U.S. NUCLEAR REGULATORY COMMISSION

REGION III

SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE

Northern States Power Company

Monticello Nuclear Generating Plant

Docket No. 50-263

Report No. 50-263/83-17

Assessment Period

July 1, 1982 through June 30, 1983

CONTENTS

I. INTRODUCTION

The NRC has established a program for the Systematic Assessment of Licensee Performance (SALP). The SALP is an integrated NRC Staff effort to collect available observations and data on a periodic basis and evaluate licensee performance based upon those observations. SALP is supplemental to normal regulatory processes used to insure compliance to the rules and regulations. SALP is intended primarily from a historical point to be sufficiently diagnostic to provide a rational basis for allocating future 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 the staff members listed below, met on August 31, 1983, 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 Monticello Nuclear Generating Plant from July 1, 1982 through June 30, 1983.

The results of the SALP Board assessments in the selected functional areas were presented to the licensee at a meeting held on September 21, 1983.

SALP Board for Monticello Nuclear Generating Plant:

J. A. Hind, Director, DRMSP (Board Chairman)
C. E. Norelius, Director, DPRP
R. L. Spessard, Director, DE
J. F. Streeter, Chief, Engineering Branch 1, DE
W. D. Shafer, Chief, Projects Branch 2, DPRP
R. D. Walker, Chief, Projects Section 2C, DPRP
L. R. Greger Chief, Facilities Radiation Protection Section, DRMSP
M. C. Schumacher, Chief, Independent Measurements and Environmental Protection Section, DRMSP
C. H. Brown, Senior Resident Inspector, Monticello, DPRP
J. A. Grobe, Projects Section 2C, DPRP
J. P. Patterson, Emergency Preparedness Section, DRMSP
W. B. Grant, Facilities Radiation Protection Section, DRMSP
J. R. Kniceley, Safeguards Section, DRMSP
J. S. Berggren, Program Support Staff, DPRP
J. R. Miller, Chief, Operating Reactors Branch No. 3, DL, NRR
H. Nicolaras, Project Manager, Operating Reactors Branch No. 2, DL, NRR

II. CRITERIA

The licensee's 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 observation.

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 safety standpoint,

3. Responsiveness to NRC initiatives,

4. Enforcement history,

5. Reporting and analysis of reportable events,

6. Staffing (including management), and

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 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.

III. SUMMARY OF RESULTS

Functional Area Assessment		Category 1	Category 2	Category 3
1.	Plant Operations		X*	
2.	Radiological Controls		X	
3.	Maintenance and Modifications		X	
4.	Surveillance and Inservice Testing	X		
5.	Fire Protection and Housekeeping		X	
6.	Emergency Preparedness	X		
7.	Security and Safeguards	X		
8.	Refueling Activities	X		
9.	Licensing Activities		X*	

*The rating in this category represents a decrease in performance from the previous rating period.

IV. PERFORMANCE ANALYSES

1. Plant Operations and Operator Training

a. Analysis

(1) Plant Operations

During the assessment period, portions of the routine resident inspections and one special inspection by resident and regional inspectors were in the area of operational safety. These inspections evaluated compliance with license conditions, technical specifications and plant procedures. Five items of noncompliance were identified as follows:

(a) Severity Level III (Civil Penalty - $20,000) - Primary containment not maintained when required (Inspection Report No. 263/83-01).

(b) Severity Level IV - Failure to follow work request control procedures (Inspection Report No. 263/83-01).

(c) Severity Level IV - Failure to follow equipment control procedures (Inspection Report No. 263/83-01).

(d) Severity Level V - Failure to perform local leak rate testing with an approved procedure (Inspection Report No. 263/83-01).

(e) Severity Level V - Failure to follow procedures when returning the diesel generator to service (Inspection Report No. 263/82-15).

Both the number and significance of the noncompliances identified during the SALP 4 assessment period are higher than that identified during the SALP 3 assessment period. One event, operation with a breach of primary containment, resulted in four of the violations during this assessment period ((a) through (d) above). Those violations concerned a breakdown in the management control of work activities which affected operational safety of the unit. Corporate and site management aggressively instituted comprehensive corrective action programs addressing the programmatic deficiencies identified through that event. Sufficient time has not elapsed following implementation of those corrective actions to assess their effectiveness.

