

### UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

## TOLEDO EDISON COMPANY CENTERIOR SERVICE COMPANY

AND

#### THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

DOCKET NO. 50-346

#### DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 204 License No. NPF-3

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Toledo Edison Company, Centerior Service Company, and the Cleveland Electric Illuminating Company (the licensees) dated October 2, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission:
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-3 is hereby amended to read as follows:

#### (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 204, are hereby incorporated in the license. The Toledo Edison Company shall operate the facility in accordance with the Technical Specifications.

 This license amendment is effective as of its date of issuance and shall be implemented not later than 90 days after issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Linda L. Gundrum, Project Manager

Project Directorate III-3

Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical

Specifications

Date of issuance: December 8, 1995

# FACILITY OPERATING LICENSE NO. NPF-3 DOCKET NO. 50-346

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

| Remove            | Insert            |
|-------------------|-------------------|
| XIV<br>5-1<br>5-2 | XIV<br>5-1<br>5-2 |
| 5-3               |                   |
| 5-4               |                   |
| 5-5               |                   |
| 5-6               |                   |
| 5-7               |                   |
| 5-8               |                   |
| 5-9               |                   |
| 5-10              |                   |
|                   |                   |

#### INDEX

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| SECT | ION                            |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        | PAGE                  |       |
| 5.1  | Site Location                  |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        | 5-1                   |       |
| 5.2  | Deleted                        |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        |                       |       |
| 5.3  | Reactor Core                   |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        |                       |       |
|      | Fuel Assembl<br>Control Rods   | ies.   |             |                 |                |       |  |  |          |   | *         |        |          | •        |                        | :           |                 |  |         |           |         | :      |          |        |        | 5-1<br>5-1            |       |
| 5.4  | Deleted                        |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        |                       |       |
| 5.5  | Deleted                        |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        |                       |       |
| 5.6  | Fuel Storage                   |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        |                       |       |
|      | Criticality. Drainage Capacity |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        | 5-2                   |       |
| 5.7  | Deleted                        |  |             |                 |                |       |  |  |          |   |           |        |          |          |                        |             |                 |  |         |           |         |        |          |        |        |                       |       |

#### 5.1 Site Location

The Davis-Besse Nuclear Power Station, Unit Number 1, site is located on Lake Erie in Ottawa County, Ohio, approximately six miles northeast from Oak Harbor, Ohio and 21 miles east from Toledo, Ohio. The exclusion area boundary has a minimum radius of 2400 feet from the center of the plant.

#### 5.2 (Deleted)

#### 5.3 Reactor Core

#### 5.3.1 Fuel Assemblies

The reactor core shall contain 17) suel assemblies. Each assembly shall consist of a matrix of zircaloy or ZIRLO clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide ( $\mathrm{UO}_2$ ) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in non-limiting core regions.

#### 5.3.2 Control Rods

The reactor core shall contain 53 safety and regulating control rod assemblies and 8 axial power shaping rod (APSR) assemblies. The nominal values of absorber material for the safety and regulating control rods shall be 80 percent silver, 15 percent indium and 5 percent cadmium. The absorber material for the APSRs shall be 100 percent Inconel.

#### 5.4 (Deleted)

#### 5.5 (Deleted)

#### 5.6 Fuel Storage

#### 5.6.1 Criticality

- 5.6.1.1 The spent fuel storage racks are designed and shall be maintained with:
  - a. A K<sub>eff</sub> equivalent to less than or equal to 0.95 when flooded with unborated water, which includes a conservative allowance of 1% delta k/k for calculation uncertainty. (continued)

#### 5.6 Fuel Storage (continued)

- b. A rectangular array of stainless steel cells spaced 12 31/32 inches on centers in one direction and 13 3/16 inches on centers in the other direction. Fuel assemblies stored in the spent fuel pool shall be placed in a stainless steel cell of 0.125 inches nominal thickness or in a failed fuel container.
- c. Fuel assemblies stored in the spent fuel pool in accordance with Technical Specification 3.9.13.
- 5.6.1.2 The new fuel storage racks are designed and shall be maintained with:
  - a. A K<sub>eff</sub> equivalent to less than or equal to 0.95 when flooded with unborated water, which includes a conservative allowance of 1% delta k/k for uncertainties as described in Section 9.1 of the USAR.
  - b. A K<sub>eff</sub> equivalent to less than or equal to 0.98 when immersed in a hydrogenous "mist" of such a density that provides optimum moderation (i.e., highest value of K<sub>eff</sub>), which includes a conservative allowance of 1% delta k/k for uncertainties as described in Section 9.1 of the USAR.
  - c. A nominal 21 inch center-to-center distance between fuel assemblies placed in the storage racks.
  - d. Fuel assemblies having a maximum initial enrichment of 5.0 weight percent uranium-235.

#### 5.6.2 Drainage

The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below 9 feet above the top of the fuel storage racks.

#### 5.6.3 Capacity

The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 735 fuel assemblies

5.7 (Deleted)