

Detroit
Edison

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Nuclear
Operations

September 28, 1992
NRC-92-0115

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

- References:
- 1) Fermi 2
NRC Docket No. 50-341
NRC License No. N2F-43
 - 2) NRC Generic Letter 92-04, "Resolution of the Issue Related to Reactor Vessel Water Level Instrumentation in BWRs", dated August 19, 1992
 - 3) BWR Owners' Group Report, "BWR Reactor Vessel Water Level Instrumentation", BWROG-92074, dated August 28, 1992

Subject: Detroit Edison Response to Generic Letter 92-04

This letter provides Detroit Edison's response to Generic Letter 92-04 (Reference 2) which was received on August 20, 1992. This Generic Letter requested information, in accordance with 10CFR50.54(f), related to compliance with requirements and commitments regarding reactor vessel water level instrumentation in BWRs, and required a response by September 27, 1992.

Accordingly, pursuant to the oath and affirmation requirements of 10CFR50.54(f), Detroit Edison has reviewed Generic Letter 92-04 and in general, has determined that the impact of potential water level instrumentation inaccuracies resulting from the effects of noncondensable gas at Fermi 2 is bounded by the analysis provided by the BWR Owners' Group Report "BWROG-92074" submitted to the NRC on August 28, 1992 (Reference 3).

Detroit Edison's detailed response to the "Required Actions" section of GL 92-04 is provided in the Enclosure of this letter. A copy is also being submitted to the Regional Administrator, US NRC Region III.

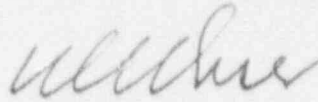
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USNRC
September 28, 1992
JRC-92-0115

If you have any questions, please contact Mr. Girija S. Shukla at
(313) 586-4270.

Sincerely,



Enclosure

cc: T. G. Colburn
A. B. Davis
M. P. Phillips
S. Stasek

UFNRC
September 28, 1992
NRC-92-0115

I, WILLIAM S. ORSER, do hereby affirm that the foregoing statements are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

William S. Orser
WILLIAM S. ORSER
Senior Vice President

On this 28th day of September, 1992, before me personally appeared William S. Orser, being first duly sworn and says that he executed the foregoing as his free act and deed.

Rosalie A. Armet
Notary Public

ROSALIE A. ARMET
NOTARY PUBLIC STATE OF MICHIGAN
MONROE COUNTY
MY COMMISSION EXPIRES NOV. 20, 1995

Detroit Edison's Response to Generic letter 92-04
Resolution of the Issues Related to Reactor Vessel Water
Level Instrumentation in BWRs

The following information represents the result of Detroit Edison's review of Generic Letter 92-04 and includes response to the requested actions contained in the GL.

o NRC Requested Action 1:

- "1. In light of potential errors resulting from the effects of noncondensable gas, each licensee should determine:
- a. The impact of potential level indication errors on automatic safety system response during all licensing basis transients and accidents;
 - b. The impact of potential level indication errors on operator's short and long term actions during and after all licensing basis accidents and transients;
 - c. The impact of potential level indication errors on operator actions prescribed in emergency operating procedures or other affected procedures not covered in (b)."

Detroit Edison Response:

- 1.a. Detroit Edison has determined that the impact of potential water level indication errors resulting from the effects of noncondensable gas on automatic safety system response is bounded by the generic safety analysis contained in the BWR Owner's Group (BWROG) report "BWROG-92074" on BWR Reactor Vessel Water Level Instrumentation provided to the NRC on August 28, 1992. It is Detroit Edison's conclusion that the information presented in the BWROG report is applicable to the design of Fermi 2. This conclusion is based on our review of the report, the Fermi 2 safety analysis and its design basis, and the evaluation made by General Electric for generic applicability of this report's safety analysis as contained in Attachment 2 of the report. Detroit Edison recognizes that there are differences between the designs of the BWR plants and systems, however, based on our review of these differences, the report and its conclusions, Detroit Edison has determined that the basic plant responses to the design basis transients and accident events as described in the BWROG report are applicable and bounding for Fermi 2.

- 1.b. Detroit Edison has determined that the impact of level indication errors on operator actions is adequately addressed in the BWROG report. The operator actions that are anticipated in response to a rapid reactor depressurization would be governed by the existing Fermi 2 Emergency Operating Procedures (EOP). The EOPs would direct operator to provide adequate core cooling following rapid reactor depressurization.

Additionally, Detroit Edison has taken immediate actions to apprise plant operations personnel to the potential concern with the water level indication during a rapid depressurization and required reading regarding this generic issue has been included in the Operations Department's night orders.

To further address the potential water level indication errors, additional guidance is being provided to the licensed operators during the current training cycle.

- 1.c. As discussed in the BWROG report and in the response to 1.b above, the operators at Fermi 2 have adequate information provided by the current Emergency Operating Procedures (EOPs). In addition, Detroit Edison is monitoring the BWROG activities to review the potential need for any additional guidance to further address the potential water level indication concern. Any resulting additional guidance will be appropriately incorporated into Fermi 2 programs and procedures.

o NRC Requested Action 2:

- "2. Based upon the results of (1) above, each licensee should notify the NRC of short term actions, such as:
- a. Periodic monitoring of level instrumentation system leakage; and,
 - b. Implementation of procedures and operator training to assure that potential level errors will not result in improper operator actions."

Detroit Edison Response:

- 2.a. Consistent with the NRC requirements to ensure high functional reliability of the level instrumentation system design, Detroit Edison has taken measures to monitor and observe reactor water level instrumentation, particularly during plant shutdown and start-up. The details of the measures taken are as follows.

The RPV water level and pressure signals are monitored on plant computer systems during shutdown and startup and will be reviewed for discrepancies that could indicate the potential build-up of noncondensable gas in the condensing chamber. The reference legs will be back filled as per Fermi 2 operating procedure prior to startup from this refueling outage.

The water level instrument channel readings are checked daily by the operators in accordance with the surveillance procedure as required by Technical Specifications.

2.b. The response to 1.b has discussed procedures and operator training to assure that potential level errors will not result in improper operator actions.

o NRC Requested Action 3:

"3. Each licensee should provide its plans and schedule for corrective actions, including any proposed hardware modification necessary to ensure the level instrumentation system design is of high functional reliability for long term operation. Since this instrumentation plays an important role in plant safety and is required for both normal and accident conditions, the staff recommends that each utility implement its longer term actions to assure a level instrumentation system of high functional reliability at the first opportunity but prior to starting up after the next refueling outage commencing 3 months after the date of this letter."

Detroit Edison Response:

Detroit Edison endorses the BWROG plan for a thorough evaluation of the postulated effects of noncondensable gases on water level measurements, for potential actions to resolve this issue, and to develop recommendations for appropriate hardware and/or procedure modifications for the plants requiring such modifications. Our decision regarding any future hardware modifications will be based on the results and recommendations of this BWROG program.

Detroit Edison is actively participating in the BWROG activities to resolve this issue. As per the BWROG schedule for identification of potential modifications, it is expected that the BWROG recommendations would be available by July 1993. Detroit Edison will review these recommendations and, if necessary, it is our intent to implement appropriate modifications at Fermi 2 prior to startup from the 4th refueling outage currently scheduled for spring of 1994, which will be our next refueling outage commencing three months after the date of issuance of Generic Letter 92-04.