TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

SEP 26 1988

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of	)	Docket Nos. 50-327
Tennessee Valley Authority	)	50-328

SEQUOYAH NUCLEAR PLANT (SQN) - NRC BULLETIN 88-05 SUPPLEMENTAL INFORMATION

Reference: TVA letter to NRC dated August 25, 1988, "Browns Ferry Nuclear Plant (BFN) Units 1, 2, and 3 and Sequoyah Nuclear Plant (SQN) Units 1 and 2 - NRC Bulletin 88-05 - Nonconforming Materials Supplied By Piping Supplies, Incorporated (PSI), At Folsom, New Jersey, and West Jersey Manufacturing Company (WJM) at Williamstown, New Jersey"

TVA presented information to NRC during a meeting on September 13, 1988, regarding the results to date of our inspections for potentially nonconforming materials supplied by Piping Supplies, Incorporated (PSI), and West Jersey Manufacturing Company (WJM). The handouts used in that presentation are enclosed.

TVA has identified five vendors that provided WJM or PSI material to SQN: M. W. Kellogg; Dubose Steel, Inc.; Capitol Pipe and Steel Products Company; National Valve Company; and Hub, Inc. All WJM and PSI material records retrieved to date are for carbon steel flanges, with the majority being two inches or less in size. WJM and PSI material has been found acceptable for the intended application because all flanges tested and reported by Nuclear Management and Resources Council (NUMARC) have met American National Standards Institute (ANSI) B16.5 dimensional requirements, and most material shows tensile strengths greater than 70,000 pounds per square inch. A safety factor of approximately 6 is present even with the minimum reported tensile strength of approximately 40,000 pounds per square inch.

TVA will continue to work with vendors to identify WJM or PSI material delivered to SQN. TVA will act on new information as it becomes available and will follow the reporting requirements of item 1 to Bulletin 88-05, supplement 1.

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Please direct questions concerning this issue to M. J. Burzynski at (615) 870-6172.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

Ralph H. Shell

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ENCLOSURE

SQN BULLETIN 88-05 - SUPPLEMENTAL INFORMATION

NRC BULLETIN 88-05 SQN RESULTS TO DATE

- Five vendors provided WJM or PSI material to SQN (Kellogg, National Valve, Capitol Pipe and Steel Products, Dubose Steel, and Hub). Awaiting responses to inquiries from 11 other vendors for material provided after construction.

- All WJM and PSI material records retrieved thus far are for flanges (orifice, blind, and weld neck). Sizes range from 1 to 14 inches, with a majority being 2 inches or less.

- All fittings identified to date are carbon steel (approximately 580).

- Carbon steel fittings are prohibited from use in systems containing boric acid.

- TVA continuing to work with vendors to identify WJM or PSI material delivered to SQN.

TECHNICAL EVALUATION OF FLANGES

- Based on ANSI B16.5 criteria, flanges are normally designed to be thicker than adjoining piping, which results in low stress factors.

- The WJM flanges have been shown to meet ANSI B16.5 dimensional requirements.

- The minimum tensile value to date for WJM material is 40,000 pounds per square inch (psi), which gives a safety factor of approximately 6.

- Most material has shown tensile strength greater than 70,000 psi (NUMARC test report), which gives a safety factor of at least 10.

- WJM material has been found acceptable for intended application.

