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F. L. Clayton, Jr.
Senior Vice President
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Alabama Power

the southern electric system

July 26, 1982

Docket No. 50-364

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

Attention: Mr. S. A. Varga

Joseph M. Farley Nuclear Plant - Unit 2
Extension Request for License Condition 2.C.(19)(b)

Gentlemen:

In accordance with the Joseph M. Farley Nuclear Plant, Unit 2 Operating License [NPF-8, Section 2.C.(19)(b)], Alabama Power Company is required to complete all modifications, prior to resuming power operation following the first refueling, of the primary and backup circuit protection devices in containment electrical penetration circuits (hereafter referred to as containment overcurrent protection modification). Based on recent detailed evaluations of work planning and scheduling for the first refueling outage, it has been determined that the scope of work necessary to complete the containment overcurrent protection modifications is not compatible with the scheduled outage duration. The current critical path schedule for the outage is 6-weeks; however, efforts are continuing toward reducing the duration to a goal of 5-weeks. A detailed explanation of the constraints preventing completion of the required modifications in a 5 to 6 weeks outage timeframe is contained herein. As a result of these constraints, an extension of License Condition 2.C.(19)(b) is respectfully requested until the second refueling outage.

The detailed outage sequence plan for completing the containment overcurrent protection modifications has determined that the scope of this work includes installing 7 fuse panels and completing internal wiring; installing the necessary electrical cable trays; pulling and terminating 86 new cables (8900 ft. of cable involved); reworking 74 existing cables (determinating, repulling, reterminating); and retesting the 74 affected circuits. All work that can be completed prior to the refueling outage will be completed. However, the majority of the activity involves work on power circuitry associated with safety related devices. This work can only be done during an outage when the unit is in cold shutdown.

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Some of the factors that must be considered in the work planning and coordination associated with this job which, when properly addressed, dictate outage work of approximately ten weeks for the containment overcurrent protection modifications are: (1) the limited work space in the electrical penetration rooms prohibit utilization of a large work force; (2) the electrical penetration rooms are part of the radiation control area necessitating extra precautions for access control and control of working conditions; (3) the need for detailed planning and for exercising extreme caution when scheduling removal from service of the 74 separate components (these components are primarily safety related); (4) all components are located inside containment which requires integration of work with concurrent refueling, testing, and maintenance activities and satisfying Limiting Conditions for Operation stipulated in plant Technical Specifications; (5) the coordination of this work with all other refueling and maintenance activities outside the containment; and (6) the coordination of this work with all modification activities required by license conditions or other licensing commitments.

The licensing related modifications referenced above include containment mini-flow purge valve modifications (License Condition 2.C.(17)), Appendix R fire protection modifications (seismic RCP oil collection system, sprinklers, kaowool, etc.), environmental qualification modifications (License Condition 2.C.(18)), auxiliary feedwater system modifications (License Condition 2.C.(21)(e)), diesel generator lube oil system modifications (License Condition 2.C.(19)(c)), low pressure turbine rotor replacement (License Condition 2.C.(19)(d)), plant shielding modifications (License Condition 2.C.(21)(c)), Hot Shutdown Panel alternate power supply modifications, fire damper modifications, IEB 82-02 Degradation of Threaded Fasteners Inspection, and IEB 81-03 Asiatic Clam Contamination of Safety Related Heat Exchangers Inspection. Approximately 70,000 manhours have been projected to implement these licensing activities.

Based on the above identified constraints, the scheduled refueling outage duration, and the detailed implementation plan, approximately 50% of the outage work for the containment overcurrent protection modifications can be completed during the first refueling of FNP Unit 2. This projection is based upon completing all non-outage related work prior to the refueling outage. In order to accomplish the non-outage work such that it will integrate with the outage portion of the work, procurement items must arrive on site before August 1, 1982. Any delay in delivery of procurement items will directly impact the above projected work completion. If the delivery of equipment is delayed beyond August 1, 1982, the implementation schedule will require reevaluation of the containment overcurrent protection modifications to determine the scope of work that can be completed during the first refueling outage. Delays are not currently expected; however, prompt

Mr. S. A. Varga
Director, Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission

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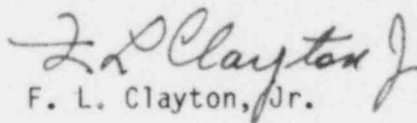
notification will be made to the NRC of this or other conditions affecting this proposed extension. Additionally, in order to expedite the delivery of the safety related fuse panels, manufacturing was authorized prior to completion of seismic testing. As a result of vendor and test facility delays, the seismic testing originally scheduled for May, 1982 was re-scheduled for July, 1982. Although the panels are expected to pass the seismic testing, it would be highly improbable that panel redesign, subsequent modifications, and seismic retesting could be completed in time for the refueling outage if initial test results are not satisfactory.

Alabama Power Company therefore requests that License Condition 2.C.(19)(b) be extended until the second refueling outage or the first extended cold shutdown (following the first refueling) of sufficient duration to complete this work. Alabama Power Company's Plant Operations Review Committee has reviewed this proposed change to the Farley Unit 2 Facility Operating License NPF-8 and has determined that the change does not involve an unreviewed safety question as shown in the attached safety evaluation. The Nuclear Operations Review Board will review this change at its next scheduled meeting.

This proposed change is designated as Class III according to 10CFR170.22 requirements. Enclosed is a check for \$4,000 to cover the total amount of fees required.

In accordance with 10CFR50.30(c)(1)(i), three signed originals and forty (40) additional copies of this change are enclosed.

