



OLIVER D. KINGSLEY, JR.
Vice President
Nuclear Operations

May 20, 1988 10:50

U. S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 2900
Atlanta, Georgia 30323

Attention: Dr. J. Nelson Grace, Regional Administrator

Dear Dr. Grace:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Supplemental Response to SALP
Report and Additional Information
on SERI Initiatives and
Improvement Actions
AECM-88/0102

Your letter dated January 15, 1987 transmitted the Systematic Assessment of Licensee Performance (SALP) report for the Grand Gulf Nuclear Station (GGNS) facility for the period May 1, 1985 through October 31, 1986. On January 22, 1987 members of our staff and the GGNS Safety Review Committee met with members of your staff to review the results of the report. System Energy Resources, Inc. (SERI) responded to that report via letter AECM-87/0042 dated February 23, 1987. The attachment to this letter provides additional information addressing actions taken since the initial response. The attachment also provides additional information on SERI initiatives to improve performance. This information is intended to support the NRC assessment of SERI in the most recent appraisal period.

SERI endorses the SALP concept and believes that objective evaluations of licensee performance benefit the licensee, the NRC, and the public by identifying and focusing attention and resources on matters important to safety of plant operations. SERI is committed to operating GGNS safely and at a standard well above the minimum regulatory requirements. We believe we have been responsive to the conclusions and recommendations discussed in your report.

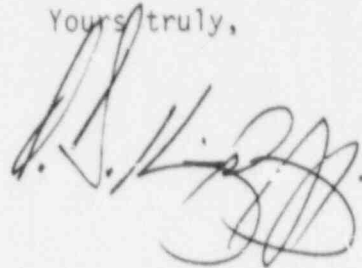
SERI believes that a candid and cooperative relationship should exist between the NRC and its licensees in order to promote the free interchange of information necessary to facilitate the regulatory process and enhance nuclear safety. We believe that this sort of relationship exists between SERI and your office and intend to maintain the spirit of cooperation that has characterized our dealings in the past. Further, we believe that the significant improvements documented in the SALP report provide evidence that we have been responsive and are committed to nuclear safety in the operation of Grand Gulf Nuclear Station.

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SERI appreciates the efforts of you and your staff in helping to identify areas where improvement of our operations is needed. We believe the corrective actions we have taken continue to be effective and expect additional continued improvement in the future. We look forward to positive indications of this in the upcoming SALP report.

I would be happy to discuss this information or answer any questions you may have at your earliest convenience.

Yours truly,



ODK:bms
Attachment

cc: Mr. T. H. Cloninger (w/a)
Mr. R. B. McGehee (w/a)
Mr. N. S. Reynolds (w/a)
Mr. H. L. Thomas (w/o)
Mr. R. C. Butcher (w/a)

Mr. L. L. Kintner, Project Manager (w/a)
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop 14B20
Washington, D.C. 20555

SERI ACTIVITIES DURING THE
CURRENT SALP PERIOD

I. Plant Operations

1. To achieve both improved overall control and improved management control with respect to root cause analysis of failure to follow procedures, a number of actions have been taken:
 - o Plant Administrative Procedure 01-S-06-5, "Incident Report/Reportable Events" was revised to increase management involvement in the root cause determination and corrective action process. This process provides for a timely investigation into the cause of a documented incident. Incident Reports (IR's) containing a discussion of immediate corrective actions are forwarded to the Site Director and Vice President, Nuclear Operations after approval by the GGNS General Manager. Newly initiated IR's are discussed with the on-call corporate officer on a daily basis if at all practical. Additionally, the Incident Review Board process was formalized.
 - o A Root Cause Determination Policy is being developed. This policy will provide a standard methodology for determining the root cause of a condition.
 - o SERI has begun to implement the Human Performance Evaluation System. This system focuses on root cause identification of an event.
 - o SERI management recognizes that continued increased attention must be focused on this area in an effort to improve root cause determination and corrective action performance.
2. Improved controls with respect to root cause analysis and management controls are reflected in the reduction of incidents resulting from personnel errors.

