

Docket Nos. 50-327
and 50-328

January 21, 1993

Tennessee Valley Authority
ATTN: Dr. Mark O. Medford, Vice President
Nuclear Assurance, Licensing & Fuels
3B Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Dr. Medford:

SUBJECT: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT
IMPACT - SPENT FUEL POOL STORAGE CAPACITY INCREASE -
SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2 (TAC NOS. M83068 AND
M83069)

By letter dated March 27, 1992, as supplemented by letters dated May 11,
May 28, September 8, and October 8, 1992, the Tennessee Valley Authority
requested a license amendment to change the Technical Specifications to
accommodate a proposed increase in the spent fuel storage capacity at the
Sequoyah Nuclear Plant, Units 1 and 2. Enclosed is our Environmental
Assessment related to this proposed action.

Based on our assessment, the staff has concluded that there are no significant
radiological or non-radiological impacts associated with the proposed spent
fuel pool expansion and it will have no significant impact on the quality of
the human environment. Also enclosed is a Notice of Issuance of Environmental
Assessment and Finding of No Significant Impact. This notice is being
forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by

David E. LaBarge, Senior Project Manager
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Environmental Assessment
- 2. Notice

cc w/enclosures:
See next page

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Tennessee Valley Authority
ATTN: Dr. Mark O. Medford

Sequoyah Nuclear Plant

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

ENVIRONMENTAL ASSESSMENT
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO THE EXPANSION OF THE
SPENT FUEL POOL STORAGE CAPACITY
TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 50-327 AND 50-328
DATED: January 21, 1993

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1.0 INTRODUCTION

1.1 Description of Proposed Amendment

By letter dated March 27, 1992, and supplemented by letters dated May 11, May 28, September 8, and October 8, 1992, the Tennessee Valley Authority (TVA or the licensee) requested amendments to change the Technical Specifications (TS) for the Sequoyah Nuclear Plant, Units 1 and 2. The changes would reflect expansion of the spent fuel pool (SFP) storage capacity by installation of new storage racks. The new racks would increase the total spent fuel storage capacity to 2316 fuel assemblies and extend the projected storage capacity for spent fuel into the year 2005 or 2006.

1.2 Need for Increased Storage Capacity

The specific need to increase the limited existing spent fuel storage capacity at Sequoyah is based on the continually increasing inventory in the spent fuel pool and the advisability of maintaining full core off-load capability.

The current Sequoyah SFP storage racks have a total storage capacity of 1386 cells. Since the full core for each unit has 193 fuel assemblies, maintaining full core off load capability from one reactor implies that 1193 storage cells (1386 minus 193) be available for normal off load storage. Consideration of previous and future fuel assembly discharges indicates that Sequoyah will lose full core discharge capability (for one reactor) in 1996. Therefore, to preclude this situation, and to ensure that sufficient spent fuel storage capacity continues to exist, TVA plans to replace the present medium density fuel racks with new free-standing, self-supporting, high density spent fuel storage modules whose design incorporates Boral as a neutron absorber in the cell walls, thereby allowing for more dense storage of spent fuel and an increase in the storage capacity from the present 1386 cells to a total of 2091 cells in the spent fuel pool. In addition, a similar fuel storage module would be installed in the cask loading area of the cask pit for storage of no more than 225 spent fuel assemblies.

2.0 ALTERNATIVES

2.1 Generic Environmental Impact Statement

Commercial reprocessing of spent fuel has not developed as originally anticipated. In 1975, the Commission directed the staff to perform a Generic Environmental Impact Statement (GEIS) for spent fuel storage. The Commission also directed the staff to evaluate alternatives for the handling and storage of spent light water power reactor fuel with particular emphasis on developing long-range policy. The GEIS was to consider alternative methods of spent fuel storage as well as the possible restrictions on termination of the generation of spent fuel through reactor shutdown.

A "Final Generic Environmental Impact Statement (FGEIS) on Handling and Storage of Spent Light Water Power Reactor Fuel" (NUREG-0575, Volumes 1-3) was

issued by the Commission in August 1979. The finding of the FGEIS is that the environmental costs of interim storage are essentially negligible, regardless of where such spent fuel is stored. A comparison of the impact costs of various alternatives reflects the advantage of continued generation of nuclear power versus its replacement by coal-fired power generation. Continued generation of nuclear power versus its replacement by oil-fired generation provides an even greater economic advantage. In the bounding case considered in the FGEIS, that of shutting down the reactor when the existing spent fuel storage capacity is filled, the cost of replacing nuclear stations before the end of their normal lifetime makes this alternative uneconomical. The storage of spent fuel, as evaluated in NUREG-0575, is considered to be an interim action, not a final solution to permanent disposal.

