

From: [Kellner, Bob](#)
To: [Stephen C Newman](#)
Cc: [William Terry \(Generation - 3\); Butcavage, Alexander](#)
Subject: Re: Upcoming Surry Inspections
Date: Monday, March 30, 2020 1:33:20 PM
Attachments: [image001.png](#)
[SUR 2020002 RP Document Request List.docx](#)

Stephen,

Per my previous email, and our phone conversation earlier today, attached is the Request for Information for the upcoming RP inspection. The request includes the documents that we would normally request for Inspection Procedures (IPs) 71124.01, 71124.03, 71124.04, 71124.05, and applicable portions of 71151. Given the current SPS policy of 'non-essential personnel' only, and the uncertainty of future travel due to the COVID-19, please focus on providing the requested IP 71124.05 information, followed by as much of the remaining information as is possible, depending on accessibility to the information by people working remotely. Based on a pilot inspection I completed at another site last week, if we are unable to complete the on-site inspection as planned in May, at least we will be able to complete most of the instrument inspection remotely.

If the rest of the inspection activities have to be rescheduled due to COVID-19 considerations, I will let you know as soon as I have been informed by management.

Please let me know if you have any questions.

Regards.

Bob

Robert Kellner, Sr. Health Physicist
NRC/RII/EB3
245 Peachtree Center Ave. NE, Suite 1200
Atlanta, GA 30303-1257
404-997-4508

Surry Nuclear Power Station
Radiation Safety Baseline Inspection
Initial Information Request
Inspection Report: 2020002

During the week of May 4 - 8, 2020, the NRC will perform a baseline Radiation Safety Inspection at the Surry Nuclear Power Station (NRC Inspection Procedures 71124.01, 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 April 30, 2020.

If there are any questions about this inspection or the material requested, please contact the lead inspector, Robert Kellner at Robert.Kellner@nrc.gov, at 404-997-4508, or the Engineering Branch 3 Chief, Binoy Desai at 404-997-4519.

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.

Document Request List

Occupational and Public Radiation Safety Cornerstones

Inspection Dates: May 4 - 8, 2020

Documents Due to Region II by: April 30, 2020

Inspection Procedures:	IP 71124.01	Radiological Hazard Assessment and Exposure Controls
	IP 71124.03	In-plant Airborne Radioactivity Control and Mitigation
	IP 71124.04	Occupational Dose Assessment
	IP 71124.05	Radiation Monitoring Instrumentation
	IP 71151	Performance Indicator Verification

Lead Inspector & Mailing Address:

Robert Kellner
Senior Health Physicist
US NRC Region II
(404) 997-4508
Robert.Kellner@nrc.gov

U.S. Nuclear Regulatory Commission
Region II
ATTN: Robert Kellner
245 Peachtree Center Ave., N.E
Suite 1200
Atlanta, GA 30303

Note: The current version of these documents is expected unless specified otherwise. Secure file server access (Certrec, SharePoint, etc.), or electronic media (CD/DVD), is preferred. To the extent possible, please organize the information as it is arranged below. Experience has shown that poorly organized files can lead to a less efficient inspection and places additional burden on licensee staff. During the inspection, the inspectors may request additional documents. If there are questions regarding the documents requested, or if the documents cannot be provided by the due date, please do not hesitate to contact the lead inspector.

Documentation for these inspection procedures, are requested from November 1, 2019 to present, unless otherwise specified. *Pay particular attention to the date ranges for the items requested as they may change from item to item.* We would prefer as much of the information as possible in electronic form. An index of the files 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, Radiation Protection, and Chemistry organizational charts w/ contact numbers
3. Corrective action program procedure(s)
4. List of radiation protection procedures, including title and number
5. Most recent 10 CFR 61 analysis for the DAW waste stream
6. Outage schedule, including work activities to be conducted during the week of the inspection (e.g. Gantt chart or similar list).

