

Distribution:

AEC PDR
Local PDR
Docket (2) ✓
RP Rdg
PWR-1 Rdg
PWR-1 File
Attorney, OGC
R. S. Boyd
RO (4)
R. C. DeYoung
S. Hanauer
D. Skovholt

P. Collins
PWR Branch Chiefs
R. W. Klecker
R. Vollmer
N. Dube
M. Jinks (w/4 encls.)
A. Dromerick
J. Lee (2)
bcc: H. Mueller, GMR/H
J. R. Buchanan, ORNL
T. W. Laughlin, DTIE
F. W. Karas, SECY

JAN 17 1973

Docket Nos. 50-280 ✓
and 50-281

Virginia Electric and
Power Company
ATTN: Stanley Ragone
Vice President
P. O. Box 1194
Richmond, Virginia 23209

Change No. 4
License No. DPR-32

Gentlemen:

As a part of the operating license review conducted for Surry Power Station Units 1 and 2, a single set of Technical Specifications was developed and intended to be used as the Regulatory requirements for the licensed operation of both Unit 1 and Unit 2. These Technical Specifications were subsequently incorporated as Appendix A to Operating License No. DPR-32 for Surry Unit 1 issued on May 25, 1972 and are currently in effect for Unit 1.

Your letter dated December 29, 1972, requested various changes to the Technical Specifications which are applicable to Units 1 and 2. Our action on your request is limited at this time to items proposed by you which relate directly to proposed operation of Unit 2. The remaining items will be considered separately.

The specific items considered herein are:

1. Change Technical Specification 3.1.B.1 page TS 3.1-6 (first paragraph) to read, "Unit 1 and Unit 2 reactor coolant temperature and pressure and the system heatup and cool-down (with the exception of the pressurizer) shall be limited in accordance with TS Figure 3.1-1".
2. Change Technical Specification Figure 3.1-1 entitled "Upper Pressurization Limits for Heatup and Cooldown - Surry Unit One" to read "Upper Pressurization Limits for Heatup and Cooldown - Surry Units No. 1 and 2".
3. Change Technical Specification 4.1 by redesignating Table 4.1-3, page TS 4.1-11, entitled "Minimum Frequencies for Flushing Sensitized Pipe" to Table 4.1-3A - Unit No. 1.

RP

OFFICE ▶						
SURNAME ▶						
DATE ▶						

JAN 17 1973

4. Change Technical Specification 4.1 by addition of new Table 4.1-3B, new page designation TS 4.1-12, entitled "Minimum Frequencies for Flushing Sensitized Pipe". Table to be designated for Unit No. 2.
5. Change Technical Specification 4.1 by amending part four of the Basis entitled "Flushing", page TS 4.1-5, in that the first line of the second paragraph is modified to read "The flushing requirements delineated in TS Table 4.1-3A and TS Table 4.1-3B, as appropriate for Unit No. 1 and Unit No. 2 respectively, insure that a buildup of contaminants will not occur." Also change the second sentence of the same paragraph by substituting the words "in Tables 4.1-3A and 4.1-3B" vice "Table 4.1-3".

We have reviewed the proposed changes for heatup and cooldown limits and the proposed flushing frequency for sensitized pipe for Surry Unit 2. On the basis of these reviews we have determined that the proposed changes for heatup and cooldown limits and flushing requirements for Surry Unit 2 are acceptable and that the reactor can be operated safely in the manner proposed.

We have concluded that the proposed changes do not involve significant hazard considerations not described or implicit in the Safety Analysis Report and there is reasonable assurance that the health and safety of the public will not be endangered.

Accordingly, pursuant to Section 50.59 of 10 CFR Part 50, the Technical Specification changes outlined above are hereby authorized. To effect these changes, replace pages TS 3.1.6, TS Figure 3.1-1, TS 4.1-11, TS 4.1-12 and 4.1-5 of the Technical Specifications of Facility Operating License No. DPR 32 with the revised pages (designated as Change No. 4 on the bottom of the page) TS 3.1-6, TS Figure 3.1-1, TS 4.1-11, TS 4.1-12 and TS 4.1-5 enclosed.