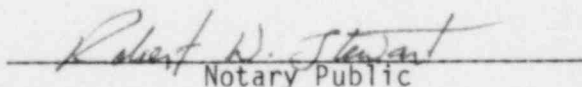
Yours very truly,


F. L. Clayton, Jr.

FLCJr/GGY:jc-D18
Enclosure

cc: Mr. R. A. Thomas
Mr. G. F. Trowbridge
Mr. J. P. O'Reilly
Mr. E. A. Reeves
Mr. W. H. Bradford

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 26 DAY OF July, 1982.


Notary Public

My Commission Expires:

10/27/85

SAFETY EVALUATION FOR EXTENSION OF
UNIT 2 LICENSE CONDITION 2.C.(19)(b)

I. Background

Alabama Power Company is required by Unit 2 Operating License Condition 2.C.(19)(b) to complete all modifications, prior to resuming power operation following the first refueling, of the primary and backup circuit protection devices in containment electrical penetration circuits (hereafter referred to as containment overcurrent protection modifications). Based on recent detailed evaluations of work planning and scheduling for the first refueling outage, it has been determined that the scope of work necessary to complete the containment overcurrent protection modifications is not compatible with the scheduled outage duration.

II. References

Facility Operating License No. NPF-8, License Condition 2.C.(19)(b).

III. Basis

The detailed outage sequence plan for completing the containment overcurrent protection modifications has determined that the scope of this work includes installing 7 fuse panels and completing internal wiring; installing the necessary electrical cable trays; pulling and terminating 86 new cables (8900 ft. of cable involved); reworking 74 existing cables (determinating, repulling, reterminating); and retesting the 74 affected circuits. All work that can be completed prior to the refueling outage will be completed. However, the majority of the activity involves work on power circuitry associated with safety related devices. This work can only be done during an outage when the unit is in cold shutdown.

Some of the factors that must be considered in the work planning and coordination associated with this job which, when properly addressed, dictate outage work of approximately ten weeks for the containment overcurrent protection modifications are: (1) the limited work space in the electrical penetration rooms prohibit utilization of a large work force; (2) the electrical penetration rooms are part of the radiation control area necessitating extra precautions for access control and control of working conditions; (3) the need for detailed planning and for exercising extreme caution when scheduling removal from service of the 74 separate components (these components are primarily safety related); (4) all components are located inside containment which requires integration of work with concurrent refueling, testing, and maintenance activities and satisfying Limiting Conditions for Operation stipulated in plant Technical Specifications; (5) the coordination of this work with all other refueling and maintenance activities outside the containment; and (6) the coordination of this work with all modification activities required by license conditions or other licensing commitments.

The licensing related modifications referenced above include containment mini-flow purge valve modifications (License Condition 2.C.(17)), Appendix R fire protection modifications (seismic RCP oil collection system, sprinklers, kaowool, etc.), environmental qualification modifications (License Condition 2.C.(18)), auxiliary feedwater system modifications (License Condition 2.C.(21)(e)), diesel generator lube oil system modifications (License Condition 2.C.(19)(c)), low pressure turbine rotor replacement (License Condition 2.C.(19)(d)), plant shielding modifications (License Condition 2.C.(21)(c)), Hot Shutdown Panel alternate power supply modifications, fire damper modifications, IEB 82-02 Degradation of Threaded Fasteners Inspection, and IEB 81-03 Asiatic Clam Contamination of Safety Related Heat Exchangers Inspection. Approximately 70,000 manhours have been projected to implement these licensing activities.

Based on the above identified constraints, the scheduled refueling outage duration, and the detailed implementation plan, approximately 50% of the outage work for the containment overcurrent protection modifications can be completed during the first refueling of FNP Unit 2. This projection is based upon completing all non-outage related work prior to the refueling outage. In order to accomplish the non-outage work such that it will integrate with the outage portion of the work, procurement items must arrive on site before August 1, 1982. Any delay in delivery of procurement items will directly impact the above projected work completion. If the delivery of equipment is delayed beyond August 1, 1982, the implementation schedule will require reevaluation of the containment overcurrent protection modifications to determine the scope of work that can be completed during the first refueling outage. Delays are not currently expected; however, prompt notification will be made to the NRC of this or other conditions affecting this proposed extension. Additionally, in order to expedite the delivery of the safety related fuse panels, manufacturing was authorized prior to completion of testing. As a result of vendor and test seismic facility delays, the seismic testing originally scheduled for May 1982 was rescheduled for July 1982. Although the panels are expected to pass the seismic testing, it would be highly improbable that panel redesign, subsequent modifications, and seismic retesting could be completed in time for the refueling outage if initial test results are not satisfactory.

Alabama Power Company finds the second refueling outage implementation schedule justified based on (1) the probability of a loss of coolant accident coupled with the short circuit of a penetration conductor and an independent failure of a protective device occurring simultaneously is highly unlikely, and (2) during the operation of similar reactors there have been no failures of containment integrity due to shorts of conductors in electrical containment penetration

assemblies. Additionally, actual operating experience at Farley Unit 1 has verified acceptable performance of unmodified containment electrical penetrations during three complete cycles of operation.

Alabama Power Company therefore requests that License Condition 2.C.(19)(b) be extended until the second refueling outage or the first extended cold shutdown (following the first refueling) of sufficient duration to complete this work.

IV. Conclusion

The proposed extension of the scheduled completion of the containment overcurrent protection modifications until the second refueling outage does not involve an unreviewed safety question as defined by 10CFR50.59. This proposed change will not affect the safe operation of Farley Nuclear Plant Unit 2.