

U.S. NUCLEAR REGULATORY COMMISSION
REGION I
SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE
INSPECTION REPORT 50-410/85-98
NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT UNIT 2
ASSESSMENT PERIOD: FEBRUARY 1, 1985 - JANUARY 31, 1986
BOARD MEETING DATE: MARCH 17, 1986

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I. INTRODUCTION

A. Purpose and Overview

The Systematic Assessment of Licensee Performance (SALP) is an integrated NRC staff effort to collect the available observations and data on a periodic basis and to evaluate licensee performance based upon this information. SALP is supplemental to normal regulatory processes used to ensure compliance to NRC rules and regulations. SALP is intended to be sufficiently diagnostic to provide a rational basis for allocating NRC resources and to provide meaningful guidance to the licensee's management to promote quality and safety of plant construction and operation.

This SALP differs substantially from previous Nine Mile Point 2 SALPs. The construction related activities have been combined into one functional area. New functional areas were added to address plant operational aspects. As this will be the last SALP issued prior to license issuance, the focus was directed to operational readiness and performance.

A NRC SALP Board, composed of the staff members listed below, met on March 17, 1986 to review the collection of performance observations and data to assess the licensee performance in accordance with the guidance in NRC Manual Chapter 0516, "Systematic Assessment of Licensee Performance." A summary of the guidance and evaluation criteria is provided in Section II of this report.

B. SALP Board

Board Chairman

R.W. Starostecki, Director, Division of Reactor Projects (DRP)

Members

E.G. Adensam, Director, BWR Project Directorate No. 3
 S.J. Collins, Chief, Projects Branch No. 2, DRP
 L.T. Doerflein, Project Engineer, Projects Section 2C
 J.P. Durr, Chief, Engineering Branch, Division of Reactor Safety (DRS)
 R.A. Gramm, Senior Resident Inspector, Nine Mile Point Unit 2
 M.F. Haughey, Project Manager, BWR Directorate No.3
 S.D. Hudson, Senior Resident Inspector, Nine Mile Point Unit 2
 J. Linville, Chief, Projects Section No. 2C, DRP

C. Background

1. Licensee Activities

The licensee has stated the project is 95% complete overall. Construction activities have included the completion of large bore piping and supports, electrical raceways, HVAC duct and supports, and small bore piping and supports. Work is continuing on fire protection and detection systems, painting, cable terminations, and instrument tubing. As of February 24, 1986, ninety one (91) of one hundred and eight (108) systems have been turned over for testing and fifty one (51) of one hundred and thirty six (136) preoperational or acceptance tests have been completed. Significant tests completed include low and high pressure core spray, the diesel generator reliability tests, and the Reactor Coolant System hydrostatic test. Major upcoming test milestones include the Loss of Power and Integrated Leak Rate tests. The site workforce has declined significantly from 7200 to 5200 personnel.

2. Inspection Activities

One NRC Senior Resident Inspector for construction was assigned throughout the SALP period. A construction Resident Inspector was additionally onsite through June 1985. A Senior Resident for preoperational testing was assigned on a part-time basis during the period. A Region I Project Engineer was detailed to the site for an extended period to supplement the resident coverage. Team inspections conducted during the period include a Nondestructive Examination Independent Measurement inspection, a Technical Specifications As-Built inspection, a Fire Protection inspection, a Quality First Program (Allegation handling program) inspection and several multi-discipline region based mini team inspections.

The NRC inspection effort during the assessment period totalled 4522 hours by the resident and region based inspectors. The distribution of inspection hours is shown in Table 2. Inspection activities and enforcement data are summarized in Tables 3 and 4 respectively.

3. Other Activities

On March 11, 1985 the ACRS reported to the NRC Chairman that, subject to the satisfactory resolution of NRC open items and the satisfactory completion of construction and staffing and preoperational testing, that the ACRS believes that there is reasonable assurance that Nine Mile Point 2 can be operated at full power without undue risk to public health and safety.

The Safety Evaluation Report (SER) NUREG-1047 was issued by NRR during February 1985. Supplements 1 and 2 were issued during June and November, 1985 respectively. There are nine outstanding issues and thirty nine confirmatory issues identified in Supplement 2. Several site audits and visits have been performed by NRR during the period.

II. CRITERIA

Licensee performance is assessed in selected functional areas, depending on whether the facility is in a construction, preoperational, or operating phase. Functional areas normally represent areas significant to nuclear safety and the environment, and are normal programmatic areas. Special areas may be added to highlight significant observations.

One or more of the following evaluation criteria were used to assess each functional area.

1. Management involvement and control in assuring quality
2. Approach to resolution of technical issues from a safety standpoint
3. Responsiveness to NRC initiatives
4. Enforcement history
5. Operational and Construction events (including response to, analysis of, and corrective actions for)
6. Staffing (including management)
7. Training effectiveness and qualification

Based upon the SALP Board assessment each functional area evaluated is classified into one of three performance categories. The definitions of these performance categories are:

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 so that a high level of performance with respect to operational safety and construction quality 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 reasonably effective so that satisfactory performance with respect to operational safety and construction quality 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 appear to be strained or not effectively used so that minimally satisfactory performance with respect to operational safety and construction quality is being achieved.

The SALP Board has also assessed each functional area to compare the licensee's performance during the last quarter of the assessment period to

that during the entire period in order to determine the recent trend for each functional area. The trend categories used by the SALP Board are as follows:

Improving: Licensee performance has generally improved over the last quarter of the current SALP assessment period.

Consistent: Licensee performance has remained essentially constant over the last quarter of the current SALP assessment period.

Declining: Licensee performance has generally declined over the last quarter of the current SALP assessment period.

III. SUMMARY OF RESULTS

A. Overall Facility Evaluation

During this assessment period the applicant's performance was satisfactory in all areas. Improved craft attitudes regarding the necessity to build quality into the plant were apparent while management maintained oversight of construction quality through a site trending effort that tracked key parameters. In addition, the acceptability of previously installed components was assured through reinspection efforts. Notwithstanding, the poor housekeeping conditions, and the occasional lapses in the implementation of complete corrective actions and control of Final Safety Analysis Report commitments are areas where improvement is needed.

The preoperational test activities have been executed by generally knowledgeable personnel and the field testing has been well controlled. Close monitoring of preoperational test activities has been maintained by Quality Assurance personnel. Also, permanent plant staff have been actively involved in the system turnover and preoperational testing process to gain system familiarization and to exercise plant operating procedures. Nonetheless, in preparing for fuel load, increased management attention is warranted in performing more timely reviews of test results to assure that satisfactory test completion was achieved.

