

50-302

**Florida
Power**
CORPORATION

POST OFFICE BOX 219 - CRYSTAL RIVER, FLORIDA 32629 - TELEPHONE: (904) 795-3802

October 31, 1984

Mr. Harley Silver
Operating Reactors Branch No. 4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Silver:

Transmitted herewith are the draft responses to the NRC positions concerning the Crystal River Unit 3 Pump and Valve Inservice Testing Program. Please have these reviewed to identify any remaining unresolved issues. Florida Power Corporation would then like to arrange a meeting to discuss the remaining issues. Should you have any questions please contact Dan Green of my staff at (904) 795-3802 extension 110.

Sincerely,

Ken Wilson
Supervisor, Site Nuclear Licensing

DG:nrk

Attachment

cc: Mr. N. Economos
Region II
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
101 Marietta St. N.W., Suite 3100
Atlanta, GA 30303

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Crystal River Unit 3 (CR-3)

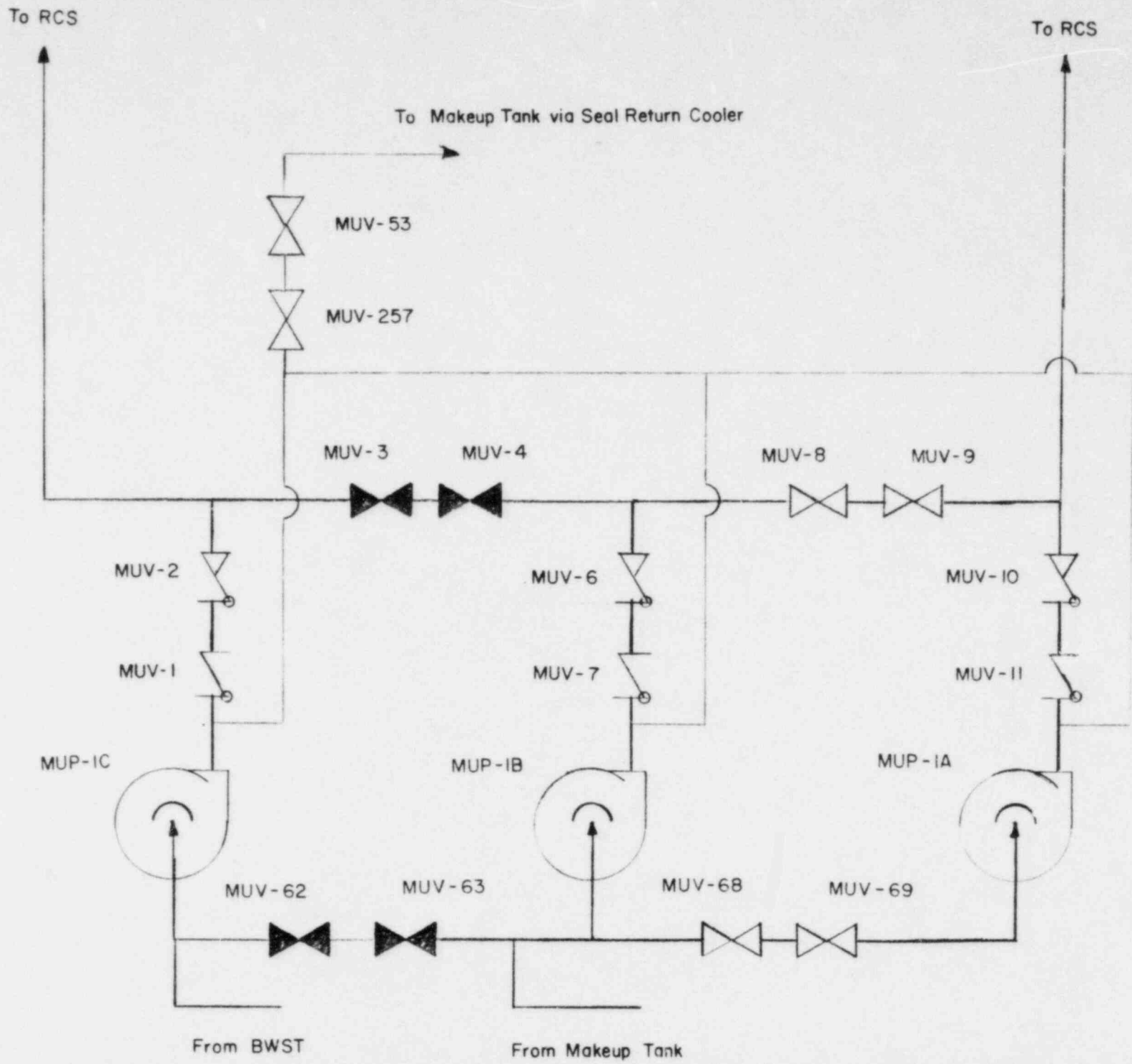
Responses to NRC Letter Concerning Inservice Testing of Pump and Valves

- Q1. The licensee has requested specific relief from the inlet and differential pressure measurements required by Section XI for the Emergency Diesel Generator Fuel Transfer pumps based on not having installed instrumentation. The licensee does not propose an alternate test. It is our position that the licensee should provide the instrumentation necessary to perform these tests, as required by the Code.
- R1. Florida Power Corporation will install inlet and differential pressure instrumentation for the Emergency Diesel Generator Fuel Oil Transfer Pumps.
- Q2. The licensee has requested specific relief from the flow measurement requirements of Section XI for the Emergency Nuclear Seawater pumps and has not proposed an alternate test. The licensee's basis is that there is no installed instrumentation. It is our position that the licensee should provide the instrumentation necessary to test these pumps in accordance with the Code.
- R2. The Emergency Nuclear Seawater Pumps are vertical, submerged pumps that take suction from a pit open to the Circulating Water Intake Structure through two 48 inch diameter lines. The pit water level is the same as the tide level, therefore, the pump inlet pressure is equal to atmospheric pressure plus a tide level pressure correction.