Two Licensee Event Reports (LERs) relating to this functional area resulted from personnel error and one LER resulted from procedural deficiency. One of the personnel error events involved the breach of primary containment discussed above. The other error was made by a non-licensed operations individual while performing a surveillance test. That error resulted in the inoperability of an emergency diesel generator.

Three LERs relating to this functional area concerned identical ground faults in the High Pressure Coolant Injection (HPCI) turbine speed control system. The licensee did not effectuate adequate corrective actions following the first two events. Generally, events are responded to in a timely manner, are accurately identified and corrective actions are effective with the exception of the HPCI system deficiency discussed above.

During the assessment period, there were no unplanned outages. Corporate management is appropriately involved in site activities and committees are adequately staffed and function properly. Corrective actions are timely and effective in most cases. Key staff positions are identified and responsibilities are defined.

(2) Operator Training

One inspection of the operator training and retraining program was conducted by two regional inspectors during the assessment period. No items of noncompliance were identified.

In January 1983, two Senior Reactor Operator and four Reactor Operator candidates were administered retake examinations resulting in one Senior Reactor Operator and two Reactor Operator licenses being issued. In May 1983, four candidates were administered Senior Reactor Operator examinations and three licenses were issued. In 1982 and 1983, the licensee's examination pass rate has been significantly below the national average. However, the trend during the rating period has shown continued improvement in candidate pass rate.

b. Conclusion

The licensee is rated Category 2 in this area. This is a decrease from the SALP 3 Category 1 rating. The decrease in rating is due primarily to the breach of containment event that showed a breakdown in control of activities which affected plant operational safety.

c. Board Recommendations

Licensee management needs to continue focusing effort to ensure that the work control deficiencies do not recur and to continue the upward trend in operator candidate pass rate.

The Board notes that preliminary findings from an ongoing inspection of an August 1, 1983, degraded essential bus voltage event reveal potential problems in the areas of design changes, implementing procedures to assure operation within the bounding assumptions of safety analyses, and communications with the NRC. NRC efforts thus far have resulted in the issuance of a Confirmatory Action Letter on August 15, 1983, and a modification of that letter on August 31, 1983. The potential problems stem from licensee actions taken during the period 1978 through 1981, which precede the SALP 4 assessment period. The final results of the inspection will be considered during SALP 5.

2. Radiological Controls

a. Analysis

Four inspections covering operational radiation protection, outage radiation protection, radwaste and transportation, and confirmatory measurements and environmental monitoring were performed during the assessment period by regional specialists. Portions of the routine inspections by the resident inspector also concerned this area. Four items of noncompliance were identified as follows:

(1) Severity Level IV - Failure to make surveys to evaluate radiation hazards (Inspection Report No. 263/82-11).

(2) Severity Level IV - Failure to adhere to radiological control procedures (Inspection Report No. 263/82-11).

(3) Severity Level IV - Failure to supply an individual with proper personnel monitoring equipment (Inspection Report No. 263/82-11).

(4) Severity Level V - Use of unauthorized temporary shielding on a shipping cask (Inspection Report No. 263/83-13).

The first three noncompliances concerned the unplanned exposures of three workers during ultrasonic testing of the recirculation system piping and inadequate implementation of radiological controls associated with operation of the box compactor. A management meeting was held on October 22, 1982, in response to these and previous matters, because they appeared indicative of a deterioration in the management

effectiveness over the radiation protection program. The licensee's corrective actions for the noncompliances, which indicated minor programmatic breakdown of the radiation protection program, were prompt and appear effective.

Total worker radiation exposures (person-rems) and power normalized exposures (person-rems/MWe) during the assessment period were about average for boiling water reactors. The total exposures (person-rems) were about 40% higher than the licensee's average exposures over the preceding five years. This increase appeared to be due primarily to inspection and repair of recirculation piping. An increased ALARA effort during the inspection and repair work, due in part to NRC initiative, was effective in limiting exposures. The licensee's annual increase (20% per year) in total exposures over the preceding five years is about equal to the average for boiling water reactors. Airborne radioactive releases and solid radioactive waste volume and activity were lower than average for boiling water reactors. No liquid radioactive releases were made during this assessment period.

