



July 1, 1982

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

P. O. BOX CN-029

TRENTON, NEW JERSEY 08625

ARNOLD SCHIFFMAN
DIRECTOR

Dr. Michael Masnik
Environmental Specialist Branch
U.S. Nuclear Regulatory Commission
P-234
Washington, DC 20555

Dear Dr. Masnik:

GPU Nuclear Corporation has submitted a request to schedule a refueling outage for its Oyster Creek Nuclear Generating Station during January, 1983. Since this outage would be in violation of its NJPDES permit condition prohibiting a planned winter outage, GPU has again requested temporary (or permanent) relief from this condition. I have enclosed a copy of their request for your review.

As you are aware of the past and potential impacts of such an outage and have had previous input to the adoption of permit conditions and/or other similar requests by GPU, I would like to solicit your comments for inclusion in my technical review and recommendation. GPU's request and mitigative plans are similar to past requests and I anticipate that NJDEP will continue to maintain to opposition to such an outage. I would appreciate your comments, however brief, in regard to this matter. A prompt response would also be appreciated. Thank you for your attention to this matter.

I can be reached by phone at (609) 292-0407 should you need to contact me.

Sincerely,

Richard J. Califano, Ph.D.
Bureau of Industrial Waste Mgt.
Water Quality Management

Enclosure

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Dept. Environmental Protection
Division Water Resources
Water Quality Management

to P.K. discuss with me
GPU Nuclear
100 Interpace Parkway
Parsippany, New Jersey 07054
201 263-6500
TELEX 136-482
Writer's Direct Dial Number

6/7/82

June 2, 1982

Mr. Arnold Schiffman, Director
New Jersey Department of
Environmental Protection
PO Box CN-029
Trenton, NJ 08625

Dear Mr. Schiffman

Subject: GPU Nuclear Corporation (GPUN)
Oyster Creek Nuclear Generating Station (OCNGS)
NPDES permit No. 000 5550
Request for Modification

On May 30, 1981 written requests were submitted to the NJDEP and USEPA to either permanently delete or authorize temporary relief from Condition 9(b)(4) of the subject permit. This condition prohibits routine shutdown of the OCNGS from December through March. At that time a refueling outage was scheduled to begin on November 30, 1981 but it was recognized that certain factors could delay that date and put us into the period in which shutdowns are prohibited.

Following a meeting with your staff, the USEPA, and the National Marine Fisheries Service a detailed report was submitted on July 24 1981 justifying our request. This justification included fuel considerations, electric system reliability, engineering considerations, outage planning, and environmental considerations. This was followed by a letter on August 27, 1981 reiterating our request for relief from condition 9(b)(4) so that the OCNGS could shutdown in February 1982. By letter dated October 20, 1981 the USEPA denied this request but indicated that such requests would be reviewed in the future on a case-by-case basis. Subsequently, that specific request was mooted because on December 4, 1981 there was a nonroutine shutdown of the plant due to equipment failure. The plant was not returned to service until April 15, 1982.

The refueling previously planned for February 1982 has yet to be conducted. For many of the reasons cited in our previous request, a reassessment of plant operational capability, engineering factors and economic considerations has led us to the conclusion that the refueling shutdown should be rescheduled to January 15, 1983. The scope of work for this refueling outage which includes such major items as: the torus system modifications, additional NRC requirements

to bring the plant up to today's technical standards, and the major items mentioned in our previous request will cause this to be an extended outage. The schedule and management of such a major outage requires that sufficient time be allotted to provide for safe, effective and efficient execution of this work. It should be noted that the OCNGS has operated for over 12 years without a major overhaul and that such a major effort is required in order to fulfill our commitment to provide safe, reliable and economic service to our customers.

