

Yellow

August 22, 1985

Florida Power Corporation  
✓ATTN: Mr. Walter S. Wilgus  
Vice President-Nuclear Operations  
P. O. Box 14042, M.A.C.H-2  
St. Petersburg, FL 33733

Gentlemen:

SUBJECT: MEETING SUMMARY

A meeting was conducted in the Region II office on July 18, 1985, at NRC's request. This letter transmits the Meeting Summary as recorded by our personnel. The agenda items of this meeting addressed the staffing of Crystal River Unit 3, the potential procedural problems, and the training required on the recent modifications made during the extended outage. The details of the subjects discussed are provided in Enclosure 1. A list of attendees at the meeting is shown in Enclosure 2.

Enclosure 3 is a summary of the NRC concerns over the Crystal River emergency procedures. These were discussed in general at the July 18, 1985 meeting and specifically discussed in detail with the Crystal River staff via telecon on July 19, 1985. We request that you provide to this office, within 30 days of the date of this letter a response to address each of the procedure concerns. The response should state what corrective action, if any, you have taken or plan to take.

It is our opinion that this meeting was very beneficial and that the requalification program for the licensed operators at the Crystal River Plant will be much improved due to the information shared.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC's Public Document Room.

Should you have any questions regarding this matter, we will be pleased to discuss them.

Sincerely,

(Original signed by VLBrownlee)

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PDR ADOCK 05000302  
F PDR

Virgil L. Brownlee, Chief  
Reactor Projects Branch 2  
Division of Reactor Projects

Enclosures:

1. Meeting Summary
2. List of Attendees
3. Statement of NRC Procedure  
Concerns for Crystal River

cc w/encls: (See Page 2)

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cc w/encls:

- ✓ E. M. Howard, Director of Site Nuclear Operations
- ✓ P. F. McKee, Nuclear Plant Manager
- ✓ G. R. Westafer, Manager  
Nuclear Operations Licensing and  
Fuel Management
- ✓ K. C. Kelley, Nuclear Operations  
Training Manager

bcc w/encls:

- ✓ NRC Resident Inspector
- Document Control Desk
- State of Florida

RII  
LLawyer:ef  
08/16/85

RII  
BAWilson  
08/16/85

RII  
CAJulian  
08/16/85

RII  
VPanciera  
08/20/85

ENCLOSURE 1

MEETING SUMMARY

Licensee: Florida Power Corporation  
Facility: Crystal River Unit 3  
Meeting Date: July 18, 1985  
Docket No.: 50-302  
SUBJECT: REQUALIFICATION PROGRAM, MODIFICATION TRAINING AND PROCEDURE CONCERNS

This meeting was held at the NRC's request to discuss staffing of Crystal River Unit 3, potential procedural problems and training required on the recent modifications made during the extended outage. All three concerns were identified during the recent Requalification examinations conducted in July 1985.

Florida Power Corporation (FPC) presented its response to each of these concerns. FPC representatives stated that this was the third longest outage in Crystal River 3 history, but had more modifications, more planning and more involvement by operations personnel than any other outage. Considering the preliminary results of the last requalification examination, they expect to be able to staff five operating shifts prior to restart. Six shifts are possible if some of the December 1984 candidates receive their licenses. They also stated considerable overtime is presently required for the modifications training.

The NRC staff presented its concerns with the symptom based abnormal procedures (APs) and emergency procedures (EPs). These concerns were based on procedural inaccuracies discovered during the examinations, poor performance by operators on some examination questions, and lack of confidence in the procedures by some of the operators. FPC briefed the staff on the philosophy and techniques of the symptom-based procedures. Although they felt that the "lack of confidence" on the part of the operators was primarily due to the procedures being new and unfamiliar, they committed to conducting debriefing sessions with the operators and listening to their concerns. Discussions concerning specific identified inaccuracies were to be resolved during a telephone discussion the following day.

The Resident Inspector presented his findings on the portions of the modification training which he had attended. He was concerned over several instances of partial attendance of lectures and the brevity of the FPC administered quiz on the emergency feedwater system (EFIC). FPC agreed to look into and correct these problems as they deem necessary.

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The NRC staff summarized the meeting with the following understanding of situation status:

1. Only those Crystal River 3 NRC licensed individuals who passed an NRC Requalification examination will be permitted to perform license duties.
2. FPC should commit to a thorough review of all APs and EPs in some reasonable time interval following restart. Identified inaccuracies in the procedures are to be corrected prior to restart.
3. The Examination Report for the May-July Requalification examinations will reflect that the NRC continues to regard the FPC program to be deficient.

FPC representatives agreed with these summary statements.

July 19, 1985:

A conference call was conducted between FPC and the Region II staff to identify specific procedural inaccuracies and NRC concerns on some APs, OPs and EPs. The following procedures were discussed: AP-380, EP-390, AP-580, OP-502, EP-290 and a lack of a procedure for loss of non-nuclear instrumentation. The staff will review during a future inspection any procedural revisions made for the above procedures. FPC restated its previous invitation to the NRC staff to observe validation of the APs and EPs at the Lynchburg simulator. NRC representatives stated their desire to attend, and requested to be informed of dates. Enclosure 3 describes the NRC concerns over Crystal River procedures.