Confirmatory measurement results during this assessment period were an improvement over the previous period, with the licensee having 23 agreements or possible agreements out of 24 comparisons. The licensee made a timely modification to his nuclide library to resolve the one disagreement identified in the comparison. The licensee was also responsive to correcting analytical problems by recalibration of his charcoal adsorber geometry, resulting in all agreements in this medium during the 1983 inspection.

The licensee's quality control (QC) practices in the counting room were marginal. There was no QC program for daily counting instrument performances. Some daily checks were being initiated on selected instruments; however, control charts were not used to note trends or anomalies. The licensee agreed to establish a QC program and prepare procedures to include control limits and actions to be taken when limits are exceeded. The licensee's laboratory chemical instrumentation is being upgraded with the purchase of new analytical equipment. Split or blind non-radiological samples are analyzed periodically by laboratory personnel to assess technical proficiency and technician's qualifications. The licensee participates in a comparison program of radiological samples with a contractor and results have been favorable. The licensee has also developed a good 10-week chemistry/radiochemistry training program for technicians.

A quality assurance (QA) audit of chemical procedure conformance to the licensee's administrative procedure format indicated no problems. However, technical aspects of the chemistry/radiochemistry program had not been audited since December 1979 because of lack of licensee QA technical expertise in this area. Implementation of the corrective action to findings from the December 1979 audit were only just completed in 1983, not a very timely response

The licensee conducts a good Radiological Environmental Monitoring Program, with good administrative controls and contact between the licensee and his contractor for sample analysis (Hazleton Environmental Sciences Corporation). Sample recovery has been good. The licensee performed an acceptable audit at Hazleton during the period. The contractor, however, was having difficulty meeting the lower limits of detection that were incorporated into the new technical specifications which became effective January 1983. The licensee agreed to resolve this problem. The licensee is also taking steps to correct the problem of using unsuitable containers for the thermoluminescent dosimeters (TLDs). Otherwise, the licensee's contractor was found to follow good quality control practices through participation in the EPA cross check program and an international comparison TLD program. Corporate management maintains trend plots of sample data indicating an appropriate assessment for data review. No trends attributable to plant operations were identified.

Staffing and training in this area were adequate during this assessment period. The licensee was generally responsive to inspector concerns.

b. Conclusion

The licensee is again rated Category 2 in this area.

c. Board Recommendations

None.

3. Maintenance and Modifications

a. Analysis

During the assessment period, portions of the routine inspection program by the resident inspector and one inspection by region based inspectors were performed to evaluate the licensee's routine maintenance program and activities, major modifications, facility changes, and outage maintenance. Two items of noncompliance were identified as follows:

(1) Severity Level V - Temporary changes were made to procedures without approval of two Senior Reactor Operators (Inspection Report No. 263/83-11).

(2) Severity Level V - Failure to follow procedures (Inspection Report No. 263/83-11).

These minor violations were not repetitive or indicative of programmatic breakdown and appropriate corrective actions were initiated.

The inspection also identified several weaknesses in the licensee's jumper and bypass procedure which the licensee agreed to correct. The licensee also agreed to revise the equipment controls within that procedures. Several prints in the Control Room file were noted to not have necessary changes available for operations and maintenance day-to-day activities. The licensee has corrected this item.

One LER was issued in the maintenance area as a result of a personnel error and one LER was issued as a result of a procedural deficiency. The personnel error concerned poor system cleanliness practices while piping was open during maintenance. This error resulted in degraded performance of a safety-related pump. The procedural deficiency resulted in maintenance work causing a main steam isolation valve's closure time to be shorter than specified limits. Neither of these events were singularly significant nor indicative of programmatic problems.

The licensee management handling of the modification program during the outage, with the number of changes to the schedule, provides evidence of prior planning and assignment of priorities. The ability to maintain the flow of work and to meet scheduled completion points indicate a technically sound and generally clear understanding of the program. Conservatism is generally exhibited on safety-related items. The number of personnel onsite during the last two major outages was four to six times the number that management would normally be concerned with. With this number of personnel, the responsibilities and positions remained well defined and identified. The plant staffing was relatively stable during this SALP period and appears adequate with only occasional difficulties with backlogs or overtime.

