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

August 22, 1984

Travis Payne, Esq.
723 W. Johnson Street
P. O. Box 12643
Raleigh, NC 27605

In the Matter of
Carolina Power and Light Company and
North Carolina Eastern Municipal Power Agency
(Shearon Harris Nuclear Power Plant, Units 1 and 2)
Docket Nos. 50-400-OL and 50-401-OL

Dear Mr. Payne:

In the event that you do not have them, I am providing you with copies of the July 1, 1980 through December 31, 1981 SALP Report for CP&L, and NRC Manual Chapter NRC-0516 for the convenience of all concerned. Page 9 of the attachment to Mr. Clewitt's prefiled testimony refers to the above cited SALP Report. The figures on page 9 of Mr. Clewitt's attachment came from page 2 of that SALP Report. The first paragraph of that July 1, 1980 - December 31, 1981 SALP Report Report refers to the NRC's formal licensee performance assessment program. NRC Manual Chapter-0516 established that formal program.

Sincerely,

Charles A. Barth
Counsel for NRC Staff

Attachment: As stated

cc w/encl.: Service List

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U. S. NUCLEAR REGULATORY COMMISSION
REGION II

SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE BOARD REPORT

CAROLINA POWER AND LIGHT COMPANY

BRUNSWICK STEAM ELECTRIC PLANT UNITS 1 AND 2
DOCKET NUMBERS 50-325 AND 50-324

H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2
DOCKET NUMBER 50-261

SHEARON HARRIS NUCLEAR POWER PLANT UNITS 1 and 2
DOCKET NUMBERS 50-400 and 50-401

JULY 1, 1980 THROUGH DECEMBER 31, 1981

INSPECTION
REPORT NUMBERS

50-325/82-15, 50-324/82-15,
50-261/82-17,
50-400/82-14, 50-401/82-14

I. INTRODUCTION

A formal licensee performance assessment program has been implemented in accordance with the commitments of Task I.B.2 of NUREG-0660, Volume 1, "NRC Action Plan Developed as a Result of the TMI-2 Accident". This program, the Systematic Assessment of Licensee Performance (SALP) is applicable to all power reactors with operating licenses or construction permits (herein after referred to as licensees). The SALP program is an integrated NRC staff effort to collect available observations of licensee performance on an annual basis and evaluate performance based on these observations. Positive and negative attributes of licensee performance are considered. Emphasis is placed on understanding the reasons for a licensee's performance in important functional areas, and sharing this understanding with the licensee. The SALP process is oriented toward furthering NRC's understanding of the manner in which: (1) the licensee directs, guides, and provides resources for assuring plant safety; and (2) such resources are used and applied. The integrated SALP assessment is intended to be sufficiently diagnostic to provide meaningful guidance to the licensee. The SALP program supplements the normal regulatory processes used to ensure compliance with NRC rules and regulations.

II. CRITERIA

Licensee performance is assessed in selected functional areas depending on whether the facility has been in the construction, preoperational, or operating phase during the SALP review period. Functional areas encompass the spectrum of regulatory programs and represent significant nuclear safety and environmental activities. Certain functional areas may not be assessed because of little or no licensee activities in these areas, or lack of meaningful NRC observations.

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

- Management involvement in assuring quality
- Approach to the resolution of technical issues from a safety standpoint
- Responsiveness to NRC initiatives
- Enforcement history
- Reporting and analysis of reportable events
- Staffing (including management)
- Training effectiveness and qualification

The SALP Board has categorized functional area performance at one of three performance levels. These levels are defined 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 appear to be strained or not effectively used such that minimally satisfactory performance with respect to operational safety or construction is being achieved.

The functional area being evaluated may have some attributes that would place the evaluation in Category 1, and others that would place it in either Category 2 or 3. The final rating for each functional area is a composite of the attributes tempered with the judgement of NRC management as to the significance of individual items.

III. SUMMARY OF RESULTS

A. Overall Utility Evaluation

The licensee is cooperative with the Commission and displays good technical competence. Weaknesses common to both operating sites were found in the areas of plant operations, procedures, and radiation protection.

B. Overall Facility Evaluation - Brunswick 1 and 2

During the review period the licensee underwent a reorganization which included major personnel changes. Evaluation of these changes is still in progress although improved performance is expected to result. Major weaknesses were noted in the areas of plant operations, maintenance, fire protection, plant procedures, radiation protection, environmental protection, and quality assurance.

C. Facility Performance - Brunswick 1 and 2

Tabulation of ratings for each functional area; operations (Units 1 and 2)

1. Plant Operations - Category 3
2. Refueling Operations - not evaluated
3. Maintenance - Category 3
4. Surveillance and Inservice Testing - Category 2
5. Personnel, Training, and Plant Procedures - Category 3
6. Fire Protection and Housekeeping - Category 3
7. Design Changes and Modifications - Category 2
8. Radiation Protection, Radioactive Waste Management, and Transportation - Category 3

9. Environmental Protection - Category 3
10. Emergency Preparedness - Category 2
11. Security and Safeguards - Category 2
12. Audits, Review and Committee Activities - Category 3
13. Administrative, QA, and Records - Category 3
14. Corrective Action and Reporting - Category 2

D. Overall Facility Evaluation - Robinson 2

Management is aware of and responsive to the performance of the plant. Strengths were noted in the area of environmental protection. Weaknesses were noted in the areas of plant procedures and radiation protection. Trends during the period were towards improvements in the health physics area.