One spent fuel storage alternative considered in detail in the FGEIS is the expansion of the onsite fuel storage capacity by modification of the existing spent fuel pools. Over 100 applications for spent fuel pool expansion have either been approved or are under consideration by the Commission. Most recently these have included expansion of SFP storage at the Indian Point Station, Unit 3 and the Three Mile Island Nuclear Station, Unit 1. The finding in each case has been that the environmental impact of such increased storage capacity is negligible. Since there are variations in storage design and limitations caused by spent fuel already in storage, however, the FGEIS recommended that licensing reviews be done on a case-by-case basis, so as to resolve plant-specific concerns.

2.2 Shipment of Fuel to a Permanent Federal Fuel Storage/Disposal Facility

Shipment of fuel to a permanent Federal fuel storage disposal facility is an alternative to increasing the onsite spent fuel storage capacity. The Department of Energy (DOE) is developing a repository under the Nuclear Waste Policy Act of 1982 (NWPAA). The facility, however, is not likely to be able to receive spent fuel until approximately 2010, at the earliest. The existing Sequoyah spent fuel storage pool will lose full core offload capability for one reactor in 1996. Therefore, spent fuel acceptance and disposal by DOE is not an alternative to increased onsite pool storage capacity.

As an interim measure, shipment to a Monitored Retrievable Storage (MRS) facility is another alternative to increasing the onsite spent fuel storage capacity. The DOE, under the NWPAA, has submitted its MRS proposal to Congress. Because Congress has not authorized an MRS, and because one is not projected to be available before 1996, this alternative does not meet the near-term storage needs of Sequoyah.

Under the NWPAA, the Federal Government has the responsibility to provide not more than 1900 metric tons capacity for the interim storage of spent fuel. The impacts of storing spent fuel at a Federal Interim Storage (FIS) facility fall within those already assessed by the Commission in NUREG-0575. In enacting NWPAA, Congress found that the owners and operators of nuclear power stations have the primary responsibility for providing interim storage for spent nuclear fuel. In accordance with the NWPAA and 10 CFR Part 53, shipping

of spent fuel to an FIS facility is considered to be a last resort alternative. At this time, the licensee cannot take advantage of FIS because existing storage capacity is not maximized.

2.3 Shipment of Fuel to a Reprocessing Facility

Contrary to the description of irradiated fuel shipments contained in the Sequoyah Final Environmental Statement (FES) dated February 13, 1974, reprocessing of spent fuel from Sequoyah is not viable because there is no operating commercial reprocessing facility in the United States, nor is there the prospect of one in the foreseeable future.

2.4 Shipment of Fuel to Another Utility or Site for Storage

The shipment of fuel from Sequoyah to the storage facility of another utility would provide short-term relief from the storage problem. The NHPA and 10 CFR Part 53, however, clearly place the responsibility for the interim storage of spent nuclear fuel with each owner or operator of a nuclear power plant. The shipment of the fuel to another site is not a viable alternative since TVA's other facilities - Browns Ferry, Watts Bar, and Bellefonte - are neither designed nor equipped to receive highly irradiated fuel from offsite. In addition, these sites are expected to have fuel storage problems of their own before the issue is resolved.

2.5 Reduction of Spent Fuel Generation

Improved usage of fuel in the reactor and/or operation at a reduced power level would extend the life of the fuel in the reactor. Also, extended burnup of the fuel would increase the fuel cycle and reduce the number of off-loads. Through increased enrichment and changes to the design of the fuel, the licensee has already taken steps to increase fuel cycles. However, full core offload will still be lost in the near future. In addition, operation at reduced power at the end of a fuel cycle is being implemented whenever possible, but does not make effective use of the available resources, and further extensions create other concerns and would cause unnecessary economic hardship on the licensee and customers. Therefore, reduction of the amount of spent fuel generated is not a practical alternative for Sequoyah.