The licensee does exhibit a positive attitude toward safety in the maintenance area. The maintenance supervision and technicians are professional in their manner and plan and schedule their work to minimize exposure of personnel contributing significantly to the ALARA program. The training and retraining of the plant staff appears to be a

satisfactory program, but the records were not well organized. Also, the snubber service and maintenance records were not well organized. The licensee is taking corrective action on these concerns.

b. Conclusion

The licensee remains rated Category 2 in this area.

c. Board Recommendations

None.

4. Surveillance and Inservice Testing

a. Analysis

(1) Surveillance and Inservice Testing Program

One inspection by two regional inspectors and portions of the routine resident inspections were conducted in this area during the assessment period. No items of noncompliance were identified in the areas of surveillance and inservice testing. No LERs were submitted that related to this functional area.

The personnel responsible for monitoring surveillance and inservice tests appeared knowledgeable, competent, and conscientious. The licensee's system of scheduling surveillances and assuring timely completion was very effective. No surveillance tests were missed during the assessment period. The program and personnel involved in scheduling and controlling the surveillance and inservice testing program are aggressive and oriented toward nuclear safety. Plant management is knowledgeable and involved in accomplishing the goals of the program. The in-place tracking system along with the above management controls provide very good overall surveillance and inservice testing programs.

(2) Inservice Inspection and Response to IE Bulletin No. 82-03

One special inspection relative to the licensee's response to IE Bulletin No. 82-03 concerning intergranular stress corrosion cracking in recirculation system piping, together with a review of inservice inspection activities, was conducted during this rating period. Areas examined included observation of work activities and a review of procedures, personnel

certifications, and records. Also, the ultrasonic examination methodology demonstration by Lambert, McGill & Thomas personnel at Battelle Laboratories in West Jefferson, Ohio, was witnessed. The overall effectiveness and attitude of licensee personnel in complying with requirements are considered acceptable. The management controls used and the record control systems in place met requirements. No items of noncompliance or other problems were identified.

(3) Calibration of Components and Test Equipment

One inspection by two regional inspectors and portions of the routine resident inspection program were conducted during the assessment period addressing the calibration program. No items of noncompliance and no LERs were identified in this area.

The licensee's calibration tracking system has been demonstrated to be effective as evidenced by the lack of missed calibrations.

b. Conclusion

The licensee remains rated Category 1 in this area.

c. Board Recommendations

Reduced routine NRC inspection activity is recommended in this area.

5. Fire Protection and Housekeeping

a. Analysis

During the assessment period, portions of the routine inspection program by the resident inspector addressed fire protection and housekeeping requirements. No items of noncompliance were identified in this area. No LERs involving personnel errors or procedure deficiencies were noted. The licensee's internal auditing was generally complete and identified some deficiencies in procedure compliance. The licensee revised procedures and training as applicable which corrected those deficiencies. Licensee management has maintained a positive attitude regarding fire protection, by providing fire protection training, performing independent on-the-job checks, and taking corrective action when required. The inspector observed several fire brigade drills including one that involved the city fire department. The inspector also observed the hands-on fire fighting training. These activities appeared to be effective in maintaining an adequately trained and qualified fire brigade.

During this assessment period the licensee evaluated the plant against the new fire protection requirements in Appendix R to 10 CFR Part 50. That assessment resulted in the licensee requesting four specific exemptions on June 30, 1982, and supplemented on October 28, 1982. On June 16, 1983, NRC granted one of the exemption requests and denied the remaining three requests.

Also during this assessment period the NRC determined that the fire resistance certification for the bullet resistant fire doors installed in the plant was not supported by the manufacturer with test data. The licensee had a representative bullet resistant fire door tested resulting in a door of that design being certified for three-hour fire resistance.

The level of plant housekeeping has decreased during this assessment period. Although management has utilized overtime to maintain site housekeeping during the assessment period, high maintenance and modification activity levels during the extended outage resulted in lower housekeeping and cleanliness levels when compared to the previous SALP period. No significant safety or fire hazards were discovered during this assessment period.

b. Conclusion

The licensee remains rated Category 2 in this area.

c. Board Recommendations

Licensee management should emphasize good housekeeping and cleanliness practices during the upcoming outage that will involve major safety-related piping replacement.

