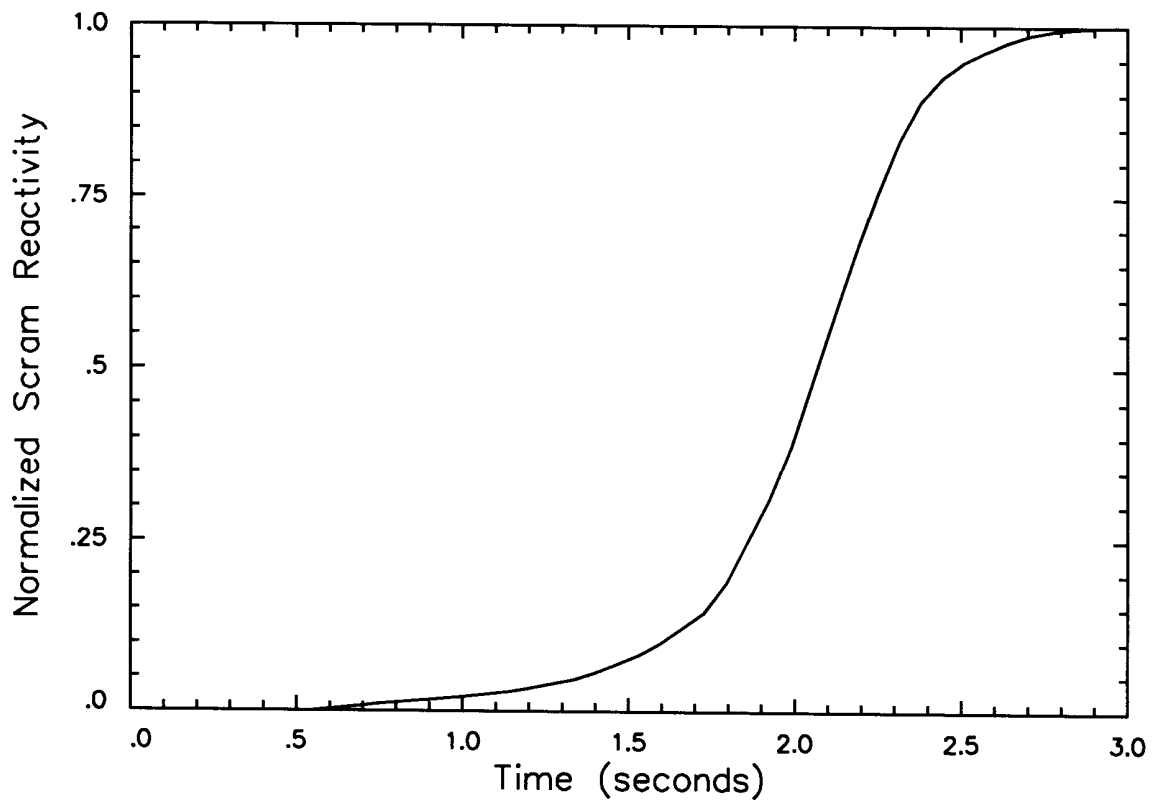
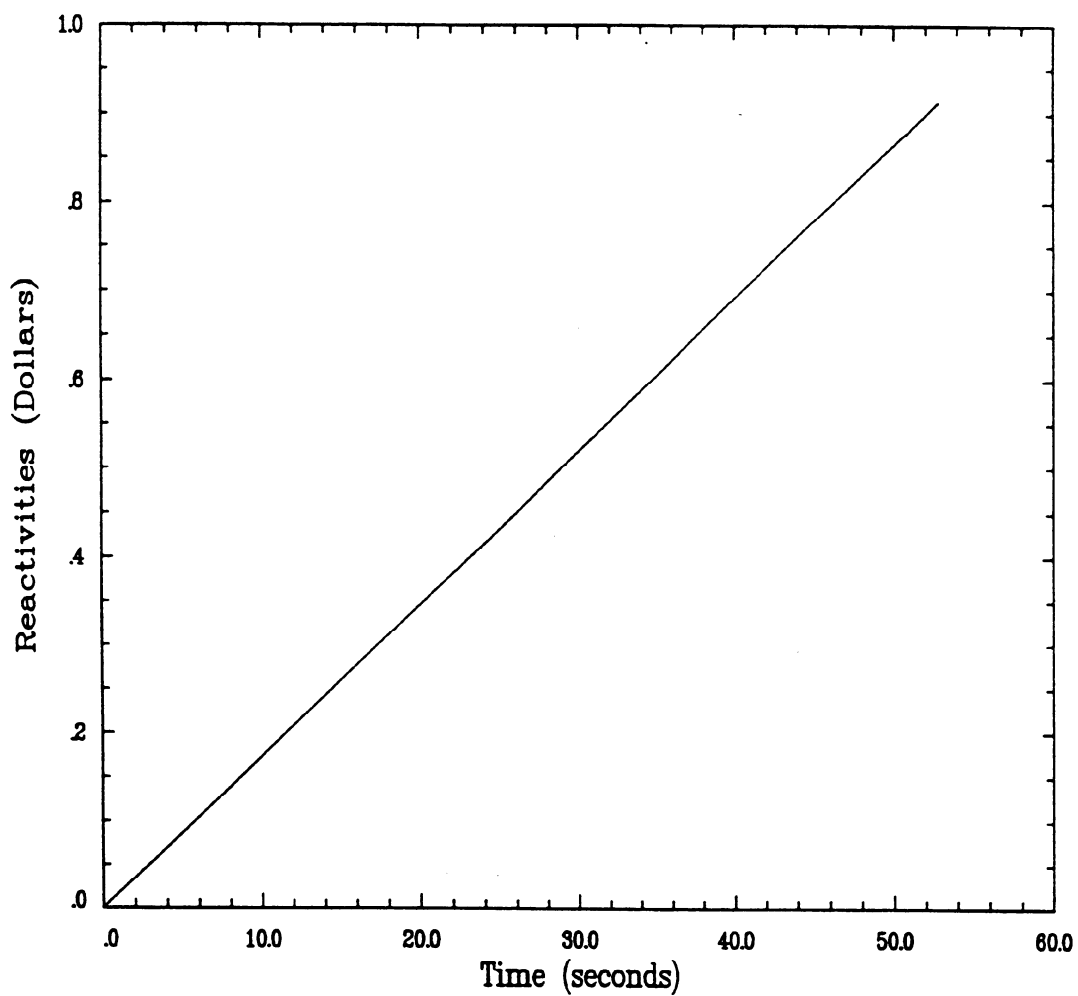


## PALISADES SCRAM CURVE

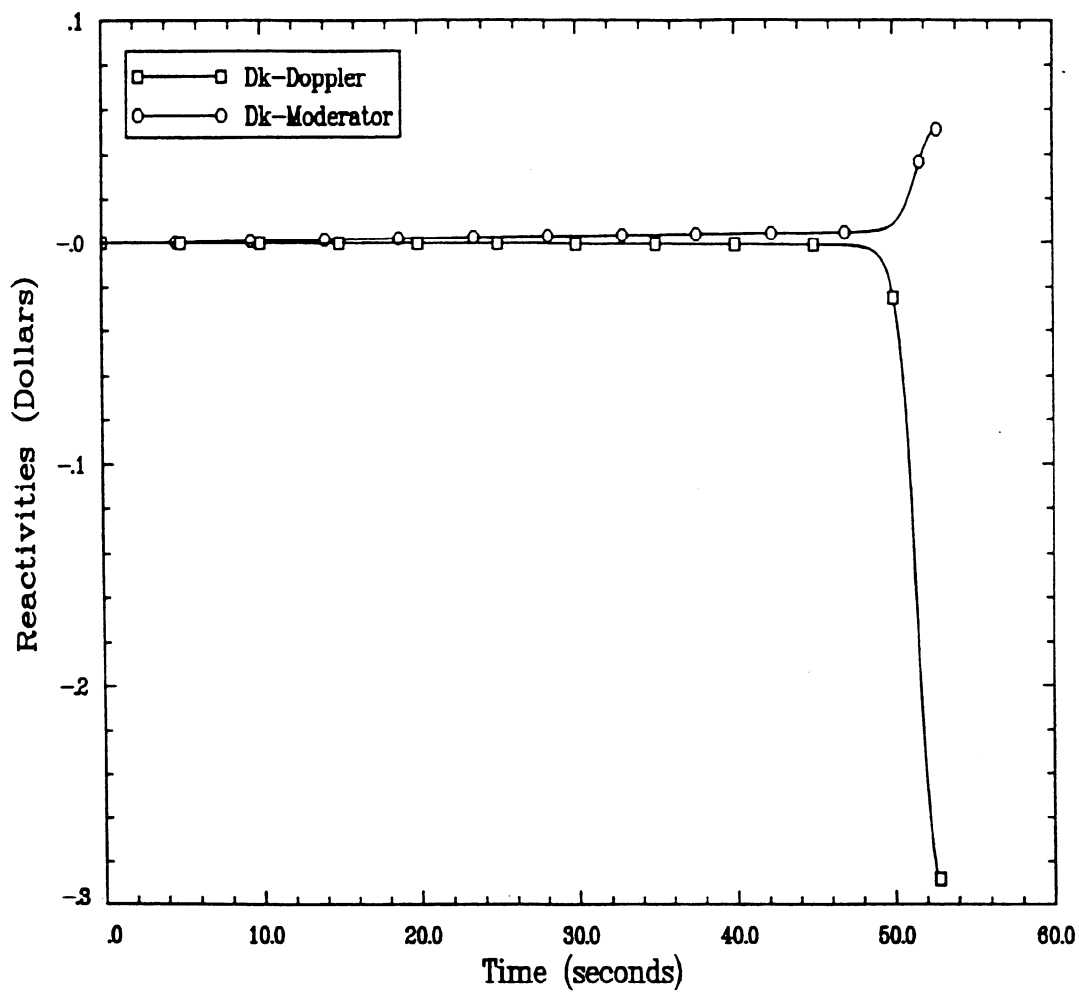


Note: Time measured from the point at which the control rod drive clutch receives the signal to release the control rods.

