

Bechtel Power Corporation

Engineers - Constructors

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April 8, 1980

U. Potapovs
Chief, Vendor Inspection Branch
United States Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region IV
611 Ryan Plaza
Suite 1000
Arlington, Texas 76011

Reference: (a) Letter dated February 11, 1980, U. Potapovs
to I. R. Caraco, Docket No. 99900~~52~~/80-01

Attachment: (a) Response to reference (a)

521/80-01

Dear Mr. Potapovs:

The Vendor Inspection Branch Report attached to your letter of February 11, 1980 describes an infraction wherein we failed to comply with NRC requirements.

The attachment describes our position concerning the infraction and the steps taken to correct the condition and prevent recurrence of the associated circumstances.

There is no proprietary information in your letter or our response.

Very truly yours,

BECHTEL POWER CORPORATION

A handwritten signature in dark ink, appearing to read "I. R. Caraco", written in a cursive style.

I. R. Caraco
Vice President & Division Manager

8007140075*

Bechtel Power Corporation
Los Angeles Power Division
Docket No. 99900521/80-01

NOTICE OF VIOLATION

Based on the results of an NRC inspection conducted on January 7-10, 1980, it appears that certain of your activities were not conducted in full compliance with NRC requirements as indicated below;

Section 21.21 of 10 CFR 21 requires that "Each individual, corporation, partnership or other entity subject to the regulations. . . shall adopt appropriate procedures for (i) evaluating deviations or (ii) informing the licensee or purchaser of the deviation in order that the licensee or purchaser may cause the deviation to be evaluated. . .," and that "A director or responsible officer subject to the regulations of this part. . . shall notify the commission when he obtains information reasonably indicating a failure to comply or a defect. . ."

Further, paragraph (b)(3)(vi) requires that the written report to the Commission include the following information "In the case of a basic component which contains a defect or fails to comply, the number and location of all such components in use at, supplied for, or being supplied for one or more facilities or activities subject to the regulations. . ."

Implicit in the above requirement is the need to evaluate deviations to determine whether defects (as defined in the regulation) exist, as well as the need to evaluate such defects for applicability to other facilities or activities.

Contrary to the above, the inspector was unable to obtain evidence from document review or discussion with cognizant personnel that such an evaluation had been performed for the following conditions described in Deficiency Evaluation Report (DER) No. 21, Revision 0 (3/2/79), 1 (4/5/79) and 3 (5/31/79).

1. Insufficient pipe bearing surface
2. Frictional loading on pipe support framing
3. Lack of reinforced branch connections
4. Use of dissimilar metal attachments for design temperatures greater than 150⁰F
5. Fillet welds not in accordance with AISC minimum size criteria.*
6. Embed plate stiffness.
7. Use of structural tees instead of dummy stubs

This is an infraction (See Details Section paragraph E.3.b)

*Previously reported by Southern California Edison on a 10 CFR 50.55(e) Report.

Bechtel Power Corporation
Los Angeles Power Division
Docket No. 99900521/80-01

RESPONSE PREFACE

Bechtel's position is that when an organization furnishes a Basic Component for a nuclear power reactor, the Basic Component includes the design, inspection and testing services which are associated with the Basic Component. Therefore, a Deviation in these associated services would not be a defect if the Deviation was discovered and fully corrected prior to delivery or offering for acceptance of the Basic Component to the purchaser.

The reasons for this position are the provisions of Part 21 itself, as well as interpretations by the NRC Staff in the past that, in determining whether a Basic Component has been delivered, the basic element, in the Staff's view, is when the purchaser has taken control of the item. NUREG-0302, Rev. 1, pg. 21.3 (d)-1. The purchaser had not taken control of the Basic Component, which had not been turned over, nor the associated services, as Bechtel had control of the design process to allow for making changes which became necessary during the construction period.

Also, it would be very subjective and arbitrary in most cases to characterize a needed design change as a "departure from the technical requirements" of a "contract" for a Basic Component, i.e. a Deviation, before the design has been incorporated into a Basic Component turned over to a purchaser. Many changes are required for diverse and overlapping reasons in the 10-12 year life of a complex engineering and construction project. Examples are improvements in the state of the art, clarifications in response to field change requests, interferences discovered in the field, an unpredictable construction circumstances. Bechtel must address these circumstances and make appropriate design changes. These changes are considered normal and within the parameters of the Bechtel design control process.

Based on the above, it is Bechtel's conclusion that the deficiencies described in the DER No. 21 which could be considered reportable under 10 CFR 50.55(e) are not reportable under 10 CFR Part 21.

