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Thomas J. Martin Vice Provident Engineering and Construction

December 2, 1980

Mr. Boyce H. Grier, Director U. S. Nuclear Regulatory Commission Office of Inspection & Enforcement Region 1 631 Park Avenue King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

NRC INSPECTION REPORT 50-354/80-14 AND 50-355/80-14 NO. 1 AND 2 UNITS HOPE CREEK GENERATING STATION

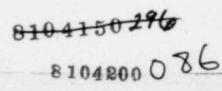
We have reviewed the report of your inspection conducted on September 2 - October 5, 1980. The report was transmitted with your letter of October 21, 1980 and received on October 30, 1980. The following corrective actions have been taken or contemplated relative to the one deficiency and three infractions determined:

"Deficiency applicable to Docket No. 50-354:

"IOCFR50, Appendix B, Criterion V, states, in part, that: 'Activities affecting quality shall be prescribed by documented instructions, procedures or drawings... shall be accomplished in accordance with these instructions, procedures, or drawings.'

"Section 16.4.5 of Chapter 16 of the PSAR states, in part, that: "Bechtel quality related activities are documented and controlled by written procedures and instructions."

"GEI&SE QA Manual paragraph 11.6.3 states, in part, that: 'The welding supervisor shall be responsible for initialing the Filler Metal Requisition Section of the JPCS. Welding filler metal shall be issued on the basis of this requisition. The Welding Supervisor shall fill in the appropriate Welder Symbol, the material class, type and size, and initial the requisition. The issuer shall eater the heat and lot number on the requisition, initial, and date the form.'





"Contrary to the above, review of the JPCS indicated it was not being utilized as the working document filler metal requisition form, but rather as a form that after-the-fact recorded that filler metal had been issued."

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Reply to A:

 Corrective steps which have been taken and the results achieved:

Nonconformity Report No. 17 was issued by GEI&SE on September 8, 1980. Subsequently, the record copy of the requisition page of the JPCS was assigned to the welder that would be using the material and the form presented to the individual issuing the electrodes/ filler material for initial.

 Corrective steps which will be taken to avoid further items of noncompliance:

Nonconformity Report No. 17 was dispositioned:

- Actual requisition page of JPCS will be used for assignment to welders as detailed in Section 11.6.3 of GE's QA Manual.
- b. A training class will be held concerning the issuance of electrodes and use of "working copies" of the traveler packages.
- 3. Date when full compliance will be achieved:

Remobilization by GEI&SE is scheduled the first week January 1981, at which time corrective actions required by Nonconformity Report No. 17 will be implemented.

B. "Infraction applicable to Docket No. 50-354:

"IOCFR50, Appendix B, Criterion IX states, in part, that: 'Measures shall be established to assure that special processes, including welding... are controlled and accomplished... using qualified procedures in accordance with applicable codes, standards specifications, criteria, and other special requirements.'

"Section 16.2.9 of Chapter 16 of the PSAR states, in part, that: 'The NSSS Contractor and Architect-Engineer shall establish controls over special processes such as welding... These controls shall assure that the procedures... are duly i qualified in accordance with applicable codes, standards...'

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"Contrary to the above, as of August 21, 1980, the control rod drive mechanism housing support brackets were being welded to the reactor vessel pedestal liner without prior establishment of a code basis for installation and inspection."

Reply to B:

- Corrective steps which have been taken and the results achieved:
 - a. GEI&SE issued SDDR, Supplier Deviation Disposition Request, No. 16 (Bechtel No. M098 No. 12), regarding CRD beam seats installed using a welding procedure that did not meet the requirements of the AWS Code prequalifications. (Dihedral Angle of Skewed "T" Joints, Section 2 - Design Welded Joints.)
 - b. GE/NEBG in turn issued FDDR, Field Deviation Disposition Request, No. KT1-042. Subsequent disposition was as follows:

Installation of the equipment using Section IX qualifications is acceptable, provided a mock-up is conducted. The mock-up shall duplicate the smallest skewed angle joint. The lack of filler metal penetration into the root shall be recorded from the mock-up and the value added to the throat thickness of skewed angle production welds. It shall be verified that welds covered by the mock-up are adequate.

