

Jersey Central Power & Light Company

MADISON AVENUE AT PUNCH BOWL ROAD • MORRISTOWN, N. J. 07960 • 539-6111

February 14, 1973

Mr. J. P. O'Reilly, Director
Directorate of Regulatory Operations, Region I
United States Atomic Energy Commission
970 Broad Street
Newark, New Jersey 07102

Dear Mr. O'Reilly:

Subject: Oyster Creek Station
Docket No. 50-219
Fish Mortalities

This letter is in response to a request received from your office for an information report regarding the January fish mortalities which occurred at Oyster Creek.

On December 29, 1972, the Oyster Creek Station inadvertently shut down while operating at 1830 MWt. Prior to placing the unit back on the line, maintenance was necessary on several plant components. On January 8, 1973, reports were received through the Jersey Central Power & Light Company's communications services office that local news media had received reports of dead fish in Oyster Creek. The company's consultant in this matter visited the site on January 9, 1973 and reported the following:

The fish kill appeared quite small compared to January 1972. Only 900 menhaden were seen in 20,000 square feet of those areas where dead menhaden were found. (Total estimate in all four lagoons on this basis would range about 18,000 if a uniform count existed. Surface ice prevented proper bottom sampling for additional dead fish). The dead ranged in size from two to ten inches based on samples obtained on January 8, 1973. These fish showed no scale loss, no cutaneous hemorrhages, no excessive accumulations of mucus, and no distention of the mouth, opercula or gills. Death can be assumed to be the result of a cold kill rather than mechanical damage or the effect of some toxicant.

Experiments show that water temperatures of approximately 37°F and below are lethal to young menhaden. The water temperature in Oyster Creek was 54°F with the plant in operation. Upon shutdown, the temperature was reduced to approximately 40°F. Due to area weather

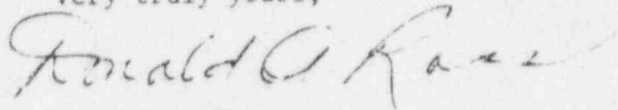
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changes commencing on January 5, the Creek temperature was reduced to the low 30's over a period of a day or so. It appears that the menhaden survived through the initial temperature change associated with the unplanned plant shutdown. However, the subsequent natural drop in temperature below 37°F caused the observed fish mortalities.

This area of concern will be under continuing study by the company through the use of appropriate consultants in an effort to develop a program to minimize the possibilities of future occurrences.

Very truly yours,



Donald A. Ross
Manager, Nuclear Generating Stations

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