Panfel, Jacob

From: Panfel, Jacob
Sent: Tuesday, August 15, 2017 2:57 PM
To: 'Kay.Brocklesby@duke-energy.com'
Cc: 'Christopher.Wasik@duke-energy.com'; 'Bob.Meixell@duke-energy.com'
Subject: Upcoming NRC Radiation Safety Inspection at Oconee
Attachments: Oconee 2017004 Radiation Safety Inspection Document Request.pdf

Per my previous email with Bob, attached is the Initial Information Request for the NRC Radiation Safety Inspection scheduled for the weeks of October 30 – November 3 and November 13-17, 2017 at Oconee Nuclear Station.

Please let me know that you received this request. If there are any questions about this inspection, or the material requested, don't hesitate to contact me via email or phone.

Regards,

Jacob Panfel

Jacob Panfel
Health Physics Inspector
Plant Support Branch 1
Division of Reactor Safety
U. S. Nuclear Regulatory Commission, Region II
404-997-4714

Oconee Nuclear Station
Radiation Safety Baseline Inspection
Initial Information Request
Inspection Report: 2017004

During the weeks of October 30 - November 3, 2017 and November 13-17, 2017, the NRC will perform a baseline Radiation Safety Inspection at the Farley Nuclear Plant (NRC Inspection Procedures 71124.01, 71124.02, 71124.03, 71124.04, 71124.05, and 71151).

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. 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 NRC requests that these documents be provided to the inspectors no later than October 16, 2017.

If there are any questions about this inspection or the material requested, please contact the lead inspector, Jacob Panfel (Jacob.Panfel@nrc.gov) at 404-997-4714, or the Plant Support Branch 1 Chief, Brian Bonser (Brian.Bonser@nrc.gov) at 404-997-4653.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public inspections, exemptions, requests for withholding," a copy of this document will be available electronically for public inspection in the NRC Public Document Room, or from the Publicly Available Records 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.

PAPERWORK REDUCTION ACT STATEMENT

This document 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 under control numbers 3150-0008, 3150-0011, 3150-0014, 3150-0044, and 3150-0135.

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.

Pre-Inspection Document Request

Occupational and Public Radiation Safety Cornerstone

Inspection Dates: October 30 - November 3, 2017 and November 13-17, 2017

Documents Due to Region II by: **October 16, 2017**

Licensee: Oconee Nuclear Station

Docket Numbers: 50-269, 50-270, and 50-287

Inspection Procedures:

71124.01	Radiological Hazard Assessment and Exposure Controls
71124.02	Occupational ALARA Planning and Controls
71124.03	In-Plant Airborne Radioactivity Control and Mitigation
71124.04	Occupational Dose Assessment
71124.05	Radiation Monitoring Instrumentation
71151	Performance Indicator Verification (Radiation Safety cornerstones only)

Lead Inspector: Jacob Panfel, Health Physics Inspector

Note: The current version of these documents is expected unless specified otherwise. Electronic media is preferred if readily available. *[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. Pay particular attention to the date ranges for the items requested as they may change from item to item. If there are questions regarding the documents requested, or if the documents cannot be provided by the due date of October 16, 2017, please do not hesitate to contact the lead inspector, Jacob Panfel at (404) 997-4714 or Jacob.Panfel@nrc.gov.

Documentation for the inspection procedures from November 1, 2015 to the present is requested for all procedures, except 71124.01 and 71151, which should be from May 1, 2016 to the present. This reflects the last time these areas were inspected. 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.

Miscellaneous

1. List of primary contacts for each inspection area including names and telephone numbers
2. Plant Management and Radiation Protection organizational charts with contact numbers.
3. List of radiation protection procedures, including title and number.
4. Most recent DAW 10 CFR Part 61 analytical results.
5. Schedule of major activities (Gantt chart if available), including work activities to be conducted during the week of the inspection (i.e., Any work activities that would incur any significant dose, calibrations of plant fixed radiation monitors)
6. Corrective action program (CAP) procedures

71124.01 - Radiological Hazard Assessment and Exposure Controls
(Last Inspected May 2016)