- c. Bechtel concurrence in the use of FDDR KT1-042 as disposition to SDDR NCR-12 has been obtained.
- Corrective steps which will be taken to avoid further items of noncompliance:

GE/NEEG review of design of similar areas revealed no other weld configurations that will require special considerations other than those addressed by FDDR KT1-042.

3. The date when full compliance will be achieved:

GEI&SE is scheduled to remobilize in January 1981, at which time the disposition (mock-up) of FDDR-042 will commence.

C. "Infraction applicable to Docket No. 50-354:

"10CFR50, Appendix B, Criterion IX states, in part, that: 'Measures shall be established to assure that special processes, including welding... are controlled...'

"Section 16.2.9 of Chapter 16 of PSAR states, in part, that: 'The... Architect Engineer shall establish controls over special processes such as welding...'

"Contrary to the above, as of September 18, 1980, controls were not established over welding preheat operations which resulted in damage to safety related concrete adjacent to areas being preheated."

Reply to C:

- Corrective steps which have been taken and the results achieved:
 - a. Preliminary inspection of the affected areas by Bechtel Civil Engineers indicates the concrete experienced only superficial damage. A full inspection will be performed and documented after removal of paint from the concrete. Removal of the paint is scheduled for completion by January 15, 1981.
 - b. Craft welders have been instructed in correct preheating procedures and the item is included in the Weekly Indoctrination Training Class for new welders.
 - c. Field Engineering and QC have been instructed to be aware of preheating operations and to take appropriate actions when preheating operations are not being accomplished satisfactorily.
- Corrective steps which will be taken to avoid further items of noncompliance:

Same as corrective steps taken.

3. Date when full compliance will be achieved:

All weld preheating operations are in full compliance with applicable codes and standards.

D. "Infraction applicable to Docket Nos. 50-354 and 50-355:

"10CFR50, Appendix B, Criterion V states, in part, that: 'Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings... and shall be accomplished in accordance with these instructions, procedures, or drawings.'

"Section 16.4.5 of Chapter 16 of the PSAF states, in part, that: 'Bechtel quality related activities are documented and controlled by written procedures and instructions.'

"Bechtel Specification C-126(Q) states in paragraph 8 that there are three acceptable bolt tightening methods permitted for erection of structural steel.

"Contrary to the above, as of September 24, 1980, ironworkers were not tensioning bolts in accordance with specification C-126(Q) requirements. Additionally, there was a misunderstanding amongst site QC personnel as to the acceptable methods of bolt tensioning."

Reply to D:

 Corrective steps which have been taken and the results achieved:

Bechtel QC initiated NCR 906 for project review/disposition. To assist in the response to the NCR, QC has inspected approximately 14% or 900 accessible bolts installed without load-indicating washers using a calibrated torque wrench. Approximately 2% or 18 bolts tested had not been properly torqued.

 Corrective steps which will be taken to avoid further items of noncompliance:

Personnel involved have been advised that all future connections will be installed with load-indicating washers of turn-of-the-nut method. The option of calibrated impact wrench will remain in the specification but will be used as a last resort only and in strict compliance with the specification and AISC requirements.

3. Date when full compliance will be achieved:

Based on data obtained through examination and review of the specification and design requirement, Project Engineering is scheduled to disposition Nonconformance Report No. 906 on or before January 30, 1981.

Boyce H. Grier

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If you require additional information, we will be pleased to discuss it with you.

Very truly yours,

1 Martin

CC Office of Inspection & Enforcement Div. of Reactor Construction & Inspection Washington, DC

H. E. Morris Bechtel Power Corp. San Francisco, CA

12/2/80