

U.S. ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I

RO Inspection Report No: 50-219/74-16 Docket No: 50-219
Licensee: Jersey Central Power and Light Company License No: DPR-16
Madison Avenue at Punch Bowl Road Priority: _____
Morristown, New Jersey 07960 Category: C
Location: Oyster Creek, Forked River, New Jersey 08731 Safeguards Group: _____

Type of Licensee: BWR (GE) 1930 MW(t)

Type of Inspection: Special, Announced

Dates of Inspection: October 30, 1974

Dates of Previous Inspection: September 23-25, 1974

Reporting Inspector: E. G. Greenman, Reactor Inspector

11/21/74
Date

Accompanying Inspectors: W. A. Ruhlman, Reactor Inspector

11/21/74
Date

Date

Date

Date

Other Accompanying Personnel: NONE

Date

Reviewed By: D. L. Caphton, Senior Reactor Inspector
Reactor Operations Branch

11/21/74
Date

31445

SUMMARY OF FINDINGS

Enforcement Action

A. Violations

Technical Specification 6.2 - Failure to follow procedure which requires distribution of RWP to the job location. (Details 3.b)

B. Safety Items

None

Licensee Action on Previously Identified Enforcement Items

Not Inspected

Design Changes

Not Inspected

Unusual Occurrences

Not Inspected

Other Significant Findings

A. Current Findings

1. Bank Stabilization

The facility intake canal banks have been graded and an asphalt coating applied to control erosion. Work was underway in the discharge canal area. (Details 3.a)

2. Chromate Water Removal

Treatment of chromated water from the torus was in progress. Nine storage tankers had been emptied. (Details 3.b)

B. Status of Previously Reported Unresolved Items

Not Inspected

Management Interview

An exit interview was conducted on October 30, 1974, with Mr. J. T. Carroll, Station Superintendent and Mr. J. Molnar, Senior Staff Assistant. Inspection results were discussed further with Mr. D. A. Ross on November 15, 1974.

Items discussed are summarized below:

A. General

The inspector summarized the scope of the special inspection as related to a review of station personnel qualifications versus ANSI N18.1 guidelines, and a tour of the facility.

B. Amendment 68, Table 3.7.1

The inspector stated that his review of positions encompassed in the referenced table indicated that information was not current and should be updated to reflect the actual site organization.

A licensee representative stated that a revision to the station organization would be submitted to D.L. as a part of Section 6 of the Technical Specifications. (Details 2)

C. Documentation of Personnel Experience

The inspector stated that numerous inconsistencies were disclosed between listed dates and actual resume data examined on a sampling audit basis. The inspector further stated his position that all records should be examined to assure accuracy.

A licensee representative concurred and stated that appropriate resolution would be provided. (Details 2)

D. Repairmen In Responsible Positions

The inspector noted that in the licensee's submittal, the statement had been made that personnel qualifications were in conformance with Safety Guide 8, which endorses N18.1-1971. The inspector stated that his findings based on a sampling indicated the licensee was in conformance as of this date, but that one individual was identified as having only 2 years, 7 months experience at the time of the submittal, which did not meet ANSI 18.1-1971, Section 4.5.3 criteria.

A licensee representative acknowledged the inspector's remarks and discussed the three year craft requirement in light of personnel policies. The licensee representative stated further that this matter would be discussed with D.L. (Details 2)

E. Related Technical Training for Technicians

The inspector stated that his review indicated that technician training was being incorporated as part of the experience and that this practice did not meet the intent of ANSI N18.1-1971, Section 4.5.2.

A licensee representative acknowledged the inspector's statement.
(Details 2)

F. Security

The inspector discussed security access controls with licensee representatives.

G. Violation

The item listed under enforcement action above was identified as an apparent violation. (Details 3.b)

DETAILS

1. Persons Contacted

Mr. J. T. Carroll, Station Superintendent
Mr. J. R. Molnar, Senior Staff Assistant
Mr. J. P. Maloney, Operations Supervisor
Mr. N. M. Cole, Shift Foreman
Mr. E. O. Scalsky, Radiation Protection Supervisor
Mr. D. A. Kaulback, Radiation Protection Foreman
Mr. J. Chardos, Associate Engineer
Mr. J. Knubel, Staff Assistant

2. Administration and Organization

The following listing of both responsible power plant experience and nuclear experience for positions listed in Table 3.7.1 of the licensee's application for reactor construction permit and operating license, were compared to personnel resume history on a sampling basis. Specific deficiencies identified were as follows:

- a. Certain positions are currently filled which are not identified in Amendment No. 68 dated March 6, 1972, Table 3.7.1. Specifically the position of Chief Engineer had not been added. Additionally, review indicated some personnel had changed positions and there were new employees. Upgrading of the original submittal was discussed at the exit interview.
- b. Inconsistencies in duration of experience were identified.
- c. The licensee is taking dual credit for training in the case of technicians.
- d. One instance was noted where an employee did not meet criteria of ANSI 18.1, Section 4.5.3 (three years experience) at the time of the submittal.

