MONTHLY OPERATIONS REPORT

DECEMBER 1984

At the beginning of the report period, the Oyster Creek Station was shutdown following a scram discharge volume scram test which occurred on November 30, 1984 at 10:18 p.m.

The reactor remained shutdown to facilitate corrective maintenance until December 3, 1984. Major maintenance completed during this shutdown period was as follows:

1. Six CRD HCUs were repaired.

2. The bonnet on V-1-34 was retorqued. Subsequently, after starting up, V-1-34 still had a large steam leak.

3. Cleanup System pressure control valve (PCV) ND-11 was adjusted. However, the plant continued to experience pressure control problems. Technical Functions Division is tasked to resolve the problem.

4. The acoustic monitor for "G" safety valve was repaired.

5. The DWEDT pump start problem was resolved by "failing" open discharge valve V-22-292 and failing its recirculation valve closed. This operation was performed in accordance with Procedure 108.

6. Various secondary system steam leaks and indication problems on various feedwater heater moisture removal valves were repaired.

7. "B" fuel zone level indication was repaired.

8. Work on the inboard seal leak on "A" RFP was started and continued after plant startup.

After all necessary repairs were completed, a reactor startup commenced at 4:31 A.M. on December 3, 1984. The reactor was critical at 7:23 A.M and continued to increase in power level in preparation for placing the turbine-generator on line. At 12:05 P.M. (December 3, 1984), a full reactor scram occurred on low condenser vacuum when reactor pressure reached 582 psig, at which point the vacuum scram function is no longer bypassed. The cause of the scram was failure to clear all low condenser vacuum trips prior to reaching the 600 psig permissive interlock. A full critique of the incident was performed. A reactor startup was commenced at 10:35 P.M. on December 3, 1984. The reactor was critical at 2:12 A.M. on December 4, 1984. The generator was placed on the line at 7:32 P.M. on December 4, 1984.

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After the primary containment was inerted with nitrogen, the reactor mode switch was placed in the "RUN" position at 8:30 A.M. on December 5, 1984. Generator load was increased to 150 MWe. Later in the day, generator load was increased to 305 MWe after the feedwater heaters were put into service. Reactor power was now limited by feed pump availability.

Repairs to "A" Reactor Feed Pump (RFP) were completed on December 10, 1984 and load was increased to 80% power (510 MWe). Reactor power and generator load were then limited by Condensate header pressure. After "A" RFP was repaired, all feedwater system flow testing was completed by the Startup and Test Department.

Reactor power remained at approximately 80% power until December 13 at which time load was decreased to 75% power (460 MWe) to change the rod pattern. Load was subsequently increased to 91% power (586 MWe) and remained at approximately this power level until December 15, 1984.

As previously noted, reactor power was limited by condensate header pressure. Condensate system sucker and dumper valves, V-2-16 and V-2-17, were leaking through diverting flow back to the condensate storage tank and condenser hotwells. Both valves have been adjusted to their maximum. Condensate header pressure increased by approximately 10 psig with these adjustments. Over the weekend of December 15, 1984, reactor power was decreased to 59% power (375 MWe) to check the impeller clearances on "A" and "C" condensate pumps. These pumps were worked on during the outage. Adjustments were made to "C" pump. The clearances on "A" pump were determined to be correct. Local condensate header pressure then indicated 270 psig. Power was increased to 95% power (620 MWe) by late evening on December 16, 1984.

After resolution of condensate header pressure problems, reactor power was limited by reactor recirculation pump flow and the second stage steam reheaters not being in service. The second stage steam reheaters were not in service due to a bonnet leak on valve V-1-34. Reactor recirculation pump flow was not at 100% due to a temperature compensation problem with "A" and "C" loops. The thermocouple readout for these loops was 480°F when actual temperature was approximately 520°F. This caused computer indicated flow (temperature compensated) to be 100% when actual flow was somewhat less. Upon resolution of temperature compensation problems, recirculation flow was increased to 100% and a maximum power level of 97% power (639 MWe) was attained.

