

MAY 25 1982

Docket Nos.: 50-508/509

MEMORANDUM FOR: F. J. Miraglia, Chief, Licensing Branch No. 3, DL

FROM: L. L. Wheeler, Project Manager, Licensing Branch No. 3, DL

SUBJECT: WPPSS MEETING WITH NRR TO DISCUSS ITT - GRINNELL PIPE
HANGER STIFF CLAMPS

DATE & TIME: June 11, 1982
9:00 AM - 3:00 PM

LOCATION: Phillips Building, Room P-114

PURPOSE: Utility briefs NRR on technical aspects of ITT - Grinnell
Figure 215 Pipe Hanger Stiff Clamps

AGENDA: See enclosed copy

PARTICIPANTS: NRC: R. Dodds, D. Haist, D. Smith, D. Terao, L. Wheeler
PNL: G. Beeman (NRC consultant)
WPPSS: O. Trapp
Ebasco: J. Rufnerman, F. Stomel, M. Mancini
ITT: J. Hare, A. Laurenson, P. Stanish

Louis L. Wheeler, Project Manager
Licensing Branch No. 3
Division of Licensing

Enclosure:
As stated

cc: See next page

NOTE: NRC meetings are open to interested members of the public to attend as observers. Members of the public who wish to attend this meeting must contact L. Wheeler (301/492-7792) no later than 3:45 pm, June 10, 1982.

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PDR ADOCK 05000508
A PDR

OFFICE	DL: LB#3	DLB LB#3					
SURNAME	LWheeler:cz	FMiraglia					
DATE	5/28/82	5/28/82					

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AGENDAITT-GRINNELL PIPE HANGER STIFF CLAMP PRESENTATION

I. Design Concepts

A. Stiffness Requirement

1. Use of pre-load
2. Method of applying pre-load

B. Qualification Procedure

1. Code requirements
2. Pre-test analysis performed
3. Testing performed
 - a. Strength verification (code)
 - b. Stiffness verification (spec.)
4. Analysis of Results

II. Field Failure

A. Field problems encountered

1. Tie rod bending
2. Torque relaxation
3. Broken Strap

B. Cause of problems encountered

C. Testing done in response to failure

1. Torque testing
2. Metallurgical

D. Remedy

1. New trunnion design
 - a. Additional testing performed
 - i. Re-qualification testing
 - ii. Ultimate strength of straps and rivet connection
 - iii. Ultimate torque test
 - iv. Torque relaxation
 - b. Effects on nested applications

III. Strap Edge Indications

- A. Discovery
- B. Site Review
- C. Cause
- D. CORRECTIVE ACTION
- E. Effect on Performance

IV. Use of Rivets

- A. Method of design
- B. Cause of initial questions
 - 1. LCD errors
 - 2. Documentation control
- C. Review of NRC

V. Material Concerns

- A. Re-qualification of Strap Material
 - 1. Code Case
 - 2. Strength
 - 3. Combined stresses
 - a. Failure
 - b. Stiffness
- B. Rivet Material
 - 1. Code Case
 - 2. Heat treatment
 - a. Not to SA spec.
 - b. Sequence of heat treating straps
 - c. NAS Specification (AMS-5737)
 - 3. No rivet failures

PRESENTATION OUTLINE
(continued)

- 3 -

Additionally:

- Creep
- Stress Corrosion
- Effects of Elevated Temp.
- Effects of Heat Treatment
- Load Capacity Data Sheet Limitations 350F V. 650F
- Actual V. Code for Material Allowables
- Pipe Wall Stress
- Re-aging Rivet Material

MEETING NOTICE DISTRIBUTION

Document Control (50-508/509)

NRC PDR

LPDR

TERA

NSIC

LB#3 Files

JLee

Project Manager L. Wheeler

ECase

DEisenhut/RPurple

RTedesco (only if participant or if held in Bethesda)

JYoungblood

ASchwencer

FMiraglia

EAdensam

JMiller

GLainas

WRussell

DCrutchfield

Tippolito

JKnight

WJohnston

DMuller

TSpeis

RHouston

LRubenstein

FSchroeder

MErnsi

JKramer

(Division Directors - only if participant in meeting)

Attorney, OELD B. Vogler

OI&E

Regional Administrator, Region y

Resident Inspector

ACRS (6)

OSD (7)

NRC Participants



cc: Service List