UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

November 1, 2023

EA-23-054

Robert Schuetz, Chief Executive Officer
Energy Northwest
MD 1023
P.O. Box 968
Richland, WA 99352

SUBJECT: COLUMBIA GENERATING STATION - FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING, NOTICE OF VIOLATION AND FOLLOW-UP ASSESSMENT LETTER; NRC INSPECTION REPORT 05000397/2023093

Dear Robert Schuetz:

This letter provides you the final significance determination of the preliminary White finding discussed in our previous communication dated June 1, 2023, which included the U.S. Nuclear Regulatory Commission (NRC) Inspection Report 05000397/2023092, Agencywide Documents Access and Management System (ADAMS) Accession No. ML23139A121. The finding involved the failure to take suitable and timely measurements to adequately assess the internal dose of the two pipefitters and compliance with occupational dose equivalent limits associated with the reactor water cleanup contamination event on May 28, 2021.

In letter dated July 25, 2023 (ML23306A224, with non-public exhibits A and C, ML23306A225 and ML23306A226 respectively), you provided a response to the NRC staff's preliminary determination regarding the finding. Your response communicated that the actions taken to measure and assess dose complied with applicable requirements and guidance. Specifically, you stated that the workers' internal dose was assessed in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 20.1204 and Energy Northwest's procedures, as well as regulatory guidance and industry standards.

After considering the information developed during the inspection and the additional information you provided in your letter dated July 25, 2023, the NRC has concluded that the finding is appropriately characterized as White, a finding of low to moderate safety significance.

You have 30 calendar days from the date of this letter to appeal the NRC's determination of significance for the identified White finding. Such appeals will be considered to have merit only if they meet the criteria given in Inspection Manual Chapter 0609, Attachment 2 (ML20337A296). Submit the appeal in writing to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 1600 East Lamar Blvd., Arlington, Texas 76011-4511, and email it to R4Enforcement@nrc.gov.

The NRC has also determined that a violation of NRC requirements occurred. The circumstances surrounding the violation were described in detail in NRC Inspection Report 05000397/2023092. The violation is cited in the enclosed Notice of Violation (Notice), Enclosure 1, and involved the failure to take suitable and timely measurements to determine internal dose exposure as required by 10 CFR 20.1204. In accordance with the NRC Enforcement Policy, the Notice is considered an escalated enforcement action because it is associated with a White finding. The details of the NRC's Enforcement and Significance Evaluation are documented in Enclosure 2.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC review of your response to the Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

As a result of our review of Columbia Generating Station's performance, including this White finding, we have assessed that the performance of Columbia Generating Station continued to be in the Regulatory Response column of the NRC's Action Matrix, effective the fourth quarter of 2021. We had previously assessed the performance of Columbia Generating Station to be in the Regulatory Response column based on a White finding documented in our letter dated June 1, 2023 (ML23111A237). Therefore, we plan to conduct a supplemental inspection using Inspection Procedure 95001, "Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs," when your staff has notified us of your readiness for this inspection. This inspection procedure is conducted to provide assurance that the root cause and contributing causes of risk significant performance issues are understood, the extent of condition and the extent of cause are identified, and the corrective actions are sufficient to prevent recurrence.

After considering the additional information you provided in your letter dated July 25, 2023, the NRC has revised the cross-cutting aspect associated with the finding. The details are provided in Enclosure 2. If you disagree with a cross-cutting aspect assignment you should provide a response within 30 days of the date of this letter, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 1600 East Lamar Blvd., Arlington, Texas 76011-4511, and the NRC Resident Inspector at the Columbia Generating Station, and email it to R4Enforcement@nrc.gov.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosures, and your response will be made available electronically for public inspection in the NRC Public Document Room and from the NRC's ADAMS, accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the public without redaction.

If you have any questions concerning this matter, please contact Gregory G. Warnick of my staff at 817-200-1249.

