

**NORTHEAST UTILITIES**



THE CONNECTICUT LIGHT AND POWER COMPANY  
THE HARTFORD ELECTRIC COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
NEW YORK WATER POWER COMPANY  
NORTHAVERT UTILITIES SERVICE COMPANY  
NORTHWEST NUCLEAR ENERGY COMPANY

P.O. BOX 270  
HARTFORD, CONNECTICUT 06101  
(203) 666-6911

December 15, 1980

Docket Nos. 50-245  
50-336

MP-1-1667  
MP-2-4540

Mr. Boyce Grier  
Director, Region 1  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

Reference: Facility Operating License Nos. DPR-21 and DPR-65  
ETS-NR/50-245/50-336/80-03

Dear Mr. Grier:

Pursuant to the Millstone Environmental Technical Specifications,  
Section 3.2, Northeast Nuclear Energy Company hereby forwards the  
following report regarding anomalous radioactivity observed in  
oysters.

Very truly yours,

E. O. Mroczka  
Station Superintendent  
Millstone Nuclear Power Station

EJM/JWD:mw

Attachment

cc: Director, Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
Director, Office of Inspection and Enforcement, U.S. Nuclear  
Regulatory Commission, Washington, D.C. (20)  
Director, Office of Management Information & Program Control,  
U.S. Nuclear Regulatory Commission, Washington, D.C. (2)  
U.S. Nuclear Regulatory Commission, c/o Document Management  
Branch, Washington, D.C. 20555

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Facility: Millstone Nuclear Power Station

Report Number: ETS-NR/50-245/50-336/80-03

Report Date: December 15, 1980

Occurrence Date: November 5, 1980

DESCRIPTION OF OCCURRENCE:

The following level of Ag-110m activity was observed in the fourth quarter sample of oysters from within 500 feet of the discharge and this exceeded the control station average activity by greater than a factor of ten.

	<u>Sample Date</u>	<u>Analysis Report Date</u>	<u>Confirmation Date</u>	<u>Results (pCi/g)</u>
				<u>Ag-110m</u>
Control Stations - Average of Giants Neck and Golden Spur	11/5	12/5	12/5	0+0.035
Within 500 feet of discharge	11/5	11/25	12/5	2.0+0.02

PLANT OPERATING CONDITIONS PRIOR TO OCCURRENCE:

Millstone Unit 1 - Operating at close to 100% power until October 4 when it was shutdown for refueling.

Millstone Unit 2 - Shutdown for refueling from August 16 until October 19. Operation at close to 100% power since that time.

CAUSE OF OCCURRENCE:

Natural oysters do not exist within 500 feet of the discharge. However, oyster trays are maintained in the discharge channel (quarry cut). Due to the location of these trays within the boundaries of the quarry and thus without any near-field dilution factors, and due to increases in the volume of plant liquid discharges during periods of refueling, the fourth quarter oyster sample showed plant related levels of Ag-110m and Co-60 (0.20 pCi/gm). Only the Ag-110m was 10 times the control levels. A similar effect was observed and reported both last quarter and last year.

CORRECTIVE ACTION:

The proposed radiological effluent Technical Specifications will result in specification of more realistic sampling locations in keeping with natural availability of shellfish and food pathways to man. These have been submitted to the NRC.

DOSE CONSEQUENCE:

Although natural oysters do not exist at or within the sample location, a dose calculation (Reg. Guide 1.109 methods) was performed, assuming an individual could have consumed shellfish having the Co-60 and Ag-110m concentration as observed for the period of one quarter year. This results in a calculated dose to the critical organ, which in this case is the gastrointestinal tract - lower large intestine, of 0.16 millirem/quarter. This is a small fraction (0.0053) of the natural background radiation exposure (30 millirem) to which this individual is normally exposed.

Thus the dose consequence of this event is insignificant. This reporting requirement is conservatively designed. Outside of the quarry, the plant discharges are rapidly diluted by the Long Island Sound to below detectable levels. Thus the concentrations of radioactivity from the station are much less at locations outside of the quarry. The monitoring program at these locations verifies this.

POOR ORIGINAL

## (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

PHONE: \_\_\_\_\_

CONTROL BLOCK:

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