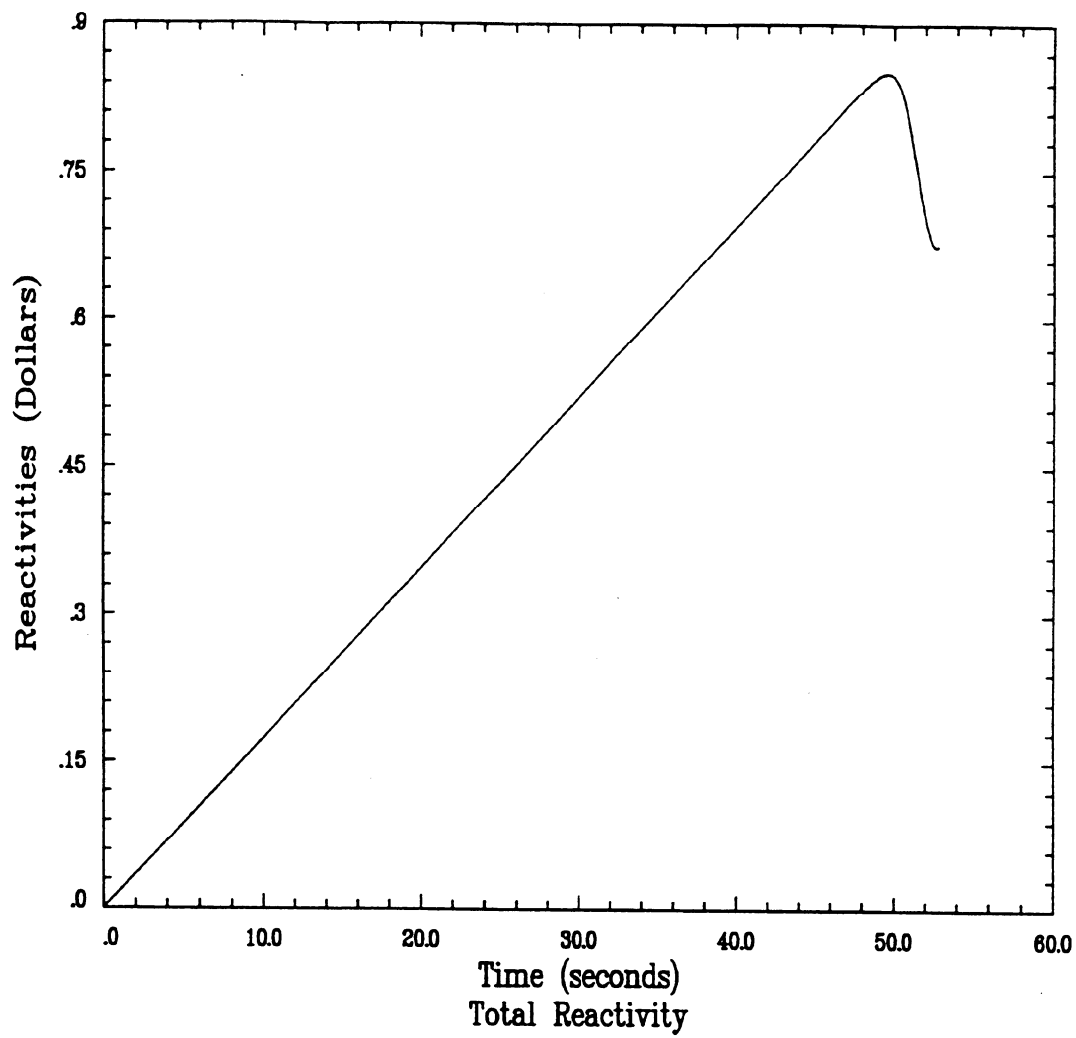
## CONTROL ROD WITHDRAWAL INCIDENT HZP REACTIVITY INSERTION CURVE



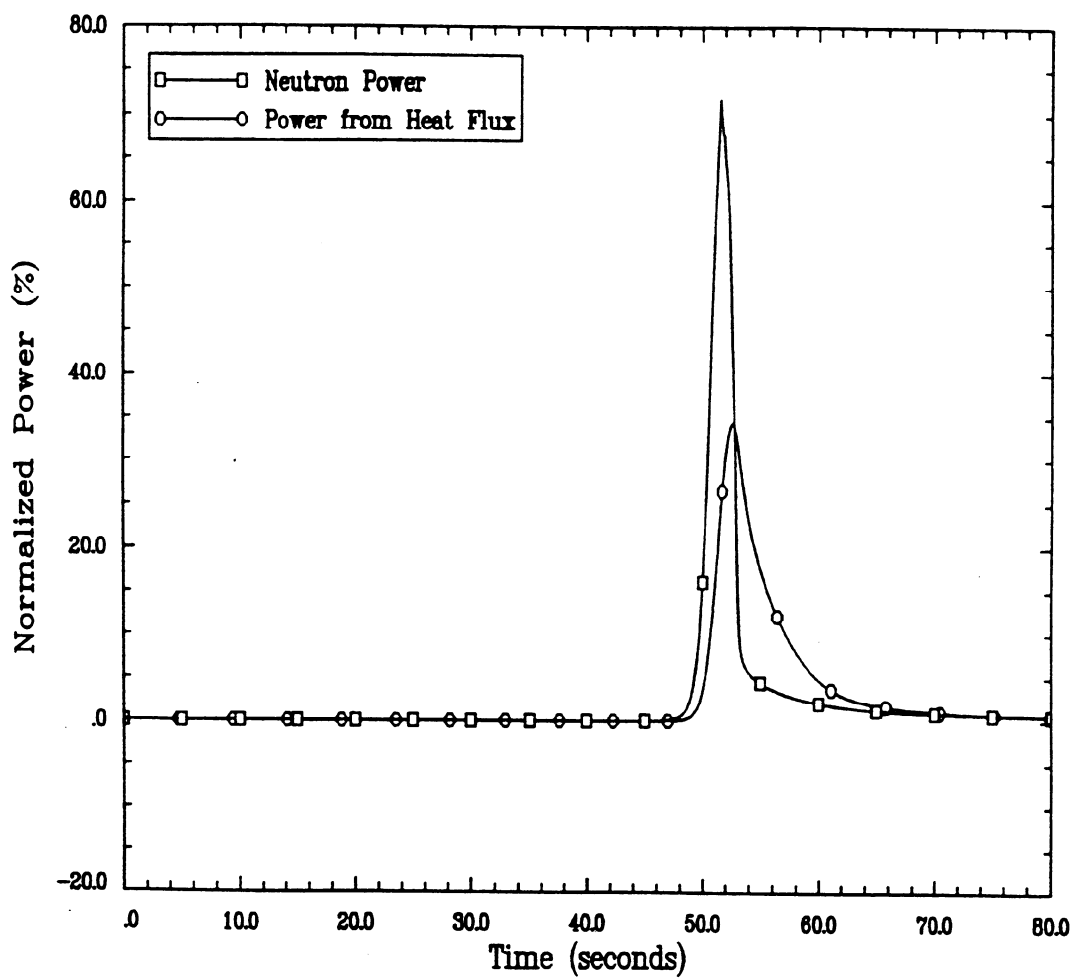
## CONTROL ROD WITHDRAWAL INCIDENT HZP REACTIVITY FEEDBACKS



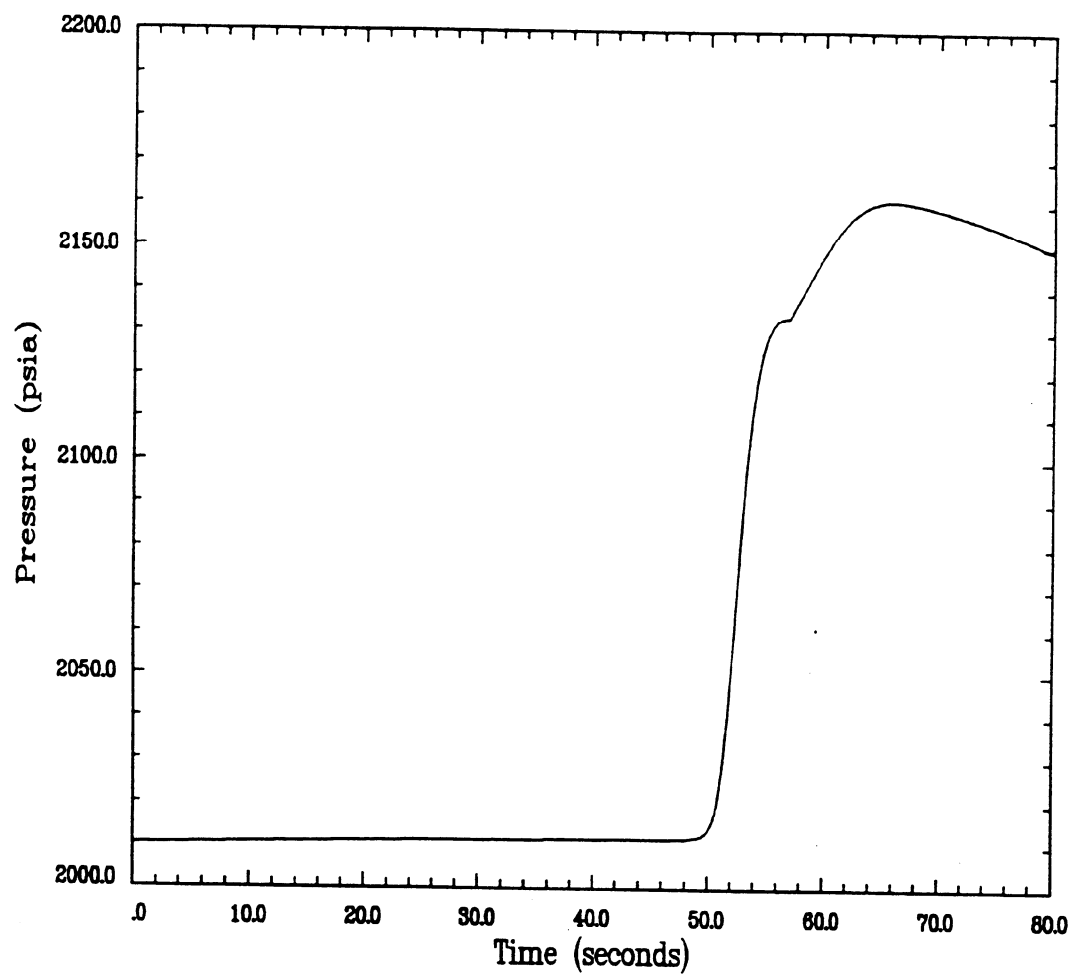
## CONTROL ROD WITHDRAWAL INCIDENT HZP TOTAL REACTIVITY



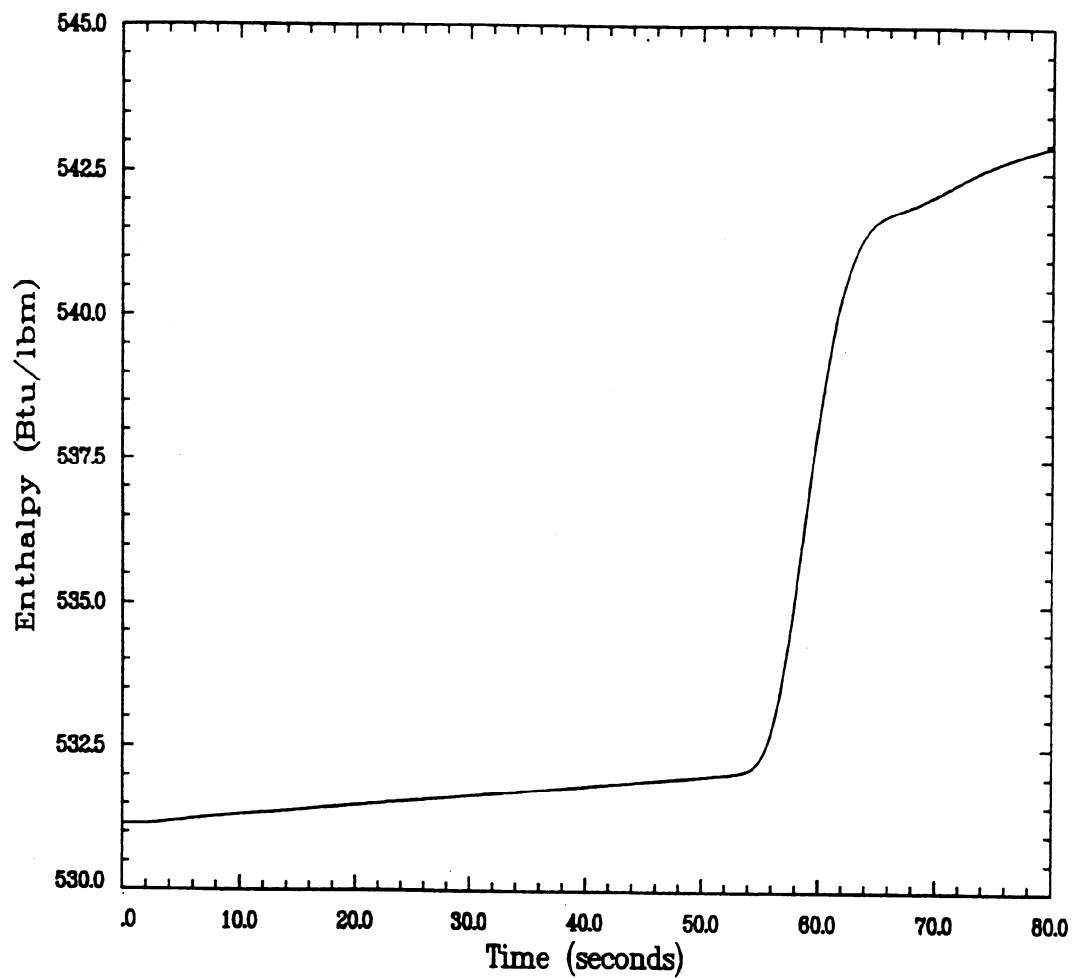
