



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

August 17, 2015

Mr. Steven D. Capps
Duke Energy Carolinas, LLC
McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078

**SUBJECT: WILLIAM B. McGUIRE NUCLEAR PLANT - NOTIFICATION OF INSPECTION AND
REQUEST FOR INFORMATION**

Dear Mr. Capps:

During the week of September 21 – 25, 2015, the U.S. Nuclear Regulatory Commission (NRC) will perform a baseline Radiation Safety Inspection at the McGuire Nuclear Plant (NRC Inspection Procedures 71124.01 and 71124.08).

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 have enclosed a request for 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 inspector has requested that the subject informational material be provided in CD format on or before September 17, 2015.

We have discussed the schedule for these inspection activities with your staff, and understand that our regulatory contact for this inspection will be Kay Crane, Senior Licensing Specialist, of your organization. If there are any questions about this inspection or the material requested, please contact the lead inspector, Carmen Dykes at 404-997-4401, or the Plant Support Branch 1 Chief, Brian Bonser at 404-997-4653.

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 3150-0044, 3150-0014, 3150-0011, and 3150-0008. 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.

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>.

Sincerely,

/RA/

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

Docket Nos. 50-369 and 50-370
License Nos. NPF-9 and NPF-17

Enclosure:
Pre-Inspection Document Request

cc: Distribution via Listserv

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☒ PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE ☒ NON-SENSITIVE

ADAMS: ☒ Yes ACCESSION NUMBER: ML15230A086 ☒ SUNSI REVIEW COMPLETE ☒ FORM 665 ATTACHED

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|-------------|-----------------|--------------|--|--|--|--|--|
| OFFICE | RII:DRS/PSB1 | RII:DRS/PSB1 | | | | | |
| SIGNATURE | CMD4 via e-mail | BRB1 | | | | | |
| NAME | C. Dykes | B. Bonser | | | | | |
| DATE | 8/ 17 /2015 | 8/ 17 /2015 | | | | | |
| E-MAIL COPY | YES NO | YES NO | | | | | |

OFFICIAL RECORD COPY

Pre-Inspection Document Request

Inspection Dates: September 21 – 25, 2015

Documents Due to Region II by: September 17, 2015

Inspection Procedures (IPs): IP 71124.01 Radiological Hazard Assessment and Exposure Controls
IP 71124.08 Radiological Environmental Monitoring Program

Lead Inspector: Carmen Dykes
Health Physicist
U.S. NRC Region II
404-997-4401
Carmen.dykes@nrc.gov

Note: This is a broad list of the documents the NRC inspectors will be interested in obtaining and reviewing prior to the onsite inspection visit. 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. Please provide three copies of each electronic media device submitted.) Information in the “document lists” should contain enough information to be easily understood by someone who has knowledge of the subject. The lead inspector can answer questions regarding questions on specific information needs with licensee staff and may request additional documents.

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 onsite review.

If you have any questions, please call Carmen Dykes at 404-997-4401. Thank you in advance for all of your effort in putting together this material.

General 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.

71124.01 - Radiological Hazard Assessment and Exposure Controls

(Last Inspected 10/03/2014)

- List of active Radiation Work Permits (RWPs).
- 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.
- Procedures related to health physics (HP) controls (e.g., Posting, labeling, surveys, RWPs, contamination control, high radiation area (HRA)/LHRA/VHRA control, key

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- control, control of divers, special controls during fuel offload, hot spots).
- List of the 10 most exposure-significant work areas within radiation areas, HRAs (<1R/hr), or airborne radioactivity areas in the plant. This may include areas with low dose rates but high collective dose. Identify any HRAs with significant dose gradients (factor of five or more), including underwater diving activities.
- Procedures related to release of personnel and materials (e.g., release surveys, decontamination, guidance for alarm followup).
- List of Nationally Tracked Sources and copies of any National Source Tracking System (NSTS) transaction documentation (e.g., annual reconciliation).
- Most recent sealed source inventory record.
- List of all non-fuel items stored in spent fuel pool.
- All self-assessments or audits covering radiological hazard assessment and exposure controls since October 2014 (if none, then provide the most recent).
- List of corrective action program (CAP) nonconformance reports (NCRs, Action Requests (ARs), Condition Reports (CRs), etc.) related to HP controls (e.g., keyword searches for radworker error, HP technician error, posting issues, Nationally Tracked Sources, HRA/LHRA/VHRA issues, survey problems) issued since October 2014. This should be a list of corrective action documents containing an (AR, CR, NCR, etc.) number and brief description, not full documents.

71124.08 - Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation

(Last Inspected 3/22/2013)

- Provide Procedures/Guidance Documents describing licensee compliance with 10 CFR Parts 20, 61, and 71, and 49 CFR Parts 170-189. Procedures/manuals 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.
 - List of radioactive material (RAM) storage areas, including satellite radiological controlled areas (RCAs).
 - Monitoring impact of long-term storage (e.g., buildup of gases produced by waste decomposition, chemical reactions, container deformation, loss of container integrity, rerelease of free-flowing water).
 - Process Control Program (PCP).
- Most recent radio-chemical sample analysis results (i.e., "10 CFR Part 61" analysis) for each of the radioactive waste streams (e.g., dry active waste (DAW), ion exchange resins, mechanical filters, and sludges and activated materials).
- List and documentation of any changes made to the radioactive waste processing systems (liquid and solid) and/or the PCP since the March 2013, and associated 10 CFR 50.59 documentation, as appropriate.

- Copies of applicable transport cask Certificate of Compliance for the last three transport cask shipments.
- Training and qualification records for personnel responsible for radioactive waste processing and RAM shipment preparation activities.
- Log of RAM shipments (LSA I, II, III; SCO I, II, Type A, or Type B) since March 2013. (The inspectors will select three to five packages to review in detail.)
- List of CAP NCRs (AR, CR, NCR, etc.) related to involving radioactive waste and RAM processing and/or transportation (e.g., keyword searches for RAM, shipping, radwaste, 10 Part 61, etc.) issued since March 2013. This should be a list of corrective action documents containing an (AR, CR, NCR, etc.) number and brief description, not full documents.
- Available for onsite review during the inspection:
 - Site drawing(s) showing the location of all stored RAMs 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.

LIST OF ACRONYMS

| | |
|------|---------------------------------|
| ARs | Action Requests |
| CAP | Corrective Action Program |
| CRs | Condition Reports |
| DAW | Dry Active Waste |
| HP | Health Physics |
| HRA | High Radiation Area |
| LHRA | Locked High Radiation Area |
| NCRs | Nonconformance Reports |
| NSTS | National Source Tracking System |
| PCP | Process Control Program |
| RAM | Radioactive Material |
| RCAs | Radiological Controlled Areas |
| RWPs | Radiation Work Permits |
| VHRA | Very High Radiation Area |