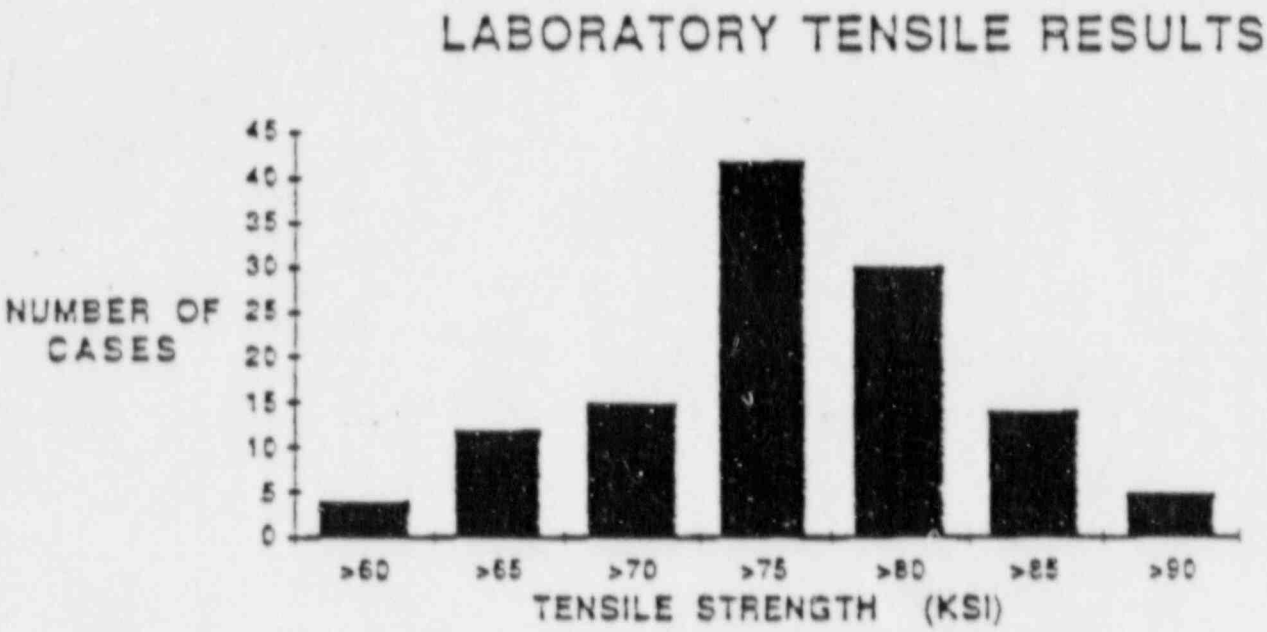
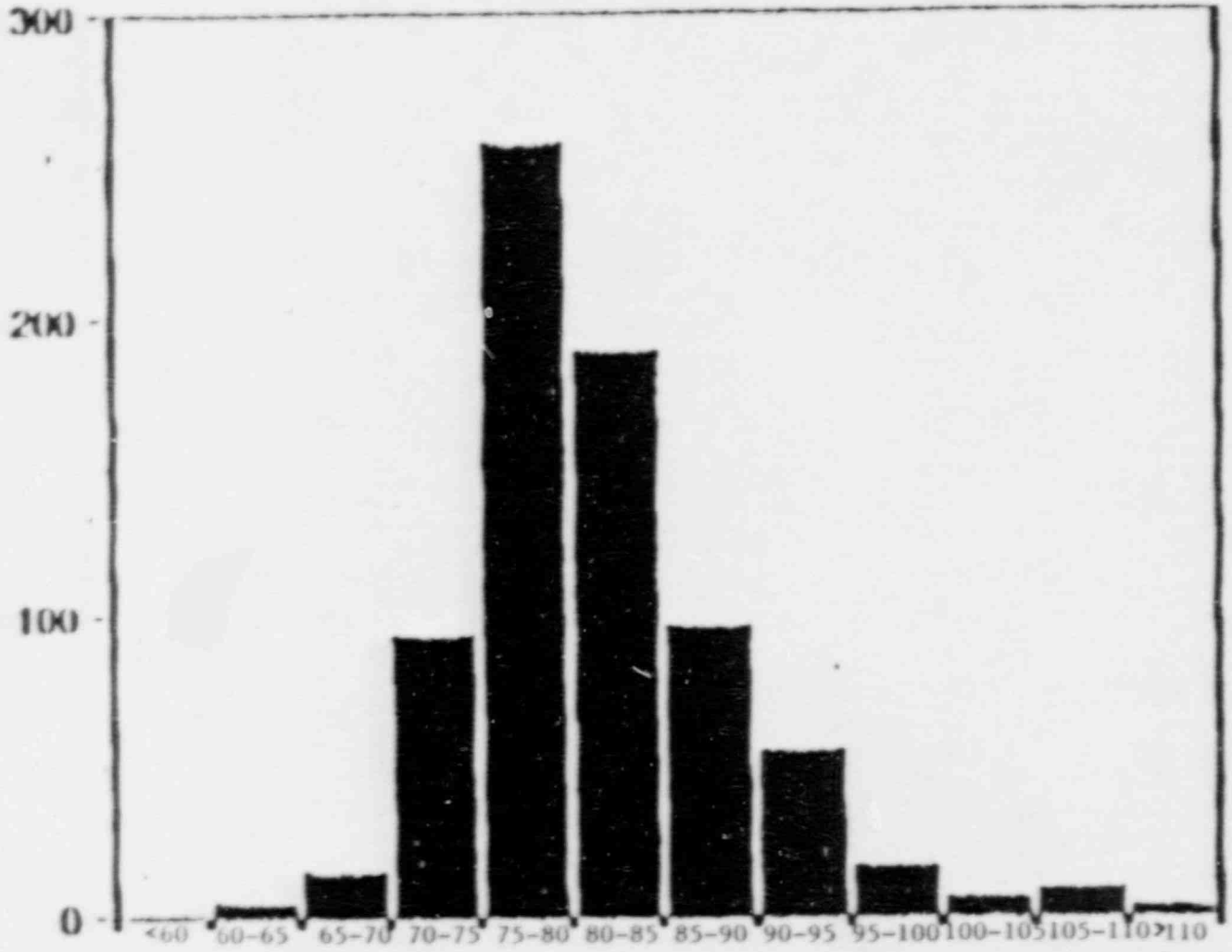


FIG. 1 HISTOGRAM OF LABORATORY TENSILE RESULTS

NUMARC letter to NRC dated July 29, 1988 (included in supplement 2 to Bulletin 88-05)

ESTIMATED TENSILE STRENGTH DISTRIBUTION



Data as of 7/15/88

FIG. 6 BEST FIT DATA APPLIED TO FIELD HARDNESS STRENGTH ESTIMATE

NUMARC letter to NRC dated July 29, 1988 (included in supplement 2 of Bulletin 88-05)