

July 21, 1999

James W. Langenbach
Vice-President and Director, TMI
GPU Nuclear, Inc
P.O. Box 480
Middletown, PA 17057-0480

SUBJECT: EXEMPTION FROM INSURANCE COVERAGE LIMIT OF 10 CFR 50.54(w)
(TAC NO. MAS086)

Dear Mr. Langenbach:

The Commission has issued the enclosed exemption from certain requirements of Title 10 of the Code of Federal Regulations Section 50.54(w), for Three Mile Island Nuclear Station, Unit 2 (TMI-2). The exemption is in response to your application dated March 9, 1999, in which you requested a reduction in the amount of insurance for the unit to \$50 million for onsite property damage coverage on the basis that potential for significant release of radioactive material from TMI-2 has been eliminated due to the permanently shutdown and defueled status of TMI-2.

The staff has completed its review of your request to reduce your insurance coverage and approves the reduction to \$50 million for onsite property damage coverage.

Sincerely,
ORIG. SIGNED BY MICHAEL MASNIK
for Lee H. Thonus, Project Manager
Decommissioning Section
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-320

Enclosure: Exemption

cc w/enci: See next page

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James W. Langenbach
 Vice-President and Director, TMI
 GPU Nuclear, Inc
 P.O. Box 480
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SUBJECT: EXEMPTION FROM INSURANCE COVERAGE LIMIT OF 10 CFR 50.54(w)
 (TAC NO. MA5086)

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The staff has completed its review of your request to reduce your insurance coverage and approves the reduction to \$50 million for onsite property damage coverage.

Sincerely,

Lee H. Thonus, Project Manager
 Decommissioning Section
 Project Directorate IV & Decommissioning
 Division of Licensing Project Management
 Office of Nuclear Reactor Regulation

Docket No. 50-320

Enclosure: Exemption

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NAME			SRichards		JZwolinski			
DATE	06/29/99		06/29/99		06/29/99			

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20545-0001

July 21, 1999

James W. Langenbach
Vice-President and Director, TMI
GPU Nuclear, Inc
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The staff has completed its review of your request to reduce your insurance coverage and approves the reduction to \$50 million for onsite property damage coverage.

Sincerely,

A handwritten signature in black ink, appearing to read "Lee H. Thonus".

Lee H. Thonus, Project Manager
Decommissioning Section
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-320

Enclosure: Exemption

cc w/encl: See next page

Three Mile Island Nuclear Station 2

cc:

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Middletown, Pennsylvania 17057**

**Mr. Bill Hoffman
Environmental Review Coordinator
US EPA Region 3
1650 Arch Street
Philadelphia, Pennsylvania 19106-2029**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of
GPU NUCLEAR, INC.
Three Mile Island, Unit 2

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Docket No. 50-320

EXEMPTION

I.

GPU Nuclear, Inc. (the licensee), is the holder of Facility Operating License No. DPR-73, which authorizes the licensee to possess the Three Mile Island Nuclear Station, Unit 2 (TMI-2). The license states, in part, that the facility is subject to all the rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (the Commission or NRC) now or hereafter in effect. The facility consists of a pressurized-water reactor located at the licensee's site in Dauphin County, Pennsylvania. The facility is permanently shut down and defueled and the licensee is no longer authorized to operate or place fuel in the reactor.

II.

Section 50.54(w) of Title 10 of the Code of Federal Regulations, Part 50 (10 CFR Part 50) requires power reactors to maintain onsite property damage insurance coverage in the amount of \$1.06 billion. The NRC may grant exemptions from the requirements of 10 CFR Part 50 of the regulations, pursuant to 10 CFR 50.12(a), which (1) are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security and (2) present special circumstances. Special circumstances exist when application of the regulations in the particular circumstance would not serve the underlying

purpose of the rule or is not necessary to achieve the underlying purpose of the rule [10 CFR 50.12(a)(2)(ii)]. The underlying purpose of Section 50.54(w) is to provide sufficient property damage insurance coverage to ensure funding for onsite post-accident recovery, stabilization, and decontamination costs in the unlikely event of an accident at a nuclear power plant.

iii.

On March 9, 1999, the licensee requested exemption from the financial protection requirement limits of 10 CFR 50.54(w). The licensee requested that the amount of insurance coverage that it is required to maintain be reduced to \$50 million for onsite property damage. The licensee stated that special circumstances exist because of the permanently shutdown and defueled condition of TMI-2.

