DRB-016

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Docket No. 50-346

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

Dear Mr. Crouse:

SUBJECT: AMENDMENT NO. 59 TO FACILITY OPERATING LICENSE NO. NPF-3; EXTENSION OF SURVEILLANCE DUE DATES

The Commission has issued the enclosed Amendment No. 59 to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated May 2, 1983 (No. 941).

The amendment changes the TSs to permit a one-time extension to September 17, 1983, regarding surveillance tests on certain instrumentation which were due on May 17, 1983.

A copy of the Safety Evaluation is also enclosed. 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. 59 to NPF-3
2. Safety Evaluation

cc w/enclosures:
See next page

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OFFICE							
SURNAME	RIngram	ADe Agazio:cf	JStolz	GLainas	M Rothschild		
DATE	6/10/83	6/10/83	6/13/83	6/14/83	6/13/83		

No legal objection

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

JUNE 16 1983

MEMORANDUM FOR: Robert A. Clark, Chief
Operating Reactors Branch #3, DL

FROM: John F. Stolz, Chief
Operating Reactors Branch #4, DL

SUBJECT: REQUEST FOR PUBLICATION IN MONTHLY FR NOTICE-
NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The Toledo Edison Company and The Cleveland Electric Illuminating Company, Docket No. 50-346, Davis-Besse Nuclear Power Station, Unit No. 1, Ottawa County, Ohio.

Date of application for amendment: May 2, 1983

Brief description of amendment: The amendment changes the Technical Specifications to extend the surveillance test due date from May 17, 1983, to September 17, 1983, for the steam generator outlet steam pressure channels in the Remote Shutdown Instrumentation and Post Accident Monitoring Instrumentation.

Date of issuance: June 16, 1983 . Effective date: June 16, 1983

Amendment No. 59 Facility Operating License No.: NPF-3

Amendment revised the Technical Specifications

Date of initial notice in Federal Register: May 16, 1983, 48 FR 22036

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated June 16, 1983.

No significant hazards consideration comments received: No

Source: N/A

Location of Local Public Document Room: University of Toledo Library, Documents Department, 2801 Bancroft Avenue, Toledo, Ohio.

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OFFICE	ORB#4:DL	ORB#4:DL	C-ORB#4:DL	*ORIGINAL SIGNED BY JOHN F. STOLZ*		
SURNAME	RIngram;cf	ADe Agazio	JStolz	John F. Stolz, Chief Operating Reactors Branch #4 Division of Licensing		
DATE	6/10/83	6/10/83	6/12/83			

Toledo Edison Company

cc w/enclosure(s):

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

Attorney General
Department of Attorney General
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Power Siting Commission
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Columbus, Ohio 43216

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
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Oak Harbor, Ohio 43449

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EPA Region V
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Chicago, Illinois 60604

Ohio Department of Health
ATTN: Radiological Health
Program Director
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

THE 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. 59
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 May 2, 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.

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2. Accordingly, Facility Operating License No. NPF-3 is hereby amended as indicated below and by changes to the Technical Specifications as indicated in the attachment to this license amendment:

   Revise paragraph 2.C.(2) to read as follows:

   Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No.59 , 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 16, 1983

ATTACHMENT TO LICENSE AMENDMENT NO. 59

FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages as indicated. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Pages

3/4 3-45

3/4 3-49

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Reactor Trip Breaker Indication	M	N.A.
2. Reactor Coolant Temperature-Hot Legs	M	R
3. Reactor Coolant System Pressure	M	R
4. Pressurizer Level	M	R
5. Steam Generator Outlet Steam Pressure	M	R*
6. Steam Generator Startup Range Level	M	R
7. Control Rod Position Limit Switches	M	R

*18 month surveillance test due May 17, 1983, may be delayed until 2400 hours September 17, 1983.

POST-ACCIDENT INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.6 The post-accident monitoring instrumentation channels shown in Table 3.3-10 shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With the number of OPERABLE post-accident monitoring channels less than required by Table 3.3-10, either restore the inoperable channel to OPERABLE status within 30 days, or be in HOT SHUTDOWN within the next 12 hours.

b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.6 Each post-accident monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3-10.

