

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

830 Power Building

NOV 22 1978

Director of Nuclear Reactor Regulation
Attention: Mr. Thomas A. Ippolito, Chief
Branch No. 3
Division of Operating Reactors
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Ippolito:

In the Matter of the) Docket No. 50-296 P
Tennessee Valley Authority)

Enclosed are revisions to the pump and valve testing program for Browns Ferry Nuclear Plant unit 3 as submitted by my letter to you dated September 29, 1978. These revisions are based on our further review of ASME Section XI requirements, present technical specification surveillance instructions, and the Browns Ferry design.

Very truly yours,

J. E. Gilleland
for J. E. Gilleland
Assistant Manager of Power

Enclosure

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ENCLOSURE

Attachment 1 - Revised pages 3 through 7 from Attachment 2 of the enclosure to the September 29, 1978, letter

Attachment 2 - Revised pages 1 and 2 from Attachment 3 of the enclosure to the September 29, 1978, letter

Attachment 3 - Additional Request for Relief PV-30

NOTE: Revisions to each page are identified by a vertical bar in the left-hand margin.

ATTACHMENT 1

| <u>SYSTEM</u> | <u>VALVE</u> | <u>CATEGORY</u> | <u>TEST FREQUENCY</u> | <u>TYPE OF TEST</u> |
|---------------------------------|--------------|-----------------|-----------------------|---------------------|
| EECW (Locked Valves) | 67-743 | E | - | None |
| | 67-744 | E | - | None |
| | 67-511 | E | - | None |
| | 67-518 | E | - | None |
| | 67-525 | E | - | None |
| | 67-532 | E | - | None |
| | 67-551 | E | - | None |
| | 67-561 | E | - | None |
| | 67-565 | E | - | None |
| | 67-572 | E | - | None |
| | 67-594 | E | - | None |
| | 67-603 | E | - | None |
| | 67-606 | E | - | None |
| 67-614 | E | - | None | |
| SLC (Check Valves) | 63-514 | C | Q | Meets IWV-3520 (b) |
| | 63-516 | C | Q | Meets IWV-3520 (b) |
| | 63-525 | AC | Cold Shutdown | Meets IWV-3520 (b) |
| | 63-526 | AC | Cold Shutdown | Meets IWV-3520 (b) |
| SLC (Relief Valves) | 63-512 | C | Operating Cycle | Tech. Spec. 4.4.A.2 |
| | 63-513 | C | Operating Cycle | Tech. Spec. 4.4.A.2 |
| SLC (Explosive Valves) | 63-8A | D | 2-year Cycle | IWV-3610 |
| | 63-8B | D | 2-year Cycle | IWV-3610 |
| SLC (Locked Valves) | 63-500 | E | - | None |
| | 63-506 | E | - | None |
| | 63-507 | E | - | None |
| | 63-515 | E | - | None |
| | 63-517 | E | - | None |
| | 63-524 | E | - | None |
| | 63-528 | E | - | None |
| | 63-527 | E | - | None |
| Feedwater (Locked Valves) | 3-66 | E | - | None |
| | 3-67 | E | - | None |
| RWCU | 69-1 | A | Cold Shutdown | Full Cycle |
| | 69-2 | A | Cold Shutdown | Full Cycle |
| RWCU (Check valves) | 69-579 | AC | Cold Shutdown | Full Cycle |