For the transition from the construction phase, the applicant conducted a self evaluation to assure that all necessary preparations have been performed to support plant operations. The permanent plant staff positions have been filled with technically competent personnel. Due to a high Reactor Operator failure rate on the initial licensed operator examinations, increased management attention was given to the operator training program to ensure a sufficient number of licensed operators were available to support fuel load. As a result, significant improvement in candidate performance was noted on the second set of examinations.

The applicant has maintained an unrealistically ambitious schedule to achieve the projected fuel load date. Numerous inspection and licensing issues remain to be resolved prior to license issuance. The routine applicant assessment of plant status has not provided worthwhile information for NRC resource scheduling.

B. Facility Performance

<u>Functional Area</u>	<u>Category Last Period</u> <u>(10/1/83-1/31/85)</u>	<u>Category This Period</u> <u>(2/1/85-1/31/86)</u>	<u>Trend</u>
A. Operations	N/A		
B. Training and Qualification Effectiveness	N/A		
C. Radiological Controls	N/A		
D. Maintenance	N/A		
E. Preservice Inspection	N/A		
F. Preoperational Testing	N/A		
G. Fire Protection	N/A		
H. Security	N/A		
I. Construction	2		
J. Quality Assurance	2		
K. Licensing	2		

IV. PERFORMANCE ANALYSIS

A. Operations (358 hours, 8%)

1. Analysis

This functional area was not addressed in previous SALP assessment periods. During the current assessment period, the one specialist inspection of Technical Specifications was performed. The resident inspectors also assessed this area during the review of preoperational testing.

The comparison of Technical Specifications and selected Interim Operating Procedures with the FSAR and the as-built systems found no major discrepancies. The licensee used its experienced previously licensed Shift Supervisors in the preparation and review of each of these documents to help ensure their accuracy. The Interim Operating Procedures were developed to allow validation and revision during the preoperational testing phase. The management controls to ensure that accurate Operating Procedures are issued prior to licensed operation were found to be adequate.

The implementation of the tagging and jumper controls program appears to be adequate. Three valves were found mispositioned after the reactor vessel hydrostatic test. The valves had been tagged by the licensee. It is not known if the valves were tagged in the incorrect position or whether they were repositioned after tagging. No other errors have been identified.

The fuel receipt inspection proceeded smoothly. This was an integrated plant operation involving security, fire protection, radiation protection and maintenance department mechanics who perform the actual fuel handling and inspection. This evolution was well controlled with detailed procedures and knowledgeable personnel. A personnel error caused two unopened boxes of fuel to topple over when a lifting sling caught on one of the boxes. The NRC was promptly informed by the licensee. The fuel was returned to the vendor for examination to determine its acceptability for use.

There are 18 licensed Senior Reactor Operators and 21 licensed Reactor Operators on the staff. This should allow for adequate shift manning without the excessive use of overtime. The station superintendent, operations superintendent and all shift supervisors have previous licensed operations experience.

2. Conclusion:

Rating:

Trend:

3. Board Recommendations:

Licensee:

NRC:

B. Training and Qualification Effectiveness (50 hours, 1%)

1. Analysis

During this assessment period, Training and Qualification Effectiveness is being considered as a separate functional area for the first time. Training and qualification effectiveness continues to be an evaluation criterion for each functional area.

The various aspects of this functional area have been considered and discussed as an integral part of other functional areas and the respective inspection hours have been included in each one. The inspection hours allotted to this functional area resulted for one team inspection of the training programs.

This discussion is a synopsis of the assessments related to training conducted in other areas. Training effectiveness has been assessed as part of most inspections and is measured primarily by the observed performance of individuals. NRC assesses by effectiveness of industry's training and qualification program by conducting operator licensing and requalification exams, monitoring events involving personnel error, conducting performance-oriented training inspections and including a training summary evaluation as part of the SALP process. The discussion below addresses licensed operator training, non-licensed staff training and the status of INPO training accreditation.

During the current assessment period, two sets of Operator and Senior Operator licensing examinations were administered. A team inspection was also conducted which examined the Unit 2 initial operator training program and technical training for mechanics, electricians, and instrument and control (I&C) technicians.

The results of the first licensing examination, administered in June 1985, indicated significant weaknesses in the training program as 75% of the RO and 20% of the SRO candidates failed the examinations. The licensee attributed this to a lack of a fully integrated training program. The simulator and the operating procedures were not completed when the training began. Therefore, they were not integrated with the classroom instruction. No written exams other than the audit exam were given during the last 2 months of training since this time was devoted to simulator training.

An inspection of the licensed operator training program found that the licensee had corrected the above deficiencies. Excellent physical facilities are provided for training. Instructors are knowledgeable and students have a positive attitude towards

training. When the NRC identified a lack of a structural on-the-job training program for fuel handling, the licensee promptly agreed to provide this training.

The second licensing examinations were administered in December 1985. They show a significant improvement over the first license examination results. Ninety percent of the ROs and 66% of the SROs will receive operating licenses. The 34% failure of SROs is somewhat higher than normal, however a distinct separation between passing and failing exam scores was observed. These results indicate the cause for the failures to be attributable to individual candidate deficiencies and not programmatic deficiencies. Marked improvement in the simulator performance was noted during the second examination. However, the licensee should continue an aggressive program for improving the simulator fidelity.

The licensee has clearly strengthened its training programs for electricians, mechanics, and I&C technicians. The quality of instructions is excellent, classroom environment and training aids have improved, and the training department is receptive to plant identified training needs. None of the licensee's training programs have received INPD accreditation to date.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

C. Radiological Controls (130 hours, 3%)

1. Analysis

This area was not addressed in the previous SALP. Within this assessment period, four radiation specialist inspections were performed. The licensee's proposed organization and projected staffing appears to be adequate to support the combined operations of Units 1 & 2. With one exception, the position responsibilities and authority are clearly defined.

Review of licensee training of personnel associated with fuel receipt activities found that acceptable radiological controls training was provided. Reviews of the licensee's current program for training, qualifying and retraining radiological control personnel for routine operation found that the program was lacking and not well defined. It was found that adequate methods were not in place to train personnel in new procedures and procedure changes in a timely manner, the license had not clearly identified the minimum tasks an individual must be qualified in based on his scope of responsibilities, the retraining/requalification frequency for radiation protection and chemistry personnel has not been established, and the minimum material an individual should be retrained and requalified in following initial training and qualification was not clearly defined. The licensee recently established a program to train personnel in safety significant procedures and procedure changes in a timely manner but failed to establish a mechanism to evaluate its effectiveness. Although licensee personnel are addressing these matters, additional management attention should be directed to this area to ensure an adequate and effective radiological controls personnel training qualification and retraining program is established.