The system is a fixed resistance type as defined in IWP-2118. Table IWP-3100-1, Note 1, states (for systems of this type) measurement of both flow and differential pressure is not required. Differential pressure can be calculated since the pumps have discharge pressure gauges and intake pressure is determined by tide level. Therefore, no relief is needed from the requirement to measure flow. However, a written clarification stating that inlet pressure is determined by tide level is appropriate. Florida Power Corporation performs testing of the Emergency Nuclear Seawater Pumps in accordance with the code, and no changes to the system or test procedures are required.

- Q3. The licensee has requested specific relief from the corrective action requirements of Section XI, paragraphs IWV-3420(g) (1) and (2) for Category A valves. The licensee proposes to use the leak rate of 95% of 0.6La as a limit to replace or repair defective valves and then retest as judiciously as possible. It is our position that this relief request should not be granted because the allowable leak rate requested by the licensee is too large. It is our position that the individual valve allowable leak rates should be linearly determined (i.e., a twelve inch valve would be allowed twice the leakage of a 6 inch valve) such that the sum of the total allowable leak rates is less than or equal to 0.6La.
- R3. Florida Power Corporation's leak rate testing program (based on Appendix J to 10CFR50) includes leak rate guidelines which are linearly determined and restrict the sum of the total allowable leak rate to less than or equal to 95% of 0.6La. For operational flexibility, the program also allows for the evaluation of individual valve leak rates. The results of these evaluations are used to determine whether valves are acceptable for use "as-is" or are in need of repair. This is more desirable in the plant because it both streamlines the program and requires immediate evaluation of valve leakage.

- R3. (Cont.) This would not be the case with the use of IWV-3420(g) which calls for trending leakages, mid-cycle leak rate tests during cold shutdowns, and recordkeeping requirements not compatible with the administrative programs currently established at Crystal River Unit 3.
- Q4. The licensee has requested specific relief from the exercising requirements of Section XI for valve ASV-50, emergency feedwater pump turbine overspeed trip and throttle valve, and has proposed to test at refueling outages. The licensee's basis is that testing quarterly or at cold shutdown increases the potential for misadjustment of the valve after testing. It is our position that the stated reason is not adequate to grant relief.
- R4. Florida Power Corporation has initiated a change to the monthly pump test procedure to require testing valve ASV-50 prior to the pump test. Performance of tests in this order eliminates the potential for midadjustment of the valve upon completion.
- Q5. The licensee has requested specific relief from the exercising requirements of Section XI for valve DHV-91, decay heat removal system to pressurizer spray isolation, and has proposed to stroke and stroke time at cold shutdown. The licensee states that stroking this valve during normal plant operation would be potentially compromising to the decay heat system by stroking a valve connecting a high pressure system to a low pressure system. The licensee states the valve has no safety function. We disagree with the licensee and our position is that this valve should be stroked quarterly. We do not agree that the valve has no safety function.
- R5. A change to the quarterly valve stroking procedure has been initiated. This change will add valve DHV-91 to this procedure.
- Q6. The licensee has requested specific relief from the exercising requirements of Section XI for valves MUV-53 and 257, makeup pump minimum flow recirculation valves, and has proposed to exercise these valves at cold shutdown. The licensee states that stroking of these valves during normal plant operation would interrupt minimum recirculation flow on the running makeup pump. Should the valve fail in the closed position, damage would result to the makeup (high pressure injection) pump. We do not agree with the licensee's basis and, therefore, conclude that relief should not be granted. The licensee has stated that pump damage could result if the valve fails closed on the running pump. However, we have concluded that operation of the pumps could be shifted and testing conducted per Section XI.
- R6. The minimum flow path, from the makeup pumps to the makeup tank is through series valves MUV-53 and MUV-257. Closure of either valve would isolate the common header for all three makeup pumps to the minimum recirculation flow path. Isolation of this flow path would result in pump damage. A simplified sketch has been provided for clarity. Florida Power Corporation, therefore, requests that the relief be granted.
- Q7. The licensee requested specific relief from the full-flow exercising requirements of Section XI for valves BSV-26 and 27 and has proposed to inspect internally every forty months. We have concluded that relief should be granted; however, we cannot justify an inspection interval longer than refueling outages.



R7. During Refuel IV, in 1983, these valves were disassembled. The task involved 49 manhours and 0.5 man-rem personnel exposure. These valves do not include the Health Physics or Quality Control support involved during the work. Florida Power Corporation would prefer to perform this task on the forty month interval, which would necessitate the inspection on every other refueling.

