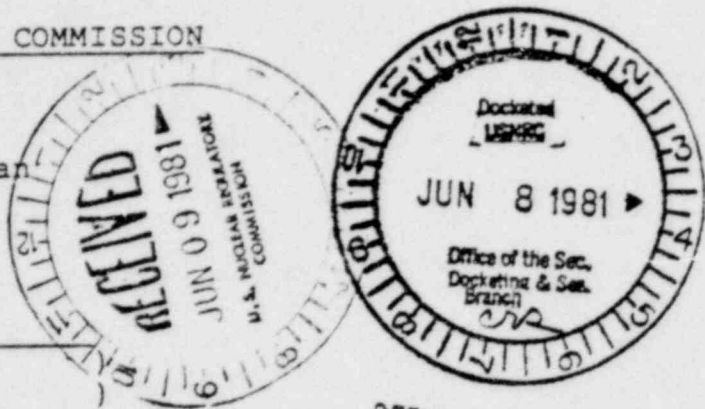


UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

COMMISSIONERS:

Joseph M. Hendrie, Chairman
Victor Gilinsky
Peter Bradford
John F. Ahearne



In the Matter of

FEDERAL TORT CLAIM OF GENERAL
PUBLIC UTILITIES CORP., ET AL.

SERVED JUN 8 1981

MEMORANDUM AND ORDER
(CLI-81-10)

On December 8, 1980, the licensees authorized to operate Three Mile Island Unit No. 2 and their parent company submitted an administrative claim to NRC under the Federal Tort Claims Act (28 U.S.C. §2671 et seq.) to recover \$4,010,000,000.00 in property damages which they assert they have sustained as a result of the March 28, 1979 accident at TMI-2. ^{1/} The claimants are the General Public Utilities Corporation ("GPU") and its operating subsidiaries, Jersey Central Power & Light Company ("JCP&L"),

^{1/} An account of the accident's events and consequences can be found in any of the several major investigations of it. See, for example, Three Mile Island, A Report to the Commissioners and to the Public, January 1980; Report of the President's Commission on the Accident at Three Mile Island, October 1979; Investigation into the March 28, 1979 Three Mile Island Accident by Office of Inspection and Enforcement (Investigative Rept No. 50-320/79-10), August 1979; Nuclear Accident and Recovery at Three Mile Island: A Report Prepared by the Subcommittee on Nuclear Regulation for the Committee on Environment and Public Works of the U.S. Senate, June 1980; TMI-2 Lessons Learned Task Force Final Report, August 1979; TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations, July 1979.

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Metropolitan Edison Company ("Met-Ed"), and Pennsylvania Electric Company ("Penelec"). The operating subsidiaries are co-owners and co-licensees of TMI-2. Met-Ed is the operator of TMI-2.

The claimants assert that NRC was negligent in the performance of its regulatory duties respecting TMI-2 and that such negligence was a proximate cause of the accident. More particularly, they claim that NRC failed to review with due care certain equipment, analyses, procedures, and training before licensing TMI-2 on February 8, 1978, and failed to warn them of defects affecting TMI-2 of which NRC was, or should have been, aware.

1. The GPU claim rests on two general assertions. First, the claim asserts that NRC negligently failed to warn GPU or Met-Ed of defects in the equipment, analyses, procedures, and training supplied for TMI-2 and negligently failed to direct Met-Ed to implement new operating requirements to correct these deficiencies. Claimants contend that NRC maintains a comprehensive system to collect, analyze, and disseminate data derived from the operating experience of all nuclear reactors in the United States. They claim that they relied on NRC to warn them of any adverse condition that might require corrective action at TMI-2. They contend that NRC failed to fulfill its obligation by negligently failing to investigate, analyze, and warn them of the "Davis-Besse Incident," an "accident that closely paralleled the events which occurred 18 months later at TMI-2."

On September 24, 1977, while operating at less than 10% of full power, the Davis-Besse I nuclear plant experienced a loss of feedwater and turbine trip. Claimants assert that the sequence of events that followed was a precursor to TMI-2: The pilot-operated relief valve ("PORV") on the pressurizer automatically opened and subsequently failed to close, leading to a loss of reactor coolant; high-pressure injection ("HPI") of new coolant activated automatically, but was terminated by operators who, unaware of the open PORV, secured HPI based on pressurizer water level indications alone. Davis-Besse officials discovered the open PORV approximately 22 minutes into the incident and immediately shut the PORV block valve. Following other actions including the manual restarting of HPI, the plant resumed a stable condition without damage to the reactor. ^{2/}

Claimants maintain that, as a result of the Davis-Besse incident, NRC knew or should have known of defects in (i) equipment application and instrumentation relating to the PORV, (ii) analyses of potential small coolant breaks and openings at the top of the pressurizer, (iii) procedures and training for plant operators, and (iv) operating and emergency procedures regarding the HPI system. The failure of NRC to notify Met-Ed

^{2/} At TMI-2, the PORV was stuck in the open position for more than two hours. Met-Ed officials failed to realize that the valve had not shut. Reactor operators turned off one HPI pump and reduced the flow from a second pump early in the accident sequence. HPI was not restored until almost an hour after the PORV block valve was closed. Substantial damage was done to the reactor.

adequately of these "generic problems" was, they claim, a proximate cause of the accident at TMI-2.