Reviews of the training, and retraining program for Radioactive Waste Operations personnel found that a program to address these matters at Unit 2 has not yet been established. The licensee is currently establishing the program in this area for Unit 2. The licensee's plans in this area will provide for a comprehensive technically sound program.

Review of the training and qualification of startup personnel identified problems in the incomplete and unavailable records which precluded NRC determination of the adequacy of the training and qualification of these personnel. Documentation of the acceptability of the architect engineers (AEs) training program for startup personnel was not available nor were all resumes of personnel readily available for review. When brought to the licensee's attention, the licensee performed a timely, comprehensive audit of the acceptability of the training, qualification,

and experience of startup personnel. The licensee documented the review of the acceptability of the AEs training program and located the resumes of all individuals.

The review of the overall licensee progress in establishing and implementing a radiological controls program for Unit 2 found that the licensee is establishing and implementing all program areas in a timely manner to support fuel load and other Unit 2 milestones. These programs are primarily Unit 1 programs approved for use in Unit 2. Special program procedures (e.g., high radiation area access control, and surveys) are being separately developed for Unit 2. The licensee is acting in a timely manner to ensure all appropriate program elements and associated procedures are in place to support appropriate plant milestones.

The licensee is currently developing the radiation shield survey program. The licensee has contacted other utilities and obtained procedures and other information to assist in the development of the program. The licensee's efforts in this area are indicative of an attention to detail in the program development. One deficiency relating to establishment of adequate administrative controls to ensure resolution of out of specification survey data was identified. The licensee addressed this issue in a timely manner.

The licensee has not yet commenced testing the major portions of his solid, liquid and gaseous waste processing systems. However, review indicates a comprehensive program in this area is to be established. The licensee is paying particular attention to the processing capabilities of the solid waste processing system to ensure it will provide a solidified product capable of meeting burial site requirements. The licensee's efforts in this area should ensure compliance with burial site requirements and are indicative of attention to detail.

Walkdowns of the solid and liquid waste processing systems and safety related ventilation filter trains found the installed systems consistent with FSAR descriptions.

The licensee has installed a state-of-the-art radioactive waste control room. The control room provides for manual and computer controlled solid and liquid waste processing.

The licensee has installed a separate decontamination bridge and associated equipment for decontaminating the reactor cavity. This, in conjunction with licensee efforts to polish the reactor cavity walls, are clear indications of management efforts to minimize exposure during refueling operations and to maintain exposure ALARA over the life of the plant.

Regarding new fuel receipt and inspection activities, the licensee performed acceptable preplanning for these activities. Defined procedures for control of the activities were established. Observation of fuel receipt and handling activities, however, identified several deficiencies requiring licensee attention. These deficiencies involved proper evaluation of smear sample results and proper completion of smear counting instrument control charts. The licensee initiated timely action to evaluate and correct these matters.

The results of the special inspection of the identification of an apparent leaking alpha source indicated the licensee addressed this matter in a timely, generally technically sound manner. The licensee's reviews were comprehensive and determined the problem was due to radon and not a leaking source.

Review of licensee action on bulletins, circulars, and generic letters in this area found that the licensee's efforts were not well coordinated and timely, the action taken was not comprehensive, and that action previously taken was not reviewed to determine if it was still adequate considering changes to plant systems. In some cases, the licensee ceased action on some circulars based on NRC acknowledgement that the licensee has received the circulars and planned to incorporate guidance contained in the circular into appropriate operations procedures and facility training programs. This problem is particularly evident in licensee actions to prevent, detect, and control cross contamination between radioactive and non-radioactive systems and resultant personnel exposures or unmonitored releases. This is also evident in licensee programs to control on site storage of radioactive material. The above demonstrates a less than acceptable response to NRC initiatives relative to control of radioactive material. The licensee has initiated action to address these matters prior to fuel load and other appropriate milestones.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

D. Maintenance (32 hours, 1%)

1. Analysis

This area was not addressed in the previous SALP. Both resident and region based inspectors have observed the implementation of the preventive maintenance program.

SWEC was responsible for the implementation of the pre-turnover Preventive Maintenance (PM) program. The PM group has been adequately staffed with supervisory and craft personnel and dedicated Quality Control inspectors were provided for PM activities. PM schedules were maintained on a computerized system. SWEC engineering reviewed Environmental Qualification and equipment manuals to identify all necessary PM measures. The site program was revised to incorporate all of the requisite PM requirements.

The Diesel Generator space heaters were found de-energized on two occasions and some equipment was not properly covered. The conditions were apparently due to in process construction activities. No detrimental equipment effects were identified.

The post-turnover PM activities are similarly guided by a computerized scheduling system. NMPC maintenance personnel are available to supplement SWEC efforts.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

E. Preservice Inspection (95 hours, 2%)

1. Analysis

This area was not addressed in the previous SALP. Within the assessment period three specialist inspections supplemented by some routine resident inspections were performed.

The field implementing procedures were found technically adequate. Examinations were performed by qualified personnel and the resulting data was properly recorded and evaluated. Inprocess ultrasonic and liquid penetrant examinations were found to meet ASME requirements. The PSI contractor appears to have sufficient personnel resources to effectively carry out the examination program.

The licensee was observed to have implemented a conservative approach regarding volumetric weld examination. The ASME code requires that only the lower third of the weldment be examined while the PSI site program specifies the entire weld be examined. The licensee is credited for going beyond minimum standards to ensure the quality of the plant installations.

Review of the docketed PSI program yielded the conclusion that the program was extremely difficult to follow. The program list of weldments was not consistent with the ASME code categorization as the welds were listed by plant system in lieu of code category and the scope of weldments to be covered by the program was ambiguous. The licensee has since re-submitted a completely revised program.

Review of ultrasonic examination records identified that neither the licensee nor any of the contractor organizations were taking responsibility for the acceptability of the data.

The initial program shortcomings were attributed to the licensee reliance upon SWEC to develop the PSI program. The responsible personnel were apparently unfamiliar with some Section XI requirements and current docketed programs.

With the revised program and management support to ensure adequate staffing levels, the site PSI program should be effectively implemented.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

F. Preoperational Testing (710 hours, 16%)

1. Analysis

This area was not addressed in the previous SALP. During the current assessment period, three specialist inspections were performed. The resident inspectors also inspected this area.

Several examples were found in which the procedure acceptance criteria were inconsistent with the stated value in the FSAR. This indicates inadequate review of the procedures by the licensee to ensure compliance with licensing commitments. Most procedures were found to yield a valid test of the system's function and logic. An exception to this was an improper valve line-up in the reactor vessel hydrostatic test procedure that would have prevented subjecting a portion of the system to test pressure. This was corrected prior to the test.

