Callaway Plant
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UNION ELECTRIC

September 13, 1996

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Stop P1-137
Washington, DC 20555-0001

ULNRC-03437
Tac. No. M96349

Gentlemen:

DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
FACILITY OPERATING LICENSE NPF-30
REQUEST FOR ALTERNATIVE EXAMINATION REQUIREMENTS FOR THE CALLAWAY PLANT INSERVICE INSPECTION PROGRAM PLAN

References: 1) W. H. Bateman ltr to D. F. Schnell dated December 20, 1995
2) ULNRC-3378 dated May 15, 1996
3) ULNRC-3422 dated August 19, 1996
4) K. M. Thomas ltr to D. F. Schnell dated September 10, 1995

The enclosed provides additional information in support of Relief Request ISI-07B. This information is submitted in response to the request for additional information transmitted by Reference 4 and supplements the information transmitted by References 2 and 3 to address concerns raised during telephone conferences on September 10, 11, and 12, 1996.

If you have any questions concerning this information, please contact us.

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Manager, Nuclear Engineering

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CDN/ts

Enclosure

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ATTACHMENT 1

RESPONSES TO NRC REQUEST FOR ADDITIONAL INFORMATION ISI-07B

Responses to NRC Requests for Additional Information
ISI-07B

Information requested by the NRC for Alternative Examination ISI-07B:

NRC Question 1

For the studs listed in Table 1 of the August 19, 1996, submittal that are made of A-286 stainless steel (SA-453, Grade 660 stainless steel), provide the pre-load torque value for each stud.

Union Electric Response

This item was modified during the telephone conference of 9/10/96 to only require a sample of five component pre-load values. A table of five typical components and their corresponding pre-load values is enclosed together with Callaway Procedure MTM-ZZ-QV009 - Westinghouse Check Valve Disassembly/Reassembly (Attachments 2 and 3 respectively).

Also enclosed as Attachment 4 are excerpts from the relevent portions of the Callaway Plant Bolting Manual for SA-564 Grade 630 and SA-453 Grade 660 bolting. The plant bolting manual is only utilized when torque values are not supplied by vendor manuals.

NRC Question 2

For the studs listed in Table 1 of the August 19, 1996, submittal that are made of 17-4 PH stainless steel (SA-564, Grade 630 stainless steel), provide the tempering temperature and hardness values where they have not already been provided.

Union Electric Response

The tempering temperature and hardness values were provided in Reference 3 for all studs made of 17-4 PH stainless steel.

The telephone conferences of 9/11/96 and 9/12/96 yielded concerns that the Rockwell hardness values for the studs made of 17-4 PH stainless steel did not correspond with the heat treatment listed. Per the 1995 Edition of ASME Section II Part A on SA-564 material the minimum Rockwell hardness number is 31 for the H1100 heat treatment. The Callaway materials in question meet this requirement.

Informal discussion with members of ASME Section XI who were present during the development of IWA-5242 confirm that this section of the code was added solely to mitigate general corrosion concerns and not to inspect for intergranular stress corrosion cracking concerns.

Table 1 of Alternative Examination Request ISI-07B (Attachment 5) is revised by this submittal. Components PEJ01A and PEJ01B have bolting fabricated from SA-453 Gr 660 material. The heat treatment and hardness values remain unchanged.

ATTACHMENT 2

TABLE A
NRC REQUEST FOR ADDITIONAL INFORMATION ISI-07B

NRC Request for Additional Information ISI-07B
Table A

Component	Stud Material	Work Document	Date	Max. Torque (ft-lbs)	Pre-load (psi)	Procedure
BB8010A	SA-453 Gr 660	W160914	10/29/93	1250	55,298	Vendor Manual A-1543
BB8948A	SA-453 Gr 660	S419143	10/22/90	2300	59,637	MTM-ZZ-QV009
BB8949B	SA-453 Gr 660	W008032	2/13/84	2300	59,637	MTM-ZZ-QV009
EJHV8701A	SA-453 Gr 660	W575714	10/13/95	3500	59,500	Vendor Manual M-724-00409
EJ8730A	SA-453 Gr 660	W171802	4/4/95	330	62,582	MTM-ZZ-QV009

Note: The stress is determined using a nut factor of .16 based on the N-5000, Never Seez lubricant.