E. Facility Performance - Robinson 2

Tabulation of ratings for each functional area; operations (Unit 2)

1. Plant Operations - Category 2
2. Refueling Operations - Category 2
3. Maintenance - Category 2
4. Surveillance and Inservice Testing - Category 2
5. Personnel, Training, and Plant Procedures - Category 3
6. Fire Protection and Housekeeping - Category 2
7. Design Changes and Modifications - Category 2
8. Radiation Protection, Radioactive Waste Management, and Transportation - Category 3
9. Environmental Protection - Category 1
10. Emergency Preparedness - Category 2
11. Security and Safeguards - Category 2
12. Audits, Review and Committee Activities - Category 2
13. Administrative, QA, and Records - Category 2
14. Corrective Actions and Reporting - Category 2

F. Overall Facility Evaluation Harris 1 and 2

No exceptionally strong or weak areas were identified.

G. Facility Performance - Harris 1 and 2

Tabulation of recommended ratings for each functional area; construction (Units 1 and 2)

1. Quality Assurance - Category 2
2. Site Preparation and Foundation - Category 2
3. Containment Structure - Category 2
4. Safety-Related Structures - Category 2

5. Piping and Hangers - Reactor Coolant and Others - Category 2
6. Safety-Related Components - Category 2
7. Electrical Systems - Category 2
8. Instrumentation and Wire - not observed
9. Fire Protection - Category 2
10. Preservice Inspection - not observed
11. Corrective Actions and Reporting - Category 2
12. Procurement - Category 2
13. Design and Design Changes - Category 2
14. Training - Category 2

H. SALP Board Members:

R. C. Lewis, Director, Division of Project and Resident Programs (DPRP) (Chairman), RII
J. A. Olshinski, Director, Division of Engineering and Technical Programs (DETP), RII
C. E. Murphy, Chief, Engineering Inspection Branch, DETP, RII

I. SALP Board Attendees:

C. A. Julian, Acting Chief, Reactor Projects Section 1C, DPRP, RII
R. C. Butcher, Project Inspector, DPRP, RII
D. Johnson, Senior Resident Inspector, Brunswick
S. Weise, Resident Inspector, Robinson
G. F. Maxwell, Senior Resident Inspector, Harris
W. J. Ross, Project Manager, Division of Licensing, NRR
J. A. VanVliet, Project Manager, Division of Licensing, NRR
E. A. Licitra, Licensing Project Manager, Division of Licensing, NRR
J. K. Rausch, Inspector, Division of Emergency Preparedness and Operational Support, RII

IV. PERFORMANCE ANALYSIS AND ACTIVITIES SUMMARY

A. Brunswick Units 1 and 2

1. Plant Operations

a. Analysis

During performance of the routine inspection program the resident inspector made frequent observations of plant operations.

Four violations were identified in the specific area of plant operations:

(1) Severity Level IV violation involving the securing of all service water systems to repair a check valve. This action rendered the LPCI, core spray, and diesel generators inoperable contrary to Technical

Specifications. The LPCI, core spray, and diesel generators were not declared inoperable when service water was secured.

(2) Severity Level IV violation for the failure to place a HPCI isolation channel in the trip mode within one hour of its becoming inoperable.

(3) Severity Level V violation for the entry into an operational mode without meeting all required Limiting Conditions for Operation. During a Unit 2 startup, as a result of operator error, the reactor mode switch was taken out of the refueling mode, placed in startup, and control rod withdrawal commenced with the A-loop RHR torus suction valve shut. Control room operators began the startup without confirming that the person sent to open the RHR valve had completed the task.

(4) Infraction assessed when, during a Unit 2 startup in September 1980, the turbine exhaust manual check valves on both HPCI and RCIC were found closed, rendering the systems inoperable. The periodic test results and valve lineup sheets showed that these valves had been verified open.

In addition to these identified violations plant operations errors have caused significant plant outage time during the appraisal period. Described in Section 3, Maintenance, are plant operations related events resulting from the fouling of the RHR heat exchangers with oyster shells.

The violations above were caused by personnel errors. These violations are examples of recurrent problems and the lack of management control in the area of plant operations.

b. Conclusion - Category 3

c. Board Comments

The board concurs with the rating.

2. Refueling Operations

No inspections were performed in this area.

3. Maintenance

a. Analysis

The resident inspectors observed plant maintenance activities as a part of their routine program. Significant findings were as follows:

Severity Level IV violation on Unit 1 concerning a component (photohelic unit) removed from the Unit 1 containment post accident radiation monitor 1-CAC-A2-1262 without the ½ inch instrument lines being isolated. This resulted in the establishment of a small undetected open flow path from the drywell, via the open instrument lines, to the reactor building. This condition existed from May 27, 1980 until its discovery on February 4, 1981, when the containment isolation valves were closed and tagged shut. During this time period the containment isolation valves in these lines were operational and would have closed upon receiving a containment isolation signal.