The licensee's program for testing is divided into two phases: preliminary testing of individual components and preoperational tests of systems and components to satisfy the requirements of the FSAR. The inspectors noticed that the licensee was using some of the preliminary test results to satisfy FSAR acceptance criteria. While this is an acceptable approach, the licensee was slow in responding to the inspector requests for a list of those preliminary tests so that they can be reviewed and inspected. Errors were identified in the list when submitted. In the future, prompt attention by the licensee to NRC requests will ensure review in a timely manner.

To date, only six safety-related systems have completed pre-operational testing. The performance of preoperational tests have generally been acceptable. Test engineers are knowledgeable of their system and the administrative controls for testing. Quality Assurance personnel were also noted witnessing the testing.

Preliminary testing of the Diesel Generator units has identified numerous problems. These involved wiring errors, improper circuit design, lube oil hose damage, and unit operation at excessive load. If left uncorrected, several of the deficiencies would have precluded the diesel operability during emergency conditions. While the test program satisfactorily identified these problems prior to plant operation, the low level of completed safety related system testing could potentially result in similar problems yet to be identified in other plant systems.

After the reactor vessel hydrostatic test, the licensee discovered portions of five small bore lines that had not been correctly inspected. Four were due to valve line up errors and

one was an instrument line that the licensee failed to examine during the hydro. Each of these lines were subsequently individually hydrostatically tested. The NRC review of the hydrostatic test results is not complete.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

G. Fire Protection (157 hours, 3%)1. Analysis

This area was not addressed in the previous SALP. Within the assessment period two specialist inspections were performed.

A team inspection was performed to assess the plant safe and remote shutdown capabilities in the event of a design basis fire. An essential cabling study had been performed by NMPC and the separation of redundant cables were verified by computer analysis. The plant procedures for achieving remote shutdown were found adequate.

The licensee fire protection staff and consultants were knowledgeable and the plant design routinely exhibited a conservative philosophy to assure plant safety. The licensee records were complete and well maintained which facilitated the inspection activities. Corporate management were frequently involved during the NRC inspection to resolve items of concern and to provide timely formal commitments. Several specific items of concern, such as fire detectors, emergency lighting and some fire proof installations remain open due to the relatively low level of construction completion in this area.

A special review was performed to support fuel receipt activities. Areas examined included fire brigade training, control of combustibles, and operability of fire extinguishing systems. Licensee management had directed that continuous and roving fire watches be established as certain fire mitigating systems were not yet operational. The overall program was found adequately implemented.

2. Conclusion:

Rating:

Trend:

3. Board Recommendations:

Licensee:

NRC:

H. Security (136 hours, 3%)

1. Analysis

This area was not addressed in the previous SALP. Three pre-operational security program reviews, including one inspection of the implementation of security and other storage requirements for new fuel, and one inspection of the licensee's program for control and accountability of Special Nuclear Material (SNM), were performed by regional-based safeguards inspectors.

The licensee was very aggressive in the development of the physical security program and its integration into the existing security program for Unit 1. The licensee modified the existing security management staff, redesigned security plant implementing procedures and orders, and conducted security training and orientation in new security systems. These additional security tasks have been accomplished with minimal impact on the daily operation of the Unit 1 security program.

The licensee aggressively pursued resolution of outstanding issues identified during Region I preoperational security program reviews. All security program plans were found to be professionally prepared, well organized and submitted in a timely manner. Changes necessitated as a result of NRC review were accomplished in a timely and cooperative manner, demonstrating the licensee commitment to an effective security program and their responsiveness to regulatory requirements.

Management interest in an effective program was further demonstrated by the construction of a modern two story security office building. Facilities include a document control vault, special purpose offices and a modern physical fitness room with lockers and showers. In addition, the ground floor of this building serves as an protected area control point that includes a weather protected vehicle entrapment area.

QA auditors and survey personnel were aggressive and prompt in following up on identified issues. Project engineers, responsible for the systems and equipment, and on-site security management personnel were found to be very knowledgeable of program status, testing schedules, turnover dates and NRC performance criteria. NRC reviews found that the licensee's integrated security resources were ample, well defined and effective. Attention was generally found to be directed toward practical applications and lessons learned. However, in one instance, several hardware problems were identified by NRC inspectors which may have been avoided by utilizing existing security expertise from Unit 1 to review work and perform walkdown inspections at Unit 2. Such practices should be implemented as hardware and systems are completed in order to prevent startup delays.

Security personnel received specialized training on Unit 2 security equipment and systems. The training was administered by qualified personnel and was consistent with the requirements of the current NRC-approved Training and Qualification Plan for Unit 1. Unit 2 security personnel were observed by the NRC staff to have progressively improved their capabilities during this assessment period.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

I. Construction (2480 hours, 61%)

1. Analysis

The previous SALP evaluated the following construction areas separately: Containment, Piping systems; Mechanical components; Support systems; Electrical equipment; Instrumentation Systems; Nondestructive Examination; and Engineering. These areas have been combined under the Construction functional area for this SALP.

Concerns identified in the previous SALP included: improper structural steel connection bolting; pipe supports not installed in accordance with design documents; control of Preventive Maintenance program; SWEC Procurement Quality Assurance not always effective; adequacy of design change documents; and electrical equipment wiring deficiencies.

Inspection coverage in this area has been performed by both specialist and resident inspectors. A second Nondestructive Examination van inspection was performed. The conduct of the SWEC Engineering Assurance Technical Audit was inspected by both Region I and Inspection & Enforcement personnel.

Vendor wire termination deficiencies were identified during sample reinspections of installed electrical equipment. Based upon the unsatisfactory results, a total inspection was performed of all safety related electrical equipment to assure the adequacy of the vendor workmanship. Inspection of other electrical installations found conformance to the design requirements.

The electrical separation problems of the Power Generation Control Complex (PGCC) have been evaluated in previous SALPs. NMPC instituted significant field efforts to rectify the conditions including numerous panel walkdowns, enhanced cable marking and enhanced inspection attributes. After the completion of the licensee corrective actions, a NRR site audit identified another PGCC panel for which General Electric (GE) had not invoked the separation requirements. Completion of additional NMPC separation walkdowns, that are scheduled, are necessary to resolve the outstanding PGCC separation concerns.

Inspection of instrument systems identified a generally high degree of design conformance. Followup inspection of an allegation received by Region I identified deficiencies regarding Neutron Monitoring System (NMS) cable installations and associated installation procedures. The NMS cable installation were demonstrated acceptable during engineering mock pulls.

