

## SAFETY EVALUATION REPORT

DOCKET NO.: 70-1151

LICENSE NO.: SNM-1107

LICENSEE: Westinghouse Electric Company, LLC

SUBJECT: REQUEST FOR AN EXEMPTION FROM 10 CFR PART 20 FOR SHIPMENT NOTIFICATION FROM COLUMBIA FUEL FABRICATION FACILITY WASTE TO THE US ECOLOGY IDAHO FACILITY

### 1.0. BACKGROUND

On June 1, 2021, Westinghouse Electric Company, LLC (WEC) requested that the U.S. Nuclear Regulatory Commission (NRC) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21153A001), grant an exemption from certain requirements of Section III.E of Appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20, for the Columbia Fuel Fabrication Facility (CFFF). The regulations in this section require Westinghouse to investigate and report to the NRC when Westinghouse does not receive notification of receipt of a shipment, or part of a shipment, of low-level radioactive waste within 20 days after transfer. WEC is requesting that the time period to receive acknowledgement that the shipment has been received by the intended recipient be extended from 20 days to 45 days for shipments. The requested exemption would be applicable to CFFF rail or mixed-mode shipments, such as those involving a combination of truck/rail shipments. It would not apply to truck-only shipments. Westinghouse requested the exemption be approved for use for the duration of the license term. This would be reflected in an amended license.

Additionally, in the same June 1, 2021 letter, WEC requested that the NRC approve an alternate disposal request (ADR) (ADAMS Accession No. ML21153A001), pursuant to 10 CFR 20.2002, "Method for obtaining approval of proposed disposal procedures," for the disposal of specified low-activity radioactive materials from the Columbia Fuel Fabrication Facility. The ADR and request for exemptions are evaluated in a separate Safety Evaluation Report (ADAMS Accession No. ML21202A112).

As described in Section 2.0 below, experience with completion of the Westinghouse Hematite Decommissioning Project, decommissioning of the CFFF East Lagoon, and historical data obtained from decommissioning power reactor sites indicates that numerous rail shipments could take longer than 20 days, resulting in an excessive administrative burden because of required investigations and reporting for normal transport times for such shipments. Specifically, the first three rail shipments associated with the CFFF East Lagoon decommissioning project exceeded 20 days but were received at US Ecology-Idaho within 30 days. By extending the time for receipt of notification to 45 days before requiring investigation and reporting, a reasonable limit on shipment without prematurely requiring licensee investigation and reporting.

## 2.0. DISCUSSION

Section III.E of 10 CFR 20, Appendix G requires that any shipment of LLRW for disposal, or part of a shipment, be investigated by the shipper if the shipper has not received notification of receipt within 20 days after transfer. It provides that each licensee who conducts such a shipment tracing investigation shall file a written report with the appropriate NRC Regional Office within 2 weeks of completion of the investigation.

WEC is in the process of disposing of CFFF low-activity radioactive materials containing byproduct and special nuclear material via truck/rail shipments to the US Ecology, Inc. Resource Conservation and Recovery Act Subtitle C waste disposal facility in Idaho.

Westinghouse provided information related to the shipping times for material shipments associated with the completion of Westinghouse Hematite decommissioning project and decommissioning of the CFFF East Lagoon. This information shows numerous rail shipments took longer than 20 days. Additionally, in the exemptions referenced below in the “NRC Evaluation” section, multiple reactors undergoing decommissioning also had experiences with waste disposal shipments by rail exceeding 20 days. This results in an administrative burden because of required investigations and reporting. Specifically, Westinghouse stated that the first three rail shipments associated with the CFFF East Lagoon decommissioning project exceeded 20 days, but were at not time unaccounted for, and were received at US Ecology-Idaho within 30 days.

### NRC Evaluation

The requested exemption is similar to four others submitted to the NRC. The most recent was submitted by Orano Northstar ADP CR3 LLC for the Crystal River Nuclear plant on January 19, 2021 (ADAMS Accession No. ML21019A464). That request was approved by NRC granting an exemption on March 3, 2021 (ADAMS Accession No. ML21028A593). The second most recent was submitted to NRC on August 28, 2019 by NorthStar Nuclear Decommissioning Co., LLC for the Vermont Yankee Power Station (ADAMS Accession No. ML19252A056). That exemption was approved by the NRC granting an extension to 45 days (ADAMS Accession No. ML20017A070). The third was submitted to the NRC on January 16, 2017 by LaCrosseSolutions, LLC for the La Crosse Boiling Water Reactor (ADAMS Accession No. ML17018A136). That exemption was approved via a *Federal Register* Notice on May 10, 2017 (82 FR 21832) and was also an extension from 20 to 45 days. The fourth was submitted to the NRC on October 27, 2014 by ZionSolutions, LLC for the Zion Nuclear Generating Station, Units 1 and 2 (ADAMS Accession No. ML14309A197). That exemption was approved on February 9, 2015 (80 FR 7035; also extending the timeframe from 20 to 45 days)).

