ALABAMA POWER COMPANY

JOSEPH M. FARLEY NUCLEAR PLANT

UNIT 1 - ANNUAL REPORT

REQUIRED BY 10CFR50.59 (1980)

Section 50.59 of Part 50, Licensing of Production and Utilization Facilities, of the regulations of the United States Nuclear Regulatory Commission, states that the holder of a license authorizing operation of a production or utilization facility may (1) make changes in the facility as described in the safety analysis report, (2) make changes in the procedures as described in the safety analysis report, and (3) conduct tests or experiments not described in the safety analysis report, without prior commission approval, unless the proposed change, test or experiment involves a change in the technical specifications incorporated in the license or an unreviewed safety question (as defined in 10CFR50.59).

The licensee is required to maintain records of such changes, tests or experiments, and those records are required to include written safety evaluations which provide the basis for the determination that the change, test or experiment does not involve any unreviewed safety questions.

Brief descriptions and a summary of the safety evaluations of the changes, tests or experiments as described above, for the Joseph M. Farley Nuclear Plant Unit 1 which were implemented in 1980, are listed below:

1. SUBJECT: PCR/PCN 77-002 (SM77-002)

DESCRIPTION: Installed the Leading Edge Flow Meter in the feedwater system.

SAFETY EVALUATION: The LEFM pipe section is installed in a non-safety related portion of the feedwater system and performs no safety related function.

PORC REVIEW: PORC Meeting 354, 3/7/79.

2. SUBJECT: PCR/PCN 79-532 (B79-532)

DESCRIPTION: Installed a Core Subcooling Monitor in the Control Room.

SAFETY EVALUATION: The inputs for this system are obtained from the 7300 Protection and Controls Cabinets utilizing existing electrical isolation capabilities of the 7300 equipment and, thus, precludes increasing the probability of an accident or equipment malfunction.

PORC REVIEW: PORC Meeting 484, 1/09/80.

3. SUBJECT: PCR/PCN78-234 (APCo 78-234)

DESCRIPTION: Installed a drain from the Turbulator and Ultrasonic Tanks to Chemical Drain Tank.

SAFETY EVALUATION: This change provides a drain path for the Turbulator and Ultrasonic Tanks and will not degrade safe operation of the system.

PORC REVIEW: PORC Meeting 489, 1/28/80.

4. SUBJECT: OCR 1759 (Westinghouse Speedletter #1925)

DESCRIPTION: Resolved deficiencies noted during post installation inspection of Fuel Storage Cells in the New Fuel Area.

SAFETY EVALUATION: Resolving deficiencies allows the Fuel Storage Cells to meet the Westinghouse F-8 Specifications.

PORC REVIEW: PORC Meeting 504, 2/19/80.

5. SUBJECT: OCR 1729 (BE-4514)

DESCRIPTION: Installed additional Gai-tronic public address stations on the roof of the Auxiliary Building.

SAFETY EVALUATION: These additions improve plant communications with respect to Security System operations.

PORC REVIEW: PORC Meeting 525, 3/27/80.

6. SUBJECT: PCR/PCN 80-635 (APCo 80-635)

DESCRIPTION: Changed a wall mounted telephone in the Service Building to a desk mounted telephone.

SAFETY EVALUATION: This change will not affect plant operation or safety.

PORC REVIEW: PORC Meeting 525, 3/27/80.

7. SUBJECT: PCR/PCN 79-531 (B79-531)

DESCRIPTION: Installed position indication for the Pressurizer Safety Relief valves.

SAFETY EVALUATION: The installation of these limit switches to provide safety relief valve position indication has been determined not to inhibit the proper response and operation of these valves and to have no structural or seismic effects.

PORC REVIEW: PORC Meeting 534, 4/22/80.

8. SUBJECT: PCR/PCN 78-162 (B78-162)

DESCRIPTION: Reduced lighting levels in the Auxiliary Building laboratories to reduce the heat load.

SAFETY EVALUATION: There is no safety related equipment in the subject rooms. The rooms and equipment contained therein are not required for a safe shutdown.

