

# Maine Yankee

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October 2, 2003  
MN-03-061 RA-03-148

UNITED STATES NUCLEAR REGULATORY COMMISSION  
Attention: Document Control Desk  
Washington, D.C. 20555

## References:

Subject: Request for Further Exemption from the Financial Protection Requirements of  
10 CFR 140.11(a)(4) and Related Amendment to Indemnity Agreement No. B-51

In accordance with 10 CFR 140.8, this letter transmits MAINE YANKEE ATOMIC POWER's (MY's) request for an exemption from the financial protection requirements of 10 CFR 140.11(a)(4) as currently applied to the Maine Yankee Plant as a result of an exemption issued by the U.S. Nuclear Regulatory Commission (NRC) on January 7, 1999. This letter also requests an amendment to Indemnity Agreement No. B-51 between MAINE YANKEE ATOMIC POWER and the NRC. The requested exemption and amendment to Indemnity Agreement No. B-51 will allow a more equitable allocation of financial risk by reducing the primary financial protection requirement currently applied to the Maine Yankee Plant from \$100 million to \$25 million.

MY requests that the exemption to the financial protection requirements of 10 CFR 140.11(a)(4) and the associated amendment to Indemnity Agreement No. B-51 be approved by and made effective upon completion of the transfer of spent nuclear fuel from the Maine Yankee Plant Spent Fuel Pool to the Maine Yankee Independent Spent Fuel Storage Installation (ISFSI). The spent nuclear fuel transfer to the Maine Yankee ISFSI is currently scheduled for completion by March 4, 2004.

If you have any questions regarding this correspondence, please contact us.

Sincerely,



Thomas L. Williamson, Director  
Nuclear Safety and Regulatory Affairs

c: Mr. J. T. Buckley, NRC NMSS Project Manager, Decommissioning  
Mr. P. J. Dostie, State of Maine, Division of Health Engineering  
Mr. H. J. Miller, NRC Regional Administrator, Region I  
M. C. Roberts, NRC, Region I  
Mr. R. Shadis, Friends of the Coast

NmSS01

**Request for Exemption from the  
Financial Protection Requirements of 10 CFR 140.11(a)(4)**

**REQUEST FOR SPECIFIC EXEMPTION**

Pursuant to the requirements of 10 CFR 140.8, MY is requesting specific exemption to the financial protection requirements of 10 CFR 140.11(a)(4) as these requirements are applied to the Maine Yankee Nuclear Plant as a result of a previous NRC exemption dated January 7, 1999.<sup>1</sup> Specifically, this exemption request proposes to reduce the primary financial protection requirement applied to the Maine Yankee Nuclear Plant from \$100 million to \$25 million following the completion of the transfer of spent nuclear fuel from the Spent Fuel Pool to the Maine Yankee Independent Spent Fuel Storage Installation (ISFSI)<sup>2</sup>. The requested exemption would allow a more equitable allocation of financial risk and would eliminate unwarranted financial burden on ratepayers for coverage no longer commensurate with the offsite radiological risk remaining at the Maine Yankee Nuclear Plant site.

As discussed in detail below, the exemption to 10 CFR 140.11(a)(4) requested herein – to reduce the primary financial protection requirement applied to the Maine Yankee Nuclear Plant from \$100 million to \$25 million following the completion of the transfer of spent nuclear fuel from the Spent Fuel Pool to the Maine Yankee ISFSI – is authorized by law and otherwise in the public interest, and is provided for by existing NRC policy. This reduced amount would continue to conservatively account for the continuing potential for claims based on asserted offsite consequences by members of the public, while minimizing the likelihood that Federal Government indemnity would be exercised for satisfaction of claims for damages. This amount is also consistent with the requirements of Section 170 of the Atomic Energy Act (Price-Anderson Act), which states that power reactor licensees maintain some level of public liability financial protection.

**BACKGROUND**

On August 7, 1997, MY notified the NRC of the Maine Yankee's Board of Directors decision to permanently cease power operations of the Maine Yankee Nuclear Plant. At that time, MY maintained financial protection as required by 10 CFR 140.11(a)(4), consisting of primary coverage in the amount of \$200 million and participation in the industry's secondary financial protection plan. This coverage is required by 10 CFR 140 for operating nuclear power plants to satisfy liability claims resulting from a nuclear incident of the type which potentially could occur at an operating nuclear power plant.

