

400 Chestnut Street Tower II

April 1, 1981

TVA-SNP-TS-8



Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Schwencer:

In the Matter of) Docket No. 50-327
Tennessee Valley Authority)

My letter to you dated January 30, 1981, committed TVA to revise the containment/temperature analysis provided in TVA's Core Degradation Report Volume 2 to reflect the reduced ice mass of 2,221,992 pounds. We have had the original Sequoyah Nuclear Plant base case CLASIX analysis rerun with the reduced ice mass. The results of the two runs are compared in the enclosed table. As expected, the results are similar except for the reduced ice mass. Also enclosed is a copy of the temperature and pressure plots for the reduced ice mass case.

If you have any questions, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Sworn to and subscribed before me
this _____ day of _____ 1981

Notary Public

My Commission Expires _____

Enclosures

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ENCLOSURE

SEQUOYAH NUCLEAR PLANT

REVISED CONTAINMENT/TEMPERATURE ANALYSIS
REFLECTING NEW ICE MASS

CLASIX ANALYSIS

TVA SEQUOYAH - REDUCED TECH SPEC ICE CASE COMPARISON

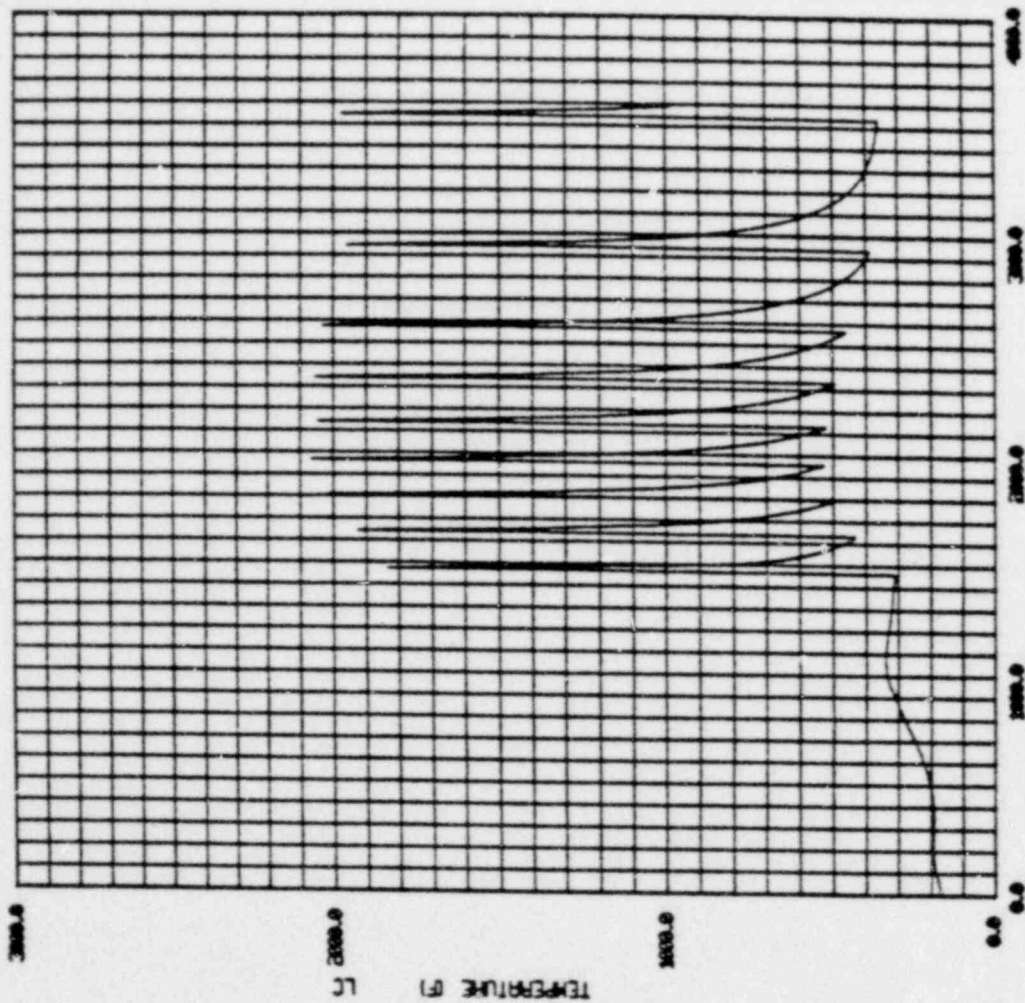
	ORIGINAL BASE CASE (JV900)	NEW TECH SPEC ICE CASE
# Burns LC	9	9
IC	1	1
UC	0	0
Magnitude of Burns (Lbm) LC	~100	~100
IC	37	45
UC	-	-
Total H ₂ Burned (Lbm)	~900	~950
H ₂ Remaining (Lbm)	~650	~600
Peak Temp (°F) LC	2200	2100
IC	1200	1350
UC	150	155
Peak Pressure (PSIA) LC	26.5	26.8
IC	28.5	28.2
UC	28.5	28.5

