

NOTICE OF VIOLATION

Westinghouse
Commercial Nuclear Fuel Division
Columbia, South Carolina

Docket No. 70-1151
License No. SNM-1107
EA 97-244

During an NRC inspection conducted on May 5 - 7, 1997, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. 10 CFR 74.11 requires, in part, that the licensee notify the NRC Operations Center within one hour of discovery of any loss or theft or other unlawful diversion of SNM [Special Nuclear Material] which the licensee is licensed to possess.

10 CFR 20.2201(a)(1)(ii) requires, in part, that the licensee provide a telephone report within 30 days after the occurrence of any lost, stolen, or missing licensed material becomes known to the licensee, all licensed material in a quantity greater than 10 times the quantity specified in Appendix C [0.01 μ Ci] to part 20 that is still missing at this time.

Licensee Condition SG-1.1 states, in part, that the licensee shall follow Chapters 1.0 through 9.0 of its "Fundamental Nuclear Material Control (FNMC) Plan."

Section 2.2.2 of the licensee's FNMC Plan requires, in part, that after resolving item and/or material control anomalies, Columbia Plant Manager, within 30 days or less, submit initial written report to the NRC.

Contrary to the above, the licensee failed to provide the required notifications in that:

1. On October 16, 1996, the licensee had indications that two fuel rods were missing and on October 20, 1996, failed to notify the NRC Operations Center within 1 hour¹;
 2. On October 16, 1996, the licensee had indications that two fuel rods were missing and on November 19, 1996, failed to submit a telephone report to the NRC within 30 days. (01013)
- B. License Condition Number (No.) S-1 of License No. SNM-1107 requires that licensed materials be used in accordance with statements, representations, and conditions in the licensee's License Application dated April 30, 1995, and supplements thereto.

Enclosure

¹ NUREG-1065, "Acceptable Standard Format and Content for the Fundamental Nuclear Material Control Plan (FNMC) Required for Low-Enriched Uranium Facilities," grants licensees 72 hours to determine whether special nuclear material is missing.

Paragraph 2.1.2 of Chapter 2 of the License Application requires, in part, that, first level managers are also responsible for assuring that personnel under their jurisdiction receive adequate training.

Paragraph 3.4.2 of Chapter 3 of the License Application requires, in part, that "training will be provided for every individual in the Columbia Fuel Fabrication Facility (CFFF), commensurate with their duties. Formal training programs will be developed and implemented to enhance and augment procedure review and acknowledgment described in Paragraph 3.4.1(d) of this Chapter, and training responsibilities described in Chapter 2.0 of this License Application. Training records will be maintained in accordance with Section 3.8 of this Chapter."

Contrary to the above, as of October 10, 1996, the licensee failed to properly implement its training program with regard to handling SNM in that:

1. The Material Service Attendant (MSA) First Level Manager did not assure that MSA personnel received proper training with regard to the use of Mechanical Operating Procedure (MOP) 759006, "ADU Fuel Rod Staging Area Instructions," and implementation of the 7-day report requirements;
 2. The formal training program did not document the training received by an MSA in order for that individual to qualify for the position;
 3. Training of the MSA First Level Manager was not effective in assuring that licensee personnel had an adequate understanding of the duties and responsibilities of the position, as evidenced by the failure to:
 - (a) routinely review and assure proper disposition of items listed in the 7-day report from October 1996 through January 1997; and
 - (b) once notified of the listed item, to disposition it in a timely manner or promptly notify the Safeguards Coordinator. (01023)
- C. License Condition Number (No.) S-1 of License No. SNM-1107 requires that licensed materials be used in accordance with statements, representations, and conditions in the license's License Application dated April 30, 1995, and supplements thereto.

Section 3.4.1 of Chapter 3 of the License Application requires that operations to assure safe, compliant activities involving nuclear material will be conducted in accordance with approved procedures. Section 3.4.1(a.3) requires that the salient utility of Category-3 Procedures will be to provide training and instructions, including health, safety, and safeguards, for the Operations, Maintenance, Inspection, and Analytical Services Functions.

Contrary to the above, on October 5, 1996, the licensee failed to provide adequate procedures for handling and testing lead-filled rods. Specifically, Special Routing 13382 was inadequate in that it lacked many of the instructions for the operation of the various equipment stations that were required by the routine Mechanical Operating Procedures for those stations; it referenced other Quality Control Instruction procedures that could not be followed for the planned operation; and the review and approval process failed to identify that the procedure could not be followed as written. (01033)

- D. 10 CFR 71.5(a) requires that a licensee who transports licensed material outside of the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 171 through 189.