## CONTROL ROD WITHDRAWAL INCIDENT HZP POWER AND HEAT FLUX



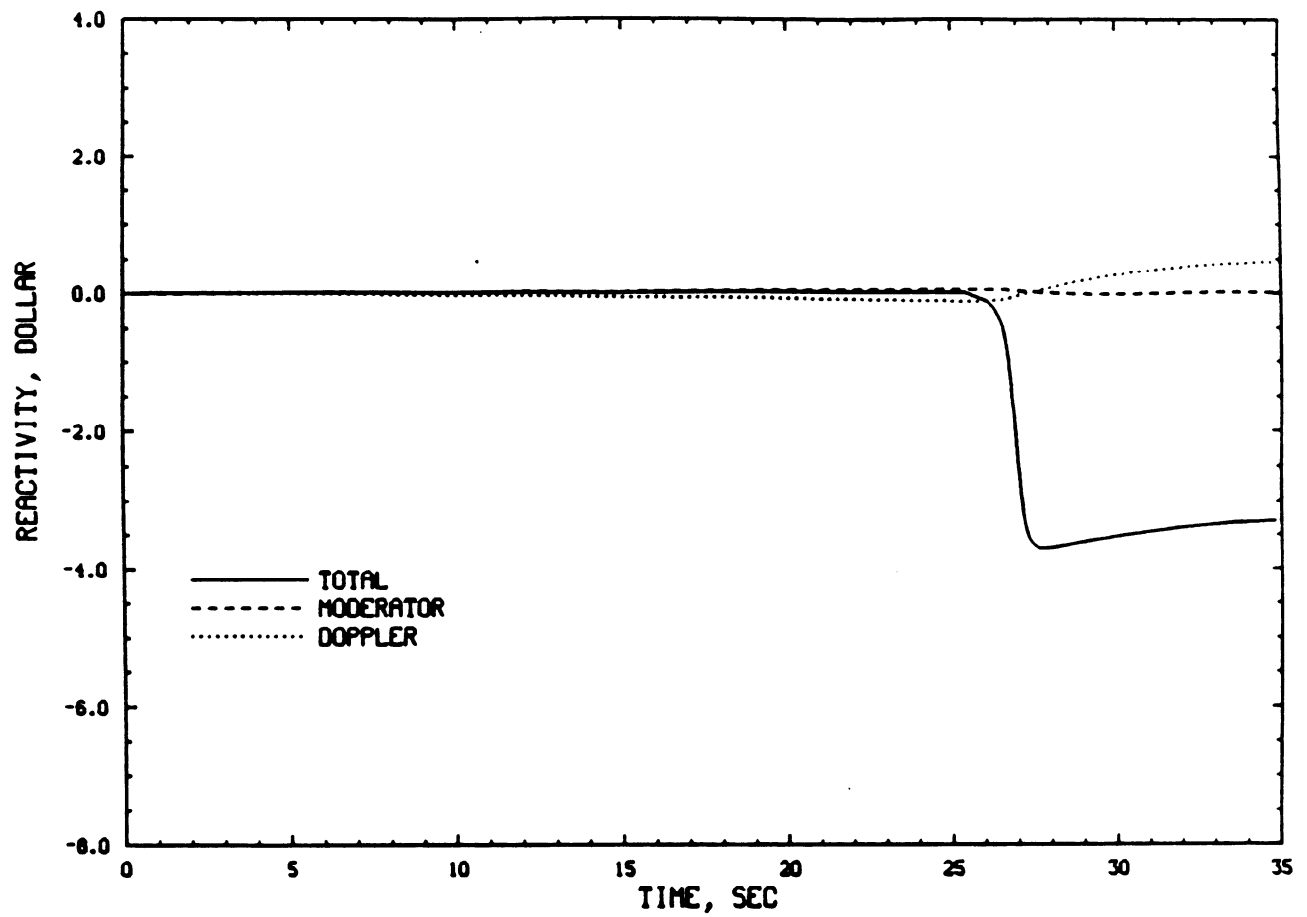
## CONTROL ROD WITHDRAWAL INCIDENT HZP SYSTEM PRESSURE



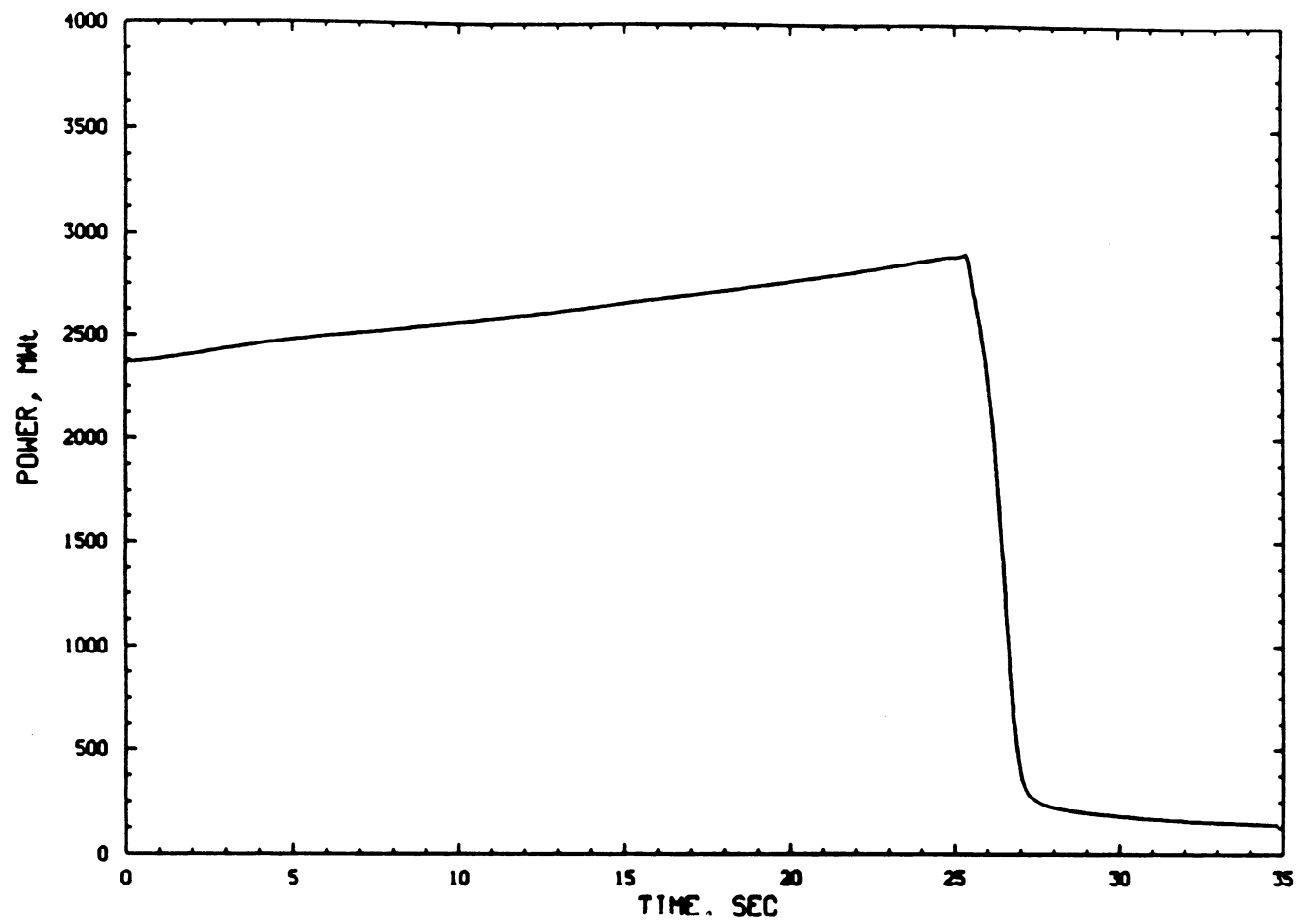
## CONTROL ROD WITHDRAWAL INCIDENT HZP INLET ENTHALPY



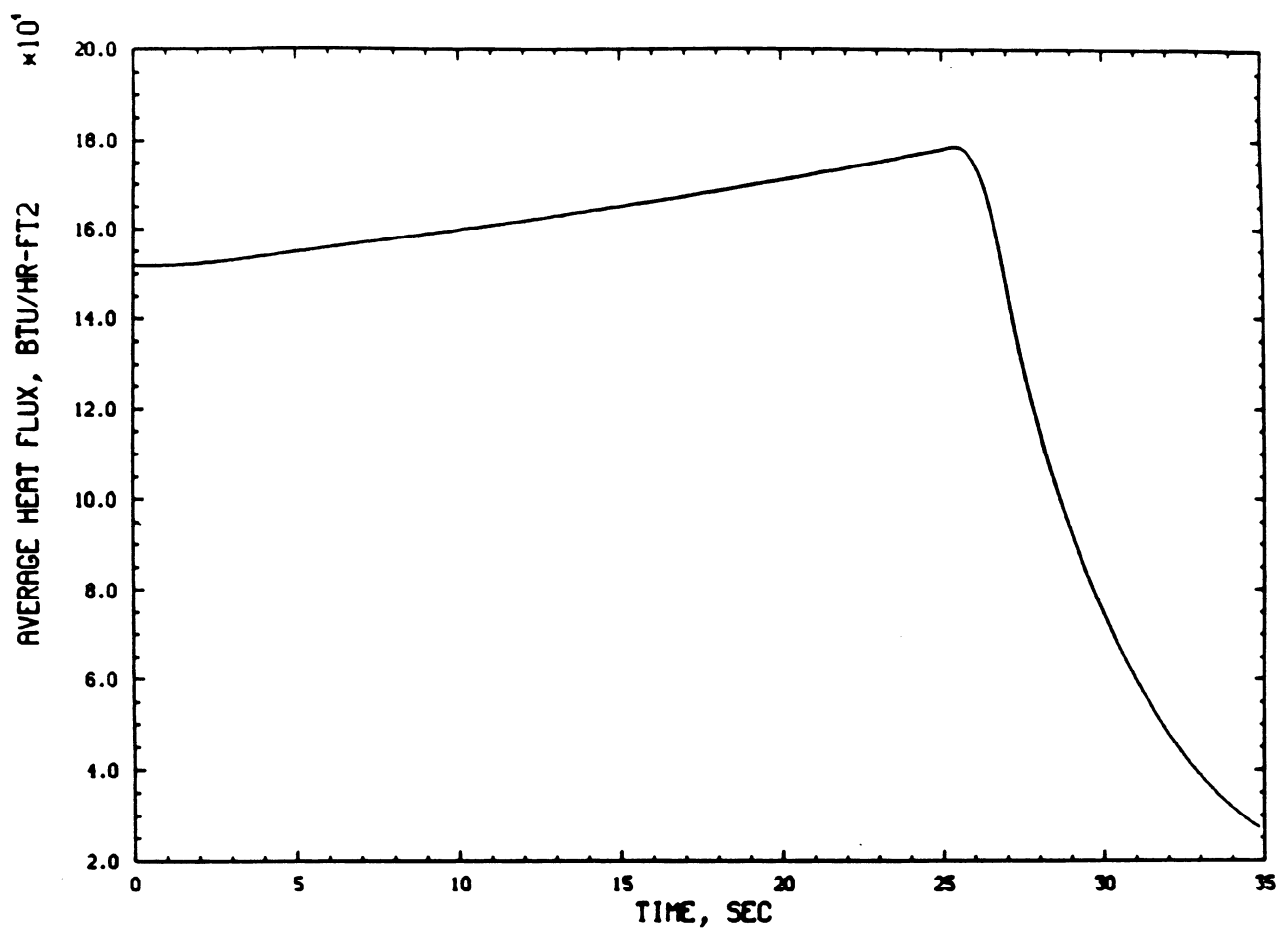
## REACTIVITIES FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