The rework of the Main Steam Isolation Valves (MSIVs) involved an overlay of the inlet and outlet spool bores. The rework

process was well controlled and evidence of careful planning was apparent. Site organizations, namely engineering, construction and quality, appeared to interface effectively.

The second NDE van inspection independently confirmed satisfactory conduct of site weld inspections. Licensee corrective actions to resolve adverse conditions were reviewed and found acceptable. The radiographic film duplication, film interpretation, and film indexing were notably resolved.

The multifunction and enterprise supports fabricated by Reactor Controls Incorporated (RCI) were reinspected by NMPC on several occasions to establish the adequacy of the weldments. RCI instituted several measures at NMPC insistence, such as use of work packages, to better control in process work activities. During NRC inspections of RCI activities, RCI site personnel were unable to provide responses to technical concerns such as fit-up requirements for fillet welds and installation tolerances for pipe restraints. Based upon the large number of reinspections performed on RCI installations as a result of NRC inspections and the lack of RCI technical expertise, it is apparent that a quality product was achieved only as a direct result of licensee initiatives in response to NRC concerns.

Inspection of ITT pipe support installations have verified the effectiveness of corrective actions to address both welding and mechanical deficiencies.

In two situations, involving HVAC baseplate shimming criteria and embedment welding restrictions, SWEC engineering failed to identify requisite inspection attributes for Quality Control inspection. Additional inconsistent design information had been promulgated in regard to duct support bracing that resulted in indeterminate support configurations. Reinspections were performed and all field installations were ultimately determined to be acceptable.

Plant housekeeping conditions have deteriorated in some plant areas, particularly those that have not been turned over to NMPC. The lack of proper cleanliness levels can lead to potential degradation of permanent plant equipment and is reflective of poor personnel practices and inadequate supervisory oversight. Although the overall plant cleanliness remains poor, isolated pockets of cleanliness have been identified in those areas turned over to NMPC.

Improvements have been noted in the overall licensee performance in this area. A substantial amount of inspection resources were devoted to the review of licensee corrective actions implemented in response to NRC open items. Extensive efforts were implemented by NMPC to verify the adequacy of installed plant hardware.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

J. Quality Assurance (374 hours, 8%)

1. Analysis

This area was jointly assessed in the previous SALP with that of Project Management. The area received a Category rating of 2. The concerns included commitment tracking, inter-organization communication interfaces, and hardware reinspection results.

Various aspects of Quality Assurance Program requirements have been considered and discussed as an integral part of each functional area. Management involvement and control in assuring quality continues to be one evaluation criterion for each functional area. Quality program effectiveness has been assessed by both resident and specialist inspectors.

Although the assurance of quality is the responsibility of every licensee employee, quality assurance is one management tool to provide confidence that a given component or activity will perform as intended when called upon. Some of the mechanisms employed are quality control inspections, holdpoints and monitoring efforts, quality assurance audits, and controls on activities such as procurement, design and special processes. Some of these and other factors which influence quality, e.g., involvement of first line supervisors, procedural adherence, review by oversight and safety committees, workers attitudes, and training are discussed in the various functional area analyses.

The Quality Performance Management Program (QPMP) has monitored key parameters such as hardware quantity installed, quantity inspected, QC acceptance rates, outstanding design changes, and nonconformance document closure rates. The QPMP has served as a management tool to diagnose construction problems and to assess the adequacy of corrective actions.

Licensee QA personnel have developed extensive checklists for guidance during the conduct of surveillances. The checklists are based upon regulatory requirements, FSAR commitments, industry codes, and design specifications. The use of the checklists during the review of preoperational test activities represents a strengthened involvement of QA in the independent verification of construction and site test activities in relationship to licensing commitments.

Review of NMPC audit reports and associated audit checklists indicates that while auditors are examining plant hardware, the audit reports do not reflect the total scope of the audit. The reports on occasion serve as an executive summary and do not document the complete extent of the audit in an explicit manner.

In response to deficiencies identified during the NRC Construction Appraisal Team inspection (50-410/83-18), NMPC instituted a large number of hardware reinspection efforts to ascertain the conformance of hardware installations to the design requirements. The sample reinspections included piping and pipe supports, instrument tubing and supports, HVAC duct supports, mechanical equipment, concrete, structural steel, nuclear coatings, expansion anchors, electrical raceway, and cables. The identified deficiencies were evaluated by engineering. A total plant reinspection was performed of electrical equipment vendor terminations, and Quality Control inspection procedures were revised as necessary.

Significant progress was made by the licensee to resolve NRC open items particularly in the Nondestructive Examination area and those identified during the CAT inspection. The application of licensee resources in this area is indicative of management involvement. However, NRC review of licensee corrective actions identified several instances where either the scope of corrective actions was inadequate or where formal commitments had not been effectively implemented. The previous SALP recommended that long term corrective action implementation be monitored through periodic auditing of a site commitment list. Based upon observations during this assessment, further evidence has been obtained to substantiate the need for this recommendation.

Major licensee initiatives included an FSAR verification program to ensure implementation of and accuracy of the FSAR. However, FSAR inaccuracies continue to be identified during routine inspection activities. The Preparedness for Operation Plan was conducted to assure that all required NMPC procedures have been developed, that requisite training has been accomplished and that responsible organizations are prepared for the operation of the plant.

The project design process was assessed by the SWEC Engineering Assurance Technical Audit. The NRC reviewed the audit program plans. Conduct of the audit was monitored as well as the corrective action phases. Some concerns were observed with the auditors exercising independent judgement on design adequacy and accepting design guides without verification of appropriate regulations. The audit concluded that the overall design process was implemented in a controlled manner.

A team inspection was performed of the NMPC allegation handling program (Quality First). The inspection scope included review of identified concerns, interviews of Quality First personnel, review of concern resolutions, examination of related site procedures and hardware, and interviews of site personnel not affiliated with the Quality First Program. The resolution of safety related concerns was found satisfactory. Some program

weaknesses were identified in the area of handling of wrongdoing issues and level of Quality First documentation to substantiate concern closure.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

K. Licensing

1. Analysis

This functional area was rated Category 2 in the previous SALP. Concerns identified in the previous SALP included untimely applicant responses to DSER outstanding issues, control of electrical separation, and verification of FSAR system descriptions.

The licensing area had a significant level of activity during the period, particularly in the areas of responses to NRC requests for information, responses to SER outstanding and confirmatory issues, support for the ACRS full and subcommittee meetings, support for NRR on-site audits, support of the Technical Specification review, and response to the downcomer bracing issue.

Management support for licensing activities has been evident. NMPC provided timely and technically adequate responses to concerns from the ACRS full and subcommittee meetings which resulted in the issuance of a favorable full power letter from the ACRS. A large number of audits that were performed by NRR during the assessment period to support the licensing effort. The audits were generally well supported by the applicant and the results showed clear evidence of prior planning.

