

SALP BOARD REPORT

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE

50-305/84-08
Inspection Report No.

Wisconsin Public Service Corporation
Name of Licensee

Kewaunee
Name of Facility

April 1, 1983 through June 30, 1984
Assessment Period

I. INTRODUCTION

The Systematic Assessment of Licensee Performance (SALP) program is an integrated NRC staff effort to collect 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.

A NRC SALP Board, composed of staff members listed below, met on August 21, 1984, 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.

This report is the SALP Board's assessment of the licensee's safety performance at Kewaunee Nuclear Plant for the period April 1, 1983 through June 30, 1984.

SALP Board for Kewaunee:

T. N. Tambling, Director, EICS
J. A. Hind, Director, DRSS
E. R. Schweibinz, Chief, Technical Support Staff
W. V. Johnston, Assistant Director, Division of Engineering, NRR
J. D. Neighbors, DL-ORB #1 Project Manager, NRR
R. L. Nelson, SPT, Kewaunee
I. N. Jackiw, Chief, Projects Section 2B
R. L. Spessard, Director, DRS
C. J. Paperiello, Chief, Emergency Preparedness and Radiological Protection Branch
M. P. Phillips, Chief, Emergency Preparedness Section
D. Kers, Plant Protection Specialist
N. A. Nicholson, Radiation Specialist

II. CRITERIA

The licensee performance is assessed in selected functional areas depending whether the facility is in a construction, pre-operational or operating phase. Each functional area normally represents areas significant to nuclear safety and the environment, and are normal programmatic areas. Some functional areas may not be assessed because of little or no licensee activities or lack of meaningful observations. 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 in assuring quality
2. Approach to resolution of technical issues from a safety standpoint
3. Responsiveness to NRC initiatives
4. Enforcement history
5. Reporting and analysis of reportable events
6. Staffing (including management)
7. Training effectiveness and qualification.

However, the SALP Board is not limited to these criteria and others may have been used where appropriate.

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

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

Trend: The performance gradient over the course of the SALP assessment period.

III. SUMMARY OF RESULTS

Overall, during this period, the licensee's performance was found to be good and generally showed an improving trend. Management attention and involvement was generally aggressive and well disciplined. This was evident in both the safe and efficient operation of the facility. Staffing levels and quality were good. Communication levels between the operating staff and proper management were well established and effective. The licensee has been, in most cases, effective in dealing with significant problems and NRC initiatives. The noncompliance history was improved from the previous SALP and did not reveal any significant problems. The licensee's attention to housekeeping and control of contamination has been excellent. Areas identified as needing improvement in the SALP III report appear to have been effectively addressed during this assessment period.

<u>Functional Area</u>	<u>April 1, 1982- March 31, 1983</u>	<u>April 1, 1983- June 30, 1984</u>	<u>Trend During Within the Period</u>
A. Plant Operations	2	1	Improved
B. Radiological Controls	2	1	Improved
C. Maintenance	1	1	Improved
D. Surveillance	2	1	Improved
E. Fire Protection & Housekeeping	1	1	Improved
F. Emergency Preparedness	2	2	Improved
G. Security	2	2	Same
H. Refueling	1	1	Improved
I. Quality Programs and Administrative Controls	None	Unrated	--
J. Licensing Activities	2	2	Same

IV. PERFORMANCE ANALYSES

A. Plant Operations

1. Analysis

Evaluation of this functional area is based on the results of routine inspections conducted by the resident inspector. The inspections included direct observation of activities, review of logs and records, verification of selected equipment lineup and operability, followup of significant operating events, and verification that facility operations were in conformance with the Technical Specifications, administrative procedures, and commitments. Two items of noncompliance were identified as follows:

- a. Severity Level IV - Failure to properly tagout a boric acid transfer pump prior to releasing it for maintenance (Inspection Report No. 50-305/83-15).
- b. Severity Level IV - Failure to submit a Licensee Event Report on September 18, 1983, for outage of a boric acid transfer pump (Inspection Report No. 50-305/83-15).

Noncompliance a. appears to be an isolated occurrence of procedure misinterpretation. The procedure was revised to clarify and define the tagging of equipment in a controlled status. Regarding noncompliance b., this violation is considered to be of minor significance in light of the licensee's normal responsibilities to reporting requirements.

During this assessment period, an improvement has been noted by the reduced number and significance of noncompliances, relative to the previous assessment period.