6. Emergency Preparedness

a. Analysis

During this period, three inspections in emergency preparedness were conducted by regional inspectors and an emergency preparedness exercise was held. In addition, a Safety Evaluation Report (SER) was completed in January 1983.

The first inspection, a follow-up to the Prompt Public Notification/Warning System inspection, showed that a corporate QA/QC program had been established by the licensee to assure continued reliability of the siren system and related communication equipment. This program is well

structured, definitive and is being carried out expeditiously as the inspector determined through a visit to both counties in the Emergency Planning Zone and a review of related records for maintenance and testing of equipment. All areas were considered satisfactory, and no noncompliance items were found.

The second inspection was a follow-up to the March 1982 emergency appraisal and no significant deficiencies were identified in emergency preparedness. The areas inspected included items for improvement and seven open items relating to emergency facilities, equipment, shift staffing, and post-accident sampling. All but two of the open items were closed.

One of these open items is the licensee's request to extend the Control Room area to include the adjacent Site Superintendent's office. The second item concerns the minimum number of Senior Reactor Operators (SROs) needed for emergency staffing. Both items are now part of a rule published in the Federal Register. NSP will have to determine if they need an exemption from this rule for those two items.

The third inspection was a routine evaluation of the licensee's emergency preparedness program. One item of noncompliance was identified as follows:

(1) Severity Level IV - Late notification to the State of Minnesota after declaring an Unusual Event (Inspection Report No. 263/83-05).

That was an isolated violation and the licensee initiated corrective action before completion of the inspection.

The annual Emergency Exercise was conducted on February 23, 1983. No items of noncompliance nor items requiring a 30-day response were noted. One isolated weakness was the lack of capability to perform dose assessment calculations at the Emergency Operations Facility. Discussions with the licensee subsequent to the exercise concluded that this will be corrected upon completion of the new MIDAS dose assessment system. That completion date has been delayed until approximately November 1983 due to delivery delays with the system software.

The SER for Emergency Preparedness that was issued in January 1983 included a review of the site and the corporate emergency plans. The licensee had corrected deficiencies in the plans identified during the initial Emergency Appraisal conducted in March 1982. The SER findings indicate that the licensee plans meet the 16 planning standards of 10 CFR 50.47(b).

The licensee's corporate emergency preparedness staff have been heavily involved in site activities. Audits of the emergency preparedness area are very definitive and detailed. When corrective action is required, it is promptly accomplished. The licensee has been very responsive to NRC requests and suggestions to improve the Emergency Preparedness Program. Plant and corporate management have readily made changes when needed. Staffing in emergency preparedness at both the plant and at the corporate offices is ample. Training, centered in the licensee's new Emergency Operations Facility, has improved. Interviews during the follow-up inspection showed licensee personnel are well trained in their emergency response functions and have pride in their emergency responsibilities. A meeting is being scheduled to discuss the role of NRC inspectors onsite during an emergency.

b. Conclusion

The licensee is again rated Category 1.

c. Board Recommendations

Reduction in the routine inspection program should be considered during the coming year.

7. Security and Safeguards

a. Analysis

Two physical security inspections were conducted by region based inspectors during the SALP period. Also, the resident inspector routinely conducted observations of security activities. Four noncompliances were identified relative to the security program. The noncompliances involved:

(1) Severity Level IV - Licensee identified contractor personnel had violated security procedures (Inspection Report No. 263/82-13).

(2) Severity Level IV - Two small sections of the protected area fence were not monitored as specified in the security plan (Inspection Report No. 263/82-13).

(3) Severity Level IV - Some surveillance equipment did not function as specified in the security plan (Inspection Report No. 263/82-13).

(4) Severity Level IV - Portions of the licensee's Protected Area alarm system did not function as designed (Inspection Report No. 263/83-08).

Three of the above items were noted during the initial inspection conducted early in the assessment period. All of the above items were satisfactorily corrected and corrective action was prompt and effective.

The items of noncompliance were not repetitive and do not represent programmatic degradation. However, they do represent an increase in number and severity when compared with the previous SALP which contained no security violations and only one minor violation pertaining to material control and accountability.

The licensee has expended considerable effort to upgrade the status of security force equipment and supervision of the security force. The effectiveness of the closed circuit television (CCTV) system was significantly upgraded by replacement of the CCTV cameras. An evaluation of the security maintenance program and more effective prioritization of maintenance support contributed directly to the significantly improved inspection results noted toward the end of the assessment period. Management support and commitment to improved maintenance of security equipment was apparent. Direct supervision of the contract security force was strengthened through the establishment of five security shift supervisor positions. These licensee positions provided continuous direct supervision of the contract security force and improved continuity of off-shift supervision. These additional supervisor positions exceeded security plan requirements at the time they were established. The licensee has also assigned a technician to provide full-time technical support for security equipment maintenance.

The licensee's security policies and procedures provide detailed guidance and are upgraded or revised in a timely manner. Close coordination exists between the corporate and site security offices in reference to required security plan revisions. The corporate security office provides effective and appropriate staff level support of site security functions in areas such as senior management security training, plan development, coordination of plan implementation and employee screening. Responses to NRC concerns at the site and corporate level are always timely. Required reports (10 CFR 73.71c) are promptly and accurately reported.

Supervision of the security force is aggressive. This has resulted in a stable, highly motivated, well-trained security force with high morale. The licensee's training program makes a positive contribution to the effectiveness of the security program with few personnel errors noted during duty performance.

In summary, the adverse trend in items of noncompliance noted during the initial inspection of this assessment period was reversed by management involvement and an increase in resources dedicated to the Security Program, upgraded security equipment (CCTV), more effective maintenance support, and a significantly increased level of licensee direct supervision of the contract security force appeared indicative of the management oversight of the entire security program for the assessment period. The licensee's management needs to assure that the initial adverse trend in violations continue to be effectively countered.

b. Conclusion

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

c. Board Recommendation

A reduction in the inspection frequency should be considered.

8. Refueling Activities

a. Analysis

During the assessment period, the plant commenced an outage on September 2, 1982, scheduled for 42 days. Due to the discovery of recirculation system piping cracks, the outage was extended to December 10. The major portion of the two resident inspections during that time concerned this functional area. Those inspections included evaluation of refueling procedures and activities, inspection of new fuel, preparation for refueling and movement of fuel bundles. No items of noncompliance were identified in this area and no LERs involving personnel error or procedure deficiencies were noted.

The high number of work items introduced by the discovery of recirculation system piping cracks that were smoothly integrated into a comprehensive work schedule demonstrated good management control over the scheduling of work activities. The procedures for that control appeared, for the most part, to be well stated and explicit. The authorities and responsibilities for the scheduling group personnel were well defined and understood.

b. Conclusion

The licensee remains rated Category 1 in this area.

c. Board Recommendations

This area should be considered for reduced routine inspection activity.

9. Licensing Activities

a. Analysis

Overall, the licensee's performance was based on the Project Manager's evaluation and daily interactions. The evaluation has also been supplemented by comments from the technical reviewers. Comments were obtained from the staff on those licensing actions that involved a significant amount of staff resources. The performance evaluation from the staff involved twelve branches in three NRR divisions with a total of 45 licensing actions.

For licensing activities considered in this evaluation, those attributes associated with (1) management involvement and staffing, (2) approach to resolution of technical issues, and (3) responsiveness to NRC initiatives, were the only ones of significance. In determining the overall rating, the following factors were taken into consideration: (1) understanding of issues, (2) conservatism of resolution, (3) acceptability of approach and resolutions, (4) technical soundness of approach, (5) quality of submittals, (6) timeliness of submittals and meeting of deadlines, and (7) cooperativeness.

(1) Management Involvement and Control in Assuring Quality

In 1982, the licensee reorganized the corporate structure and recently, the plant organization. Key positions have been filled in a reasonable time. There is evidence of systematic planning, whereby management strives to anticipate problems and to schedule priorities in an organized manner. As in the previous review period, the licensee did not request any emergency changes to the technical specifications because the licensee had adequately scheduled major projects, anticipated problems, and minimized crises.

