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Alabama Power

the southern electric system

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Docket No. 50-348

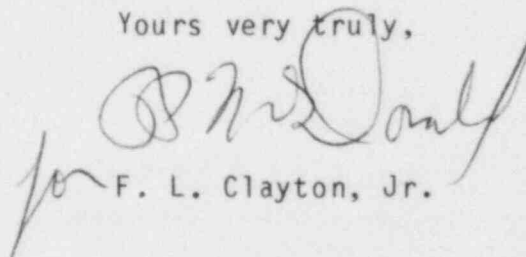
Mr. James P. O'Reilly, Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N.W.
Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Attached for your review is the annual report required by 10CFR50.59 for 1982 which summarizes changes to the plant performed in accordance with the provisions of 10CFR50.59 for Joseph M. Farley Nuclear Plant, Unit 1. Also, in accordance with 10CFR50.59(b), 39 additional copies are provided for your use.

If you have any questions, please advise.

Yours very truly,


F. L. Clayton, Jr.

FLCJr/RWS:ddr-D41

Attachment

cc: Mr. R. A. Thomas
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ALABAMA POWER COMPANY
JOSEPH M. FARLEY NUCLEAR PLANT
UNIT 1 - ANNUAL REPORT
REQUIRED BY 10CFR50.59 (1982)

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, and (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, tests 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 completed in 1982, are provided in the following:

1. Subject: PCR/PCN 78-061 (B78-061)

Description: Installed additional new fuel storage racks.

Safety Evaluation: The criticality analysis assures that K_{eff} will be less than or equal to 0.95 under normal and postulated accident conditions.

PORC Review: PORC Meeting 873, 8/20/81

2. Subject: PCR/PCN 78-200 (B78-200)

Description: Installed a test monitor to measure steam generator blowdown flow.

Safety Evaluation: No penetration of existing piping is required. The sensor weighs less than one pound and is attached by epoxy glue and a metal strap. This monitor does not affect any safety related system and, since it is of minimal weight, has no effect on the seismic requirements of the existing piping.

PORC Review: PORC Meeting 529, 4/10/80

PORC Meeting 937, 1/12/82

3. Subject: PCR/PCN 78-247 (SM78-247)

Description: Added two pressure gauges to the River Water System to aid in data taking.

Safety Evaluation: In the unlikely event that a failure of the pressure gauges/tubing should occur, an inadvertent low header pressure alarm could be generated. Should this occur, the operators could readily check the validity of the alarm by observing the alternate instrumentation. This check would allow ample time for operator action in the event of a valid alarm.

PORC Review: PORC Meeting 979, 4/27/82

4. Subject: PCR/PCN 78-277 (B78-277)

Description: Added a vent from the Bulk Loading Facility to the plant vent duct.

Safety Evaluation: The facility vents are directed through a filter in the mobile solidification unit to ensure safe operation.

PORC Review: PORC Meeting 447, 10/12/79
PORC Meeting 710, 2/10/81
PORC Meeting 904, 10/23/81
PORC Meeting 1000, 6/29/82

5. Subject: PCR/PCN 79-343 (B79-343)

Description: Revised drawing D-175045 to show actual instrument layout.

Safety Evaluation: This is a drawing change only and has no effect on the system.

PORC Review: PORC Meeting 881, 9/08/81

6. Subject: PCR/PCN 79-421 (B79-421)

Description: Reclassified the waste and recycle evaporators to non-nuclear safety grade in accordance with NRC Branch Technical Position ETSB 11-1, Rev. 1. Replaced the concentrates pump with Goulds Model 3196-ST in accordance with Westinghouse Equipment Specification 953412 and relocated them off of the skid.

Safety Evaluation: These changes will enhance the operation and maintenance of the system.

