October 30, 1985

DMB016

Docket No. 50-346

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Mr. Joe Williams, Jr.
Vice President, Nuclear
Toledo Edison Company
Edison Plaza - Stop 712
300 Madison Avenue
Toledo, Ohio 43652

Dear Mr. Williams:

SUBJECT: 1. REQUEST FOR ADDITIONAL INFORMATION
2. MAINTENANCE SAFETY EVALUATION REPORT

On September 10, 1985, Toledo Edison Company submitted its response to the NRC letter of August 14, 1985. Subsequent revisions were submitted on October 1 and October 16, 1985. Our review of your submittal is still underway, however, it has progressed sufficiently in certain areas to reveal a need for additional information as identified in Enclosure 1 to this letter.

Your submittal is also incomplete in that your responses to some of the major issues and concerns of the NRC are still in preparation. Therefore, additional information requests may be forthcoming when we have had an opportunity to review these later submittals.

Please provide your responses to this letter no later than November 8, 1985. The information requested in the letter affect fewer than ten respondents; therefore, OMB clearance under P.L. 96-511 is not required.

Enclosure 2 to this letter is our Safety Evaluation Report on the maintenance program at Davis Besse. The information requested in Enclosure 1, Items 1 and 2 are drawn from this report.

Sincerely,

ORIGINAL SIGNED BY
JOHN F. STOLZ

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

Enclosures:
1. Request for Additional Information
2. Safety Evaluation Report

cc w/enclosures:
See next page

ORB#4:DL
ADe Agazio;cf
10/29/85

ORB#4:DL
JStolz
10/30/85

ORB#4:DL
C. McCracken
10/30/85

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President, Board of
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Port Clinton, Ohio 43452

Enclosure 1

REQUEST FOR ADDITIONAL INFORMATION

1. With regard to the Toledo Edison Company Maintenance Improvement Program, clearly identify the actions and associated sub-tasks which are to be completed prior to restart of Davis-Besse. For the actions and sub-tasks which are to be completed after restart, provide the schedule for completion of each.

2. The information submitted for the Preventive Maintenance Program is insufficient for evaluation. Provide details of the new program being implemented at Davis-Besse including administrative and technical procedures and functional and position descriptions.

3. With regard to the analysis and evaluation of the difficulty experienced with controlling main steam header pressure (Appendix C.1.1 - Plan No. 16), please provide the test data for the main steam safety valves.

4. Provide an analysis of the effects on main steam safety valve performance due to installed inlet pipe inner diameter being smaller than that specified by the valve manufacturer.

5. Provide an analysis of main steam pipe vibration due to dynamic loadings such as steam hammer, particularily as it affects main steam safety valve, atmospheric vent valve, and main steam isolation valve operability. Also, please provide a description of proposed piping modifications.

6. With respect to the analysis presented in Appendix C.3.2, submit the results of the stress and fatigue analysis of the bolting on the steam generator nozzles.

7. In the steam generator analysis presented in Appendix C.3.2, you indicated that the lateral tube deflections were measured for various compressive loads and that it was determined that elastic buckling occurred at 700 lbs. Please provide a clarification of the extent of elastic buckling that occurred and whether or not it resulted in failure.

8. Toledo Edison Company has committed to providing a reliability analysis of the AFW system as it existed on June 9, 1985 and as it will exist just prior to restart using the methodology of NUREG-0611. Also an analysis of the system reliability prior to restart in accordance with SRP 10.4.6. Please provide these analysis.

9. Please address the design and analysis issues as covered by Standard Review Plan Section 10.4.9 (NUREG-0800) and reevaluate the concerns identified in TMI Task Action Plans II.E.1.1 and II.E.1.2 of NUREG-0737.

10. Toledo Edison Company provided conceptual design information on the new motor driven feedwater pump by letter dated November 21, 1984. Subsequent discussions with Toledo Edison Company representatives indicated that some features of the conceptual design have changed. Provide design information relating to the motor driven feed pump system as it will exist at plant restart. Also please address the following issues:

a. We understand that you propose to provide manual operation of the new motor driven pump when you resume plant operation. Discuss your intention for providing automatic initiation of the new motor driven feed pump and the schedule for the installation of the new circuitry.

b. Whether the new motor driven feed pump can pump water from more than one water source. We believe that suction should have the same automatic switch over to service water as the turbine driven AFW pumps.

c. Provide proposed Technical Specifications for the motor driven feed pump which are similar to the existing Technical Specifications for the existing AFW pumps.

d. Discuss the potential for damage to the pump due to pump runout in event of a failed steam generator.

11. Provide a discussion of the effects of the postulated collapse of the turbine building on the AFW pumps and piping due to a seismic event. Specifically, respond to the following:

    a. Could the rupturing of the non-seismic piping to the motor driven feed pump result in the loss of the AFW system's ability to provide water to the steam generators?

    b. Could the instantaneous loss of the piping from the CST result in damage to the AFW pumps prior to transfer to the SWS, especially with the installation of the new transfer delay?

12. Update the information provided in letters of July 15, 1981 and February 10, 1982 regarding the seismic capability of the AFW system. Figures 1.2-8, 10 and 11 of the FSAR are not clear as to the location of the AFWS pumps. Therefore, identify the seismic qualification and the identification of each building housing each pump.