On January 20, 1998, MY submitted letter, MN-98-01, "Request for Exemption from the Financial Protection Requirements of 10 CFR 50.54(w) and 10 CFR 140.11" to the NRC. The

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<sup>1</sup> As detailed later herein, the requirements of 10 CFR 140.11(a)(4) are currently applied to the Maine Yankee Nuclear Plant via an exemption approved by the NRC on January 7, 1999, that reduced the required primary financial protection from \$200 million to \$100 million and eliminated the requirement for maintaining secondary level financial protection.

<sup>2</sup> The Maine Yankee spent fuel is stored under a general license issued pursuant to 10 CFR 72 (MY Docket No. 72-30). The NRC Certificate of Compliance for Spent Fuel Storage Casks is issued to NAC International Inc., Certificate No. 1015, Amendment 2, dated 12/31/2001.

**Request for Exemption from the  
Financial Protection Requirements of 10 CFR 140.11(a)(4)**

basis for MY's January 20, 1998, request for exemption was NRC Proposed Rule<sup>3</sup> regarding liability financial protection which allowed, after a requisite minimum spent fuel decay period had elapsed, reductions in the amount of financial protection required of licensees of permanently shutdown nuclear plants. By letter dated January 7, 1999, the NRC approved MY's request for exemption from the requirements of 10 CFR 140.11. Specifically, this exemption allowed MY to (1) reduce the Maine Yankee Nuclear Plant primary financial protection required by 10 CFR 140.11 from \$200 million to \$100 million; and (2) allowed withdrawal from participation in the secondary liability insurance pool for offsite liability insurance. Consistent with this exemption, the NRC also issued Amendment 11 to Indemnity Agreement No. B-51 for the Maine Yankee Nuclear Plant. (TAC Nos. MA0659 and MA0660)

Currently, Maine Yankee continues to carry \$100 million in financial protection as required by the January 7, 1999, exemption to 10 CFR 140.11(a)(4), and Indemnity Agreement No. B-51, Amendment 11. Meanwhile, decommissioning of the Maine Yankee Nuclear Plant has progressed to the extent that, with the exception of the spent nuclear fuel in the Spent Fuel Pool, most of the residual radioactivity resulting from plant operation has been removed from the plant. This includes the removal of all Greater Than Class C (GTCC) waste from the plant and storage of the GTCC at the ISFSI. The GTCC waste is stored in a NAC-UMS<sup>®</sup> Universal Storage System cask (Docket No. 72-1015) with slightly modified internal storage baskets to accommodate the GTCC waste configuration. Loading, testing, and storage of the GTCC waste is in accordance with the NAC FSAR operating procedures. The spent nuclear fuel is being transferred from the Maine Yankee Nuclear Plant Spent Fuel Pool to the Maine Yankee ISFSI.

The completion of the transfer of spent nuclear fuel to the Maine Yankee ISFSI (currently scheduled for March 4, 2004) will eliminate the radiological source term remaining on the Maine Yankee Nuclear Plant that could have significant offsite consequences resulting from any reasonably conceivable radiological accident scenario. Specifically, the Maine Yankee Nuclear Plant inventory of radioactive material will be below the quantities specified in 10 CFR 30.72 "Schedule C – Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release" after the completion of spent fuel transfer to the ISFSI.

**BASIS FOR EXEMPTION REQUEST**

The provisions of 10 CFR 140.8 allow specific exemptions from the requirements of 10 CFR 140 provided the exemptions are authorized by law and are otherwise in the public interest. As described below, the exemption requested herein from the requirements of 10 CFR 140.11 as currently applied to the Maine Yankee Nuclear Plant is authorized by law and is otherwise in the public interest, and is provided for by existing NRC policy.

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<sup>3</sup> NRC Proposed Rule: 10 CFR Parts 50 and 140, Financial Protection Requirements for Permanently Shutdown Nuclear Power Reactors [FR 58690], October 30, 1997.

