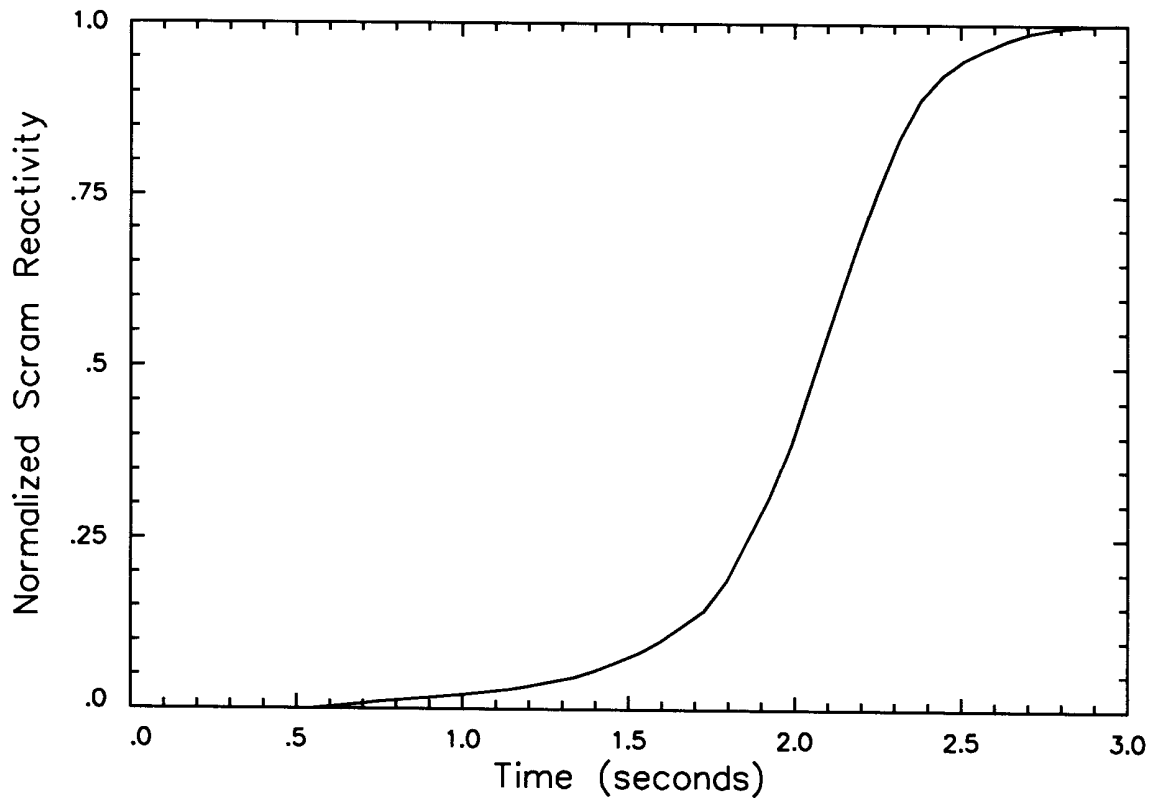
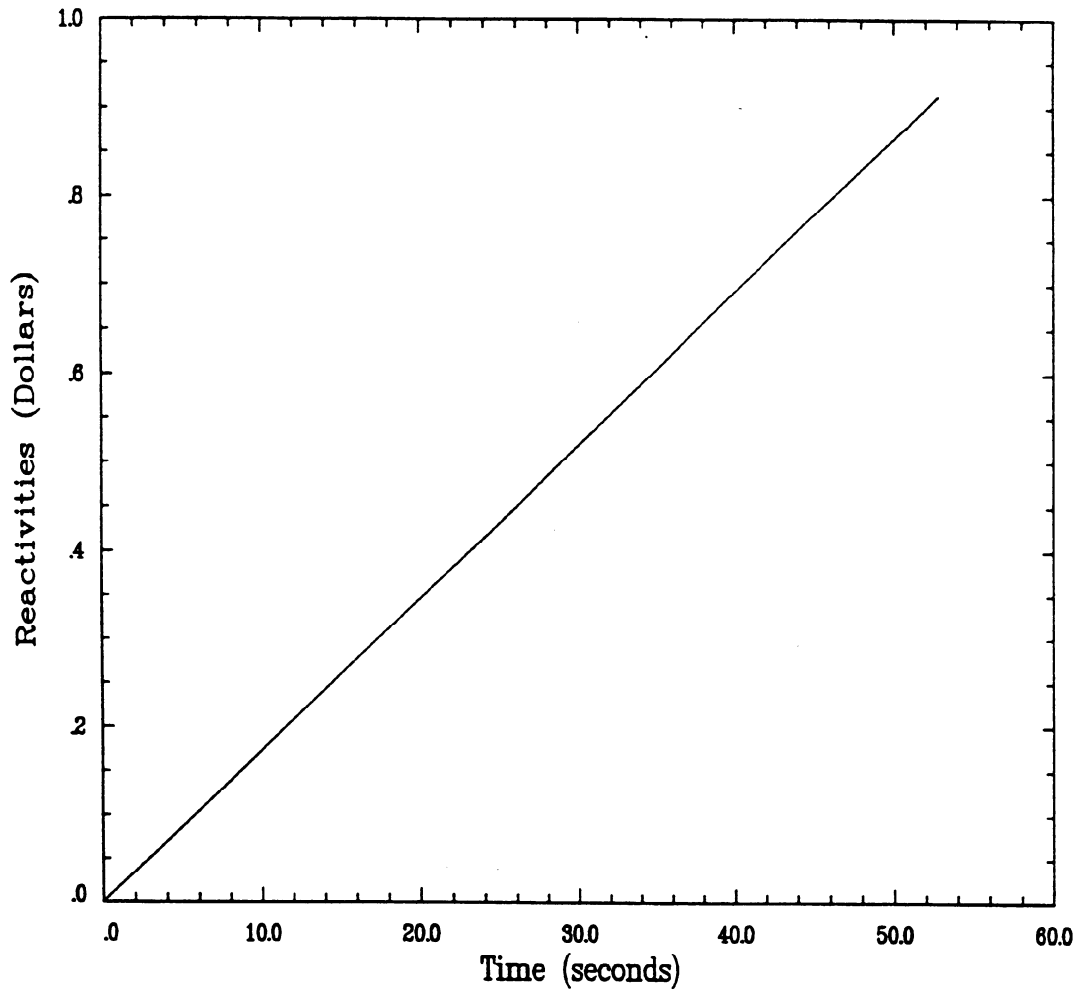


PALISADES SCRAM CURVE

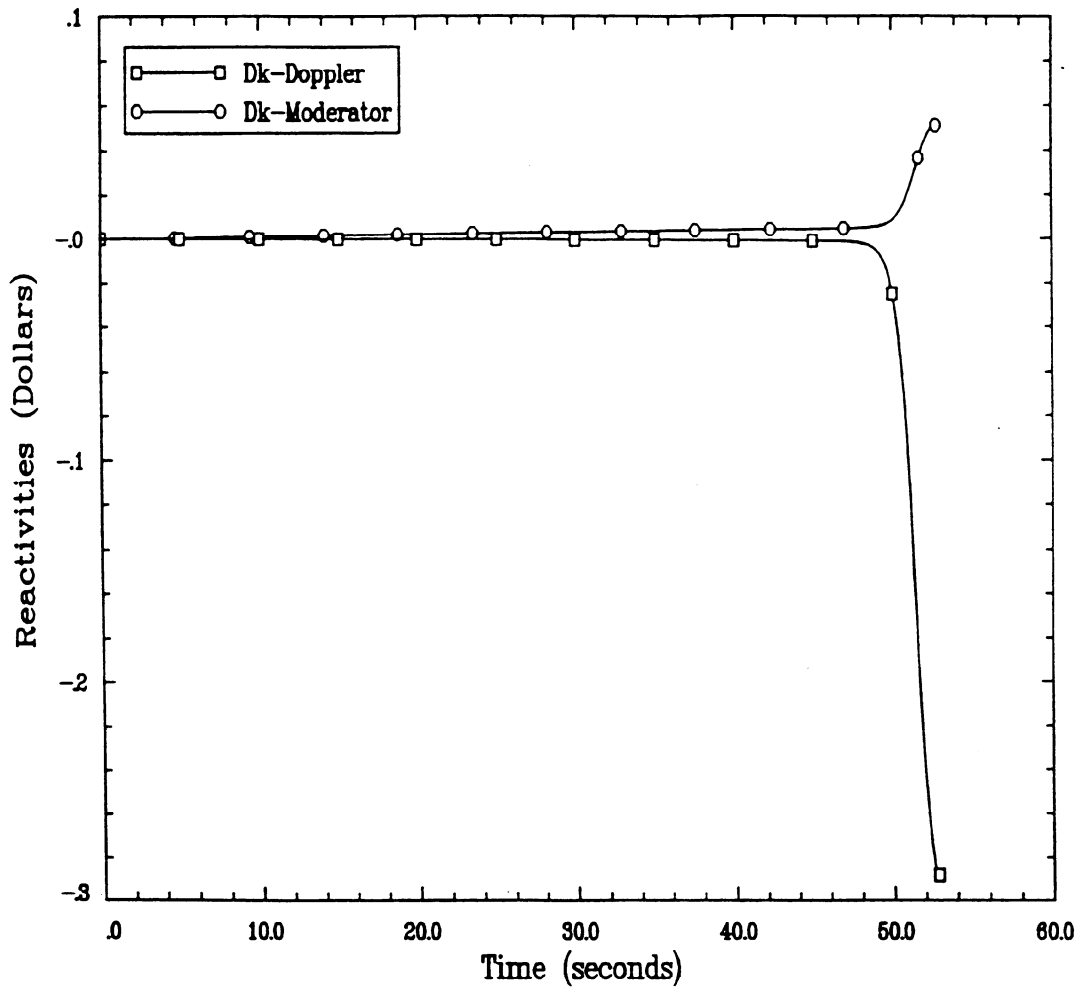


Note: Time measured from the point at which the control rod drive clutch receives the signal to release the control rods.

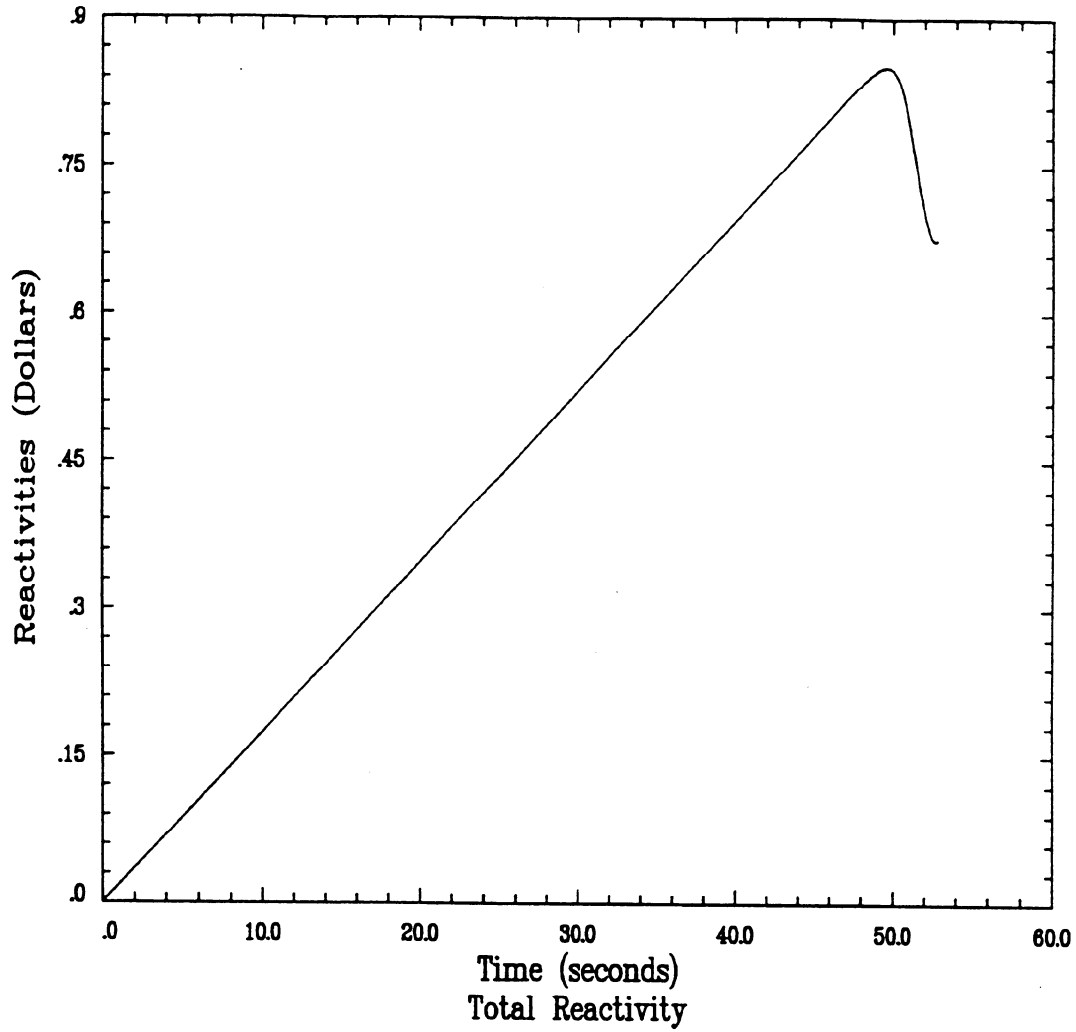
CONTROL ROD WITHDRAWAL INCIDENT HZP REACTIVITY INSERTION CURVE



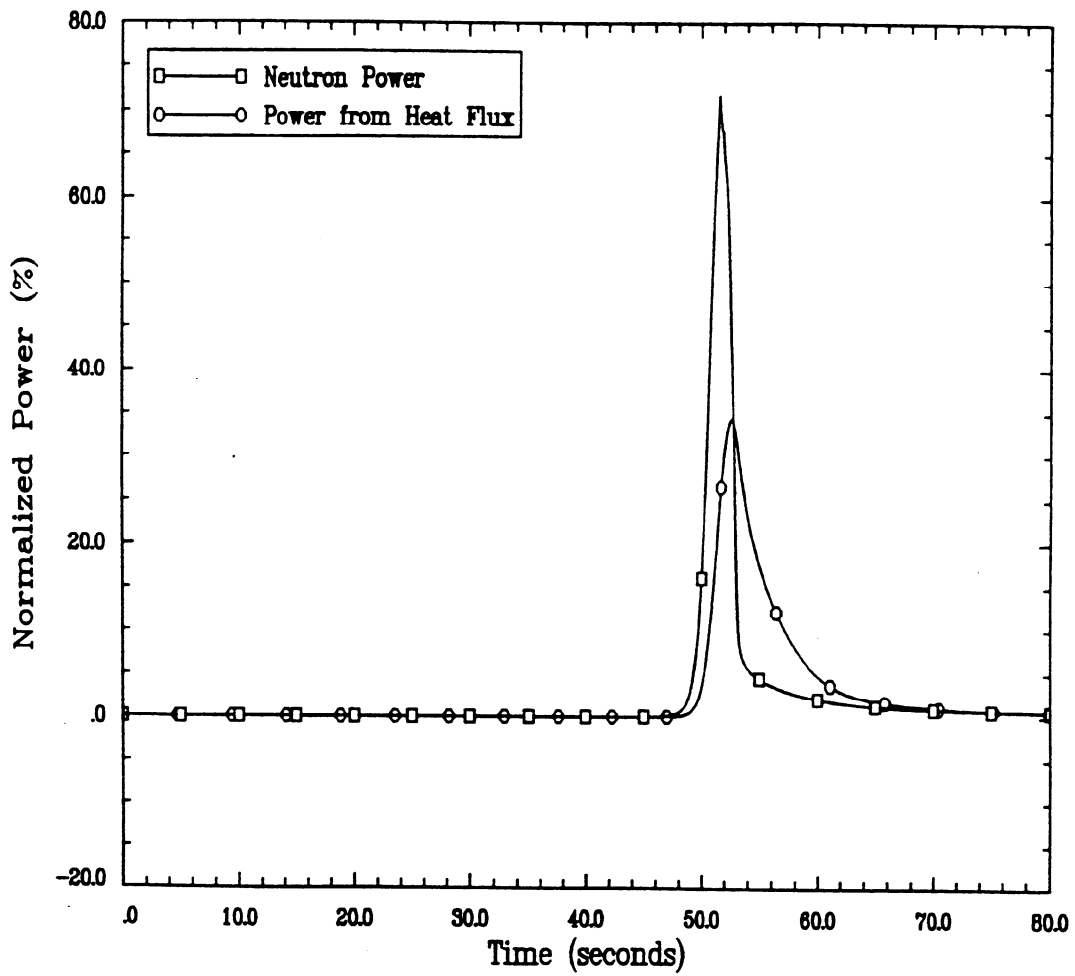
CONTROL ROD WITHDRAWAL INCIDENT HZP REACTIVITY FEEDBACKS



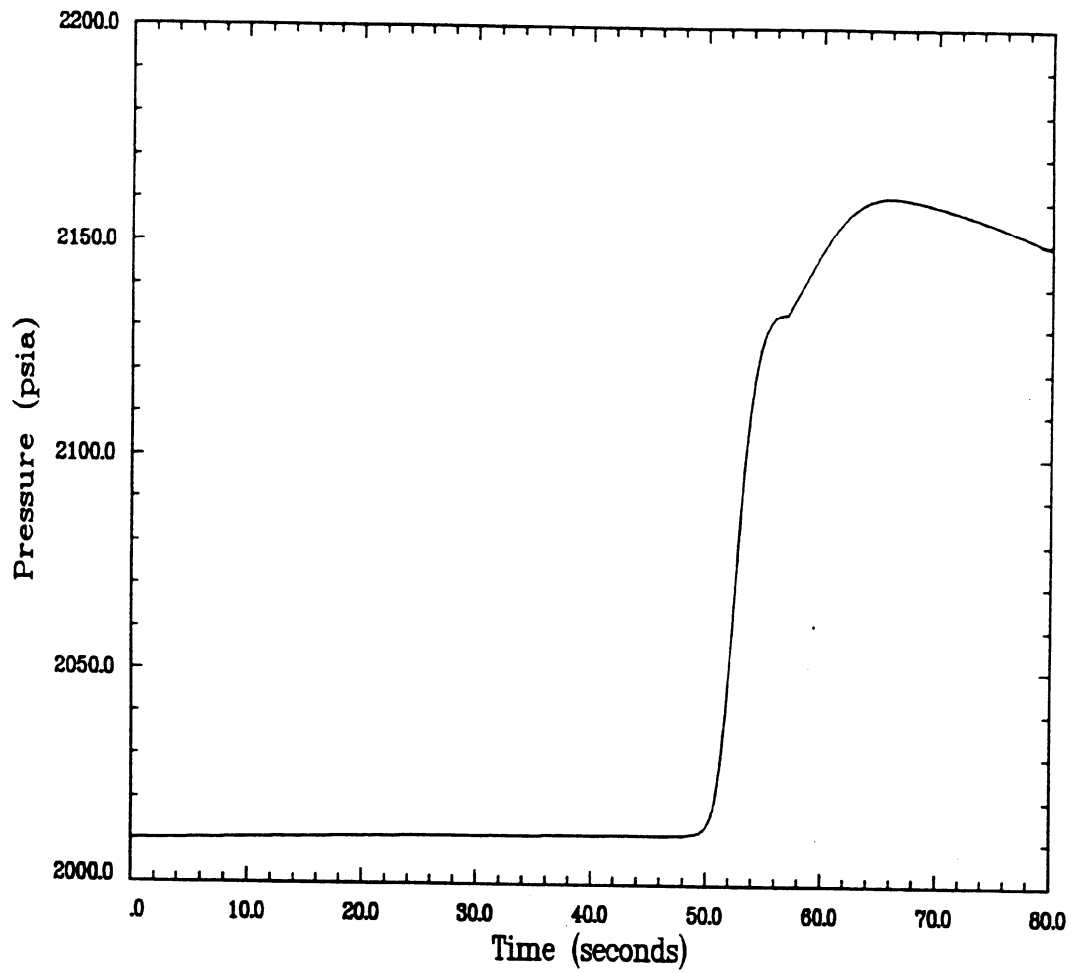
CONTROL ROD WITHDRAWAL INCIDENT HZP TOTAL REACTIVITY



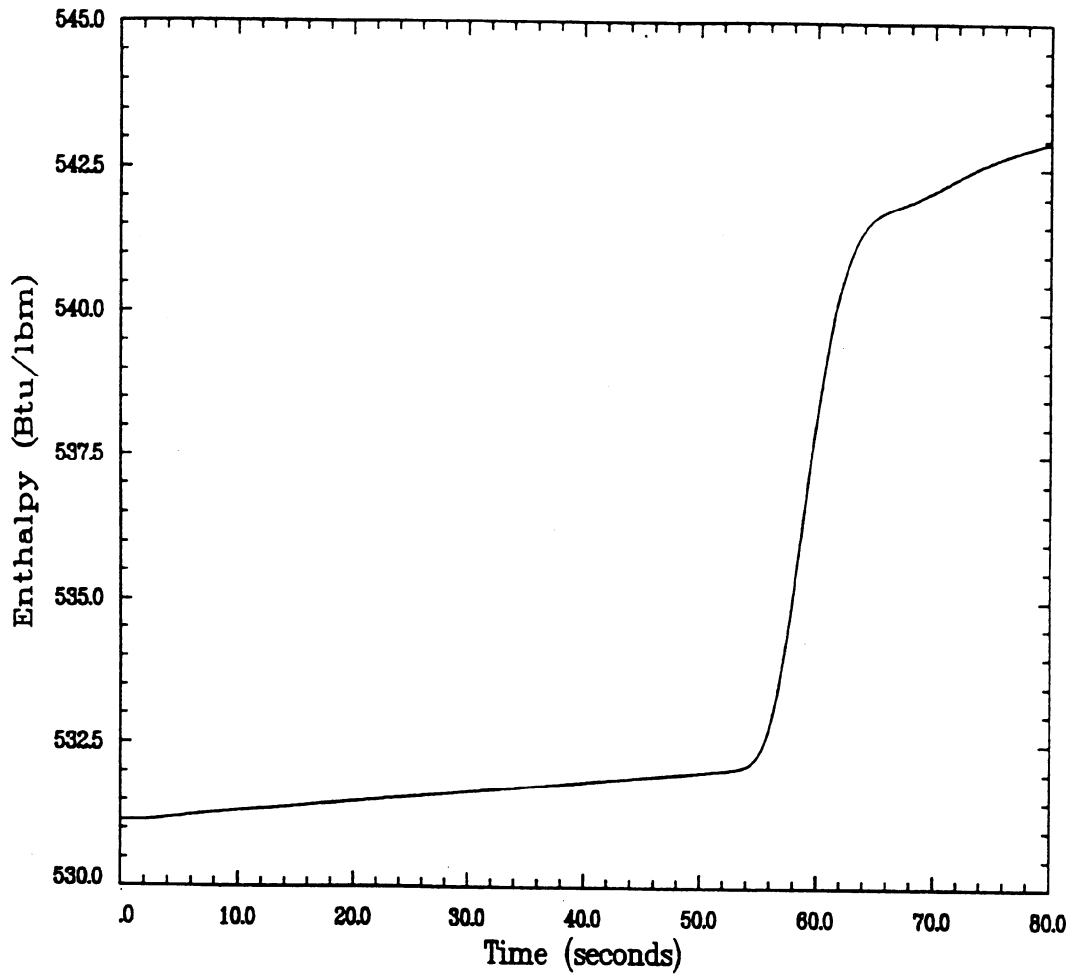
CONTROL ROD WITHDRAWAL INCIDENT HZP POWER AND HEAT FLUX



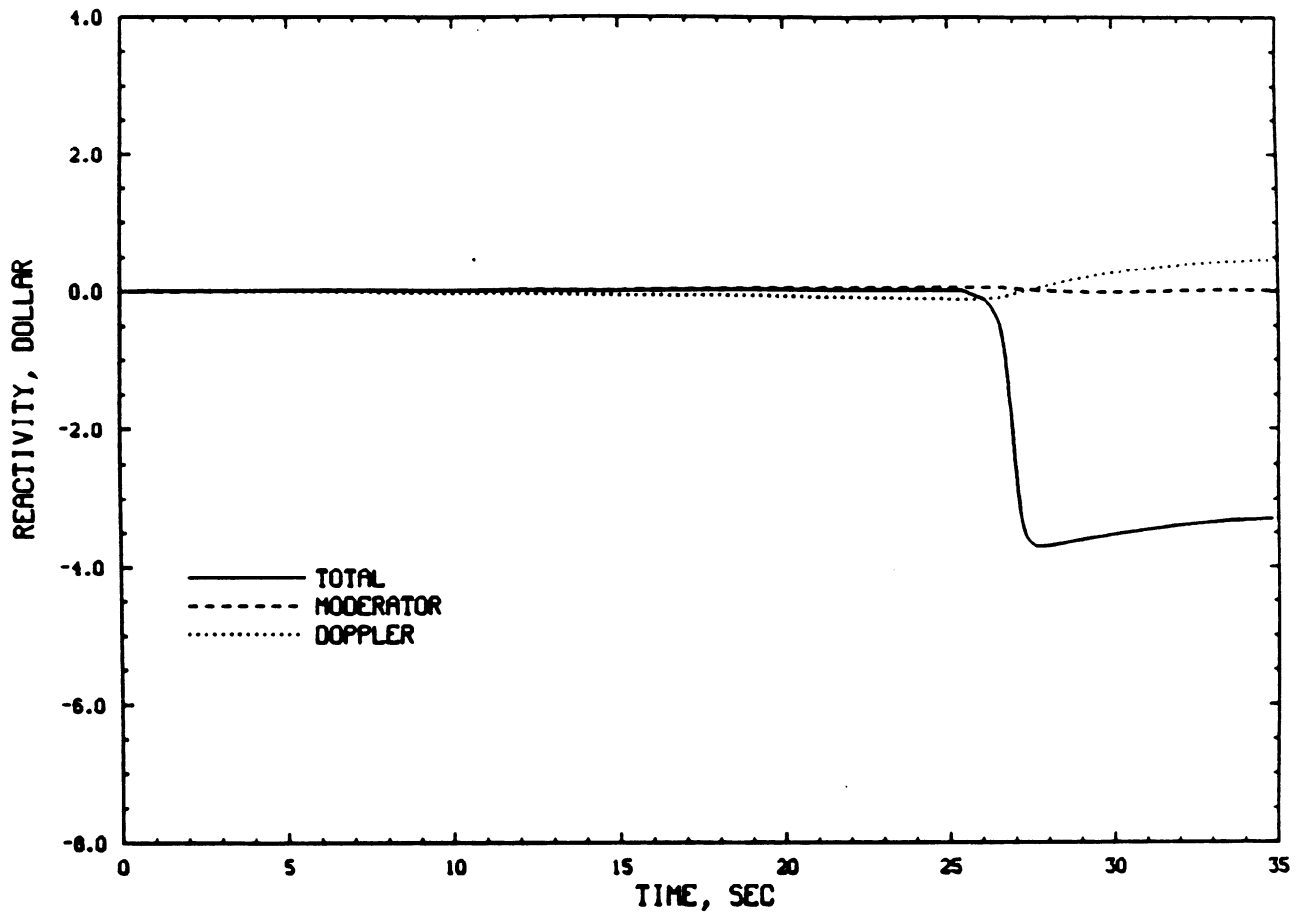
CONTROL ROD WITHDRAWAL INCIDENT HZP SYSTEM PRESSURE



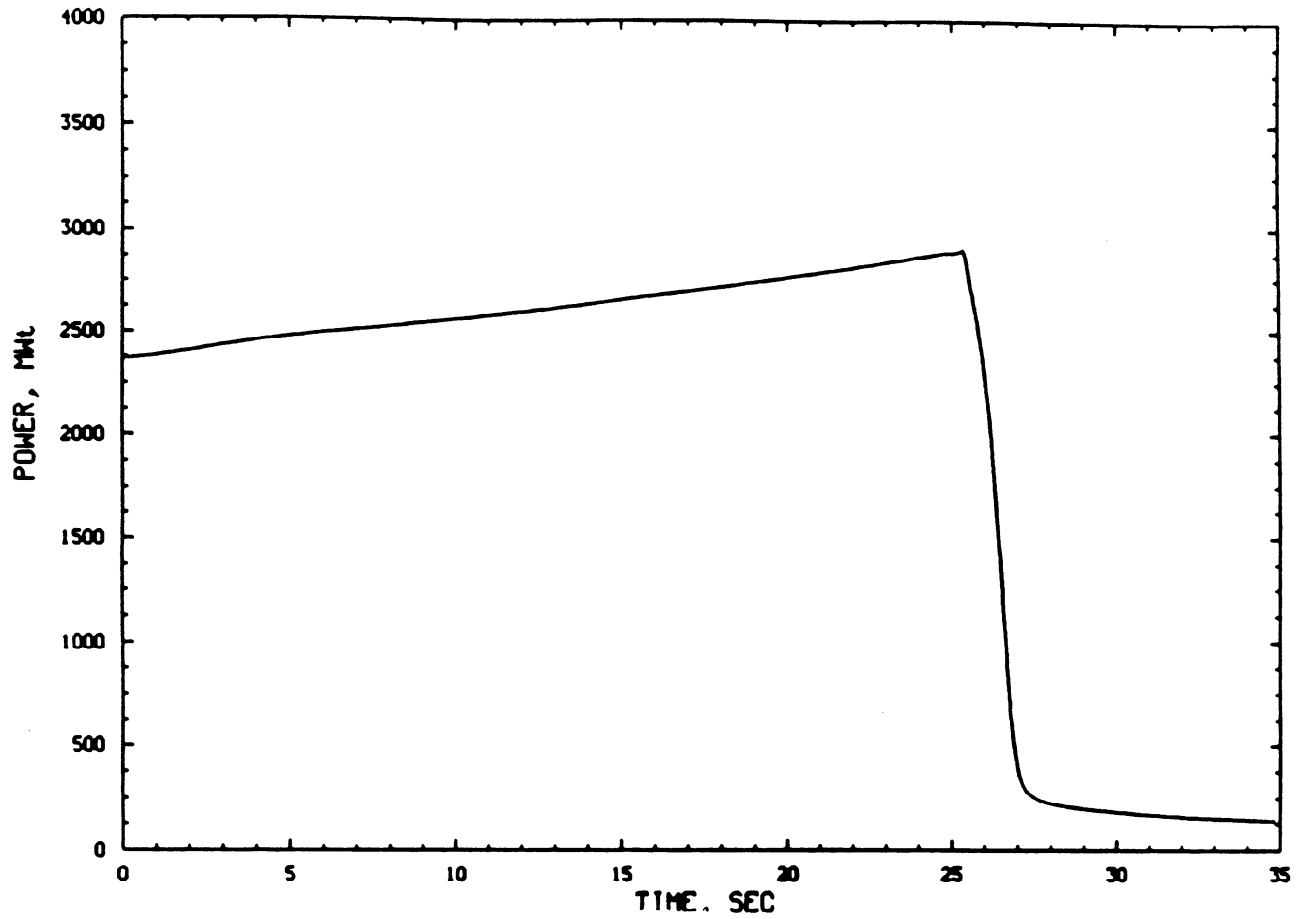
CONTROL ROD WITHDRAWAL INCIDENT HZP INLET ENTHALPY



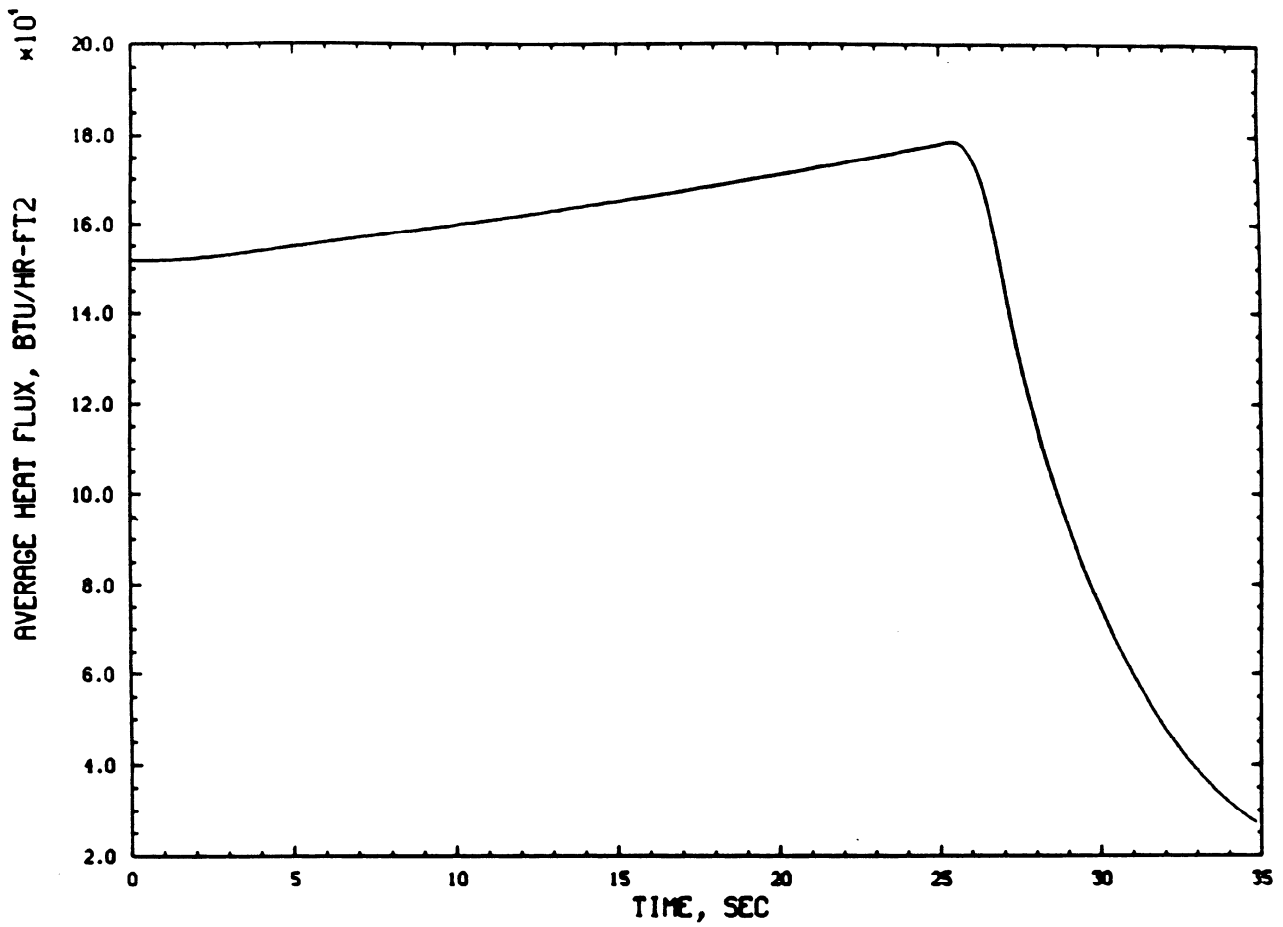
REACTIVITIES FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



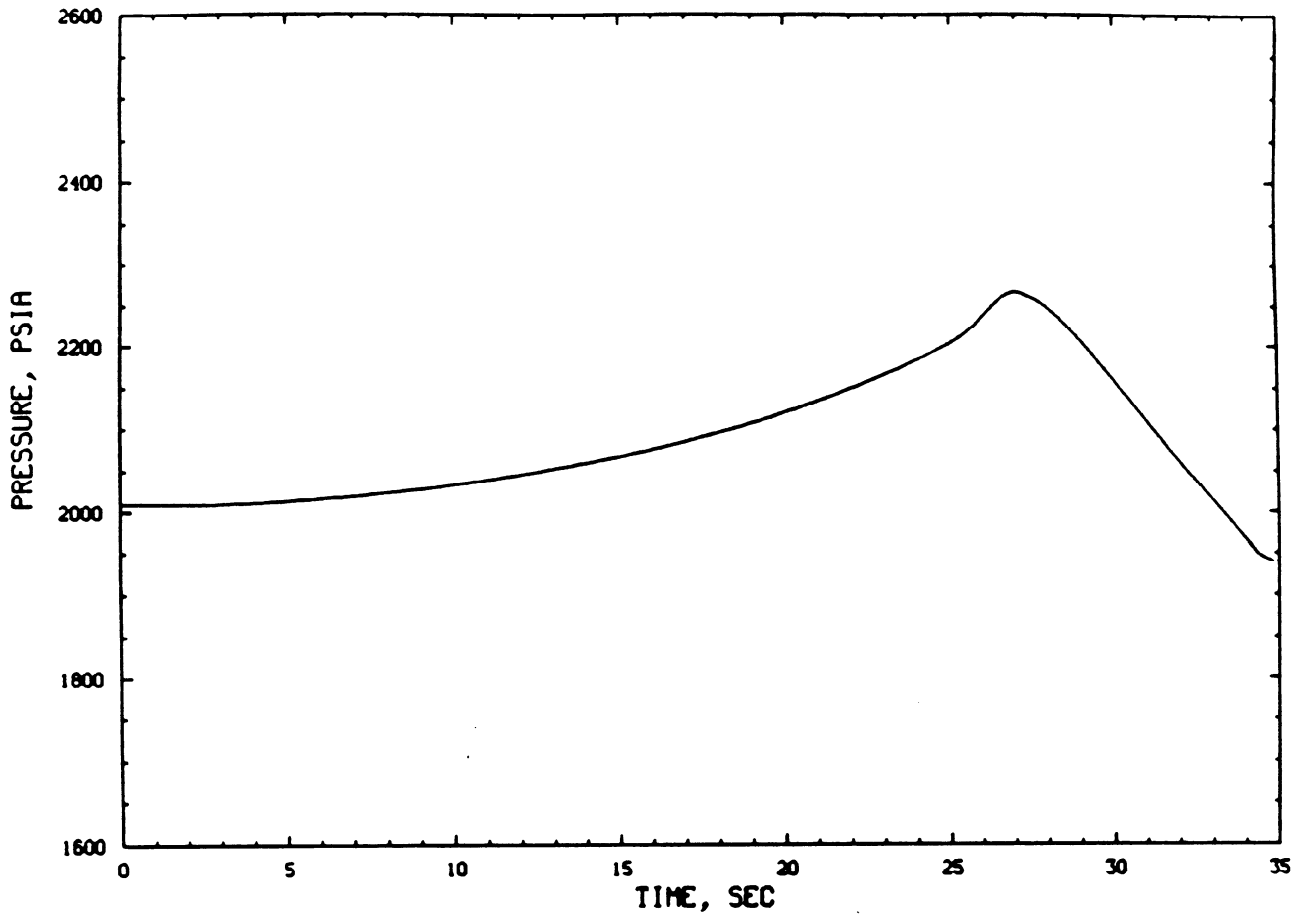
REACTOR POWER LEVEL FOR UNCONTROLLED BANK WITHDRAWAL FULL POWER



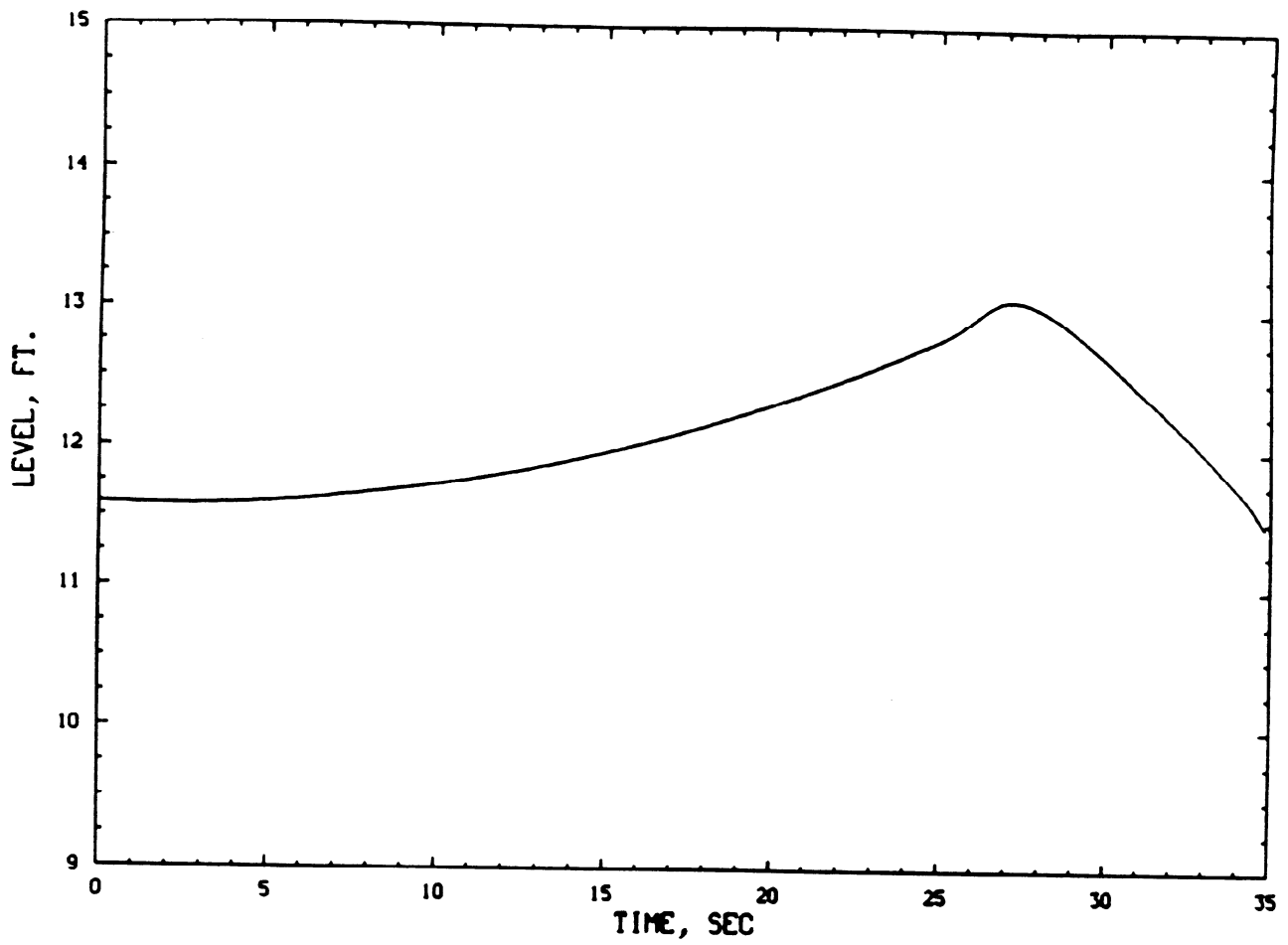
CORE AVERAGE HEAT FLUX FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



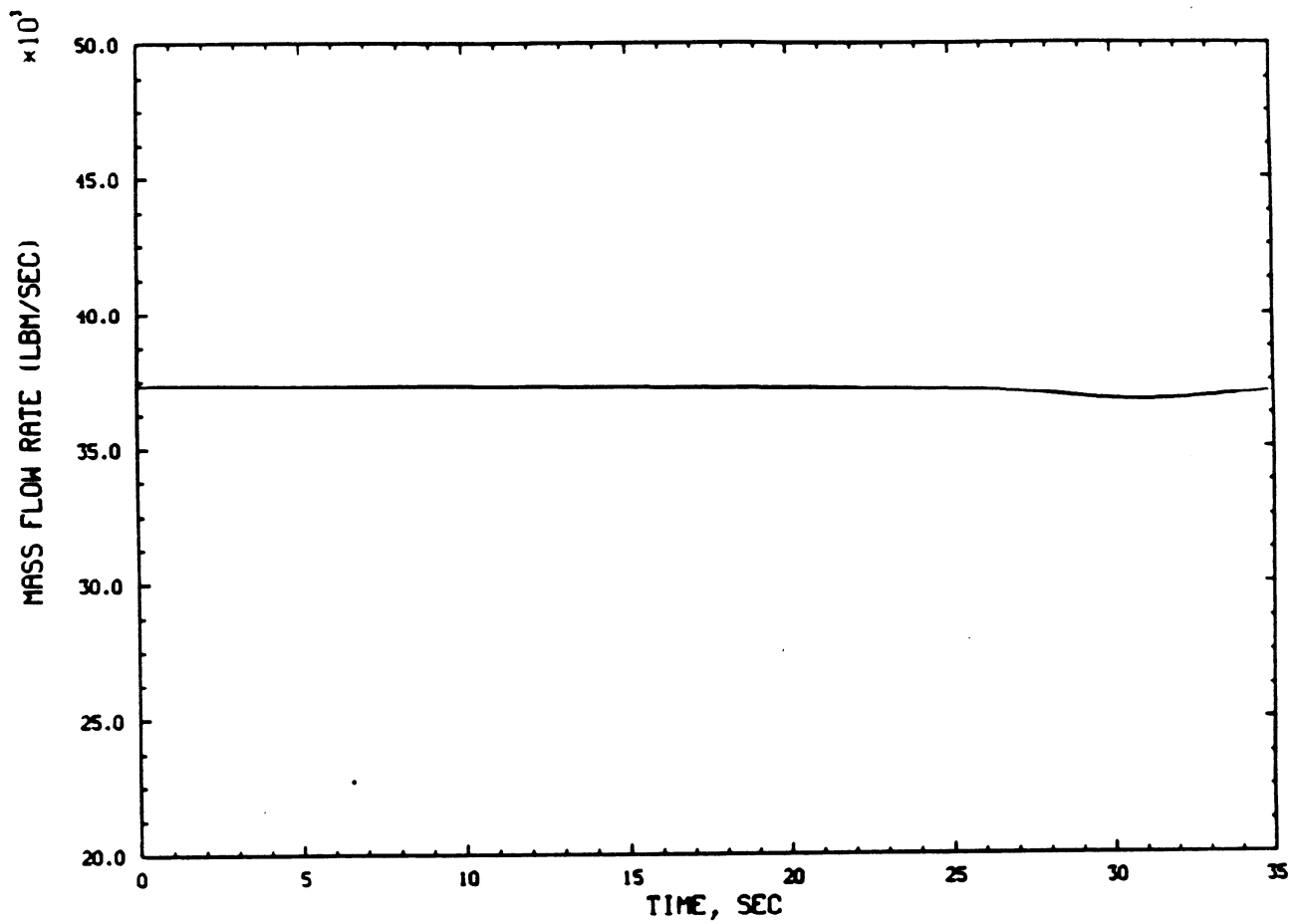
PRESSURIZER PRESSURE FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



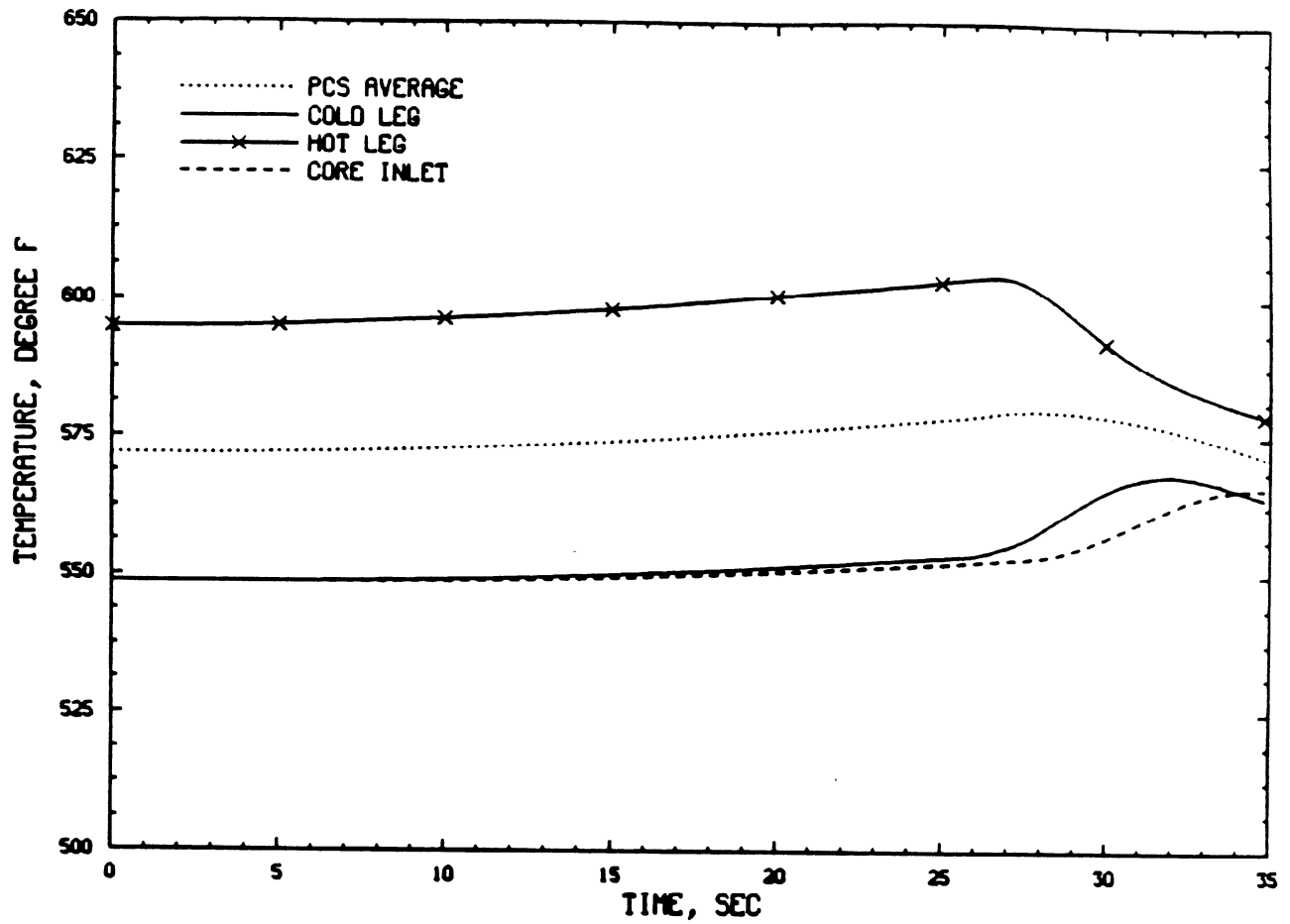
PRESSURIZER LIQUID LEVEL FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



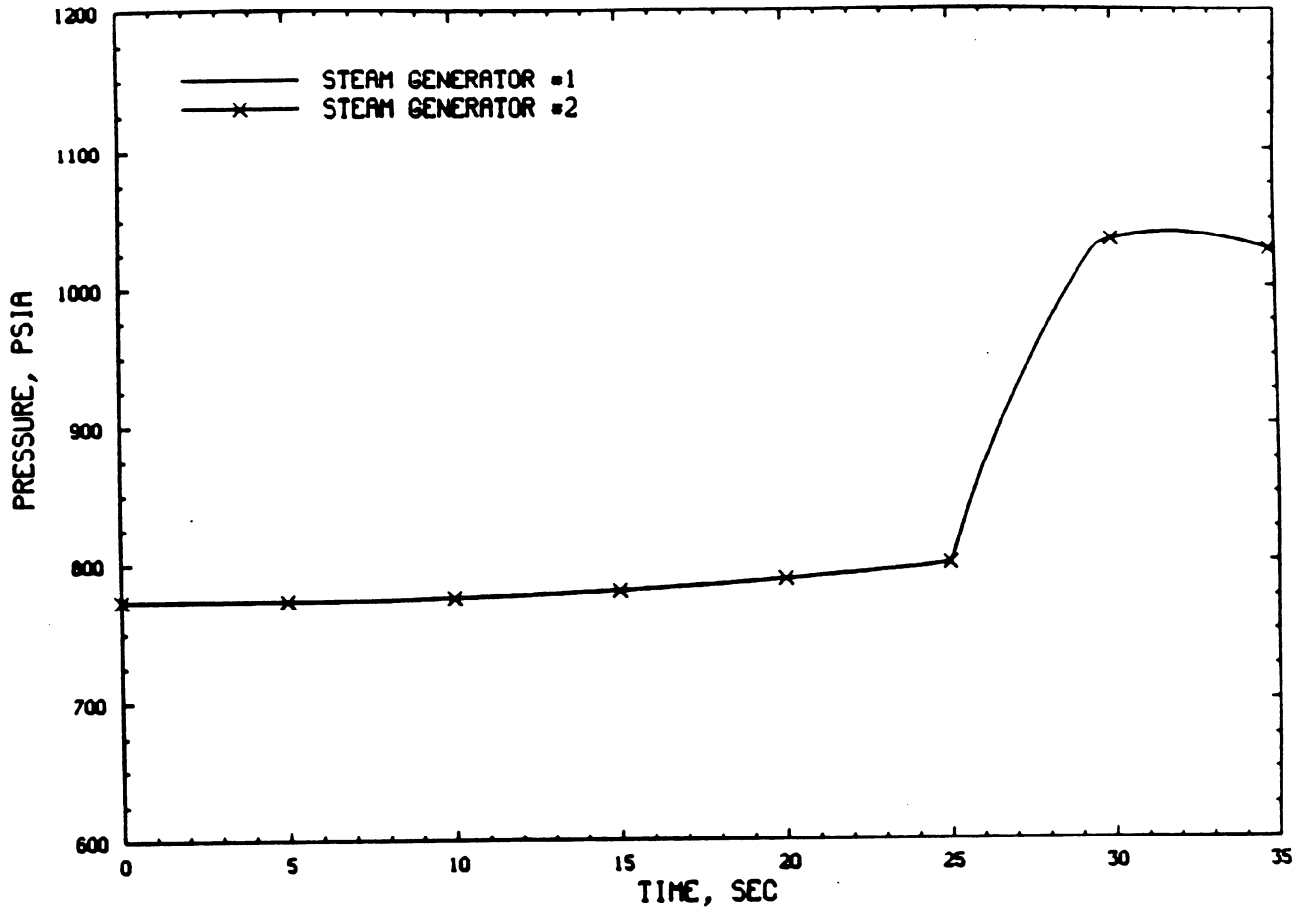
PCS MASS FLOW RATE FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



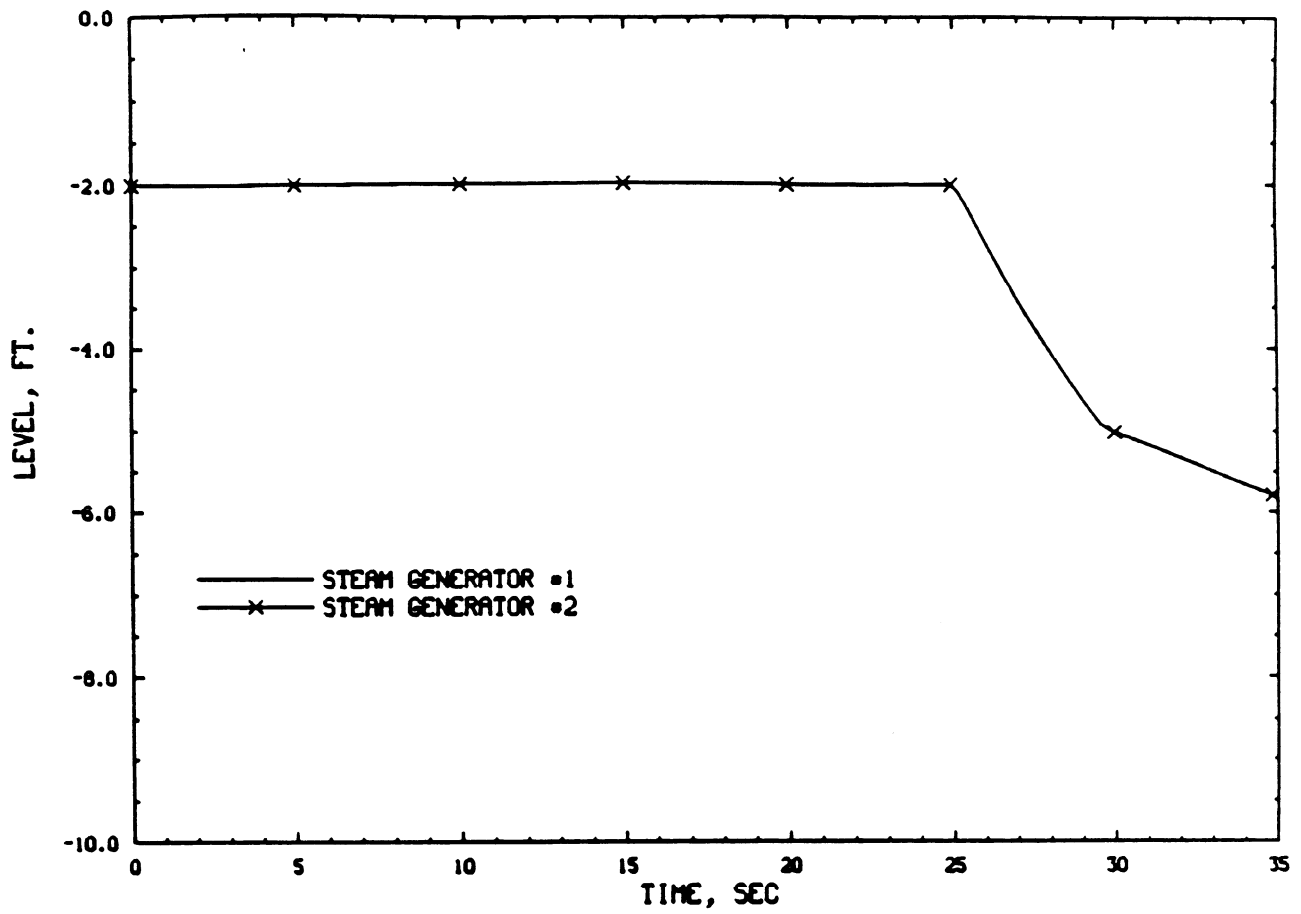
PCS TEMPERATURES FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



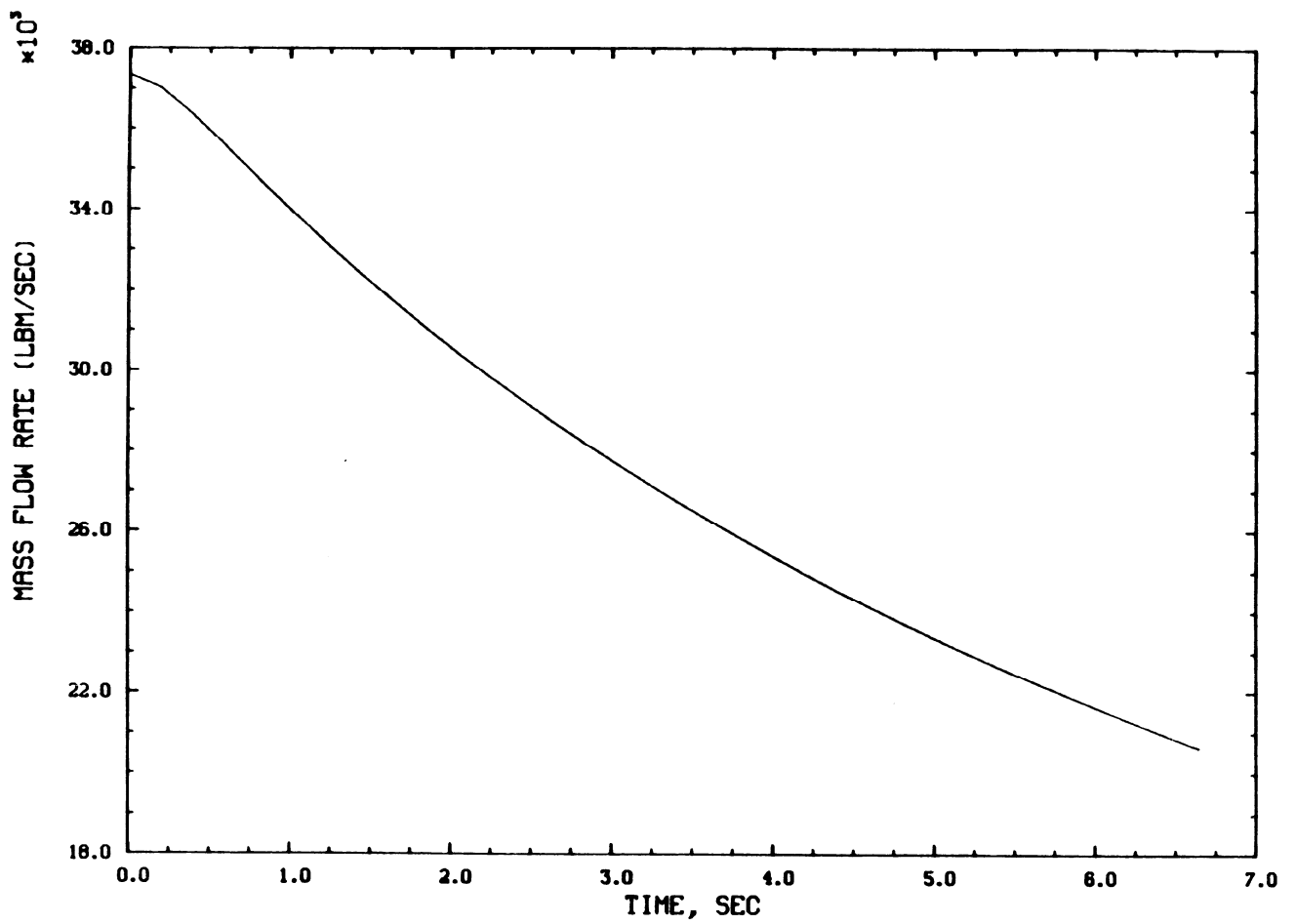
SECONDARY PRESSURE FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