Sincerely,

Signed by Monninger, John
on 11/01/23

John D. Monninger
Regional Administrator

Docket No. 05000397
License No. NPF-21

Enclosures:
1. Notice of Violation
2. Enforcement and Significance Evaluation

COLUMBIA GENERATING STATION - FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING, NOTICE OF VIOLATION AND FOLLOW-UP ASSESSMENT LETTER; NRC INSPECTION REPORT 05000397/2023093 – DATED NOVEMBER 1, 2023

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☒SUNSI Review: By: JGK | ADAMS: ☒ Yes ☐ No | ☐ Non-Publicly Available ☒ Publicly Available | ☒ Non-Sensitive ☐ Sensitive | Keyword:

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DATE	10/10/23	10/17/23	10/12/23	10/17/23	10/23/23
OFFICE	D:DORS	D:DRSS	RA		
NAME	TClark	TBloomer	JMonninger		
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DATE	10/18/23	10/18/23	11/01/23		

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NOTICE OF VIOLATION

Energy Northwest
Columbia Generating Station

Docket No. 05000397
License No. NPF-21
EA-23-054

During an NRC inspection conducted from March 9 to April 11, 2023, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

> 10 CFR 20.1204(a) requires, in part, that the licensee shall, when required under 10 CFR 20.1502, take suitable and timely measurements of: (1) concentrations of radioactive materials in air in work areas; or (2) quantities of radionuclides in the body; or (3) quantities of radionuclides excreted from the body; or (4) combinations of these measurements, to determine compliance with occupational dose equivalent limits.
>
> 10 CFR 20.1502(b)(1) requires, in part, that the licensee shall monitor the occupational intake of radioactive material by and assess the committed effective dose equivalent to adults likely to receive, in 1 year, an intake in excess of 10 percent of the annual limit on intake.
>
> Contrary to the above, on May 28, 2021, when required under 10 CFR 20.1502, the licensee failed to take suitable and timely measurements of: (1) concentrations of radioactive materials in air in work areas; or (2) quantities of radionuclides in the body; or (3) quantities of radionuclides excreted from the body; or (4) combinations of these measurements, to determine compliance with occupational dose equivalent limits. Specifically, the licensee failed to: (1) take measurements of the concentrations of radioactive materials in the air at the work area and instead used a general area air sample point located approximately 15 feet away from the pipefitters receiving the intake of radioactive material; (2) properly evaluate alpha emitters, which would not be adequately detected using whole-body counts; (3) follow station procedures for in vitro monitoring by not conducting feces sampling or establishing elimination trends; or (4) use a combination of measurements from above to determine compliance with occupational dose equivalent limits.

This violation is associated with a White significance determination process finding.

Pursuant to 10 CFR 2.201, Energy Northwest is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 1600 East Lamar Blvd., Arlington, Texas 76011-4511, and the NRC Resident Inspector at the Columbia Generating Station, and email it to R4Enforcement@nrc.gov within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a “Reply to a Notice of Violation, EA-23-054” and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken; and (4) the date when full compliance will be achieved.

Your response may reference or include previous docketed correspondence if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, the NRC may issue an order or a demand for

information requiring you to explain why your license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room and from the NRC's ADAMS, accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html, to the extent possible, it should not include any personal privacy or proprietary information so that it can be made available to the public without redaction.

If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

In accordance with 10 CFR 19.11, you are required to post this Notice within 2 working days of receipt.

Dated this 1st day of November 2023

ENFORCEMENT AND SIGNIFICANCE EVALUATION

On June 1, 2023, the NRC issued Inspection Report 05000397/2023092 to Energy Northwest (licensee). In the inspection report, the NRC documented a single, preliminary White finding and associated apparent violation of 10 CFR 20.1204(a). In letter dated July 25, 2023, Energy Northwest provided its response to the inspection report.

ENFORCEMENT EVALUATION

SUMMARY OF ENERGY NORTHWEST ENFORCEMENT RESPONSE:

1. Energy Northwest contends that it complied with applicable NRC regulations in 10 CFR 20.1502 and 10 CFR 20.1204. The licensee contends that the plain language reading of 10 CFR 20.1204 states that any one of the measurements listed in 10 CFR 20.1204(a)(1) – (4) satisfies the requirement of the regulation, with a level of subjectivity from the licensee's Radiation Protection (RP) management/supervision staff in the measurements being suitable and timely, and a "combination of measurements" was not required. However, Energy Northwest contends that consistent with 10 CFR 20.1204(a), Energy Northwest did take suitable and timely measurements of a combination of:

    - radioactive material in air in work areas (through air samples),
    - quantities of radionuclides in the body (through whole-body counts), and
    - quantities of radionuclides excreted from the body (through 24-hour urinalysis).

