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September 21, 1995  
NRC-95-0064

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

- References: 1) Fermi 2  
NRC Docket No. 50-341  
NRC License No. NPF-43
- 2) NRC Inspection Report 50-341/95003,  
dated March 17, 1995
- 3) Response to Notice of Violation.  
NRC-95-0033, dated April 17, 1995

Subject: Questions on Response to Notice of Violations,  
NOV 341/95003-02A, 02B, 03

Inspectors from the Region III office had contacted Detroit Edison with several questions on Reference 3. During telephone conversations, Detroit Edison agreed to provide supplemental information. This information is contained in the Attachment to this letter. Also, some commitments have been amended. The following are the commitments made in this letter.

1. Training of I&C Plant Design Engineers and Maintenance Technicians and first line supervisors in lessons learned from the Barton Task force review and the industry lessons learned provided by Barton will be completed by December, 1995.
2. All Barton Switches shall be evaluated by December, 1995.

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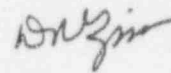
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3. The MCC auxiliary contact multi-discipline team's efforts will continue in order to determine the root cause. Actions that require further evaluation include:
  - Continued review of past and future unexplained failures. This includes the use of the troubleshooting guide; inspection and replacement, if necessary, of the seven remaining auxiliary contacts; TES analysis of replaced auxiliary contacts; and review of site failure rate for consistency with the data in EFA 94-006. These actions will be completed by March, 1996.
  - Future review of DER 93-0312 to determine effectiveness of the main contactor corrective actions. This will be completed within 60 days following RF05.
  - Review of alternatives developed by the team to modify or replace the auxiliary contact or the MCC in its entirety. This will be completed by April, 1996.

If you have any further questions regarding this letter, please contact Ms. Mari Jaworsky, Compliance Engineer at (313) 586-1427.

Sincerely,



cc: T. G. Colburn  
H. J. Miller  
M. P. Phillips  
T. Vogel  
Region III

## **ATTACHMENT**

### **BARTON DIFFERENTIAL SWITCHES**

#### NRC QUESTIONS:

The NRC questioned whether the training by Barton on lessons learned from experience on calibrating and maintaining Barton Switches would be provided to Instrumentation and Controls (I&C) Plant Design Engineering and supervisory personnel in addition to I&C technicians.

There was also a question regarding whether there was a schedule for completing all the modifications on the Barton Switches.

#### DETROIT EDISON RESPONSE:

The training of I&C Plant Design Engineers and Maintenance I&C technicians and first line supervisors shall be completed by December, 1995. This training will include lessons learned from the Barton task force review and the industry lessons learned provided by Barton. Selected engineers will attend the training to be given by Barton. These engineers will then "cascade" the information to the remaining I&C Plant Design Engineers.

The training of I&C Plant Design Engineers will be based on the design lessons learned from the Barton review task force and the input provided by the ITT Barton during the onsite training on industry lessons learned. The training of the Maintenance I&C Technicians and first line supervisors will consist of industry lessons learned in the calibration and maintenance techniques, hands on practice of these techniques and Fermi lessons learned based upon the Barton review task force.

We have reviewed all QA1 Barton Switches and recommendations have been made to do design modifications for several of these switches. The remainder of the problem Barton switches (Balance of Plant) will be evaluated by December, 1995. Should the evaluation results deem any modification to be necessary, a Technical Service Request (TSR) will be initiated. Once the TSR's are initiated they will be appropriately prioritized by the Project Evaluation Review Committee (PERC) or the Plant Manager.

## **MOTOR CONTROL CENTER MAIN CONTACTOR AND AUXILIARY CONTACTS**

### NRC QUESTIONS:

There were several questions about the main contactor and auxiliary contact issue. The questions were:

- When were the main contactor and auxiliary contact issues first identified - 1989 or 1993?
- What does Detroit Edison view as the main issue - main contactors or auxiliary contacts?
- Will a Probabilistic Safety Assessment (PSA) have to be performed after each new auxiliary contact failure?
- What is the scope of Fermi 2's on-going evaluation of these problems; which failures will be considered - past, present, future, or all failures?
- When will the final two auxiliary contact failures of 1994 be evaluated?
- Clarify the total number of failures described in Reference 3.
- What are the completion dates for the commitments made in Reference 3 regarding these issues.
- Revise section entitled "Date When Full Compliance will be Achieved" to include a discussion on both the Barton Switches and the Motor Control Center (MCC) main contactors and auxiliary contacts.

DETROIT EDISON RESPONSE:

Based on a review of Deviation Event Reports (DER's) since 1989, repeat occurrences of ITE Motor Control Center (MCC) main contactor and auxiliary contact problems were noted. As a result of various DER's in 1993, DER 93-0312, "Investigation of Failures Related to the ITE Contactors", was assigned as the lead DER to identify the root cause of the contactor problem. This DER includes an investigation of the failures prior to 1993.

An omission of the word "contactor" from a statement made in the first paragraph on page 3 of 8 of Reference 3 implied that Detroit Edison regarded the main problem to be the main contactors and not the auxiliary contacts. The omission of the word "contactor" inadvertently implied that Detroit Edison did not consider the problem with the auxiliary contacts an important problem. Detroit Edison considers both the main contactor problems and the auxiliary contact problems important issues to be resolved.

