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

August 29, 2016

Mrs. Cheryl A. Gayheart
Vice President, Nuclear Plant Site
Southern Nuclear Operating Co., Inc.
Joseph M. Farley Nuclear Plant
7388 North State Highway 95
Columbia, AL 36319

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

Dear Mrs. Gayheart:

During the week of October 3 – 7, 2016 and October 17-21, 2016, the U.S. Nuclear Regulatory Commission (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, Radiation Safety Sections of 71151, and portions of Temporary Instruction 2800/041). 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 activity. The NRC requests that these documents be provided to the inspectors no later than September 26, 2016.

We have discussed the schedule for these inspection activities with your staff, and understand that our regulatory contact for this inspection will be Julie Collier. If there are any questions about this inspection or the material requested, please contact the lead inspector, William Pursley at 404-997-4517, or the Plant Support Branch 1 Chief, Brian Bonser 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:” 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 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.

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 under control numbers 3150-0008, 3150-0011, 3150-0014, 3150-0044, and 3150-0135. The NRC may not conduct or

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Sincerely,

/RA: Adam D. Nielsen for/

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

Docket Nos. 50-348 and 50-364
License Nos. NPF-2 and NPF-8

Enclosure:
Document Request List

cc: Distribution via Listserv

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NAME	WPURSLEY	BBONSER					
DATE	8/26/2016	8/29/2016	8/ /2016	8/ /2016	8/ /2016	8/ /2016	8/ /2016
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRSII\PSB1\RFI INFORMATION REQUEST LETTERS\FARLEY\2016\FARLEY RP DOC REQUEST 16-04.DOCX

Document Request List

Inspection Dates: October 3-7 and October 17-21

Documents Due to Region II by: September 26, 2016

Inspection Procedures (IPs):	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
	TI 2800/041	Title 10 CFR Part 37 Materials Security Review - At Facilities with a Title 10 CFR Part 73 Physical Protection Program

Note: Unless specified otherwise, the current version of these documents is expected. Electronic media is preferred if readily available (The preferred file format is MSWord, 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.* To the extent possible, please organize the information in the order shown below. 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.

Documentation for the inspection procedures from November 1, 2014 to the present is requested for all procedures, except 71124.01 which should be from April 1, 2015, and 71151 which should be from July 1, 2015 to 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.

If you have any questions, please call William Pursley at (404) 997-4517. Thank you in advance for your effort in putting together this material.

General and Miscellaneous Information

- List of primary site contact(s) for each inspection area including name(s) and telephone numbers.
- List of radiation protection procedures, including title and number.
- Plant Management, Radiation Protection, and Chemistry organizational charts w/ contact numbers

- Outage schedule, including work activities to be conducted during the week(s) of the inspection
- Most recent DAW 10 CFR Part 61 analytical results
- Corrective Action Program procedure(s)
- Audits and self-assessments performed since November 1, 2014 that encompass the areas of (1) the ALARA program and implementation, (2) respiratory protection, (3) airborne radioactivity, monitoring and/or mitigation-engineering controls, and (4) radiological monitoring instrumentation (portable, installed, and counting room instruments).

71124.01 - Radiological Hazard Assessment and Exposure Controls

1. List of active Radiation Work Permits (RWPs), including outage RWPs, with their administrative limits, electronic dosimeter dose rate limit, and dose limit.
2. 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.
3. Most recent survey of all Locked HRAs and VHRAs (as applicable).
4. Independent spent fuel storage installation 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 Thermoluminescent Dosimeter area monitoring results of the facility.
5. 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.).
6. Procedures related to release of personnel and materials (e.g. release surveys, decontamination, guidance for alarm follow up, etc.).
7. List of Nationally Tracked Sources, change of owner ship and copies of any National Source Tracking System transaction documentation (e.g., annual reconciliation).
8. Most recent sealed source inventory record.
9. List of all non-fuel items stored in spent fuel pool.
10. All self-assessments and audits covering HP controls since April 1, 2015.
11. List of Corrective Action non-conformance documents (e.g. NCRs, CRs, etc.) related to HP controls where the cause was listed as human performance (radworker error) or human performance (HP technician error) generated since April 1, 2015. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs*.
12. All CRs related to Nationally Tracked Sources since April 1, 2015.