| <u>SYSTEM</u> | <u>VALVE</u> | <u>CATEGORY</u> | <u>TEST FREQUENCY</u> | <u>TYPE OF TEST</u> | |
|----------------------------|------------------------|-----------------|-----------------------|-----------------------|--------------------|
| RCIC | 71-2 | A | Cold Shutdown | Full Cycle | |
| | 71-3 | A | Cold Shutdown | Full Cycle | |
| | 71-5 | B | Q | Full Cycle | |
| | 71-6A | B | Q | Full Cycle | |
| | 71-6B | B | Q | Full Cycle | |
| | 71-8 | B | Q | Meets IWV-3410 (b)(1) | |
| | 71-9 | B | Q | Meets IWV-3410 (b)(1) | |
| | 71-10 | B | Q | Meets IWV-3410 (b)(1) | |
| | 71-17 | B | Q | Full Cycle | |
| | 71-18 | B | Q | Full Cycle | |
| | 71-25 | B | Q | Full Cycle | |
| | 71-37 | B | Cold Shutdown | Full Cycle | |
| | 71-39 | A | Cold Shutdown | Full Cycle | |
| | 71-40 | A | Cold Shutdown | Full Cycle | |
| | 71-22 | B | Q | Meets IWV-3410 (b)(1) | |
| | RCIC (Check Valves) | 71-580 | AC | Q | Meets IWV-3520 (b) |
| | | 71-597 | C | Q | Meets IWV-3520 (b) |
| 71-598 | | C | Q | Meets IWV-3520 (b) | |
| 71-599 | | C | Q | Meets IWV-3520 (b) | |
| 71-600 | | C | Q | Meets IWV-3520 (b) | |
| 71-508 | | C | None | None | |
| 71-592 | | AC | Q | Meets IWV-3520 (b) | |
| RCIC (Relief Valves) | 71-543 | C | 60 Months | Meets IWV-3510 | |
| RCIC (Locked Valves) | 71-14 | AE | - | None | |
| | 71-16 | E | - | None | |
| | 71-570 | E | - | None | |
| | 71-578 | E | - | None | |
| | 71-579 | E | - | None | |
| | 71-571 | E | - | None | |
| | 71-32 | AE | - | None | |
| HPCI | 73-2 | A | Cold Shutdown | Full Cycle | |
| | 73-3 | A | Cold Shutdown | Full Cycle | |
| | 73-5 | B | Q | Full Cycle | |
| | 73-6A | B | Q | Full Cycle | |
| | 73-6B | B | Q | Full Cycle | |
| | 73-16 | B | Q | Meets IWV-3410 (b)(1) | |
| | 73-18 | B | Q | Meets IWV-3410 (b)(1) | |
| | 73-19 | B | Q | Meets IWV-3410 (b)(1) | |
| | 73-27 | B | Q | Full Cycle | |
| | 73-34 | B | Cold Shutdown | Full Cycle | |
| | 73-43 | B | Q | Meets IWV-3410 (b)(1) | |
| | 73-44 | A | Cold Shutdown | Full Cycle | |
| | 73-45 | A | Cold Shutdown | Full Cycle | |
| | 73-26 | B | Q | Full Cycle | |
| HPCI (Relief Valves) | 73-574 | C | 60 Months | Meets IWV-3510 | |
| HPCI (Locked Valves) | 73-23 | AE | - | None | |
| | 73-24 | AE | - | None | |
| | 73-25 | E | - | None | |

| <u>SYSTEM</u> | <u>VALVE</u> | <u>CATEGORY</u> | <u>TEST FREQUENCY</u> | <u>TYPE OF TEST</u> |
|----------------------------|--------------|-----------------|-----------------------|---------------------|
| HPCI (Locked Valves) | 73-592 | E | - | None |
| | 73-607 | E | - | None |
| | 73-593 | E | - | None |
| | 73-608 | E | - | None |
| HPCI (Check Valves) | 73-517 | C | None | None |
| | 73-603 | AC | Q | Meets IWV-3520 (b) |
| | 73-609 | AC | Q | Meets IWV-3520 (b) |
| | 73-633 | C | Q | Meets IWV-3520 (b) |
| | 73-634 | C | Q | Meets IWV-3520 (b) |
| | 73-635 | C | Q | Meets IWV-3520 (b) |
| | 73-636 | C | Q | Meets IWV-3520 (b) |
| RHR | 74-1 | B | Q | Full Cycle |
| | 74-2 | B | Q | Full Cycle |
| | 74-7 | B | Q | Full Cycle |
| | 74-12 | B | Q | Full Cycle |
| | 74-13 | B | Q | Full Cycle |
| | 74-24 | B | Q | Full Cycle |
| | 74-25 | B | Q | Full Cycle |
| | 74-30 | B | Q | Full Cycle |
| | 74-35 | B | Q | Full Cycle |
| | 74-36 | B | Q | Full Cycle |
| | 74-46 | B | Q | Full Cycle |
| | 74-47 | A | Cold Shutdown | Full Cycle |
| | 74-48 | A | Cold Shutdown | Full Cycle |
| | 74-52 | B | Q | Full Cycle |
| | 74-53 | A | Cold Shutdown | Full Cycle |
| | 74-54 | AC | Cold Shutdown | Full Cycle |
| | 74-57 | A | Q | Full Cycle |
| | 74-58 | A | Q | Full Cycle |
| | 74-60 | A | Q | Full Cycle |
| | 74-61 | A | Q | Full Cycle |
| | 74-66 | B | Q | Full Cycle |
| | 74-67 | A | Cold Shutdown | Full Cycle |
| | 74-68 | AC | Cold Shutdown | Full Cycle |
| | 74-71 | A | Q | Full Cycle |
| | 74-72 | A | Q | Full Cycle |
| | 74-74 | A | Q | Full Cycle |
| | 74-75 | A | Q | Full Cycle |
| | 74-77 | A | Cold Shutdown | Full Cycle |
| | 74-78 | A | Cold Shutdown | Full Cycle |
| | 74-96 | B | Q | Full Cycle |
| | 74-97 | B | Q | Full Cycle |
| | 74-100 | B | Q | Full Cycle |
| | 74-98 | B | Q | Full Cycle |
| | 74-99 | B | Q | Full Cycle |