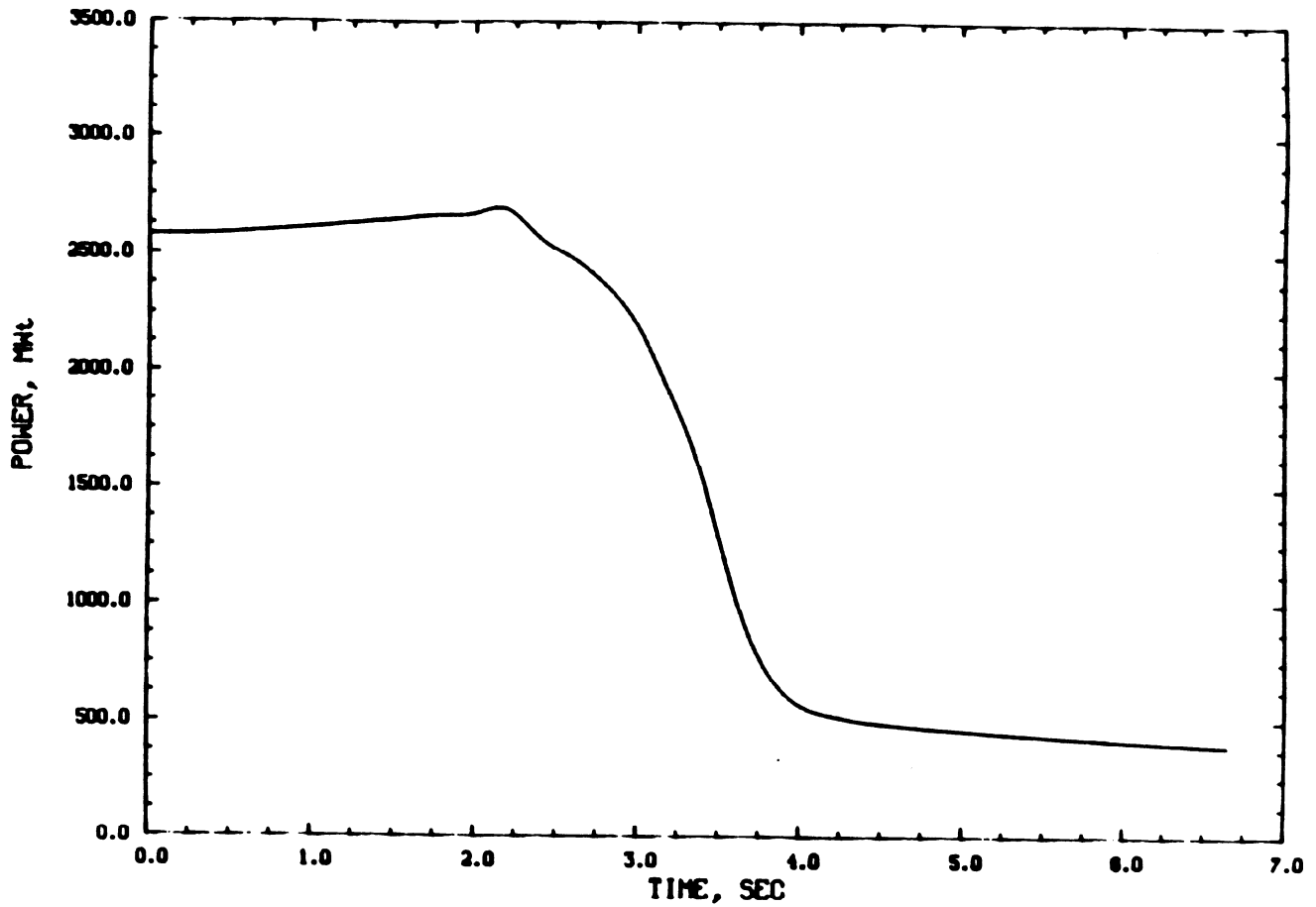
S/G LIQUID LEVEL FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



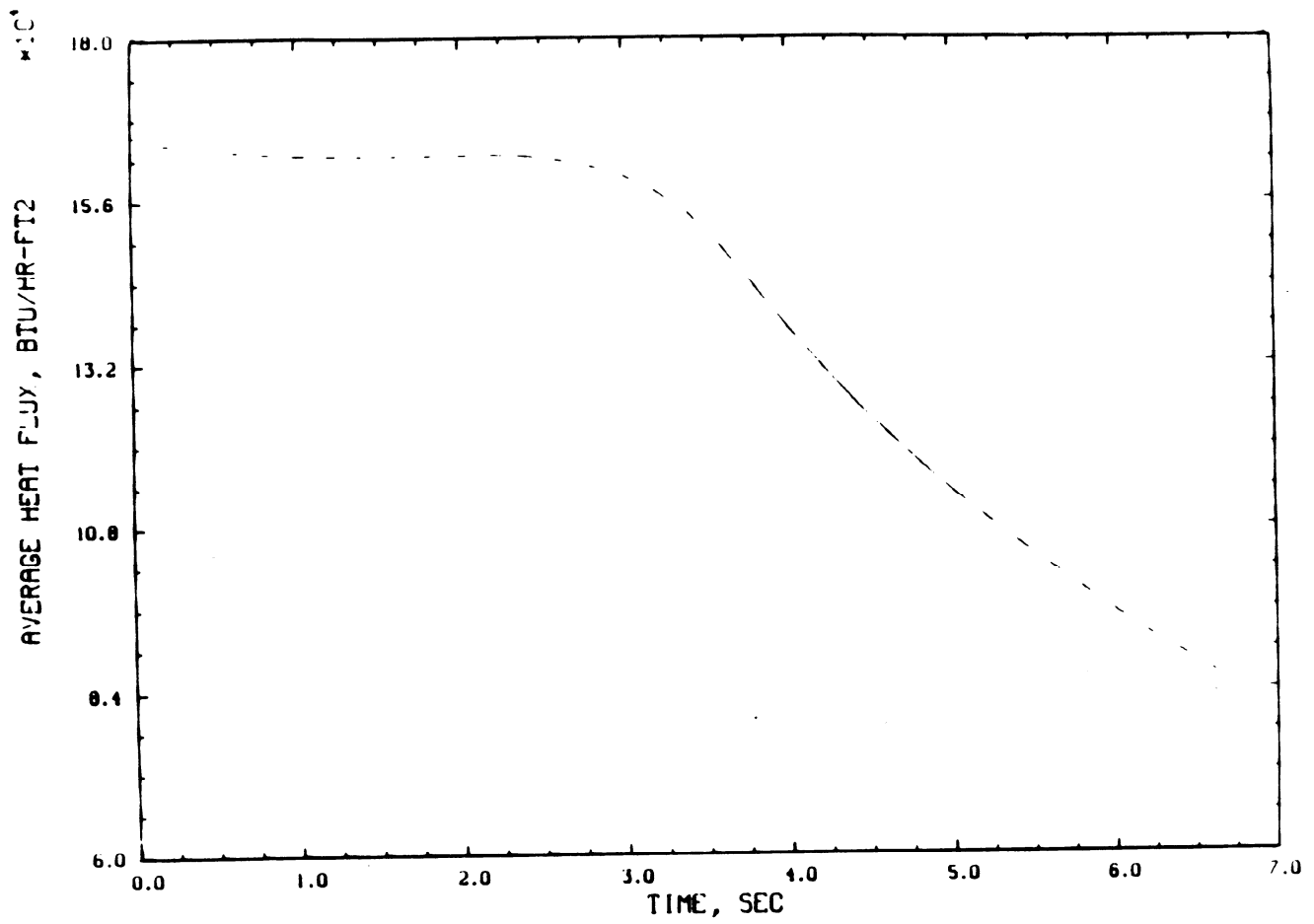
PRIMARY COOLANT SYSTEM MASS FLOW RATE FOR LOSS OF FORCED FLOW



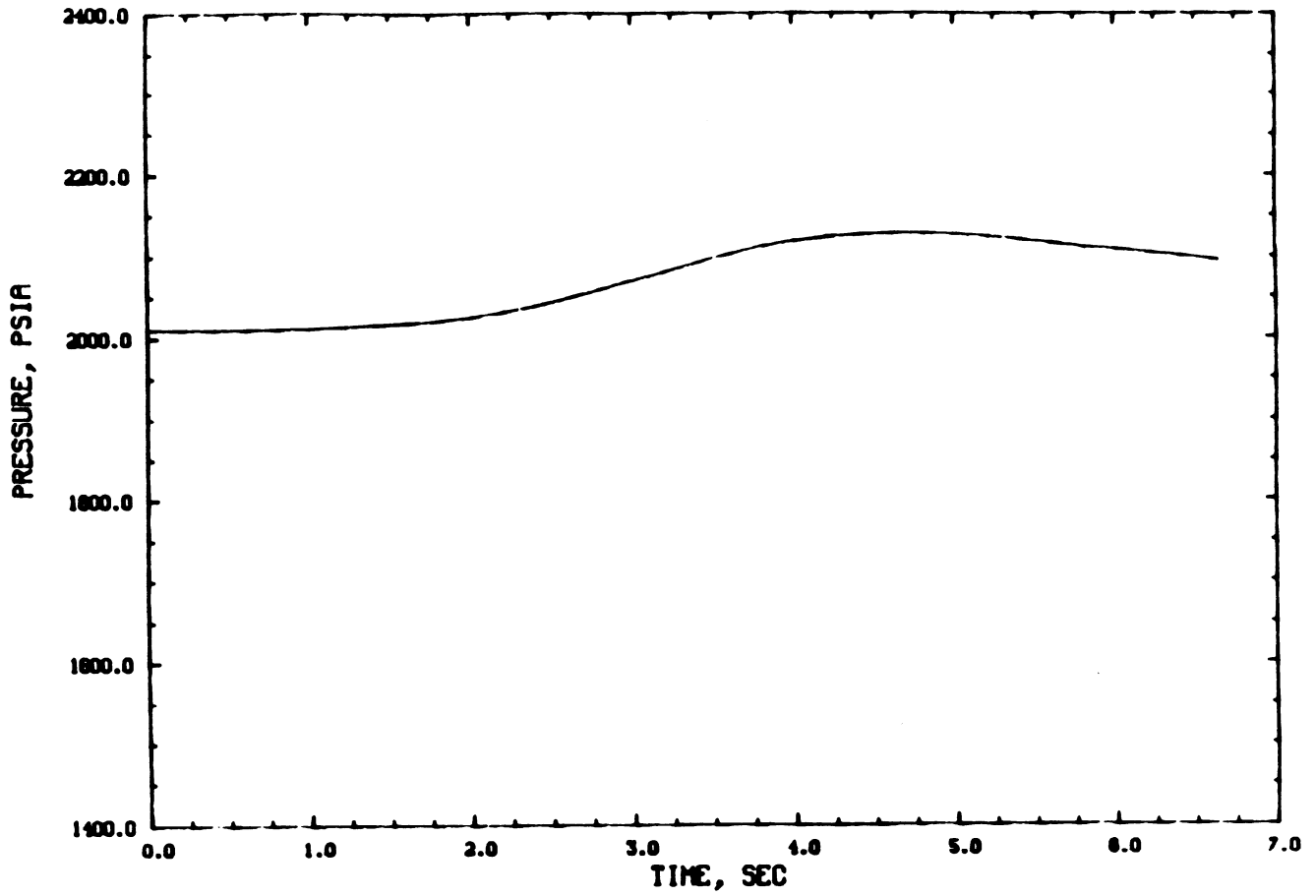
REACTOR POWER LEVEL FOR LOSS OF FORCED FLOW



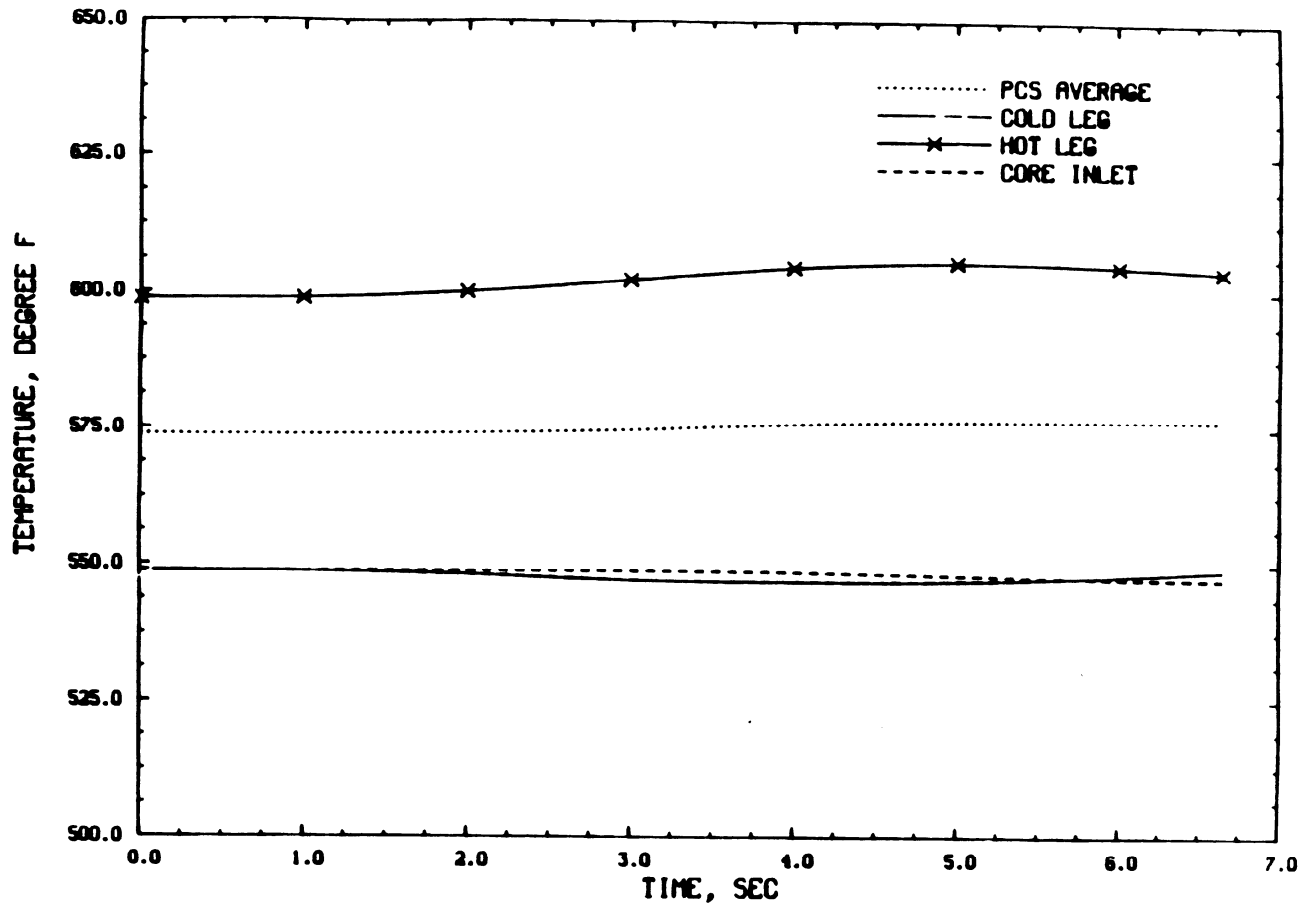
CORE AVERAGE HEAT FLUX FOR LOSS OF FORCED FLOW



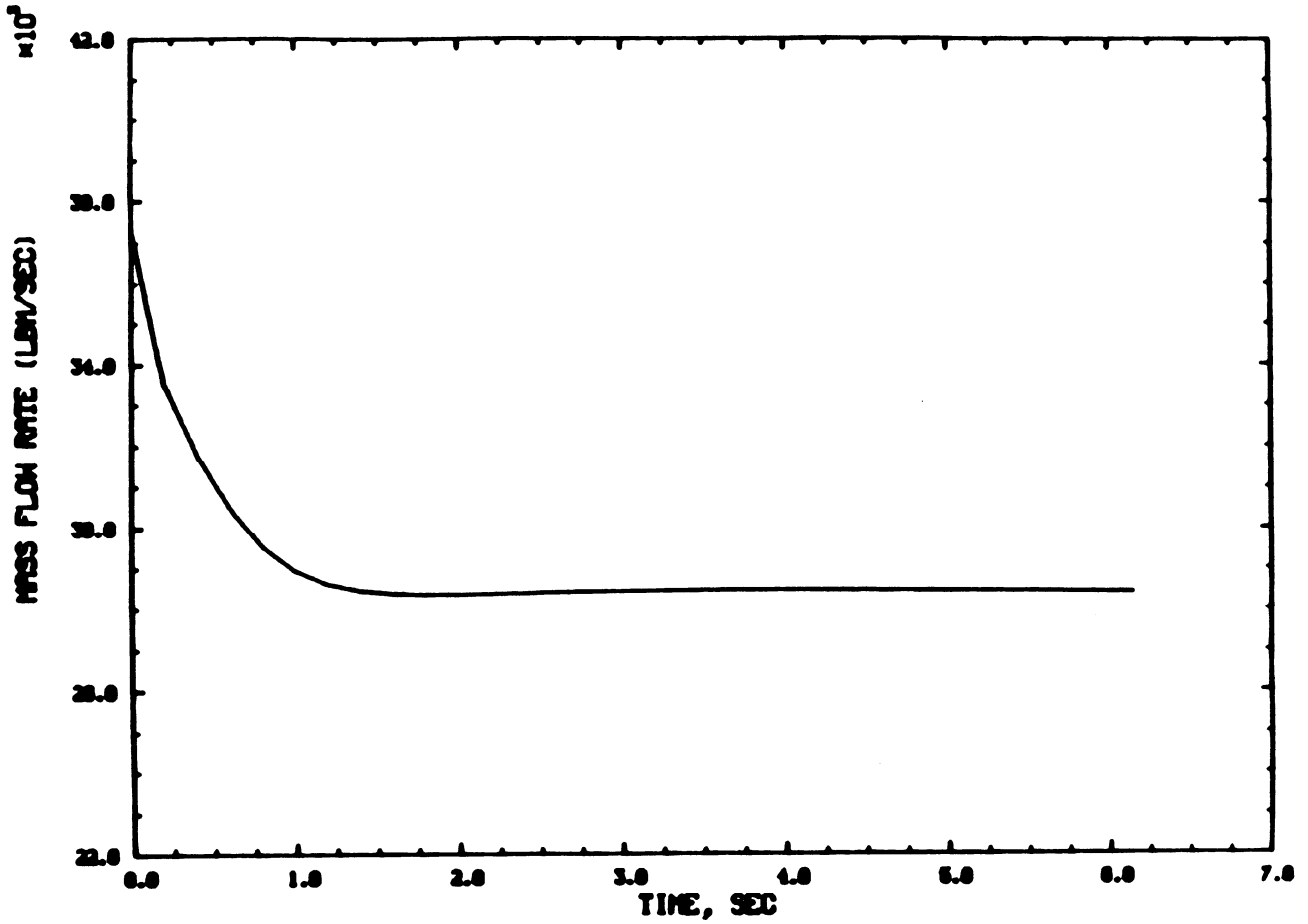
PRESSURIZER PRESSURE FOR LOSS OF FORCED FLOW



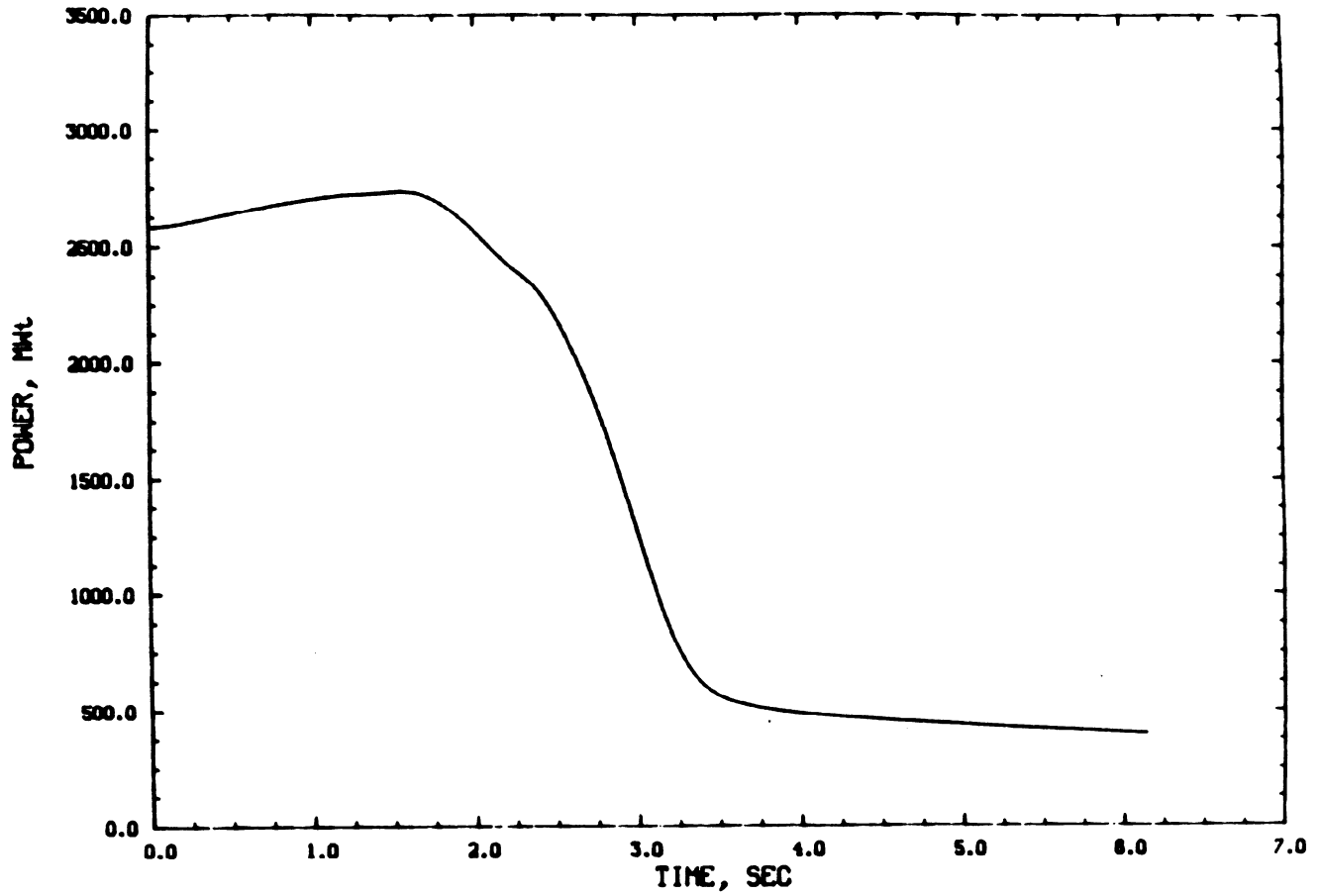
PRIMARY COOLANT SYSTEM TEMPERATURES FOR LOSS OF FORCED FLOW



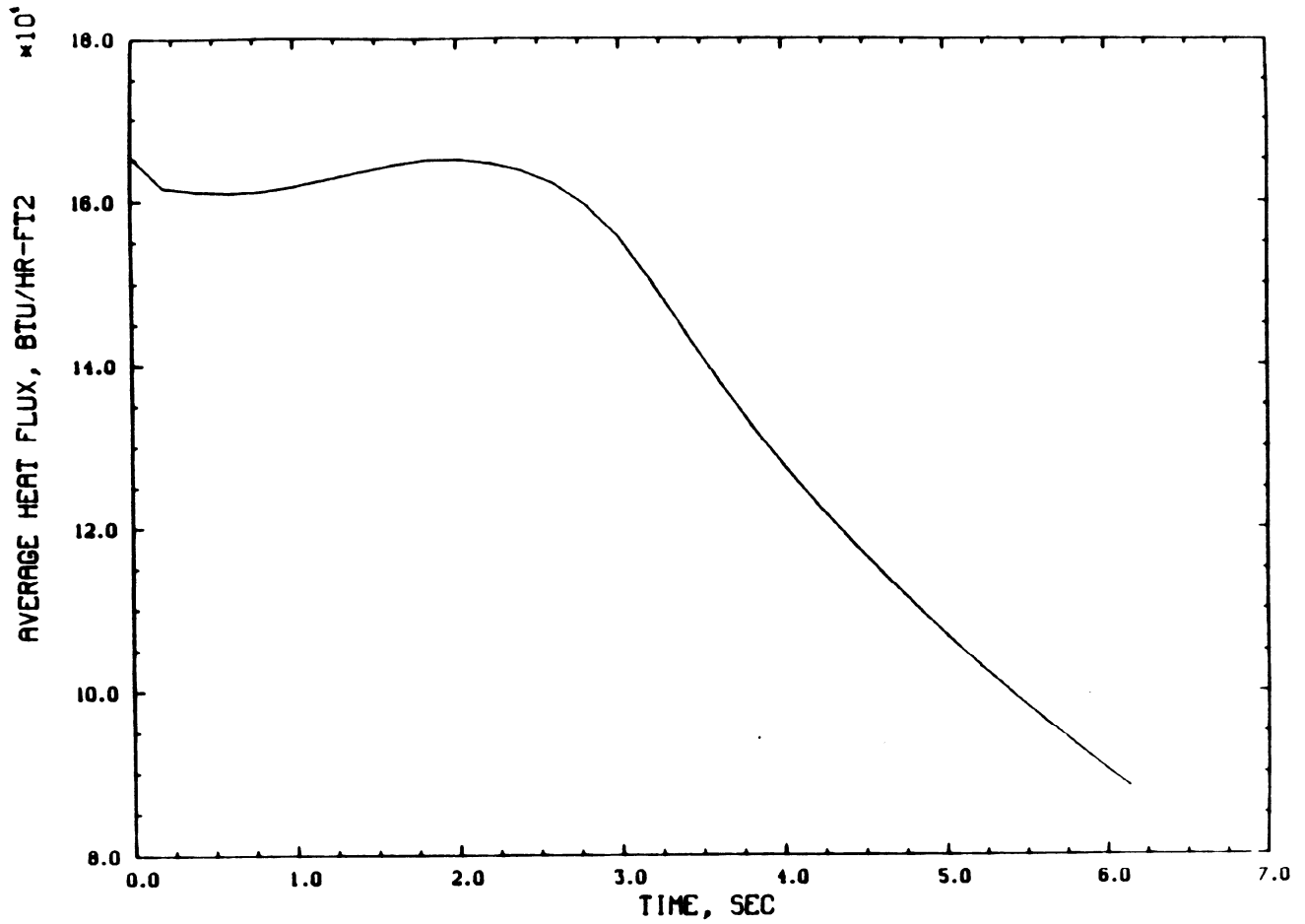
PRIMARY COOLANT SYSTEM MASS FLOW RATE FOR
REACTOR COOLANT PUMP ROTOR SEIZURE



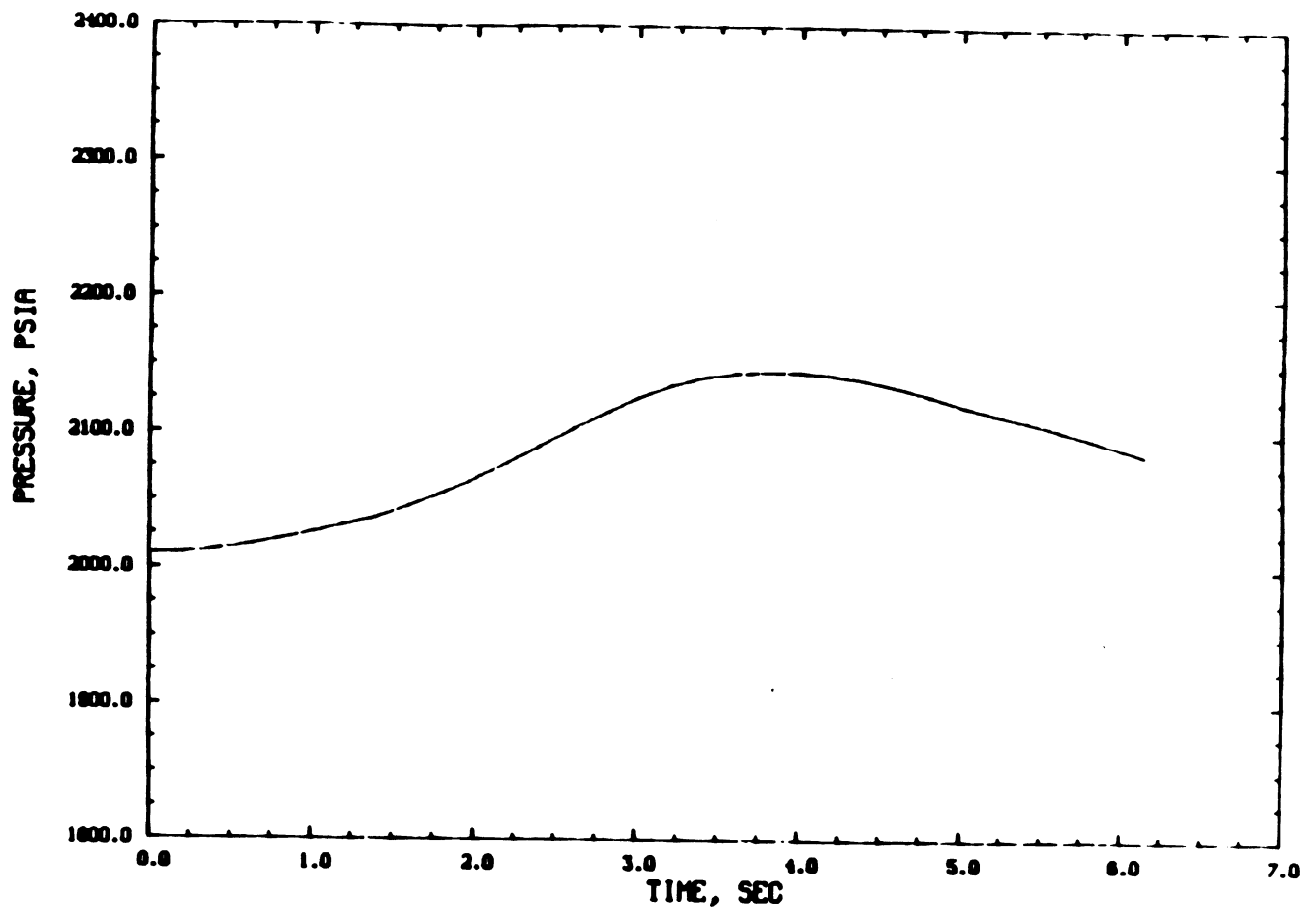
REACTOR POWER LEVEL FOR REACTOR COOLANT PUMP ROTOR SEIZURE



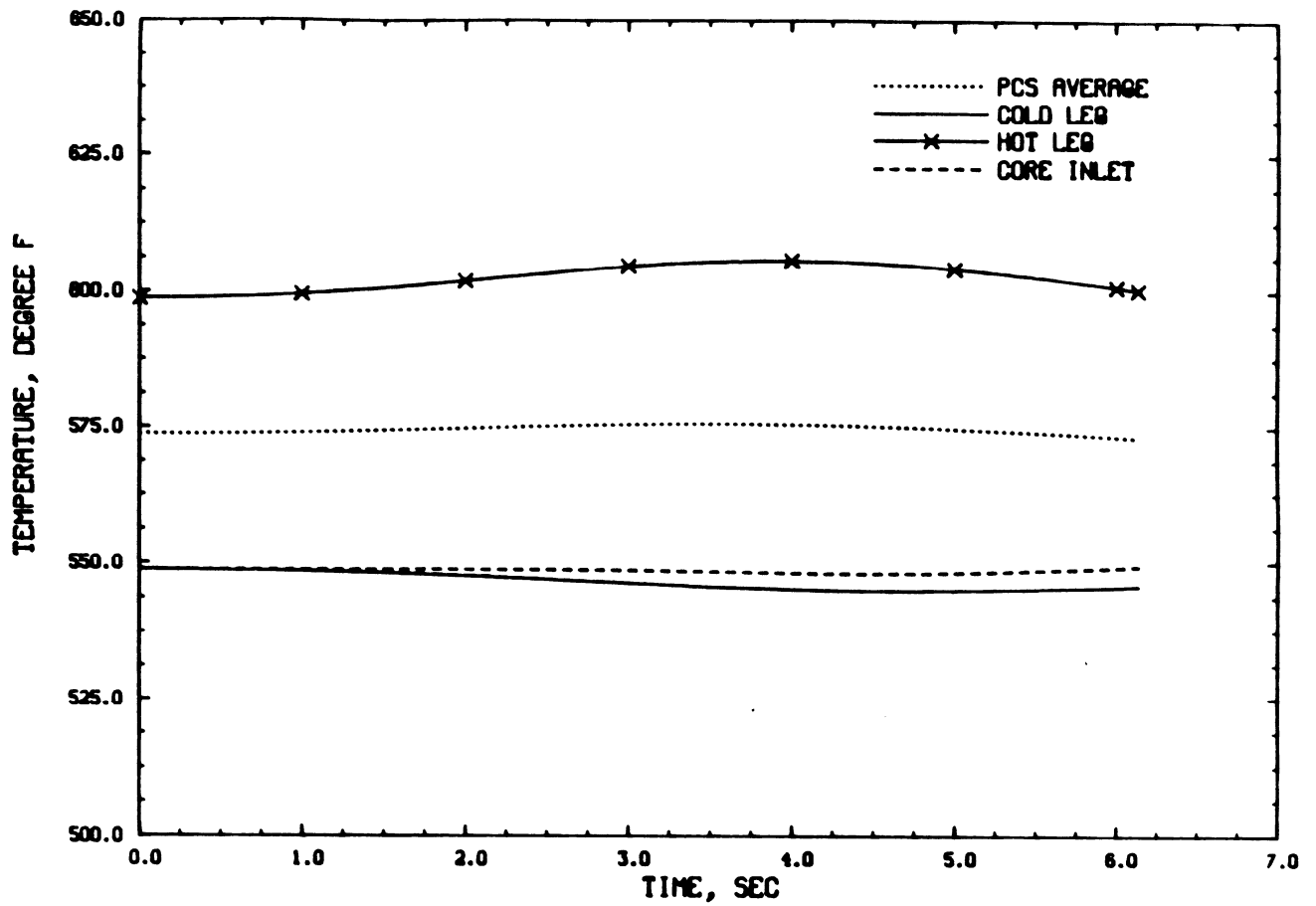
CORE AVERAGE HEAT FLUX FOR REACTOR COOLANT PUMP ROTOR SEIZURE



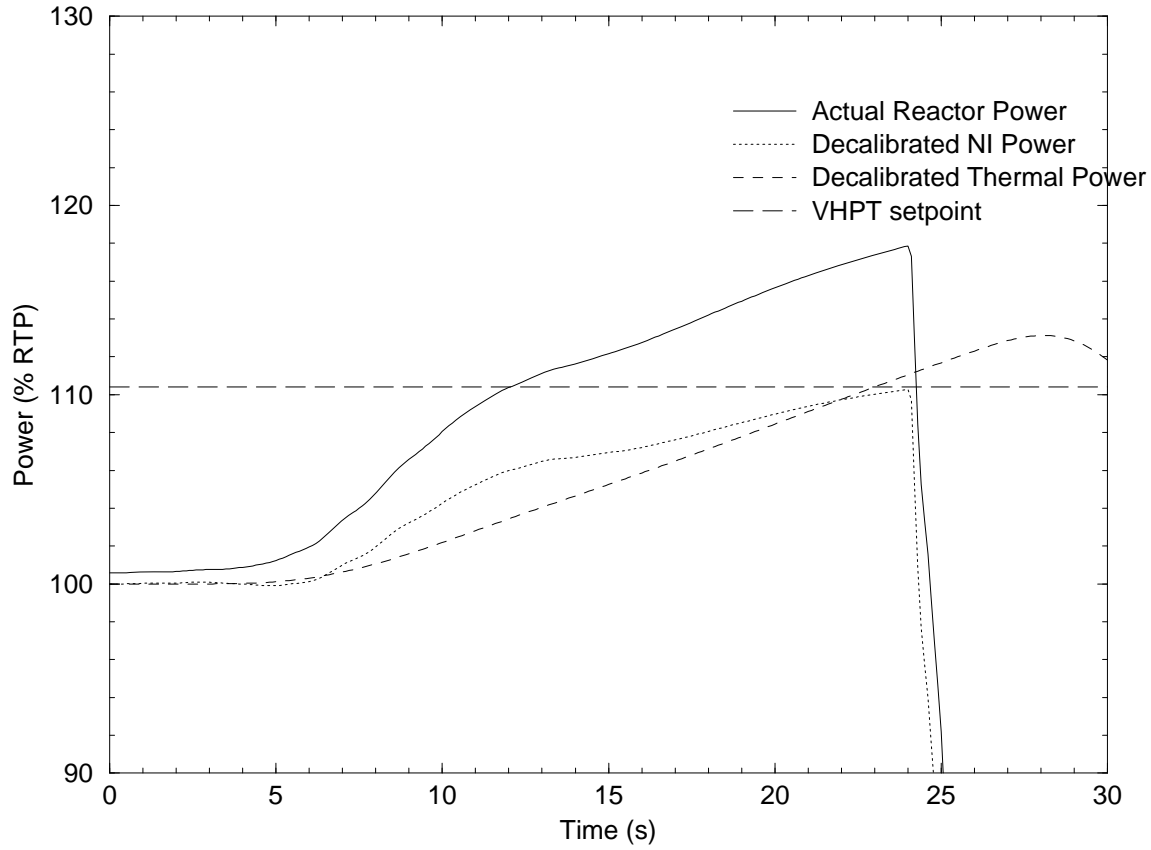
PRESSURIZER PRESSURE FOR REACTOR COOLANT PUMP ROTOR SEIZURE



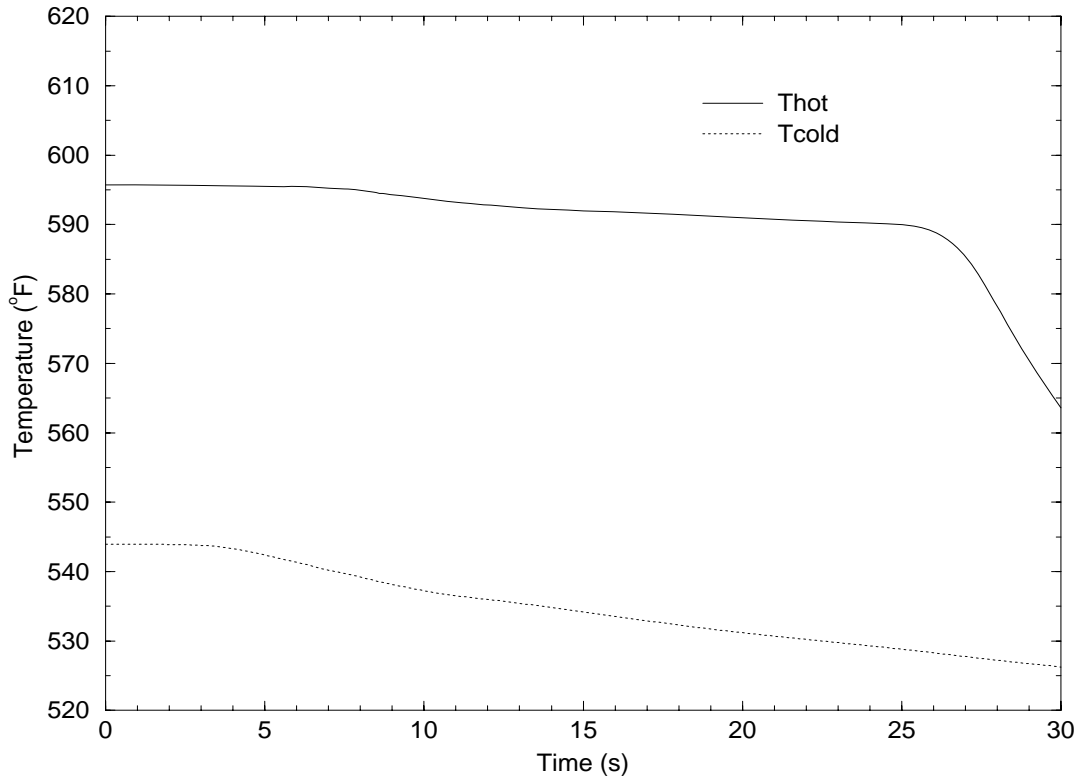
PRIMARY COOLANT SYSTEM TEMPERATURES FOR
REACTOR COOLANT PUMP ROTOR SEIZURE



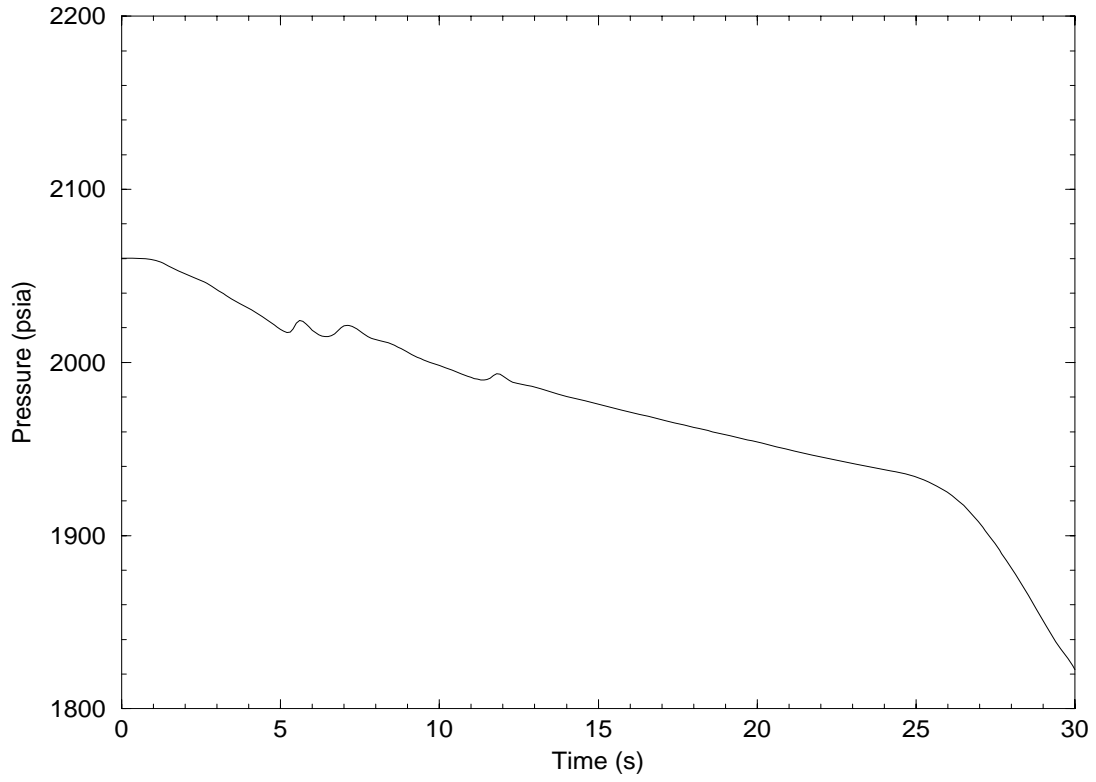
POWER COMPARISONS – EXCESS LOAD



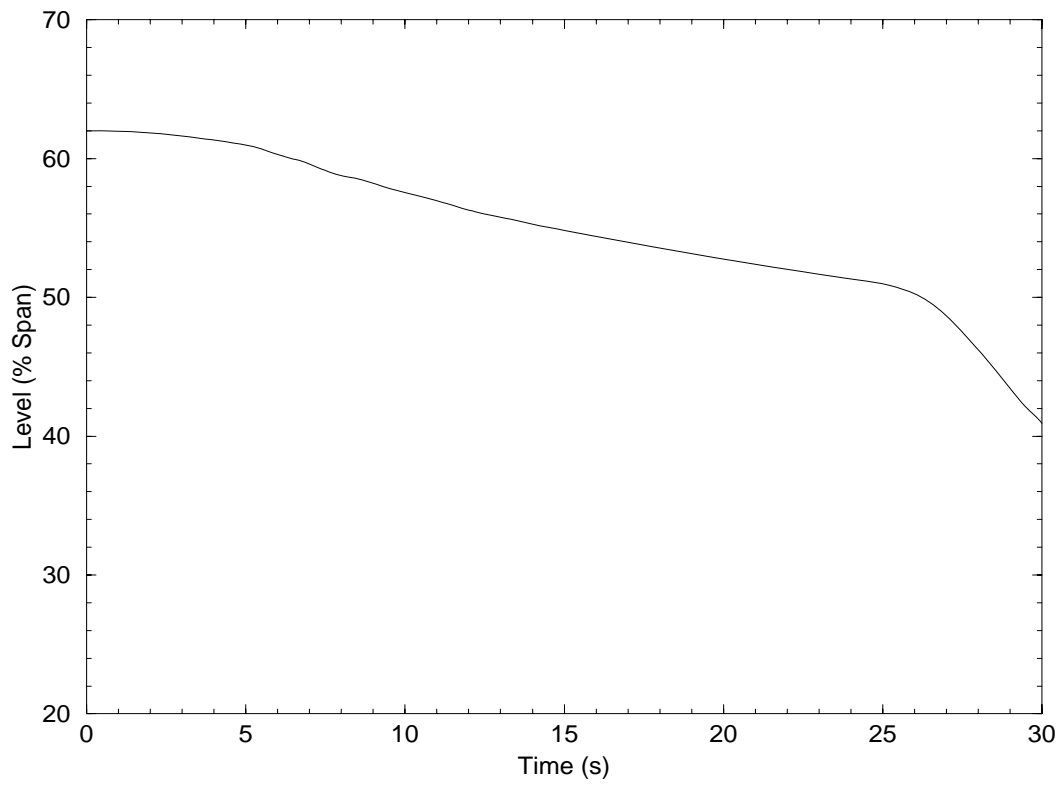
PCS COOLANT TEMPERATURE – EXCESS LOAD



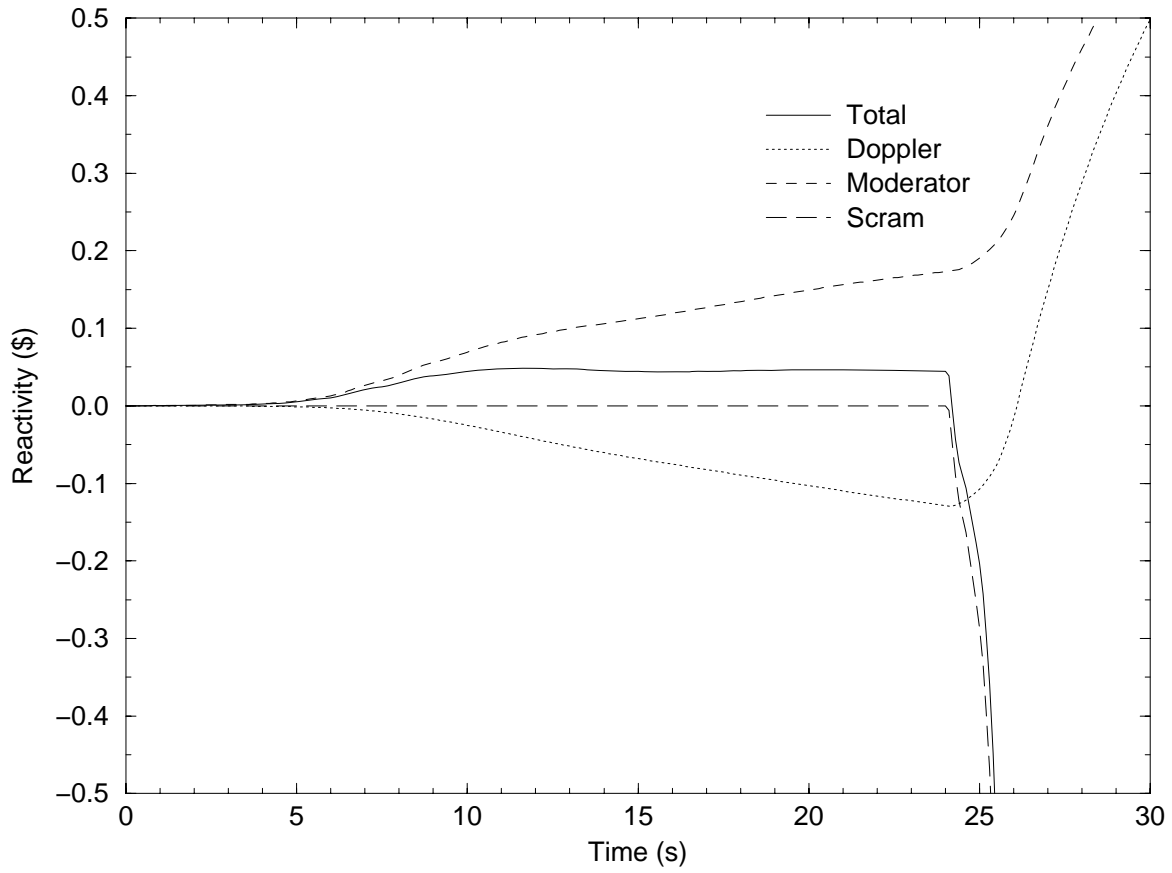
PRESSURIZER PRESSURE – EXCESS LOAD



PRESSURIZER COLLAPSED LIQUID LEVEL – EXCESS LOAD

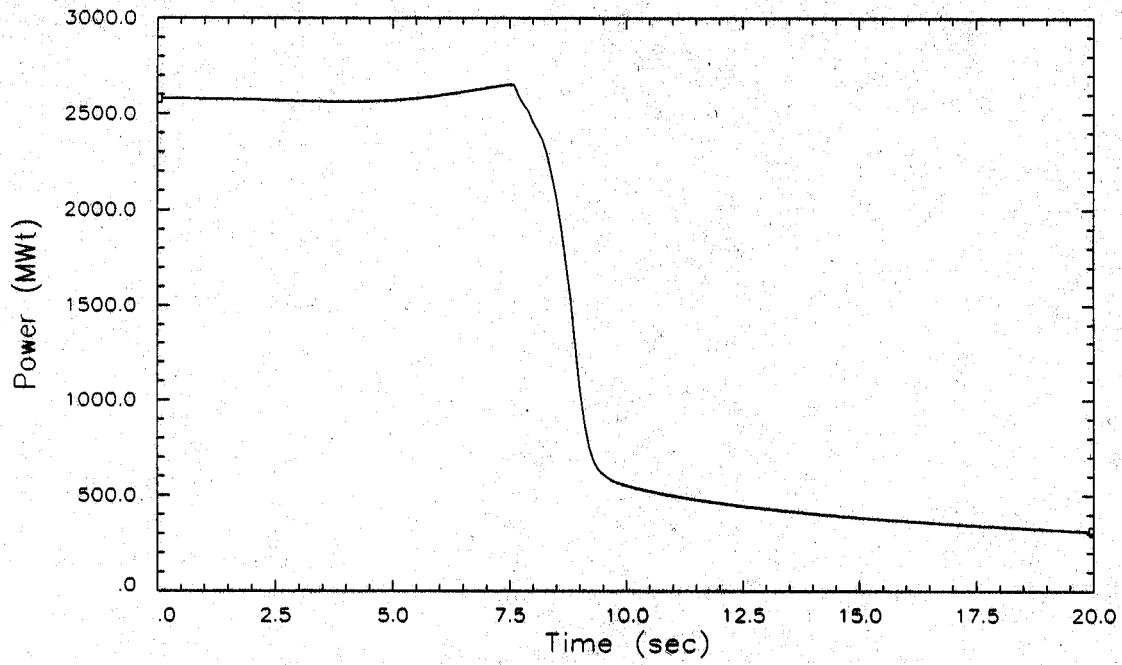


COMPONENTS OF REACTIVITY – EXCESS LOAD

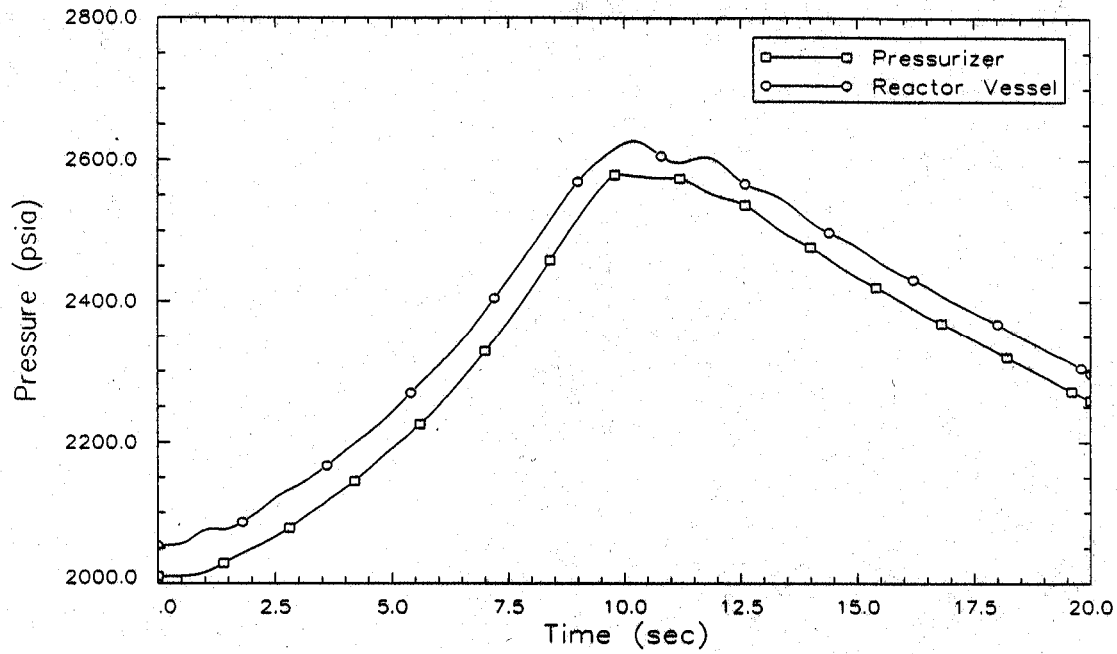


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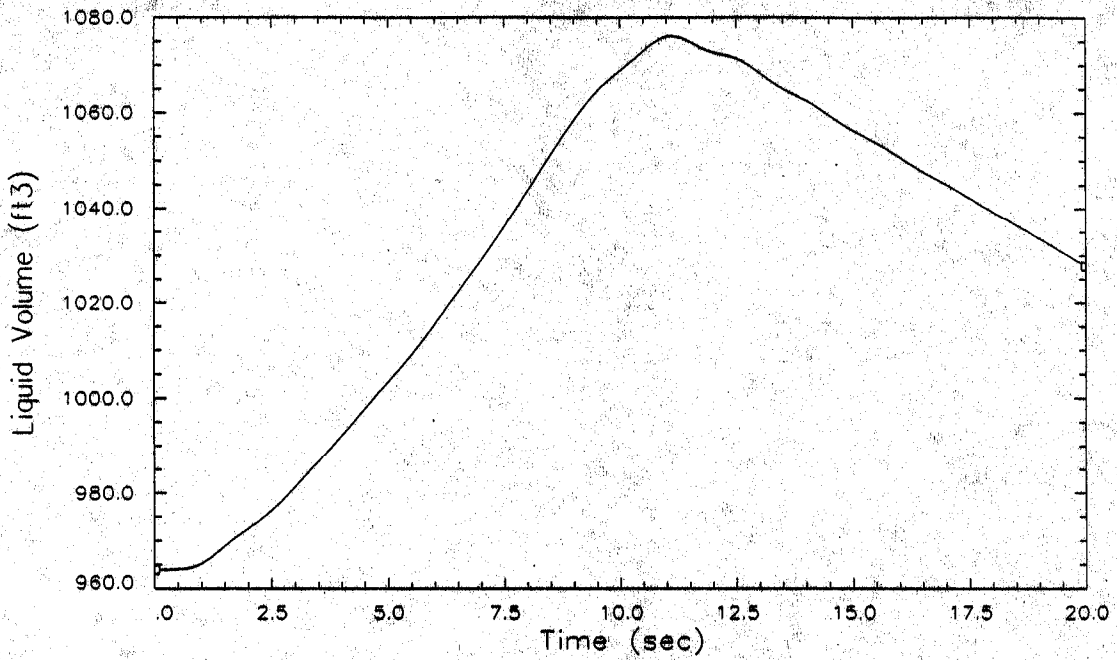
REACTOR POWER LEVEL FOR LOSS OF EXTERNAL LOAD EVENT



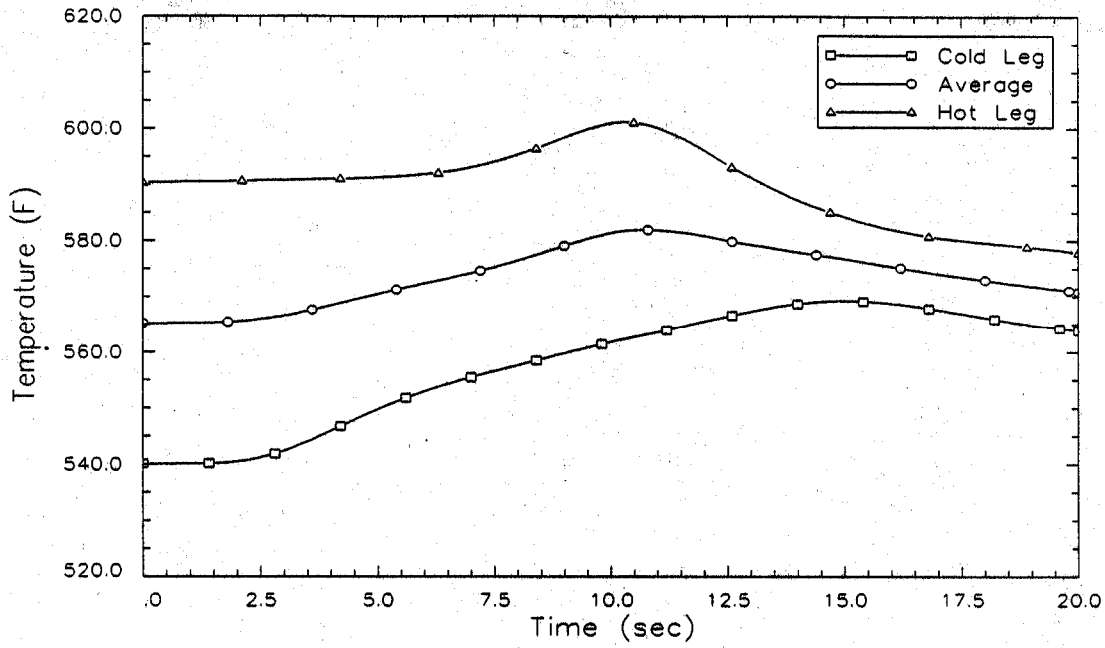
PRIMARY PRESSURES FOR LOSS OF EXTERNAL LOAD EVENT



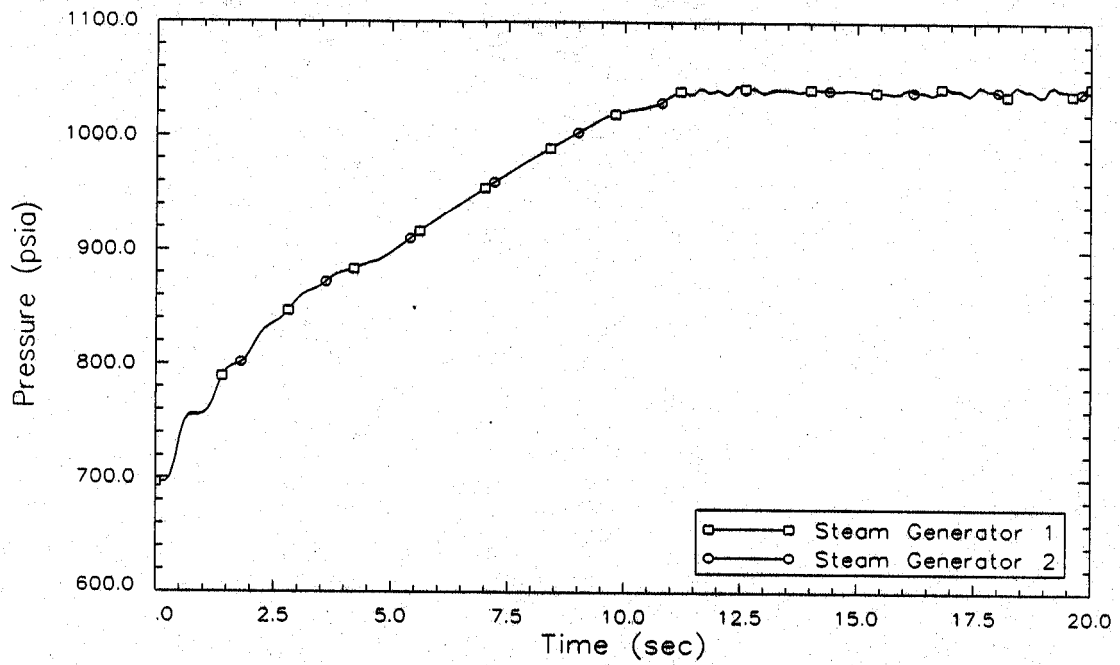
PRESSURIZER LIQUID VOLUME FOR LOSS OF EXTERNAL LOAD EVENT



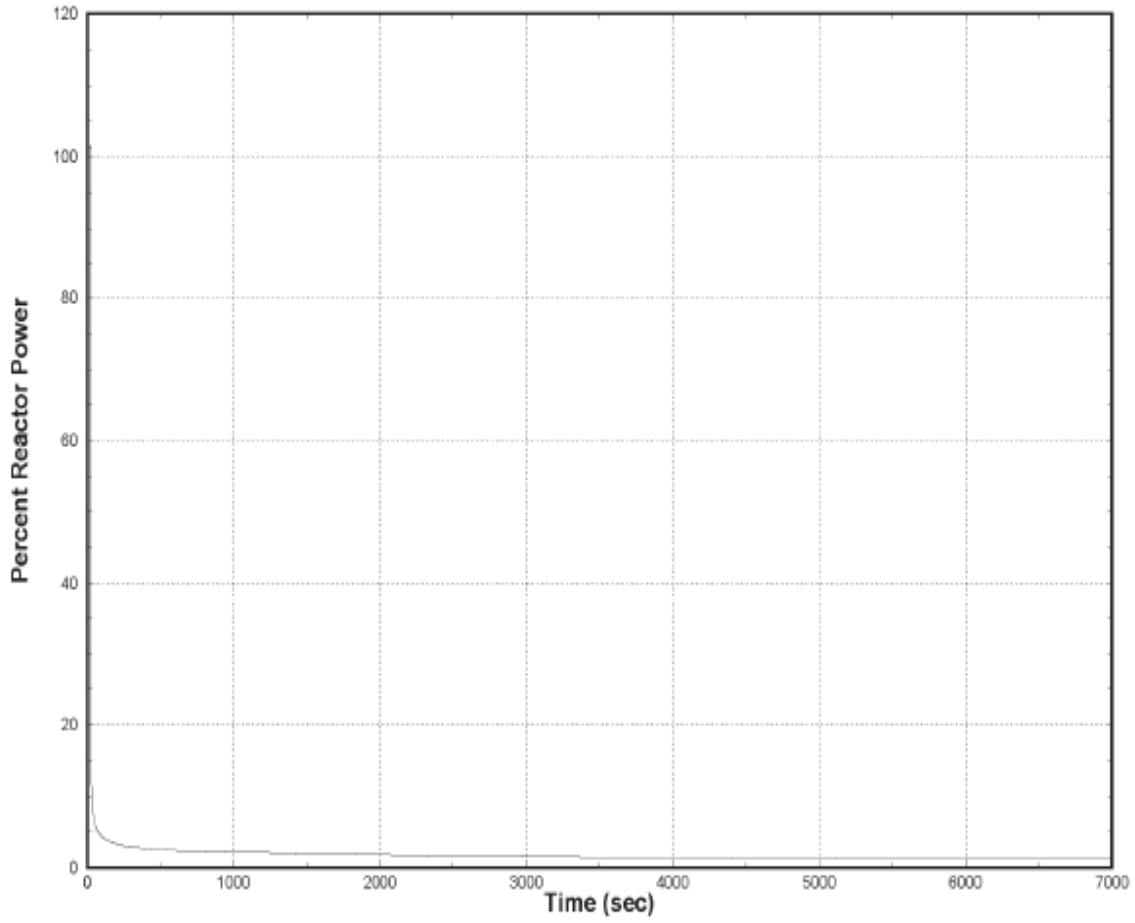
PRIMARY COOLANT SYSTEM TEMPERATURES FOR LOSS OF EXTERNAL LOAD EVENT



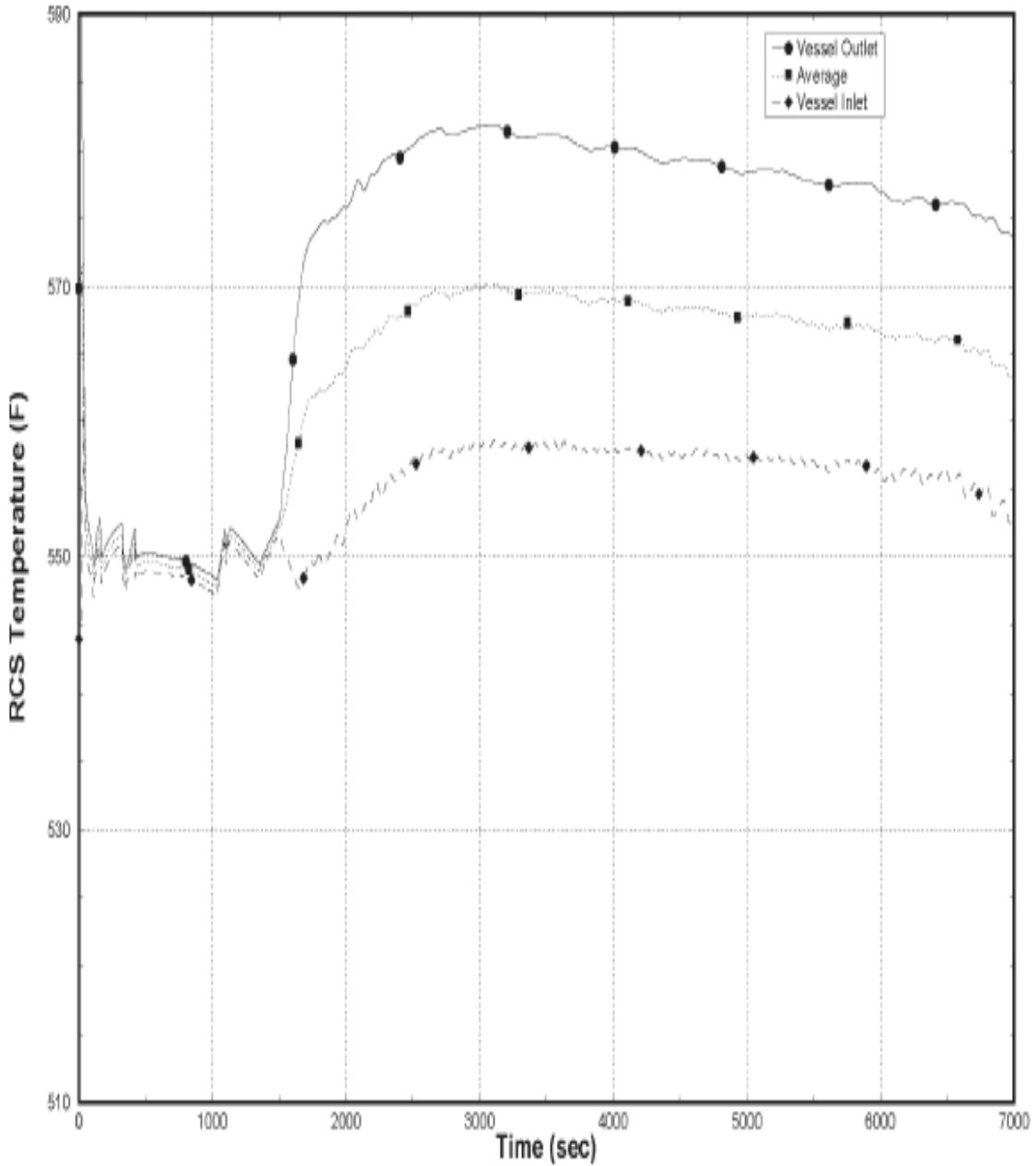
SECONDARY PRESSURES FOR LOSS OF EXTERNAL LOAD EVENT



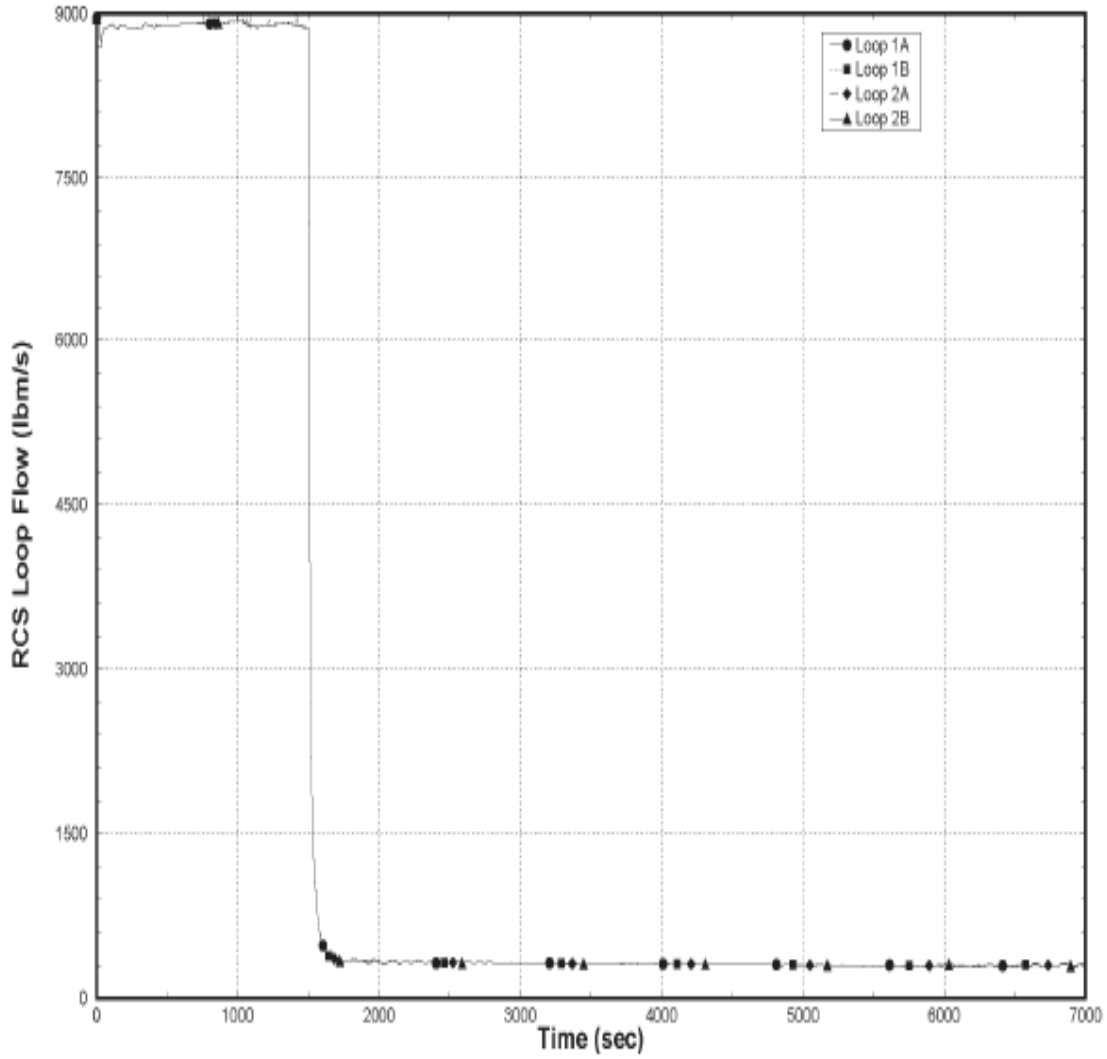
**Reactor Power, LNFF Analysis with Off-Site Power Available
and Steam Dump System Disabled**



