UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

50-400

November 23, 1994

Mr. W. R. Robinson, Vice President
Shearon Harris Nuclear Power Plant
Carolina Power and Light Company
Post Office Box 165- Mail Code: Zone 1
New Hill, North Carolina 27562-0165

SUBJECT: SITE VISIT TO REVIEW IMPLEMENTATION OF THE MAINTENANCE RULE

Dear Mr. Robinson:

An NRC team visited the Shearon Harris Nuclear Power Plant on October 24-28, 1994 to review the implementation of the Maintenance Rule, 10 CFR 50.65. Members of this team included Suzanne Black, Richard Correia, Thomas Foley, Ed Ford and Charles Petrone from NRR, Paul Kellogg from NRC Region II, Wayne Shafer and George Replogle from Region III, and Angel Coello from the Spanish Nuclear Safety Council. During this visit the team reviewed the implementation of the Maintenance Rule with Ron Zula, Martin Bridges, Robert Biggerstaff and other members of your staff. The team's objectives were to 1) verify usability and adequacy of the NRC's draft Maintenance Rule Inspection Procedure, 2) determine the strengths and weaknesses of the Harris Plant's implementation of the maintenance rule, and 3) summarize results of the site visits for the benefit of the other licensees. To accomplish this the team performed a step by step review of the implementation of the maintenance rule using the draft Maintenance Rule Inspection Procedure.

The team reviewed the procedure and processes you are developing to implement the maintenance rule. The team also reviewed examples of implementation for systems within the scope of the rule and interviewed members of your staff responsible for the maintenance rule, probabilistic safety assessment (PSA) activities, engineering, operations, maintenance, planning and scheduling. The review included walk-downs of selected structures and systems in the plant.

The team's detailed findings were discussed daily with members of your staff and summarized by Mr. Correia at the exit meeting on October 28, 1994. The team concluded that you have made progress in developing and implementing a procedure and processes for implementing the rule. The team noted that some procedures and processes remain to be developed, and significant implementation activities need to be completed before the maintenance rule takes effect on July 10, 1996. The team recommends that you carefully reevaluate the procedure and processes you have developed and implemented taking into consideration the guidance contained in NUMARC 93-01 and the following specific findings identified by the team:

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1. Some non-safety related SSCs were excluded from the scope of the rule without adequate justification.

2. The process for considering safety when setting goals for (a)(1) SSCs is not clearly defined in your procedures.

3. Operating Experience had not been fully taken into account when setting goals for some (a)(1) SSCs. Documentation of this activity needs further attention.

4. Trending activities are not well coordinated and integrated with the goals and monitoring.

5. Corrective actions for some (a)(1) SSCs were ineffective.

6. For some (a)(2) SSCs; monitoring was not being performed to support the performance criteria, performance and system engineers were not aware of performance criteria that had been set for systems they were responsible for, and monitoring was not being performed at the train level on systems that contained redundant trains.

The team also noted that in addition to performing risk determinations, your staff plans to have the expert panel participate in other maintenance rule activities such as scoping, establishment of goals and performance criteria, and review of corrective actions. The team considers the participation of the expert panel in these additional activities to be a strength.

Although your preliminary plans for performing the periodic evaluation, balancing unavailability and reliability, and performing the plant safety assessments required by (a)(3) of the rule appeared reasonable, the team was unable to assess these activities because they had not been fully developed at the time of the site visit.

Additional details on the results of our review are provided in Enclosure 1 to this letter. A list of those who attended the entrance meeting on October 24, 1994 and the exit meeting on October 28, 1994, are provided in Enclosure 2 to this letter.

The team would like to thank you and your staff for volunteering for this pilot effort. What the team has learned during this visit will be used to refine the guidance contained in our draft inspection procedure and help

assure that the maintenance rule can be implemented as intended by the Commission. The team hopes that our feedback to you will assist you in your implementation of the rule. Please convey our thanks to your staff for their support and cooperation during this site visit.

Sincerely,

Ngoc B. Le, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-400

Enclosures:
As stated

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MAINTENANCE RULE IMPLEMENTATION AT SHEARON HARRIS NUCLEAR POWER PLANT

The guidance contained in NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Plants" was used by the licensee, with some exceptions, to implement the maintenance rule at the Harris Plant. The details provided below follow the sequence described in that document.