TIME DURING TRANSIENT (SEC)	TIME DURING CLASIX (SEC)	ICE MASS (LBM)	
		ORIGINAL BASE CASE	NEW TECH SPEC ICE CASE
0	--	* 2.45×10^6	* 2.22×10^6
3480	0	1.67×10^6	1.44×10^6
7080	3600	3.05×10^5	1.19×10^5
Ice Melted During CLASIX		1.37×10^6	1.32×10^6

*Note: LOTIC portion of analysis (0 to 3480 sec) was not rerun; ice mass was reduced by $.23 \times 10^6$ lbm at the beginning of the new CLASIX run.

READY-

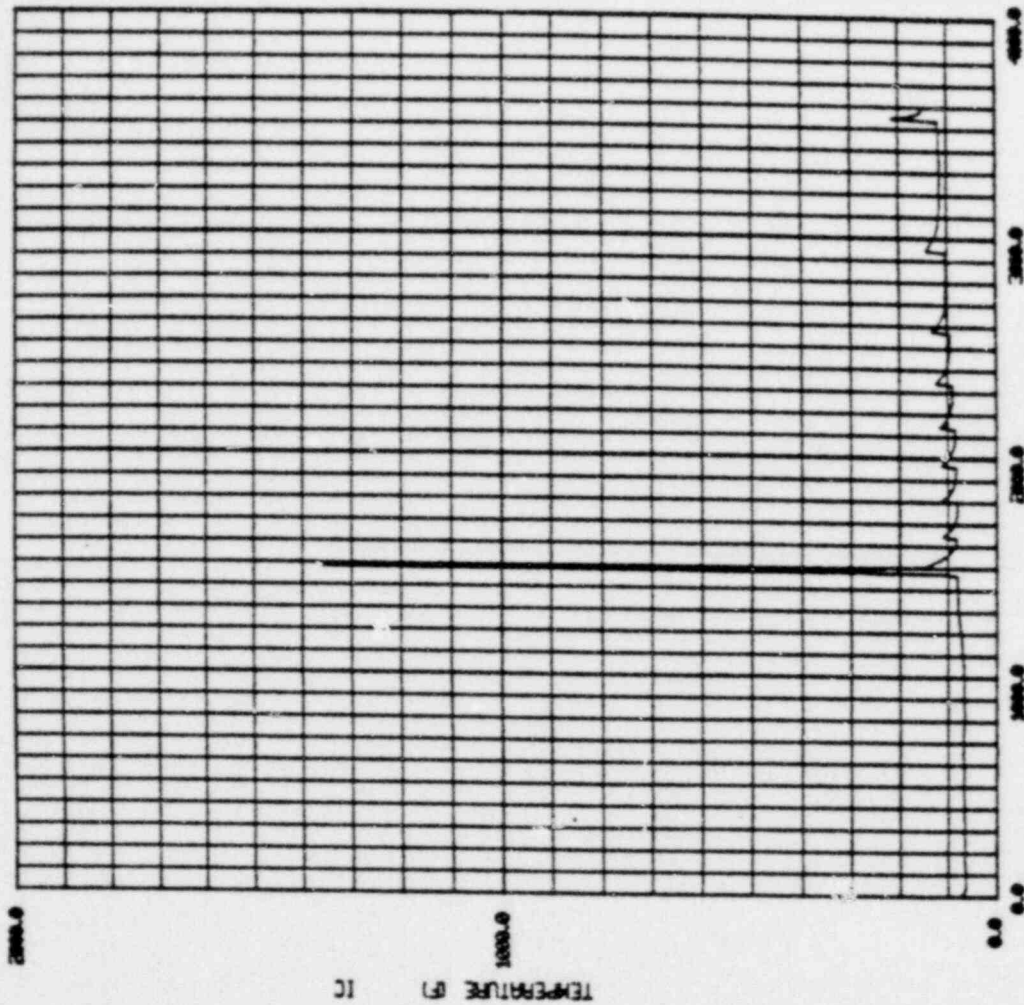
FRAME 01 F.1



TIME (SECONDS)
TWA 520 CAGE19 2 FAN 1 SPRAY BURN 100 PCT AT 10 U/O 6FPS T-3400 NEU IC

READY-

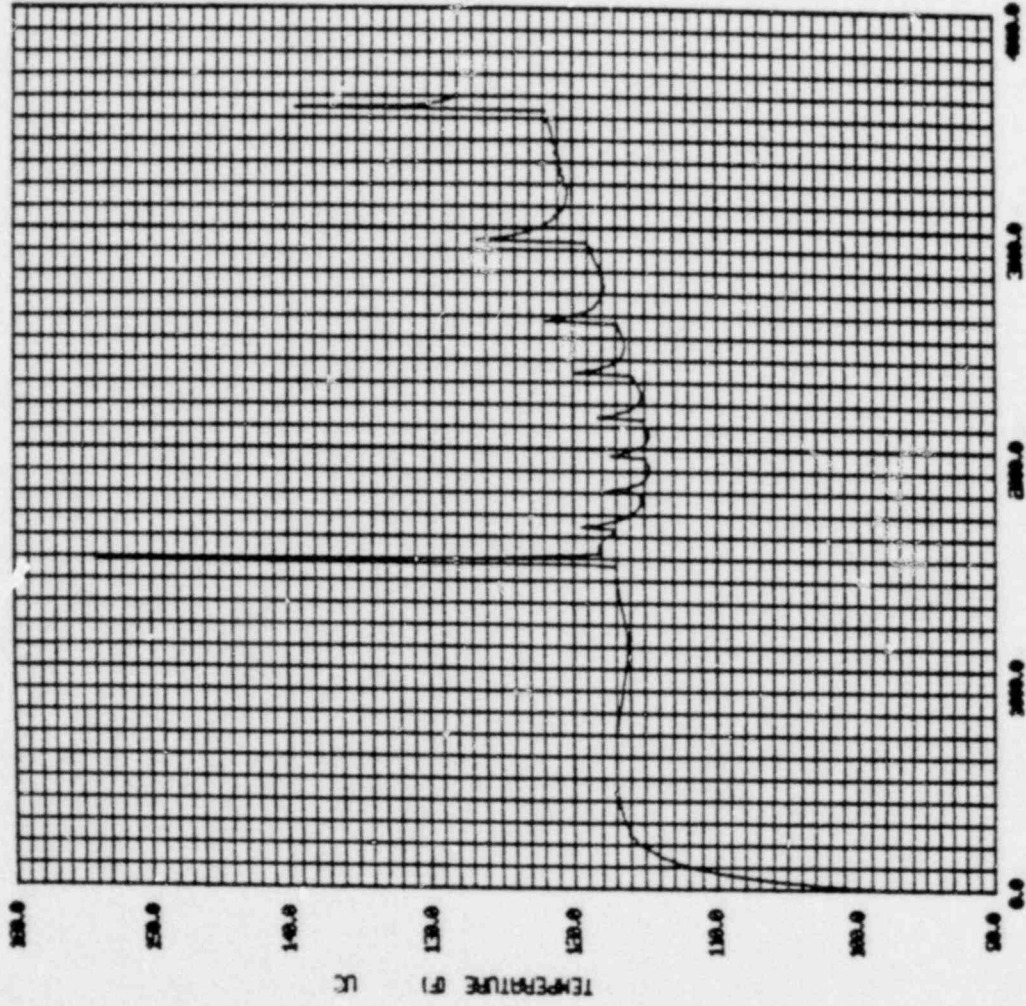
FRAME 03 F.8



TUA S2D CASE19 2 FAN 1 SPRAY BURN 100 PCT AT 10 U-8 GTPS T-3400 HEU IC