49 CFR 171.2(a) prohibits any person from offering hazardous material for transportation unless, among other requirements, the hazardous material is properly classified, described, packaged, marked, labeled, and in condition for shipment required or authorized under the Hazardous Material Regulations (49 CFR Parts 171-177).

10 CFR 110.5 prohibits the export of special nuclear material (SNM), including unirradiated fuel, unless authorized by a general or specific license issued under Part 110.

10 CFR 71.12(a) issues a general license to any licensee of the Commission to transport, or deliver to a carrier for transport, licensed material in a package for which a license, Certificate of Compliance (CoC), or other approval has been issued by the NRC. 10 CFR 71.12(c)(2) requires the licensee to comply to the terms and conditions of the NRC CoC and the applicable requirements of subparts A, G, and H of this part.

NRC CoC, No. 9239, Rev. 4, dated March 21, 1996, requires that the minimum transport index (TI) for a shipment of material in the licensee's shipping containers designated as MCC-3, MCC-4, or MCC-5, be shown on the shipping label for nuclear criticality safety as 0.4.

Contrary to the above, on October 10, 1996, the licensee inadvertently shipped two unirradiated fuel rods from their site in Columbia, South Carolina, to an overseas location, the Temelin Plant in the Czech Republic, and the licensee failed to comply with the transportation requirements for the shipment of licensed material specified in 10 CFR 71.5 and 49 CFR 170 through 189 in that:

1. The shipment of transport container No. M508 was classified as non-hazardous; however, two unirradiated fuel rods which contained hazardous material were present, a violation of 49 CFR 171.2(a);
2. The shipment of transport container No. M508 failed to comply with several DOT hazard communication requirements, including those for shipping papers [49 CFR 172.200(a)] in that it failed to describe the hazardous material, marking [49 CFR 172.301(a)] in that it failed to mark the package with the proper shipping name and identification number, and labeling [49 CFR 172.403(a)] in that it failed to label the package in accordance with the requirements;
3. The shipment of transport container No. M508 resulted in the export of two unirradiated fuel rods, a quantity that requires an NRC specific license under 10 CFR 110.5 (the licensee used NRC License No. XCOM1082 rather than NRC License No. XSNM02785, which authorizes the export of a specified amount of SNM); and
4. The shipment of transport container (designated MCC-5) No. M508 did not comply with the terms and conditions of NRC CoC Number 9239, in that transport container No. M508 did not indicate a minimum transportation index of 0.4 on the label for criticality safety as required by the CoC. (01043)

- E. Licensee Condition SG-1.1 states, in part, that the licensee shall follow Chapters 1.0 through 9.0 of its "Fundamental Nuclear Material Control (FNMC) Plan."

10 CFR 74.31(a)(1) requires the licensee's material control and accounting (MC&A) system to confirm the presence of special nuclear material (SNM).

10 CFR 74.31(c)(6) requires, in part, that the licensees maintain current knowledge of items when the sum of the time of existence of an item, the time to make a record of the item, and the time necessary to locate the item exceeds 14 days, and also store and handle, or subsequently measure, items in a manner so that unauthorized removals of items will be detected.

10 CFR 74.15(a) requires, in part, that each licensee who receives and ships SNM shall complete a Nuclear Material Transaction Report (DOE/NRC Form 741) in accordance with instructions in NUREG/BR-0006, "Instructions for Completing Nuclear Material Transaction Reports and Concise Note Forms." Critical MC&A Procedure NMM-CP-850, "Nuclear Material Shipments," requires that all SNM shipped from the Columbia plant shall be measured or received a measurement

verification before departing the plant site, and DOE/NRC Form 741 with shipper's values must be completed by the assigned personnel within one day of the shipment.

Section 6.2 of the licensee's FNMC Plan requires that the licensee maintains control of items and verifies material shipment and removal from the item control program.

Contrary to the above, from October 5, 1996, through April 17, 1997, the licensee failed to adequately implement its MC&A program in that the first general performance objective of 10 CFR Part 74.31 was not met, and the item control program failed to confirm the presence of two fuel rods. In addition, the licensee failed to maintain a current knowledge of items or make appropriate records when the items could not be located within 14 days. As a result of the loss of item control, the required DOE/NRC Form 741s were not generated. (01053)

These violations represent a Severity Level III Problem (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Westinghouse Electric Corporation is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region II, and to the Director, Office of Nuclear Material Safety and Safeguards, 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" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, 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, an order or a Demand for Information may be issued as to why the 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.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR 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 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Rockville, Maryland
this 28th day of July 1997