PORC Review: PORC Meeting 970, 3/30/82

7. Subject: PCR/PCN 79-536 (B79-536)
- Description: Installed Eberline vent stack monitoring system, SPING-4.
- Safety Evaluation: This change satisfies requirements imposed by NUREG-0578, NUREG-0654 and NUREG-0737 for wide range vent stack monitoring.
- PORC Review: PORC Meeting 679, 1/08/81
8. Subject: PCR/PCN 79-579 (B79-579)
- Description: Resolved conflicts between drawings delineating fire walls in the auxiliary building.
- Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.
- PORC Review: PORC Meeting 995, 6/15/82
9. Subject: PCR/PCN 80-600 (B80-600)
- Description: Changed containment sump pump control from a level switch to a more reliable electronic type.
- Safety Evaluation: This change will improve system operation and reliability.
- PORC Review: PORC Meeting 618, 10/07/80
PORC Meeting 635, 11/05/80
PORC Meeting 699, 1/30/81
PORC Meeting 952, 2/11/82

10. Subject: PCR/PCN 80-611 (B80-611)
- Description: Revised appropriate drawings to show the actual location of various fire barrier penetrations.
- Safety Evaluation: This change satisfies a commitment made to and accepted by the NRC in the Fire Protection Program Re-evaluation Report.
- PORC Review: PORC Meeting 989, 5/25/82
11. Subject: PCR/PCN 80-642 (B80-642)
- Description: Installed a tool crib in the radiation controlled area of the Auxiliary Building.
- Safety Evaluation: This change does not affect the seismic analysis of the Auxiliary Building.
- PORC Review: PORC Meeting 606, 9/12/80
PORC Meeting 993, 6/08/82
12. Subject: PCR/PCN 80-651 (SM80-651 & SE80-651)
- Description: Added a flow monitoring loop to the shared discharge line from steam jet air ejectors A and B.
- Safety Evaluation: This change enhances the plant's ability to measure condenser air inleakage.
- PORC Review: PORC Meeting 668, 12/16/80
PORC Meeting 892, 9/29/81

13. Subject: PCR/PCN 80-654 (B80-654)

Description: Changed the boron injection tank heat tracing control setpoint from 165°F to 170°F and high temperature alarm from 180°F to 190°F.

Safety Evaluation: This change will eliminate control band overlap.

PORC Review: PORC Meeting 811, 5/05/81

14. Subject: PCR/PCN 80-662 (P80-662)

Description: Installed a spare 230 kv startup transformer, a spare 230 kv bus, a 230 kv motor operated disconnect and new 230 kv breaker and bus connections.

Safety Evaluation: These changes reduce the possibility of an extended outage as a result of failure of one of the startup transformers or an oil pipe cable.

PORC Review: PORC Meeting 791, 4/10/81
PORC Meeting 852, 7/15/81
PORC Meeting 879, 9/01/81
PORC Meeting 907, 10/27/81

15. Subject: PCR/PCN 80-690 (SM80-690)

Description: Changed low-level alarm set points for the diesel generator day tanks from 520 gal. to 760 gal. for the 2850 kw diesels and from 680 gal. to 1000 gal. for the 4075 kw diesels.

Safety Evaluation: This change will alert the operator before the tank levels reach the Technical Specification limit.

PORC Review: PORC Meeting 934, 1/05/82

16. Subject: PCR/PCN 80-694 (B80-694)

Description: Installed environmentally qualified solenoid valves for the main steam isolation valves and the turbine driven auxiliary feedwater pump steam admission valves.

Safety Evaluation: This change will enhance system reliability.

PORC Review: PORC Meeting 916, 11/12/81

PORC Meeting 944, 1/22/82

17. Subject: PCR/PCN 80-707 (B80-707)
- Description: Installed a vibration monitoring system for the reactor coolant pumps.
- Safety Evaluation: This change improves the monitoring capability and will enhance reliability.
- PORC Review: PORC Meeting 652, 11/22/80
18. Subject: PCR/PCN 80-765 (B80-765)
- Description: Installed an experimental reactor vessel water level measuring system.
- Safety Evaluation: This system will not prevent any safety related system from performing its function.
- PORC Review: PORC Meeting 686, 1/16/81
19. Subject: PCR/PCN 80-800 (SM80-800 & B80-800)
- Description: Added an air supervision system to various sprinkler systems.
- Safety Evaluation: This change enhances plant safety and satisfies a commitment made to and accepted by the NRC in the Fire Protection Re-evaluation Report.
- PORC Review: PORC Meeting 835, 6/19/81
PORC Meeting 862, 7/30/81
PORC Meeting 876, 8/25/81
PORC Meeting 882, 9/08/81

20. Subject: PCR/PCN 80-804 (B80-804)

Description: Installed sample tubing and a sample panel for use in waste gas decay tank sampling.