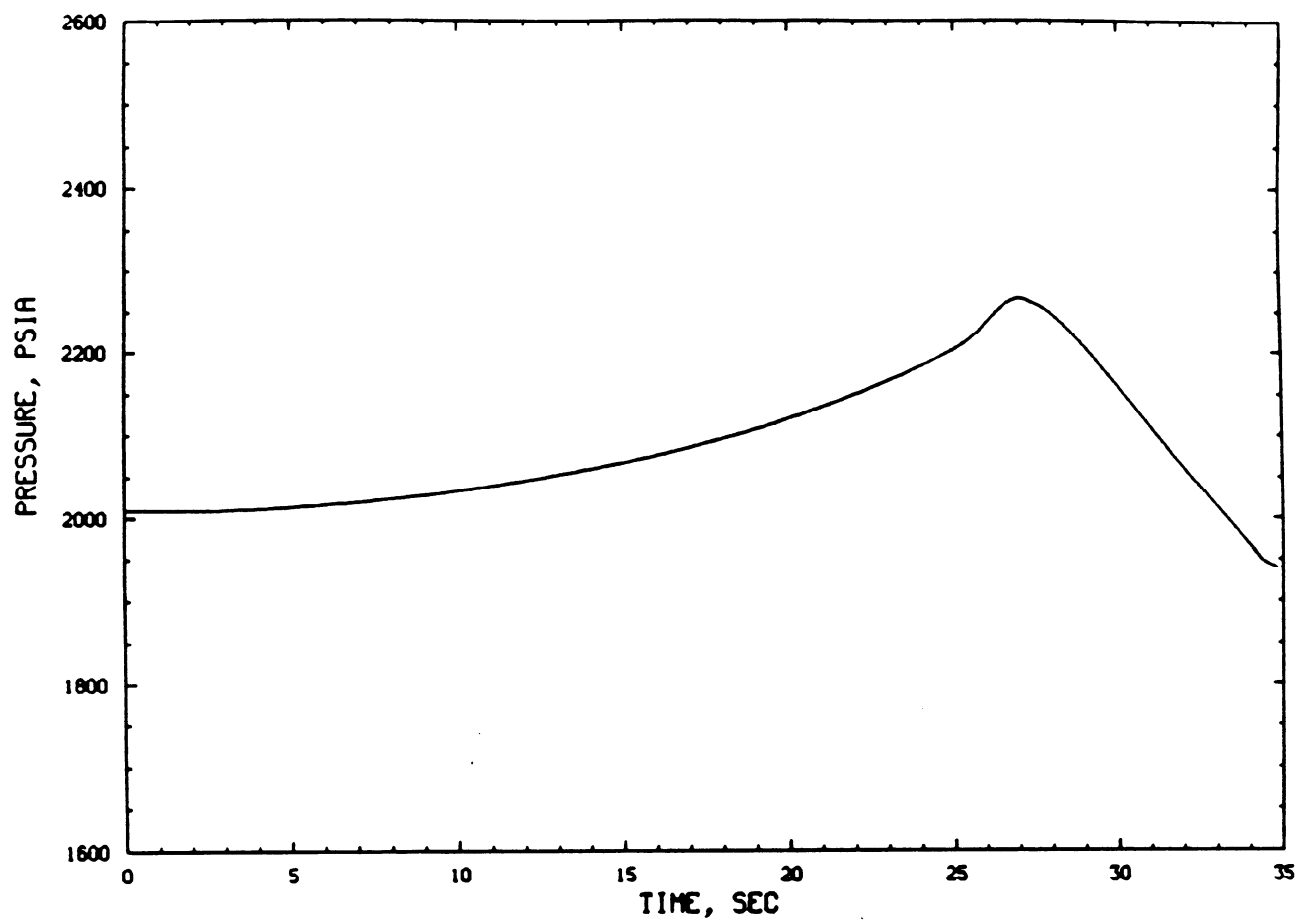
## REACTOR POWER LEVEL FOR UNCONTROLLED BANK WITHDRAWAL FULL POWER

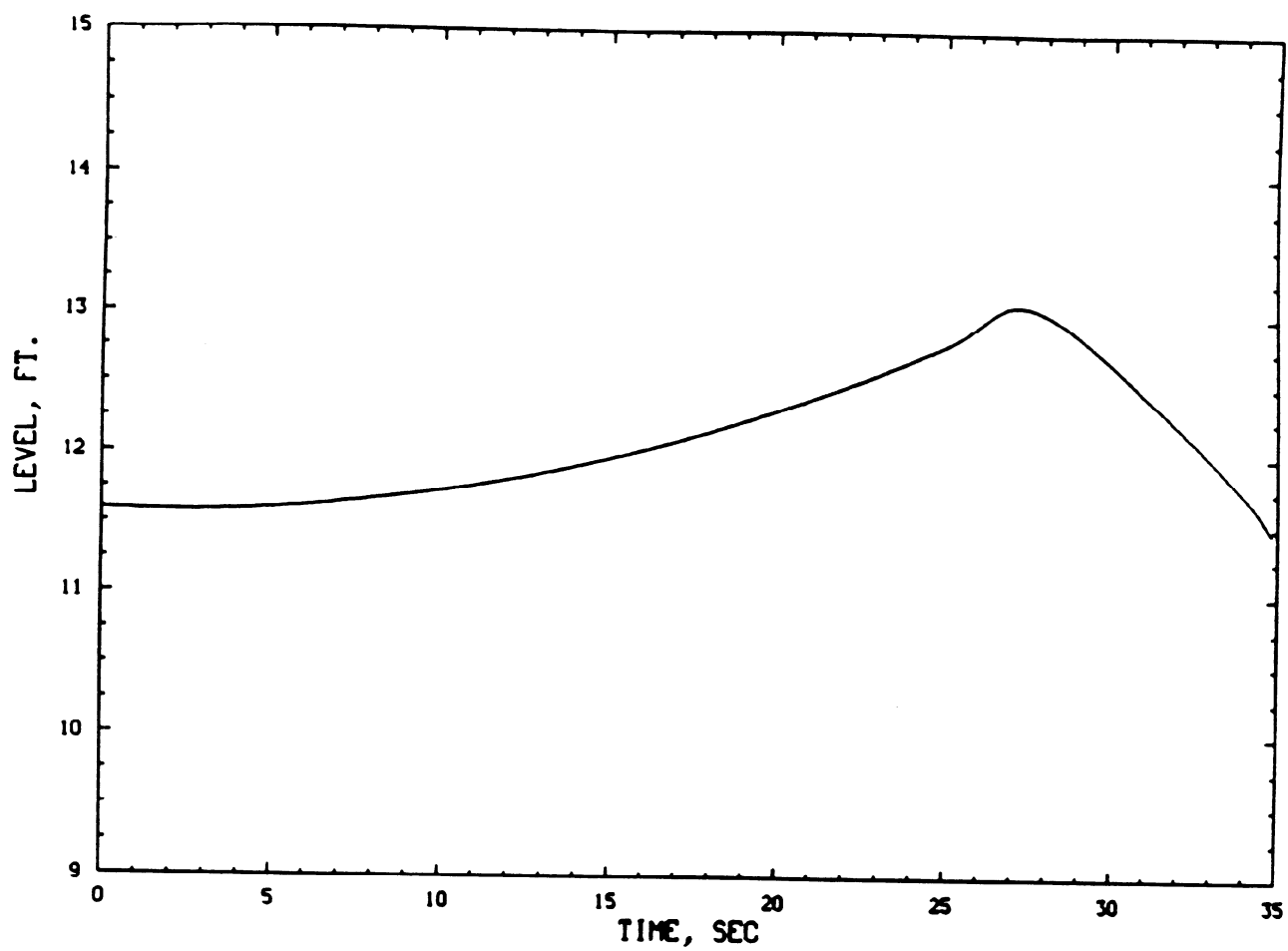


## CORE AVERAGE HEAT FLUX FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER

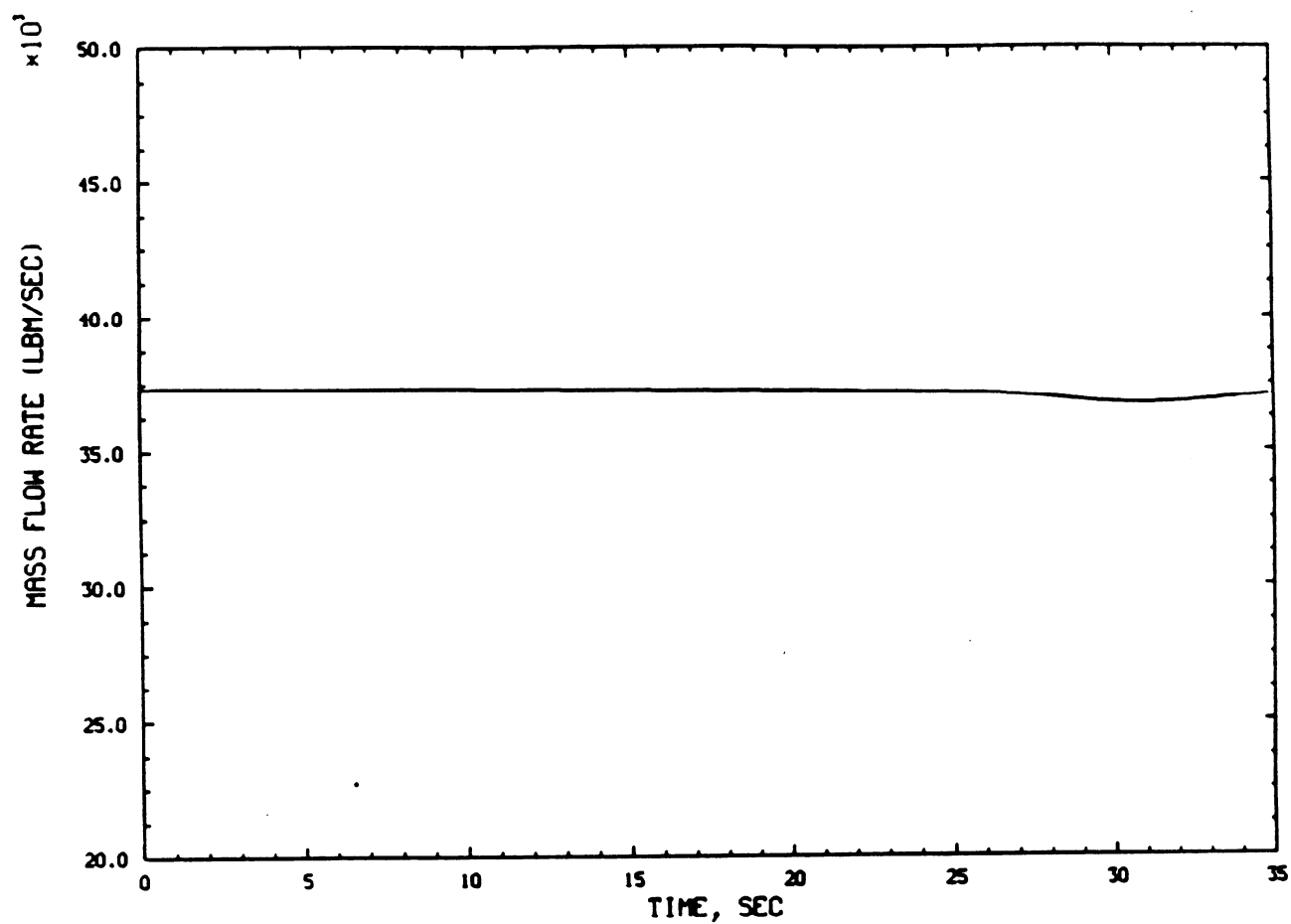


