UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

March 9, 1987

Docket No. 50-219

LICENSEE: GPU Nuclear Corporation
Jersey Central Power and Light Company

FACILITY: Oyster Creek Nuclear Generating Station

SUBJECT: OCTOBER, NOVEMBER, DECEMBER 1986 AND JANUARY 1987 PROGRESS REVIEW MEETING ON LICENSING ACTIONS WITH GPU NUCLEAR SITE PERSONNEL

On Monday, February 2 to Friday, February 6, 1987, meetings were held at Oyster Creek Station site with GPU Nuclear (the licensee) to discuss the status of station licensing actions. Attachment 1 is the list of the individuals attending the meetings. Attachment 2 is handouts from the licensee. The following is a summary of the significant items discussed and the actions taken or proposed. References may be made to Cycle 11 Refueling (Cycle 11R) outage which began in April 1986 and ended in December 1986.

Attachment 3 is a marked up copy of the staff's Licensing Actions Report Extended (LARE) dated January 29, 1987, for Oyster Creek. The markup, to update the LARE, resulted from the discussion on each item or TAC number in this meeting. The status of each item is given in the column "STAT" on the right-hand side of the LARE sheets. The status in that column is the following: "01" means licensee, "02" means staff's reviewer, "03" means staff's Project Manager, "04" means action completed and "05" means staff's Project Manager has the licensing action in concurrence.

1. Updated Final Safety Analysis Report (FSAR)

The licensee requested that it submit its annual update of the FSAR for 1987 as late as June 1, 1987. This is to allow the update to include all the modifications made to Oyster Creek in the Cycle 11R outage, including the drawings for the modifications. The update for future years will be made by the licensee in February. This is acceptable to the staff.

2. Visual Weld Acceptance Criteria (VWAC)

The licensee adopted, in its letter dated October 14, 1986, the provisions of VWAC, revision 2, for structural welding at nuclear power plants. These criteria were issued to the staff in its letter dated June 26, 1985. In its letter, the licensee stated that inspection criteria as VWAC, revision 2, should not be put in the FSAR. The licensee explained that it would incorporate these criteria in the GPU Nuclear Welding Manual. This manual is controlled by the licensee's Operational Quality Assurance Plan. The licensee further explained in its letter that training will be provided to quality control inspectors involved in the implementation of these criteria to assure uniformity of implementation of the criteria.

The NRC Project Manager stated that it was the staff's position that without a licensee commitment to the criteria in the form of an amendment to the FSAR, the staff will not be able to enforce compliance to the criteria. The licensee agreed to incorporate the criteria in the FSAR.

3. Battery Status Alarms (TAC 49410)

This is IPSAR Section 4.32 of the Integrated Plant Safety Assessment Report dated January 1983. This was resolved in the staff's evaluation issued December 16, 1986.

The licensee stated that it measured the resistance of the breakers in the Cycle 11R outage. The testing procedure is being revised to include this measurement in every future refueling outage. The modifications which were to resolve this issue and which were to be completed in the Cycle 11R outage have been completed.

4. Containment Isolation Valve Closure

The staff's letters dated January 21 and October 10, 1986, requested the licensee to submit Technical Specifications (TS) on the following: (1) closure times of the valves and (2) resilient seals in the valves. The proposed closure times are to be based on the measured time to close the valves and the resultant dose consequences of the closure times. The licensee was also requested to submit the amount of containment atmosphere that would be released through the purge/vent isolation valves during the loss of coolant accident (LOCA) before their closure.

The licensee explained that it would provide the list of containment valves and valve closure times based on its valve inservice testing program. It would also list the ventilation valve closure times based on the LOCA analysis. The licensee would also provide a justification for any ventilation valve closure time greater than 15 seconds. This would include the cost of upgrading the valve or replacing the valve operator. The licensee stated that its submittal would be sent by April 30, 1987.

5. Meeting On Drywell Shell Corrosion

The staff issued its evaluation on the corrosion of the drywell shell and plant restart from the Cycle 11R outage in its letter dated December 29, 1986. This letter required the licensee to submit its plan, to mitigate the corrosive attack on the drywell shell, by June 30, 1986. The first meeting between the staff and the licensee on such a plan was held on February 26, 1987, at NRR headquarters, Bethesda, Maryland.

The licensee agreed that the staff's references to Cycle 12 in its letter dated December 29, 1986, were in fact references to the Operating Cycle 11. This began with the restart from the Cycle 11R outage and will end with the shutdown for the Cycle 12R outage.

6. Mid-Cycle Inspection of the Drywell Shell

In its evaluation dated December 29, 1986, on the drywell shell corrosion, the staff required that the licensee provide its plans for an inspection of the drywell shell should there be no forced outages of sufficient duration prior to the midpoint of Operating Cycle 11. This inspection requires deinerting the containment for personal entry. This inspection was to be no later than September 30, 1987.

The licensee stated that it would take advantage of an outage of opportunity for an inspection of the drywell shell only between and including May 1 and September 30, 1987. If necessary, it will shut down for this inspection on September 30, 1987. This time frame of after May first will assure that the inspection of the drywell shell will give meaningful measurements of corrosion rates with respect to the measurements of corrosion in the last quarter of 1986.

This time period for the drywell inspection is acceptable to the staff.

7. Channel Check for RWL Analog Trip Systems

In its letter dated August 22, 1986, the staff evaluated the licensee's proposed methods to provide channel checks for the reactor water level (RWL) low and low-low functions. The licensee was installing analog trip systems for these functions in the Cycle 11R outage. The staff concluded in its letter that the proposed differential pressure gauges in parallel with the transmitters of the analog trip system was not acceptable for a channel check without further justification.

The analog trip system is described in the staff's letter dated December 15, 1986, on Static-O-Ring switches. The licensee has provided a remote readout in the control room from the transmitter in each analog trip system. The pressure gauges were not used. The readout will be used to perform the daily channel check on the RWL instrumentation. The NRC Project Manager observed the remote readouts for these RWL functions in a tour of the control room.

8. Static-O-Ring (SOR) Switches

In its letter dated December 15, 1986, on SOR switches in service, the staff requested the licensee to address the long-term correction action on these switches in the licensee's submittal on the results of the 6 month testing of these switches. These are the RV-40 and DPS-66 switches used in the core spray system and the reactor building-to-torus vacuum breakers. The licensee stated it will submit this by July 31, 1987. This is acceptable to the staff.

9. Status of NUREG-0737 Requirements

The licensee updated the status of TMI Action Plan, NUREG-0737, items that are not yet completed. This update is a marked-up table in Attachment 3. The table shows the status as of March 1986 (3/86) and as of February 1987 (2/87). The remaining item is the implementation of the Safety Parameter Display System during the operating Cycle 11 by the end of the calendar year 1987.

10. Containment Inerting/Deinerting Study

The staff requested the licensee to consider the possibility that the large containment purge and vent isolation valves may close from an opening greater than the 30° that the valves are now limited to. This maximum opening limit was to assure the valves would close against LOCA accident containment pressure. However, a larger opening would reduce the time when the containment is being purged during power operation to inert or deinert the containment. The staff requested this study in its letter dated October 10, 1986, on containment purge and vent isolation valves.

The licensee requested that this study be deferred until after the Cycle 12R outage in 1988. It explained that there are other more important issues as the drywell shell corrosion and containment piping penetrations to be resolved in Operating Cycle 11.

This is acceptable to the staff. The staff's October 10, 1986 letter documented the acceptability of the existing containment purge and vent isolation valves.

11. Containment High Range Radiation Monitoring System

This is TMI Action Plan Items II.F.1.3 and II.E.4.2.7. It is the containment post-accident high radiation monitor and the trip system to close the large containment purge and vent isolation valves on high radiation inside containment.

The licensee provided the following data on the system from its Nuclear Safety/Environmental Evaluation Summary Sheet dated December 18, 1984:

System Performance - No present safety-related system functions are affected by this system.

Quality Standards - The system will be designed for Class 1E and Important to Safety operation.

Natural Phenomenon Protection - The system will be designed to maintain its structural integrity during a seismic event. This system is not required to operate within specifications during the seismic event, but shall perform within the specifications after the conclusion of the event. The system will be located in the containment, reactor building and the control room and, as such, will be protected from natural phenomena, such as tornadoes, hurricanes and floods.

Fire Protection - The new components and cable added per this modification will be considered in Fire Hazards Analysis FPE-402187-001.

Environmental Qualifications - The new Class 1E components will be qualified in accordance with IEEE-323 for use under the environmental conditions as listed in SDD-OC-664A.

Missile Protection - Not affected since the system will maintain structural integrity during a seismic event; therefore, a missile cannot be generated.

High energy line break protection not affected since no high energy lines are added by this system.

Electrical Separation - Electrical separation is not compromised since this system shall follow the existing plant separation criteria for Class 1E system.

Single Failure Criteria - This system will not adversely affect existing systems since redundant radiation monitoring channels will be installed.

Separation Criteria - The system will not adversely affect existing systems. Criteria for separation and isolation will be per GPUN Design Criteria Document No. 782A, Revision 0.

Containment Isolation - Not affected since existing electrical penetration shall be used and drywell pressure boundary shall be maintained.

