

Docket No. 50-219

Jersey Central Power & Light Company
Attention: Mr. R. H. Sims,
Vice President
Madison Avenue at Punchbowl Road
Morristown, New Jersey 07960

Reference: Your letter dated April 16, 1973 in response to
Our letter dated March 27, 1973

Gentlemen:

Thank you for your letter informing us of the action you have taken to correct the violations which we brought to your attention following our recent inspection of your licensed program. Your corrective action will be verified during our next inspection of your program.

In accordance with Section 2.790 of the AEC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the AEC's Public Document Room. If this report contains any information that you (or your contractor) believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must include a full statement of the reasons on the basis of which it is claimed that the information is proprietary, and should be prepared so that proprietary information identified in the application is contained in a separate part of the document. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

Your cooperation with us is appreciated.

Sincerely,

James P. O'Reilly
Director

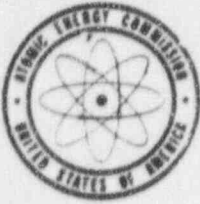
Enclosure:
RO Inspection Report No. 50-219/73-04

B253

cc: Mr. J. Carroll, Plant Superintendent

OFFICE ▶	RO	<i>JRC</i>	<i>JL</i>		
SURNAME ▶	Cantrell:smg	Caphton	Carlson	O'Reilly	
DATE ▶	4/24/73			5/20	

bcc: RO Chief, Operations Branch, HQ
RO:HQ (4)
Directorate of Licensing (4)
DR Central Files
PDR
Local PDR
TIC
NSIC
State of New Jersey



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I
970 BROAD STREET
NEWARK, NEW JERSEY 07102

APR 26 1973

J. P. Stohr, Senior, Environmental Protection and Special Programs Section
Directorate of Regulatory Operations, Region I

INSPECTOR'S EVALUATION
RO INSPECTION REPORT NO. 50-219/73-03
JERSEY CENTRAL POWER AND LIGHT COMPANY
OYSTER CREEK NUCLEAR STATION (OC)

The above inspection report documents the findings of my review of the licensee's environmental monitoring program. This inspection covered both radiological and non-radiological areas and, as indicated in the report, several items of noncompliance were found with respect to Oyster Creek Technical Specification requirements. My overall evaluation of the program is that it is essentially nonexistent. The radiological program is apparently an extension of the pre-operational program for the site and as such is in need of extensive upgrading. I have included my recommendations for this upgrading as an attachment to this evaluation but feel that the problem at OC goes much deeper than the facade of an acceptable program. The most sophisticated environmental surveillance program would be meaningless at OC at this time due to (a) the lack of manpower to undertake it and (b) the apathetic attitude of management at both the site and at the corporate level of JCPL and GPU. Data is being accumulated at OC for the sake of collecting data. It was the inspector's opinion that the personnel in charge of the program had absolutely minimal concern with the program and provided no evaluative review of the data being received. The inspector was surprised when the OC Technical Supervisor had to be notified by the inspector that two of the five OC air particulate samplers had been inoperable for periods approaching 10 months. Throughout the inspection, the Technical Supervisor was very apologetic and made many excuses but at no time gave this inspector the impression that he (the Technical Supervisor) had a firm handle on what was going on with the environmental monitoring program. Even the OC Station Superintendent was taken back by the apparent lack of knowledge exhibited by the Technical Supervisor when the items of noncompliance were discussed at the management interview. (This, by the way, after the inspector had previously reviewed the items with the Technical Supervisor alone). The Technical Supervisor stated that he wished to informally provide me with a listing of why each violation occurred but no such listing has been received to date.

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The non-radiological programs are also in very poor condition. Water quality parameters are only monitored (when monitored) three times a year. Results from measurements such as this are meaningless. I would strongly recommend a detailed review in this area by DL since JCPL is planning to put a second unit (Forked River Unit 1) on this same site. JCPL and GPU rely heavily on consultant reports but appeared to be totally ignorant of their contents. At one point, the inspectors were presented with a stack of consultant reports, one of which would have been quite damaging to JCPL with respect to a lawsuit filed against it involving the shipworm problem discussed in the report. Realizing the impact of the report I had just read, I asked the licensee if they wished the report or information therein be kept proprietary. The Manager of Nuclear Generating Stations, (JCPL), the Safety and Licensing Manager (GPU) and the Safety and Licensing Project Engineer (GPU) all admitted that they did not know what information the report contained, read the report at that time, and concurred with me that it definitely should be kept proprietary. This is but one example of the lack of control, supervision, and awareness provided by management over environmental matters.

(NOTE: Along the lines of current litigation in the aforementioned lawsuit, the licensee informally conceded that the utility was responsible for the ecological changes in Oyster Creek and the aggravation of the shipworm problem therein).

During the part of the inspection in which I spoke to marina owners, I was impressed by their sincerity and alarmed by the apparent fear these people have of radiological releases from OC. Although I feel that I may have alleviated these fears temporarily, I'm afraid that others (e.g., Dr. Sternglass et al.) will soon bring this fear back. In talking to these owners, I got the impression that public relations at JCPL is nonexistent also. The company (JCPL) appears to be insensitive to their inquiries unless forced into it by adverse publicity.