2.6 Construction of a New Independent Spent Fuel Storage Installation (ISFSI)

Additional storage capacity could be developed by building a new ISFSI. This facility could be either a pool, similar to the existing facility, or a dry storage installation. The staff has generically assessed the impacts of the pool alternative and found, as reported in NUREG-0575, that the storage of spent light water reactor fuel in water pools has an insignificant impact on the environment. Dry storage facilities have been built and used at a few facilities, and staff reviews have indicated that they do not have a significant impact on the environment.

While these alternatives are economically acceptable, such a new storage facility, either at Sequoyah or offsite, would require new site-specific engineering and design, including equipment for the transfer of spent fuel. Commission review, evaluation, and licensing of such a facility would also be required. It is not likely that this entire effort would be completed in time to meet the need for additional capacity. Furthermore, such construction would not use the capability of the existing pool to be reracked to increase storage, and thus would waste resources.

2.7 No Action Taken

If no action were taken, the storage capacity would become exhausted in the near future and Sequoyah would have to shut down. Since replacement power costs average \$320,000 per day per unit, shutting down is many times more expensive than increasing the onsite spent fuel storage capacity. This alternative is considered to be a waste of an available resource and an economic hardship. It is not, therefore, considered to be a viable alternative.

2.8 Summary of Alternatives

The only viable long-term alternative solution to the licensee's spent fuel storage problem is the construction of an ISFSI. However, it is not likely that the construction of such a facility could be completed in a timely manner or that it is environmentally superior to increasing the capacity of the existing SFP. In addition, the capital costs associated with the alternatives were determined by the licensee to be significantly higher.

2.9 TVA Analysis

TVA determined that reracking is the most viable option for Sequoyah in comparison with other spent fuel storage alternatives. The key considerations in evaluating the alternative options were: (1) minimizing the effects on plant systems and operations by reducing the amount of fuel handling as well as the related potential impacts on safety and the as low as reasonably achievable (ALARA) program; (2) maturity of the technology and the extent of industry experience; (3) maximizing flexibility to implement subsequent actions for further increasing onsite spent fuel storage capacity and interface with DOE technology choices for shipment, storage, and ultimate disposal of the spent fuel; and (4) minimizing the overall capital and Operating & Maintenance costs.

Reracking was found by TVA to be the most attractive option with respect to each of these criteria when compared with the alternatives of wet storage using double-tiered racks, rod consolidation, or trans-shipment (pool-to-pool), or dry storage consisting of metal casks, concrete casks, concrete vaults, or dual-purpose casks.

2.10 Fuel Reprocessing History

Contrary to the description of irradiated fuel shipments contained in the Sequoyah FES, currently commercial nuclear fuel is not being reprocessed in the United States. The Nuclear Fuel Services (NFS) plant in West Valley, New York, was shut down in 1972 for alterations and expansion. In September 1976, NFS informed the Commission that it was withdrawing from the nuclear fuel reprocessing business.

The proposed Allied General Nuclear Services (AGNS) plant in Barnwell, South Carolina, is not licensed to operate. The General Electric Company facility in Morris, Illinois, has been abandoned as a fuel reprocessing facility.

In 1977, President Carter issued a policy statement on commercial reprocessing of spent nuclear fuel that effectively eliminated reprocessing as a part of the near-term nuclear fuel cycle.

Although no plants are licensed for reprocessing fuel, the storage pools at Morris and West Valley are licensed to store spent fuel. However, the West Valley facility is no longer accepting additional spent fuel and the Morris facility is accepting limited quantities of additional spent fuel only from certain plants.

3.0 RADIOACTIVE WASTES

The Sequoyah design contains waste treatment systems designed to collect and process the gaseous, liquid, and solid waste that might contain radioactive material. The radioactive waste treatment systems are evaluated in the FES, in the current Updated Final Safety Analysis Report (UFSAR), and in the Safety Evaluation Report (SER) dated March 1979. The proposed rerack will not involve any changes in the waste treatment systems described in the FES, UFSAR or SER.

3.1 Radioactive Material Released to the Atmosphere (Gaseous Radwaste)

With respect to releases of gaseous materials to the atmosphere, the only radioactive gas of significance that could be attributable to storing additional spent fuel assemblies for a longer time is the radionuclide Krypton-85 (Kr-85). Experience has demonstrated that after spent fuel has decayed 4 to 6 months, there is no longer a significant release of fission products, including Kr-85, from stored spent fuel containing cladding defects.