12. Control Room Habitability

The licensee and the NRC Project Manager discussed control room habitability for Oyster Creek. This discussion was based on the staff's evaluations dated July 15 (Amendment 105) and November 14, 1986 and the licensee's Technical Specification Change Request (TSCR) No. 151 dated November 28, 1986. This discussion was concerned with the following: (1) the flow rate for the control room pressure test in TSCR 151, (2) the modifications to the chlorination facility to remove the tanks of liquid chlorine offsite, (3) the procedures requested in the staff's evaluations, and (4) the control room damper and fan.

In its TSCR 151, the licensee proposed a maximum inflow rate to the control room of 2000 cfm. This was based on the licensee's submittal dated September 29, 1986, on the results of the control room heating, ventilation, and air conditioning (HVAC) system test. The test showed the licensee could maintain an 1/8 inch water gauge positive air pressure in the control room at 1830 cfm. The 2000 cfm proposed for the TS is based on (1) being slightly, 9%, above the 1830 cfm for surveillance testing and (2) the calculated radiological dose consequences for 2000 cfm are within the requirements in GDC 19.

In the staff's meeting summaries dated August 1 and October 1, 1986, and in the licensee's letter dated September 29, 1986, the licensee stated it would be removing the 1-ton tanks of liquid chlorine from the site by Spring 1987. The tanks of chlorine are being replaced by non-gaseous sodium hydrochlorite. The chlorine tanks have already been removed from the site. This was seen in a tour of the chlorination facility by the NRC Project Manager. There will also be no deliveries to the site of the tanks of chlorine.

The NRC Project Manager reviewed Procedures 326 and 331 concerning notification of the control room about chlorine. The procedure requires notification when a chlorine tank is replaced, prior to transport of chlorine onsite, prior to change out of a chlorine tank onsite and in the event of chlorine released onsite. These procedures were requested in the staff's evaluations dated July 15 and November 14, 1986. In these evaluations, the staff also requested procedures to notify the control room when there is maintenance or repairs on the chlorination facility. This was not in the plant procedures; however, this is acceptable because the chlorine tanks have been removed offsite and the chlorination facility is being replaced by a sodium hypochlorite system.

Procedure 2000-ABN-3200.33 was also reviewed. It concerns control room operator actions in response to a chlorine release alarm from the chlorine release alarm from the chlorination facility. The procedure requires the operator to place the HVAC on full circulation but does not tell the operator to immediately don protective breathing apparatus. This procedure also does not tell the operator what action to take if the control room is notified of a chlorine release onsite. The response of the operator should be the same.

The evaluations by the staff assumed the operators would immediately don protective breathing apparatus in the event of a chlorine release onsite or the chlorine alarm. This was to have the operators protected within 2 minutes of the release and possible entry of chlorine into the control room through the ventilation intake. The staff's evaluation was based on the source of chlorine onsite being the 1-ton chlorine tanks. There is, however, none of these tanks onsite and the chlorination facility will use sodium hypochlorite. Therefore, the lack of these procedures is acceptable. Acceptable breathing apparatus were seen by the NRC Project Manager in a tour of the control room.

The last issue discussed was the control room damper and fan. The test run by the licensee to verify the inflow rate to maintain the control room at 1/8 inch water gauge pressure above its surroundings had the damper closed and the fan turned off. This test was discussed in the licensee's submittal dated September 29, 1986. The fan and damper are used to ventilate the kitchen when the stove is being used and the bathroom when it is being used. The control for the damper is in the bathroom and the control switch for the fan is on a control room wall outside and away from the kitchen and bathroom. To control the use of the fan and damper, it is acceptable to the staff that (1) a timer is on the fan switch to limit the time the fan is on, (2) the stove in the kitchen is disconnected to prevent its use, (3) a placard is put in the bathroom explaining that the damper should be closed when the bathroom is not being used and the position for the damper to be closed and (4) the position of the fan switch and damper would be indicated on the shift turnover sheet. The licensee has instead disconnected the stove, tagged out and deenergized the fan and tagged out and closed the damper. The position of the fan and damper does not need to be indicated on the shift turnover sheet because the fan and damper are tagged out and inoperable. Either situation is acceptable to the staff because either set of conditions on the fan and damper provide assurance that the fan and damper will not be operating during accidents.

13. Integrated Living Schedule (ILS)

The licensee submitted its ILS for Oyster Creek on January 27, 1987. This submittal does not include the list of Category A, B and C projects for Oyster Creek which represent the projected allocations of significant fiscal and manpower resources for the plant. This list will be submitted later. The ILS submitted is the licensee's program to manage the implementation of such projects at Oyster Creek and is being proposed as an amendment to the Oyster Creek license.

The staff requested that a meeting be held at the Oyster Creek site and at the licensee's headquarters to discuss the ILS plan and implementing procedures. It requested that the list of projects be provided at that time. The licensee agreed.

14. Core Spray Sparger Inspection

The licensee stated that it is considering a proposal to the staff to amend its license and reduce the frequency of the required inspections of the core spray spargers. The license condition 2.C.(7) requires an inspection every refueling outage. This was added to the license in Amendment 70 dated January 26, 1984. The license condition requires replacement of the sparger if the results of the inspection are unacceptable to the staff.

The licensee is reviewing several inspection programs in terms of the results that have been gained, the personrem exposure cost to workers and the fiscal and manpower resources expended for the inspections. One program being reviewed is that for the spargers.

In the Cycle 11P outage, the sparger inspection showed no new crack indications, the unrepaired crack indications reported in the 1980 refueling outage were again not observed, and the cracks under the repair assemblies were not observed to have progressed beyond these assemblies. This is documented in the licensee's submittal dated September 3, 1986, and the staff's evaluation dated October 31, 1986.

The staff Project Manager stated that the staff would review such a proposal to modify the license condition and reduce the frequency of core spray sparger. However, the licensee should submit its proposal with the results of the inspection in Cycle 12R inspection. The spargers have been inspected in only the last three refueling outages. Also, because the inspections are instead of replacing the core spray sparger and cracks exist in the spargers, the staff may not agree with a reduction in the inspections of the spargers.

15. Status of Rod Worth Minimizer (RWM) Replacement

The licensee is replacing the existing RWM which is original plant equipment. The new RWM was scheduled for installation during the Cycle 11R outage; however, delays in the delivery date for the new hardware has delayed completion of the installation and the startup testing until after the startup from the Cycle 11R outage. The new RWM will be installed and made operable during Operating Cycle 11. This new RMW was the subject of Amendment 113 dated November 7, 1986, which allows an unlimited number of plant startups without an operable RWM.

The licensee explained that all the new RWM hardware is onsite. Most of the tie-ins between the plant and the new system are installed. The licensee estimates approximately 2 more weeks of work in the cable spreading room to complete the installation of the cable needed. This work will occur only during a period of expected stable plant operation without shutdowns. This is being done because the old RWM is being kept operable by the licensee to minimize the use of Amendment 113 and limit startups without an operable RWM. The cable work will make the old RWM inoperable.

After the cabling is installed, the new RWM will undergo acceptance testing. During this testing, the old RWM will be operable. After this testing, the remaining work will be to install a display for the new RWM in the control room. This will not require a plant shutdown. The equipment would then be tested with the new display and turned over to plant operations.

The old RWM will remain in place in the control room until the Cycle 12R outage when it will be removed. Plant operations would have both RWM available until then. In the Cycle 12R outage, the old RWM would be removed from the control room panel and the new RWM would be installed in the panel.

16. No Radiation Signal To Close The Small Containment Purge/Vent Isolation Valves

In its letter dated December 2, 1986, the licensee stated that the containment isolation valves on purge and vent lines of 2 inches or less do not need to be provided with a containment high radiation isolation signal. Such a signal for the large containment purge and vent isolation valves was installed in the Cycle 11R outage.

The licensee's decision to not provide radiation signals to isolate the small lines was based on (1) the generic staff evaluation attached to its letter dated August 4, 1986, on such signals and (2) the licensee's calculations of resulting dose consequences from the small lines at Oyster Creek. The licensee provided in this meeting the assumptions that were made in its calculations of the doses. These are doses from radioactivity released through these 2 inches or less purge and vent lines until the lines are isolated. The licensee's dose rates were several orders of magnitude less than the staff's acceptance criteria, less than 10% of 10 CFR Part 100 guidelines, in the generic staff evaluation for not providing the radiation signal to isolate these lines. The licensee's assumptions in its calculations are the following:

(1) drywell atmosphere is saturated steam at the containment isolation setpoint on pressure,

(2) discharge through the 2" lines for 30 minutes which is justified in the licensee's letter dated December 2, 1986,

(3) flow calculations were based on a 10' vent pipe which is 2" in diameter,

(4) two 2" lines were open for the 30 minutes,

(5) assumed an iodine concentration of 8 uci/gram in the reactor coolant,

(6) assumed an accident meterology of 4.8×10^{8} sec/M^3 from a release from the stack,

(7) no filtration through the existing Standby Gas Treatment System,

(8) an iodine spiking factor of 2 from the Boiling Water Reactor Owners' Group evaluation,

(9) the whole body exposure assumes 0.365 mev/disintegration, 8 uCi/gram and a spiking factor of 2 in the reactor coolant, and

(10) the dose consequences are whole body 3.71×10^{-4} rem and thyroid 3.88×10^{-4} rem.

