Docket No. 50-346

License No. NPF-3

Serial No. 1-616

February 27, 1986

TOLEDO EDISON

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Mr. C. J. Paperiello, Director
Division of Reactor Safety
United States Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Dear Mr. Paperiello:

Toledo Edison acknowledges receipt of the October 18, 1985 letter (Log No. 1-1260), Notice of Violation, and Inspection Report No. 50-346/85031(DRS). In accordance with our discussions with Mr. I. T. Yin on January 15 and February 20, 1986, we are providing a revised response to the Notice of Violation. This letter supercedes our previous response (Serial No. 1-593) and provides additional clarification for both issues identified in the Notice of Violation.

Following an examination of the items of conc[illegible]edo Edison herein offers information regarding these items:

1. Violation: 10 CFR 50, Appendix [illegible], Criterion III, as implemented by TECo Nuclear Quality Assurance Manual and Nuclear Quality Assurance Procedure, requires establishment of procedures among participating design organizations for review, approval, release, distribution, and revision of documents involving design interfaces.

Contrary to the above, the design interface between Bechtel Power Corporation and ITT-Grinnell Corporation during implementation of IE Bulletin No. 79-14 piping as-built activities was not established in an approved controlled interface procedure.

This is a Severity Level IV violation (Supplement II). (50-346/850[illegible]-01)

Response: (1) Inspection Report 50-346/85031 stated that "Upon the NRC inspector's request, Bechtel could not produce the document that controlled IE Bulletin 79-14 activities between Bechtel and ITT-Grinnell. The failure to establish a controlled design interface document to

control IE Bulletin 79-14 activities between Bechtel and ITT-Grinnell is considered to be a violation of 10 CFR 50, Appendix B, Criterion III." As a result of further investigation, we have identified the following information relative to the Bechtel/ITT-Grinnell interface for the IE Bulletin 79-02 and 79-14 efforts:

a. NRC IE Bulletin 79-02 required pipe hangers to be re-evaluated for base plate flexibility and for the effects of base plate flexibility on fasteners to concrete. IE Bulletin 79-14 required piping and hanger installations to be verified for as-built conditions versus design requirements.

b. Pipe hangers for piping 2½ inches or larger for Davis-Besse Unit 1 were originally designed by ITT-Grinnell, Providence, Rhode Island. Many hangers were subsequently reanalyzed by ITT-Grinnell because of the reanalysis of piping systems required for IE Bulletin 79-14 and the detailed analysis required for IE Bulletin 79-02. The piping systems reanalysis was performed by Bechtel. Many hangers were within the scope of both IE Bulletins 79-02 and 79-14, in which case, the hanger reanalysis, performed under IE Bulletin 79-14 incorporated the base plate flexibility criteria, dictated by IE Bulletin 79-02.

c. For hangers within the scope of IE Bulletin 79-02 only, ITT-Grinnell furnished Bechtel with base plate forces and moments. These forces and moments were requested during conferences and by letter transmitted from Bechtel to ITT-Grinnell which listed the hanger numbers requiring the needed information. The response from ITT-Grinnell was by letter with a summary of forces and moments to base plates for each hanger.

d. Bechtel engineering/design activities (Calculations, Drawings, Vendor Documents, Drawing Change Notices, Facility Change Requests) were controlled by Project Procedures and the following procedures were prepared specifically for IE Bulletin work.

- PDP-1 Inspection and Testing Procedure for Concrete Expansion Anchors

- PDP-2 Inspection Procedure for As-Built Configuration of Nuclear Safety Related Piping Components

- PDP-3 Evaluation Procedure for As-Built Configuration of Nuclear Safety Related Piping Components IE Bulletin 79-14.

The Bechtel/ITT-Grinnell/Toledo Edison design interface for work performed under IE Bulletin 79-14 was as follows:

a. Pipe stress analysis was performed by Bechtel.

b. Bechtel prepared load summary sheets from the pipe stress analysis for the hangers. Certain hangers were selected to be reanalyzed by ITT-Grinnell. These load summary sheets were transmitted to ITT-Grinnell by letter.

c. Hanger reanalysis for selected hangers were performed by ITT-Grinnell and upon completion, ITT-Grinnell forwarded force and moment data to Bechtel for base plate analysis under IE Bulletin 79-02. Details of any required modifications for hangers were also transmitted to Bechtel by letter.

d. Calculations were prepared and maintained by ITT-Grinnell and Bechtel for their respective scope of work.

e. All communications and transfer of design information was documented by letter.

f. ITT-Grinnell engineering design and analysis work was performed under purchase order from the Toledo Edison Company (TED) to ITT-Grinnell. The TED Purchase Order required a current version of an approved ITT-Grinnell Quality Assurance Program and specifically provided that ITT-Grinnell would receive authorization related to their IE Bulletin 79-02 and 79-14 calculation efforts through written Bechtel correspondence.

g. Hanger drawing revisions which were required as the result of IE Bulletin analysis were prepared by Bechtel Engineering as Vendor Drawing Change Notices (VDCNs) to ITT-Grinnell drawings (Bechtel Vendor Document Control Number

7749-M-190-H-X-X Series). VDCNs were issued in Facility Change Request (FCR) packages and sent to TED for implementation of changes to the plant. Upon completion of FCR implementation and receipt of notification that the FCR(s) implementation was completed, Bechtel incorporated the VDCNs in the drawings, issued revised drawings to reflect the as-built condition and notified TED when their actions were completed.

