

Attachment 1
DUKE POWER COMPANY
McGuire Nuclear Station
Proposed License Amendment

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1. Amend Facility Operating License NPF-9 by the following changes:

A. Revise paragraph 2K on page 19 to read:

K. The licensee is authorized to receive from the Oconee Nuclear Station, Units 1, 2 and 3, possess, and store irradiated Oconee fuel assemblies containing special nuclear material, enriched to not more than 3.24% by weight U-235 subject to the following conditions:

- a. Oconee fuel assemblies may not be placed in the McGuire Nuclear Station, Units 1 and 2, reactors.
- b. Irradiated fuel shipped to McGuire Nuclear Station, Units 1 and 2, from Oconee shall have been removed from the Oconee reactor no less than 270 days prior to shipment.
- c. No more than 300 Oconee irradiated fuel assemblies shall be received for storage at McGuire Nuclear Station Units 1 and 2, spent fuel pools.
- d. Burnup of Oconee fuel shipped shall be no greater than 36,000 MW days per metric ton.
- e. Receipt of irradiated Oconee fuel shall be limited by the use of the NFS-4 (NAC-1) or NLI-1/2 spent fuel casks.
- f. The spent fuel pool crane travel shall be restricted by administrative controls to the paths required by Technical Specification 3/4 9.7 whenever a spent fuel cask is being handled.

2. Amend Facility Operating License NPF-17 by the following changes:

A. Add paragraph 2J to read:

J. The licensee is authorized to receive from the Oconee Nuclear Station, Units 1, 2 and 3, possess, and store irradiated Oconee fuel assemblies containing special nuclear material, enriched to not more than 3.24% by weight U-235 subject to the following conditions:

- a. Oconee fuel assemblies may not be placed in the McGuire Nuclear Station, Units 1 and 2, reactors.
- b. Irradiated fuel shipped to McGuire Nuclear Station Units 1 and 2, from Oconee shall have been removed from the Oconee reactor no less than 270 days prior to shipment.

- c. No more than 300 Oconee irradiated fuel assemblies shall be received for storage at McGuire Nuclear Station, Units 1 and 2, spent fuel pools.
- d. Burnup of Oconee fuel shipped shall be no greater than 36,000 MW days per metric ton.
- e. Receipt of irradiated Oconee fuel shall be limited by the use of the NFS-4 (NAC-1) or NLI-1/2 spent fuel casks.
- f. The spent fuel pool crane travel shall be restricted by administrative controls to the paths required by Technical Specification 3/4 9.7 whenever a spent fuel cask is being handled.

B. Change the designation of paragraph 2.J on page 9 to 2.L.

Technical Justification

The existing license for McGuire Unit 1 allows for the storage of up to 300 spent fuel assemblies discharged from the Oconee Nuclear Station. While this provision applies only to the Unit 1 pool, storage of all or part of the allowed 300 Oconee assemblies in the McGuire Unit 2 spent fuel pool should technically have no increased impact on the safe operation of the Nuclear Station or its effect on the environment. This is primarily due to the identical design of the two pools and their related equipment and procedures as follows:

- A rerack of the Unit 1 pool scheduled for completion in late 1985 will install fuel racks which are identical in configuration to those installed recently in the Unit 2 pool. Both sets of racks were designed and fabricated by Westinghouse using common seismic, criticality, dimensional and thermal analyses. The resulting license submittal was common for both rerack jobs in all areas except for installation procedures. License approval for reracking both pools was obtained jointly from the NRC. The designs allow storage of B&W fuel.
- Spent fuel pool cooling equipment and resulting overall heat removal capacities of both pools are identical. Cooling Upgrade of either pool was determined unnecessary following the reracks.
- Cask handling procedures in both pools are identical in that the restrictive paths used for moving the cask in and out of the pit and platform area of the Unit 2 pool are a mirror image of those paths used in the Unit 1 pool. Procedures for opening, closing and deconing the cask are specific to the cask itself and will therefore be identical between pools.
- The cask tipping analysis covered in Chapter 9 of the McGuire FSAR is identical for both pools. This analysis addresses the question of whether or not the cask is capable of falling into the spent fuel pool. The same analysis is applicable for both pools because of the identical pool and pit geometry and dimensions between the two pools.
- Cask and fuel handling equipment between the Unit 1 and Unit 2 pools are identical. Both pools have 125 ton capacity overhead cranes used for cask movement. Both pools are equipped with a set of handling tools used specifically for the Oconee fuel. The decontamination pits and associated equipment are the same between both pools and the wire gate systems for flooding the cask pits are identical.
- Other areas which are considered part of the overall system for receipt, handling, and storage of spent fuel are the receiving area and related equipment, the spent fuel pool building ventilation system, area and process radiation monitoring systems and the pool water filtration system. These are all additional areas where the two spent fuel pools are identical.

- Both pools falling under the jurisdiction of a single nuclear station consequently share common emergency, health physics, security and safety procedures. Additionally, the manpower requirements for performing spent fuel handling-related work would be provided by the same group for both pools.

It is desireable from an overall standpoint to divide the inventory of Oconee spent fuel between the two pools at McGuire. This would reduce the need for on-site transfers of spent fuel in order to maintain a balanced inventory between the two pools.

Attachment 3

Analysis of Significant Hazards Considerations

As required by 10 CFR 50.91, this analysis is provided concerning whether the proposed modifications of the Technical Specifications involve significant hazards considerations, as defined by 10 CFR 50.92.

The proposed License Amendment involves adding the authority to possess, receive and store irradiated Oconee fuel assemblies at McGuire Unit 2 in a manner identical to that presently authorized for McGuire Unit 1.

The capability of the McGuire Unit 2 spent fuel pool to store irradiated Oconee fuel assemblies has been previously reviewed and accepted by NRC. The systems and equipment for handling spent fuel are essentially identical at each McGuire Unit. Finally, the restrictions currently in place on McGuire Unit 1 concerning possession, receipt, and storage of irradiated Oconee fuel assemblies will be incorporated into the McGuire Unit 2 license.

This proposed License Amendment is essentially an administrative change. The technical and environmental issues associated with possession, receipt, and storage of irradiated Oconee Fuel assemblies at McGuire have been addressed previously.

The proposed License amendment herein does not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- 3) Involve a significant reduction in a margin of safety.

Based upon the preceding, Duke Power Company concludes that the proposed amendments do not involve a significant hazard consideration.