

SEP 8 1982

Docket No. 50-333

Power Authority of the State of New York
James A. FitzPatrick Nuclear Power Station
ATTN: Mr. J. P. Bayne
Executive Vice President
Nuclear Generation
10 Columbus Circle
New York, New York 10019

Gentlemen:

Subject: Systematic Assessment of Licensee Performance (SALP) and your letter, JPN 82-66, August 3, 1982

This refers to the SALP for J. A. FitzPatrick Nuclear Power Station, conducted by this office on May 3, 1982 and discussed with you and your staff at the subject meeting on June 10, 1982. The list of attendees is attached as Enclosure 1. The NRC Region I SALP Report is attached as Enclosure 2 and covers the period March 1, 1981 to February 28, 1982. Your letter dated August 3, 1982 which we requested in our letter of May 19, 1982 provided commitments for performance improvements. These letters are attached as Enclosures 3 and 4.

Overall, we find that your performance of licensed activities generally is acceptable and directed toward safe facility operation. In the area of Security and Safeguards, we found your management attention and involvement to be aggressive and oriented toward nuclear safety; effective use of ample resources has resulted in a high level of performance. However, your performance in the areas of Plant Operations and Radiological Controls was found to be in need of increased NRC and Power Authority of the State of New York management attention.

In our meeting of June 10, 1982, we discussed our assessment of your regulatory performance in these areas, your comments on the SALP Program and assessment, and the actions that you are taking to improve your performance. We have also reviewed your letter of August 3, 1982, and determined that your actions to improve performance in these areas needing attention are generally responsive. We look forward to receiving the details of your plan to improve the safety oversight review of the Plant Operating Review Committee, particularly in light of the recent loss of experienced members like the Reactor Analyst Supervisor and the Maintenance Superintendent. Your plans for completing modifications and updating plant drawings as described in your letter dated August 3, 1982 are generally acceptable. However, we urge you to accelerate the solution to this long standing problem as much as possible consistent with other priorities for safe operation of the facility.

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We consider that our meeting was beneficial and improved mutual understanding of your activities and our regulatory program. Based on your comments during our meeting and your August 3, 1982 letter, we have found that no changes to our assessment are necessary and therefore, we have not supplemented our report. We have, however, made minor editorial and typographical corrections that did not affect our assessment or conclusions.

In accordance with 10 CFR 2.790(a), a copy of this letter and its enclosures will be placed in the NRC Public Document Room. No reply to this letter is required. Your actions in response to the NRC Systematic Assessment of Licensee Performance will be reviewed during future inspections of our licensed activities.

Your cooperation is appreciated.

Sincerely

Original Signed By:
Ronald C. Haynes
Regional Administrator

Enclosures:

1. SALP Management Meeting - Attendees
2. NRC Region I Systematic Assessment of Licensee Performance, J. A. FitzPatrick Nuclear Power Station, May 3, 1982
3. NRC Letter, R. Starostecki to J. P. Bayne, May 19, 1982
4. PASNY Response Letter, J. P. Bayne to R. Starostecki, Systematic Assessment of Licensee Performance, J. A. FitzPatrick Nuclear Power Station, May 3, 1982

cc w/encls:

- L. W. Sinclair, President and Chief Operating Officer
- A. Klausmann, Vice President - Quality Assurance
- M. C. Cosgrove, Quality Assurance Superintendent
- J. F. Davis, Chairman, Safety Review Committee
- C. M. Pratt, Assistant General Counsel
- Public Document Room (PDR)
- Local Public Document Room (LPDR)
- Nuclear Safety Information Center (NSIC)
- NRC Resident Inspector
- State of New York
- C. A. McNeill, Jr., Resident Manager
- W. F. Harrington, Director of Security and Safety
- Director, Power Division

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bcc w/encls:
Region I Docket Room (w/concurrences)
Chief, Operational Support Section (w/o encls)
E. Brunner
H. Kister
R. C. Lewis, Region II
R. L. Spessard, Region III
J. Gagliardo, Region IV
J. Crews, Region V
R. Gilbert, NRR
J. Taylor, IE:HQ
B. Bordenick, ELD

OFFICE	RI: DPRP	RI: DPRP	RI: DPRP	RI: ADM			
SURNAME	Kister/clc	Brunner for	Starostecki	Haynes	Allan		
DATE	8/26	9/22	9/21/82	9/7	9/3		

Enclosure 1

U. S. NUCLEAR REGULATORY COMMISSION

SALP Management Meeting Attendees

Licensee: Power Authority of the State of New York
10 Columbus Circle
New York, New York

Facility Name: James A. FitzPatrick Nuclear Power Station

Meeting at: Buchanan, New York

Meeting conducted: June 10, 1982

1. Licensee Attendees

R. Baker, Superintendent of Power, JAF
J. Bayne, Executive Vice President, Nuclear Generation
J. Brons, Resident Manager, Indian Point, Unit 3
R. Burns, Vice President BWR Support
J. Gray, Acting Director Licensing BWR Support
L. Guaguil, Director of Engineering BWR Support
J. Kelly, Manager, Rad. Health and Chemistry
A. Klausmann, Vice President, Quality Assurance
C. McNeill, Resident Manager, JAF
L. Sinclair, President and Chief Operating Officer
C. Spieler, Vice President, Public Relations
S. Zulla, Vice President, PWR Support