This interval does not compromise the inspection coverage intent of the code and provides a reduction of worker exposure. Florida Power Corporation, therefore, requests that the relief be granted.

Q8. The licensee requested specific relief from the exercising requirements of Section XI for valves BSV-152 and 153 and proposes not to test them. The licensee's basis is that there is no method for testing, since a disassembly/inspection would expose personnel to highly concentrated boric acid. It is our position that the system should be modified so testing can be performed per the Code.

R8. The requested relief is no longer required. Tank BST-2 and associated valves BSV-152 and 153 are not being used at this time. The lines to these valves will be isolated with blank flanges.

Q9. The licensee requested specific relief from the Section XI quarterly exercising requirements for valves CFV-2 and 4. The licensee has proposed to partial stroke these valves at refueling outages. It is our position that partial stroking does not provide adequate assurance of valve operability, and that the valves should be either exercised per the Code or internally inspected on a refueling outage frequency.

R9. A "burp test" is performed on these check valves as a part of the cold shutdown procedure at Crystal River Unit 3. This test consists of two parts. The first part of the test provides assurance that the valves CFV-2 and 4, which are normally closed, will open when required. This portion of the test is accomplished by lowering the Reactor Coolant System (RCS) pressure below the Core Flood Tank (CFT) pressure and observing an increase in pressurizer level and a decrease in the CFT level. The test verifies that the valve opens upon removal of the closing pressure differential. The second part of the test demonstrates that the condition of the sealing surface of the disc and seat is adequate to prevent reverse flow through the valve. It also demonstrates that the hinge pin is intact and that the hinge rotates freely. This portion of the test is accomplished by raising the RCS pressure until it is greater than the CFT pressure and verifying that the CFT level does not increase and that pressurizer level remains constant.

The core flood check valve test does not full stroke exercise valves CFV-2 and 4 per IWV-3520(b)(2). However, it does constitute an acceptable alternate test and it provides assurance of valve operability.

Q10. At the working meeting of March 1 and 2, 1983, the licensee was asked the question (E-2):

How are check valves CFV-17 and 20 verified to close, their safety-related position, when they are full-stroke exercised quarterly?

Q10. Licensee's Response:
(Cont.)

These valves only perform a function important to safety in the closed position; therefore, the quarterly exercising of these valves open will be deleted from the IST program and the licensee will provide a request for relief from the Section XI exercising requirements. These valves will be verified shut by the Appendix J leak rate tests performed during refueling outages.

The changes were not made to the program (Reference 1). We have tentatively concluded that the valves cannot be exercised quarterly as the licensee claims. Therefore, so that we can verify the testing that is performed, we request that the licensee provide a copy of the procedure for exercising these valves quarterly.

R10. Florida Power Corporation has not revised the program since the meeting was held on March 1 and 2, 1983. Relief request #160 which addresses these valves is attached.

Q11. At the working meeting of March 10, 1983, the licensee was asked the following (E-4):

Provide a more detailed technical justification for not full-stroke exercising valves CFV-18 and 19 quarterly.

Licensee's Response:

The only function important to safety that these valves perform is in the closed position. The licensee will, therefore, delete the quarterly stroke testing of these valves to the open position from the IST program and will request relief from the Section XI exercising requirements. These valves will be verified shut by the Appendix J leak rate tests performed during the refueling outages.

The change was not made to the program (Reference 1). We have tentatively concluded that the valves cannot be exercised quarterly as the licensee claims. So that we can verify the testing that is performed, we request that the licensee provide a copy of the procedure for exercising these valves quarterly.

R11. The issue raised for valves CFV-18 and 19 is the same issue described in Question 10 above. Relief request #170 which addresses valves CFV-18 and 19 is attached.

Q12. The licensee requested specific relief from the exercising and stroke time test requirements of Section XI for valves DHV-110 and 111 and proposed to operationally test these valves during the decay heat removal system inservice operational tests. We have concluded that system operational testing is not adequate, because it does not guarantee that these valves will be exercised at the required frequency or at a full stroke. In the working meeting of March 1 and 2, 1983, the licensee agreed to provide additional information on valve fail-safe position and demonstrate that in the throttled position design accident flow rate from the decay heat pumps would not be restricted (H-5). The additional information was not provided and, therefore, we have concluded that relief should not be granted.

