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Georgia Power the southern electric system

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J. T. Beckham, Jr.

May 6, 1982

Director of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Washington, D. C. 20555

> NRC DOCKETS 50-321, 50-366 OPERATING LICENSES DPR-57, NPF-EDWIN I. HATCH NUCLEAR PLANT UNITS I ADDITIONAL INFORMATION REGARDING NUREG-0737 ITEMS I.A.2.1 and II.B.4

Gentlemen:

Your letter of March 31, 1982, transmitted a request for additional information required for your review of our submittals regarding NUREG-0737 Items I.A.2.1 (Upgrading of Operator Training) and II.B.4 (Training for Mitagating Core Damage). Attached are our responses to that request. A copy of this submittal will be sent directly to Dr. Liner of Science Applications, Inc.

Should you have further questions regarding items I. A.2.1 or II.B.4, please contact this office.

J. T. Beckham, Jr. states that he is Vice President of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company, and that to the best of his knowledge and belief the facts set forth in this letter are true.

GEORGIA POWER COMPANY

Sworn to and subscribed before me this 6th day of May, 1982

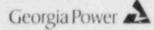
Notary Public

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Notary Public, Georgia, State at Larse My Commission Expires Sept. 20, 1983

Attachment

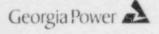
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Director of Nuclear Reactor Regulation Washington, D. C. 20555 May 6, 1982

xc: R. T. Liner Science Applications, Inc. 1710 Goodridge Drive McLean, Virginia 22102 H. C. Nix

- R. F. Rogers, III
- J. P. O'Reilly (NRC-Region II)
- G. Bockhold



ATTACHMENT TO MAY 6, 1982 LETTER

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING UPGRADED SRO AND RO TRAINING AND TRAINING FOR MITIGATING CORE DAMAGE - NUREG 0737 ITEMS I.A.2.1 AND II.B.4

QUESTION 1:

"Do the 'Criteria for Reactor Operator Training and Licensing' (I and IV) which you have enclosed in your August 12, 1980, letter apply to training and requalification programs for reactor operator and for senior reactor operator?"

RESPONSE 1:

Yes.

QUESTION 2:

"The 'Criteria for Reactor Operator Training and Licensing' (I and IV) appear to have the potential for covering the subject of heat transfer, fluid flow, and thermodynamics as called out in enclosure 1 of Denton's March 28, 1980, letter. Do these lectures in fact cover this material and is the coverage at the level of detail called for in enclosure 2 of the Denton letter?"

RESPONSE 2:

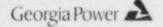
Yes.

QUESTION 3:

"The 'Criteria for Reactor Operator Training and Licensing' (I and IV) appear to have the potential for addressing the subject of using installed plant systems to control or mitigate an accident in which the core is severely damaged. This requirement is called out in enclosure 1 of Denton's letter. Do these lectures address the topic to the level of detail called for in enclosure 3 of Denton's letter?"

RESPONSE 3:

Yes.



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QUESTION 4(a):

"Are the lectures and quizzes on the subject of accident mitigation given to shift technical advisors and operating personnel from the plant manager through the operations chain to the licensed operators?"

RESPONSE 4(a):

Yes.

QUESTION 4(b):

"If they are, would you please provide the titles of the people who are trained and an organizational chart which illustrates their position in the operations chain? Operating personnel from plant manager down to licensed operators as called out in enclosure 3 of Denton's letter and in post-TMI Action Item II.B.4 of NUREG - 0737 ?"

RESPONSE 4(b):

All licensed personnel (SRO and RO) and all shift technical advisors receive this training. The positions which require licensed personnel are indicated in Chapter 6 of the Technical Specifications for the plant. Currently the following positions are filled with Senior Reactor Operators (this qualification level exceeds the requirements of the technical specifications and is subject to change):

Plant Manager Assistant Plant Managers (2) Operations Superintendant Operations Supervisors Shift Supervisors Shift Foremen Superintendant of Plant Engineering & Services

Plant Operators and Assistant Plant Operators who satisfy the technical specification requirements have a reactor operator's license as a mininum. Shift technical advisors although not licensed, receive the same training as the senior reactor operator licensees.

A chart which reflects the Plant Hatch organization is included in this attachment.

Certain individuals may not have received training due to their recent assignment to their positions . It will be provided during upcoming retraining.



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QUESTION 5:

"Do the training and requalification program elements which involve heat transfer, fluid flow, thermodynamics and accident mitigation involve 80 contact hours?"

RESPONSE 5:

Yes.

QUESTION 6:

"As specified in enclosure 1 of Denton's March 28, 1980, letter, does the operator requalification program call for accelerated requalififcation if the overall score is less than 80% and the score in each category is less than 70%?"

RESPONSE 6:

Yes.

QUESTION 7:

"Are your instructors enrolled in appropriate requalification programs to assure they are cognizant of current operating history, problems, and changes to procedures and administrative limitations?"

RESPONCE 7:

Yes.

QUESTION 8:

Does the operator requalification program call for control manipulations as specified in enclosure 4 of Denton's letter of March 28, 1980, to all power reactor applicants and licensees?"

RESPONSE 8:

Yes.

QUESTION 9:

For item II.B.4 provide an outline of the training program for mitigating core damage, including the number of training hours involved. Your outline can include any training program which related to the training for mitigating core damage. Follow the guidelines given in the enclosure 3 of H. R. Denton's letter dated March 28, 1980 and INPO Guidelines for Training to Recognize and Mitigate the Consequences of Core Damage (Document Number STG-O1, Rev. 1, January 15, 1981). NRC requires minimum of 80 contact hours of training for mitigating core damage.

RESPONSE 9:

LICENSED OPERATOR INITIAL TRAINING

1). Accident and Transient Analyses - 40 contact hours.

Plant safety criteria Inherent reactor protective features Engineered systems Accidents Lis Reactor safety experience Plant response Shutdown panel Review/Quiz

2) Severe Core Damage Accident - 80 contact hours.

- 1. Vulnerable operating conditions
 - a) offsite power losses
 - b) onsite power losses
 - c) inoperative plant equipment
- 2. Core cooling mechanics
 - a) flow paths normal
 - b) alternate cooling methods
 - c) cooling mode selection
- 3. Core Gases
 - a) sources
 - b) effects on cooling
 - c) elimination and/or control of gases
 - d) hydrogen hazard
- 4. Critical Instrumentation During Accident
 - a) pressure
 - b) temperature
 - c) level
 - d) radiation
 - e) alternate methods of evaluation

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RESPONSE 9: (Continued)

- 6. Radiation Hazard
 - location a)
 - b) monitoring instrument responsec) radiological emergency plan