An additional indicator of the improvements being achieved as a result of increased management involvement is a comparison of reportable incidents originating during the first two refueling outages:

<u>Functional Area</u>	<u>RF01</u>	<u>RF02</u>
Unrelated to Outage	4	1
Indirectly Associated with Outage	5	3
Directly Related to Outage	<u>6</u>	<u>5</u>
TOTAL	15	9

Plant Management continues to stress procedural compliance and accountability of plant personnel for noncompliance. SERI recognizes the need to continue emphasis and improvement in this area and will be monitoring progress and the effectiveness of the actions discussed above.

II. Maintenance

1. The backlog of completed history documents to be entered into the plant Material History Log (MHS) has been reduced by approximately 50%. Implementation of the integrated Work Control System (SIMS) is underway with a completion date of mid 1989. Once implemented, material history will not be entered into a separate system. Until full implementation of the integrated Work Control System, Planning personnel will continue to retrieve historical information.
2. An operational assessment involving reduction of administrative workload on first line supervisors was conducted and the following enhancements implemented to improve the standards of daily maintenance activities:
 - o Centralized Planning and Scheduling Section with Schedulers and Planners whose associated activities are coordinated by one Superintendent in direct support of the daily maintenance activities.
 - o Standardized work status meeting conducted each morning to approve work schedule changes, set work priorities and discuss emergent work.
 - o Standardized work planning meeting conducted each afternoon to coordinate planning and approving upcoming week's work.
 - o Standardized four week schedule for I&C surveillances in effect maintained to facilitate the scheduling of concurrent and mutually interfering tasks.
 - o System outages are used to facilitate accomplishing blocks of related maintenance on the same component/system.
 - o Quarterly Work Forecast is used to define surveillances, PMs, and system outages required for the next three (3) months.
 - o Work packages are being standardized to contain more information for the first line supervisors.
 - o Automated Maintenance Work Order System (SIMS) is being developed to reduce administrative workloads.

The net effect of the preceding has been to simplify the coordination of work activities and allow first line supervisors and their personnel the opportunity to plan their work day in advance.

III. Fire Protection

1. SERI has filed a proposed change to the operating license in response to Generic Letter 86-10. The proposed change requests deletion of the fire protection features from the technical specifications and requests the standard fire protection license condition. The request was filed on May 19, 1987 and is currently under review by the NRC. Following NRC approval, SERI will implement the necessary UFSAR changes and procedural controls to support implementation and control of these fire protection requirements.
2. Many major upgrades to the fire protection systems were completed during this SALP period:
 - o During RFO2 SERI completed all modifications necessary to bring the fire protection systems into compliance with commitments to 10CFR50 Appendix R. These modifications involved ten separate work packages involving an estimated 46,000 craft man hours.
 - o Also during RFO2 and in addition to Appendix R requirements, SERI completed a major upgrade to the fire detection system as recommended by the utility-sponsored Triennial Fire Protection Audit of the Fire Protection Program. The modification involved the relocation of numerous fire detectors and addition of approximately thirty-four detectors.

IV. Security

1. Until such time as a final decision is made on Unit 2, SERI continues to consider it imprudent to make a decision on installing a permanent barrier separating the Unit 1 operational side from the Unit 2 construction side which may require removal at a later date. The following contingencies were taken since the SALP report was issued:
 - o Two additional cameras have been installed providing coverage of the Unit 1/Unit 2 separation fence.
 - o Additional alarm systems have been installed, tested, and placed in service.
 - o The procedure controlling security patrol functions requires checks of the Unit 1/Unit 2 separating wall.

V. Licensing Activities

1. The following actions have been taken to improve the 10CFR 50.59 program:
 - o The PSRC has generated a list of commonly identified deficiencies in safety evaluations. This information has been evaluated for lessons learned and incorporated into the SERI 10CFR50.59 improvement and associated training program.

