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Docket No. 50-346

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Mr. Richard P. Crouse
Vice President, Nuclear
Toledo Edison Company
Edison Plaza - Stop 712
300 Madison Avenue
Toledo, Ohio 43652

Dear Mr. Crouse:

SUBJECT: AMENDMENT NO. 77 TO FACILITY OPERATING LICENSE NO. NPF-3;
POWER REMOVAL FROM DH 11 AND DH 12 DURING POWER OPERATION

The Commission has issued the enclosed Amendment No. 77 to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. This amendment is in response to Item 1 of your application dated November 21, 1983 (No. 997). Item 2 of your application was incorporated into the Appendix A Technical Specifications by Amendment 68 issued on May 30, 1984.

This amendment modifies Appendix A Technical Specification Section 4.5.2.d to permit removal of power to the Decay Heat Removal System suction line isolation valves, DH-11 and DH-12, during operation in Modes 1, 2 or 3. The staff Safety Evaluation supporting this amendment is enclosed.

The Notice of Issuance will be included in the Commission's Monthly Notice.

Sincerely,

"ORIGINAL SIGNED BY:"

Albert W. De Agazio, Project Manager
Operating Reactors Branch #4
Division of Licensing

Enclosures:

1. Amendment No. 77
2. Safety Evaluation

cc w/enclosures:
See next page

ORB#4:DL
RIngram
10/26/84

ORB#4:DL *ADe*
Ade Agazio;cf
10/26/84

ORB#4:DL
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10/26/84

AD:DR:DL
GLainas
10/5/84

OELD
M. KARMAN
10/30/84
[Signature]

Toledo Edison Company

cc w/enclosure(s):

Mr. Donald H. Hauser, Esq.
The Cleveland Electric
Illuminating Company
P. O. Box 5000
Cleveland, Ohio 44101

Gerald Charnoff, Esq.
Shaw, Pittman, Potts
and Trowbridge
1800 M Street, N.W.
Washington, D. C. 20036

Paul M. Smart, Esq.
Fuller & Henry
300 Madison Avenue
P. O. Box 2088
Toledo, Ohio 43603

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
7910 Woodmont Avenue, Suite 220
Bethesda, Maryland 20814

President, Board of County
Commissioners of Ottawa County
Port Clinton, Ohio 43452

Attorney General
Department of Attorney General
30 East Broad Street
Columbus, Ohio 43215

Harold Kohn, Staff Scientist
Power Siting Commission
361 East Broad Street
Columbus, Ohio 43216

Mr. James G. Keppler, Regional Administrator
U. S. Nuclear Regulatory Commission, Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Mr. Robert F. Peters
Manager, Nuclear Licensing
Toledo Edison Company
Edison Plaza
300 Madison Avenue
Toledo, Ohio 43652

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
5503 N. State Route 2
Oak Harbor, Ohio 43449

Regional Radiation Representative
EPA Region V
230 South Dearborn Street
Chicago, Illinois 60604

Ohio Department of Health
ATTN: Radiological Health
Program Director
P. O. Box 118
Columbus, Ohio 43216

James W. Harris, Director (Addressee Only)
Division of Power Generation
Ohio Department of Industrial Relations
2323 West 5th Avenue
P. O. Box 825
Columbus, Ohio 43216



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

TOLEDO EDISON 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. 77
License No. NPF-3

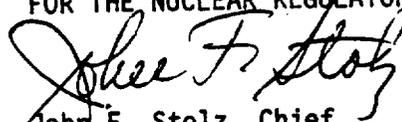
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Toledo Edison Company and The Cleveland Electric Illuminating Company (the licensees) dated November 21, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, 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.
2. 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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 77, are hereby incorporated in the license. The Toledo Edison Company shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 6, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 77

FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

Replace page 3/4 5-4 of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains a vertical line indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

EMERGENCY CORE COOLING SYSTEMS

ECCS SUBSYSTEMS - T_{avg} 280°F

LIMITING CONDITION FOR OPERATION

3.5.2 Two independent ECCS subsystems shall be OPERABLE with each subsystem comprised of:

- a. One OPERABLE high pressure injection (HPI) pump,
- b. One OPERABLE low pressure injection (LPI) pump,
- c. One OPERABLE decay heat cooler, and
- d. An OPERABLE flow path capable of taking suction from the borated water storage tank (BWST) on a safety injection signal and manually transferring suction to the containment sump during the recirculation phase of operation.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one ECCS subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 72 hours or be in HOT SHUTDOWN within the next 12 hours.
- b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date.

