

14 SOUTH TEXAS PROJECT
UNITS 1 and 2
50-498 and 50-499
Project Manager
Michael Webb

From: Michael Webb
To: Loya, Joe
Date: 3/26/04 10:27AM
Subject: Re: RETRAN RAI's Westinghouse Draft Preliminary Response

Joe,
I received the questions (actually two questions and a clarification) below from the newly assigned Reactor Systems Branch (SRXB) reviewer in response to the RAI response you provided.

The reviewer indicated that when you have provided the formal response to the earlier RAI and his additional questions, we should have the information necessary to write a Safety Evaluation. He will be available to discuss any of the RAIs with you after April 6.

Mike Webb

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We understand that analyzes using a stand alone NOTRUMP model of the South Texas steam generators will be used to determine the steam generator water mass that will be present when a low level reactor trip occurs. This mass will then be used to set the reactor trip logic in the RETRAN model that will be used to analyze plant response to loss of feedwater, loss of offsite power and feedwater line breaks. The NOTRUMP computer code has many options for calculating bubble rise in the fluid nodes and drift flux in the flow links. These models will affect the water mass calculated to be in a steam generator. Please identify which models will be used to determine steam generator water mass for analysis of loss of feedwater, loss of offsite power and feedwater line breaks. Justify that these models have been verified to be accurate for the conditions that would occur within the South Texas steam generators during these events.

For analysis of feedwater line breaks using NOTRUMP, please discuss the models used to predict break flow and liquid entrainment from the broken steam generator. Justify that the models are conservative for determining the low level trip water mass to be input into RETRAN. Provide a comparison of the break flow rate predicted by NOTRUMP to that predicted by RETRAN.

We understand that the RETRAN model of the South Texas steam generators utilizes homogeneous mixing below the steam separators and assumes perfect separation of above the steam separators. The feedwater lines are below the steam separators so that so that the fluid entering a postulated broken feedwater line would be in the homogeneous flow condition. The assumption of homogenous flow would be conservative for calculating reactor system overheating following a feedwater line beak. We also understand that break flow is calculated using the Henry-Fauske (subcooled) and Moody (saturated) options which are also conservative. Please verify that the staff's understanding is correct or discuss the conservatism of other models that are used.

>>> "Loya, Joe" <jaloya@STPEGS.COM> 02/19/04 09:35AM >>>
Dave,

Attached are the draft preliminary RETRAN RAI responses. Please let me know when we can set up a conference call to review and discuss the draft.

As we discussed earlier with Scott Head , Charlie Albury, Ulhas Patil and I will be participating in this phone call.

Please advise.

Joe Loya
South Texas Project Nuclear Operating Company
Licensing Engineer
(361) 972-7922

Pager: 0656

CC: Head, Scott

Mail Envelope Properties (40644BC4.914 : 5 : 21368)

Subject: Re: RETRAN RAI's Westinghouse Draft Preliminary Response
Creation Date: 3/26/04 10:27AM
From: Michael Webb

Created By: MKW@nrc.gov

Recipients	Action	Date & Time
nrc.gov	Delivered	03/26/04 10:27AM
owf4_po.OWFN_DO MKW BC (Michael Webb)	Opened	03/26/04 10:58AM
STPEGS.COM	Transferred	03/26/04 10:27AM
jaloya (Loya, Joe) smhead CC (Head, Scott)		

Post Office	Delivered	Route
owf4_po.OWFN_DO	03/26/04 10:27AM	nrc.gov STPEGS.COM

Files	Size	Date & Time
MESSAGE	4371	03/26/04 10:27AM

Options

Auto Delete: No
Expiration Date: None
Notify Recipients: Yes
Priority: Standard
Reply Requested: No
Return Notification: None

Concealed Subject: No
Security: Standard

To Be Delivered: Immediate
Status Tracking: Delivered & Opened

From: Michael Webb
To: Taplett, Kenneth
Date: 3/26/04 2:18PM
Subject: Re: STP PROPOSED EXIGENT TECH SPEC - CONTROL ROOM

Ken,
I have attached the (slightly reformatted, but substantively the same) questions related to the exigent TS request that were forwarded to you by Mark Blumberg yesterday afternoon.

After you and your colleagues have had a chance to evaluate them, we can set up a call to discuss them further if you desire to do so.

Thanks,
Mike Webb
NRC Project Manager for South Texas Project
301-415-1347

CC: Head, Scott

Mail Envelope Properties (40648218.466 : 5 : 21368)

Subject: Re: STP PROPOSED EXIGENT TECH SPEC - CONTROL ROOM
Creation Date: 3/26/04 2:18PM
From: Michael Webb

Created By: MKW@nrc.gov

Recipients	Action	Date & Time
nrc.gov		
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STPEGS.COM		
kjtaplett (Taplett, Kenneth)	Transferred	03/26/04 02:18PM
smhead CC (Head, Scott)		

Post Office	Delivered	Route
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Files	Size	Date & Time
MC2358RAI-SPSB.wpd	11727	03/26/04 02:07PM
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Options

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Reply Requested:	No
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REQUEST FOR ADDITIONAL INFORMATION
REGARDING PROPOSED AMENDMENT TO TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATION 3/4.7.7
CONTROL ROOM MAKEUP AND CLEANUP FILTRATION SYSTEM

SOUTH TEXAS PROJECT NUCLEAR OPERATING COMPANY
UNITS 1 AND 2
DOCKET NO 50-498 AND 50-499

By letter dated March 18, 2004, South Texas Project Nuclear Operating Company submitted a proposed amendment to the Technical Specifications (TSs) for the South Texas Project Units 1 and 2. The Nuclear Regulatory Commission (NRC) staff has reviewed the information the licensee provided that supports the proposed TS changes. In order for the staff to complete its evaluation, the following additional information is requested:

1. The current licensing bases for the control room as described in the STP Technical Specifications and UFSAR states that the control room envelope is maintained at a minimum 0.125-inch positive water gauge with respect to adjacent areas. The proposed technical specification would allow positive pressure less than 0.125-inch water gauge with "appropriate compensatory measures." This proposed change represents a decrease in the pressure margin used to assure that unfiltered inleakage is minimized. In light that this decreased positive pressure condition may exist for approximately 18 months, there are no provisions to compensate for possible boundary degradation or variances in pressure conditions external to the control room boundary. The staff believes that compensatory measures are necessary to offset this decreased margin.

Please specify and justify the "appropriate compensatory measures" to be taken to offset this decrease in the pressure margin (for example, increased surveillance frequency, potassium iodide and/or self-contained breathing apparatus (SCBA)). If potassium iodide and SCBA are deemed appropriate measures to insure that GDC 19 is maintained, Regulatory Position 2.7.3 of NRC Regulatory Guide, 1.196, "Control Room Habitability at Light-Water Nuclear Power Reactors provides a method for crediting these compensatory measures. If Regulatory Guide 1.196 is used please verify if these provisions are met. The staff believes that inclusion of these compensatory measures in the bases is necessary to provide reasonable assurance that these compensatory measures are "appropriate."

2. With these compensatory measures available for use in case of an accident provide an estimate of the maximum unfiltered inleakage allowable to meet GDC 19.
3. Provide the measurement uncertainty of the measurements made for Surveillance Requirement 4.7.7.e.3 and state whether this uncertainty is included in surveillance. If the uncertainty is not included justify exclusion of the uncertainty.
4. State whether the most limiting points measured for the Component Test will be included in future 4.7.7e.3 surveillance tests. If these limiting points will be excluded justify the exclusion of these points.

Enclosure