2. NRC Attendees

J. Allan, Deputy Regional Administrator, Region I
L. T. Doerflein, Resident Inspector
H. B. Kister, Chief, Reactor Projects Section 1C
J. C. Linville, Senior Resident Inspector
P. Polk, Licensing Project Manager, NRR
R. W. Starostecki, Director, DPRP

ENCLOSURE 2

SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE

May 3, 1982

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

REGION I

I. INTRODUCTION

a. Purpose and Overview

The Systematic Assessment of Licensee Performance (SALP) is an integrated NRC Staff effort to collect the available observations on an annual basis and evaluate licensee performance based on those observations with the objectives of improving the NRC Regulatory Program and licensee performance. The assessment period is March 1, 1981 through February 28, 1982.

The prior SALP assessment period was December 1, 1979 through November 31, 1980. Significant findings of that assessment are provided in the applicable Performance Analysis Functional Areas (Section IV).

Evaluation criteria used during this assessment are discussed in Section III below. Each criterion was applied using the "Attributes for Assessment of Licensee Performance" contained in NRC Manual Chapter 0516.

b. SALP Attendees:

- R. W. Starostecki, Director, Division of Project and Resident Programs
- S. D. Ebnetter for T. T. Martin, Director, Division of Engineering & Technical Programs
- G. L. Snyder for G. H. Smith, Director, Division of Emergency Preparedness & Operational Support
- E. J. Brunner, Chief, Reactor Projects Branch No. 1, Division of Project and Resident Programs
- H. B. Kister, Chief, Reactor Projects Section No. 1C, Division of Project and Resident Programs
- P. J. Polk, Licensing Project Manager, Operating Reactors Branch No. 2, NRR
- J. C. Linville, Resident Inspector, James A. FitzPatrick Nuclear Power Station

Other NRC Attendees:

- L. T. Doerflein, Resident Inspector, James A. FitzPatrick Nuclear Power Station

c. Licensee Activities

The facility operated at near full power from March until September with the exception of four unscheduled outages ranging in duration from two days to seven days. The unscheduled outages involved reactor recirculation pump seal repairs, low pressure coolant injection check valve packing gland leak repairs, replacement of a damaged reactor protection system cable and replacement of leaking safety relief valve topworks. On August 28, 1981, the Resident Manager, Mr. R. J. Pasternak was replaced by former Resident Manager J. D. Leonard as the interim Resident Manager. During September and October 1981, the facility operated at reduced power of about 70 percent to delay the refueling and modification outage originally scheduled to begin on October 1, 1981 until October 31, 1981 so that preparation could be completed.

From November 1981 until the end of the assessment period in February 1982, the facility underwent a scheduled major modification and refueling outage. Major modifications completed during the outage included phase II of III of the Mark I Containment Program, TMI Task Action Plan modifications, and Fire Protection modifications.

In December 1981, Mr. Corbin A. McNeill, Jr. replaced Mr. John D. Leonard as the facility Resident Manager.

d. Inspection Activities

Two NRC resident inspectors were onsite during the appraisal period.

Total NRC Inspection Hours: 2511 (Resident and region based)
Distribution of Inspection Manhours is shown on Table 3.

Emergency Plan appraisal team conducted an inspection on February 10-26, 1982.

A tabulation of Inspection Activities is attached as Table 4. A tabulation of Violations is attached as Table 5.

II. SUMMARY OF RESULTSJAMES A. FITZPATRICK POWER STATION

<u>FUNCTIONAL AREAS</u>	<u>CATEGORY 1</u>	<u>CATEGORY 2</u>	<u>CATEGORY 3</u>
1. Plant Operations			X
2. Radiological Controls Radiation Protection Radioactive Waste Management Transportation Effluent Control and Monitoring			X
3. Maintenance		X	
4. Surveillance (Including Inservice and Preoper- ational Testing)		X	
5. Fire Protection		X	
6. Emergency Preparedness		X	
7. Security & Safeguards	X		
8. Refueling		X	
9. Licensing Activities		X	

III. CRITERIA

The following evaluation criteria were applied to each functional area:

1. Management involvement in assuring quality.
2. Approach to resolution of technical issues from a safety standpoint.
3. Responsiveness to NRC initiatives.
4. Enforcement history.
5. Reporting and analysis of reportable events.
6. Staffing (including management).
7. Training effectiveness and qualification.

To provide consistent evaluation of licensee performance, attributes associated with each criterion and describing the characteristics applicable to Category 1, 2, and 3 performance were applied as discussed in NRC Manual Chapter 0516, Part II and Table 1.

The SALP Board conclusions were categorized as follows:

Category 1: Reduced NRC attention may be appropriate. Licensee management attention and involvement are aggressive and oriented toward nuclear safety; licensee resources are ample and effectively used such that a high level of performance with respect to operational safety or construction is being achieved.