The gaseous fission products that have significant impacts on the offsite doses following short fuel cooling periods are the short-lived nuclides of iodine and xenon, which reach saturation inventories during incore operation. These inventories depend primarily on the fuel-specific power over the few months immediately preceding reactor shutdown. At the conservatively short cooling time of 100 hours used in the Sequoyah calculations (which is the minimum delay time that the Sequoyah Technical Specifications requires that must expire before irradiated fuel may be moved), most of the thyroid dose comes from Iodine-131, while most of the whole-body dose comes from Xenon-133.

At longer cooling times, Iodine-131 remains the dominant isotope for thyroid dose, while the major contributor to whole-body dose becomes Kr-85. The doses after long cooling periods are so low as to be insignificant compared to the doses calculated for the very short cooling time of 100 hours. Though the single iodine and xenon isotopes are the major contributors to offsite doses, the contributions from other isotopes were calculated and included in the overall dose assessment.

As a result of the assessment, TVA determined that the Sequoyah site boundary doses from the specified fuel handling accident for the storage of additional fuel in the spent fuel pool were well within the exposure guideline values of 10 CFR Part 100.

Most of the tritium in the spent fuel pool water results from activation of boron and lithium in the primary coolant, which will not be affected by the proposed changes. A relatively small amount of tritium is contributed during reactor operation by fissioning of reactor fuel and subsequent diffusion of the tritium through the fuel and cladding. Tritium releases from the fuel assemblies occur mainly during reactor operations and, to a limited extent, shortly after shutdown. Thus, expanding the spent fuel pool capacity will not increase the tritium activity in the pool.

The maximum bulk fuel pool temperature is anticipated to increase by less than 10°F due to the additional heat load arising from the proposed increase in the spent fuel inventory. The worst case total heat load for the emergency core off-load is less than one percent of the total plant heat loss to the environment. The increase in the pool water evaporation rate is within the capacity of the heating, ventilation and air conditioning (HVAC) system, resulting in negligible water vapor emission to the environment.

Most airborne releases of tritium and iodine result from evaporation of reactor coolant, which contains tritium and iodine in higher concentrations than the spent fuel pool. Therefore, even if there were a higher evaporation rate from the spent fuel pool, the resulting tritium and iodine releases would be small in comparison to the amount already evaluated for Sequoyah. In addition, the technical specifications require that the auxiliary building gas treatment system and the containment ventilation system isolation system be operable whenever irradiated fuel is being moved within the containment. Thus, any potential release, however unlikely, exceeding the conservatively set radiation monitors would be detected and isolate the area from the outside environment automatically. Also, gaseous releases from the fuel storage area are combined with other plant exhaust air. Normally, the concentration from the fuel storage area is negligible compared to the other releases and no significant increases are expected as a result of the expanded storage capacity.

3.2 Solid Radwaste

The necessity for resin replacement in the spent fuel pit demineralizer system is determined primarily by the requirement for water clarity, and the resin is normally changed about once per year. During reracking operations, a small

amount of additional used resin may be generated by operation of the spent fuel pit cleanup system on a one-time basis. No significant increase in the volume of solid radioactive waste is expected with the proposed expanded storage capacity.

During the reracking evolutions, the existing racks and the grid support structure will be removed, decontaminated as much as possible by washing and wipe-downs, and packaged for shipment. Shipping containers and procedures will conform to the Federal Department of Transportation (DOT) regulations and to the requirements of any state through which the shipment may pass, as set forth by the State DOT office. Present plans call for the material to be sent to a volume reduction facility, and then to the Barnwell, South Carolina, waste disposal facility. This will add approximately 1100 cubic feet to the burial volume, which is less than 15 percent of the plant's annual radwaste shipment output.

It is not expected that the new racks, cleanup or transportation of the existing spent fuel storage racks, and disposition of the resulting material will have a significant effect on the quality of the human environment. Any changes to the disposal plans for the spent fuel storage racks, such as shipment for use at another facility such as Watts Bar, if they occur, are not expected to have a significant impact on this evaluation.