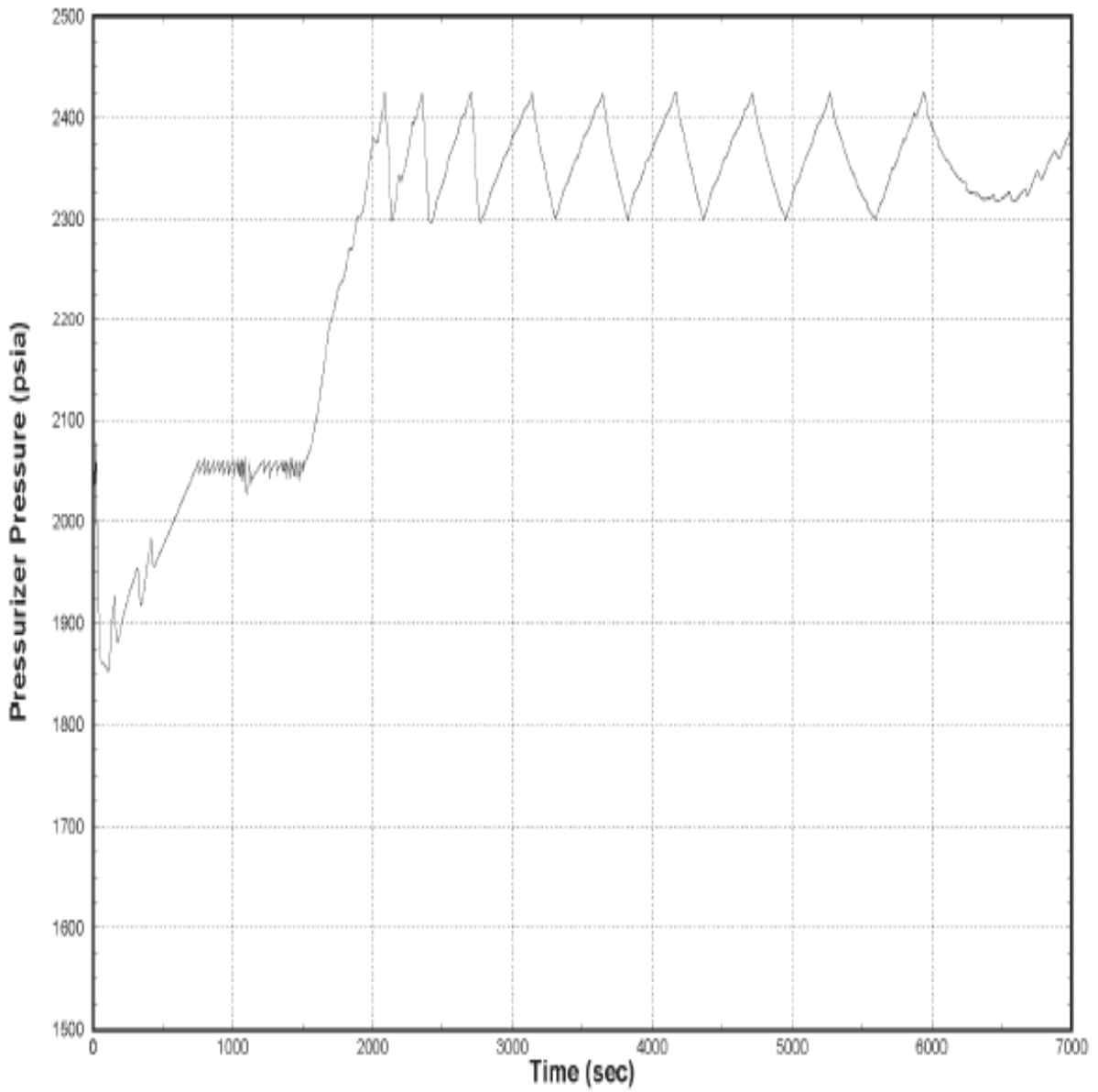
Primary Coolant System Loop Temperatures, LNFF Analysis with Off-Site Power Available and Steam Dump System Disabled



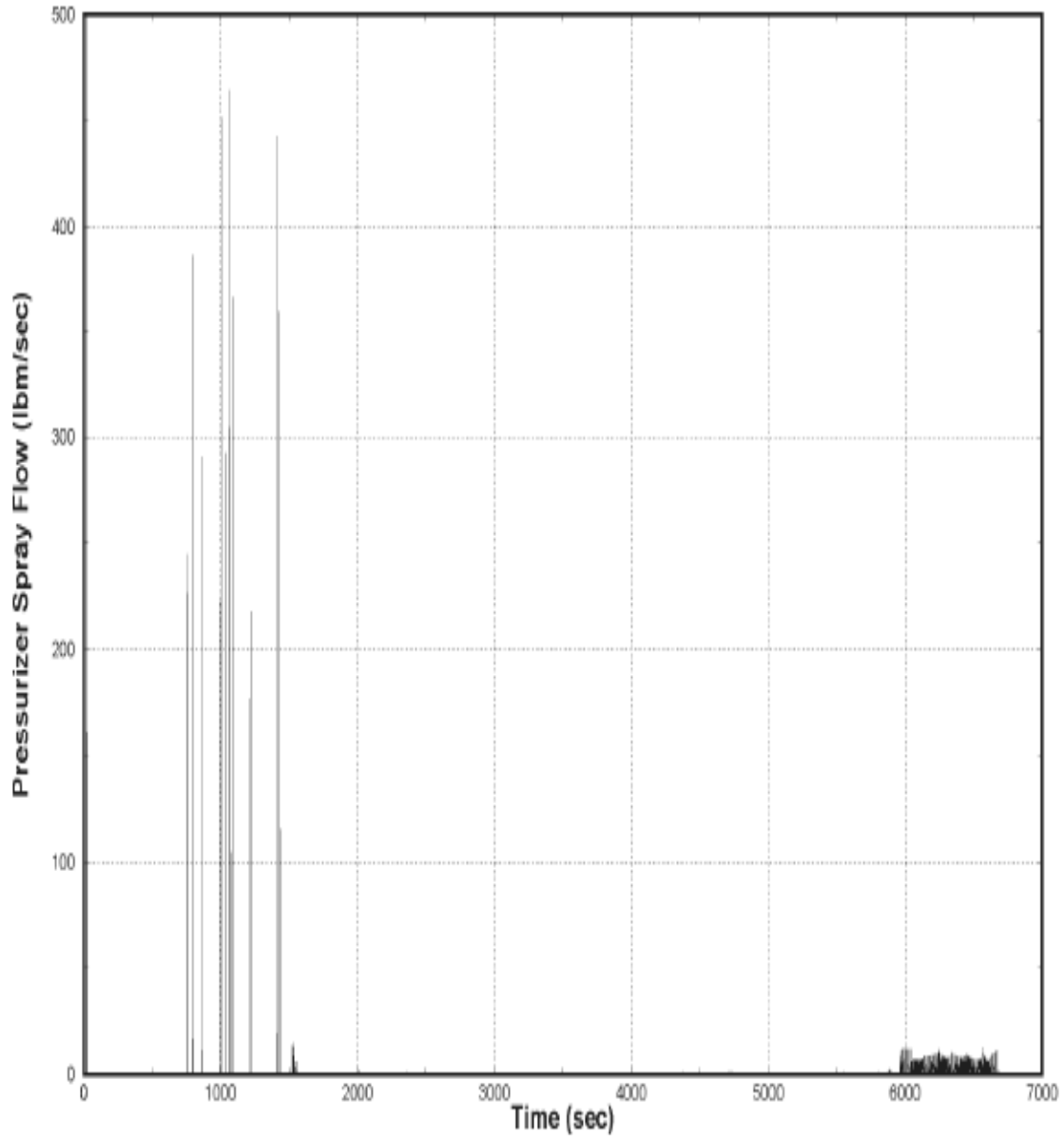
Primary Coolant System Loop Flow, LNFF Analysis with Off-Site Power Available and Steam Dump System Disabled



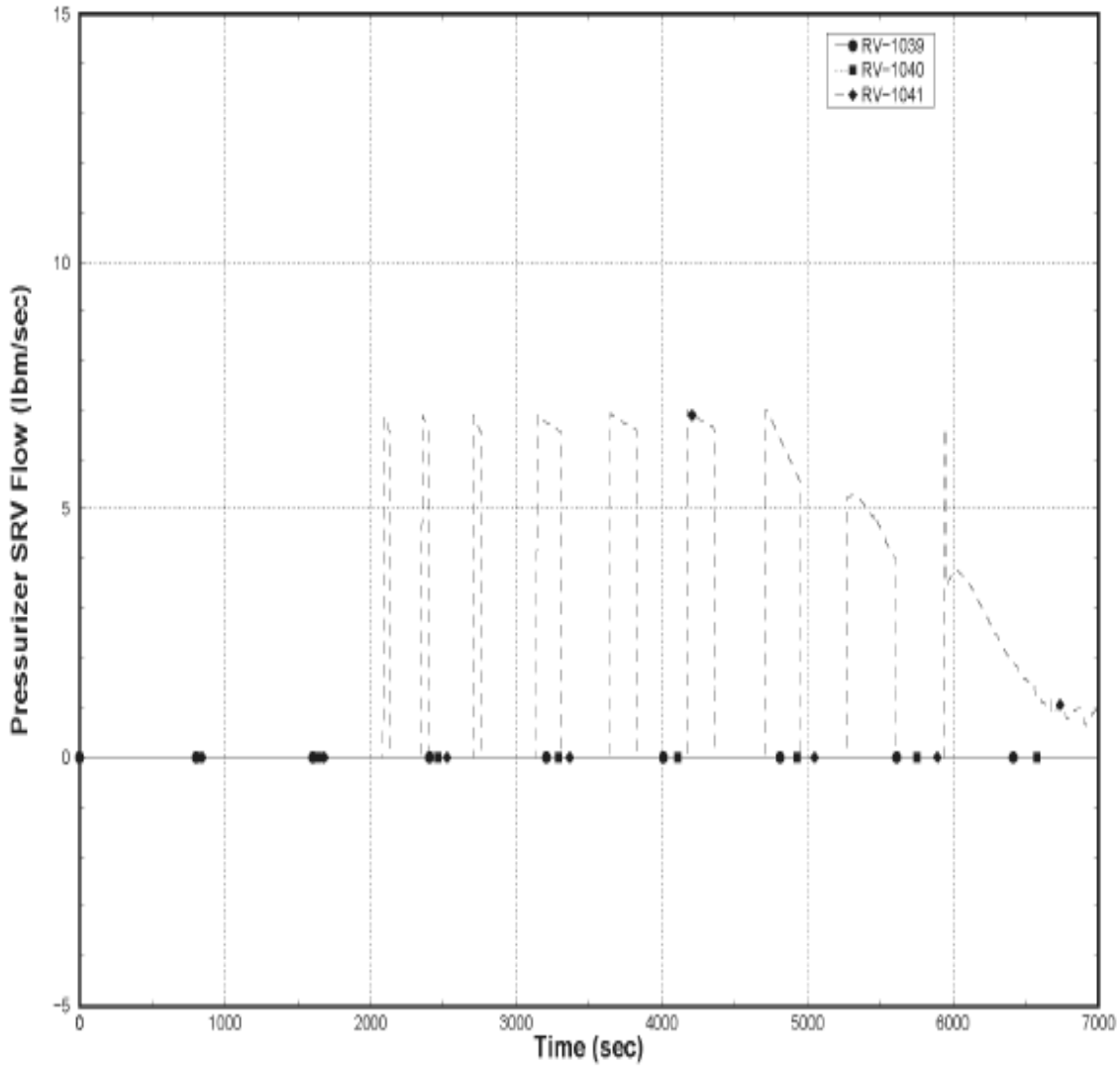
**Pressurizer Pressure, LNFF Analysis with Off-Site Power Available
and Steam Dump System Disabled**



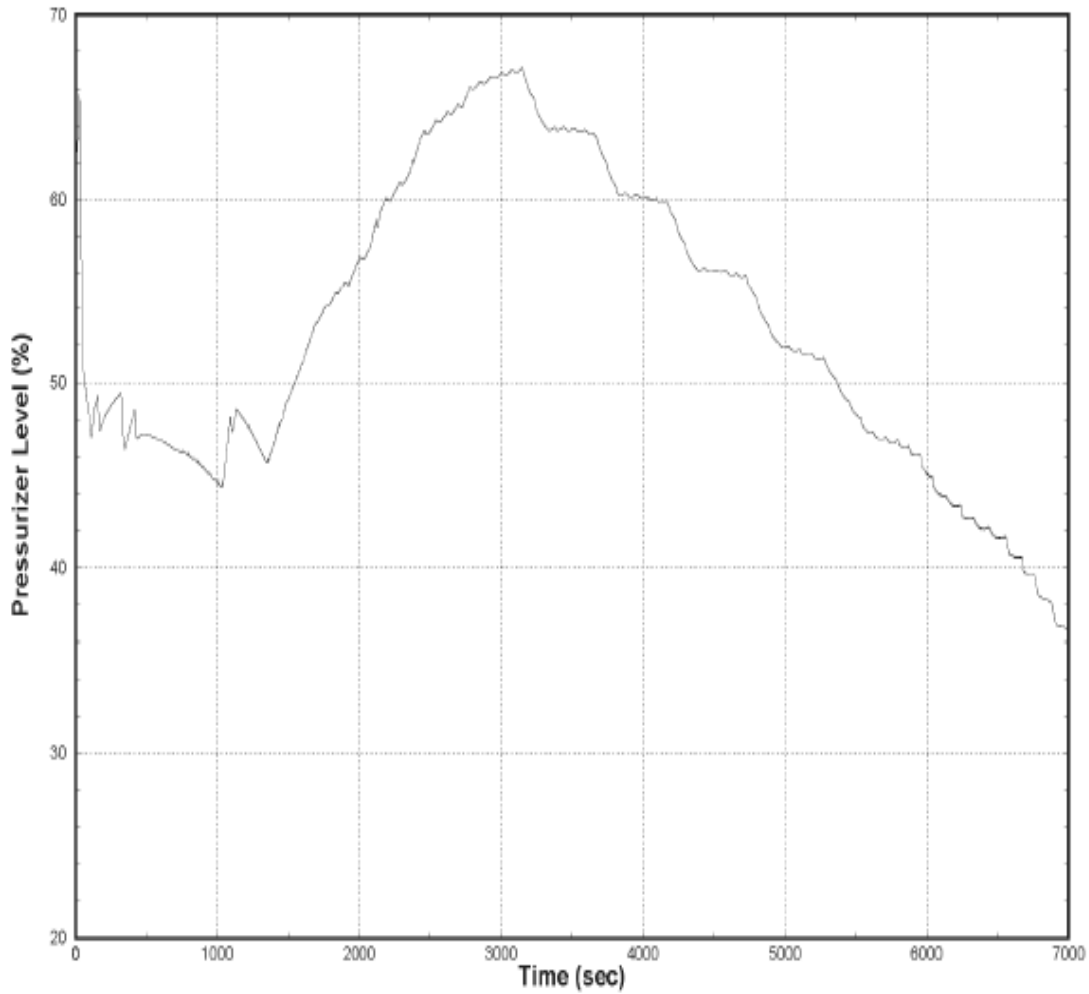
**Pressurizer Spray Flow, LNFF Analysis with Off-Site Power Available
and Steam Dump System Disabled**



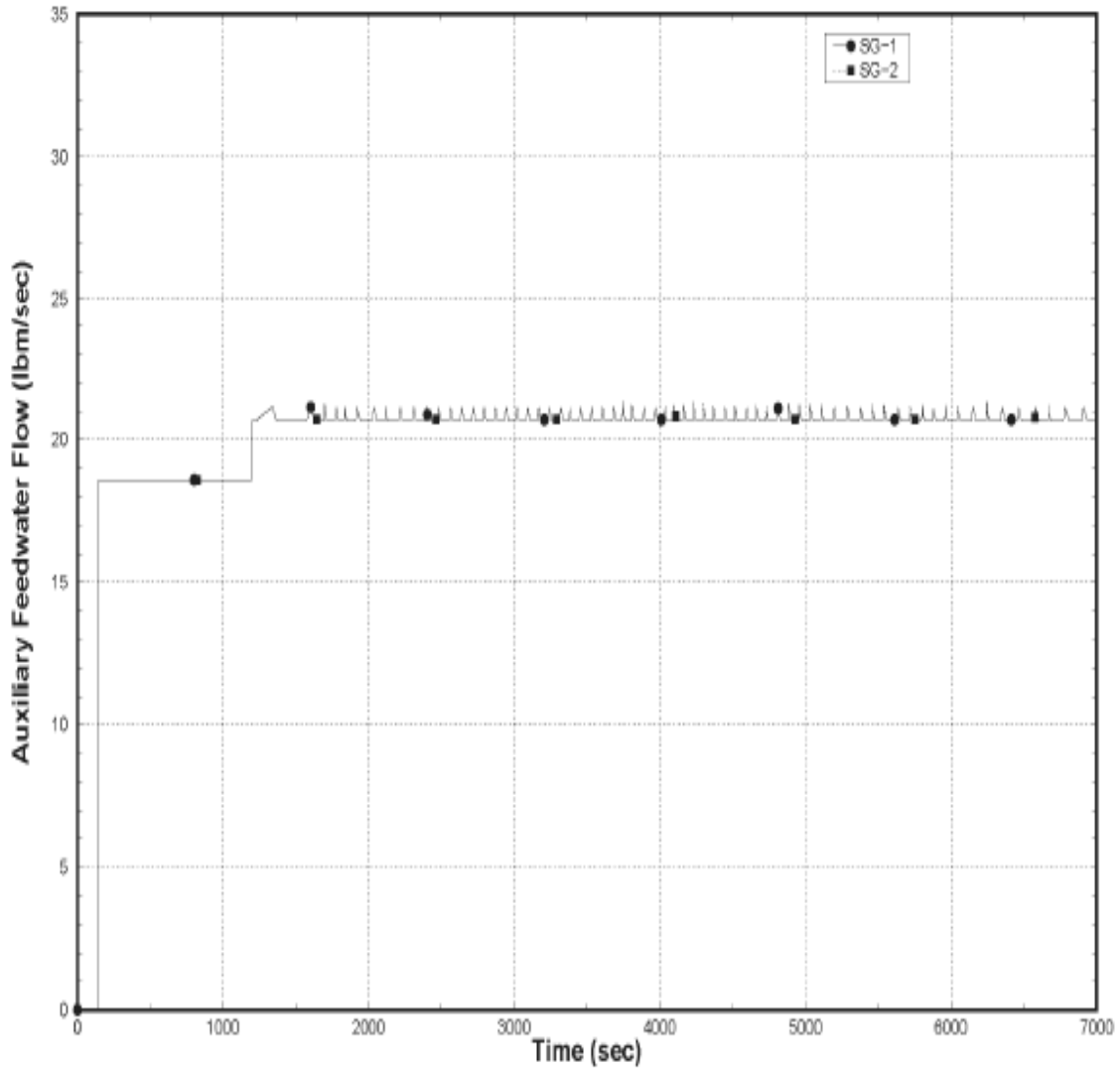
**Pressurizer SRV Flow, LNFF Analysis with Off-Site Power Available
and Steam Dump System Disabled**



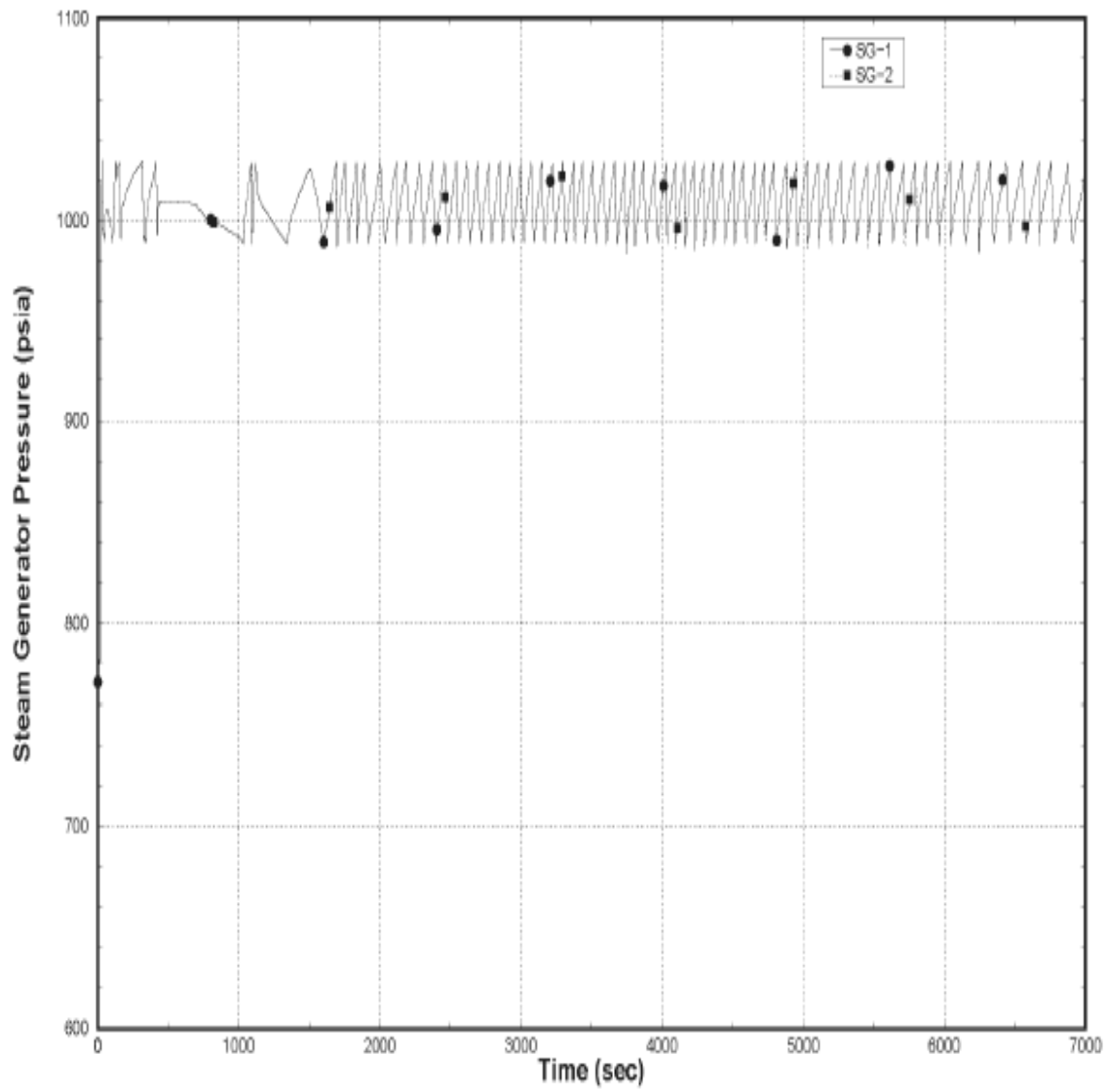
**Pressurizer Level, LNFF Analysis with Off-Site Power Available
and Steam Dump System Disabled**



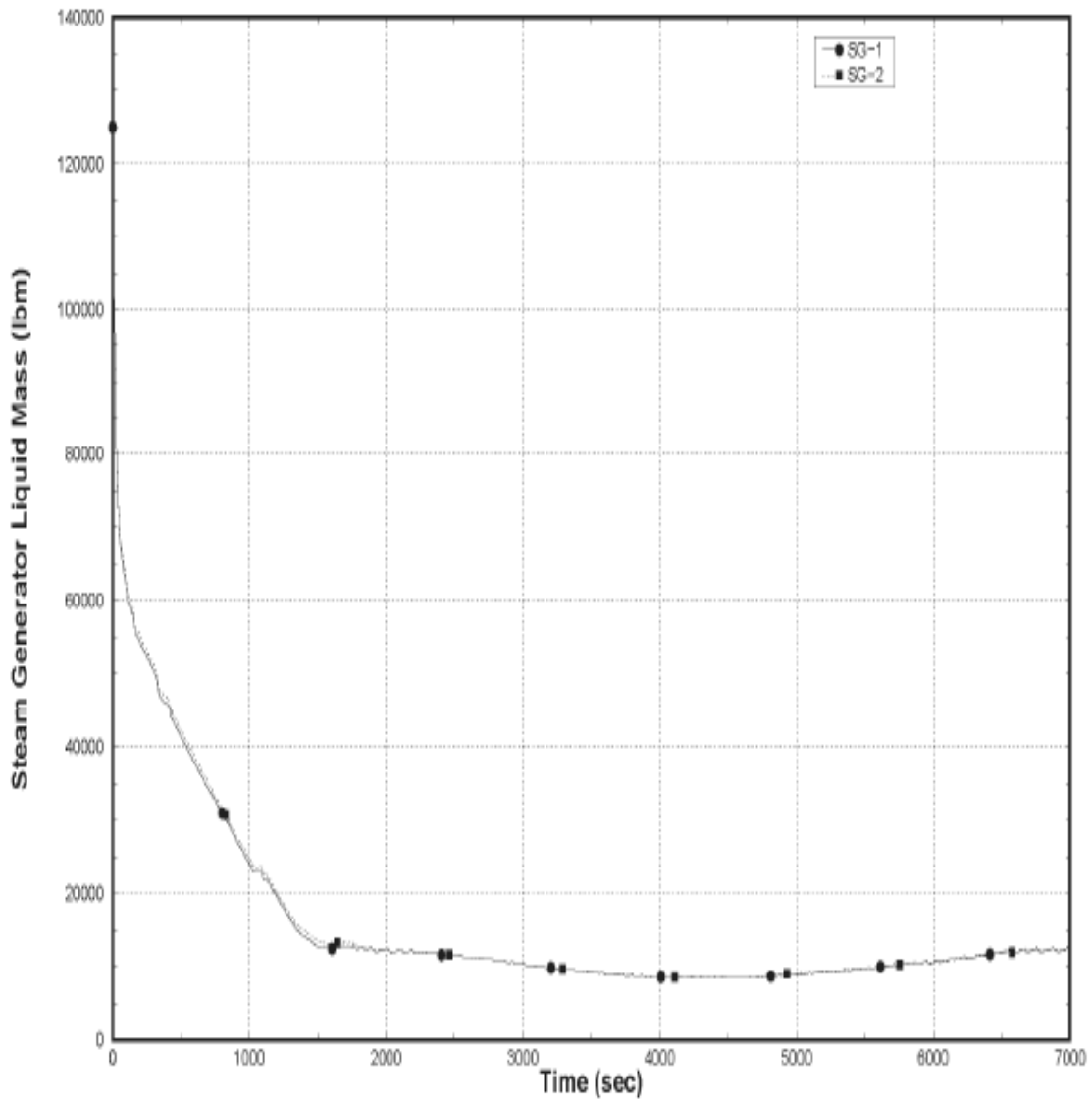
**SG Auxiliary Feedwater Flow, LNFF Analysis with Off-Site Power Available
and Steam Dump System Disabled**



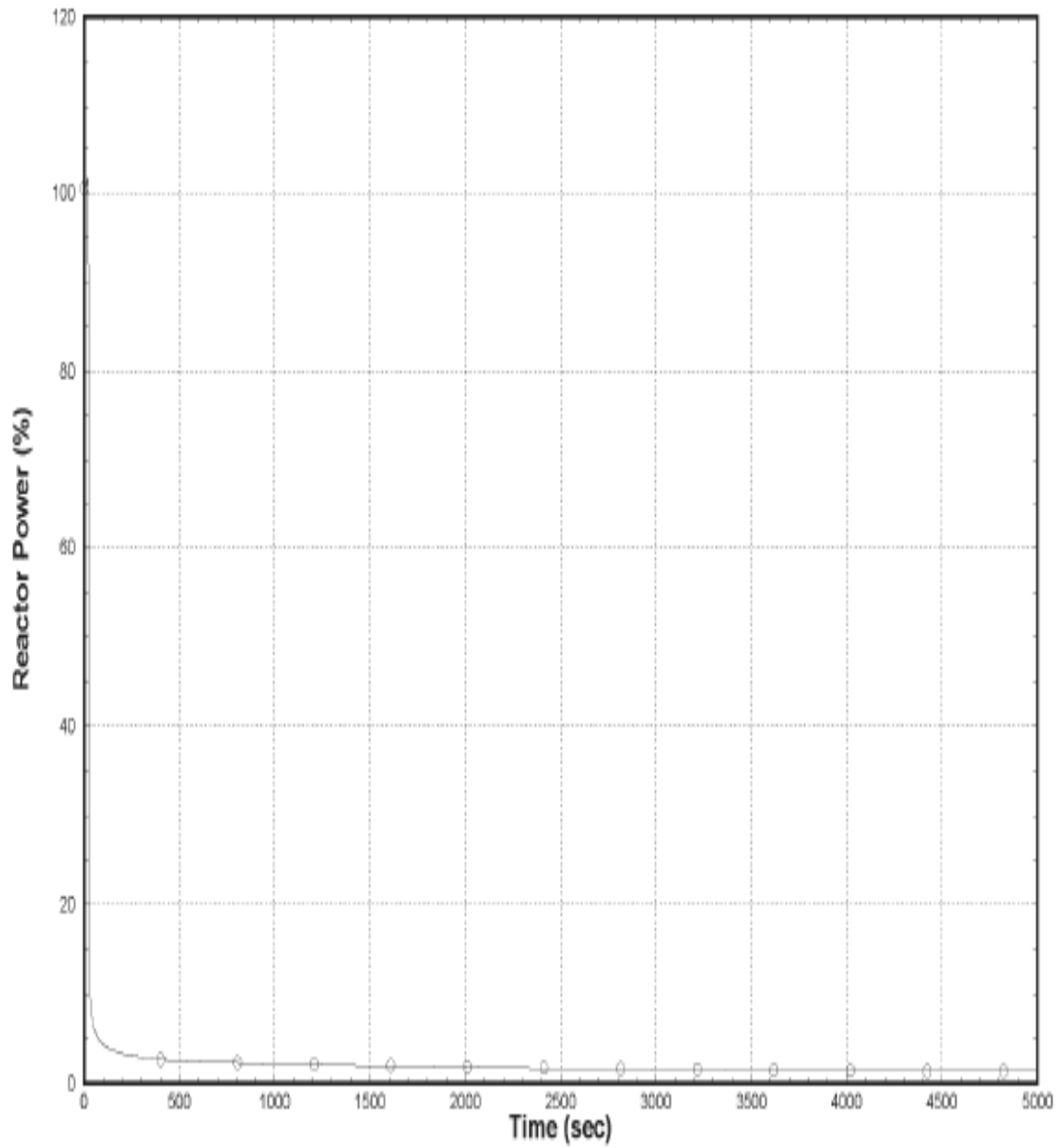
SG Dome Pressure, LNFF Analysis with Off-Site Power Available
and Steam Dump System Disabled



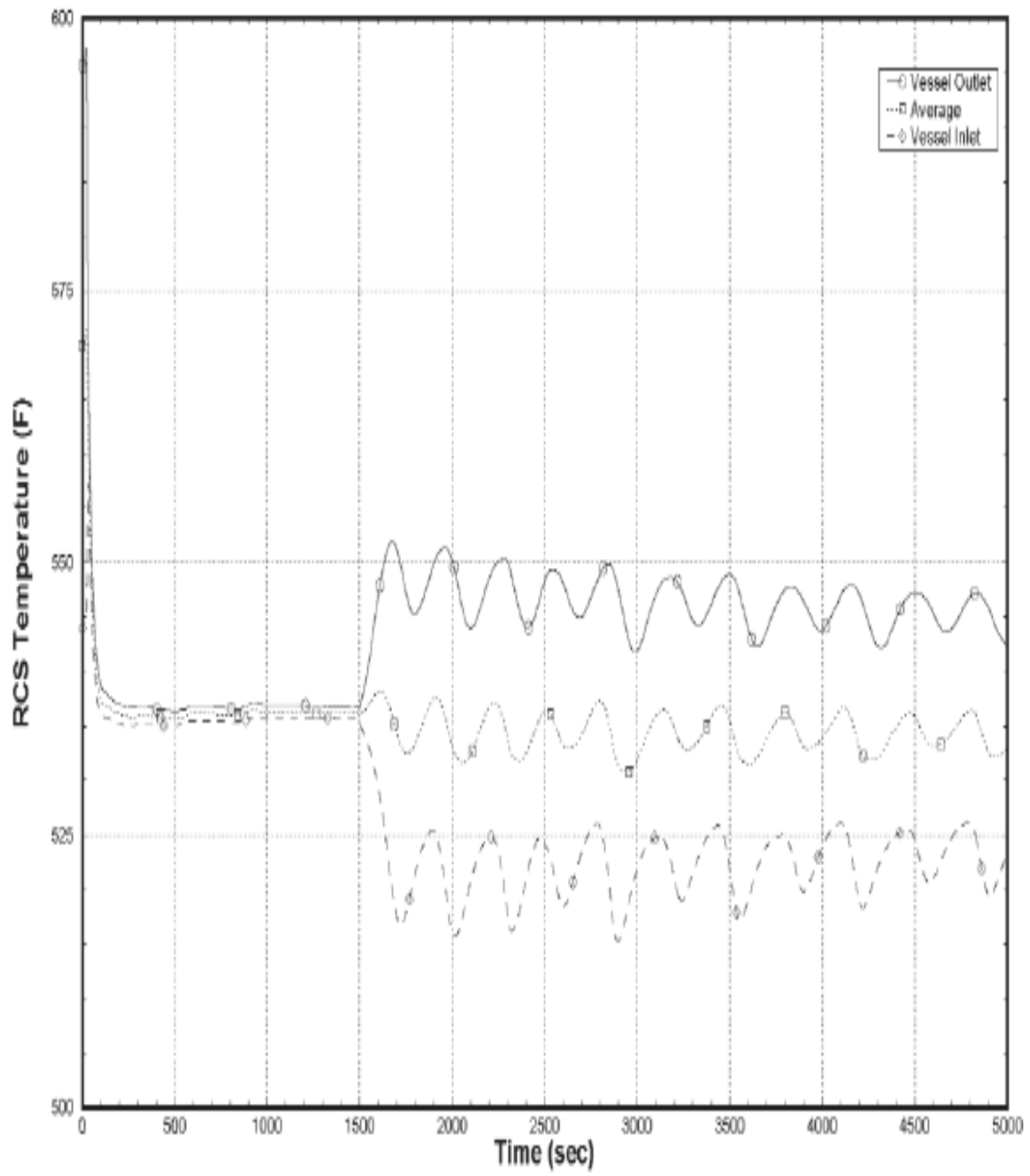
**SG Liquid Mass Inventory, LNFF Analysis with Off-Site Power Available
and Steam Dump System Disabled**



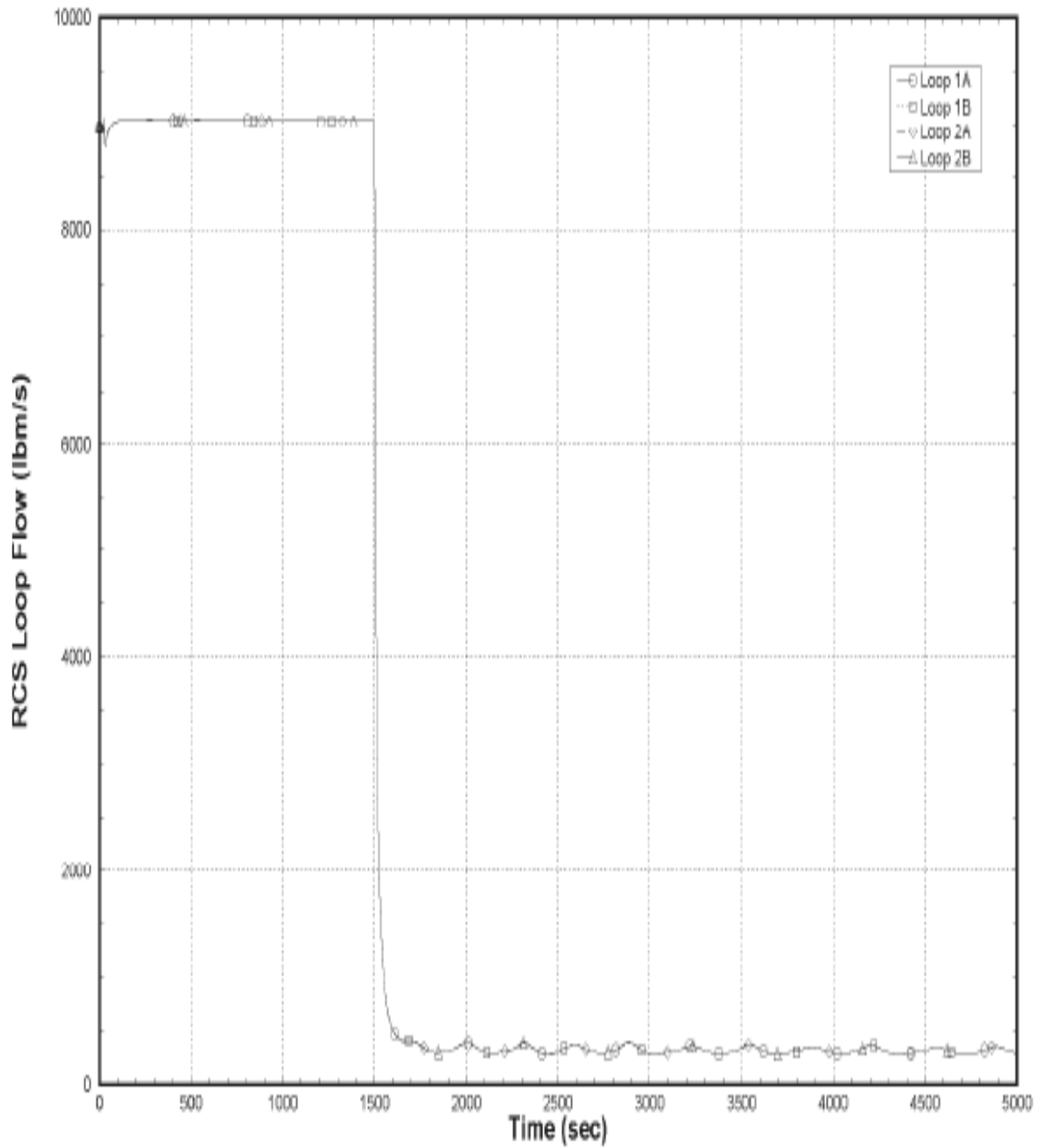
**Reactor Power, LNFF Analysis with Off-Site Power Available
and Steam Dump System Available**



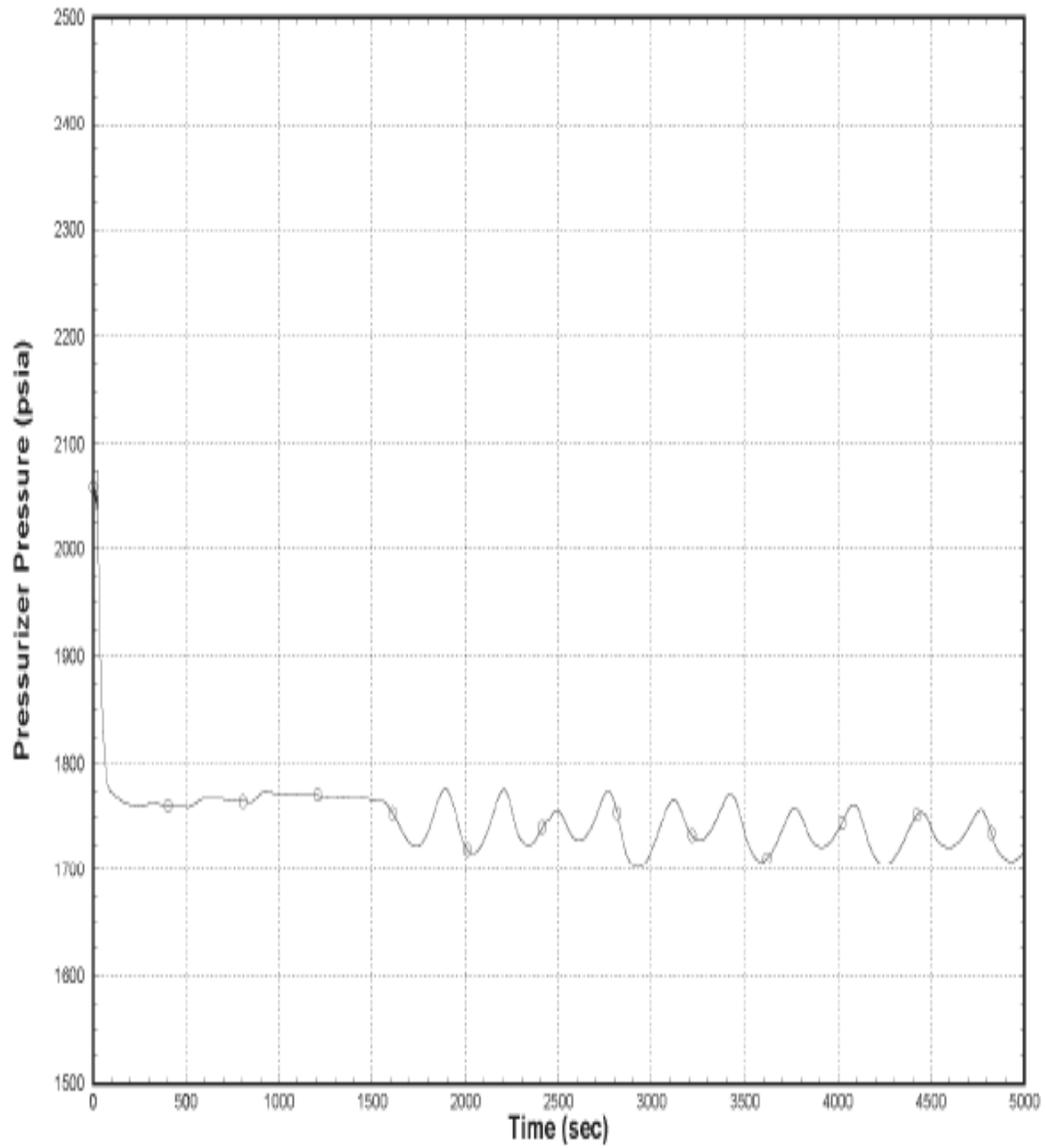
**Primary Coolant System Loop Temperatures, LNFF Analysis with Off-Site
Power Available and Steam Dump System Available**



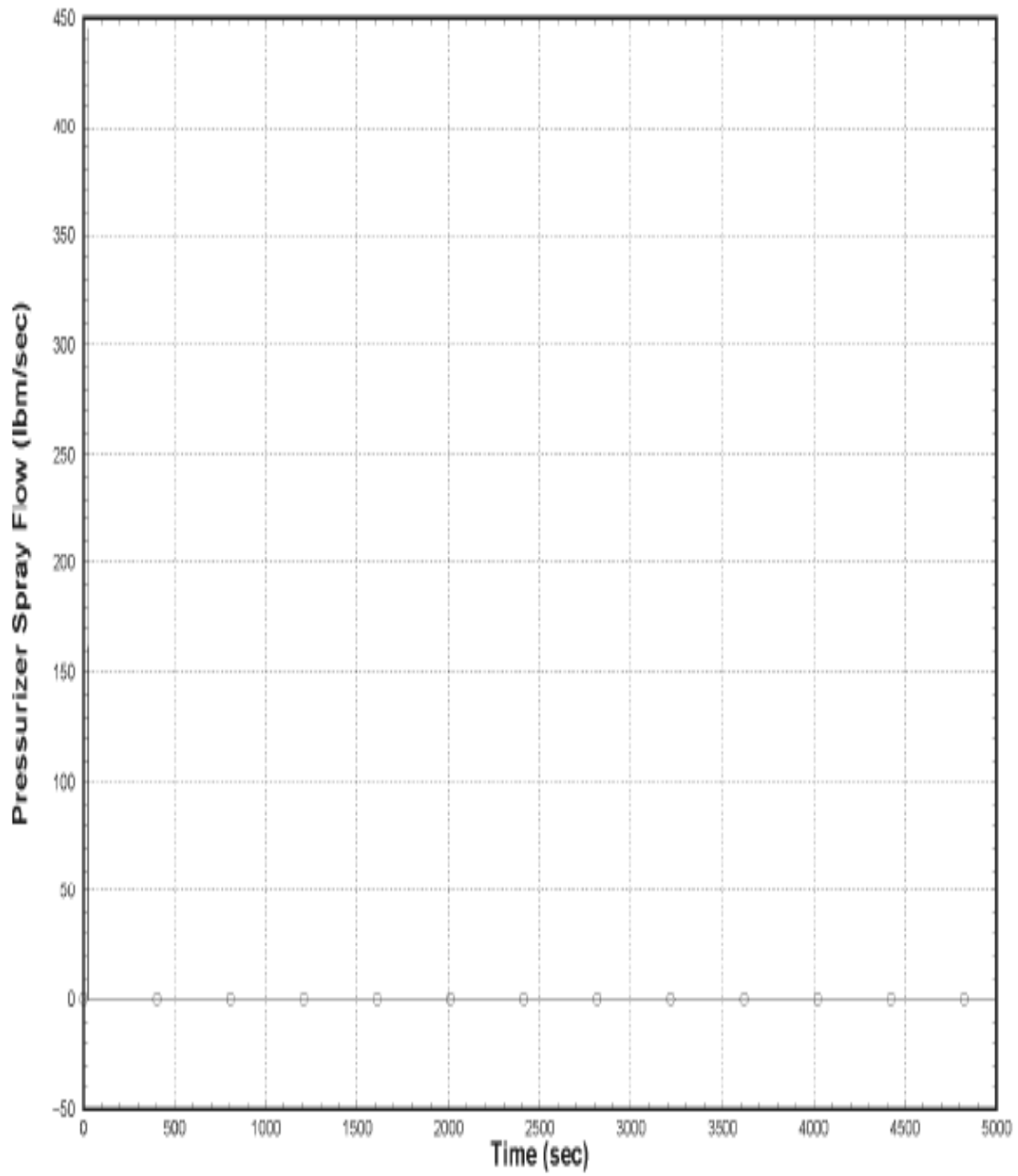
Primary Coolant System Loop Flow, LNFF Analysis with Off-Site Power Available and Steam Dump System Available



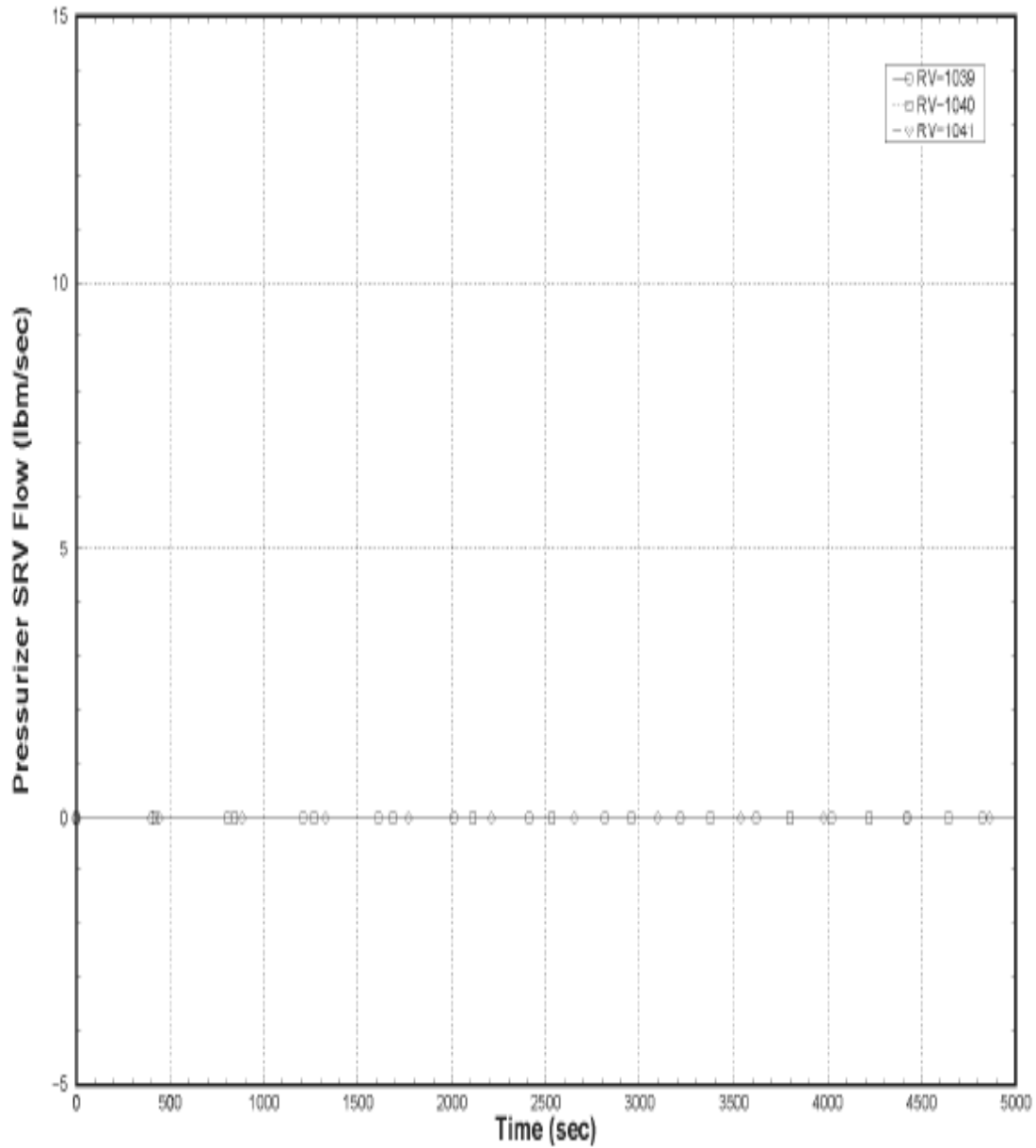
**Pressurizer Pressure, LNFF Analysis with Off-Site Power Available
and Steam Dump System Available**