**Request for Exemption from the  
Financial Protection Requirements of 10 CFR 140.11(a)(4)**

**Specific Exemption is Authorized by Law**

The exemption to 10 CFR 140.11 requirements that the NRC issued to MY for the Maine Yankee Nuclear Plant on January 7, 1999, was based on NRC action regarding liability financial protection that provided assurance that specific exemptions to 10 CFR 140.11(a)(4) are authorized by law. Specifically, the NRC Staff independently evaluated the legal, technical, and policy issues regarding the financial protection requirements under the Price-Anderson Act for large nuclear power plants that have been permanently shut down. The results of these evaluations were summarized in SECY-96-256 dated December 17, 1996 and as embodied in the associated SRM dated January 28, 1998. These Commission documents established the basis for the NRC exercising its discretionary authority to establish a level of offsite financial protection appropriate to the presence or absence of potential risks at a permanently shutdown nuclear power plant.

NRC activity regarding liability financial protection since the issuance of SECY-96-256 and associated SRM provide additional assurance that the proposed exemption as requested herein is authorized by law. Specifically, the NRC Staff has conducted further evaluation of the legal, technical, and policy issues regarding the financial protection requirements under the Price-Anderson Act for large nuclear power plants that have been permanently shut down. These evaluations are documented in SECY-97-186, "Changes to the Financial Protection Requirements for Permanently Shutdown Nuclear Power Reactors, 10 CFR 50.54(w) and 10 CFR 140.11," and were the bases for a proposed decommissioning insurance rule issued by the NRC on October 30, 1997. This proposed rulemaking established several different configurations for permanently shutdown reactors that encompassed anticipated spent fuel characteristics and storage modes during the period between permanent shutdown and termination of the license. The rulemaking proposed financial protection requirements for each of the specified plant configurations, which included the configuration in which the plant is permanently shutdown and the spent nuclear fuel has been transferred from the Spent Fuel Pool to an ISFSI.

Prior to the issuance of final rulemaking, however, the NRC Staff halted rulemaking efforts when it was realized that no Staff-approved technical basis existed for generic decay times after which a zirconium fire concern could be eliminated. The proposed changes to insurance requirements were subsequently included in the risk-informed, integrated rulemaking for decommissioning nuclear power plants. This rulemaking initiative, documented in SECY-00-145, "Integrated Rulemaking Plan for Nuclear Power Plant Decommissioning," dated June 28, 2000,<sup>4</sup> included offsite financial protection requirements based on the aforementioned proposed decommissioning insurance rule issued on October 30, 1997, and as modified to address the public comments received in response to that proposal. The modified rulemaking as incorporated into SECY-00-145 would allow the minimum offsite financial protection requirement to be reduced to \$25 million once the spent nuclear fuel has been transferred from the Spent Fuel Pool

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<sup>4</sup> As documented in a Commission SRM dated September 27, 2000, regarding the integrated rulemaking initiative for decommissioning nuclear power plants presented in SECY-00-145, rulemaking progress is awaiting further developments by the Staff.

**Request for Exemption from the  
Financial Protection Requirements of 10 CFR 140.11(a)(4)**

to an ISFSI provided that the remaining radioactive materials stored onsite satisfied specific criteria. The radioactive materials criteria were stated as follows:

*...offsite doses in the event of a reasonably conceivable radiological accident would not exceed a TEDE of 1 rem or a CDE to the thyroid of 5 rems, or the site inventory of radioactive material is below the quantities specified in 10 CFR 30.72 "Schedule C - Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Response to a Release,"...*

As the NRC Staff stated in SECY-00-145 for licensees meeting these criteria:

*"This amount [\$25 million] should account for the continuing potential for claims based on asserted offsite consequences. It is the staff's judgment that \$25 million in coverage would minimize the possibility that Federal Government indemnification would be required and would be consistent with the requirements of Section 170 of the Atomic Energy Act which states that power reactor licensees maintain some level of public liability financial protection."*

Following the completion of the transfer of spent nuclear fuel from the Maine Yankee Nuclear Plant Spent Fuel Pool to the Maine Yankee ISFSI, the Maine Nuclear Plant will satisfy the criteria cited in SECY-00-145 to allow a reduction in offsite financial protection to \$25 million. Specifically, there will be no spent fuel assemblies remaining at the Maine Yankee Spent Fuel Pool and the Maine Yankee Nuclear Plant inventory of radioactive material will be well below the quantities specified in 10 CFR 30.72, "Schedule C – Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release."