The following data was obtained and compared against resume information available on site for positions as referenced:

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Station Superintendent	Pump Room Engineer	E.H. Werner Sta. South Amboy, NJ	3½ yrs	Shift Foreman	Oyster Creek (incl. 1 yr. trng. at SNEC, Saxton, PA)	4-10/12 yrs.
	Switch Board Oper.	" " "	4-5/12 yrs			
	Shift Operator	" " "	2-3/12 yrs	Operating Supv.	Oyster Creek	3-1/12 yrs
	Shift Foreman	" " "	2-4/12 yrs	Plant Supervisor	Oyster Creek	4/73 -
Operations Supervisor				Reactor Plant Tech.	(SNEC) Saxton Nuclear Experimental Corp. Saxton, PA.	4-1/12 yrs
				Shift Foreman	Oyster Creek	7-2/ yrs
				Operations Supervisor	Oyster Creek	11/73 -

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Maintenance Supervisor	Various Operation & Maint. Assignments	Williamsburg & Shawville Elect. Gen. Stations	13 yrs	Sr. Instr & Control Technician	Saxton Nuclear Experimental Corp. Saxton, PA.	5 yrs
				Instr. & Elect. Maint. Foreman	Oyster Creek	4-1/2 yrs
				Maintenance Supervisor	Oyster Creek	3/70 -
Nuclear experience reviewed indicates experience of four years, 2 months.						
Technical Engineer	Cadet/Jr./Assoc. Engineer	Sayreville Gen. Station	3½ yrs*	Assoc. Engr.	Oyster Creek	9/12 yrs
				Assist. Tech. Eng.	Oyster Creek	6/12 yrs
				Tech. Eng.	Oyster Creek	2-8/ yrs
				Tech. Supervisor	Oyster Creek	2/12 yr
				Tech. Engineer	Oyster Creek	11/73 -
Position not listed in Table 3.7.1						

*Power plant experience reviewed by the inspector indicates years in position should be 3 and 1/12 years.

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Shift Foreman	Various Operating Positions	Sayreville Gen. Station	3-3/12 yrs	Control Room Oper.	Oyster Creek	4-6/12 yrs
				Operating Foreman	Oyster Creek	4/12
				Shift Foreman	Oyster Creek	5/71 -
Shift Foreman	Various Operating Positions	Sayreville Gen. Station	12-11/12 yrs	Reactor Plant Supervisor	Saxton Nuclear Experimental Corp.	5-1/2 yrs
				Shift Foreman	Oyster Creek	4/66 -
Shift Foreman				C.R. Operator "B"	Oyster Creek	5-1/12 yrs
				C.R. Operator	Oyster Creek	3-8/12 yrs
				Shift Foreman	Oyster Creek	2/74 -
Shift Foreman	Various Operating Positions	E.H. Werner & Sayreville Station	7-6/12 yrs	Control Room Oper.	Oyster Creek	8-4/ yrs
				Operating Foreman	Oyster Creek	3/12 yr
				Shift Foreman	Oyster Creek	2/74 -

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Shift Foreman	Various Operating Positions	E.H. Werner & Sayreville Stas.	7-4/12 yrs	Control Room Oper. Operating Foreman Shift Foreman	Oyster Creek Oyster Creek Oyster Creek	4-11/12 yrs 2/12 yr 8/70 -
Maintenance Foreman	Machinists Mech.Maint "A" Certified Welder Mech. Maint Foreman	E.H. Werner Sta Whippany Sta. E.H. Werner Sta South Amboy Sayreville Sta Sayreville, NJ	10-1/12 yrs 1-3/12 yrs 5-1/12 yrs	Mach. Maint. Foreman	Oyster Creek	9/65 -
Electrical Maint. Foreman				Elect. Maint. Foreman Instr.&Elect. Main. Foreman	Oyster Creek Oyster Creek	2-2/12 yrs 3/70 -

