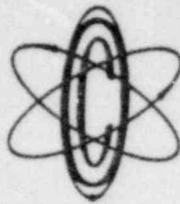


OYSTER CREEK



NUCLEAR GENERATING STATION

JCP&L / GPU

Jersey Central Power & Light
Company is a Member of the
General Public Utilities System

(609) 693-1951 P.O. BOX 388 • FORKED RIVER • NEW JERSEY • 08731

December 2, 1980

RECEIVED 8 NOV 9 37
DISTRIBUTION SERVICES
NEW JERSEY
GENERAL PUBLIC UTILITIES SYSTEM

Mr. Boyce H. Grier, Director
Office of Inspection and Enforcement
Region I
United States Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

SUBJECT: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Nonroutine Environmental Operating Report No. 50-219/80-12

This letter forwards two copies of Nonroutine Environmental Operating Report No. 50-219/80-12 in compliance with paragraph 5.6.2 of Appendix B to the Technical Specifications.

Very truly yours,


Ivan R. Finfrock, Jr.
Vice President-Generation

IRF:dh
Enclosures

cc: Director (17 copies)
Office of Nuclear Reactor Regulations
United States Nuclear Regulatory Commission
Washington, D. C. 20555

c/o Distribution Services Branch, DDC, ADM

5 8012080 420

OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, Jersey 08731

Nonroutine Environmental Operating Report No. 50-219/80-12

Report Date

December 2, 1980

Occurrence Date

November 22, 1980

Identification of Occurrence

Fishkill in Oyster Creek during a shutdown of the Oyster Creek Nuclear Generating Station. Approximately 3638 Blue runner and Crevalle jack (Caranx chrysos and Caranx hippos), 1038 Bluefish (Pomatomus saltatrix), 17 Smooth dogfish (Mustelus canis), 3 Ladyfish (Elops saurus), 2 Northern kingfish (Menticirrhus saxatilis), 1 Gray snapper (Lutjanus griseus), 1 American eel (Anguilla rostrata) and 1 Mojarra (Eucinostomus gula) were collected in Oyster Creek dead or in a severely stressed condition.

This event is considered to be a nonroutine environmental operating report as defined in the Technical Specifications, Appendix "B", paragraph 5.6.2.

Conditions Prior to Occurrence

Prior to shutting down for maintenance the plant was operating as follows at 2100 hours on November 21:

Power:	628 MWe
Dilution Pump Flow:	5.20×10^5 gpm - 2 pumps
Circulating Pump Flow:	4.60×10^5 gpm - 4 pumps

Water temperatures were measured at 2130/hours on November 21 as follows:

<u>Location</u>	<u>Temperature °F (°C)</u>	
Intake	42.1	(5.7)
Discharge	62.4	(17.0)
U.S. Route 9 Bridge	48.7	(9.4)

Description of Occurrence

The Oyster Creek Nuclear Generating Station began a controlled reactor shutdown at approximately 2200 hours on November 21, 1980, consistent with OCETS condition 2.1.5. At approximately 2246 hours one dilution pump was shut off and at 2249 hours the second operating dilution pump was taken out of service. At 2253 hours one circulating water pump was taken out of service leaving three in operation. By 0730 hours on November 22 no further heat was being rejected and water temperatures were as follows:

<u>Location</u>	<u>Temperature °F (°C)</u>	
Intake	42.1	(5.7)
Discharge	42.7	(6.0)
U.S. Route 9 Bridge	42.6	(5.9)

At approximately 0040 hours on November 22, the Blue runner and Crevalle jack which were observed swimming in the condenser discharge began to show signs of severe stress. The discharge temperature at that time was approximately 55°F (12.9°C). At approximately 0300 hours, when the condenser discharge temperature had dropped to approximately 47.5°F (8.7°C), dead Blue runner and Crevalle jack were observed floating down the discharge canal and began to appear on the banks of Oyster Creek. By 0630 hours, the discharge temperature was 45.2°F (7.4°C) and Bluefish began appearing on the creek banks. The Blue runner and Crevalle jack were apparently all dead by daylight on November 22, however, the Bluefish continued to appear on the beaches until approximately 1100 hours after which time little additional mortality was observed.

Surveys of the banks of Oyster Creek were conducted late in the evening on November 21 and throughout the day on November 22. In addition, trawl samples were taken on November 23 at the mouth of Oyster Creek and in the residential lagoons on the south side of the Creek.

The following is a summary of the number of dead fish collected with average fork length and weight where available:

<u>Species</u>	<u>Number</u>	<u>Average Fork Length(mm)</u>	<u>Average Weight(Kg)</u>
Blue runner)	3638	206.1	0.18
Crevalle Jack)		173.0	0.14
Bluefish	1038	266.5	0.28
Smooth dogfish	17	600.9	0.74
Ladyfish	3	292.7	0.30
Northern kingfish	2		
Gray snapper	1	118.0	
American eel	1		
Mojarra	1	221.0	

Apparent Cause of Occurrence

The water temperature in the discharge canal fell below the lower lethal temperature for the affected species following plant shutdown.

Analysis of Occurrence

A review of the literature on the affected species reveals that Blue runner and Crevalle jack will die when water temperatures are lower than 50°F(10°C) and Bluefish when temperatures are lower than 37.9 to 47.3°F (3.3 to 8.5°C). Lower lethal temperatures are not readily available for the other affected species, however, data on their distribution indicates that most would not be expected to occur in Barnegat Bay as the prevailing ambient temperatures and cold shock is the most probable cause of death.

Corrective Action

Since no further mortality is expected on the affected species and no other species should be stressed or die, no immediate corrective action will be taken. JCP&L is currently investigating the feasibility of installing blocking devices in the discharge canal in order to divert fish that might be attracted to the heated discharge.

Failure Data

Not Applicable.