As the EPA stated in their October 20 letter, all elements involved in a winter outage except for the possible environmental impacts of fishkills were adequately addressed in our previous submittal. In our December 30, 1981 response to EPA we disagreed with their position that environmental impacts were inadequately addressed. We considered and still do that sufficient data is available to justify a winter outage. As indicated in our December 30, 1981 submittal conservative estimates of cold shock mortality of Atlantic menhaden due to winter shutdown of the OCNGS amounts to approximately 0.59 percent of the annual New Jersey commercial catch. Again we believe that it is highly unlikely that the loss of such a small number of individuals could adversely impact the New Jersey coast population of this species. While the proposed schedule will result in a planned shutdown during the period such shutdown is prohibited, it should be noted that under this proposed schedule the plant will be operating at reduced power levels and in actuality will be in a coastdown mode starting in June 1982. As a result of this coastdown, during the period when the autumnal migration would be expected to occur in Barnegat Bay (i.e. late October through mid-November) the plant will be operating at approximately 50 percent of full rated power. Because of this reduced power level, the heat addition to Oyster Creek as a result of plant operation will be reduced thereby tending to reduce the attractiveness of the discharge canal to migrating fishes. To further minimize this attraction, we plan that two dilution pumps will be operated continuously, whenever possible, starting in early October until the plant shutdown is commenced. At a 100 percent power level with one dilution pump operating the delta-T in Oyster Creek would be approximately 7.7°C; however at 50 percent power level with two dilution pumps operating this delta-T is reduced to approximately 3.4°C.

In order to accurately assess the impact of this proposed shutdown we have included as Attachment I a proposed outage fish sampling program to be conducted prior to and following the shutdown of the station. As indicated in that attachment, a report on the results of the sampling program will be submitted within two months after shutdown--well before any subsequent planned shutdown.

Since the administration of the NPDES program has been delegated to the NJDEP by the EPA, CPUN hereby requests that permanent relief from condition 9(b)(4) be granted, or as an alternative temporary relief from this condition be authorized to allow the conducting of a refueling outage shutdown on or about January 15, 1983.

Representatives of GPUN and I are available to meet with you and members of your staff to support and discuss our request and its environmental implications. Please call Mr. Mitchell Gertz of our Environmental Licensing staff at (201) 299-2186 to arrange such a meeting at your earliest convenience.

Very truly yours,

Philip R. Clark

Philip R. Clark
Executive Vice President

MG:dls

cc: Dr. R. A. Baker, USEPA
Dr. M. M. Sadat, P.E., NJDEP ✓

ATTACHMENT I

Proposed Outage Fish Sampling Program

Introduction:

In response to regulatory agency requests, samples of the fish fauna of Oyster Creek will be collected prior to and following the shutdown of the Oyster Creek Station, in order to document any cold shock mortality.

Objectives:

The objectives of the program are:

1. To document the species composition, abundance and distribution of fishes in Oyster Creek prior to Station shutdown.
2. To quantify the extent of any shutdown induced mortalities.
3. To document any movement into or out of the discharge canal subsequent to plant shutdown.

Methodology:

Pre-Shutdown Survey (to commence no more than one month in advance of the shutdown with the greatest effort concentrated in the two weeks prior to shutdown)

1. Mark and Recapture Study - Fish caught by hook and line, cast net or scoop net; marked and released. Any species that can be captured in sufficient numbers and tagged without injury will be included.
2. Gill netting and trawling in discharge canal and residential lagoons.

During and Post-Shutdown Survey

1. Fishkill monitoring
 - A. Qualitative and quantitative assessment of impact by actual enumeration.
 - B. Trawling in Oyster Creek and the residential lagoons.
2. Gill netting at mouth of Oyster Creek to determine if any movement to or from the discharge canal takes place subsequent to plant shutdown.

3. Determination of species composition and enumeration of species that remain on bottom of Oyster Creek.

A. Transects by divers along the entire length of Oyster Creek and in the residential lagoons.

B. Trawling in Oyster Creek

4. Tag Returns - Petersen population estimates for marked species.

Trawling will be done with a 4.8 meter semiballon trawl with a 3.9 cm stretch mesh body, a 3.2 cm stretch mesh cod end and a 1.3 cm stretch mesh liner. Gill netting will be done with a 60 m x 2.4 m monofilament net consisting of two 30 m panels, one of 3.9 cm stretch mesh and the other of 8.5 cm stretch mesh.

The details of the tagging methodology will depend upon the species present in Oyster Creek prior to the shutdown and will be furnished in the report on the results of the program.

Samples will be collected at a minimum of 4 stations in Oyster Creek and in at least two residential lagoons. Exact locations and number of stations will depend upon prevailing weather conditions and knowledge of type of fish present based upon routine sampling.

All fish captured will be identified to the lowest possible Taxon and enumerated; lengths will be measured for key species.

Temperature and salinity data will be taken with all samples.

Reporting:

A report on the results of the sampling program will be submitted to USEPA and NJDEP within two months of the date of shutdown.