**Pressurizer Spray Flow, LNFF Analysis with Off-Site Power Available
and Steam Dump System Available**

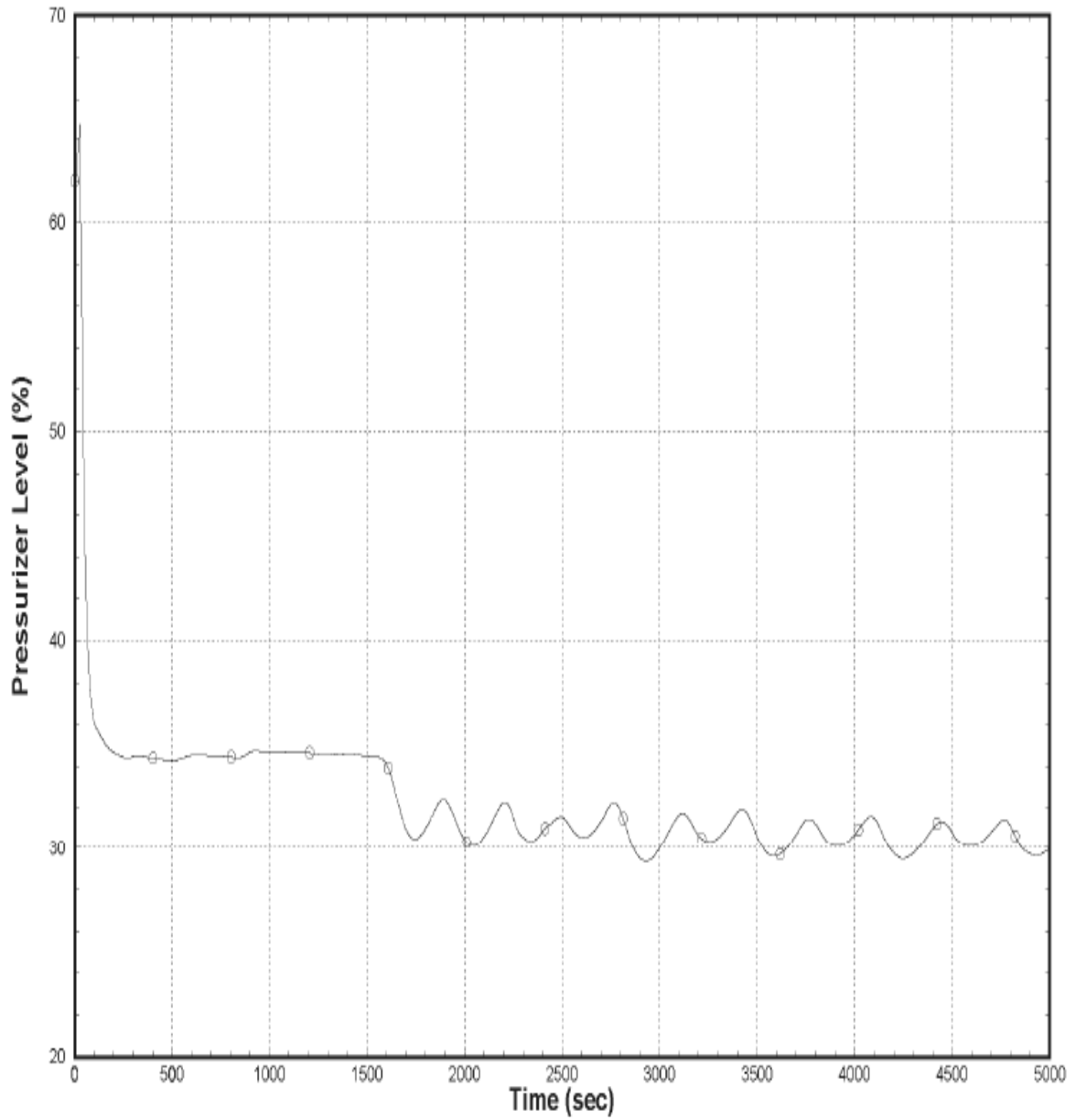


**Pressurizer SRV Flow, LNFF Analysis with Off-Site Power Available
and Steam Dump System Available**

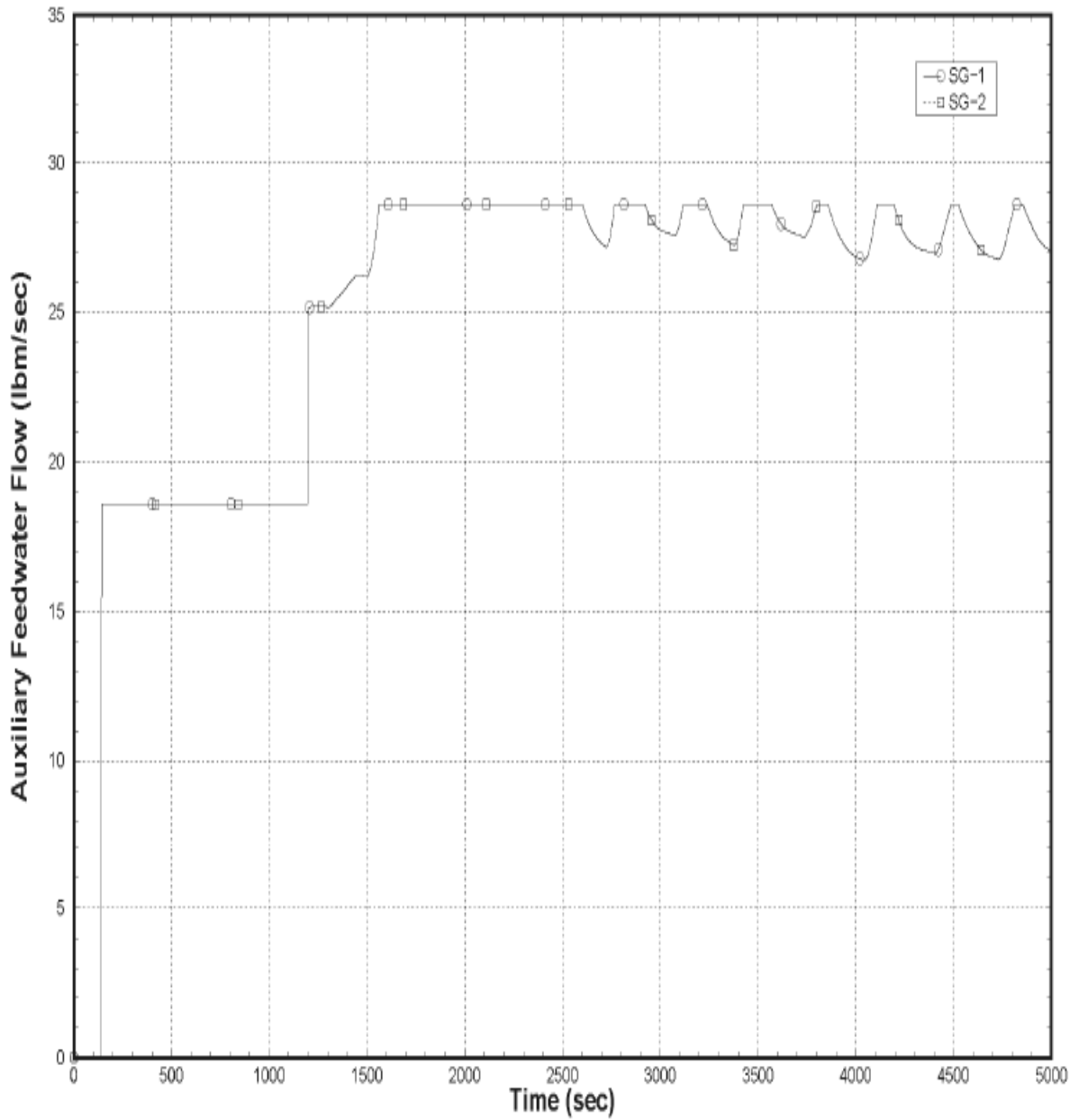


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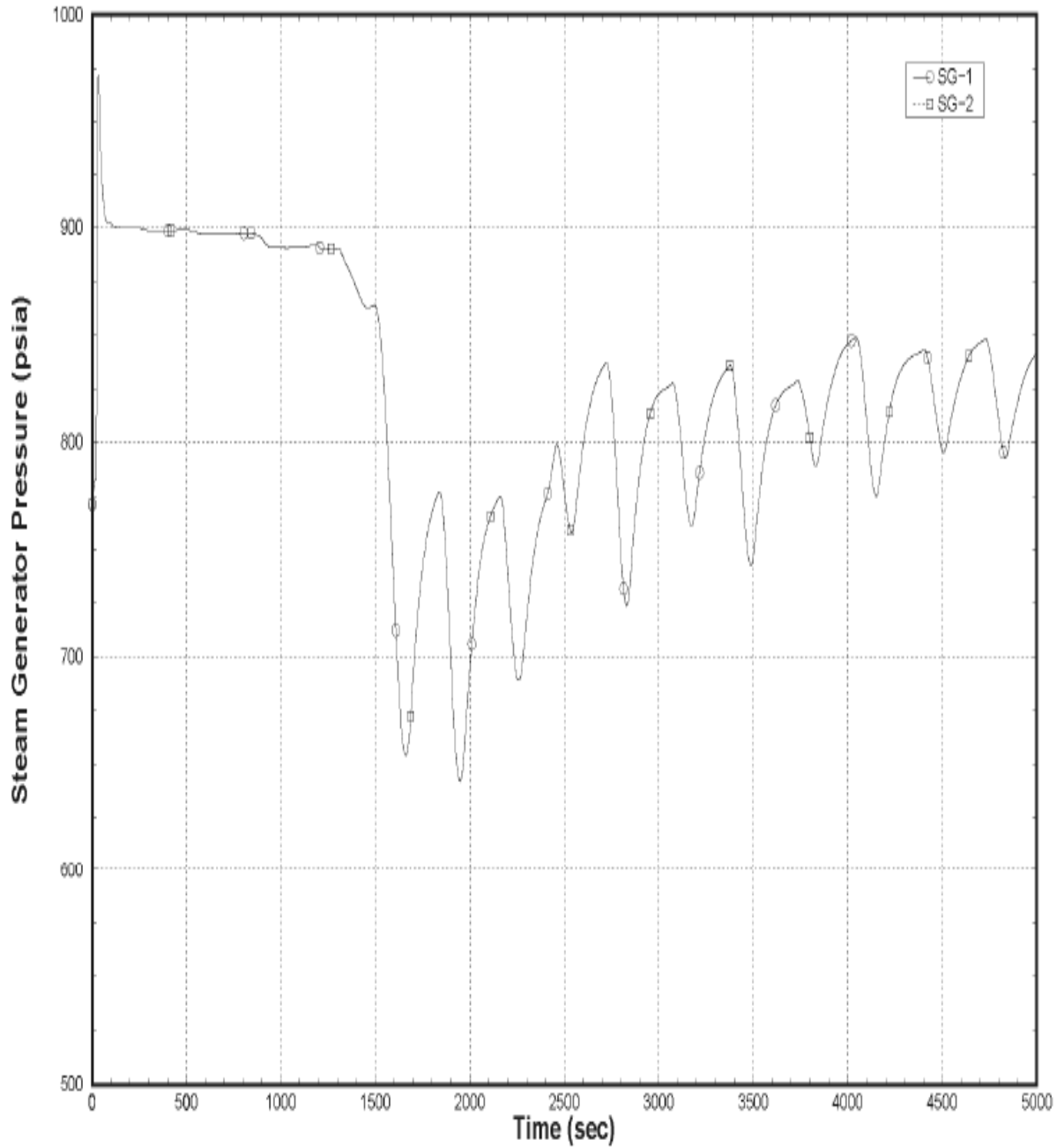
**Pressurizer Level, LNFF Analysis with Off-Site Power Available
and Steam Dump System Available**



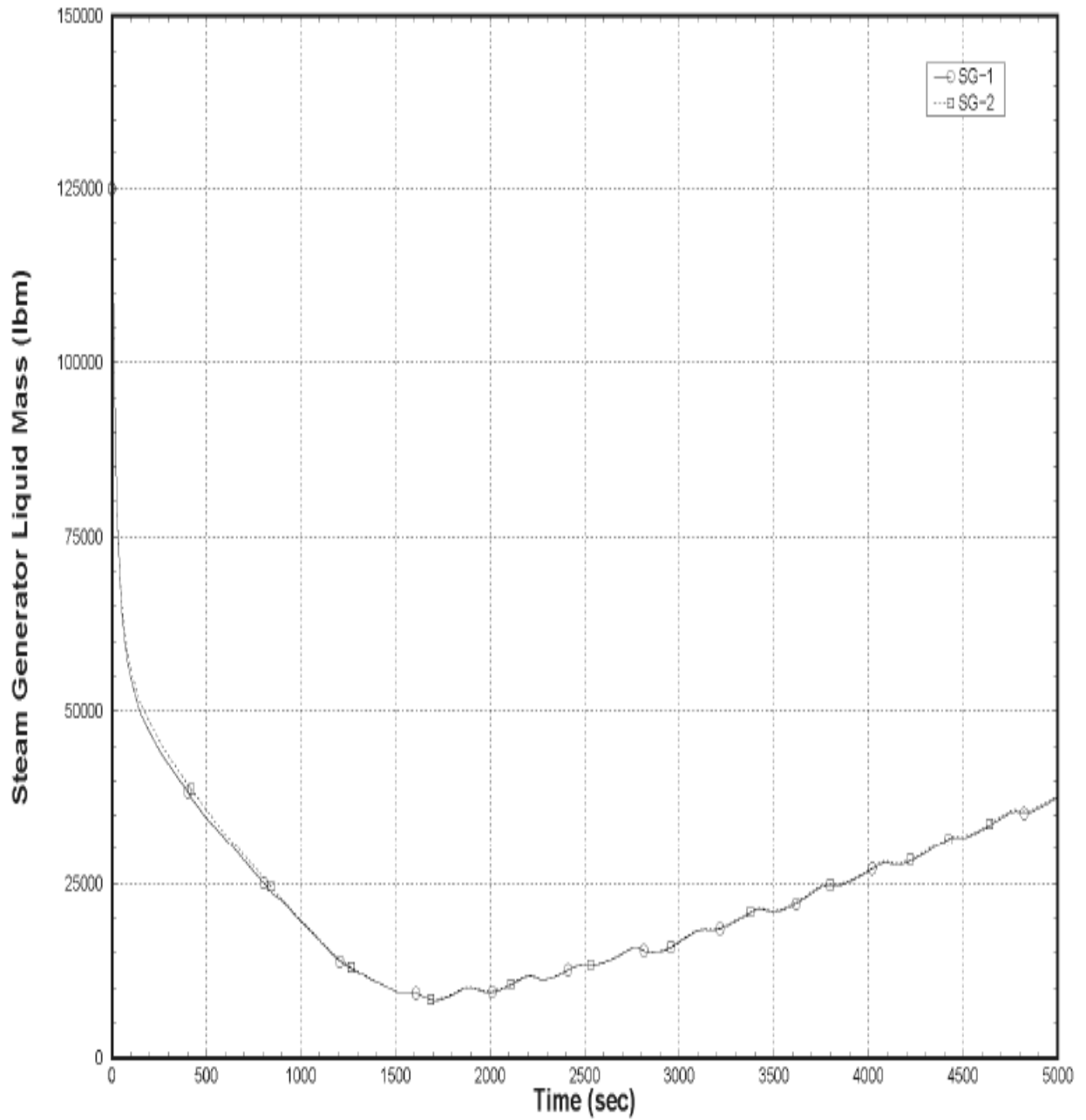
SG Auxiliary Feedwater Flow, LNFF Analysis with Off-Site Power Available and Steam Dump System Available



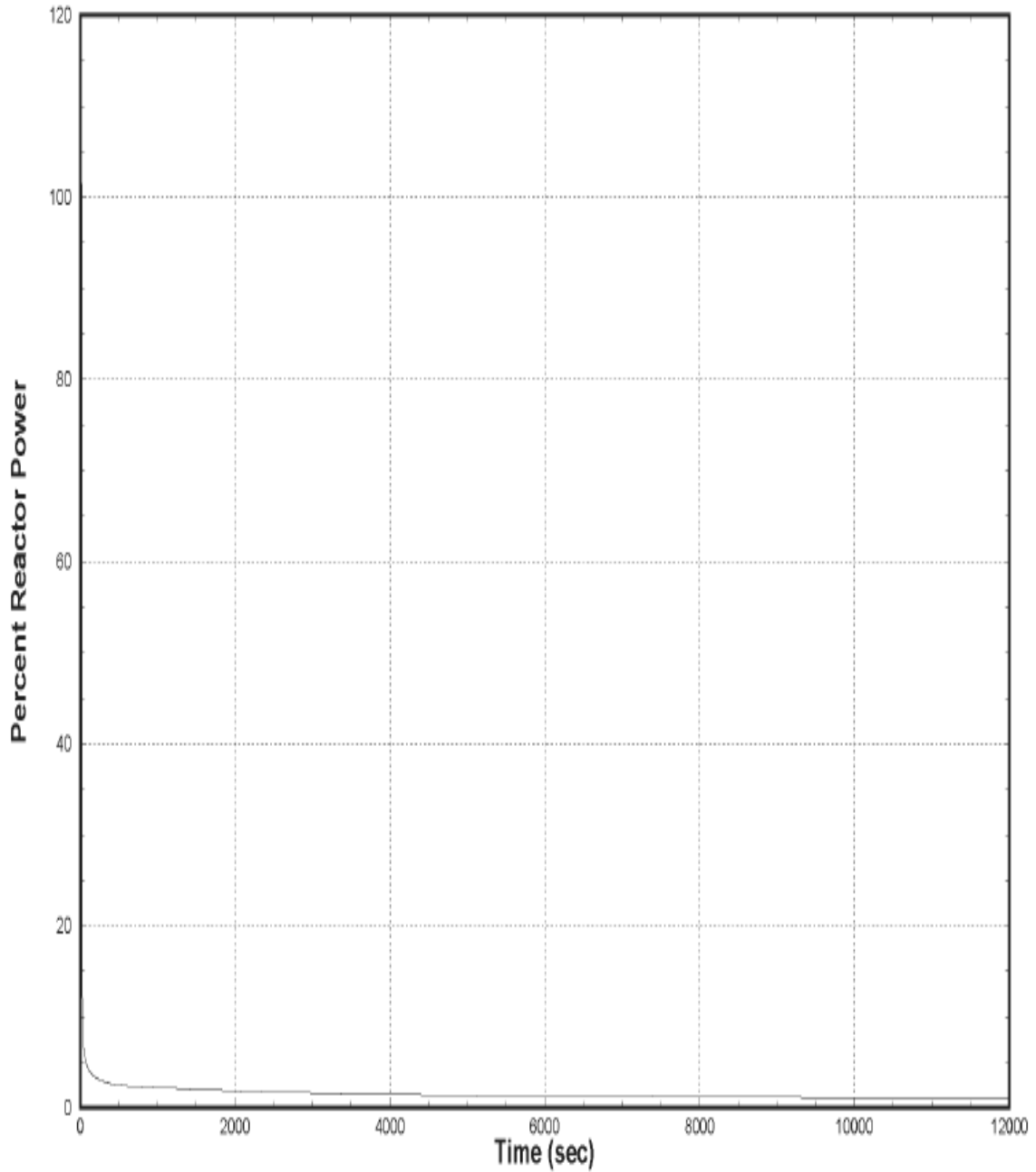
**SG Dome Pressure, LNFF Analysis with Off-Site Power Available
and Steam Dump System Available**



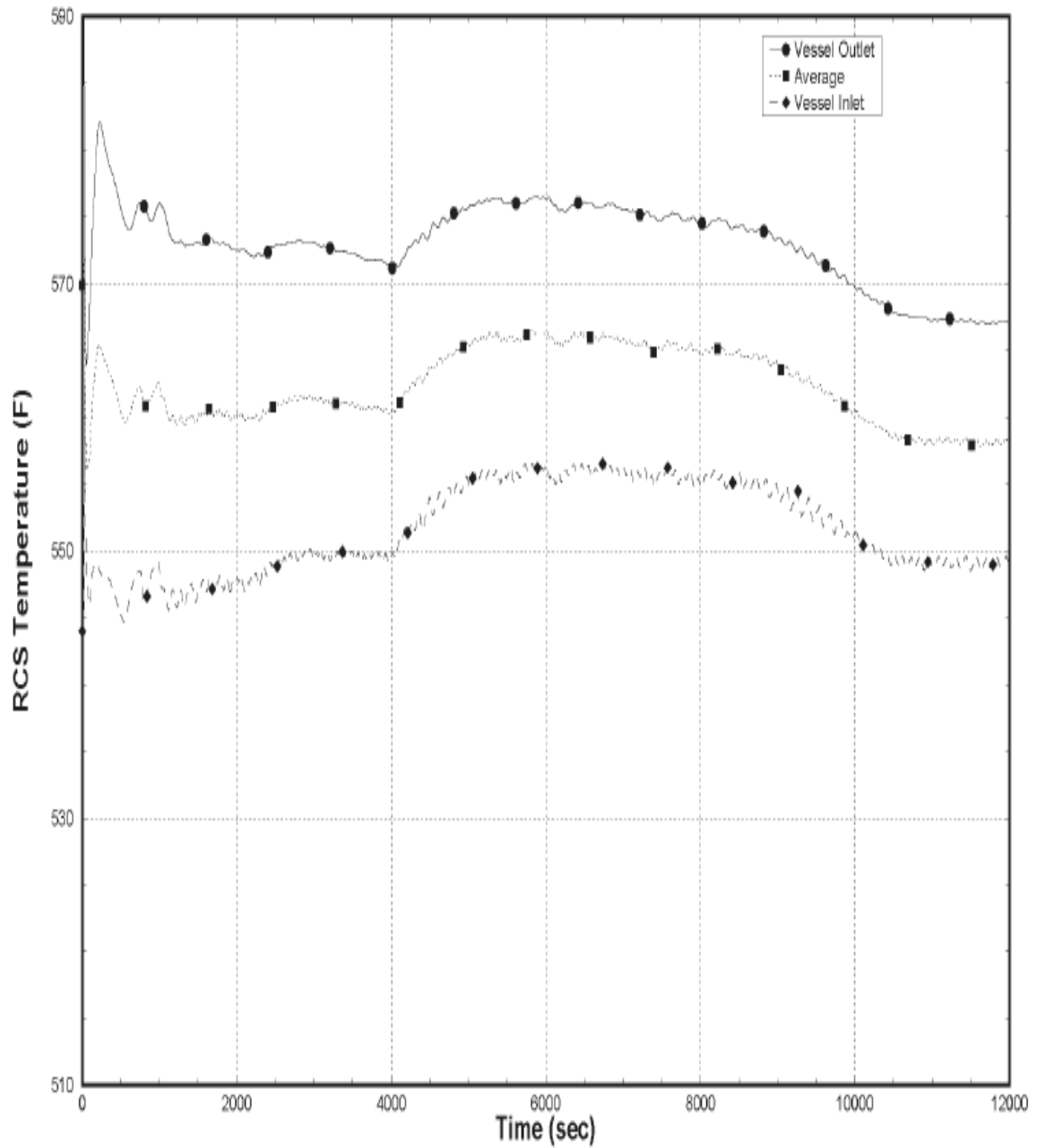
**SG Liquid Mass Inventory, LNFF Analysis with Off-Site Power Available
and Steam Dump System Available**



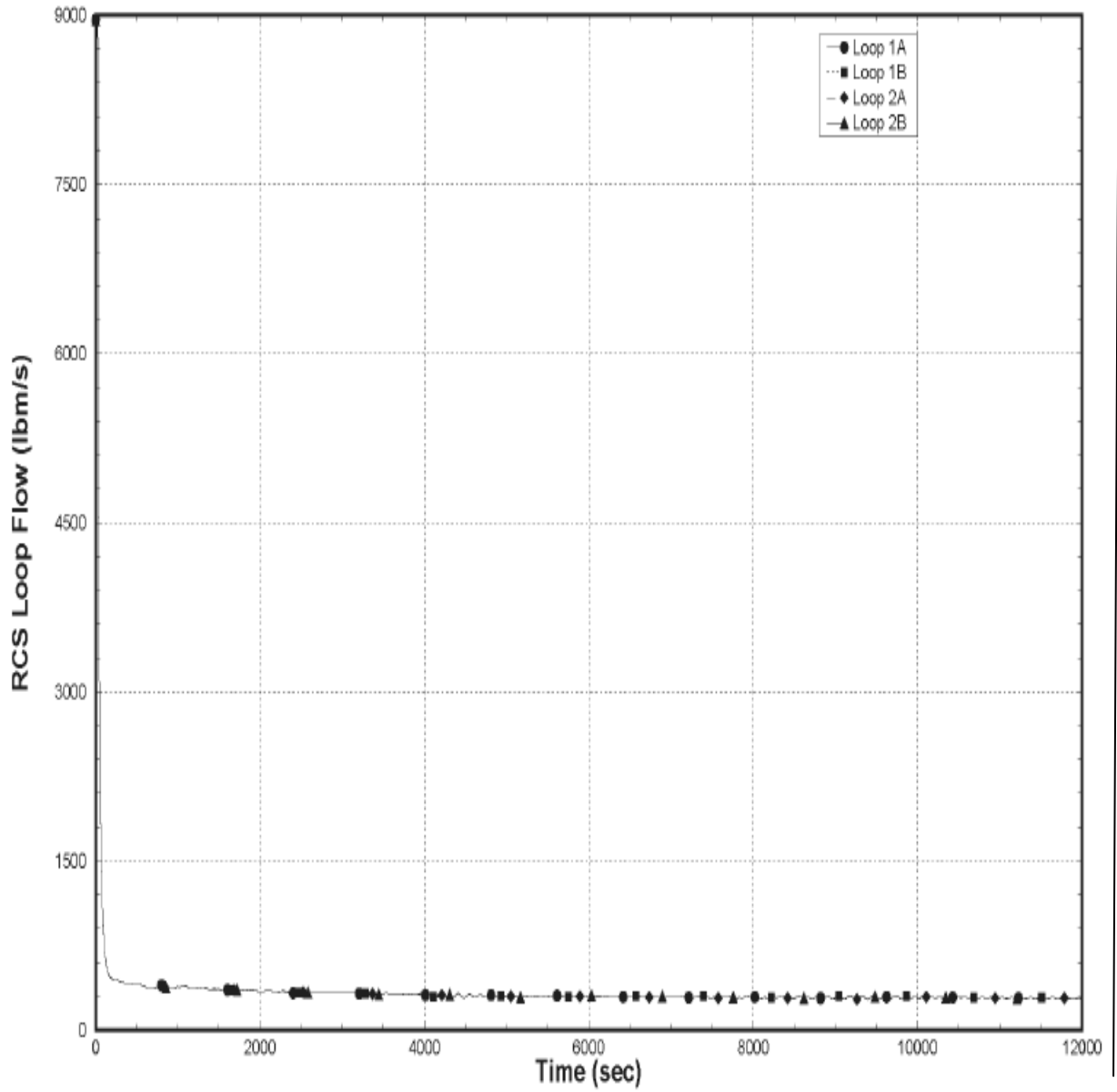
**Reactor Power, LNFF Analysis without Off-Site Power Available
and Steam Dump Systems Disabled**



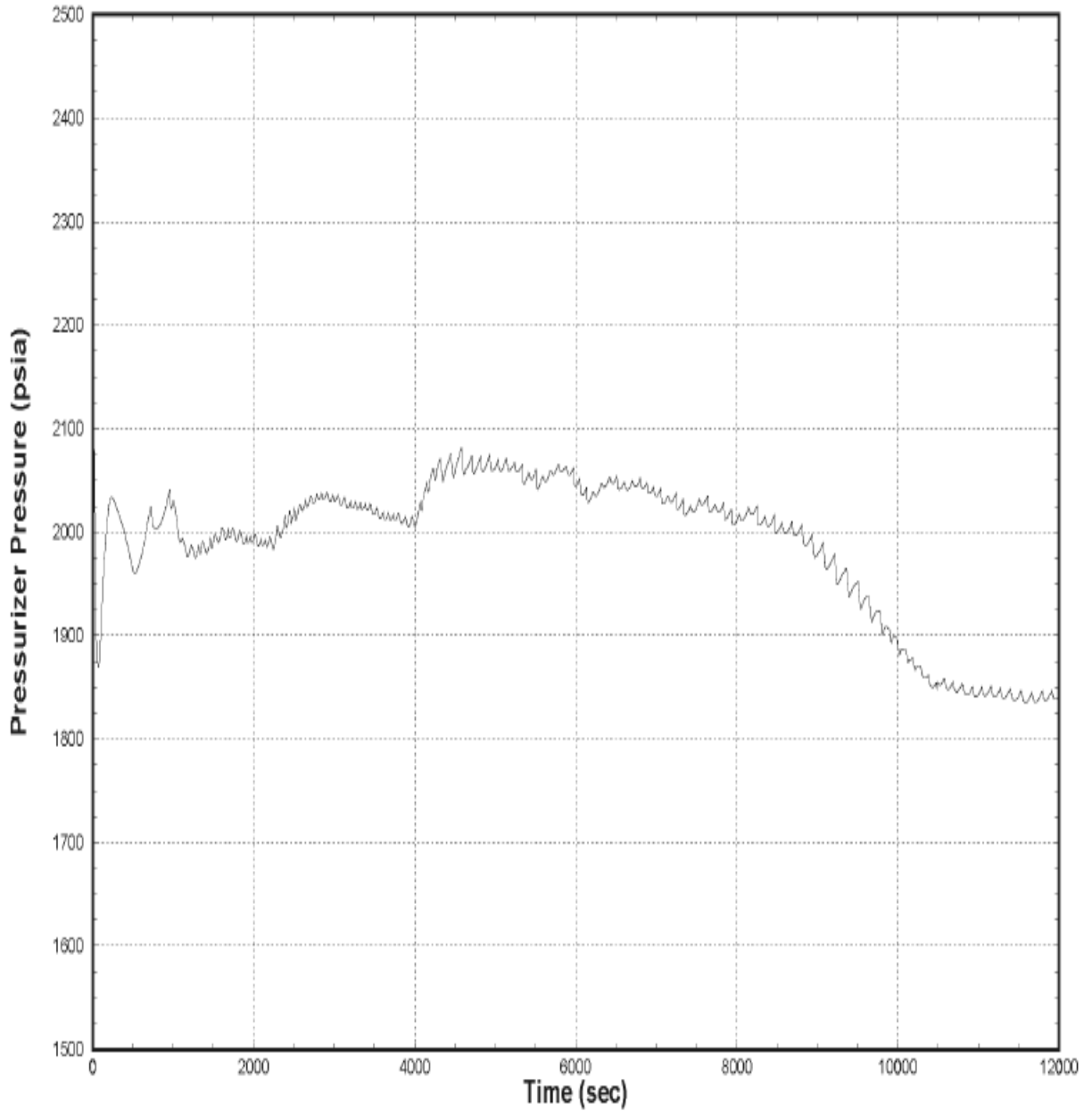
Primary Coolant System Loop Temperatures, LNFF Analysis without Off-Site Power Available and Steam Dump Systems Disabled



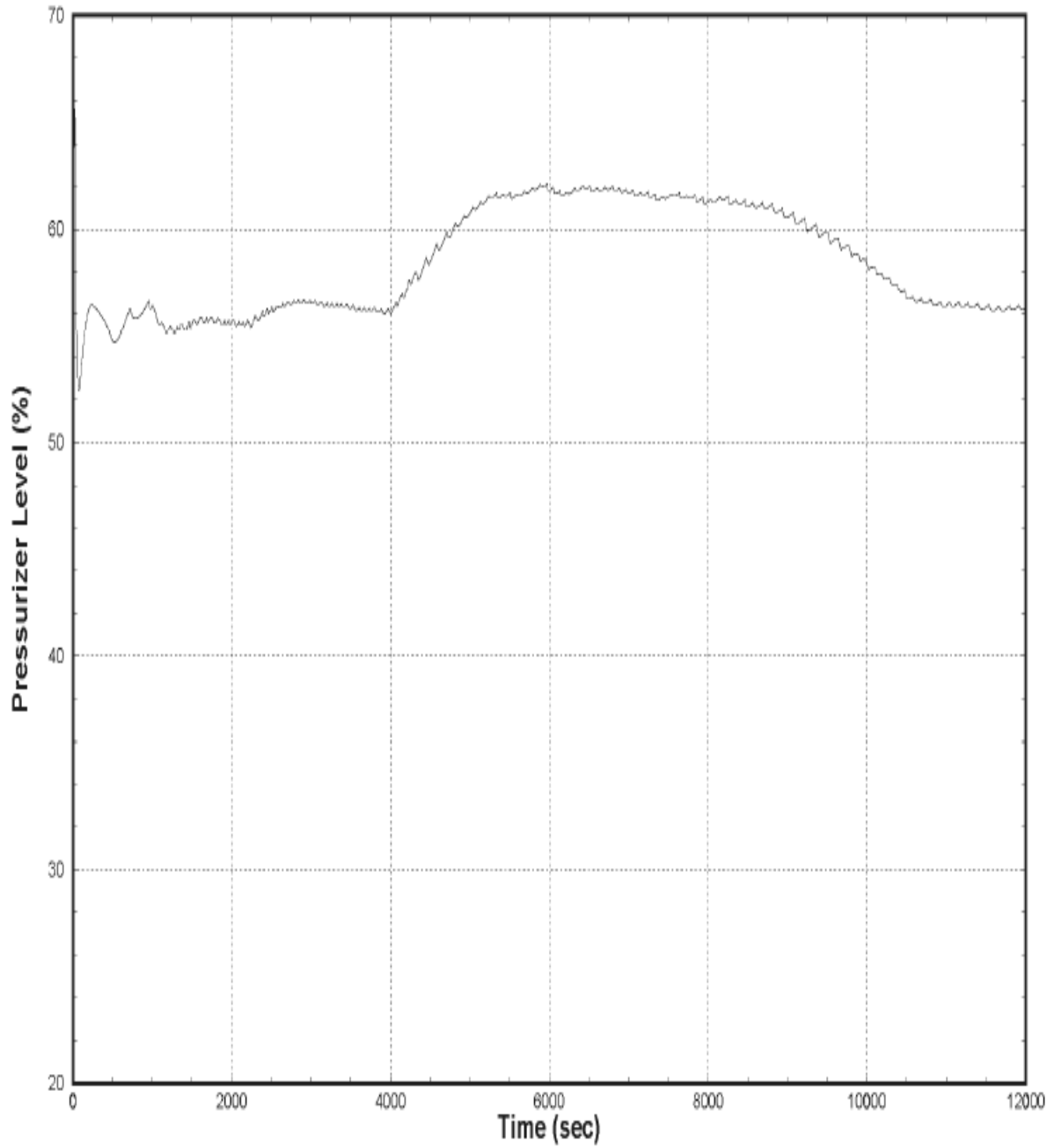
Primary Coolant System Loop Flow, LNFF Analysis without Off-Site Power Available and Steam Dump Systems Disabled



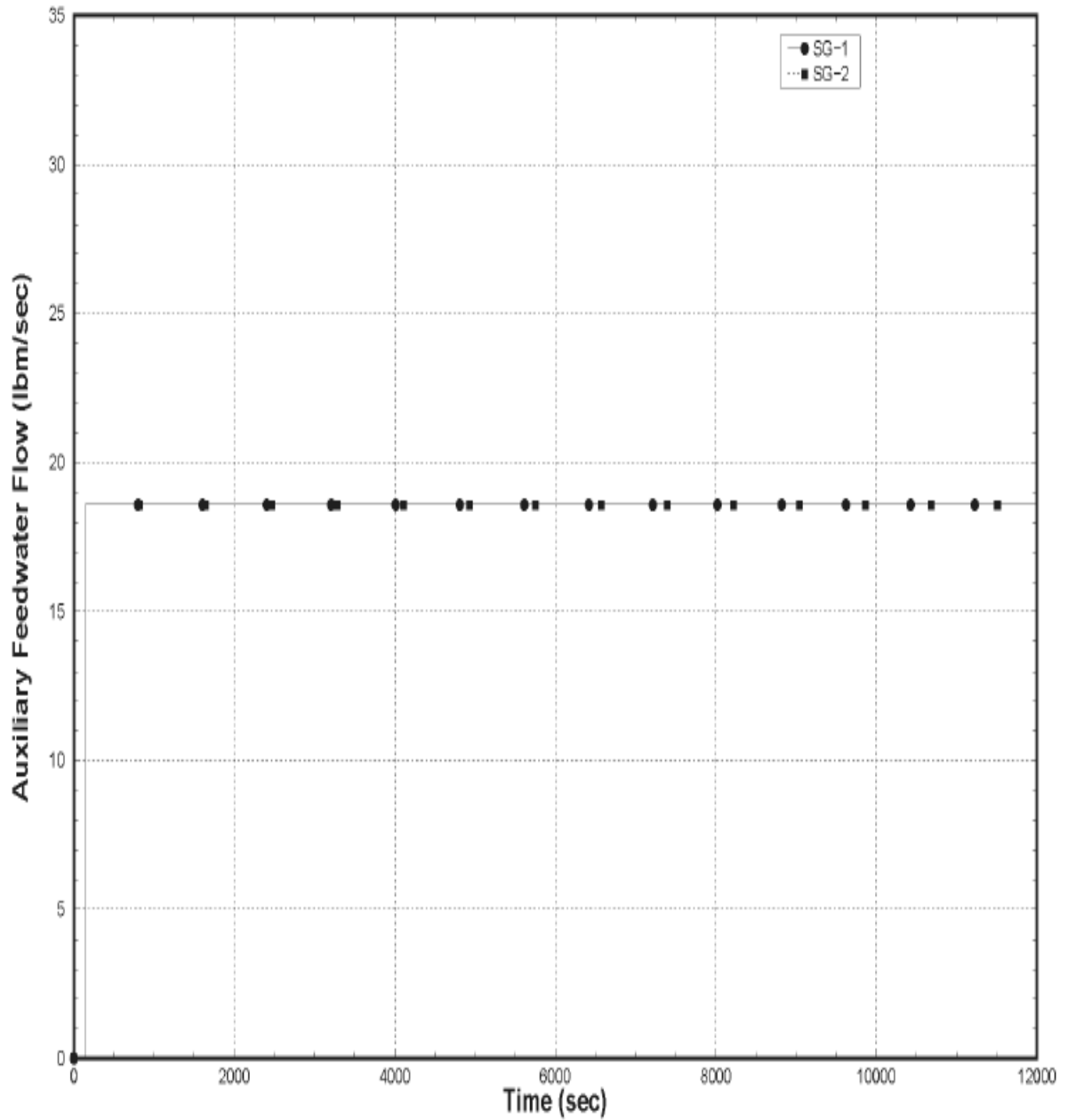
**Pressurizer Pressure, LNFF Analysis without Off-Site Power Available
and Steam Dump Systems Disabled**



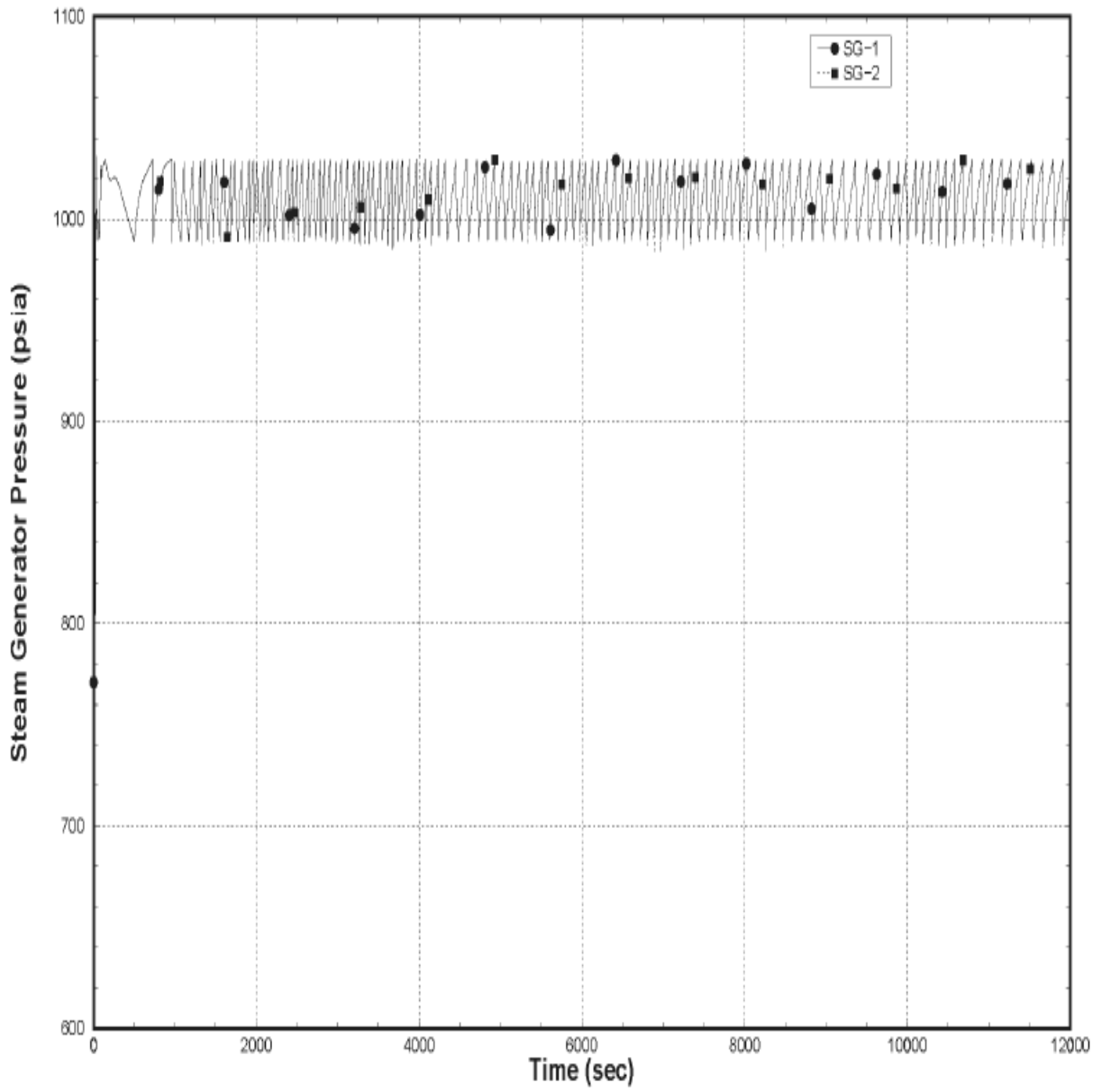
**Pressurizer Level, LNFF Analysis without Off-Site Power Available
and Steam Dump Systems Disabled**



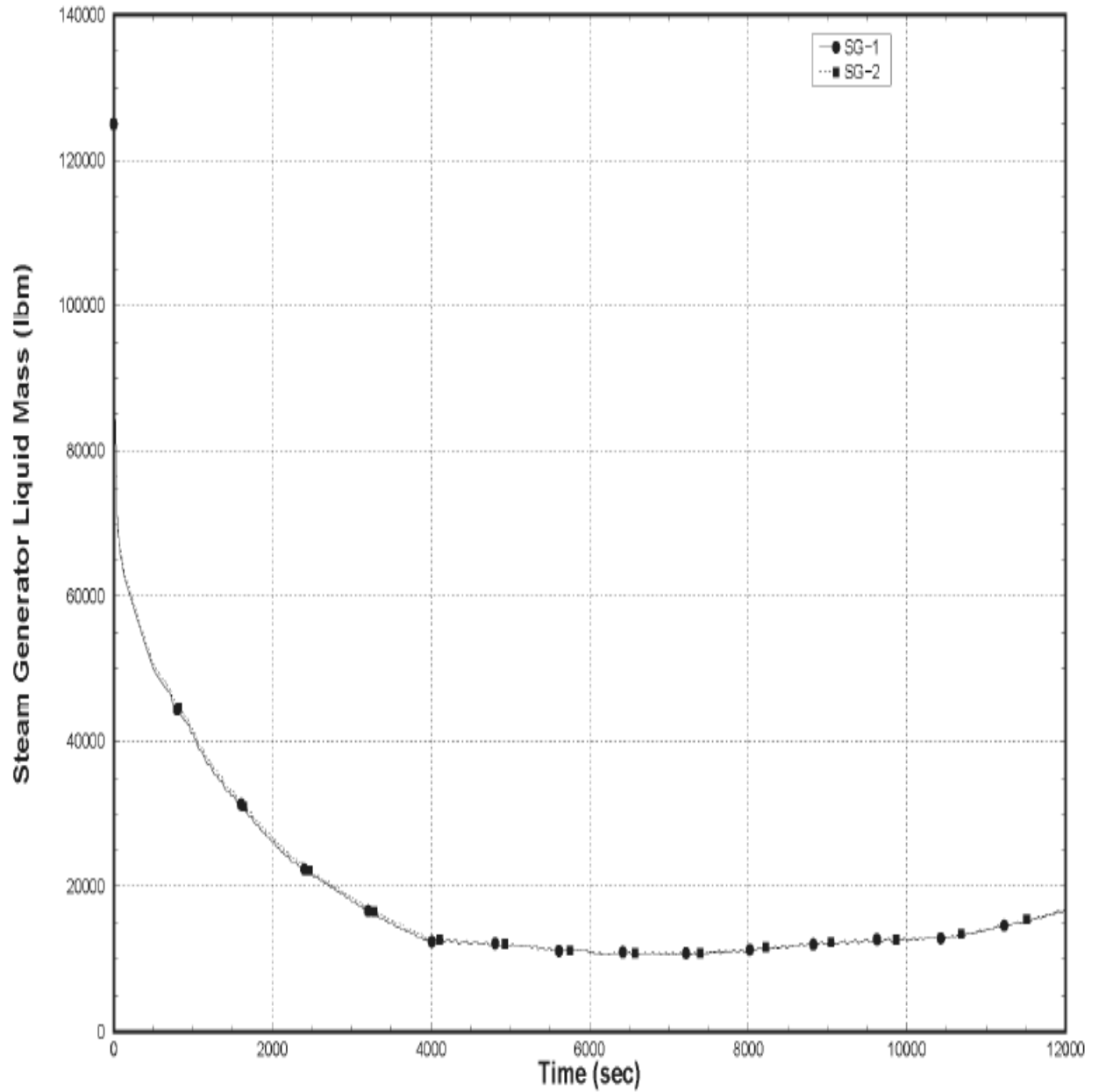
SG Auxiliary Feedwater Flow, LNFF Analysis without Off-Site Power Available and Steam Dump Systems Disabled



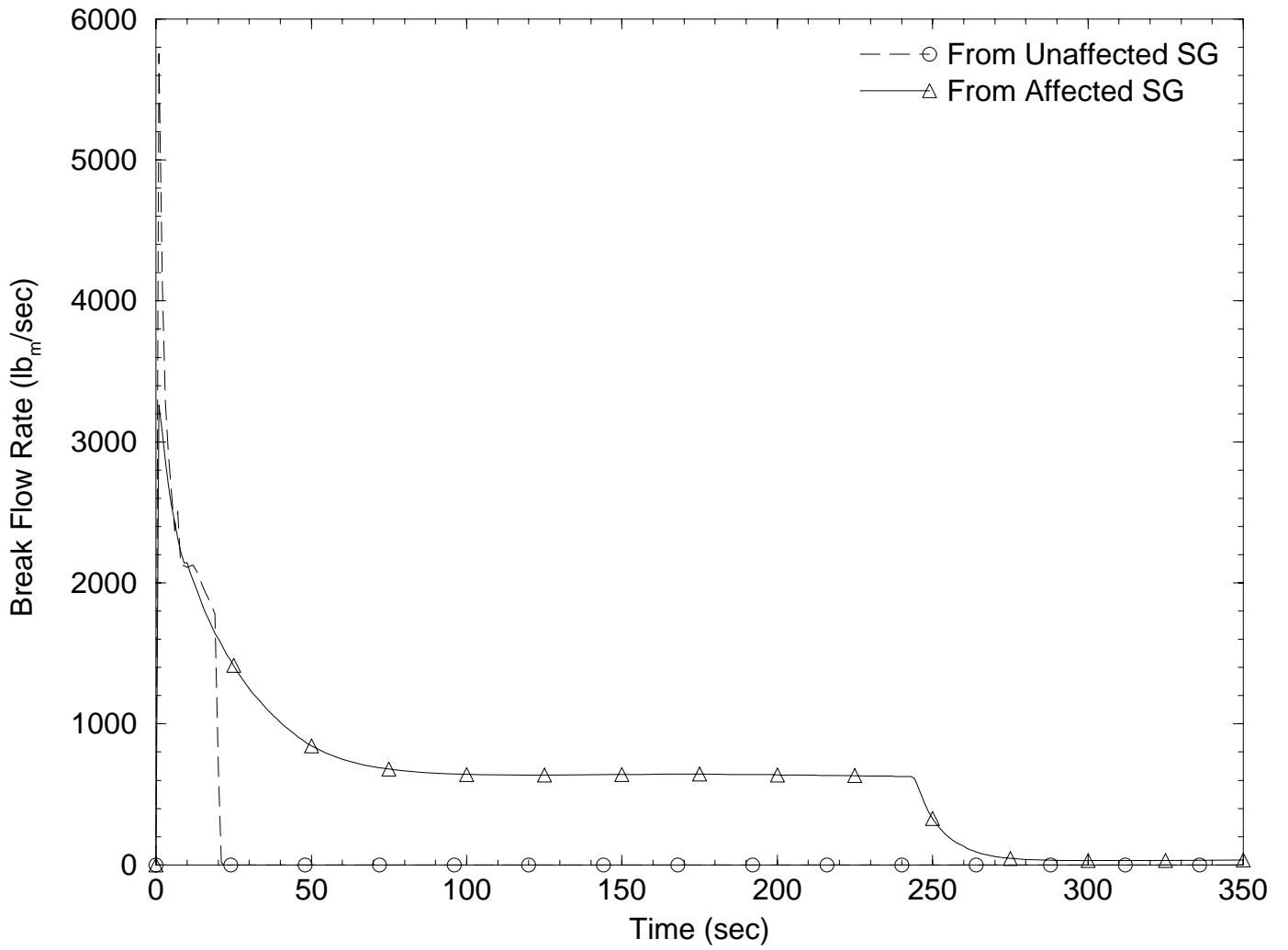
**SG Dome Pressure, LNFF Analysis without Off-Site Power Available
and Steam Dump Systems Disabled**



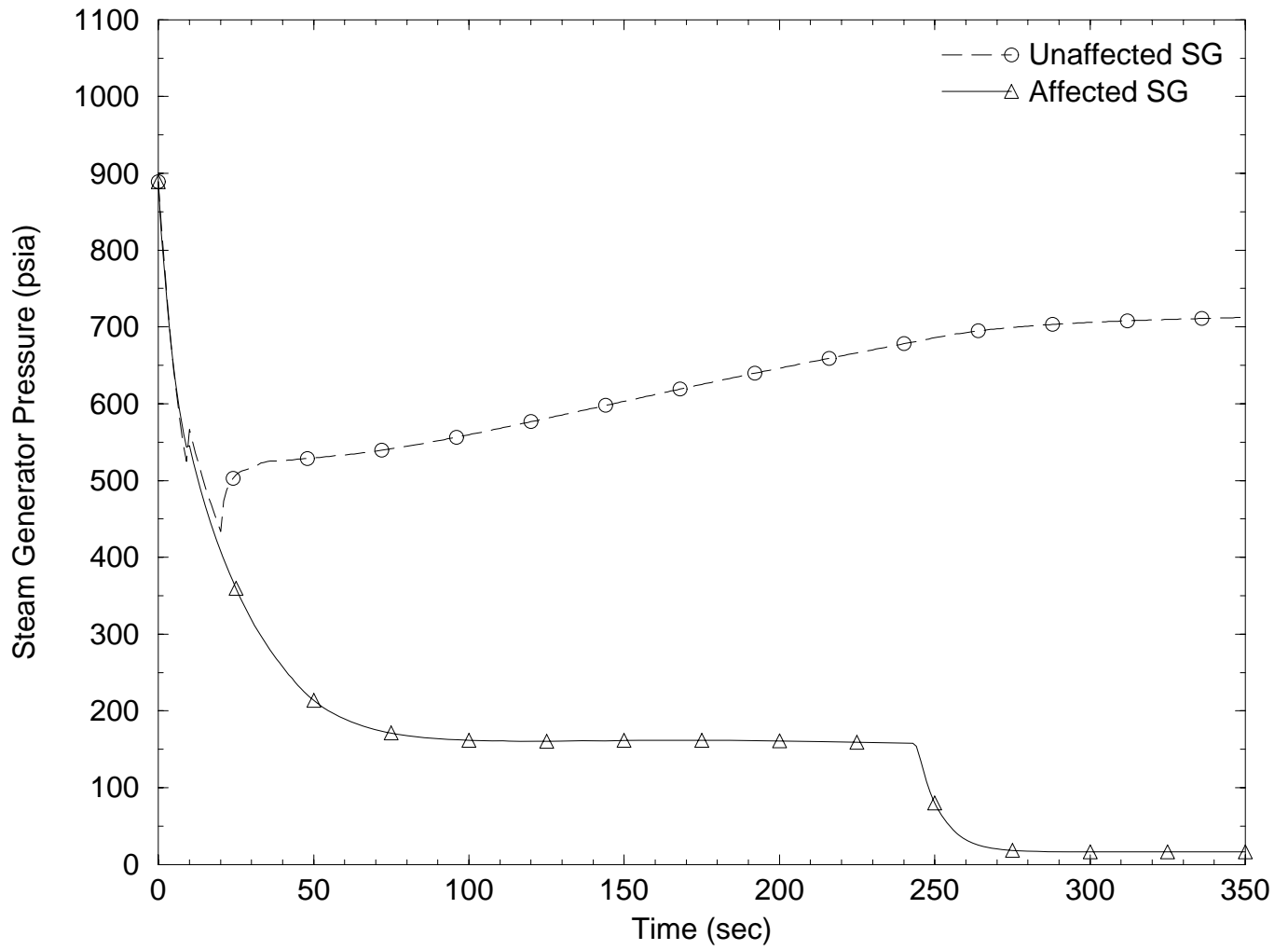
SG Liquid Mass Inventory, LNFF Analysis without Off-Site Power Available and Steam Dump Systems Disabled



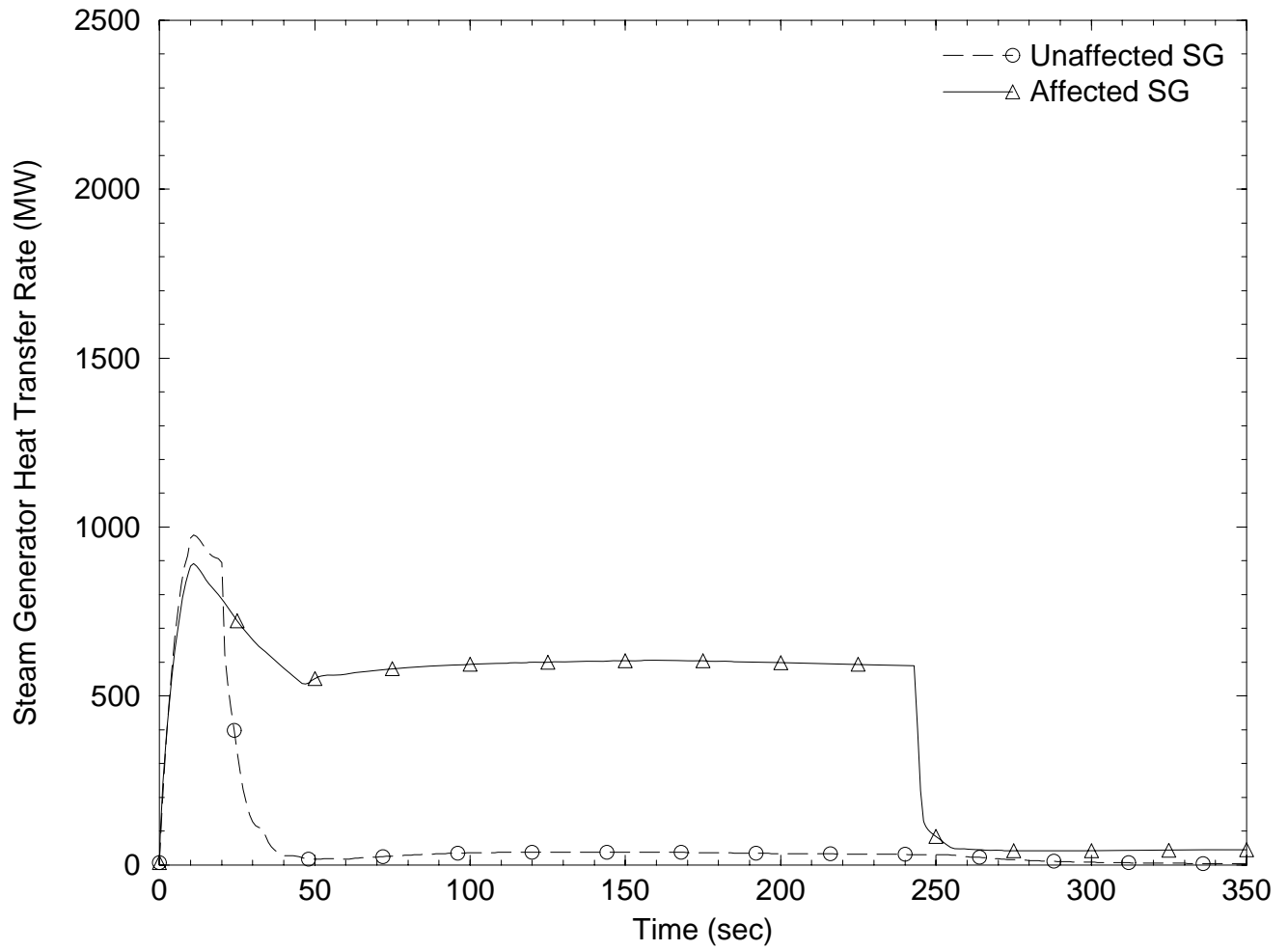
Break Flow Rates During LHR-Limiting Transient



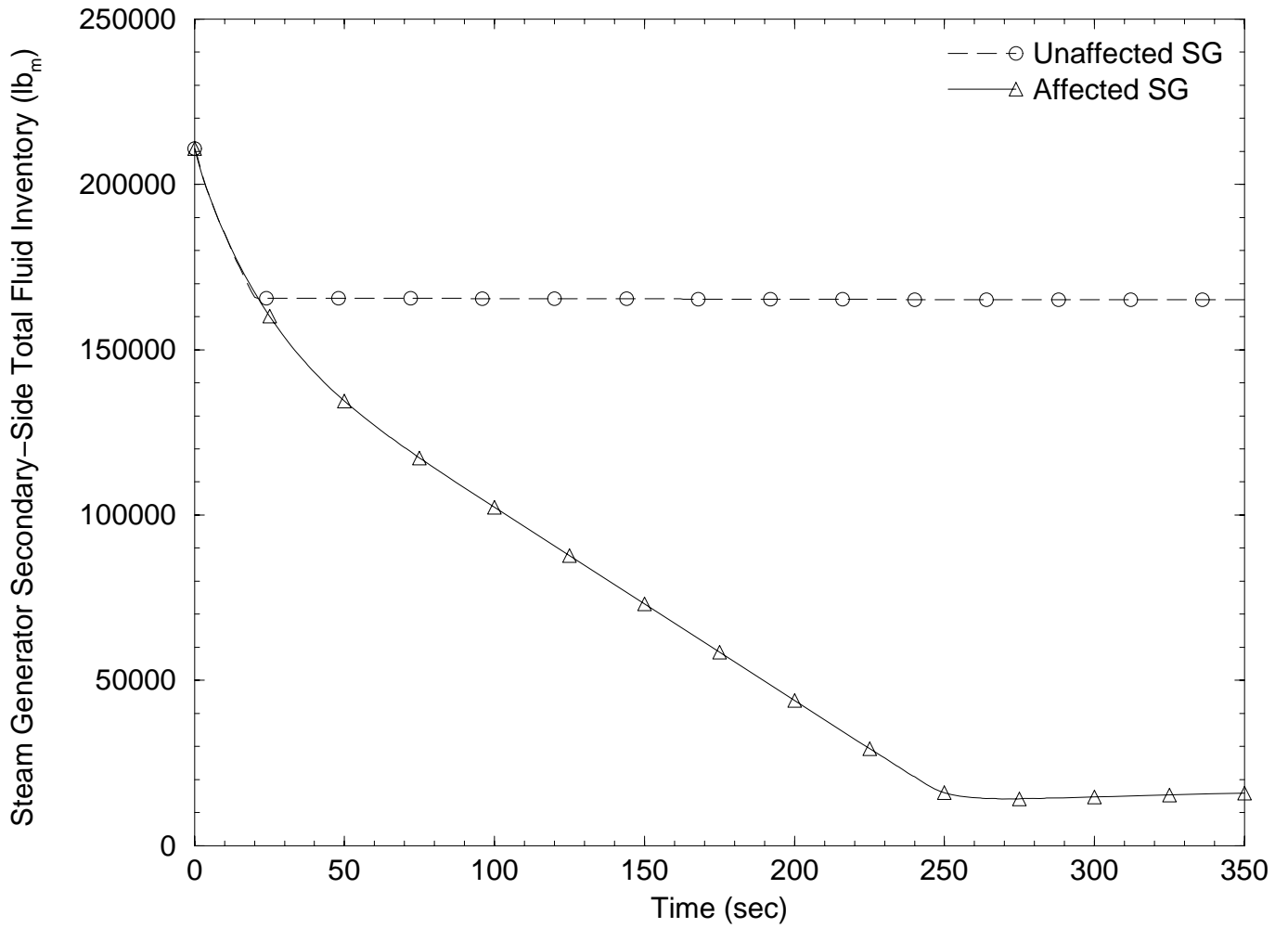
Steam Generator Pressures During LHR-Limiting Transient



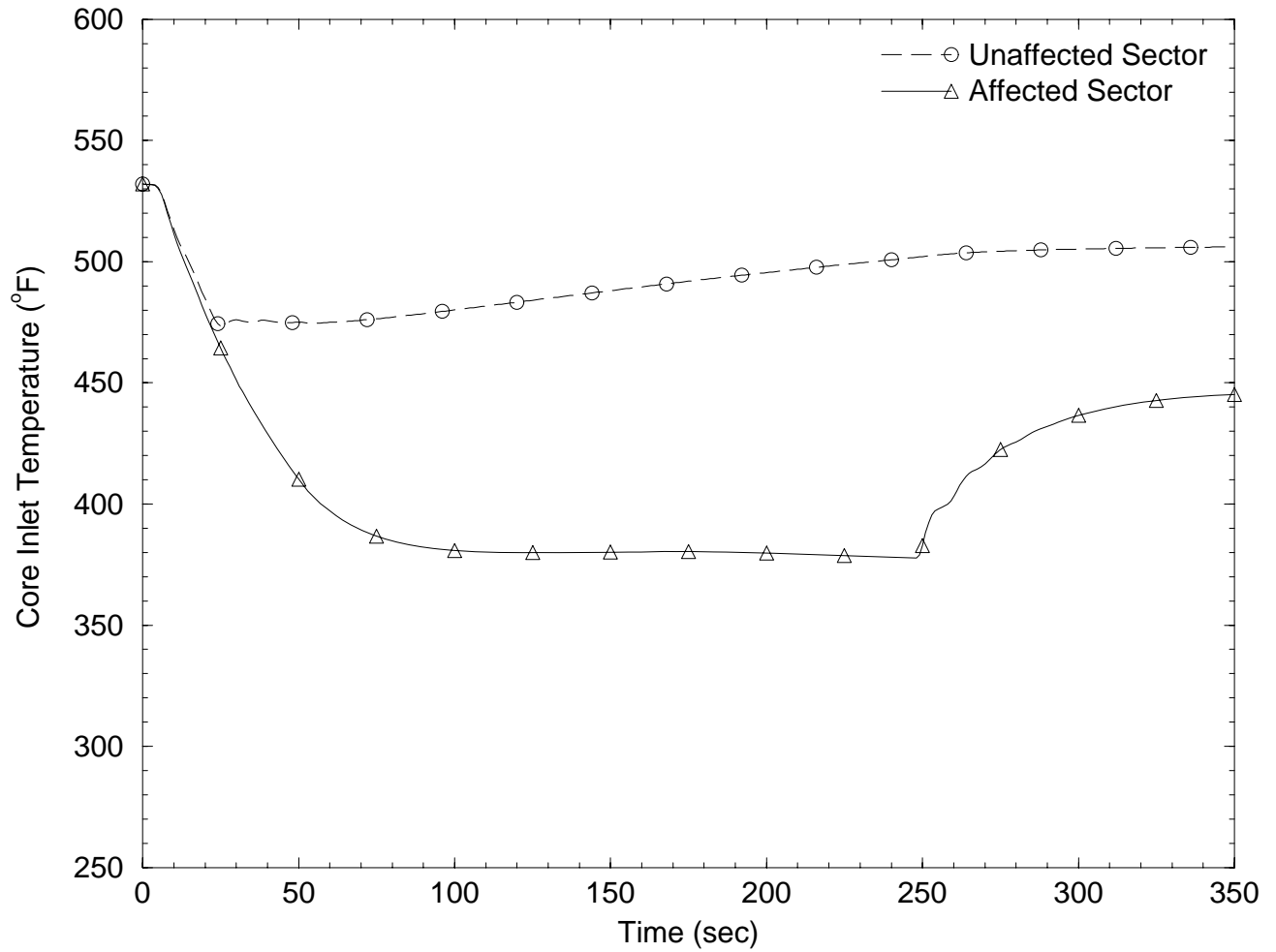
Steam Generator Heat Transfer Rates During LHR-Limiting Transient



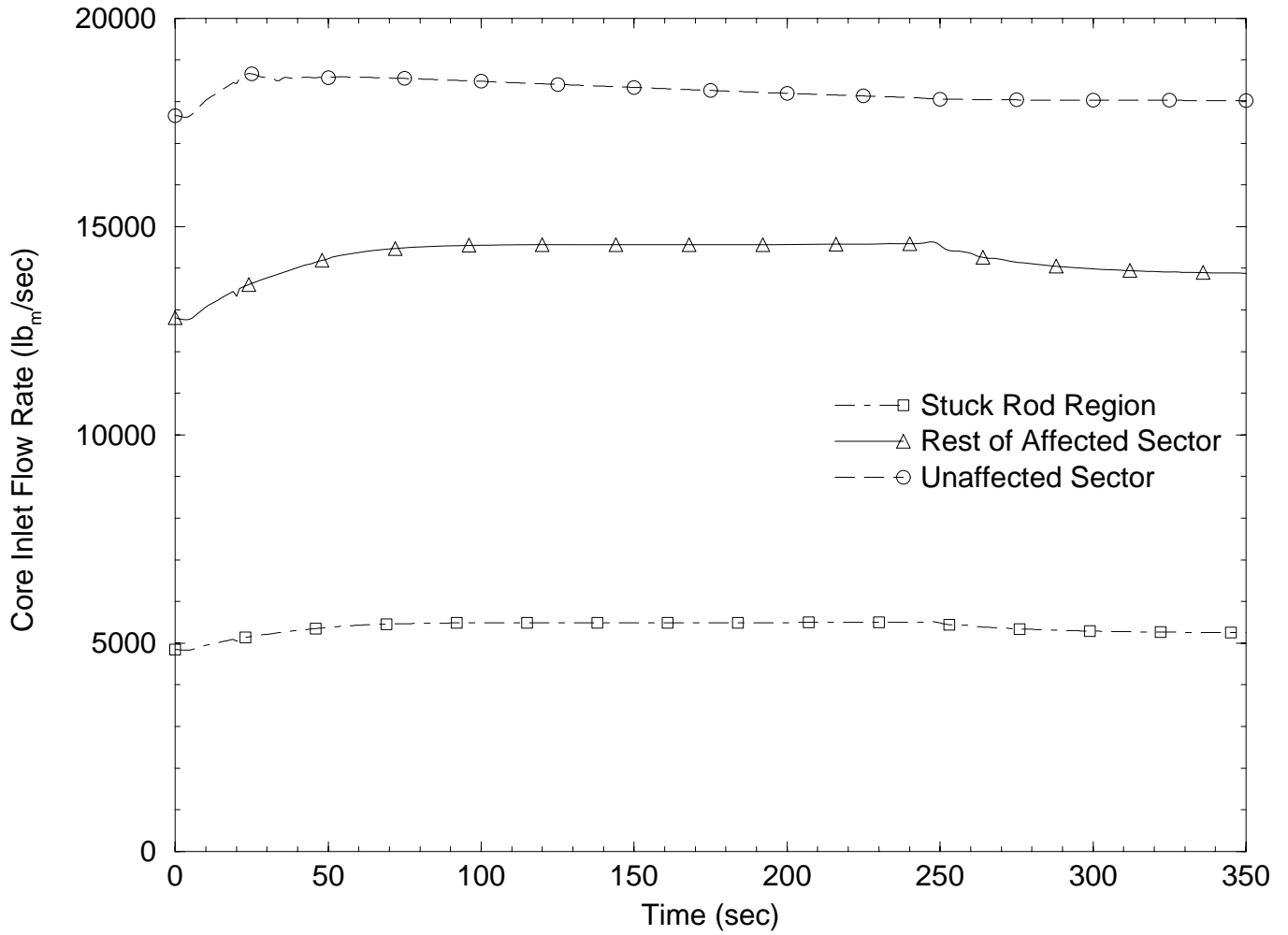
Steam Generator Secondary-Side Total Fluid Inventories
During LHR-Limiting Transient



