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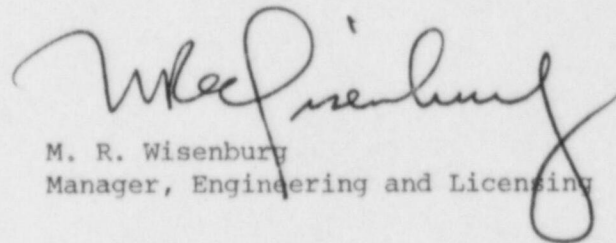
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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

South Texas Project
Unit 1
Docket Nos. STN 50-498
Response to SORT, PVORT and Environmental Questions

Attached are responses to several audit items and follow-up questions from the staff.

If you should have any questions on this matter, please contact Mr. M. E. Powell at (713) 993-1328.



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Attachment

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South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Response to SORT, PVORT and Environmental Questions

PVORT #4

This item, requesting confirmation of a successful test of the AFW Steam Isolation Valve, was responded to previously. A follow-up question by Mr. A. Masciantonio asked for results of the testing with special regard to valve sequencing.

Response

The design configuration at the time of the audit provided a "warm up" system utilizing a bypass valve around MOV-143. The bypass valve, upon command, would open to warm up the line. After a time delay, MOV-143 would open.

A redesign establishes MOV-143 as normally open, and trip and throttle valve MOV-154 normally closed. This maintains temperature and pressure of the Main Steam System in the AFW steam inlet up to the trip and throttle valve.

The test conclusions are as follows:

The Auxiliary Feedwater turbine driven pump has demonstrated its ability to operate in a miniflow mode and minimum design flow mode for extended periods of time. The pump has also demonstrated its ability to operate successfully during a "Total loss of AC power" and feed steam generators "A" through "D".

The Auxiliary Feedwater turbine driven pump has demonstrated its ability to respond correctly to an "SI" or "2/4 low level" Steam Generator signal. The acceptance criteria for the pump have been met or exceeded.

The only criteria which was not entirely met was the opening of the trip and throttle valve in 10 seconds or less. The valve actually opened against main steam pressure at 11 seconds. Failure to meet this criteria has been evaluated as insignificant since the primary objective is that the APW System turbine driven pump deliver rated flow within one minute of actuation. This criterion was met.

SORT #6 Control Room Panel Tag# 5Z341ZCP003

This satisfactory completion of the qualification program is to be confirmed. This confirmation should include the devices, if any, whose similarity could not be established and a brief summary of their subsequent qualification. This is part of question 18, the balance of which has been answered and accepted by the NRC.

Response

Qualification of the subject main control panel is complete. In the process of qualification 2 Westinghouse recorders were found to be unqualifiable. They were replaced by qualified recorders. Most devices on the panel are shown to have a 40-year qualified life. Exceptions to this rule are nine different devices, some of which require complete replacement between 5 and 20 years, and others which require replacement only of parts.

Followup SQRT Items

BOP-1-HL&P was asked to address traceability of seismic qualification for this panel. This item was discussed in the 4/29/87 meeting with the NRC. Attached is an illustration of the elements of traceability. These were accepted in the referenced meeting.

BOP-8-Sample Valve Tag# B1PS-FV-4456. During the seismic test loose screws were observed. This finding has been identified for entry into the STP Special EQ Maintenance requirements. It will require an inspection following an identified seismic event at the plant site.

Followup Environmental Item

Mr. Harold Walker questioned the qualification of cables in a post-accident submerged condition. Discussion ensued utilizing information developed by Bechtel. Based on this information HL&P can state that the cables meet the requirements of 10CFR50.49. The supporting evidence is in the STP qualification files.



JOB NO. 14926-001
 BY: WEN CHANG
 DATE: May 1, 1987

NRC SBRT Audit BOP-1 (Tag No. 4255/ZLP660A)
 Establish Identification Trail of
 Tested-Analyzed-Supplied Cabinets

SHEET 1 OF 1

<p><u>GENERIC PANEL</u> $f_n < 33$ Hz By Test ID NO. 00644-1 (Ref. DWG. 00657)</p>	<p>Refer Qualification Report No. STP 702 (page 26 thru 59)</p>	<p>Supplier Document No. Drawing 00657 (5 sheets) 01020 01037 01150 Qualif. Report STP 702 (includes 3 NYSR Reports 58880 for cabinet for test, 58729 & 58955 for device test)</p>
<p><u>GENERIC PANEL</u> $f_n < 33$ Hz By Analysis ID NO. 00644-1 (Ref. DWG. 00657)</p>	<p>$f_{nt} \approx f_{na}$ correlation verifies the accuracy of analysis model</p> <p>Refer Qualification Report No. STP 702 (page 60 thru 203). Analysis results predicted adequately the tested frequencies.</p>	<p>BEC LOG NO. 14926-4331-00989 thru 00993 14926-4331-00019 thru 00022 14926-4331-00185 thru 00189 14926-4331-00066 sheet 1 of 6 14926-4331-00006</p>
<p><u>MODIFIED PANEL SUPPLIED TO STP</u> $f_n > 33$ Hz By Analysis ID NO. 01020 (Ref. DWG. 01020, 01437, 01150)</p>	<p>modified the tested panel to satisfy STP requirement of rigid panel ($f_n > 33$ Hz)</p>	<p>Refer Qualification Report No. STP 702 (page 60 thru 203) STP Cabinet Tag Nos.: 4255/ZLP659 A,B,C 4255/ZLP660 A,B,C 4255/ZLP661 A,B,C 4255/ZLP668</p>
<p><u>Electrical/Control Devices Qualifica- tion By Test</u></p>	<p>Test Reports Included In STP 702 (page 241 thru 336 & page 337 thru 410)</p>	