

**Kellner, Bob**

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**From:** Kellner, Bob  
**Sent:** Monday, September 09, 2019 12:49 PM  
**To:** Stephen C Newman  
**Cc:** 'Barry Garber'; Rivera, Jonathan  
**Subject:** October 2019 NRC Radiation Safety Inspection  
**Attachments:** Surry 2019004 Rad Safety Inspection Initial Doc Request.pdf

Steve,

Per the email that I received last week from Barry Garber, you will be the Surry Licensing point of contact for the upcoming NRC Radiation Safety Inspection scheduled to begin at the week of October 28, 2019. Attached is the Initial Information Request and the Initial Document Request List.

The NRC Health Physics inspectors who will be on-site for the inspection are myself, and Jonathan Rivera. Jonathan may not have been onsite in a couple of years, but we both should be on the current 'good guy' letter.

Please let me know that you received this request. If there are any questions about this inspection, or the requested material, please contact me via email, by phone, or at the address included below.

Regards,

Bob

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Surry Power Station  
Radiation Safety Baseline Inspection  
Initial Information Request  
Inspection Report: 2019004

During the week of October 28 - November 1, 2019, the NRC will perform a baseline Radiation Safety Inspection at the Surry Power Station (NRC Inspection Procedures 71124.01, 71124.08, and 71151 Occupational PIV only).

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 14, 2019.

If there are any questions about this inspection or the material requested, please contact the lead inspector, Robert Kellner at [Robert.Kellner@nrc.gov](mailto:Robert.Kellner@nrc.gov), or 404-997-4508, or the Engineering Branch 3 Chief, Brian Bonser at [Brian.Bonser@nrc.gov](mailto:Brian.Bonser@nrc.gov), or 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.

## Document Request List

### Occupational and Public Radiation Safety Cornerstone

Licensee: **Surry Power Station**

Docket Number: **05000280, 281**

Inspection Dates: **October 28 – November 1, 2019**

Documents Due to Region II by: **October 14, 2019**

Inspection Procedures: IP 71124.01 Radiological Hazards Assessment and Exposure Controls  
IP 71124.08 Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation  
IP 71151 Performance Indicator Verification

Lead Inspector: Robert Kellner  
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**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.*] To the extent possible, please organize the information as it is arranged below. An index of the CD contents is also helpful. 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 May 1, 2017 or November 1, 2018 to the present, depending on the inspection procedure. These dates reflect the last time these areas were inspected. *Pay particular attention to the date ranges for the items requested as they change from item to item.* For those items requesting a list of documents/areas, the inspector will select documents/areas from the list for on-site review.

### Miscellaneous

1. Telephone numbers of primary site contact(s) for each inspection area including name(s) and telephone numbers.
2. Plant Chemistry, and Radiation Protection organizational charts.
3. List of radiation protection procedures, including title and number.
4. Copies of Corrective Action Program procedures

71124.01 - Radiological Hazard Assessment and Exposure Controls  
(Last Inspected November 2018)

1. List of active routine and outage related Radiation Work Permits (RWPs), including their administrative limits, electronic dosimeter dose rate limit, and dose limit.
2. Timeline of major outage activities (e.g. Gantt chart or similar list)
3. Procedures related to Radiation Protection (RP) 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.).
4. List of locations, or plant maps indicating the location, of all Locked High Radiation Areas (LHRAs) and Very High Radiation Areas (VHRAs). Include areas with the potential to become a LHRA during routine operations or outages.
5. Copies of the most recent survey of all LHRAs and VHRAs (as applicable).
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 and copies of any National Source Tracking System (NSTS) transaction documentation (e.g., change of ownership and annual reconciliation).
8. Copy of the most recent sealed source inventory and leak testing record.
9. List of all non-fuel items stored in spent fuel pool (e.g. used filters, irradiated hardware, etc.).
10. Copies of all self-assessments and audits covering RP controls since November 1, 2018.
11. List of Corrective Action Program (CAP) documents (CRs, NCRs, PIPs, etc.) related to RP controls (e.g. keyword searches for radworker error, RP technician error, posting issues, HRA/LHRA/VHRA issues, survey problems, etc.) generated since November 1, 2018. This should include CAP nonconformance reports where the cause was listed as human performance. *This should be a list of corrective action documents containing a (CR, NCR, etc.) number and brief description, not full documents.*
12. All CAP nonconformance reports (AR, CR, NCR, etc.) related to Nationally Tracked Sources since November 1, 2018.