## PRESSURIZER PRESSURE FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER

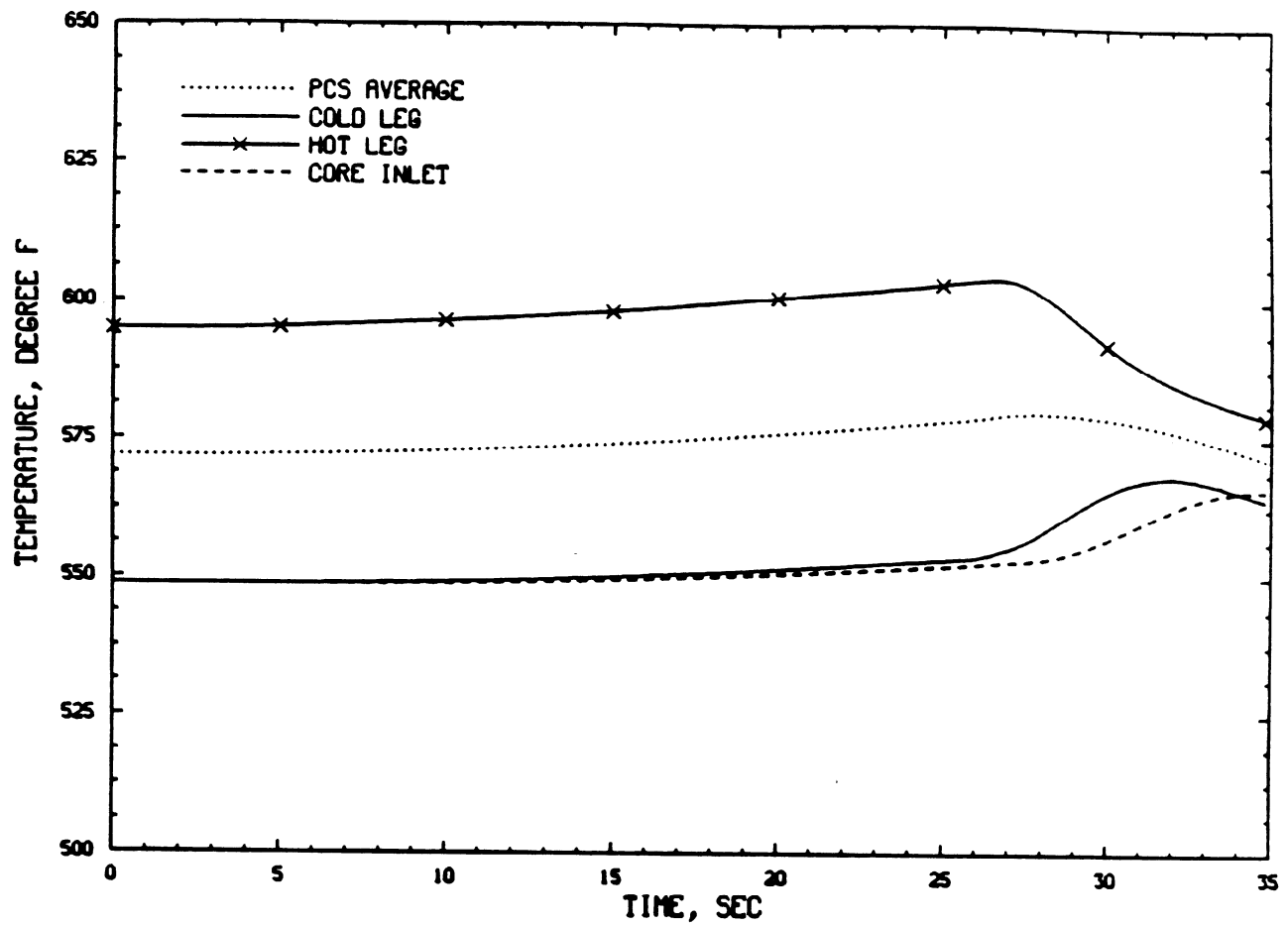


**PRESSURIZER LIQUID LEVEL FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER**

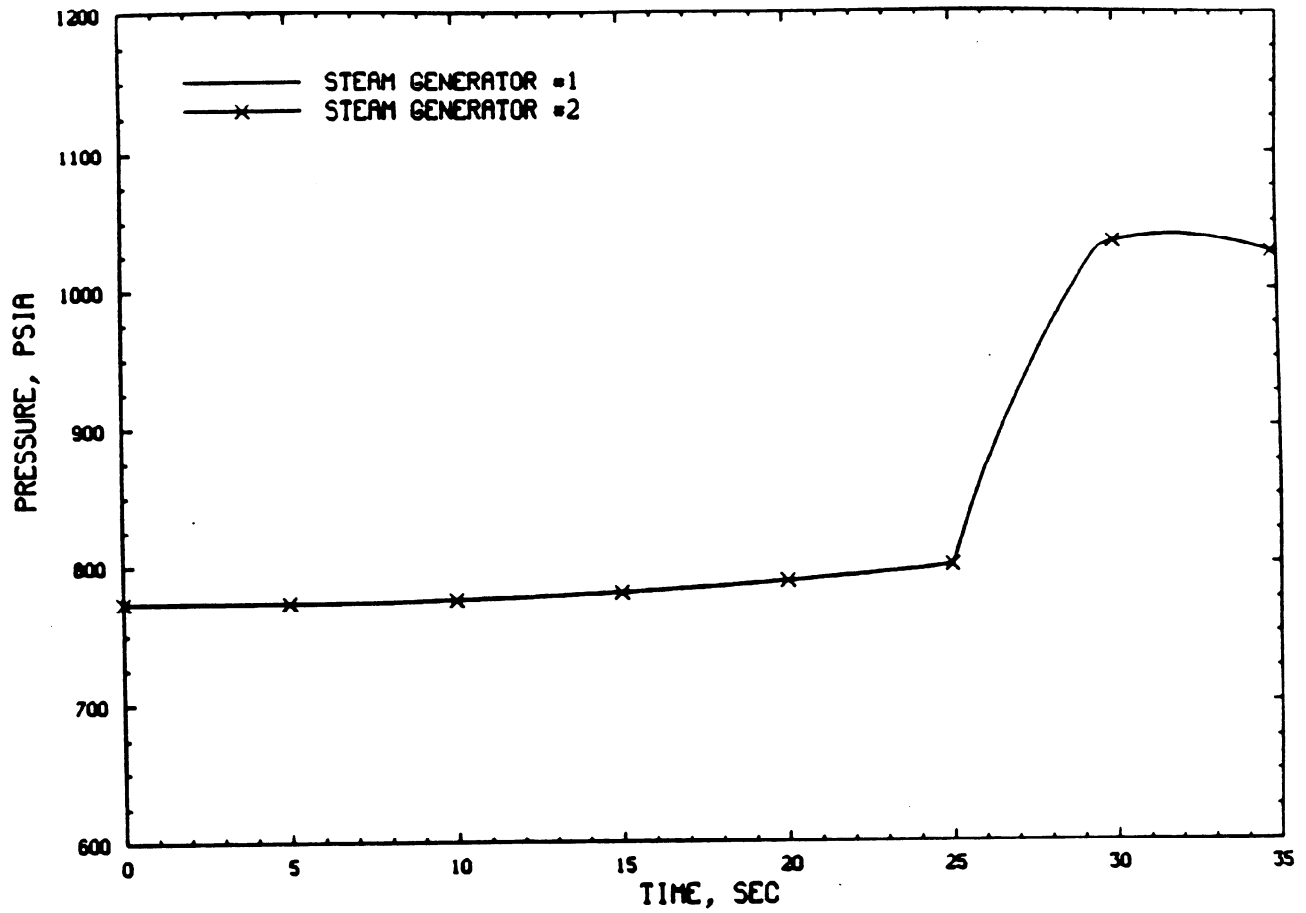