ENCLOSURE 2

LIST OF ATTENDEES NRC-FPC MEETING JULY 18, 1985

NRC Personnel

<u>Name</u>	<u>Title</u>
J. A. Olshinski	Deputy Regional Administrator
R. D. Walker	Division Director, Division of Reactor Projects
A. F. Gibson	Acting Division Director, Division of Reactor Safety
V. L. Brownlee	Branch Chief, Reactor Projects
C. A. Julian	Acting Branch Chief, Operations Branch
B. A. Wilson	Section Chief, Operator Licensing
V. W. Panciera	Section Chief, Projects
T. F. Stetka	Senior Resident Inspector
L. Lawyer	License Examiner
S. Ninh	Reactor Engineer
R. E. Carroll, Jr.	Project Engineer

FPC Personnel

<u>Name</u>	<u>Title</u>
G. C. Moore	Vice President - Engineering Services, NGRC
G. Westafer	Manager, Nuclear Licensing and Fuel Management
E. M. Howard	Director, Site Nuclear Operations
P. F. McKee	Plant Manager
L. C. Kelley	Nuclear Operations Training Manager
W. M. Johnson	Nuclear Plant Engineering Superintendent
G. Boldt	Nuclear Plant Operations Manager

### ENCLOSURE 3

#### STATEMENT OF NRC PROCEDURE CONCERNS FOR CRYSTAL RIVER

##### AP 380, Rev, 01 - Engineered Safeguards System Actuation (Equivalent of LOCA Procedure)

- ° Procedure does not use any kind of flow chart. FPC will review and respond.
- ° Immediate Step 1 remedial action states "Bypass ES Actuation and return ES equipment to STBY status." This is not an appropriate remedial action and appears to be an action required for inadvertent ES actuation. This step is not correct and operators state they would not follow it in an emergency. FPC acknowledges this is an error and committed to correct it along with any similar errors they can identify.
- ° Immediate Step 1 does not include as possible cause ES actuation signal on Reactor Building Pressure greater than 4 psig. The procedure only addresses ES caused by low RCS pressure. FPC will review and respond.
- ° Immediate Actions do not require operators to ensure Core Flood Tank Actuation. Should promptly verify they have injected into the RCS. FPC will review and respond.
- ° Followup Step 17 appears to be the Large Break LOCA case with OTSGs not available. The operator is required to terminate HPI and proceed to Step 27 to establish LPI recirc at 2.5 ft in the BWST. Step 27 should end operator actions under this procedure; however, no exit is provided in Step 27. Step does not tell operator what procedure to go to next.
- ° Step 29 refers you to OP 404, but does not exit from AP.
- ° Followup Step 24 appears to provide actions for the small break LOCA case with no OTSGs available. This step refers the operator to Step 27 establishing LPI recirc at 2.5 ft in the BWST. This would probably burn up LPI pumps! The more appropriate reference should be step 34 establishing piggy-back operation at 4 ft in the BWST. Could be a typo. FPC will correct.
- ° Followup Step 43 can't be done until additional thermocouple readout equipment is operable.



EP 390, Rev 01 - Steam Generator Tube Rupture

- ° Followup Step 6 states that with RC pressure greater than 1500 psig maintain subcooling margin between 50 and 60 degrees. Maintaining such a narrow band on subcooling margin would be very difficult and do not understand reason for it. Further, Step 9 states that if adequate subcooling does not exist, trip all reactor coolant pumps.
- ° Followup Step 10 requires that minimum subcooling be maintained while depressurizing and cooling down to 1000 psig and 500 degrees F. This is not possible since the end point of 1000 psig and 500 degrees F gives a subcooling margin of less than the required minimum of 50 degrees F. Therefore, if the operator follows the procedure, he would always be required to trip the RCPs regardless of circumstances. FPC will revise procedure for clarity.

EP 290

- ° Step 1.7 calls for averaging in-core thermocouple readings. Where will they get the data as the in-core thermocouple readouts don't appear to be operable?

AP 580, Rev. 01 - Reactor Protection System Actuation

- ° Immediate Step 1 does not require observation of decreasing neutron flux with an appropriate remedial action to go to EP 140, Emergency Reactivity Control.
- ° In event of ATWS, does not call for emergency boration.
- ° Followup Step 6 requires verification of intermediate and source range overlap. This is irrelevant following RPS actuation.

SP 104

- ° References operator to computer groups 66 and 67; however, these groups no longer exist.

OP 502, Rev. 8

- ° Procedure for ICS sensor failure says immediately shift to alternate sensor. Operators state they would never do that.

Additional Comments

- ° No procedure for loss of non-nuclear instrumentation. There used to be one.
- ° Examiners observe that operators don't know remedial actions in response to Diesel Generator actuation.