The 10 CFR 100 guidelines are the following: whole body, 25 rem, and thyroid, 300 rem. The licensee also stated that the procedure referred to in its letter dated December 2, 1986, has been revised.

17. Recirculation Loop Alarms TS

In its letter dated November 13, 1986, the licensee provided its justification for not submitting Technical Specifications (TS) on the recirculation loop alarms. The staff in its letters dated April 16 and July 15, 1986 stated that the alarms were acceptable for TMI Action Plan Item II.K.3.19, Recirculation Loop Interlock. The alarms were to indicate that a fourth and a fifth recirculation loop has been closed. An alarm reflash would indicate the fifth loop had been closed.

The NRC Project Manager requested the following additional information in the meeting:

(1) description of the circuitry to provide the alarms,

(2) description of the testing of this circuitry to show it will perform its function, and

(3) discussion of the surveillance on this circuitry to show it is functional and operable and the controls on this surveillance.

The NRC Project Manager requested that this be submitted within 60 days of this meeting.

18. Decontamination of Concrete

In its letter dated February 18, 1986, the licensee provided the radioisotopic analysis of recent core borings. These borings were taken from concrete blocks during the decontamination of the old Radwaste Building on the Oyster Creek site. This analysis had been requested by the staff in its letter dated March 8, 1984.

The staff had requested in its March 8, 1984 letter the following: (1) as low as is reasonably achievable (ALARA) actions taken during the decontamination process, (2) total radioisotopic analysis, and (3) comparison of measurement results with results from an independent laboratory.

The licensee explained that the original decontamination of the building was to be only the removal of the surface layers of the inside building walls and the disposal of concrete blocks removed from these walls. This has been disposed of as radioactive waste. The licensee is now considering that these concrete blocks will be sent to a licensed decontamination facility for further decontamination and which also would dispose of the blocks. This is beyond what the staff concluded was acceptable in its March 8, 1984 letter.

The licensee explained that the ALARA actions taken during the removal of the concrete wall surfaces were the following:

(1) workers were controlled by Radiological Controls,

(2) work required an ALARA review by Radiological Controls,

(3) workers wore respirators and protective clothing,

(4) Scan and swipe surveys of the building were taken, and

(5) the ventilation system was used to keep building airborne concentrations down.

The licensee further explained that if it sends blocks to a decontamination facility the independent measurements of the concrete blocks would then be made by the decontamination facility that receives the blocks. The blocks will be disposed of under the license of the facility and the facility will have a license to receive the blocks.

The licensee also explained that some of the blocks may not need to be sent for further decontamination. The licensee stated that before disposal of these blocks, it will get an independent measurement of the surface contamination of these blocks to document the blocks do not exceed the criteria of Regulatory Guide 1.86, Table I.

19. Augmented Offgas System (AOG) Operation Problems

The licensee discussed the problems it has had with operating the AOG and the actions it has taken to resolve these problems. The goal of the licensee is to have the system operate 100% of the time.

The AOG is on the discharge from the offgas system before the stack. It consists of a flame arrester, recombiner, dryer equipment, charcoal delay beds and HEPA filters. The four low temperature charcoal delay beds are to hold up the noble gases to allow them to decay before being released to the environment from the stack. The flame arrester is to limit the propagation and consequences of a hydrogen explosion and the recombiner is to remove hydrogen by recombination from the offgas flow. This system is discussed in Section 11.3 of the Updated Final Safety Analysis Report.

The AOG is in operation whenever the Main Condenser steam jet air ejectors are in operation except during startup, shutdown or when reactor power is less than 40% of rated power. It is also not in operation during end-of-cycle coast-down periods when the offgas flowrate is low.

The licensee has calculated that the AOG was 78.8% operable in 1985. This was based on when power operation was above 40%. Since 1984, the primary reasons for the AOG being down was airborne radioactive in the building and power interruptions. The licensee explained that work was done on the AOG in the Cycle 11R outage to increase its operability. The list of work is in Attachment 3.

20. Tour of Site

The NRC Project Manager toured the reactor building, control room, and the site. This tour of the site included the chlorination facility where the chlorine tanks have been removed. The tour of the reactor building was of the 23', 51', 75', 95' and 119' elevations. The tour included the isolation condensers, control rod drives, hydrogen/oxygen monitors and fire protection modifications completed in the Cycle 11R outage. One modification was the passive air accumulators and spare air bottle for the isolation condenser valves.

The reactor building was very clean and in good order. Good housekeeping was evident on all elevations. The plant restarted from the Cycle 11R outage December 20, 1986.

21. Systematic Evaluation Program (SEP) Issues

The licensee discussed the following SEP issues: (1) classification of structures, components and systems, IPSAR Section 4.2; (2) wind and tornado loading, IPSAR Section 4.3; (3) design codes, IPSAR Section 4.12; (4) reactor water purity, IPSAR Section 4.20, (5) trip uncertainty, IPSAR Section 4.28; and (6) surveillance capsule results, IPSAR Section 4.17. the above reference to the IPSAR section is to the Integrated Plant Safety Assessment Report (IPSAR) for Oyster Creek. This was issued by the staff as NUREG-0822 in January 1983 as part of the staff's SEP. A handout from the licensee which discusses these issues and gives the commitment date to submit information on these issues is in Attachment 2.

The licensee's commitment dates to submit information are the following:

IPSAR 4.2		8/31/87
IPSAR 4.3	first submittal	4/15/87
	second submittal	7/31/87
IPSAR 4.12		8/31/87
IPSAR 4.17		4/15/87
IPSAR 4.20	no submittal needed	
IPSAR 4.28		5/30/87

For IPSAR Section 4.3, the licensee agreed to make two submittals. The first will have its evaluation of all items identified by the staff except one item. The second will discuss that one exception. See the licensee's handout in Attachment 2.

The licensee stated that the controls on the reactor coolant quality in specification No. 1302-28-001, revision 2 provided the additional requirement requested by the staff in its letter for Amendment 93 dated November 21, 1985. The page 4 of the specification is included in Attachment 2. It is on the chloride and conductivity limits for the reactor coolant. The footnote (1)

on page 4 is the additional requirement requested by the staff. This specification is the document used by the licensee in meeting the requirements on water quality of the reactor coolant in the TS.

22. Low Intake Canal Water Level Instrumentation

In its letter dated November 28, 1986, the staff stated the licensee's submittals on the intake canal level instrumentation did not address the use of this instrumentation for measuring low water level. This would be measuring the water level at the intake structure to determine if the level is near or below the suction of the service water pumps. This is discussed in Section 4.1(5) of the IPSAR for Oyster Creek.

In discussing its instrumentation for low intake canal water level, the licensee explained plant Procedure 2000-ABN-3200.32 which covers this situation. The procedure is applicable to a loss of intake canal water level for the following events:

(1) low canal water level due to low tide conditions,

(2) excessive debris on the intake trash racks and traveling screens, and

(3) excessive ice.

For a low intake level, the procedure requires actions to be taken by the control room operators at -0.5 foot or less. At -0.5 foot, reactor power is reduced if service water cavitation is indicated. At -1.5 feet, reactor power may be reduced because of reduced condenser vacuum. At -3.0 feet, the affected emergency service water system and containment spray system is declared inoperable and the licensee takes the actions required by TS 3.4C.

The licensee explained that once a shift the canal water level is logged by the intake watch.

23. Regulatory Guide 1.97

In its letter dated December 15, 1986, the staff issued its draft Technical Evaluation Report (TER) on the licensee's conformance to Regulatory Guide (RG) 1.97, revision 2, for Oyster Creek. This is Section 6 of the staff's Generic Letter 82-33, Supplement 1 to NUREG-0737 - Requirements for Emergency Response Capability, dated December 17, 1982. The licensee's responses to this issue are dated June 13, 1984, and May 9, 1986.

The licensee briefly explained its position on the 13 questions for additional information in the conclusion of the draft TER. This is in its handout on RG 1.97 in Attachment 2. The licensee will submit its response to the draft TER by April 15, 1987.

24. Neutron Monitoring Isolation

This is IPSAR Section 4.27(1) in the staff's SEP program. The licensee submitted its last responses on this issue in its letters dated July 8, 1985, and April 4, 1986. These were responses to the staff's request for additional information dated August 3, 1984.

The licensee explained that the Institute of Electrical and Electronic Engineers (IEEE) Standards 279 (1971) and 379 (1977) which are referenced in the staff's letter do deal with the testing of isolators to show that they will perform their function. This testing is (1) performance testing by the isolator manufacturer and (2) surveillance testing by the user. The surveillance testing by the licensee was discussed. The test to withstand maximum credible voltages which are in the staff's letter may damage the isolator and the circuit it is in. The licensee's position is that the loss of the isolator function will be seen at the output of the equipment which has the isolator.

25. Updated NRR Licensing Action Report Extended (LARE) Dated 1/29/87

Attachment 3 has the updated LARE for Oyster Creek. The updating was done during the discussion on each licensing action in this meeting. The licensing actions are listed by TAC number (left hand column of LARE).

