

U. S. NUCLEAR REGULATORY COMMISSION

Region I

Report No.: 89-09  
Docket No.: 50-333  
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Licensee: New York Power Authority  
Post Office Box 41  
Lycoming, New York 13093  
Facility: James A. FitzPatrick Nuclear Power Plant  
Location: Scriba, New York  
Dates: July 30, 1989 through September 6, 1989  
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Division of Reactor Projects

10-6-89  
Date

Inspection Summary:

This inspection report documents routine inspections during day and backshift hours of plant activities, including plant operations, security, surveillance and maintenance, emergency preparedness, engineering and technical support, and radiological protection. This report period encompassed a total of 225.5 hours of direct inspection effort. Of that total, 26 were backshift hours while 13 were deep backshift hours which were conducted on August 3, 13, 23, and 27.

Results:

The inspectors did not identify any violations. There are      unresolved items identified. Additional inspection items that the inspector will follow in a subsequent report are noted by an F-" designation. A Table of Contents follows and notes Unresolved Items and follow items.

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## DETAILS

### 1. Plant Tour by Commissioner Curtiss

On August 28, 1989, Commissioner James R. Curtiss met with the Resident Manager and his staff, and toured the facility. Commissioner Curtis was accompanied by Kevin Connaughton, his technical assistant, William F. Kane, Director, Division of Reactor Projects for Region I, and the resident inspectors.

### 2. Operations

The plant operated at 100% power during the report period except for August 26 and 27, when power was reduced due to a ground on a circulating water pump.

- a. The inspector observed an example of inappropriate conduct and lack of professionalism by the on shift senior reactor operators (SROs). Specifically, during the early morning hours on August 3, the inspector observed that the shift supervisor (SS) and the assistant shift supervisor (ASS), both licensed SROs, were in the lunch room taking a break from licensed duties concurrently. The nuclear control operator (NCO), a licensed reactor operator (RO), was observed to be in the controls area of the control room as required. However, the inspector judged it to be inappropriate for both SROs to be on a break concurrently with neither person reviewing the operation of the reactor.

The lunch room is adjacent to the controls area and inside of the security boundary. NYPA considers the lunch room to be an acceptable area for the SS and ASS to perform some duties, such as turnovers and briefing of equipment operators, because in this location the SS and ASS can respond to alarms in the controls area, but any disruption of the controls area is minimized. Nevertheless, the inspector concluded that it was inappropriate for both SROs to be in the lunch room on a break.

The inspector addressed this concern with the Resident Manager, who agreed that this type of activity was inappropriate and would be corrected. As corrective action, the Operations Superintendent held discussions with each SRO in which he stated that it was inappropriate for both SROs to take a break together and reemphasized the importance of direct supervision by the SS and ASS and the high standards of professionalism expected. The inspector concluded that these discussions were acceptable as initial corrective actions.

The inspector reviewed Operations Department Standing Order (ODSO)-1, Operating Staff Responsibilities and Authorities. Section 5.4.8 requires that an SRO be within the control room at all times when the plant is not in cold shutdown. Section 5.7 requires that the NCO be in the control room as defined by a diagram in the back of the procedure. The diagram defines the confines of the control room for the NCO as the area bounded by the main control panels and the SS's office. The inspector noted that there is no definition as to what "within the control room" means for the SRO. Further, there is no provision as to when the SRO may take a break or under what conditions. The Resident Manager agreed that the procedure needed clarification. He committed to reviewing this and making the necessary procedure corrections. This item remains unresolved pending inspector review of NYPA's corrective actions. UNR 89-09-01

- b. The inspector found an instance when the SROs did not formally enter the applicable Technical Specification (TS) Limiting Condition for Operation (LCO) despite being aware of the potential inoperability of the system and taking action to correct it. Specifically, on August 9 the Maintenance Department tried to obtain a run time indicator for the B standby gas treatment (SBGT) fan to replace a failed indicator. An environmentally qualified (EQ) replacement was not available, and Technical Services was contacted to resolve the replacement part issue. On August 10, Technical Services completed a review that verified the function of the indicator was not necessary for system operability. However, this indicator was installed in parallel with the control circuit for the fan motor breaker and was not separately fused. Therefore, if the indicator was to short, it could result in the blowing of the breaker control power fuses, potentially causing the breaker and the fan to be inoperable.