PORC REVIEW: PORC Meeting 553, 6/5/80

9. SUBJECT: PCR/PCN 79-382 (B79-382)

DESCRIPTION: Changed safety injection initiation from coincident pressurizer pressure and level signal to pressurizer pressure only.

SAFETY EVALUATION: All current ECCS analyses are valid and appropriate for plants with safety injection initiation as a function of pressurizer pressure signals only. Previously safety injection was initiated on coincident pressurizer pressure and level signals. The effect of changing to a pressure only signal will result in either an earlier initiation of safety injection,

or no change in the time of safety injection initiation for all break locations. For small breaks in the pressurizer the pressure only signal will assure SI actuation. Therefore, current small break analysis assumptions concerning safety injection time are appropriate. Additionally, the effect of safety injection initiation time on peak clad temperature is negligible when initiation times being considered correspond to RCS pressures above 1400 psia. The switch to a pressure only safety injection signal results in a negligible impact on large break analyses.

PORC REVIEW: PORC Meeting 392, 3/29/79.
PORC Meeting 560, 6/19/80.

10. SUBJECT: Unit 1 Cycle 3 Fuel Reload

DESCRIPTION: The Joseph M. Farley Unit 1 Cycle 3 fuel reload consisted of replacing 51 Region 2 fuel assemblies and 2 Region 1 fuel assemblies with 52 Region 5 assemblies and one once burned Region 1 assembly. As in Cycle 2, two Region 4 assemblies, designated as 4A, were loaded into the core in a manner that prevents them from becoming limiting during normal operation or leading to more limiting conditions during transient conditions than analyzed for the standard fuel assemblies. Nuclear, Mechanical and Thermal Hydraulics compatibility with respect to standard fuel design has been fully evaluated.

SAFETY EVALUATION: The insertion of 52 Region 5, one once burned Region 1 and two Region 4A assemblies into Farley Unit 1 and the operation throughout Cycle 3 is within the bounds of the currently approved safety analyses and meets an established core design criteria on the use of the Region 4A assemblies.

PORC REVIEW: PORC Meeting 601, 9/5/80.

11. SUBJECT: PCR/PCN 80-591 (B80-591)

DESCRIPTION: Changed the label designation of the boric acid pumps.

SAFETY EVALUATION: This change presents a drawing change only and has no affect on the operation of equipment.

PORC REVIEW: PORC Meeting 626, 10/21/80.

12. SUBJECT: PCR/PCN 78-073 (SM78-073 & B78-073)

DESCRIPTION: Added an electric high level alarm switch to D/G 1-2A fuel oil storage tank level indication circuit.

SAFETY EVALUATION: This change improves the diesel fuel oil system without degrading safety of system operation.

PORC REVIEW: PORC Meeting 638, 11/07/80.

13. SUBJECT: PCR/PCN 78-195 (B78-195)

DESCRIPTION: Added flush and drain taps to radiation monitors RE-13 and RE-15.

SAFETY EVALUATION: These changes increase reliability and do not degrade the safety of system operation.

PORC REVIEW: PORC Meeting 640, 11/11/80.

14. SUBJECT: PCR/PCN 79-403 (SM79-403)

DESCRIPTION: Replaced Service Water Lube and Cooling Piping with stainless steel pipe and added a Sullectron Water treater. Also corrected Lube and Cooling Train separation problem identified in LER 80-069/01T-0.

SAFETY EVALUATION: These changes improve system reliability and do not affect the safety of plant operation.

PORC REVIEW: PORC Meeting 648, 11/18/80.

15. SUBJECT: FNP-1-ETP-89 (Westinghouse Fuel Examination System, Initial Setup, Calibration and Functional Testing)

DESCRIPTION: This procedure provided instructional guidance for the initial setup, calibration and functional testing of the Westinghouse Fuel Examination System. This procedure was also the controlling document for the performance of all phases of the Westinghouse onsite fuel inspection procedure FP-ALA-FE-1 "Fuel Inspection for Cycle II/III Farley (ALA) Unit 1".