SURVEILLANCE REQUIREMENTS

4.5.2 Each ECCS subsystem shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.

SURVEILLANCE REQUIREMENTS

- b. At least once per 18 months, or prior to operation after ECCS piping has been drained by verifying that the ECCS piping is full of water by venting the ECCS pump casings and discharge piping high points.
- c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the containment which could be transported to the containment emergency sump and cause restriction of the pump suction during LOCA conditions. This visual inspection shall be performed:
 1. For all accessible areas of the containment prior to establishing CONTAINMENT INTEGRITY, and
 2. Of the areas affected within containment at the completion of each containment entry when CONTAINMENT INTEGRITY is established.
- d. At least once per 18 months by:
 1. Verifying that the interlocks:
 - a) Close DH-11 and DH-12 and deenergize the pressurizer heaters, if either DH-11 or DH-12 is open and a simulated reactor coolant system pressure which is greater than the trip setpoint (<438 psig) is applied. The interlock to close DH-11 and/or DH-12 is not required if the valve is closed and 480 V AC power is disconnected from its motor operators.
 - b) Prevent the opening of DH-11 and DH-12 when a simulated or actual reactor coolant system pressure which is greater than the trip setpoint (<438 psig) is applied.
 2.
 - a) A visual inspection of the containment emergency sump which verifies that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or corrosion.
 - b) Verifying that on a Borated Water Storage Tank (BWST) Low-Low Level interlock trip, the BWST Outlet Valve HV-DH7A (HV-DH7B) automatically close in <75 seconds after the operator manually pushes the control switch to open the Containment Emergency Sump Valve HV-DH9A (HV-DH9B) which should be verified to open in <75 seconds.
 3. Verifying a total leak rate ≤ 20 gallons per hour for the LPI system at:
 - a) Normal operating pressure or hydrostatic test pressure of > 150 psig for those parts of the system downstream of the pump suction isolation valve, and
 - b) ≥ 45 psig for the piping from the containment emergency sump isolation valve to the pump suction isolation valve.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 77 TO FACILITY OPERATING LICENSE NO. NPF-3

TOLEDO EDISON COMPANY

AND

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

DOCKET NO. 50-346

Introduction

In July 1983, the NRC staff conducted an inspection of the Davis-Besse Nuclear Power Station to verify compliance to NRC requirements for fire protection. One result of this inspection was a request to Toledo Edison Company (TED) to remove power to the decay heat removal (DHR) system suction line isolation valves, DH-11 and DH-12, during power operation. This request is discussed in the staff Safety Evaluation Report on the Fire Protection Corrective Action Plan, dated September 23, 1983. This action is intended to ensure that a fire in the vicinity of the control or power circuitry of the DHR system valves would not cause spurious opening of these valves during normal operation initiating a LOCA outside of containment.

Discussion and Evaluation

In response to the staff request, TED, by letter dated November 21, 1983, requested a change to Technical Specification Section 4.5.2.d which would permit power removal from valves DH-11 and DH-12 when in operational Modes 1, 2 or 3, when these valves must be closed because the reactor coolant system pressure is higher than the DHR system design pressure. TED stated that the valve position indication is unaffected by removal of the power from the motor operators since the valve position indication is powered from a separate power source.

To achieve cold shutdown, operation of the isolation valves (DH-11 and DH-12) motor power supply breakers will be required. Then the valves could be opened to initiate residual heat removal (RHR) cooling. The actions that need to be taken by an operator outside of the control room and the time necessary to take them have been examined and have been determined to be acceptable.

TED has verified by letter dated May 2, 1984, that it will take less than ten minutes for the operators to reach the motor control centers for valves DH-11 and DH-12. The breaker for valve DH-11 is located at Room 427, one level below the control room and the breaker for valve DH-12 is located at Room 304, two levels below the control room. The operator will not be exposed to any unacceptable environmental conditions by going to the motor control centers. Both motor control centers are located within the radiation control access which has a nominal exposure of 10 mR per hour.

Although Branch Technical Position RSB 5-1 states that the plant should be capable of being brought to the cold shutdown conditions from inside the control room, the Davis-Besse Nuclear Power Station is a class 3 plant under the implementation plan for BTP RSB 5-1 and, therefore, was not reviewed against RSB BTP 5-1.

The staff finds that the proposed changes to Technical Specification Section 4.5.2.d will not cause unsafe operation of the plant and therefore, they are acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20, and a change in a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: November 6, 1984

Principal Contributors: C. Liang