3.3 Radioactive Material Released to Receiving Waters

It is not expected that there will be a significant increase in the radioactive liquid released from the plant as a result of the modifications. The spent fuel pit cooling and cleanup system operates as a closed system. The spent fuel pool demineralizer resin removes soluble radioactive materials from the spent fuel pool water. These resins are periodically replaced (usually annually) and disposed of as solid radioactive waste. The amount of activity in the resins may increase slightly due to the increased amount of spent fuel in the pool; however, the amount of radioactivity released to the environment as a result of the proposed change would be negligible.

4.0 RADIOLOGICAL IMPACT ASSESSMENT

All of the operations involved in reracking will utilize detailed procedures prepared with full consideration of the ALARA principles to minimize radiation exposure to personnel, including the divers that will be used.

The occupational exposure for the proposed modification of the SFP is estimated by the licensee to be less than 12 person-rems. This dose is less than 3 percent of the average annual occupational dose of 404 person-rems per unit per 10 years (1981-1991) for operating PWRs in the United States. It is not expected that the small increase in radiation dose will affect the licensee's ability to maintain individual occupational doses within the limits of 10 CFR 20, and as low as reasonably achievable. Normal radiation control procedures (NUREG-0800, US NRC 1981) and Regulatory Guide 8.8 (US NRC 1978) should preclude any significant occupational radiation exposures.

Based on present and projected operations in the SFP area, we estimate that the proposed operation of the modified SFP will add only a small fraction to the total annual occupational radiation dose at the facility.

Thus, we conclude that the proposed storage of spent fuel in the modified SFP will not result in any significant increase in dose received by the workers.

5.0 NON-RADIOLOGICAL IMPACT

The only non-radiological effluent affected by the spent fuel pool expansion is the additional spent fuel waste heat rejected from the plant. The total increase in heat load rejected to the environment will be small in comparison to the amount of total heat currently being released. No impact on aquatic life is expected. Thus, the increase in rejected heat will have a negligible effect on the environment.

6.0 ACCIDENT CONSIDERATIONS

The staff, in its related Safety Evaluation to be issued at a later date, will address both the safety and environmental aspects of a fuel handling accident. A fuel handling accident bounds the potential consequences of an accident attributable to operation of a spent fuel pool with high density racks. A fuel handling accident may be viewed as a "reasonably foreseeable" design basis event that the pool and its associated structures, systems, and components (including the racks) are designed and constructed to prevent.

The staff believes that the probability of severe structural damage occurring at Sequoyah is extremely low. This belief is based on the Commission's requirements for the design and construction of spent fuel pools and their contents, and on the licensee's adherence to approved industry codes and standards. For example, in the Sequoyah case, the spent fuel pit is a reinforced concrete structure that rests on the rock formation that underlies the Sequoyah site and is designed to seismic Category 1 standards. The spent fuel storage racks are Seismic Category 1 and, thus, are required to remain functional during and after a safe shutdown earthquake. The cooling water system is extremely reliable. In the unlikely event of a total loss of the cooling system, makeup water sources are available.

The staff acknowledges that if a severe accident occurred, the environmental impacts could be significant; however, these events are unlikely and adverse effects are not reasonably foreseeable in light of the design of the spent fuel pit and racks. Therefore, further discussion of severe accidents is not warranted, and the staff concludes that an environmental impact statement need not be prepared.

7.0 SUMMARY

The FGEIS on Handling and Storage of Spent Light Water Reactor Fuel concluded that the cost of the various alternatives reflects the advantage of continued generation of nuclear power with the accompanying spent fuel storage. Because

of the differences in spent fuel pool designs, the FGEIS recommended environmental evaluation of spent fuel pool expansions on a case-by-case basis.

The occupational radiation dose for the proposed operation of the expanded fuel pool is extremely small compared to the annual occupational exposure for a facility of this type. The small increase in radiation dose is not expected to affect the licensee's ability to maintain individual occupational doses at Sequoyah within the limits of 10 CFR Part 20 and ALARA program guidelines. Furthermore, the non-radiological impacts of expanding the spent fuel pool will be insignificant, and none of the alternatives are practical or reasonable.

7.1 Alternative Use of Resources

This action does not involve the use of resources not previously considered in connection with the Commission's Final Environmental Statement, dated February 13, 1974, in connection with Sequoyah.

7.2 Agencies and Persons Consulted

The staff reviewed the licensee's request. No other agencies or persons were consulted.