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Technical Supervisor				Reactor Operator Tech	U.S. Navy	7 yrs
				Jr. Cadet Eng.	Oyster Creek	2-11/12 yrs
				Assist Tech Eng.	Oyster Creek	2-5/12 yrs
				Tech. Supervisor	Oyster Creek	11/73 -
Technical Engineer (Assoc.)				Associate Engineer	Oyster Creek	9/70 -
Chemistry Superivsor				Radiochemist	Industrial Reactor Labs, Plainsboro NJ	10 yrs
				Chemical Foreman	Oyster Creek	3-7/1 rs
				Chemical Foreman	Oyster Creek	5/74 -

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Radiation Protection Supervisor	Radiation Protection Supervisor	Oyster Creek	10/73 -	Health Physicist	Brookhaven Natl. Labs. Upton, L.I. N.Y.	6-2/12 yrs
				University Health Physicists	Princeton Univ. Princeton, N.J.	3-3/12 yrs
				Health Physicist/ Acting Mgr.	Cambridge Nuclear Radio-Pharmaceutical Corp. Princeton, N.J.	9/12 yr
				Health Physicist	Bio Nuclear Inc. Friendwood, Texas	9/12 yr
Control Room Operator	Power Plant -- Various Power Plant Positions	E.H. Werner Sta.	4-1/12 yrs	Equip. Oper. "B"	Oyster Creek	1-3/12 yrs
				Equip. Operator	Oyster Creek	3-9/12 yrs
				Control Room Oper "B"	Oyster Creek	1 yr
Control Room Operator	Power Plant Various Power Plant Positions	Werner & Sayreville Stas.	8-8/12	Control Room Oper	Oyster Creek	11/73 -
				Equip. Operator	Oyster Creek	5-6/12 yrs
				Control Room Operator "B"	Oyster Creek	10/12 yr
				Control Room Oper.	Oyster Creek	11/73 -

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Control Room Operator	Equip. Operator	Oyster Creek	5/12 yr	Reactor Operator/ Electronics Tech.	U.S. Navy	5-2/17 yrs
	Control Room Oper. "B"	Oyster Creek	3-8/12 yrs			
	Control Room Oper.	Oyster Creek	8/73 -			
Control Room Operator	Equip. Operator	Oyster Creek	1 yr	Reactor Operator/ Electronics Tech.	U.S. Navy	3 yrs
	Control Room Oper. "B"	Oyster Creek	3-5/12 yrs			
	Control Room Oper.	Oyster Creek	8/73 -			
Control Room Operator	Equip. Operator	Oyster Creek	1-9/12 yrs	Eng. Lab. Tech./ Eng. Room. Super.	U.S. Navy	4-8/12 yrs
	Control Room Oper. "B"	Oyster Creek	1 yr			
	Control Room Oper.	Oyster Creek	11/73 -			
Control Room Operator "B"	Control Room Operator "B"	Oyster Creek	1/73 -	Reactor Operator	U.S. Navy	2-10/12 yrs