The LARE is a print out from the BWD1 personal computer licensing action management tracking system. The LARE contains references to future licensing actions to be submitted by the licensee. These future actions have TAC number OCXXX.

26. Next Meeting

The February 1987 Progress Review Meeting is expected to be held at the licensee's headquarters by March 31, 1987.

Jack R. Donohew, Jr., Project Manager
BWR Project Directorate #1
Division of BWR Licensing

Attachments:
1. List of Attendees
2. Licensee's Handout
3. Staff's Updated LARE dated 6/14/86

DISTRIBUTION:
Docket File
NRC PDR
Local PDR
See attached list

OFC	:BWD1:DBL	:BWD1:DBL	:BWD1:DBL	:	:	:	:
NAME	:CJamerson	:JDonohew	:~~DZwolinski~~	:	:	:	:
DATE	:3/9/87	:3/5/87	:3/9/87	:	:	:	:

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Distribution for Meeting Summary Dated: March 9, 1987

Facility: Oyster Creek Nuclear Generating Station*

Docket File (50-219)
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*Copies sent to persons on facility service list

Attachment 1

PROGRESS REVIEW MEETINGS

FEBRUARY 2-6, 1987

Oyster Creek Site

Name	Affiliation
J. Donohew	NRC/NRR/DBL
M. Laggert	GPUN
J. Kowalski	GPUN
M. Heller	GPUN
D. Jerko	GPUN
P. Czaya	GPUN
E. Boruszkowski	GPUN
C. Halbfoster	GPUN
A. Wacha	GPUN
J. Rogers	GPUN
Y. Nagai	GPUN
K. Eibon	GPUN
W. Bateman	NRC/Resident Inspector

*GPUN = GPU Nuclear Corporation

Attachment ?

1. Status of NUREG-0737 Requirements
2. Modification To Augmented Offgas System (AOG) in Cycle 11R outage
3. SEP issues
4. Oyster Creek Specification No. 1302-28-001 page 4 of 56
5. Regulatory Guide 1.97 TER

O.C. STATUS
NUREG 0737 POST-TMI REQUIREMENTS
FOR OPERATING REACTORS

TOTAL NUMBER OF ITEMS - 148

TOTAL NUMBER APPLICABLE TO O.C. - 99

TOTAL NUMBER OF APPLICABLE ITEMS
COMPLETED BY GPUN - 91

APPLICABLE ITEMS YET TO BE COMPLETED

Clarification Item*	Shortened Title*	Description*	Status (5/86)	Remaining GPUN Effort (2/87)
I.C.1	Short-term accident & procedures review	3. Transients & Accidents b. Revise procedures	Phase I (All except ATWS) of revised Emergency Operating Procedures complete & in place.	Complete & Implement Phase II (includes ATWS) Due by restart from 11R outage (10/86) Completed
I.D.2	Plant-safety parameter display console	2. Install	Hardware being installed during current outage	Complete hardware installation before restart from 11R outage (10/86) Completed
		3. Fully Implement	Software being developed by vendor.	Complete software & fully implement system during cycle 11 operation (1987).
II.E.4.2	Containment isolation Dependability	6. Containment purge valves	GPUN has requested cancellation of this modification and supplied technical justification to support their request.	NRC accepted cancellation of modification
		7. Radiation signal on large purge valves	GPUN has requested cancellation of this modification and supplied technical justification to support their request.	Signal installed during Cycle 11R outage
		8. Tech. Specs.	Technical Specifications are not appropriate if the canncelations are approved	Tech. Spec.s proposed

* - Exactly as presented in Enclosure 1 to NUREG 0737

APPLICABLE ITEMS YET TO BE COMPLETED

Clarification Item*	Shortened Title*	Description*	Status 5786	Remaining GPUN Effort 2/87
II.F.1	Accident Monitoring	3. Containment High Range Monitoring	The hardware is being installed during 11R outage (10/86)	Completed ~~Complete~~ installation and have the modifications fully operational prior to startup from 11R outage (10/86).
III.D.3.4	Control-room habitability	3. Modifications	Interim upgrades are being completed during 11R outage (10/86)	Completed ~~Complete~~ interim upgrades during 11R outage and complete the final modifications during the 12R outage.

OYSTER CREEK
NUCLEAR GENERATING STATION

AOG Modifications In Cycle 11R Outage [redacted]

ITEM	DESCRIPTION	SIGN-OFF/DATE
8.6.1	Provide better method for venting flame arrestor.	COMPLETED
8.6.2	Relocate switches so HVAC rollamatic filter can be advanced without entry into containment cabinet.	COMPLETED
8.6.3	Repair OG-ACV-004A (isolation valve for water removal train 010) so it opens and closes properly.	COMPLETED
8.6.4	Metal flex hose to be hard piped for recombiners A/B.	COMPLETED
8.6.5	Provide state-of-the-art seals and helium leak test for detonation detectors XM-100 thru 108.	COMPLETED REPLACED ALL O-RINGS
8.6.6	Four hydrogen analyzers to be cleaned and calibrated.	COMPLETED SHOP TESTED
8.6.7	All controllers to be recalib. before startup.	COMPLETED
8.6.8	Level control valves LCV-006A/B and LCV-007A/B/C, investigate loss of water level and provide fix.	REPAIRED LCV-006 A/B REPLACED LCV-007A/B/C WITH LOOP SEAL. COMPLETED.
8.6.9	Free up sticking pens to victoreen recorder OG-R-0[illegible]075: Monitors gases leaving charcoal absorbers.	COMPLETED
8.6.10	Change bleed air pressure regulators to self-adjusting pressure. Present regulators allow excess pressure buildup in recombiners A/B.	COMPLETED.
8.6.11	Check operability and calibrate freon analyzer.	COMPLETED.
8.6.12	OG-ACV-051B - Cannibalized actuator to be replaced.	COMPLETED.
8.6.13	Repack ten valves & replace unit sleeves on two Train Isolation Valves.	COMPLETED
8.6.14	Inspect piping in pipe gallery located below flame arrestor. NDE PIPING	COMPLETED.
8.6.15	Replace AOG by-pass valve V-7-31. (BASE OF STACK) VALVE WAS BY-PASSING ALLOWING OFF GAS UP STACK	NEW VALVE COMPLETED
8.6.16	Determine cause of noise and vibration of the Spencer turbine on recombiner B.	COMPLETED REBUILT - NEW MOTOR BLADES BALANCED
8.6.17	Inspect and confirm operability of SOV-361.	COMPLETED
8.6.18	Service refrigeration units.	OUTSIDE VENDOR - CONTROL TEMP SERVICED UNITS BEFORE RESTART

OYSTER CREEK
NUCLEAR GENERATING STATION

"RESTART CERTIFICATION"

ITEM	DESCRIPTION	SIGN-OFF/DATE
8.6.19	Repair mechanism on supply fan rollamatic (before AOG was shut down, exhaust fan rollamatic filter paper separated from roll).	COMPLETED.
8.6.20	Repair broken mechanism on supply fan HV-S-057/ damper AOD-019.	COMPLETED
8.6.21	Inspection of stainless steel hydrogen sensing lines for stress cracking. NON-DESTRUCTIVE EXAM	COMPLETED.
8.6.22	Install upstream dryers in the hydrogen sensing lines.	NOT REQUIRED.
8.6.23	Provide a reliable, back-up power supply to AOG.	TO BE INSTALLED CYCLE 11 FEB OR MARCH, 1987
8.6.24	Provide external lubrication parts for the recombiner blowers.	RESCHEDULED FOR CYCLE 11 TARGET OF OPPORTUNITY
	MINI MOD LOOP SEAL INSTALLED ON WATER REMOVAL TRAIN DURING 11R OUTAGE. REPLACED LEVEL CONTROL VALVES LCV-007A/B/C SINCE LOOP SEAL INSTALLED NO AIRBORNE DETECTED IN AOG.	COMPLETED.

	IPSAR Section	Description	COMMITMENT DATE
✓	4.2	Classification of Structures, Components and Systems	8/31/87
✓	4.3	Wind & Tornado Loading	1. 4/15/87 2. 7/31/87
✓	4.12	Design Codes, Design Criteria, Load Combination and Rx Cavity Design Criteria	8/31/87
✓	~~4.20~~	~~Water Purity of BWR Primary Coolant~~	~~6/30/87~~
✓	4.28	Trip Uncertainty and Set-point Analysis Review of Operating Data Base	5/30/87
	R.G 1.97	Post accident Sampling	4/15/87
✓	4.17	Surveillance Capsule Results	4/15/87

* IPSAR 4.2
Classification of Structures, Components and Systems

Evaluations by GPUN and consultant are on-going. GPUN will submit the results by Aug 31, 1987.

* IPSAR 4.20
Water Purity of BWR Primary Coolant

GPUN specification (Specification No. 1302-28-001, Rev 2) already restrict Oyster Creek operation when the chloride concentration or conductivity limit is exceeded two weeks in any consecutive 12 month period. Also, the limits at which the restrictions are applied are far less than the limits given in Oyster Creek Tech. Specs. Therefore, GPUN specification is much more restrictive.