On December 19, 1984, the catch basin installed around the leaking flash tank manway failed. This caused concern because of wetting of the reactor feed pump motors due to leakage from above. The leakage was determined to have increased since first identified. The containment was refabricated to divert the water. At the same time, a contractor having expertise in the repair of steam leaks during plant/system operation was engaged by M & C. On December 20, 1984, plant load was decreased to 51% power (300 MWe) so that the contractor could evaluate the repairs necessary on the manway. The load decrease reduced flash tank pressure from approximately 75 psig to 25 psig. This drop in pressure decreased the magnitude of the leak to a manageable level. Repairs by the same contractor were also planned for the V-1-34 bonnet leak.

Initial attempts to stop the leaks on both the manway and the valve were unsuccessful, however, after additional evaluation and sealant injection, the leak on the manway was reduced to approximately .5 gpm. By Friday, December 28, 1984, plant load had been increased to 572 MWe. Additional repairs were still scheduled for valve V-1-34. Intentions were to drill the valve at a higher position on the valve packing gland and inject more sealant. These repairs were completed subsequent to this report period.

On December 31, 1984, reactor power was increased to 92% power (618 MWe).

Towards the end of the report period, an increasing trend in drywell unidentified leak rate was noted. At first, it was believed that the leak rate varied with reactor recirculation pump speed. Subsequent to the report period, via chemical analysis, it was determined that the unidentified leakage was not primary coolant. The increasing trend in leak rate continues at the end of this report period and is being closely monitored.

Other significant events during the report period were as follows:

On December 5, 1984, an operability problem developed with main steam drain valves V-1-106, 107 and 110. The V-1-106 and V-1-107 valves were electrically closed and the breakers were racked out. The V-1-110 valve had to be manually closed. Plant Engineering and M&C are investigating the cause of the failure.

A number of problems were experienced with the new air dryer. The air dryer was out of service twice during the report period for corrective maintenance. The unit is currently in service and is being closely monitored.

One of the potentiometers for voltage regulation had to be adjusted on Diesel Generator No. 2 due to a hunting problem. The problem did not cause the Diesel Generator to be considered inoperable. The problem was corrected in a matter of hours (December 10).

Standby Gas Treatment System (SGTS) No. 1 flow dampers were adjusted following surveillance testing in order to meet acceptance criteria. The system was inoperable for less than a one-day period (December 10). SGTS No. 1 was also out of service for a short period of time for removal of a test canister on December 14, 1984.

The starting setpoint of the emergency D.C. seal oil pump was adjusted so it does not cycle on. Plant Engineering investigation revealed that the main seal oil pump is not developing designed pressure. A replacement pump is being ordered.

Repairs were completed on IRMs 12, 13, 16 and SRM 23 after they failed their associated front panel tests.

The Yarway level discrepancy in the Control Room continues to exist, but not to the extent experienced previously. The Yarways are presently reading 3 to 4 inches lower than the GEMAC level gauges.

A main steam line flow oscillation problem occurred once during the report period. The oscillations stopped before any trouble shooting could be performed. Monitoring of the associated parameters continues.

Fire diesel pump No. 1 was inoperable for approximately one shift to repair a leaking pressure sensing line (December 12).

Technical Functions Division and the Operations Department have been collecting data on the performance of Cleanup System pressure control valve (PCV) ND-11. On December 18, 1984, while slowly increasing Cleanup System pressure with PCV ND-11, the system tripped. The Cleanup System was subsequently put back in service. Due to the difficulty in restarting the Cleanup System while at power, further adjustments and testing of ND-11 were terminated. On December 19, 1984, while attempting to place a Cleanup System filter in service, the system again tripped due to the inability of PCV ND-11 to keep up pressure while slowly valving in the filter. A filter was still not in service at the end of the report period. Subsequent to the report period, a spring on ND-11 was discovered missing and is believed to have caused the oscillation problem. Procurement of a new spring is presently in progress.

The dilution pumps are presently being supplied with seal water by the Fire Water System. Attempts to run the system with the seal water pumps have proven unsuccessful. Debris (mainly grass) is clogging up the pumps and strainers.