2. Energy Northwest contends its actions were suitable and timely, consistent with NRC guidance and industry practice. Energy Northwest asserts that its measurements were "suitable and timely" because they were consistent with (1) Regulatory Guide 8.9, "Acceptable Concepts, Models, Equations, and Assumptions for a Bioassay Program," which the NRC staff published as nonmandatory "general guidance" for meeting the requirements set forth in 10 CFR 20.1502 and 10 CFR 20.1204; and (2) industry practice.

3. Energy Northwest contends that the NRC Inspection Report incorrectly asserts that plutonium 239/240 (Pu-239/240) is a significant contributor to dose. Energy Northwest asserts that it did not need to take additional internal dose measurements because: (1) at the time of the event, when Radiological Support decided on the tests to measure internal dose, available data did not show the presence of Pu-239/240 in a "statistically significant quantity," and (2) even now, there is still no data showing that Pu-239/240 was detectable or present.

4. Energy Northwest asserts that it complied with its own procedures. Energy Northwest specifically identified site procedures PPM 11.2.4.6, PPM 11.2.4.5, and HPI-5.9, which governed the need for in vitro samples to determine internal exposures to comply with 10 CFR 20.1204. The licensee's position is that these procedures allow Radiological Support and RP to exercise significant discretion in determining the necessary tests based on the specific facts of each potential exposure. The licensee asserts that because alpha emitters were not detectable or present in a statistically significant quantity, Radiological Support exercised its discretion, in accordance with its

procedures, and decided to pursue 24-hour urinalysis, numerous whole-body counts, the smear, and air sample data to calculate dose.

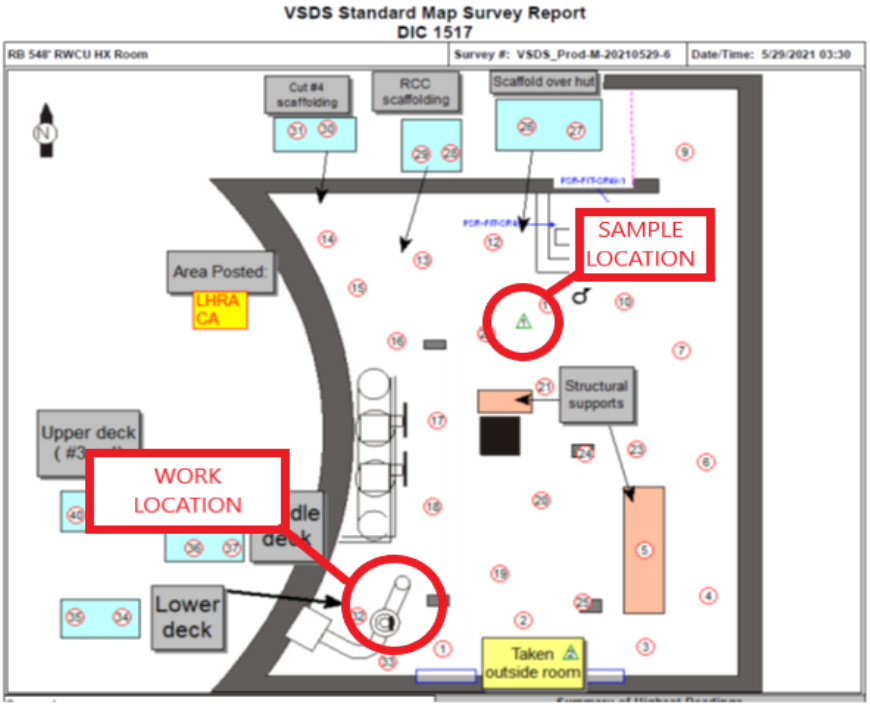
NRC ENFORCEMENT EVALUATION:

The NRC evaluated the original apparent violation in Inspection Report 05000397/2023092 in the context of the licensee's points of disagreement discussed above. Specifically, the NRC reviewed licensee procedures and established industry guidance, to which Energy Northwest is committed, to determine if the licensee took suitable and timely measurements to assess dose and determine compliance with occupational dose equivalent limits required under 10 CFR 20.1502. The NRC agrees that 10 CFR 20.1204, "Determination of internal exposure," allows for any single method, as described in paragraphs (a)(1) – (a)(4), to show compliance with the requirement. The NRC's intent on focusing on the "combination of measurements" in the inspection report was to address that the licensee did attempt to meet each of the stated methods in (a)(1) – (a)(3) of 10 CFR 20.1204.