During the evaluation period the service water intake chlorination system was removed from service for maintenance and remained out of operation for approximately six months. This resulted in an excessive buildup of oysters in the service water piping. During a Unit 1 outage in April 1981 an RHR heat exchanger baffle plate failed due to excessive differential pressure caused by fouling of the heat exchanger tubes with oyster shells. The redundant RHR heat exchanger was disassembled at the time for repair of a similar baffle plate. The resulting vessel heatup due to decay heat was controlled by use of the spent fuel pool cooling system.

Unit 2 was in power operation at the time and testing of its RHR heat exchangers revealed one to be inoperable with a failed baffle plate and the other to be operable with reduced capacity due to shell plugging. Unit 2 was then shut down on May 6 for removal of oyster shells from the service water system and repair of the RHR heat exchangers and remained down until June 8. Unit 1 remained shut down from April 17 through the end of the evaluation period for service water system cleaning, RHR heat exchanger repairs, and other maintenance activities.

Section A.14 of this report discusses the March 1980 failure of hydraulic snubbers to meet functional testing requirements. All hydraulic snubbers in both units were tested and approximately 20% were found inoperable. The majority of the failures was due to wear but many failures were caused by previous inadequate maintenance.

The plant has experienced significant down time due to inadequate maintenance during the appraisal period.

The licensee is currently focusing management attention and resources on this matter to improve maintenance quality at the plant.

The recurrence of maintenance problems represents a lack of management control in this area. Supervisory maintenance personnel have been reorganized and the licensee has committed to increasing the numbers of maintenance foremen on site.

b. Conclusion - Category 3

c. Board Comments

The board concurs with the rating and recommends increased inspection effort in this area to confirm the effectiveness of the corrective actions initiated.

4. Surveillance and Inservice Testing

a. Analysis

The resident inspectors routinely observed the surveillance activities as part of their inspection program. One violation was identified in the surveillance area:

Severity Level IV violation concerning the procedure used to conduct the Containment Integrated Leak Rate Test performed in June, 1981. The procedure specified neither the requirements for venting and draining of certain systems nor the addition of certain type "C" leak rate test results to the integrated leak rate. The procedure also included improper valve lineups.

One inspection of inservice testing was performed by regional based inspectors. No violations resulted from this inspection.

The licensee is in the process of reorganization and realignment of Quality Assurance control functions. This reorganization is expected to improve the inservice inspection and testing programs because of more clearly defined responsibilities.

During the appraisal period no significant weakness was observed in the surveillance program.

b. Conclusion - Category 2

c. Board Comments

The board concurs with the rating.

5. Personnel, Training, and Plant Procedures

a. Analysis

These areas were examined during a Quality Assurance team inspection. Two violations were identified in the training area:

(1) Severity Level V violation for the failure to provide adequate training for quality assurance inspectors. QA training procedures were out of date and not being followed, some training which had been conducted was not documented, and training to maintain the proficiency of QA personnel was not being conducted.

(2) Severity Level V violation concerning the required annual audits of plant training by the corporate Nuclear Safety and Quality Assurance Audit Section. The audits were conducted but failed to identify the deficiencies in QA personnel training described above.

During this period 27 reactor operator licensing examinations were conducted of which 18 passing grades were recorded.

Routine inspection by the resident and region based inspectors identified five violations in the procedures area:

(3) Severity Level V violation for the failure to follow procedures which required logging of annunciator alarms.

(4) Severity Level V violation for five examples of failure to follow procedures. These procedures involved the implementation of plant modifications and the use of special procedures.

(5) Severity Level V violation for six examples of failure to maintain controlled copies of safety related procedures.

(6) Severity Level V violation for the failure to maintain the current revision of emergency procedures at the remote shutdown panel.

(7) Severity Level V violation for the failure to provide an alarm procedure of the ECCS room flooding annunciator.

Two additional violations are discussed in sections 1 and 7, plant operations and maintenance, involving failure to provide adequate procedures.

Most violations identified at Brunswick relate in some way to procedures. Violations in this category occur either because the procedure was not adequate to properly instruct personnel in the performance of safety-related activities or the procedure was not followed. The resident inspectors have observed a continuing difficulty by management to maintain procedures current and a lack of regard for the necessity to consistantly follow current procedures on the part of plant personnel.

b. Conclusion - Category 3

c. Board Comments

The board concurs with the rating.

6. Fire Protection and Housekeeping

a. Analysis

The area of housekeeping was included in routine inspections conducted by the Resident Inspector. No violations were identified. The area of fire protection was the object of one routine inspection during this evaluation period by a regional based inspector. Considerable resources have been exerted by the licensee to conform to the NRC fire protection guidelines and requirements. The licensee continues to have difficulty, though, in effectively implementing a satisfactory fire protection program as evidenced by the following four violations:

(1) Severity Level V violation for the failure to verify that the fire barrier penetrations protecting safety related areas in a number of plant areas were functional.

(2) Severity Level V violation for the failure to implement the procedure for fire brigade training and drills.

(3) Severity Level V violation for the failure to implement the respirator protection procedure for the training of fire brigade members in the use of respirators.