- R12. A change to the monthly pump test procedure has been initiated. The change will require valves DHV-110 and 111 to be tested prior to the pump test. Performance of the tests in this order verifies that the valves perform their intended function.
- Q13. The licensee requested specific relief from the exercising requirements of Section XI for valves FWV-45 and 46. The licensee proposes to not exercise these valves. We have concluded that these valves should be tested in compliance with the requirements of Section XI. It is our position that the licensee should modify the system so testing can be performed, or institute a valve partial disassembly program on a refueling outage frequency.
- R13. A test is being developed for valves FWV-45 and 46 that will comply with the requirements of IWV-3520(b)(1). This work will be done in conjunction with other work associated with the OTSGs in Refuel V. This outage is scheduled to begin in March, 1985.
- Q14. During the working meeting of March 1 and 2, 1983, the licensee agreed to investigate whether or not the atmospheric steam dump valves, MSV-25 and 26, belonged in the program (Q-2). The valves were not added to the program and no further discussion has been provided. We have concluded that these valves perform a function important to safety and, therefore, should be included in the IST program.
- R14. Florida Power Corporation performs the valve stroke exercising test of the atmospheric steam dump valves, MSV-25 and 26, as required by the code during startup operations. The revised pump and valve program which includes these test requirements will be submitted by July 1, 1985.
- Q15. In the working meeting of March 1 and 2, 1983, the licensee agreed to change valves MSV-55 and 56 from Category C to Category B/C (Q-1). The licensee also agreed to exercise and stroke time these valves in the open and closed directions. There is no indication that the changes were made. The program for these valves is, therefore, unacceptable.
- R15. A change to the quarterly valve exercising procedure has been initiated. The change will add valves MSV-55 and 56 to this procedure. The revised program which includes the category change and the exercise and stroke time requirements for these valves will be submitted by July 1, 1985.
- Q16. The licensee has requested relief from the leak rate testing requirements for the following pressure isolation valves. It is the licensee's intention to use installed instrumentation to monitor valve leak tight integrity. However, the proposed method does not provide adequate assurance that the leak tight integrity of each valve is verified individually.

CFV-1	MUV-36
CFV-3	MUV-37
CFV-2	MUV-42
CFV-4	MUV-160
DHV-3	MUV-163
DHV-4	MUV-164

We have concluded that this relief request should be denied.