The Maintenance Department initiated a temporary modification (TM) to lift the leads on the B SBGT fan run time indicator. The B SBGT train was already inoperable for electrical maintenance on system breakers. The applicable Technical Specification (TS) Limiting Condition for Operation (LCO), Section 3.7.B.2.a, for one train of SBGT inoperable was in effect. TM 89-66 was prepared and authorized for installation. Subsequently, on that day, the ASS was requested by Maintenance to prepare and install a TM to lift the leads from the A SBGT fan run time indicator. This was requested because Technical Services was questioning the EQ of the installed instruments and felt that lifting the leads was conservative, until the EQ determination was completed.

The inspector concluded that due to concerns on the SBGT run timers, A SBGT should have been declared inoperable at this time. While NYPA took action to correct the problem, i.e., the TM was authorized to remove the timers from the circuitry by lifting leads on A SBGT, it was not declared inoperable until three hours later when Technical Services concluded that the indicator did not meet EQ requirements. Even then, the inoperable B SBGT train was not properly logged. Under the LCD action statement NYPA had 24 hours to reach a cold shutdown condition. The leads were lifted within ten minutes of the EQ determination, returning A SBGT to operability.

In discussions with the inspector the Operations Superintendent stated that in the absence of a final determination of EQ acceptability, the declaration of inoperability was premature and that lifting of leads on A SBGT was a conservative action. The inspector stated that these actions were inconsistent and that the conservative step of declaring A SBGT inoperable should have been taken.

The Operations Superintendent made a 10 CFR 50.72 notification at 2:46 p.m., based on a condition that was outside the plants design bases (1 hour call) and a condition that could prevent the fulfillment of a safety function needed to control a release of radioactive material and to mitigate the consequences of an accident.

NYPA subsequently qualified the timers based on material composition and their ability to withstand the radiation field that would follow a loss of coolant accident (LOCA).

In summary, the inspector concluded that the SRCs had not been conservative regarding the declaration of the second train of SBGT as inoperable and that logging of the inoperability had been neglected. NYPA will be asked to respond in writing to these issues. This item is unresolved pending review of the actions taken by NYPA to resolve these issues. UNR 89-09-02

- c. The inspector discussed several outstanding Technical Specification (TS) issues with the Resident Manager. In Inspection Report 88-01 two deficiencies were noted:
- 1) The instruments that provide the primary containment isolation (PCI) functions for the high pressure core injection (HPCI) and the reactor core isolation cooling (RCIC) systems are included with the instrumentation that control and initiates the ECCS system (TS table 3.2-2). These instruments should be listed with instruments that cause primary containment isolations (TS table 3.2-1), because PCI instruments may be required to be operable at times when ECCS instruments are not. NYPA has committed to review this and determine the need for a TS amendment, but no decision has been reached yet.

- 2) TS 3.5.F.2 for ECCS systems needed during cold shutdown does not specify what systems are required when maintenance that could drain the vessel is being performed. NYPA is in the process of developing a proposed submittal to address this issue. NYPA has committed to submitting this amendment to have it in place by the 1990 refueling outage. NYPA committed to maintaining one ECCS system available for injection to the core during shutdowns when work is occurring that could drain the reactor vessel.

The inspector will follow these items in a subsequent inspection report F-1

The inspector found the NYPA resolution acceptable regarding a concern in Inspection Report 88-17 on deinerting of the containment (TS 3.7.A.7). Specifically, is it acceptable if within 24 hours of a planned shutdown, the containment is deinerted as allowed by 3.7.A.7(1), and then the shutdown is not completed within 24 hours? NYPA stated that TS 3.7.A.7(3) applies, which allows six hours to restore the differential pressure or be in hot shutdown within the next 6 hours and cold shutdown within the next 18 hours. Based on this, NYPA does not plan on submitting a TS amendment. The inspector found this acceptable.

- d. The inspector has noted that TS contain several different LCOs which require the plant to be placed in the cold shutdown condition and that various terminology is used. Some examples are:
- On April 19, as documented in Inspection Report 88-07, both standby liquid control systems were declared inoperable. In this case TS 3.4.D requires that the plant shall be in cold shutdown within 24 hours.
  - On April 27, as documented in Inspection Report 88-07, TS 3.7.D.3 was entered because the primary containment was declared inoperable. This TS requires that a shutdown be initiated and the plant be placed in cold shutdown within 24 hours.
  - On August 15 (see Section 2.b) both trains of SBT were declared inoperable. The applicable TS 3.7.B.3 requires that the plant be placed in the cold condition.