(4) Severity Level V violation for the failure to provide the required number of servicable spare cylinders for self contained breathing apparatus.

The above violations indicate a need for the licensee to continue to strengthen the implementation of the fire protection program. Additional resources have been allocated by the licensee to accomplish this goal.

b. Conclusion - Category 3

c. Board Comments

The board concurs with the rating.

7. Design Changes and Modifications

a. Analysis

Design changes were routinely reviewed by the resident inspector and inspected during a Quality Assurance Team Inspection. Two violations were identified:

(1) Severity Level V violation for the failure to provide an adequate procedure for testing following a modification. While performing a hydrostatic test of piping following a plant modification of reactor vessel level instrumentation, an inadvertent actuation of ECCS equipment occurred because the testing procedures were not clear, concise, and coordinated with all personnel involved in the testing.

(2) Severity Level VI violation for the failure to establish measures to assure that design analyses will be provided for in-plant modifications.

Considering the large number of plant modifications in progress during the inspection period in response to the TMI Task Action plan, the violations identified do not represent a significant program deficiency.

b. Conclusion - Category 2

c. Board Comments

The board concurs with the rating.

8. Radiation Protection, Radioactive Waste Management, and Transportation

a. Analysis

A Health Physics Team Appraisal, three reactive inspections, one confirmatory measurements inspection, an investigation, and a routine radiation protection inspection were performed

in this area during the appraisal period. The resident inspectors also performed routine inspections in this area. The violations and findings identified indicate management system weaknesses in this area. The violations were:

(1) Severity Level III violation for exposing a worker to radiation in excess of the quarterly limit.

(2) Severity Level III violation for not properly evaluating the radiation hazards associated with maintenance which resulted in the overexposure of one individual.

(3) Severity Level IV violation for assigning a radiation control technician to a position of responsibility with less than the minimum experience required by Technical Specifications.

(4) Severity Level IV violation for not performing adequate evaluations of gaseous radioactive releases from the Auxiliary Boiler to ensure that offsite limits would not be exceeded.

(5) Severity Level IV violation for not properly monitoring gaseous radioactive releases from the Unit 1 and Unit 2 reactor buildings, the main stack, and the Unit 1 and Unit 2 turbine buildings.

(6) Severity Level IV violation for not properly monitoring and recording releases of radioactive liquid wastes to the stabilization pond and the discharge canal.

(7) Severity Level IV violation for not properly notifying the NRC Operations Center of an unplanned release of gaseous radioactivity from the auxiliary boiler.

(8) Severity Level IV violation for an inadvertent release of liquid from the floor drain sample tank without prior sampling.

(9) Severity Level V violation for not including certain liquid and gaseous releases in the facility's semiannual effluent release report.

(10) Severity Level V violation for not taking an adequate airborne radioactivity survey in the breathing zone of individuals and not conducting an adequate general air sampling program for detection or evaluation of airborne radioactivity in the work area.

(11) Severity Level V violation for not performing the required evaluation, conducting corrective actions to assure against recurrence, and completing documentation following the intake of radioactive material by any individual exceeding the 40-MPC hours control measure.

(12) Severity Level V violation for not following procedures controlling the release of radioactive material outside the Radiation Control Area.

(13) Severity Level V violation for not conspicuously posting radiation areas.

(14) Severity Level V violation for inadequate liquid radioactive waste handling procedures.

(15) Severity Level V violation for the failure to wear anti-C clothing as required.

(16) Severity Level VI violation for not properly reviewing and approving temporary changes to liquid radwaste processing procedures.

(17) Infraction for the inadequate evaluations of doses to individuals using thermoluminescent dosimeter (TLD) results.

(18) Infraction for the failure to follow procedures for annual calibration of the analytical balances and the gamma ray spectrometer.

(19) Infraction for the failure to adequately measure airborne particulate radioactivity in plant gaseous effluent monitors.

The first three violations resulted in the issuance of a civil penalty and appeared to be attributable to inadequate evaluations of radiation hazards. These hazards were associated with reactor water cleanup system valve maintenance work. The event was compounded by inadequate control of the work of an unqualified radiation control technician.

The last violation demonstrates the lack of management review of monitoring data and the inadequacy of quality control checks which would have ensured the adequacy of the effluent monitoring program.

The Health Physics Appraisal Team identified weaknesses in the internal exposure control program, contamination control surveillance, liquid radwaste management, and routine

surveillance of operating parameters for safety-related effluent filter systems.

The licensee's performance toward the end of the evaluation period has improved and is attributable to upper management attention, organization and personnel changes, and additional emphasis and resources in this area. Recent inspections indicate that the radiation protection program is rapidly attaining a high level of proficiency.

b. Conclusion

Due to the presence of significant management control problems as evidenced by the above Severity Level III and IV violations, the licensee's performance is rated in Category 3.

c. Board Comments

The board concurs with the rating.

9. Environmental Protection

a. Analysis

One environmental protection inspection resulted in four Severity Level V violations which indicated a lack of adequate management attention to develop and maintain the environmental monitoring program in accordance with the Environmental Technical Specifications. The violations were:

(1) Severity Level V violation for the failure to implement automatic intermittent surface water sampling of the intake canal. Although this is a Technical Specification requirement, the sampling program had never been implemented.

