



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

May 9, 2011

Mr. Regis T. Repko
Vice President
Duke Energy Carolinas, LLC
McGuire Nuclear Station
MG01VP/12700 Hagers Ferry Road
Huntersville, NC 28078

**SUBJECT: MCGUIRE NUCLEAR POWER STATION, NOTIFICATION OF INSPECTION
AND REQUEST FOR INFORMATION**

Dear Mr. Repko:

During the periods of June 27 – July 1, 2011, and July 11 - 15, 2011, the NRC will perform baseline Occupational Radiation Safety Inspection activities at the McGuire Nuclear Power Station. The inspection will focus on the Occupational Safety Inspection cornerstone using NRC inspection procedures 71124.01, 71124.05, 71124.06, 71124.07, 71151, and TI 2515/179.

Experience has shown that this inspection is resource intensive for the NRC inspectors and your staff. In order to minimize the impact to your on-site resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. It is important that all of these documents are up to date and complete, in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. The inspector has requested that the subject material be made available to the NRC staff by June 13, 2011.

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 of your organization. If there are any questions about this inspection or the material requested, please contact the lead inspector, Wade Loo at (404) 562-4727.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document

DPC

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Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

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

Docket Nos.: 50-369, 50-370
License Nos.: NPF-9, NPF-17

Enclosure:
Occupational Radiation Protection Inspection Document Request

cc w/encl.: (See page 3)

DPC

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Enclosure:
Occupational Radiation Protection Inspection Document Request

cc w/encl.: (See page 3)

Distribution w/encl:
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*See previous concurrence page

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: XYes ACCESSION NUMBER: ML111290551 X SUNSI REVIEW COMPLETE

OFFICE	RII: DRS	RII: DRS											
SIGNATURE	RA	RA											
NAME	W. LOO	B. BONSER											
DATE	05/05/2011	05/09/211											
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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004 DOCUMENT REQUEST LTR REV1.DOCX

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Enclosure

Pre-Inspection Document Request

Occupational Radiation Safety Cornerstone

Licensee: McGuire Nuclear Plant
Docket Numbers: 50-369, 50-370
Inspection Dates: June 27 – July 1, 2011, and July 11 - 15, 2011

Inspection Procedures to be performed:

71124.01 Radiological Hazard Assessment and Exposure Controls
71124.05 Radiation Monitoring Instrumentation
71124.06 Radioactive Gaseous and Liquid Effluent Treatment
71124.07 Radiological Environmental Monitoring Program
71151 Performance Indicator Verification
TI 2515/179 Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in the National Source Tracking System Pursuant to Title 10, Code of Federal Regulations, Part 20.2207 (10 CFR 20.2207)

Documentation is requested from August 2009, to the present for all items however, information for the Performance Indicator Verification inspection procedure is requested from April 2010, to present.

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 inspectors will select documents/areas from the list for on-site review. If any of the requested information is too burdensome to provide electronically or as hard copies, simply indicate that the requested material is available for onsite review by the inspectors.

If you have any questions, please call Wade Loo at (404) 562-4727. Thank you in advance for all your effort in putting together this material.

Assistance Requested During On-Site Inspection

- Identification of work activities during the inspection for inspector observations, including notification of pre-job briefings, notification of diving activities, 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 HDR-HRA and VHRA, and SFP controls.
- Health physics assistance in plant walk-downs/job coverage of ongoing activities to assess access controls.
- Assistance in plant walk-downs of the solid and liquid radwaste processing systems.
- Discussions with appropriate individuals regarding access controls.

General Information Request

- Telephone numbers of contacts.

Enclosure

- Plant and Radiation Protection organizational charts.
- Electronic copy of applicable chapters of UFSAR (e.g. radiation protection program, liquid and solid radioactive waste program, etc.).
- Work schedule to include work activities that will be conducted during the weeks of the inspection.
- List of active radiation work permits with their administrative limits, electronic dosimeter dose rate limit, and dose limit.
- List of radiation protection procedures.
- Corrective Action Program (CAP) procedures.
- Procedure(s) for identifying, notification, tracking, and correcting PI occurrences.
- List of all Performance Indicators (PIs), and copies of associated corrective action reports for Occupational Exposure Control Effectiveness and RETS/ODCM Radiological Effluent Occurrences.
- Audits and self-assessments performed since the last inspection that encompass the areas of (1) access controls; (2) liquid and solid radwaste processing; (3) radiation related instrumentation; and (4) the REMP program.
- Procedures associated with the ISFSI facility. Procedures should include:
 - ▶ Radiological surveys, postings, and radiation control barricades.
 - ▶ Environmental monitoring (including TLDs).
 - ▶ Loading of casks.
 - ▶ Routine activities.
- Radiation surveys of the ISFSI since the last inspection.
- Environmental monitoring results (e.g. TLDs).
- Radiological records for the loading of casks since the last inspection.
- Records of contamination incidents since the last inspection.
- List of CAP reports related to the ISFSI with respect to radiation protection (i.e. access controls, contamination, radiation levels, etc.) since the last inspection.

71124.01: Radiological Hazard Assessment and Exposure Controls

- Site and corporate procedures associated with the access control program. Procedures should include:
 - ▶ Radiological surveys, postings, and radiation control barricades.
 - ▶ Security and control of high radiation sources/objects stored in pools.
 - ▶ Radiation Work Permits.
 - ▶ Radiological Job-Coverage.
 - ▶ Controlling access to High Radiation Areas (HRAs), High Dose Rate High Radiation Areas (HDR-HRAs), and Very High Radiation Areas (VHRAs).
 - ▶ Key controls for all HRAs.