READY-

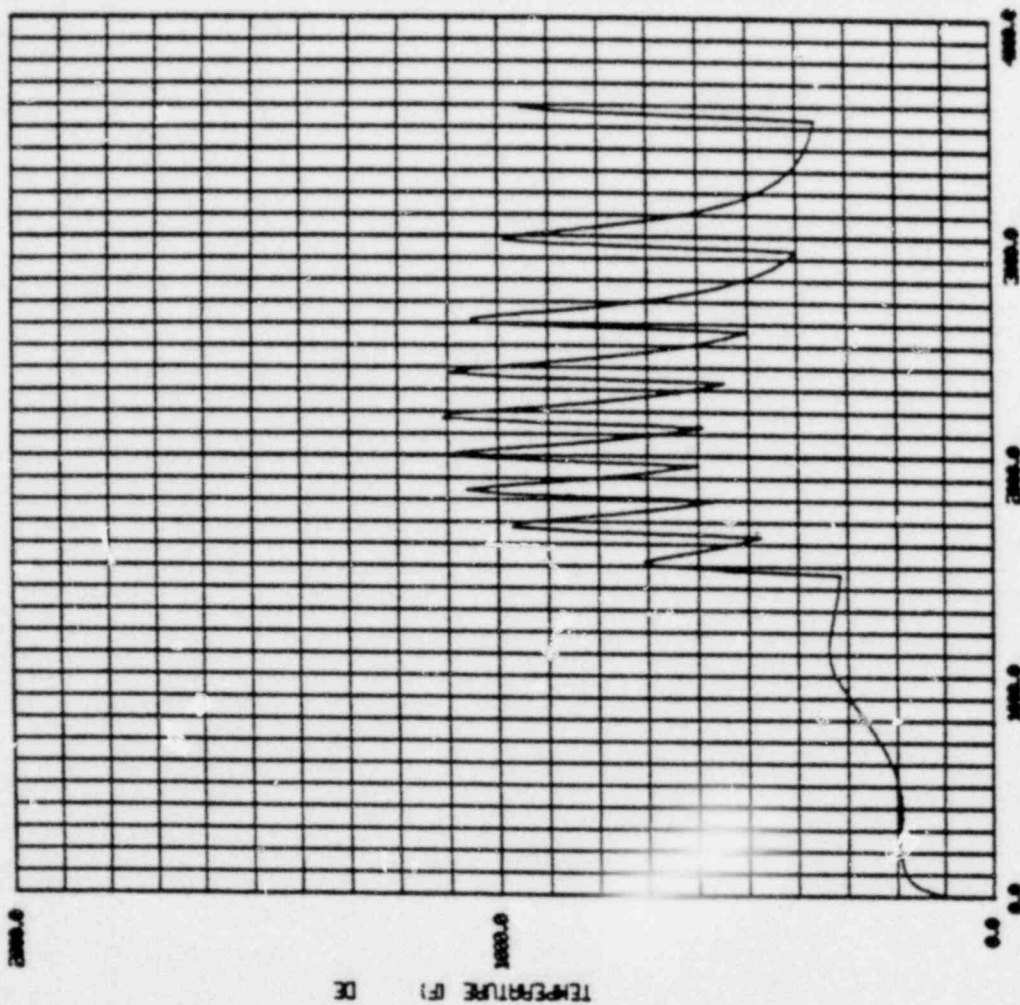
FRAME 03 F.3



TWA S2D CASE19 2 FAN 1 SPRAY BURN 100 PCT AT 10 U-8 6FPS T+3400 NEW IC

READY-

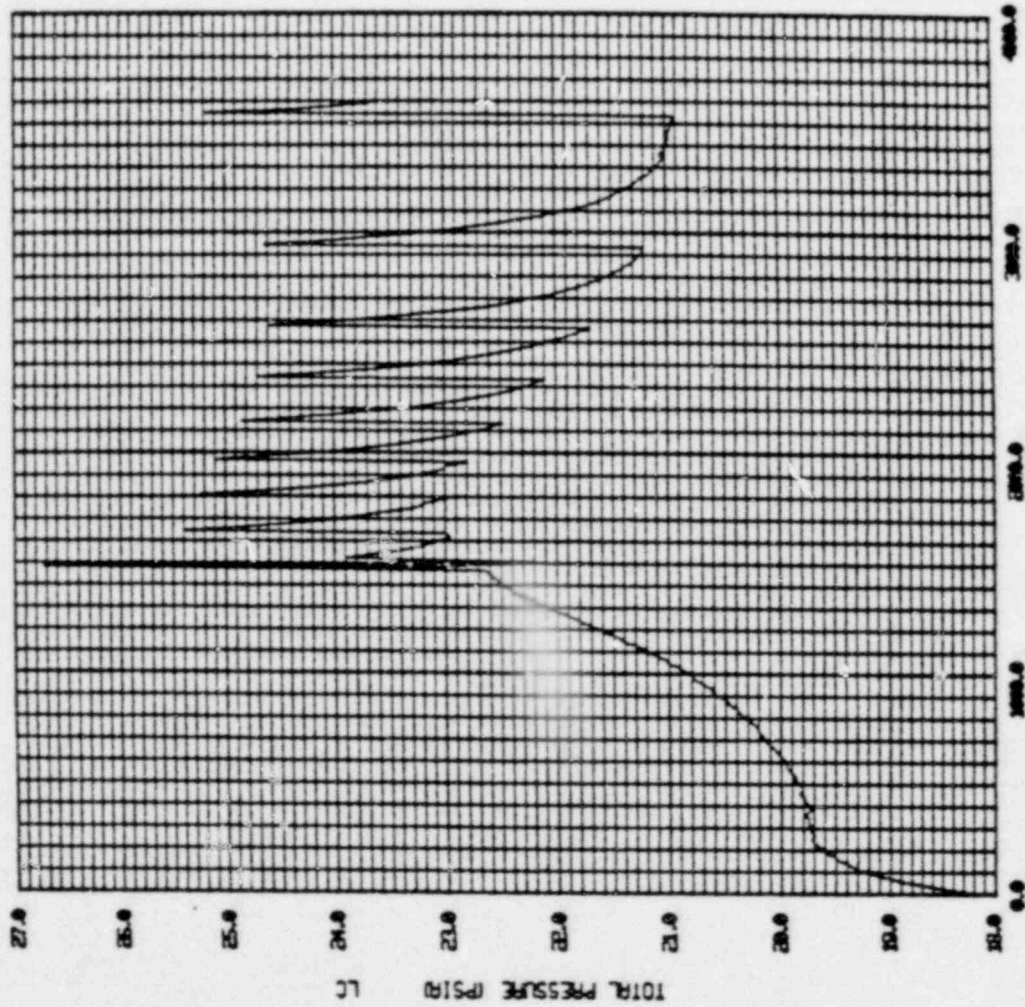
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TIME (SECONDS)
TUA S2D CASE19 2 FAN 1 SPRAY BURN 100 PCT AT 10 U/O 6TPS T-3400 NEW IC