Category 2: NRC attention should be maintained at normal levels. Licensee management attention and involvement are evident and are concerned with nuclear safety; licensee resources are adequate and are reasonably effective such that satisfactory performance with respect to operational safety or construction is being achieved.

Category 3: Both NRC and licensee attention should be increased. Licensee management attention or involvement is acceptable and considers nuclear safety, but weaknesses are evident; licensee resources appeared strained or not effectively used such that minimally satisfactory performance with respect to operational safety and construction is being achieved.

IV. PERFORMANCE ANALYSIS

1. Plant Operations

During the previous assessment period, (December 1, 1979 to November 31, 1980) twelve inspections identified one violation. The issue involved in the violation was adherence to Technical Specifications. Except for a refueling and torus modification outage between May and August 1980, the facility operated at near full power throughout the prior assessment period. In addition, the area of design changes and modifications required additional inspection effort during the last period because of failure to complete many longstanding modifications.

This area was under continuing review by the resident inspectors during the current assessment period (March 1, 1981 - February 28, 1982). Design changes and modifications were reviewed by region-based inspectors as well as by the resident inspectors.

Two civil penalties were assessed for failure to conduct a nuclear safety evaluation of a change in a limiting safety system setting and failure to restore required containment continuous atmosphere monitoring systems to service after a surveillance test. Four other violations involved failure to implement jumper procedures, removal of safety related components from service without proper authorization, and inadequate quality assurance in the areas of documentation of corrective action and control of classification of safety related components. In addition, there was one deviation from an FSAR commitment regarding containment isolation capability for closed systems inside containment. Fifteen LERs reported operational problems, four of which involved personnel errors.

Management Control of recently initiated design changes and modifications has improved considerably during the current assessment period under revised procedure, added staffing in the technical services department and improved technical support from corporate headquarters. However, there is evidence which suggests that little headway has been made toward closing out the large backlog of modifications for which much of the documentation such as drawing revisions remain incomplete. Although the licensee has more clearly identified the problems in this area, there does not appear to be much progress toward resolving them. Additional improvement in this area is expected as a result of a recent reorganization which collected all BWR support under a single vice president with extensive site experience. However, effectiveness in this area is still limited by unfilled vacancies in the corporate office. Management plans to relocate the support group offices to make these positions more attractive.

Licensee's management commitment to an excellent quality program as expressed in their responses to two civil penalties and at the enforcement conferences, which preceded them, appear to be sincere. However, their efforts to follow through on these commitments sometimes fall short of the mark. For example, in both civil penalty responses the licensee committed to the establishment of an independent Onsite Review Committee by the end of the 1981-1982 refueling outage to help prevent the type of management oversights which lead to these incidents. In correspondence initiated shortly after the end of the current assessment period, the licensee stated that although an individual had been selected to head the committee, it had not yet been fully staffed. The resident inspectors have seen little evidence to suggest that there is actually a functioning committee yet since there are apparently no procedures defining its responsibilities, and the chairman continues to be occupied with his previous responsibilities of developing Licensee Event Reports.

There have been problems noted by the resident inspectors in the area of Licensee Event Reports (LERs) which have included improper categorization of the causes of events, a continuing failure to assure that followup reports are completed and submitted in a timely manner, incomplete or incorrect descriptions of the events, and inadequate corrective actions to ensure the events do not recur. Examples of LERs for which the cause was reclassified as a result of inspector followup include LER 81-031/03L, LER 81-036/03L, LER 81-073/03L, and LER 81-074/03L. Those during the current assessment period for which followup reports are outstanding and overdue are LER 81-039/03L, LER 81-059/03L, LER 81-066/03L, LER 81-071/03L, and LER 81-082/03L. A recent event for which the descriptions were incorrect or incomplete until identified by inspectors include LER 81-078/03L. In addition, this problem has been identified in events which have occurred since the end of the assessment period. Similarly, the problem of inadequate corrective action has been noted in events which have been reported since the end of the assessment period.

Licensed Operator staffing is at a minimum to support plant operations. One shift supervisor was lost due to promotion to a management position, vacated by a licensed SRO leaving the company, and one licensed operator left the company. Two other licensed operators bid to other departments but withdrew these bids when management offered incentives not to transfer. Licensed Operators remain skeptical about management promises to improve conditions by adding more licensed operators to the staff. This is because an additional SRO will be required on shift by November 1982, which is later than the NRC required date but was approved by NRR. However, licensee management has increased considerably the tempo of Licensed Operator replacement training program to meet their commitments to the licensed operators as well as the NRC requirements.

The facility has had three Resident Managers during this assessment period, the middle one, a former Resident Manager, who is now a vice president, serving only in an interim capacity during the outage until the current one, a newcomer to the commercial industry, was able to assume the duties. The current Resident Manager exhibits a strong management style which seems to be providing the leadership necessary to produce a quality organization which can operate the facility in an improved manner.

Conclusion

Category 3

Board Recommendation

Perform an engineering team inspection, including a review of licensee site, corporate interfaces.

