

FLORIDA POWER CORPORATION
Crystal River Unit 3
Docket No. 50-302/License No. DPR-72
Request No. 110, Revision 0
Operation of Closed Containment Isolation Valves

LICENSE DOCUMENT INVOLVED:

Technical Specifications (Appendix A)

PORTION:

3/4.6.3 Containment Isolation Valves

DESCRIPTION OF REQUEST:

This submittal requests the Nuclear Regulatory Commission to approve a Technical Specification amendment to allow operation (opening) of certain containment isolation valves when they would normally be required to be isolated provided that a dedicated operator is posted to isolate the valve when necessary.

REASON FOR REQUEST:

Since initial startup Florida Power Corporation, like other Standard Technical Specification plants, has been allowed to continue POWER OPERATION with containment isolation valve(s) inoperable provided, at least one of the following criteria is satisfied:

- a. The inoperable valve(s) are restored to operability in 4 hours,
- b. The penetration is isolated using at least one deactivated and isolated automatic valve in 4 hours, or
- c. The penetration is isolated using at least one closed manual valve or blind flange in 4 hours.

Such ACTIONS, although allowing continued POWER OPERATION, significantly reduced operator flexibility with regard to other Technical Specification requirements and/or plant operation often even making it impossible to fulfill other requirements.

One example of isolation of an inoperable containment isolation valve affecting another Technical Specification requirement was brought to light by IE Inspection Report 83-10. Containment isolation valve, CAV-6, had been declared inoperable because it would not close under system pressure. In accordance with Action b, above, the penetration was isolated. Upon reaching 15% RTP, Environmental Technical Specification 2.4.1.0 requires that a sample from the Steam Generators be obtained and analyzed every four hours. Yet to obtain this sample CAV-6 must be operated, which is not allowed by Technical Specification 3.6.1.3. These two specifications therefore have placed Florida Power Corporation in a position that necessitates an immediate plant shutdown or violation of Technical Specifications. A plant shutdown subjects the plant to unnecessary transients that are not commensurate with the problem at hand (i.e. an inoperable containment isolation valve).

Since Inspection Report 83-10, Florida Power Corporation has reviewed other Technical Specifications to identify additional conflicts. The Technical Specifications that are affected by the inoperability and isolation of certain valves are described in the "Basis for Operation" for applicable valve(s) in the Enclosure.

Additionally there are some valves that are required to be locked closed due to lack of an ES actuation signal. For several reasons, stated in the Enclosure, Florida Power Corporation would also like to be able to use these isolated penetrations.

EVALUATION

This submittal requests that Florida Power Corporation be allowed to open certain isolated containment isolation valves, as suggested in NUREG 0103, Standard Technical Specifications Revision 4. When one of the specified valves is opened, a dedicated operator will be stationed at a valve to isolate the affected penetration. The dedicated operator is considered to be sufficient to assure that the penetration is isolated upon receipt of a containment isolation signal. For several of these valves the Commission has previously granted temporary approval to operate the valve intermittently. Amendment 27, dated January 23, 1980, granted temporary approval to intermittently operate CAV-1, to allow sampling of the pressurizer steam space. Additionally, Florida Power has requested and been granted (verbal) permission to operate CAV-6 and 7, SAV-23 and 24 and LRV-70, 71, 72 and 73.

The attached Enclosure describes which valves Florida Power is requesting approval for operation using a dedicated operator. The valves' function and the basis for the request is also included for each valve.

In most cases, described on the Enclosure, operation of the isolated valves is necessary to comply with surveillance or sampling requirements in the Technical Specifications. To prevent these activities would cause the unit to shutdown due to failure to fulfill these specifications. This is not a reasonable or desirable course of action when considering that these valves can be controlled adequately by a dedicated operator.

ENCLOSURE

1. **Valves:** CAV-1, 2, 3 and 126

Function: These automatic valves are the Reactor Coolant System sample valves. The samples are used to assure that the specific activity and chemical concentrations are maintained within Technical Specification limits.

Basis for Operation:

Technical Specifications 3.4.7 and 3.4.8 require that the Reactor Coolant System chemistry and specific activity be determined to be within limits as often as every 72 hours. When inoperability of any of these valves causes isolation of the entire penetration, the samples required by 3.4.7 and 3.4.8 can not be obtained.