READY-

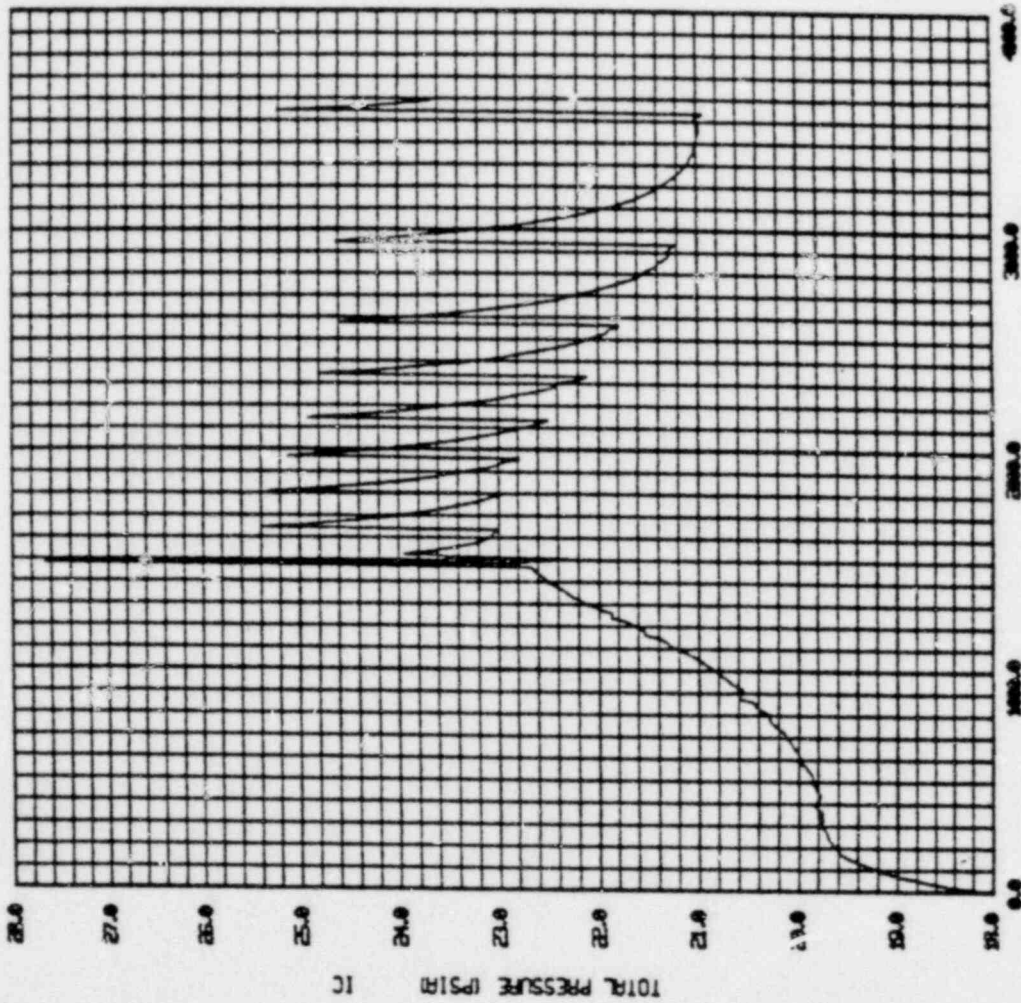
FRAME 05 1



TIME (SECONDS)
TWA SED CASE19 2 FAN 1 SPINNY BLUN 100 PCF AT 10 U-8 GIPS T-3400 NEW IC

READY-