2. RADIOLOGICAL CONTROLS

ANALYSIS

During the previous assessment interval problems were identified in the following three categories: Radiation Protection; Radioactive Waste Management; and Transportation. In Radiation Protection, One item of noncompliance was identified and one immediate action letter was issued. The Health Physics (HP) Appraisal identified weaknesses in Rad Protection staffing, qualification and training, the ALARA Program, radioactive contamination control, airborne radioactivity surveillance, and internal and external exposure control. In Rad Waste Management and Transportation, weaknesses were found in procedures, staffing, training and the Quality Assurance program. Two other items of noncompliance were identified in radioactive waste shipment labeling. Additionally, the State of South Carolina issued a \$1,000.00 fine, and suspended the licensee's burial permit for 30 days, as a result of high waste container radiation levels.

During the assessment period there were three inspections of Rad Protection, Rad Waste Management and Transportation involving 108 onsite hours conducted by Region I Specialist Inspectors. The Resident Inspectors additionally reviewed activities in Rad Protection and Rad Waste Management routinely during the assessment period. Four inspections of Transportation Activities were conducted by Region II and Region IV specialist inspectors and by State Inspectors in South Carolina and Washington.

RADIATION PROTECTION

As late as November 1981, the licensee had not yet procedurally documented an ALARA program to effect personnel exposure reductions. The licensee had obtained the services of a contractor ALARA engineer to support a major outage. No management control system had been established to determine the effectiveness of his efforts. Although the facility expended 2,040 man-rem in 1980 (NUREG 0713 ranking; 4th highest BWR; 5th highest BWR/PWR), the licensee did not have any estimate of man-rem to support the outage. The lack of a documented ALARA program, and the personnel to support it, had been identified during the November 1980 Health Physics Appraisal. Although the final report was issued in January 1982, both plant and corporate licensee management had been made aware of NRC concerns in this area during the exit interview in 1980.

On October 7, 1981, three weeks prior to the outage, an organizational plan for the purpose of identifying the authority, responsibility or function of Health Physics personnel to support the outage had not been established. In response to inspector concerns, the licensee developed and implemented an adequate plan prior to the outage.

Two violations with five examples of failures to comply with procedural requirements relating to the use of RWP's were identified by the Resident Inspectors. Additionally three instances of failure in the control of access doors to high radiation areas in six months were characterized by NRC management as a repetitive problem and indicative of programmatic breakdown. The letter and report (81-27) were sent to the licensee in January 1982. The Resident Inspectors have increased their inspection coverage in this area. No additional violations were identified during the last quarter of the assessment period.

The documented training and qualification program for Health Physics technicians is structured and includes classroom, on-the-job and practical testing requirements. This licensee has a unique program which outlines the procedures to evaluate, train and qualify contractor Health Physics technicians before being allowed to function within the plant organization. The standards are applied equally to licensee and contractor technicians, resulting in uniformity regarding work practices and procedure adherence.

RAD WASTE MANAGEMENT, TRANSPORTATION

Two severity level III violations were identified. One, a generic problem, involved the use of urea formaldehyde spent resin solidification. The licensee, when notified by the burial site, immediately suspended use of urea formaldehyde and now uses an approved solidification process which will preclude recurrence.

The second severity level III violation was the result of two instances of leaking rad waste packages (a barrel containing absorbed oil and an oil-like liquid in a compacted LSA box). The instances were six months apart. Final inspection of the licensee's corrective action remains outstanding.

The training and qualification program for Rad Waste systems and packaging, developed and implemented in response to the Health Physics Appraisal findings in November 1980, had not, by March 1981, provided for adequate documentation to verify on-the-job training and systems qualifications were completed and reviewed by management.

The discovery of a leak in a spent resin liner being removed from temporary storage in preparation for shipment was the subject of an LER. Corrective actions included decontamination and repair of the liner. The LER did not address careful handling methodology to prevent similar damage while handling other packages in storage.

Conclusion

Category 3

Board Recommendations

Conduct followup inspections after licensee corrective actions in response to the Health Physics Appraisal findings have been completed.

3. Maintenance

During the previous assessment period, (December 1, 1979 - November 31, 1981) resident inspectors identified no violations. Problem areas identified included inadequate documentation of preplanning of major maintenance activities and inadequate communications between maintenance personnel requesting tag outs and operations personnel performing tag outs.

This area was under continuing review by the resident inspectors for the current assessment period (March 1, 1981 - February 28, 1982). While there have been no violations identified in this area, there were 17 licensee event reports attributed to maintenance activities.

During this assessment period the inspectors observed improved documentation of preplanning of major maintenance activities and improved interdepartmental coordination in the implementation of tag outs. Principle problem areas identified during the assessment period were a lack of management initiative to assure that safety related equipment and equipment required to reduce radioactive releases remained operable and to assure that the cause of equipment failures was identified and that adequate corrective action was taken to prevent recurrence, and a recently observed tendency to use detailed work request instructions in lieu of an approved revision to a maintenance procedure. Examples of equipment that was out of service during much of the period are the offgas system, cell 8 of B station battery, the reactor core isolation cooling system steam trap bypass valve, and one of the containment oxygen analyzers. Failure modes were never identified and reported in followup LER reports for containment spray system valve limit switch rotor failures and safety relief valve acoustic monitor failures. Cases where detailed instructions were used in lieu of procedure revisions during the recent refueling outage include replacement of scram solenoid pilot valve parts and in-place testing of safety relief valve solenoid valves.