1. List of active Radiation Work Permits (RWPs), including their administrative limits, electronic dosimeter dose rate limit, and dose limit. This list should include associated outage RWPs as well.
2. Timeline of major outage activities (e.g., Gantt chart or similar list).
3. List of locations, or plant maps indicating the location, of all LHRAs and VHRAs. Include areas with the potential to become a LHRA during routine operations or outages.
4. Most recent survey of all Locked HRAs and VHRAs (as applicable).
5. ISFSI information to include surveys, exposure data, as low as reasonably achievable (ALARA) planning and reviews conducted for the last two moves. Also, the last two routine surveys of the facility and any passive area monitoring results for the facility.
6. 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, ISFSI, etc.).
7. Procedures related to release of personnel and materials (e.g. release surveys, decontamination, guidance for alarm follow up, etc.).
8. List of Nationally Tracked Sources, change of owner ship and copies of any National Source Tracking System (NSTS) transaction documentation (e.g., annual reconciliation).
9. Most recent sealed source inventory record.
10. List of all non-fuel items stored in spent fuel pool.
11. Most recent self-assessments and audits covering HP controls since May 1, 2016.
12. List of CAP nonconformance reports (AR, CR, NCR, etc.) related to HP controls (e.g. keyword searches for radworker error, HP technician error, posting issues, HRA/LHRA/VHRA issues, survey problems, etc.) issued since May 1, 2016. This should include CAP nonconformance reports where the cause was listed as human performance. *This should be a list of corrective action documents containing an (AR, CR, NCR, etc.) number and brief description, not full documents.*
13. All CAP nonconformance reports (AR, CR, NCR, etc.) related to Nationally Tracked Sources since May 1, 2016.

71124.02 - ALARA Planning and Controls
(Last inspected November 2015)

1. Site and corporate procedures associated with maintaining exposure ALARA, including those involving ALARA work activities. These procedures should include ALARA program implementation, RWP preparation and worker compliance, estimating and tracking specific exposures for work activities, making changes to dose estimates during task performance, work controls, engineering controls, temporary shielding, exposure mitigation requirements, and source term reduction.
2. List of top five dose jobs for the upcoming refueling outage and associated ALARA planning packages (including dose estimates, work-hour estimates, special HP controls, and dose reduction initiatives).
3. Annual ALARA and refueling outage reports since November 1, 2015.
4. Annual ALARA goals for 2016 and 2017, and the methodology utilized to make the projections.
5. Current status/characterization of plant source term, as well as any relevant plans or actions to reduce it (e.g., Source Term Reduction Strategic Plan).

6. Summaries of the last four ALARA Committee Meetings (e.g., meeting minutes).
7. List of temporary shielding requests generated for the upcoming refueling outage
8. Self-assessments or audits of ALARA program since November 1, 2015
9. List of NCRs, ARs, CRs, etc. related to the ALARA program issued since November 1, 2015. This should be a list of corrective action documents containing NCR, AR, CR, etc. numbers and brief descriptions, not full documents.

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation
(Last inspected November 2015)

1. Site and corporate procedures related to airborne monitoring and control. These procedures should include operation, calibration, maintenance, and set-point determination of air sampling equipment; issuance, use, training, fit-testing, storage, maintenance, and quality assurance (QA) of respiratory protective equipment, including Self-Contained Breathing Apparatus (SCBA) and air-supplied respirators; SCBA maintenance of vital components (i.e., regulators); determination and verification of Grade D air for SCBAs; use of containment purge; use of portable High Efficiency Particulate Air (HEPA) / charcoal units; Total Effective Dose Equivalent (TEDE)-ALARA determinations; and alpha air sampling.
2. Two most recent HEPA filter Dioctyl phthalate (DOP) and charcoal test results for the following ventilation systems:
   - Units 1&2 Control Room Ventilation
   - Unit 3 Containment Ventilation
3. All records of grade D air quality certification for breathing air supply systems for SCBAs and air-supplied respirators filling equipment since November 1, 2015.
4. Last two surveillances performed on SCBAs stored for emergency use.
5. Audits or self-assessments covering airborne controls and respiratory protection since November 1, 2015.
6. List of NCRs, ARs, CRs, etc. related to airborne controls and respiratory protection since November 1, 2015. This should be a list of corrective action documents containing NCR, AR, CR, etc. numbers and brief descriptions, not full documents.
7. Available for onsite review by inspector during inspection*:*
   - Inventory, inspection, and maintenance records for SCBA equipment
   - Training records, including fit-testing, for SCBA-qualified individuals
     - List of all licensed operators qualified to use SCBA
     - List of all instrumentation and control personnel qualified to use SCBA
     - List of all HP personnel qualified to use SCBA
   - Training records/certification for individuals qualified to perform maintenance on vital components (e.g. regulators) on SCBA