(2) Severity Level V violation for the failure to provide quality assurance procedures for monitoring, sample collection, and sample analysis as required by the Technical Specifications. The licensee failed to develop procedures for the calibration of dry gas meters on air particulate monitors located at various monitoring stations.

(3) Severity Level V violation for the failure to notify the NRC within 30 days, as required by Technical Specifications, when a milk sampling point was dropped from the surveillance program.

(4) Severity Level V violation for the failure to complete the review and approval of temporary procedure changes. Technical Specifications require subsequent review and

U.S. NUCLEAR REGULATORY COMMISSION
NRC MANUAL

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CHAPTER 0516 SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE

0516-01 COVERAGE

This Chapter and Appendix describe the basic structure and overall procedures for implementation of the NRC program to assess licensee performance. This program applies to all power reactors with operating licenses or construction permits (hereinafter referred to as licensees).

0516-02 OBJECTIVES

021 To improve the NRC Regulatory Program with emphasis on resource allocation.

022 To improve licensee performance.

023 To collect available observations on an annual basis and evaluate licensee performance based on those observations, through the Systematic Assessment of Licensee Performance (SALP), an integrated NRC staff effort. Positive and negative attributes of licensee performance are considered. Emphasis is placed upon understanding the reasons for licensee's performance in important functional areas, and sharing this understanding with the licensee. The SALP process is oriented toward furthering NRC's understanding of the manner in which: (a) the licensee management directs, guides, and provides resources for assuring plant safety; and (b) such resources are used and applied. The integrated SALP assessment is intended to be sufficiently diagnostic to provide a rational basis for allocating NRC resources and to provide meaningful guidance to licensee management.

0516-03 RESPONSIBILITIES AND AUTHORITIES

031 The Executive Director for Operations (EDO) provides oversight for the activities described herein.

032 The Director, Office of Inspection and Enforcement (IE):

a. implements the requirements of this chapter within the Office of Inspection and Enforcement.

Approved: March 23, 1982

b. provides monitoring of SALP process and evaluation of SALP policy, criteria, and methodology; and assesses the uniformity and correctness of the Regions' implementation of the program.

033 The Directors, Offices of Nuclear Reactor Regulation (NRR), Analysis and Evaluation of Operational Data (AEOD), and Nuclear Materials Safety and Safeguards (NMSS), implement the requirements of this chapter within their Offices.

034 Regional Administrators:

a. implement the requirements of this chapter within the Regions.

b. assure that assessments of licensee nuclear safety performance are conducted.

c. assure that meetings are conducted with licensees subsequent to each SALP Board assessment to provide NRC assessment findings to utility management.

d. evaluate the SALP Board's report and the licensee's comments; provide a characterization of overall safety performance; transmit the results to the licensee; and initiate appropriate actions.

0516-04 EVALUATION CRITERIA AND FUNCTIONAL AREAS

041 Evaluation. Licensees will be evaluated in the functional areas listed in this section using the criteria provided herein and further amplified in the Appendix to this Chapter. Each functional area evaluated will be assigned a Category as defined in Section 042. Not all functional areas need be covered in a given review. If a functional area appropriate to a licensee is not covered, the reasons should be given in the report. The Appendix to this Chapter lists a number of attributes for each evaluation criterion. The functional area being evaluated may have some attributes that would place the evaluation in Category 1 and others that would place it in either Category 2 or 3. The final rating for each functional area will be a composite of the attributes tempered with judgment as to significance of individual items. Departures from this guidance may sometimes be warranted. In such cases, the rationale for such departures should be explained in the report.

042 Performance Categories.

a. 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.

b. 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.

c. 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 such that minimally satisfactory performance with respect to operational safety or construction is being achieved.

043 Functional Areas.

a. Operating Reactors

(1) Plant operations

(2) Radiological controls

(a) radiation protection

(b) radioactive waste management

(c) transportation

(d) effluent control and monitoring

(3) Maintenance

(4) Surveillance - includes inservice and preoperational testing

(5) Fire protection

(6) Emergency preparedness

(7) Security and Safeguards

(8) Refueling - includes initial fuel loading

(9) Licensing activities

(10) Others (as needed)

b. Construction Phase Reactors

(1) Soils and foundation

(2) Containment and other safety related structures

(3) Piping systems and supports - includes welding, NDE and preservice inspection

(4) Safety related components - includes vessel, internals, pumps

(5) Support systems - includes HVAC, radwaste, fire protection

(6) Electrical power supply and distribution

(7) Instrumentation and control systems

(8) Licensing activities

(9) Others (as needed)

c. Preoperational Reactors. For reactors in the preoperational phase, functional areas from the listing for either Operating Reactors or Reactors under Construction should be selected as appropriate for evaluation.

044 Evaluation Criteria.

a. The evaluation criteria are as follows:

(1) Management involvement in assuring quality

(2) Approach to resolution of technical issues from 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

b. Guidance for using these criteria to arrive at a category assignment is found in the Appendix to this Chapter.