During the current cycle, licensee management depended heavily upon contractors for maintenance support. Under the new plant management, emphasis has shifted to in-house accomplishment of maintenance tasks. Procedure adherence has been stressed. Prioritizing of maintenance activities is being revised. While an improved priority system should contribute to a more orderly reduction of the large backlog of work requests, added staffing will probably be required to eliminate the backlog with less dependence on contractors and to fully implement a preventative maintenance program which will assure such large backlogs do not develop in the future.

Conclusion

Category 2

Board Recommendations

Review the maintenance program after the revisions in progress are implemented.

4. Surveillance

During the previous assessment period, (December 1, 1979 - November 31, 1980) resident inspectors identified no violations. No significant problems were identified.

This area was under continuous review by the resident inspectors for the current assessment period (March 1, 1981 - February 28, 1982). Region based inspectors also reviewed surveillance procedures in the areas of Fire Protection, Refueling, Leakage Rate Testing, and Inservice Testing. Two violations were identified in this area. One involved a civil penalty for failure to provide an adequate surveillance procedure to assure that the safety related containment atmosphere monitoring systems were returned to service after the test as discussed in area No. 1. The second was for failure to complete required testing of the emergency diesel generator support systems within the prescribed frequency. There were 20 licensee events reported in this area including five for missed surveillance tests due to personnel errors or procedural inadequacies and 15 attributed to instrument drift.

Other issues identified during the period involved testing the reactor core isolation cooling (RCIC) system steam line isolation functions with the containment isolation valves failed in the open position, failure of a low pressure coolant injection valve motor due to an inadequate surveillance procedure, reporting of local leak rate test results, implementation of pump and valve inservice testing requirements, and calibration of some portable test equipment used in surveillance tests such as pyrometers used to monitor reactor vessel head stud temperatures.

The licensee corrected the causes of the missed surveillance tests, modified the procedures which were defective in other cases, and revised their report of local leak rate testing results. The licensee is in the process of implementing inservice testing of pumps and valves, and reviewing their program for calibration of measuring and test equipment. They have delayed the implementation of the independent Onsite Review Committee (ORC) committed to in response to the civil penalty as noted in area No. 1.

Conclusion

Category 2

Board Recommendations

None

5. Fire Protection

During the previous assessment period, (December 1, 1979 - November 31, 1980) resident inspectors and one region-based inspector identified three violations and one deviation. Problem areas included fire barrier integrity management and quality control of fire protection modification activities and housekeeping commitments.

This area was under continuing review by the resident inspectors during the current assessment period (March 1, 1981 - February 28, 1982). In addition, one inspection was conducted by a region-based inspector of fire protection modifications. There were two violations involving fire barrier integrity and fire brigade training. There were also two licensee events reported in this area which involved plugging of spray nozzles and failure of a multiplexer in the smoke detector systems.

Other problem areas identified included the use of the shift supervisor as the fire brigade leader, fire pump testing and performance, and hydrostatic testing of outdoor fire hoses. With the completion of fire protection modifications, the fire barrier integrity problems appear to be resolved. Under the new plant management there has been substantial improvement in fire brigade training and housekeeping. After NRR clarified the NRC position on the use of the shift supervisor as the fire brigade leader, the licensee was requested to comply by removing the shift supervisor from fire brigade leader duties after training other personnel to fulfill this duty by July 1982.

Conclusion

Category 2*

Board Recommendation

None

*This rating is assigned without regard to the licensee's position with respect to 10 CFR 50, Appendix R, provisions.

6. Emergency Preparedness

During the previous assessment period, (December 1, 1979 to November 31, 1980) an Immediate Action Letter was issued after the Health Physics Appraisal Inspection concerning problems with procedures, organization and training. There were no violations identified. The board concluded that increased inspection effort was required in this area.

During the current assessment period, (March 1, 1981 to February 28, 1982) the resident inspectors witnessed two licensee declared Unusual Events associated with a Reactor Recirculation Pump seal failure and a potentially contaminated injured man. In addition, they observed one onsite drill and one drill involving offsite facilities concerning a contaminated injured person, and they inspected emergency response facilities, training and equipment. No violations were identified.

An Emergency Preparedness Implementation Appraisal (EPIA) following the guidelines and criteria established by NUREG-0654, NUREG-0696, NUREG-0737, and 10 CFR 50 Appendix E, was conducted during the period February 16-25, 1982. During the appraisal, six significant findings and 34 improvement items were identified in Inspection Report No. 50-333/82-03. No followup inspection has been performed to close-out any of the identified deficiencies. There were significant deficiencies associated with training activity coordination, procedures for measuring iodine in the presence of noble gases, post accident sampling procedures and equipment, and emergency classification procedures. Findings such as these are typical of most licensees. The licensee committed to completion of corrective action for all of these items except for two within the required 120 days. An extension was required to complete installation of the post accident sample due to equipment procurement delays, and the measurement of iodine in the presence of noble gases is indefinite because it is still under NRR review.

