

Electrosleeve™

UT-360® History

- **Electrosleeve™ Ultrasonic Proof of principal - 1994**
- **FTI selects Ultrasonic Testing (UT) as main NDE Technique for Electrosleeve™ Repair - 1997**
- **NRC Inspection Requirements Defined - 1998**
- **EPRI Industry Peer Review for NDE Techniques for ES - 1999 & 2000**
- *Many other meetings concerning NDE issues.*

Electrosleeve™ UT-360® Techniques

- **Total of Seven (7) Techniques:**
 - **UT-360® Electrosleeve™ Disbond Analysis Procedure**
 - **UT-360® Inner Diameter Profilometry Analysis Procedure**
 - **UT-360® Outer Diameter Pit Analysis Procedure**
 - **UT-360® Electrosleeve™ Inner Diameter Pit Analysis Procedure**
 - **UT-360® Electrosleeve™ Outside Diameter Pit Analysis Procedure**
 - **UT-360® Crack Detection and Extent Sizing Analysis Procedure**
 - **UT-360® Crack Depth Sizing Analysis Procedure**

Electrosleeve™ UT-360®

Peer Review (continued)

- ***August 2000 Peer Review Details:***
- **Techniques Presented (ISI):**
 - **UT-360® Crack Detection and Extent Sizing Analysis Procedure**
- **Peer Review Members:**
 - **EPRI, LMT, Tennessee Valley Authority, Dominion Generation, AmerenUE - Callaway, Rochester Gas & Electric - Ginna, Westinghouse/Westdyne, FTI**

Electrosleeve™ UT-360®

Peer Review

RESULTS

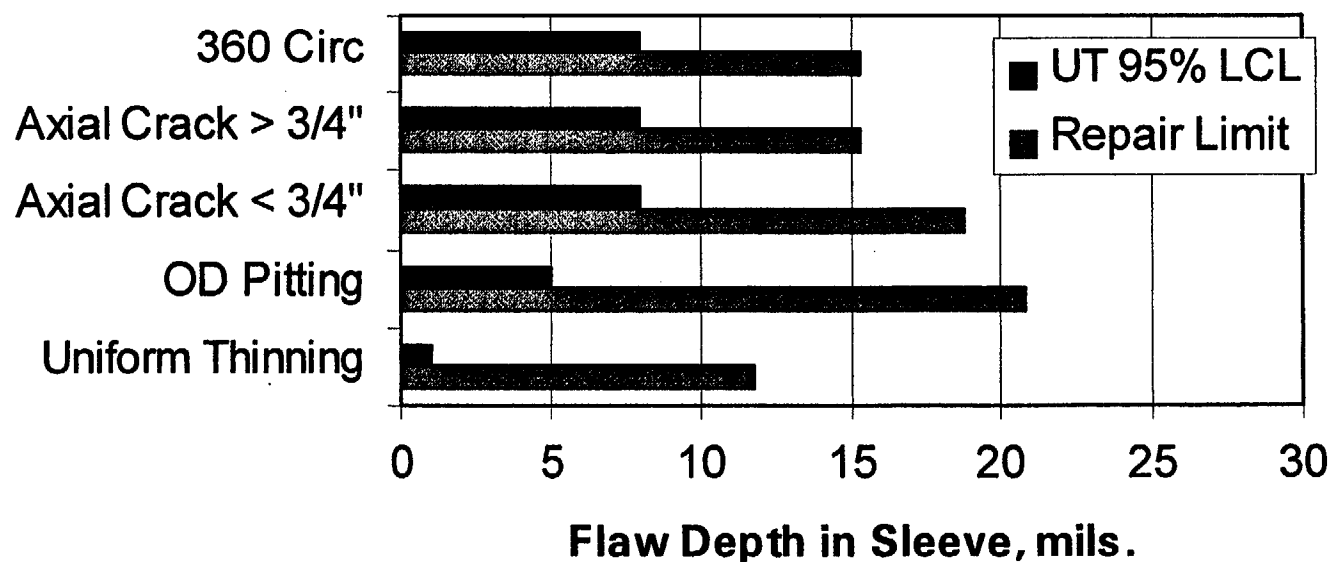
6/6/01

 **FRAMATOME ANP**

Electrosleeve™ UT-360®

Table 12.4.4 BAW-10219P Rev 04

11/16x0.040" Tube with a 0.031" Sleeve
(Tube with 100% TW)