R16. Valves CFV-2 and CFV-4 are verified to seat and prevent backflow during the core flood tank "burp test". This "burp test" does not meet all the requirements of IWV-3420 (d) (1), however, it is sufficient to demonstrate valve operability and is an acceptable alternate test. These valves are in series with valves CFV-1 and CFV-3, which are tested in accordance with ASME code requirements. The arrangement of the valves in the system and the tests performed on them provide adequate assurance that high and low pressure systems will remain isolated from each other.

Valves DHV-3 and DHV-4 have an engineered system installed such that seat leakage in the closed position is inconsequential for the fulfillment of their function. Seat leakage of valve DHV-3 can flow into Class 1 piping. The only paths available for the leakage from this piping are through valve DHV-116 to the higher pressure reactor vessel or through valve DHV-4. Any seat leakage of DHV-4 will flow into the Reactor Building dump. Seat leakage of the valves will not degrade the ability of the valves to perform their function. A figure depicting these possible leakage paths is attached. Therefore, they are not category "A" valves.

The makeup system is at a higher pressure than is the reactor coolant, and must be in order to function. Therefore, back leakage into the system is precluded and seat leakage of these valves in the closed position is inconsequential. They are not category "A" valves.

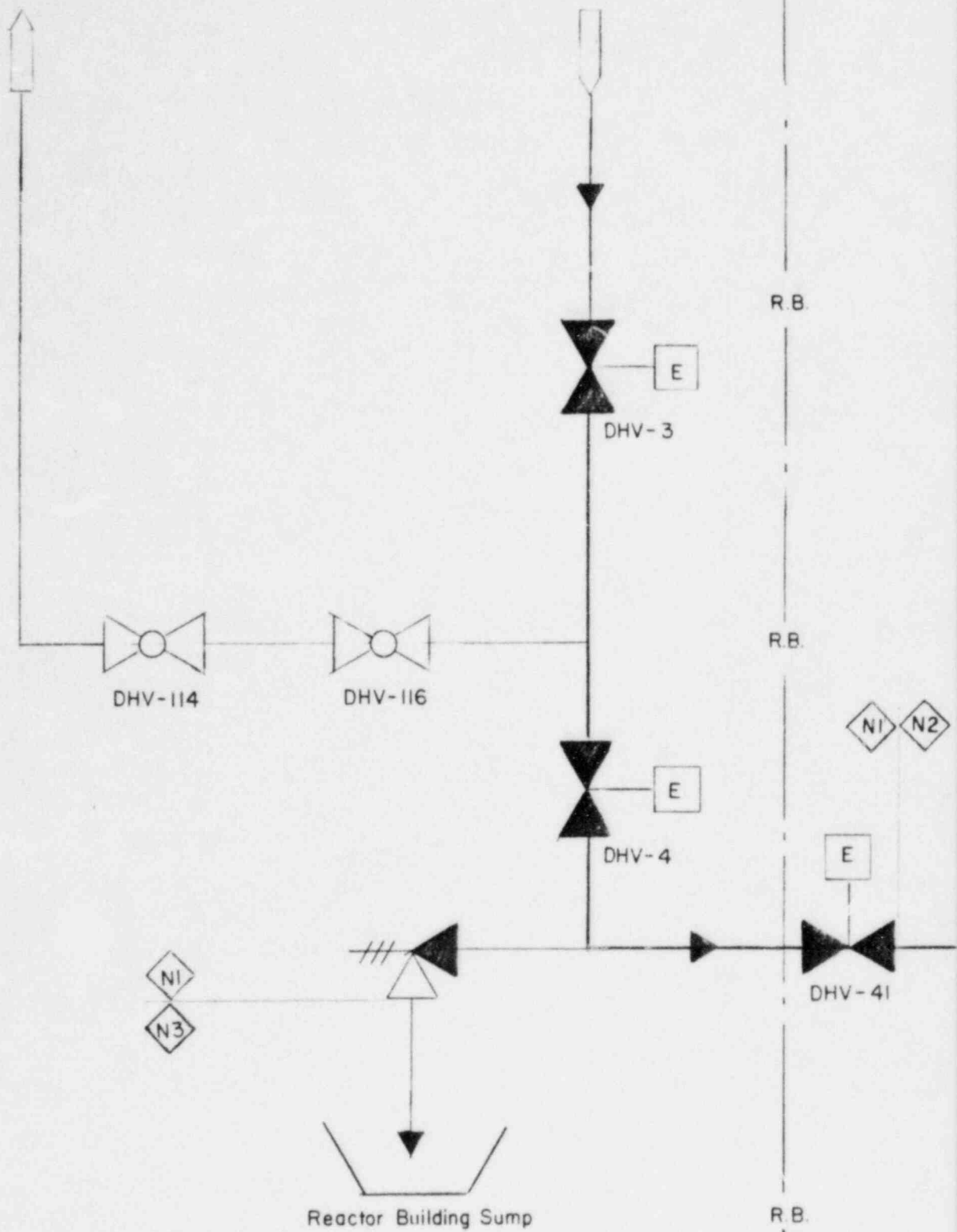
Q17. In the working meeting of March 1 and 2, the licensee stated that valves MUV-1, 7, 11, 36, 37, 42, 43, 160, 161, 163 and 164 are not full-stroke exercised (R-3). MUV-1, 7 and 11 would be partial stroke exercised at cold shutdown and full stroke exercised during the system balance procedure after maintenance or system modification. MUV-36, 37, 42, 160, 163 and 164 are partial stroke exercised at cold shutdown. MUV-43 and 161 are partial stroke exercised quarterly and full stroked after maintenance or system modification during the system balance procedure. The licensee's resubmittal program (Reference 1) did not demonstrate these variances from the Code and no relief requests were submitted. In the resubmittal program the licensee stated that valves MUV-1, 7, 11, 43 and 162 would be partial stroke exercised at cold shutdown. We have tentatively concluded that full stroke exercising these valves at cold shutdown could lead to low temperature overpressurization. It is our position that the licensee should re-evaluate the testing requirements of these valves and make the appropriate changes to the program or provide additional justification as to why the testing shown in the resubmittal program is acceptable.