The EPIA inspection team concluded that the licensee appeared to be capable of responding to, managing, and mitigating an accident and that an adequate state of emergency preparedness exists at the James A. FitzPatrick Nuclear Power Plant.

The licensee indicated that the public emergency notification siren system was installed by the required date. According to the licensee, each siren was growl tested and system operability was demonstrated by a statistical study based on an operational test of selected sirens.

Conclusion

Category 2

Board Recommendations

None

7. Security and Safeguards

Analysis

During the previous assessment period, (December 1, 1979 to November 31, 1980) five inspections of the security program resulted in twenty-one violations and a civil penalty.

During the current assessment period, (March 1, 1981 to February 28, 1982) two inspections were conducted by Region-based physical protection inspectors. In addition, the resident inspectors audited security activities monthly. Two Severity Level V and three Severity Level VI violations were identified.

The licensee was generally effective in security and safeguards during the assessment period. Site management was responsive in administering the security program, as indicated by periodic internal audits and procedural reviews. The security organization was amply staffed with well-trained supervisory and guard force personnel. The training and qualification program provided for periodic retraining of security personnel, in addition to the initial training administered to new hires. For violations identified in licensee audits and NRC inspections, the lack of repetition indicated the corrective actions taken were thorough and effective. Most NRC findings were corrected prior to the completion of the inspection in which they were identified, reflecting timely responsiveness to NRC initiatives. The violations identified during the assessment period were not considered major weaknesses but rather, minor programmatic breakdowns.

Conclusion

Category 1

Board Recommendations

None

8. Refueling

During the previous assessment period, (December 1, 1979 - November 31, 1980) one inspector identified no violations. One licensee event report indicated a radioactive release in the early stages of refueling operations which resulted in a violations.

In addition to resident inspector review of refueling preparations and activities, a region based inspector visited the facility to inspect refueling activities during the current assessment period (March 1, 1981 - February 28, 1982). There were no violations and no licensee event reports associated with refueling activities.

At the beginning of the previous refueling outage, the instantaneous release rate limit was exceeded because disassembly procedures did not provide for adequate monitoring and precautionary measures such as operation of filtered ventilation systems. The inspectors determined that the licensee action to prevent releases like this were adequate. These actions included better interdepartmental coordination, more frequent monitoring, and preplanned operation of filtered ventilation systems. Although the refueling outage start was delayed for about one month because of planning problems and procurement delays, the outage progressed smoothly in spite of unforeseen contingencies such as replacement of a section of core spray piping due to daily management planning sessions and frequent schedule adjustments. The outage extended about three weeks beyond the scheduled completion date.

During fuel receipt inspections, the licensee identified a bowed fuel rod which was replaced prior to insertion into the core. Licensee management actively pursued several concerns with the fuel vendor to satisfactory resolution. When reviewing the qualifications of refueling bridge operators, the inspector was concerned that the operators did not receive hands on training on the refueling bridge prior to actual fuel movement. The licensee agreed to require movement of the dummy fuel bundle prior to actual fuel movement in the future.

The inspector noted that licensed operator staffing at the facility cannot support the current general NRC requirement that a Senior Reactor Operator (SRO) be on the refuel floor during refueling. However, the licensee requested relief from this requirement and received it. The licensee has implemented a training program which should support having a second SRO on shift by the next refueling outage.

Conclusion

Category 2

Board Recommendations

None

9. Licensing Activities

Since most engineering work is contracted to vendors, a significant amount of home office managerial talent is devoted to contract administration. There is significant planning and prioritization as evidenced by PASNY's involvement in integrated scheduling. Although reviews are not always timely or thorough, significant improvement has been achieved over the reporting period. As a result, there has been a significant reduction in backlog, with the FitzPatrick license being amended 17 times over the past year.

Due to a large number of personnel assigned to the FitzPatrick site the licensee's technical strength is more apparent there than in the corporate office. With respect to the home engineering office, there has been high personnel turnover. In spite of excessive personnel turnover, technical understanding of the issues is usually demonstrated. It is felt that the turnover problem has been addressed over the past year and the situation has improved. Key positions have been filled in a reasonable period of time and there has been continuity in the licensing engineer positions.

There are very few items outstanding for significant periods of time. Problems of this type have been restricted to situations where higher priority NRR work has displaced work on other items. The licensee often demonstrates an awareness of existing as well as pending requirements. However, the licensee on several occasions has appeared unadvised. Although an attempt is made to remain abreast of NRC needs, more often than not responses are reactionary in nature. Once NRC clarification has been received the licensee usually pursues the solution.

Over the past year the licensee's performance has improved. This is, in part, due to the fact that the same personnel have been assigned to the FitzPatrick plant and the large post-TMI backlog has been significantly reduced.

Conclusion

Category 2

Board Recommendations

None

V. SUPPORTING DATA AND SUMMARIES

1. Licensee Event Reports

Tabular Listing

Type of Events:

A.	Personnel Error	10
B.	Design/Man./Constr./Install.	3
C.	External Cause	0
D.	Defective Procedure	5
E.	Component Failure	30
X.	Other	14
	Total	<u>62</u>

Licensee Event Reports Reviewed

Report No. 81-024/03L -81-082/03L, 82-001/01T - 82-002/03L and 82-004/03L

Causal Analysis

Six sets of common mode events were identified.