- ▶ Radioactive material control, including contamination and hot particles.
- 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 high radiation areas with significant dose gradients (factor of five or more), including underwater diving activities.
- List of LHRAs, HDR-HRAs (>25 rem in one hour @ 30 cm), and VHRAs. Include areas with the potential to become a LHRA during routine operations or outages.
- List of CAP PIPs generated since the last inspection related to access controls, including the following:
 - ▶ Access controls, including HRA radiological incidents.
 - ▶ Radiological events caused by radiation worker errors.
 - ▶ Radiological events caused by radiation protection technician errors.
- Available for onsite review during inspection:
 - ▶ Elevation maps with most recent operating and outage radiation survey levels.
 - ▶ RWPs for the top five dose rate areas or tasks.

71124.05: Radiation Monitoring Instrumentation

- Site and corporate procedures associated with radiation detection and monitoring instrumentation. Procedures should include:
 - Portable radiation survey instrument calibrations and source checks.
 - Electronic dosimeter calibration and use.
 - WBC, PCM, portal monitor, and SAM calibrations and source checks.
 - Area radiation monitor alarm setpoint values and setpoint bases, calibration, and source checks.
 - Effluent monitor alarm setpoint bases and calculational methods.
 - Collecting and analyzing high-range, post-accident iodine effluent samples.
 - Maintenance and calibration/certification of calibration sources/ranges.
- List of in-service survey instrumentation including air samplers, SAMs, PCMs, portal monitors, WBCs, neutron monitoring instrumentation, etc.
- TSs related to post-accident monitoring instrumentation, effluent monitoring, and emergency assessment.
- Most recent channel calibration and functional test for the effluent/process monitors, post-accident monitoring instruments, and area radiation monitors.
- WBC calibration reports since August 2009, calibration/check source information, and WBC analysis library.
- List of CAP PIPs generated since August 2009, related to radiation monitoring instrumentation, including the following:

- Radiation survey instruments/calibrations.
- Radiation Monitoring System, including effluent monitors, process monitors, and area radiation monitors.
- Chemistry count lab, including cross-check analysis and QC.
- WBC, PCMs, PMs, and SAMs.

71124.06: Radioactive Gaseous and Liquid Effluent Treatment

- Provide site and/or corporate procedures associated with implementing the effluents and the groundwater monitoring program. Procedures should include those that address:
 - Effluent sampling.
 - Effluent monitor set-point determinations.
 - Dose calculations.
 - Groundwater monitoring and reporting of spills/leaks.
 - Methodology for determining effluent stack/vent flow rates.
- ARERRs for CYs 2009, and 2010. [Note: provided as part of the General Information Request and do not need to be duplicated.]
- List of all unmonitored spills, leaks, or unexpected liquid/gaseous discharges since August 1, 2009. If applicable, provide the LER, event report, and/or special report.
- List of non-radioactive systems that have become contaminated and any 10 CFR 50.59 evaluations performed. [Data since August 1, 2009].
- List of any changes to the effluent release points or effluent treatment systems and associated 50.59 documentation. [Data since August 1, 2009].
- Material condition surveillance records for effluent system components not readily accessible, including those inaccessible due to radiological conditions
- Effluent release permits for continuous gaseous, batch gaseous, continuous liquid, and/or batch liquid releases. Only provide permits for last releases within each category.
- Results of inter-laboratory comparison program for count lab for CY 2009, to 2010 YTD.
- The last two surveillance results for ESF ventilation systems (e.g. system flow, HEPA, and charcoal filter tests).
- Groundwater monitoring results since August 1, 2009.
- List of changes to written ground water monitoring program for identifying/controlling contaminated spills/leaks since August 1, 2009.
- List of onsite surface water bodies (e.g. ponds, retention basins, lakes) that contain or potentially contain radioactivity.

- List of CAP PIPs and audit documents generated since August 2009, related to liquid and gaseous effluent treatment and monitoring, unmonitored spills, leaks, or effluent discharges, or the groundwater monitoring program.

71124.07: Radiological Environmental Monitoring Program

- Site and corporate procedures associated with radiological environmental monitoring, including:
 - Collection, preparation, and analysis of environmental samples including air samples, TLD stations, ground and surface water, sediment, vegetation, milk, fish, etc.
 - Calibration and maintenance of air/water sampling equipment.
 - Calibration and QC activities for sample counting instruments.
 - Sampling and monitoring program to detect leaks from contaminated or potentially contaminated systems, structures, or components.
 - Meteorological instrument calibration, operation, and routine surveillances.
- AREOR CYs 2009, and 2010. [Note: provided as part of the General Information Request and do not need to be duplicated].
- List of structures, systems, or components that contain or could contain licensed material for which there is a credible mechanism for the radioactive material to reach ground water.
- Summary of leaks and/or spills since August 1, 2009, i.e. additions to the 50.75(g) file.
- Calibration and maintenance records for REMP air and composite water samplers since August 1, 2009.
- Inter-laboratory comparison program results for the past two years (in-house or vendor laboratory).
- Last two calibration /surveillance/maintenance records for the meteorological monitoring instruments since August 1, 2009.
- List of CAP PIPs and audit documents generated since August 1, 2009, related to environmental monitoring activities.

TI 2515/179: Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in the National Source Tracking System Pursuant to Title 10, Code of Federal Regulations, Part 20.2207 (10 CFR 20.2207)

- Provide inventory NSTS records of nationally tracked sources, including radionuclide quantities, make, model number and serial number for each.
- Provide records of leak tests and required maintenance, as applicable, for the NSTS listed devices. Records should go back to January 1, 2008, or receipt of subject source(s).
- Provide records of any transfer of NSTS devices.