71124.02 - ALARA Planning and Controls

1. Site and corporate procedures associated with maintaining site dose ALARA, including those involving ALARA work activities. These procedures should include:
   - ALARA program implementation, including ALARA committee activities and ALARA planning, briefing, and reviews
   - Radiation work permit preparation and worker compliance
   - Processes used to estimate and track work activity specific exposures
   - Making changes to dose estimates during task performance
   - Work controls
   - Engineering controls

- Exposure mitigation requirements

2. List of top five dose jobs for the upcoming refueling outage and ALARA planning packages (including dose estimates, work-hour estimates, special HP controls, and dose reduction initiatives).
3. Most recent annual ALARA report and most recent refueling outage report.
4. Annual ALARA goals for 2015 and 2016, and the methodology utilized to make the projections.
5. ALARA Committee activity summaries (e.g. meeting minutes) discussing and approval of activities associated with the upcoming refueling outage.
6. Outline of the source term reduction strategy. Information should include:
   - Historic trends and current status of plant source term
   - Factors that affect the source term
   - Activities employed to reduce the source term
   - Specific sources identified for reduction actions
   - Source term reduction evaluation
   - Results achieved since November 1, 2014.
7. List of Corrective Action non-conformance documents (e.g. NCRs, CRs, etc.) generated since November 1, 2014, related to the ALARA program, including the following:
   - ALARA planning
   - Post-job review identified problems
   - Radiation worker practices
   - Occurrences where the collective exposure was greater than intended dose determined to be ALARA for the individual work activities
8. Available for onsite review during the inspection:
   - ALARA planning packages for jobs to be performed during the outage
   - Temporary shielding requests generated for the outage
   - Completed ALARA packages (including post-job reviews) for the five work activities that were completed during the last outage that had the greatest collective dose, and/or presented significant radiological risk.

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

1. Site and corporate procedures/manuals associated with airborne radiation monitoring instrumentation and respiratory protection. Procedures/manuals should include:
   - Operation, calibration, and maintenance of air sampling instrumentation, including set-point determination (e.g., low-vols, high vols, goosenecks, AMS 4s, etc.)
   - Actions to be taken when air sampling instrumentation is found to be significantly out of tolerance/calibration
   - Issuance and use of respiratory protective equipment (emphasis on SCBA and air-supplied equipment)
   - Total Effective Dose Equivalent-ALARA evaluation guidance
   - Training, including fit-testing, for use of SCBA and supplied-air systems
   - SCBA maintenance activities, including vital components (i.e. regulators)
   - Determination/verification of Grade D air for SCBA

2. Two most recent HEPA filter DOP and charcoal test results or the following ventilation systems:
   - Main Control Room

3. Records of certification of air quality for equipment used to provide breathing air for air-supplied respirators and SCBA bottles (air compressors and bottled breathing air) since November 1, 2014.
4. Documentation for last two surveillances performed on SCBA stored for emergency use.
5. List of Corrective Action non-conformance documents (e.g. NCRs, CRs, etc.) generated since November 1, 2014 involving radiation monitoring and protective equipment deficiencies, including the following:
   - Continuous air monitors
   - Respiratory protection equipment and program implementation
6. 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
     i. List of all licensed operators qualified to use SCBA
     ii. List of all instrumentation and control personnel qualified to use SCBA
     iii. 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

1. Site and corporate Procedures/Guidance Documents for external dose monitoring, i.e. dosimetry issuance and use. The documents 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 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. The documents should include guidance for calibration/QC and use of whole body counter (WBC); release of contaminated individuals, use of passive monitoring as screening method for evaluations, and special *in vitro* sample collection and analysis, and actions for declared pregnant workers
2. NVLAP accreditation documentation for current dosimetry used by the site.
3. List of all positive whole body count (WBC), in vitro, or air sampling analyses which resulted in an assigned CEDE equal to, or exceeding, 10 millirem since November 1, 2014. *[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, dispersed contamination/discrete particles, identified since November 1, 2014. *[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. Copies of all audits, self-assessments, and/or reviews related to internal or external dosimetry issues generated since November 1, 2014. The documents provided should include any reviews/evaluations conducted of vendor facilities, e.g., corporate or outside vendor/ or corporate calibration facilities.
6. List of Corrective Action non-conformance documents (e.g. NCRs, CRs, etc.) generated since November 1, 2014, for internal or external dosimetry issues/events. *[Note: only titles and a summary statement should be provided for use by the inspectors to select a sample of issues for in-depth review]*.