SAFETY EVALUATION: Similar examinations have been performed in accordance with procedures similar to FP-ALA-FE1, at other plants over the past 12 years where hundreds of fuel assemblies and thousands of fuel rods have been examined without incident or without compromising personnel safety and/or plant equipment. Futhermore, the examinations conducted at these

plants have not resulted in any unreviewed safety questions, nor have they required SAR, Technical Specification or operating license changes. The probability of a fuel assembly handling accident is not increased by the examination equipment because assemblies are not handled by the examination equipment. Therefore, the radiological consequences of a fuel assembly handling accident remains the same as that already analyzed in Section 15 of the Plant Safety Analysis Report.

PORC REVIEW: PORC Meeting 642, 11/13/80.
PORC Meeting 657, 11/26/80.
PORC Meeting 663, 12/5/80.

16. SUBJECT: PCR/PCN 80-733 (B80-733)

DESCRIPTION: Modified Unit 1 liquid waste piping to allow future processing of liquid waste in Unit 2 volume reduction system.

SAFETY EVALUATION: This change is in accordance with applicable codes, standards, FSAR and licensing requirements and does not adversely affect other installed systems.

PORC REVIEW: PORC Meeting 656, 11/25/80.
PORC Meeting 666, 12/10/80.

17. SUBJECT: PCR/PCN 80-893 (P80-893)

DESCRIPTION: Replaced Chem-Nuclear Services Inc. urea formaldehyde solidification system with the Hittman Nuclear & Development Corp. cement solidification system.

SAFETY EVALUATION: This change does not adversely affect other installed systems and meets the South Carolina burial criteria effective 1/01/81.

PORC REVIEW: PORC Meeting 671, 12/22/80.

18. SUBJECT: OCR 1699 (Various change notices for fire protection)

DESCRIPTION: (SM-1570): Core Drill in the Diesel Building.

(SM-1573): Core Drill in the Service Water Structure.

(BE-4522): Modified the differential pressure switch used for auto closure of the Fire Main motor operating valve to provide alarm function only.

(SM-1574): Fabricated 12 smoke removal equipment storage boxes.

(SM-1530): Installed smoke removal equipment.

(BC-1236): Replaced steel plate barriers with Fire Rated Class A door and masonary wall in the Auxiliary Building.

(SM-1583): Changed flow alarm setpoints.

(BC-1237): Installed oil spillage curbs around the CCW pumps.

(SE-2280): Applied door coating in the Diesel Building cable tunnels.

(BE-4544): Installed kaowool wrap on safe shutdown raceways.

(BE-4515): Installed kaowool wrap on safe shutdown raceways.

SAFETY EVALUATION: These changes enhance plant safety and satisfy commitments made to and accepted by the NRC in the Fire Protection Program Re-evaluation Report. These designs have been evaluated for their effect on other systems and have been found not to interfere with or degrade other installed systems. These designs are in accordance with applicable codes, standards, FSAR and licensing commitments.

PORC REVIEW:

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| (SM-1570): | PORC Meeting 490, 1/29/80. |
| (SM-1573): | PORC Meeting 490, 1/29/80. |
| (BE-4522): | PORC Meeting 493, 2/04/80. |
| | PORC Meeting 502, 2/13/80. |
| (SM-1574): | PORC Meeting 502, 2/13/80. |
| (SM-1530): | PORC Meeting 502, 2/13/80. |
| (BC-1236): | PORC Meeting 513, 3/06/80. |
| (SM-1583): | PORC Meeting 520, 3/18/80. |
| (BC-1237): | PORC Meeting 520, 3/18/80. |
| (SE-2280): | PORC Meeting 529, 4/10/80. |
| | PORC Meeting 550, 5/28/80. |
| (BE-4544): | PORC Meeting 550, 5/28/80. |
| | PORC Meeting 575, 7/29/80. |
| (BE-4515): | PORC Meeting 543, 5/13/80. |
| | PORC Meeting 575, 7/29/80. |