0516-05 BASIC REQUIREMENTS

051 Applicability. This Chapter applies to and shall be followed by NRC Headquarters Offices and Regional Offices.

052 Appendix 0516. Procedures for implementation of these directives are presented in the Appendix to this Chapter.

053 Reports. The SALP Board report will be transmitted to the licensee by the SALP Board Chairman, who should normally be at the Branch Chief level or above. Following receipt and resolution of licensee comments, if any, the Regional Administrator issues the SALP report to the licensee, provides the characterization of overall safety performance and identifies further actions, as appropriate.

Approved: March 23, 1982

NRC APPENDIX 0516

SYSTEMATIC ASSESSMENT
OF LICENSEE PERFORMANCE

UNITED STATES NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

CONTENTS

TABLES

PART I

GENERAL

A. Overall guidance for the Systematic Assessment of Licensee Performance (SALP) is provided in Chapter NRC-0516. Procedures for SALP are provided in this Appendix.

B. The NRC will conduct an annual review and evaluation of the performance of each power reactor licensee possessing an operating license or construction permit. The individual facility assessments are intended to take place at an approximately uniform rate throughout the year. The evaluation process is comprised of three parts: (1) a SALP Board assessment; (2) a meeting with licensee management to discuss the assessment; and (3) issuance of the report.

PART II

EVALUATION CRITERIA

The assessment of licensee performance is implemented through the use of seven evaluation criteria. The criteria which provide standard guidance, are applied to each functional area for the categorization of licensee performance.

To provide a consistent evaluation of licensee performance, several attributes associated with each criterion are listed to describe the characteristics applicable to the three categories.

The seven criteria discussed in Chapter NRC-0516-04 are listed in Table 1 with their associated attributes. These form the guidance which aids in understanding and evaluating licensee performance by identifying the causes and factors appropriate for categorization. It is not intended that consideration of these attributes influence established programs of the agency. For example, it is not intended that specific inspections be performed to evaluate attributes. It is expected that during the implementation of established programs many of the attributes which describe performance will be observed. Cognizance of these attributes should assist the staff in their observation of licensee performance during routine activities.

All of the attributes of the evaluation criteria are not necessarily applicable. In some instances, the observed performance within a functional area may be insufficient to allow consideration in the evaluation. Conversely, additional attributes may be appropriate for the evaluation. Matters such as Quality Assurance, Design Control, Training and the like, are attributes of each functional area and should be considered in the evaluation of the functional areas. On the other hand, if there is a problem with one of these attributes that is observed in several functional areas, it may be desirable to highlight that attribute in a separate discussion; e.g., Quality Assurance may be a problem in Operations, Radiological Control and Surveillance. It would be appropriate to discuss Quality Assurance as if it were a functional area, in addition to covering the specific QA problem in each functional area.

The listed attributes are intended only as guidance in the assessment of performance in the functional areas and thus, are <u>indicators</u> of the licensee performance.

It is emphasized that all available information should be analyzed by the SALP Board, and its significance, whether it be positive or negative, should be weighed. If information is scarce or nonexistent, a decision as to performance as it relates to an attribute should not be forced.

TABLE 1

EVALUATION CRITERIA WITH ATTRIBUTES FOR ASSESSMENT OF LICENSEE PERFORMANCE

1. MANAGEMENT INVOLVEMENT AND CONTROL IN ASSURING QUALITY

Category 1	Category 2	Category 3
consistent evidence of prior planning and assignment of priorities; well stated, controlled and explicit procedures for control of activities	evidence of prior planning and assignment of priorities; stated, defined procedures for control of activities	little evidence of prior planning and assignment of priorities; poorly stated or ill understood procedures for control of activities
well stated, disseminated and understandable policies	adequately stated and understood policies	poorly stated, poorly understood or non-existent policies
decision making consistently at a level that ensures adequate management review	decision making usually at a level that ensures adequate management review	decision making seldom at a level that ensures adequate management review
corporate management frequently involved in site activities	corporate management usually involved in site activities	corporate management seldom involved in site activities
audits complete, timely and thorough	audits generally complete, and thorough	audits frequently not timely, incomplete or not thorough
committees properly staffed and functioning in almost all cases	committees usually properly staffed and functioning	committees not properly staffed or functioning
reviews timely, thorough and technically sound	reviews generally timely, thorough and technically sound	reviews not timely, thorough or technically sound
records complete, well maintained and available	records generally complete, well maintained and available	records not complete, not well maintained or unavailable
procedures and policies strictly adhered to	procedures and policies rarely violated	procedures and policies occasionally violated

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corrective action systems promptly and consistently recognize and address non-reportable concerns	corrective action systems generally recognize and address non-reportable concerns	corrective action systems rarely recognize and address non-reportable concerns
procurement well controlled and documented	procurement generally well controlled and documented	repetitive breakdown in procurement control
design well controlled and verified	rare breakdowns of minor significance in design control or verification	repetitive breakdown in designs control or verification

