

JUL 28 1987

MEMORANDUM FOR: Steven A. Varga, Director
Division of Reactor Projects I/II

Lawrence C. Shao, Director
Division of Engineering
and Systems Technology

Charles E. Rossi, Director
Division of Operational Events Assessment

Frank J. Congel, Director
Division of Radiation Protection and Emergency Preparedness

James G. Partlow, Director
Division of Reactor Inspection and Safeguards

THRU: Elinor G. Adensam, Director
Project Directorate II-1
Division of Reactor Projects I/II

FROM: Bart C. Buckley, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects I/II

DISTRIBUTION:
Docket file
NRC PDR
Local PDR
G. Lainas
B. Buckley
P. Anderson
PD21 r/f

Enclosed is a draft of NRR's SALP input for Shearon Harris Nuclear Power Plant, Unit 1, covering Carolina Power & Light Company (CP&L) licensing activities for the period from August 1, 1986 through June 30, 1987. The report is based on inputs provided by NRR reviewers and observations by NRR project management during their interactions with CP&L during the SALP period. A performance rating of Category 1 has been assigned by the NRR SALP evaluation effort for the current licensing period.

Please review the draft assessment and provide any comments you feel are appropriate. All comments received by July 31 will be considered for incorporation in the final report. Due to the short time available for comment, please provide your comments directly to the Harris Project Manager, Bart Buckley, at X27215.

The NRC SALP Board meeting for Shearon Harris is scheduled for August 27, 1987.

Bart C. Buckley, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects I/II

Enclosure:
Draft NRR SALP Report

BB
PM:PD21:DRPR
BBuckley
7/28/87

E
D:PD21:DRPR
EAdensam
7/28/87

8707310117 87072B
PDR ADDCK 05000400
PDR



[The page contains extremely faint and illegible text, likely bleed-through from the reverse side of the document. The text is scattered across the page and cannot be transcribed accurately.]



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

OFFICE OF NUCLEAR REACTOR REGULATION

INPUT FOR SALP REPORT

CAROLINA POWER & LIGHT COMPANY

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

1. Licensing Activities (August 1, 1986 to June 30, 1987)

The basis for this appraisal was the licensee's performance in support of licensing actions (Low power license, full power license, amendment requests and other actions) which have been reviewed and evaluated by the staff during the rating period. The activities associated with this rating period include those in the prelicensing period (August-October, 1986) which culminated in the issuance of a low power license and those associated with the issuance of a full power license are identified below to reflect the transitional aspects of this licensing application. The low power and full power licenses were issued in October 1986, and January 1987, respectively. The various issues involved include the following:

Plant Specific Issues resolved in support of low power license

- (1) Effect of local intense precipitation
- (2) Normal water supply
- (3) Emergency water supply
- (4) Technical Specifications and emergency operating requirement
- (5) Instrumentation
- (6) Moderator temperature coefficient
- (7) Crud deposition
- (8) Pressurized thermal shock
- (9) Residual heat removal system
- (10) Containment isolation system
- (11) Large-break LOCA
- (12) Small-break LOCA
- (13) Control room habitability
- (14) Spare component cooling water (CCW) pump
- (15) Spare charging pump
- (16) Electric power systems
- (17) AC power system
- (18) Physical independence of redundant safety-related systems
- (19) TMI Action Plan requirements
- (20) Primary component cooling water system
- (21) Essential services chilled water system
- (22) Emergency diesel engine fuel oil storage and transfer system
- (23) ECCS leakage outside containment
- (24) Generic Letter 83-28

(Revision 0)

- (25) II.K.3.30, Revised small-break LOCA methods to show compliance with 10 CFR 50.46
- (26) II.K.3.31, Plant-specific calculations to show compliance with 10 CFR 50.46
- (27) Organization
- (28) Building clearances

Plant Specific Issues resolved in support of full power license

- (1) Emergency Diesel Generator Reliability
- (2) Physical Independence of Redundant Safety-Related Systems
- (3) Emergency Planning
- (4) Operating and Maintenance Procedures
- (5) Preoperational Test Program
- (6) II.K.3.5, Automatic Trip of RCPs during LOCA
- (7) Technical Specifications

Management continues to exercise control and overview in the licensing activity area as evidenced by the very successful manner in which the various issues associated with the preparation of both the low power license and full power license Technical Specifications were resolved. The licensee's management continued to take a strong and aggressive approach in resolving various technical issues which resulted in the very timely resolution of all issues necessary to support the issuance of a low power license in October 1986, and a full power license in January 1987. The licensee's computer system, which keeps abreast of all issues requiring resolution, contributed significantly to the effective management of licensing activities.

