

Technical Specification Change Request No. 14

Replace pages 3/4 6-9a, 3/4 6-9b, 3/4 6-9c, 3/4 6-9d and B 3/4 6-2 with the attached revised pages 3/4 6-9a, 3/4 6-9b, 3/4 6-9c, 3/4 6-9d, 3/4 6-9e and B 3/4 6-2.

Proposed Change

Revise Specification 4.6.1.6.4 to be Specification 4.6.1.6.5 and insert Specification 4.6.1.6.4 Containment Dome as per the attached pages.

Revise the final sentence of Bases Specification 3/4.6.1.6 to read: "The measurement of containment tendon lift off force, the visual and metallogical examinations of tendons, anchorages and liner, the measurement of dome elevation differences and cracks, the general visual inspection of the dome and the Type A leakage tests are sufficient to demonstrate this capability."

Reason for Proposed Change

In accordance with Paragraph 2.C.(8) of Amendment No. 1 to the Crystal River Unit 3 Nuclear Generating Plant Facility Operating License No. DPR-72, FPC submitted a proposed surveillance program for monitoring the containment dome to detect any future delamination on May 10, 1977. The NRC subsequently approved the surveillance program on May 31, 1977 and requested that FPC submit changes to the Facility Operating License Appendix A Technical Specifications. This Change Request incorporates the approved surveillance program into the Technical Specifications.

Safety Analysis Justifying Proposed Change

Florida Power Corporation and the NRC have concluded that the proposed surveillance program for monitoring the containment dome (which provides a system for measuring the vertical movement of the dome and mapping of crack widths and crack patterns) at periodic intervals can determine that the condition of the structure is within acceptable limits. Therefore, the incorporation of this surveillance program into the CR #3 Technical Specifications does not involve an unreviewed safety question.

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CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.6.1.6.2 End Anchorages and Adjacent Concrete Surfaces The structural integrity of the end anchorages of all tendons inspected pursuant to Specification 4.6.1.6.1 and the adjacent concrete surfaces shall be demonstrated by determining through inspection that no apparent changes have occurred in the visual appearance of the end anchorage of the concrete crack patterns adjacent to the end anchorages. Inspections of the concrete shall be performed during the Type A containment leakage rate tests (reference Specification 4.6.1.2) while the containment is at the maximum test pressure.

4.6.1.6.3 Containment Surfaces The structural integrity of the exposed accessible interior and exterior surfaces of the containment, including the liner plate, shall be determined during the shutdown for each Type A containment leakage rate test (reference Specification 4.6.1.2) by a visual inspection of these surfaces and verifying no apparent changes in appearance or other abnormal degradation.

4.6.1.6.4 Containment Dome The containment dome's structural integrity shall be demonstrated at the end of 1 year, 18 months, 2 years, 3 years, 40 \pm 10 months (coincident with the first periodic integrated containment leak rate test), and 5 years following the initial containment structural integrity test. The dome's structural integrity shall be demonstrated by:

- a. Measuring the elevation difference of 7 dome survey points (1 at the apex; 3 at a radius of \approx 29 feet at azimuths 90^o, 215^o and 334^o; and 3 at a radius of \approx 49 feet at azimuths 90^o, 215^o and 334^o) and 3 benchmarks (on Ring Girder at azimuths 90^o, 215^o and 334^o) along with respective azimuths. These elevation differences shall be compared to the elevation differences established by the Baseline Survey. If the containment is in a normal operation/shutdown mode, the acceptable change in change in elevation differences will be based on consideration of expected movement and survey accuracy coupled with an acceptable strain level for the radial reinforcement. Changes of a greater magnitude shall require an engineering evaluation. If the containment is in a pressurized mode for a periodic containment integrated leak rate test, the acceptable changes in elevation differences will be similar to that for the initial containment structural integrity test applied to the elevation differences during the periodic containment integrated leak rate test.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. Measuring crack widths and plotting crack patterns in the area of the dome 3 feet on either side of azimuths 195° from the apex to the Ring Girder. Cracks wider than 0.010 inches will be plotted and cracks wider than 0.040 inches shall require an engineering evaluation. In addition, a general visual inspection of the entire dome surface area shall be performed.

4.6.1.6.5 Reports Any abnormal degradation of the containment structure detected during the above required tests and inspections shall be reported to the Commission pursuant to specification 6.9.1. This report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedure, the tolerances on cracking, and the corrective actions taken.

