

## UNITED STATES NUCLEAR REGULATORY COMMISSION

50-21410

WASHINGTON, D.C. 20555-0001

July 3, 1997

Mr. Steve Gannis Coordinator, Ohio Citizens Against A Radioactive Environment 13511 Detroit Avenue, Apt. C-9 Cleveland, Ohio 44107

Dear Mr. Gannis:

I am responding to your letter of April 28, 1997, to Chairman Jackson, in which you requested that the U.S. Nuclear Regulatory Commission (NRC) act immediately to shut down the Perry Nuclear Power Plant (PNPP), Unit 1, until it determines that there is no increased danger to public health and safety from the increased valve leakage assumed post-accident from the emergency closed cooling water (ECCW) system.

This issue involves a recent NRC inspection team finding (June 10, 1997, report enclosed) concerning a change made by the PNPP licensee to the licensing basis for the surge tanks in the ECCW system. The change involved the amount of time post-accident that would pass before the surge tanks needed refilling. As a result of a new assumption about ECCW leakage post-accident, the licensee calculated that the surge tanks could need refilling approximately 50 minutes following the design-basis accident versus the original licensing basis of 7 days following the accident. The licensee then proceduralized operator actions to initiate makeup to the ECCW system within 30 minutes to compensate for this revised leakage assumption. The assumption change regarding ECCW leakage post-accident was due to the licensee's finding that intersystem leakage past isolation valves had not been considered in the original design.

Existing system leakage test results showed that the licensee would have had approximately 2.5 hours post-accident before action would have been needed. Additionally, those test results were considered conservatively high by the licensee because the tests were performed in the opposite direction relative to the system valve design utilized to protect against post-accident leakage, so it was likely that there was more time available than 2.5 hours. The ECCW system provides cooling water to safety-related components only during hot standby, shutdown, and accident conditions. When needed, it provides cooling to room coolers and the residual heat removal pump seals.

The NRC staff performed a preliminary review of the licensee's compensatory measures, and determined that there was reasonable assurance that the plant could safely operate before final resolution of this issue for the following reasons: (1) a loss-of-coolant accident coincident with a loss of offsite power and an emergency diesel generator failure is a low probability event; (2) the staff has accepted in other cases operator action following a design basis accident within the same timeframe (i.e., approximately 30 min.) necessary in this instance;

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(3) the licensee had procedures in place for the necessary actions to ensure refilling of the surge tanks; and (4) the plant areas were accessible and the licensee planned to maintain any individual doses within allowable limits. During telephone discussions with you on May 9 and 15, 1997, a member of my staff informed you that the NRC found operation of the Perry plant acceptable while resolution of the issue was pursued. In the discussion of May 9, 1997, it was also agreed that a letter response was acceptable rather than treating your letter as a 10 CFR 2.206 petition.

When the plant shut down on June 5, 1997, it was placed in a condition to perform more accurate system leakage tests (i.e., in the normal flow direction). The licensee performed the more accurate tests, which resolved the ECCW system issue to the NRC staff's satisfaction by showing that the system leakage was sufficiently small such that the surge tanks would last significantly longer than 7 days post-accident before they would need refilling. Therefore, the system was shown to meet the original design basis, and the plant started up with no further action necessary concerning this issue.

The scenario you raised in which the loss of ECCW could lead to excessive control room heating and then to the abandonment of the control room and finally to a serious safety event is not considered credible. First, by more accurate testing, the ECCW system has been shown to meet the original design basis. Additionally, all nuclear power plants (including PNPP) are equipped with an alternate shutdown panel from which the plant can be safely shut down if, for some reason, the control room has been rendered uninhabitable.

Your assertion that PNPP releases massive quantities of radioactive waste to the environment is unsubstantiated. In the 1996 Annual Environmental and Effluent Release Report for the Perry Nuclear Power Plant, submitted to the NRC by letter dated April 29, 1997, the licensee reports, "The summation of the hypothetical maximum individual dose from effluents in 1996 is equivalent to less than one percent of the dose that an individual living in the PNPP area receives from all sources of radiation." This statement is consistent with the staff's conclusion contained in the "Final Environmental Statement Related to the Operation of Perry Nuclear Power Plant, Units 1 and 2," NUREG-0884, dated August 1982, p. vi, that "there should be no measurable radiological impact on members of the public from routine operation of the plant."

Your concerns with regard to the Below Regulatory Concern Policy document were raised in your petition for rulemaking dated January 8, 1994. The NRC staff fully evaluated those concerns and denied your request as noticed in the <u>Federal Register</u> on March 13, 1995 (60 FR 13385).

You make several statements that appear to question the actions of the staff with respect to its handling of the leaking ECCW issue and the continued operation of the facility. We intend to forward your letter to the Office of the Inspector General for their information, and any action that they consider appropriate.

In conclusion, after reviewing your concerns, the staff finds that operation of PNPP has not endangered public health and safety or resulted in any significant environmental impact.

I trust this reply responds to your concern.

Sincerely,

Jack W. Roe, Director

Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

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Docket No. 50-440

Enclosure: Inspection Report

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Sincerely,

Original signed by E. Adensam for:

Jack W. Roe, Director Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Docket No. 50-440

Enclosure: Inspection Report

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NAME	BCalure*	JHopkins /	CBoyle C	TMarsh*
DATE	6/19/97	719_197 1	112-197 V	6/25/97
OFC	PERB	HHFB	ogc	PD33:D
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