

October 29, 1998

MEMORANDUM TO: PD IV-1 File

FROM: Thomas W. Alexion, Project Manager ORIGINAL SIGNED BY  
Project Directorate IV-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

SUBJECT: DRAFT LETTER FROM STP NUCLEAR OPERATING COMPANY ON  
ACTION NEEDED FOR THE IMPLEMENTATION OF GRADED  
QUALITY ASSURANCE, SOUTH TEXAS PROJECT, UNITS 1 AND 2

On October 6, 1998, STP Nuclear Operating Company (STPNOC) provided the attached draft letter to the Nuclear Regulatory Commission (NRC) on the above subject. On October 14, 1998, STPNOC subsequently finalized the letter and formally submitted it to the NRC. The purpose of this memorandum is to place the draft letter in the Public Document Room.

Docket Nos. 50-498 and 50-499

Attachment: As stated

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U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

South Texas Project  
Units 1 and 2

Docket Nos. STN 50-498, STN 50-499

Action Needed for the Implementation of Graded Quality Assurance at the South Texas Project

STP Nuclear Operating Company (STPNOC) received a Safety Evaluation Report (SER) on November 6, 1997 granting approval from the NRC to implement a Graded Quality Assurance (GQA) program. The South Texas Project GQA program utilizes risk ranking of structures, systems, and components derived from the STP Probabilistic Risk Assessment (PRA), deterministic inputs from a Working Group. Those inputs are reviewed by an expert panel to develop the final risk-informed results. The STP PRA has been reviewed and approved by the NRC and has been used for various licensing applications. Based on the credibility of the tools and methods and the rigor of the STP review, STP has a high level of confidence in the risk evaluation results done for the GQA program. The risk evaluation results demonstrated that a significant number of the current safety-related components have very low risk significance, or have no risk significance.

The results show that there is substantial safety and cost benefit available from a complete implementation of a GQA program. These benefits derive from the potential reduction in regulatory and licensee resource allocation to systems and components that have no substantive influence on safety or reliability of the station. However, as discussed with the NRC staff in a meeting on September 15, 1998, there are regulatory compliance barriers which greatly impact the complete implementation of the GQA program. These barriers are embodied in the regulations themselves, such as the definition of safety-related structures, systems, and components in 10CFR50.2, and the present requirements of 10CFR50.59. These barriers were recognized by STP early on in the approval process for the GQA program, however, conversations with NRC staff clearly indicated that an interactive process was the prudent path to pursue. STP believes that a complete implementation of an effective GQA program requires that the conflicts with these deterministic regulatory requirements be clearly addressed and resolved.

As we discussed in a phone call with the NRC staff on September 23, 1998, STP intends to request exemption from the appropriate regulations to allow downgrading of low or non-risk significant safety-related components identified by the risk ranking tool to non-safety related or not important to safety, thereby removing these components from the scope of various deterministic regulations. This would allow STP to recognize substantial results from the GQA program in the near term without which the viability of the program is limited.

ATTACHMENT

We believe this effort could serve to extend the scope of the existing GQA pilot activity that would support the ongoing evaluation of risk based changes to regulations and can be approved and implemented in the short-term. It is also our belief that the end result will be a methodology that offers substantial benefit beyond STP and insight to the structure of risk informed regulation. As a pilot, some limitations on the overall scope of the effort and the NRC participation in the process is appropriate. Specifically:

- The systems to which this exemption will be applied will be specifically identified.
- The applicable exemptions are expected to focus on removing components from the scope of the seismic, equipment qualification and ASME rules such that the complexity of routine maintenance and replacement can be reduced without substantive reduction in overall plant safety.

STP would enter into this pilot with the expectation that NRC would approve expanding the scope at the successful conclusion of the pilot.

If you should have any questions concerning this matter please contact me at (512) 972-8787.

AWH/nl

T. H. Cloninger  
Vice President  
Engineering and Technical Services