SCOPE OF THE RULE

The NRC team reviewed the process and procedures used by the licensee to determine that approximately 111 structures, systems and components (SSCs) were included and 94 were excluded from the scope of the rule. The team noted the licensee generally followed the scoping process described in NUMARC 93-01.

The team reviewed the Shearon Harris Nuclear Power Plant Final Safety Analysis Report (FSAR) and Emergency Operating Procedures (EOPs) and selected a sample of SSCs that the team believed should be included within the scope of the maintenance rule. The team used this sample list to determine if the licensee had included the required SSCs within the scope of the rule. The team concluded that there were some non-safety related SSCs that should have been included and were not. The team noted that the justification for excluding these from the scope did not appear adequate.

For example, the documentation for site grounding (system 5260) indicated that this system is a "non-safety related SSC whose failure causes trip/power reduction" which would indicate that it should be included within the scope of the rule. Contrary to this, this system was excluded from the scope of the rule with the justification that "... the plant has not experienced significant problems with system in the past...." The team believes that the licensee has misinterpreted the paragraph (b)(2)(iii) of the rule which states that non-safety related SSCs "Whose failure could cause a reactor scram or actuation of a safety-related system" shall be included within the scope of the rule. It appears from the way the licensee has stated this requirement on their data sheet, "...failure causes trip...," that the SSC would not be included unless the SSCs had caused a trip or safety system actuation in the past at their plant. The team believes that this interpretation is overly restrictive and should be re-evaluated. The team also believes the data sheets should be revised to more accurately reflect the words on the rule.

Other examples of SSCs that the team believes should be considered for inclusion are the plant computer, heat tracing and freeze protection, and reactor coolant pump vibration monitoring.

When questioned by the team members, the licensee's representatives stated that in some cases their decision to exclude SSCs from the scope of the rule was based on the fact that they could not think of a good performance criteria. The team members explained that excluding these SSCs from the scope of the rule for this reason was not acceptable.

Conclusion for Scoping: The team concluded that most safety related SSCs been included within the scope of the rule. However, there were some non-safety related SSCs that were excluded without adequate justification.

Recommendations for Scoping: The licensee should re-evaluate all non-safety related SSCs that were excluded from the scope of the rule to determine if the justification for excluding them is adequate and consistent with the rule and the guidance contained in NUMARC 93-01. The licensee should also revise the screening criteria contained on the scoping and performance criteria data sheets to accurately reflect the words in the rule.

RISK DETERMINATION

Implementation of the rule using NUMARC 93-01 requires that a risk (or safety) determination be performed for all SSCs within the scope of the rule. This risk determination would then be taken into account when setting goals and monitoring under (a)(1) of rule and when establishing performance criteria under (a)(2).

At Shearon Harris the expert panel made the risk determinations taking into consideration the results of the plant Probabilistic Safety Assessment (PSA) and the methods described in NUMARC 93-01. The expert panel identified 44 systems as risk significant. The team noted that the expert panel is a multidisciplinary group of licensee employees with extensive plant experience.

The team questioned the expert panel about their plans for updating their PSA in the future. NUMARC 93-01, paragraph 9.3.2, states "Performance criteria for risk significant SSCs should be established to assure that reliability and availability assumptions used in the plant specific PRA, IPE, IPEE or other risk determining analysis are maintained or adjusted when determined necessary by the utility." The licensee's representative stated that they plan to review and update the PSA as necessary to account for any plant modifications. However, there were no plans to update the assumptions used in the PSA with the reliability and availability data information obtained through maintenance rule monitoring activities.

The team noted that in addition to making the risk significant determinations as recommended in NUMARC 93-01, the expert panel at the Harris Plant participated in the scoping process and other maintenance

rule activities. These activities include the establishment of performance criteria and goals, the determination of when SSCs should be moved from (a)(1) to (a)(2) and from (a)(2) to (a)(1), the review of corrective actions, and the performance of the periodic evaluation required by (a)(3) of the rule.

The team believes that the participation of the expert panel in these additional maintenance rule activities will provide a multidisciplinary review of the ongoing implementation of the rule.

Conclusion for Risk Determination: The methods used to establish risk significance appear to meet the intent of the rule and the NUMARC 93-01 guidance. The participation of the expert panel in other maintenance rule activities is considered a strength of the licensee's program.

Recommendations for Risk Determination: None.

(a)(1) GOAL SETTING AND MONITORING and (a)(2) PREVENTIVE MAINTENANCE

The team reviewed in detail the licensee's process for goal setting and monitoring of SSCs under (a)(1) and for verifying that preventive maintenance was effective for SSCs under (a)(2) of the rule. The team reviewed program documents and records and discussed the program with plant staff personnel. The team also selected a sample of six (a)(1) systems and eight (a)(2) systems for further review.

Safety Consideration in Goal Setting:

Paragraph (a)(1) of the rule requires that goals must be commensurate safety (risk).

The risk determination process performed by the licensee's expert panel (described previously) is the first step in the licensee's process for taking safety into account for goal setting. This risk information is then used by the expert panel to establish goals for those SSCs categorized under (a)(1) of the rule (and for establishing performance criteria under (a)(2) of the rule). The team reviewed the goals that had been established for each of the six (a)(1) systems and noted that they appeared to be very demanding. For example: the goal for the turbine driven auxiliary feedwater pump is no failures; the goal for the LK-16 circuit breakers is no failures to open on demand; and the goal for the BIF butterfly valves is no local leak rate testing failures. Although these goals appear adequate, it is not clear from a review of the available information that safety was taken into consideration when setting goals other than through the first step of the risk determination process described previously.

Conclusions for Safety Consideration in Goal Setting: The expert panel's first step had considered safety when setting goals however, this process is not clearly defined in the licensee's procedures nor documented in the implementation records.

Recommendations for Safety Consideration in Goal Setting: Revise the goal setting procedure to make the process of taking safety into consideration more explicit and assure the basis for each goal is clearly defined.

Monitoring:

The Statements of Consideration for the maintenance rule require that where failures are likely to cause loss of an intended function, monitoring of SSCs under (a)(1) should be predictive in nature providing early warning of degradation. NUMARC 93-01 provides guidance for predictive maintenance, inspection, testing and performance trending for monitoring of SSCs under (a)(2) of the rule.

The team's review of the monitoring that was being performed for the six (a)(1) systems indicated the goals that had been set were generally not amenable to trending. For example the goal for the turbine driven auxiliary feedwater pump is no failures; the goal for the LK-16 circuit breakers is no failures to open on demand; and the goal for the heater drain pump "A" motor is no motor failures. Although these pass/fail type goals are very demanding, they do not lend themselves to trending. The licensee does perform many trending activities such as vibration analysis, thermography, flow measurements, and ultrasonic measurement of pipe wall thickness pertinent to the performance of the SSC. However, these activities are not well coordinated and integrated with the goals and monitoring that is being performed to support the implementation of the maintenance rule. The team believes that trending should be coordinated and integrated with goals and monitoring whenever possible.

Conclusions for Trending: Many trending activities are being performed but they are not well coordinated and integrated with the goals and monitoring.

Recommendations for Trending: The licensee's procedures should clearly state that goal setting and monitoring activities should be coordinated and integrated as much as possible with trending activities.

Industry Wide Operating Experience in Goal Setting:

Paragraph (a)(1) of the rule requires that industrywide operating experience (OE) be taken into account, where practical, when establishing goals.

The licensee's procedure PLP-402 currently includes a step that requires that "relevant industry NPRDS operating experience" be reviewed and considered as part of the goal setting process. The team believes these words could be interpreted to mean that the OE information could be limited to NPRDS data. The team believes that the licensee's review should include consideration of all OE information available from the licensee's Operating Experience Feedback program, and not be limited to the information available from NPRDS. The licensee's representative stated that they would consider revising the words in their procedure PIP-402 to make it clear that the review should not be limited to NPRDS data.

The team's review of the goals for six selected (a)(1) systems indicated that OE had been taken into consideration when setting goals for the "B" emergency diesel generator and LK-16 circuit breakers but had not been taken into consideration when setting goals for the turbine driven auxiliary feedwater pump, the reactor cavity seal, the heater drain pump "A" motor, and the BIF butterfly valves. In the case of the auxiliary feedwater pump, OE information on a previous failure at another site was available but had not been identified by the licensee during the goal setting process. The licensee's representative stated that a new procedure was being developed that will require a review of OE whenever goals are established for SSCs under (a)(1) of the rule. This procedure will also require a review of the predictive monitoring, trending, and corrective maintenance procedures whenever there is a failure of an SSC.

