



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

March 7, 1980

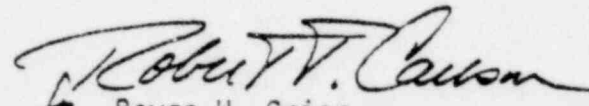
Docket No. 50-309

Maine Yankee Atomic Power Company
ATTN: Mr. Robert H. Groce
Senior Engineer - Licensing
25 Research Drive
Westborough, Massachusetts 01581

Gentlemen:

The enclosed IE Information Notice No. 80-09, Possible Occupational Health Hazard Associated With Closed Cooling Systems for Operating Power Plants, is forwarded to you for information. No written response is required. Should you have any questions regarding this matter, please contact this office.

Sincerely,


Boyce H. Grier
Director

Enclosures:

1. IE Information Notice No. 80-09
2. List of Recently Issued IE Information Notices

CONTACT: R. J. Bores
(215-337-5260)

cc w/encls:
E. Wood, Plant Superintendent
E. W. Thurlow, President

80031 80041

ENCLOSURE 1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

SSINS: 6870
Accession No.:
7912190681

DUPLICATE

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POSSIBLE OCCUPATIONAL HEALTH HAZARD ASSOCIATED WITH CLOSED COOLING SYSTEMS FOR OPERATING POWER PLANTS

As a result of information that the causative agent for meningoencephalitis, the amoeba Naeglaria fowleri, had been found in warm water ponds in Florida and Texas where two fatalities were reported, NRC initiated a study by Oak Ridge National Laboratory on the occurrence of Naeglaria in power plants with closed cycle cooling systems. For seven power stations examined (6 fossil, 1 nuclear), this study confirmed the presence of pathogenic Naeglaria at three plants including the nuclear plant (Dresden).

Recently, Northern States Power Company (NSP), while monitoring the Prairie Island Nuclear Generating Plant closed cooling system for the amoeba, did identify the presence of Naeglaria. Although the Minnesota Department of Health does not consider the existence of the organism to be a public health threat, it was recognized as a possible occupational health hazard. Plant personnel were instructed to wear rubber gloves when coming into contact with the circulating water and to wear respirators when working in the area of the cooling towers. In November 1979, NSP conducted a special chlorination program at Prairie Island that was designed by Dr. Richard Tyndall of Oak Ridge to eradicate this organism. Chlorine concentrations in the circulating water system was raised to 2.0 mg/l (measured as free chlorine) for a period of six hours to destroy both the amoebae and its encysted form. This program also included dechlorination prior to discharge and intensive monitoring to document chlorine concentrations, the impacts of chlorinated cooling tower draft and sampling to determine the efficacy of the special chlorination program in destroying Naeglaria. Preliminary results indicate that the program was successful in reducing the number of organisms present by two to three orders of magnitude.

It is recognized that there have been no reported cases of meningoencephalitis reported among power plant personnel to date; however, the seriousness of the disease (if contracted) and the confirmed presence of Naeglaria at four plants, leads us to inform all licensees with closed cycle cooling water systems of the potential occupational hazard and advise that they take appropriate action.

This Information Notice is provided as an early notification of a possibly significant matter. It is expected that recipients will review the information for possible applicability to their facilities. No specific action or response is requested at this time. If further NRC evaluations so indicate, an IE Circular, Bulletin or NRR Generic Letter will be issued to recommend or request specific licensee actions. If you have any questions regarding the matter, please contact the Director of the appropriate NRC Regional Office.

ENCLOSURE 2

IE Information Notice No. 80-09
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RECENTLY ISSUED IE INFORMATION NOTICES

Information Notice No.	Subject	Date Issued	Issued to
79-33	Improper Closure of Primary Containment Access Hatches	12/21/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-34	Inadequate Design of Safety-Related Heat Exchangers	12/31/79	All Power Reactor Facilities with an OL or CP
79-35	Control of Maintenance and Essential Equipment	12/31/79	All Power Reactor Facilities with an OL or CP
79-36	Computer Code Defect in Stress Analysis of Piping Elbow	12/31/79	All Power Reactor Facilities with an OL or CP
79-37	Cracking in Low Pressure Turbine Discs	12/31/79	All Power Reactor Facilities with an OL or CP
80-01	Fuel Handling Events	1/4/80	All Power Reactor Facilities with an OL or CP
80-02	8X8R Water Rod Lower End Plug Wear	1/25/80	All BWR Facilities with an OL or CP
80-03	Main Turbine Electro-hydraulic Control System	1/31/80	All Power Reactor Facilities with an OL or CP
80-04	BWR Fuel Exposure in Excess of Limits	2/4/80	All BWR Facilities with an OL or CP
80-05	Chloride Contamination of Safety Related Piping and Components	2/8/80	All Power Reactor Facilities with an OL or CP and applicants for a CP
80-06	Notification of Significant Events	2/27/80	All Power Reactor Facilities with an OL and applicant for OL
80-07	Pump Fatigue Cracking	2/29/80	All Power Reactor Facilities with an OL or CP
80-08	The States Company Sliding Link Electrical Terminal Block	3/7/80	All Power Reactor Facilities with an OL or CP