

**SARGENT & LUNDY
ENGINEERS**

FOUNDED BY FREDERICK SARGENT-1891
55 EAST MONROE STREET
CHICAGO, ILLINOIS 60603
TELEPHONE - 312-269-2000
CABLE ADDRESS - SARGUN-CHICAGO

July 7, 1980

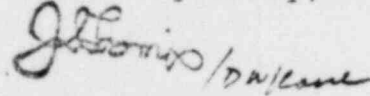
Mr. Richard W. Snaider
Generic Issues Branch
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Snaider:

Enclosed are our comments on "Additional Guidance on
'Potential for Low Fracture Toughness and Lamellar
Tearing on PWR Steam Generator and Reactor Coolant
Pump Supports,' NUREG-0577" dated May 20, 1980.

We appreciate having been given the opportunity to
comment.

Yours very truly,



J. S. Loomis, Head
Nuclear Safeguards &
Licensing Division

JSL:LAL:cjr
Enclosure
Copies:
R. F. Janecek (1/1)
G. P. Wagner (1/1)
NSLD File: 1B-4 (1/1)

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LIST

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Sargent & Lundy Comments On "Additional Guidance on 'Potential For Low Fracture Toughness and Lamellar Tearong On PWR Steam Generator and Reactor Coolant Pump Supports,' NUREG-0577"

General

1. Fracture Toughness

- a. The Additional Guidance dated May 20, 1980 requires that NDTT criteria be met for thicknesses > 2.5 inches.
- b. When Charpy test is permitted, the acceptance criteria are given in terms of ft-lbs at 75°F.

As these criteria affect a large number of the operating plants and plants under construction, it is suggested that those plants designed using the ASME B&PV Code, Section NF criteria be considered acceptable.

The ASME Section NF 2300 criteria insure adequate fracture toughness at temperatures well below the operating temperature. Per NF 2300, the CVN test is permitted for all material thicknesses, and the acceptance criteria are given in terms of mils lateral expansion. The mils lateral expansion was considered by the ASME a better indicator of the fracture toughness and adopted in NF 2300 as it provides a fixed level of ductility and shows much less variation as compared to the energy (ft-lbs) variability. (Ref.: "PVRC Recommendations on Toughness Requirements to Ferritic Materials," Welding Research Council Bulletin 175, August 1972.)

2. Stress Corrosion Cracking

The stress corrosion cracking for materials with minimum yield strength greater than 120 ksi is inconsistent with the Sandia report (page C-23). The report states that "...as long as the specified yield strength is less than 180 ksi, this problem is not considered to be present."

The 120 ksi yield level will preclude the use of pretensioned A490 bolts, which have a yield strength of 130 ksi. Sargent & Lundy recommends that 180 ksi be established as the minimum yield strength used to determine the susceptibility of a material to stress corrosion cracking, to be consistent with the Sandia report. The acceptance of higher strength materials will also be consistent with NRC Regulatory Guide 1.85, Code Case 1644.