

FEB 21 1985

NOTE TO: B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

FROM: Paul W. O'Connor, Project Manager
Licensing Branch No. 1
Division of Licensing

SUBJECT: MEETING WITH COMMISSIONER ASSELSTINE IN REGION IV

On February 15, 1985, T. M. Novak, B. D. Liaw, and I assisted in the briefing of Commissioner Asselstine in Region IV on the subject of Wolf Creek Structural Steel Welding. The enclosed slides were used.

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Paul W. O'Connor, Project Manager
Licensing Branch No. 1
Division of Licensing

Enclosure:
As stated

CONCURRENCES:

DL:LB#1 *PWC*
PO'Connor:es

2/21/85

DIST:

Docket File *STN 50-482*
PRC System
LB#1 Rdg
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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WOLF CREEK
FIELD WELDING OF STRUCTURAL STEEL

11,000+ STRUCTURAL STEEL JOINTS FOR SAFETY-RELATED COMPONENTS
AND STRUCTURES

2670 STRUCTURALLY SIGNIFICANT (SAFETY-RELATED) FIELD WELDED
JOINTS

MAR 83 241 WELD SAMPLE SHOWS 147 DEFECTIVE, EVALUATED, MANY
DEFECTS CALLED COSMETIC, USE-AS-IS.

AUG 83 16% OF INSPECTION RECORDS NOT AVAILABLE. CALLED
ACCEPTABLE SINCE WELDS "SHOWN TO BE OK."

JUN-SEP 84 RIV INSPECTION AND TASK FORCE

SEP 84 KG&E/BECHTEL/D.I.C. MEET WITH NRC-RIV.
RIV CONCLUDES:
- MAR 83 AND AUG 83 DECISIONS WRONG, WELDING
INDETERMINANT.
- MORE INSPECTION SHOWS MISSING AND DEFICIENT
WELDS.

OCT 84 RIV ISSUES INSPECTION REPORT

OCT 84 KG&E INITIATES CORRECTIVE ACTION

2/15/85 - RPD

NOV 84 RIV REQUESTS NRR ASSISTANCE

- SELECTION OF JOINTS
- CONDUCT OF ANALYSIS
- INSPECTION OF PAINTED WELDS
- PRIOR NRC EXPERIENCE ON SIMILAR DECISIONS

NOV 84 RIV ISSUES NOV & CP (\$75,000)

- FAIL TO INSPECT
- FAIL TO TAKE CORRECTIVE ACTION
- FAIL TO MAINTAIN RECORDS

DEC 84 KG&E SUBMITS CORRECTIVE ACTION RESULTS

- ASSURE WELD PROCED. QUALIFIED
- ASSURE WELDER QUALIFICATIONS
- ASSURE MATERIAL CONTROL
- REINSPECT ALL STRUCTURALLY SIGNIFICANT WELDS WHICH ARE ACCESSIBLE
- REPAIR DEFICIENCIES AFTER ANALYSIS
- INSTALL MISSING WELDS
- EXAMINE OTHER AREAS FOR DEFICIENCIES

JAN 85 NRC ANALYSIS
KG&E ADDITIONAL INFO
RIV CONTINUES INSPECTION

FEB 85 NRR EVALUATION COMPLETE
RIV CONTINUES INSPECTION
RIV REQUESTS AND RECEIVES REGION I NDE ASSISTANCE
KG&E AUGMENTS INFORMATION

NRC DECISION SCHEDULED.

2/15/85 - RPD

CORRECTIVE ACTION MODE

ISSUES -

- CONFORMANCE TO AWS D.1.1
 - ° WELD DEFICIENCIES - EVALUATION/REPAIR
 - ° REINSPECTION OF PAINTED WELDS*

- SOUNDNESS OF STRUCTURE FOR SAFE OPERATION - BASIS FOR DETERMINATION

*AWS D.1.1 DOES NOT HAVE A "CORRECTIVE ACTION PRESCRIPTION LOOP," ONLY AN "ORIGINAL INSPECTION LOOP." CORRECTIVE ACTION IS UP TO OWNER/A-E/NRC.

CANNOT "GO BACK" IN AWS.

FUNDAMENTAL CONCLUSION - INSPECTION OF PAINTED WELDS WILL SHOW SIGNIFICANT DEFECTS. "MASKED" DEFECTS NOT EXPECTED TO OCCUR DUE TO MATERIALS AND PROCEDURES.

BUT YOU DO NOT HAVE TO DEPEND ON THIS FOR TECHNICAL ADEQUACY.

TECHNICAL ELEMENTS OF DECISION

DETAILED REINSPECTION OF PAINTED JOINTS
DETAILED REINSPECTION OF UNPAINTED JOINTS
ANALYSIS AND EVALUATION OF JOINTS AS-BUILT
REPAIR REJECTABLE DEFECTS
INSTALL MISSING WELDS
INDEPENDENT NRC INSPECTIONS AND WITNESSING
REVIEW OF KG&E RESULTS
INDEPENDENT NRC NDE (REGION I)
STATISTICAL EVALUATION WITH HIGH CONFIDENCE

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RESULTS

TOTAL STRUCT. SIGNIFICANT JOINTS	2670
INACCESSIBLE CONNECTIONS	119*
MISSING CONNECTIONS	21
NET STRUCT. SIGNIFICANT JOINTS INSP.	<u>2529</u>

<u>BUILDING</u>	<u>CONNECTIONS</u>		<u>UNPAINTED + MT PAINTED</u>	
	<u>PAINTED</u>	<u>UNPAINTED</u>	<u>+ WELDER QUAL.</u>	
AUX (635)	133	502	581	(92%)
CONTROL (212)	40	172	204	(96%)
DIESEL (97)	66	31	81	(83%)
FUEL (278)	163	115	256	(92%)
ESW PUMP (36)	31	5	17	(55%)
REACTOR <u>(1271)</u>	1051	<u>220</u>	<u>953</u>	<u>(75%)</u>
(2529)	(1484)	(1045)	(2092)	(83%)

A SOUND AND CONFIDENT CONCLUSION CAN BE MADE BASED ON ALL FACTORS. SAMPLE SIZE OUT OF TOTAL POPULATION SUPPORTS CONFIDENCE FACTOR > 95%.

*BEING REDUCED IN IMPORTANCE DUE TO ANALYSIS WHICH SHOWS SOME JOINTS. COVERED WITH CONCRETE DO NOT NEED WELD MATERIAL SINCE CONCRETE ITSELF SUPPORTS THE LOAD.

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