TABLE 4.3-10

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. SG Outlet Steam Pressure	M	R*
2. RC Loop Outlet Temperature	M	R
3. RC Loop Pressure	M	R
4. Pressurizer Level	M	R
5. SG Startup Range Level	M	R
6. Auxiliary Feedwater Status	M	NA
7. Containment Vessel Hydrogen	M	R
8. Containment Vessel Post-Accident Radiation	M	R
9. Containment Vessel Isolation Status	M	NA
10. SFAS Status	M	NA
11. Safety Features Equipment Status	M	NA
12. RPS Status	M	NA
13. SFRCS Status	M	NA
14. High Pressure Injection Flow	M	R

*18 month surveillance test due May 17, 1983, may be delayed until 2400 hours September 17, 1983.

TABLE 4.3-10 (Continued)

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
15. Low Pressure Injection (DHR) Flow	M	R
16. HPI System Pump and Valve Status	M	NA
17. LPI System Pump and Valve Status	M	NA
18. Containment Spray Pump and Valve Status	M	NA
19. Core Flood Valve Status	M	NA
20. BWST Valve Status	M	NA
21. Containment Emergency Sump Valve Status	M	NA
22. Containment Air Recirculation Fan Status	M	NA
23. Containment Air Cooling Fan Status	M	NA
24. EVS Fan and Damper Status	M	NA
25. Auxiliary Feedwater Flow Rate	M	R
26. RC System Subcooling Margin Monitor	M	R
27. PORV Position Indicator	M	R
28. PORV Block Valve Position Indicator	M	R
29. Pressurizer Safety Valve Position Indicator	M	R
30. BWST Level	S	R

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 59 TO FACILITY OPERATING LICENSE NO. NPF-3

TOLEDO EDISON COMPANY

AND

CLEVELAND ELECTRIC ILLUMINATING COMPANY

DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1

DOCKET NO. 50-346

Introduction

By letter dated May 2, 1983, The Toledo Edison Company (the licensee) requested changes to Facility Operating License NPF-3, Appendix A Technical Specifications, for the Davis-Besse Nuclear Power Station, Unit No. 1. The proposed changes would permit a one-time extension to September 17, 1983, of certain surveillance requirements which were to have been completed no later than May 17, 1983.

Discussion

Technical Specification 3.3.3.5 and Table 3.3-9 and Technical Specification 3.3.3.6 and Table 3.3-10 specify the requirements for the Remote Shutdown Instrumentation and Post Accident Instrumentation when the facility is in the Power, Startup, or Hot Standby operational mode. Tables 4.3-6 and 4.3-10 specify the surveillance requirements for the instrumentation. The Action Statements of the above Technical Specifications permit continued operation of the unit with less than the specified minimum number of channels operable for up to 30 days. If, within 30 days, at least the minimum requirements are not restored, then the unit is to be in Hot Shutdown within the next 12 hours.

Surveillance Requirements 4.3.3.5 and 4.3.3.6 require that the operable status of the instrumentation be demonstrated by performing channel checks and channel calibrations at certain prescribed frequencies. These checks and calibrations must be performed, per Surveillance Requirement 4.0.2, within the specified time interval (or frequency) with an allowable extension not to exceed 25% and the total combined interval for any three consecutive tests not to exceed 3.25 times the specified time interval.

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One of the requirements, common to both Tables 3.3-9 and 3.3-10, is for one channel per steam generator of steam generator outlet steam pressure. (A single instrument channel per steam generator satisfies the requirements of both Tables 3.3-9 and 3.3-10). Surveillance testing of these pressure instrument strings which are used only for indication purposes (no automatic equipment actuation) was performed on the following dates:

July 13, 1977	
	347 day interval
June 25, 1978	
	829 day interval
October 1, 1980	
	414 day interval
November 19, 1981	

In accordance with Surveillance Requirement 4.0.2 and Tables 4.3-6 and 4.3-10, the surveillance interval for the pressure instruments should be 550 days plus an allowance of no more than 25% for a maximum interval of 687 days. The total combined time for any three consecutive intervals should not exceed 1787 days. The interval between the second and third surveillance test exceeded the maximum single interval allowable of 687 days. However, this was acceptable at that time since the facility was shutdown when the surveillance tests were due. The required surveillance testing was done prior to restart of the facility. (The outage started in April 1980 and ended in November 1980).

Applying the specification for the combined time for any three consecutive intervals requires that surveillance testing should have been performed no later than May 17, 1983. Therefore, on May 2, 1983, the licensee applied for a license amendment which would provide a one-time extension of the surveillance requirements discussed herein to September 17, 1983. This would result, if granted, in a 667-day interval since the last surveillance on November 19, 1981. This interval is within the 687-day allowable for a single interval, but the combined total for the last three intervals would be 1910 days which is longer than the 1787 days permitted by the Technical Specifications.