| <u>SYSTEM</u> | <u>VALVE</u> | <u>CATEGORY</u> | <u>TEST FREQUENCY</u> | <u>TYPE OF TEST</u> |
|------------------------------|--------------|-----------------|-----------------------|---------------------|
| RHR (Check Valves) | 74-559A | C | Q | Meets IWV-3520 (b) |
| | 74-559B | C | Q | Meets IWV-3520 (b) |
| | 74-559C | C | Q | Meets IWV-3520 (b) |
| | 74-559D | C | Q | Meets IWV-3520 (b) |
| | 74-661 | AC | Cold Shutdown | Meets IWV-3520 (b) |
| | 74-662 | AC | Cold Shutdown | Meets IWV-3520 (b) |
| | 74-560A | C | Q | Meets IWV-3520 (b) |
| | 74-560B | C | Q | Meets IWV-3520 (b) |
| | 74-560C | C | Q | Meets IWV-3520 (b) |
| | 74-560D | C | Q | Meets IWV-3520 (b) |
| RHR (Locked Valves) | 74-10 | E | - | None |
| | 74-22 | E | - | None |
| | 74-33 | E | - | None |
| | 74-44 | E | - | None |
| | 74-49 | E | - | None |
| | 74-55 | E | - | None |
| | 74-69 | E | - | None |
| | 74-85 | E | - | None |
| | 74-86 | E | - | None |
| | 74-87 | E | - | None |
| | 74-88 | E | - | None |
| | 74-89 | E | - | None |
| | 74-90 | E | - | None |
| 74-150 | E | - | None | |
| Core Spray | 75-2 | B | Q | Full Cycle |
| | 75-9 | B | Q | Full Cycle |
| | 75-11 | B | Q | Full Cycle |
| | 75-23 | B | Q | Full Cycle |
| | 75-25 | A | Cold Shutdown | Full Cycle |
| | 75-26 | AC | Cold Shutdown | Full Cycle |
| | 75-30 | B | Q | Full Cycle |
| | 75-37 | B | Q | Full Cycle |
| | 75-39 | B | Q | Full Cycle |
| | 75-51 | B | Q | Full Cycle |
| | 75-53 | A | Cold Shutdown | Full Cycle |
| | 75-54 | AC | Cold Shutdown | Full Cycle |
| | 75-57 | A | Q | Full Cycle |
| | 75-58 | A | Q | Full Cycle |
| Core Spray (Check Valves) | 75-537A | C | Q | Meets IWV-3520 (b) |
| | 75-537B | C | Q | Meets IWV-3520 (b) |
| | 75-537C | C | Q | Meets IWV-3520 (b) |
| | 75-538D | C | Q | Meets IWV-3520 (b) |
| | 75-570A | C | Q | Meets IWV-3520 (b) |
| | 75-570B | C | Q | Meets IWV-3520 (b) |
| | 75-570C | C | Q | Meets IWV-3520 (b) |
| | 75-570D | C | Q | Meets IWV-3520 (b) |