Six reactor trips occurred during this assessment period. Four of the trips occurred during plant startup, two were due to mechanical problems with a feedwater control valve, one due to an incorrectly wired turbine oil pressure switch, and one due to lo-lo steam generator water level while in manual control. The remaining two trips occurred at full power, one due to an electrician bumping a relay in the reactor protection relay racks, and the other due to loss of an instrument bus inverter. The sensitivity of steam generator feedwater flow while in manual control is being addressed as part of the human factors associated with the control room design review program. All trips were isolated occurrences and do not indicate any programmatic failures.

Two Licensee Event Reports resulted from errors attributed to licensed operators. One resulted from the failure to test a redundant isolation valve in a Engineered Safety Features system prior to releasing the other valve for maintenance, the other resulted from a reactor trip, during startup, caused by 10-10 steam generator water level while in manual control. Both events are considered of minor safety significance, and do not reflect the high degree of performance normally exercised in the conduct of plant operations.

During this assessment period some of the specific improvements noted in this area were: the implementation of the NRC requirement for a second senior reactor operator on the operating shift; the licensee's initiative in acquiring and placing into operation a plant specific simulator; their authorization of an Operations Supervisor position and the assignment of a senior shift supervisor to the position; and the implementation of a formal training program for non-licensed operators. General improvements were noted in independent verification; operational control of systems and components, that is, use of out-of-service stickers and informational type tagging; and professionalism in which control room activities are conducted.

During the assessment period two Reactor Operator (RO) and eight Senior Reactor Operator (SRO) candidates were administered examinations. The two RO and seven of the eight SRO candidates passed the initial examination. The remaining SRO candidate subsequently passed a reexamination. These results are better than the national average of 80%.

Operation of the Kewaunee Nuclear Power Plant (KNPP) has historically been very reliable. As of June 30, 1984, the plant had an availability factor of 82.9% with a unit capacity factor of 77.9% since beginning commercial operation on June 16, 1974. During this 15 month reporting period the unit operated with less than two days total forced outage time. This operating record was attained as a result of several contributing factors, mainly; experienced and dedicated personnel; involved plant and corporate management; effective formulation and implementation of preventative and corrective programs; and low failure rates of equipment.

2. Conclusion

The licensee is rated Category 1 in this area. The licensee was previously rated Category 2. The major factors contributing to the higher rating are the decreases in the number and significance of noncompliances and LERs attributed to licensed and non-licensed operator errors.

3. Board Recommendations

None.

B. Radiological Controls

1. Analysis

Four inspections were conducted by regional based inspectors during this assessment period. These inspections included operational and outage radiation protection, radioactive waste management, transportation, confirmatory measurements, and environmental monitoring. The resident inspector also reviewed this area during routine inspections. Two violations were identified as follows:

- a. Severity Level IV - Failure to consistently provide respiratory protection training to contractors in accordance with procedures (305/84-03-01).
- b. Severity Level IV - Failure to calibrate the multi-source calibrator annually as required by technical specifications (305/84-05-03).

These two items of noncompliance were not repetitive nor were they indicative of programmatic breakdowns. Corrective actions were prompt and effective.

Annual person-rem totals, although increased somewhat in 1983 over 1982 because of extensive steam generator surveillance and maintenance activities, remain among the lowest for U.S. PWRs.

Housekeeping and cleanliness of the radiation controlled areas continue to be excellent. Nuclear industry's recognition of Kewaunee's excellent contamination control program has resulted in several plants sending representatives to Kewaunee during this assessment period to observe implementation of this program for application to their own plants. These findings and observations reflect effective pre-job planning and good attention to decontamination efforts. A formal ALARA program was implemented during this assessment period, supported by a written management policy. Several ALARA design changes were approved for the solid radwaste system during this assessment period. These modifications are indicative of management's continuing efforts to minimize personnel doses. No problems were identified with transportation activities. Progress was noted concerning completion of TMI Action Items (NUREG-0737) over the previous assessment period.

One low-level, unplanned gaseous release was reported during the 1984 outage. No technical specifications or 10 CFR 20 limits were exceeded. Licensee representatives have implemented corrective actions to prevent recurrence. No unplanned liquid releases were reported.

During this assessment period the licensee completed corrective actions for previous noncompliance and for the weak state of quality control as applied to radiological measurements.

The licensee has greatly improved his ability to accurately identify and quantify radioactivity in all media by completing calibrations for his new gamma spectrometer with fresh standards. This new equipment resulted in 29 agreements out of 29 comparisons. All agreements made regarding gamma spectrometry during previous inspections have been implemented.