Sincerely,

Original signed by R. C. DeYoung

R. C. DeYoung, Assistant Director
for Pressurized Water Reactors
Directorate of Licensing

Enclosures:
As stated

cc: OFFICE ▶	George D. Gibson, Esq. Hunton, Williams, Gay and Gibson	PWR-1	PWR- 1	AD:PWRs
SURNAME ▶	P. O. Box 1535	Dromerick:mds	DVassallo	RCDeYoung
DATE ▶	Richmond, Virginia 23213	1/15/73	1/17/73	1/17/73

B. HEATUP AND COOLDOWN

Specification

1. Unit 1 and Unit 2 reactor coolant temperature and pressure and the system heatup and cooldown (with the exception of the pressurizer) shall be limited in accordance with TS Figure 3.1-1. 4

Heatup:

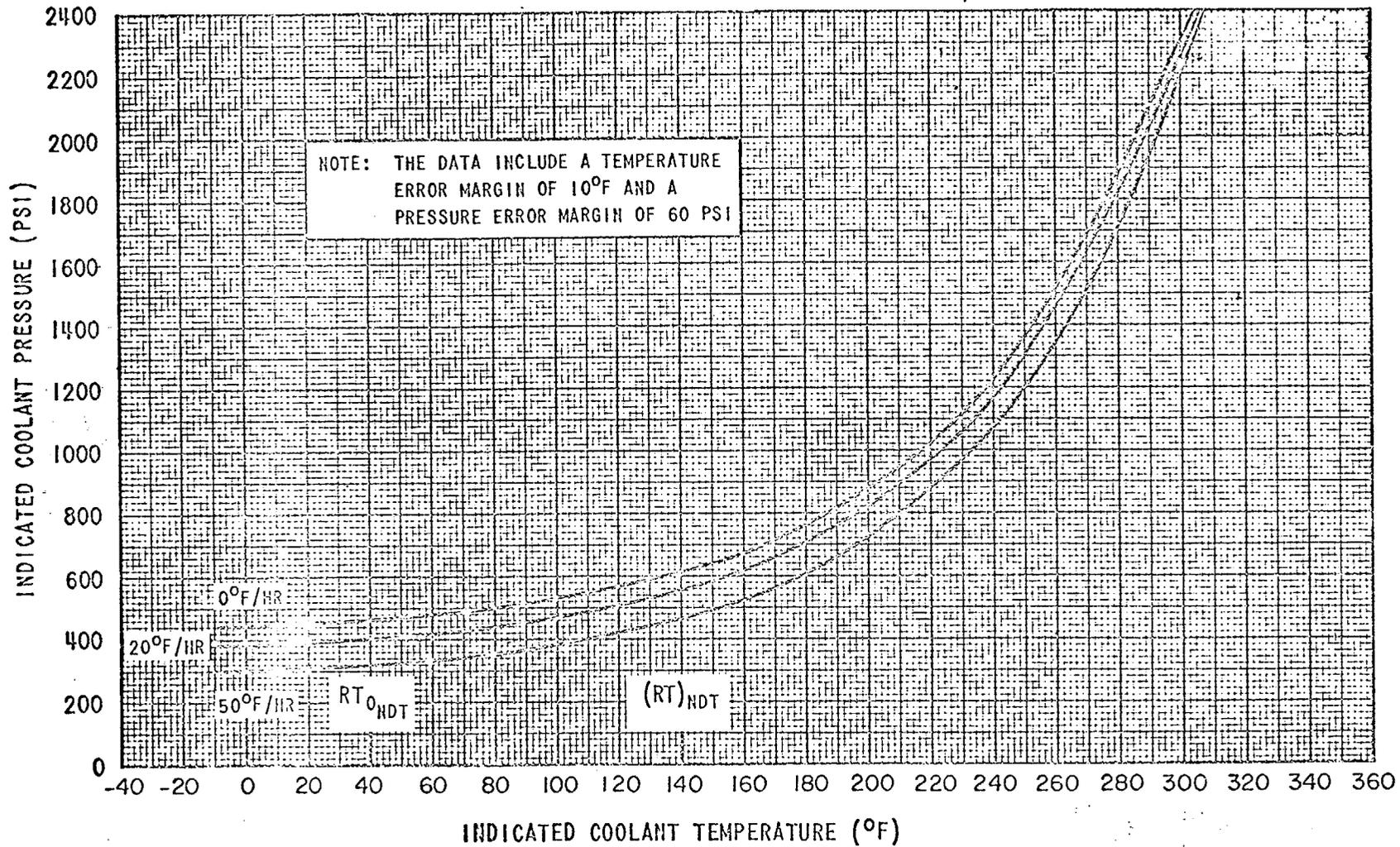
The 0°F/hr. curve of Figure 3.1-1 may be used for heatup rates of up to 60°F/hr. below an indicated temperature of 304°F and 100°F/hr. above 304°F.

Cooldown:

Allowable combinations of pressure and temperature for a specific cooldown rate are below and to the right of the limit lines for that rate as shown in TS Figure 3.1-1. This rate shall not exceed 50°F/hr. for temperatures at or below an indicated temperature of 308°F. For temperatures above an indicated temperature of 308°F, the rate shall not exceed 100°F/hr. The limit lines for rates between those shown in TS Figure 3.1-1 may be obtained by interpolation.

2. The secondary side of the steam generator must not be pressurized above 200 psig if the temperature of the vessel is below 70°F.

