



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

October 26, 1998
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U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Response to NRC Staff Questions on Fire Protection System with regard to
the Proposed Amendment to Technical Specifications for
Spent Fuel Storage Pool Rack Criticality Analysis with Soluble Boron Credit

Reference: Letter from T. H. Cloninger, South Texas Project, to the Nuclear Regulatory
Commission dated July 7, 1998 (NOC-AE-000178)

In response to NRC staff questions on the referenced letter regarding the proposed Amendment
to Technical Specifications for Spent Fuel Storage Pool Rack Criticality Analysis with Soluble
Boron Credit, the STP Nuclear Operating Company hereby submits the requested information.
The questions and answers are attached.

Should you have any questions in regard to this response, please contact Mr. D. W. Wiegand at
(512) 972-7574 or me at (512) 972-7902.

ATP/LE *1/1*
Apoc

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KAW

Attachment

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Question) With regard to the proposed Technical Specification change for soluble boron credit in the spent fuel pool, describe the location of the six inch Fire Protection line in the spent fuel pool area and explain the consequences of a line break.

Answer) The six inch line runs along the east wall of the Fuel Handling Building and splits into three smaller lines before it reaches the 68-foot elevation of the spent fuel pool deck. Consequently, a break in the six-inch line has no potential effect on spent fuel pool inventory or boron concentration.

Two of the three lines that come off of the six-inch line are two and one-half inch lines that penetrate the 68-foot elevation near the stairwell, south of the spent fuel pool, approximately 65 feet from the nearest point of the spent fuel pool. The third line is a two-inch line that penetrates the 68-foot elevation by the elevator east of the spent fuel pool. This point is approximately 30 feet from the spent fuel pool.

These branch lines are located near large unrestricted floor openings (stairwell, elevator shaft, equipment shaft) and water from a line break would flow towards these unprotected/unrestricted openings before affecting the spent fuel. In addition, there is a four-inch berm around the spent fuel pool that would divert most, if not all, of the flow of water around the pool. Thus, breaks in these branch lines pose no credible threat to the inventory or boron concentration in the spent fuel pool.