Quality control of analytical measurements has also shown improvement. Combining and revising Health Physics and Chemistry procedures affecting the same equipment now assures that QC tests will be performed at the proper frequency and lists specific actions to be taken for unacceptable test results. All equipment routinely used was operational and required QC checks had been performed and properly documented.

The implementation of the radiological environmental monitoring program remains acceptable. A previous 1983 open item relating to MDAs in this program and the findings of a 1982 licensee audit on the absence of documentation defining duties and responsibilities of the corporate environmental group were still not completed. These are to be completed by August 1, 1984.

2. Conclusion

The licensee is rated Category 1 in this area. The licensee was previously rated Category 2. The improved rating is based on the marked increase in the confirmatory measurements agreements; the implementation of methods to accurately quantify radioactivity measurements; the strengthening of the Quality Control Program; the resolution of TMI Action Item deviations; and on a continued strong program of radiological controls.

3. Board Recommendation

This area to be considered for reduced inspection effort.

C. Maintenance

1. Analysis

Evaluation of this area is based on the results of routine inspections by the resident inspector and one inspection by Regional Office inspectors. The inspection included such activities as the observation of maintenance; compliance with procedures, and Plant Technical Specifications; the use of properly certified parts and materials; and adherence to radiological and fire protection controls. Two items of noncompliance were identified as follows:

- a. Severity Level V - Failure to document activities as required by Administrative Control Directive No. 5.4 "Work Request" (Inspection Report No. 50-305/83-15).
- b. Severity Level IV - Simultaneous placement of both trains of Shield Building Ventilation (SBV) out of service (Inspection Report No. 50-305/84-02).

Noncompliances a. and b. were of minor safety significance. Regarding noncompliance b, the operability of the SBV system was within the limits required by the Technical Specifications, but was of regulatory concern because of the circumstances which unknowingly placed the plant in a limiting condition for operation. The licensee's actions to prevent recurrence of the above non-compliances were timely and appropriate.

During this assessment period the licensee completed corrective actions for previous noncompliances.

Five LERs (305/84-01, 04, 07, 09 and 12) were attributed to maintenance and construction personnel errors. LER 84-01 resulted in a noncompliance (for details see Section C.1.b.); LER 84-04 was caused by an inadvertent actuation of one train of a safeguards ventilation system during a refueling outage; LER 84-07 was caused by an inadvertent actuation of the emergency diesel generators during a refueling outage; LER 84-09 was caused by an improperly wired turbine bearing oil pressure switch which caused a turbine/reactor trip while performing a surveillance test of turbine trip features during plant startup from a refueling outage; and LER 84-12 was caused by an inadvertent actuation of a safeguards ventilation system during power operation. These events were considered of minor safety significance. It was noted that there were two LERs attributed to personnel error during the previous assessment period, and by using the LER reporting requirements in effect during that period, only one of the above events would have required an LER submittal.

Strengths were noted by the inspectors in the management control of extensive contractor activities associated with the Appendix "R" modification; the high quality of workmanship and supervision in the performance of both corrective and preventative maintenance; the quality of maintenance procedures; and management involvement in maintenance activities. These attributes have contributed to a high degree of reliability and performance of plant equipment, which has resulted in an impressive record of plant availability and capacity factors.

2. Conclusions

The licensee continues to be rated Category 1 in this area.

3. Board Recommendations

None.

D. Surveillance

1. Analysis

Evaluation of this functional area is based on the results of routine inspection conducted by the resident inspector. The inspections included such activities as the observation of testing; verification that testing was performed in accordance with adequate procedures; that limiting conditions for operations were met; that test results conformed with Technical Specifications and procedure requirements and were reviewed by personnel other than the individual directing the test; and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

No items of noncompliance or deviations were identified. One LER attributed to personnel error was submitted during the assessment period. The event resulted from failure to perform an Appendix J type C test following the replacement of a reactor coolant hot leg sample containment isolation valve. Following discovery, an approved revised local leak rate test and engineering evaluation was performed which demonstrated valve operability. No other failures to perform surveillance testing as required by the Technical Specifications were noted. During this assessment period the licensee completed corrective actions for previous noncompliance.