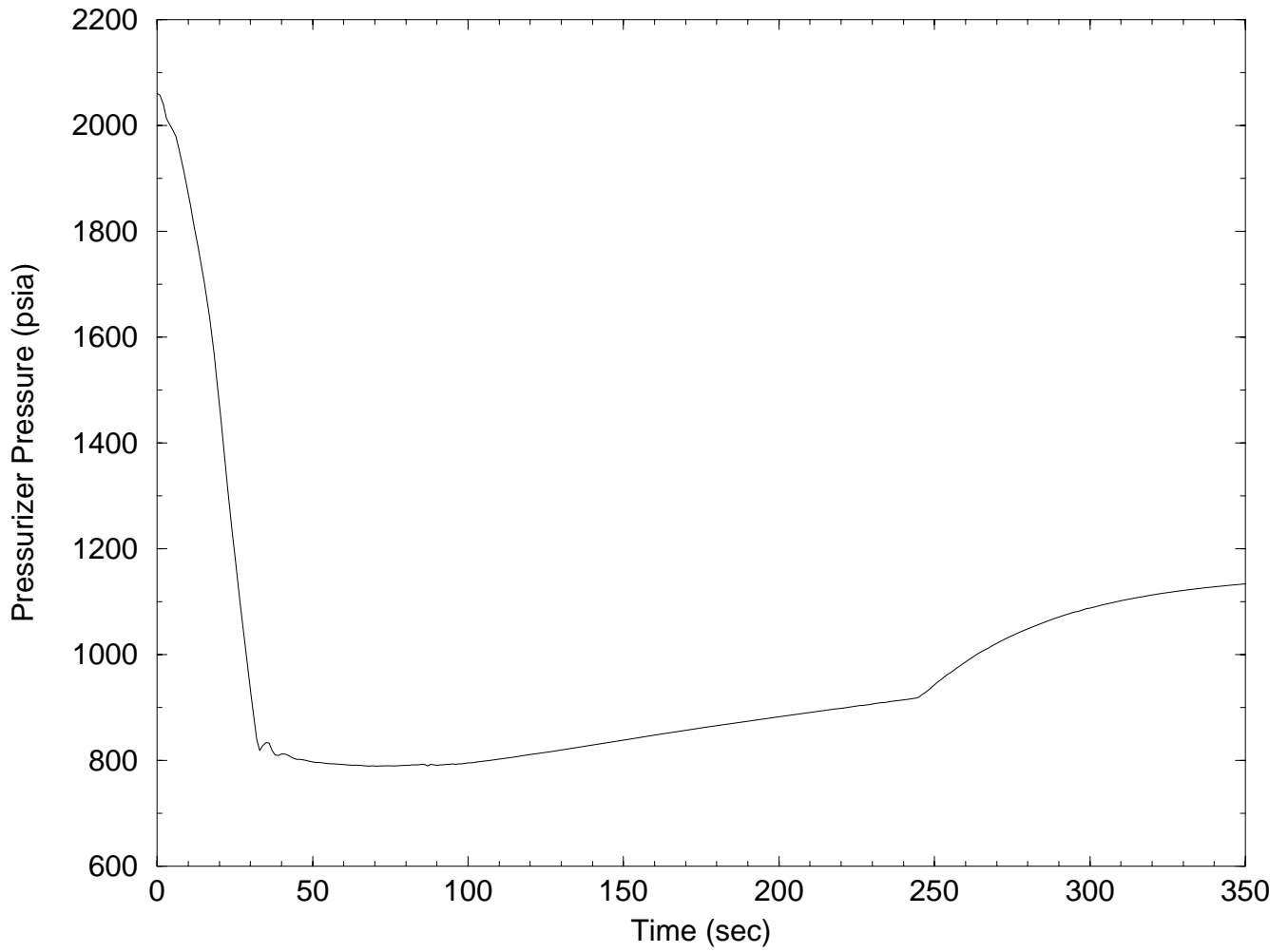
Core Inlet Temperatures During LHR-Limiting Transient



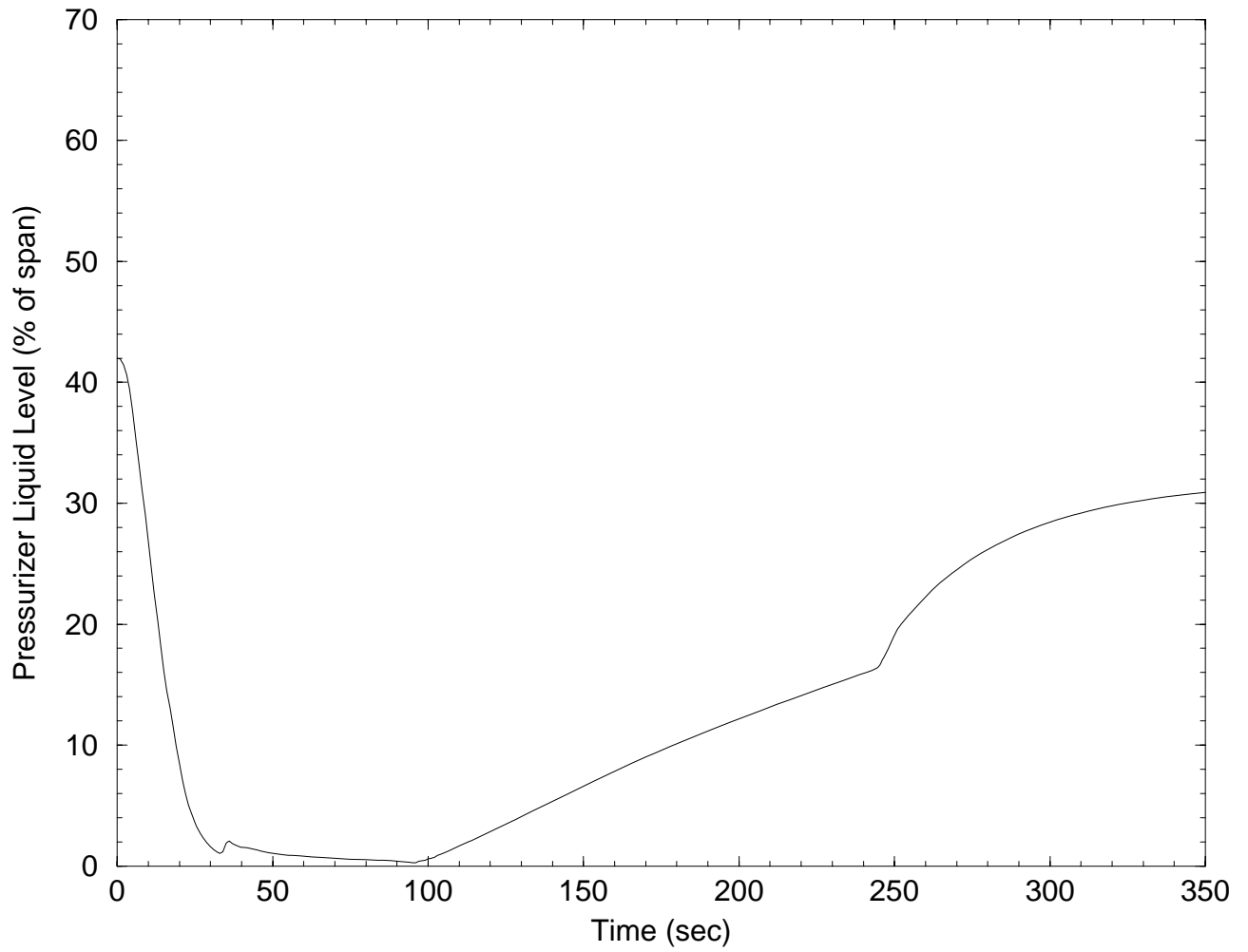
Core Inlet Flow Rates During LHR-Limiting Transient



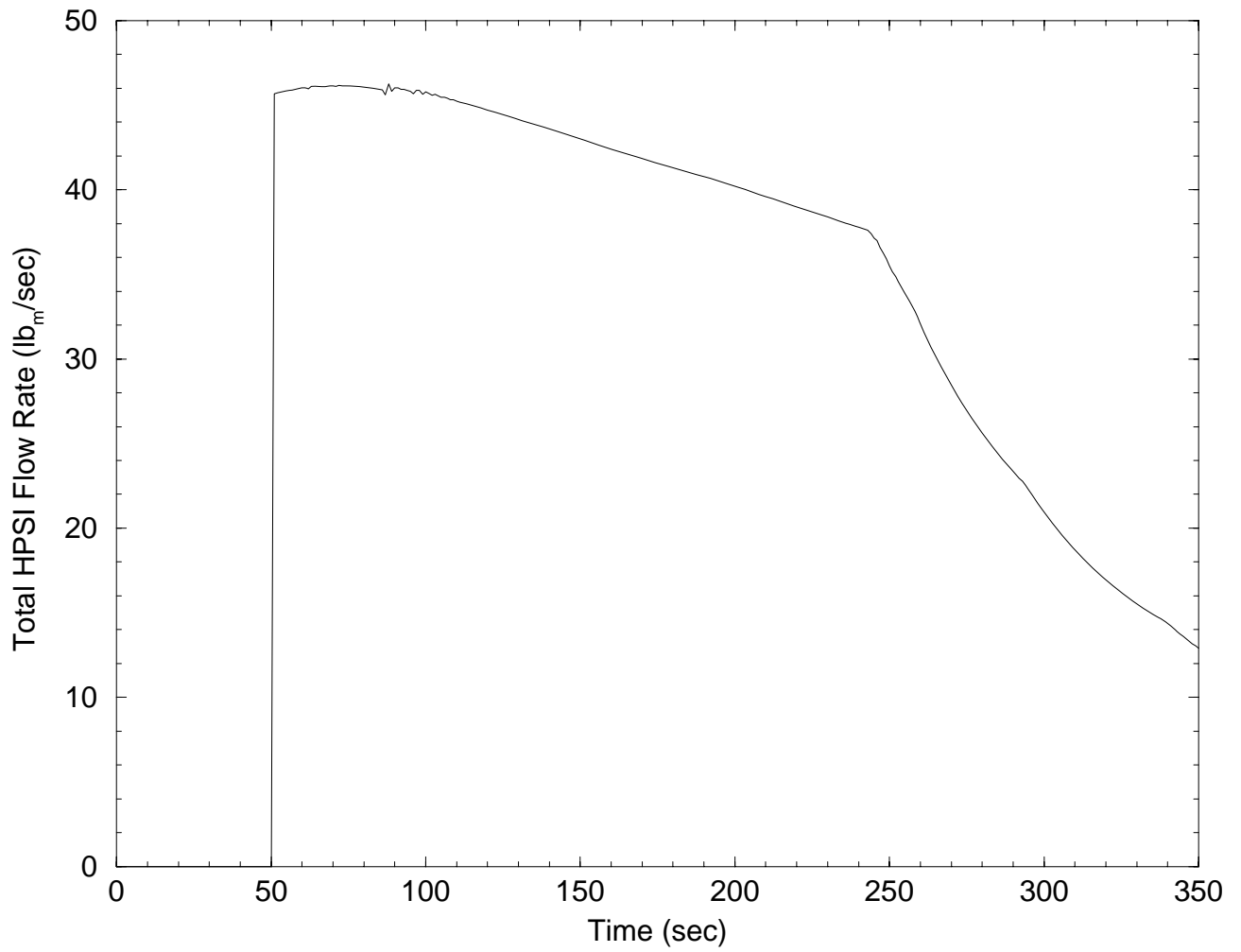
Pressurizer Pressure During LHR-Limiting Transient



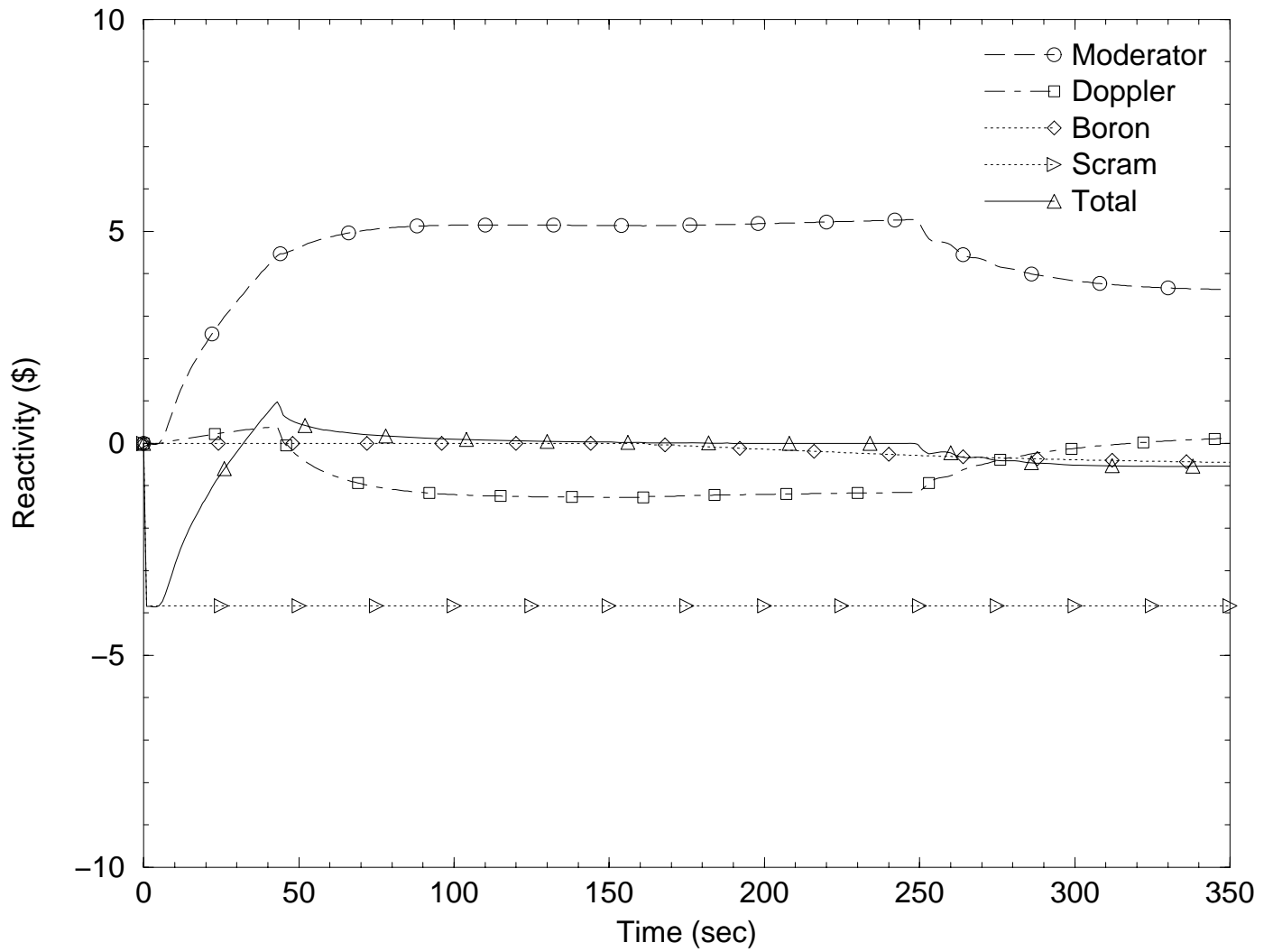
Pressurizer Liquid Level During LHR-Limiting Transient



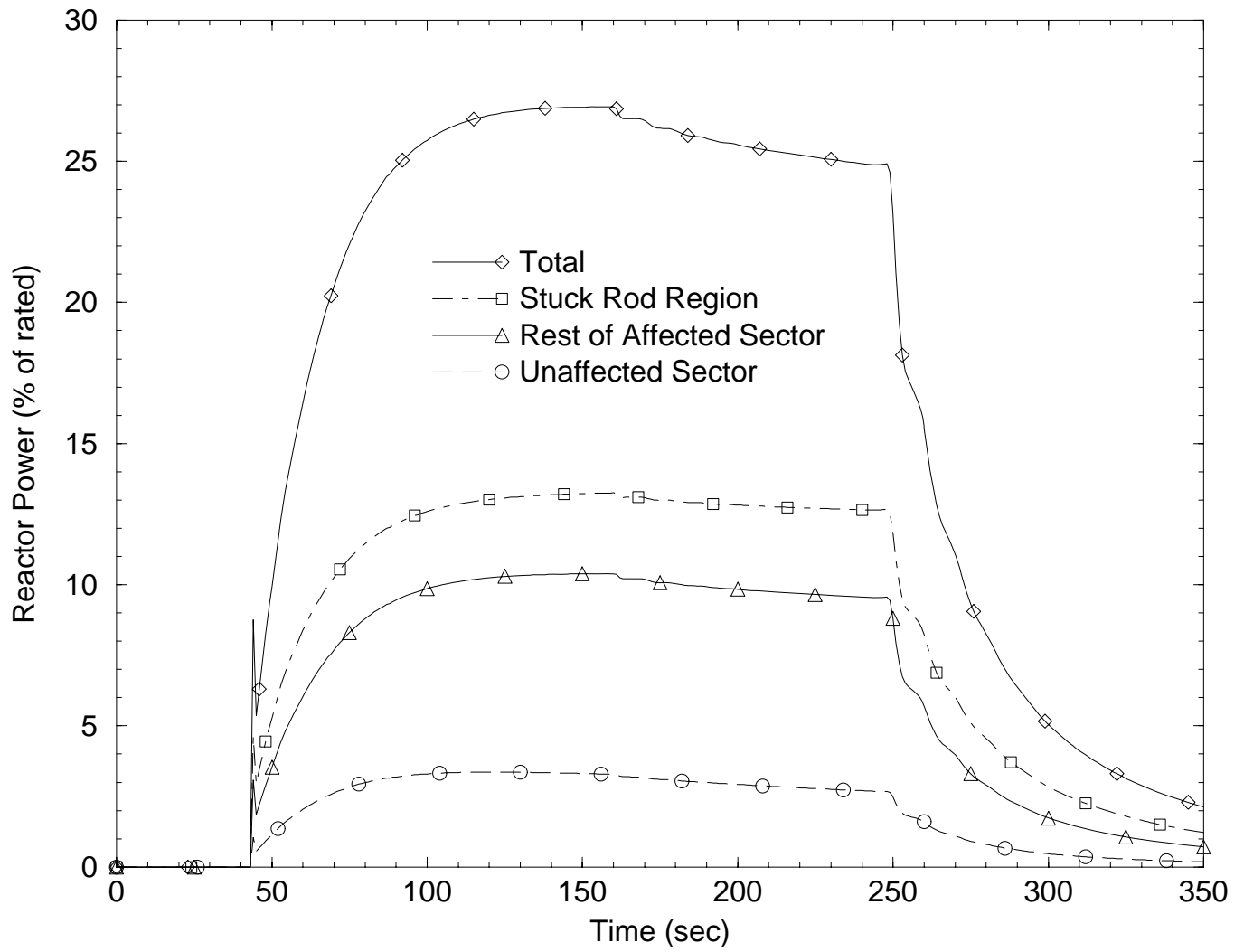
Total HPSI Flow Rate During LHR-Limiting Transient



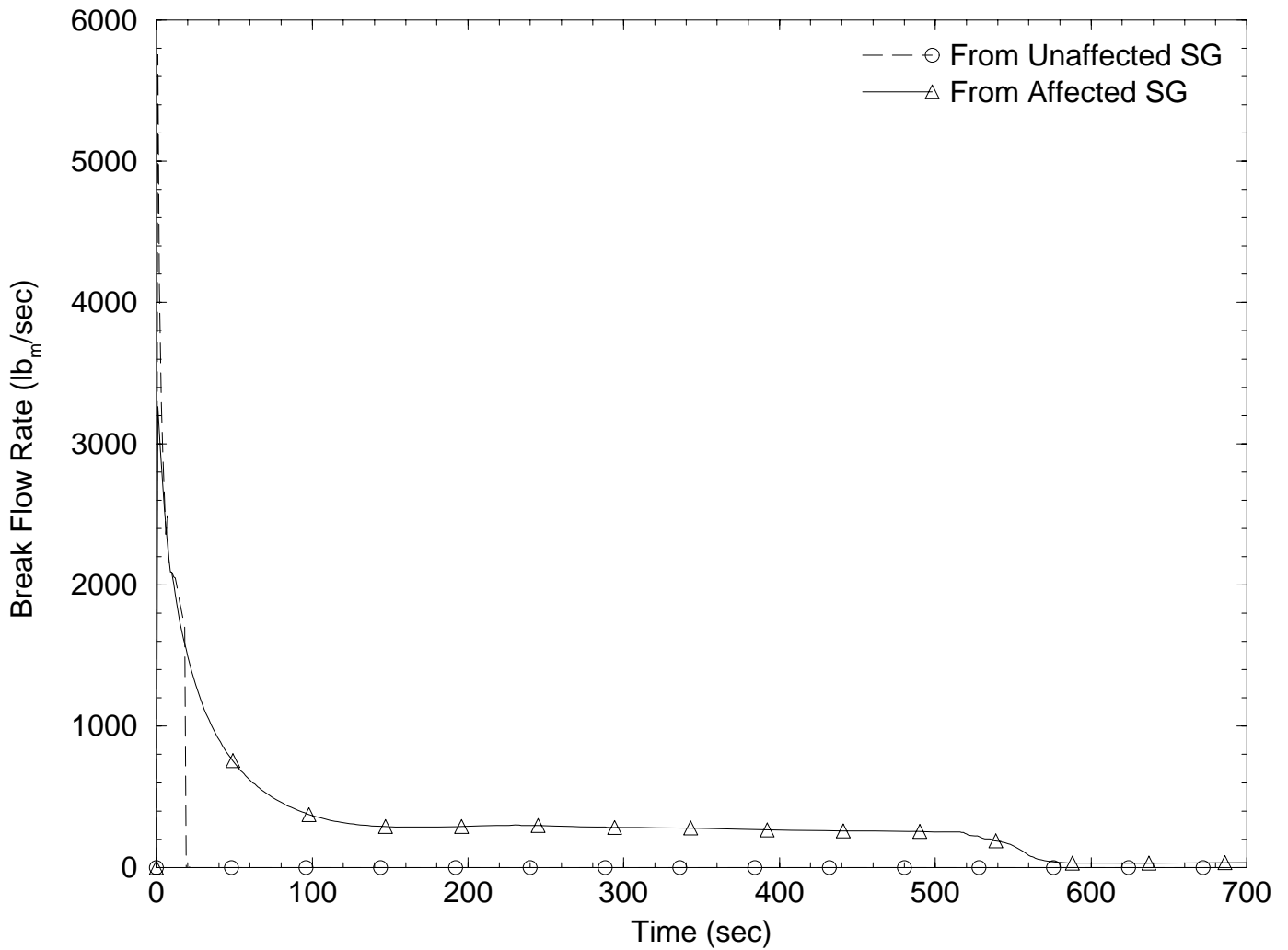
Reactivity During LHR-Limiting Transient



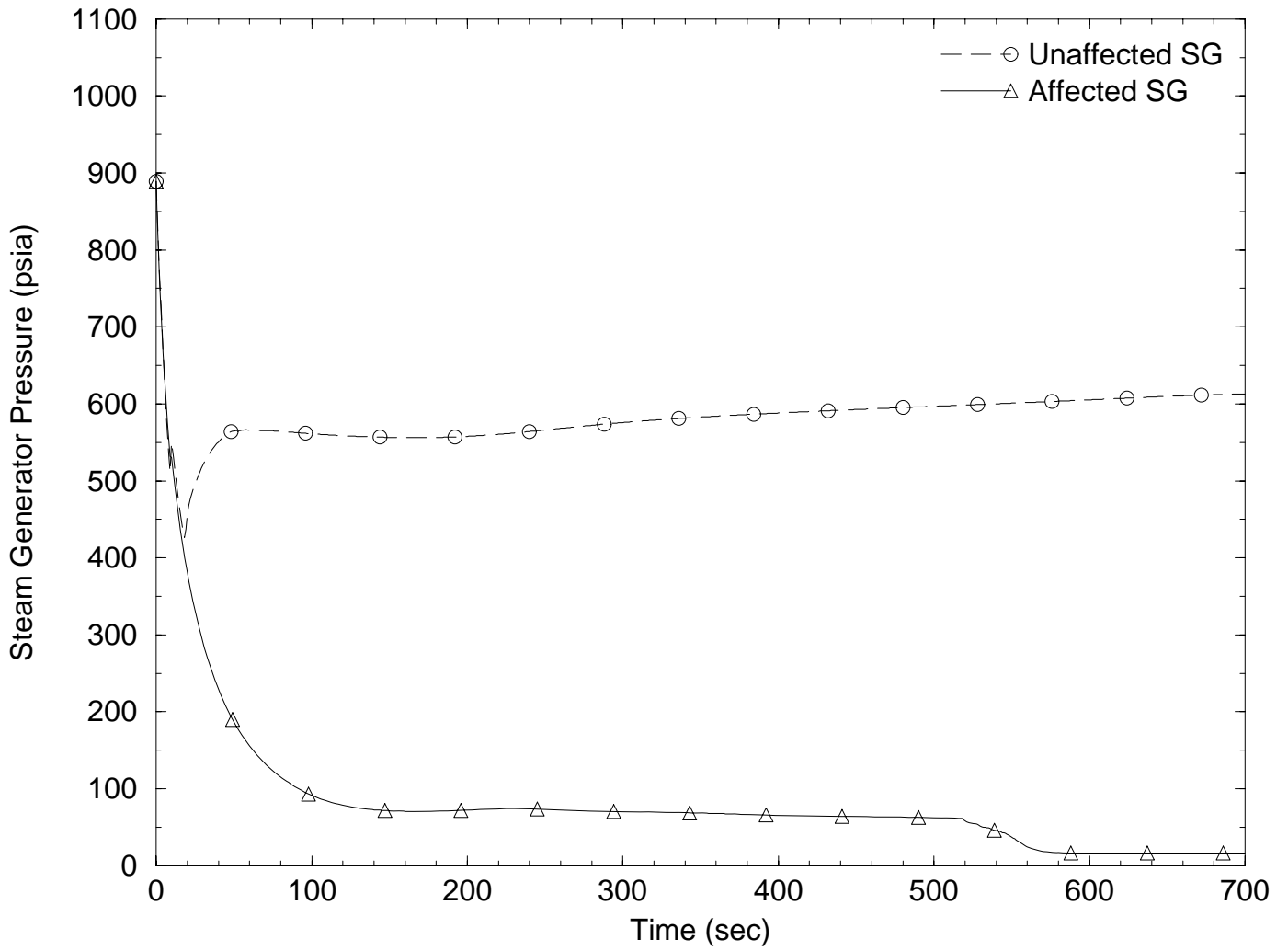
Reactor Power During LHR-Limiting Transient



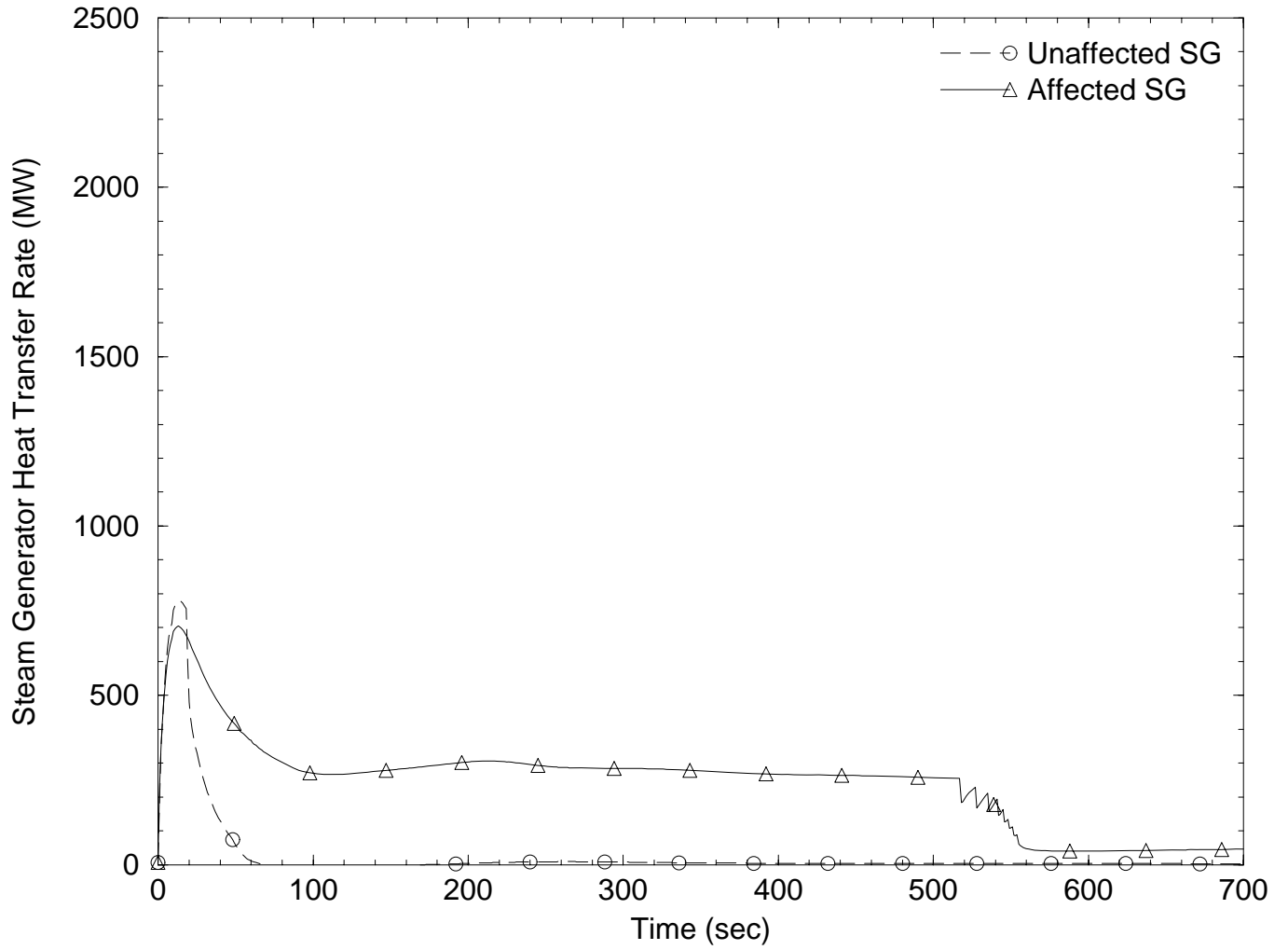
Break Flow Rates During DNBR-Limiting Transient



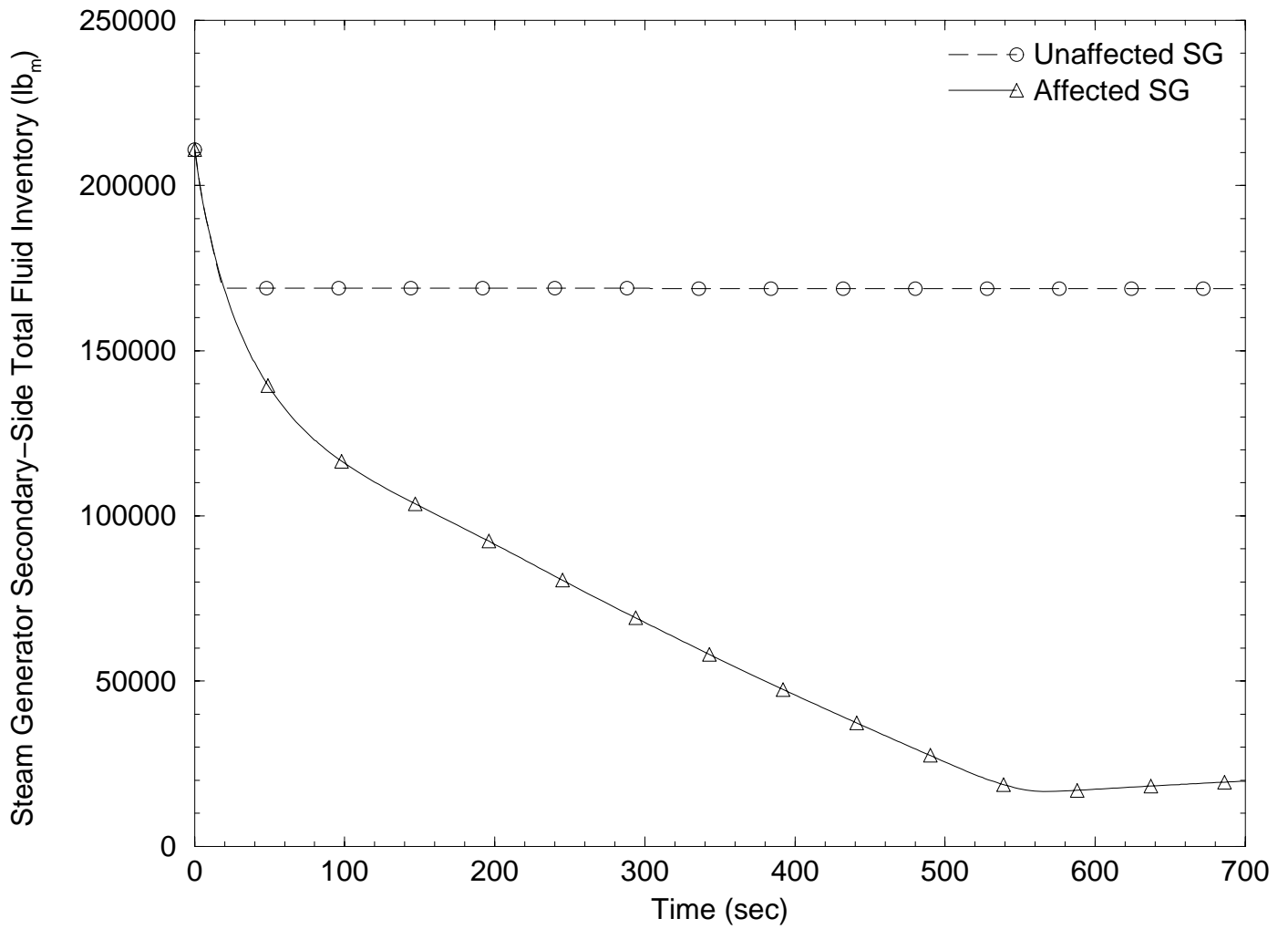
Steam Generator Pressures During DNBR-Limiting Transient



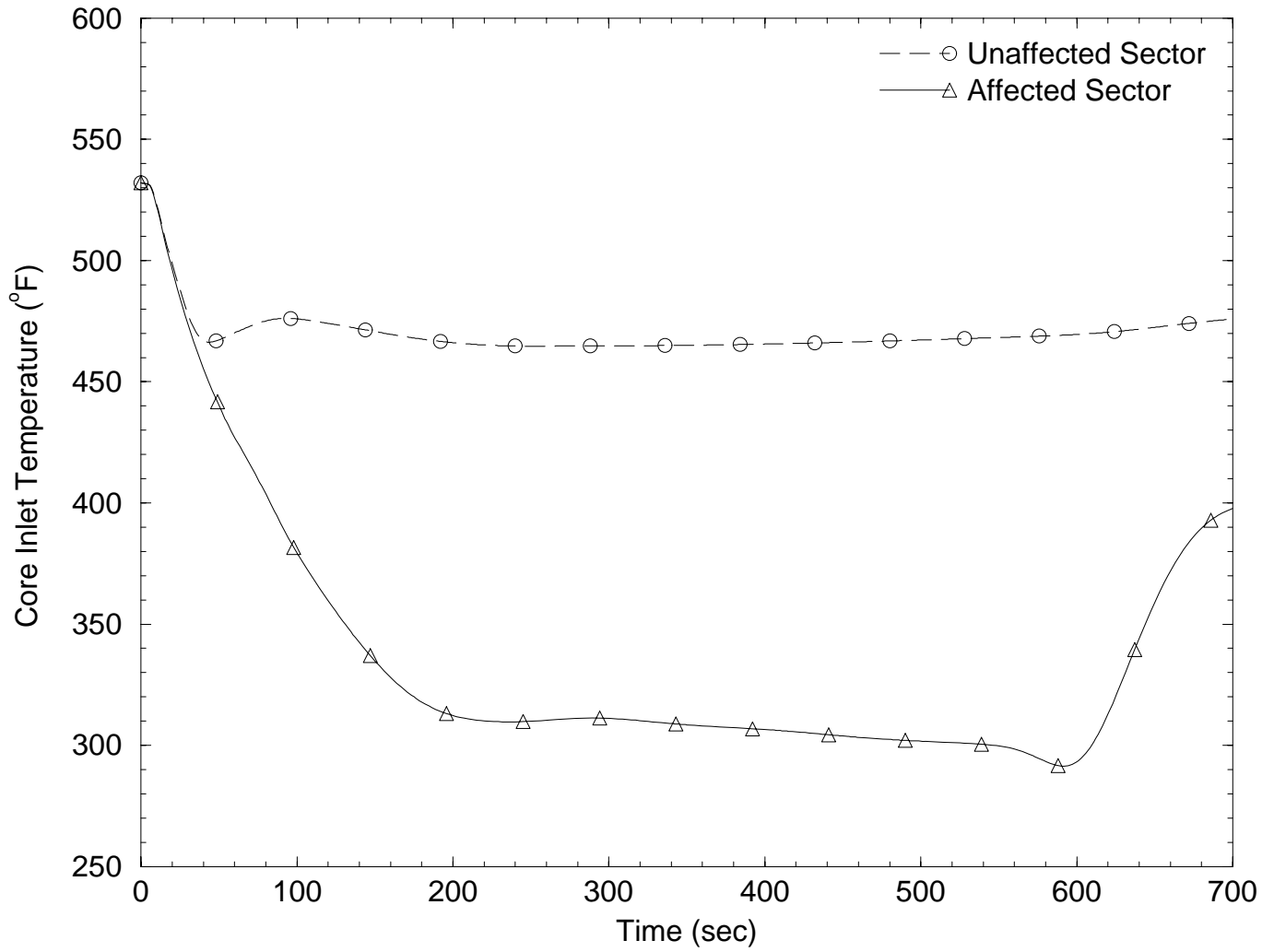
Steam Generator Heat Transfer Rates During DNBR-Limiting Transient



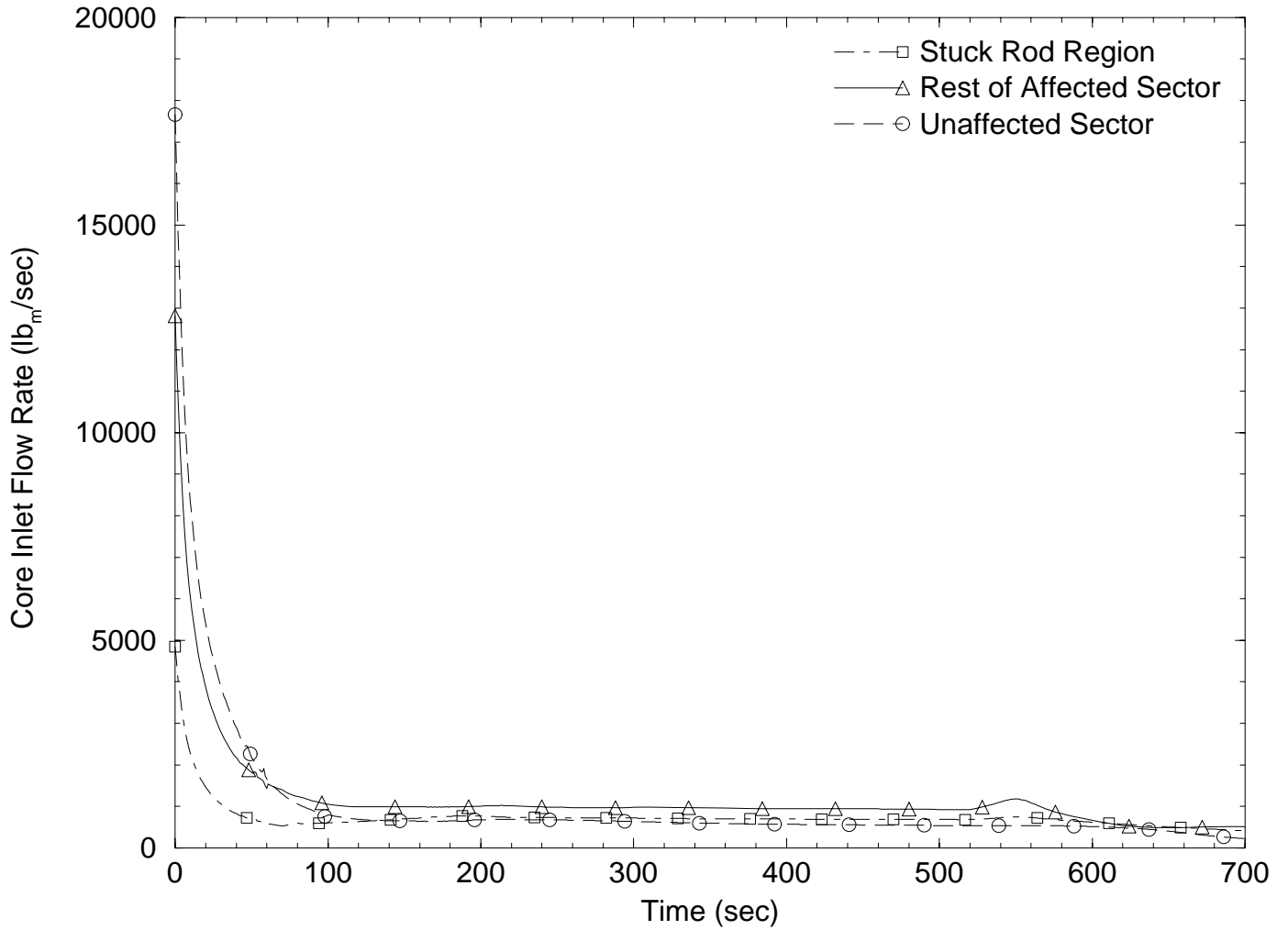
Steam Generator Secondary-Side Total Fluid Inventories
During DNBR-Limiting Transient



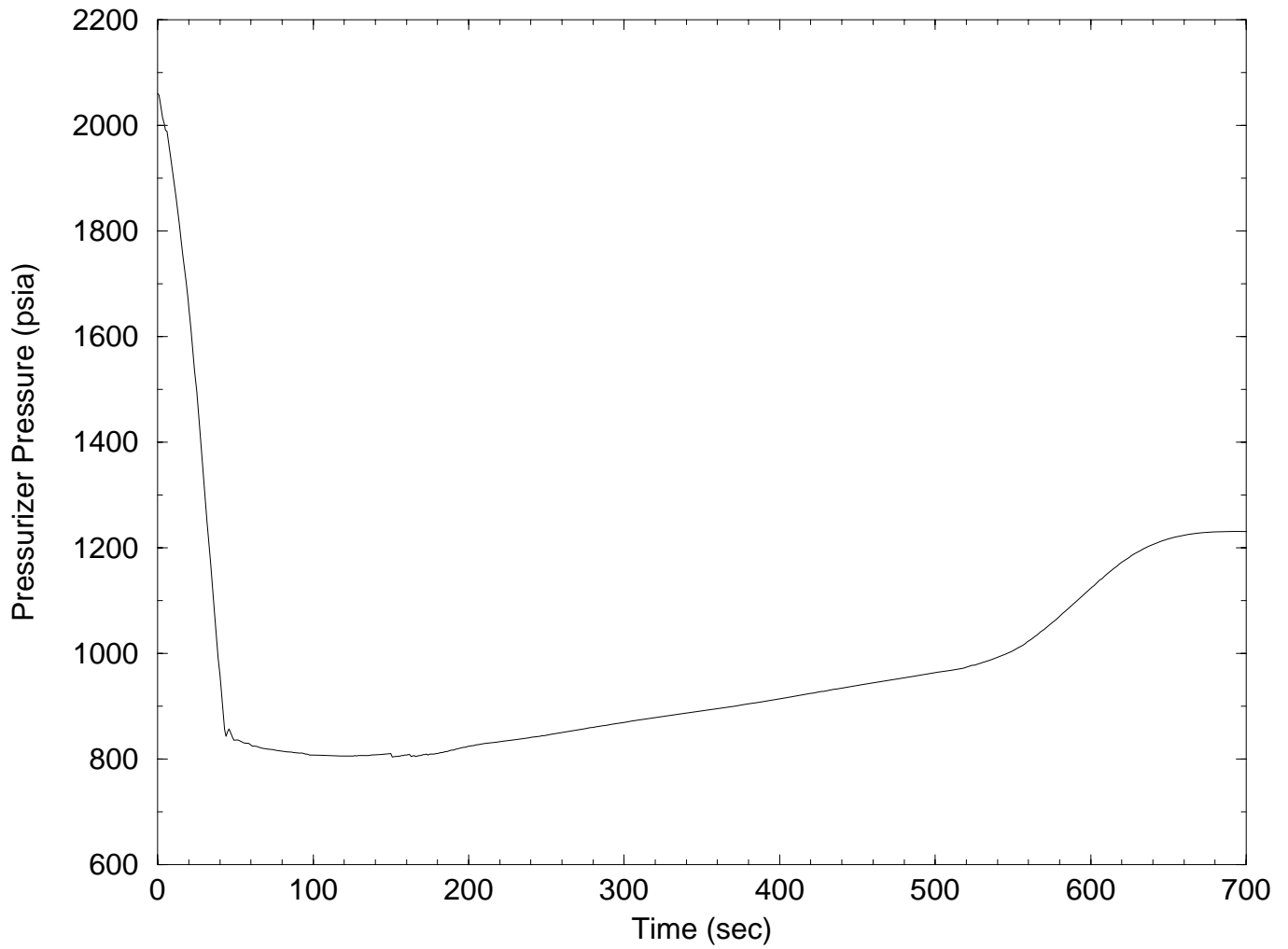
Core Inlet Temperatures During DNBR-Limiting Transient



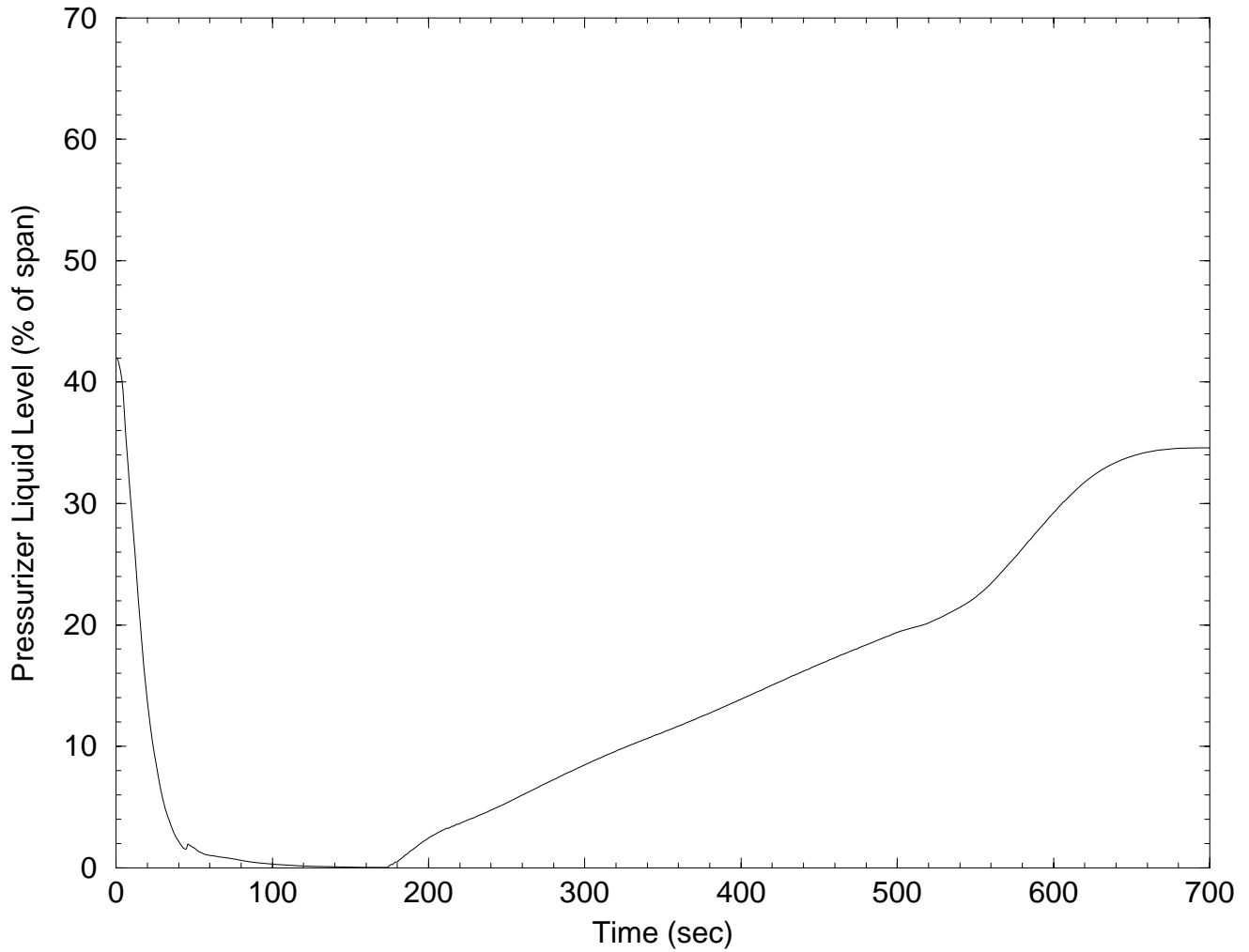
Core Inlet Flow Rates During DNBR-Limiting Transient



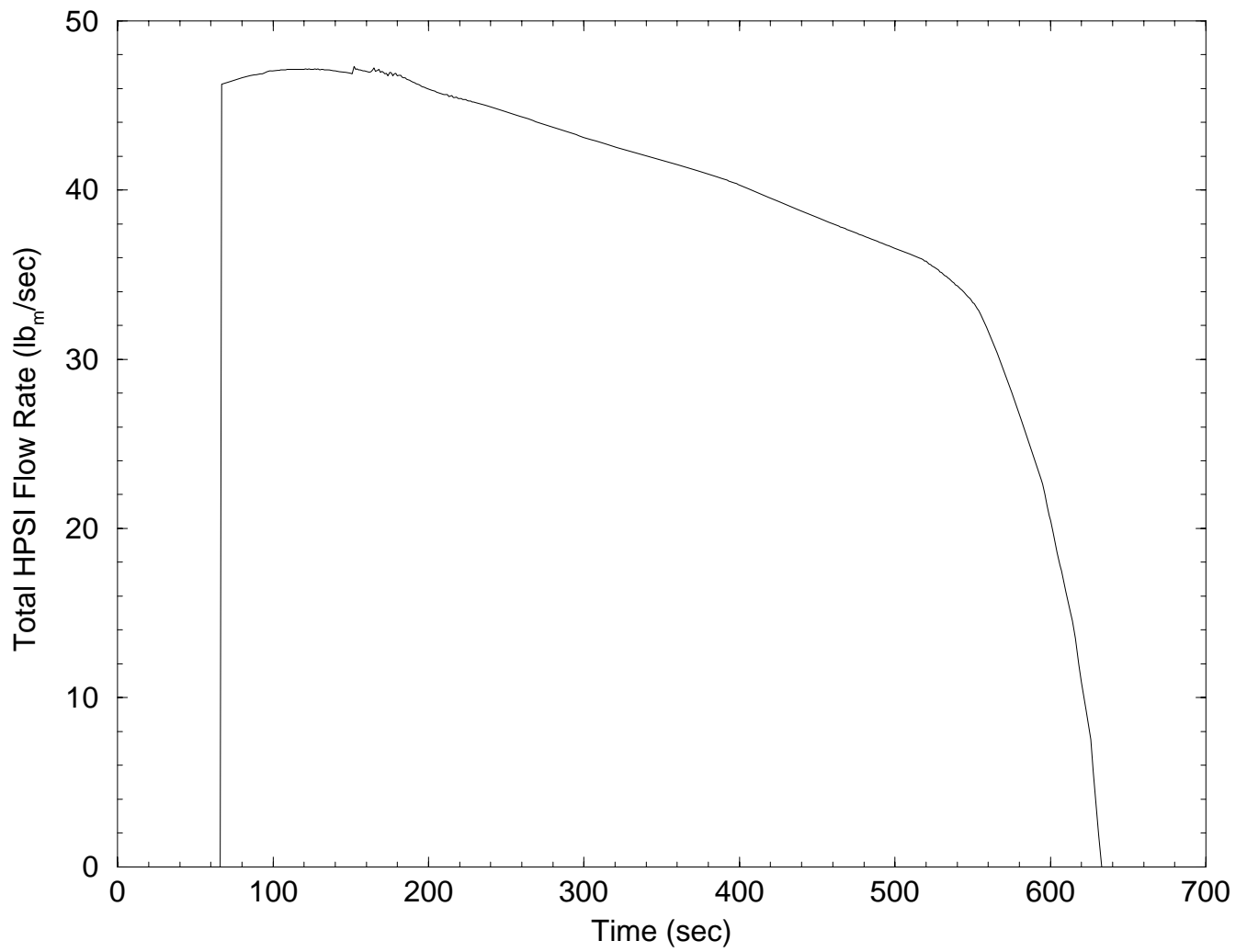
Pressurizer Pressure During DNBR-Limiting Transient



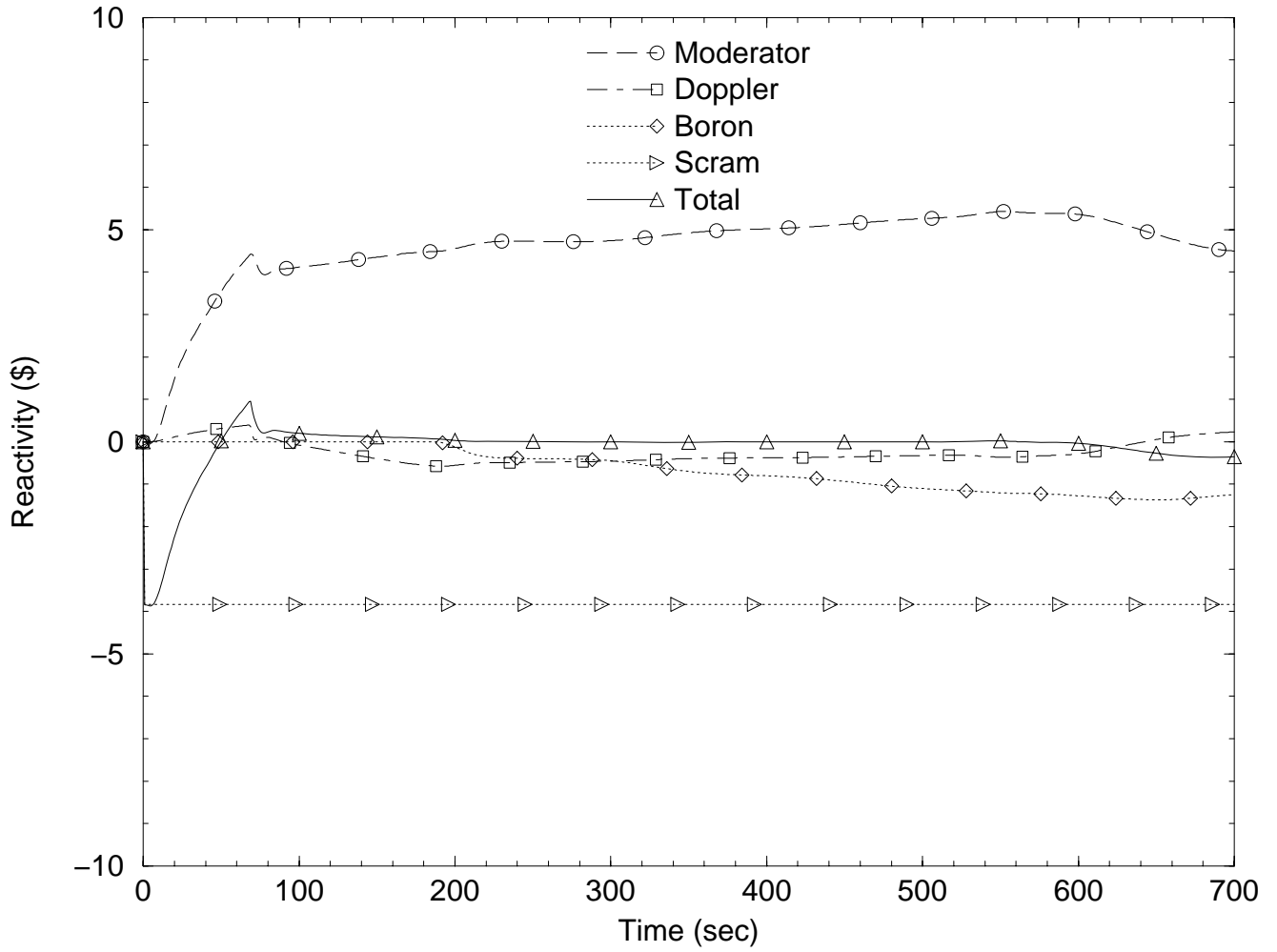
Pressurizer Liquid Level During DNBR-Limiting Transient



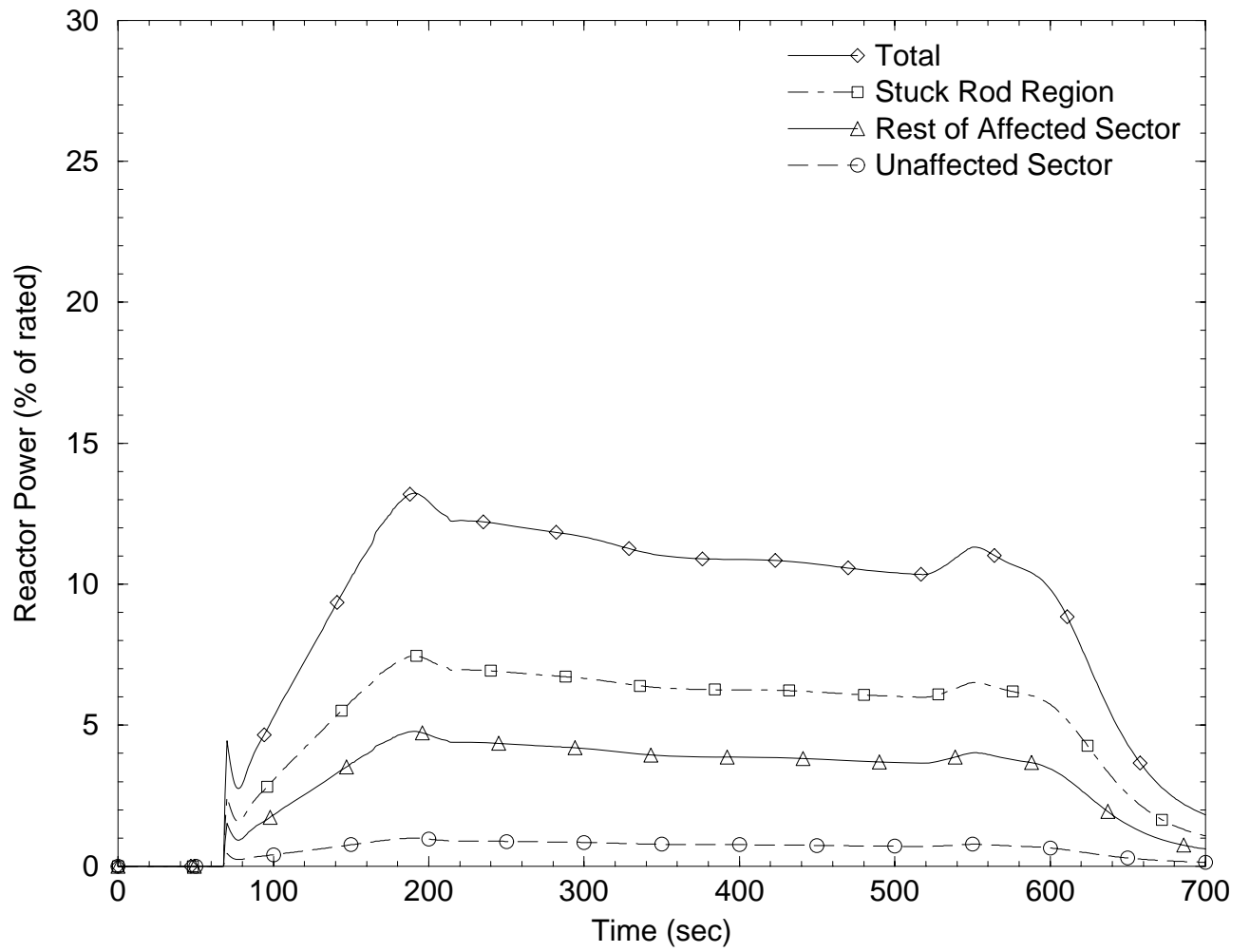
Total HPSI Flow Rate During DNBR-Limiting Transient