Conclusions for Industry Wide Operating Experience: Operating Experience had not been taken into account when setting goals for some (a)(1) SSCs. Documentation of this activity was inadequate.

Recommendations for Industry Wide Operating Experience: Re-evaluate the goals for all SSCs currently under (a)(1) and verify that OE had been taken into account when these goals were established. Complete planned revisions to procedures to ensure that OE is taken into account every time that goals are set for SSCs under (a)(1) and to ensure that this activity is documented.

Structures:

The licensee determined that all structures within scope of the rule, except the primary containment, are inherently reliable and therefore do not require goal setting under (a)(1) or monitoring against performance criteria under (a)(2) of the rule. The licensee's representative stated that structures are routinely examined by plant personnel during their walk downs of the plant and that this monitoring activity is sufficient to assure that preventive maintenance is adequate. Although condition monitoring of structures appears to be an appropriate method of monitoring structures, the lack of an established baseline condition to monitor against would appear to make it difficult to detect degradation of these structures. The team recommends that the licensee perform an

initial survey to document the current condition of plant structures to establish the baseline for future condition monitoring activities and to take credit for the plant walkdowns as part of the maintenance rule implementation.

Conclusions for Structures: Monitoring the condition of most plant structures as part of the plant walk down inspections is a reasonable approach to meeting the requirements of the rule as long as guidelines are established that include appropriate acceptance criteria.

Recommendations for Structures: Establish the baseline condition of plant structures and develop guidelines for taking credit for plant walk down inspections as part of the maintenance rule implementation.

Corrective Actions:

Paragraph (a)(1) of the rule states that when the performance or condition of an SSC does not meet established goals, appropriate corrective action shall be taken. The licensee has assigned the task of determining the root cause and developing corrective action to the responsible system engineer. The process requires a search of the previous three years data to identify repetitive failures. To enhance this process, the licensee is implementing plans to require that all proposed corrective actions be presented to the expert panel for review and approval. The corrective actions will also include a review of the corrective, predictive, and preventive maintenance activities. The licensee's process for establishing corrective actions appears to be very rigorous and methodical and should result in appropriate corrective actions when the process has been fully implemented.

The team's review of the corrective actions for the six (a)(1) systems indicated that some of the corrective actions did not appear to be effective. For example, the turbine driven auxiliary feedwater pump experienced an over speed trip on May 5, 1994 that was attributed to a faulty RAM logic card which was replaced. On August 24, 1994 a second over speed trip occurred and was again attributed to a faulty RAM logic card which was also replaced. On August 28, 1994 the pump experienced a third over speed trip that was attributed to a faulty seal on the servo unit. On October 24, during the site visit, a fourth over speed trip occurred which was again attributed to a faulty RAM logic card. Based on a review of these actions, the team concluded that a more thorough evaluation of the first failure might have identified the root cause of the RAM logic card failure and possibly avoided the subsequent failures.

Conclusions for Corrective Actions: The team did note some weaknesses in the corrective actions taken for some of the (a)(1) SSCs. However, the licensee's plans to enhance their corrective action process by involving their expert panel should increase the effectiveness of future corrective actions.

Recommendations for Corrective Actions: Implement plans for improving the corrective action requirements of the maintenance rule.

Preventive Maintenance:

Paragraph (a)(2) of the rule states that monitoring as specified in paragraph (a)(1) of the rule is not required where it has been demonstrated that the performance or condition of the SSC is being effectively controlled through the performance of appropriate preventive maintenance such that it remains capable of performing its intended function. The licensee generally followed the methods described in NUMARC 93-01 which uses performance criteria and monitoring to demonstrate effective maintenance. The licensee typically used two percent system unavailability and 100% reliability (i.e., no functional failures) as specific performance criteria for risk significant and standby SSCs. Plant level performance criteria were used for the remaining non-risk significant SSCs. These performance criteria were established by the licensee's expert panel.

