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March 27, 1984  
EF2-66730

DMB

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

Dear Mr. Keppler:

Reference: Fermi 2  
NRC Docket No. 50-341

Subject: Report of 10CFR50.55(e) Item on Commercial  
Grade Material in QA I Applications (#117)

On February 15, 1984, Detroit Edison's Mr. W. R. Wingfield - Construction Quality Assurance telephoned Mr. F. C. Hawkins of NRC Region III to report a potential deficiency concerning the use of commercial grade material at Fermi 2. The potential deficiency reported involves the use of commercial grade material for safety-related applications ("CQ" material) where evaluation of the materials for this application is not adequately documented. This potential deficiency was initially identified during an NRC inspection in late 1983. Subsequent to this inspection, Detroit Edison has discussed this matter with your staff in meetings and by telephone.

Description of the Deficiency

In response to this potential deficiency, Detroit Edison assigned a task force to determine the extent of the deficiency and to propose a corrective action plan. To date the task force has identified approximately 2,300 commercial grade material purchase requisitions, issued during the period 1978 through 1983, which were intended for use in safety-related systems and components.

The materials included nuts, bolts, anchors and support materials as well as electrical components such as relays, circuit breakers and circuit boards. Replacement CQ materials were purchased "like for like" (i.e., same manufacturer, model number, or part number) from suppliers or distributors.

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The purchase requisitions affected include past purchases including some purchases from original equipment manufacturers (OEMs). Past purchases are those commercial grade materials already ordered and either installed or in stock on site. OEMs are purchases from the original manufacturer, who was an approved QA-1 supplier. However, in some cases the manufacturer was no longer on Detroit Edison's Approved Suppliers List at the time replacements were purchased.

#### Analysis of the Safety Implications

The area of immediate concern involves CQ materials purchased for use in safety-related applications that have been installed in the plant. Evaluation of the material for this application was not in all cases adequately documented. This resulted in a potential for less than adequate verification of the quality of the installed CQ material and the ability of that material to perform its safety-related function.

Detroit Edison has reevaluated a significant number of past purchases to determine the adequacy of these materials for their intended safety-related applications. The results of the review of CQ purchase documentation to date have indicated that the items purchased were appropriate for the intended application. From this it seems apparent that in the past, evaluations necessary to determine the appropriate use of CQ materials at Fermi 2 had been performed. However, the evaluations were not in all cases documented. On this basis, it has not been possible to provide assurance that all equipment specifications and/or requirements have been met. However based on the results of our investigation effort thus far, Detroit Edison does not expect to find purchases that will adversely affect safety-related systems or consequently impact the safe operation of the plant.

#### Corrective Action

Detroit Edison has implemented a program, with a dedicated CQ Engineering Group, to evaluate and document past purchases, new purchases and OEMs. All past CQ purchases are classified by equipment, part or material type.

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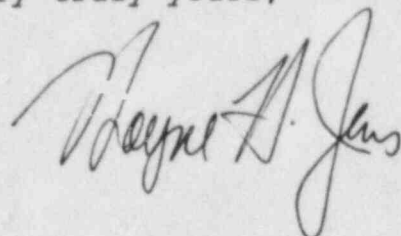
Existing purchase documentation is reviewed and a historical profile is created. The actions necessary to qualify the material are performed and the evaluation is documented. Conditional releases may be used where work progress could be impacted. OEMs are assessed to verify their status. Material may be found acceptable based on testing, historical data or supplier history such as past audits, manufacturer survey (reaudit) or industry experience with a manufacturer.

New CQ purchase requisitions or change requests are processed in a similar manner to past purchases. However, refined procedures ensure that each item is evaluated from an engineering and quality assurance viewpoint and supporting documentation is prepared and maintained.

Until recently most of the emphasis has been directed at evaluating materials to support construction and testing. We are confident that adequate controls are now in place to control the purchase and issuance of CQ materials, and Detroit Edison is shifting emphasis to evaluate materials already installed in the plant. However, as stated above, Detroit Edison expects this reevaluation will confirm the adequacy of materials already installed in the plant.

Detroit Edison believes that the program and actions described above will ensure that proper documentation is maintained which delineates the engineering and quality assurance assessments, inspections or tests performed to support the use of commercial grade materials in safety-related applications. We will provide another report on this item, either interim or final, when further information is available. If you have questions concerning this matter, please contact Mr. L. P. Bregni (313) 586-5083.

Very truly yours,



cc: P. M. Byron  
R. C. Knop