The NMPC resolution of technical issues has been generally acceptable. This included the responses to SER issues and was also noted during the Technical Specification review process. The NMPC responses generally exhibited an understanding of the technical issues and viable, generally sound and thorough approaches were proposed. The downcomer analysis is an exception as this issue was the source of technical disagreement during the later stages of the period. NMPC ultimately applied extensive effort to respond to most of the staff concerns in a short period of time.

A recent FSAR amendment included two caveats that the FSAR plant description may vary from the as-designed or as-built conditions. In particular NMPC stated that dimensions and quantities stated in the FSAR are nominal. Region I review of the Standby Liquid Control (SLC) system design and preoperational test procedures, a few days after the close of the assessment period, identified that the two SLC pumps are rated for a cumulative flow rate of 82.4 GPM in lieu of 86 GPM specified in the FSAR. This error impacts the SER acceptance of the SLC system in regards to 10 CFR 50.62 which requires the capability to inject 86 GPM of 13 weight percent sodium pentaborate solution. The accuracy of the FSAR is critical for the performance of the licensing review. The NMPC attitude that the FSAR is not a design document fosters

the problems noted regarding the FSAR inaccuracies. As indicated in section J of this SALP, an FSAR verification program has been implemented by NMPC. The identification of further inaccuracies of this nature after the conduct of the associated licensee verification efforts indicates further attention is required in this area.

Followup effort to the October 1984 Caseload Forecast Panel Meeting was conducted. NMPC chose not to revise the projected Fuel Load date even though evidence existed to support the NRC projected slip in the Fuel Load date. In January 1986, the licensee Fuel Load date was revised. NMPC was continually unable to adhere to scheduled commitment dates made to the NRC staff. This process posed difficulties for effective NRC resource scheduling.

The safeguards area continued, in this SALP period, to be an area of above average performance. There was consistent evidence of prior planning by utility (including corporate level) management. Responses regarding safeguards matters were technically sound and consistent, demonstrating the existence of well developed policies and procedures for control of security-related activities. The applicant's responses in the safeguards area were submitted promptly and in most cases were acceptable the first time. The Security Organization positions and responsibilities are well defined and the security staff is considered to be more than ample to implement the facility physical protection program.

The timely resolution of licensing issues will remain dependent upon NMPC responsiveness. Management attention needs to be focused on issuance of operating procedures, testing of Kaman Radiation Monitoring system isolators, justification for deferral of preoperational tests, and justification for alternate means to provide structural steel fire protection.

2. Conclusion:

Rating:

Trend:

3. Board Recommendation:

Licensee:

NRC:

V. SUPPORTING DATA AND SUMMARIES

A. Construction Deficiency Reports (CDRs)

The licensee identified twenty seven (27) potential 10 CFR 50.55(e) Construction Deficiencies during the assessment period, three of which were subsequently found as not reportable. Table 1 identifies the reported items and the current NRC item status. Analysis of the CDRs for causal linkage has resulted in the identification of the following linked chains:

CDRs 85-00-06, 85-00-14, 85-00-23, 85-00-27, 85-00-29. Vendor or SWEC design errors resulted in deficiencies that would preclude proper operation of the Diesel Generator units.

CDRs 85-00-11, 85-00-13. Improper vendor or site craft practices resulted in a hardware configuration that would degrade the operability of the Diesel Generator units.

B. Investigations and Allegations Review

During the assessment period 13 allegations were received.

Several formal investigations were conducted during the assessment period. One investigation determined that a QC inspector had not been harassed by other site personnel. The remaining investigations are not complete.

Routine inspection followup was performed in response to ten allegations as discussed below:

- Alleged unsatisfactory resolution of nonconforming cable conditions for PGCC floor duct cables. 125 Nonconformance and Disposition reports were sampled and the "use-as-is" dispositions were supported by calculation or analysis.
- Alleged that the spent fuel pool gates were nonconforming. The site QA programs had identified the deficient welds. The vendor had performed poor quality workmanship and SWEC Procurement Quality Assurance had not detected the deficient items.
- Alleged that electrical QC inspections had been improperly performed. SWEC Inspection Reports documented the isolated case in which the electrical separation inspection had not been properly performed. The wires were reworked as required and PGCC electrical inspectors received additional training regarding documentation of nonconforming conditions.
- Alleged that material certifications had been falsified for Crucible Steel products that had been supplied to Nine Mile Point.

Review of site purchase orders did not identify procurement of Crucible Steel products.

- Alleged that a unit cooler motor had been improperly installed. The motor rework and conduit disassembly and reinstallation were found to have been performed in accordance with the quality assurance program.
- Alleged that a pipe support bearing pad had been improperly left in place. Review of quality records and SWEC calculations showed the abandoned bearing pad acceptable.
- Alleged that the Gould switchgear specification had been improperly changed. The specification changes related to fastener torque had been properly reviewed. The QC quality records documented proper resolution of shipping split hardware installations.
- Alleged that SWEC personnel had improperly generated RCI quality records. The RCI turnover document pre-package review was found satisfactory.
- Alleged that inspection holdpoints had been bypassed on electrical terminations. The quality records and design documents were reviewed for the transformers. All completed terminations had received appropriate QC inspection.
- Alleged that Neutron Monitoring System cables had been improperly installed. Inspection of the cable conduits identified minimum bend radius violations and that the cables were installed without approved procedures, two violations were subsequently issued. SWEC engineering performed mock cable installations that demonstrated the acceptability of the installed cables.

C. Escalated Enforcement Actions

No escalated enforcement actions were initiated during this SALP period. Section IV.C of the Enforcement Action 83-137 Order was modified on March 15, 1985 to defer indefinitely the requirement to perform a third party independent appraisal of organizational responsibilities, management controls, staffing levels, communications, and operating practices.

D. Management Conferences

1. February 6, 1985 - A management meeting was convened at NMPC request. The Management Analysis Corporation report was discussed that had been generated in response to the CAT Order. The interim results of the NMPC hardware reverification efforts were presented.

2. February 27 and March 15, 1985 - A management meeting was convened at NRC request. The SWEC Engineering Technical Audit program was reviewed. The proposed scope and conduct of the final technical audit was also reviewed.
3. June 17, 1985 - A management meeting convened at NRC request. The NMPC reverification of ITT-Grinnell large bore pipe supports was discussed. NMPC instituted program enhancements and performed engineering analysis to demonstrate the acceptability of the pipe supports.
4. July 23, 1985 - A management meeting convened at NRC request. The NMPC reverification of instrument tubing supports, HVAC duct supports, and electrical equipment were discussed. Additionally the electrical separation program and FSAR verification efforts were discussed.
5. January 22, 1986 - A management meeting convened at NRC request. The plant completion status with respect to construction, preoperational testing, and operational readiness were discussed. This information will be utilized by the Region I Near Term Operating License (NTOL) Review Panel to guide NRC inspection activities.

