

**Florida
Power**
CORPORATION

September 21, 1979

File: 3-0-3-a-3

Mr. D. F. Ross, Jr.
Director
Bulletins and Orders Task Force
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72

Dear Mr. Ross:

On August 31, 1979, Florida Power Corporation submitted our response to Items 1, 4, 5, 7, and 8 contained in your letter of August 21, 1979, concerning the long-term issues related to the Order for Crystal River Unit 3. Your letter also requested FPC to submit a response to Item 2, concerning the CR-3 Training Program by September 21, 1979.

On September 13, 1979, Florida Power Corporation and the other utilities with B and W plants met with the members of your staff to discuss the schedules identified in our August 31, 1979, response. As a result of this meeting, we were requested to reevaluate our schedule and submit a revised schedule concerning these long-term issues on September 21, 1979.

In that regard, Florida Power Corporation hereby submits, as Attachment 1, our response to Item 2 and our revised schedule for the long-term issues identified in your August 21, 1979, letter.

If you require any further discussion concerning our response, please contact us.

Very truly yours,

FLORIDA POWER CORPORATION

W. P. Stewart

W. P. Stewart
Manager
Nuclear Operations

WPSekeF02(047)
Attachment

7909260391

6002
5/3/3
ADD:
ORR#4 & 9
LE

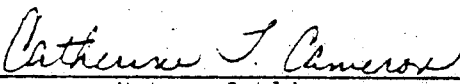
STATE OF FLORIDA
COUNTY OF PINELLAS

W. P. Stewart states that he is the Manager, Nuclear Operations, of Florida Power Corporation; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.



W. P. Stewart

Subscribed and sworn to before me, a Notary Public in and for the State and County above named, this 21st day of September, 1979.



Notary Public

Notary Public, State of Florida at Large,
My Commission Expires: August 8, 1983

CameronNotary 3(012)

ATTACHMENT 1

Item 2: Continued Operator Training and Drilling

Each licensee shall document the steps it has taken to insure that continued operator training and drilling incorporates the necessary lessons learned from TMI-2 and assure a continuing high state of preparedness. This shall be submitted to the NRC by September 21, 1979. Pending Commission action regarding improvements in the Operator Licensing Program, this requirement may be keyed to an upgrade in the initial training and requalification program by licensees.

RESPONSE:

The enclosed training program outline was developed by Florida Power Corporation for training of the CR#3 operators following the TMI-2 event to insure that they can operate the plant in a safe manner with knowledge learned from the TMI event and subsequent analysis. This program was reviewed by NRC I&E personnel and found acceptable prior to the restart of Crystal River Unit 3.

To insure that the CR#3 operators maintain a high state of preparedness with regards to the lessons learned from TMI-2, the enclosed training program has been included in our operator Requalification Training Program and Hot License Training Program at Crystal River Unit 3.

CR-3 SMALL BREAK TRAINING PROGRAM

Goals

The goal of this training program is to provide operator awareness not only of the small break accident and its consequences but of other expected transients such as the loss of feed to the OTSG's and others that have similar symptoms.

The training program shall increase operator awareness in areas such as small break, transients due to feedwater upsets, plant modifications, procedure changes, ERM small break analysis, symptoms of accidents similar to small break, and use of instrumentation in diagnosing these symptoms. The ultimate goal is to educate the operators so that they can operate the plant in a safe manner with knowledge learned from the TMI event and subsequent analysis.

Objectives

1. Simulator Training

The objective of the simulator training is to provide operators with hands-on experience of handling small breaks or other transients that could lead to loss of heat removal and therefore, core voiding.

2. TMI Sequence of Events, 4/3/79-4/5/79

The objective of this training was to make the operators aware of the TMI accident and the consequences of the accident, and to have them think through the same type of accident on CR-3. Additionally, to make them aware of changes in operational philosophy as far as we understood the impact of TMI. Such things as standing orders concerning RB swing pump operation, isolation of HPI and emerg. IV operation.

3. Procedure change training to make the operators aware of the changes to CR-3 procedures as affected by ERM operating procedures guidelines. They shall understand what, how, and why.
4. Plant modifications training to make the operators aware of the plant modes in effect and those proposed for long term as a result of the TMI accident. Knowledge shall include why changes are made, actual hardware changes, effects on operation and how they are to be implemented into systems.
5. Review of ERM small break analysis is to make operators aware of the spectrum of small breaks, the symptoms of small breaks and how to mitigate the consequences of small breaks. This shall include effects of SCDS on small breaks.
6. Transients training shall include expected feedwater transients and others of similar symptoms so that the operator knows how to differentiate accidents of similar symptoms, which instruments to check as backups for indications he might see. It shall also provide him with instructions on operations of emergency systems to mitigate the consequences of those transients.