| <u>SYSTEM</u> | <u>VALVE</u> | <u>CATEGORY</u> | <u>TEST FREQUENCY</u> | <u>TYPE OF TEST</u> |
|----------------------------------|-----------------|-----------------|--|---------------------|
| Core Spray (Locked Valves) | 75-1 | E | - | None |
| | 75-8 | E | - | None |
| | 75-17 | E | - | None |
| | 75-18 | E | - | None |
| | 75-27 | E | - | None |
| | 75-29 | E | - | None |
| | 75-36 | E | - | None |
| | 75-38 | E | - | None |
| | 75-45 | E | - | None |
| | 75-46 | E | - | None |
| | 75-55 | E | - | None |
| | 75-10 | E | - | None |
| Recirculation Loops | 68-1 | B | Cold Shutdown | Full Cycle |
| | 68-3 | B | | |
| | 68-77 | B | | |
| | 68-79 | B | | |
| | | B | | |
| CRD Hydraulic System | 85-39A-(1-185)B | | 10% of valves every 16 weeks, valves also cycle during any unit scram, all valves also tested each refueling outage | Full Cycle |
| | 85-39B-(1-185)B | | | Full Cycle |

ATTACHMENT 2

ATTACHMENT 3

This table identifies the Category A valves, and the testing criteria (Appendix J, Section XI, or both) to be satisfied at each refueling outage. Testing criteria is based on Items 2, 3, and 4 of Testing Requirements and Requests for Relief, attached to NRC (T.A. Ippolito) letter to TVA (N. B. Hughes) of August 8, 1978.

| <u>Valve No.</u> | <u>TESTING CRITERIA</u> | |
|------------------|------------------------------|------------------------|
| | <u>10 CFR 50, Appendix J</u> | <u>ASME Section XI</u> |
| 1-14 | X | |
| 1-15 | X | |
| 1-26 | X | |
| 1-27 | X | |
| 1-37 | X | |
| 1-38 | X | |
| 1-51 | X | |
| 1-52 | X | |
| 1-55 | X | |
| 1-56 | X | |
| 3-554 | X | |
| 3-558 | X | |
| 3-568 | X | |
| 3-572 | X | |
| 63-525 | X | |
| 63-526 | X | |
| 69-1 | X | |
| 69-2 | X | |
| 69-579 | X | |
| 71-2 | X | |
| 71-3 | X | |
| 71-39 | X | |
| 71-40 | X | |
| 71-14 | X | |
| 71-32 | X | |
| 71-580 | X | |
| 71-592 | X | |

| <u>VALVE NO.</u> | <u>10 CFR 50, APPENDIX J</u> | <u>ASME SECTION XI</u> |
|------------------|------------------------------|------------------------|
| 73-2 | X | |
| 73-3 | X | |
| 73-44 | X | |
| 73-45 | X | |
| 73-23 | X | |
| 73-24 | X | |
| 73-603 | X | |
| 73-609 | X | |
| 74-47 | X | |
| 74-48 | X | X |
| 74-53 | X | X |
| 74-54 | X | X |
| 74-57 | X | X |
| 74-58 | X | |
| 74-60 | X | |
| 74-61 | X | |
| 74-67 | X | |
| 74-68 | X | X |
| 74-71 | X | X |
| 74-72 | X | |
| 74-74 | X | |
| 74-75 | X | |
| 74-77 | X | |
| 74-78 | X | X |
| | | X |
| 74-661 | X | X |
| 74-662 | X | X |
| 75-25 | X | X |
| 75-26 | X | X |
| 75-53 | X | X |
| 75-54 | X | X |
| 75-57 | X | X |
| 75-58 | X | |

ATTACHMENT 3

Request for Relief PV-30

System - Standby Liquid Control

Valves - 63-512, 63-513

Category - C

Function - Pressure Relief

Test Requirement - Setpoint testing per ASME PTC 25.2 - 1966 every 5 years.

Basis for Relief - Setpoints of these valves are tested once per operating cycle in place per present Technical Specification 4.4.A.2. There is no additional safety margin gained by testing per Section XI.

Alternate Testing - Testing in place once per operating cycle per Technical Specification 4.4.A.2.