

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
GPU NUCLEAR CORPORATION)	
(Three Mile Island Nuclear)	Docket No. 50-289
Generating Station, Unit 1))	

EXEMPTION

I.

The GPU Nuclear Corporation (the licensee) is the holder of Facility Operating License No. DPR-50, which authorizes operation of the Three Mile Island Nuclear Generating Station, Unit 1 (TMI-1). The license provides that the licensee is subject to all rules, regulations, and orders of the Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

The facility consists of a pressurized-water reactor at the licensee's site located in Dauphin County, Pennsylvania.

II.

The Code of Federal Regulations at 10 CFR 70.24, "Criticality Accident Requirements," requires that each licensee authorized to possess special nuclear material shall maintain a criticality accident monitoring system in each area where such material is handled, used, or stored. Subsection (a)(2) of 10 CFR 70.24 specifies detection and sensitivity requirements that these monitors must meet. Subsection a(1) also specifies that all areas subject to criticality accident monitoring must be covered by two detectors. Subsection (a)(3) of 10 CFR 70.24 requires licensees to maintain emergency procedures for each area in which this licensed special nuclear material is handled, used, or stored and provides (1) that the procedures ensure that all personnel withdraw

to an area of safety upon the sounding of a criticality accident monitor alarm, (2) that the procedures must include drills to familiarize personnel with the evacuation plan, and (3) that the procedures designate responsible individuals for determining the cause of the alarm and placement of radiation survey instruments in accessible locations for use in such an emergency. Subsection (d) of 10 CFR 70.24 states that any licensee who believes that there is good cause why it should be granted an exemption from all or part of 10 CFR 70.24 may apply to the Commission for such an exemption and shall specify the reasons for the relief requested.

III.

By letter dated February 7, 1997, as supplemented March 26 and June 5, 1997, GPU Nuclear Corporation requested an exemption from 10 CFR 70.24(a). The Commission technical staff has reviewed the licensee's submittal and has determined that inadvertent criticality is not likely to occur in special nuclear materials handling or storage areas at TMI-1. The quantity of special nuclear material other than fuel that is stored on site is small enough to preclude achieving a critical mass.

The purpose of the criticality monitors required by 10 CFR 70.24 is to ensure that if a criticality were to occur during the handling of special nuclear material, personnel would be alerted to that fact and would take appropriate action. Although the staff has determined that such an accident is not likely to occur, the licensee has radiation monitors, as required by General Design Criterion 63, in fuel storage and handling areas. These monitors will alert personnel to excessive radiation levels and allow them to initiate appropriate safety actions. The low probability of an inadvertent

criticality together with the licensee's adherence to General Design Criterion 63 constitute good cause for granting an exemption to the requirements of 10 CFR 70.24(a).

IV.

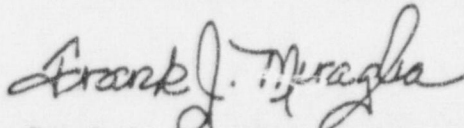
The Commission has determined that, pursuant to 10 CFR 70.14, this exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest; therefore, the Commission hereby grants the following exemption:

The GPU Nuclear Corporation is exempt from the requirements of 10 CFR 70.24(a) for TMI-1.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the quality of the human environment (62 FR 36084).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Frank J. Miraglia, Acting Director
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,
this 3rd day of July 1997.