CR-3 SMALL BREAK TRAINING PROGRAM OBJECTIVES (cont'd)

7. TMI review as a part of training for small break analysis is included to update the operators' knowledge of the sequence of events at TMI and to include lessons learned from that accident.
 8. Items 3 through 7 shall be tested with a written examination administered by the CR-3 staff. It shall be passed with a grade of 90% or better.
 9. The program 3 through 7 shall be audited by an outside agency (IUS) for program content, documentation and operator knowledge level.
- A copy of the training program for items 3 through 7 is attached.

SMALL BREAK TRAINING PROGRAM

I. Introduction to Program

- a) Explain program and its impact on CR-3 operation
- b) Explain goals and objectives of program
- c) Explain tests and audits that will be performed on the program as they impact operators.

II. TMI Accident Review

- a) Introduction to TMI accident
- b) Objectives of review
- c) Review of sequence of events and curves
- d) During c) explain where our plant is different and the effects of similar operations on CR-3
- e) Long term cooldown of TMI-2 until cold shutdown and problems faced
- f) Summary of lessons learned.

III. Small Break Analysis

- a) Introduction
- b) Objectives
- c) Review of HT and FF as far as it impacts expected transients and small breaks
- d) Safety evaluations and conclusions
- e) Loss of feedwater
- f) Small break description
- g) Natural circulation
- h) OTSG tube thermal stress
- i) Restart of RCP's in a system with 50% voids
- j) Operating guides for assessment of accidents and operation
- k) Summary.

IV. Plant Modifications

- a) Introduction
- b) Objectives
- c) Reactor trip mods
- d) Emergency feedwater pump mods
- e) Feed and emergency feed system flow and alarms
- f) Rupture matrix system mods
- g) Instrument air mods
- h) Power operated relief valve setpoint change
- i) RMA-6 RB isolation MIP
- j) Summary

V. Procedure Review

- a) Introduction
- b) Objectives
- c) Starting EFWP (motor driven) from ES Bus A with loss of off-site power
- d) Auto start of motor driven EFW pump on loss of main feedwater
- e) Failure of ICS OTSG low level limit control (control of EFW bypass valves by operations)
- f) Loss of air to "startup" FW valves
- g) Operator responsibility at EFW valve during surveillance testing of EFW
- h) Procedures covering alternate sources of water to EFW pumps
- i) Procedures to be reviewed are:

OP-103	EP-103	EP-105	AP-122
EP-103	OP-606	EP-104	EM-100
OP-302	EP-112	OP-210	EM-203
OP-204	EP-106	OP-203	EM-207
AP-113	AP-106	EP-101	

- j) Summary.

VI. Exams

- a) Written exams to be administered by training staff.



TOLEDO
EDISON

LOWELL E. ROE
Vice President
Facilities Development
16701 050504P

Docket No. 50-146
License No. NPP-3
Serial No. 547
October 22, 1979

Director of Nuclear Reactor Regulation
Attention: Mr. Robert W. Reid, Chief
Operating Reactors Branch No. 4
Division of Operating Reactors
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Reid:

This is in response to Item 2 of your staff's letter of August 21, 1979 (Log No. 423) concerning continued operator training and drilling. Toledo Edison has incorporated changes in each segment of its continuing training program for the operators at the Davis-Besse Nuclear Power Station Unit 1 (DB-1) as a result of the TMI-2 event.

Both the initial hot license and the requalification simulator training programs have been upgraded to continually reinforce the lessons learned at TMI-2. The procedural modifications that have been made are reviewed and discussed during each initial qualification and requalification lecture series. Additionally, the importance of items such as proper shift turnover, monitoring all system instrumentation and the evaluation of thermal conditions within the reactor coolant system are exercised in both the simulator and classroom portions of the operator's training.

The results of the lessons learned at TMI-2 will continue to be a part of the initial and requalification operator training program at Davis-Besse Nuclear Power Station.

Very truly yours,

Lowell E. Roe

LRITJM

J. A. Capra
Project Management Group
Planning and Orders Task Force
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

THE TOLEDO EDISON COMPANY EDISON PLAZA 300 MADISON AVENUE TOLEDO, OHIO 43859