The PSA discussed in the Engineering Functional Analysis, EFA 94-006, mentioned in Reference 3 is a bounding analysis and does not need to be updated should another auxiliary contact failure occur. However, the 1995 site failure rate for MCC auxiliary contact failures will be reviewed for consistency with the data in EFA 94-006.

In Reference 3 we discussed our evaluation of the seventeen auxiliary contact failures since 1989. All seventeen auxiliary contacts had been inspected and/or replaced as documented on work packages. Review of the work packages indicated that nine of the auxiliary contacts were replaced and one was not an auxiliary contact issue. The remaining seven were worked, but not replaced. The prior response stated that the seven auxiliary contacts will be replaced. In consideration of the evaluation results obtained thus far and operational requirements, this is modified in that the seven remaining auxiliary contacts in question will be inspected and then replaced, if necessary.

The reason for this is that the evaluation of two of the unexplained failures in 1994 indicates the auxiliary contact problems were related to rework after the main contactor was disassembled and cleaned. Additionally, two of the auxiliary contacts to be replaced are on valves which are open during normal operation and will not be stroked until an outage. This results in the ability to test the auxiliary contacts per the troubleshooting guidelines but only partially test the Motor

Operated Valve (MOV) circuitry since the valve can not be stroked until an outage. Accordingly, if the auxiliary contacts are inspected and tested per the troubleshooting guidelines and they function properly, revealing no abnormalities, they may not be replaced. The majority of the seven auxiliary contacts in question are expected to be replaced and in fact three have already been replaced.

In Reference 3 we also discussed the six unexplained failures of 1994. This was meant to be a separate discussion; these failures are included in the population of seventeen failures which occurred since 1989.

The target dates for completing our investigation of the auxiliary contact issues as described in item 2 of the cover letter of Reference 3 and on pages 4 and 5 of the enclosure of Reference 3 are as follows:

The MCC auxiliary contact multi-discipline team's efforts will continue in order to determine the root cause. Actions that require further evaluation include:

- Continued review of past and future unexplained failures. This includes the use of the troubleshooting guide; inspection and replacement, if necessary, of the seven remaining auxiliary contacts; TES analysis of replaced auxiliary contacts; and review of site failure rate for consistency with the data in EFA 94-006. These actions will be completed by March, 1996.
- Future review of DER 93-0312 to determine effectiveness of the main contactor corrective actions. This will be completed within 60 days following RF05.
- Review of alternatives developed by the team to modify or replace the auxiliary contact or the MCC in its entirety. This will be completed by April, 1996.

Since Detroit Edison has appropriate corrective actions in place for both the Barton Differential Pressure Switches and the MCC main contactor and auxiliary contact problems, Detroit Edison has achieved full compliance with 10CFR50, Appendix B, Criterion XVI.



## **CONSUMABLE MATERIAL ISSUE AND CONTROL PROGRAM**

### NRC QUESTIONS:

There were several questions about the consumable material issue and control program. The questions were:

- Clarify whether the reason for this violation involved the program up to the point of issue or the awareness of the workers in the field, i.e., after the point of issue.
- Are there any changes to the program being considered?
- Is Cramolin being evaluated for its past use at the plant in addition to the ten mentioned in Reference 3? Also, when are the reviews to be completed?
- Was Detroit Edison going to provide the training about the appropriate use of consumables to first line supervisors and engineers in addition to the field workers?

### DETROIT EDISON RESPONSE:

Detroit Edison's review of its consumable Material Issue and Control Program up to the point of issue has found it to be effective. The problem with the use of cramolin on safety related components occurred after the point of issue. However, the program has been amended in that the requisitioning process now requires the Chemistry Department to evaluate a consumable material with respect to its potential impact on the Reactor Pressure Vessel and Internals prior to its use on site.

Detroit Edison reviewed cleaners used on electrical equipment for appropriate past use in the field. This action was completed July 31, 1995. The past use of cramolin on safety related components was also reviewed. No cramolin has been found on the MCC auxiliary contacts that have already been evaluated. However, the above evaluation determined that two cleaners, freon and cramolin

were inappropriately used in 1993 on Reactor Protection System (RPS) relays. Freon, also a consumable to be issued for non-safety related applications, was issued for work on these safety-related RPS relays. The RPS relays in question have since been replaced.

As stated in Reference 3, steps have been taken to remove cramolin from stock. Also, cramolin will not be reordered. However, during a continuing effort by QA to ensure the effectiveness of the Consumable Material Issue and Control Program, a can of cramolin was found in a consumable locker and two cans were found to have been returned into stock from a canceled non-safety related Requisition On Stores (ROS). This material was removed from stock immediately after it was found because cramolin is now restricted from use at Fermi 2. This is based on the fact that cramolin was placed on the Restricted Engineered Components List (RECL), Revision 25. Any cramolin that may be found in the future in the plant will also be removed since it is on the RECL.

Cramolin had been added to the list of material that the "SWEEP" (Site Workers Ensuring Environmental Protection) team has looked for during its efforts to identify locations that contain materials that might present an environmental, chemical, or safety hazard to Fermi site personnel.

Detroit Edison's training program to raise the level of awareness regarding the appropriate use of consumables has been completed. This program included the training of Maintenance Department field workers and first line supervisors. This effort was completed July 31, 1995. The lessons learned from this event have also been presented to other groups including Quality Assurance, Operations and Materials Engineering and Support.