



10 CFR 20, Appendix G

August 30, 2021

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Pilgrim Nuclear Power Station
Renewed Facility License No. DPR-35
NRC Docket Nos. 50-293 and 72-1044

Subject: Request for Exemption from 10 CFR 20, Appendix G, Section III.E

In accordance with 10 CFR 20.2301, "Applications for exemptions," Holtec Decommissioning International, LLC (HDI) requests NRC approval for exemption from certain requirements of Section III.E of 10 CFR 20, Appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," for the Pilgrim Nuclear Power Station (PNPS). These regulations require PNPS to investigate and report to the NRC when PNPS does not receive notification of receipt of a shipment, or part of a shipment, of low-level radioactive waste within 20 days after transfer.

PNPS 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 low-level radioactive waste shipments. The requested exemption would be applicable to mixed mode shipments from PNPS, including combination of truck/rail shipments.

The attachment to this letter provides an evaluation of the request, which includes a description and purpose of the request, as well as justification for granting the exemption.

This exemption request is not required to address an immediate safety concern; however, PNPS anticipates making an increased number of low-level radioactive waste shipments in the near future as site decommissioning activities increase. Therefore, PNPS is requesting NRC approval of this exemption request within six months.

This letter contains no new regulatory commitments.

If you have any questions or need further information, please contact me at (856) 797-0900, ext. 3813.

Sincerely,

Andrea L. Sterdis
HDI Vice President, Regulatory and Environmental Affairs
Holtec Decommissioning International, LLC



Attachment:

1. Exemption Request Evaluation

cc: NRC Regional Administrator - Region I
NRC NMSS Project Manager (Pilgrim Nuclear Power Station)
Director, Massachusetts Emergency Management Agency

Attachment 1 to

HDI-PIL-21-055

Pilgrim Nuclear Power Station

Exemption Request Evaluation

**APPLICATION FOR EXEMPTION FROM CERTAIN REQUIREMENTS OF
10 CFR 20, APPENDIX G, SECTION III.E**

(7 total pages)

APPLICATION FOR EXEMPTION FROM CERTAIN REQUIREMENTS OF 10 CFR 20, APPENDIX G, SECTION III.E

I. APPLICATION FOR EXEMPTION

In accordance with 10 CFR 20.2301, "Applications for exemptions," Holtec Decommissioning International, LLC (HDI) requests an exemption from certain requirements of Section III.E of 10 CFR 20, Appendix G, for Pilgrim Nuclear Power Station (PNPS). 10 CFR 20, Appendix G, Section III.E "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," requires that any shipment, or part of a shipment, for which acknowledgement is not received within the times set forth in this section must:

1. Be investigated by the shipper if the shipper has not received notification of receipt within 20 days after transfer; and
2. Be traced and reported. The investigation shall include tracing the shipment and filing a report with the nearest Commission Regional Office listed in appendix D to this part. Each licensee who conducts a trace investigation shall file a written report with the appropriate NRC Regional Office within 2 weeks of completion of the investigation.

PNPS is requesting that the period of time to receive acknowledgement that a shipment has been received by the intended recipient be extended from 20 days to 45 days for radioactive waste shipments from the PNPS. The requested exemption would be applicable to PNPS mixed mode shipments such as a combination of truck/rail shipments.

II. PURPOSE

As described in the background summary below, PNPS waste shipment experience thus far in 2021 as well as historical data obtained from other decommissioning power reactor sites, indicates that numerous rail shipments have taken longer than 20 days, resulting in an excessive administrative burden because of the required investigations and reporting. By extending the time for receipt notification to 45 days before requiring investigation and reporting, a reasonable upper limit on shipment duration is still maintained if a shipment is delayed.

III. BACKGROUND

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

PNPS is in the process of decommissioning the Pilgrim Nuclear Power facility. Inherent to the decommissioning process, large volumes of slightly contaminated debris are generated and require disposal. PNPS transports low-level radioactive waste from the facility to distant locations such as a waste disposal facility operated by Waste Control Specialists (WCS) in Andrews, Texas.

In May and June 2021, PNPS shipped numerous freight containers of low-level radioactive waste that were transloaded onto railcars for transport to the WCS disposal facility in Andrews, Texas. The total transit time when the shipments were released from the PNPS facility until verification of receipt, varied from twenty-two (22) to fifty-six (56) days. These shipments were investigated by PNPS and reports were submitted to the NRC Region I Administrator (References 1, 2 and 3).