- a. LERs 81-037/03L, 81-043/03L, 81-053/03L, 81-065/03L, and 82-004/03L involved missed surveillances caused by personnel errors or procedural inadequacies.
- b. LERs 81-059/03L, 81-060/03L, and 81-061/01T involved inadequate management control of maintenance and surveillance activities caused by personnel error.
- c. LERs 81-064/04T and 81-070/04T reported anomalous results of environmental radiological samples of periphyton in excess of 10 times control sample concentrations.
- d. LERs 81-024/03L and 81-048/03L involved failure of single drywell equipment sump pumps when the redundant pump and monitoring system remained operable.
- e. LERs 81-025/03L, 81-026/03L, 81-040/03L, 81-044/03L, 81-047/03L, 81-050/03L, 81-054/03L, 81-055/03L, 81-056/03L, 81-057/03L, 81-067/03L, 81-068/03L, 81-072/03L, 81-075/03L, and 82-002/03L involved instrument drift. Within this set the following subsets were identified.

- (1) LERs 81-047/03L and 81-075/03L involved drift of drywell floor sump flow instrumentation.
 - (2) LERs 81-054/03L and 81-075/03L involved drift of the shutdown cooling permissive pressure switch.
- f. LERs 81-035/03L and 81-057/03L reported failures of the main steam line radiation monitors.

2. Investigation Activities

None

3. Escalated Enforcement Actions

a. Civil Penalties

A Civil Penalty (\$40,000) was assessed July 31, 1981 for failure to conduct a 10 CFR 50.59 nuclear safety evaluation when a Limiting Safety System Setting, G safety relief valve setpoint was changed in January 1981 based on a March 25, 1981 Resident Inspector Inspection.

A Civil Penalty (\$40,000) was assessed November 9, 1981 for failure to restore the containment atmosphere monitoring systems to service after a surveillance test in violation of a limiting condition for operation based on an August 21, 1981 Resident Inspector finding.

b. Orders

None

c. Immediate Action Letters

None

4. Management Conferences held During The Assessment Period

Special Enforcement Conference at the Region I office on April 29, 1981 to discuss the NRC finding regarding the replacement of G safety relief valve (SRV) with an SRV having a different setpoint without performing a 10 CFR 50.59 nuclear safety evaluation.

Special Enforcement Conference at the Region I office on September 2, 1981 to discuss the NRC finding and concerns regarding the event in which both drywell continuous atmosphere monitors were made inoperable as a result of the failure to reopen two sample line isolation valves following the performance of a surveillance test.

TABLE I
TABULAR LISTING OF LERS BY FUNCTIONAL AREA
JAMES A. FITZPATRICK POWER STATION

<u>Area</u>	<u>Number/Cause Code</u>	<u>Total</u>
1. Plant Operations	6/A, 1/B, 2/D, 5/E, 1/X	15
2. Radiological Controls	4/X	4
3. Maintenance	1/A, 9/E, 7/X	17
4. Surveillance	3/A, 1/B, 13/E, 3/D	20
5. Fire Protection	1/E, 1/X	2
6. Emergency Preparedness	None	
7. Security and Safeguards	None	
8. Refueling	None	
9. Licensing Activities	1/E, 2/X	3
10. Other (Original Design Errors And Equipment Failures Not Classifiable Into Areas 1-9.	1/B	1
TOTAL		62

Cause Codes: A - Personnel Error
 B - Design, Manufacturing, Construction, or Installation Error
 C - External Cause
 D - Defective Procedures
 E - Component Failure
 X - Other

TABLE 2
 VIOLATIONS (3/1/81 - 2/28/82)
 JAMES A. FITZPATRICK POWER STATION

A. Number and Severity Level of Violations

1. Severity Level

Deviation	1
Severity Level I	0
Severity Level II	0
Severity Level III	4
Severity Level IV	8
Severity Level V	7
Severity Level VI	4
Total	<u>24</u>

B. Violations Vs. Functional Area

FUNCTIONAL AREAS	Severity Levels						DEV
	I	II	III	IV	V	VI	
1. Plant Operations			2	3	1		1
2. Radiological Controls			2	3	3		
3. Maintenance							
4. Surveillance				2			
5. Fire Protection					1	1	
6. Emergency Preparedness							
7. Security & Safeguards					2	3	
8. Refueling							
9. Licensing Activities							
10. Others							
Totals			4	8	7	4	1

TABLE 3
INSPECTION HOURS SUMMARY (3/1/81 - 2/28/82)
JAMES A. FITZPATRICK POWER STATION

	<u>HOURS</u>	<u>% OF TIME</u>
1. Plant Operations	1040	41
2. Radiological Controls	348	14
3. Maintenance	154	6
4. Surveillance	117	5
5. Fire Protection	100	4
6. Emergency Preparedness	550	22
7. Security & Safeguards	173	7
8. Refueling	29	1
9. Licensing Activities	No Data Available	
Total	<u>2511</u>	<u>100%</u>