[redacted]
licensee stated a TS was needed because of the plant procedure.

IPSAR 4.3

~~Design Code & Standard~~

Ref: Wind & Tornado Loadings

GPUN has completed evaluation of all items identified by the NRC letter dated March 8, 1986 with one exception. The item that has not been completed is the evaluation of the control room precast panels in the north wall. GPUN is in the process of retaining a consultant to evaluate this item. The evaluation is expected to be completed in June 1987 GPUN submittal will be made by July 31, 1987

first submittal with all items but one exception & 4/15/87

second submittal with the one exception & 7/31/87

JMF

★ Rx Coolant Vessel IR 4.4.4 4.1.7
(Surveillance Capsule Results)
Submittal of P-T curve

This submittal will be made within by April 15, '87

★ IPSAR 4.12
Design Codes, Design Criteria, Load Combination and Reactor Cavity Design Criteria

(1) CB&I has been requested to respond on Reinforcement of Openings. The results will be available by July, 1987 (This include GPUN internal review.
(2) Impell has completed evaluation on the effect of high temperature on drywell concrete wall. GPUN must review and concur with the Impell report.

GPUN submittal will be made by Aug. 31, 1987

IPSAR 4.28 (Topic VII-1.B)
TRIP Uncertainty and Setpoint Analysis Review of Operating Data Base

Status.

Sensors RE 12 A, B, C and D (Core spray and isolation on lo-lo level) have recently been replaced by Analog sensors. These sensors were replaced with SOR switches in Oct: Nov. '85 mini-outage for EQ reason: However, due to the drift problem encountered by the SOR switches, it was decided to replace the SOR switches with Analog.

The remaining sensors RE 23 (A→D) and RE 18 (H→D) are still being investigated for future modifications as described in GPUN letter to NRC dated _____.
Results of the investigation (i.e., technical approach and schedule) are expected to be available by [redacted] 30, 1987.
May

SYSTEM: REACTOR COOLANT - POWER OPERATION, STEAMING > 100,000 lb/hr
SAMPLE POINT LOCATION: "A" RECIRCULATION LOOP OR RWCU SYSTEM FILTER INLET

Parameter	Measuring Frequency	Limits		Remarks
		Admin.	Initiate Action	
1. Chloride	Continuous and 1/D	≤20 µg/L	>50 µg/L	Chloride between 20 and 200 µg/L(1): a. Increase measurment frequency. b. Ensure full flow (~760 gpm) through RWCU System. c. Check RWCU effluent and take action as appropriate. d. Check feedwater conductivity and take action as appropriate. e. If above actions do not identify source, identify ingress by checking CST, individual condensate demineralizers, and hotwell conductivity and chloride levels. f. If above does not identify ingress, perform reactor water and condensate demineralizer effluent TOC analysis. Chloride >200 µ/L: (EXCEEDS FUEL WARRANTY LIMIT) a. Take actions specified for chloride between 50 and 200 µg/L. b. Initiate immediate shutdown.
2. Conductivity @ 25°C	Continuous and 1/D	≤0.2 µS/cm	>0.3 µS/cm	Conductivity between 0.3 and 1.0 µS/cm(1): a. Increase measurement frequency and verify continuous monitor. b. Ensure full flow (~760 gpm) through RWCU System. c. Measure chloride, sulfate, and pH. d. Check RWCU effluent conductivity and take action as appropriate. e. Check final feedwater conductivity and take action as appropriate. f. If above actions do not identify source, identify ingress by checking CST, individual condensate demineralizers, and hotwell conductivity. g. If above does not identify ingress, perform reactor water TOC analysis.

(1) Time limit above 100 µg/L chloride and 0.5 µS/cm conductivity should not exceed 24 continuous hours for any single incident. Total time for all incidents should not exceed two weeks in any consecutive 12 month period. When time limits are exceeded, an orderly shutdown should be initiated within 4 hours. Deviation from these limits beyond 24 hours shall be determined by the Plant Operations Director with the concurrence of the Technical Function Division.

NUREG 0737
Reg. Guide 1.97

NRC comment

The NRC staff needs a commitment date of our letter which will describe our technical approach to address the EG&G comments with schedule. If GPU does not agree with EG&G comment, the letter should explain. If the schedule is not available, the letter should state that the schedule will be provided later or negotiated with the staff according to the Oyster Creek integrated living schedule.

YN comments

(1) The letter requested by the staff should either transmit a revised Topical Report 028 or state that the revised report will be submitted. The report submitted earlier contained some erroneous information which led the EG&G reviewers to generate comments we received.

GPUN position

GPUN will prepare a letter by March 31, 1987 and submit it by April 15, 1987

1. Neutron flux

BWR Owners Group is in the process of evaluating a proper categorization of neutron flux monitoring system with justification. Results of the evaluation, which are expected to be available in July, 1987, will be reviewed by GPUN for Oyster Creek application. GPUN response to the EG&G comment will be provided at that time.

2. Coolant Level in Reactor

EG&G comments

(1) GPUN should provide additional info. on the range and the span that is covered by a single channel.

(2) GPUN should provide independent Class IE power supplies for the redundant channels of instrumentation.

GPUN response:

(1) GPUN will provide the additional info requested.

(2) O.C. has Fuel Zone Water Level instrument with independent class IE power supplies.
The NRC concern is probably based on an error in GPU submittal (Topical Report 028).
Note 9 of Table II (page 26) states, "Both instrument channels powered by the same diesel generator with provisions to transfer to other diesel generator." This statement must be deleted.

3. Reactor Coolant System Pressure

EG&G concern:

GPUN should provide independent Class IE power supplies for the redundant channels of instrumentation.

GPUN response:

OC depends on Fuel Zone instrument to monitor the reactor coolant system pressure. The Fuel Zone monitoring instrument has independent Class IE power supplies. The NRC concern is probably based on an error in the GPUN submittal (Topical Report 028). Note 9 of Table II (page 26) states, "Both instrument channels powered by the same diesel generator with provisions to transfer to other diesel generator". This statement must be deleted

d. Containment effluent radioactivity

E686 concern:

GPUN should show that the range of this instrumentation is adequate for its purpose.

GPUN response

The range of the Containment effluent radioactivity monitor (RAGEM) has been determined to be adequate based on the plant specific evaluation for the worst case DBA (1% leakage following a LOCA). Note 13 of Table II of Topical Report 028 is erroneous and must be deleted.

5. Effluent radioactivity

EG&G comments

(1) GPUN should verify that the power supply is suitable for Cat. 2 instrumentation,

(2) GPUN should show that the range of this instrumentation is adequate for its purpose

GPUN response:

(1) In order to verify that the power supply is suitable for Cat 2, GPUN will prepare documentation for environmental qualification for this instrument.

(2) The range of the effluent radioactivity monitor (RAGEM) has been determined to be adequate based on the plant specific evaluation for the worst case DBH (1% leakage following a LOCA). Note 13 of Table II of Topical Report 028 is erroneous and must be deleted.

6. Radiation Exposure Rate

EG&G comments

GPU should show, by analysis, that the instrument range for a given location encompasses the maximum expected radiation level

GPU response:

Following actions are needed to addresses the EG&G comment;

(1) List all area monitors located near the safe shutdown and accident mitigation instruments

(2) Compare the maximum expected exposure rate at the monitor location with the monitor range. (The max. expected exposure rates were generated for EQ.

(3) Propose modification, if required, and provide interiam justification.

7. Containment spray throttling valve position

EG&G comment:

GPUN should verify that this instrumentation is Category 2.

GPUN response:

Containment spray throttling valve does not exist at Oyster Creek and, therefore, this instrument is not applicable to Oyster Creek.

9. Standby liquid control system (SLCS) storage tank level

EG&G comments

GPUN should verify that this instrumentation is Cat. 2

GPUN response:

SLCS is only needed for ATWS mitigation However, 10 CFR 50.49, EQ rule, excludes instrumentation only needed for ATWS mitigation. Therefore, this instrumentation should be Category 3.

8. Torus Water temperature

EG&G comment:

GPUN should provide independent Class IE power supplies and show that Cat 1 criteria are met for this instrumentation

GPUN response:

Engineering Project has been tasked to modify the instrumentation to satisfy the EG&G comment.

10. Cooling Water temperature to engineered safety features system components

EG&G comments:

(1) GPUN should verify that the containment spray heat exchanger inlet and outlet temperature instrumentation is Cat 2.

(2) Verify that the containment system is the only engineered safety feature (ESF) that utilizes cooling water

GPUN response:

(1) Page 22 of Topical Report 028 list containment spray heat exchanger outlet temperature instrument (variable D-17) to be Cat 2 (i.e. EQ qualified)
Inlet temperature of the heat exchanger can be monitored by torus water temperature instrument which is listed as Cat 1 on page 26 of Topical Report 028 (Variable A-3)

(2) GPUN will verify the ESF that utilizes cooling water (e.g., Core Spray, Iso Condenser, etc.)

11. Status of standby powers

EG&G comment:

GPUN should upgrade this instrumentation to Cat 2.

GPUN response:

Following actions should be taken.

(1) List instrumentation associated with O.C. standby power sources (e.g. Diesel Generator, Station batteries)

(2) Verify if any of them are in a harsh environment.

