NUCLEAR REGULATORY COMMISSION

[Docket No. 50–341]

In the Matter of Detroit Edison Company (Fermi 2); Exemption

I

The Detroit Edison Company (the licensee) is the holder of Facility Operating License No. NPF–43, which authorizes operation of Fermi 2. The license provides, among other things, that the licensee is subject to all rules, regulations, and orders of the Commission now or hereafter in effect.

The facility consists of a boiling-water reactor at the licensee's site located in Monroe County, Michigan.

II

Section 70.24 of Title 10 of the Code of Federal Regulations, ''Criticality accident requirements,'' requires that each licensee authorized to possess special nuclear material (SNM) shall maintain a criticality accident monitoring system in each area where such material is handled, used, or stored. Subsections (a)(1) and (a)(2) of 10 CFR 70.24 specify detection and sensitivity requirements that these monitors must meet. Subsection (a)(1) also specifies that all areas subject to criticality accident monitoring must be covered by two detectors.

Paragraph (a) of 10 CFR 70.14 states that the Commission may, upon application of any interested person, grant such exemptions from the requirements of the regulations in 10 CFR Part 70 as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

III

The SNM that could be assembled into a critical mass at Fermi 2 is in the form of nuclear fuel; the quantity of SNM other than fuel that is stored on site in any given location is small enough to preclude achieving a critical mass. The Commission has evaluated the possibility of an inadvertent criticality of the nuclear fuel at Fermi 2 and has determined that it is extremely unlikely for such an accident to occur if the licensee meets the following seven criteria:

1. Only three new fuel assemblies are allowed out of a shipping cask or storage rack at one time.

2. The k-effective does not exceed 0.95, at a 95% probability, 95% confidence level in the event that the fresh fuel storage racks are filled with fuel of the maximum permissible U–235 enrichment and flooded with pure water.

3. If optimum moderation occurs at low moderator density, then the k-effective does not exceed 0.98, at a 95% probability, 95% confidence level in the event that the fresh fuel storage racks are filled with fuel of the maximum permissible U–235 enrichment and flooded with a moderator at the density corresponding to optimum moderation.

4. The k-effective does not exceed 0.95, at a 95% probability, 95% confidence level in the event that the spent fuel storage racks are filled with fuel of the maximum permissible U–235 enrichment and flooded with pure water.

5. The quantity of forms of SNM, other than nuclear fuel, that are stored on site in any given area is less than the quantity necessary for a critical mass.

6. Radiation monitors, as required by General Design Criterion 63, are provided in fuel storage and handling areas to detect excessive radiation levels and to initiate appropriate safety actions.

7. The maximum nominal U–235 enrichment is limited to 5.0 weight percent.

By letter dated April 27, 1998, the licensee requested an exemption from 10 CFR 70.24. In this request the licensee addressed the seven criteria given above. The Commission has reviewed the licensee's submittal and has determined that Fermi 2 meets the applicable criteria. Criteria 2 and 3 are not applicable to Fermi 2 because plant procedures preclude the use of the fresh fuel storage racks. Therefore, the staff has determined that it is extremely unlikely for an inadvertent criticality to occur in SNM handling or storage areas at Fermi 2.

The purpose of the criticality monitors required by 10 CFR 70.24 is to ensure that if a criticality were to occur during the handling of SNM, personnel would be alerted to that fact and would take appropriate action. The staff has determined that it is extremely unlikely that such an accident could occur; furthermore, the licensee has criticality accident monitors conforming to 10 CFR 70.24 in the areas in which fuel is handled outside the inner metal shipping cask and administrative controls over the handling of the casks in other areas. The low probability of an inadvertent criticality, together with the licensee's criticality accident monitors and administrative controls, constitutes good cause for granting an exemption to the requirements of 10 CFR 70.24(a).

IV

The Commission has determined that, pursuant to 10 CFR 70.14, this exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. Therefore, the Commission hereby grants the Detroit Edison Company, an exemption from the requirements of 10 CFR 70.24(a) for Fermi 2.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the quality of the human environment (63 FR 29256).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 2nd day of June 1998.

For the Nuclear Regulatory Commission.

Samuel J. Collins,

Director, Office of Nuclear Reactor Regulation.

[FR Doc. 98–15268 Filed 6–8–98; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–260 and 50–296]

Tennessee Valley Authority; Notice of Consideration of Issuance of Amendment to Facility Operating Licenses and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (NRC, the Commission) is considering issuance of an amendment to Facility Operating License Nos. DPR–52 and DPR–68 issued to the Tennessee Valley Authority (TVA or the licensee) for operation of the Browns Ferry Nuclear Plant (BFN), Units 2 and 3, located in Limestone County, Alabama.

Presently, the BFN Units 2 and 3 are licensed to operate at a maximum rated thermal power of 3293 MWt. By letter dated October 1, 1997, as supplemented October 14, 1997, March 16, April 1 and 28, May 1 and 20, 1998, the licensee proposed changes to the BFN Units 2 and 3 Technical Specifications (TS) to allow operation of the Units at the uprated power level of 3458 MWt which represents a proposed power level increase of 5 percent. The licensee proposed several TS changes to revise the rated thermal power value, flow, pressure and temperature values for various systems and structures, relief valve setpoints and associated surveillance requirements to reflect operation of the BFN Units 2 and 3 at the increased power level. For further details with respect to specific TS