NYPA treated all these instances the same, i.e., as requiring the plant to be in cold shutdown within 24 hours. Because a normal shutdown can be achieved within 8 hours, no actions were taken until 8 hours prior to the the 24 hour end point. The inspector asked for justification for this interpretation. Further, there is no guidance available to operators on how to interpret these different requirements.

This is further complicated by the NYPA's interpretations of the timing of Unusual Event (UE) declaration and 10 CFR 50.72 notification of a shutdown required by TS. The emergency plan procedure states that a UE should be declared when a shutdown is commenced as required by a TS LCO. Therefore, NYPA interprets a UE would be declared and a notification made when the shutdown was actually begun (as little as 8 hours prior to the action statement's expiration).

Also, NYPA has stated verbally that power reductions using recirculation flow do not constitute commencing a shutdown, but that once a control rod needs to be driven into the core a shutdown has commenced. The inspector requested a justification for this position.

NYPA committed to review the requirements for commencing a shutdown required by TS and the above issues. This item is unresolved pending review of NYPA's actions. UNR 89-09-03

### 2.1 Safety Assessment

The actions taken to resolve the issue of both SROs taking a break at the same time were adequate. NYPA management should continue to review day-to-day operations for adequacy with expectations.

The findings cited while reviewing the SBTG issue discussed above indicated that site management must take steps to ensure that system operability concerns are addressed by GSs and ASSs in a conservative manner. Further action should be taken to improve log keeping to ensure that LCO entry and exit conditions are fully documented.

## 3. Security

- a. On August 27, the inspector walked down the protected area and observed security personnel performing routine surveillance checks of the perimeter intrusion detection system. The surveillance was completed properly. The status of a loose manway cover to the storm drain system was questioned. Security responded that the lake discharge line, downstream of the manway cover, is welded with boiler grating, making the manway cover inaccessible from outside the protected area. The inspector determined this to be adequate.
- b. The inspectors observed various vehicle and personnel searches during the period. No discrepancies were noted.
- c. Guard responses to vital area door alarms were observed to be adequate.

### 3.1 Safety Assessment

The security department continued to perform their duties properly.

#### 4. Surveillance and Maintenance

- a. The inspector reviewed NYPA actions regarding the inoperability of the A and C residual heat removal (RHR) pumps based on inservice testing (IST) problems. (The engineering aspects are discussed in Section 6.a). During quarterly surveillance and inservice testing, the pumps were in the required action range due to low pump differential pressures. The required action range was as defined by ASME Code, Section XI and the baseline data at that time. Although the differential pressures were above the TS required values, the pumps were declared inoperable as required by the Code.

The inspector monitored the performance of the subsequent inservice testing on these pumps. This testing was conducted in accordance with ST-2A, Quarterly RHR Pump and Valve Testing (IST). Testing was observed to be well conducted from the control room. Data collection was proper at the pumps. During this testing, NYPA recalibrated instrumentation and closed manual blocking valves to ensure that the indicated flow was the actual pump flow.

The inspectors noted the following while observing this testing:

- NYPA found that the gages used to measure pump suction pressures were of a large scale (30" Hg vacuum to 150 psig), but the normal testing values are 2-4 psig. This did not meet the criteria imposed by ASME Code section XI. The Code states that the gages shall be of a range not greater than four times the expected value to be read. The Technical Services Department implemented a modification which installed higher accuracy gages to be used during testing. This was acceptable to correct this deficiency.
- The inspector also noted that the flow indicators (annubar type) for drywell spray showed approximately 500 gpm going to the drywell with the spray blocking and throttle valve verified shut. When this was noted, the control room operators verified that there was no difference in the measured drywell leak rates before and after the test and wrote a work request to troubleshoot the deficiency.
- The panel indication for RHR flow was not as accurate as the digital process computer point. Both of these indications receive input from the same transmitter and are calibrated when the detector is calibrated. The Operations Department has changed the test procedure to utilize the computer point vice the panel indication to allow for better establishment of initial conditions.