E. Licensing Activities

1. NRR Licensee Meetings

A large number of meetings were held with the applicant in Bethesda to resolve/discuss staff concerns. These are documented by meeting summaries.

2. NRR Site Visits & Audits

Instrumentation and Control Audit
 Environmental Qualification Audit
 Seismic Qualification Review Team Audit
 Pump and Valve Operability Review Team Audit
 Containment Systems Site Visit
 Reactor Systems Site Visit
 Auxiliary Systems Site Visit
 Emergency Site Exercise
 Electrical Power Systems Site Visit
 DCRDR Audit
 SPDS Audit
 Revetment Ditch Audit

3. Licensing Documents Issued

FES
SER
SSER-1
SSER-2
Draft Technical Specifications
Proof-and-Review Technical Specifications

4. Applicant Responses

- a. Responses to requests for information.
- b. Letters & FSAR updates to respond to SER concerns.
- c. Responses to ACRS questions.
- d. Responses to concerns on downcomer supports.
- e. Support for the Technical Specification review.
- f. Support for the ACRS full and subcommittee meetings.

TABLE 1
 CONSTRUCTION DEFICIENCY REPORTS
 (February 1, 1985 - January 31, 1986)
 NINE MILE POINT, UNIT 2

<u>CDR No.</u>	<u>Subject</u>	<u>Cause Code</u>	<u>Discipline</u>	<u>Status</u>
85-00-04	MSIV actuator latching bearing failure	B	3	Open
85-00-05	ECCS manual control switches do not maintain run position	B	5	Closed
85-00-06	Overheating of DG control cabinet due to non-safety coil failure	B	5	Closed
85-00-07	Anaconda flexible conduit bend radius violations	D	4	Open
85-00-08	DG jumpers missing	Determined not reportable		Closed
85-00-09	ITT design of trim details without SWEC review	A	2	Closed
85-00-10	Structural steel sub-supplier did not have a Appendix B quality assurance program	C	1	Closed
85-00-11	DG lube oil hose abraded by timing chain	C	4	Closed
85-00-12	Motor lead connections sealed with unapproved insulation material	A	4	Closed
85-00-13	DG timing chain sprocket locknuts missing	F	4	Closed
85-00-14	DG load shedding timer overcurrent	B	4	Open

T1-2

<u>CDR No.</u>	<u>Subject</u>	<u>Cause Code</u>	<u>Discipline</u>	<u>Status</u>
85-00-15	Missing jumpers for limit switch assembly on MOV	A	3	Open
85-00-16	Unqualified filler material used for attachment welds to containment liner	A	1	Closed
85-00-17	DG tested in excess of rated power	Determined not reportable		Closed
85-00-18	Linear indication in tube steel seam weld	C	4	Open
85-00-19	ITT disassembled valves without procedure	Determined not reportable		Open
85-00-20	RCIC suction line isolation valve missing	B	2	Closed
85-00-21	Erroneous RCIC steam-line drain trap set-point	B	3	Open
85-00-22	Limitorque motor operator failed qualification testing	E	4	Open
85-00-23	DG current transformer wiring error	C	4	Closed
85-00-24	PGCC solder connections nonconforming	F	5	Open
85-00-25	Valve CMTR did not document test coupon heat treatment parameters	C	3	Open
85-00-26	Panel boards not mounted in qualified arrangement	B	4	Open
85-00-27	UPS induced DC noise cancelled DG emergency start signal	C	4	Open

<u>CDR No.</u>	<u>Subject</u>	<u>Cause Code</u>	<u>Discipline</u>	<u>Status</u>
85-00-28	Insufficient thread engagement of SWP motor anchor bolts	F	3	Open
85-00-29	DG exciter field circuit incorrectly sized	B	4	Open
85-00-30	Spatial relationships, structural steel and containment	F	1	Open

Cause Codes

A - Personnel Error	D - Defective Procedure
B - Design Error	E - Component Failure
C - External Cause	F - Fabrication Error

Summary

<u>Cause Code</u>	<u>Total Number</u>
A. Personnel Error	4
B. Design Error	8
C. External Cause	6
D. Defective Procedure	1
E. Component Failure	1
F. Fabrication Error	4
Total	24

CONSTRUCTION DEFICIENCY REPORTS CORRELATED BY DISCIPLINE

<u>Discipline</u>	<u>Cause Codes</u>	<u>Total</u>
1. Safety Related Structures	1/A, 1/C, 1/F	3
2. Piping Systems and Supports	1/A, 1/B	2
3. Mechanical Components	1/A, 2/B, 1/C, 1/F	5
4. Electrical Components	1/A, 3/B, 4/C, 1/D, 1/E, 1/F	11
5. Instrumentation Control Systems	2/B, 1/F	3

TABLE 2

INSPECTION HOURS SUMMARY
 (2/1/85 - 1/31/86)
NINE MILE POINT UNIT 2

<u>Functional Areas</u>	<u>Hours</u>	<u>% of Hours</u>	<u>Notes</u>
A. Operations	358	8	
B. Training	50	1	
C. Radiological Controls	130	3	
D. Maintenance	32	1	
E. Preservice Inspection	95	2	
F. Preoperational Testing	710	16	
G. Fire Protection	157	3	
H. Security	136	3	
I. Construction	2480	55	
J. Quality Assurance	374	8	1
K. Licensing	-	-	
Total	4470	100	

Notes

1 - Quality Assurance/Control also inspected during routine construction inspections captured in functional area I

TABLE 3

INSPECTION REPORT ACTIVITIES (2/1/85- 1/31/86)
NINE MILE POINT, UNIT 2

<u>INSPECTION REPORT NUMBER</u>	<u>INSPECTION HOURS</u>	<u>AREAS INSPECTED</u>
84-21	269	Concrete expansion anchors, design control, HVAC supports, rework control, PSI, QA corrective action systems
85-02	40	Welding procedures; RCI and JCI welding operations
85-03	102	Preventive maintenance, electrical, instrumentation, HVAC
85-04	110	Welding inspection, FSAR verification, electrical equipment wiring
85-05	---	Management conference on NMPC hardware reverification and Management Analysis Corporation report
85-06	112	QA/QC for preoperational testing, NSSS pipe supports
85-07		Cancelled
85-08	105	Electrical and Instrumentation equipment
85-09	---	Management conference on Engineering Assurance Technical audit
85-10	473	Reactor Coolant system hydrostatic test, spent fuel racks, nitrogen inerting system
85-11	112	Reactor Coolant system hydrostatic test