The efforts of the licensee's staff have usually been efficient, with key personnel possessing a good working knowledge and history of the plant. There is, however, an increasing trend in the lack of quality submittals sent to the NRC, where submittals have contained insufficient information to support the action requested, and a number of errors or inconsistencies. Management attention needs to be focussed to review submittals for their thoroughness and completeness. This trend is discussed further in the next section.

(2) Approach to Resolution of Technical Issues From a Safety Standpoint

When resolving technical issues, the licensee has generally expressed conservatism from the safety standpoint, and has usually presented a sound approach to resolving issues. When proposing an approach to resolve any safety concerns or to meet any regulatory requirements, the licensee has consistently proposed solutions that more than meet the minimum acceptable standards. However, it appears that the licensee's performance has slipped from the previous degree of excellence with most of the ratings from reviewers being lower in this assessment period.

NRR has observed a trend in the licensee's performance, where submittals have been consistently decreasing in thoroughness and completeness. In requesting a schedule exemption from certain requirements of Appendix R to 10 CFR Part 50, associated with fire protection, the licensee merely requested the extension of time without providing a basis for the exemption request.

In requesting an amendment to the technical specifications to remove all limiting conditions for operation and surveillance requirements associated with the scram discharge volume (SDV) vent and drain valves, the licensee merely requested the change without providing any basis. Six months earlier, the staff had requested from all licensees to amend this technical specifications to ensure that the SDV vent and drain valves were operable because of their contribution to safety.

In requesting a technical specification change to add setpoints for the Residual Heat Removal Shutdown Cooling System that would protect the low pressure piping, the licensee had requested setpoints with associated deviations that are higher than the design pressure of the piping.

The submittal's quality has a substantial bearing on the technical review process. Assuring attention to detail could only improve the submittal's effectiveness during the technical review process.

(3) Responsiveness to NRC Initiatives

The licensee seems to follow closely the regulatory environment and takes an active role from the safety standpoint. NRR has met with the licensee several times during this review period The licensee was well prepared, responsive and made a concerted effort to resolve the issues. Monticello had also been visited by various staff members for site visits or for information. Although the licensee was involved in a heavy schedule, the licensee was courteous, cooperative and informative.

The licensee tries to meet deadlines and notifies NRR when they cannot be met. Usually, few items are outstanding for significant periods of time. The licensee generally submits license amendments on a timely basis, allowing adequate time for NRR review. Again, there was no need for an emergency change to the technical specifications during this review period.

b. Conclusion

The licensee is rated a Category 2 for licensing activities during this rating period which is a decrease from the SALP 3 rating due primarily to a decrease in submittal quality.

c. Board Recommendations

Attention needs to be given to improve the quality of the submittals sent to NRR.

V. SUPPORTING DATA AND SUMMARIES

A. Noncompliance Data

Facility Name: Monticello Docket No. 50-263

Inspections: No. 82-09 through 82-17
No. 83-01 through 83-14

Functional Area Assessment	Noncompliances and Deviations Severity Levels I	II	III	IV	V	Dev.
1. Plant Operations and Operator Training			1	2	2	
2. Radiological Controls				3	1	
3. Maintenance and Modifications					2	
4. Surveillance and Inservice Testing						
5. Fire Protection and Housekeeping						
6. Emergency Preparedness				1		
7. Security and Safeguards				4		
8. Refueling Operations						
9. Licensing Activities						
TOTALS	-	-	1	10	5	-

B. Licensee Report Data

1. Licensee Event Reports (LERs)

Proximate Cause	SALP 2 7/1/80-6/30/81	SALP 3 7/1/81-6/30/82	SALP 4 7/1/82 6/30/83
Personnel Error	5	1	3
Design, Mfg., Construction/ Installation	5	1	5
External Cause	0	0	0
Defective Procedure	0	0	2
Component Failure	13	10	17
Other	2	0	1
TOTALS	25	12	28

2. LER Evaluation

The Office of Analysis and Evaluation of Operational Data (AEOD) reviewed the first 18 LERs submitted during the assessment period. That review included an evaluation of completeness of the information provided, a determination if appropriate events are reported to NPRDS, and an examination of the relationship between LERs and Preliminary Notifications (PNs). AEOD found the LERs to contain exceptionally informative narrative descriptions of the event in all but one of the reports. LER 82-12 referenced valves by their number without stating where the valves were located or what their function was. AEOD found the coded information in the reports to be accurate without exception.