The financial protection limits of 10 CFR 50.54(w) were established to require a licensee to maintain sufficient insurance to cover the costs of a nuclear accident at an operating reactor. Those costs were derived from the consequences of a release of radioactive material from the reactor. Although the risk of an accident at an operating reactor is very low, the consequences can be large. In an operating plant, the high temperature and pressure of the reactor coolant system, as well as the large inventory of relatively short-lived radionuclides, contribute to both the risk and consequences of an accident. In a permanently shutdown and defueled reactor facility, the reactor coolant system will never be operated and contains no short-lived radionuclides, which eliminates the possibility of reactor accidents. A further reduction in risk occurs when fuel is shipped offsite as in the case at TMI-2, where over 99 percent of the fuel has been removed and shipped offsite.

Along with the reduction in risk, the consequences of potential releases decrease after a reactor permanently shuts down and defuels. The short-lived radionuclides contained in the

fuel, particularly volatile components such as iodines and noble gases decay, thereby, reducing the inventory of radioactive materials that are readily dispersible and transportable in air.

Although the risk and consequences of radiological releases decline substantially after a plant permanently defuels the reactor, they are not completely eliminated. There are potential onsite and offsite radiological consequences that can be associated with storage of activated reactor components, contaminated materials, and the remaining fuel debris at TMI-2. In addition, an inventory of liquid and solid radioactive wastes can be created during the future decontamination phases of the TMI-2 decommissioning process. For the purposes of modifying the amount of insurance coverage maintained by the licensee, the potential consequences, despite the very low risk, are an appropriate consideration.

In order to determine the insurance coverage sufficient for a permanently defueled facility, the cost of recovery from potential accident scenarios must be evaluated. At TMI-2, greater than 99 percent of the fuel debris has been removed and transported offsite. The remaining fuel debris is stored dry with no need for forced cooling. Loss of spent fuel cooling water accident scenarios are not applicable to the TMI-2 plant condition. In SECY 88-256, "Changes to the Financial Protection Requirements for Permanently Shutdown Nuclear Power Reactors, 10 CFR 50.54(w) and 10 CFR 140.11," dated December 17, 1995, the NRC staff estimated the onsite cleanup costs of accidents considered to be the most costly at a permanently shut down reactor with spent fuel stored in the spent fuel pool. The staff found that the onsite recovery costs for a fuel handling accident could range up to \$24 million. The estimated onsite cleanup costs to recover from the rupture of a large liquid radwaste storage tank could range up to \$50 million. The licensee's proposed level of \$50 million for onsite property insurance is sufficient to cover these estimated cleanup costs.

IV.

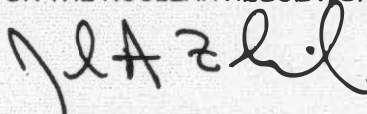
The NRC staff has completed its review of the licensee's request to reduce financial protection limits to \$50 million for onsite property insurance. The requested reductions are consistent with SECY 96-258. The Commission informed the staff in a staff requirements memo dated January 28, 1997, that it did not object to the insurance reductions recommended in SECY 96-258. The licensee's proposed financial protection limits will provide sufficient insurance to recover from the limiting hypothetical events, if they occur. Thus, the underlying purposes of the regulations will not be adversely affected by the reductions in insurance coverage.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), an exemption to reduce onsite property insurance to \$50 million is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Further, special circumstances are present, as set forth in 10 CFR 50.12(a)(2)(ii). Therefore, the Commission hereby grants the licensee an exemption from the requirements of 10 CFR 50.54(w).

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant effect on the quality of the human environment (64 FR 39178). This exemption is effective immediately.

Dated at Rockville, Maryland, this 21st day of July, 1999.

FOR THE NUCLEAR REGULATORY COMMISSION



John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

IV.

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Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), an exemption to reduce onsite property insurance to \$50 million is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Further, special circumstances are present, as set forth in 10 CFR 50.12(a)(2)(ii). Therefore, the Commission hereby grants the licensee an exemption from the requirements of 10 CFR 50.54(w).

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Dated at Rockville, Maryland, this 21st day of July, 1999.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIG. SIGNED BY
 John A. Zwolinski, Director
 Division of Licensing Project Management
 Office of Nuclear Reactor Regulation

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