2. **Valves:** CAV-4, 5, 6 and 7

Function: These automatic valves are the Steam Generator Sample Valves (Shell Side). The samples obtained are one method of detecting a primary to secondary Steam Generator leak.

Basis for Operation:

Environmental Technical Specification 2.4.1.O requires that the Steam Generators be sampled every 4 hours during low power bleeds. With any of the valves inoperable and isolated this Specification can not be met.

3. **Valves:** CFV-25 and 26

Function: These automatic valves supply water to the Core Flood Tanks from the Make-up System.

Basis for Operation:

Technical Specification 3.5.1.b. requires that each core flood tank have a volume of borated water between 7555 and 8005 gallons. With either of these valves inoperable and isolated, additional borated water cannot be added to these tanks if necessary.

4. Valves: CFV-11, 12 and 42

Function: These automatic valves are the core flood tank sample valves. The samples are used to assure that an adequate boron concentration is maintained in the core flood tanks.

Basis for Operation:

Technical Specification 3.5.1.c requires that the boron concentration in the core flood tanks be determined at least once every 31 days. With any of these valves inoperable and isolated this specification can not be met.

5. Valves: CFV-27 and 28

Function: These automatic valves provide nitrogen cover - pressure to the core flood tanks. The cover - pressure assures that there is sufficient motive force to cause the core flood tanks to discharge cooling water into the Reactor Coolant System during an accident.

Basis for Operation:

Technical Specification 3.5.1.d requires that the nitrogen cover - pressure be maintained between 575 and 625 psig. With either of these valves inoperable and isolated, additional nitrogen cannot be added to these tanks to maintain the pressure if necessary.

6. Valves: SAV-23 and 24 (Manual)

Function: These manual valves supply air to the Reactor Building for breathing.

Basic for Operation:

During HOT STANDBY or HOT SHUTDOWN respirators are often necessary when performing maintenance in the Reactor Building. Air supply for these respirators is supplied by the station air system. Operation of these valves allows Florida Power to perform maintenance during plant operation.

7. **Valves:** LRV-70, 71, 72 and 73

Function: These normally locked closed automatic valves provide a flow path for a "mini" hydrogen purge system. Although the valves and piping are installed, the system is still incomplete.

Basis for Operation:

Operation of these valves allows Florida Power to decrease the Reactor Building pressure during power operations. These releases will be monitored by the Reactor Building Radiation Monitor, RM-A1.

TABLE 3.6-1

CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>ISOLATION TIME</u> (seconds)
A. CONTAINMENT ISOLATION		
1. BSV-27 check #	closed dur. nor. operation and open dur. RB spray	NA
BSV-3 #	"	60
BSV-26 check #	"	NA
BSV-4 #	"	60
2. CAV-126 (A)*+	iso. CA sys. fr. RC letdn.	60
CAV-1 (A)*+	iso. CA sys. fr. pzz.	60
CAV-3 (A)*+	"	60
CAV-2 (B)*+	iso. CA sys. fr. RB	60
CAV-4 # (A)*+	isolate liquid sampling system	60
CAV-6 # (B)*+	"	60
CAV-5 # (A)*+	"	60
CAV-7 # (B)*+	"	60
CAV-429 *	iso. CA fr. RC	NA
CAV-430 *	"	NA
CAV-433 *	is. CA fr. RB sump	NA
CAV-434 *	"	NA
CAV-431 *	iso. CA fr. RB	60
CAV-432 *	"	NA
CAV-435 *	"	NA
CAV-436 *	"	NA
3. CFV-20 check	iso. N ₂ supply fr. CFT-1A	NA
CFV-28 (A/B)*+	"	60
CFV-17 check	iso. N ₂ supply fr. CFT-1B	NA
CFV-27 (A/B)*+	"	60
CFV-18 check	iso. MU system fr. CFT-1B	NA
CFV-26 (A/B)*+	"	60
CFV-19 check	iso. MU system fr. CFT-1A	NA
CFV-25 (A/B)*+	"	60
CFV-42 (B)*+	iso. liquid sampling fr. CF system	60
CFV-15 (A)*	iso. WD sys. fr. CF tanks	60
CFV-16 (A)*	"	60
CFV-29 (B)*	"	60
CFV-11 (A)*+	iso. CF tanks fr. liquid sampling system	60
CFV-12 (A)*+	"	60