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Control Room Operator "B"	Control Room Operator "B"	Oyster Creek	1/73 -	Various Operating Assignments	U.S. Navy	6 yrs.
Control Room Operator "B"	Control Room Operator "B"	Oyster Creek	1/73 -	Various Operating Assignments	U.S. Navy	4 yrs
Control Room Operator "B"	Control Room Operator "B"	Oyster Creek	12/72 -	Various Operating Assignments	U.S. Navy	6-10/12 yrs
Control Room Operator "B"	Equipt. Oper "B" Control Room Operator "B"	Oyster Creek Oyster Creek	6/12 11/72 -	Various Operating Assignments	U.S. Navy	3-1/12 yrs
Equipment Operator	Equipment Operator	Oyster Creek	3/74 -			
Equipment Operator	Equipment Operator	Oyster Creek	6/74 -	Elect. Operator/ Radiological Control Super.	U.S. Navy	4 yrs
Equipment Operator	Equipment Operator	Oyster Creek	1/74 -			
Equipment Operator	Equipment Operator	Oyster Creek	6/74 -			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Equipment Operator	Various Operating Positions	Sayreville Gen. Station	3 yrs 8/12 Mos.	Equipment Operator	Oyster Creek	1/70 -
Equipment Operator	Equipment Operator	Oyster Creek	1/73 -	Various Operating Positions	U.S. Navy	2-9/12 yrs
Equipment Operator	Equipment Operator	Oyster Creek	1/73 -	Various Operating Positions	U.S. Navy	5 yrs
Equipment Operator	Various Operating Positions	E.H. Werner & Sayreville Sta.	4 yrs			
	Equipment Operator	Oyster Creek	3/69 -			
Equipment Operator	Equipment Operator	Oyster Creek	3/70 -			
Equipment Operator	Various Operating Positions	E.H. Werner & Sayreville Sta.	3-1/12 yrs			
	Equipment Operator	Oyster Creek	9/72 -			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Equipment Operator	Equipment Operator	Oyster Creek	1/73 -	Various Operating Positions	U.S. Navy	3-6/ yrs
Equipment Operator	Equipment Operator	Oyster Creek	10/73 -			
Equipment Operator	Equipment Operator	Oyster Creek	12/73 -			
Equipment Operator	Equipment Operator	Oyster Creek	1/74 -			
Equipment Operator	Equipment Operator	Oyster Creek	3/74 -			
Equipment Operator	Equipment Operator	Oyster Creek	3/74 -			
Equipment Operator	Equipment Operator	Oyster Creek	3/74 -			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Technician-Radiation Protection <u>Training</u> Assist. Tech. 1-5/12 yrs. Various Lectures, Instructions during period.	Various Operating Positions Equipment Oper. Asst. Tech (R.P.) Radiation Tech.	E.H. Werner & Sayreville Sta. Oyster Creek Oyster Creek Oyster Creek	7-11/12 yrs 2/12 yr 1-5/12 yrs 6/72 -			
Technician-Radiation Protection <u>Training</u> Assist. Tech. 8/12 yr. Various Lectures, Instructions during OST period.	Asst. Tech (R.P.) Radiation Tech.	Oyster Creek Oyster Creek	8/12 yr 1/71 -			
Technician-Radiation Protection <u>Training</u> Assist. Tech (R.P.) 1-3/12 yrs, Various Lectures, Instructions during period.	Equip. Operator Asst. Tech (R.P.) Radiation Tech.	Oyster Creek Oyster Creek Oyster Creek	2-3/12 yrs 1-3/12 yrs 1/74 -			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Chemistry Foreman	Asst. Tech (R.P. Chem.) Chemical Tech. Chemical Foreman	Oyster Creek Oyster Creek Oyster Creek	2-4/12 yrs. 3-3/12 yrs. 5/74 -			
Technician Chemistry <u>Training</u> Chem & Rad. Orientation Course (9 days) Chem & Intro. to Radiological Health (8 Mos) GE Technology Training Course (11 Mos)	Mech. Maint. "C" Chemical Tech.	Sayreville Sta. Oyster Creek	1-10/12 yrs. 9/65 -			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Technician-Chemistry <u>Training</u> Chem & Rad. Tech Orientation Course (9 Days) Chem & Intro to Radiological Health (8 Mos) G.E. Technology Training Course (11 Mos)	Various Operating Positions Chemical Tech.	E.H. Werner & Sayreville Gen. Stations Oyster Creek	9-1/12 yrs 9/65 -			
Technician-Inst. & Control <u>Training</u> Asst. Tech (1-9/12 yrs)	Asst. Tech (Inst. and Control) Tech. (Inst. and Control)	Oyster Creek Oyster Creek	1-9/12 yrs 3/72 -			
Technician - Inst & Control <u>Training</u> Basic & Advanced Electronics (2-6/12 yrs) College (Electronics Curriculum) (2 yrs)	Tech - (Instr. & Control)	Oyster Creek	'67 -			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Technician-Inst. & Control <u>Training</u> Assistant Tech. (11/12 yr)	Equip. Operator Asst. Tech. (Instr. & Control) Tech. (Instr & Control)	Oyster Creek Oyster Creek Oyster Creek	3-1/12 yrs 11/12 yr 3/73 -			
Technician Instr. & Control <u>Training</u> Assist. Tech. (R.P. Chem.)	Asst. Tech. Equip. Operator Assist. Tech. (R.P.)	Oyster Creek Oyster Creek Oyster Creek	7/70 - 3-5/12 yrs 1/74 -			
Assistant Tech. (R.P. Chem.)	Equipment Oper. Station Helper Assist. Tech.	Oyster Creek Oyster Creek Oyster Creek	1-11/12 yrs 1-6/12 yrs 9/73 -			
Assist. Tech. (R.P. Chem.)	Equipment Oper. Assist. Tech.	Oyster Creek Oyster Creek	1 yr 3/74 -			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Assist. Technician (R.P. Chem.)	Station Helper	Oyster Creek	10/12 yrs.			
	Assist. Tech.	Oyster Creek	2/74 -			
Assist. Tech. (R.P. Chem.)	Assist. Tech.	Oyster Creek	4/74 -			
Assist. Technician (R.P. Chem.)	Assist. Tech.	Oyster Creek	4/73 -			
Assist. Technician (Instr. & Control)	Assist. Tech.	Oyster Creek	4/72 -			
Assist. Technician (Instr. & Control)	Assist. Tech.	Oyster Creek	4/72 -			
Assist. Technician (Instr. & Control)	Equip. Operator	Oyster Creek	3/12 yr	Reactor Oper.	U.S. Navy	6 yrs.
	Assist. Tech.	Oyster Creek	1-2/12 yrs.			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Repairman	Elect. Maint. B	Oyster Creek	3 yrs			
	Elect. Maint. A	Oyster Creek	3/72 -			
Repairman	Station Helper	Oyster Creek	2-1/12 yrs			
	Mech. Maint. B	Oyster Creek	1-6/12 yrs			
	Mech. Maint. A	Oyster Creek	2/72 -			
Repairman	Mech. Maint. C&B	Sayreville Sta	1-2/12 yrs			
	Mech. Maint. B	Oyster Creek	? 3/12 yrs			
	Mech. Maint. A	Oyster Creek	1/71 -			
Repairman	Mech. Maint. C&B A	Gilbert Sta.	2-7/12* yrs			
	Mech. Maint. A	Oyster Creek	8/72 -			