The off-gas flow instrumentation problem (Channel "B") remained an outstanding item at the end of the report period. Plant Engineering is now involved in resolving the problem.

The collector ring wear problem on the circulating water pumps was identified as being caused by improper material. The existing collector rings are made of aluminum-bronze. Plant Engineering reported the proper material is brass. Proper material collector rings are on order. In addition, an expert from General Electric is being consulted to insure the correct actions are being taken.

Intake screen No. 3 repairs have been completed. So far, the screen has been running satisfactorily. The starting setpoint for the screen wash pumps had to be adjusted during the report period.

Maintenance on the limitorque for Reactor Building Closed Cooling Water (RBCCW) valve V-5-106 started during the report period. A replacement for the defective part (flanged bushing) is on order.

The DWEDT pumps are presently operating solely on level. The recirculation valve for the cooling system was failed closed due to a pump cycling problem. So far, no temperature regulation problems have been noted. A permanent fix to the problem will require a drywell entry and will be done when a scheduled or forced outage occurs.

The discharge pressure on No. 2 RBCCW pump was noted as being lower than No. 1 pump. The pump is still operable and the problem is believed to be a partially plugged suction strainer. The strainer is scheduled to be cleaned after the Christmas holidays when manpower is more readily available. Subsequent to the report period, a new strainer was installed and the problem was resolved.

The local I.I.P. Room area radiation klaxon is presently out of service. The alarm is operable in the Control Room. A new Klaxon was installed subsequent to this report.

Maintenance is in progress to find suspected tube leaks in No. 1 fuel pool heat exchanger.

On December 12, 1984 at 0001 hours, the plant was turned over to the PJM System. Determination of plant output will be made by system, and coordination of any power changes must be made with the system dispatcher.

On December 21, 1984, during routine inspection of the Feedpump Room, a leak was discovered on "B" feed pump minimum flow valve. The leak (approximately one quart per minute) is coming from the valve flange. Attempts to tighten the flange bolts to stop the leak were unsuccessful. A drain enclosure to contain the water was installed. The valve and leak rate will be monitored during operation. Repairs are scheduled during the next plant shutdown.

During a surveillance test on the Main Steam Safety Valve and EMRV acoustic monitors on December 22, 1984, it was determined that the monitors for safety valves NR 28G and NR 28L were inoperable. The adjacent valve monitors were subsequently adjusted (gains increased). Engineering believes the problem is in the amplifier units. Both monitors remained inoperable at the end of the report period. Subsequent to the report period, the monitors were returned to operable status following replacement of defective line drivers.

On December 21, 1984, after releasing valve V-11-17 (makeup to the skimmer surge tank) from maintenance, water from the fuel pool spilled into the fuel pool ventilation ducts and via the ducts to various locations in the Reactor Building. Cause of the spill can be attributed to leakage through the makeup valve and also failure of the fuel pool hi-level alarm. The hi-level alarm has subsequently been repaired, however, the makeup valve is still out of service for rework.

During a routine surveillance on No. 1-2 Fire Diesel Battery on December 21, 1984, electricains found the "A" Battery low. The "A" Battery was subsequently placed on "equalize" charge and a deviation report submitted. On December 23, 1984, the battery was retested in accordance with the surveillance procedure and the results were verified as satisfactory.

Bank 8-230KV disconnects were inadvertently opened under load on December 26, 1984 during substation maintenance by UC&M Department personnel. No effects on the plant were noted and the disconnects were reclosed. The trip was caused by inadvertent actuation of the opening solenoid by maintenance personnel.

During execution of the Containment Spray/ESW pump IST test on December 26, 1984, problems were encountered maintaining Drywell/Torus delta P within prescribed limits. The increase in Torus pressure could not be explained. Due to the problem maintaining pressure within limits, the test was stopped and Engineering evaluation requested. The test was completed satisfactorily (December 28, 1984).

On December 27, 1984, a fire occurred in No. 1 High Pressure Screen Wash pump motor. The fire was a result of a failure of the motor breaker to trip, the cause of which has not been determined yet. Repairs to the pump and breaker are in progress.