2. APPROACH TO RESOLUTION OF TECHNICAL ISSUES FROM A SAFETY STANDPOINT

Category 1	Category 2	Category 3
clear understanding of issues demonstrated	understanding of issues generally apparent	understanding of issues frequently lacking
conservatism routinely exhibited when potential for safety significance exists	conservatism generally exhibited	meets minimum requirements
technically sound and thorough approaches in almost all cases	viable and generally sound and thorough approaches	often viable approaches, but lacking in thoroughness or depth
timely resolutions in almost all cases	generally timely resolutions	resolutions often delayed

3. RESPONSIVENESS TO NRC INITIATIVES

Category 1	Category 2	Category 3
meets deadlines	generally timely responses	frequently requires extensions of time
timely resolution of issues	few longstanding regulatory issues attributable to licensee	longstanding regulatory issues attributable to licensee
technically sound and thorough responses in almost all cases	viable and generally sound and thorough responses	often viable responses, but lacking in thoroughness or depth
acceptable resolutions proposed initially in most cases	acceptable resolutions generally proposed	considerable NRC effort or repeated submittals needed to obtain acceptable resolutions

4. ENFORCEMENT HISTORY

Category 1	Category 2	Category 3
major violations are rare and are not indicative of programmatic breakdown	major violations are rare and may indicate minor programmatic breakdown	multiple major violations or programmatic breakdown indicated
minor violations are not repetitive and not indicative of programmatic breakdown	multiple minor violations or minor programmatic breakdown indicated	minor violations are repetitive and indicative of programmatic breakdown
corrective action is prompt and effective	corrective action is timely and effective in most cases	corrective action is delayed or not effective

Approved: March 23, 1982

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5. REPORTING AND ANALYSIS OF REPORTABLE EVENTS

Category 1	Category 2	Category 3
events promptly and completely reported	events are reported in a timely manner, some information may be lacking	event reporting is frequently late or incomplete
events are properly identified and analyzed	events are accurately identified, some analyses are marginal	events are poorly identified or analyses are marginal, events are associated with programmatic weaknesses
corrective action is effective as indicated by lack of repetition	corrective action is usually taken but may not be effective as indicated by occasional repetition	corrective action is not timely nor effective, events are repetitive

6. STAFFING (INCLUDING MANAGEMENT)

Category 1	Category 2	Category 3
positions are identified, authorities and responsibilities are well defined	key positions are identified, and authorities and responsibilities are defined	positions are poorly identified, or authorities and responsibilities are ill-defined
vacant key positions are filled on priority basis	key positions usually filled in a reasonable time	key positions are left vacant for extended periods of time
staffing is ample as indicated by control over backlog and overtime	staffing is adequate, occasional difficulties with backlog or overtime	staffing is weak or minimal as indicated by excessive backlog and overtime

7. TRAINING AND QUALIFICATION EFFECTIVENESS

Category 1	Category 2	Category 3
training and qualification program makes a positive contribution, commensurate with procedures and staffing, to understanding of work and adherence to procedures with few personnel errors	training and qualification program contributes to an adequate understanding of work and fair adherence to procedures with a modest number of personnel errors	training and qualification program is found to be the major contributing factor to poor understanding of work, as indicated by numerous procedure violations or personnel errors
training program is well defined and implemented with dedicated resources and a means for feed back experience; program is applied to nearly all staff	a defined program is implemented for a large portion of the staff	program may be either lacking, poorly defined, or ineffectively applied for a significant segment of the staff

PART III

SALP BOARD ASSESSMENT

The SALP Board Assessment should include the following activities:

1. Obtain assessment data applicable to the appraisal period.

   a. Notify NRR, AEOD, and NMSS of the assessment period and the date when inputs from those offices are needed. The notification should be at least 30 days before the inputs are needed.

   b. NRR will provide written input.

   c. Normally, NMSS will respond to the notification by telephoning the regional security experts and, if appropriate based on licensing activities during the appraisal period, providing input to the draft functional area analysis.

   d. AEOD will respond and will provide input, if appropriate based on AEOD activities relative to the appraisal period.

   e. Inputs will be directed into the functional areas as defined in Chapter NRC-0516.

2. Tabulate and analyze the data obtained for the facility.

   a. Prepare the enforcement and inspection summary data - numbers and types of inspections performed and enforcement findings for each functional area.

   b. Provide the number of LERs submitted under each of the licensee's cause categories. This information will be included in the SALP Board report. If the review indicates that the proximate cause classification of significant LERs persistently varies from that reported by the licensee that issue should be discussed under the appropriate functional area of the performance evaluation. LERs should be discussed under the appropriate functional area.

   c. Provide the number of Construction Deficiency Reports (CDR) and 10 CFR Part 21 reports submitted by the licensee. These reports should be discussed in the appropriate functional area.

   d. Any events which have been determined to be "Abnormal Occurrences" should be identified.

   e. The number and nature of unplanned trips.

3. Develop the performance analysis for each of the functional areas. It is expected that the performance analysis would be drafted (in a preliminary form) by a knowledgeable member of the NRC staff prior to the

SALP Board meeting. The analysis shall include a characterization (Category 1, 2, or 3) and its basis, as well as SALP Board recommendations for NRC action, if necessary. The criteria for these categorizations are discussed in Part II of this Appendix. For some functional areas there may be insufficient licensee activity or NRC observation to warrant characterization. This would be appropriate for functional areas for which licensee action or involvement was not necessary during the appraisal period.