TABLE 3.6-1 (continued)
CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>ISOLATION TIME</u> (seconds)
4. CIV-41*	iso. CI sys. fr. RB	60
CIV-40*	"	60
CIV-34*	"	60
CIV-35*	"	60
5. DHV-93 check	iso. DH system fr. pzs.	NA
DHV-91*	"	60
DHV-43 #	iso. DH sys. fr. RB sump	120
DHV-42 #	"	120
DHV-4# & 41#	iso. DH sys. fr. RC	120
DHV-6 #	iso. DH system from Reactor Vessel	60
DHV-5 #	"	60
6. DWV-162 check	iso. DW system fr. RB	NA
DWV-160 (A/B)*	"	60
7. FWV-44 check #	iso. feedwater from RCSG-1A	NA
FWV-45 check #	"	NA
FWV-43 check #	iso. feedwater from RCSG-1B	NA
FWV-46 check #	"	NA
8. LRV-70 *+	iso. H ₂ purge sys. from RB	NA
LRV-71 *+	"	NA
LRV-72 *+	"	NA
LRV-73 *+	"	NA
9. MSV-130 #(A/B)*	iso. MDT-1 from RCSG-1A	60
MSV-148 #(A/B)*	iso. MDT-1 from RCSG-1B	60
MSV-411 # *	iso. main steam lines from RCSG-1A	60
MSV-412 # *	iso. main steam lines from RCSG-1A	60
MSV-413 # *	iso. main steam lines from RCSG-1B	60
MSV-414 # *	iso. main steam lines from RCSG-1B	60

TABLE 3.6-1 (continued)
CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>ISOLATION TIME</u> (seconds)
LRV-51	iso. atmos. vent and RB	NA
LRV-35 & 47	purge exhaust system from RB	NA
LRV-49	iso. atmos. vent from RB	NA
LRV-38 & 52	"	NA
LRV-45	iso. LR test panel from RB	NA
LRV-44	"	NA
LRV-46	"	NA
3. MSV-146#	iso. misc. waste storage tank from RCSG-1B	NA
4. NGV-62	iso. NG system from steam generators	NA
NGV-81#	"	NA
NGV-82	iso. NG system from pwr.	NA
5. SAV-24+	iso. SA from RB	NA
SAV-23+	"	NA
SAV-122	"	NA
6. SFV-18	iso. SF system	NA
SFV-19	"	NA
SFV-119#	iso. Fuel Transfer tubes from F. T. Canal	NA
SFV-120#	"	NA
7. WSV-1	iso. containment monitoring system from RB	NA
WSV-2	"	NA
D. PENETRATIONS REQUIRING TYPE B TESTS		
Blind Flange 119	iso. RB	NA
Blind Flange 120	"	NA
Blind Flange 202	"	NA

TABLE 3.6-1 (continued)
CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>ISOLATION TIME</u> (seconds)
D. PENETRATIONS REQUIRING TYPE B TESTS		
Blind Flange 348	iso. fuel transfer tube from Transfer Canal	NA
Blind Flange 436	"	NA
Equipment Hatch	iso. RB	NA
Personnel Hatch	"	NA

Not subject to Type C Leakage Test

* The provisions of Specification 3.0.4 are not applicable.

+ May be opened under administrative control.

(A) Isolates on Diverse Isolation Actuation Signal A

(B) Isolates on Diverse Isolation Actuation Signal B

(A/B) Isolates on Diverse Isolation Actuation Signal A or B

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Docket No: 50-302

Facility: Crystal River Unit 3

Licensee: Florida Power Corporation Date of Application:

Request For:

Florida Power Corporation requests an amendment to the Technical Specifications to allow operation of certain containment isolation valves when they would normally be required to be isolated provided that a dedicated operator is posted to isolate the valve if necessary.

Significant Hazards Consideration Determination:

- (x) Amendment involves no significant hazards considerations.
- () Amendment involves significant hazards considerations.

Basis for Determination:

This amendment is considered not likely to involve significant hazards considerations because the change is clearly within the criteria of NUREG-0103, referenced in chapter 16 of the Standard Review Plan.

Requested Implementation Date:

Florida Power Corporation does not request a specific implementation date.