The following discussion individually evaluates each method described in paragraphs (a)(1) – (a)(4) of 10 CFR 20.1204.

10 CFR 20.1204(a)(1) - Concentrations of radioactive materials in air in work areas

The NRC determined that the licensee did not assess dose to the pipefitters using concentrations of radioactive materials in air in work areas. Specifically, while the licensee did sample air in the room where the May 28, 2021, radioactive uptake occurred, this air sample location was approximately 15 horizontal feet from the location of the two pipefitters who received a radioactive uptake. Survey Map VSDS_Prod-M-20210529-6, taken on May 29, 2021, at 3:30 a.m., shows the sample location relative to the work on the reactor water cleanup heat exchangers (RWCU HX).



Based on its location, the NRC determined this air sample constituted a general area air sample, as indicated on Survey M-20210529-13 as a “General Area A/S.” Licensee procedure PPM 11.2.13.1, “Radiation and Contamination Surveys,” section 3.0, states, in part, that air sample data is noted with a sample identification number and the type of air sample (i.e., “BZ” for breathing zone or “GA” for general area). Thus, the NRC determined that this air sample is not indicative of the pipefitters breathing zone or work area and is not suitable for assessing dose to the pipefitters. The pipefitters were across the room on a platform away from this air sample data location. The room’s ventilation airflow was in a general direction such that the airborne condition was directed away from the sample location. In reaching this conclusion, the NRC considered licensee procedure HPI-5.9, “Evaluation of In Vivo Bioassay Results Following a Potential Intake,” revision 15. In section 3.5, this procedure provides instruction that “when potential alpha intake has occurred, use information obtained from any of the following to determine the best estimate of internal exposure.” The procedure cites “lapel air sample,” “breathing zone air sample,” or “air sampling in work area.”

Based on the procedural requirements to notate the type of air sample and the actual location of the air sample data used in their assessment, the NRC determined that the sample location did not constitute a “Lapel Air Sample,” “Breathing Zone Air Sample,” or “Air Sampling in the Work Area,” that the licensee could use for internal dose assessment. The air sample data used was determined as a general area air sample for the RWCU HX room.

10 CFR 20.1204(a)(2) - Quantities of radionuclides in the body

Regarding compliance with 10 CFR 20.1204(a)(2), the licensee established procedure PPM 11.2.4.5, “Whole Body Counts and Daily Checks Using the Renaissance Fastscan,” revision 16, to assess dose based on quantities of radionuclides in the body.

Procedure PPM 11.2.4.5, step 5.4.3.d, required in part, that for Action Level 3 (0.1 annual limit on intake (ALI) to 0.25 ALI or 500 mrem committed effective dose equivalent (CEDE) to 1.25 rem CEDE), Radiological Support evaluates use of alternate bioassay methods to confirm internal dose measurements. For an intake equivalent to or greater than 3000 nanocuries (nCi) of cobalt 60 (Co-60) (an approximate CEDE of 1 rem), the licensee would evaluate the contribution to the CEDE from alpha emitters.

On the same day the uptake event occurred, the licensee administered initial whole-body counts to the two pipefitters in accordance with procedure PPM 11.2.4.5. These whole-body counts revealed internal activity from Co-60 of 5,890 nCi and 2,340 nCi for the two pipefitters involved in the event. Based on the timing of these whole-body counts and quantities of Co-60 detected, both values exceeded the Action Level 3 threshold of 1,460 nCi in procedure PPM 11.2.4.5; and one (5,890 nCi) exceeded the Action Level 4 threshold of 3,650 nCi.

