

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

June 19, 1979

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555Serial No. 494
PSE&C/CMRjr:mac:wangDocket Nos. 50-280
50-281License Nos. DPR-32
DPR-37

Dear Mr. Denton:

SUPPORT MODIFICATIONS
REANALYSIS OF PIPING SYSTEMS
SURRY POWER STATION UNIT 1

Our letter of June 15, 1979 (Veeco Serial No. 490) included an Attachment 3 with a Table 1 which delineated the status of those supports associated with the reactor coolant pressure boundary. This letter contains an updated Table 1 reflecting recent progress in the analysis of supports. All hangers have been reviewed while detailed analysis is incomplete on six hangers.

Modifications presently required within the reactor coolant pressure boundary in addition to those previously identified, are as follows:

1. Problem 555 - Low Head Safety Injection

An additional snubber will be added to problem 555. The addition of this snubber will reduce the loads on the remaining pipe supports under evaluation to within allowables. This modification is due to the high seismic stress during the Design Basis Earthquake (DBE) condition.

2. Problem 508 - Residual Heat Removal

Additional snubbers will be added on this system to bring the supports within the reactor coolant pressure boundary to within allowable stresses. This problem is presently being rerun with additional snubbers. The reasons for the modifications are the same as indicated in our June 12, 1979 letter (Veeco Serial No. 477).

In addition to the supports requiring modification in the reactor coolant pressure boundary as noted above, other modifications have been identified in the reactor containment but are not part of the reactor coolant pressure boundary. These modifications are listed below:

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5/11Add:
W. Russell

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1. Problem 546/560 - Recirculation Spray

In order to meet the allowable stress in the DBE condition, it was necessary to modify the function of three supports in the system. This is a result of bumping the seismic inertial stresses upward by the 1.5 magnification factor per the NRC letter of May 25, 1979 pertaining to SSI-ARS.

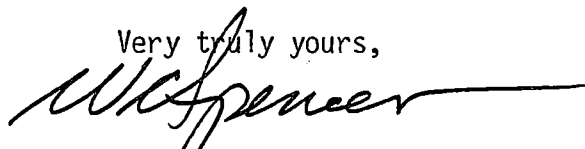
2. Problem 540 - Residual Heat Removal

To bring the pipe stress on this problem to within allowables, it was necessary to remove three supports and add an anchor. These modifications are required due to a combination of bumping the inertial stresses and also to resolve a thermal overstress problem.

Modifications associated with problem 630 were identified in our letter of June 12, 1979 (Veeco Serial No. 477). Modifications resulted from thermal overstress problems. However, the overstressed condition resulted when design yield strength values were used for the piping material. Analyses now show that by taking credit for the actual yield strength of the piping material rather than using the design yield strength, there is an appreciable margin between calculated and allowable stress for the thermal analysis. Therefore, there are no hardware modifications required for problem 630.

Modifications identified herein, all of which occur within the reactor containment building, will be completed prior to start-up.

Very truly yours,



W. C. Spencer
Vice President - Power Station
Engineering and Construction Services

Attachment

TABLE 1

REACTOR COOLANT PRESSURE BOUNDARY
STATUS OF SUPPORTS

TYPE OF SUPPORT	TOTAL NO.	TOTAL COMPLETE	TOTAL UNDER REVIEW
SNUBBER	17	15	2
VERT. SUPT. (R.H., MONOBALL)	10	10	0
SPRING	23	23	0
ANCHOR	4	1	3
RESTRAINT (V.C., L.C., AXIAL)	13	12	1
TOTALS	67	61	6

Total support status for problems (to second isolation valve): 630, 707A, 1020A, 1000A, 636, 1010A, 508, 555, 708, 1555, and 706.