The team reviewed available maintenance records for a sample of eight SSCs that were categorized (a)(2) to determine if the licensee had implemented monitoring against performance criteria as described in NUMARC 93-01. The team concluded that the licensee had demonstrated effective maintenance by establishing and monitoring against appropriate performance criteria for five of the eight SSCs selected for review (reactor protection system, emergency load sequencer, normal service water, instrument air and main feedwater). However, the team had concerns regarding the monitoring of the remaining three SSCs:

1. The licensee had established performance criteria of 2% unavailability and 100% reliability for the containment spray system but the team could find no evidence that 1) provided the technical basis for these criteria or 2) that system unavailability or reliability were being tracked by the performance engineers or the responsible system engineer. Additionally, the team was concerned that the system, which contains redundant trains, was being monitored at the system level rather than the train level. The team believes that failure to monitor systems with redundant trains at the train level could allow unreliable components to go undetected by the monitoring process. The poor performance of one component can be masked by the acceptable performance of the redundant component.

2. Plant air compressors are monitored using a plant level performance criteria; i.e., unit availability. The system includes five separate compressors which supply air to the instrument air system. A failure of one pump would be masked by the acceptably performing redundant pumps and therefore would not be counted as a functional failure

requiring goal setting and monitoring under part (a)(1) of the rule. The team believes that these compressors should be considered redundant trains that require monitoring at the train level using train level performance criteria (i.e., each compressor should be monitored).

3. The condenser vacuum system is monitored using plant level performance criteria despite the fact that the system contains two separate 100% capacity pumps. The team believes that these pumps should be considered redundant trains and therefore be monitored at the train level rather than at the system or plant level to ensure that the poor performance of one pump is not masked by the acceptable redundant pump.

The team also noted that the licensee's plant level performance criteria did not follow the guidance contained in NUMARC 93-01. For example, safety system actuations were not used as performance criteria and unplanned capability loss factor was evaluated on an annual basis instead of a per occurrence basis.

Conclusions for Preventive Maintenance: For some SSCs; monitoring was not being performed to support the performance criteria, performance and system engineers were not aware of performance criteria that had been set for systems they were responsible for, monitoring was not being performed at the train on some systems that contained redundant trains, and plant level performance criteria were inconsistent with NUMARC 93-01.

Recommendations for Preventive Maintenance: The licensee should reexamine their procedures and processes for establishing performance criteria and monitoring under paragraph (a)(2) of the rule to ensure that monitoring adequately supports performance criteria and that monitoring is performed at the train level for systems with redundant trains. The licensee should ensure that performance criteria, including plant level performance criteria, follow NUMARC 93-01 or provide justification for any deviations. The licensee should also ensure that appropriate plant staff, including performance engineers and system engineers, are aware of the monitoring that is performed on the systems for which they have been assigned responsibility.

(a)(3) PERIODIC EVALUATION:

Paragraph (a)(3) of the rule requires that performance and condition monitoring activities and associated goals and preventive maintenance activities be evaluated at lease every refueling cycle provided the interval between evaluations does not exceed 24 months. The team reviewed the licensee's schedule for performing this periodic evaluation and noted that they tentatively plan to perform the first evaluation in

January 1995. Subsequent evaluations will be performed once per refueling cycle. The normal fuel cycle at the Shearon Harris Plant is 18 months. This evaluation will be performed by the expert panel and will include a review of all goals and performance criteria, all risk determinations, all corrective actions, and other maintenance rule activities.

Conclusions for Periodic Evaluation: The licensee's preliminary plans for performing the periodic evaluation appear to be reasonable although the adequacy of these planned evaluations could not be verified during this site visit.

Recommendations for Periodic Evaluations: Finalize and implement plans for periodic evaluations.

(a)(3) BALANCING UNAVAILABILITY AND RELIABILITY:

Paragraph (a)(3) of the rule requires that adjustments be made where necessary to assure that the objective of preventing failures through the performance of preventive maintenance is appropriately balanced against the objective of minimizing unavailability due to monitoring or preventive maintenance.

The licensee's representatives stated that they plan to perform the balancing of unavailability and reliability on an ongoing basis. However, their program is still under development and the details were not available for review by the team.

Conclusion for Balancing Unavailability and Reliability: The team was unable to evaluate these balancing activities because these plans have not been fully implemented.

Recommendation for Balancing Unavailability and Reliability: Develop and implement processes and procedures for balancing unavailability and reliability.

(a)(3) Plant Safety Assessments Before Taking Equipment Out of Service:

Paragraph (a)(3) of the maintenance rule requires that the total impact on plant safety be taken into account before taking equipment out of service for monitoring or preventive maintenance activities.