CORRECTIVE ACTION PREFACE

It is recognized that the initial 10 CFR 50.55(e) report submitted by Southern California Edison did not address the individual deficiencies resulting from the breakdown in the QA Program. It is also recognized that documentation did not indicate that Deficiency Evaluation Report (DER) No. 21 was transmitted to projects within LAPD and divisions external to LAPD for appropriate action. The DER information, however, was in fact transmitted to projects within LAPD and to the other Bechtel Thermal Power Organization Divisions.

CORRECTIVE ACTION

1. Corrective Steps Which Have Been Taken And The Results Achieved

- The amended 10 CFR 50.55(e) Report (refer to attachment 1) further defines the individual deficiencies described in DER 21 that were not included in the initial report, but which could be considered to be reportable. The amended report includes the corrective steps that have and will be taken with regard to these deficiencies.
- Information concerning potentially reportable conditions is disseminated to projects within LAPD and Divisions external to LAPD. The system for doing so is described in attachment 2.
- Conditions considered reportable are reviewed and a decision made at the project level as to whether one or both Regulations (10 CFR 50.55(e) and/or 10 CFR Part 21) apply.

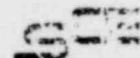
2. Corrective Steps Which Will Be Taken

- A Deficiency Evaluation Report Review Committee will be formed that will review each project Deficiency Evaluation Report for adequacy, accuracy, completeness and reportability under the appropriate Regulations.
- Provisions for closed loop actions and the formal documentation of these actions will be incorporated into the systems procedures. Applicability to other facilities or activities will be evaluated.
- Procedures and Instructions defining the detailed responsibilities and requirements of the projects and the Committee are being formulated.

3. Date When Full Compliance Will Be Achieved

- Necessary revisions to existing procedures and formulation of new procedures for items 1 and 2 above will be completed by May 5, 1980.
- It is expected that the corrective steps taken and those that will be taken will resolve the reported infraction issues.

Southern California Edison Company



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L. T. PAPAY
VICE PRESIDENT

TELEPHONE
213-572-1474

April 7, 1980

Mr. R. H. Engelken, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region V
Suite 202, Walnut Creek Plaza
1990 North California Boulevard
Walnut Creek, California 94596

Dear Mr. Engelken:

Subject: Docket Nos. 50-361 and 50-362
San Onofre Nuclear Generating Station, Units 2 and 3

In a letter to your office dated July 6, 1979 we provided a final report related to pipe support design calculation deficiencies for San Onofre Units 2 and 3. This report was submitted pursuant to 10CFR50.55(e).

Enclosed in accordance with 10CFR50.55(e) are twenty-five (25) copies of an amended report entitled "Amended Final Report Regarding Pipe Support Design Deficiencies, San Onofre Nuclear Generating Station, Units 2 and 3."

If you have any questions regarding this report, we would be pleased to discuss this matter with you at your convenience.

Very truly yours,

Enclosures

cc: Victor Stello (NRC, Director I&E)
R. J. Pate (NRC, San Onofre Units 2 and 3)

*dupe of
8004150538*

AMENDED FINAL REPORT REGARDING PIPE
SUPPORT DESIGN DEFICIENCIES

San Onofre Nuclear Generating Station
Units 2 and 3

INTRODUCTION

This report is submitted pursuant to 10CFR50.55(e)(3). It describes design deficiencies related to certain safety related pipe supports. This report includes a description of the deficiencies, analysis of the safety implications and a summary of the corrective action taken.

BACKGROUND

By letter dated July 6, 1979, Edison submitted a final report related to a lack of documented design calculations for certain safety related pipe supports. This report amends that report to include six additional deficiencies relating to safety related pipe support design activities. These deficiencies were reviewed in a meeting with the NRC resident inspector on January 31, 1980 and are considered reportable in accordance with 10CFR50.55(e).

DESCRIPTION OF DEFICIENCY

1. Insufficient Pipe Bearing Surface

A maximum of 500 large pipe supports for thin wall piping may not meet design requirements for pipe bearing surface. In these cases, loading conditions could result in local pipe stress allowables being exceeded. The problem was discovered in mid 1977. Design practices and criteria prior to this date did not provide for specific evaluation of local stresses.

2. Frictional Loading on Pipe Support Framing

The effect of loads imposed by thermal expansion movement of piping on pipe support framing may not have adequately considered in the design of certain 8 inch and larger pipe supports. The number of supports affected is included in the structural load resulting from pipe would cause additional loading. The problem was discovered in late 1977 and is attributable to a lack of written structural design calculations to activities.

DUPLICATE DOCUMENT

Entire document previously
entered into system under:

ANO 8004150546

No. of pages: 5