R17. Relief is requested from the testing requirements of IWV-3410 (b) for valves MUV-1, 7, 11, 36, 37, 42, 43, 160, 161, and 164. Relief requests #180 and #190 which apply to these valves are attached.

Q18. The licensee requested specific relief from the quarterly exercising requirements of Section XI for valves MUV-2, 6 and 10, and proposed to partial stroke these valves quarterly and full stroke at cold shutdown. The basis for relief was that full stroke exercising requires injecting into the core through the HPI nozzles. This type of evolution during power operation would result in a thermal cycle transient on the HPI nozzle. We do not agree with the licensee's basis. In the working meeting, the licensee informed us that these valves mechanical operators on them (R-3) and are located outside the containment, thus making it possible to exercise these valves quarterly without injecting into the core. Therefore, we have concluded that relief should not be granted because it is possible to exercise these valves and meet the requirements of the Code.

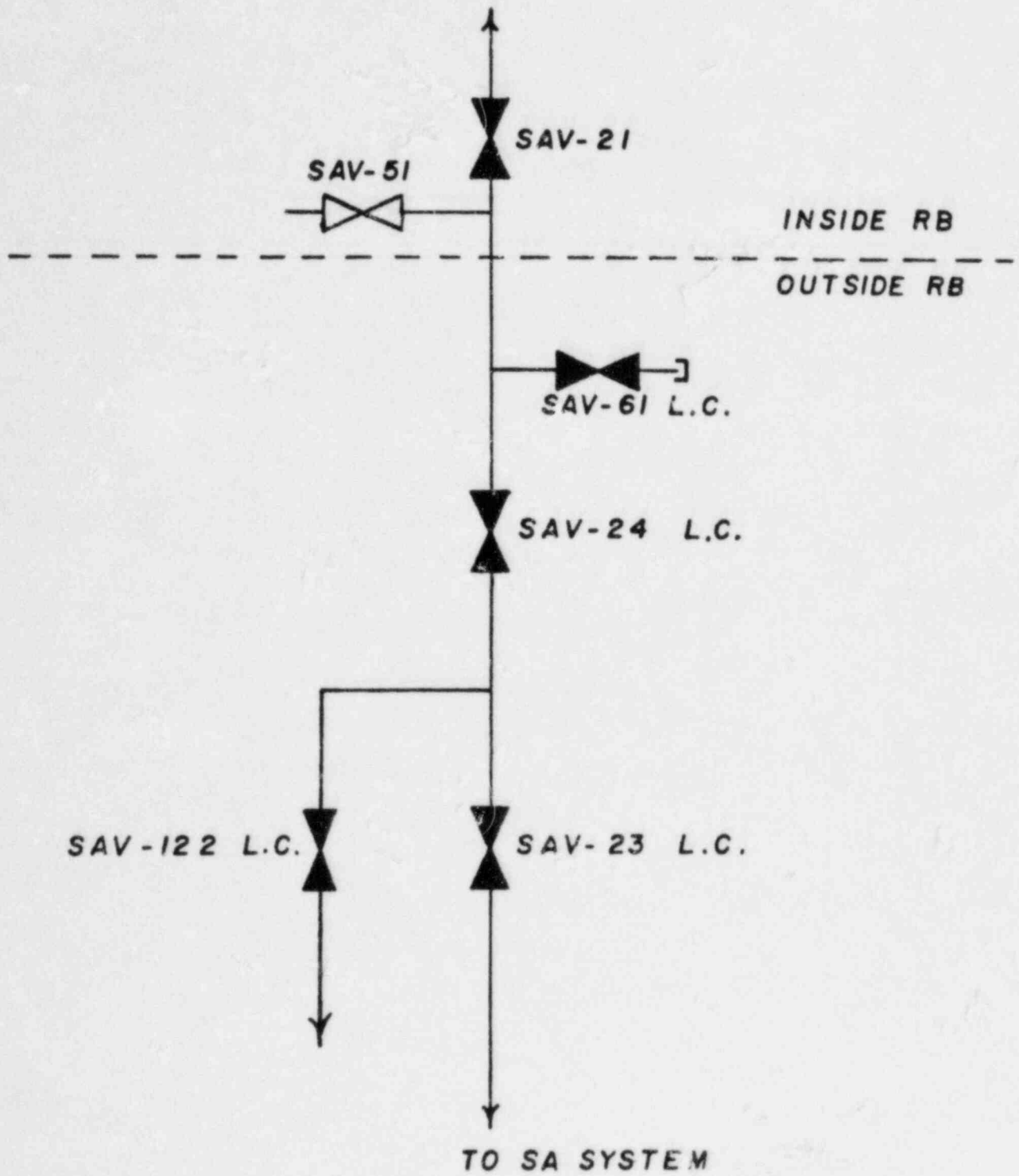
To RCS via Core Flood Line

From RCS via Decay Heat Line



- R18. A change to the quarterly valve stroking procedure has been initiated. This change will add valves MUV-2, 6 and 10 to the procedure.
- Q19. In the resubmittal program (Reference 1), the licensee indicated that valves MUV-60 and 72 will be full flow stroke exercised at cold shutdown. We do not see how this will be done without resulting in a low-temperature overpressurization of the RCS. We request the licensee to verify the procedure. The licensee was also to verify if these valves were important to safety in the closed position (R-7). In the resubmittal, the licensee did not address these discrepancies. It is our position that these valves are also important to safety in the closed position and should be periodically verified to shut.
- R19. Florida Power Corporation does not full flow stroke exercise these valves at cold shutdowns. Relief request #200 documenting an adequate alternate test is attached.
- These valves do not have a closing force (reverse dP) exerted on them until the Borated Water Storage Tank (BWST) is drained and the makeup pumps are taking suction from the decay heat pump discharge (via the decay heat exchanger outlet). Valves MUV-58 and MUV-73 isolate the BWST from the makeup pumps when the BWST is exhausted, therefore, MUV-60 and MUV-72 have no function in the closed position that could degrade the safety of the plant.
- Q20. In the working meeting the licensee agreed to change SAV-23 from Category E to Category A/E (P-2); this change was not made in the resubmittal program. Our position is that the ISI program should be revised to reflect the A/E categorization of valve SAV-23.
- R20. The NRC position is based on the temporary Post-Accident Sampling System (PASS) configuration that was employed at CR-3 until the permanent system could be installed. The installation of the permanent system has been completed, therefore, the original definition of valve SAV-23 in the program is correct. A figure showing the permanent configuration is attached. No changes to the program are needed.
- Q21. The licensee has requested specific relief from the exercising requirements of Section XI for valves CFV-1 and 3. The licensee proposes to full flow stroke exercise these valves at cold shutdown using decay heat flow of 3000 gpm. We have concluded that 3000 gpm may not be enough flow to full stroke these valves open. Therefore, it is our position that relief should not be granted and the licensee should make a proposal to verify the full stroke capability of these valves. This may require disassembly and inspection on a refueling outage frequency.
- R21. The manufacturer of valves CFV-1 and CFV-3 has indicated that the minimum flow required to full stroke open these valves is 2400 gpm per valve. This is exceeded on every cold shutdown where decay heat flow of 3000 gpm per train is verified. Therefore, full stroke capability of these valves is verified.
- Q22. The licensee did not address exercising or stroke timing the diesel air start valves. It is our position that these valves should be added to the program and tested individually to the Code requirements.