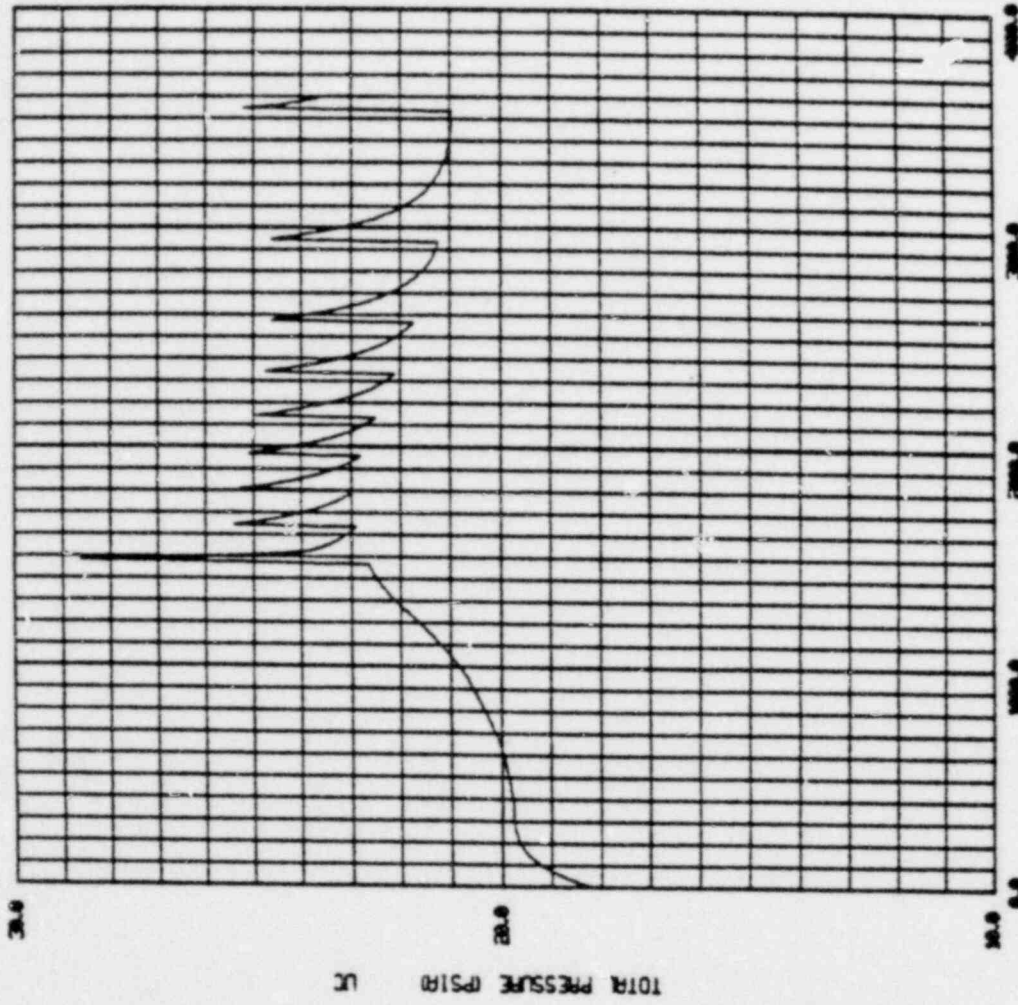
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TIME (SECONDS)
TWA 520 OAGE19 2 FAN 1 SPRAY BURN 100 PC/ AT 10 U/L 6FPS T-3400 NEU IC