13. Provide your analyses which support the relocation of the AFPT steam admission valve as a change that can be made under the provisions of 10 CFR 50.59(a)(1), including, but not limited to the following:

    a. The results of a subcompartment environmental analysis based on the steam line HELB.

    b. Whether the steam line HELB will or will not result in a reactor trip and turbine trip.

    c. The results of the AFW pump room structural analysis which verifies that no structural failures will result from the HELB.

    d. Verification that communication between the AFW pump rooms would not permit the subcompartment environment due to a HELB in one compartment from adversely effecting the other compartment.

14. Specify whether the old SUFP will be used in the future. If it is to be used, will system modifications be made to eliminate the need for the license conditions relating to its operation?

15. Provide a discussion of the protection of the AFWS, including the motor driven feed pump, from all natural phenomena, environmentally generated missiles, internally generated missiles, internal flooding, and protection from failure of nonsafety-related components.

16. Provide a discussion of the compliance with the intent of the TMI TAP II.E.1.1 recommendation concerning a single failure in a common suction line with the strainer S257 in the common suction line.

17. Provide the analyses which support modifications to SFRCS logic and trip function as changes which can be made under the provisions of 10 CFR 50.59(a)(1).

18. NUREG-1154 concluded that, "Neither the SFRCS nor the Auxiliary Feedwater System at the Davis-Besse plant meet the single-failure criterion for all design basis accidents." Please provide your analysis of these systems regarding this issue and submit the necessary design information, diagrams and other material necessary to make an independent evaluation of this issue.

19. With respect to your response to your course of Action Report Section II.C.5, we require additional information regarding the Detailed Control Room Design Review. These requirements were identified in a letter dated July 2, 1985 and were discussed in a meeting between Toledo Edison Company and NRC on October 9, 1985.

20. A description of the restructured organization is provided in Section II.B.1 of the Course of Action, however, no descriptions of the functions and responsibilities of elements of the organization are presented. Please provide these descriptions.

21. Please address our concern as to whether the Plant Manager has readily available technical support for day-to-day issues in light of the transfer of the Technical Section to the Nuclear Engineering Division.

22. With regard to the proposed training to discourage premature secondary system pressure reduction, Section II.C.4 and Appendix C.4.1, it is not clear how the proposed training will achieve a proper balance between premature and desired timely actions. Please provide additional discussion of the details of the training program to demonstrate that an appropriate balance in emphasis exists.

23. You have stated in Appendix C.4.1 that the emergency procedures will be modified to provide more definitive criteria for lack of heat transfer requiring initiation of Make-up/High Pressure Injection cooling ("feed and bleed"). Please provide full documentation of your analyses, synthesis of conclusions, and formulation of criteria for our review.

24. In Appendix C.4.1 you state that EP-1202.01 and all abnormal procedures will be reviewed with regard to the adequacy of existing control room instruments prior to restart and if deemed necessary, instruments will be color coded to denote important values to support significant actions of EP-1202.01 and other abnormal procedures.

    Although this may be acceptable in remedying some recognition problems, it is not clear how color coding addresses all problems which the licensee's examination might identify related to reacting to decision criteria. In addition, failure to recognize certain conditions may indicate a lack in training in this area. Please provide details or training program descriptions that demonstrate solutions to this recognition problem. Also, provide the results of the procedures/instrumentation comparison for staff review (also see related item (23) above.

25. In Appendix C.4.1 you state that procedural changes will be made to provide specific criteria for deciding if and when to transfer back to Condensate Storage Tank suction. This transfer back to the Condensate Storage Tank suction source would assure continued availability of auxiliary feedwater if it does not involve disabling the automatic transfer to service water feature. Insufficient information was submitted to allow a complete evaluation. Please describe further the proposed transfer so that its acceptability can be determined.

26. On page 4, Appendix C.4.1, you have proposed to require that the SRO, once he has assumed the duties of procedure director, remain in the control room until relieved by another SRO. We find that this requirement can increase the assurance of compliance with 10 CFR 50.54. However, it is not clear that a review of the 10 CFR 50.54 staffing requirements has been made, nor is it clear what kind of emphasis will be made in the training to ensure SRO awareness of, and adherence to, those requirements. Please submit for our review a description of how your program will address this matter. See also related item 23 discussing recognition of steam generator dryout conditions.

27. Please provide a description of how the training program will address delegation and the role of the interim EDO as discussed in item 3 of Appendix C.4.1.

28. Please clarify how an appropriate balance will be achieved between assurance of procedures execution and operator judgment based on his technical knowledge and experience as discussed in item 4 of Appendix C.4.1.

    What kind of training is being provided to ensure that this objective is appropriately tempered through exercise of operator judgment?

29. Provide a description of the training program for those tasks, as developed according to the TSD process discussed in item 5, Appendix C.4.1.

30. Describe the training program in sufficient detail to identify tests, etc. which will provide assurance of understanding of the loss of feedwater events analyses as discussed in item 6, Appendix C.4.1.

31. Provide additional justification or alternate means for ensuring that operator plotting will be performed when required as discussed in item 4, Appendix C.4.1.