The licensee's management demonstrated a good understanding of the various technical and licensing issues. Licensing personnel who are generally in daily contact with the NRC licensing project manager have an excellent understanding of the technical and licensing issues. Monthly meetings are generally held with the NRC staff to discuss scheduling and prioritization of licensing activities. The licensee's amendment requests have been submitted in a very timely manner indicating the licensee's sensitivity to allow appropriate lead time for NRC staff review. Moreover, while there have only been a limited number of amendment requests, the NRC licensing project manager is always informed by the licensing personnel of the pending amendment request several weeks in advance of its submittal. This enhances the overall management and the scheduling of licensing activities. The licensee's involvement in the preparation of the low power license and full power license Technical Specifications was outstanding as was the effort in resolving the various licensing issues in support of the issuance of the above cited licenses and is indicative of the strong and aggressive approach that is taken to resolve issues. Throughout the period of Technical Specifications development the licensee had exhibited a very straightforward attitude and provided rapid responses to questions raised by the staff.

The licensee's response to NRC initiatives is prompt and generally complete. The licensee's continued involvement in a significant number of utility advisory and owners groups is indicative of their commitment to be aware of the methods of timely resolution of issues of a generic nature such as the issue on Transamerica Delaval diesel generators.

Daily communication between the licensee staff and the NRC Licensing Project Manager continues to yield timely and sound technical responses to NRC initiatives. An example of this initiative is the detailed presentation by the licensee, as requested by staff, on the root causes of balance-of-plant initiated trips and the planned corrective actions to minimize plant trips. It should also be noted that the licensee voluntarily made available to the NRC staff its evaluation of the performance indicators for the Shearon Harris plant and its comparison with other Westinghouse near-term operating license plants (NTOLs).

The licensee has adequate licensing staff who have a solid working knowledge of the regulations, guides, standards and generic issues as they apply to the Shearon Harris facility. One of the licensing staff is Chairman of the Westinghouse Owners Group Technical Specification Subcommittee coordinating the Technical Specification Improvement Program. The assignment of certain licensing personnel at the site in conjunction with the coordination with the off-site licensing staff has continued to result in prompt and timely responses to the NRC staff needs in the area of licensing.

The licensee promptly notified the NRC Licensing Project Manager of operational events generally after they evaluated the cause of the event. There has been a significant number of malfunctions of the plant computer security system during the first three or four months following the issuance of the Low power license. Subsequently, a steering committee was established by the licensee to evaluate the security computer problems. As a result of committee efforts and corrective measures taken there has been a large reduction in the number of security computer malfunctions. The number of scrams initiated by the secondary system is higher than those experienced at other Westinghouse NTOLs. The licensee formed a task force, which included various technical disciplines, and conducted a comprehensive evaluation of the cause of the secondary system trips, and as a result of this effort certain modifications or adjustments have been made to reduce the likelihood of plant trips. The Licensee is presently continuing this effort over the long term to determine what other steps may be taken to further minimize secondary system initiated trips. License Event Reports (LERs) are submitted on a timely basis and contain a detailed description of the event and its evaluation.

A plant specific simulator is operational and is being used in the training of new operating personnel and in the requalification of licensed operators to effectively maintain plant safety. The Senior Vice President Operations Support Group and the Manager of Licensing and Nuclear Fuels received training using the simulator.

2. Conclusion

An overall performance rating of Category 1 has been assigned for the functional area of Licensing Activities for this rating period.

3. Other Functional Areas

The Licensee's performance in resolving certain allegations contained in a 2.206 petition was very commendable. In the area of house-keeping, good cleaning practices are being maintained throughout the plant including the control room.

RECORDS OF MEETINGS AND OFFICIAL DOCUMENTS

1. Significant NRR/Licensee Meetings

There were four significant meetings between the licensee and NRR during this rating period. Three of these meetings were held to discuss schedular and prioritization of licensing activities and one was a Licensee management introductory meeting following the reorganization of the NRC.

2. NRR Site Visits

PM Unescorted Access recertification	6/8/87
Licensee/NRR AND Region II to discuss overall plant operations	6/9-10/87

3. Commission Briefing

Full Power License	1/8/87
--------------------	--------

4. Exemptions Granted with issuance of licenses

Appendix E, 10 CFR 50 Appendix J, 10 CFR 50 10 CFR 70	1/12/87
---	---------

5. Reliefs Granted

relief granted from requirements for certain preservice examinations	10/86
--	-------

6. Licenses Issued

Low power license	10/24/86
Full power license	01/12/87