In addition, prior removal of the reactor vessel and internals from the plant<sup>5</sup> and the movement of the spent nuclear fuel from the Maine Yankee Plant to the ISFSI will remove the available radiological source terms for credible accident scenarios. The quantities of radioactive material remaining at the plant will be less than the quantities specified in 10 CFR 30.72, "Schedule C—Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release."

Thus, following the completion of the spent nuclear fuel transfer from the Spent Fuel Pool to the Maine ISFSI, a reduction in offsite financial protection from \$100 million to \$25 million would represent a conservative level of financial protection considered commensurate with the absence of significant offsite radiological risk remaining at the Maine Yankee Nuclear Plant. Consistent with the NRC's conclusions documented in SECY-00-145, this reduced amount would continue to conservatively account for the continuing potential for claims based on asserted offsite consequences by members of the public, while minimizing the likelihood that Federal Government indemnity would be exercised for satisfaction of claims for damages. This amount also is consistent with the requirements of the Price-Anderson Act, which states that power

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<sup>5</sup> The reactor vessel with most of the internals was transported offsite for disposal in May of 2003.

**Request for Exemption from the  
Financial Protection Requirements of 10 CFR 140.11(a)(4)**

reactor licensees maintain some level of public liability financial protection. Therefore, the exemption to 10 CFR 140.11(a)(4) requested herein for the Maine Yankee Nuclear Plant following the completion of the transfer of spent nuclear fuel from the Spent Fuel Pool to the Maine Yankee ISFSI is authorized by law and provided for by existing NRC policy.

**Specific Exemption is Otherwise In The Public Interest**

Implementing the further reduction in primary financial protection as proposed in this exemption request is otherwise in the public interest. Continued compliance with 10 CFR 140.11(a)(4) as previously exempted for the Maine Yankee Nuclear Plant would result in unnecessary and unwarranted financial burden to ratepayers. This burden results from the payment of insurance premiums for coverage no longer commensurate with the condition wherein no spent nuclear fuel remains in the Maine Yankee Spent Fuel Pool and insufficient radioactive source term remains to represent a potential offsite radiological hazard. A reduction in offsite financial protection from \$100 million to \$25 million would represent a level of financial protection commensurate with the absence of significant offsite radiological risk remaining at the Maine Yankee Nuclear Plant and would eliminate any unnecessary and unwarranted financial burden to ratepayers. Thus, the exemption requested herein from the requirements of 10 CFR 140.11(a)(4) as currently applied to the Maine Yankee Nuclear Plant is otherwise in the public interest.

**POTENTIAL ENVIRONMENTAL IMPACT**

The proposed action does not involve significant environmental impacts. Although MY recognizes that this exemption request does not constitute a license amendment, the proposed exemption is in an area (e.g. changes in surety, insurance and/or indemnity requirements) for which the NRC in 10 CFR 51.22(b) and 10 CFR 51.22(c)(10) has determined that a license amendment would meet the criteria for categorical exclusion from the need for either an environmental assessment or an environmental impact statement.

Notwithstanding the above, because the exemption to 10 CFR 140.11(a)(4) requested herein does not involve a change in facility operation or configuration, this exemption: (1) would not increase the probability or the consequences of an accident or reduce a margin of safety; (2) would not change the types or quantities of effluents that may be released offsite; and (3) would not significantly increase the allowable individual or cumulative radiation exposure. Thus, the proposed exemption would result in no significant radiological environmental impact. With regard to potential nonradiological impacts, the exemption to 10 CFR 140.11(a)(4) requested herein does not affect nonradiological plant effluents and has no other environmental impact. Therefore, there are no significant nonradiological impacts associated with the proposed exemption