The licensee plans to implement this requirement through the use of matrix of risk significant combinations of equipment which will be incorporated into their twelve week work planning schedule. This matrix was developed from the licensee's probabilistic safety assessment and identifies combinations of equipment that would increase risk unacceptably if taken out of service at the same time. The licensee also plans to provide this matrix to the staff in their work clearance center so that the information on risk significant combinations can be

considered prior to tagging equipment out of service for maintenance. Procedures to implement this process had not been developed at the time of the inspection.

On October 27, 1994, the NRC issued Temporary Instruction (TI) 2515/126, "Evaluation of On-Line Maintenance" which will be used by NRC inspectors to evaluate the impact on safety of licensee's procedures and practices regarding the removal of equipment for service for on-line scheduled maintenance. This TI provides details of the NRC's expectations regarding safety assessments to be performed before taking equipment out of service. Included in the TI is the recommendation that three factors 1) the probability of an initiating event such as a LOCA 2) the probability of not being able to mitigate the event using core damage prevention, and 3) the probability of not being able to mitigate the consequences using containment integrity preservation should be taken into consideration when evaluating overall risk of taking equipment out of service for on-line maintenance. Since this TI was not issued prior to the site visit, the reviews recommended in the TI were not performed at Shearon Harris. However, the guidance provided in the TI will be considered during future site visits to verify the implementation of the maintenance rule.

Conclusion for Plant Safety Assessments: The team believes that the licensee's plans for taking plant safety into account before taking equipment out of service for maintenance appear to be reasonable, thus far. However, the effectiveness of the licensee's program could not be established during this site visit.

Recommendations for Plant Safety Assessments: Complete development and implementation of processes and procedures for taking plant safety into account before taking equipment out of service for maintenance.

ENTRANCE MEETING
October 24, 1994

Nuclear Regulatory Commission

Richard P. Correia	Chief, Reliability & Maintenance Section, NRR
Thomas Foley	Reliability & Maintenance Section, NRR
Charles D. Petrone	Reliability & Maintenance Section, NRR
Angel Coello	Spanish Nuclear Safety Council (CSN)
Ed Ford	Senior Resident Inspector, Waterford - 3
Paul Kellogg	Region II DRS, Section Chief
George Replogle	Reactor Inspector, RIII
Wayne Shafer	Chief, Maint and Operations Section, RIII
N. B. Le	NRC Project Manager
Stephen Elrod	Senior Resident Inspector, Shearon Harris

Licensee: Shearon Harris

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J. Donohue	Plant General Manager - Harris
R. W. Prunty, Jr.	Mgr - Licensing
R. J. Zula	Mgr. Maintenance Support
E. L. Rothe	NAS-RNP
M. D. Hill	Mgr. - Nuc. Assmt.
R. J. Duncan	Mgr. Technical Support
S. H. Sewell	Shift Supervisor
A. J. Canterbury	Project Eng. - RNP Tech. Support
J. H. Smith	Mgr. RadWaste (Representing Mgr. Ops)
Lewis Rowell	Project Engineer
C. Wayne Crawford	Mgr- Ma Svcs (Corp)
Greg Rolfson	Mgr. Hess
Martin Bridges	Manager BOP Systems
Nash Palmer	Mgr. Int. Sched
Mark Hale	Sr. Engr.
Carl Sweely	Sr. Spec.
Mike Macon	Proj. Engr.
Bill Gantz	Maintenance
Mark Blinson	Sr. Engr, Brunswick
Pete Brady	Sr. Eng, Harris Plant
Dan Rains	Project Manager, NEI
Doug Walters	Project Manager, NEI
R. T. Biggerstaff	Project Specialist,
B. M. Christensen	Manager, Maintenance

ENCLOSURE 2

EXIT MEETING
October 28, 1994

Nuclear Regulatory Commission

Suzanne C Black	Chief, QA & Maintenance Branch, NRR
Richard P. Correia	Chief, Reliability & Maintenance Section, NRR
Thomas Foley	Reliability & Maintenance Section, NRR
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Angel Coello	Spanish Nuclear Safety Council (CSN)
Ed Ford	Senior Resident Inspector, Waterford - 3
Paul Kellogg	RII DRS, Section Chief
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J. H. Smith	Mgr. RadWaste (Representing Mgr. Ops)
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C. Wayne Crawford	Mgr- Ma Svcs (Corp)
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Dan Rains	Project Manager, NEI

ENCLOSURE 3