Disposal of CFFF low-activity radioactive materials containing byproduct and SNM will require rail shipments to waste disposal facilities. Rail shipments may sit on the rail spur at a remote railyard (e.g., waiting for the train to depart or allow for railcar repair), which may add to shipping delays that extend the durations of shipments from CFFF. In addition, administrative processes at the disposal facility, as well as mail delivery times (with respect to confirmation of delivery documentation) could also add several additional days to the process.

## 3.0 JUSTIFICATION FOR EXEMPTION

Section 20.2301 provides that “[t]he Commission may, upon application by a licensee or upon its own initiative, grant an exemption from the requirements of the regulations in this part if it

determines the exemption is authorized by law and would not result in undue hazard to life or property.” The purpose of the 10 CFR 20, Appendix G regulation is to investigate a late shipment that may be lost, misdirected, or diverted. For rail shipments, CFFF utilizes an electronic data tracking system interchange, or similar tracking system that allows monitoring the progress of the shipments on a daily basis. As a result, it is very unlikely that a shipment could be lost, misdirected, or diverted without knowledge of the carrier or CFFF.

(1) The Requested Exemption is Authorized by Law

There are no provisions in the Atomic Energy Act (or in any other Federal statute) that impose a requirement to investigate and report to the NRC low-level radioactive waste shipments that have not been acknowledged by the intended recipient within 20 days after transfer. Therefore, there is no statutory prohibition on the issuance of the requested exemption, and therefore the NRC is authorized to grant the exemption under law where appropriate.

(2) The Requested Exemption Would Not Result in Undue Hazard to Life or Property

The intent of 10 CFR 20, Appendix G, Section III.E is to require licensees to investigate, report, and trace radioactive shipments that have not reached their destination within 20 days after transfer. For rail shipments, CFFF utilizes an electronic data tracking system interchange or similar tracking system that allows monitoring the progress of the shipments by rail carrier on a daily basis. Thus, even where a shipment takes longer than 20 days (but less than 45) for delivery to be confirmed, it is very unlikely that the shipment is lost, misdirected, or diverted, or would otherwise pose a risk to life or property. Therefore, the NRC staff finds that issuing the requested exemption for rail or mixed-mode rail shipments to disposal facilities would not result in an undue hazard to life or property.

#### **4.0 ENVIRONMENTAL REVIEW**

The proposed exemption has been evaluated against the eligibility criterion for a categorical exclusion set forth in 10 CFR 51.22(c)(25). With respect to compliance with Section 102(2) of the National Environmental Policy Act (NEPA), 42 U.S.C. 4332(2) (NEPA), the NRC staff has determined that the proposed action, namely, the approval of the WEC exemption request, is within the scope of the categorical exclusions listed at 10 CFR 51.22(c)(25). The proposed action presents (i) no significant hazards considerations; (ii) would not result in a significant change in the types, or significant increase in the amounts, of any effluents that may be released offsite; (iii) would not result in a significant increase in individual or cumulative public or occupational radiation exposure; (iv) has no significant construction impact; (v) does not present a significant increase in the potential for or consequences from radiological accidents. The requirements from which an exemption is sought involves reporting requirements under 10 CFR 51.22(c)(25)(vi)(B) and inspection or surveillance requirements under 10 CFR 51.22(c)(25)(vi)(C). Therefore, no further analysis is required under NEPA.

## 5.0. CONCLUSION

The NRC finds that granting WEC a limited exemption from 10 CFR 20, Appendix G, Section III.E is appropriate. Under the exemption, WEC would not be required to report a waste disposal shipment sent by rail or mixed-mode including rail whose delivery was not confirmed within 20 days, in accordance with 10 CFR 20, Appendix G, Section III.E, unless a copy of the signed NRC Form 540 (or NRC Form 540A, if required) acknowledging receipt has not been received within 45 days of the shipment leaving the CFFF facility. CFFF shall continue to utilize an electronic data tracking system interchange, or similar tracking system that allows monitoring the progress of the shipments on a daily basis for shipments subject to this exemption.

License condition S-12 is added and states the following:

The licensee is granted an exemption from 10 CFR 20, Appendix G, Section III.E. Under the exemption, WEC is not required to report a low-activity radioactive material (containing byproduct and special nuclear material shipment) shipment sent by rail or by mixed-mode including rail whose confirmation of delivery exceeds 20 days unless a copy of the signed NRC Form 540 (or NRC Form 540A, if required) acknowledging receipt has not been received within 45 days of the shipment leaving the CFFF facility as described in its submittal dated June 1, 2021. CFFF shall continue to utilize an electronic data tracking system interchange, or similar tracking system that allows monitoring the progress of the shipments on a daily basis for shipments subject to this exemption.

PRINCIPAL CONTRIBUTOR:

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