The inspector observed the surveillance testing performed on to determine that the pumps met the newly determined baseline. This testing was completed satisfactorily. Both pumps were returned to service on August 17.

- b. On August 17, the inspector observed preventive maintenance being performed on one of the 115 KV offsite emergency transformers. The inspector verified that NYPA performed the required surveillances prior to deenergizing the line and daily while it was deenergized. The protective tagging was performed satisfactorily. Niagara Mohawk was informed, and the required guarantee was received from them prior to deenergizing the transformer. The maintenance was handled properly.
- c. On August 17, the high pressure coolant injection system (HPCI) was declared inoperable due to water being found in the turbine lube oil. This was reported to the NRC via ENS. The lube oil sample was taken based on the known leakage of the steam supply valve (MOV-14) and the turbine seals. The oil sump was drained, cleaned and refilled. After replacing the oil, HPCI was run satisfactorily. An oil sample was then taken to verify no presence of water in the oil and HPCI was declared operable. This evolution was handled properly.

Excessive seal leakage has been observed by the inspector when the system was started for surveillance testing. The leakage slows as the gland exhauster takes a suction. When the machine is idle, steam can leak from MOV-14 and can enter the lube oil sump through the shaft seals. NYPA's short term corrective action has been to sample the oil weekly and after every HPCI operation to verify no presence of water in the oil. The long term corrective actions were to perform repairs on MOV-14 and the turbine seals to correct leakage during the fall maintenance outage. These actions were determined to be adequate by the inspector. The repairs will be reviewed during a subsequent inspection report. F-2

- d. On August 16, an attempt was made to start the B RHR service water pump, but the pump would not start. A work request was issued to troubleshoot. The pump breaker was found to have a broken prop spring. This spring holds the breaker closed. This Magne-Blast AMH-4.76 circuit breaker had been through 1,625 cycles. The Peach Bottom Atomic Power Plant had reported such spring failures at higher cycles and recommended changing out the springs at 2,000 cycles. The Maintenance Department plans on reviewing the number of cycles on other safety related breakers and to complete inspections as necessary during the upcoming fall outage. The inspector will follow this in a subsequent report. F-3
- e. On August 3, NYPA reported via ENS the actuation of a partial Group II isolation due to a grounded jumper during an instrument surveillance. The ground caused a blown fuse in the B train of the Group II isolation logic. This resulted in one recirculation pump seal purge

valve and the transversing incore probe nitrogen purge valve failing closed. The fuse was replaced and the valves reopened within fifteen minutes. The inspector observed the operators in the control room respond to the actuation and concluded that their actions were proper and timely. This event was documented in LER 89-13-00. The inspector found the corrective actions to be adequate.

- f. (Open) Unresolved Item (88-11-01): Acceptance criteria during surveillance tests. The inspector reviewed surveillance test (ST) 40D, Daily Surveillance and Instrument Check, Rev. 36, dated June 7, 1989. This procedure encompasses the daily checks of instruments, containment leakage, reactor coolant system leakage and other daily checks. This item was initially opened because the Operations Department did not specify any acceptance criteria for leakage from the primary containment. This acceptance criteria has not yet been incorporated.

During the review of the procedure the inspector determined that specific criteria for acceptability of TS required instrument checks was not provided. The only acceptance criteria applied to these instrument checks was "instruments should be in the normal expected range as determined by plant conditions, and then should agree with their separate, but redundant, comparison instruments (if there is one) with a reasonable degree of accuracy." While this meets the definition of an instrument check in section 1.F.4 of TS, NYPA should specify the required accuracies and, where possible, the required ranges for power operation. Further, there are numerous TS instruments that require instrument checks. The instruments are not grouped in the ST to give a clear understanding which instruments are required for which TS. NYPA has committed to reviewing ST-40D for incorporation of appropriate acceptance criteria. This item has been expanded to encompass this and will remain open pending inspector review of NYPA's actions.

