### MEETING NOTICE DISTRIBUTION

Docket File NRC PDR Local PDR TIC NSIC TERA LB #2 File H. Denton E. Case D. Eisenhut R. Purple T. Novak S. Varga T. Ippolito R. A. Clark R. Reid R. Tedesco J. Youngblood A. Schwencer F. Miraglia J. R. Miller G. Lainas D. Crutchfield W. Russell J. Olshinski R. Vollmer R. Bosnak F. Schauer R. E. Jackson G. Lear V. Noonan S. Pawlicki V. Benaroya 2. Rosztoczy W. Haass D. Muller R. Ballard W. Regan J. D. Saltzman D. Ross P. Check R. Satterfield O. Parr F. Rosa W. Butler W. Kreger R. W. Houston T. Murphy

W. Gammill

J. Kramer

. . .

L. Rubenstein T. Speis W. Johnston B. Grimes H. Collins F. Pagano S. Ramos J. Stolz S. Hanauer P. Collins D. Vassallo D. Ziemann R. Mattson R. Schroeder K. Kniel D. Skovholt G. Knighton M. Ernst R. Baer E. Adensam A. Thadani ACRS (16) Attorney, OELD OIE (3) OSD (7) Project Manager CStahle Licensing Assistant MService Receiptionist J. LeDoux, I&E V. Moore I&E Headquarters I&E Region I I&E Region II I&E Region III I&E Region IV I&E Region V NRC Participants:

Others:

BCC: Applicant & Service List



#### UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

OCT 16 1980

Docket No. 50-364

MEMORANDUM FOR: A. Schwencer, Chief

Licensing Branch No. 2, DOL

FROM:

L. Kintner, Project Manager Licensing Branch No. 2, DOL

SUBJECT:

FORTHCOMING MEETING WITH ALABAMA POWER COMPANY REGARDING

REVIEW OF FARLEY 2 OPERATING LICENSE APPLICATION

DATE & TIME:

October 22, 1980 11:30 a.m.

LOCATION:

Joseph M. Farley Nuclear Plant

Dothan, Alabama

PURPOSE:

To review the auxiliary feedwater system

(proposed agenda attached)

PARTICIPANTS:

ALABAMA POWER COMPANY

Ron George, George Hairston

BECHTEL CORPORATION

Harold Bell

WESTINGHOUSE

Glen Lang

NRC STAFF

T. Dunning and C. E. Rossi

Lester Kintner, Project Manager

Licensing Branch No. 2 Division of Licensing

cc: See next page

Mr. F. L. Clayton, Jr., Senior Vice President Alabama Power Company Post Office Box 2641 Birmingham, Alabama 35291

cc: Mr. W. O. 'Ihitt Executive Vice President Alabama Power Company Post Office Box 2641 Birmingham, Alabama 35291

> Mr. Ruble A. Thomas Vice President Southern Company Services, Inc. Post Office Box 2625 Birmingham, Alabama 35202

Mr. George F. Trowbridge Shaw, Pittman, Potts and Trowbridge 1800 M Street, N. W. Washington, D. C. 20036

Ira L. Myers, M. D. State Health Officer State Dept. of Public Health State Office Building Montgomery, Alabama 36104

Honorable A. A. Middleton Chairman Houston County Commission Dothan, Alabama 36301

U. S. Environmental Protection Agency ATTN: EIS Coordinator Region IV Office 345 Courtland Street, N. E. Atlanta, Georgia 30308 Mr. W. Bradford NRC Resident Inspector P. O. Box 1814 Dothan, Alabama 36302

# PROPOSED AGENDA FOR MEETING WITH ALABAMA POWER COMPANY ON AUXILIARY FEEDWATER SYSTEM ACTUATION LOGIC

- Review auxiliary feedwater system actuation logic by going through automatic initiation, operation, and reset sequence assuming each possible system switch position at the start of the sequence. Perform this review for each automatic initiation signal.
- Review power supply assignments for each train of the auxiliary feedwater system.
- Review switch locations for each switch in the auxiliary feedwater system.
- 4) Review control system failures which can result in inadvertent auxiliary feedwater actuation during plant heatup, cooldown, or shutdown operations.
- 5) Discuss specific concerns on attached.

## CONCERNS WITH ALABAMA POWER COMPANY AUXILIARY FEEDWATER SYSTEM ACTUATION LOGIC

- The redundant solenoid valves in the control air lines to the auxiliary feedwater pump discharge valves are presently arranged to be "energize to close or modulate" the discharge valves and "de-energize to open" the discharge valves. When the auxiliary feedwater system is in use, the loss of a single power supply will, thus, open all of the auxiliary feedwater pump discharge valves and initiate full auxiliary feedwater flow to the steam generators. The following information is needed to evaluate this design:
  - A conservative analysis of the primary system cooldown rate following the opening of the auxiliary feedwater pump discharge valves with the auxiliary feedwater pumps in operation during hot shutdown, system heat-up, or system cooldown. This should include both normal operation and automatic initiation of auxiliary feedwater for transients and accidents. The analysis should include primary system pressure response and indicate operator actions necessary to maintain cooldown rates within appropriate limits and to maintain required primary system pressure and temperature relations
  - b) Steam generator levels versus time for the transients in a) above
  - c) The safety related reasons (if any) for designing the system such that the solenoid valves "de-energize to open" the pump discharge valves
- The motor driven pump discharge valves are apparently not automatically fully opened following a low low steam generator level signal if the valve switch is in the "mod" position even though low low steam generator level is the primary auxiliary feedwater system actuation signal for loss of feedwater accidents not involving initiation of safety injection. This appears to be a deficiency in the design.
- The power source dependencies of other components in the auxiliary feedwater trains is also of concern, e.g., the normal loading stations which are used to throttle auxiliary feedwater flow.