During this assessment period two refueling outage Appendix J, type B & C tests, and one type A test were conducted. The resident inspector's inspection of the type B & C testing revealed a significant improvement in the implementation of the 1984 outage testing over previous tests. Improvements were evident in the test procedure, the newly acquired testing and calibration instruments, and training provided to personnel responsible for performing the tests. The findings of the NRC inspection of the type A test data was not available for use in evaluation of this area.

During both refueling outages a management decision was made to inspect 100% of the steam generator tubes although it was not required by the Technical Specifications. The results of the 1983 refueling inspection indicated, for the first time in nine years of operation, defective tubes which required plugging. The surveillance testing program has continued to be a well managed and effective program. During the last two assessment periods a total of two LERs attributed to personnel error have occurred.

Effective management action has corrected an observation made during the previous assessment period relative to occasional inadequate information included in LERs.

2. Conclusion

The licensee is rated Category 1 in this area. This is an improved rating over the previous SALP period and is based on the initiative and aggressiveness demonstrated by management in supplemental testing of the steam generators; improvements in procedures and equipment used for Appendix J testing; and the improvement in information provided in LERs.

3. Board Recommendations

None.

E. Fire Protection and Housekeeping

1. Analysis

Throughout this assessment period, while performing the resident inspection program, observations were made of the control of combustible materials, control of fire barriers, implementation of ignition control permit requirements and housekeeping requirements. No items of noncompliance or deviations were identified.

The licensee is continuing aggressive and productive actions in meeting the requirements of 10 CFR 50, Appendix R, "Fire Protection Program for Nuclear Power Facilities". The licensee was granted an extension for full compliance with the requirements until the completion of their 1987 refueling outage. The Office of Nuclear Reactor Regulation, in their Exemption dated February 22, 1984, stated, in part, "Because of good faith efforts, the licensee continues to lead much of the industry in implementation of the Appendix R requirements. The licensee had the first approved Safety Evaluation. The final design will require essentially no 'operator action' to achieve and maintain hot shutdown, and only minimal operator action to achieve cold shutdown. Additionally, containment entry will not be required. It is significant to note that the licensee design did not require any exemptions from the technical requirements of Appendix R."

All licensee Fire Team and Fire Brigade members have attended a fire fighting course taught by the Waukisha County Technical Institute. In addition, some of the members belong to local volunteer fire departments and through these organizations have received additional training in fire fighting and fire protection.

Housekeeping continues to result in a high degree of cleanliness in all areas. Management's foresight in requiring that concrete surfaces in areas which have a potential for radiological contamination be sealed or painted, has contributed significantly

to the excellent state of housekeeping in those areas. The maintaining of this degree of cleanliness is reflective of the plant staff's pride in their plant. The excellent state of housekeeping has been noted by NRC Headquarters and regional personnel, and by other organizations.

2. Conclusion

The licensee is rated Category 1 in this area. This rating is based on inspections of housekeeping activities, and in the fire protection area, on limited inspection effort and on the NRR evaluation of Appendix R submittals.

3. Board Recommendations

None.

F. Emergency Preparedness

1. Analysis

Two inspections were conducted during this assessment period to evaluate compliance with 10 CFR Part 50, Technical Specifications, and procedures. One item of noncompliance was identified as follows:

Severity Level IV - Shift Supervisors, initially the Emergency Directors, were incapable of determining when and what type of protective measures should be considered outside the site boundary to protect health and safety due to inadequate training in the procedures (305/83-13-03).

The licensee was not aware of the inadequacy in training until it was brought to their attention during the inspection. However, the licensee responded immediately to address the problem by retraining all Shift Supervisors. Less than two weeks after the inspection this corrective action was documented and was completed prior to issuance of the Notice of Violation. A subsequent examination of the noncompliance determined that appropriate corrective action had been completed.

Although the licensee's scope, content, and documentation for the emergency preparedness training program were acceptable, a weakness noted was poor attendance for required annual emergency preparedness training. This problem was being addressed by licensee management to reduce the number of times it was necessary to conduct a given training session to have all required individuals attend.

The licensee's overall performance during their annual exercise was very good. The demonstration of command and control throughout the exercise was excellent, including at the Emergency

Operations Facility which was staffed entirely by personnel from the Corporate Office. Communications and interactions between the licensee and the state and county agencies during the exercise was adequate. Support from the Corporate Office in emergency preparedness has been good.

2. Conclusion

The licensee is rated Category 2 in this area.

3. Board Recommendation

None.