21 AIRHOSE STATIONS
INSIDE RB



- R22. The diesel generator air start valves (EGV-5, 6, 7, 8, 21, 22, 23, 24, 25, 26, 56, 57, 58, and 59) are included in pump and valve program for Crystal River Unit 3. A copy of the applicable portion of the program is attached.
- Q23. The licensee requested relief from the leak rate testing requirements of Section XI, and proposed to use Appendix J leak rate testings as an alternate test with the plant Technical Specifications as a means of establishing limits. We agree with using Appendix J leak rate testing as an alternate test program. However, it is our position that the requirements of Section XI IWV-3420 (f) and (g) should be met instead of Technical Specifications limits.
- R23. Florida Power Corporation's leak rate testing program (based on Appendix J to 10CFR50) includes leak rate guidelines which are linearly determined and restrict the sum of the total allowable leak rate to less than or equal to 95% of 0.6La. For operational flexibility, the program also allows the evaluation of individual valve leak rates. The result of the evaluations are used to determine whether the valves are acceptable for use "as-is" or are in need of repair. This is more desirable in the plant because it both streamlines the program and requires immediate evaluation of valve leakage. This would not be the case with the use of IWV-3420(g) which calls for trending leakages, mid-cycle leak rate tests during cold shutdowns, and recordkeeping requirements not compatible with the administrative programs currently established at Crystal River Unit 3.

Paragraph IWV-3420 (f) provides for the linearly determined leakage rates to be either determined by the owner or set from Table IWV-3420-1. Since Florida Power Corporation has already set leak rate guidelines, which are also consistent with plant Technical Specifications, this paragraph is met by the existing program. The company's program meets the intent of Section XI, requires more immediate evaluation of valve leakage than a Section XI program and constitutes an acceptable alternate test program.

- Q24. The licensee requested relief from the exercising requirements of Section XI for the diesel fuel oil transfer system check valves. It is our position that relief should not be granted on the basis that it is possible to exercise these valves and meet the requirements of the Code.
- R24. The diesel fuel oil transfer system check valves are normally closed and open upon activation of the fuel oil transfer pumps. They require testing in accordance with IWV-3520 (b) (2). This can be accomplished by verifying that the day tank level increases during the transfer. The verification occurs during each monthly test of the diesel generator units, therefore, the ASME Section XI requirements are met. No changes to the program or procedures are required.
- Q25. The licensee requested relief from the exercising requirements of Section XI for the flushing water pump discharge check valves. As an alternate test, the licensee proposes to substitute monitoring for normal valve operation. In the relief request, the licensee demonstrated that the position important to safety is closed and in the normal position, the valves are open, therefore, monitoring in the normal position has no bearing on the position important to safety. It is our position that the valves should be exercised per the Code or the licensee should propose an alternate method.
- R25. Two pressure gauges will be installed in the system so that pressure across the valves can be monitored as an alternate test.

TABLE I - VALVES BEING TESTED IN ACCORDANCE WITH ASME CODE REQUIREMENTS

SYSTEM NAME: EMERGENCY DIESEL GENERATOR COMPRESSED STARTING AIR & ENGINE EXHAUST DRAWING No. FD-302-282

Page 1 of 1
DATE: 1/15/82
REVISION 3

Valve Number	Asme Class	Dwg. Co-Ord.	Asme Valve Cat. A B C D E	Size In Inches	Valve Type	Act. Type	Norm. Pos.	Test Freq.	Test Method	Surv. Proc.	Leak Rate (SCC/Min)	REMARKS
EGV-5	3	D-1	X		3/4	REL	SA	-	3	TF-3	602	
EGV-6	3	D-3	X		3/4	REL	SA	-	3	TF-3	602	
EGV-7	3	D-6	X		3/4	REL	SA	-	3	TF-3	602	
EGV-8	3	D-8	X		3/4	REL	SA	-	3	TF-3	602	
EGV-21	3	F-1	X		1	CK	SA	C	1	EF-1F	354	
EGV-22	3	F-3	X		1	CK	SA	C	1	EF-1F	354	
EGV-23	3	E-6	X		1	CK	SA	C	1	EF-1F	354	
EGV-24	3	E-8	X		1	CK	SA	C	1	EF-1F	354	
EGV-25	3	D-4	X		2-1/2	GA	M	C	1	EF-1F	370	EGV-25 & 26: Crosstie Line from Air Receiver 3A, 3B, 3C & 3D
EGV-26	3	D-5	X		2-1/2	GA	M	C	1	EF-1F	370	
EGV-56	3	D-1	X		1-1/2	GA	SA	0	1	EF-1F	354	
EGV-57	3	C-1	X		1-1/2	GA	SA	0	1	EF-1F	354	
EGV-58	3	D-8	X		1-1/2	GA	SA	0	1	EF-1F	354	
EGV-59	3	C-8	X		1-1/2	GA	SA	0	1	EF-1F	354	

**FLORIDA POWER CORPORATION
INSERVICE INSPECTION
RELIEF REQUEST #160
CRYSTAL RIVER - UNIT 3**

REFERENCE CODE: ASME Boiler and Pressure Vessel Code, Section XI, 1974 Edition through Summer 1975 Addenda.

I. Component for which exemption is requested:

(a) Name and Identification Number:

Core flood tank nitrogen supply line isolation check valves (CFV-17 and CFV-20).

(b) Function:

Provide isolation for penetrations 123 and 124 (inside containment).

(c) ASME Section III Code Class:

Class II

(d) Valve Category:

A/C

II. Requirement that has been determined to be impractical:

Quarterly valve exercise requirement of subsection IWV-3520(b)(2).

III. Basis for Requesting Relief:

The core flood tanks have a static inventory of borated water with 600 psi pressure applied through a regulated nitrogen gas system. The normal position of these valves and the position to fulfill their function is closed. Stroke testing would not provide assurance that these valves would perform their intended function. Therefore, stroke testing is unnecessary.