## PCS MASS FLOW RATE FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



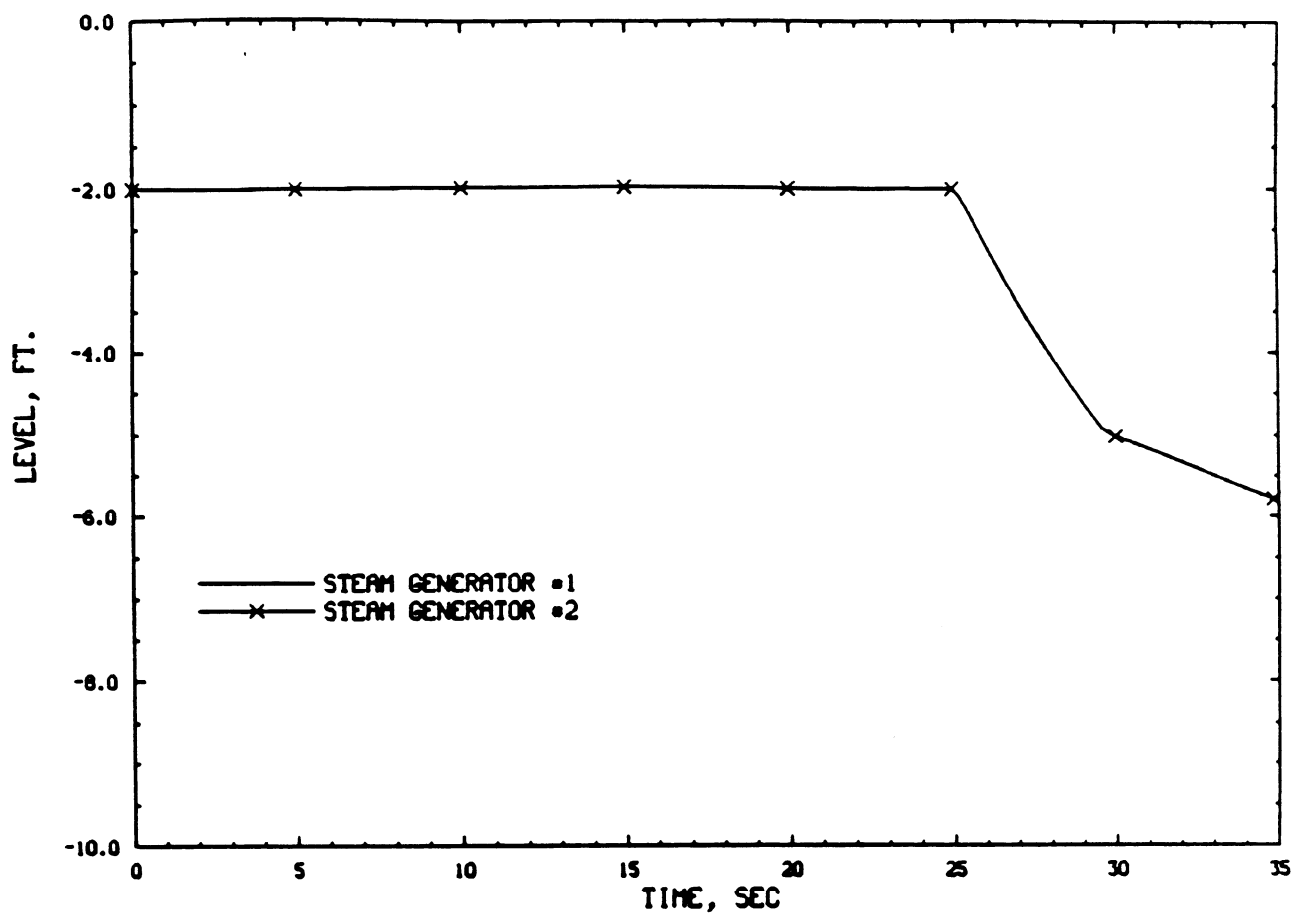
## PCS TEMPERATURES FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



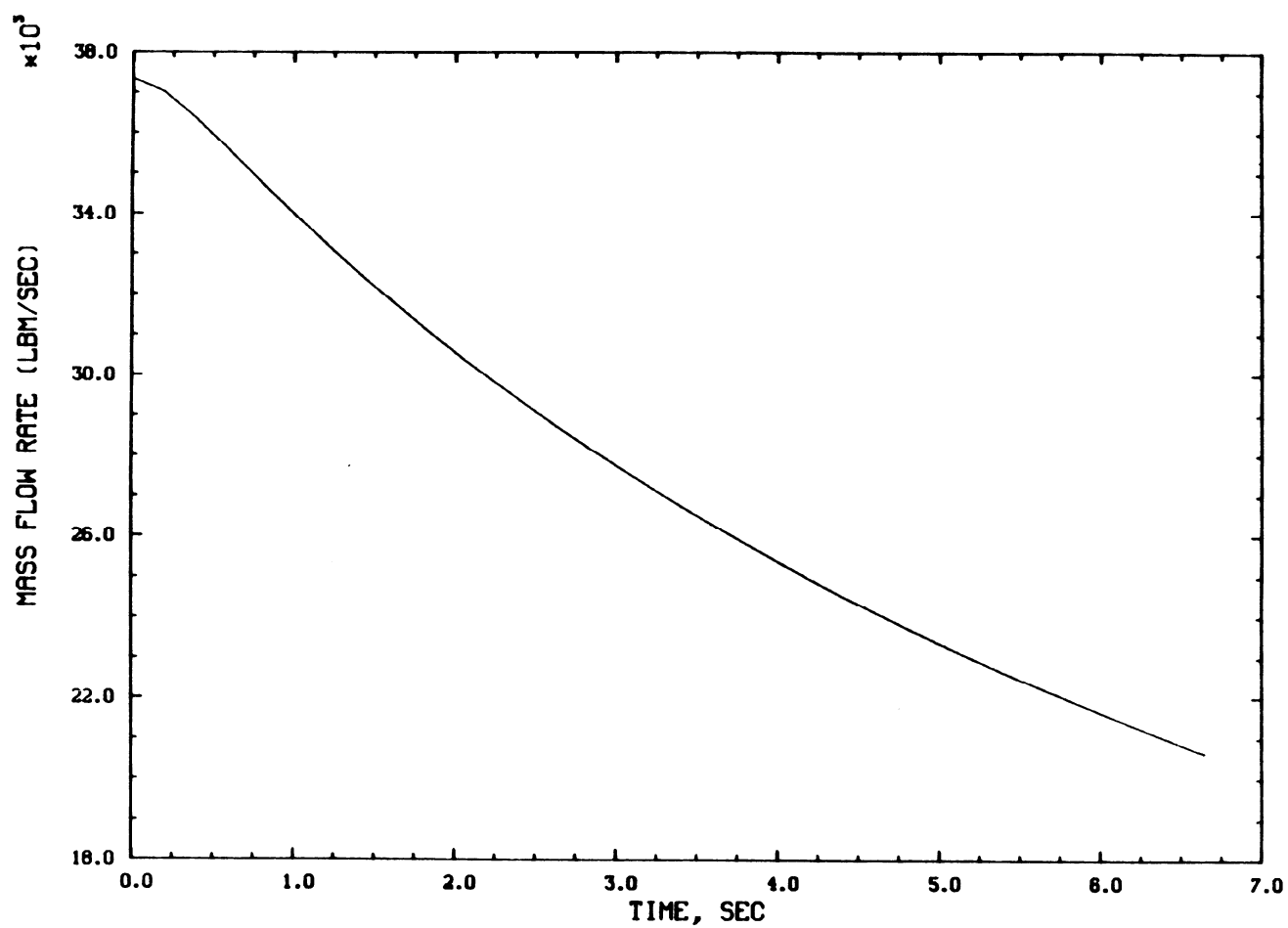
## SECONDARY PRESSURE FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