71124.08 - Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation (Last Inspected May 2017)

1. Provide procedures and guidance documents describing licensee compliance with the applicable portions of 10 CFR Parts 20, 37, 61, 71, and 49 CFR Parts 170-189. Procedures, manuals, and guidance documents should include:
  - Solid and liquid radwaste processing procedures.
  - Procedure(s) for transferring radioactive waste resin and sludge discharges into shipping/disposal containers.
  - Waste stream mixing and/or sampling procedures, including: (1) waste concentration averaging; (2) use of scaling factors and calculations used to account for difficult-to-measure radionuclides; and (3) ensuring waste stream composition data accounts for changing operational parameters.
  - Shipping/transportation procedures.
  - Cask loading and closure procedures (licensee and vendor) applicable to last three cask transports.
  - Monitoring impact of long-term storage (e.g., buildup of gases produced by waste decomposition, chemical reactions, container deformation).
  - Process Control Program (PCP).
2. Provide a list of radioactive material (RAM) storage areas, including satellite radiological

- controlled areas (RCAs)
3. Provide liquid and solid radwaste system diagrams and detailed system descriptions (e.g., information that might be contained in curricula for training new system engineers)
  4. List of all abandoned solid and liquid radwaste processing equipment.
  5. Copies of the last two 10 CFR Part 61 analyses for each waste stream (DAW, resins, filters, etc.), including quality assurance data (e.g., in-house vs. vendor lab comparisons, current results vs. database)
  6. List and documentation of any changes made to the radioactive waste processing systems (liquid and solid) and/or the Process Control Program (PCP) since May 1, 2017, and associated 10 CFR 50.59 documentation, as appropriate.
  7. Provide a list or log of RAM shipments (LSA I, II, III; SCO I, II, Type A, or Type B) since May 1, 2017. (The inspectors will select three to five packages to review in detail.)
  8. Copies of applicable transport cask Certificate of Compliance for the last three transport cask shipments.
  9. Most recent self-assessment or audit of shipping, radwaste processing, and RAM storage programs.
  10. List of CAP documents (CRs, NCRs, PIPs, etc.) involving radioactive waste and RAM processing and/or transportation (e.g., keyword searches for RAM, shipping, radwaste, 10 Part 61, etc.) generated since May 1, 2017. *This should be a list of corrective action documents containing a (CR, NCR, etc.) number and brief description, not full documents.*
  11. Available for onsite review during the inspection:
    - Site drawing(s) showing the location of all stored RAM and all stored radioactive waste.
    - Plant drawings sufficient to permit the inspector to walkdown the liquid and solid radioactive waste processing systems, to verify current system configuration/ operation agree with the descriptions contained in the Updated Final Safety Analysis Report and in the PCP.
    - Documentation describing the status of any radioactive waste process equipment that is not operational and/or is abandoned in place.
    - Information concerning the site's waste disposal volume and waste reduction program.
    - Training and qualification records for personnel responsible for radioactive waste.
    - Training curriculum and primary lesson plans for qualifying persons, including vendors, for radwaste processing, packaging, and making shipments of RAM and radioactive waste as specified by 49 CFR Part 172.

71151 – Performance Indicator Verification - Occupational Radiation Safety only (Last inspected November 2018)

1. Procedures for gathering and reporting NRC Performance Indicator (PI) data, including any Radiation Protection specific guidance and applicable “desktop guides”.
2. Monthly/Quarterly Performance Indicator (PI) reports and copies of associated CAP documents, for Occupational Exposure Control Effectiveness Occurrences since November 1, 2018.
3. List of all CAP documents since November 1, 2018, using keywords such as high radiation area (HRA), locked high radiation area (LHRA), very high radiation area (VHRA), unintended dose, unlocked LHRA door, etc. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*
4. List of all electronic dosimeter (ED) dose rate alarms and all ED dose alarms since November 1, 2018.
5. Audits and self-assessment documents generated since November 1, 2018, related to Performance Indicators.

### 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
- 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

#### Inspector Contact Information:

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