71124.04 Occupational Dose Assessment
(Last inspected November 2015)

1. Site and corporate procedures related to internal and external dose monitoring (i.e., dosimetry issuance and use). These procedures should include guidance for multi-badging; monitoring in steep/highly variable dose rate gradients; personnel contamination events; storage/care of personal dosimeters; use of electronic dosimeters (EDs) including evaluation of any biases identified relative to TLD monitoring; internal dose assessment (i.e., both *in-vivo* and *in-vitro* bioassay and air sampling capabilities); guidance for calibration, QC, and use of whole body counter (WBC); release of contaminated individuals; use of passive monitoring as screening method for evaluations; special *in-vitro* sample collection

and analysis; and actions for declared pregnant workers (DPW).
2. National Voluntary Laboratory Accreditation Program (NVLAP) accreditation documentation for current dosimetry used by the site.
3. List of all positive WBCs results, *in-vitro* or air sampling analyses that resulted in an assigned committed effective dose equivalent (CEDE) equal to or exceeding 10 millirem since November 1, 2015. *[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]*.
4. List of all personnel contamination events identified since November 1, 2015. *[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].*
5. A list of personnel who have received approved dose extensions since November 1, 2015.
6. Audits or self-assessments covering the dosimetry program since November 1, 2015.
7. List of NCRs, ARs, CRs, etc. related to internal and external dosimetry since November 1, 2015. This should be a list of corrective action documents containing NCR, AR, CR, etc. numbers and brief descriptions, not full documents.

71124.05 Radiation Monitoring Instrumentation
(Last inspected November 2015)

1. Site and corporate procedures related to radiation monitoring instrumentation. These procedures should include use of portable instrument calibrators (e.g., Shepherd/Hopewell calibrators); calibration and functional test/source checks of portable radiation detection instrumentation; calibration and functional tests of small article monitors (SAMs), personnel contamination monitors (PCMs), portal monitor (PMs), WBC equipment, and continuous air monitors (CAMs); determination of set-points for Area Radiation Monitors (ARMs), CAMs, PCMs, PMs and SAMs; QA program for count room instruments (e.g., laboratory inter-comparison data); and collection and analysis of high-range post-accident effluent samples.
2. Last two calibration records for the following instruments:
    - Unit 2 Containment High Range Radiation Monitors (RIA-57/58)
    - Control Room Units 1&2 Area Monitors (RIA-1)
3. List of the following monitors currently in service (including serial number, location, and model information): (*Specific calibration records will be selected for review during the onsite inspection)*
    - All SAMs at radiological controlled area (RCA) exit points
    - All PCMs at RCA exit points
    - All PMs at RCA exit points and the protected area (PA) exit
    - All count room High-Purity Germanium and Liquid Scintillation counters
4. Documentation for the sources used to calibrate the above requested monitors showing traceability to the National Institute of Standards & Technology/National Bureau of Standards (NIST/NBS), and to the primary calibration, as applicable.
5. Last two calibration records of the portable instrument calibrator (e.g., Shepherd/Hopewell validation testing/dose rate curves).
6. Last two calibration records for the WBC (and PM if passive monitoring used). Can be made available on-site the week of inspection.
7. List of any Emergency Action Level (EAL) value(s) associated with installed or portable radiation monitoring instrument indication(s).
8. Last two system health reports for the Radiation Monitoring systems.
9. Any modification(s), upgrade(s), or replacement(s) performed on installed radiation monitoring instrumentation (e.g., area radiation monitors, CAMs, RCA release point monitors, WBCs, and count room instruments) since November 1, 2015.

10. Audits or self-assessments covering HP instruments (portables, RCA exit point, WBC, count room) since November 1, 2015. Include any reviews conducted of vendor facilities, as applicable.
11. List of NCRs, ARs, CRs, etc. related to radiation monitoring instrumentation since November 1, 2015. This should be a list of corrective action documents containing NCR, AR, CR, etc. numbers and brief descriptions, not full documents.

71151 - Performance Indicator Verification
(Last inspected May 2016)

1. Site and corporate procedures for gathering and reporting performance indicator (PI) data.
2. Monthly/Quarterly PI reports since May 1, 2016, and copies of associated corrective action reports for any Occupational Exposure or Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual (RETS/ODCM) Radiological Effluent PI events occurrences.
3. Most recent gaseous and liquid effluent release permits showing year-to-date curies released by isotope and associated public dose assessments, and the last calendar year (CY) 2017 gaseous and liquid effluent release permits showing year-to-date curies released by isotope and associated public dose assessments
4. List of all corrective action documents since May 1, 2016, using keywords such as: HRA, LHRA, VHRA, unintended dose, unlocked LHRA door, etc.
5. List of all corrective action documents since May 1, 2016, using keywords such as: abnormal/ unmonitored effluent release, etc.
6. List of all ED dose and dose rate alarms (including setpoints and the dose / dose rate received), since May 1, 2016.

Assistance Requested During On-Site Inspection

- Identification of work activities available during the inspection for inspector observations, including notification of pre-job briefings, notification of risk significant work activities, and audio/visual surveillance for remote job coverage
- HP assistance in plant walk-downs assessing access controls, e.g. verifying the posting and locking of entrances to LHRAs, VHRAs and SFP controls.
- HP assistance in plant walk-downs/job coverage of ongoing activities to assess access controls.
- Coordination of observations of source checks of fixed and portable instruments.

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