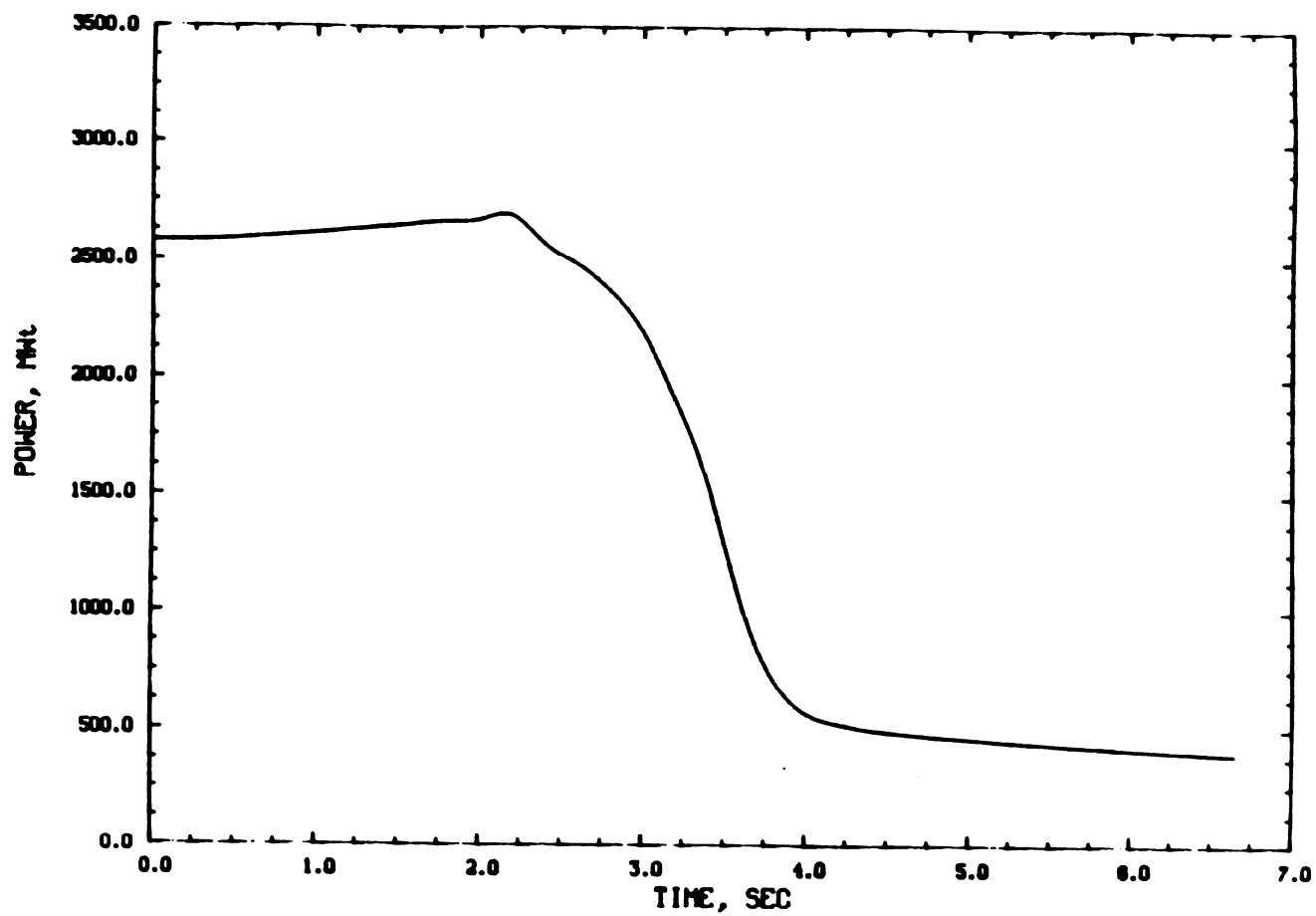
## S/G LIQUID LEVEL FOR UNCONTROLLED BANK WITHDRAWAL AT FULL POWER



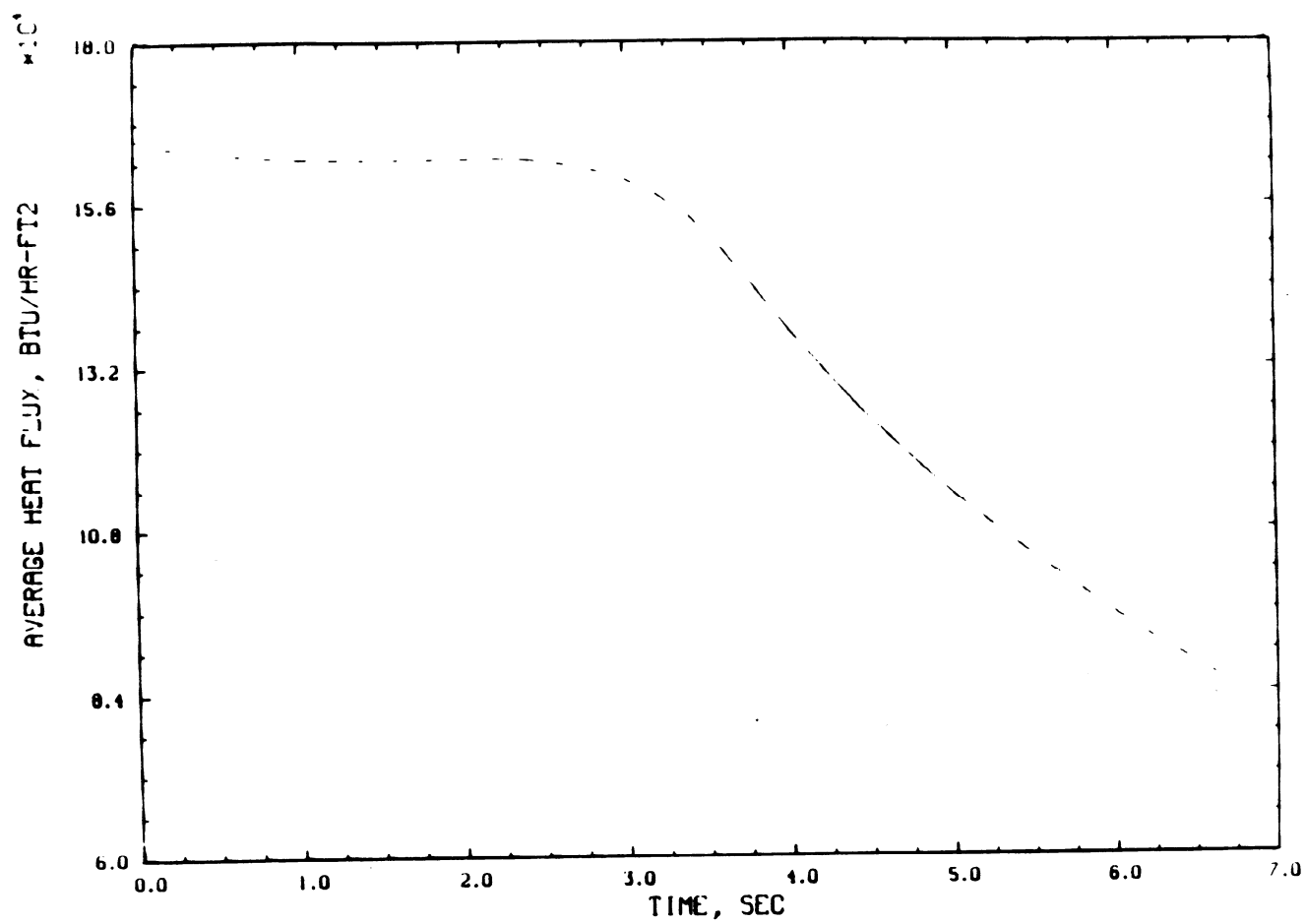
## PRIMARY COOLANT SYSTEM MASS FLOW RATE FOR LOSS OF FORCED FLOW



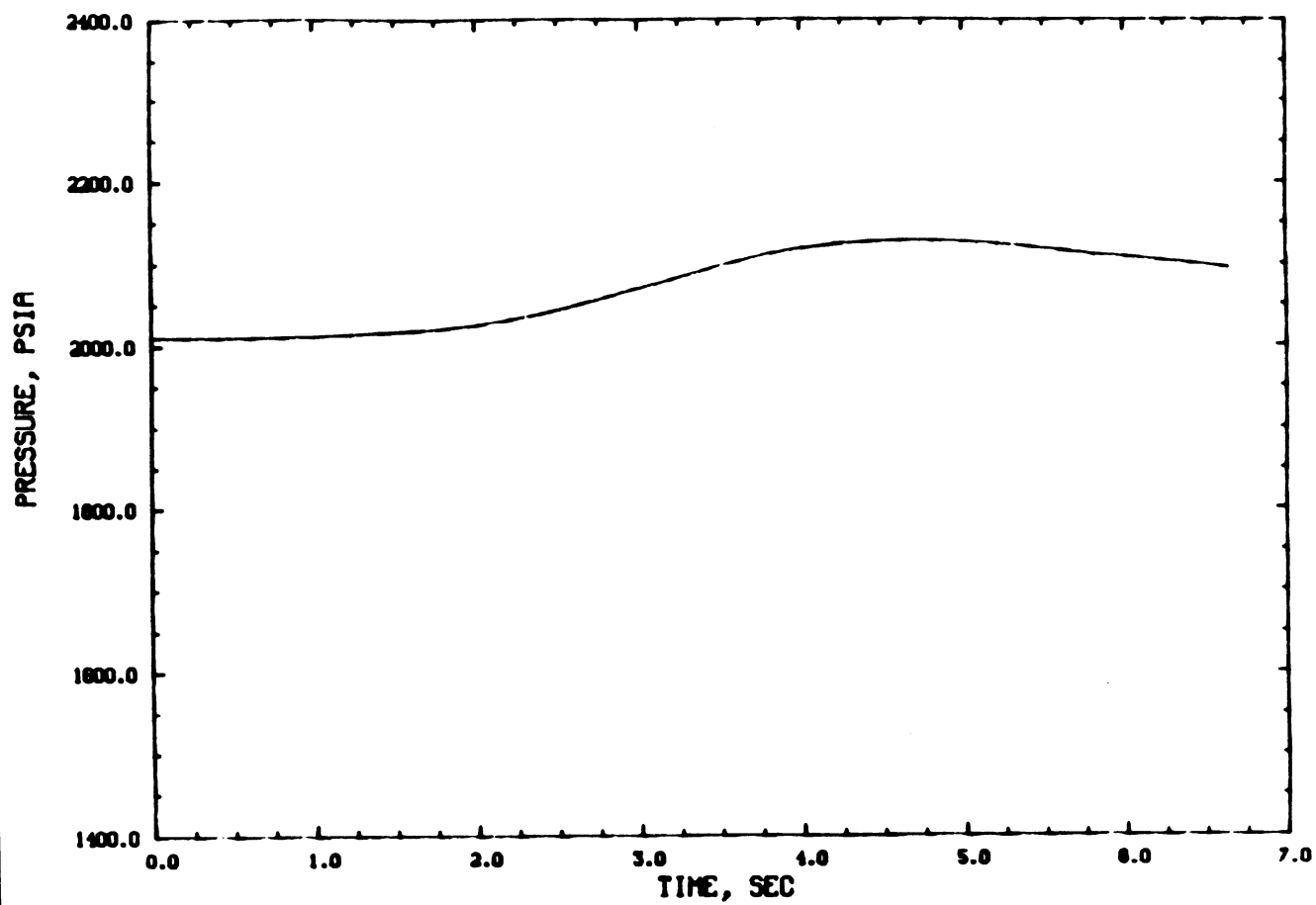