(3) If it is in a harsh environment, qualify it environmentally.

Item 12 & 13 are repeats of item 5 & 6

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01/29/87

Attachment 3

LICENSING ACTION REPORT EXTENDED
PROGRESS STATUS REPORT
BWR PROJECT DIRECTORATE 02
DIVISION OF BWR LICENSING

REC #	DR	TAC #	LICENSING ACTION	REV BR.	TARGET ~~TAC~~ RESPONSE DATE	SHOLLY EXPIRE DATE	TARGET SER COMPLETE DATE	TARGET LICENSING ACTION DATE	S T & T	LIC PRI	BWD1 PRI	SS PRI	COMMENTS
28	OC	OC006	50.72/73 TSCR REQUESTED IN EVALUATION DATED 05/30/86	BWD1	~~07/[illegible]/86~~ 3/13/87	/ /	~~03/20/87~~	~~03/20/87T~~ 5/30/87	01	9	9	9	EVALUATION REQUESTED TSCR TO ADMINISTRATIVE CONTROLS - RECORD RETENTION.
49	OC	OC017	CONFIRMATION OF IMPLEMENTATION DATES FOR SAFETY GENERIC ISSUES	BWD1	~~12/[illegible]/86~~ 3/15/87	/ /	~~03/20/87~~	~~03/30/87T~~ 5/30/87	01	5	9	9	GPUN'S CONFIRMATION OR REVISION OF THE IMPLEMENTATION DATES IN ITS LETTER DATED 6/27/86 AND IN THE STAFF'S LETTER DATED 8/22/86.
54	OC	~~[illegible]~~ 64380	PROPREITARY DATA REQUEST WITH CONTAINMENT PURGE/VENT VALVES REPLACEMENT REVIEW	BWD1	~~11/07/86~~	/ /	02/28/87	02/28/87T	~~X~~ 05	7	9	9	CERTAIN DATA SUPPLIED FOR THE TAC 59828 REVIEW WAS REQUESTED TO BE JUDGED PROPREITARY ~~HOWEVER, ADDITIONAL INFORMATION IS NEEDED~~
9	OC	52944	SALEM ATWS - ITEMS 3.1.1 & 3.1.2 - POST MAINTENANCE TESTING PROCEDURES (RTS)	REG1	~~11/[illegible]/86~~ 3/15/87	/ /	~~02/28/87~~	~~03/31/87T~~ 5/30/87	01	7	6	7	SEE TAC 53781. DISCUSSED DATA NEEDED BY REGION. GPUN COMPLETED POST MAINTENANCE TESTING PROGRAM (LETTER 11/15/86, SE DELAYED).
11	OC	53781	SALEM ATWS - ITEMS 3.2.1 & 3.2.2 - POST MAINTENANCE TESTING PROCEDURES (SR)	REG1	~~10/[illegible]/86~~ 3/15/87	/ /	~~02/28/87~~	~~03/31/87T~~ 5/30/87	01	7	5	8	HAVE DISCUSSED DATA NEEDED BY REGION. GPUN HAS POST MAINTENANCE TESTING PROGRAM IN PLACE (LETTER DUE 11/15/86, SE DELAYED).
19	OC	60842	DISPOSAL OF CONTAMINATED CONCRETE	BWD1	~~12/[illegible]/86~~ 2/4/87	/ /	03/31/87	03/31/87T	~~X~~ 03	8	7	9	GPUN LOWERED PRIORITY ON DISPOSAL OF MINOR SURFACE CONTAMINATED CONCRETE. THERE WAS A REQUEST IN 3/8/84 STAFF LETTER TO GPUN.
20	OC	OC001	TSCR - DIESEL GENERATOR LOADING	BWEI	~~04/[illegible]/86~~ 3/31/87	/ /	~~02/28/87~~	~~03/31/87T~~ 7/30/87	01	3	3	3	THE LICENSEE HAS NOT MADE ITS SUBMITTAL YET.
22	OC	OC002	GENERIC LETTER 83-02 EVALUATION 05/30/85: ~~X~~ 1 TSCR ITEMS	BWD1	~~[illegible]~~	/ /	03/31/87	03/31/87T	~~X~~ 03	7	4	8	ITEMS: II.E.4.1, ~~II.E.4.2.7 (RAD.SIGNAL ON PURGE VALVE) AND I.A.1.3 (LIMIT OVERTIME, CLOSED OUT. II.E.4.2.7 IS TAC 61118)~~
23	OC	OC003	GENERIC LETTER 83-36 EVALUATION 11/22/86: ~~X~~ 3 TSCR ITEMS	BWD1	~~[illegible]~~	/ /	~~03/31/87~~	~~03/31/87T~~	01	9	3	8	ITEMS: II.F.1.1, II.F.1.2, II.F.1.3, II.B.1, III.D.3.4. II.F.1.3 + III.D.3.4 submitted

Response to GL 84-09 precludes need for II.E.4.1 being submitted

LICENSING ACTION REPORT EXTENDED
PROGRESS STATUS REPORT
BWR PROJECT DIRECTORATE #1
DIVISION OF BWR LICENSING

REC #	OR	TAC #	LICENSING ACTION	REV NR.	TARGET RAI RESPONSE DATE	SHOULD EXPIRE DATE	ESTIMATED SER COMPLETE DATE	TARGET LICENSING ACTION DATE	S T A T	LIC PRI	BWR1 PRI	SS PRI	COMMENTS
30	OC	OC007	INTEGRATED LIVING SCHEDULE FOR OYSTER CREEK	BWR1	1/27/87	/ /	~~03/31/87~~	6/30/87 03		3	6	7	SEE 02/12/86 MTG SUMMARY DATED 03/05/86. DISCUSSED IN 8/28/86 MEETING AT THE SITE.
40	OC	OC014	TSCR - AUXILIARY ELECTRICAL POWER LCO DURING COLD SHUTDOWN AND REFUEL MODES	BWR1	3/31/87	/ /	~~03/31/87~~	7/31/87 01		7	9	9	TS DO NOT HAVE LCO FOR DIESEL GENERATOR/OFFSITE AUXILIARY POWER DURING COLD SHUTDOWN AND REFUELING. SEE LER 84-07.
45	OC	OC016	TSCR - REQUIREMENTS ON THE RCS LOW LEVEL FUNCTION ANALOG TRIP SYSTEM	BWR1	6/30/87	/ /	~~03/31/87~~	10/30/87 01		9	9	9	GPUN DOES NOT NEED THE TSCR BEFORE THE RESTART FROM THE CYCLE 11R OUTAGE (10/86).
52	OC	OC020	RESPONSE TO STAFF'S LETTER DATED 08/22/86 ON CHANNEL CHECK FOR RWL INSTRUMENTS	BWR1	2/28/87	/ /	03/31/87	03/31/87T 03 X		3	9	9	STAFF LETTER DATED 8/22/86 REQUESTED ADDITIONAL JUSTIFICATION FOR USE OF DP GUAGES FOR ANALOG TRANSMITTER CHANNEL CHECK.
56	OC	OC024	TSCR - IMPLEMENT GENERIC LETTER 84-11 TS RECOMENDATIONS	BWR1	3/28/87	/ /	~~03/31/87~~	6/30/87 01		3	9	9	STAFF LETTER DATED 9/5/86 REQUESTED GPUN TO PROPOSE TS TO IMPLEMENT THE GL 84-11 TS RECOMENDATIONS.
66	OC	OC032	IPSAR SECTION 4.28, REPLACE REACTOR PROTECTION SYSTEM TRIP SYSTEMS	BWR1	5/30/87	/ /	~~03/31/87~~	7/30/87 01		5	9	9	GPUN SUBMITTED INFORMATION ON RE-02'S THROUGH RESPONSE TO IE BULLETIN 86-02, SOR SWITCHES. ✓
25	OC	OC005	CONTAINMENT PURGING DURING OPERATION EVALUATION 01/21/86: 3 ITEMS	BWR1	4/30/87	/ /	~~03/31/87~~	9/30/87 01		8	6	8	ITEMS: RESILIENT SEALS AND VALVES CLOSURE TIMES. RADIATION SIGNAL TO PURGE VALVES IS ~~OBSOLETE~~. SEE 59828 AND 61118. 64015
33	OC	OC010	TSCR - WATER PURITY AND REGULATORY GUIDE 1.56	BWR5	3/6/87	/ /	03/31/87	04/30/87T 03 X		7	9	9	LA DATED 11/21/85 REQUESTED REVIEW OF TABLE 1, FOOTNOTE A, OF REG. GUIDE 1.56 TO PROPOSE MAX. TIME OUT-OF-SPEC IN A YEAR.
41	OC	OC015	TSCR - REVISE APP.B TECH. SPEC. TO CONFORM TO NONRAD. ENVIRON. PROTECT. PLAN	BWR6	5/30/87	/ /	~~03/31/87~~	8/30/87 01		7	8	9	REQUESTED IN FTOL FES UPDATE LETTER DATED 4/10/86 AND TSCR ON REVISED APP.B TS. DRAFT EPP SENT WITH LETTER.