In addition, the NRC documented that “operating experience indicates that, while the 20-day receipt notification window is adequate for waste shipments by truck, other modes of shipment such as rail, barge, or mixed-mode shipments, such as combinations of truck and rail, barge and rail, and barge and truck shipments, may take more than 20 days to reach their destination due to delays in the route that are outside the shipper’s control (e.g., rail cars in switchyards waiting to be included in a complete train to the disposal facility)” (Reference 4).

The requested exemption is similar to those previously submitted and approved by the NRC for San Onofre, Fort Calhoun, and Vermont Yankee (References 5, 6 and 7).

Disposal of PNPS low level radioactive waste will require “truck to rail” shipments to waste disposal facilities or processors. PNPS does not have direct rail access on-site and currently utilizes road shipments to intermodal transfer terminals for transfer of containers onto rail as the primary transport method. This transport method has the added benefit to reduce our overall highway miles traveled. As decommissioning continues, an increase in truck to rail shipments is expected.

These road /rail shipments may sit on the rail spur at a remote railyard (e.g., waiting for a train to depart or allow for railcar repair) and may add to shipping delays that extend the durations of shipments from PNPS. In addition, administrative processes at the disposal facility and communication of receipt times could add several additional days. Therefore, PNPS is requesting an extension to 45 days for receipt notification for mixed mode shipments from the disposal processing facility.

IV. JUSTIFICATION FOR EXEMPTION

As stated in 10 CFR 20.2301, "The 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."

(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 the NRC is authorized to grant the exemption under law.

(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, PNPS utilizes an electronic data tracking system that allows monitoring the progress of the shipments by the rail/road carrier on a daily basis. As a result, granting an exemption to PNPS for shipments of low-level radioactive waste to disposal facilities or waste processors results in no 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, PNPS utilizes an electronic data tracking system interchange that allows monitoring the progress of the shipments daily. As a result, it will be unlikely that a shipment could be lost, misdirected, or diverted without the knowledge of the carrier or PNPS.

V. ENVIRONMENTAL CONSIDERATIONS

The proposed exemption has been evaluated against the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(25):

(i) **There is no significant hazards consideration**

Pilgrim Nuclear Power Station (PNPS) has evaluated the proposed exemption to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 CFR 50.92(c) as discussed below:

1. Does the proposed exemption involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

All spent fuel at PNPS is maintained in either the spent fuel pool or is in dry fuel storage within an Independent Spent Fuel Storage Installation. In this configuration, the only accident evaluated in the Defueled Safety Analysis Report is the dropped fuel bundle accident.

The proposed exemption involves changes to certain reporting requirements delineated in 10 CFR Part 20, Appendix G, Section III.E. This proposed change has no effect on any facility structures, systems, and components (SSCs) or their capability to perform design functions, and therefore would not increase the likelihood of a malfunction of any facility SSC or affect the performance of any SSCs relied upon to mitigate the consequences of an accident previously evaluated. The means by which SSCs are operated, maintained, modified, tested, or inspected are also not affected.

Therefore, the proposed exemption does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed exemption create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed exemption does not involve a physical alteration of the facility, and no new or different types of SSCs will be installed, therefore there are no physical modifications to existing equipment that could result from the exemption. The proposed exemption does not involve modifications which could modify the manner in which facility SSCs are operated and maintained and does not result in any changes to parameters within which the facility is normally operated and maintained.

Therefore, the proposed exemption does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed exemption involve a significant reduction in a margin of safety?

Response: No.

The proposed exemption from certain reporting requirements of 10 CFR Part 20, Appendix G, Section III.E is unrelated to any facility operation. As such, the exemption would not affect any remaining equipment of the facility.

Therefore, the proposed exemption does not involve a significant reduction in a margin of safety.

Based on the above, PNPS has determined that the proposed exemption presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

(ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite

The requested exemption to certain reporting requirements specified in 10 CFR Part 20, Appendix G, Section III.E will not result in changes to any facility SSCs or design functions associated with monitoring or limiting the release of effluents. There are no expected changes in the types, characteristics, or quantities of effluents discharged to the environment as a result of the exemption. The exemption would not introduce any materials or chemicals into the facility that could affect any of the amounts or types of

effluents released offsite. Therefore, there is no change in the types or increase in the amounts of any effluents that may be released offsite.

