Florida Power
CORPORATION

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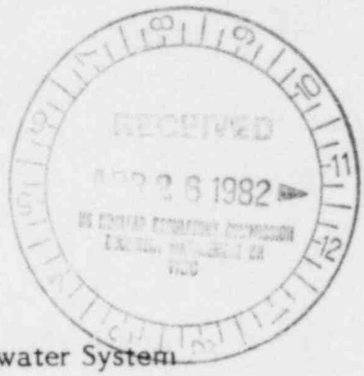

Mr. John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
Seismic Qualification of Auxiliary (Emergency) Feedwater System

Dear Mr. Stolz:

By letter dated January 7, 1982, the NRC requested additional information on seismic qualification of the Auxiliary (Emergency) Feedwater System (EFWS). Florida Power Corporation (FPC) submitted a partial response to your additional information request on February 26, 1982. FPC hereby submits the remaining responses to your questions.

Question 2(b) Mention what vertical seismic input was used for floors with fundamental frequency less than 25 cps.

Response 2(b) Within CR-3's seismically qualified structures, the only floors with fundamental frequencies less than 25 cps are the steel frame supported floor slabs of the containment interior structure. The seismic qualification for equipment and systems supported by these floors was based upon use of a vertical input which was two-thirds (2/3) of the horizontal response spectrum for the respective elevation.

Question 4 Table 1 of your response indicates that certain power supplies and the initiation and control system for the EFWS are not seismically qualified:

(a) Identify those non-seismically qualified items.

(b) Describe your program and schedule for their upgrading or justify why upgrading is not required.

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(c) Describe the results of your walkdowns of these items, along with the scope and schedule of any resulting corrective actions which were identified.

Response 4

(a) See Attachment 1 for identification of EFWS associated circuits which are not seismically qualified, and Attachment 2 for identification of EFWS associated initiation and control devices which are mounted within non-seismically qualified cabinets or panels.

(b) Included within the ongoing EFWS upgrade (reference letters dated December 19, 1980, and August 11, 1981) is the seismic qualification of all the power and the initiation and control circuits required for EFWS function.

(c) The walkdown reported in our July 14, 1981 response to your February 10, 1981 information request provided the required evaluation of the EFWS associated power and control circuits (Note: deviations 8, 9, 10, and 11 are the problems identified).

In addition, a walkdown of the main control board devices was performed during a recent survey of panels and cabinets for the EFWS upgrade project. This survey was performed for the purpose of incorporating additional instrumentation and control devices on the existing main control board and determining the feasibility of upgrading the seismic qualification of the Plant Secondary Auxiliary section of the main control board.

Along with the main control board survey, a walkdown of the Non-Nuclear Instrumentation and Integrated Control System cabinets was performed by the same personnel. The walkdown identified no significant deviations from purdent engineering practices which could cause equipment failures during a seismic event.

If you have any further questions, please contact this office.

Very truly yours,

David G. Mardis

David G. Mardis
Acting Manager
Nuclear Licensing

RAW:mm

cc: Mr. J. P. O'Reilly, Regional Administrator
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 3100
Atlanta, GA 30303

ATTACHMENT 1

NON-SEISMIC QUALIFIED ELECTRICAL CIRCUITS

EQUIPMENT	CKT. NUMBER	CKT. FUNCTION
EFV-1	EFE2	POWER
	EFE4	CONTROL
	EFE5	"
	EFE6	"
EFV-2	EFE12	POWER
	EFE14	CONTROL
	EFE15	"
	EFE16	"
EFV-3	EFC1	"
	EFC3	"
EFV-4	EFC4	"
	EFC6	"
EFV-7	EFC7	"
	EFC9	"
EFV-8	EFC10	"
	EFC12	"
EFV-11	EFE24	"
	EFE25	"
	EFE26	"
	EFE27	"
EFV-14	EFE34	"
	EFE35	"
	EFE36	"
	EFE37	"
EFV-32	EFE44	"
	EFE45	"
	EFE46	"
	EFE47	"
EFV-33	EFE54	"
	EFE55	"
	EFE56	"
	EFE57	"
FWV-33	FWE25	POWER
	FWE26	"

EQUIPMENT	CKT. NUMBER	CKT. FUNCTION
FWV-33	FWE27	POWER
	FWE28	"
	FWE29	"
	FWE30	"
	FWE31	"
	FWE32	"
	FWE147	"
	FWE148	"
	FWE151	"
	FWE152	"
FWV-34	FWE9	POWER
	FWE10	"
	FWE11	POWER
	FWE12	"
	FWE13	"
	FWE14	"
	FWE16	"
	FWE37	"
	FWE143	"
	FWE144	"
FWV-35	FWE1	POWER
	FWE2	"
	FWE3	"
	FWE4	CONTROL
	FWE5	"
	FWE6	"
	FWE8	"
	FWE36	"
	FWE141	"
	FWE142	"
	FWF47	"
	FWF194	"
FWV-36	FWE17	POWER
	FWE18	"
	FWE19	"
	FWE20	"
	FWE21	"
	FWE22	"
	FWE24	"
	FWE145	"
	FWE146	"

EQUIPMENT	CKT. NUMBER	CKT. FUNCTION
FWV-39	FWE131	POWER
	FWE132	CONTROL
	FWE133	"
	FWE134	"
	FWE135	"
	FWE136	"
FWV-40	FWE121	POWER
	FWE122	CONTROL
	FWE123	"
	FWE124	"
	FWE125	"
	FWE126	"
ASV-5	ASE1	POWER
	ASE2	"
	ASE3	"
	ASE4	CONTROL
	ASE5	"
	ASE6	"
	ASE7	"
	ASE10	"
	ASE11	"
MSV-55	MSE11	POWER
	MSE12	"
	MSE13	CONTROL
	MSE14	"
	MSE15	"
	MSE16	"
	MSE17	POWER
MSV-56	MSE1	POWER
	MSE2	"
	MSE3	CONTROL
	MSE4	"
	MSE5	"
	MSE6	"
	MSE7	POWER

ATTACHMENT 2

NON-SEISMICALLY QUALIFIED CONTROL DEVICES

PSA Panel

CDST Level indicator (CD-67-LI)

EFP - 3A (Motor)	Control Station (GA)	-	Train A
EFV - 1	Control Station (GH)	-	Train A
EFV-2	Control Station (GC)	-	Train A
EFV-3	Control Station (GB)	-	Non-Safety Related (NSR)
EFV-4	Control Station (GG)	-	NSR
EFV-7	Control Station (GD)	-	NSR
EFV-8	Control Station (GJ)	-	NSR
MSV-55	Control Station (GE)	-	Train B
MSV-56	Control Station (GF)	-	Train B
ASV-5	Control Station (GN)	-	Train B
FWV-34	Control Station (GK)	-	Train B
FWV-35	Control Station (GL)	-	Train A

EF Flow Indicators (FW-312-FI and FW-313-FI)

ICS Panel

FWV-39	H/A Station
FWV-40	H/A Station

OTSG A & B Level Indication
OTSG A & B Startup or Emergency Feedwater Flow

Also, the following functions have been identified and are associated with these cabinets:

ICS Cabinet

Steam Generator Level Control of FWV-39 and 40

NNI Cabinet

a) Steam Generator Level, Startup or Emergency Feedwater Flow, Pressure, and Temperature Instrument Signals
b) Steam Generator Level, Startup or Emergency Feedwater Flow, Pressure, and Temperature Instrument Signals (Redundant Channel)
c) EFP Actuation Signals