At the time the licensee submitted application for amendment, the facility was operating at power. The licensee's estimate of the earliest date for shutdown for refueling is July 29, 1983.(1) The licensee has indicated(2) that in order to completely perform the surveillance testing of the pressure channels, it would be necessary to enter the containment building to gain access to the pressure transmitters. Entry to containment while the reactor is operating is possible but is done only for essential purposes to minimize personnel radiation exposure. If entry is deemed necessary, special protective equipment must be worn by the personnel involved to protect against the radioactive atmosphere inside the building.

The licensee has stated[2] that a minimum of four days is required after reactor shutdown to allow access to containment without the special protective equipment. Two of these days are to allow the short-lived airborne fission and activation products to decay and the other two days are to allow purging to the environment the remaining airborne activity. The nominal activity release expected from such a procedure is 50-100 curies of the longer-lived noble gas fission products.

Evaluation

The eighteen-month surveillance test interval for these systems was selected to be consistent with the maximum anticipated interval between refueling outages and is based on engineering judgment to achieve the dual goals of the need to require periodic surveillance tests but not interfere substantially with unit availability. These tests are intended to identify for correction any drift in calibration or system deterioration which might occur over the long term. These tests are not intended to reveal random system or component failure which might occur. The tolerances on the individual and consecutive invervals are intended to ensure that the reliability associated with the surveillance activity is not significantly degraded beyond that obtained from the nominal specified interval.

The licensee has stated that an examination of the records from the past surveillance testing/calibration reveals that the "as found" and "as left" conditions for the steam generator outlet steam pressure instruments were within the tolerance as specified in the Updated Safety Analysis Report (USAR). This tolerance is stated to be ± 2% of full scale or 24 psig based on an indicator scale of 0-1200 psig. Thus, past surveillance testing of these instruments has shown that instrument drift has had no significant effect upon instrumentation calibration. Based on the experience with these instruments, satisfactory performance can be expected for the extended surveillance interval requested by the licensee. The long interval between the first and second surveillance test, i.e., 829 days, in no way influences the current or future expected performance of the instrumentation.

Considering the sequence of the four surveillance tests conducted to date and assuming that the next surveillance would occur no sooner than September 17, 1983, the extended due date proposed by the licensee, the average interval between surveillance tests would be 564 days. The Technical Specifications permit testing to be conducted such that the average interval for a sequence of five consecutive tests could be as long as 584 days (three intervals of 550 days and one of 687 days). The effect of the Technical Specification for the combined intervals is to assure that the average surveillance interval is within acceptable bounds for a facility which is operating routinely.

However, the first refueling outage for the Davis-Besse facility was substantially longer than is normally anticipated. To have performed the third surveillance test within the prescribed interval would have

required the surveillance to be done while the plant was in the refueling mode and almost five months before restart. This test at that time would contribute little towards protecting the health and safety of the public. Instead, the test was done just prior to restart at a time when its safety contribution was greatest.

Based on the above considerations, we find that the proposed extension of the surveillance due date to September 17, 1983, for the steam generator outlet steam pressure channels for the Remote Shutdown Instrumentation and Post Accident Instrumentation will not impose any adverse impact on the health and safety of the public. Therefore, we find the licensee's proposed Technical Specification change acceptable. The Action Statements to Technical Specifications 3.3.3.5 and 3.3.3.6 became effective on May 17, 1983, upon failure to perform the required surveillance tests. The Action Statements require the performance of the surveillance tests no later than June 16, 1983, otherwise the facility is to be placed in Hot Shutdown within 12 hours. This amendment, which extends the due date of the surveillance tests to September 17, 1983, also has the effect, upon issuance, of granting relief from those Action Statements.

The licensee, in his application, committed to performing the required surveillance test before the refueling outage if the plant is shutdown for a period of time greater than two weeks and containment is open for general access. Since the 1983 refueling outage is scheduled to be eight weeks(1) long, we believe that it is desirable for the licensee to conduct the surveillance test at the earliest opportunity consistent with good personnel protection practices and the licensee's obligation to maintain offsite radioactivity releases as low as practicable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not 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: June 16, 1983

This Safety Evaluation was prepared by Albert De Agazio.

References

(1) Telephonic communication between L. D. Young, Toledo Edison Company, and A. W. De Agazio, USNRC, May 23, 1983.

(2) Telephonic communication between R. F. Peters, Toledo Edison Company, and A. W. De Agazio, USNRC, May 27, 1983.