6/6/01

Electrosleeve™ UT-360®

Callaway

RESULTS

6/6/01

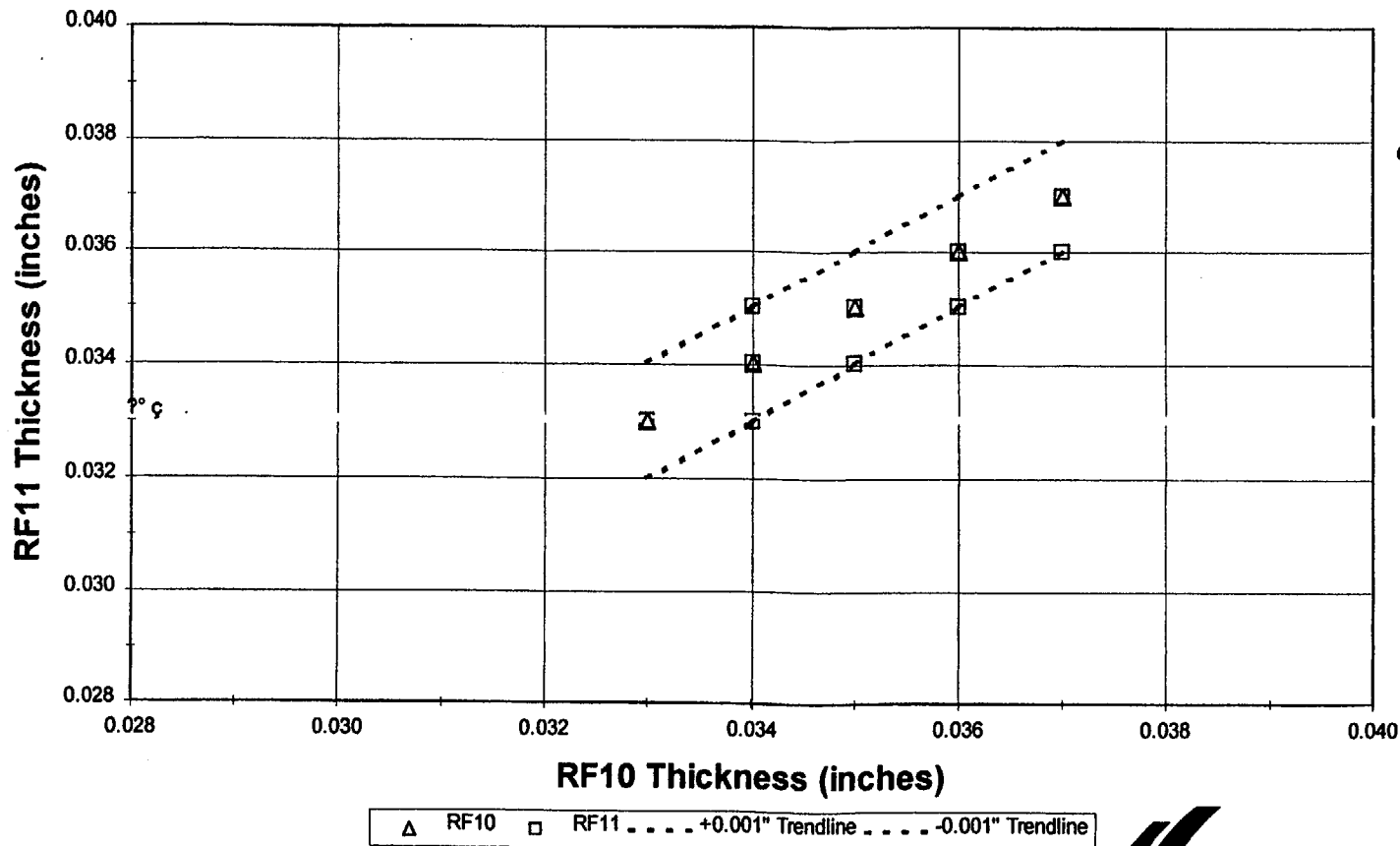
 **FRAMATOME ANP**

Electrosleeve™ UT-360®

Callaway Results - Summary

S/G "C" H/L Electrosleeve UT-360 Exam Results

(Average Sleeve Thickness - ADS)



6/6/01

Electrosleeve™

- **SER in May 1999**
- **Successful Installation in RF-10 (October, 1999)**
- **ISI UT Qualified, EPRI Appendix J**
- **Topical Revision 4, February 2001.**
- **ISI RF-11 (April, 2001)**
 - **No Changes**

6/6/01