71124.01 - Radiological Hazard Assessment and Exposure Controls

(Last inspected October 2019)

1. Procedures related to RP controls (e.g. Posting, labeling, surveys, survey frequency, RWPs, contamination control, HRA/LHRA/VHRA control, key control, control of divers, special controls during fuel offload, hot spots, ISFSI Controls, etc.)
2. Procedures related to release of personnel and materials (e.g. release surveys, decontamination, guidance for alarm follow-up, etc.)
3. List of outage & active Radiation Work Permits (RWPs) including dose and dose rate limits.
4. 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.
5. List of all non-fuel items stored in spent fuel pool (e.g. used filters, irradiated hardware, etc.).
6. The following Independent Spent Fuel Storage Installation (ISFSI) information:
 - a) Last two (2) routine radiological surveys
 - b) As low as reasonably achievable (ALARA) planning and post reviews conducted for the last two ISFSI campaigns.
7. All self-assessments or audits covering radiological hazard assessment and exposure controls and HP controls since August 1, 2019 (if none, then provide the two most recent).
8. List of Corrective Action Program (CAP) documents (CR, NRC, AR, etc.) related to RP controls (e.g., radworker error, HP technician error, posting issues, Nationally Tracked Sources issue, HRA/LHRA/VHRA issues, survey problems, etc.) generated since August 1, 2019. *This should be a list of corrective action documents containing a CAP document number and a brief description, not complete documents.*

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

(Last inspected November 2018)

1. Procedures related to airborne monitoring and control (e.g. use of purge systems, use of portable HEPA/charcoal units, temporary ventilation enclosures, use of CAMs, air sampling guidance, Alpha air sampling, etc.)
2. Procedures related to the use of respiratory protection devices (e.g., self-contained breathing apparatus (SCBA), total effective dose equivalent-ALARA guidance, powered air purifying respirators (PAPRs), storage, maintenance, training, quality assurance (QA), and fit-testing).
3. The last two (2) grade D air testing certificates for each supplied air system and SCBA filling station
4. Documentation of the last two (2) surveillances performed on SCBAs available for emergency use.
5. Two most recent surveillances that verify the flow rates for the following ventilation systems:
 - a) Reactor Auxiliary Building Ventilation System
 - b) Fuel Handling Building Exhaust System
6. Two most recent HEPA filter DOP and charcoal test results for the following ventilation systems:
 - a) Control Room Ventilation System
 - b) Fuel Handling Building Systems
7. Most recent audit or self-assessment covering airborne controls and respiratory protection
8. List of CAP documents (CR, NCR, AR, etc.) related to airborne monitoring and respiratory

protection generated since November 1, 2018. *This should be a list of corrective action documents containing a CAP document number and a brief description, not complete documents.*

9. Available for onsite review during inspection
 - a) Inventory, inspection and maintenance records for respiratory protection devices and SCBA equipment
 - b) Training records, including fit tests, for SCBA qualified individuals
 - i. List of all licensed operators qualified to wear an SCBA
 - ii. List of site ERO personnel qualified to wear an SCBA
 - iii. List of all RP personnel qualified to wear an SCBA
 - c) Training/qualification certificates for all onsite and/or vendor personnel qualified to repair SCBA that performed maintenance or repairs from November 2018 to present.

71124.04 - Occupational Dose Assessment (Last inspected November 2018)

1. Procedures related to occupational dose assessment (e.g. external dose monitoring, dosimetry issuance and use, unusual dosimetry occurrences, multi-badging/extremity dosimetry/badge relocation, Effective Dose Equivalent (EDE), personnel contamination events PCEs, storage/care of personal dosimeters, use of electronic dosimeters, *in-vivo* and *in-vitro* internal dose assessment, skin dose assessment, QC for whole body counter, use of passive monitoring, if applicable, and declared pregnant workers).
2. NVLAP accreditation documentation for the 2019, and current dosimetry used by the site as the dose of record.
3. ISFSI perimeter monitoring data (i.e. perimeter TLDs) from November 2018 through the most recent monitoring period.
4. Copy of the current facility alpha characterization and prospective dose evaluation, if available.
5. List of all positive air-sampling, whole body count, or in vitro analyses which resulted in a CEDE equal to or exceeding 10 millirem since November 1, 2018. *[Note: only a listing should be provided for use by the inspectors to select a sample of issues for review during the onsite inspection]*
6. List of all PCEs identified since November 1, 2018. *[Note: only a listing should be provided for use by the inspectors to select a sample of issues for review during the onsite inspection.]*
7. Most recent audit or self-assessment of the dosimetry program, and the most recent audit of the lab that processes site dosimetry.
8. List of CAP documents (CR, NRC, AR, etc.) related to internal or external dosimetry issues/events generated since November 1, 2018. *This should be a list of corrective action documents containing a CAP document number and a brief description, not complete documents.*

71124.05 - Radiation Monitoring Instrumentation (Last inspected November 2018)