The second general assertion of the claim is that NRC negligently performed its regulatory review of equipment, analyses, procedures, and training supplied for TMI-2 when it licensed the plant's operation. Claimants contend that they relied on NRC to perform with due care the regulatory review required by statute of the safety and safeguards of all facilities, materials, and activities associated with nuclear power plant construction and operation. They argue that NRC negligently reviewed and approved (i) transient analyses relating to small-break loss-of-coolant accidents ("LOCA") and loss of normal feedwater which were inadequate as a basis for plant design and for development of operating procedures and operator training programs, (ii) procedures for operating TMI-2 which were later used by operators during the accident and which incorrectly proscribed filling the pressurizer "solid" with water and risked uncovering the core during a small-break LOCA, (iii) equipment, analyses, and procedures which relied on repeated, correct operation of the PORV which NRC knew, or should have known, incurred prior failures, and (iv) the licensing of operators who were not properly trained to respond to the events that occurred at TMI-2 on March 28, 1979.

2. The claim is without merit. The claim is at odds with the regulatory framework flowing from the Atomic Energy Act of 1954, as amended. Within that framework, the regulated industry (i.e., the licensees and their suppliers and consultants) bears

the primary responsibility for the proper construction and safe operation of licensed nuclear facilities. The Nuclear Regulatory Commission has the statutory responsibility for prescribing licensing standards to protect public health and safety and for inspecting industry's activities against these standards. The Commission does not thereby certify to the industry that the industry's designs and procedures are adequate to protect its equipment or operations.

This is the understanding that prevailed when NRC issued the license to operate TMI-2, as it had for more than 20 years of commercial nuclear plant licensing and as it continues to prevail today. Therefore the claim is denied.

It is so ORDERED.

Commissioner Ahearne's additional views are attached.



For the Commission

Samuel J. Chilk

 SAMUEL J. CHILK
 Secretary of the Commission

Dated at Washington, D.C.

this *5th* day of June, 1981.

Commissioner Ahearne's Additional Views

I concur in the result reached by the Commission. However, I find the description of our reasons unfortunately brief. We rejected the claim because it is inconsistent with the NRC regulatory philosophy as well as the law.

Within the regulatory framework flowing from the Atomic Energy Act and other applicable statutes, the regulated industry (i.e., the licensee, the vendor, and the architect-engineer) bears the primary responsibility for protecting the general public from the health, safety, and environmental risks posed by the generation of electricity from nuclear power. The industry must take the initiative to develop safe nuclear plants, to monitor them for sufficiency, and to evaluate the need for change. It is best equipped with the resources and detailed knowledge of particular equipment, systems, and procedures to accomplish this task. The Federal government cannot invest enough resources into the review, inspection, and operation of each nuclear power plant to develop the level of knowledge of individual plants possessed by the licensees.

The Nuclear Regulatory Commission has a statutory responsibility for prescribing the minimum standards for assuring the adequate protection of public health and safety. Through licensing and inspection, the Commission's function is to ensure that the industry meets these threshold standards. However, NRC's approval of a licensee as meeting these requirements at one time does not absolve the industry of its independent obligation to operate its

equipment in a manner to protect the public. NRC licensing and inspection reviews cannot be and are not intended to be all-encompassing. As is well known to NRC licensees, NRC programs are based on a sampling and do not supplant reviews by the regulated sector. When violations of regulations occur, the NRC imposes penalties. But this is after the violation has occurred and been found. ^{1/} However, the Commission expects nuclear power plant licensees, and the suppliers and architect-engineers with whom they contract, through their own comprehensive reviews to assure or verify independently the adequacy of a plant's design, construction, and operation, and to monitor data respecting the plant's operation to detect the need for corrective measures.

Chairman Hendrie agrees with these views.

^{1/} It may be noted that compliance with NRC requirements could have prevented the accident's serious consequences. Following the review of the accident, Metropolitan Edison was cited for and chose not to contest violations of NRC requirements. In particular, Metropolitan Edison operating personnel had become accustomed to a leaking pilot-operated relief valve prior to the accident. During the accident this led them to disbelieve indications that the pilot-operated relief valve was stuck open and a loss of coolant accident was in progress.