Drywell bulk temperature is thought to be running higher than normal, approximately 137°F. Operations Department has taken action in accordance with appropriate procedures, however, success at substantial reduction in temperatures has been limited. This problem is currently being addressed and causes evaluated by Tecn. Functions and Plant Engineering.

NOTE: Reference to % power in this report is based on thermal power. Oyster Creek is rated at 1930 MWt.

The following Licensee Event Reports were submitted during the month of December 1984:

Licensee Event Report 50-219/84-27 - On 11/3/84 at approximately 2007 hours the Manager-Plant Chemistry was notified that the liquid poison boron concentration of 10.1% was below the Technical Specification minimum limit of 10.3%. An immediate plant shutdown was initiated. All proper notifications were made, including the 1 hour notification to NRC. Chemicals were added within 2 hours to bring the boron concentration above the Technical Specification minimum.

Licensee Event Report 50-219/84-28 - During startup surveillance testing, 2 of the 5 Electromatic Relief Valves associated with the Automatic Depressurization System failed to operate as designed. Investigation revealed that a leak path existed around a threaded retainer which prevented the valve from porting its lower pressure chamber causing the valve to remain closed.

Licensee Event Report 50-219/84-29 - While performing lifting and transporting maneuvers of an empty TN-9 spent fuel shipping cask over the Cask Drop Protecton System, switches that limit crane hook and load height were not properly adjusted. A toggle switch was installed in series with 2 limit switches and was in the open position, de-energizing the hoist 'raise' control circuit. With the toggle switch open, the hoist could not be raised. As a result, the load height limit was maintained administratively by use of a measuring gauge and toggle switch.

Licensee Event Report 50-219/84-30 - An automatic reactor scram occurred due to low reactor water level. Problems developed with the 'A' feed pump after starting it which required that it be manually secured. Further attempts to maintain reactor vessel level were inadequate and a decision was made to start 'B' feed pump. However, reactor water level had decreased sufficiently such that the Reactor Protection System scrammed the reactor on low reactor water level just prior to starting the 'B' feed pump. Scram response was normal and reactor water level control was regained. Personnel error and inadequate post-maintenance testing all contributed to the occurrence.

Licensee Event Report 50-219/84-32 - The monthly channel test of the Main Steam Line Safety and Relief Valve acoustic monitors was not performed within the Technical Specification time period. The event occurred due to lack of communication between departments responsible for performing surveillance and failure to verify that the test was completed.

Oyster Creek Station
Docket No. 50-219

REFUELING INFORMATION - December 1984

Name of Facility: Oyster Creek Station #1

Scheduled date for next refueling shutdown: November 30, 1985

Scheduled date for restart following refueling: June 1, 1986

Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

Yes

Scheduled date(s) for submitting proposed licensing action and supporting information:

June, 1985

Important licensing considerations associated with refueling e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:

1. General Electric Fuel Assemblies - fuel design and performance analysis methods have been approved by the NRC.

2. Exxon Fuel Assemblies - no major changes have been made nor are there any anticipated.

The number of fuel assemblies (a) in the core = 560
(b) in the spent fuel storage pool = 980

The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies:

Present licensed capacity: 2,600

The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity:

Reracking of the fuel pool is in progress. This will provide the spent fuel pool with sufficient capacity for refueling and full core offload until January of 1992.

UNIT NAME: OYSTER CREEK

1. DOCKET: 50-219
2. REPORTING PERIOD: 12/84
3. UTILITY CONTACT: MOLNAR 609-971-4699
4. LICENSED THERMAL POWER (MWt): 1930
5. NAMEPLATE RATING (GROSS MWe): 687.5 X 0.8 = 550
6. DESIGN ELECTRICAL RATING (NET MWe): 650
7. MAXIMUM DEPENDABLE CAPACITY (GROSS MWe): 650
8. MAXIMUM DEPENDABLE CAPACITY (NET MWe): 620
9. IF CHANGES OCCUR ABOVE SINCE LAST REPORT, GIVE REASONS:
   NONE
10. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWe):
11. REASON FOR RESTRICTION, IF ANY:
    NONE