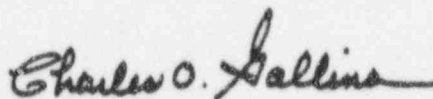
The ecological problems discussed with the marina owners (high temperatures, silting and shipworms) appear to be well founded. The temperature problems have come up before and the way the upper limit of temperature is measured at the temperature buoy in Barnegat Bay virtually gives OC the freedom to discharge effluent at any temperature it desires provided the temperature at the buoy never exceed 95°F. It doesn't take too much imagination to see how water temperatures at these marinas could reach 104°F during the hot summer months. I would recommend that DL look into a more reliable way of controlling thermal discharge at OC such as setting criteria within the Creek or some similar approach.

The shipworm problem appears to also be well founded based on my observations. According to the proprietary report I read by Dr. Wurtz to JCPL as mentioned earlier, the incidence of shipworms in Oyster Creek was a factor of two greater than in the control creek (Stout's Creek). The shipworm and silting problem should be investigated in detail, and if JCPL is uncooperative in this respect, perhaps DL or AEC consultants should do so.

To summarize this aspect of the evaluation, the marina owners feel that JCPL is operating with utter disregard for their problems. After talking to JCPL and GPU representatives, I was inclined to agree with the owners. After describing the problems observed at the marinas to a JCPL representative, his only reply was, "At least the hot water keeps the marinas free of ice in the winter."

Looking at the overall inspection results, including observations by all three inspectors, I would make the following recommendations.

- A. The overall radiological environmental monitoring program be jointly reviewed by DRO, DL and the licensee in order to arrive at an acceptable monitoring program which will provide an adequate monitor of critical pathways of radioactive effluents from the plant to man. This program should include state-of-the-art techniques and not be based on outmoded techniques or unnecessary analyses.
- B. The overall non-radiological environmental program should also be jointly reviewed by DRO, DL and the licensee in order to arrive to an acceptable monitoring program to protect the ecology of the area from any further adverse impact from either the Oyster Creek Plant or the proposed Forked River Station.
- C. It is recommended that based on the number and nature of the items of noncompliance found, and in order to insure that adequate manpower and supervision will be provided with respect to the above stated program, corporate management of JCPL and/or GPU be called in to RO:I for a management meeting with the Director.



Charles O. Gallina, Ph.D.
Radiation Specialist

Enclosure:

Attachment: Recommendations for the
Upgrading of the Environmental Mon-
itoring Program

ATTACHMENT

RECOMMENDATIONS FOR THE UPGRADING OF THE ENVIRONMENTAL MONITORING PROGRAM AT THE OYSTER CREEK NUCLEAR GENERATING STATION

1. Air particulate samplers should be located at a minimum of 3 locations where the highest off-site ground level concentrations are expected according to updated meteorological data.
2. Air particulate samplers should be located in from one to five communities within 10 miles of the plant.
3. An air particulate sampler should be located at a location greater than a 20 mile radius in the least prevalent annual wind direction to act as a control sampler.
4. Air particulate samplers should be upgraded to provide adequate reliability with respect to long term operation. Filters should be changed weekly and in addition to a gross beta analysis at a filter change*, a composite gamma analysis should be conducted monthly.
5. Charcoal cartridges should be added to the above samplers to measure for airborne iodine. Cartridges should be changed and analyzed weekly.
6. Direct radiation should be measured by the inclusion of 2 or more dosimeters (preferably TLD's) at each of the locations listed in 1, 2 and 3 above, as well as additional locations where the highest annual off-site dose at ground level is predicted. These later locations would be based on estimated dose levels as opposed to ground level concentrations where the dose may be effected by sky shine, high plumes or direct radiation from the facility.
7. Sediment, benthic organisms and aquatic plants should be sampled downstream from the outfall in Oyster Creek and Barnegat Bay and upstream from the intake. A gamma isotopic analysis should be performed on these samples.
8. Fish and shellfish should be sampled downstream from the outfall in Oyster Creek and Barnegat Bay and from one area not influenced by the plant discharges. A gamma isotopic analysis should be performed on these samples.

*Allowing 24 hour delay for radon and thoron daughter decay

9. The Water Quality Monitoring Program (See ER Section 5.5.2.3) should be undertaken on a weekly basis with certain parameters (eg, DO, pH, salinity, temperature, etc.) monitored continuously at the plant intake and discharge.
10. Various analyses currently being performed at the OC Station (eg, Uranium, Ra-226, Ra-227, etc.) should probably be discontinued.
11. Soil sampling at the OC station should probably be discontinued.

INSPECTION OUTSTANDING ITEMS
(Region I Work Form)

Licensee: J. J. Central Power and Light Company License No.: DPR-16
Facility: Onyx Creek Nuclear Generating Station Docket No.: 50-219

	IDENTIFIED RPT # OR OTHER REFERENCE	S	NC	UN	IN	IEB	O	ITEM	CLOSED RPT #
1	50-219/13-03		✓					atmospheric radiation monitoring	
2	"		✓					air Particulate monitoring	
3	"		✓					Soil Sampling	
4	"		✓					Vegetation Sampling	
5	"		✓					Rainwater Sampling	
6	"		✓					Domestic Water Sampling	
7	"		✓					Surface Water Sampling	
8	"		✓					Salt Sampling	
9	"		✓					Clam Sampling	
10	"			✓				Water Quality Monitoring	
11	"						✓	See Teledyne Sampling + Analysis Proc.	

S-Safety Item; NC-Noncompliance or nonconformance; UN-Unresolved item; IN-Inquiry item; IEB-Reactor Inspection and Enforcement Branch request; O-Other source requested item.