Further, because one of the pipefitters exceeded the 3,000 nCi threshold in procedure PPM 11.2.4.5, step 5.4.3.d, the procedure required Radiological Support to evaluate the contribution to the CEDE from alpha emitters. The need to evaluate for alpha emitters is established by Energy Northwest Technical Basis Document (TBD) 04-02, “RP Technical Basis Document – Comparison of Whole-Body Counter Library with CGS Source Term,” revision 2. Document TBD 04-02 established that because in vivo measurements are not suitable to measure the dose contribution from alpha emitters, the licensee needed to use in vitro measurements to evaluate the contribution from alpha emitters. Document TBD 04-02 established a threshold based on the expected ratio of alpha emitters as a contribution to overall CEDE. Document TBD 04-02 specifically established the following:

A review of the [dry active waste] waste stream identified the presence of two transuranic isotopes, Pu-238 and Pu-239. Because these nuclides decay by alpha emission, they have relatively higher radiological impacts if inhaled. Additionally, as they will not be detected through ordinary in vivo monitoring [emphasis added]*, their presence in the waste stream was evaluated to determine their contribution in internal exposures.*

The guidance contained in EPRI Technical Report TR-1013509, Alpha Monitoring Guidelines for Operating Nuclear Power Stations, states that alpha contributions to CEDE should be calculated when they reach ≥10 mRem CEDE. The results indicate the alpha emitters contribute 2% of the CEDE dose, hence, to reach 10 mRem, a total CEDE intake of 500 mRem must be reached before their contribution is required to be accounted for. Consequently, an intake equivalent to 3000 nanoCuries of Co-60 would be required to trigger an evaluation of CEDE due to the transuranic contributors. This value serves as the current trigger point that will prompt calculating CEDE based upon the presumed presence of alpha emitting isotopes for any station intakes of radioactive material [emphasis added]*.*

Additionally, Action Level 4, procedure PPM 11.2.4.5 states that, if possible, THEN USE alternate bioassay techniques and results to aid in the evaluation of the intake; and further, to USE person-specific data to review suitability of assumptions, techniques, and models used to assess the intake. Thus, this action level required the use of alternate bioassay methods, as available, not just to evaluate the use of them.

The NRC notes that the characterization of potential alpha emitters based on historical, dry active waste stream contamination is likely not representative of the alpha emitters present in a work evolution where the oxide corrosion layer of primary system piping is disturbed by cutting, grinding or flapping piping internals.

Based on the above, the NRC determined that the use of in vivo measurements (e.g., whole-body counts) in itself was not an adequate method for the purposes of assessing dose from alpha emitters used to determine compliance with occupational dose equivalent limits.

10 CFR 20.1204(a)(3) - Quantities of radionuclides excreted from the body

Because the licensee did not have suitable air sample data to measure concentrations of radioactive materials in air in work areas or in the breathing zone of the pipefitters, and because whole-body counts alone were not a suitable method for the purposes of assessing dose from alpha emitters, the licensee was left with in vitro monitoring to determine quantities of radionuclides excreted from the body. The licensee established procedure PPM 11.2.4.6, “In Vitro Bioassay Sampling and Analysis,” revision 3, to measure quantities of radionuclides excreted from the body. The NRC reviewed this procedure and while adequate, as written, the NRC determined the licensee failed to complete several required steps to obtain suitable measurements of quantities of radionuclides excreted from the body. Specifically, while the licensee did obtain a single 24-hour urine sample for each of the pipefitters involved in the event which identified the presence of Pu-239, an alpha emitter, in one of the pipefitters, the NRC identified that the licensee failed to complete the following steps:

- Step 5.1.1. states, “Attachment 8.1 provides guidelines for the type of sample needed for various radionuclides.” Attachment 8.1 recommends collection of both urine and feces sample types for indications of Pu-239/240 radionuclides (alpha emitters).

- Step 5.1.3 states, “IF fecal sampling is being performed for an acute intake, THEN **CONTINUE** for the first three to five days following the intake.”

- Step 5.1.4 states, “**CONTINUE** excreta collection until the elimination rates are well-established.”

Because the licensee failed to follow their internal procedures for in vitro monitoring, and in particular, failed to continue excreta sampling to determine the elimination rates of Pu-239 following the identification of that isotope in at least one 24-hour urinalysis, the NRC determined that the licensee did not use suitable and timely methods by measuring the quantities of radionuclides excreted from the body for the purposes of assessing dose from alpha emitters used to determine compliance with occupational dose equivalent limits.