G. Security and Safeguards

1. Analysis

Two routine safeguards inspections were completed by regional based inspectors during the assessment period. In addition, the Resident Inspector routinely conducted observations of security activities. One management meeting with the licensee was conducted. The subject of the meeting concerned the inadequacy of both a licensee response to an item of noncompliance and two security concerns. Three items of noncompliance were identified relative to the security program.

- a. Severity Level IV - A portion of the intrusion alarm system did not meet detection capability criteria identified in the security plan (Inspection Report No. 50-305/83-11-03).
- b. Severity Level IV - A portion of a vital area barrier was inadequate (Inspection Report No. 50-305/84-06-01).
- c. Severity Level IV - Some hand-carried packages were inadequately searched (Inspection Report No. 50-305/84-06-02).

In addition to the identified items of noncompliance, the inspectors identified three weaknesses in the licensee's security program.

These weaknesses dealt with compensatory measures for response procedures, metal detector capabilities, and capabilities of the intrusion alarm system.

Corrective action to identified noncompliance and other security concerns were generally timely and reasonably effective in most cases. During this assessment period a management meeting was conducted to discuss the licensee's inadequate response to an item of noncompliance and the security concerns and to discuss a mutual concern regarding improved communications. Subsequent to

the meeting the licensee proposed an adequate course of corrective actions. The noncompliances and weaknesses represented minor programmatic deficiencies, and these items were of minimal threat to the health and safety of the public.

Site security management is adequately trained and knowledgeable in implementing the approved security program. Corporate management exhibits adequate but not aggressive oversight in site security activities. Licensee security management has generally taken a conservative approach in the implementation of their security program in that, commitments and requirements within the scope of the approved security plan are generally met, but NRC proposals for plan improvements are generally met with resistance. The licensee's independent audit and surveillance program is generally complete and meets security plan requirements; issues identified during these audits were generally resolved in a timely manner.

The licensee's approach to resolving technical issues from a security standpoint are generally viable and sound on specific issues but at times lack thoroughness when considering the generic implications. This point became evident regarding an item of noncompliance (50-305/83-11-03) for which the licensee corrected the specific failure but did not evaluate the remainder of the system for similar deficiencies. Consequently, on the next inspection, the same type of failure was identified in another portion of the system. Security management should be cognizant of the generic impact of identified noncompliances on their security program.

The security equipment utilized by the licensee meets security plan commitments and is adequate to implement the security program. However, some security related equipment as identified in the security inspection will require added surveillance by the security organization and increased maintenance to assure that the equipment is operating properly.

The contract security force is adequately supervised and trained. Procedural guidance for the security force generally is in sufficient detail to assure personnel are knowledgeable of their responsibilities. The Training and Qualification Program utilized by the licensee is considered to be acceptable and does meet committed requirements. The Training and Qualification Program generally contributes to an adequate understanding of the security program. Security personnel staffing levels appear to be adequate.

2. Conclusion

The licensee is rated Category 2 in this area. Licensee performance has remained essentially constant over the course of the assessment period.

3. Board Recommendation

None.

H. Refueling Activities

1. Analysis

Evaluation of this functional area is based on the results of inspections conducted by the resident inspector. The inspection activities included; observation of fuel movements, verification that surveillance for refueling activities had been performed, that refueling containment integrity requirements were met, and observation of outage controls and activities. No items of noncompliance or deviations were identified.

The inspector observed that core reload activities were performed by an experienced contractor under the direct supervision of licensee personnel. It was noted that detailed refueling procedures were strictly adhered to unless a deviation was necessary. Then, any deviation was properly considered and well documented.

During the outages the inspector noted extensive involvement of corporate office personnel in plant activities. This involvement, particularly in the area of modifications and design changes, is a significant factor in the continuing well controlled and productive outages.

During the 1984 refueling outage, an inspection of three rod cluster control assemblies (RCCAs) revealed apparent wear marks on the cladding of the RCCA absorber rodlets. The cladding wear is attributable to the design of the guide cards and the vibratory interaction between the rodlets and the guide cards during periods of steady state power operation. Although this event did not meet the reporting requirements of 10 CFR 50.73(a), it was reported as an LER which may be of generic interest.

The conduct of refueling activities continue to indicate the efforts of strong management involvement, and dedicated plant and contractor personnel.

2. Conclusion

The licensee continues to be rated Category 1 in this area.

3. Board Recommendations

None.