READY-

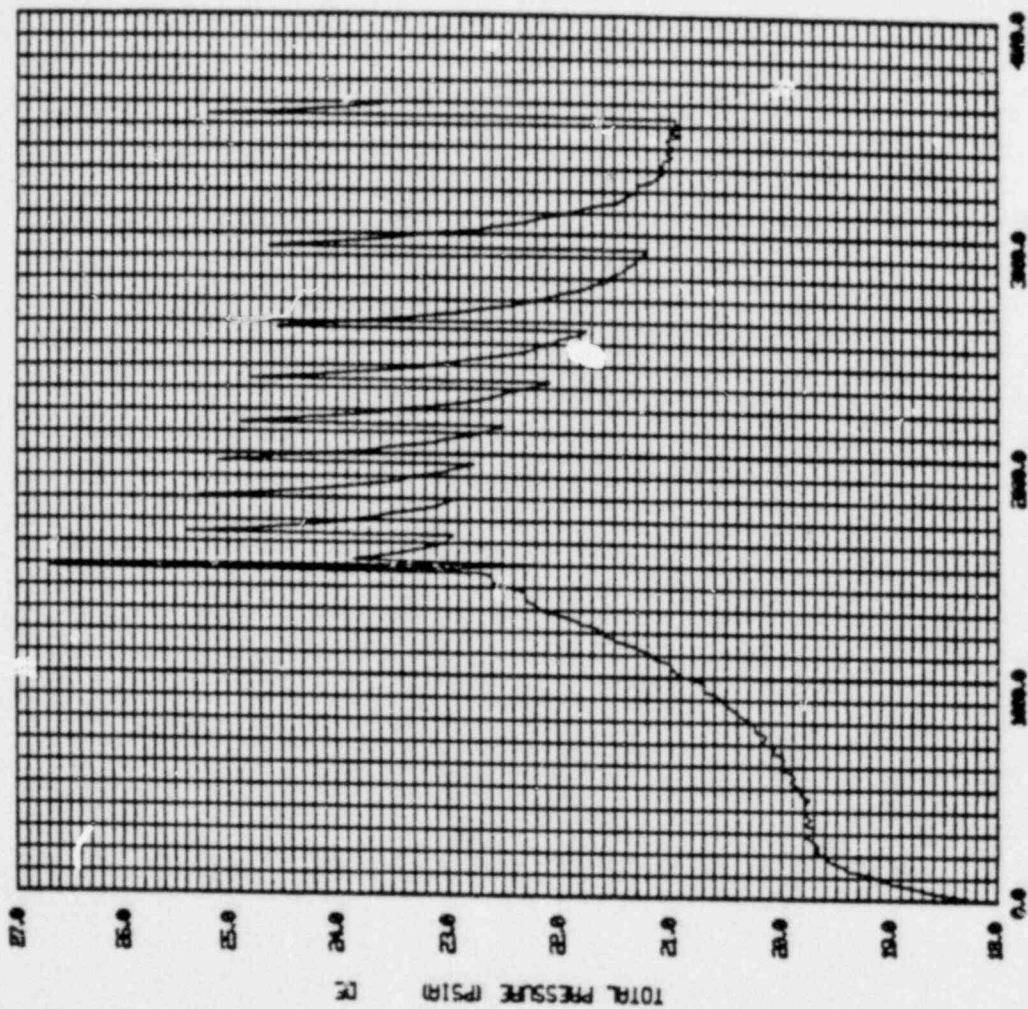
FRAME 87 1



TIME (SECONDS)
TWA SED CASE19 2 FAN 1 SPRAY BURN 100 PCT AT 10 U/V 6FPS T+3400 NEU IC

READY-

FRAME 08 1



TIME (SECONDS)
TWA S2D CASE10 2 FAN 1 SPRAY BURN 100 PCT AT 10 U-0 6FPS T+3400 NEW IC