TABLE 4

Inspection Report Activities (3/1/81 - 2/28/82)James A. FitzPatrick Nuclear Power Plant

<u>Inspection Report No.</u>	<u>Inspection Hours</u>	<u>Areas Inspected</u>
81-07	108	Routine Resident Inspection
81-08	40	Region Based Independent Measurements of licensee's chemical and radio-chemical measurements program by NRC Mobile Radiological Measurements Laboratory
81-09	112	Routine Resident Inspection
81-10	36	Region Based Transportation Activities and Radioactive Waste Management Programs
81-11	1	Special Enforcement Conference regarding replacement of G safety relief valve with valve of a different setpoint without performing a 10 CFR 50.59 nuclear safety evaluation
81-12	93	Routine Resident Inspection
81-13	73	Region Based Physical Protection Inspection
81-14	71	Routine Resident Inspection
81-15	32	Region Based Fire Protection Inspection
81-16	124	Routine Resident Inspection
81-17	30	Region Based Design Change/Modification Inspection
81-18	67.5	Routine Resident Inspection
81-19	10	Special Resident Inspection of Operational Safety Verification

TABLE 4 (Continued)

Inspection Report Activities (3/1/81 - 2/28/82)James A. FitzPatrick Nuclear Power Plant

<u>Inspection Report No.</u>	<u>Inspection Hours</u>	<u>Areas Inspected</u>
81-20	1	Special Enforcement Conference for failure to restore drywell continuous air monitoring system to service after a surveillance test
81-21	122	Routine Resident Inspection
81-22	0	Inspection of radioactive waste shipment by South Carolina Department of Environmental Control
81-23	72	Region Based Radiation Protection Outage Preparation and Outage Inspection
81-24	134	Routine Resident Inspection
81-25	60	Region Based Physical Protection Inspection
81-26	175	Routine Resident Inspection
81-27	133	Routine Resident Inspection
81-28	0	Region IV Based Radioactive Waste Shipment Inspection
81-29	0	Inspection of Radioactive Waste Shipment by Washington Department of Social and Health Services
82-01	165	Routine Resident Inspection
82-02	162	Routine Resident Inspection
82-03	503	Emergency Preparedness Appraisal
82-04	34	Region Based Primary Containment Integrated Leak Rate Testing Inspection

TABLE 5

James A. FitzPatrick Nuclear Power PlantEnforcement Data (3/1/81 - 2/28/82)

<u>Inspection Report No.</u>	<u>Inspection Date</u>	<u>Violation</u>	<u>Severity Level</u>	<u>Functional Area</u>
81-07	March 1-31, 1982	Failure to obtain prior Commission approval or perform a nuclear safety evaluation when changing G safety relief valve setpoint	III	1
		Failure to document corrective action for condition adverse to quality	IV	1
		Failure to meet FSAR commitment regarding containment isolation capabilities	Deviation	1
81-10	April 14-17 and 27, 1981	Failure to establish procedures for opening packages of licensed material	V	2
81-12	May 1-31, 1981	Failure to barricade High Radiation Area	IV	2
		Failure to complete surveillance test of emergency diesel generators	IV	4
81-13	June 1-5, 1981	Failure to log entries to vital areas	VI	7
		Failure to log control of keys	VI	7
81-18	August 1-31, 1981	Failure to control release of equipment for maintenance activities	IV	1
		Failure to barricade High Radiation Area	IV	2

TABLE 5 (Continued)

James A. FitzPatrick Nuclear Power Plant

Enforcement Data (3/1/81 - 2/28/82)

<u>Inspection Report No.</u>	<u>Inspection Date</u>	<u>Violation</u>	<u>Severity Level</u>	<u>Functional Area</u>
81-18 (continued)		Failure to follow Radiation Work Permit Procedures	V	2
81-19	August 21-31, 1981	Failure to provide required number of operable reactor coolant system leakage detection systems	III	1
		Failure to establish surveillance procedure to restore drywell continuous atmosphere monitoring systems to service	VI	4
81-21	September 1-30, 1981	Failure to follow emergency diesel generator operating procedure	V	5
81-22 81-29	May 27-28, 1981 November 18, 1981	Failure to provide strong, tight packages for waste shipments	III	2
81-25	November 2-6, 1981	Failure to follow security implementing procedure	V	7
		Failure to test security equipment	V	7
81-26	November 1-30, 1981	Failure to control identification of safety related equipment	IV	1
		Failure to take physical protection compensatory measures	VI	7

TABLE 5 (Continued)

James A. FitzPatrick Nuclear Power PlantEnforcement Data (3/1/81 - 2/28/82)

<u>Inspection Report No.</u>	<u>Inspection Date</u>	<u>Violation</u>	<u>Severity Level</u>	<u>Functional Area</u>
81-27	December 1-31, 1981	Failure to follow jumper procedure	V	1
		Failure to lock High Radiation Area	IV	2
		Failure to follow Radiation Work Permit Procedure	V	2
		Failure to follow Fire Brigade Training Procedure	VI	5
81-28	September 28, 1981	Failure to ship solidified waste without detectable free standing liquid	III	2

ENCLOSURE 3