Safety Evaluation: This change reduces sampling time and radiation exposure by making waste gas decay tank sampling independent of Waste Gas System operation.

PORC Review: PORC Meeting 903, 10/22/81
PORC Meeting 921, 11/24/81

21. Subject: PCR/PCN 80-833 (B80-833)

Description: Added a check valve to the Number 1 seal leakoff line of each reactor coolant pump.

Safety Evaluation: This change will prevent reverse flow through the seals.

PORC Review: PORC Meeting 914, 11/10/81

22. Subject: PCR/PCN 80-854 (SM80-854)

Description: Added test connections to the River Water System to measure flow rate.

Safety Evaluation: This change has no impact on system safety.

PORC Review: PORC Meeting 635, 11/05/80

23. Subject: PCR/PCN 81-934 (SM81-934)
- Description: Replaced River Water System valves QSP25V515 and QSP25V516 with 60" weld-in spool pieces.
- Safety Evaluation: These are header isolation valves which are normally open. It has been determined that these valves are no longer required.
- PORC Review: PORC Meeting 739, 2/27/81
24. Subject: PCR/PCN 81-939 (SC81-939, SE81-939 & SM81-939)
- Description: Added a Service Water System return line to the wet pit.
- Safety Evaluation: This change eliminates the need for operator action to balance service water flow rates.
- PORC Review:
- PORC Meeting 749, 3/05/81
 - PORC Meeting 758, 3/11/81
 - PORC Meeting 765, 3/16/81
 - PORC Meeting 768, 3/20/81
 - PORC Meeting 769, 3/21/81
 - PORC Meeting 776, 3/26/81
 - PORC Meeting 777, 3/27/81
 - PORC Meeting 780, 3/31/81
 - PORC Meeting 782, 4/02/81
 - PORC Meeting 786, 4/03/81
 - PORC Meeting 787, 4/06/81

PORC Meeting 789, 4/08/81
PORC Meeting 792, 4/10/81
PORC Meeting 793, 4/12/81
PORC Meeting 797, 4/15/81
PORC Meeting 800, 4/17/81
PORC Meeting 805, 4/22/81
PORC Meeting 808, 4/27/81
PORC Meeting 815, 5/12/81
PORC Meeting 820, 5/20/81
PORC Meeting 834, 6/16/81
PORC Meeting 837, 6/23/81
PORC Meeting 862, 7/30/81
FORC Meeting 867, 8/10/81
PORC Meeting 884, 9/15/81
PORC Meeting 889, 9/24/81
PORC Meeting 896, 10/08/81
PORC Meeting 929, 12/17/81
PORC Meeting 932, 12/19/81
PORC Meeting 969, 3/26/82
PORC Meeting 994, 6/10/82

25. Subject: PCR/PCN 81-967 (SM81-967)

Description: Installed additional instrumentation in the
Meteorological Monitoring System.

Safety Evaluation: These additions will meet the requirements of
proposed Revision 1 to Regulatory Guide 1.23.

PORC Review: PORC Meeting 893, 10/01/81
PORC Meeting 920, 11/19/81
PORC Meeting 968, 3/23/82

26. Subject: PCR/PCN 81-968 (B81-968 & SM81-968)

Description: Added a 4160V cubicle to Bus 1C to supply power
to the Emergency Operations Facility.

Safety Evaluation: This addition will not impose any unacceptable
load on the electrical distribution network.

PORC Review: PORC Meeting 826, 6/02/81
PORC Meeting 892, 9/29/81

27. Subject: PCR/PCN 81-1074 (B81-1074)

Description: Waived conduits BHL134 and BEM071, as shown on drawing D-180506, with regard to safe shutdown raceway requirements.

Safety Evaluation: These conduits carry a control cable and a power cable for MOV-3084A-B. Their failure will not reposition the valve which is open under both normal and emergency conditions.

PORC Review: PORC Meeting 919, 11/17/81

28. Subject: PCR/PCN 81-1078 (S81-1078)

Description: Installed additional smoke detectors in the service water structure.

Safety Evaluation: This modification will improve the early warning capability of the service water structure fire protection system.

PORC Review: PORC Meeting 987, 5/19/82
PORC Meeting 993, 6/08/82
PORC Meeting 999, 6/25/82

29. Subject: PCR/PCN 81-1080 (B81-1080)

Description: Spared conduits AEM071 and AEM081. Deleted cables 1VAL1C09A and 1VAL1C10A. New routing is included with PCN 81-1083.

Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 934, 1/05/82

30. Subject: PCR/PCN 81-1082 (B81-1082)

Description: Spared raceways AEM071 and AEM081. New routing is included with PCN 81-1083.

Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 932, 12/29/81

31. Subject: PCR/PCN 81-1083 (B81-1083)

Description: Rerouted conduits AEM085, AEM086 and AEM087.
This change was worked with PCN 81-1080 and
PCN 81-1082.

Safety Evaluation: This change satisfies a commitment to comply with
10CFR50 Appendix R Paragraph II.G.2.

PORC Review: PORC Meeting 934, 1/05/82
PORC Meeting 944, 1/22/82
PORC Meeting 965, 3/16/82
PORC Meeting 969, 3/26/82
PORC Meeting 975, 4/16/82

32. Subject: PCR/PCN 81-1084 (B81-1084)

Description: Wrapped B train raceways with Kaowool and rerouted
the cables to the auxiliary feedwater pump discharge
and component cooling water heat exchanger inlet valves.

Safety Evaluation: This change satisfies a commitment to comply with
10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 932, 12/29/81
PORC Meeting 944, 1/22/82
PORC Meeting 947, 1/28/82
PORC Meeting 954, 2/16/82
PORC Meeting 975, 4/16/82

33. Subject: PCR/PCN 81-1085 (B81-1085)
- Description: Wrapped raceways BHE182 and BHE183 with Kaowool.
- Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.
- PORC Review: PORC Meeting 931, 12/22/81
34. Subject: PCR/PCN 81-1086 (B81-1086)
- Description: Wrapped raceways BFDB1F, BHF019, BHF018, BFDB2E, BFDB21 and BHF-42 with Kaowool.
- Safety Evaluation: The change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.
- PORC Review: PORC Meeting 931, 12/22/81
35. Subject: PCR/PCN 81-1087 (B81-1087)
- Description: Wrapped raceways BFDB2G, BHF025, BFDB21 and BHF-42 with Kaowool.
- Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.
- PORC Review: PORC Meeting 931, 12/22/81

36. Subject: PCR/PCN 81-1088 (B81-1088)

Description: Wrapped raceways BHLZ45, BHJX64 and BHK-57 with Kaowool.

Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 931, 12/22/81
PORC Meeting 970, 3/30/82

37. Subject: PCR/PCN 81-1089 (B81-1089)

Description: Reworked and rerouted safe shutdown conduit BEN008 out of Room 72D in the Service Water Intake Structure. The new route is included on PCN 82-1091.

Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 932, 12/29/81

38. Subject: PCR/PCN 81-1090 (B81-1090)

Description: Wrapped raceways AEN251, AEN252, AHP850, AHS376, AHS419, AEN007, AEN008, AHS126 and AHS127 with Kaowool.

Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 931, 12/22/81
PORC Meeting 962, 3/09/82
PORC Meeting 971, 4/01/82
PORC Meeting 976, 4/20/82

39. Subject: PCR/PCN 81-1091 (B81-1091)

Description: Wrapped raceways BHP093, BHRC42, BHRC45, BHRC48, BHQ108, CDN002, BDN132, BDN133, BHT061, BHS063, BDN129, BHP094, BHT130, AHS376, AHS421, AHS419, AEN251, AEN252, AEP320, AHP850, AHZ281, AEP310, ADN390, ADN391 and AHP448 with Kaowool. Rerouted safe shutdown conduit BEN008.

Safety Evaluation: This change satisfies a commitment to comply with 10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 932, 12/29/81
PORC Meeting 962, 3/09/82
PORC Meeting 965, 3/16/82
PORC Meeting 969, 3/26/82
PORC Meeting 976, 4/20/82

40. Subject: PCR/PCN 81-1094 (B81-1094)

Description: Installed new conduits AHP216 and AHT287 while
sparing conduits AHT073 and AHT323.

Safety Evaluation: This change satisfies a commitment to comply with
10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 932, 12/29/81
PORC Meeting 944, 1/26/81
PORC Meeting 963, 3/11/82

41. Subject: PCR/PCN 81-1102 (B81-1102)

Description: Sealed penetrations 32-100-40, 33-100-40, 34-100-40,
35-100-40, 36-100-40, 37-139-35 and 38-139-35.