1. Radiation Protection and Maintenance procedures/guidance documents, as applicable, for the following:
 - a) Calibration and functional test/source checks of portable radiation detection instruments
 - b) Calibration and functional tests of small article monitor, personnel contamination monitor, portal monitor, counting room equipment, electronic alarming dosimeters, whole body counting equipment, and continuous air monitors

- c) Collection and analysis of high-range, post-accident effluent samples
- d) Determination of set-points for area radiation monitor, CAM, PCM, PM, and SAM equipment used for area and personnel monitoring equipment
- e) QA program (inter-laboratory comparison program) for count room instruments
- 2. The last two (2) calibration records for each of the following instruments:
 - a) Containment Building High Range Radiation Monitors (2-RM-RMS-227 and 2-RM-RMS-228)
 - b) Main Steam Line Monitors (2-MS-RM-224, 225, & 226)
 - c) Main Control Room Radiation Monitor (1-RM-RMS-157)
 - d) Liquid Waste Radiation Monitor (1-RRM-RE-131)
 - e) Process Vent (1-GW-RM-130B) (Normal Range Noble Gas Effluent Monitor)
 - f) Process Vent (1-GW-RM-130C) (High Range Noble Gas Effluent Monitor)
 - g) Ventilation Vent No. 2 (1-VG-RM-131C)
- 3. Documentation showing traceability to NIST and/or the primary calibration for the radioactive sources used to calibrate the instruments in item 2 above.
- 4. Emergency plan documents identifying which radiation monitors are used to determine emergency action levels (EALs).
- 5. Chart or procedure identifying emergency action levels (EALs) and actions associated with radiation monitors (if applicable).
- 6. Provide a current list of in service (available for use) SAMs, PCMs, PMs, air samplers, continuous air monitors (CAMs), portable radiation detection instruments, counting room (RP and Chemistry), and Whole Body Counters. *[Note: The list will be used to select monitors for evaluation during the onsite inspection.]*
- 7. Most recent calibration/test record for the instrument calibrator (e.g. Shepherd validation testing/dose rate curves)
- 8. Design documents and/or calculations showing how the alarm setpoints for the following instruments are determined:
 - a) PCMs and PMs at the RCA and Protected Area exit points
 - b) CAMs
- 9. Result of the Inter-Laboratory Comparison Program since November 1, 2018.
- 10. Most recent Radiation Monitoring System engineering performance review/evaluation or system health report, if applicable.
- 11. Most recent audit or self-assessment covering RP instruments (e.g. portables, RCA exit point, WBC, count room). Include any reviews conducted of vendor facilities, as applicable
- 12. List of CAP documents (CR, NRC, AR, etc.) related to portable instruments, area monitors, CAMs, RCA release point monitors, WBCs, and count room instruments generated since November 1, 2018. *This should be a list of corrective action documents containing a CAP document number and a brief description, not complete documents.*

71151 - Performance Indicator Verification (Occupational and Public Cornerstones)
(Last inspected August 2019)

- 1. Procedure(s) for identifying, notification, tracking, and correcting performance indicator (PI) occurrences.
- 2. Monthly PI reports since September 1, 2019, and copies of associated condition reports for any Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual (RETS/ODCM) Radiological Effluent occurrences.
- 3. List of all CAP documents using search keywords such as: HRA, LHRA, VHRA, unintended dose, unlocked door, RETS/ODCM, abnormal or unmonitored release, offsite dose, and effluent release, etc. since September 1, 2019. *This should be a list of corrective action documents containing a CAP document number and a brief description, not complete documents.*

4. Most recent liquid and gaseous effluent release permits which specify the quarterly and annual (year to date) curies released by isotope and the associated public dose assessments.
5. List of all electronic dosimeter (ED) alarms, for dose and dose rate, since October 1, 2019

Assistance Requested During On-Site Inspection

- Identification of radiological work activities available during the inspection week for observation, including notification of pre-job briefings, notification of risk significant work activities, and location of audio/visual surveillance for remote job coverage.
- Health physics assistance in plant walk-downs/job coverage of ongoing activities to assess access controls.

Inspector Contact Information:

Robert Kellner
Sr. Health Physicist
(404) 997-4508
robert.kellner@nrc.gov

Mailing Address:

U.S. Nuclear Regulatory Commission
US NRC Region II
ATTN: Mr. Robert Kellner
245 Peachtree Center Ave., N.E.
Suite 1200
Atlanta, GA 30303