- g. (Open) Violation (89-80-02.1): This violation was issued during the Safety System Functional Inspection (SSFI) due to the lack of an accurate standard during the calibration of fuel oil tank gauges. During the period this problem resulted in an incorrect calibration. Specifically, on August 23, the Operations Department performed surveillance test (ST)-9G, Emergency Diesel Generator (EDG) Fuel Oil and Combustion Air Class III Piping Pressure Test (ISI). Portions of the testing were observed by the inspector. The intent of the surveillance is to drain the fuel oil day tank (FODT) to permit operation of the fuel oil transfer pumps (FOTP) for 10 minutes to verify class III piping integrity. The D1 FOTP, while selected as lead pump, and the D2 FOTP, selected as the backup pump, did not start at the required

low (7.5%) and low-low (5%) FODT level, respectively. These FODT levels were being monitored using the installed level indicator on the LDG local panel. With the D2 FOTP selected as the lead pump, both pumps operated satisfactorily. Based on this, NYPA declared the D1 FOTP inoperable and placed a special condition tag on the selector switch to maintain the D2 FOTP as the lead pump. This placed the plant in a 60 day LCO.

I&C performed troubleshooting per Fuel Oil Day Tank Level Functional Test, IMP 93.6. It was determined that the D1 (lead) and D2 (backup) pumps started as required on actual FODT level as measured using a dip stick. The level transmitter and indicator were found to be erratic at less than 15% day tank level. This level transmitter had been used to calibrate the other separate tank level switches that controlled the pump start functions on low and low-low FODT level. The pump was declared inoperable because an incorrectly calibrated installed level instrument was used as the standard to determine pump operability. This item remains open.

- h. (Open) Unresolved Item 60-29-10: Acceptability of crescent area unit cooler testing. The unit coolers can be supplied with cooling flow from either the service water (SW) system (nonsafety-related) or emergency service water (ESW) (safety-related). During this period NYPA performed testing using a temporary surveillance test (TST)-4 to determine the heat removal capacities of the crescent area coolers while using ESW as the cooling water source. TST-4 testing demonstrated acceptable heat exchanger capabilities with ESW. Surveillance test ST-19A had previously been used to determine acceptable unit cooler operability while using SW as the cooling source.

One concern remained open regarding system flow effects and their acceptability. During testing under both SW and ESW, the unit coolers were tested individually, but the system flow effects, i.e., all coolers being supplied, were not measured. The primary consideration is that the flow from each of the five heat exchangers on the two headers are throttled to provide acceptable cooling when supplied by ESW. However, no testing has confirmed the acceptability of these throttled valve positions, and the basis for the throttle positions was not clear.

#### 4.1 Safety Assessment

The surveillance testing observed was properly conducted and controlled. NYPA must continue their efforts to ensure that each surveillance requirement is met with an applicable acceptance criteria. The planned and corrective maintenance activities observed were conducted properly.

## 5. Emergency Preparedness

- a. On August 4, NYPA made an ENS call reporting a major loss of offsite notification capability. Thirteen sirens were lost during a severe thunderstorm, which had caused two power supply breakers to trip. The siren loss was identified by the Oswego County Warning Point, which promptly notified the FitzPatrick and Nine Mile Point control rooms via the Radiological Emergency Communication System (RECS). An additional ENS call was made on August 6, reporting five sirens still out of service. The inspector determined that the transfer of information from the county to NYPA and NYPA's 50.72 reporting were adequate.
- b. On August 21, the inspector discussed the observations that NYPA had made with respect to the two practice drills that were run in April and July. The areas of difficulty were personnel accountability, dose assessment and protective action recommendations. The actions taken by NYPA to correct these areas were followed by the NRC team during the September 6, 1989 drill. The results of this review are documented in Inspection Report 89-19.

### 5.1 Safety Assessment

The internal NYPA reviews of the last two practice drills were proper and extremely self-critical. The deficiencies noted and actions taken were well documented.

## 6. Engineering and Technical Support

- a. Technical Services personnel performed evaluations of the data received during the inservice testing (IST) of the A and C residual heat removal (RHR) pumps (see section 4.a). This analysis concluded that the reason for the differential pressures being in the required action range stemmed from a poorly defined baseline. In April 1989 the flow transmitter used to determine the total pump flow was calibrated and found to be reading the required 10,000 gpm when flow was actually 9,500 gpm. It appears, from review of the applicable pump differential pressure versus flow curves, that this 500 gpm discrepancy was the cause of the baseline being approximately 10 psid higher than it should have been. This would cause the differential pressure at which the alert and required action ranges are entered to be higher than actually required.

