear Plant
Tennessee Valley Authority
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Letter to R. M. Krich from Brian Bonser dated September 1, 2011.

SUBJECT: SEQUOYAH NUCLEAR PLANT - NOTIFICATION OF INSPECTION AND
REQUEST FOR INFORMATION

Distribution w/encl:

RIDSNNRRDIRS

PUBLIC

RidsNrrPMSequoyah Resource

Document Request List

Inspection Dates: September 12-16, 2011

Inspection Procedures:

IP 71124.04	Occupational Dose Assessment
IP 71124.05	Radiation Monitoring Instrumentation
IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment
IP 71124.07	Radiological Environmental Monitoring Program
IP 71151	Performance Indicator Verification

Note: 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). *Note that the inspectors cannot accept data provided on USB or “flash” drives due to NRC IT security policies.* Please organize the information as it is arranged below to the extent possible. Experience has shown that a poorly organized CD leads to a less efficient inspection and places additional burden on licensee staff. If there are questions regarding the documents requested, please do not hesitate to contact the lead inspector.

Assistance Requested During On-Site Inspection

- Identification of work activities during the inspection for inspector observations, including notification of pre-job briefings.
- Health physics assistance in plant walk-downs of effluent treatment systems, meteorology tower, installed radiation monitoring systems, REMP sample collection run.

General Information Request

1. Plant Management, Radiation Protection, and Chemistry organizational charts w/ contact numbers.
2. List of radiation protection procedures.
3. Most recent DAW 10 CFR Part 61 analytical results.
4. Audits and self-assessments performed since January 2010 that encompass the areas of (1) radiation protection, (2) control of radiologically significant areas, and (3) radioactive material control.
5. Electronic copy of relevant UFSAR chapters (e.g. site description, radwaste program, and radiation protection).
6. Corrective Action Program procedures.
7. Procedures for gathering and reporting NRC Performance Indicator data.
8. Procedures associated with the ISFSI facility. Procedures should include:
 - Radiological surveys, postings, and radiation control barricades
 - Environmental monitoring (including TLDs)
 - Loading of casks
 - Routine activities

Enclosure

71124.04 – Occupational Dose Assessment

1. Procedures related to occupational dose assessment (e.g. external dose monitoring, dosimetry issuance and use, guidance for multi-badging, personnel contamination events, storage/care of personal dosimeters, use of electronic dosimeters, *in-vivo* and *in-vitro* internal dose assessment, QC for whole body counter, use of passive monitoring if applicable, declared pregnant workers)
2. NVLAP accreditation documentation for the current dosimetry used by the site.
3. Inter-laboratory comparison program results for the whole body counting system since January 2010.
4. Results of blind spike testing completed of the dosimetry processor since January 2010.
5. Results of comparison(s) or evaluations of Electronic Dosimeter (ED) vs. TLD response characteristics and neutron exposure estimates vs. TLD results since January 2010
6. List of all positive whole body counts, in vitro, or air-sampling analyses which resulted in an assigned CEDE equal to or exceeding 10 millirem since January 2010. *[Note: only a listing should be provided for use by the inspectors to select a sample of issues for in-depth review during the onsite inspection]*
7. List of all personnel contamination events identified since January 2010. *[Note: only a listing should be provided for use by the inspectors to select a sample of issues for in- depth review during the onsite inspection]*
8. All audits and self-assessments of the dosimetry program (including audits of the lab that processes site dosimetry) since January 2010.
9. Identify the system(s) utilized to track and trend collective dose, providing sufficient detail to assess the ability of the system to detect and control work activity specific trends.
10. List of CRs generated since January 2010, for internal or external dosimetry issues/events. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*
11. Available for onsite review during the inspection:
 - Records of personnel monitored for radiation exposure that show the total TEDE to-date for each person. Include the worker's dose limit if available.
 - Records for declared pregnant workers in the last 12 months, listing their monthly radiation exposure during the term or year-to-date.