*The inspector's review indicated that at the time of submittal, this repairman did not meet the experience level specified in ANSI 18.1, Section 4.5.3.

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Repairman	Elect. Maint. A	Oyster Creek	7/67 -			
Repairman	Elect. Maint. A	Oyster Creek	2/69 -			
Repairman	Equip. Operator	Oyster Creek	2 yrs.			
	Mech. Maint. B	Oyster Creek	8/12 yrs			
	Mech. Maint. A	Oyster Creek	12/72 -			
Repairman	Various Operating Positions	E.H. Werner & Sayreville Stas	6-1/12 yrs			
	Equipment Oper.	Oyster Creek	4-9/12 yrs			
	Elect. Maint. B	Oyster Creek	1-1/12 yrs			
	Elect. Maint. A	Oyster Creek	9/73 -			

	Power Plant Experience			Nuclear Experience		
	Previous Positions Held	Location where experience was obtained	Years in Position	Previous Positions Held	Location where experience was obtained	Years in Position
Mech. Maint. Foreman	Various Operating Positions	Whippany and Sayreville Stas.	7-7/12 yrs			
	Mach. Maint. A	Whippany and Sayreville Stas.	6-10/12 yrs			
	Mech. Maint. Certified Welder	Oyster Creek	5-9/12 yrs			
	Mech. Maint. Foreman	Oyster Creek	4/73 -			
Mech. Maint. Foreman	Mech. Maint. A&B	Sayreville Sta.	1-1/12 yrs			
	Mech. Maint. A	Oyster Creek	1-5/12 yrs			
	Mech. Maint. A/ Certified Welder	Oyster Creek	4-6/12 yrs			
	Mech. Maint. Foreman	Oyster Creek	9/73 -			

3. Environmental

a. Bank Stabilization Program

The inspector observed that the intake canal area had been graded and smoothed. Coarse rock is in place at and below the water line and a finer crushed rock has been applied to the bank incline. An asphalt surface has been applied to the bank rock on both sides of the canal. Erosion appeared minimal. Several small problem areas were noted. Grading work was in progress along the discharge canal structure at the time of this inspection.

b. Chromate Processing Plant

The inspector observed that a system has been established whereby chromate waste water from the torus is processed. According to licensee representatives, the influent is processed at a very low pH through activated carbon, and then through anion resins to remove trace chromates. Waste water was being transferred from temporary tank storage into waste storage tanks and then pumped through the processing system prior to transferring the effluent to radwaste. According to licensee representatives, about nine tankers had been processed, and six tankers remain to be processed. Disposition of empty tanks was unknown. The processing system was installed in the vicinity of the waste surge tank and radwaste building. Actual transfer of waste water is from the tank cars via hose, to permanent storage tanks then through the processing system. The licensee was considering addition of another carbon bed.

The inspector observed the area posted as a radiation area requiring RWP for entry. No RWP was posted at the job location. The inspector was subsequently furnished a copy of an extended RWP purported posted in the radwaste building. The inspector was unable to determine a relationship between the extended RWP and the involved radiation area. Radiation Protection Procedure 903, Revision 3 dated December 11, 1973, requires a copy of the RWP to be distributed at the job location. (Violation)