I. Quality Programs and Administrative Controls

1. Analysis

While no specific inspections were performed to assess the overall implementation and effectiveness of the licensee's quality assurance program and other management systems in place to ensure the quality of work and to provide the required resources, these areas were routinely reviewed during inspections involving other functional areas. These reviews and observations included functioning of the onsite review committee, QA audits, general staffing and training, corrective action, licensee responses to bulletins, records and document control, facility modifications and design control, procedures, and management oversight of plant activities. In addition, one inspection was performed to review and closeout potential enforcement findings from a previous PAB inspection.

No items of noncompliance were identified that specifically related to this assessment period; however, four items were confirmed based upon the previous PAB inspection. The four items were:

- a. Severity Level V - Failure to establish a program to audit all the provisions contained within the Technical Specifications as required by Technical Specification 6.5.3.8.
- b. Severity Level V - Deficient certifications for Quality Control inspectors.
- c. Severity Level V - Failure to have procedures that prescribe and control activity affecting quality in the area of forms and conditions adverse to quality during maintenance and modifications.
- d. Severity Level V - Lack of a training program for job-related activities with regard to department supervisors, engineering disciplines, and quality control certified areas.

The corrective actions for items a., b., and c. were reviewed and verified to be appropriate. The inspection of the corrective actions for item d. will be conducted at a later date.

The potential enforcement findings and evaluations of the PAB were considered and factored into the SALP II report. This, in conjunction with the minimal inspection effort devoted to this specific area during the SALP IV assessment period, does not provide sufficient information to arrive at a meaningful evaluation for this area.

2. Conclusion

No rating is assigned to this area.

3. Board Recommendation

None.

J. Licensing Activities

1. Analysis

The assessment of licensee performance was based on the following licensing activities:

- Project Management Administration
- NUREG-0737 Technical Specifications
- Appendix R Exemption
- Shift Staffing
- Control of Heavy Loads
- Control Room Habitability
- NUREG Item II.F.2
- Inservice Inspection Technical Specifications
- Appendix J Exemption
- Decay Heat Technical Specifications
- Undervoltage Setpoint Technical Specifications
- Extended Burnup Technical Specifications
- Auxiliary Feedwater Reliability
- Condensate Storage Tank Level

Within this evaluation period a number of licensing actions (such as Appendix R Exemption, essentially all NUREG-0737 items and several amendment requests) have involved direct management input through numerous meetings and telephone calls. From these experiences, one can conclude that there is evidence of prior planning and assignment of priorities and decisions were usually promptly made at an appropriate level.

There appears to be a clear understanding of most issues and workable approaches are taken to resolve them. The overall technical competence has been good. Sound technical basis and conservatism are generally provided to support the licensee's position. These attributes were demonstrated in responding to the actions on Appendix R and most NUREG-0737 requirements. Two areas where the approach was not timely were the licensee's response on auxiliary feedwater pump reliability and condensate storage tank level. Other responses were usually on time. For those that may be late, the licensee usually provided advance notice to the project manager. The same weak areas discussed above are noted.

The licensee staff has demonstrated willingness to work with the Commission in a timely manner. It has a good understanding of plant design and operations. Its responsiveness in most licensing issues is impressive. It is obvious that management capability in licensing is strong.

2. Conclusions

The licensee is rated Category 2 in this area. This is the same rating established in the previous assessment period.

3. Board Recommendations

None.

V. SUPPORTING DATA AND SUMMARIES

A. Licensee Activities

1. The plant was returned to service on May 15, 1983, following a refueling outage. During the outage a management decision was made to perform, based on initial indications, Eddy Current examination of 100% of the tubes in both steam generators. The results indicated that four tubes in the 1A steam generator and eighteen in the 1B steam generator required mechanical plugging, an additional fifty tubes were plugged as a preventative measure. This was the first time in nine years of operation that tube plugging was required.
2. The plant was shut down on March 15, 1984, for a refueling outage.
3. The plant was returned to service following the refueling outage on May 8, 1984.
4. Some of the significant activities conducted during this assessment period were; installation of equipment to allow the capability for connection of a Hydrogen Recombiner; replacement of instrument bus transformer BRA-106 with a higher capacity unit and removal of certain non-essential loads from this non-interruptible power supply; replacement of the single channel turbine overspeed trip system with a redundant overspeed trip system; a new meteorological data acquisition system was installed in support of the Emergency Preparedness program; placing the Kewaunee plant simulator into service; and completion of significant work on modifications required by 10 CFR 50 Appendix R.