- o SERI has developed 10CFR50.59 Guidelines based on NRC documents, results of NRC inspections at utilities, NUMARC and industry groups' documents, and other utilities' training and guidance documents. These guidelines provide the basis for a corporate-wide 10CFR50.59 training program.
- o SERI Operating Manual Policy 7.205, Safety and Environmental Review and Evaluation, is being revised to address needed improvements identified during a Company 10CFR50.59 assessment. The revision will provide guidance on the application of 10CFR50.59 and consistency in safety evaluation content and format. The revision will define 10CFR50.59 terms and provide Company policy guidance to the safety evaluation performer/reviewer. A later revision of the policy will incorporate appropriate improvements from the NUMARC 10CFR50.59 Guidelines after they are issued to the industry.
- o Over 250 SERI personnel responsible for the performance and/or review of safety evaluations have completed SERI's recently developed 10CFR50.59 training program. The participants have included Nuclear Plant Engineering, Plant Staff, Nuclear Licensing, and Quality Programs personnel as well as PSRC and SRC members. The remainder of appropriate personnel are expected to complete training by July 31, 1988.

The training program provides 10CFR50.59 applicability review and unreviewed safety question determination guidance. Used in conjunction with the SERI Operating Manual Policy, the training is directed to a Company-wide consistent approach concerning the application of 10CFR50.59. SERI recognizes the development of industry guidance by NRC and NUMARC in this area and will update training and procedures when NRC and NUMARC issue the new guidance.

2. SERI has made significant effort to keep the NRC Staff apprised of circumstances or conditions that may lead to the need for emergency relief actions. Action taken on conditions arising during RFO2 demonstrated this.

For example, during the stuck fuel bundle incident, SERI had discussions with the GGNS Resident Inspector on the status and plans to remove the bundle prior to seeking emergency relief. In addition, prior to making the final decision to request enforcement discretion the GGNS Plant Safety Review Committee approved the analysis and options for removing and dispositioning the affected bundle.

3. SERI meets periodically (approximately quarterly) with NRR and NRC RII Staff to discuss current issues, open items and forecast activities. These meetings support scheduling, planning of NRC and SERI resources, and proper assignment of priorities. Overall, SERI considers these meetings highly beneficial to interface effectiveness from a planning standpoint.

VI. Training

1. SERI training programs were fully accredited on April 29, 1987 by the National Nuclear Accrediting Board, when SERI became the eleventh utility to obtain full membership status in the National Academy for Nuclear Training.

This accomplishment culminated a two-and-a-half year effort of analyzing, developing, implementing, and evaluating training program content and processes so that they conform to a systems approach to training methodology.

2. During and subsequent to this time many program modifications have been made based on feedback and evaluation of implemented programs. Of particular significance are the changes and enhancements associated with License Operator Initial Training and Requalification Training Programs. In the Initial Training Program, the program sequencing has been rearranged for improved training performance. In the Requalification Training Program, simulator training is now included in each training cycle instead of being held separately. In both programs, management involvement in simulator critiques has been increased, the simulator critique methodology has been improved, management standards have been developed which more clearly define the roles of control room positions (RO/SRO), and learning objectives and supporting performance criteria have been improved.
3. To better complement SERI's revised training program methodology with that of the NRC license examination process, several meetings and telephone conferences were held between SERI's Operations Training Group and the Region II NRC Operator Licensing Branch. The results of these exchanges has not only improved the working relationship between the two groups, but has resulted in a clearer understanding of how we can assist one another in preparing for license examinations. SERI was recently given the opportunity to pilot a program aimed at minimizing examination development problems, and post-examination comments. While the results of SERI candidates' performance on these examinations won't be known until sometime after May 18, 1988, SERI believes that this approach has greatly improved the examination process and minimized the number of post-examination comments submitted. SERI is appreciative of the opportunity we had to participate in this pilot program.

