

**Florida  
Power**  
CORPORATION

February 21, 1983  
3F-0283-19

Director of Nuclear Reactor Regulation  
Attention: Mr. John F. Stolz, Chief  
Operating Reactors Branch No. 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  
NUREG-0737, Items I.A.2.1.4 and II.B.4

Dear Sir:

In response to your December 27, 1982 letter, Florida Power Corporation (FPC) hereby responds to your request for additional information on "Upgrading of RO and SRO Training" (NUREG-0737 Item I.A.2.1.4) and "Training for Mitigating Core Damage" (NUREG-0737 Item II.B.4).

Question 1

Describe in detail how the material contained in Enclosure 2 of Denton's March 28, 1980 letter, is incorporated into the licensee's training and retraining programs.

Response to Question 1

Enclosure 2 of Mr. Denton's March 28, 1980 letter pertaining to training in heat transfer, fluid flow, and thermodynamics is incorporated into a forty-two (42) hour program. The Crystal River Unit 3 course is outlined in the table of contents of the program text. This table of contents, for the text titled "Heat Transfer, Thermodynamics and Fluid Flow for the Nuclear Power Plant Operator," is enclosed as Attachment 1.

Question 2

Describe in detail how the material contained in Enclosure 3 of Denton's March 28, 1980 letter is incorporated into the licensee's training and retraining programs.

Response to Question 2

Enclosure 3, concerning training criteria for mitigating core damage, is covered in FPC's sixteen (16) hour program, "Operator Training - Degraded Core Recognition and Mitigation." The topics covered in this course are listed in Attachment 2.

*Asst*

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### Question 3

The response to Question 5 in your May 5, 1982 correspondence, refers to an instructor requalification program. If not the same as the licensed operator requalification program, please describe this program in detail.

### Response to Question 3

The instructor requalification program is the same as the licensed operator requalification program.

### Question 4

The total training time (approximation) that INPO has recommended to be provided on heat transfer, fluid flow and thermodynamics and on training to recognize and mitigate the consequences of core damage is 222 hours (STG-01 and STG-02). The NRC (OLB) has taken the position that approximately 80 contact hours of instruction are required to adequately cover this subject matter to the depth of understanding desired. FPC's training program provides only 56 total hours for this subject matter. Please describe in detail how your program covers this information to the depth required within the time frame specified in your program.

### Response to Question 4

This question was verbally answered in a telephone conference with Mr. Pierce Skinner of the NRC on January 31, 1983.

### Question 5

Your response to Question 3 in your May 5, 1982 correspondence states that training was provided to eleven different groups of personnel. The facility organization chart provided with Technical Specification Change Request Number 67, Rev. 1, dated January 19, 1982, identified various other personnel that would or could be involved in an accident. Please provide a detailed description of the training involved in an accident. Please provide a detailed description of the training involving mitigating core damage that is to be provided to personnel such as plant Health Physicist, Chemical and Waste Manager, Chemical and Waste Supervisor, Chemistry Technicians, and the Operations Engineer.

### Response to Question 5

The training received by personnel such as the plant Health Physicist, Chemical and Waste Manager, Chemical and Waste Supervisor, Chemistry Technicians, and Operations Engineers on mitigating core damage is the same instruction received by operators in training. The outline of the course, as stated in the Response to Question 2 above, is given in Attachment 2.

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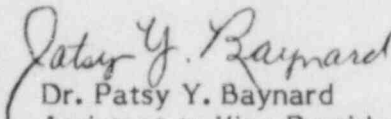
Question 6

Please provide details of how increased emphasis on reactor transients has been implemented in the training program.

Response to Question 6

FPC has implemented a Transient Assessment Program (TAP) to emphasize reactor transients. As part of the TAP, various transients that have taken place at the Crystal River Unit 3 or similar nuclear facilities are studied. They are also modelled at the Babcock & Wilcox reactor simulator in Lynchburg, Virginia to allow operators and operators-in-training an opportunity to respond to these transients.

Sincerely,

  
Dr. Patsy Y. Baynard  
Assistant to Vice President  
Nuclear Operations

Attachments

TSW:mm

HEAT TRANSFER,  
THERMODYNAMICS  
AND  
FLUID FLOW  
FOR THE  
NUCLEAR POWER PLANT OPERATOR  
42 Hour Program

By

C. J. BOSTED

Illustrated by

Dolores F. Stark

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OPERATOR TRAINING-DEGRADED CORE  
RECOGNITION AND MITIGATION

Phase 1

Volume 1

16 Hour Program

BABCOCK & WILCOX  
Nuclear Power Group  
Nuclear Power Generation Division  
P. O. Box 1260  
Lynchburg, Virginia 24505

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OPERATOR TRAINING-DEGRADED CORE  
RECOGNITION AND MITIGATION

Phase 1

Volume 2

BABCOCK & WILCOX  
Nuclear Power Group  
Nuclear Power Generation Division  
P. O. Box 1260  
Lynchburg, Virginia 24505

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