Safety Evaluation: This change satisfies a commitment to comply with
10CFR50 Appendix R Paragraph III.G.2.

PORC Review: PORC Meeting 947, 1/28/82

42. Subject: PCR/PCN 81-1146 (B81-1146)

Description: Relocated gas trap N1G22K002 to the 83' elevation
and rerouted the moisture separator drains directly
to the waste holdup tank.

Safety Evaluation: These changes will improve moisture separator
drainage and prevent moisture carry over into the
Waste Gas System.

PORC Review: PORC Meeting 947, 1/28/82

43. Subject: PCR/PCN 81-1182
- Description: Reoriented the appropriate containment spray nozzles to conform with the description in the FSAR.
- Safety Evaluation: This modification will correct an installation error. The performance of the Containment Spray System will not be altered nor will the consequences of an accident be increased by these changes.
- PORC Review: PORC Meeting 948, 2/02/82
44. Subject: PCR/PCN 82-1234 (B82-1234)
- Description: Revised FSAR figure 9.3-4 sheet 3 to include a valve which had been inadvertently deleted from the figure.
- Safety Evaluation: This is a drawing change only and has no effect on plant safety.
- PORC Review: PORC Meeting 1026, 9/14/82
45. Subject: FCR 2C-2058 (2BC-940)
- Description: Six 1½" core drills were made in the Auxiliary Building wall to allow relocation of the Hittman Disposable Demineralization System pump lubricators.
- Safety Evaluation: This change will have no impact on the seismic analysis of the plant.
- PORC Review: PORC Meeting 751, 3/06/82

46. Subject: CN 2BE-964

Description: Added a 120V 30A AC power supply for the Hittman Disposable Demineralization System control panel.

Safety Evaluation: This addition will not impose any unacceptable load on the electrical distribution network.

PORC Review: PORC Meeting 751, 3/06/81

47. Subject: OCR 1572 (BE-4479)

Description: Installed additional communications in the Auxiliary Building.

Safety Evaluation: These additions improve plant communications with respect to Security System operations.

PORC Review: PORC Meeting 525, 3/27/80

48. Subject: CN 2BM-2589

Description: Installed piping to route the evaporator bottoms, spent resins and the contents of the chemical drain tank to either the Unit 1 Drumming Station or the Bulk Loading Facility.

Safety Evaluation: This change enhances waste handling flexibility.

PORC Review: PORC Meeting 751, 3/06/81

49. Subject: OCR 1582 (BM-3064)

Description: Reflected vendor furnished equipment details for the Penetration Room Cooling System.

Safety Evaluation: This change has no effect on system design.

PORC Review: PORC Meeting 339, 1/24/79
PORC Meeting 447, 10/12/79

50. Subject: FNP-0-CCP-102

Description: Reduced the lower RCS hydrogen concentration limit to 15 cc/kg during low power physics testing and initial power operation. Also lowered the minimum lithium concentration to 0.2 ppm at the end of core life.

Safety Evaluation: Westinghouse has reviewed these changes and concluded that no unreviewed safety question is involved.

PORC Review: PORC Meeting 1054, 12/1/82

51. Subject: FNP-1-RCP-617

Description: This procedure establishes a flow path to the plant vent stack rather than the waste gas processing system for gases which collect under a Recycle Holdup Tank bladder.

Safety Evaluation: Since the RHT provides a delaying mechanism ensuring adequate decay time and since these releases are monitored in the same manner as Waste Gas Decay Tank releases, no unreviewed safety question is involved.

PORC Review: PORC Meeting 1058, 12/16/82

52. Subject: FNP-0-RCP-803

Description: This document details the operation of the Low Level Radwaste Storage Facility.

Safety Evaluation: This procedure will ensure the safe operation of the Low Level Radwaste Storage Facility. All control measures and special cautions are included.

PORC Review: PORC Meeting 969, 3/26/82

53. Subject: Onsite Low Level Radwaste Storage Facility

Description: Documented the assessment of the construction and use of an onsite storage facility for low level radwaste.

Safety Evaluation: The facility was designed and built to meet all applicable regulatory codes. Operation of this facility will produce no significant increase in accident probabilities or radiation exposure.

PORC Review: PORC Meeting 934, 1/05/82