10 CFR 20.1204(a)(4) - Combination of Measurements

The NRC’s apparent violation stated the licensee failed to use a combination of measurements per 10 CFR 20.1204(a) to assess internal dose of the pipefitters. The licensee’s response focused on this terminology of “use of combination of measurements,” and stated they are not legally required to use a combination of measurements. The NRC agrees that the licensee may use any of the methods noted for compliance in this regulation as long as an adequate assessment is performed. The NRC maintains that the licensee was inadequate in all three measurement aspects of 10 CFR 20.1204(a)(1) – (a)(3). The NRC used “combination of measurements” (10 CFR 20.1204(a)(4)) because the licensee attempted to address each of the above three measurement methods, but NRC determined each of those methods (i.e., the combination of them) was not adequate to assess doses; thus, the combination of measurements was deficient.

NRC ENFORCEMENT CONCLUSION:

Based on the above, the NRC has determined that the violation of 10 CFR 20.1204(a) is valid. The discussion below addresses the licensee’s failure to make suitable and timely measurements in each area of 10 CFR 20.1204(a):

1. Concentrations of radioactive materials in air in work areas because the licensee did not have air samples that were representative of the breathing zone or work area location where the uptake occurred. The licensee used a general area air sample that was approximately 15 feet across the room from the pipefitters’ work area.

2. Quantities of radionuclides in the body because, consistent with procedure PPM 11.2.4.5, step 5.4.3.d, in vivo monitoring is not suitable to detect nuclides that decay by alpha emission (e.g., Pu-239), and the Co-60 activity detected required use of alternate bioassay methods.

3. Quantities of radionuclides excreted from the body because the licensee failed to follow procedure PPM 11.2.4.6, “In Vitro Bioassay Sampling and Analysis,” revision 3, and conduct fecal sampling and establish elimination rates of excreta (Steps 5.1.1, 5.1.3, and 5.1.4).

4. Combination of measurements per 10 CFR 20.1204(a)(4) because the licensee failed to complete suitable and timely measurements per 10 CFR 20.1204(a)(1), or 10 CFR 20.1204(a)(2), or 10 CFR 20.1204(a)(3), as stated above.

SIGNIFICANCE EVALUATION

ENERGY NORTHWEST POSITION:

Overall, the licensee presented arguments in their written response that led them to a conclusion that there was no violation of 10 CFR 20.1204(a) and requested that NRC withdraw the apparent violation. Thus, the licensee provided no evaluation of significance for the preliminary White finding.

NRC SIGNIFICANCE EVALUATION:

Using NRC Inspection Manual Chapter (IMC) 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the violation was determined to be of low to moderate safety significance (White) because: (1) it was not a finding in ALARA Planning or Work Controls, (2) it was not an overexposure, (3) there was no substantial potential for overexposure in this aspect of the uptake event; however, (4) the ability to assess dose was compromised. Inspection Manual Chapter IMC 0609, Appendix C, Section III.B, defines, in part, the "Compromised ability to assess dose," as failures to implement adequate program requirements resulting in unaccounted exposures that exceed, or could have exceeded, an acute intake of radionuclides greater than 0.02 ALI, per individual. The manual chapter states, in part, that a compromised ability to assess dose can result from improper analysis of bioassay data that results in missed intakes of radioisotopes or the failure to recognize a radiological hazard in the workplace (i.e., the potential for exposure to alpha emitting radionuclides resulting in the failure to appropriately assess intakes of these nuclides). For this performance deficiency, the NRC determined the definition of a compromised ability to assess dose was met based on the uncharacterized dose for at least one pipefitter exposed to alpha emitters that exceeded 0.02 ALI (100 mrem).

CROSS-CUTTING ASPECT EVALUATION

In NRC Inspection Report 05000397/2023092, the NRC cited H.1 – Resources as the associated cross-cutting aspect for the apparent violation. However, based on the information provided by the licensee in the written response, the NRC has determined that H.8 – Procedure Adherence is the more appropriate cross-cutting aspect given the licensee's presentation of applicable procedures for internal dose assessment.

The NRC has assigned the cross-cutting aspect of H.8 – Procedure Adherence: Individuals follow processes, procedures, and work instructions. Specifically, the licensee had internal dose procedures that would have provided them the appropriate instructions to evaluate alpha contamination and its contribution to internal dose, but they did not follow these steps resulting in a failure to perform an adequate internal dose assessment.

NRC CONCLUSION

The NRC concluded that the apparent violation documented in NRC Inspection Report 05000397/2023092 is valid and is categorized as a White significance determination process finding.