LICENSING ACTION REPORT EXTENDED
PROGRESS STATUS REPORT
BWR PROJECT DIRECTORATE #1
DIVISION OF BWR LICENSING

REC #	OR	TAC #	LICENSING ACTION	REV BR.	TARGET RAI RESPONSE DATE	SHOULD EXPIRE DATE	TARGET SER COMPLETE DATE	TARGET LICENSING ACTION DATE	S T A T	LIC PRI	BWD1 PRI	SS PRI	COMMENTS
53	OC	OC021	IPSAR SECTION 4.12 - DESIGN CODES AND STANDARDS SUPPLEMENT #1	BWD1	2/27/87	/ /		12/31/87	01	5	9	9	EVAL. DRYWELL CONCRETE FOR HIGH TEMP. ASSESS DIFF. FROM CURRENT CRITERIA FOR REINFORCED OPENINGS AND CONFIRM CYCLIC ANALYSIS.
83	OC	OC042	CLAMPING CIRCUIT FOR APRM ROD BLOCK LINE ABOVE 100% RECIRCULATION FLOW	BWRS	02/28/87	/ /	03/31/87	04/30/87T	01	7	9	9	PLANT HAS KEYLOCK TO PREVENT ROD WITHDRAWAL. IT IS UNDER ADMIN CONTROL AND LOCKED WHEN RECIRC FLOW REACHES 100%.
18	OC	59935	TSCR - REVISE LO-LO RCS WATER LEVEL INSTRUMENT OPERABILITY FOR VESSEL ISOL.	BWRS	6/30/87			10/30/87	01	3	3	2	LICENSEE TO SUBMIT REVISED TSCR BY 04/30/86 AND THIS MUST BE SHOLLIED.
24	OC	OC004	RCS VESSEL SURVEILLANCE CAPSULE RESULTS	BWEB	4/15/87	/ /		8/31/87	01	3	5	7	LICENSEE MUST SUBMIT SURVEILLANCE CAPSULE ANALYSIS RESULTS FOR NEXT 10 EFF. FULL POWER YEARS EST. TO BEGIN AFTER JULY 1987.
31	OC	OC008	IPSAR SECTION 4.3, WIND LOADS, OPEN ITEMS FROM 03/08/86 SE	PBIA	4/15/87	/ /		9/30/87	01	8	6	8	SE DATED 03/08/86 REQUESTED SCHEDULE RESPONDING TO OPEN ITEMS. GPUN STATED THAT IT WILL SUBMIT DATA ON 2/15/87.
47	OC	62078	TSCR 126 - REVISE CONTAINMENT INTEGRATED LEAKAGE TESTING (meeting with NRR on 3/5/87 requested)	BWPS	3/31/87			8/31/87	01	2	9	9	GPUN WANTED REVIEW DONE BY 9/15/86. BWPS REVIEW SHOWS TS PROBLEMS REQUIRING NEW TSCR AND REQUEST FOR APPENDIX J EXEMPTIONS.
58	OC	OC026	LARGE CONTAINMENT PURGE/VENT ISOLATION VALVES OPENED TO GREATER THAN 30 DEGREES	BWEB	12/31/88	/ /		6/30/89	01	4	9	9	BY HAVING THESE VALVES OPEN GREATER THAN 30 DEGREES, THE CONTAINMENT CAN BE INERTED/DEINERTED FASTER.
69	OC	OC035	OYSTER CREEK PUMP AND VALVE INSERVICE TESTING PROGRAM REVISION 5	BWEB	2/28/87	/ /		7/31/87	01	4	9	9	CONTRACTOR,S TER ON OYSTER CREEK IST PROGRAM MAY NOT INCLUDE ALL OF PROGRAM UP TO REVISION 4.
76	OC	OC038	DRYWELL ISOLATION CONDENSERS PENETRATION DESIGN	BWEB	4/30/87	/ /		6/30/87	01	2	9	2	FIRST MEETING → AT NRC. GPUN TO DISCUSS CONCEPTUAL DESIGN. 2/11/87

LICENSING ACTION REPORT EXTENDED
PROGRESS STATUS REPORT
BWR PROJECT DIRECTORATE #1
DIVISION OF BWR LICENSING

REC #	OR #	TAC #	LICENSING ACTION	REV BR.	TARGET RAI RESPONSE DATE	SCHEDULED EXPIRE DATE	TARGET SER COMPLETE DATE	TARGET LICENSING ACTION DATE	STAT	LIC PRI	BWD1 PRI	SG PRI	COMMENTS
38	OC	OC012	BWR RELOAD REPORT NO. 3	BWRS	~~12/31/86~~ ?	/ /	~~05/31/87~~	~~08/30/87~~ 09/30/87	01	6	9	9	THIRD OF FOUR RELOAD REPORTS. TWO (TAC 60339 & 61169) HAVE BEEN SUBMITTED.
39	OC	OC013	BWR RELOAD REPORT NO. 4	BWRS	~~12/31/86~~ ?	/ /	~~05/31/87~~	~~08/30/87~~ 09/30/87	01	6	9	9	FOURTH OF FOUR RELOAD REPORTS. TWO (TAC 60339 & 61169) HAVE BEEN SUBMITTED.
64	OC	OC030	IPSAR SECTION 4.2, SEISMIS AND QUALITY GROUP CLASSIFICATION	PBIA	~~08/31/87~~ 8/31/87	/ /	~~05/31/87~~	~~08/30/87~~ 12/31/87	01	5	9	9	GPUN ESTIMATING IT WILL SUBMIT ITS RESULTS BY 3/87. SEE THE STAFF'S SE DATED 04/12/82 FOR THE AREAS BEING REVIEWED.
75	OC	OC037	CONTAINMENT SPRAY AUTOMATIC INITIATION LOGIC	BWD1	3/31/87	/ /	06/30/87	06/30/87T	01	3	9	9	LER 86-023 EXPLAINS BASIS FOR GPUN TO SUBMIT TSCR TO DELETE AUTOMATIC INITIATION OF DRYWELL SPRAY, NOT NEEDED IMMED. FOR LOCA.
51	OC	OC019	EXPANDED SAFETY SYSTEM FACILITY STATUS	BWD1	~~10/31/87~~	/ /	~~08/31/87~~	~~08/30/87~~ 9/30/88T	01	3	9	9	THE ESSF IS TO BE BUILT ON SITE. THIS TAC IS TO COVER MEETINGS BETWEEN NRC AND GPUN ON THE STATUS OF THE PROJECT.
50	OC	OC018	TSCR - REVISE RESTRICTIONS ON CONTROL ROD SCRAM TIME TESTING	BWD1	~~6/30/87~~ 6/30/87	/ /	~~08/31/87~~	~~08/30/87~~ 10/31/87T	01	5	9	9	THIS TSCR IS NEEDED TO BE APPROVED BEFORE RESTART FROM CYCLE 12R OUTAGE. TSCR WILL CLARIFY RESTRICTIONS IN EXISTING TS.
55	OC	OC023	REDRAWN FIGURES FOR FTOL TECHNICAL SPECIFICATIONS	BWD1	~~6/30/87~~ 6/30/88	/ /	~~08/31/87~~	~~08/30/87~~ 9/30/88T	01	6	9	9	GPUN TO REDRAW THE FIGURES AND SUBMIT THEM IN TIME TO BE INCLUDED IN THE FTOL TS WHEN THEY ARE ISSUED WITH THE FTOL LICENSE.
63	OC	OC029	TSCR - FIRE PROTECTION piping ~~WATER~~ FOR CORE SPRAY SYSTEM	BWD1	~~09/01/87~~ 09/30/87	/ /	~~08/31/87~~	~~08/30/87~~ 12/31/87T	01	5	9	9	GPUN TO PROPOSE TS TO ALLOW piping ~~WATER~~ TO BE INOPERABLE IN REFUEL AND COLD SHUTDOWN MODES.
71	OC	OC036	OYSTER CREEK 50.62 ATWS RULE SUBMITTAL	BWRS	03/31/87	/ /	06/30/87	09/30/87T	01	2	2	2	BWROG SE DATED 10/21/86. SE ADDRESSED ACCEPTABLE STANDBY LIQUID CONTROL, ALTERNATE ROD INJECTION, AND RECIRCULATING PUMP TRIP. ✓