<u>INSPECTION REPORT NUMBER</u>	<u>INSPECTION HOURS</u>	<u>AREAS INSPECTED</u>
85-12	28	Open item closure, cable pull sidewall tension calculations.
85-13	238	Engineering assurance audit, diesel generator exhaust, startup quality assurance, control rod drive system installation and hydrostatic testing, MSIV testing, piping and pipe supports, structural steel, preoperational test procedure review
85-14	---	Review of EA/QA Audit plans
85-15	---	Operator licensing examinations for 12 SROs and 12 ROs
85-16	26	Preservice Inspection of procedures and data
85-17	37	Electrical equipment and open item review
85-18	--	SWEC Engineering Assurance Audit implementation
85-19	157	Quality Assurance, RPV internals, preliminary testing, flood control berm
85-20	93	Preoperational radiological controls, radiation protection organization, training, facilities
85-21	--	Management meeting to discuss NMPC re-verification of large bore pipe supports
85-22	--	Cancelled
85-23	24	Preservice Inspection program, review of PSI data, inprocess PSI examinations

<u>INSPECTION REPORT NUMBER</u>	<u>INSPECTION HOURS</u>	<u>AREAS INSPECTED</u>
85-24	42	HVAC installations, open item review
85-25	187	Instrumentation components, piping and pipe supports, hydrostatic testing, diesel generator testing, RPV internals
85-26	---	Management meeting to discuss NMPC hardware reverification, electrical separation, FSAR verification, and transitional organization
85-27	367	Local leak rate testing, pipe welds, HPCS walkdown, Preventive Maintenance, preoperational test procedure review, QA audits
85-28	--	Results and corrective actions of SWEC Engineering Assurance Technical Audit
85-29	41	Resolution of welding issues
85-30	37	Preoperational test program, procedures, QA/QC interface
85-31	72	Piping system as-built stress reconciliation, ITT large bore pipe supports
85-32	29	Radiological controls inspection, preoperational testing, shield survey program, fuel receipt preparations, staffing, and training
85-33	38	Mechanical equipment, review of open items
85-34	138	Safe shutdown systems, emergency lighting system

<u>INSPECTION REPORT NUMBER</u>	<u>INSPECTION HOURS</u>	<u>AREAS INSPECTED</u>
85-35	34	Electrical equipment, open item review
85-36	110	Preoperational testing, preliminary testing, electrical equipment, Operational Preparedness Plan, Reactor Core Isolation Cooling system walkdown
85-37	50	Licensed operator training programs, technical training for mechanics/electricians / I&C technicians
85-38	32	Security plan and procedures implementation for fuel receipt, security systems preoperational review, open item review
85-39		Cancelled
85-40	8	Nuclear material control and accounting, receiving, storage, inventory, records, management
85-42	55	Neutron Monitoring system cable and raceway installations.
85-43	483	Nondestructive Examination van inspection
85-44	202	Fuel receipt, preoperational testing, Information Notices, open item review
85-45	15	Fire Protection Program readiness to receive fuel
85-46	40	Preservice Inspection program, procedures and data, review of open items

<u>INSPECTION REPORT NUMBER</u>	<u>INSPECTION HOURS</u>	<u>AREAS INSPECTED</u>
85-48	52	Security Program implementation
*86-02	300	Technical Specification As-Built Inspection
*86-03	28	Preoperational test program, procedure review
*86-04	160	Team inspection of Quality First allegation handling program
86-06	21	Management meeting for Near Term Operating License Panel

*not issued yet

TABLE 4

ENFORCEMENT DATA (2/1/85 - 1/31/86)

A. Number and Severity Level of Violations

Severity Level I	0
Severity Level II	0
Severity Level III	0
Severity Level IV	2
Severity V	5
Deviation	0
Total	7

B. Violation correlated by Functional Area

<u>Functional Areas</u>	<u>Severity Levels</u>				
	I	II	III	IV	V
A. Operations	0	0	0	0	0
B. Training	0	0	0	0	0
C. Radiological Controls	0	0	0	0	0
D. Maintenance	0	0	0	0	1
E. Preservice Testing	0	0	0	0	0
F. Preoperational Testing	0	0	0	0	0
G. Fire Protection	0	0	0	0	0
H. Security	0	0	0	0	0
I. Construction	0	0	0	1	2
J. Quality Assurance	0	0	0	1	2
K. Licensing	0	0	0	0	0
Totals	0	0	0	2	5

C. Summary

<u>Inspection Report No.</u>	<u>Severity Level</u>	<u>Functional Area</u>	<u>Violation</u>
84-21	IV	J	Improper QA classification of Refueling Bridge
	IV	I	Inconsistent design drawings for HVAC duct supports
85-03	V	J	HVAC support baseplate gaps not inspected

TABLE 4

ENFORCEMENT DATA (2/1/85 - 1/31/86)

A. Number and Severity Level of Violations

Severity Level I	0
Severity Level II	0
Severity Level III	0
Severity Level IV	2
Severity V	5
Deviation	0

Total	7
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B. Violation correlated by Functional Area

<u>Functional Areas</u>		<u>Severity Levels</u>				
		<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
A.	Operations	0	0	0	0	0
B.	Training	0	0	0	0	0
C.	Radiological Controls	0	0	0	0	0
D.	Maintenance	0	0	0	0	1
E.	Preservice Testing	0	0	0	0	0
F.	Preoperational Testing	0	0	0	0	0
G.	Fire Protection	0	0	0	0	0
H.	Security	0	0	0	0	0
I.	Construction	0	0	0	1	2
J.	Quality Assurance	0	0	0	1	2
K.	Licensing	0	0	0	0	0
Totals		0	0	0	2	5

C. Summary

<u>Inspection Report No.</u>	<u>Severity Level</u>	<u>Functional Area</u>	<u>Violation</u>
84-21	IV	J	Improper QA classification of Refueling Bridge
	IV	I	Inconsistent design drawings for HVAC duct supports
85-03	V	J	HVAC support baseplate gaps not inspected

<u>Inspection Report No.</u>	<u>Severity Level</u>	<u>Functional Area</u>	<u>Violation</u>
	V	D	Preventive maintenance not performed on Diesel Generator Systems.
85-10	V	I	Concrete expansion anchors improperly installed
85-36	V	J	Improper bolting of Remote Shutdown Panel uni-strut connections
85-42	V	I	Minimum cable bend radius violations and cable installed without pull tension monitoring and documented procedures