During the SALP 4 assessment period, the number of LERs increased to 28 from 12 events reported during the SALP 3 period. While the number of events caused by personnel errors and procedural deficiencies increased from 1 to 3 events and 0 to 2 events, respectively, the licensee is maintaining a very low occurrence rate for those types of events. The largest increase in reportable events occurred in the area of equipment failures; from 10 events during the SALP 3 period to 17 events currently. None of the equipment failures were singularly significant and, where appropriate, corrective actions included expansion of the preventative maintenance program to preclude recurrence. The percentage of events caused by design, manufacturing, construction or installation problems is somewhat higher than expected, but does not appear to be significant at this time.

During the SALP 1, 2 and 3 assessment periods, the number of reportable events was consistently decreasing. While the overall number of events in the SALP 4 assessment period remains low, management attention should be focused on maintaining a low frequency of reportable events and ensuring that an upward trend in LER frequency does not occur.

C. Licensee Activities

1. Operations

The plant was in power coast down mode from the beginning of the SALP 4 period until shutdown on September 2, 1982. Reactor power had reduced to 60% at that time. Shutdown for refueling began on September 2, 1982, for a 42-day shutdown, which was extended to December 8, 1982, due to intergranular stress corrosion cracks (IGSCC) found in primary piping. Two forced outages occurred (December 17, 1982, and December 26, 1982,) after startup from the outage due to main turbine bearing vibration problems. The first outage lasted three days and the second lasted thirteen days. One forced

outage occurred on May 19, 1983, to repair a steam leak on a moisture separator drain line. That outage lasted five days. During the assessment period, the licensee pursued decreasing the number of standing control board alarms during routine operation. Currently, a virtually black board has been obtained for routine operation. This is a commendable achievement.

2. Modifications

The licensee continued a significant program of facility modifications during the SALP 4 period in the following areas:

a. All below water level Mark I Torus upgrade work was completed during the refueling outage.

b. Reinforcement was added to the main steam lines at the relief valve pipe connections.

c. The scram discharge volume modifications, pursuant to IE Bulletin 80-17 were completed.

d. An addition to the administration building to house the Technical Support Center and other offices was completed.

e. Work continued on the training center with a site specific simulator expected to be completed in December 1983.

f. The control room emergency filtration system was completed.

In addition, major repair work on the recirculation system piping was necessitated following the discovery of cracks in a recirculation system manifold end cap and five jet pump risers. The cracks were repaired to design piping wall thickness using the weld overlay technique.

D. Inspection Activities

During the assessment period, the following significant team inspections were performed:

1. Monticello Emergency Exercise (February [illegible] through 24, 1983)

2. Emergency Preparedness Appraisal Follow-up (May 16 through 20, 1983)

3. INPO Third Appraisal (April 25 through May 5, 1983 (site) and May 3 through 6, 1983 (corporate))

E. Investigations and Allegations Reviews

None.

F. Escalated Enforcement Actions

A $20,000 Civil Penalty was proposed and paid by the licensee for failure to maintain primary containment when required. A newly installed containment valve and two leak check valves were found to have been open creating an open flow path from primary to secondary containment while primary containment integrity was required. The valves were shut and leak tested. (Inspection Report No. 263/83-01)

G. Administrative Actions

1. Confirmatory Action Letters

October 19, 1982 - Proposed corrective actions following discovery of cracks in the recirculation system piping.

2. Management and Enforcement Conferences

a. October 22, 1982 - Management meeting to discuss deterioration of management effectiveness of the radiation protection program evidenced by unplanned exposures of individuals during the outage and other previously identified matters. (Inspection Report No. 263/82-11)

b. November 10, 1982 - SALP 3 meeting with the licensee (Inspection Report No. 263/82-18)

c. February 18, 1983 - Enforcement Conference on failure to maintain primary containment when required. (Inspection Report No. 263/83-01)

VI. Enclosures

1. Letter to licensee from SALP Board Chairman

2. Licensee Comments