VII. Quality Programs and Administrative Controls Affecting Quality

1. SERI has taken positive steps to improve the qualification of both Quality Programs (QP) as well as Corporate audit team members in specific areas such as Health Physics and in the overall sense as well:
 - o Health Physics audits are augmented with technical assistance from the Corporate Radiological & Environmental Services (R&ES) staff in the form of joint audits/appraisals.

- o An agreement has been made with the Operations Department to maintain a licensed RO/SRO within the OP organization for the purpose of auditing the operations area and expanding the experience levels of other auditors in this area.
- o As the need arises, Quality Programs obtains special assistance in the form of Technical Specialists from System Services, Inc. or outside agencies. These requests are based on the scope and complexity of the audit subject. Examples of the use of Technical Specialists are audits performed on Design Control, Emergency Preparedness and Fire Protection.

Also, a high level of senior management involvement in the audit process is maintained in order to ensure adequate scope and depth. Active independent oversight is provided through SRC Subcommittee presentations, discussions, review, and analysis of audit conduct and findings.

2. Based on MAEC-87/0116 (NRC Inspection Report No. 50416/87-10), LER 85-033 is closed. A chronology of key events and issues involving Unit 1 dependence on Unit 2 equipment and structures was completed and submitted April 9, 1987 (AECM-87/0077). A review was conducted to identify those Unit 2 activities which may have safety impact on Unit 1 operations. The problems identified were discussed in AECM-87/0077 and have been corrected. Also programmatic controls have been implemented to provide control and the appropriate level of evaluation of the impact of any Unit 2 activities on Unit 1 safety.
3. SERI completed an extensive As-Built Program Improvement Plan on December 31, 1987 and documented this via SERI letter AECM-88/0024 dated February 1, 1988. The improvement plan focused on the 4200 upper tier operations critical/sensitive drawings and was comprised of several task elements in areas needing improvement including legibility, accuracy, timeliness, and procedural strengthening. A multi-department task force was formed and charged with overview of the implementation of the improvement plan. SERI conducted walkdowns of several systems during RFO2 as an aid in assessing the corrective actions in progress. The walkdown related drawings were found to match the plant configuration with a high degree of accuracy, with only minor discrepancies noted. In addition, a followup Quality Programs audit of the As-Built Program concluded that the corrective actions had been effective.

As a result of the completion of the aforementioned activities, SERI believes the As-Built Program at Grand Gulf has been significantly improved. However, SERI is committed to continue to sustain this improvement trend. Specific activities are in progress to improve elements of the lower tier non-operational sensitive drawing program. SERI will also continue to aggressively test and assess the As-Built Program to seek further opportunities for improvement. In addition, on the broader perspective of configuration management, SERI is committed to the completion of a number of important initiatives.

4. Additional information on Material Nonconformance Report Status (MNCRs) and QA Nonconformance Performance Indicators (CARs) is provided below:

- o MNCRs: Quality Programs has developed two methods to allow for better categorization of nonconforming items. These are Discrepant Material Reports (DMRs) and Discovered Discrepancies (DDs).

DMRs were developed and implemented in May 1987. The DMR is used by QP Personnel to document nonconformances for safety related non-installed material. The system does not eliminate the Material Nonconformance Reporting System (MNCR) which is for reporting nonconformances on installed or previously/operational equipment.

DDs were developed and implemented in October 1987. The DDs are used by QP personnel to document the request for engineering clarification and/or non-material discrepancies found during receipt inspection.

A task force was formed to address and resolve NRC and SERI management concerns on nonconformance systems including MNCRs. The task force identified and published action items which resulted in improvements in operability/reportability determinations, division of responsibility assignments, and provided corporate level guidance on condition identification and evaluation. The Duty Manager has also become involved for those MNCRs where operability cannot be readily determined.

- o CARs Emphasis continues on timely corrective actions to CARs as evidenced by the decreasing numbers of CARs open greater than 120 days. The number of CARs open greater than 120 days has been reduced from 27 (January 1987) to 3 (May 1988). Management attention remains focused in this area through scheduled reports to the full SRC.