	MONTH	YEAR	CUMULATIVE
12. REPORT PERIOD HRS	744.0	8785.0	131713.0
13. HOURS RX CRITICAL	674.5	1004.0	85627.9
14. RX RESERVE SHTDWN HRS	0.0	1.5	469.7
15. HRS GENERATOR ON-LINE	664.3	842.9	83535.7
16. UT RESERVE SHTDWN HRS	0.0	2.7	2.7
17. GROSS THERM ENER (MWH)	873100	1037600	137262329
18. GROSS ELEC ENER (MWH)	283520	326090	46382993
19. NET ELEC ENER (MWH)	270210	276882	44562565
20. UT SERVICE FACTOR	89.3	9.6	63.4
21. UT AVAIL FACTOR	89.3	9.6	63.4
22. UT CAP FACTOR (MDC NET)	58.6	5.1	54.6
23. UT CAP FACTOR (DER NET)	55.9	4.8	52.1
24. UT FORCED OUTAGE RATE	2.1	3.9	9.7
25. FORCED OUTAGE HRS	14.0	34.3	8951.1

26. SHUTDOWNS SCHED OVER NEXT 6 MONTHS (TYPE,DATE,DURATION):
    NA

27. IF CURRENTLY SHUTDOWN ESTIMATED STARTUP TIME: N/A

AVERAGE DAILY POWER LEVEL
NET MWe

DOCKET #.....50219
UNIT.....O.C.#1
REPORT DATE....JANUARY 0
COMPILED BY....W. J. EMF
TELEPHONE.....609-971-4

MONTH: DECEMBER, 1984

DAY	MW	DAY	MW
1	0	17	598
2	0	18	612
3	0	19	602
4	12	20	437
5	160	21	296
6	287	22	326
7	291	23	315
8	305	24	314
9	301	25	323
10	319	26	314
11	490	27	385
12	487	28	529
13	508	29	539
14	558	30	569
15	384	31	585
16	453		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH December 1984

DOCKET NO. 50-219
UNIT NAME Oyster Creek
DATE 1-8-85
COMPLETED BY R. Barar
TELEPHONE 971-4640

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	Licensee Event Report #	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence
31	2-11-83	S	15138.1	C	1	N/A	ZZ	ZZZZZZ	Start of the 1983/84 Refueling and Maintenance Outage.
32	11/4/84	F	479.9	A	1	84.28	SH	VALVEX	Two EMRVs failed to operate properly.
33	11/30/84	S	139.8	B	2	N/A	ZZ	ZZZZZZ	Manual scram to test the scram discharge volume.
34	12/15/84	F	0	B	4	N/A	ZZ	ZZZZZZ	Power reduction of >20% power to check condensate pump performance.
35	12/20/84	F	0	B	4	N/A	ZZ	ZZZZZZ	Power reduction >20% power to repair the flash tank manway.

1
F: Forced
S: Scheduled

2
Reason:
A-Equipment Failure (Explain)
B-Maintenance of Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

3
Method:
1-Manual
2-Manual Scram.
3-Automatic Scram.
4-Other (Explain)

4
Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

5
Exhibit 1 - Same Source

(9/77)

GPU Nuclear

GPU Nuclear Corporation
Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000
Writer's Direct Dial Number:

January 17, 1985

Director
Office of Management Information
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Monthly Operating Report

In accordance with the Oyster Creek Nuclear Generating Station Operating License No. DPR-16, Appendix A, Section 6.9.1.C, enclosed are two (2) copies of the Monthly Operating Data (gray book information) for the Oyster Creek Nuclear Generating Station.

If you should have any questions, please contact Mr. Drew Holland at (609) 971-4643.

Very truly yours,

Peter B. Fiedler
Vice President and Director
Oyster Creek

PBF:KB:dam
Enclosures

cc: Director (10)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. Thomas E. Murley, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

NRC Resident Inspector
Oyster Creek Nuclear Generating Station
Forked River, NJ 08731

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