4. Conduct the SALP Board meeting to review the performance analysis and supporting data, develop the report including determination of each functional area's performance and recommendations for NRC action. This meeting should be attended by senior regional management, the NRR Project Manager, resident inspectors, and other individuals as determined by the Regional Administrator. As part of the SALP Board meeting it may be appropriate to make recommendations for reallocation of NRC resources. Also note that even in the absence of recommended changes to inspection frequencies, the Regional Office may adjust the frequencies based on SALP evaluations as discussed in the inspection procedures. In some areas the inspection program may mandate a change in scope, depth or frequency.

PART IV

MEETING WITH LICENSEE

The licensee management meeting should be planned and conducted considering the following:

1. Notification of the meeting should be made at least two weeks in advance. Notification should be made to the licensee, the resident inspectors at the involved facilities, the NRR Project Managers for the involved facilities and cognizant NRC managers.

2. The licensee should be encouraged to have the following management representatives participate in the meeting:

   a. Senior corporate management representative.

   b. Management officials responsible for the major functions wherein problem areas have been identified (e.g., health physics, security, engineering).

   c. Site Manager.

3. The Board Chairman will transmit the Board's report to the licensee one week before the meeting. The transmittal letter will identify weak areas and request licensee response in these areas, as appropriate, within 20 days after the meeting. The licensee will also be given the opportunity to make comments on the report during the discussions at the meeting or in writing within 20 days after the meeting.

4. NRC representatives for this meeting should include the following:

   a. Either the Regional Administrator, Deputy Administrator, or Division Director

   b. Responsible Regional Division Director(s), Branch Chiefs, or Section Chiefs, as appropriate

   c. NRR Project Manager or designated NRR manager

   d. Resident Inspector and/or assigned inspectors

For meetings with minimal issues, the Regional Administrator may elect to involve fewer staff members in the licensee management meeting.

5. The Regional Administrator, Deputy Administrator, or Division Director will chair the meeting and discussions of the adequacy of the licensee's management controls. These meetings are intended to provide a forum for candid discussion on issues relating to the licensee's performance. Those aspects of the licensee's operation that need improvement will be identified.

PART V

ISSUANCE OF REPORT

After the meeting and after considering the licensee's oral and written comments, the report will be transmitted by letter to the licensee over the Regional Administrator's signature. The letter should acknowledge the licensee's comments and amplify as appropriate on these comments or other findings of the review board. Additionally, the letter will include a characterization of overall safety performance. This letter, enclosing the report and licensee comments, will receive standard distribution including PDRs.

PART VI

FORMAT FOR SALP BOARD REPORT

Report Cover Sheet (Report Number)

U.S. NUCLEAR REGULATORY COMMISSION
REGION ___

Systematic Assessment of Licensee Performance

(Name of Licensee)

(Name of Facility)

(Date)

Report Body

I. INTRODUCTION

Provide an introductory statement.

II. SUMMARY OF RESULTS

Provide a tabulation of functional area assessments.

III. CRITERIA

Describe the evaluation criteria used.

IV. PERFORMANCE ANALYSES

Functional Area Analysis

For each functional area considered, provide a brief narrative of significant strengths and weaknesses; summary of major problems; significant events (LERs or CDRs); enforcement issues; and summary of NRC and licensee actions. Include a brief summary of the previous year's evaluation if there has been a significant change or if there should have been significant improvement but there was not.

Conclusion

Provide the performance assessment (Category 1, 2, or 3) for each functional area considered and if appropriate, a summary assessment.

Board Recommendations

Recommend NRC actions to be taken, if any are required. A basis for changes in the NRC program must be provided. Note that even in the absence of a recommendation to vary inspection levels, the Regional Office may do so based on the assessment as discussed in the inspection procedures.

V. SUPPORTING DATA AND SUMMARIES

1. Report Data

   (Most reports will have been previously addressed in the appropriate functional area sections of the Performance Analysis).

   a. LER Conclusions. Provide a brief summary of significant findings from the LER review, unless already addressed in individual areas in the Performance Analysis.

   b. Construction Deficiency Reports (Reactors under Construction). Provide the total number of CDRs reviewed and a brief summary of significant findings from the CDR review, unless already addressed in individual areas of the Performance Analysis.

   c. Part 21 Reports. Provide the total number of Part 21 Reports reviewed and a brief summary of significant findings from the Part 21 Reports, unless already addressed in individual areas of the Performance Analysis.

2. Licensee Activities. Provide an outline of major licensee activities, such as major outages, power limitations, and significant modifications.

3. Inspection Activities. Provide a summary of major inspection activities, such as major team inspections, and amount of inspection effort.

4. Investigations and Allegations Review. Provide a summary of major investigative activities and their results.

5. Escalated Enforcement Actions

   a. Civil Penalties

   b. Orders (only those relating to enforcement)

   c. Confirmation of Action Letters

6. Management Conferences Held During Appraisal Period. Discuss conferences that dealt with regulatory performance or enforcement.

7. Other. Narrative of any significant strengths, weaknesses, or issues at the discretion of the SALP Board.