CONTAINMENT SYSTEMS

BASES

3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that 1) the containment structure is prevented from exceeding its design negative pressure differential with respect to the outside atmosphere of 3.0 psig and 2) the containment peak pressure does not exceed the design pressure of 54.6 psig during LOCA conditions.

The maximum peak pressure obtained from a LOCA event is 49.6 psig. The limit of 3 psig for initial positive containment pressure will limit the total pressure to 52.6 psig which is less than the design pressure and is consistent with the safety analyses.

3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that the overall containment average air temperature does not exceed the initial temperature condition assumed in the accident analysis for a LOCA.

3/4.6.1.6 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the containment will withstand the maximum pressure of 52.6 psig in the event of a LOCA. The measurement of containment tendon lift off force, the visual and metallurgical examinations of tendons, anchorages and liner, the measurement of dome elevation differences and cracks, the general visual inspection of the dome, and the Type A leakage tests are sufficient to demonstrate this capability.

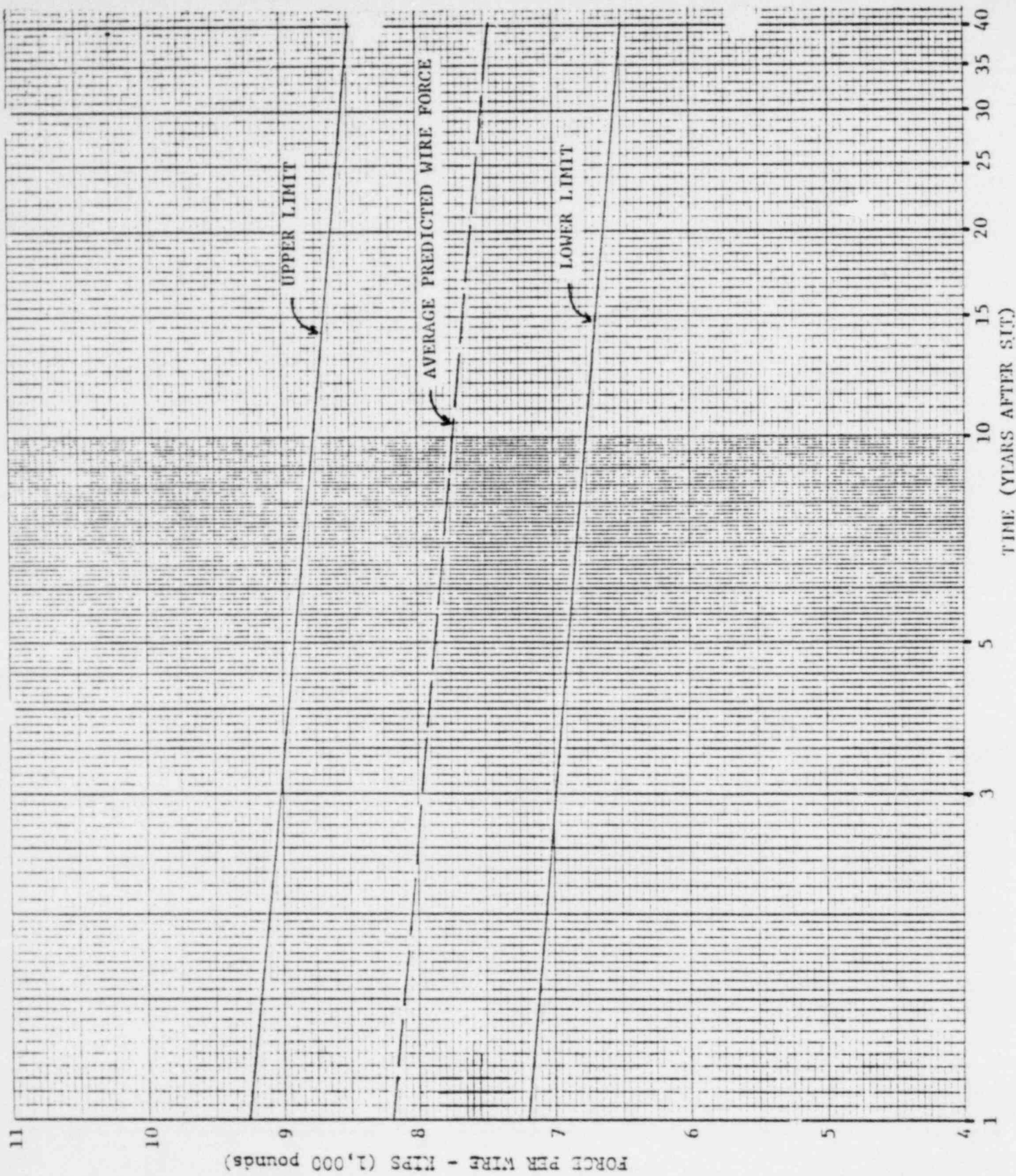


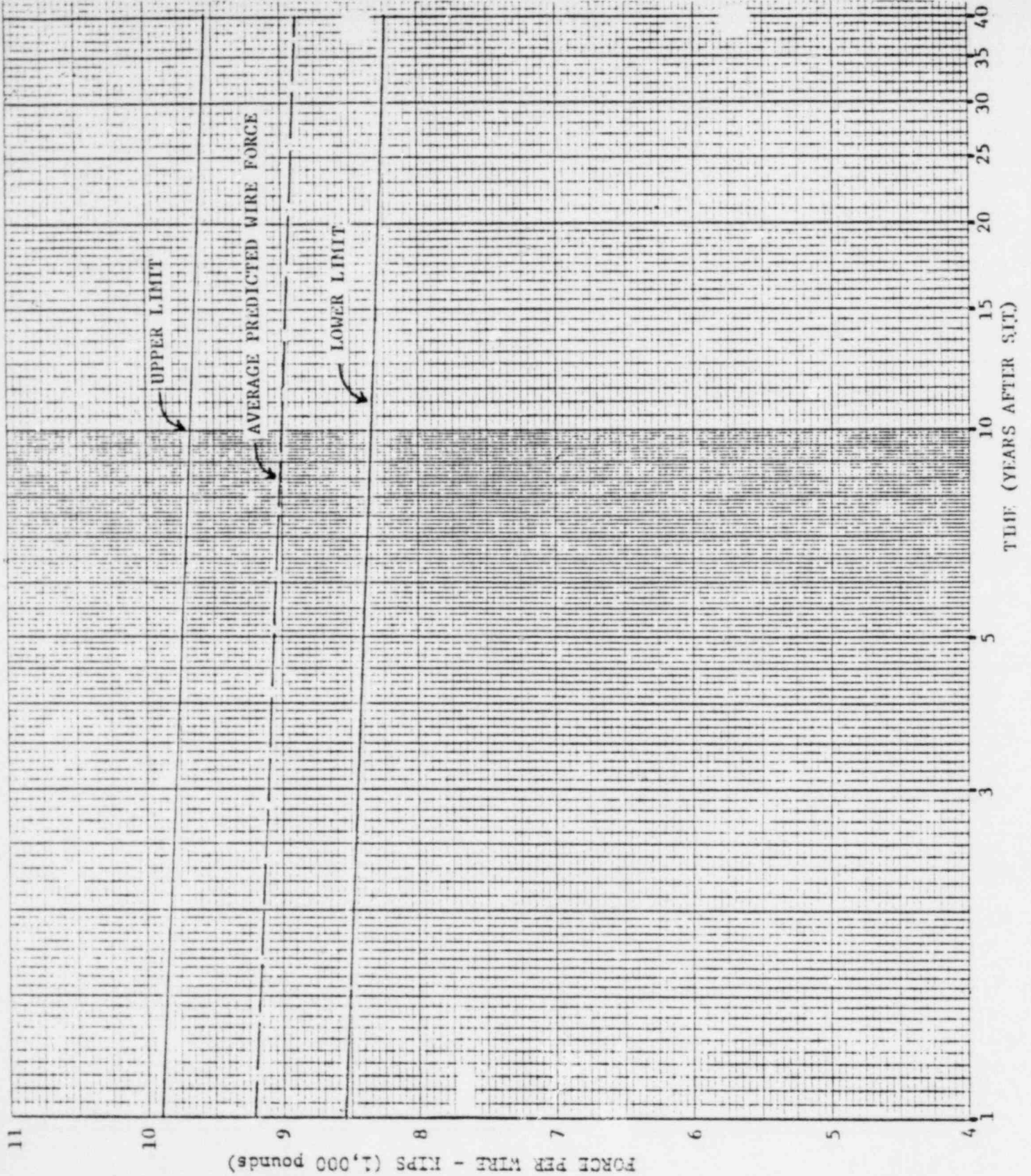
Figure 4.6-1

WIRE FORCE VS. TIME
 DOME TENDONS

CRYSTAL RIVER - UNIT 3

3/4 6-9c

POOR ORIGINAL



POOR ORIGINAL

FIGURE 4.6-2
WIRE FORCE VS. TIME
VERTICAL TENDONS

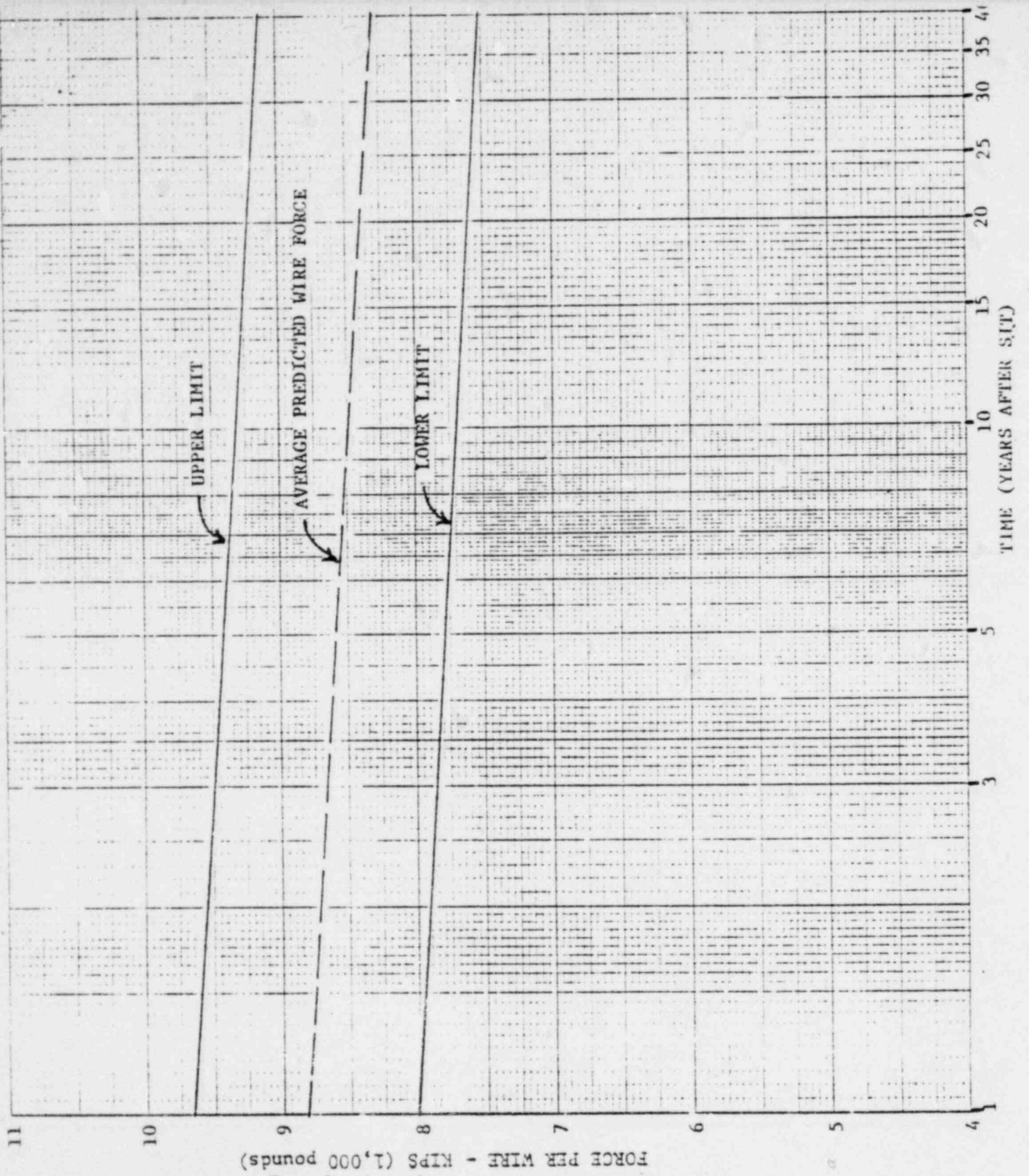


FIGURE 4.6-3
 WIRE FORCE VS. TIME
 HOOP TENDONS