

Dykes, Carmen

From: Dykes, Carmen
Sent: Wednesday, July 25, 2018 12:55 PM
To: 'Brian.Richards@duke-energy.com'
Cc: Rivera, Jonathan; Kellner, Robert
Subject: McGuire Initial RP Fall 2018 Request for Information
Attachments: MNS 2018004 RPRFI.pdf

Richard,

Per our conversation you will be the licensing point of contact for the upcoming . Please see the attached Initial Information Request for the upcoming Radiation Safety Baseline Inspection for the weeks of September 24 – 28 and October 15- 19, 2018 at McGuire Nuclear Station.

The NRC inspectors that will be onsite in addition to myself are Robert Kellner and Jonathan Rivera.

If you have any question regarding the upcoming inspection please let me know. Thank you,

Regards,
Carmen Dykes
Health Physicist
US NRC Region II
404-997-4401
Carmen.dykes@nrc.gov

McGuire Nuclear Station
Radiation Safety Baseline Inspection
Initial Information Request
Inspection Report 2018004

During the weeks of September 24-28 and October 15-19, the Nuclear Regulatory Commission (NRC) will perform a baseline Radiation Safety Inspection at McGuire Nuclear Station, (NRC Inspection Procedures 71124.01, 71124.02, 71124.03, 71124.04, 71124.05 and the Radiation Safety Sections of 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 August 31, 2018.

If there are any questions about this inspection or the material requested, please contact the lead inspector, Carmen Dykes at Carmen.Dykes@nrc.gov or 404-997-1401, or the Engineering Branch 3 Branch 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> (the Public Electronic Reading Room),

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

Inspection Dates: September 24-28, 2018 & October 15-19, 2018

Documents Due to Region II by: August 31, 2018

Licensee: McGuire Nuclear Station

Docket Number: 05000369, 370

Inspection Procedure:

IP 71124.01	Radiological Hazard Assessment and Exposure
IP 71124.02	Occupational ALARA Planning and 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:

Carmen Dykes Health Physicist U.S. NRC Region II 404-997-4401 Carmen.dykes@nrc.gov	U.S. Nuclear Regulatory Commission Region II ATTN: Carmen Dykes 245 Peachtree Center Ave., N.E Suite 1200 Atlanta, GA 30303
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Note: The current version of these documents is expected unless specified otherwise. Electronic media (CDs, DVDs, FTP site) is preferred if readily available. *[Note do not provide data on USB or "flash" drives due to NRC IT security policies.]* Please organize the information as it is arranged below to the extent possible. Please note the date ranges for the items requested as they may change from item to item. If there are questions or if the documents cannot be provided by the due date, please do not hesitate to contact the lead inspector, Carmen Dykes at (404) 997-4101.

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. List of radiation protection procedures, including title and number.
4. Corrective action program (CAP) procedures
5. Electronic copy of applicable Chapters of Updated Final Safety Analysis Report (UFSAR) (e.g., radiation protection program).

71124.01 - Radiological Hazard Assessment and Exposure Controls

(Last Inspected April 2017)

1. List of outage & active Radiation Work Permits (RWPs) with dose limits.
2. Outage schedule (e.g., Gantt chart or similar list).
3. Procedures related to health physics (HP) controls (e.g., Posting, labeling, surveys, RWPs, contamination control, high radiation area (HRA)/locked high radiation area (LHRA)/very high radiation area (VHRA) control, key control).
4. Procedures related to release of personnel and materials (e.g., release surveys, decontamination, and guidance for alarm followup).
5. List of locations, or plant maps indicating the location, of all LHRA and VHRA. Include areas with the potential to become a LHRA during routine operations or outages.
6. 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.
7. Independent spent fuel storage installation information to include last 2 surveys, exposure data (including area TLD), as low as reasonably achievable (ALARA) planning and reviews conducted for the last two moves.
8. List of Nationally Tracked Sources, change of ownership and copies of any National Source Tracking System transaction documentation (e.g., annual reconciliation).
9. Most recent sealed source inventory record.
10. List of all non-fuel items stored in spent fuel pool.
11. All self-assessments or audits covering radiological hazard assessment and exposure controls/HP controls since May 2017 (if none, then provide the two most recent).
12. List of CAP nonconformance reports (NCRs, Action Requests (ARs), Condition Reports (CRs), etc.) related to HP controls (i.e., radworker error, HP technician error, posting issues, Nationally Tracked Sources issue, HRA/LHRA/VHRA issues, survey problems) issued since May 2017. This should be a list of corrective action documents containing an (AR, CR, NCR, etc.) number and brief description, not full documents.

71124.02 - Occupational As Low As Reasonably Achievable Planning and Controls

(Last Inspected March 2016)

1. All procedures related to ALARA (e.g., temporary shielding, ALARA planning, source term reduction, RWP...).
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. ALARA trending point data for last two outages.
4. Source term reduction strategic plan, if available.
5. Minutes from the last four Plant ALARA Committee Meetings.

Enclosure

6. Most recent self-assessment or audit of ALARA program.
7. 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.
8. List of CAP nonconformance reports (NCRs, ARs, CRs, etc.) related to ALARA issues since March 2016. This should be a list of corrective action documents containing an (AR, CR, NCR, etc.) number and brief description, not full documents

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

(Last Inspected March 2016)

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 continuous air monitors (CAMs), air sampling guidance, Alpha air sampling).
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), fit-testing).
3. Two most recent HEPA filter DOP and charcoal test for the following ventilation systems;
 - a. Main control room
 - b. Unit 1 Auxiliary Ventilation Exhaust
4. The last two grade D air testing certificates for each supplied air system and SCBA filling station.
5. Documentation for last two surveillances performed on SCBA stored for emergency use.
6. Most recent audit or self-assessment covering airborne controls and respiratory protection.
7. List of NCRs related to airborne monitoring and respiratory protection since March 2016. *[This should be a list of corrective action documents containing an AR number and brief description, not full NCRs.]*
8. Available for onsite review by inspector during inspection
 - a. Inventory, inspection and maintenance records for SCBA equipment
 - b. Training records, including fit tests, 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
 - c. Vendor training certificates for all onsite individuals qualified to repair SCBA

71124.04 – Occupational Dose Assessment

(Last Inspected March 2016)

1. Procedures related to occupational dose assessment including by not limited to:
 - a. external dose monitoring

- b. dosimetry issuance and use
 - c. unusual dosimetry occurrences
 - d. multi-badging/extremity dosimetry/badge relocation
 - e. Effective Dose Equivalent, personnel contamination events (PCEs)
 - f. storage/care of personal dosimeters
 - g. use of electronic dosimeters (EDs)
 - h. *in-vivo* and *in-vitro* internal dose assessment
 - i. skin dose assessment
 - j. quality control for whole body counter (WBC)
 - k. use of passive monitoring
 - l. declared pregnant workers
2. National Voluntary Laboratory Accreditation Program accreditation documentation for current dosimetry used by site.
 3. List of all positive air-sampling, whole body counts, or *in vitro* analyses, which resulted in an assigned committed effective dose equivalent equal to or exceeding 10 millirem since March 2016. (*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 PCEs identified since March 2016. Include full documentation for any PCEs requiring skin dose assessment. (*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; however, please include full dose assessment documentation as applicable.*)
 5. Most recent audit or self-assessment of the dosimetry program, and the most recent audit of the lab that processes site dosimetry.
 6. List of CR documents generated since March 2016, for internal or external dosimetry issues/events. (*This should be a list of corrective action documents containing an AR number and brief description, not full NCRs.*)

71124.05 - Radiation Monitoring Instrumentation

(Last Inspected March 2016)

1. Procedures/Guidance Documents for:
 - a. Calibration and functional test/source checks of portable radiation detection instruments
 - b. Calibration and functional tests of small article monitor (SAM), personnel contamination monitor (PCM), portal monitor (PM), WBC equipment, and continuous air monitors (CAMs)
 - 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 for count room instruments
2. The last two calibration records for each of the following instruments:
 - a. Containment High Range Area Monitors (both units)
 - b. Auxiliary Building Ventilation Monitor

- c. Control Room Ventilation Monitors
 - d. Units 1 & 2 Vent Airborne Monitor
 - e. Condenser Air Ejector Monitor
 - f. Main Steam Line N-16 Monitors
3. Documentation for the radioactive sources used to calibrate the instruments in item 2 above. Also include paperwork showing traceability to a National Institute of Standards & Technology standard and/or traceability to the primary calibration, as applicable
 4. Provide a list of in-service SAM, PCM, PM, and WBC equipment. [Note: The list will be used to select three to five monitors for evaluation of their calibration/functional check surveillances during the onsite inspection. In addition, portable radiation detection instrumentation will be selected at random to evaluate adequacy of calibrations.]
 5. Design documents and/or calculations showing how the alarm setpoints for the following instruments are determined:
 - a. PMs at radiological controlled area (RCA) exit point
 - b. CAMs
 6. Chart or procedure listing emergency action levels associated with radiation monitors (if applicable).
 7. The latest test record of the instrument calibrator (Shepherd validation testing/dose rate curves).
 8. Latest system health report for the Radiation Monitoring system.
 9. Most recent audit or self-assessment covering HP instruments (portables, RCA exit point, WBC, count room). Include any reviews conducted of vendor facilities, as applicable.
 10. List of CR documents generated March 2016, related to portable instruments, effluent and area monitors, CAMs, RCA release point monitors, WBCs, and count room instruments. *[This should be a list of corrective action documents containing an AR number and brief description, not full NCRs.]*

71151 Performance Indicator Verification

(Last Inspected April 2017)

1. Procedure(s) for identifying, notification, tracking, and correcting performance indicator (PI) occurrences.
2. Monthly PI reports since May 2017 and copies of associated condition reports for any Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual (RETS/ODCM) Radiological Effluent occurrences.
3. Liquid and gaseous effluent release permits since May 2017, which specify the quarterly and annual curies released by isotope and associated public dose assessments.
4. List of all CAP documents since May 2017 using keywords such as: HRA, LHRA, VHRA, unintended dose, unlocked door, RETS/ODCM, abnormal or unmonitored release, offsite dose, and effluent release, etc.
5. List of all ED dose rate alarms and all ED dose alarms since April 2017.
6. Annual Radiological Effluent Release Reports 2017 and 2016.

7. Audit and self-assessment documents generated since May 2017 related to PIs or last assessment.

LIST OF ACRONYMS

ALARA	As Low As Reasonably Achievable	PCM	Personnel Contamination Monitor
ARs	Action Requests	PIs	Performance Indicators
CAMs	Continuous Air Monitors	PM	Portal Monitor
CAP	Corrective Action Program	QA	Quality Assurance
CRs	Condition Reports	RCA	Radiological Controlled Area
EDs	Electronic Dosimeters	RETS	Radiological Effluent Technical Specifications
HP	Health Physics		
HRA	High Radiation Area	RWPs	Radiation Work Permits
LHRA	Locked High Radiation Area	SAM	Small Article Monitor
NCRs	Nonconformance Reports	SCBA	Self-contained Breathing Apparatus
ODCM	Offsite Dose Calculation Manual	VHRA	Very High Radiation Area
PCEs	Personnel Containment Events	WBC	Whole Body Counter