IV. Alternate Examination:

This valve is subject to leak-rate testing which will verify proper valve closure.

V. Implementation Schedule:

This will be implemented during Refuel V, scheduled to begin in March, 1985.

**FLORIDA POWER CORPORATION
INSERVICE INSPECTION
RELIEF REQUEST #170
CRYSTAL RIVER - UNIT 3**

REFERENCE CODE: ASME Boiler and Pressure Vessel Code, Section XI, 1974 Edition through Summer 1975 Addenda.

I. Component for which exemption is requested:

(a) Name and Identification Number:

Core flood tank borated water supply line isolation check valves (CFV-18 and CFV-19)

(b) Function:

Provide isolation for penetrations 350 and 372 (inside containment).

(c) ASME Section III Code Class:

Class II

(d) Valve Category:

A/C

II. Requirement that has been determined to be impractical:

Quarterly valve exercise requirement of subsection IWV-3520(b)(2).

III. Basis for Requesting Relief:

The core flood tanks have a static inventory of borated water. The major loss of inventory results from sampling for chemical assay. Makeup of borated water is not periodic and is not sufficient to full stroke open these valves. The normal position of these valves and the position required to fulfill their intended function is closed. Stroke testing would not provide assurance that these valves would perform their intended function. Therefore, stroke testing is unnecessary.

IV. Alternate Examination:

The valves are verified to properly seat in the closed position by the leak rate testing at refueling intervals.

V. Implementation Schedule:

This will be implemented during Refuel V, scheduled to begin in March, 1985.

**FLORIDA POWER CORPORATION
INSERVICE INSPECTION
RELIEF REQUEST #180
CRYSTAL RIVER - UNIT 3**

REFERENCE CODE: ASME Boiler and Pressure Vessel Code, Section XI, 1974 Edition through Summer 1975 Addenda.

I. Component for which exemption is requested:

(a) Name and Identification Number:

Makeup pump discharge check valves (MUV - 1, 7, 11)

(b) Function:

To prevent backflow through an idle makeup pump, while one of the other pumps charges the common discharge header and provides makeup to the RCS

(c) ASME Section III Code Class:

Class II

(d) Valve Category:

C

II. Requirement that has been determined to be impractical:

Quarterly valve exercise requirements of subsections IWV-3520(a) and IWV-3520(b)(2).

III. Basis for Requesting Relief:

These valves are partially stroked during each test of the makeup pumps and one of the pumps is always running. However, the flow rates are not sufficient to full stroke open these valves in this recirculation mode. Full stroke exercising of these valves at cold shutdown could subject the reactor coolant system to low temperature overpressurization.

IV. Alternate Examination:

These valves will be partially stroke exercised quarterly.

V. Implementation Schedule:

This will be implemented within 90 days of approval of this relief request.

**FLORIDA POWER CORPORATION
INSERVICE INSPECTION
RELIEF REQUEST #190
CRYSTAL RIVER - UNIT 3**

REFERENCE CODE: ASME Boiler and Pressure Vessel Code, Section XI, 1974 Edition through Summer 1975 Addenda.

I. Component for which exemption is requested:

(a) Name and Identification Number:

Makeup system to RCS check valves (MUV-36, 37, 42 and 43 and 160, 161, 163 and 164).

(b) Function:

To prevent backflow from RCS into the makeup system.

(c) ASME Section III Code Class:

Class I

(d) Valve Category:

C

II. Requirement that has been determined to be impractical:

The check valve exercise requirements of IWV-3520(a) and IWV-3520(b)(2).

III. Basis for Requesting Relief:

These valves cannot be exercised during power operation and cannot be full stroke exercised at cold shutdown due to the possibility of causing a low temperature overpressurization transient.

IV. Alternate Examination:

These valves are partially stroke exercised following modification to the system that requires the flow balancing procedure.

V. Implementation Schedule:

The alternate examination will be required at the end of Refuel V, scheduled to begin in March, 1985.

**FLORIDA POWER CORPORATION
INSERVICE INSPECTION
RELIEF REQUEST #200
CRYSTAL RIVER - UNIT 3**

REFERENCE CODE: ASME Boiler and Pressure Vessel Code, Section XI, 1974 Edition through Summer 1975 Addenda.

I. Component for which exemption is requested:

(a) Name and Identification Number:

Borated Water Storage Tank to Makeup Pumps Suction Header Check Valves (MUV-60 and MUV-72)

(b) Function:

To prevent backflow to the BWST after it is drained and HPI/LPI is in the "piggy-back" mode.

(c) ASME Section III Code Class:

Class II

(d) Valve Category:

C

II. Requirement that has been determined to be impractical:

The check valve exercise requirements of IWV-3520(a) and IWV-3520(b)(2).

III. Basis for Requesting Relief:

These two valves are normally closed check valves that cannot be stroked during power operation. During refueling they can be partially stroke exercised, however, they cannot be full stroke exercised at cold shutdowns due to low temperature overpressurization concerns.

IV. Alternate Examination:

These valves will be partially stroke exercised at each refueling.

V. Implementation Schedule:

This alternate examination will be implemented during Refuel V, scheduled to begin in March, 1985.