The only baseline data that had been taken on the pumps up until the April 1989 calibration included this 500 gpm error. A review of pump differential pressure since the calibration, shows an initial drop in differential pressure, followed by a repeatable scatter of data. When the 10 psid, correction for the 500 gpm error, was subtracted from the data points prior to the calibration, the scatter of data was within the same ranges as after the calibration.

On August 17, the inspector attended the PORC meeting at which the analysis of the pump data was discussed. NYPA approved plans to use the digital flow indicators on the process computer during testing to allow more accurate setting of initial conditions. Also, the establishment of a new baseline per Technical Services Performance Memorandum PN 89-16 was approved.

The PORC also approved increasing the frequency of testing of the pumps to once every two weeks. This would allow a substantial amount of data to verify the new baseline prior to the scheduled fall maintenance outage.

The PORC also recommended that a modification be implemented to increase the accuracy of the pump discharge and suction pressure gages (see Sections 4.a and 6.c).

- b. On August 24, the inspector attended the Plant Operations Review Committee (PORC) meeting. Among other PORC business were two safety evaluations; JAF-SE-89-008, detailed control room design review to resolve human engineering deficiencies on main control room benchboards and vertical panels and, JAF-SE-89-079, addition of RHR pump test pressure gages.

The PORC discussion on these items was adequate. Inspector review, after PORC approval, showed the evaluations to be proper and to meet the requirements of 10 CFR 50.59, for determining that no unresolved safety questions existed.

- c. NYPA has known of the IST instrumentation range and accuracy deficiencies since Technical Services completed a study in August. The modification that was installed on the RHR pumps is only part of a total plant wide modification to enhance IST data usability. The Resident Manager has committed to reviewing this study and preparing modifications, where necessary, to enhance the instrumentation. This will be done on a case by case basis where the installed instrumentation is not adequate to give acceptable IST data. The extent to which other IST gages do not meet the Code requirements has not been completely addressed and is an Unresolved Item. 89-09-04.

- d. Safety Analysis Procedures (10 CFR 50.59) Audit. The purpose of the inspection was to audit the procedures and processes used by NYPA to evaluate proposed changes to equipment, procedures, tests and experiments to ensure compliance with 10 CFR 50.59 criteria. The inspector concluded that the procedures were acceptable; however, the adequacy of the resulting safety analyses was not assessed.

The following procedures were reviewed:

- WACP 10.1.6, Control of Modifications and Component Changes
- WACP 10.1.3, Jumpers, Lifted Leads, Temporary Modifications
- MCM 5, Minor Modifications
- MCM 4, Nuclear Safety and Environmental Evaluations

LER 89-12-00. This event report was submitted to document the review of the three phased bolted short condition when emergency diesel generators are paralleled with the 345 KV generator bus during testing. This is discussed in the SSFI report, 89-80, section 4.5.1.3 and in Resident Inspector Report, 89-08, section 5.a. A subsequent report was committed to be submitted by June 30, 1990, which will document the long term corrective actions that could involve system modifications. The acceptability of emergency diesel generator operation in parallel with the main generator was under review by the NRC staff and represents an Unresolved Item. 89-09-05

- f. (Open) Violation (89-80-05):

1. On June 30, LER 89-11-00 was submitted to document the plugging of the emergency diesel generator (EDG) room floor drains. This item is discussed in SSFI report 89-80, section 4.4.2.3. The plugging was completed in 1979 without a 10 CFR 50.59 safety evaluation to prevent the toxic corrosion inhibitor used in the EDG coolant from entering the lake. This inhibitor was replaced with a non-toxic substance in 1986. The plugs were removed on May 31.
2. On June 19, LER 89-10-00 was submitted documenting conditions outside the design basis on safety related environment enclosures housing safety related switchgear. This item is discussed in SSFI report 89-80, section 4.4.2.2 and in resident Inspection Report 89-07, section 5.c. On May 19, these deficiencies, which would have made the air conditioning units for these enclosures inoperable in the event of a high energy line break were corrected.

NYPA's actions to resolve these issues was adequate. The violation will remain open pending the review of NYPA's response to the violation.

## 6.1 Safety Assessment

Technical Services involvement in the EQ issue dealing with the SBTG fan run timers was proper and in accordance with WACP 10.1.11. The technical resolution of the pump differential pressure baseline issue for the A and C RHR pumps was well founded. Actions taken to resolve issues raised by the SSFI were timely and adequate to resolve safety concerns.