LICENSING ACTION REPORT EXTENDED
PROGRESS STATUS REPORT
BWR PROJECT DIRECTORATE #1
DIVISION OF BWR LICENSING

REC #	OR	TAC #	LICENSING ACTION	REV BR.	TARGET RAI RESPONSE DATE	SHOULD EXPIRE DATE	TARGET SER COMPLETE DATE	TARGET LICENSING ACTION DATE	S T A T	LIC PRI	BWD1 PRI	BG PRI	COMMENTS
77	OC	OC039	LICENSEE'S PLAN TO MITIGATE DRYWELL SHELL CORROSION	BWEB	06/30/87	/ /	10/31/87	11/30/87T	01	4	9	4	STAFF TO REVIEW GPUN'S PLAN TO MITIGATE CORROSION ATTACK ON DRYWELL SHELL. SET UP MEETINGS TO DISCUSS GPUN'S PRELIMENARY PLANS. (meeting with NRR on 2/26/87 requested)
78	OC	OC040	MID-CYCLE INSPECTION OF DRYWELL SHELL CORRODSION	BWEB	09/30/87	/ /	10/31/87	11/30/87T	01	4	9	4	INSPECTION TO VERIFY CORROSION RATE OF DRYWELL SHELL CORROSION. SEE TAC OC039.
6	OC	51115	TMI - NUREG-0737 SUPPLEMENT 1: REGULATORY GUIDE 1.97 REVISION 2	BWEI 4/15/87		/ /	08/31/87	12/30/87T	01	5	3	3	GPUN SUBMITTED REV.1 LATE (9 MONTHS). SEE SUPPLEMENT 1 CONF. ORDER. COPIES HAVE BEEN SENT TO CONTRACTOR (EG&G IDAHO, A. UDY).
62	OC	OC028	SUBMITTAL OF INSPECTION PROGRAM FOR SERVICE SENSITIVE AUSTENITIC STAINLESS STEEL	BWEB 12/31/87		/ /	3/31/88		01	3	9	9	SE ON INSPECTION RESULTS (RECIRCULATION AND ISOLATION CONDENSER PIPING) REQUESTED SUBMITTAL 3 MONTHS BEFORE CYCLE 12R OUTAGE.
61	OC	OC027	SOFTWARE AND HARDWARE IMPLEMENTATION OF RETS	BWD1	09/30/88	/ /	12/31/88	12/31/88T	01	5	9	9	GPUN STATED THAT SOFTWARE AND HARDWARE PROBLEMS, IDENTIFIED IN SE FOR AMDT. 108, WOULD BE RESOLVED BY END OF CYCLE 12R OUTAGE.

*** Total ***
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THE LARS LICENSING STATUS SELECTED WAS: 01

THE TECHNICAL REVIEW BRANCH SELECTED : ALL

LICENSING ACTION REPORT EXTENDED
PROGRESS STATUS REPORT
BWR PROJECT DIRECTORATE #1
DIVISION OF BWR LICENSING

REC #	OR	TAC #	LICENSING ACTION	REV BR.	TARGET RAI RESPONSE DATE	SHOULD EXPIRE DATE	TARGET SER COMPLETE DATE	TARGET LICENSING ACTION DATE	S T A T	LIC PRI	BWD1 PRI	SS PRI	COMMENTS
10	OC	53698	SALEM ATWS - ITEM 2.2 - SR EQUIPMENT CLASSIFICATION AND VENDOR INTERFACE	PAEI	10/23/85	/ /	~~09/30/86~~	~~04/30/87T~~ 9/30/87	02	7	5	7	IMPORTANT SALEM ATWS ITEM. SE DATE PER C.ROSSI 5/15/86 MEMO TO BWD1.
16	OC	50004	DISCREPANCY IN DRAWINGS USED IN SEP REVIEW	PBIA	/ /	/ /	~~04/30/87~~ 3/31/87	04/30/87T	02	3	1	2	GPUN PROVIDED 2ND SET OF MNCR. INEL FIRST TER 8/30/85. GRIMES SAID SE OUT 12/01/86. GPUN HAS PROVIDED ALL MNCR'S ON SEP REVIEWS.
60	OC	49398	IPSAR SECTION 4.11 - SEISMIC DESIGN	PBIA	05/30/86	/ /	~~03/31/87~~ 3/31/87	04/30/87T	02	3	5	5	MTG OF 4/1/86, HELD 4/24/86, DISCUSSED DRAFT TER SENT 1/9/86. GPUN SUBMITTED FORMAL RESPONSE ON 6/24/86.
34	OC	61169	BWR STEADY STATE PHYSICS RELOAD REPORT - TR021	BWRS	02/28/87	/ /	04/30/87	05/31/87T 01	3	9	9		PHONE CALL ON 1/22/87 TO DISCUSS QUESTIONS 12 & 20 WITH BWRS.
7	OC	52482	SEP ACTION ITEMS - IPSAR SUPPLEMENT TIA	REG1	/ /	/ /	06/30/87	09/30/87T	02	5	6	8	REGION I TASK INTERFACE AGREEMENT (TIA) FOR INSPECTION OF RESOLVED SEP ITEMS. REGION HAS AGREE12 TO DO THE INSPECTIONS.
32	OC	OC009	EMERGENCY RESPONSE FACILITY APPRAISAL	REG1	/ /	/ /	06/30/88	08/31/88T	02	9	9	9	IE AND REGION SCHEDULE ERF APPRAISALS TO AUDIT THE LICENSEE AGAINST REQUIREMENTS. THIS IS TO ISSUE THE INSPECTION REPORT.

*** Total ***
421

THE LARS LICENSING STATUS SELECTED WAS: 02

THE TECHNICAL REVIEW BRANCH SELECTED : ALL

LICENSING ACTION REPORT EXTENDED
PROGRESS STATUS REPORT
BWR PROJECT DIRECTORATE #1
DIVISION OF BWR LICENSING

REC #	OR	TAC #	LICENSING ACTION	REV BR.	TARGET RAI RESPONSE DATE	SKOLLY EXPIRE DATE	TARGET SER COMPLETE DATE	TARGET LICENSING ACTION DATE	S T A T	LIC PRI	BWD1 PRI	SS PRI	COMMENTS
12	OC	54008	SALEM ATWS - ITEMS 4.5.2 AND 4.5.3 - REACTOR TRIP SYSTEM FUNCTIONAL TESTING	PAEI	10/23/85	/ /	~~02/28/87~~ 8/30/87	~~02/28/87~~ 9/30/87	02	7	5	8	LASHER SAID BWROG SE TO BE ISSUED SOON, THEN GPUN ACCEPTS BWROG'S POSITION AND THEN SE ISSUED ON OCNGS. DELAY IN BWROG SE.
14	OC	57161	GL 83-08 MARK I DRYWELL VACUUM BREAKERS	BWEB	05/30/86	/ /	~~08/31/86~~ 2/13/87C	02/28/87T	03 X	4	5	4	LICENSEE HAS PROVIDED STAFF THE SECOND SUBMITTAL. THE CONTRACTOR HAS SUBMITTED ITS TER.
21	OC	61603	DCRDR EVALUATION DATED 02/27/86 (TAC 56147) OPEN ITEMS	BWEI	08/31/86	/ /	~~01/30/87~~ 2/23/87	~~08/28/87~~ 3/31/87	02	9	6	8	RESPONSE TO LA DATED 2/27/86. STAFF REQUESTED ADD'L INFO IN PHONE CALL (7/22/86). GPUN HAS SUBMITTED LETTER.
29	OC	62229	ADDITIONAL TECHNICAL EXEMPTIONS TO APPENDIX R, FIRE PROTECTION	BWD1	/ /	/ /	~~01/30/87~~ 2/23/87	~~02/28/87~~ 3/31/87	02	1	2	4	DISCUSSED IN 02/11/86, 4/23/86 AND 6/23/86 MEETINGS WITH GPUN. GPUN EXPECTS SUBMITTAL BY 8/15/86.
81	OC	0C041	VERIFICATION OF CALCULATIONS ON HELB IN ISOL. COND. STEAM LINE PENETRATIONS	BWD1 ~~2/11/87~~	/ /	/ /	03/15/87	03/15/87T	03 X	9	9	9	GPUN COMMITTED TO SHUT DOWN IF 2 GPM LEAKAGE FROM ANY ISOL. COND. LINE. VERIFIED CALC.S FOR STEAM LINES WILL CHANGE THIS.
2	OC	44324	TMI - NUREG-0737 SUPPLEMENT 1: EMERGENCY OPERATING PROCEDURES (EOPS)	BWFO	10/31/85	/ /	02/28/87	~~02~~ 04/30/87T	02	9	7	8	DBL/FOP 8/18/86 MEMO HAS TER DONE 9/30/86, SE DONE 3/87. PLANT TECH. GUIDELINE REVIEW DELAYED FOR STAFF APPROVAL OF EPG-REV.4.
13	OC	54091	SALEM ATWS - ITEM 4.5.1 - REACTOR SYSTEM FUNCTIONAL TESTING (DIVERSE TRIP)	REGI	08/09/85	/ /	~~04/30/87~~ 5/30/87	~~05/31/87~~	02	6	5	8	ON 2-5-86 HAVERKAMP TOLD BWD1 SE WOULD BE ISSUED 4-30-86. TIED TO TAC 52944 & 53781 WHICH NEED A LETTER FROM GPUN.
82	OC	64444	USE OF APRM IN PLACE OF INOPERABLE IRM DURING STARTUP ON DECEMBER 27, 1986	BWRS	/ /	/ /	02/28/87	03/31/87T	02	9	9	9	MEMO SENT TO BWRS REQUESTING REVIEW TO ANSWER RESIDENT'S QUESTIONS.
8	OC	52863	SALEM ATWS - ITEM 2.1 - RTS EQUIPMENT CLASSIFICATION AND VENDOR INTERFACE	PAEI	10/23/85	/ /	~~10/31/86~~ 8/30/87	~~04/30/87~~ 9/30/87	02	8	8	5	IMPORTANT SALEM ATWS ITEM. SE DATE PER C.ROSSI 5/15/86 MEMO TO BWD1.