B. Inspection Activities

1. Noncompliance Data

a. Facility Name: Kewaunee Nuclear Power Plant
Docket No. 50-305

Inspection Reports No. 83-06 through 83-17
No. 84-01 through 84-06

Noncompliances and Deviations
Severity Levels

Functional Area	I	II	III	IV	V	Dev.
A. Plant Operations				2		
B. Radiological Controls				2		
C. Maintenance				1	1	
D. Surveillance and Inservice Testing						
E. Fire Protecting and Housekeeping						
F. Emergency Preparedness				1		
G. Security and Safeguards				3		
H. Refueling Operations						
I. Quality Assurance and Administrative Controls						4
J. Licensing Activities						
TOTALS	0	0	0	9	5	

C. Investigations and Allegations Review

None were conducted

D. Escalated Enforcement Actions

1. Civil Penalties

As a result of findings, detailed in Inspection Report 305/82-19, the NRC issued an order imposing a Civil Penalty in the amount of \$30,000 on August 8, 1983, for license condition violations related to inoperable containment pressure transmitters. The licensee paid the Civil Penalty on September 8, 1983. While the Civil Penalty was imposed and paid during this assessment period, the incident occurred and was assessed in the previous SALP.

2. Orders

No orders were issued during this assessment period.

E. Management Conferences Held During Appraisal Period

1. On June 24, 1983, a management meeting was held in the NRC Region III offices to present the licensee with the findings of the SALP III report.
2. On October 17, 1983, a management meeting was held in the NRC Region III office to discuss the inadequacy of a response to findings identified in Inspection Report 305/83-11; the conduct of the inspection; and mutual concern regarding improved communications.
3. On November 16, 1983, a management meeting was held at the O'Hare Airport Holiday Inn to discuss the enforcement policy and 10 CFR 50, Appendix J, requirements.

F. Review of Licensee Event Reports and 10 CFR 21 Reports

1. Licensee Event Reports (LERs)

On August 29, 1983, the NRC published an amendment clarifying its regulations regarding Licensee Event Reports required by 10 CFR 50.73. Details of the new reporting system were published as NUREG-1022 "Licensee Event Report System". The effective date of this amendment was January 1, 1984. The new rule deleted reporting requirements for several types of licensee events which had been found, through experience, to be of little value to the Commission.

- a. The LERs for this evaluation period include 83-12 through 83-38 and 84-01 through 84-12.

Proximate Cause*	SALP I**	SALP II**	SALP III**	SALP IV**
Personnel Error	6(0.50)***	12(0.70)	7(0.58)	8(0.53)
Design, Manufacturing & Construction/ Installation	3(0.25)	3(0.18)	2(0.17)	2(0.13)
External	1(0.08)	0	0	0
Defective Procedure	0	2(0.12)	2(0.17)	3(0.20)
Component Failure	16(0.75)	21(1.23)	23(1.92)	16(1.07)
Other	10(0.83)	14(0.82)	7(0.58)	10(0.67)
Totals	36(3.00)	52(3.06)	41(3.42)	39(2.60)

*Proximate cause is the cause assigned by the licensee according to NUREG-0161, "Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File", of NUREG-1022, "Licensee Event Report System".

**SALP I (12 months) 11/01/79 - 10/31/80; SALP II (17 months) 11/01/80 - 03/31/82; SALP III (12 months) 04/01/82 - 03/31/83; SALP IV (15 months) 04/01/83 - 06/30/84

***Numbers in parenthesis are the average number of events per month.

b. Evaluation

Review of the LERs indicated that the information given provided a clear and adequate description of each event; the entries reviewed were correct and the codes agreed with the information in the narrative. Supplementary information was provided when necessary to clarify the information contained in the LER. LER 83-35 is a particularly good example of providing detailed supplementary information. When appropriate an updated report was provided within the committed time frame and contained significant, detailed additional information. The licensee submitted voluntarily a report that was not required by the reporting criteria of 10 CFR 50.73. The report was provided because the event may be of generic interest and exemplified a positive attitude of exceeding the minimum reporting requirements.

In summary, the number of licensee events per month during the assessment period have generally decreased, indicating strong management awareness and aggressive involvement. Overall decline in licensee events was noted in the Personnel Error, Design, Manufacturing and Construction/Installation and Component Failure areas.

2. 10 CFR 21 Reports

No Part 21 reports were submitted by the licensee during the evaluation period.