UPPER PRESSURIZATION LIMITS
FOR HEATUP AND COOLDOWN
SURRY UNITS NO. 1 AND 2



CHANGE NO.

Figure 3.1-1 Upper pressurization limit for heatup is depicted by "0°F/Hour" curve. Upper pressurization limits for cooldown are dependent as depicted, on the cooldown rates. This figure is applicable through an nvt of 1.1×10^{18} neutrons per cm^2 ($E > 1$ Mev)

TS Figure 3.1-1
1-17-73

TABLE 4.1-3 A
UNIT 1
MINIMUM FREQUENCIES FOR FLUSHING SENSITIZED PIPE

<u>FLUSH FLOW PATH GENERAL DESCRIPTION</u>	<u>MINIMUM FLUSH DURATION</u>	<u>FREQUENCY</u>	<u>REMARKS</u>
11. From C.S. Pump CS-P-1A to M.O. Isolation Valves	15 minutes	Monthly	Run in conjunction with or immediately after pump test required by Specification 4.5.A.1
2. From C.S. Pump CS-P-1B to M.O. Isolation Valves	20 minutes	Monthly	Run in conjunction with or immediately after pump test required by Specification 4.5.A.1
3. From L.H.S.I. Pump, SI-P-1A, Discharge Line to MOV 863A	20 minutes	Monthly	Run in conjunction with or immediately after pump test required by Specifica- tion 4.11.B.1
4. S.I. line, from charging pump discharge loop fill header to containment missile barrier, for flow to			Flushes to be performed only when R.C. System pressure is greater than 1500 psig.
a. R.C. hot leg loop 1	15 minutes	Monthly	
b. R.C. hot leg loop 2	10 minutes	Monthly	
c. R.C. hot leg loop 3	15 minutes	Monthly	
5. S.I. line, from charging pump discharge header to containment missile barrier, for flow to			Flushes to be performed only when R.C. System pressure is greater than 1500 psig.
a. R.C. cold leg loop 1	5 minutes	Monthly	
b. R.C. cold leg loop 2	5 minutes	Monthly	
c. R.C. cold leg loop 3	5 minutes	Monthly	

CHANGE NO. 4

TABLE 4.1-3B
UNIT 2
MINIMUM FREQUENCIES FOR FLUSHING SENSITIZED PIPE

1. From C.S. Pump 2-CS-P-1A to M.O. Isolation Valves	20 minutes	Monthly	Run in conjunction with or immediately after pump test required by specification 4.5.A.1 (
2. From C.S. Pump 2-CS-P-1B to M.O. Isolation Valves	15 minutes	Monthly	Run in conjunction with or immediately after pump test required by Specification 4.5.A.1
3. From L.H.S.I. Pump 2-S1-P-1A, Discharge Line to MOV 2-863A	20 minutes	Monthly	Run in conjunction with or immediately after pump test required by Specification 4.11.B.1
4. 6" S.I. line, from L.H.S.I. pumps to containment missile barrier, for flow to			Flushes to be performed only when R.C. System pressure is greater than 500 psig. Run in conjunction with or immediately after pump test required by Specification 4.11.B.1
a. R.C. hot leg loop 1	35 minutes	Monthly	
b. R.C. hot leg loop 2	35 minutes	Monthly	
c. R.C. hot leg loop 3	35 minutes	Monthly	
5. S.I. line, from charging pump discharge header to containment missile barrier, for flow to			Flushes to be performed only when R.C. System pressure is greater than 1500 psig.
a. R.C. cold leg loop 1	5 minutes	Monthly	
b. R.C. cold leg loop 2	5 minutes	Monthly	
c. R.C. cold leg loop 3	5 minutes	Monthly	

attack of the pipe. In order to insure the continued integrity of the pipe throughout plant life, the affected lines are flushed periodically to remove stagnant water which may contain contaminants.

The flushing requirements delineated in TS Table 4.1-3A and TS Table 4.1-3B as appropriate for Unit No. 1 and Unit No. 2 respectively, insure that a build up of contaminants will not occur. The specified minimum flush durations, with expected flow rates during flushing, insures that a volume of water greater than the volume contained in the stagnant flow paths listed in Table 4.1-3A and 4.1-3B will be flushed. The required sampling of flushed lines further ensures that the specified flushing procedures were effective in removing any undesirable contaminants that may have accumulated in the sensitized piping. 4

The control room ventilation system is required to establish a positive differential pressure in the control room for one hour following a design basis loss-of-coolant accident using a bottled air supply as the source of air. The ability of the system to meet this requirement is tested by pressurizing the control room using the ventilation system fans and comparing the volume of air required to that stored. The test is conducted each refueling interval (approximately 12 to 18 months), normally coinciding with the refueling outage of either Unit 1 or Unit 2.