8.0 BASIS AND CONCLUSIONS FOR NOT PREPARING AN ENVIRONMENTAL IMPACT STATEMENT

The staff has reviewed the proposed spent fuel pool modification to Sequoyah relative to the requirements set forth in 10 CFR Part 51. Based on the environmental assessment, the staff has concluded that there are no significant radiological or non-radiological impacts associated with the proposed action and that the proposed license amendment will not have a significant effect on the quality of the human environment. Therefore, the Commission has determined, pursuant to 10 CFR 51.31, not to prepare an environmental impact statement for the proposed amendment.

Principal Contributor: D. LaBarge, J. Minns

Date: January 21, 1993

UNITED STATES NUCLEAR REGULATORY COMMISSIONTENNESSEE VALLEY AUTHORITYSEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2DOCKET NOS. 50-327 AND 50-328NOTICE OF ISSUANCE OF ENVIRONMENTAL ASSESSMENTAND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. DPR-77 and DPR-79, issued to the Tennessee Valley Authority (the licensee), for operation of the Sequoyah Nuclear Plant (SQN), Units 1 and 2, located in Soddy-Daisy, Hamilton County, Tennessee.

SUMMARY OF ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action:

The amendment would consist of changes to the Technical Specifications (TS) and would authorize an increase in the spent fuel storage capacity from the present 1386 assemblies to a total of 2316 assemblies.

The amendment to the TS is responsive to the licensee's application dated March 27, 1992, as supplemented by letters dated May 11 and 28, September 8, and October 8, 1992. The NRC staff has prepared an Environmental Assessment of the Proposed Action.

The "Final Generic Environmental Impact Statement (FGEIS) on Handling and Storage of Spent Light Water Power Reactor Fuel" (NUREG-0575), Volumes 1-3, concluded that the environmental impact of interim storage of spent fuel was negligible and the cost of the various alternatives reflects the advantage of

continued generation of nuclear power with the accompanying spent fuel storage. Because of the differences in design, the FGEIS recommended evaluating spent fuel pool expansions on a case-by-case basis.

Radiological Impact:

For SQN, the expansion of the storage capacity of the spent fuel pool will not create any significant additional radiological effects or non-radiological environmental impacts.

The additional whole body dose that might be received by an individual at the site boundary and the estimated dose to the population within an 80 kilometer radius is believed to be too small to have any significance when compared to the fluctuations in the annual dose this population receives from exposure to background radiation. The occupational radiation dose for the proposed operation of the expanded spent fuel pool is estimated to be less than one percent of the total annual occupational radiation exposure for this facility.

Non-Radiological Impact:

The only non-radiological impact affected by the spent fuel pool expansion is the waste heat rejected. The total increase in heat load rejected to the environment will be small in comparison to the amount of total heat currently being released. There is no significant environmental impact attributed to the waste heat from the plant due to this very small increase.

Alternative Use of Resources:

This action does not involve the use of resources not previously considered in connection with the Commission's Final Environmental Statement dated February 13, 1974, in connection with Sequoyah.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's request. No other agencies or persons were consulted.

FINDING OF NO SIGNIFICANT IMPACT

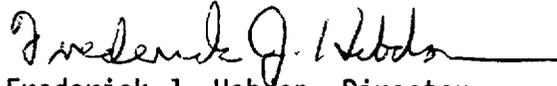
The NRC staff has reviewed the proposed spent fuel pool expansion to the facility relative to the requirements set forth in 10 CFR Part 51. Based on this assessment, the staff concludes that there are no significant radiological or non-radiological impacts associated with the proposed action and that the issuance of the proposed amendment to the license will have no significant impact on the quality of the human environment. Therefore, pursuant to 10 CFR 51.31, no environmental impact statement needs to be prepared for this action.

For further details with respect to this action, see: (1) the application for amendment to the Technical Specifications dated March 27, 1992, as supplemented by letters dated May 11 and 28, September 8, and October 8, 1992; (2) the FGEIS on Handling and Storage of Spent Light Water Power Reactor Fuel (NUREG-0575); (3) the Final Environmental Statement for the Sequoyah Nuclear Plant, Units 1 and 2, dated February 13, 1974; and (4) the Environmental Assessment dated

These documents are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555 and at the local public document room located at the Chattanooga-Hamilton County Library, 1101 Broad Street, Chattanooga, Tennessee 37402.

Dated at Rockville, Maryland, this 21st day of January 1993.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Frederick J. Hebdon", followed by a horizontal line.

Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation