

**H. B. Robinson Steam Electric Plant, Unit No. 2
Radiation Safety Baseline Inspection
Initial Information Request
Inspection Report: 050-00261/2019-004**

During the week of September 30th, 2019, the Nuclear Regulatory Commission (NRC) will perform the baseline Radiation Safety Inspection at the H. B. Robinson Steam Electric Plant, Unit No. 2 (NRC inspection procedures 71124.01, 71124.06, 71124.07, 71124.08 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 September 20th, 2019.

If there are any questions about this inspection or the material requested, please contact the lead inspector, José M. Díaz Vélez, at (404) 997- 4736 or jose.diaz-velez@nrc.gov, or the Engineering Branch 3 Chief, Brian Bonser at (404) 997-4653 or brian.bonser@nrc.gov.

In accordance with Title 10 of the Code of Federal Regulations 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 Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

PAPERWORK REDUCTION ACT STATEMENT

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, control number 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 Radiation Safety Cornerstone

Licensee: **H. B. Robinson Steam Electric Plant**
Docket Number: **050-00261**
Inspection Dates: **September 30th, 2019 – October 4th, 2019**
Documents Due to Region II by: **September 20th, 2019**

Inspection Procedures:

- 71124.01 - Radiological Hazard Assessment and Exposure Controls
- 71124.06 - Radioactive Gaseous and Liquid Effluent Treatment
- 71124.07 - Radiological Environmental Monitoring Program
- 71124.08 - Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation
- 71151 - Performance Indicator Verification

Lead Inspector: José M. Díaz-Vélez
Senior Health Physicist
US NRC Region II
(404) 997-4736
jose.diaz-velez@nrc.gov

Other Inspectors: Wade Loo
Senior Health Physicist
US NRC Region II
(404) 997-4727
wade.loo@nrc.gov

William Pursley
Health Physicist
US NRC Region II
(404) 997-4517
william.pursley@nrc.gov

Jonathan Rivera
Health Physicist
US NRC Region II
(404) 997-4646
jonathan.rivera@nrc.gov

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.*] The information can be provided on a CD delivered to the Region II Office at the address provided by the request date or all the information placed in a single "zip" file on CERTREC by the request date.

Please organize the information as it is arranged below and use name convention so that files requested are readily identifiable to the extent possible. Experience has shown that a poorly organized response leads to a less efficient inspection and places additional burden on licensee staff. Pay attention to the date ranges for the items requested as they may change from item to item. 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.

Miscellaneous

1. Plant Management, Radiation Protection and Chemistry organizational charts with contact telephone numbers
2. List of primary contacts for each inspection area w/phone numbers
3. Corrective action program procedure(s)
4. List of radiation protection procedures including title and number

71124.01 - Radiological Hazard Assessment and Exposure Controls

Last inspected: *September 2018*

1. Schedule of any on-going radiological work (e.g. Gantt chart or similar list)
2. Procedures related to HP 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, ISFSI Controls, etc.)
3. Procedures related to release of personnel and materials (e.g. release surveys, guidance for alarm follow-up, decontamination, etc.)
4. List of last outage and active RWPs and corresponding dose limits
5. List of locations or plant maps indicating locations of all LHRAs and VHRAs, including areas with the potential to become LHRAs during operations or outages
6. List of Nationally Tracked Sources and any change-of-ownership transactions
7. Most recent sealed source inventory record
8. List of all non-fuel items stored in spent fuel pool
9. Most recent self-assessment or audit covering HP controls
10. List of condition reports related to HP controls (e.g. radworker error, HP technician error, posting issues, HRA/LHRA/VHRA issues, rad survey problems, etc.) issued since September 2018. This should be a list of corrective action documents containing a CR number and brief *description, not full CRs*.

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Last Inspected: *March 2017*

1. Copy of Offsite Dose Calculation Manual (ODCM) including a list of changes made in the latest revision
2. Procedures for gaseous and liquid effluents to include collection, analysis, release, alarm setpoints, dose evaluations, and QC for counting instrumentation
3. List of changes made to radioactive effluent processing/discharge systems since: March 2017
4. List of "out of service" (OOS) effluent monitors and duration since March 2017
5. The last two calibration records for the following effluent monitors:
 - a) Containment and plant vent radioactive gas monitor (R-12)
 - b) Plant Vent Radiation Monitoring System, (R-14C, D, and E Channels)
 - c) Waste disposal system liquid effluent monitor (R-18)
6. Documentation for the radioactive sources used to calibrate the instruments in item 5 above
7. The last two surveillances (in-place filter tests and charcoal tests) performed on the Unit 2 Containment Purge Air-exhaust Filtration System
8. The last two gaseous effluent release permits and liquid effluent release permits
9. List of all unmonitored spills, leaks, or unexpected liquid/gaseous discharges since March 2017
10. Material condition surveillance records for effluent treatment system components not readily accessible for any reason (e.g. in-service & spent resin tanks, waste gas hold-up tanks, etc)
11. The last two Inter-laboratory comparison program results (for onsite count lab)
12. Most recent audit, self-assessment, and/or review of the radioactive effluent monitoring program
13. List of CRs generated since March 31, 2017, as a result of gaseous and liquid effluent processing and/or ODCM related activities. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs*

71124.07 - Radiological Environment Monitoring Program (REMP)

Last Inspected: *March 2017*

1. Procedures for radiological environmental monitoring including but not limited to:
 - a) Collection, preparation and analysis of all environmental samples
 - b) Calibration and maintenance of REMP air and/or water samplers
 - c) Calibration of meteorological monitoring instruments
 - d) Periodic meteorological instrumentation surveillance requirements
 - e) Land use census
 - f) Calibration and quality control of for sample counting instruments
2. Procedures associated with NEI/industry groundwater protection initiative
3. Collection schedule for REMP samples during the week of inspection and contact information for collection staff.
4. Last two calibration records for REMP air and water sampling equipment
5. Last two calibration records for meteorological monitoring instrumentation on the primary tower (wind speed & direction, and air temperature)
6. Data recovery report for meteorological monitoring instruments since March 2017

7. Most recent inter-laboratory comparison program results
8. List of systems, structures and components identified as credible mechanisms for the potential release of licensed material to the groundwater (e.g. SSC risk ranking matrix)
9. List of any non-radioactive system that has become contaminated since March 2017
10. Summary of any leaks and/or spills that have occurred since March 2017 (a copy of 10.75g file)
11. Copies of any reports to the NRC regarding abnormal onsite spills/leaks or radioactive material since March 2017
12. Groundwater monitoring results since March 2017
13. Environmental TLD results since March 2017
14. List of onsite surface water bodies (e.g. ponds, retention basins, lakes) that contain or can potentially contain radioactivity
15. Most recent audit/self-assessments of REMP activities including vendor activities
16. List of CRs generated since March 2017, because of REMP activities or groundwater activities. This should be a list of corrective action documents containing a CR number and brief description, not full CRs

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

Last Inspection: *September 2016*

1. 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 but are not limited to:
 - a) Solid and liquid radioactive waste (radwaste) processing
 - b) transferring radwaste resin and sludge discharges into shipping/disposal containers
 - c) Waste stream mixing and/or sampling, including:
 - i. waste concentration averaging
 - ii. use of scaling factors and calculations used to account for difficult-to-measure radionuclides
 - iii. ensuring waste stream composition data accounts for changing operational parameters
 - d) Shipping/transportation
 - e) Cask loading and closures (licensee and vendor), make applicable to the last three cask transports
 - f) Process Control Program
2. Liquid and solid radwaste system diagrams and detailed system descriptions (e.g. information that might be contained in curricula for training new system engineers)
3. List of RAM storage areas, including satellite radiological controlled areas (RCAs)
4. List of all RAM/Radwaste shipments made since September 2016 (shipping logs)
5. List of all changes made to solid and liquid radwaste processing systems since September 2016
6. List of all abandoned solid and liquid radwaste processing equipment
7. Last two 10 CFR Part 61 analyses for each waste stream, including QA data (e.g. in-house vs. vendor lab comparisons, current results vs. database, etc.)
8. Most recent self-assessment or audit of Shipping/radwaste processing and RAM storage programs

9. List of condition reports related to shipping, radwaste processing, or RAM storage since September 2016. This should be a list of corrective action documents containing a number and brief description, not full condition reports.

71151 - Performance Indicator Verification (Occupational and Public Cornerstones)

1. Procedure(s) for gathering and reporting PI data
2. List of all CRs related to effluent dose/ODCM issues since April 2018 until June 2019. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*
3. List of all CRs related to LHRA/VHRA issues or significant (>100 mrem) unintended doses since July 2018 until June 2019. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*
4. Most recent gaseous and liquid effluent evaluation of dose to the public (year-to-date doses).
5. List of electronic dosimeter alarms since July 2018 (dose and dose rate)

Onsite Assistance During Inspection

- Identification of ongoing radiological risk significant work activities, including pre-job briefings
- Notification of expected shipment preparation or receipt
- Health physics assistance with plant walk-downs of *containment, meteorological tower, ventilations systems, waste processing systems*

Inspector Contact Information:

José M. Díaz-Vélez
Sr. Health Physicist
(404) 997-4736
jose.diaz-velez@nrc.gov

Mailing Address

US Nuclear Regulatory Commission, Region II
ATTN: José M. Díaz-Vélez
245 Peachtree Center Ave., NE
Suite 1200
Atlanta, GA 30303

Diaz, Jose

To: justin.wild@duke-energy.com
Subject: NRC Radiation Safety Baseline Inspection at H. B. Robinson Steam Electric Plant, Unit No. 2, Sept. 30th - October 4th, 2019
Attachments: Robinson Letter.pdf
Importance: High

Mr. Wild,

Per our previous conversation I understand you will be our licensing point of contact for the upcoming NRC Radiation Safety Inspection scheduled for the week of September 30 - October 4, 2019 at H. B. Robinson Steam Electric Plant, Unit No. 2. Attached is the Initial Information Request and a Document Request List.

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

Regards,

José M. Díaz Vélez, Sr. Health Physicist

Division of Reactor Safety

Engineering Branch 3

Jose.diaz@nrc.gov

404-997-4736

U. S. Nuclear Regulatory Commission

Region II Office

Marquis One Tower 245 Peachtree Center Avenue, NE

Suite 1200

Atlanta, Georgia 30303-1257