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 (e.g. laboratory inter-comparison data)
2. The last two calibration records for the following monitors:
   - R-1 Control Room Radiation Monitor
   - R-5 Spent-fuel building
   - Unit 1 Containment high range Monitors A&B
3. Documentation for the radioactive sources used to calibrate the instruments in item 2 above, including paperwork showing traceability to a National Institute of Standards & Technology standard and/or traceability to the primary calibration, as applicable
4. The last two surveillances performed on the Post-accident Sampling System, as applicable if it is still required in the plant technical specifications
5. The last two test records of the instrument calibrator (Shepherd validation testing/dose rate curves).
6. The last two records of calibration for the whole body counter (WBC).
7. List of the portable instruments currently in service and available for use. Several will be selected for on-site review of the calibration records.
8. List of the following radiation monitors currently in service. Several will be selected for on-site review of the calibration records.
   - Portal Monitors used in Dosimetry for Passive Monitoring
   - SAMs at RCA exit point
   - Whole Body Contamination Monitors at RCA exit point
   - Portal Monitors at RCA exit point
   - Countroom High-purity Germanium and liquid scintillation systems
9. Documentation for the radioactive sources used to calibrate the monitors requested for item 8 above showing traceability to a national standard (NIST).
10. Chart or procedure listing any Emergency Action Level (EAL) value associated with installed or portable radiation monitoring instrument indication(s).
11. Latest system health report for the Radiation Monitoring system.
12. Copies of all audits, self-assessments, and/or reviews of area and personnel monitoring equipment and portable radiation survey instruments generated since November 1, 2014. The records should include any reviews conducted of vendor facilities, e.g., outside calibration laboratories, as applicable.
13. List of Corrective Action non-conformance documents (e.g. NCRs, CRs, etc.) generated since November 1, 2014, related to portable instruments, area monitors, CAMs, WBCs, and count room instruments. *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. Site procedures/manuals for gathering and reporting PI data.
2. Monthly/Quarterly PI reports since July 1, 2015, and copies of associated corrective action reports for any RETS/ODCM Radiological Effluent occurrences.
3. List of all corrective action documents since July 1, 2015, using keywords such as: HRA, LHRA, VHRA, unintended dose, unlocked door, etc.
4. List of all electronic dosimeter (ED) dose rate alarms and ED dose alarms since July 1, 2015 which includes dose or dose rate alarm received, and the alarm setpoint(s).
5. List of all Corrective Action non-conformance documents (e.g. NCRs, CRs, etc.) generated since July 1, 2015, using keywords abnormal/ unmonitored effluent release, etc.

Technical Instruction 2800/041 - Title 10 CFR Part 37 Materials Security Review – At Facilities with a Title 10 CFR Part 73 Physical Protection Program (Radiation Protection portions only)

1. All site specific and corporate procedures related to 10 CFR Part 37 compliance (storage of RAM, 10 CFR Part 37 Security Plan, etc.).*
2. List of all known locations of Category 1 and 2 material.
3. All supporting calculations for determination of whether an aggregation of RAM meets the definition of Category 1 or Category 2 (e.g., warehouse calculation).
4. Any additional radiation protection procedures that identify radiation protection interaction with security, or requirements related to 10 CFR Part 37 compliance.

*Please do not include Safeguards or Official Use Only information in the submittal. That information can be reviewed onsite.

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 walkdowns of areas identified for storage of Category 1 and 2 materials.
- Health physics assistance in plant walk-downs assessing access controls, e.g. verifying the posting and locking of entrances to high and very high radiation areas (HRA and VHRA), and SFP controls.
- Health physics assistance in plant walk-downs/job coverage of ongoing activities to assess access controls.

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