## 7. Radiological Protection

- a. (Open) Unresolved Item (89-08-01): NYPA spent quite a lot of time fixing the post accident sampling system (PASS) and ensuring that all samples could be taken during this period. On August 31, PASS was declared operable. The inspector watched a gaseous drywell sample being drawn on August 30. NYPA also successfully completed the other samples; small and large volume reactor coolant and drywell iodine and particulate. These samples were drawn in accordance with process surveillance procedure (PSP)-17, PASS operating procedure. These efforts should have been completed prior to the issuance of TS amendment 131 which established the requirements for PASS. The operability of the system should be tracked and known at all times.

PASS is included in TS 6.19, which requires that a program be implemented to ensure the capability to obtain and analyze the above samples. This item will remain open until the inspectors review this program.

- b. During troubleshooting to determine the cause of the low RHR pump differential pressures (see Section 4.a), the I&C department calibrated the suction and discharge pressure gages for the A and C RHR pumps. The inspector entered the area to monitor the reperformance of the surveillance test and noted water spillage below the test connections for the A&C RHR pump suction gages. These gages are located in an area not posted as a contaminated area. The inspector informed the radiological technician responsible for the crescent areas of the spill. The technician determined the spill area to be contaminated. The water was cleaned up by the technician to prevent any spread of the contamination.

The I&C technicians performing the gage calibrations were self-monitors and were not required to have a specific Radiation Work Permit (RWP) to perform the calibration. All radiological workers should be sensitive to potential changing radiological conditions due to the work they perform. It is every worker's responsibility to ensure an area is left in the same radiological conditions as found. If leakage is not contained or other conditions change, the proper radiological protection personnel should be informed to perform surveys to ensure the radiological conditions of an area are known at all times.

- c. During the surveillance testing on the A and C RHR pumps, the inspector observed the operators having to utilize a hear-hear in the vicinity of the RHR pumps. This was a high noise area which made it difficult to communicate and was also in a 25-30 mrem/hr. field. There are other areas in the room where the noise is greatly reduced and the background radiation is minimal. (The ALARA area between the RHR pumps and core spray pump was noted to be 2-3 mrem/hr by the inspector.) This was discussed with the Operations Superintendent, and he said he is aware of this situation. He committed to obtaining additional communications lines to allow the use of ALARA areas. This will be followed in a subsequent report. F-4
- d. The inspector entered the east crescent to monitor the HPCI turbine lube oil change-out (see Section 4.c). On August 17, general cleanliness of this area was poor, with mud and turbine lube oil on the floor. In addition, a radiologically contaminated area boundary in the vicinity of the step off pad was not properly posted. The inspector informed radiation protection of these observations. The inspector returned to this area after HPCI was declared operable. The same radiological boundary was not properly posted. In addition, numerous protective clothing (PCs) and rags were left in the contaminated area in a pile and some had fallen onto the step off pad (clean area). The PC laundry bags were overfilled and spilling to the floor outside the contaminated area. The oil and mud were still present. Plant management and radiological personnel were informed of these observations. The inspector was informed that personnel were in the process of cleaning the area. The inspector revisited the area again on August 21 and cleanliness was adequate at that time. The condition of the HPCI room after completion of corrective actions and declaration of system operability were seen by the inspectors as an indication of poor quality work.
- e. Inspection report 89-08 contained a typographical error in Section 6.c. The amount of radioactive material consumed by the person who drank the spiked lemonade was 1.5 uCu rather than 1.5 mCu as documented in the report.

#### 7.1 Safety Assessment

The inspector concluded that conduct of radiological work by the I&C technicians, the contaminated area barriers left not properly posted, the utilization of communication lines in high noise and radiation field areas, and the condition of areas after corrective maintenance represented radiological program weaknesses, which needed improvement. These weaknesses were discussed with the appropriate station managers.

8. Exit Interview (30703)

At periodic intervals during the course of this inspection, meetings were held with senior facility management to discuss inspection scope and findings. In addition, at the end of the period, the inspectors met with NYPA representatives and summarized the scope and findings of the inspection as they are described in this report.

Based on the NRC Region I review of this report and discussions held with NYPA representatives during the exit meeting, it was determined that this report does not contain information subject to 10 CFR 2.790 restrictions.