71124.05 - Radiation Monitoring Instrumentation

1. Procedures/Guidance Documents for:
 - use of portable instrument calibrators (e.g. Shepherd calibrator)
 - calibration and functional test/source checks of portable radiation detection instrumentation
 - calibration and functional tests of small article monitor (SAM), personnel contamination monitor (PCM), portal monitor (PM), whole body counting (WBC) equipment; and continuous air monitors (CAMs)
 - determination of set-points for Area Radiation Monitor (ARM), CAM, PCM, PM and SAM equipment
 - collection and analysis of high-range, post accident effluent samples
 - QA program for count room instruments
2. The last 2 calibration records for the following monitors:
 - 0-RE-90-101B Auxiliary Building Vent Monitor
 - 0-RE-90-400 Shield Building Vent Monitor
 - 0-RE-90-122 Liquid Waste Disposal

- 0-RE-90-99 and 256 Condenser Air Ejector
 - 1-RE-90-271 and 273 Containment High Range Area Radiation Monitors (RG 1.97)
 - 0-RE-90-135 Main Control Room Area Radiation Monitor
 - All personnel contamination and tool monitors at RCA exit point
 - Count room high-purity Germanium detector no. 1
 - Count room liquid scintillation detector no. 1
3. Certificates for the sources used to calibrate the above requested monitors showing traceability to a national standard (NIST), as applicable
 4. The last 2 test records of the portable instrument calibrator (Shepherd validation testing)
 5. Copies of all audits, self-assessments, and/or reviews of area and personnel monitoring equipment and portable radiation survey instruments generated since January 2010. The records should include any reviews conducted of vendor facilities, e.g., outside calibration laboratories, as applicable.
 6. List of CRs generated since January 2010, related to portable instruments, effluent and area monitors, CAMs, RCA release point monitors, WBCs, and count room instruments. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

1. 2009 and 2010 Annual Radioactive Effluent Reports.
2. Offsite Dose Calculation Manual (ODCM) and a list of changes made since the last revision
3. Procedures/Guidance Documents for:
 - collection, analysis, release and dose evaluations for gaseous and liquid effluents
 - groundwater monitoring program
 - determination of rad monitor set-points for main plant gaseous and liquid effluent discharge pathways
4. List of changes made to radioactive effluent processing systems since January 2010.
5. Schedule of, and point of contact information, for REMP sampling activities (TLD, air samples, etc.) occurring during the period of the inspection.
6. List of any non-radioactive systems that have become contaminated since January 2010.
7. List of any unmonitored, unplanned, or otherwise abnormal gaseous or liquid releases since January 2010.
8. List of 10 CFR 50.75(g) entries made since January 2010.
9. List of liquid and gaseous effluent monitors listed as out-of-service (OOS) since January 2010.
10. Groundwater monitoring results since January 2010.
11. Inter-laboratory comparison program results (for onsite count lab) since January 2010.
12. Results of the last 2 filtration system (HEPA/Charcoal) surveillances for gaseous effluent pathways.
13. All audits, self-assessments, and/or reviews of the radioactive effluent monitoring program since January 2010. Include any reviews conducted of vendor activities and their facilities, as applicable.
14. List of CRs generated since January 2010, because of gaseous and liquid effluent processing and/or ODCM related activities. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*

71124.07 - Radiological Environmental Monitoring Program (REMP)

1. 2009 and 2010 Annual Radiological Environmental Operating Reports
2. Procedures/Guidance Documents for:
 - collection and analysis of environmental samples
 - calibration and maintenance of REMP air and/or water samplers
 - calibration of meteorological monitoring instruments (wind speed & direction, air temperature, etc.)
 - periodic meteorological instrumentation surveillance requirements
3. Calibration records for REMP air and water sampling equipment (as applicable) since January 2010.
4. Last 2 calibration records for each meteorological monitoring instrument on the primary tower (wind speed & direction and air temperature).
5. Inter-laboratory comparison program results (environmental lab) since January 2010.
6. 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 (e.g. environmental lab).
7. List of systems, structures, or components (SSCs), identified as credible mechanism(s) having the potential for release of licensed material to the groundwater environs
8. List of changes to the REMP (sample locations, sample frequency, type of samples, etc.) since January 2010.
9. List of CRs generated as a result of REMP activities since January 2010. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*

71151: Performance Indicator (PI) Verification

1. Monthly PI reports since January 2010, and copies of associated condition reports for any RETS/ODCM Radiological Effluent occurrences.
2. Liquid and gaseous effluent release permits which specify the monthly, quarterly, and annual, curies released by isotope, and the associated public dose assessments since January 2010.
3. List of all corrective action documents since January 2010, using keywords such as: HRA, LHRA, VHRA, unintended dose, unlocked door, etc.
4. List of all electronic dosimeter (ED) dose rate alarms > 1 R/hr and all ED dose alarms since January 2010.