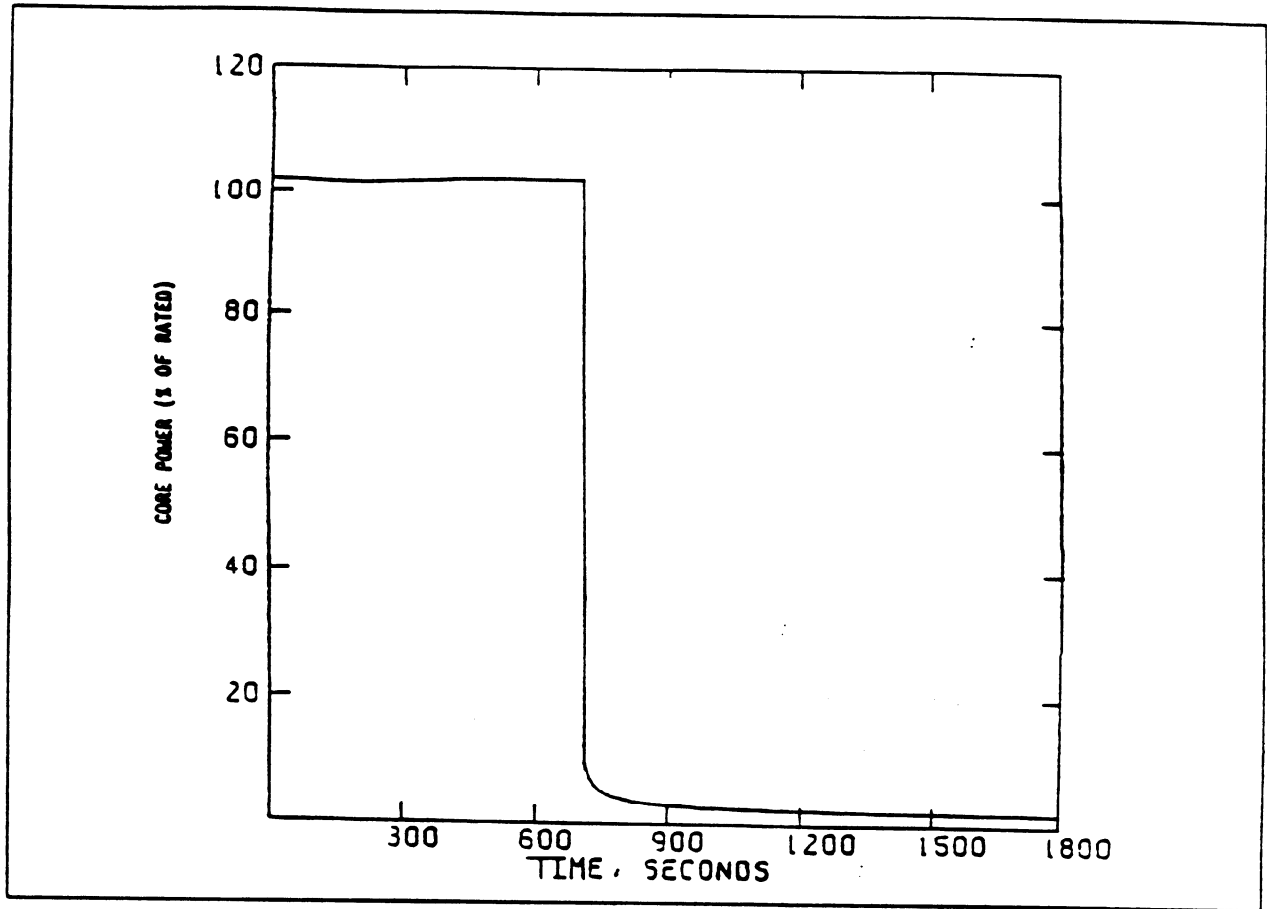
Reactivity During DNBR-Limiting Transient



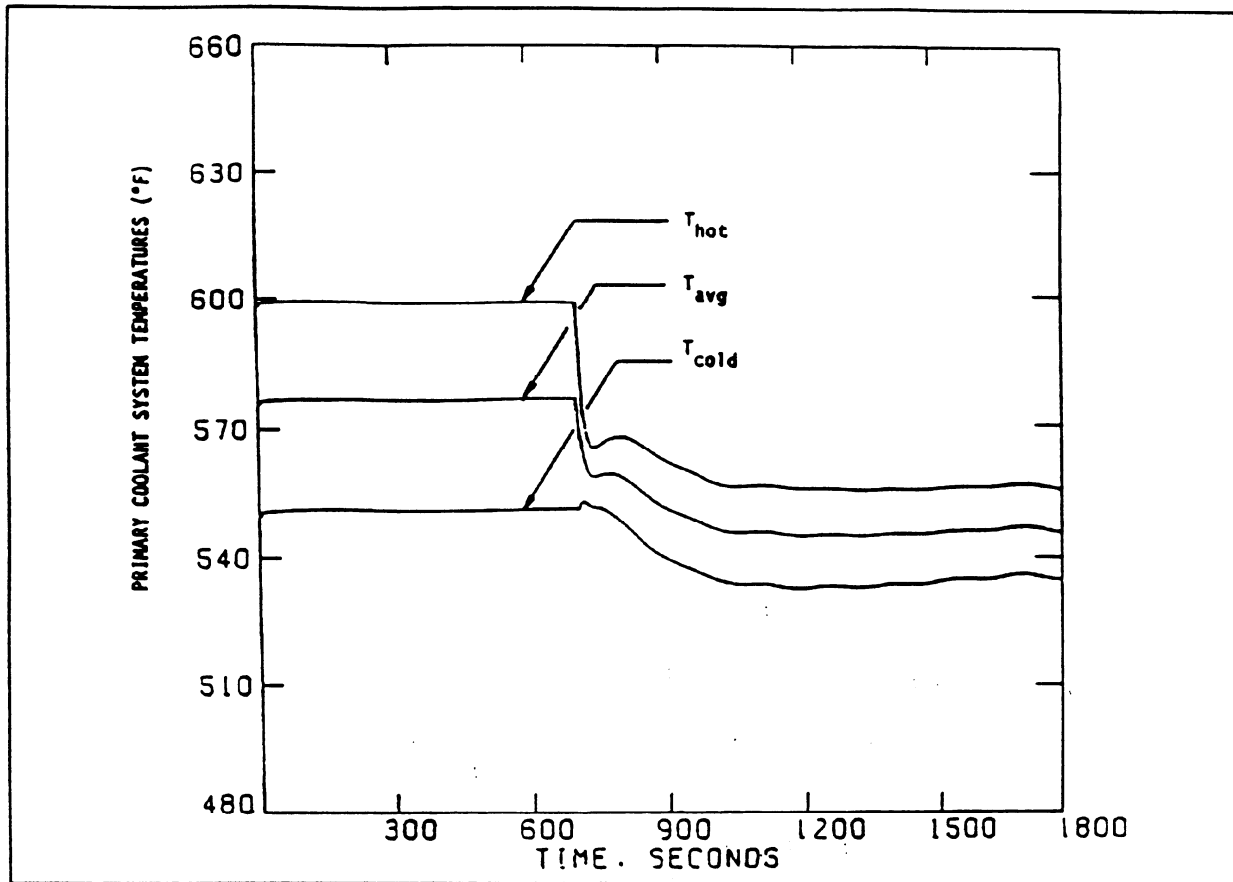
Reactor Power During DNBR-Limiting Transient



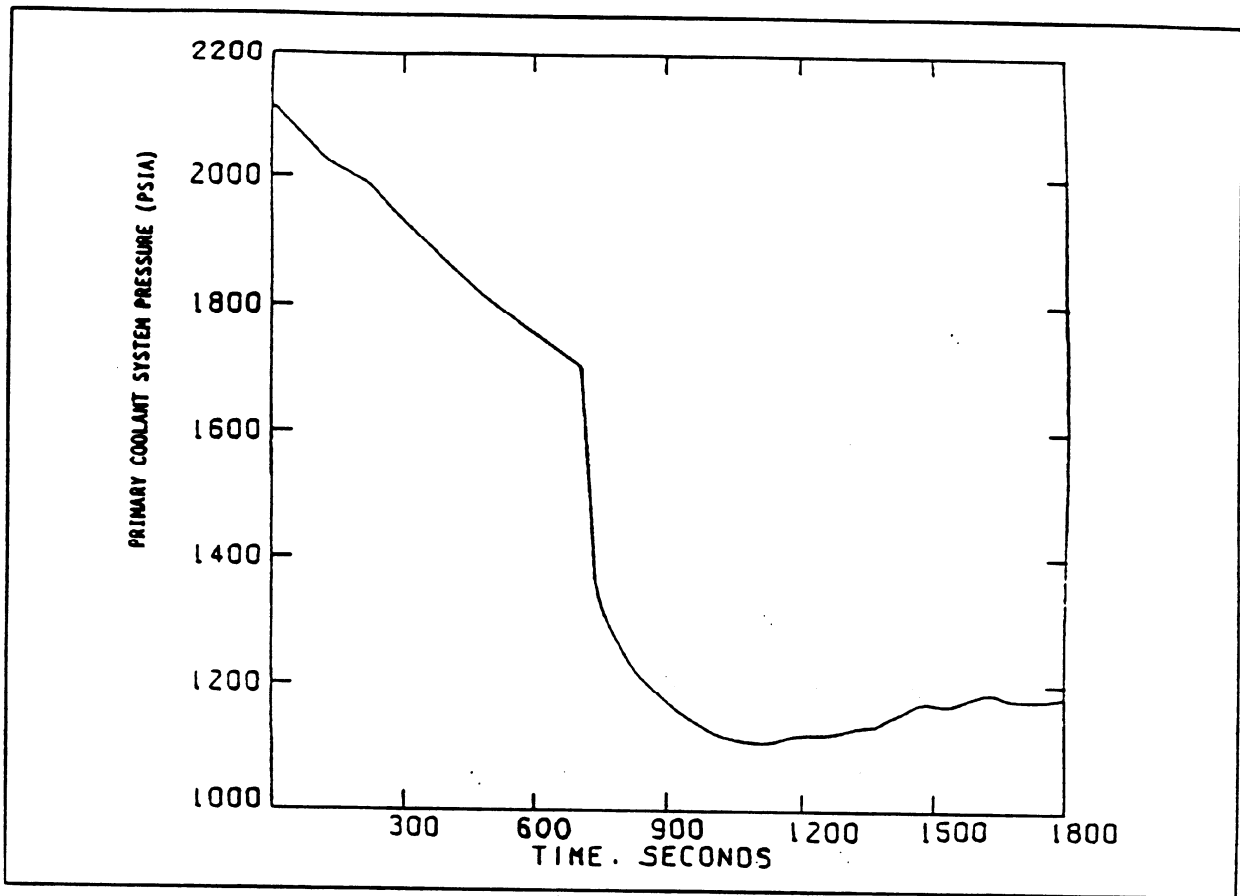
SGTR WITH LOAC: CORE POWER vs TIME



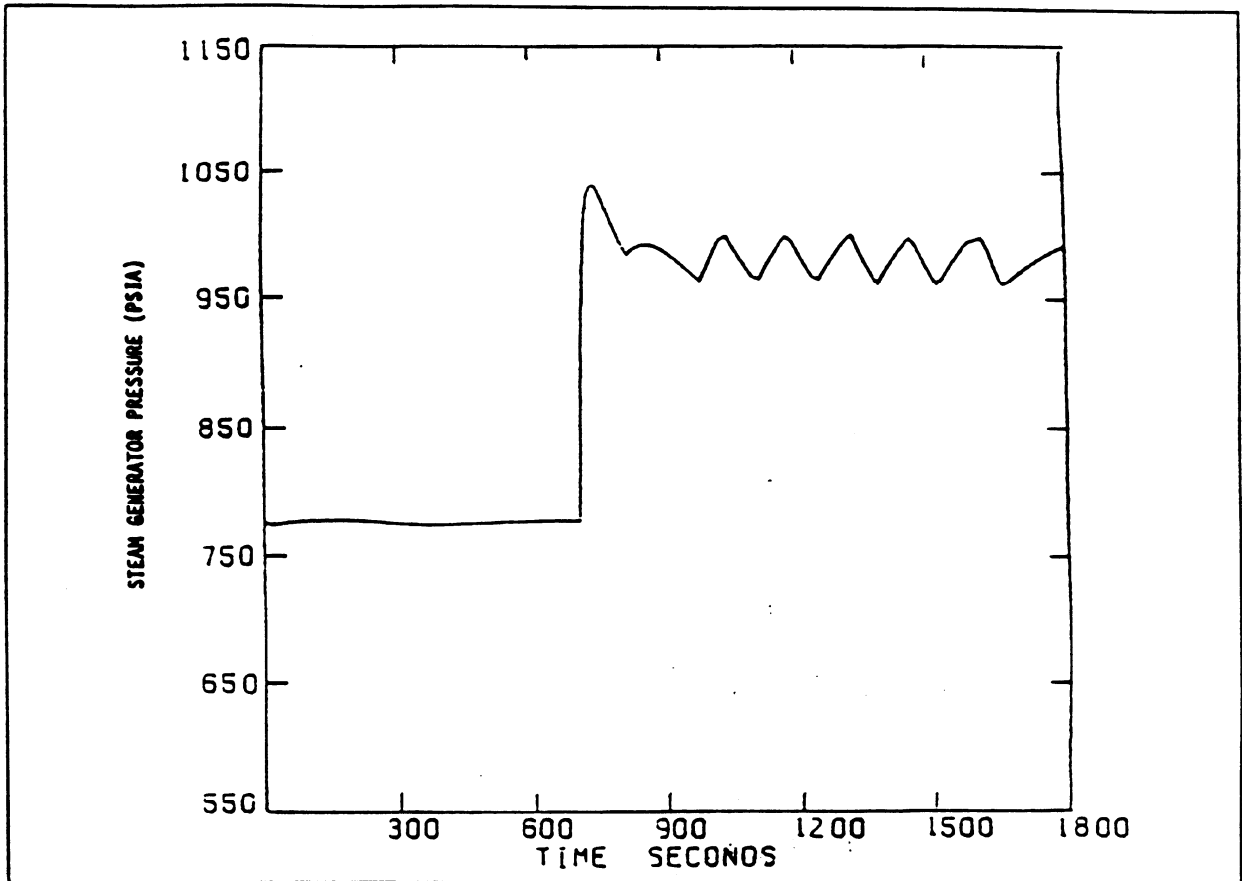
SGTR WITH LOAC: CORE COOLANT TEMPERATURE vs TIME



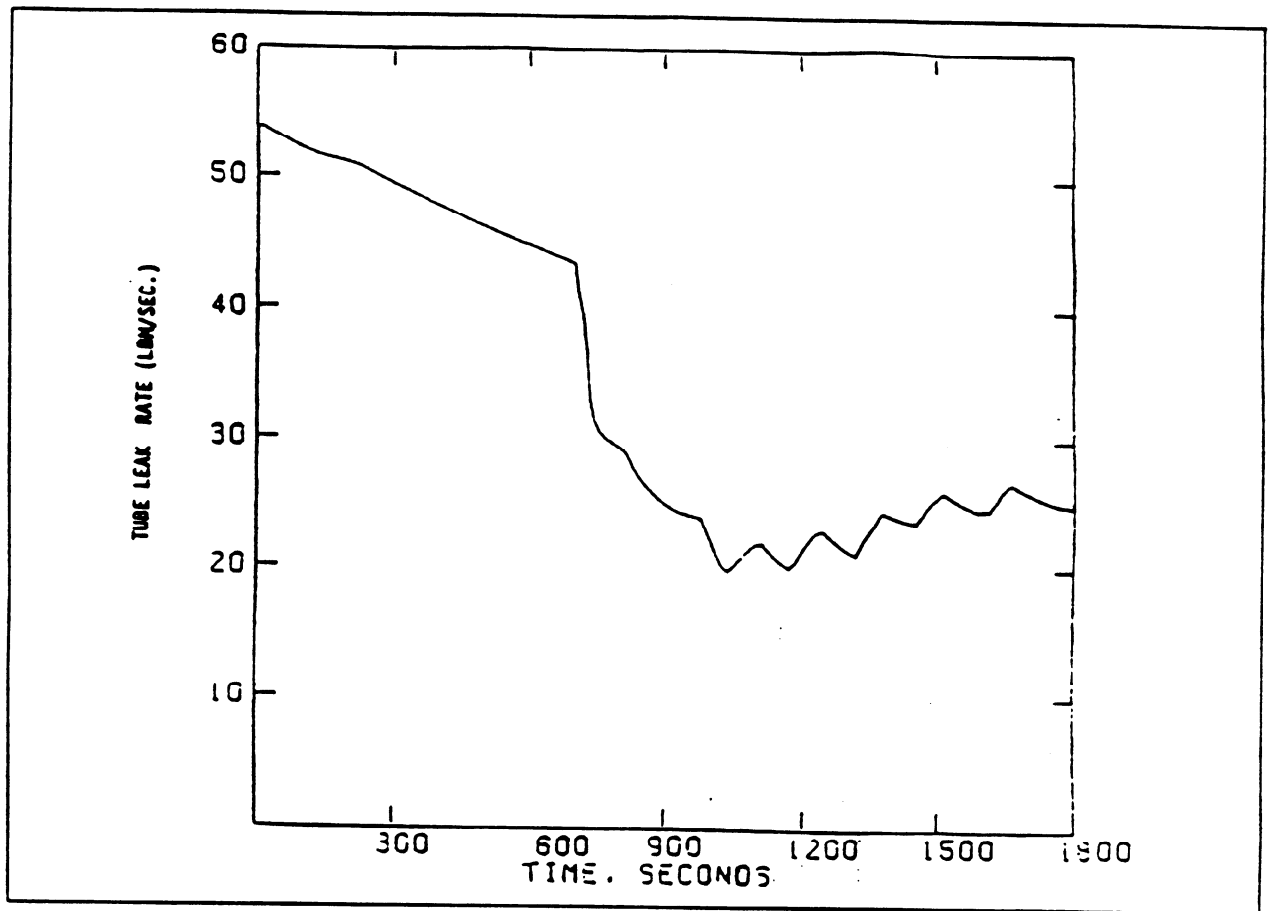
SGTR WITH LOAC: PRIMARY COOLANT SYSTEM PRESSURE vs TIME



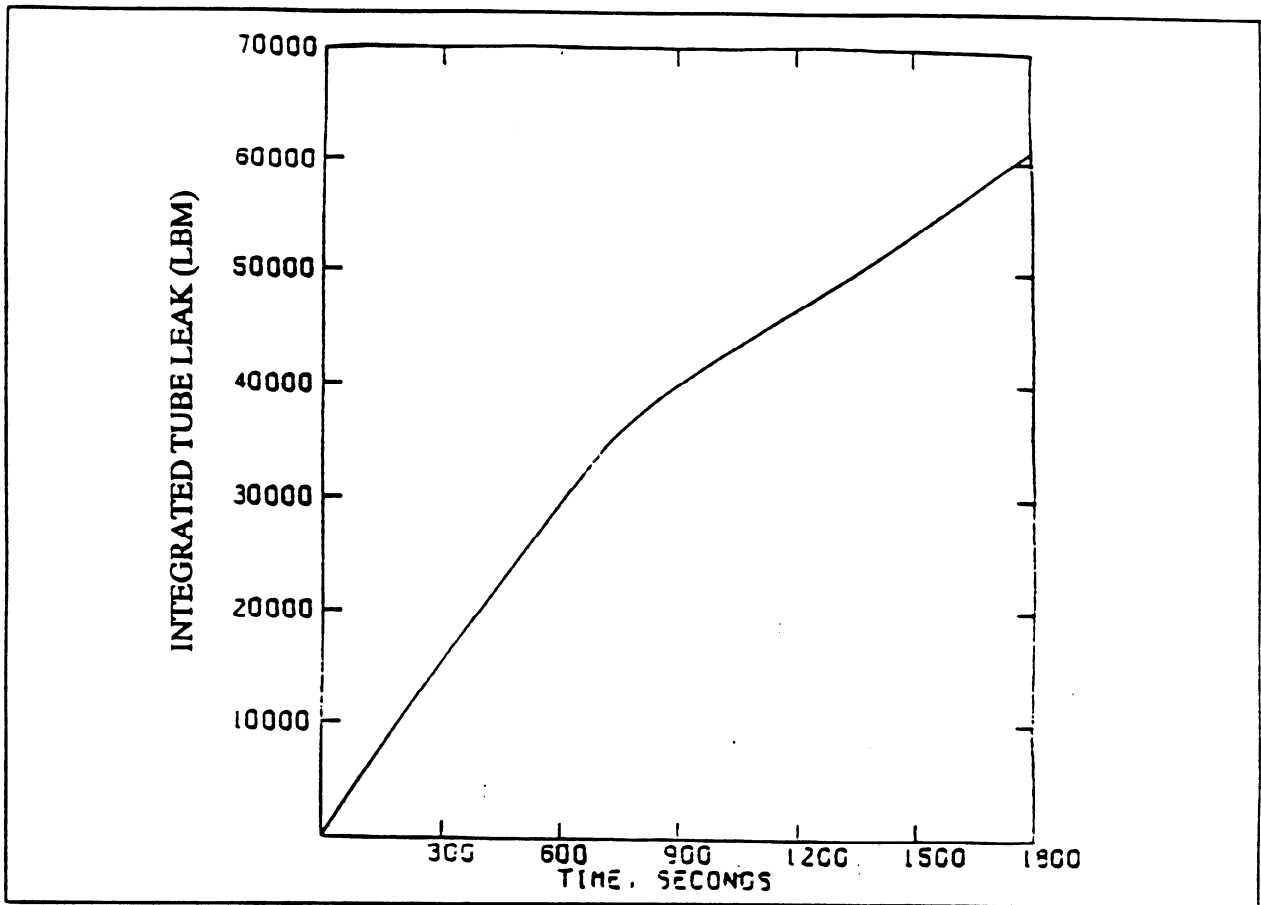
SGTR WITH LOAC: STEAM GENERATOR PRESSURE vs TIME



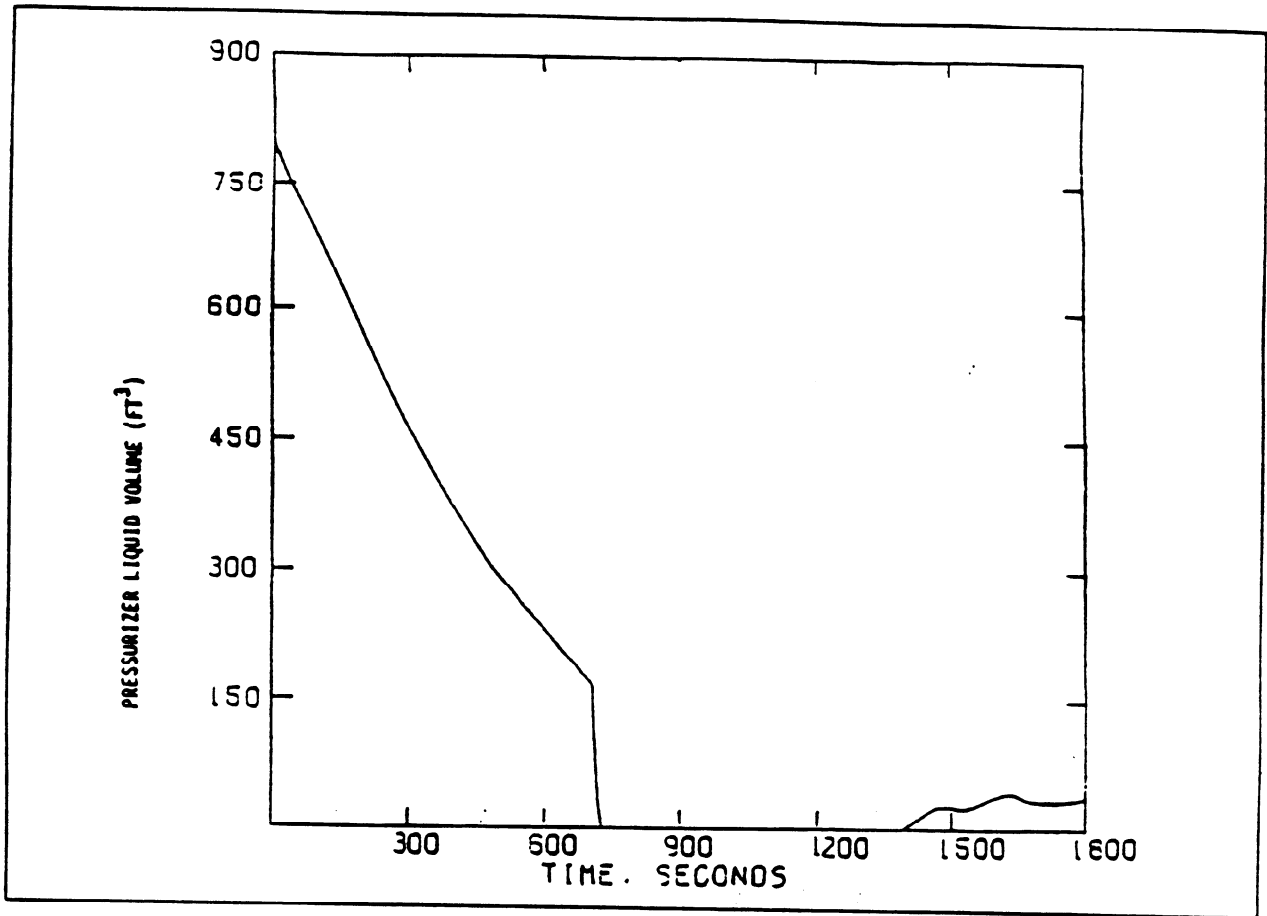
SGTR WITH LOAC: TUBE LEAK FLOW RATE vs TIME



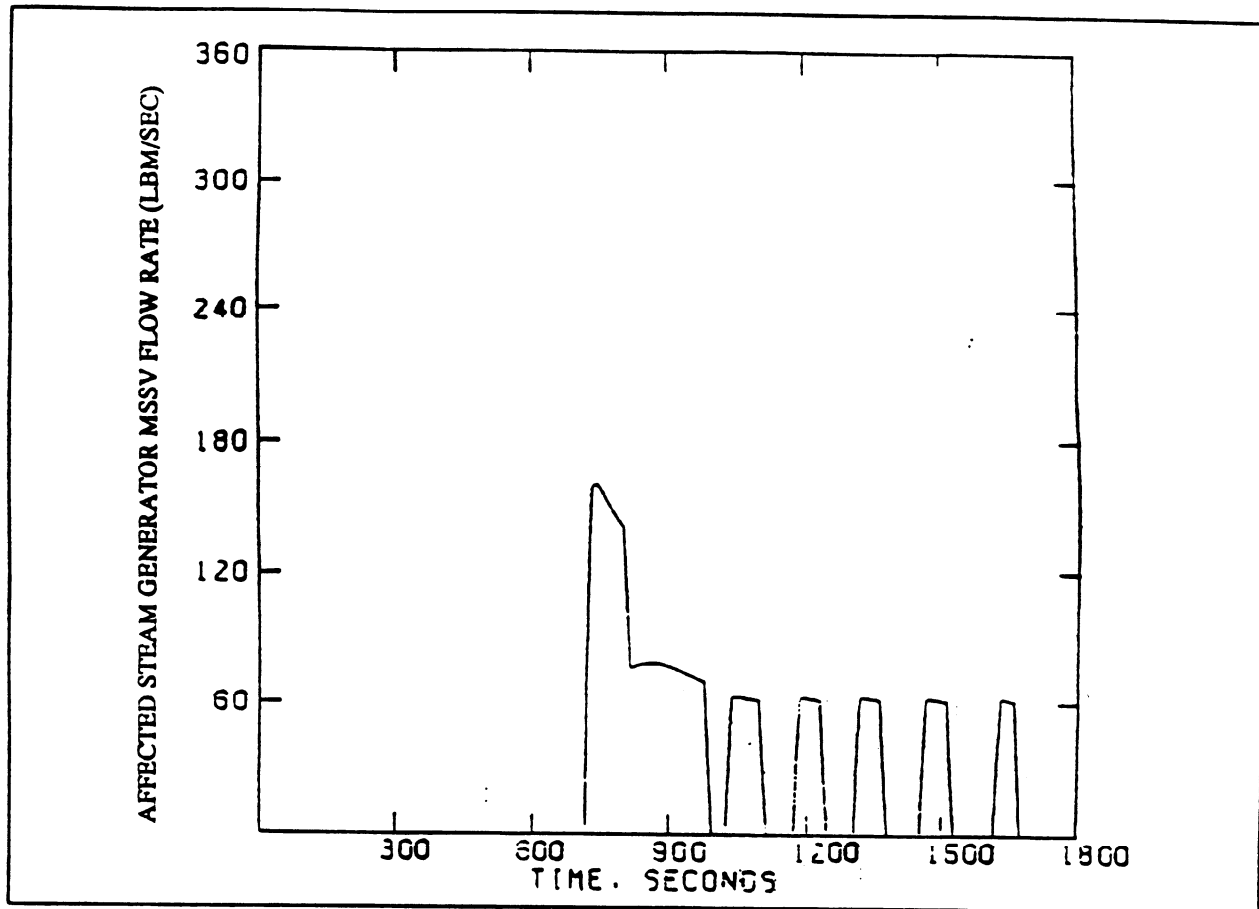
SGTR WITH LOAC: INTEGRATED TUBE LEAK FLOW vs TIME



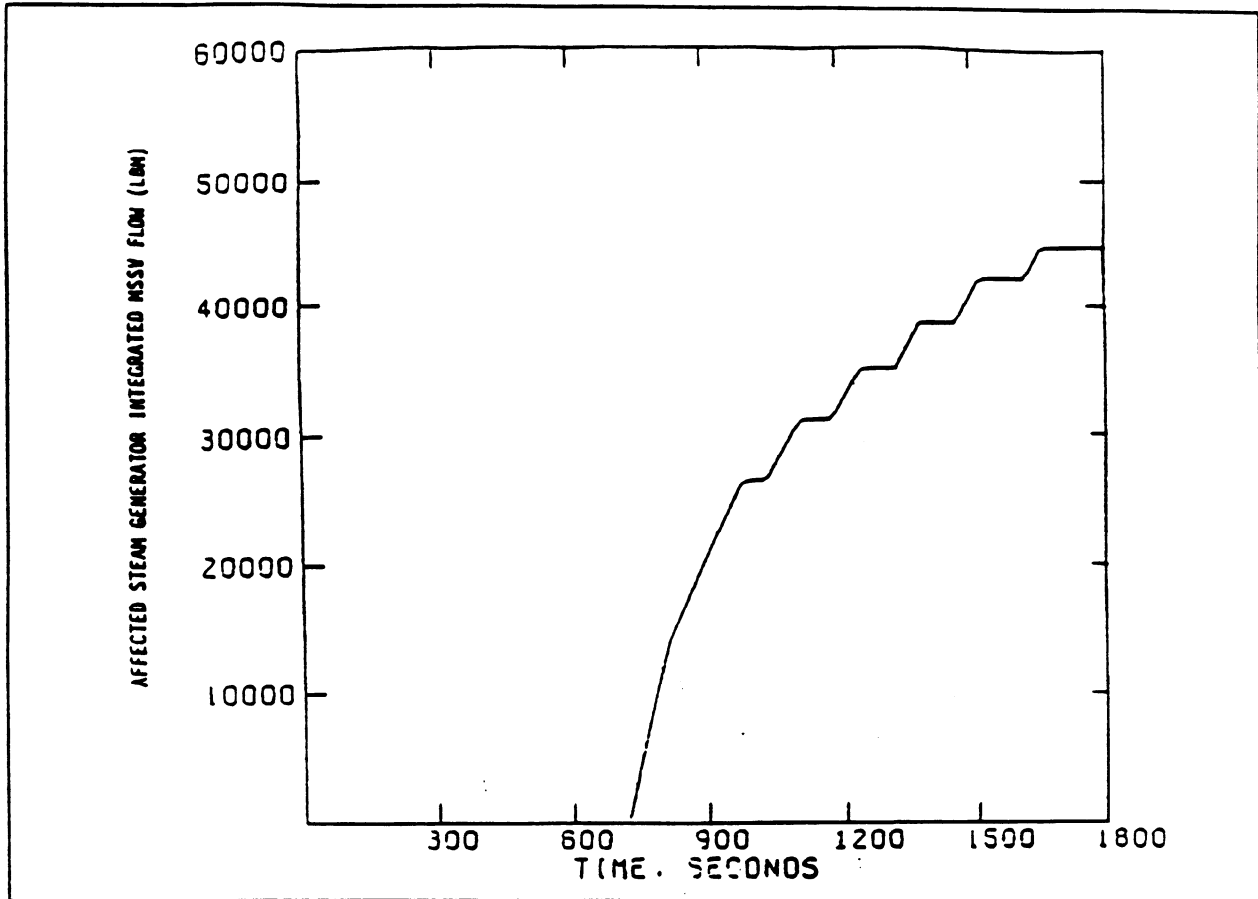
SGTR WITH LOAC: PRESSURIZER LIQUID VOLUME vs TIME



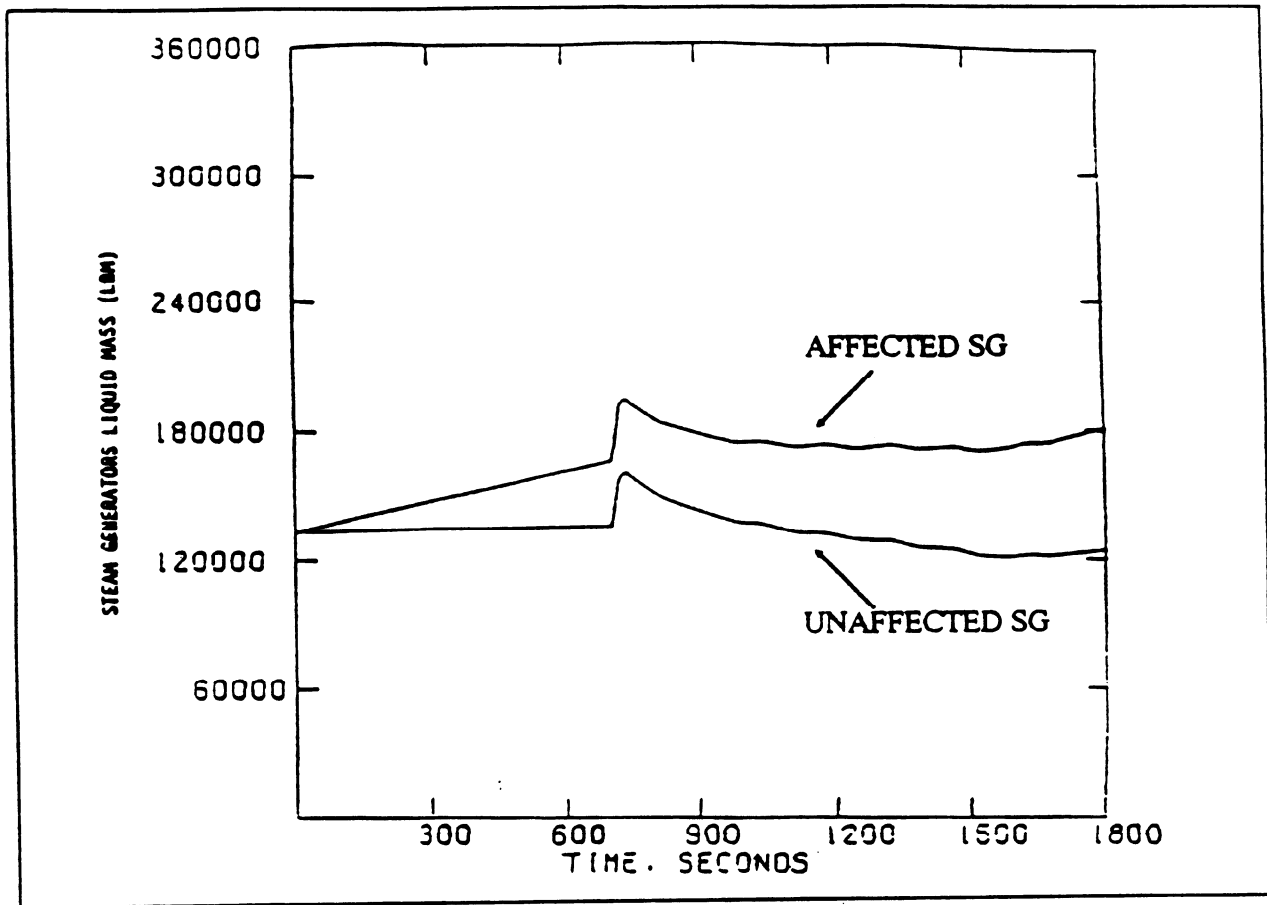
SGTR WITH LOAC: AFFECTED STEAM GENERATOR SAFETY VALVE (MSSV)
FLOW RATE vs TIME



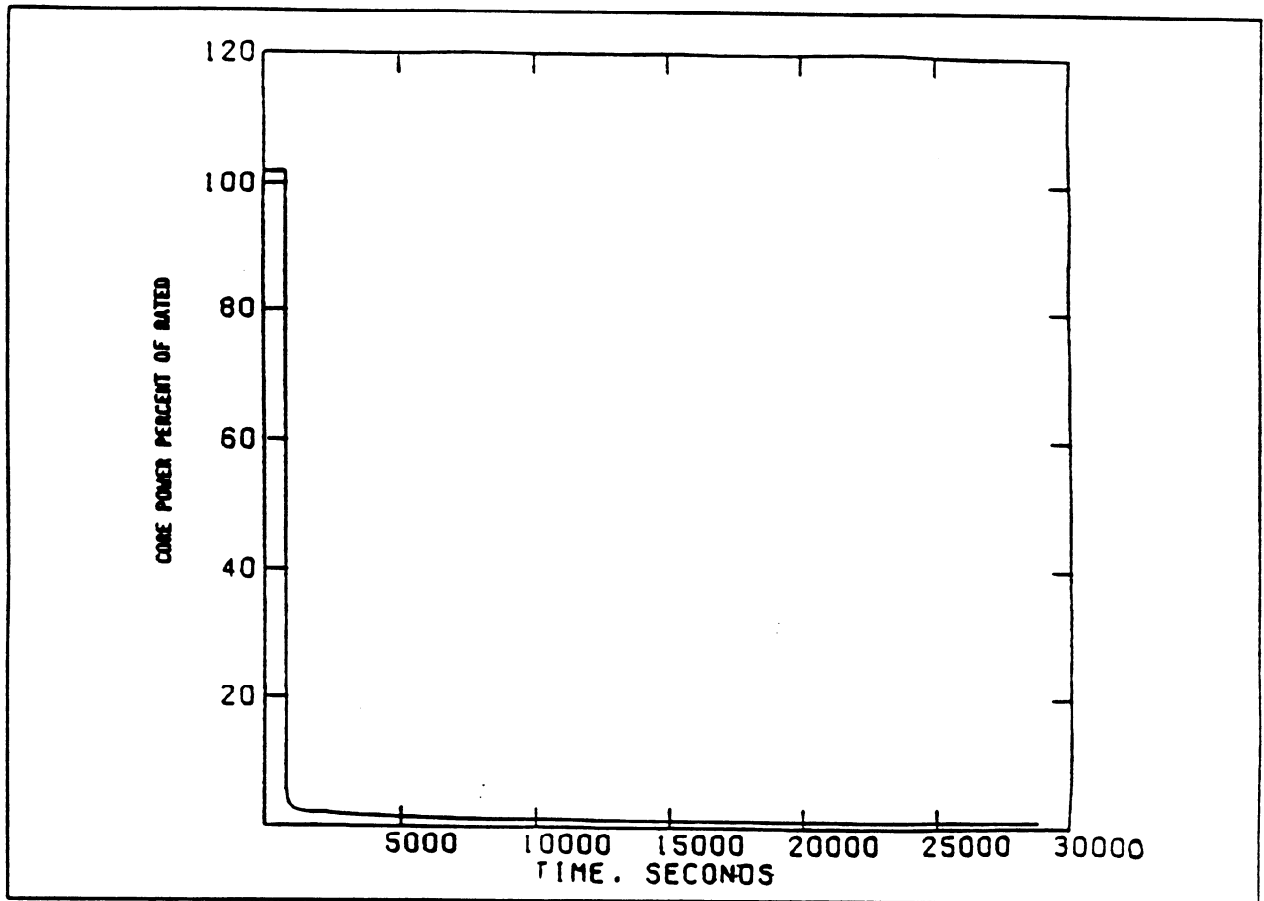
SGTR WITH LOAC: AFFECTED STEAM GENERATOR SAFETY VALVE (MSSV)
INTEGRATED FLOW vs TIME



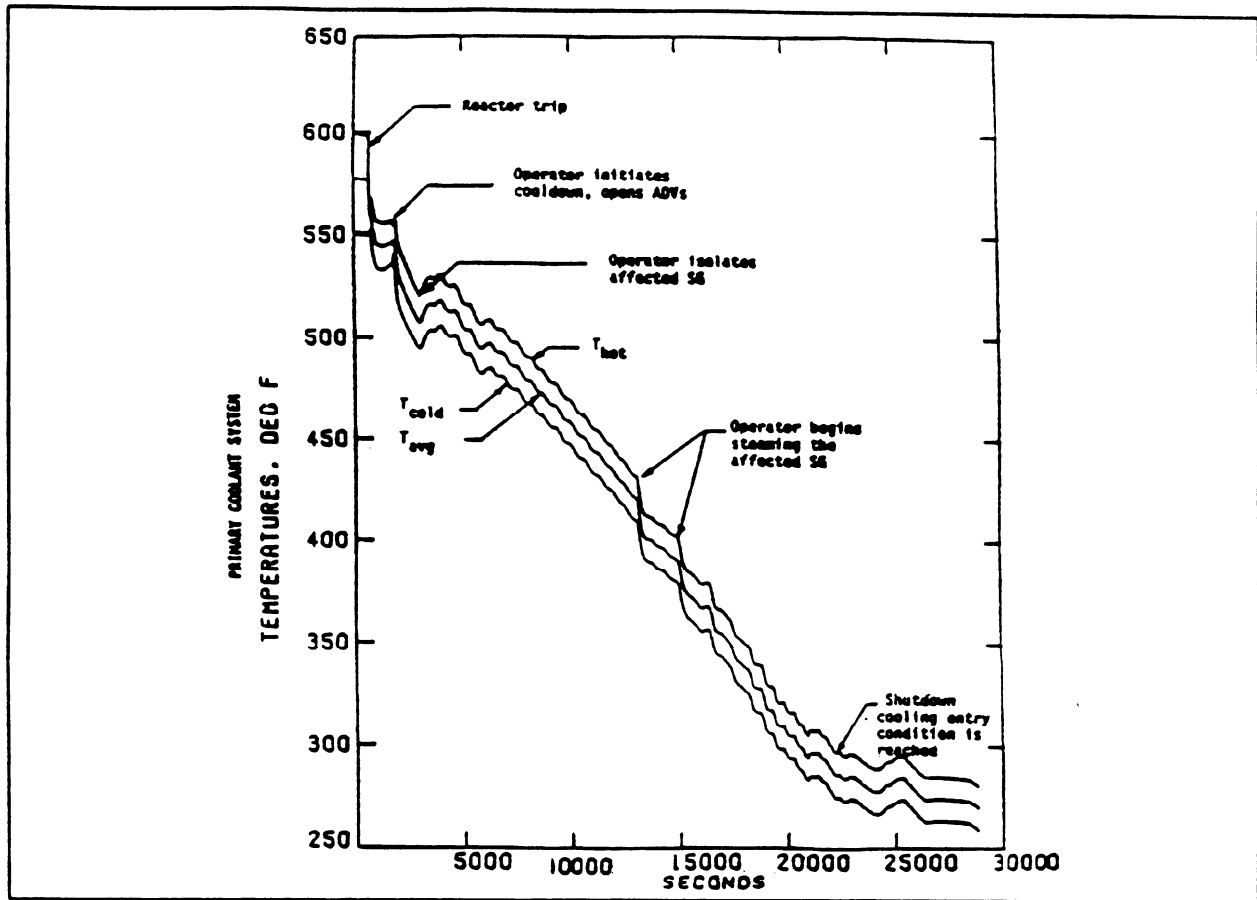
SGTR WITH LOAC: STEAM GENERATORS LIQUID MASS vs TIME



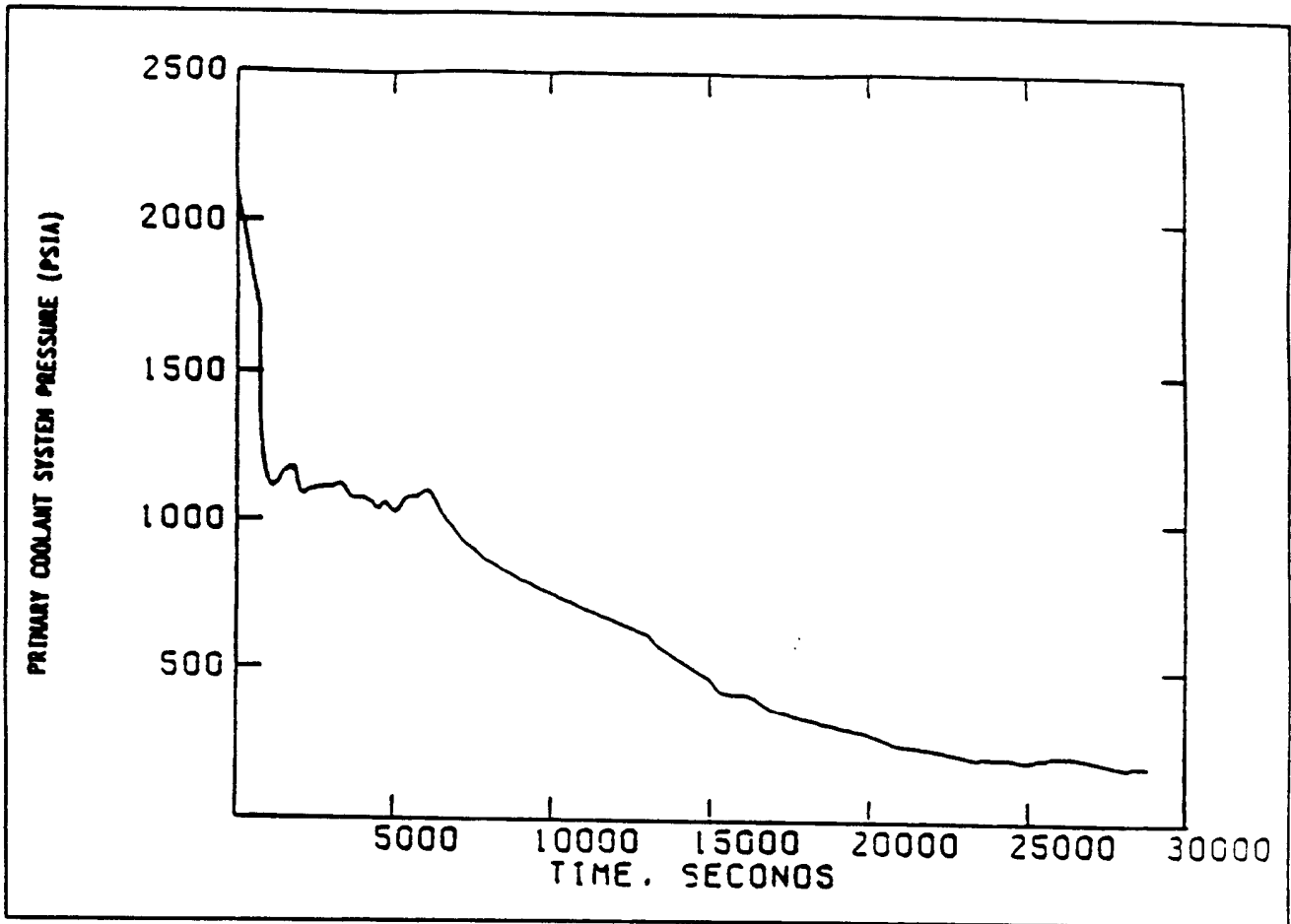
SGTR WITH LOAC: CORE POWER vs TIME



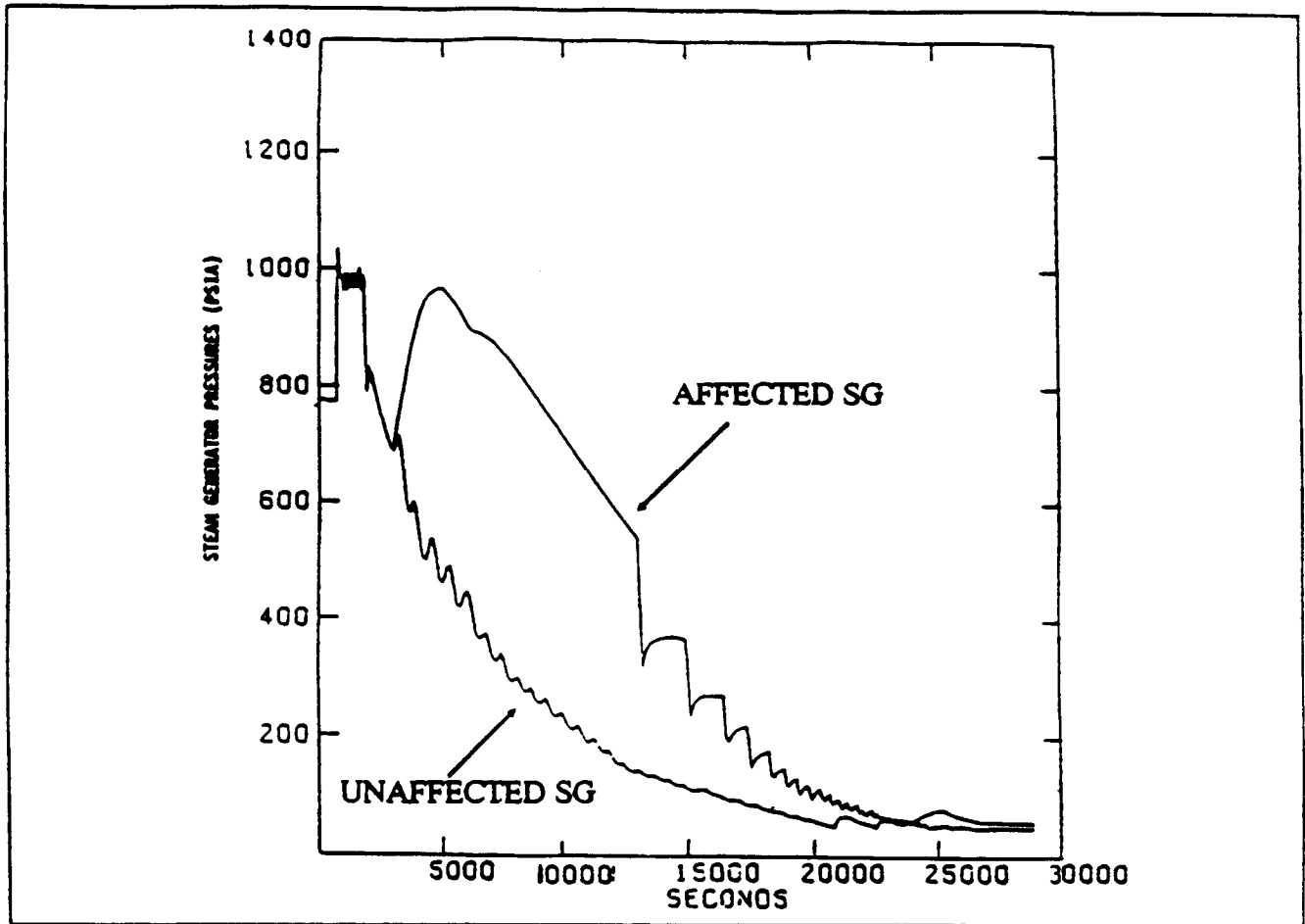
SGTR WITH LOAC: CORE COOLANT TEMPERATURES vs TIME



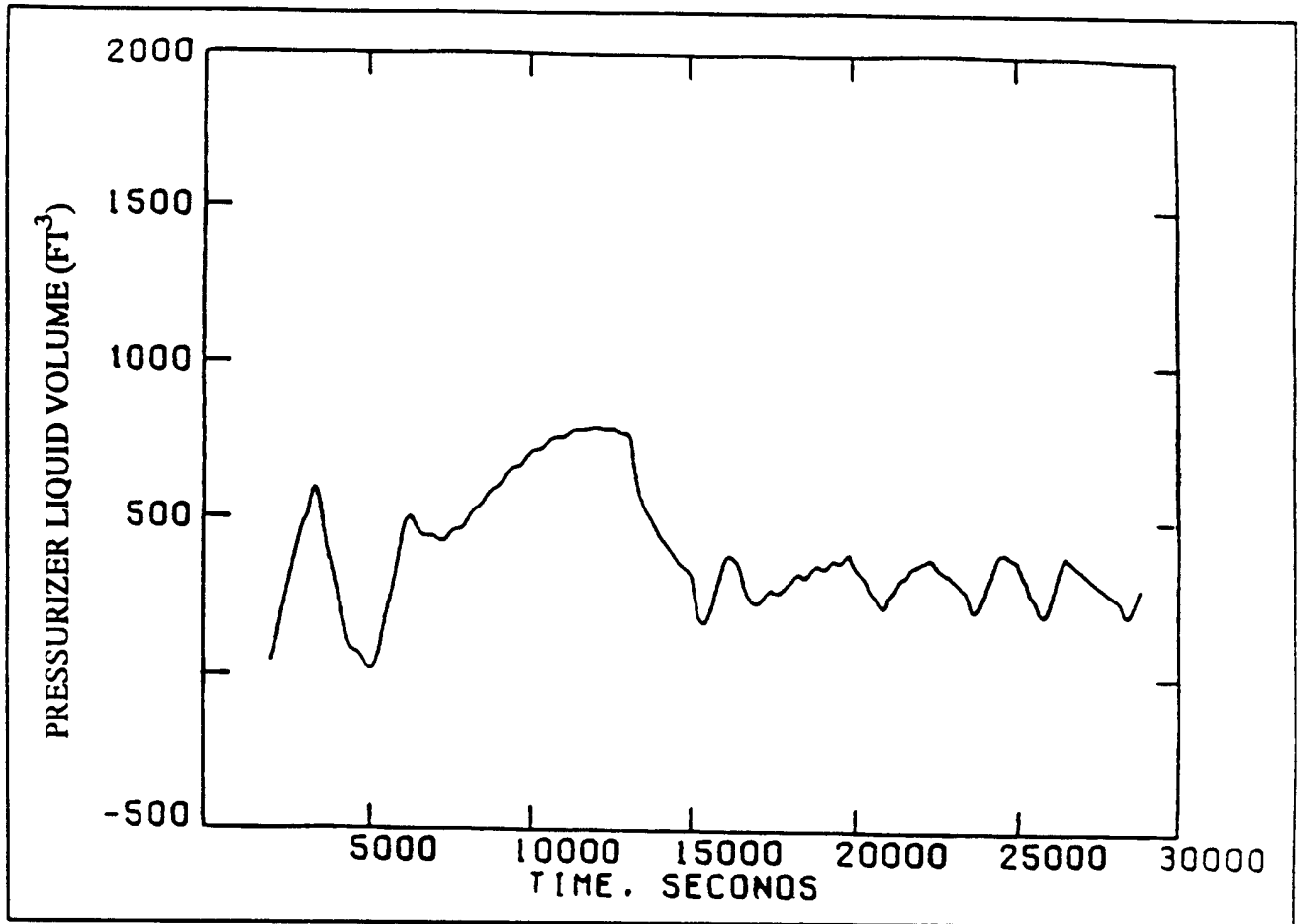
SGTR WITH LOAC: PRIMARY COOLANT SYSTEM PRESSURE vs TIME



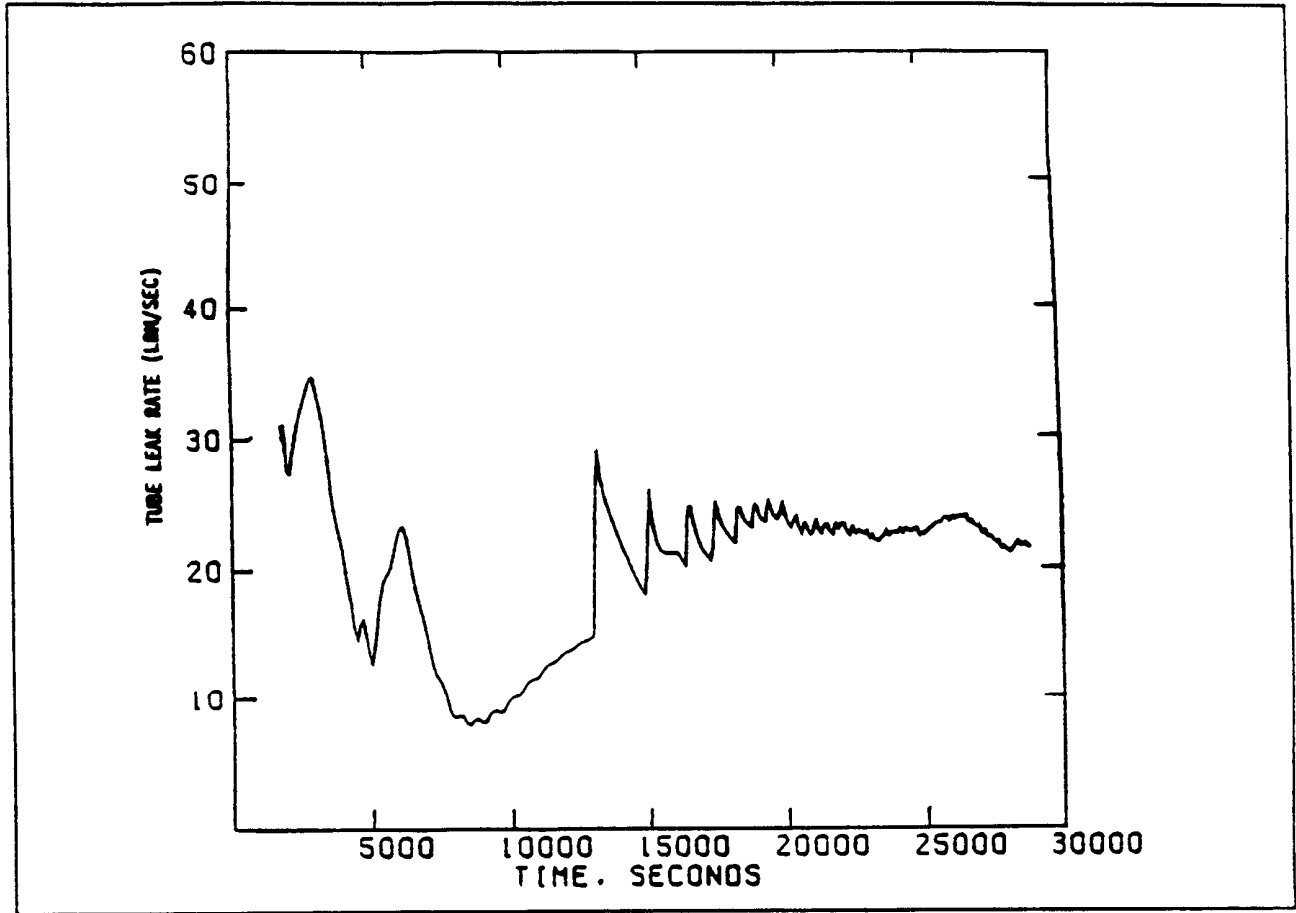
SGTR WITH LOAC: STEAM GENERATORS PRESSURE vs TIME



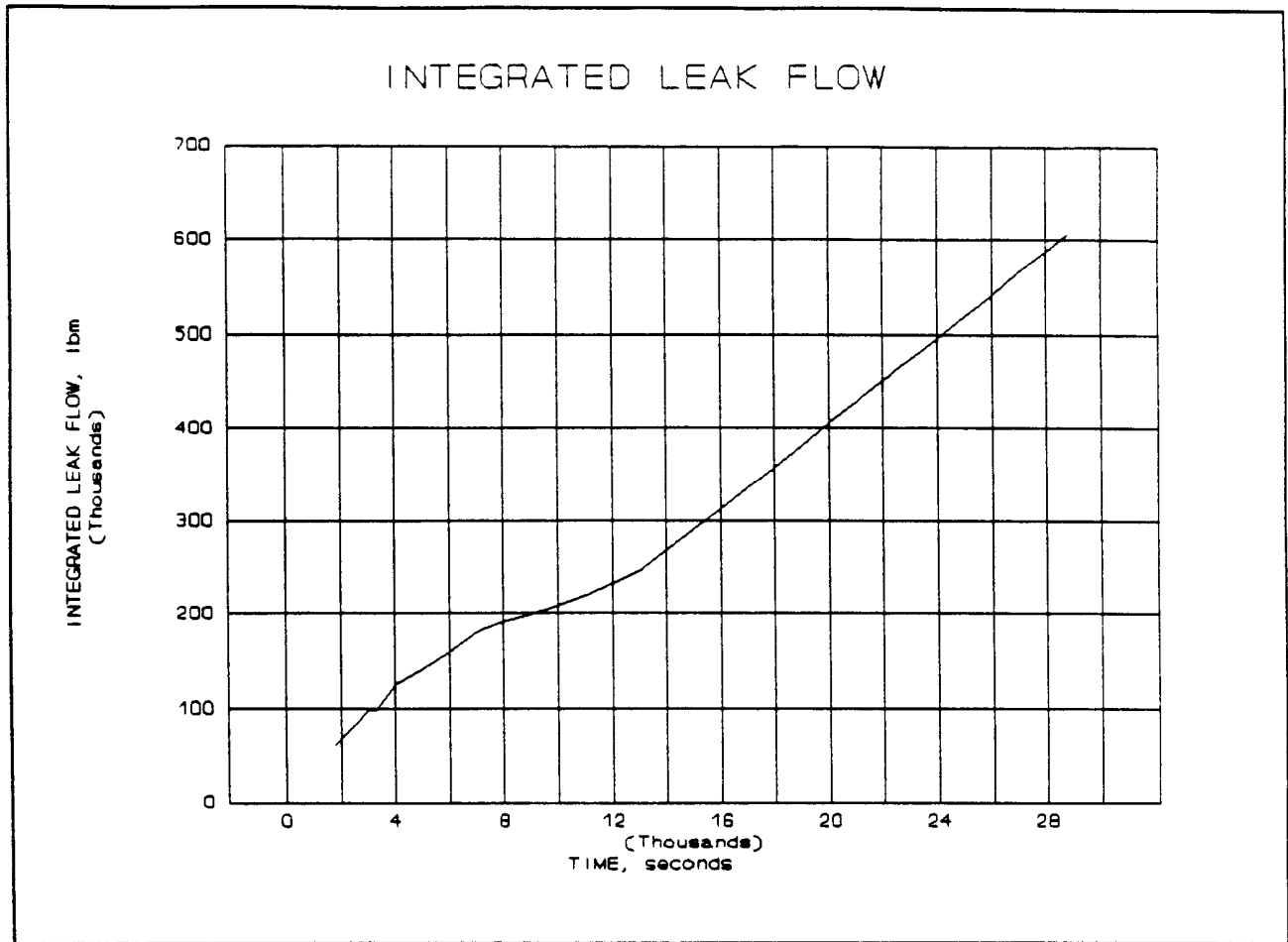
SGTR WITH LOAC: PRESSURIZER LIQUID VOLUME vs TIME



