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APR 4 1983

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Docket No. 50-483

50-483

DCS

DCS EXEMPT

Union Electric Company
ATTN: Mr. Donald F. Schnell
Vice President, Nuclear
P.O. Box 149
Mail Code 400
St. Louis, Missouri 63166

Gentlemen:

SUBJECT: Integrated Design Inspection 50-483/82-22

This refers to the integrated design inspection conducted by the Office of Inspection and Enforcement on November 10 - November 19, 1982 and November 29 - December 14, 1982 at the Callaway Plant, your St. Louis corporate office, Nuclear Projects Incorporated, Bechtel Power Corporation and Westinghouse Electric Corporation. The inspection team was composed of personnel from the NRC's Office of Inspection and Enforcement, Office of Nuclear Reactor Regulation, the Region IV Office and consultants. This inspection covered activities authorized by NRC Construction Permit CPPR-139.

This inspection is the first of a series of integrated design inspections that the Office of Inspection and Enforcement plans to conduct with assistance from other NRC offices and consultants. The results of these inspections will be used to evaluate control of the design process and quality of design activities at nuclear plants.

The enclosed report identifies the areas examined during the inspection, which focused on the auxiliary feedwater system as a selected sample. Activities included examination of procedures, records, training and inspection of the system as installed at the plant. Emphasis was placed upon reviewing the adequacy of design details as a means of measuring how well the design process had functioned for the selected sample.

Findings regarding errors, procedural violations and inconsistencies are identified in the report. Unresolved items are identified where insufficient information was developed to allow final determinations on the adequacy of specific features or practices. Other observations are identified where it was considered appropriate to call attention to a matter that was not a specific finding or unresolved item. They include items recommended for your consideration but for which there are no specific regulatory requirements.

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Section 1 of the report provides a summary of the results of the inspection and the conclusions reached by the inspection team. No pervasive breakdown in the design process was identified; however, your prompt attention is needed for resolution of the specific deficiencies identified.

The most significant negative findings or deficiencies are summarized as follows:

- (1) There was a lack of formal control over Bechtel's use of plant design newsletters. Thus, these newsletters, which described acceptable modeling and stress analysis techniques, were not being applied uniformly to project design work (Section 3.1.2).
- (2) The auxiliary feedwater pump turbine exhaust pipe was not classified as Seismic Category I and safety grade throughout its entire length. No justification was available. This represented incomplete detailed analysis to support pump operability requirements. A similar classification was identified in two other systems (Section 2.4).
- (3) The ability of motor controllers to withstand fault currents had not been considered or assured. This represented an instance of improper detailed design (Section 5.2).
- (4) The team identified needs for improvement in control of the design process at Bechtel in certain areas such as those related to high energy line break analyses (Section 2.4), guidance for two design groups (Sections 3.1.4 and 3.2.4), interface definitions (Section 4.4) and baseplate design (Section 4.5).
- (5) Three instances were identified where specific FSAR commitments were not met, one of which involved the turbine exhaust pipe discussed above (Sections 2.3, 2.4, and 6.2).

With the exception of the matters identified in the findings and one observation concerning delay in resolving a design issue, the team considered the general project management to be a strength. Nearly all the detailed design information reviewed was adequate and consistent, indicating a controlled design process.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosures will be placed in the NRC Public Document Room unless you notify this office, by telephone, within 15 days of the date of this letter and submit written application to withhold information contained herein within 30 days of the date of this letter. Such applications must be consistent with the requirements of 10 CFR 2.790(b)(1).

You are requested to respond in writing to the findings and unresolved items within 45 days after receipt of this letter. With respect to the deficiencies identified in findings, the response should address the cause, extent, corrective actions and any other information you consider relevant. For unresolved items, the response should provide information concerning acceptability of the specific feature or practice involved. The response should be addressed to the NRC Region III Office, with copies to the NRC Region IV Office and this office.

As discussed in the report, the NRC's followup efforts will be managed by the Region III Office with assistance from other NRC offices as needed. Some of the items identified in the report may provide bases for enforcement actions. The Regional Office will initiate any enforcement actions considered appropriate.

Should you have any questions concerning this inspection, please contact us or James E. Konklin, Chief, Reactor Projects Section 1A, in the Region III Office.

Sincerely,

***Original Signed By
R. C. DeYoung***

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Inspection Report 50-483/82-22

cc: See Page 4

SEE PREVIOUS CONCURRENCES

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D:QASIP:IE
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JH Shiezek
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D:IE
RC DeYoung
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Mr. D. F. Schnell

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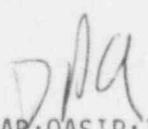
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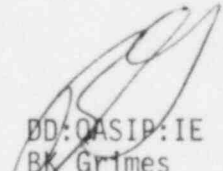
Sincerely,

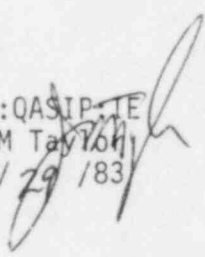
Richard C. DeYoung, Director
Office of Inspection and Enforcement

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JH Sniezek
3/ /83

D:IE
RC DeYoung
3/ /83

Mr. D. F. Schnell

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APR 4 1983

cc: Mr. W. H. Weber
Manager, Nuclear Construction
P.O. Box 620
Fulton, Missouri 65251

Mr. S. E. Miltenberger
Plant Manager
Callaway Plant
P.O. Box 620
Fulton, Missouri 65251

Mr. G. L. Koester
Vice President, Nuclear
Kansas Gas and Electric Company
201 North Market Street
Wichita, Kansas 67201

Mr. N. Petrick
Executive Director - SNUPPS
5 Choke Cherry Road
Rockville, Maryland 20850

Mr. Ronald Fluegge
Utility Division
Missouri Public Service Commission
P.O. Box 3601
Jefferson City, Missouri 65102

Mr. E. P. Wilkinson
President
Institute for Nuclear Power Operations
1100 Circle 75 Parkway
Suite 1500
Atlanta, Georgia 30339

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OCA (3)

W. J. Dircks, EDO

H. R. Denton, NRR

J. Heltemes, AEOD

H. Boulden, OIA

NRC Resident Inspector

NRR Project Manager

Regional Administrators

Inspection Team Members

R. C. DeYoung, IE

J. H. Sniezek, IE

E. L. Jordan, IE

J. M. Taylor, IE

B. K. Grimes, IE

T. L. Harpster, IE

R. L. Baer, IE

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