(iii) There is no significant increase in individual or cumulative public or occupational radiation exposure

The requested exemption proposes to revise certain reporting requirements delineated in 10 CFR 20, and as such does not result in any change to the consequences of the accident previously evaluated, and does not involve any significant change in the types of amounts of effluents that may be released offsite, as evaluated above. The proposed reporting requirements contained within this exemption request does not result in any physical changes to the facility SSCs, the manner in which they are operated or maintained, and does not involve a change to land use at the PNPS site. Therefore, there is no significant increase in individual or cumulative public or occupational radiation exposure.

(iv) There is no significant construction impact

The requested exemption involves a change to certain reporting requirements specified in 10 CFR Part 20, Appendix G, Section III.E, and does not result in any physical changes to the facility or the manner in which any physical changes to the facility are performed. Therefore, there is no significant construction impact.

(v) There is no significant increase in the potential for or consequences from radiological accidents

Refer to the no significant hazards considerations discussion in item (i) above. Therefore, there is no significant increase in the potential for or consequences from radiological accidents.

(vi) The requirements from which an exemption is sought involve reporting requirements

The purpose of the requested exemption is to modify certain reporting timeframe requirements in 10 CFR Part 20, Appendix G, Section III.E, which requires that any shipment, or part of a shipment, be investigated by the shipper if the shipper has not received notification of receipt within 20 days after transfer. The required investigation includes tracing the shipment and filing a report with the nearest Commission Regional Office. Therefore, the requirement from which an exemption is sought does involve reporting requirements.

Accordingly, PNPS has determined that the proposed exemption meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(25)(i) through (vi). Therefore, in accordance with 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the consideration of this exemption request.

VI. Precedent

The requested exemption is similar to exemptions submitted and approved by the NRC for San Onofre Station , Fort Calhoun Station, and Vermont Yankee (References 5, 6 and 7).

VII. CONCLUSION

The information provided meets the requirements outlined in 10 CFR 20.2301, specifically giving the NRC sufficient basis for determining that the requested exemption is authorized by law and would not result in an undue hazard to life or property. Under the exemption, PNPS would not be required to investigate and report a shipment 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 PNPS facility. PNPS will request a daily update to be provided for the location of the conveyance from the appropriate carriers. As a result, it will be unlikely that a shipment could be lost, misdirected, or diverted without the knowledge of the carrier or PNPS personnel.

VIII. REFERENCES

1. Letter, Holtec Decommissioning International, LLC to USNRC, "Late LLRW Shipment Investigation Report Pursuant to 10 CFR 20, Appendix G," HDI -PIL-21-054, dated June 14, 2021 (ML21165A399).
2. Letter, Holtec Decommissioning International, LLC to USNRC, "Report of Investigation Pursuant to 10 CFR 20, Appendix G," HDI -PIL-21-078 dated July 06, 2021 (ML21187A200).
3. Letter, Holtec Decommissioning International, LLC to USNRC, "Report of Investigation Pursuant to 10 CFR 20, Appendix G," HDI -PIL-21-086, dated July 22, 2021 (ML21203A313).
4. SECY-18-0055: Enclosure 1 - Federal Register Notice, Proposed Rule "Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning," pages 157-160, dated May 22, 2018, (ML18012A022).
5. Letter US NRC to Southern California Edison, "San Onofre Nuclear Generating Station, Unit Nos. 1, 2, and 3 - Exemption from Title 10 of the Code of Federal Regulations Part 20, Appendix G, Section III.E (EPID No. L-2020-LLE-0142), November 13, 2020 (ML20287A358)
6. Letter US NRC to Omaha Public Power District, "Fort Calhoun Station, Unit No. 1 - Exemption from 10 Code of Federal Regulation Part 20, Appendix G, Section III.E (EPID No. L-2020-LLE-0015), June 30, 2020 (ML20162A155)
7. Letter US NRC to NorthStar,LLC, "Vermont Yankee Nuclear Power Station - Exemption from 10 Code of Federal Regulation Part 20, Appendix G, Section III.E (EPID No. L-2019-LLE-0026, February 5, 2020 (ML20017A069)