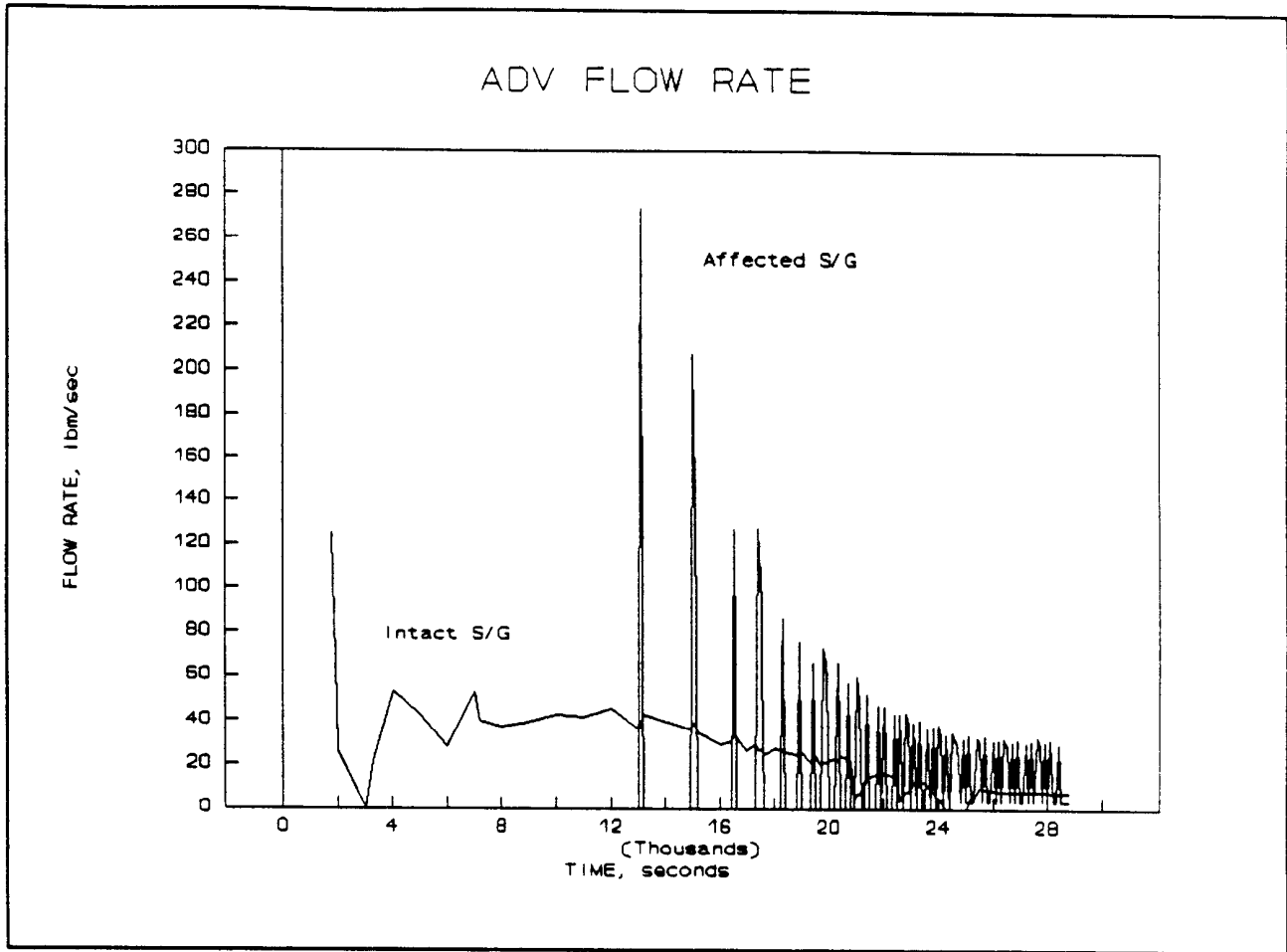
SGTR WITH LOAC: TUBE LEAK FLOW RATE vs TIME



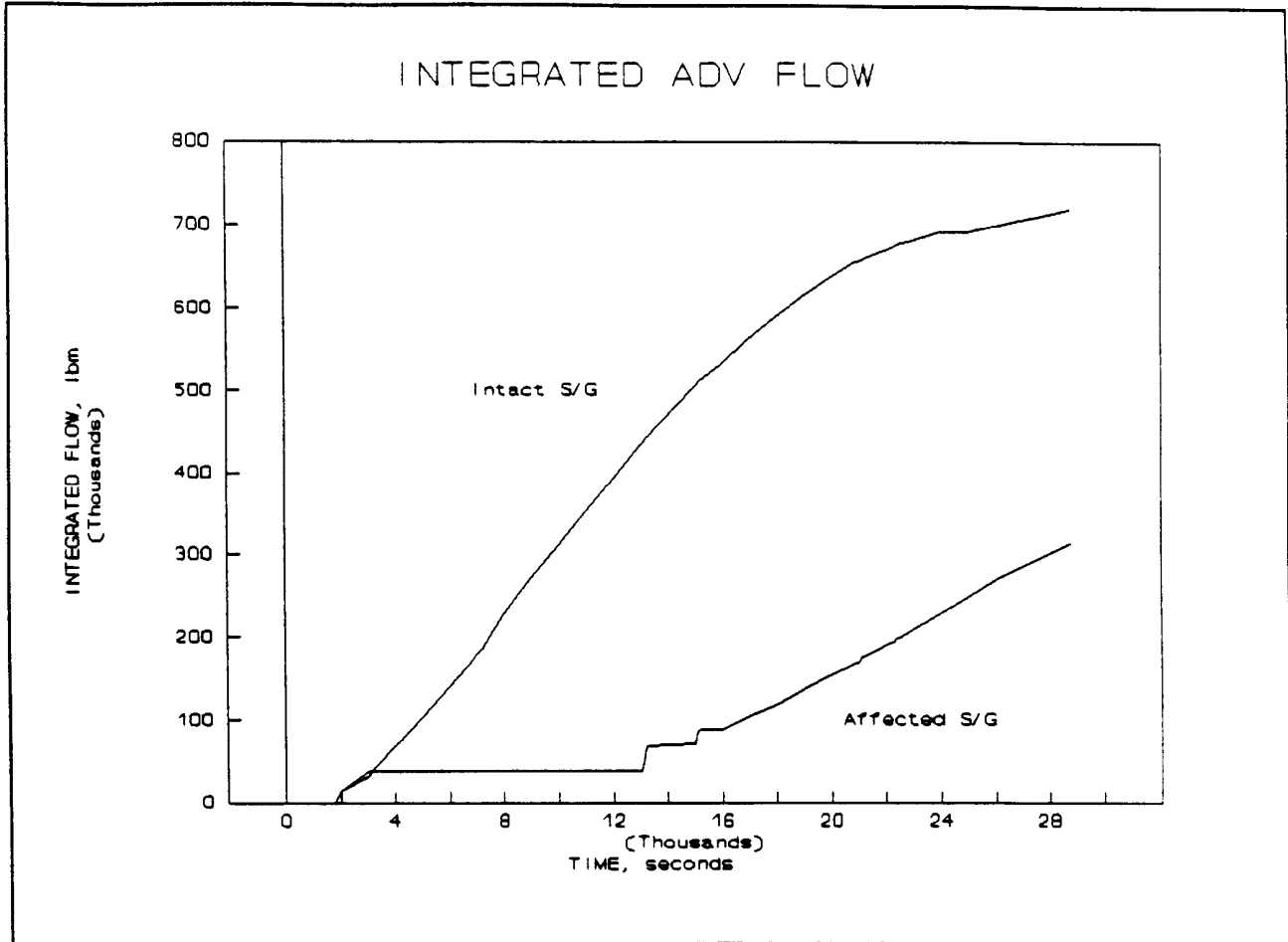
SGTR INTEGRATED LEAK FLOW vs TIME



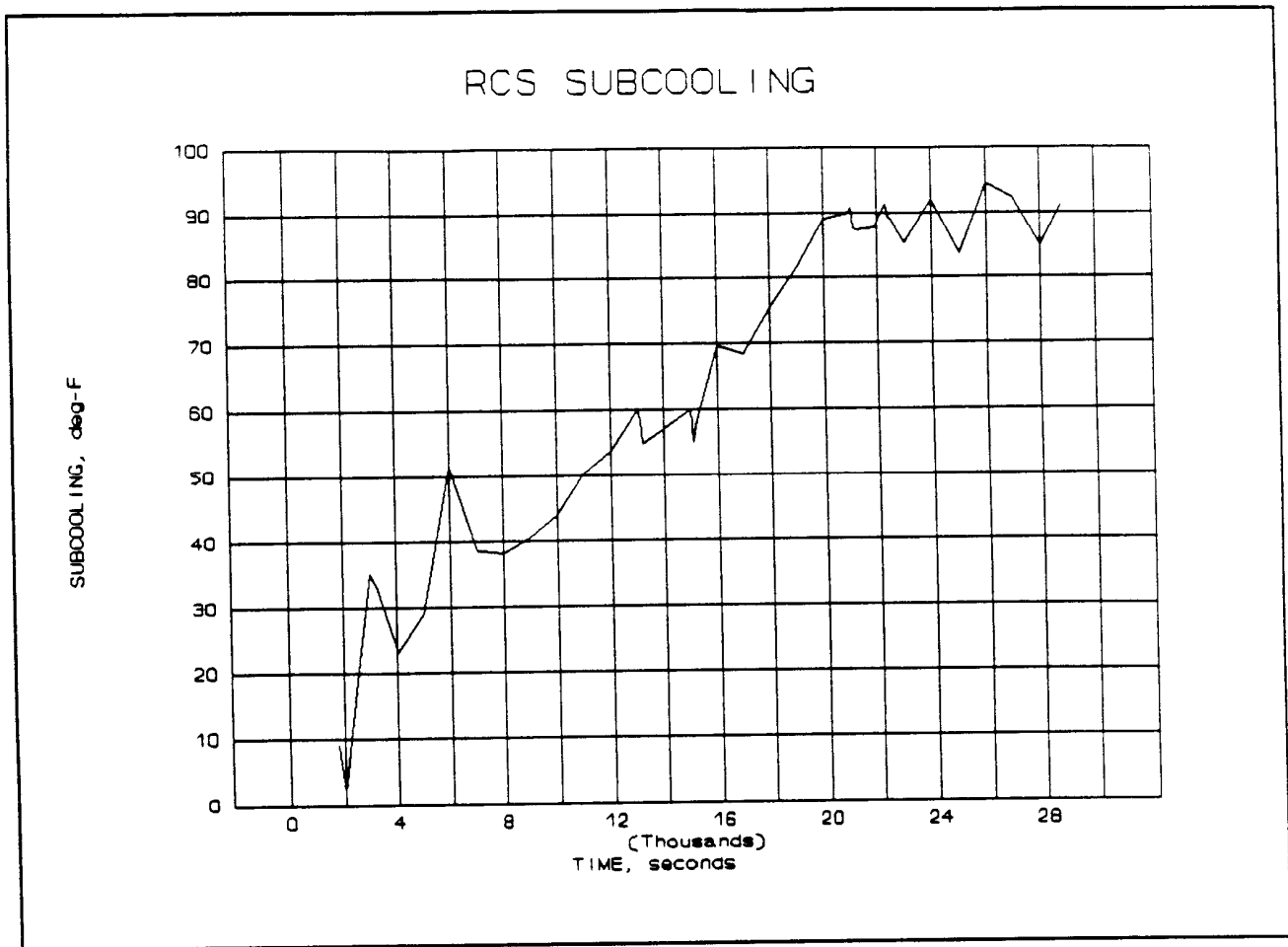
SGTR ADV FLOW RATE vs TIME



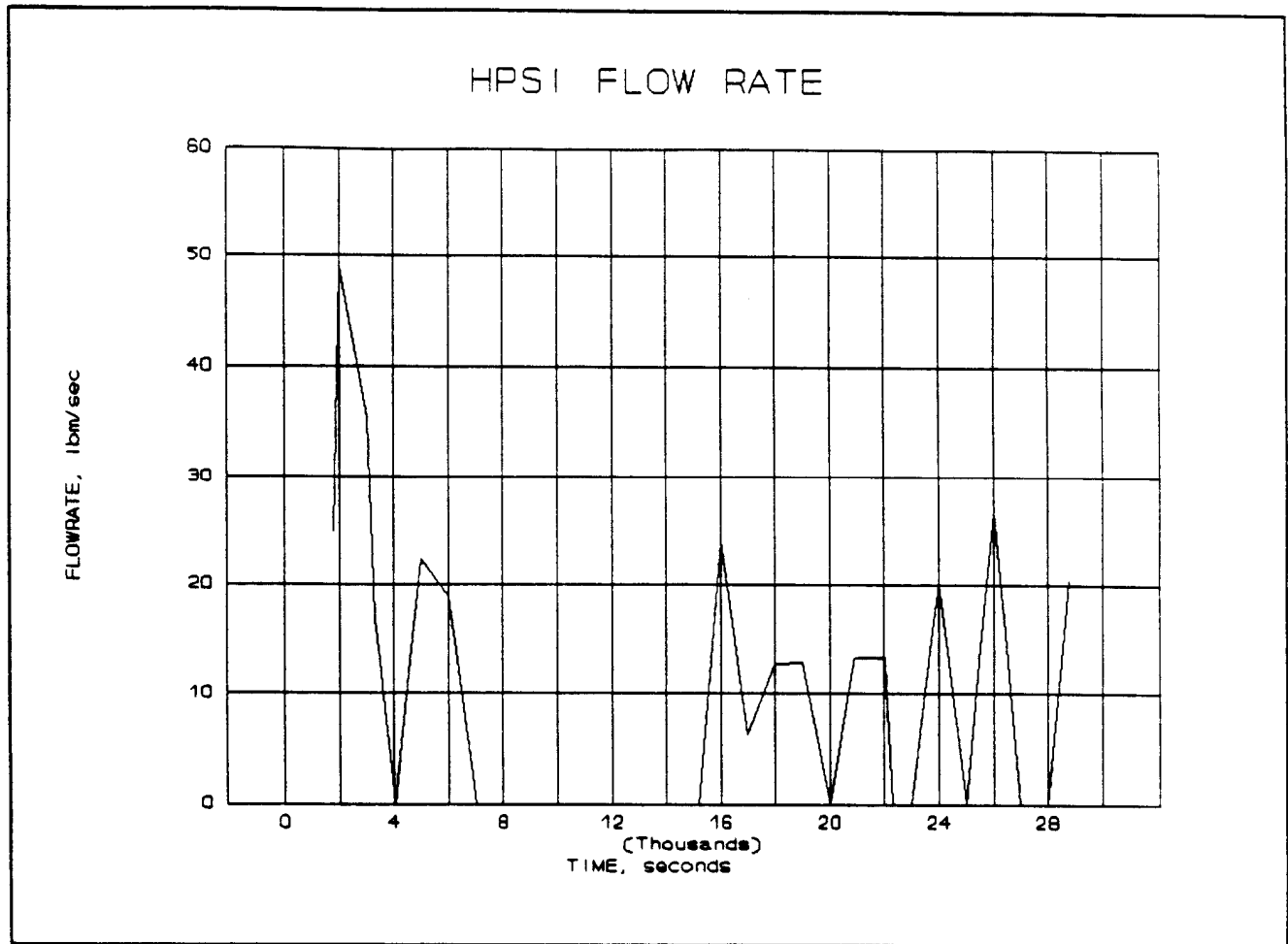
SGTR INTEGRATED ADV FLOW vs TIME



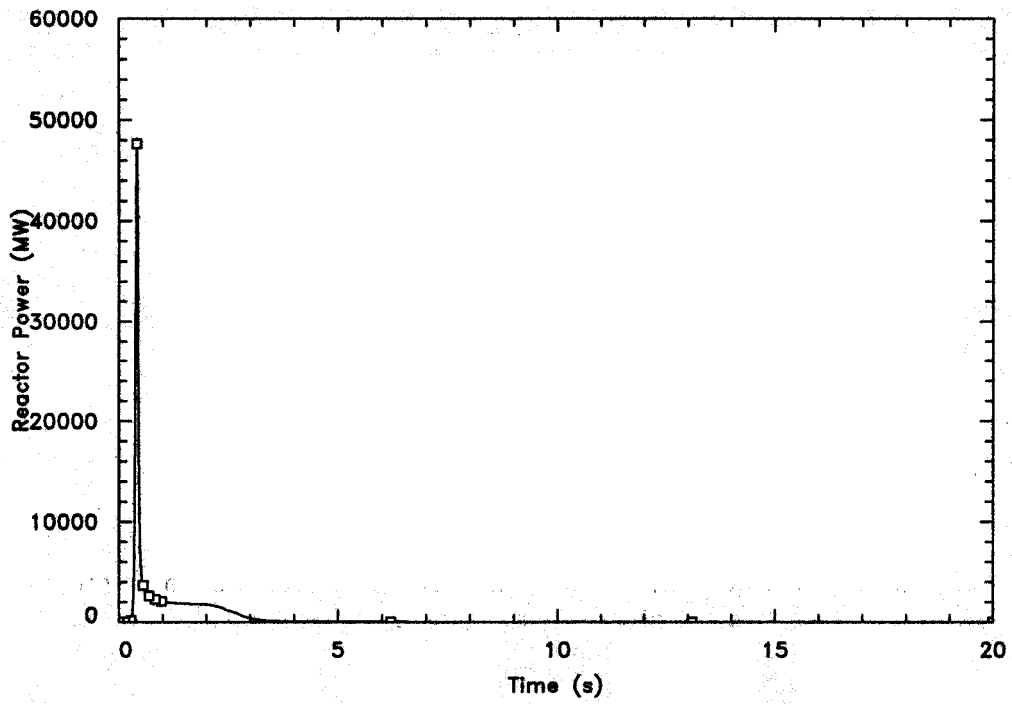
SGTR PCS SUBCOOLING vs TIME



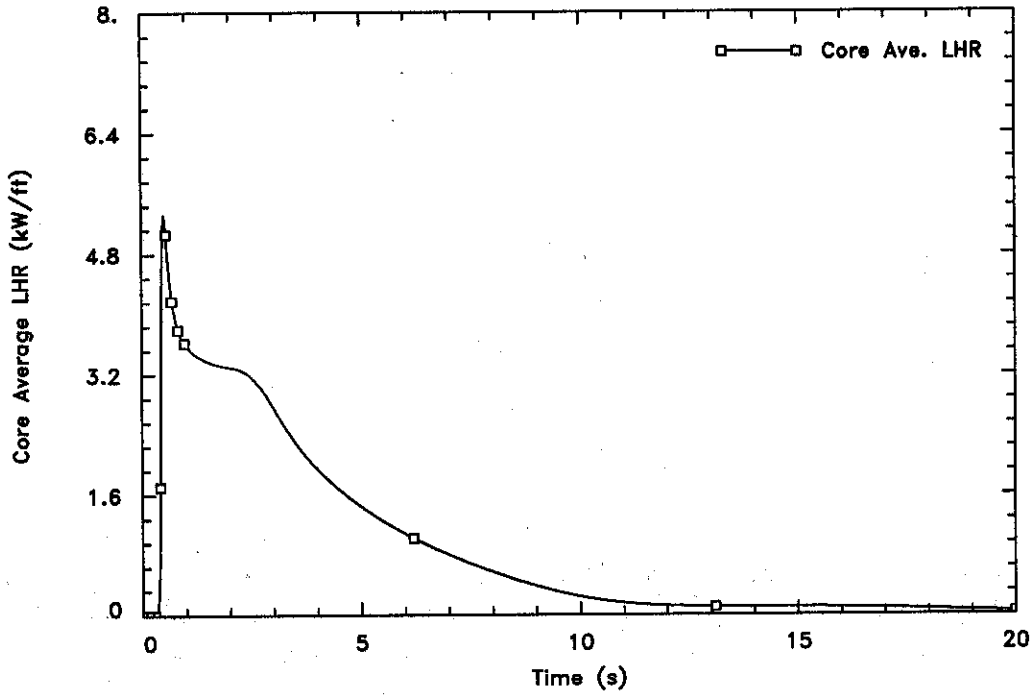
SGTR HPSI FLOW RATE vs TIME



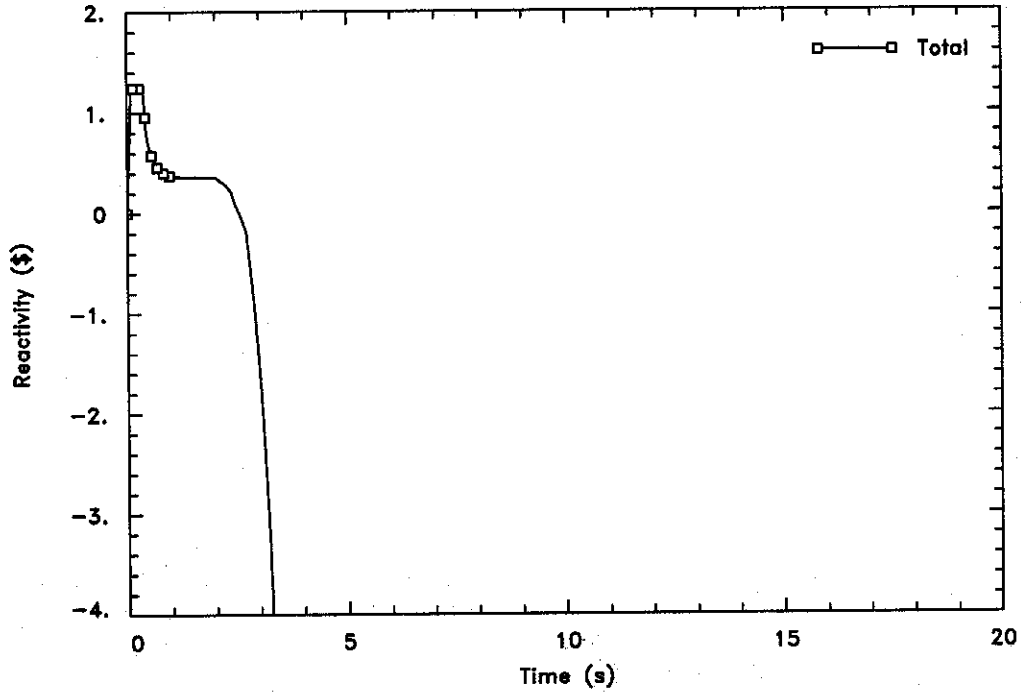
CONTROL ROD EJECTION, EOC HZP CASE: CORE POWER



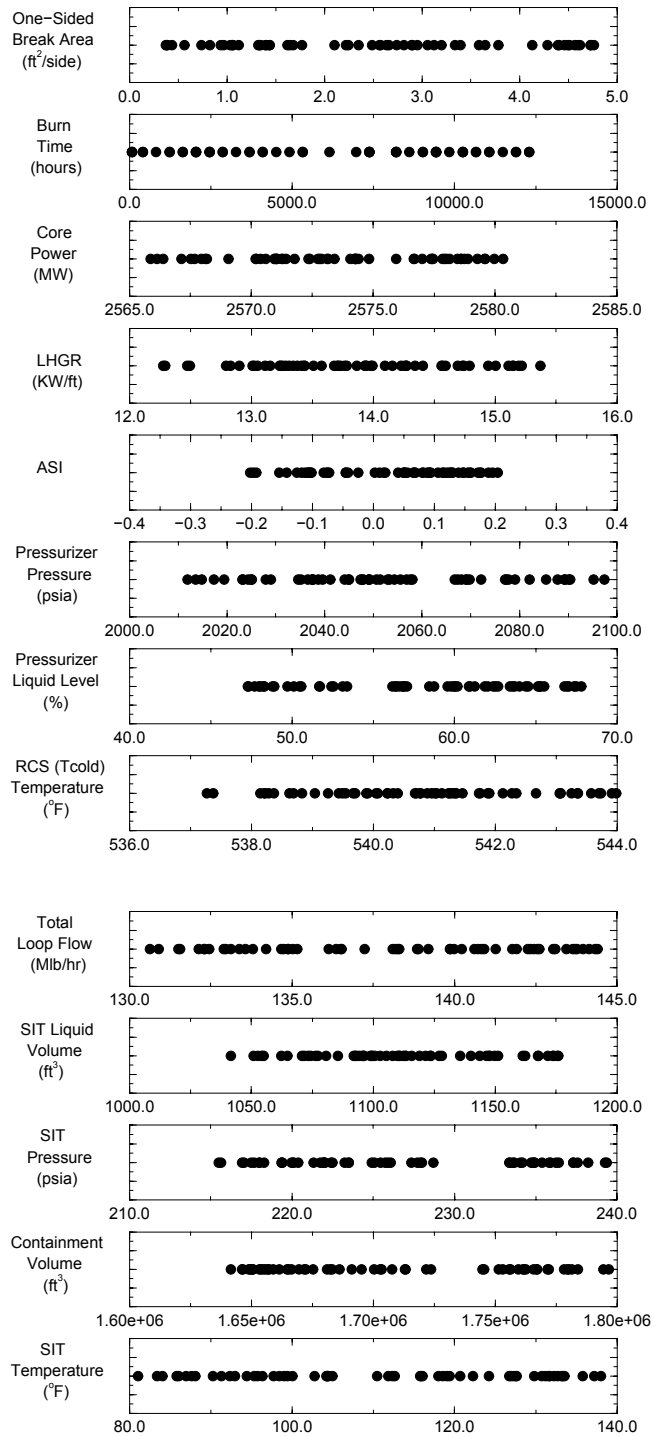
CONTROL ROD EJECTION, EOC HZP CASE: CORE AVERAGE HEAT-FLUX-BASED LHR



CONTROL ROD EJECTION, EOC HZP CASE: TOTAL CORE REACTIVITY

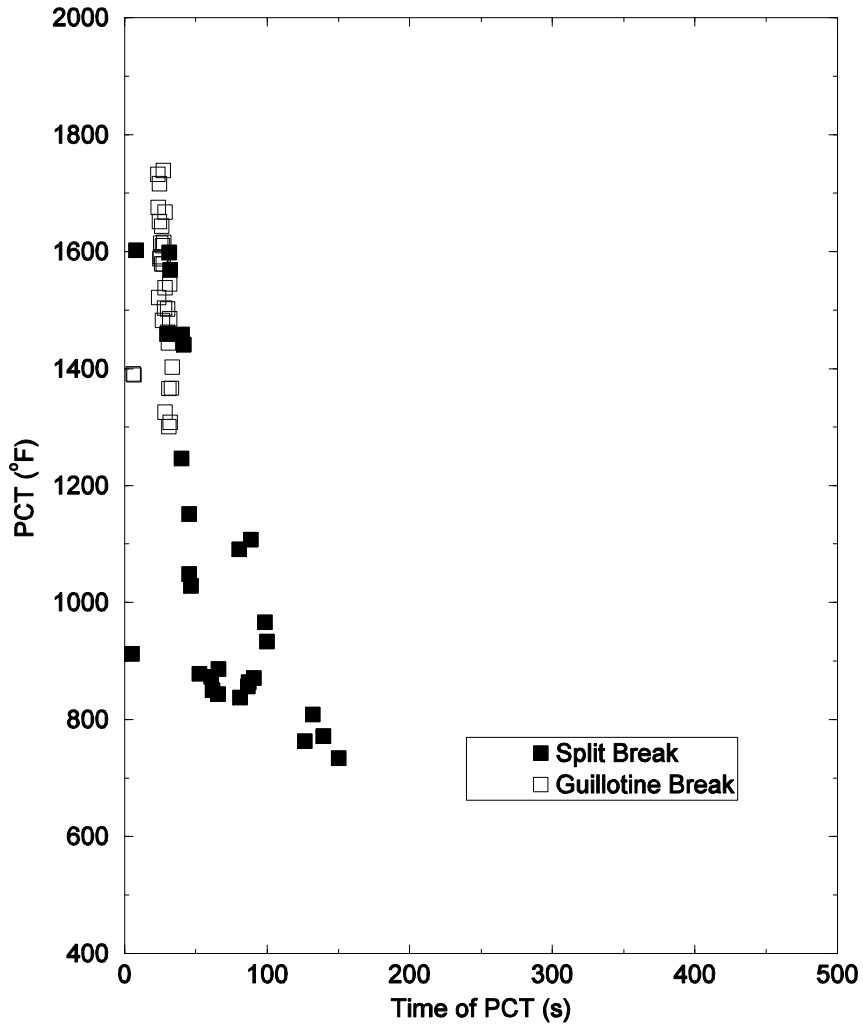


SCATTER PLOT OF OPERATIONAL PARAMETERS



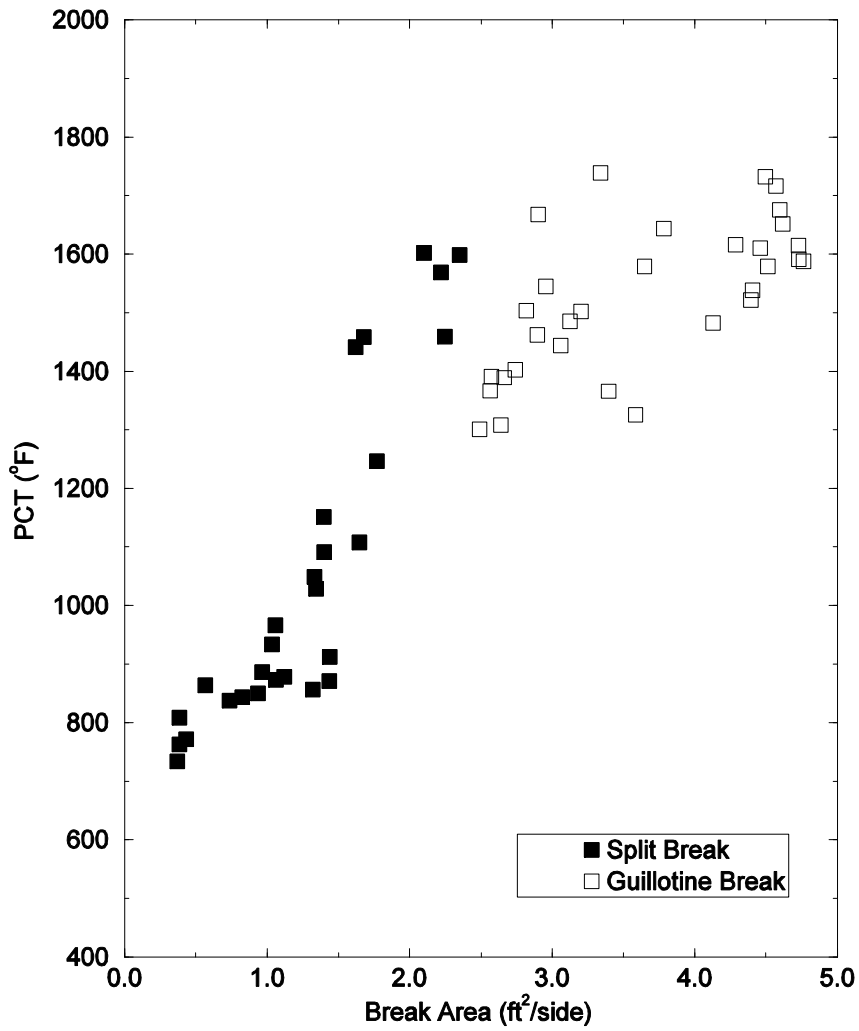
PCT VERSUS PCT TIME SCATTER PLOT FROM TRANSIENT CALCULATIONS

PCT vs Time of PCT



PCT VERSUS BREAK SIZE SCATTER PLOT FROM TRANSIENT CALCULATIONS

PCT vs One-sided Break Area

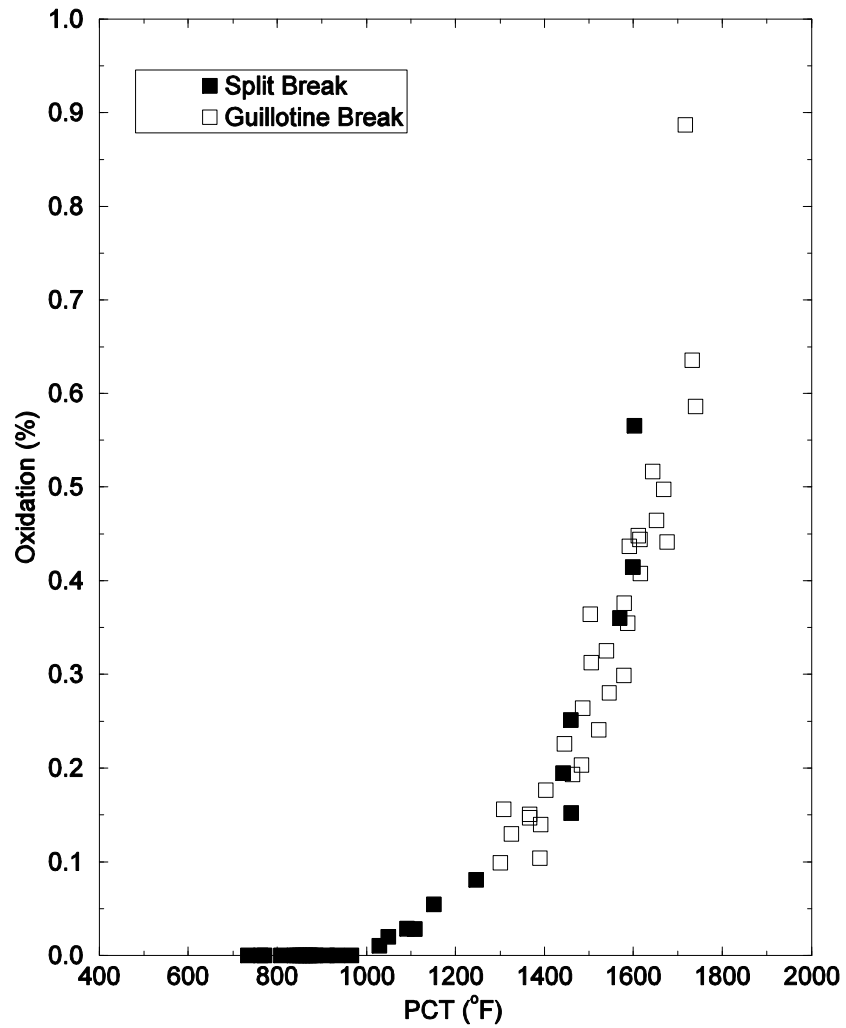


SUMMARY OF MAJOR PARAMETERS FOR THE LIMITING PCT CASE

	6.0 % Gad Rod
Core Average Burnup (EFPD)	7,381.22
Core Power (MWt)	2,572.79
Hot Rod LHR, kW/ft	14.60
Total Hot Rod Radial Peak (F_r^T)	2.040
Axial Shape Index (ASI)	0.1602
Break Type	Guillotine
Break Size (ft ² /side)	3.339
Offsite Power Availability	Not Available
Decay Heat Multiplier	1.01073

MAXIMUM OXIDATION VERSUS PCT SCATTER PLOT
FROM TRANSIENT CALCULATIONS

Maximum Oxidation vs PCT

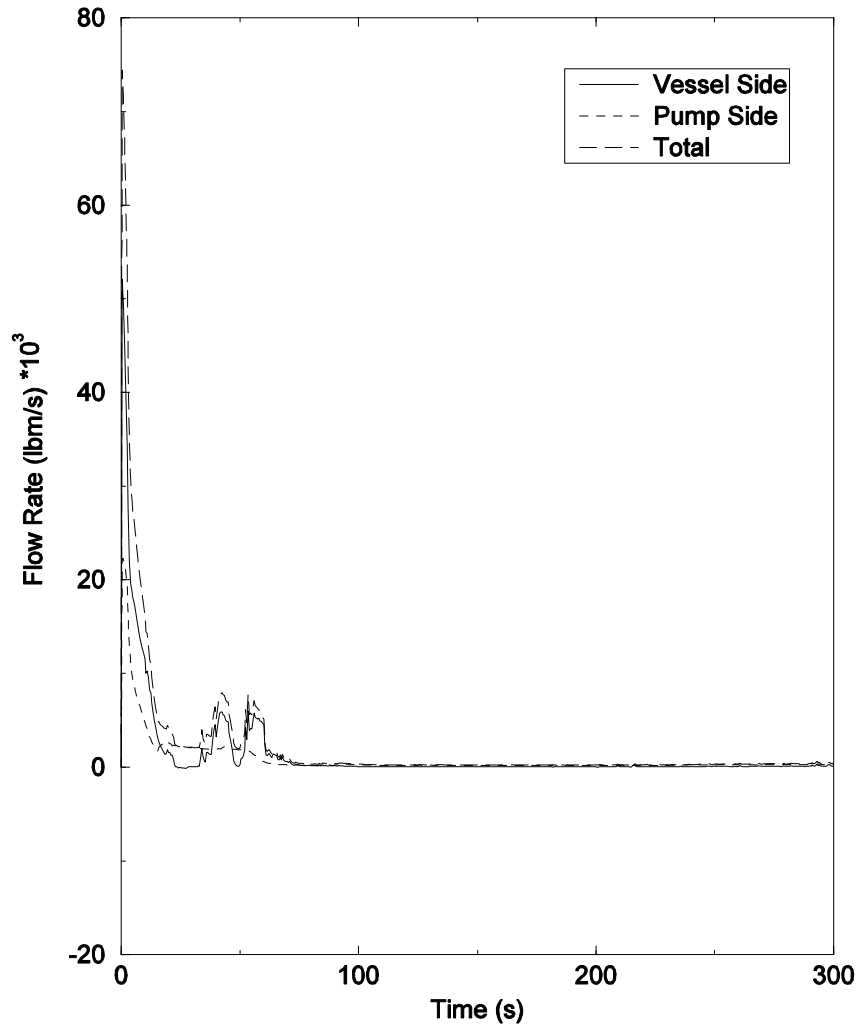


CALCULATED EVENT TIMES FOR THE LIMITING PCT CASE

Event	Time (sec)
Break Opened	0
PCP Trip	0
SIAS Issued	0.6
Start of Broken Loop SIT Injection	14.9
Start of Intact Loop SIT Injection (loops 1B, 2A and 2B, respectively)	17.1, 17.1 and 17.1
Beginning of Core Recovery (Beginning of Reflood)	27.2
PCT Occurred	27.2
Start of HPSI	40.6
LPSI Available	40.6
Broken Loop LPSI Delivery Began	40.6
Intact Loop LPSI Delivery Began (loops 1B, 2A and 2B, respectively)	40.6, 40.6 and 40.6
Broken Loop HPSI Delivery Began	40.6
Intact Loop HPSI Delivery Began (loops 1B, 2A and 2B, respectively)	40.6, 40.6, 40.6
Broken Loop SIT Emptied	50.7
Intact Loop SIT Emptied (loops 1B, 2A and 2B, respectively)	50.8, 54.6 and 53.1
Transient Calculation Terminated	300

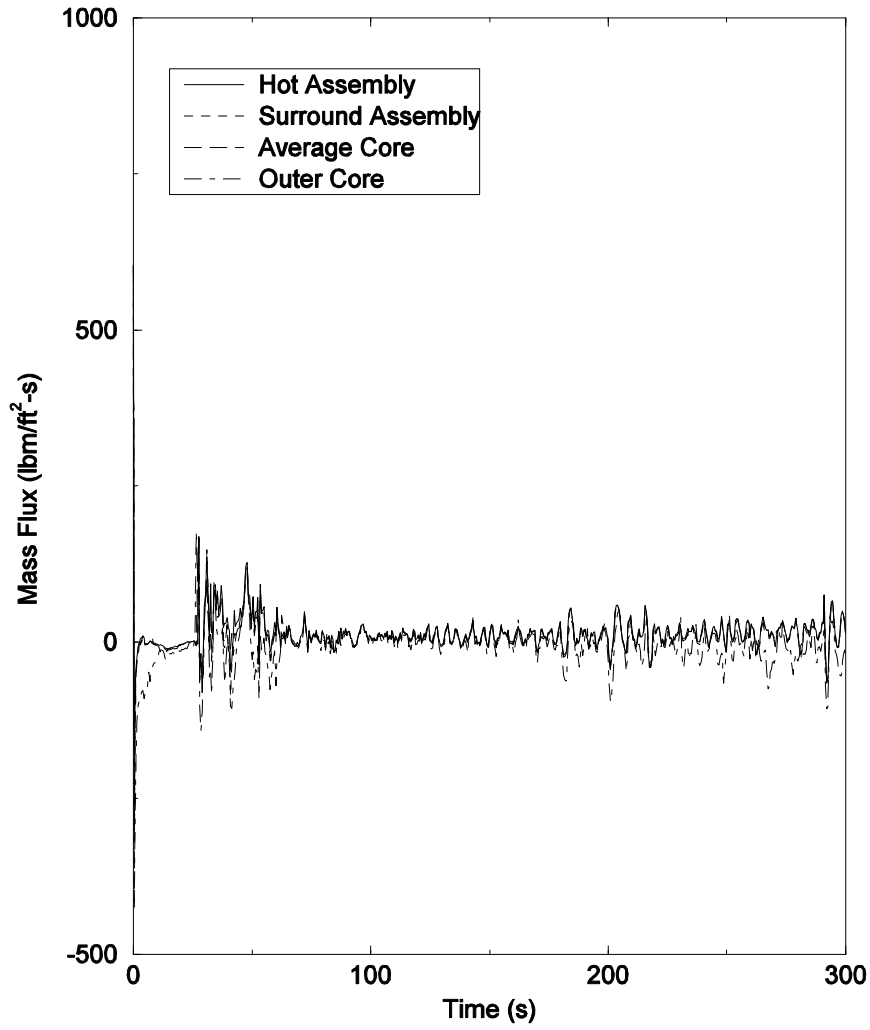
BREAK FLOW FOR THE LIMITING CASE

Break Flow

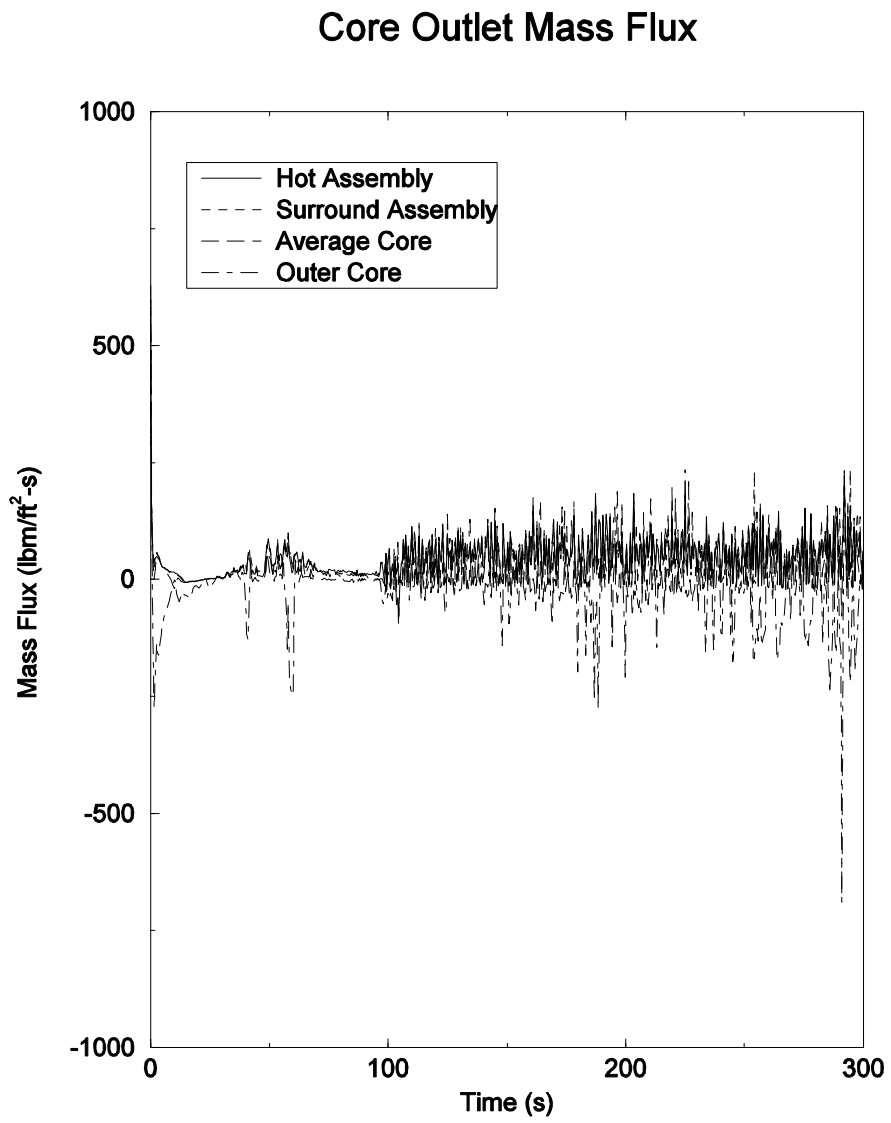


CORE INLET MASS FLUX FOR THE LIMITING CASE

Core Inlet Mass Flux

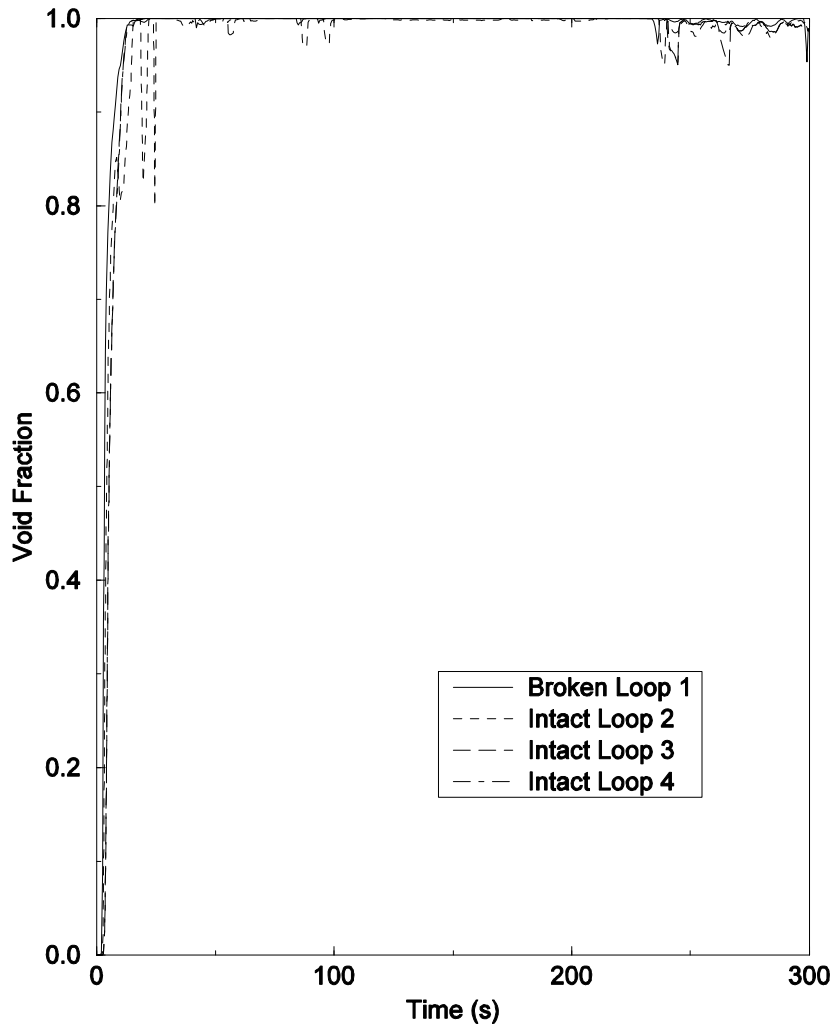


CORE OUTLET MASS FLUX FOR THE LIMITING CASE

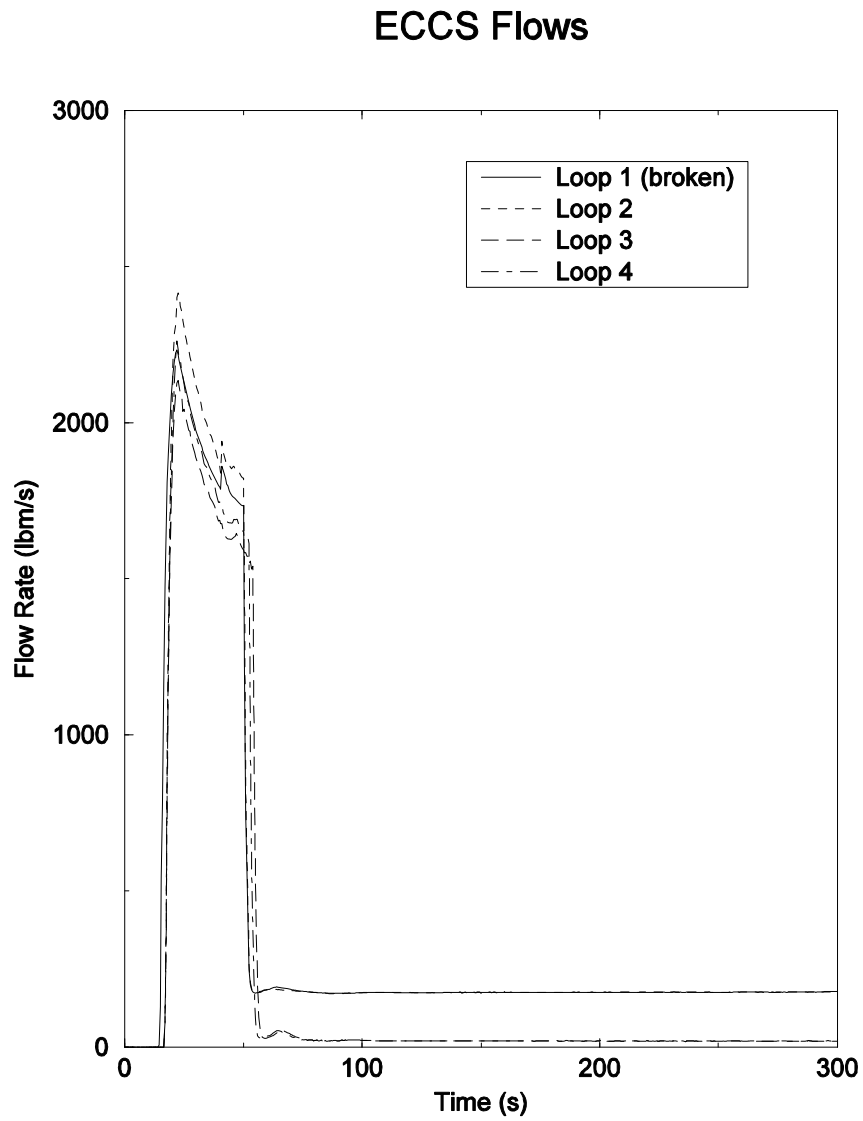


VOID FRACTION AT PCS PUMPS FOR THE LIMITING CASE

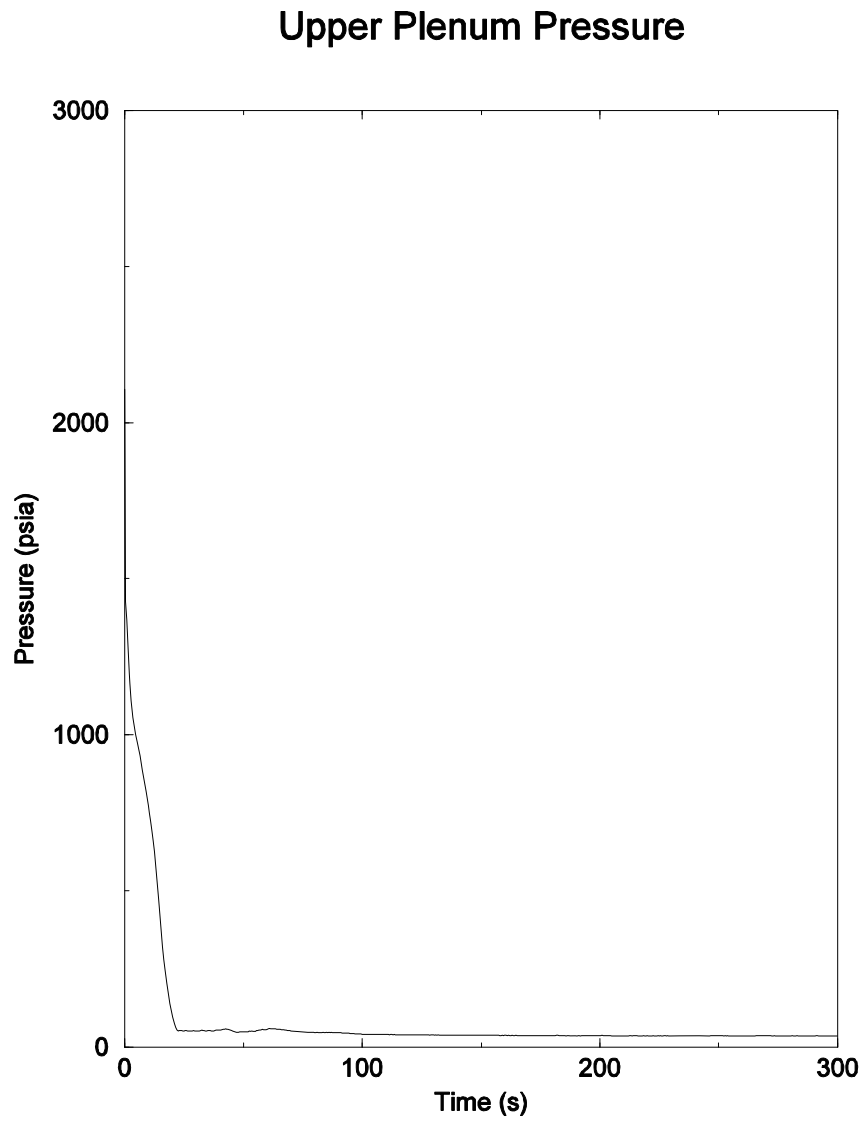
Pump Void Fraction



ECCS FLOW (INCLUDES SIT, HPSI, AND LPSI) FOR THE LIMITING CASE

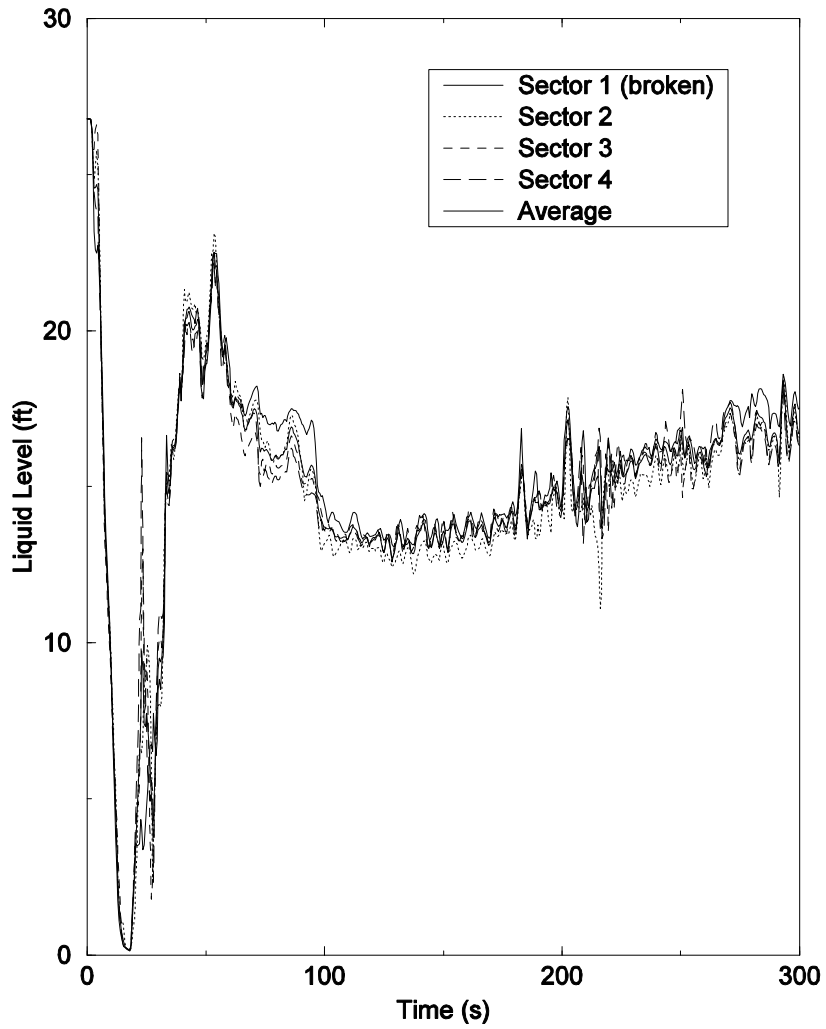


UPPER PLENUM PRESSURE FOR THE LIMITING CASE

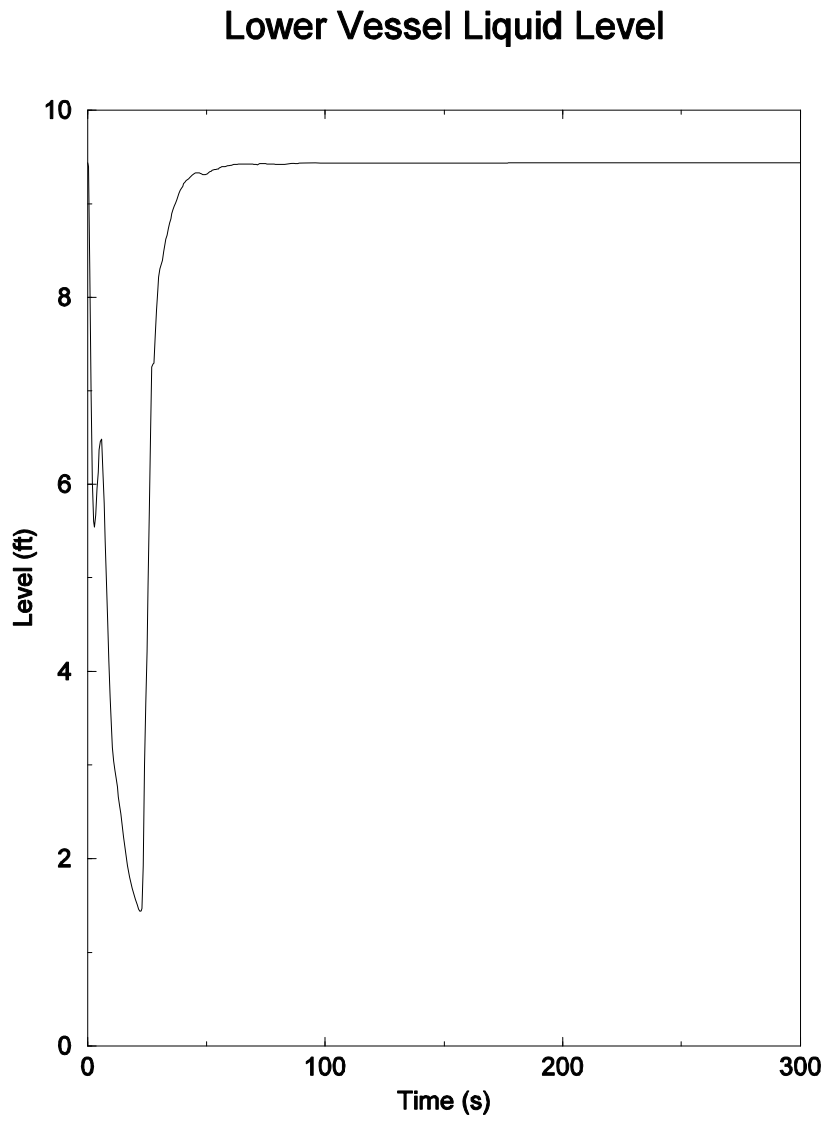


COLLAPSED LIQUID LEVEL IN THE DOWNCOMER FOR THE LIMITING CASE

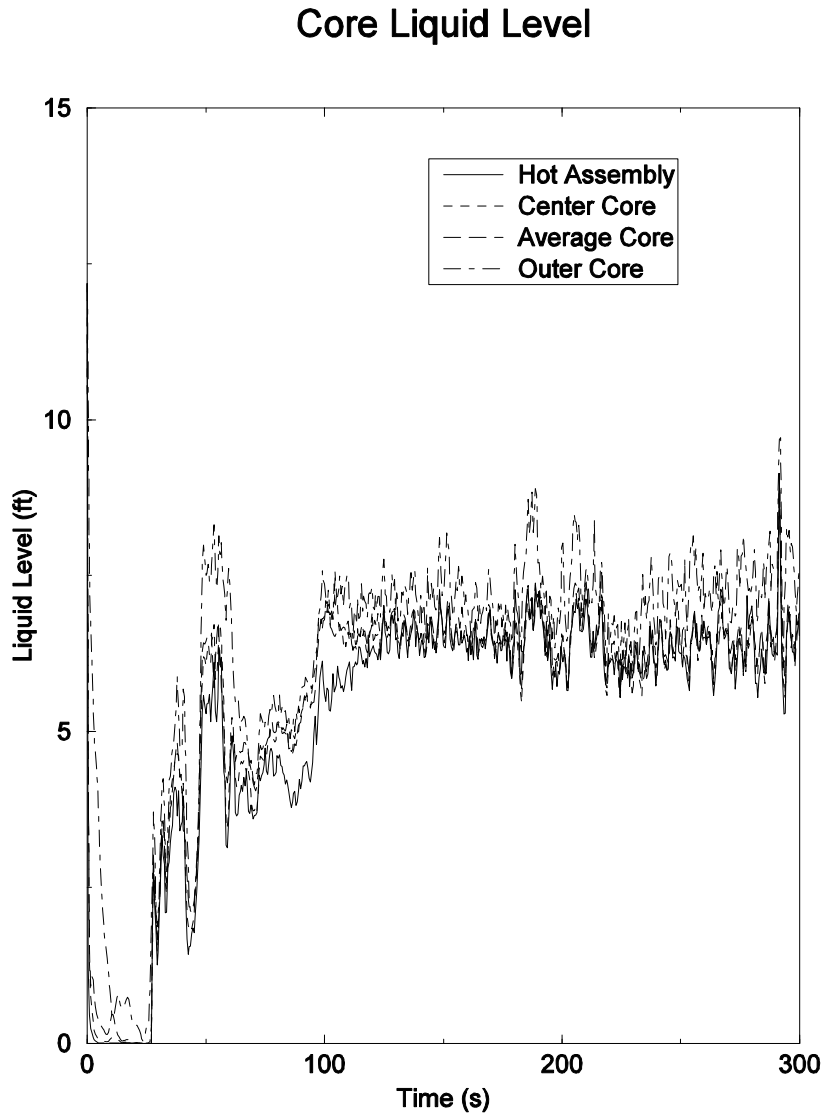
Downcomer Liquid Level



COLLAPSED LIQUID LEVEL IN THE LOWER PLENUM FOR THE LIMITING CASE

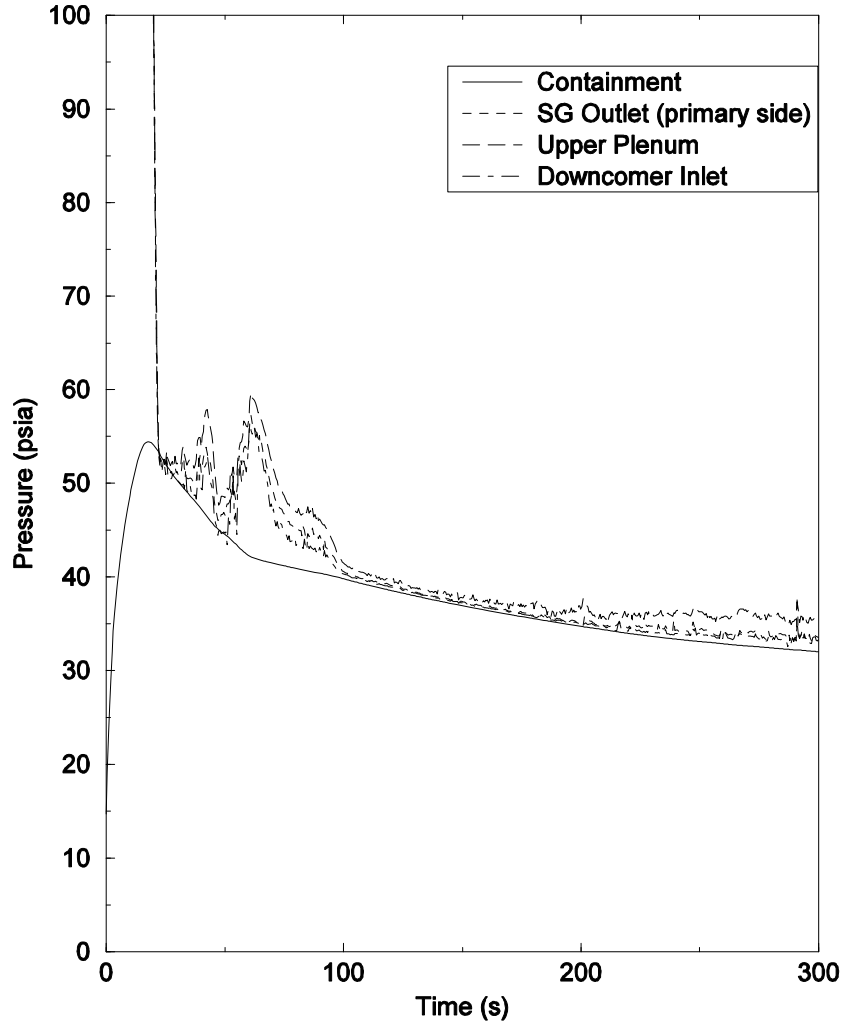


COLLAPSED LIQUID LEVEL IN THE CORE FOR THE LIMITING CASE



CONTAINMENT AND LOOP PRESSURES FOR THE LIMITING CASE

Containment and Loop Pressures



CORE EFFECTIVE FLOODING RATE

DELETED in Revision 28

CORE COLLAPSED LIQUID LEVEL

DELETED in Revision 28

CORE QUENCH LEVEL

DELETED in Revision 28

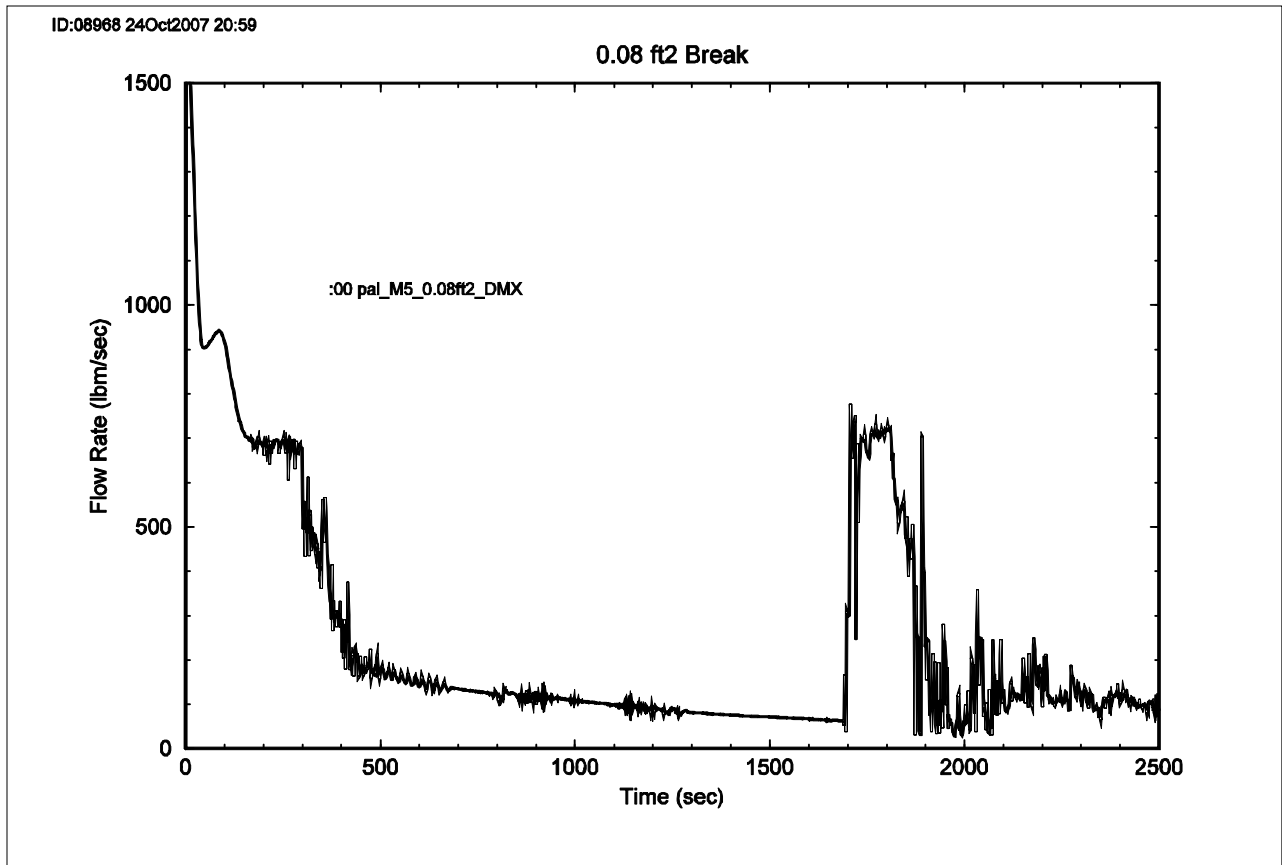
PCT-NODE HEAT TRANSFER COEFFICIENT

DELETED in Revision 28

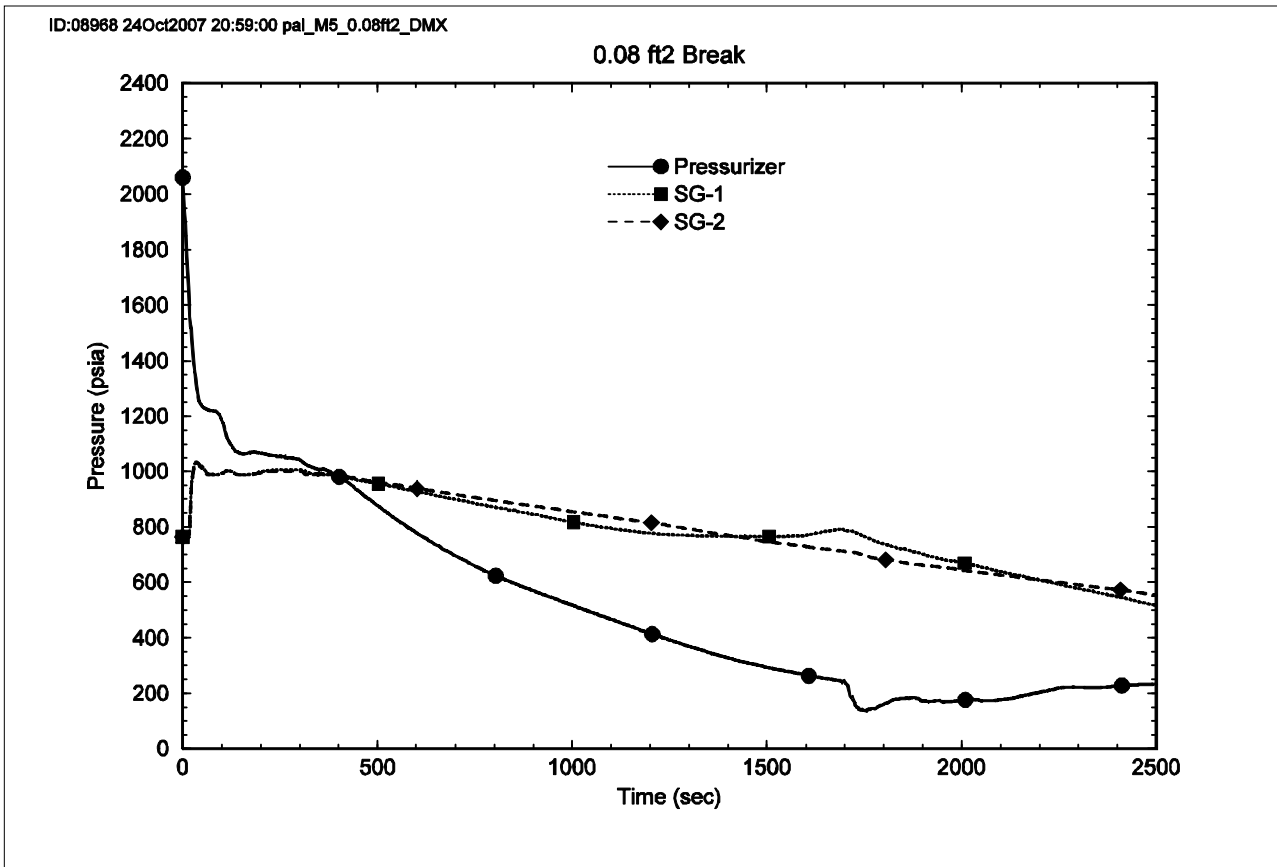
**PEAK CLADDING AND RUPTURE LOCATION CLADDING TEMPERATURE
FOR THE LIMITING CASE**