The Engineering Procedure manuals in effect during the IE Bulletin 79-14 effort were: (1) The Engineering Procedures Manual (EPM), Third Edition, and (2) the Project Engineering Procedures Manual (PEPM) and were approved by TED.

Initial Bechtel/ITT-Grinnell activities were conducted when the EPM was in effect. EPM paragraph 3.0, Correspondence, included subparagraphs which established the Bechtel/ITT-Grinnell interface procedure.

3.2 Toledo Edison - Correspondence
3.3 Bechtel - Correspondence
3.4 Equipment Vendors - Correspondence
3.7 Conference Notes- procedures required conferences to be serially numbered, the Project Engineer's signature, transmittal letters be prepared and copies distributed.

Bechtel/ITT-Grinnell activities continued during the period, when the PEPM superseded the EPM and became effective (April, 1980). Engineering Department Project Instruction (EDPI) 5.1-11, Communications Control, includes subparagraphs which establish the Bechtel/ITT-Grinnell interface procedure. The procedure describes handling and control of Project Engineering Communication as follows:

a. EDPI paragraph 3.0, Outgoing Communications, describes control of all outgoing correspondence.

   - ITT-Grinnell Letter Numbers GTB-XXX Series were used to transmit IE Bulletin information to Bechtel. All letters were processed per EDPI 5.1-11, Communications Control.

b. EDPI paragraph 4.0, Outgoing Communications, describes control of all outgoing correspondence.

- Bechtel Letter Numbers BV1-XXX Series were used to transmit IE Bulletin information to ITT/Grinnell. All letters were processed per EDPI 5.1-11, Communications Control.

- Bechtel Letter Numbers BT-XXXX Series were used to transmit IE Bulletin information to TED. All letters were processed per EDPI 5.1-11, Communications Control.

c. EDPI paragraph 10.0, Conference Notes, describes requirements for recording formal meetings and listing action items on Exhibit I, Agreements/Commitments form.

Although TED was not in full compliance with 10 CFR 50, Appendix B, Criterion III, we believe the lack of a controlled design interface procedure was not adverse to the design related aspects of the IE Bulletin 79-02 & 79-14 program. This is based on the forgoing discussion of the controls in effect for IE Bulletin 79-02 & 79-14 design activities, coupled with the fact that ITT-Grinnell did not have final design responsibility. ITT-Grinnell's IE Bulletin 79-02 & 79-14 work was processed through the Bechtel Design Control Program. This determination is consistent with the results of recent reviews of the IE Bulletin 79-14 program which have identified that problems were related to implementation/closeout rather than design.

However, to assure ourselves that the lack of design interface procedures is not a generic problem, the TED Quality Assurance Department will conduct an audit to determine whether the appropriate design interface controls exist for vendors who provide engineering services to TED. This audit commenced on February 3, 1986 and specifically includes Bechtel as well as a selection of several other vendors.

2. Violation: 10 CFR 50, Appendix B, Criterion XVI, as implemented by TECo Nuclear Quality Assurance Manual and Nuclear Quality Assurance Procedure, requires that conditions adverse to quality such as deficiencies, deviations, and nonconformances be promptly identified and corrected.

Contrary to the above, the licensee did not effectively implement its Facility Change Request system in that a number of safety-related supports were not restored to their FSAR design condition in a timely manner. These supports were left in a short-term operable status for three to five years.

This is a Severity Level IV violation (Supplement II). (50-346/85031-02)

Response: (1) Corrective action taken and results achieved.

Those FCRs (80-079 through 80-094, 80-125, 80-131) which were identified during the IE Bulletin 79-02 and 79-14 walkdowns as requiring restoration of the supports/hangers to their FSAR design condition, have been closed out.

Toledo Edison has developed an FCR Closeout Action Plan. The plan establishes the support requirements and activities which are necessary to closeout the backlog of implemented FCRs (Phase I). Likewise, Toledo Edison will expedite the closure of the FCRs which will have been implemented by the end of the current outage (Phase II). Phase I consists of 238 FCRs which were implemented as of October 18, 1985, while Phase II will consist of approximately 210 FCRs. Currently, the responsibility for this project resides with the Information Management department.

Toledo Edison has identified twenty FCRs which could potentially impact piping system operability for those systems listed in Item 1.b of Confirmatory Action Letter (CAL) 85-13. As required by CAL 85-13, Toledo Edison will complete an engineering evaluation prior to Restart for those FCRs with completed modifications to ensure that piping system operability will not be impacted.

(2) Corrective action to be taken to avoid further violation.

Nuclear Facility Engineering Procedure NFEP-060, Processing Nonconformance Reports, Deviation Reports, and Supplier Deviation Disposition Requests, was modified on October 1, 1985 to require that piping systems which are determined to be within interim allowable requirements must be restored to FSAR requirements no later than the next refueling outage for inaccessible supports and as expeditiously as possible for normally accessible supports.

As part of the commitment made in the Davis-Besse Course of Action (Serial No. 1182) to generate and maintain nuclear program procedures necessary to control inter-divisional nuclear program activities, Toledo Edison is developing a Nuclear Mission Procedure (NMP) for the FCR process. This NMP will provide the interface relationships and the specific responsibilities for the different departments involved in the FCR process. In developing this NMP, Toledo Edison is reviewing the FCR process with the intent of streamlining the program and resolving those problems which have been identified either internally or by external reviews of the FCR process.

(3) The date when full compliance will be achieved.

Full compliance will be achieved upon closeout of the approximately 448 FCRs which is scheduled for completion by the end of the fifth refueling outage.

Very truly yours,

JW:TJB:lah

cc: DB-1 NRC Resident Inspector