DELETED in Revision 28

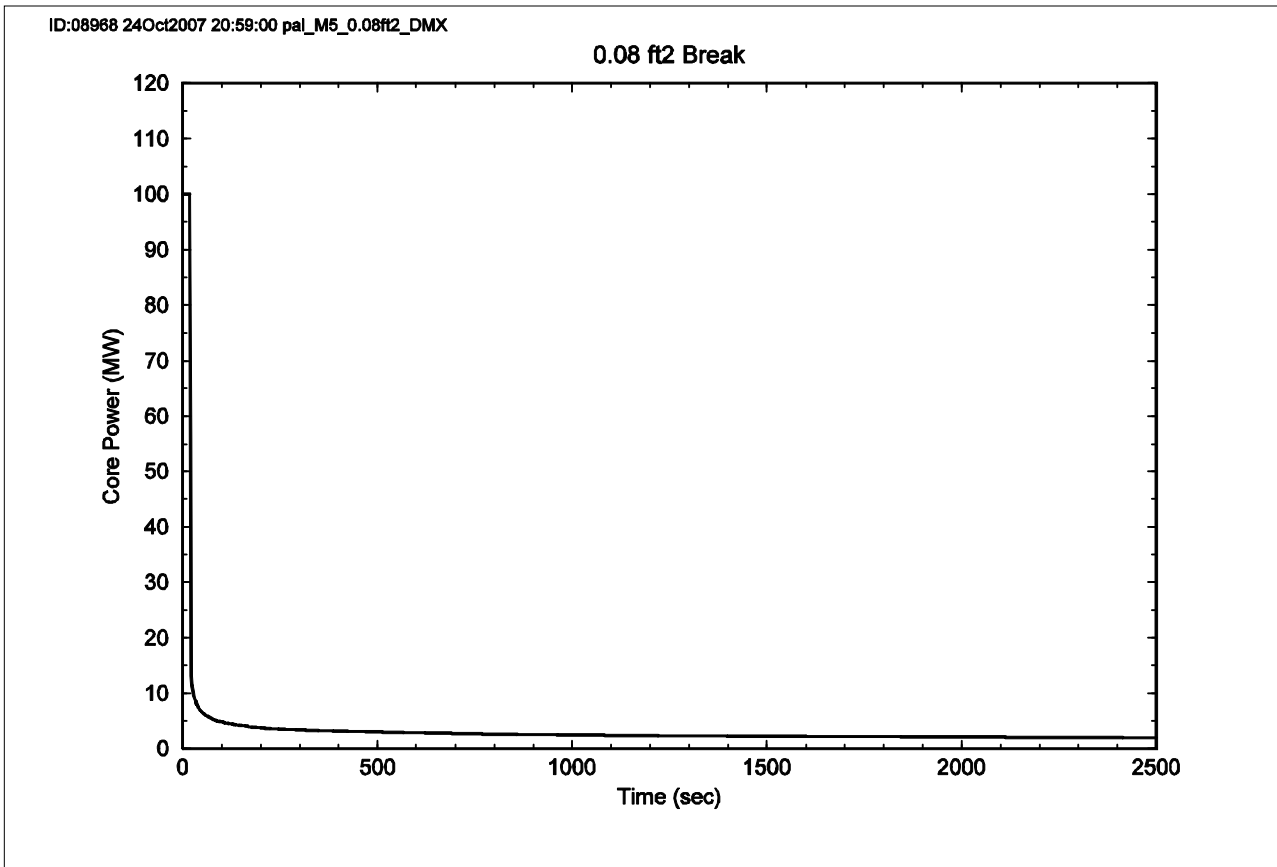
Break Mass Flow Rate (Limiting Case)



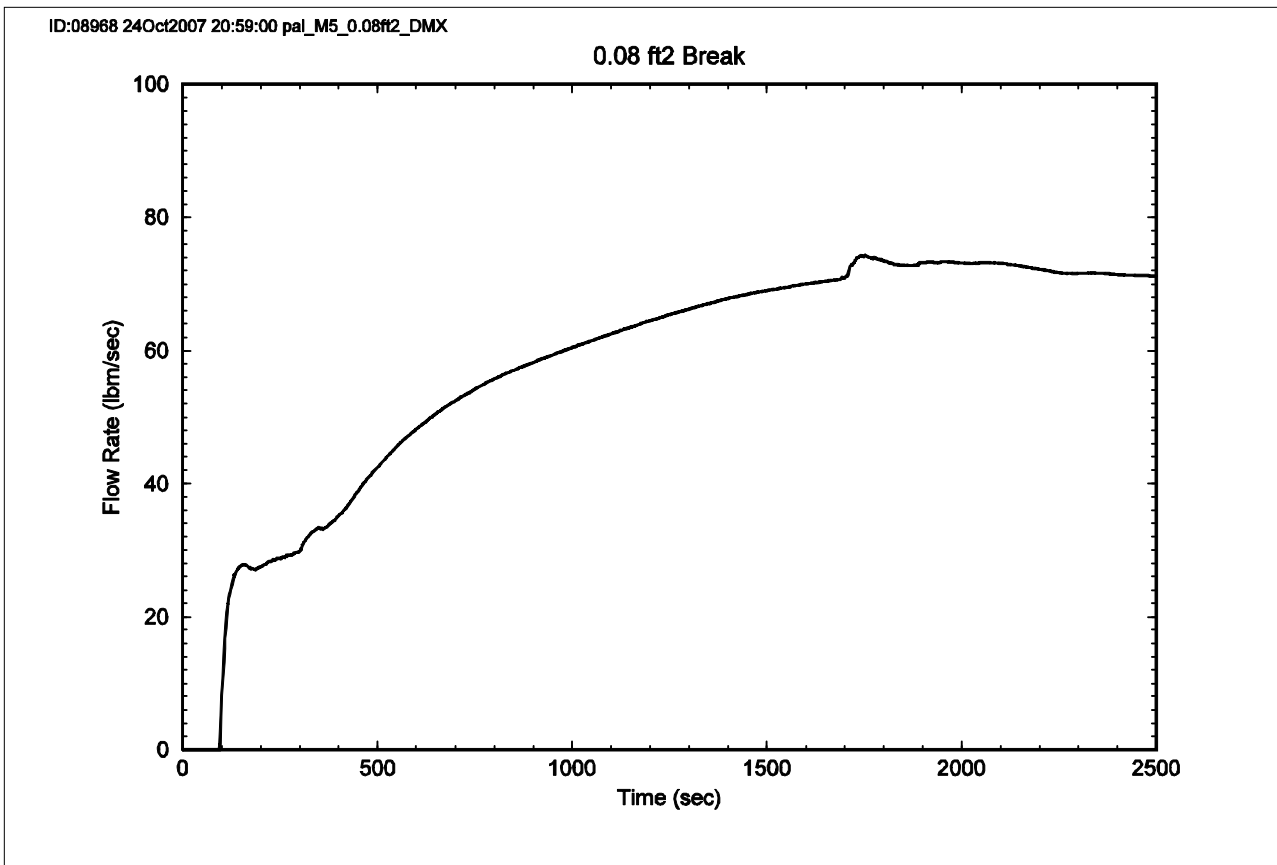
Primary and Secondary Pressures (Limiting Case)



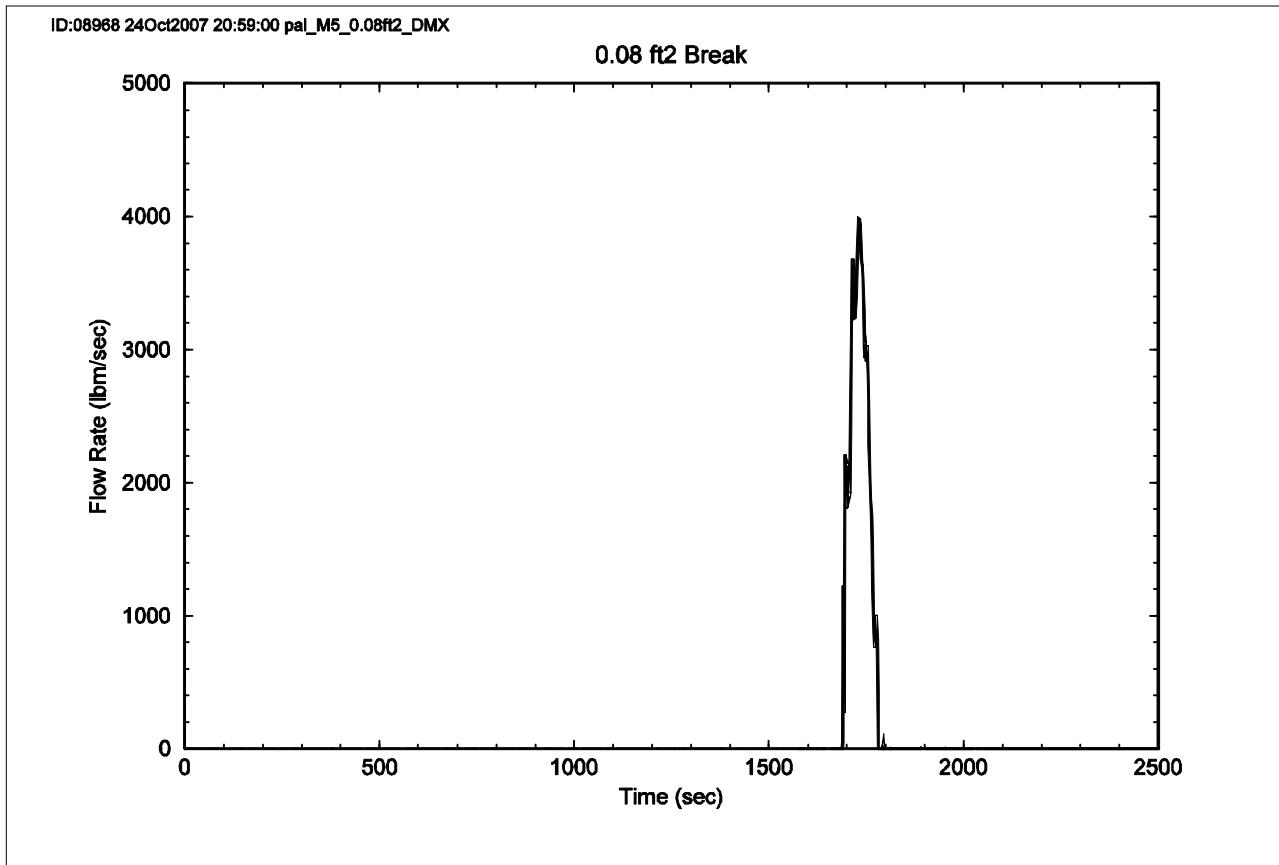
Normalized Reactor Power (Limiting Case)



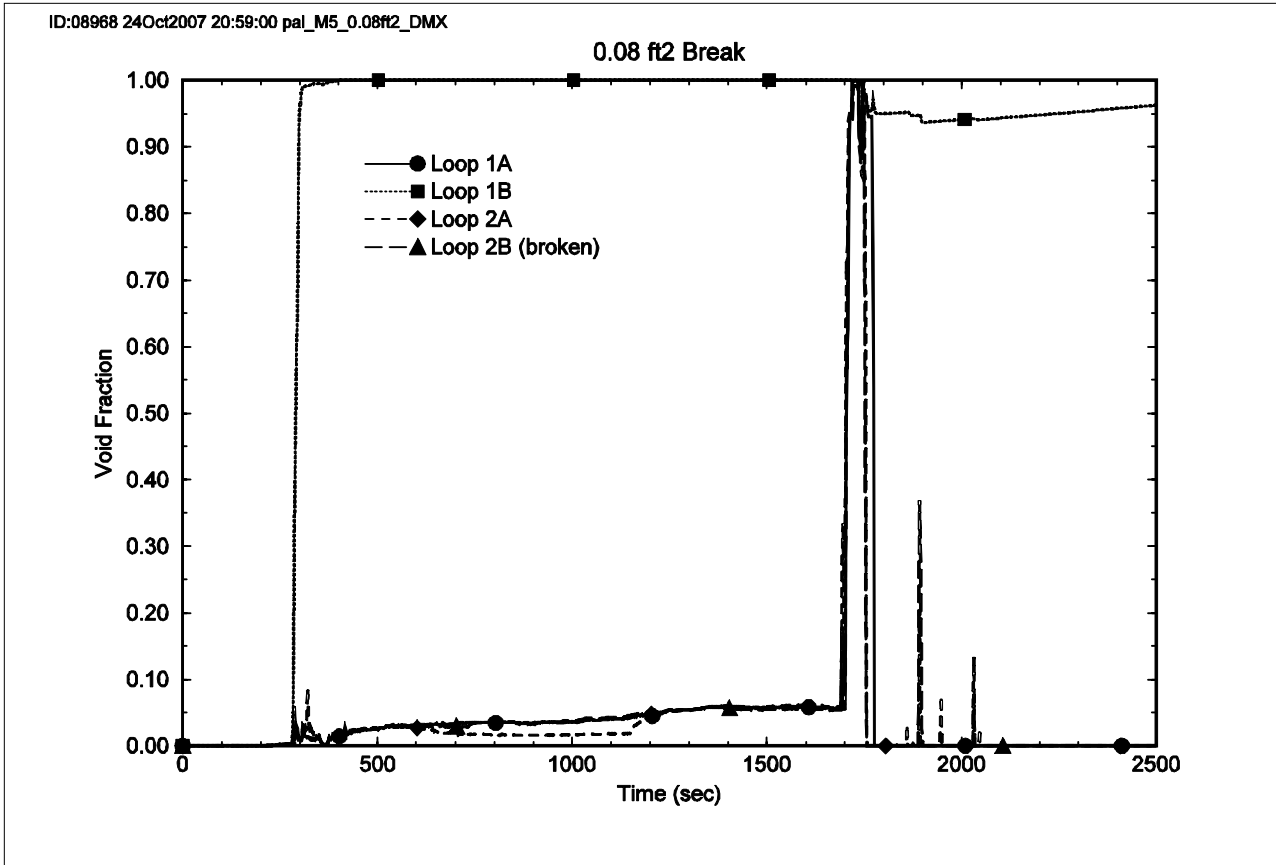
Total HPSI Mass Flow Rate (Limiting Case)



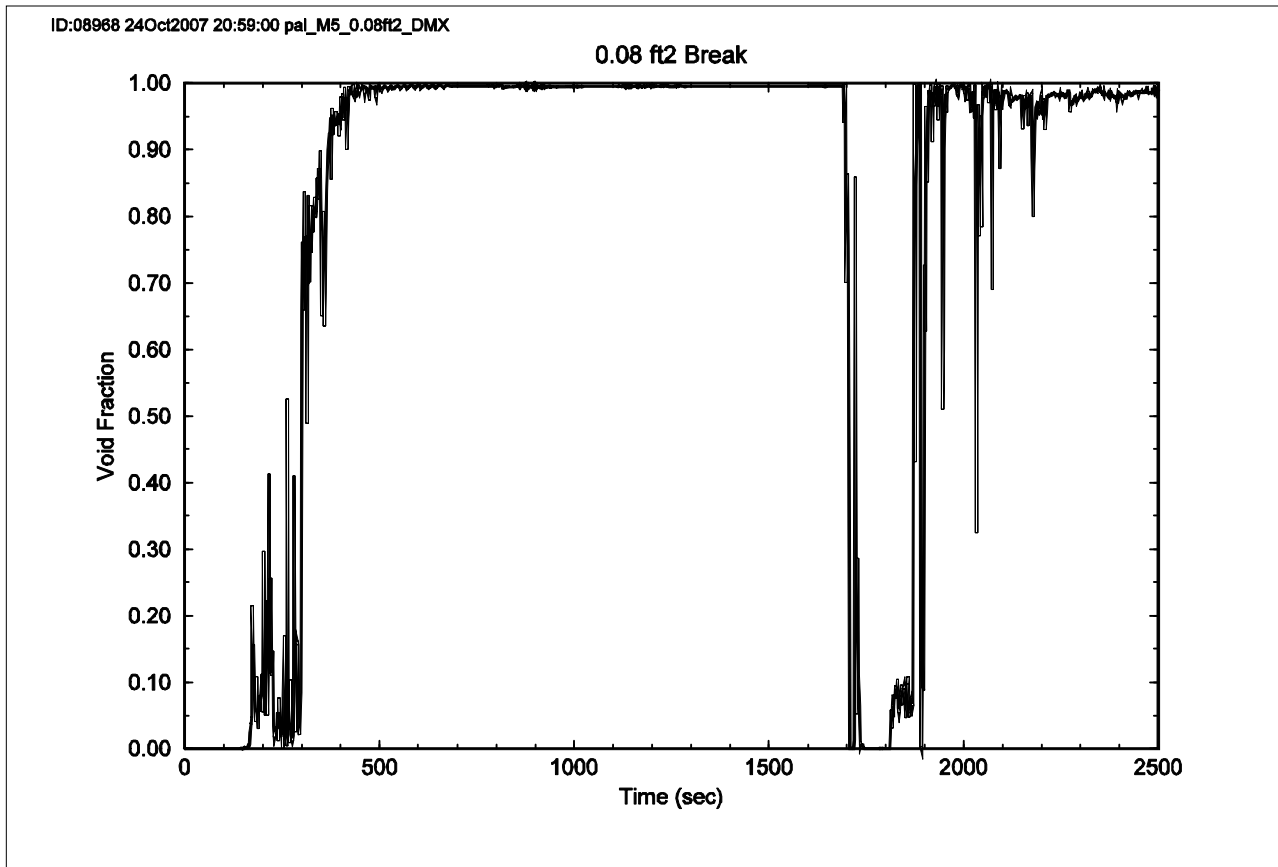
Total SIT Mass Flow Rate (Limiting Case)



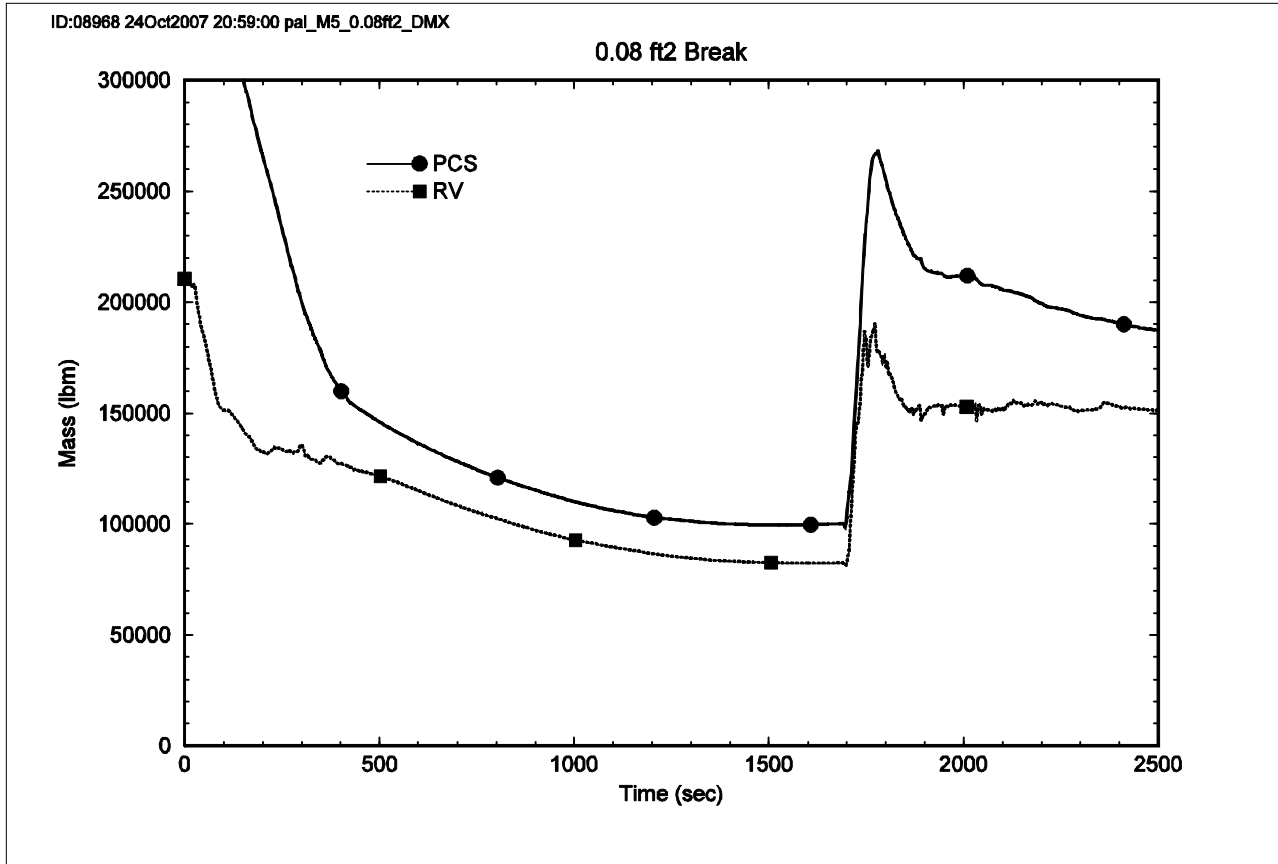
Loop Seal Void Fractions (Limiting Case)



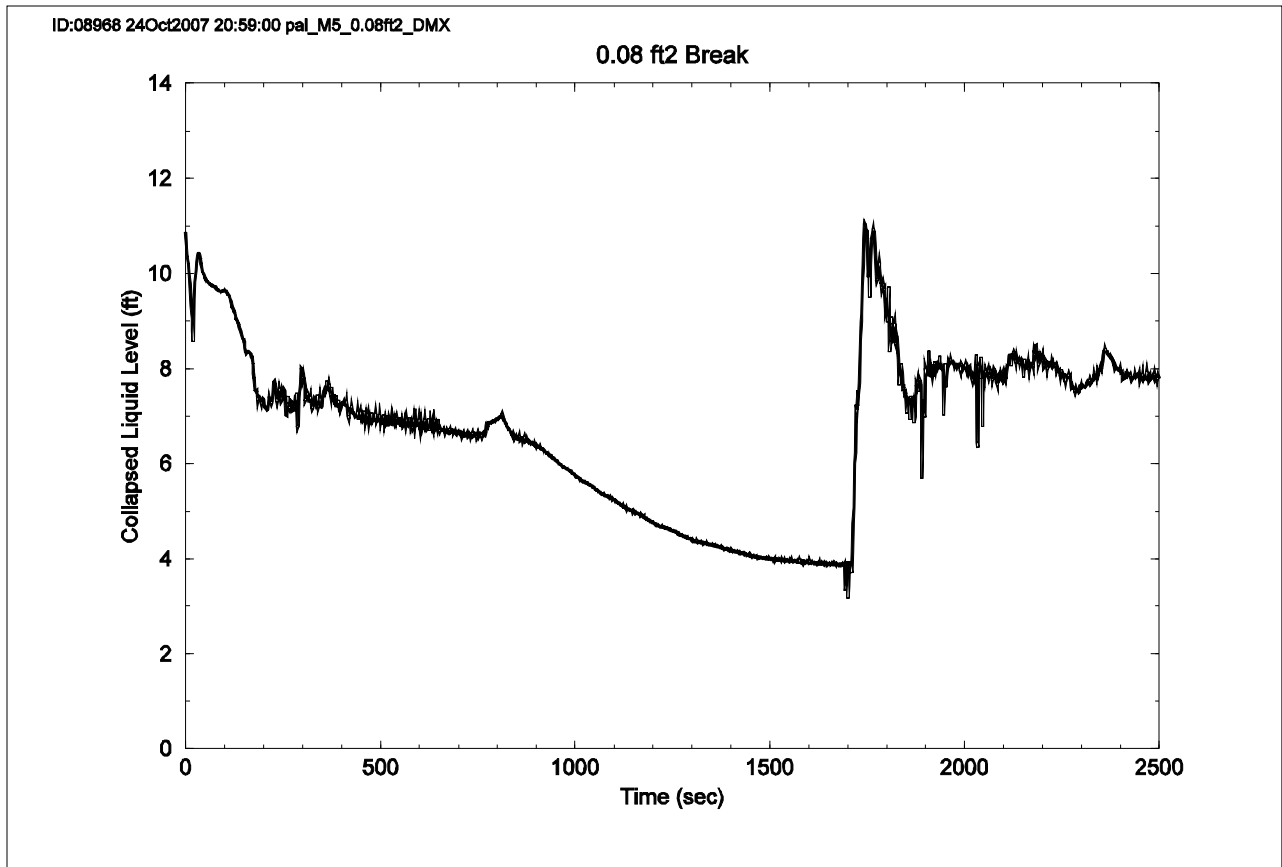
Break Void Fraction (Limiting Case)



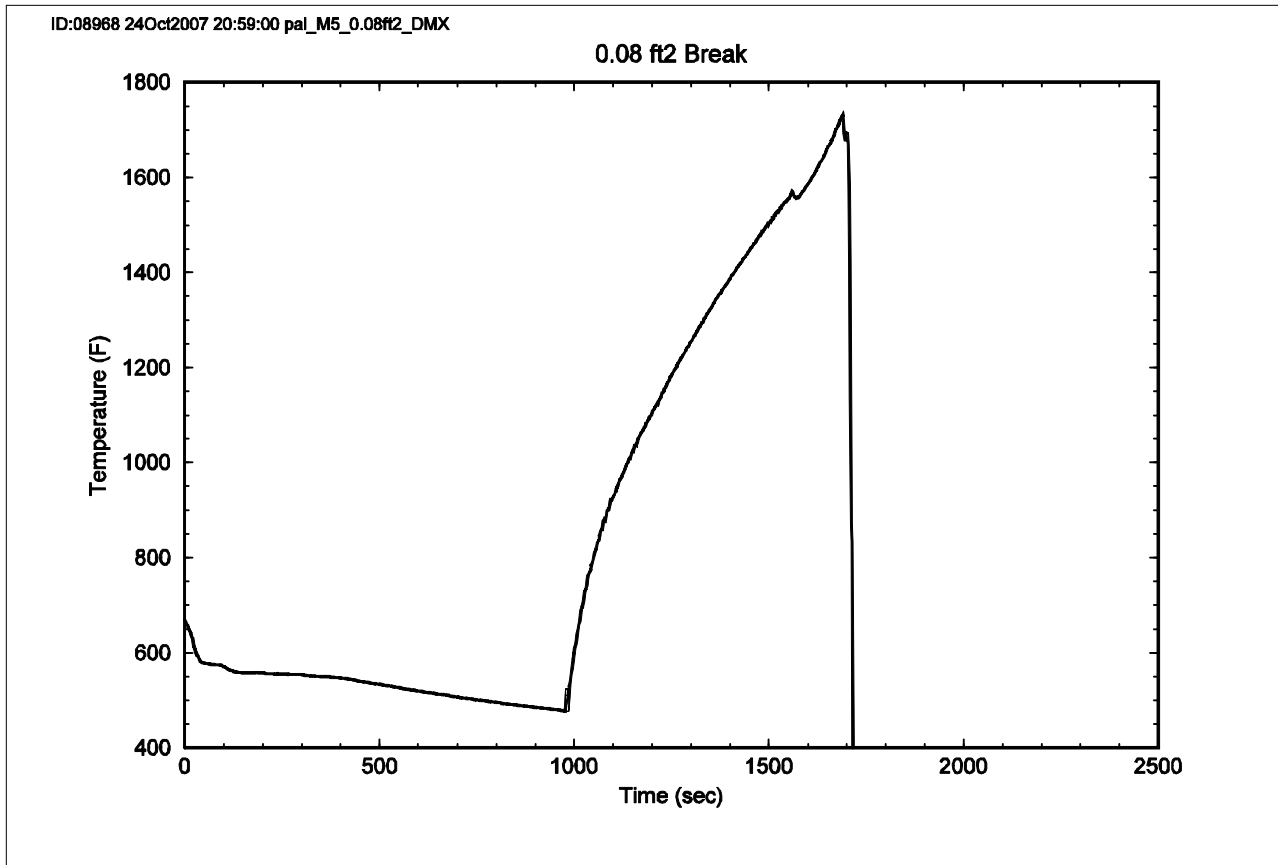
Reactor Vessel and PCS Mass Inventories (Limiting Case)



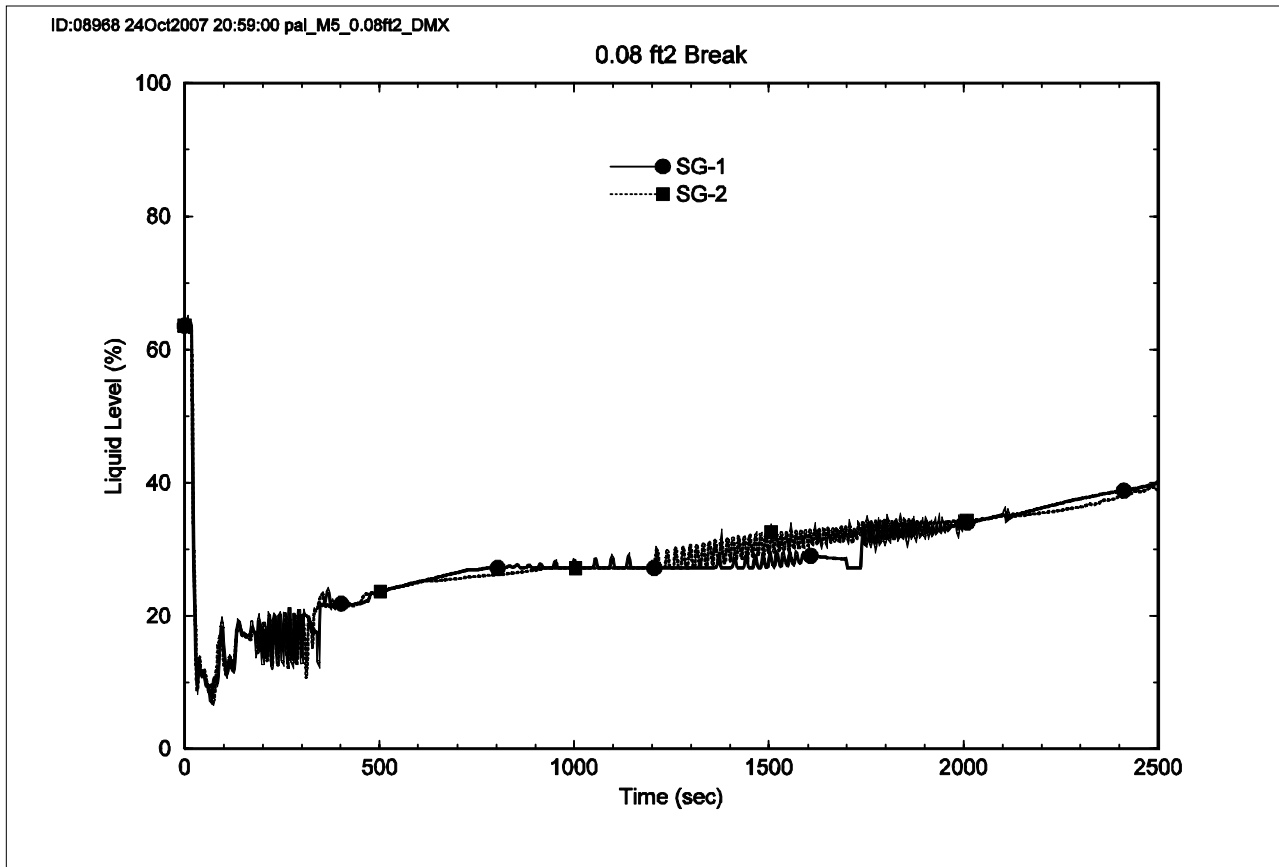
Hot Channel Collapsed Level (Limiting Case)



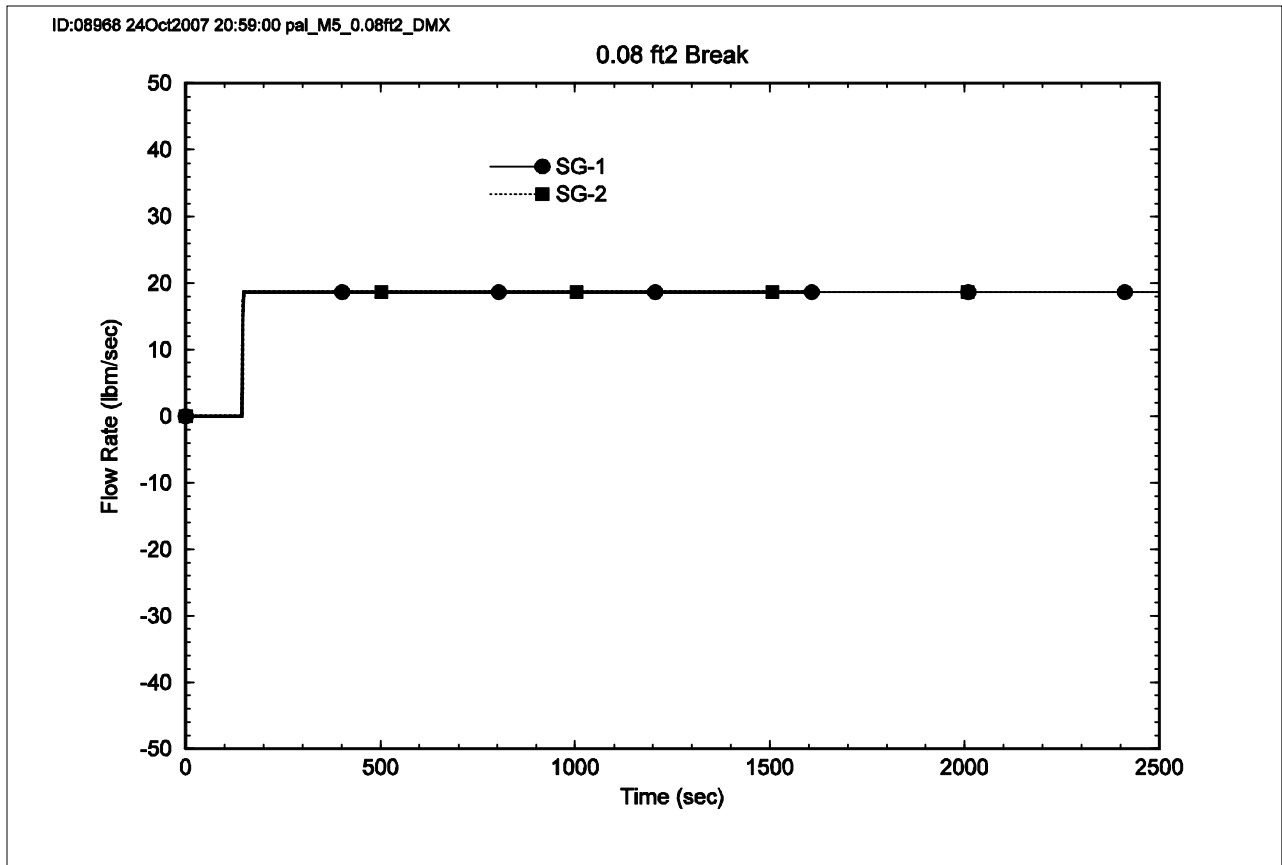
Fluid and Cladding Temperatures (Limiting Case)



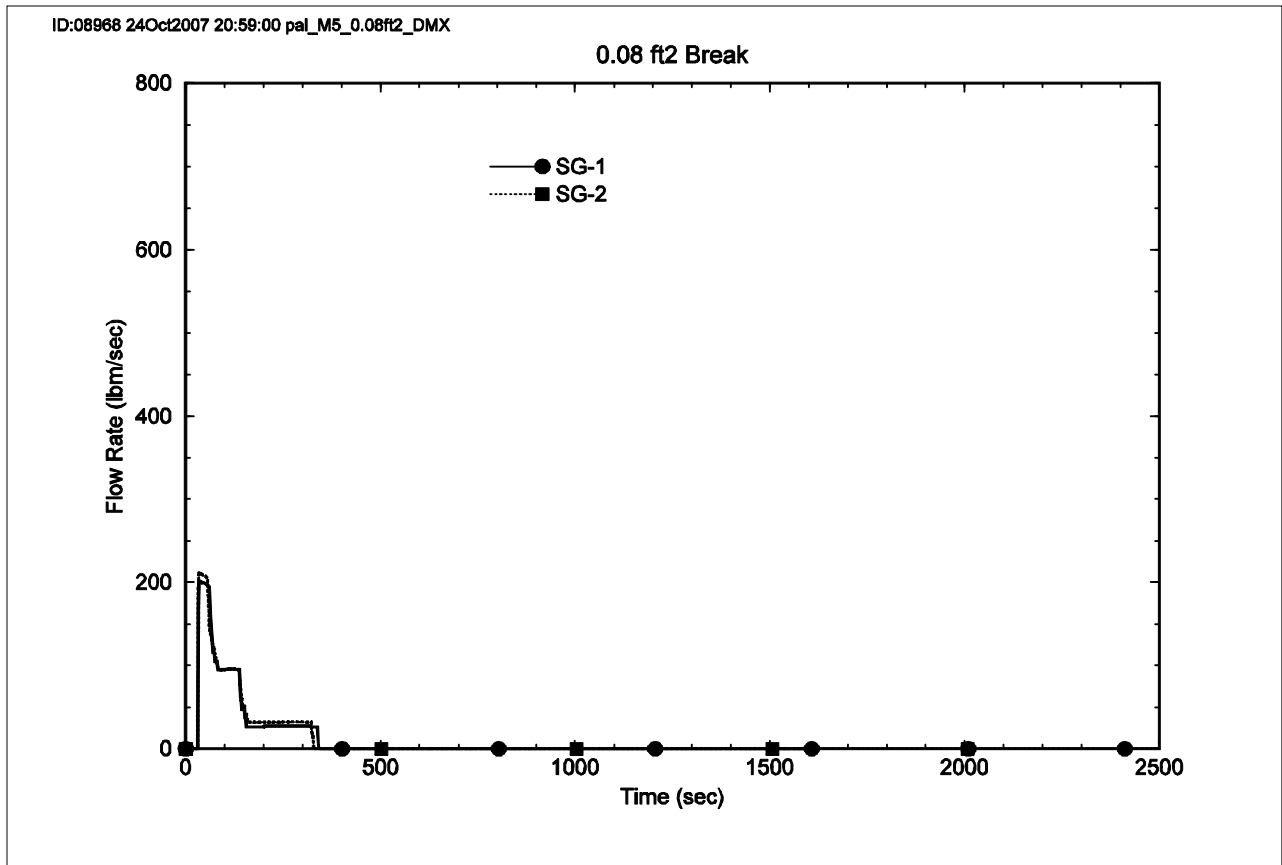
SG Narrow Range Liquid Levels (Limiting Case)



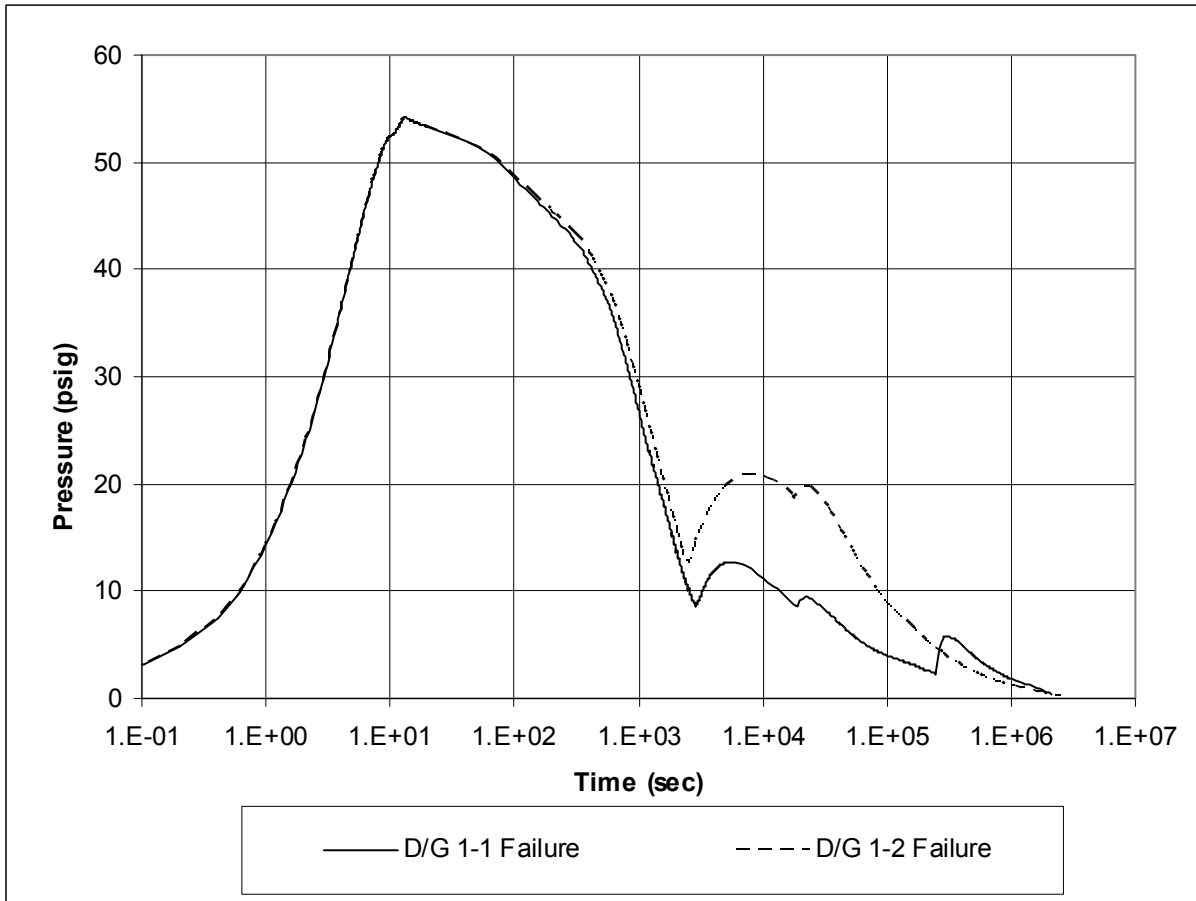
AFW Flow Rates (Limiting Case)



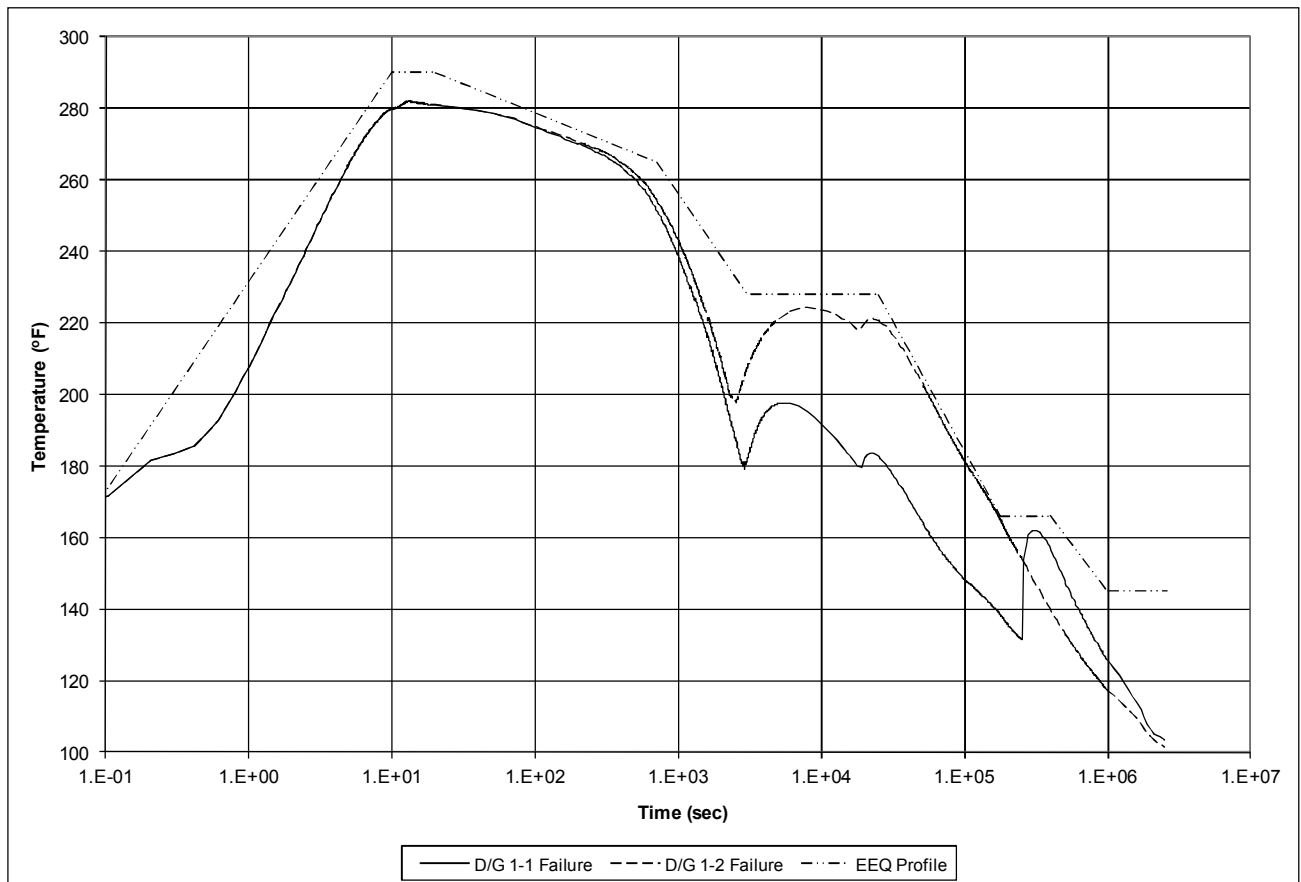
Total MSSV Flow (Limiting Case)



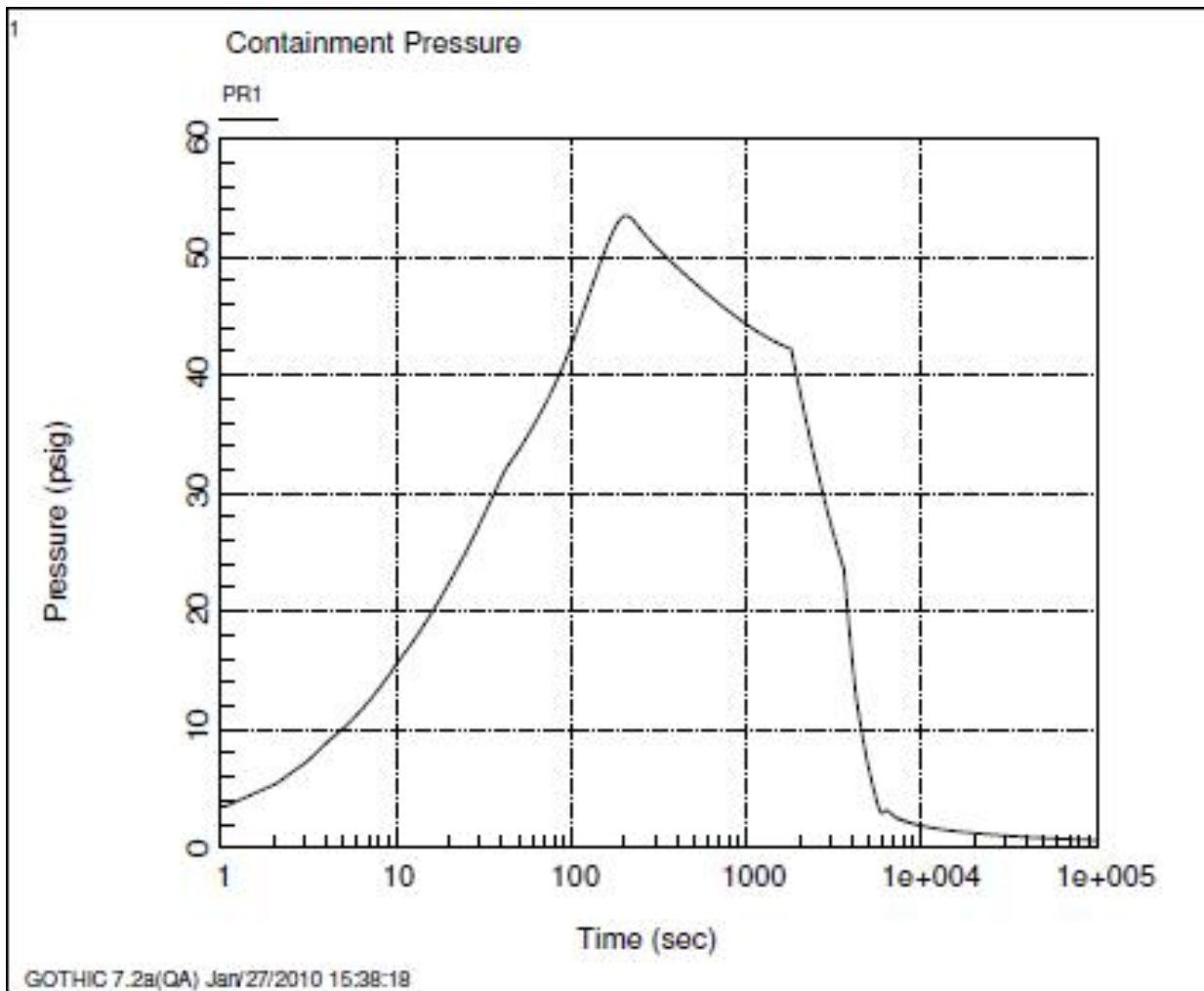
LOCA CONTAINMENT PRESSURE PROFILE



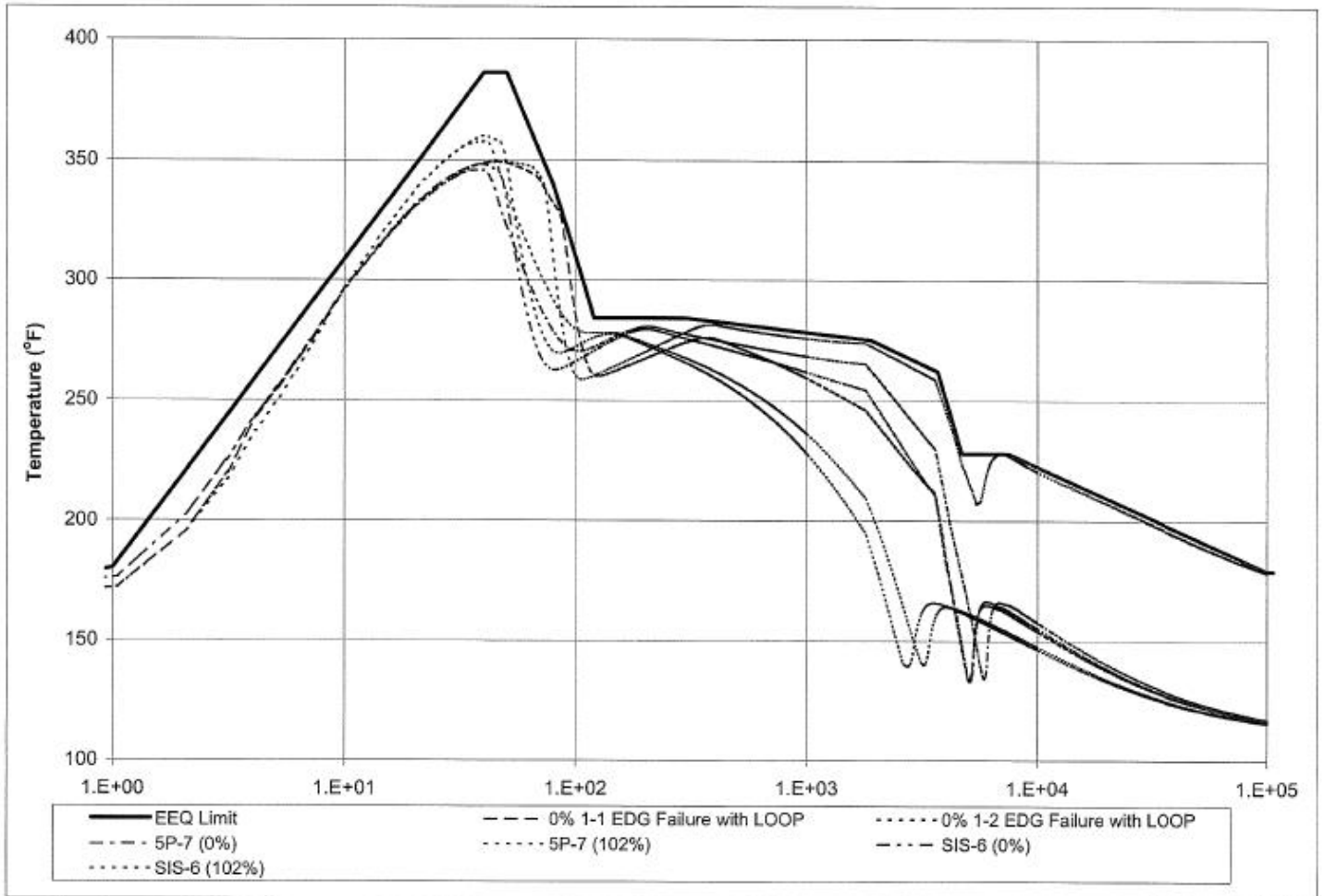
LOCA CONTAINMENT TEMPERATURE PROFILE



**MSLB CONTAINMENT RESPONSE
MAXIMUM PRESSURE PROFILE**



MSLB CONTAINMENT RESPONSE
ENVIRONMENTAL QUALIFICATION PROFILE



PALISADES CONTAINMENT HYDROGEN ANALYSIS

Deleted per FSAR-2479

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CONTAINMENT TEMPERATURE FOR H2 GENERATION

Deleted per FSAR-2479

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