## REACTOR POWER LEVEL FOR LOSS OF FORCED FLOW



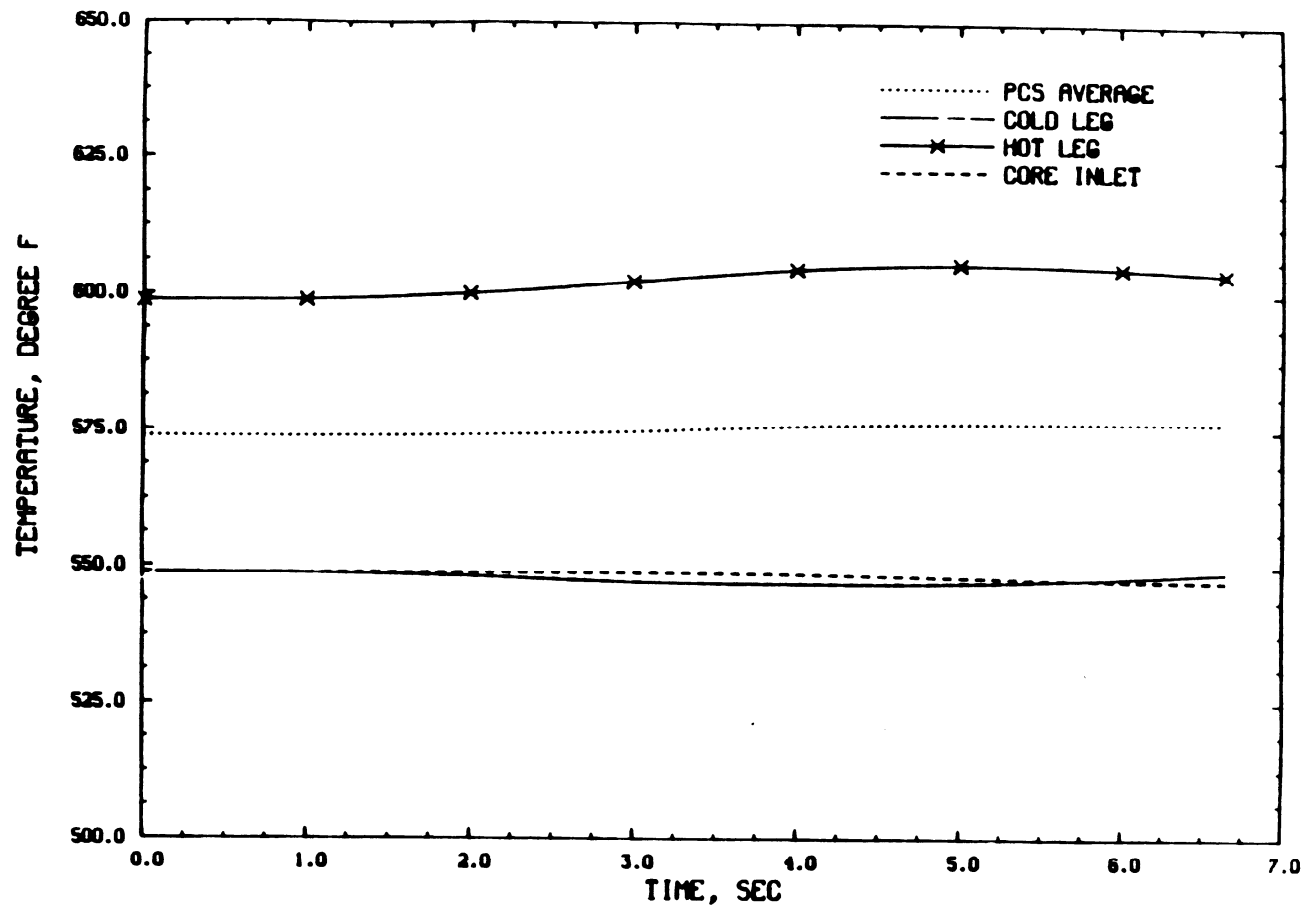
## CORE AVERAGE HEAT FLUX FOR LOSS OF FORCED FLOW

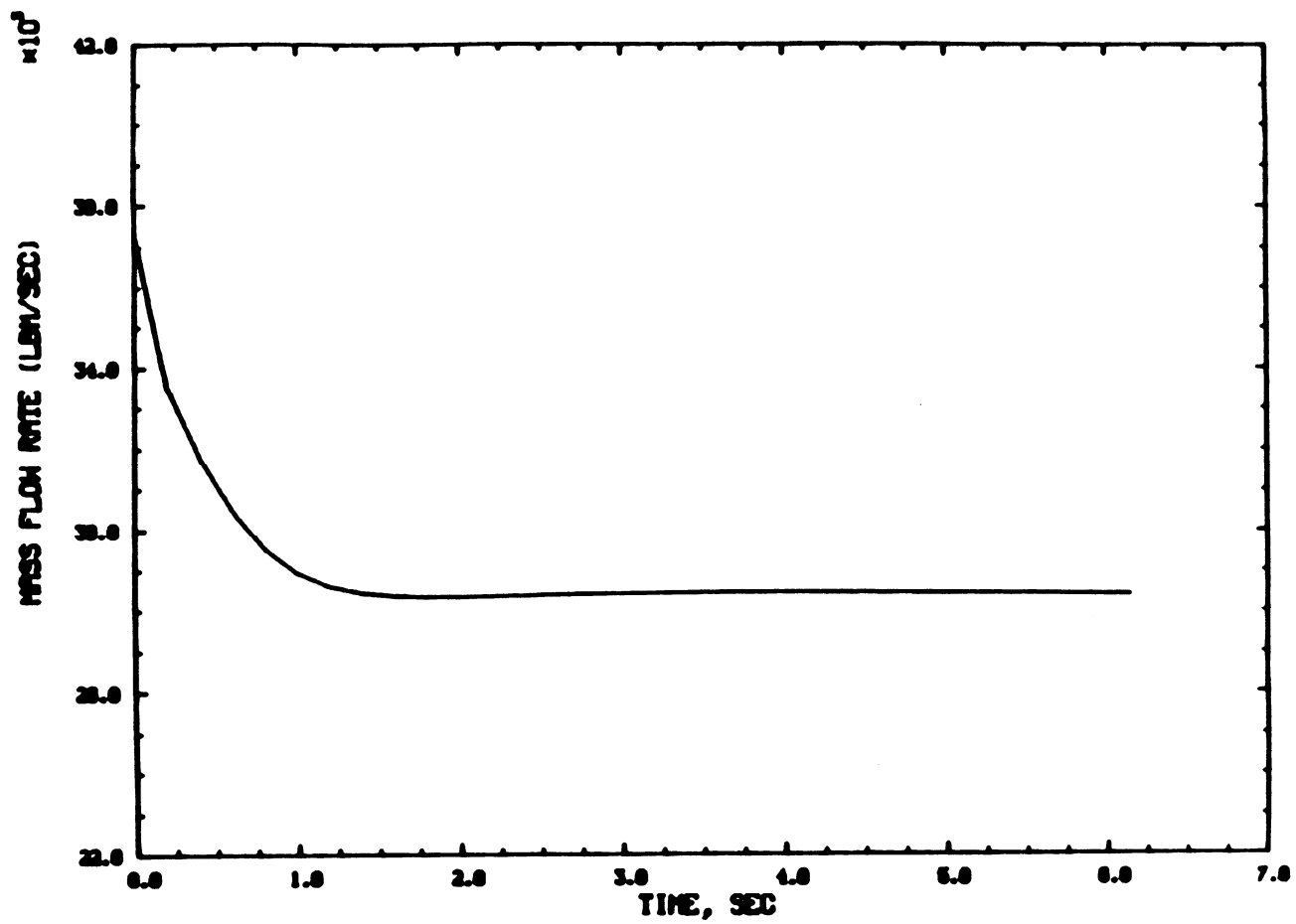


## PRESSURIZER PRESSURE FOR LOSS OF FORCED FLOW

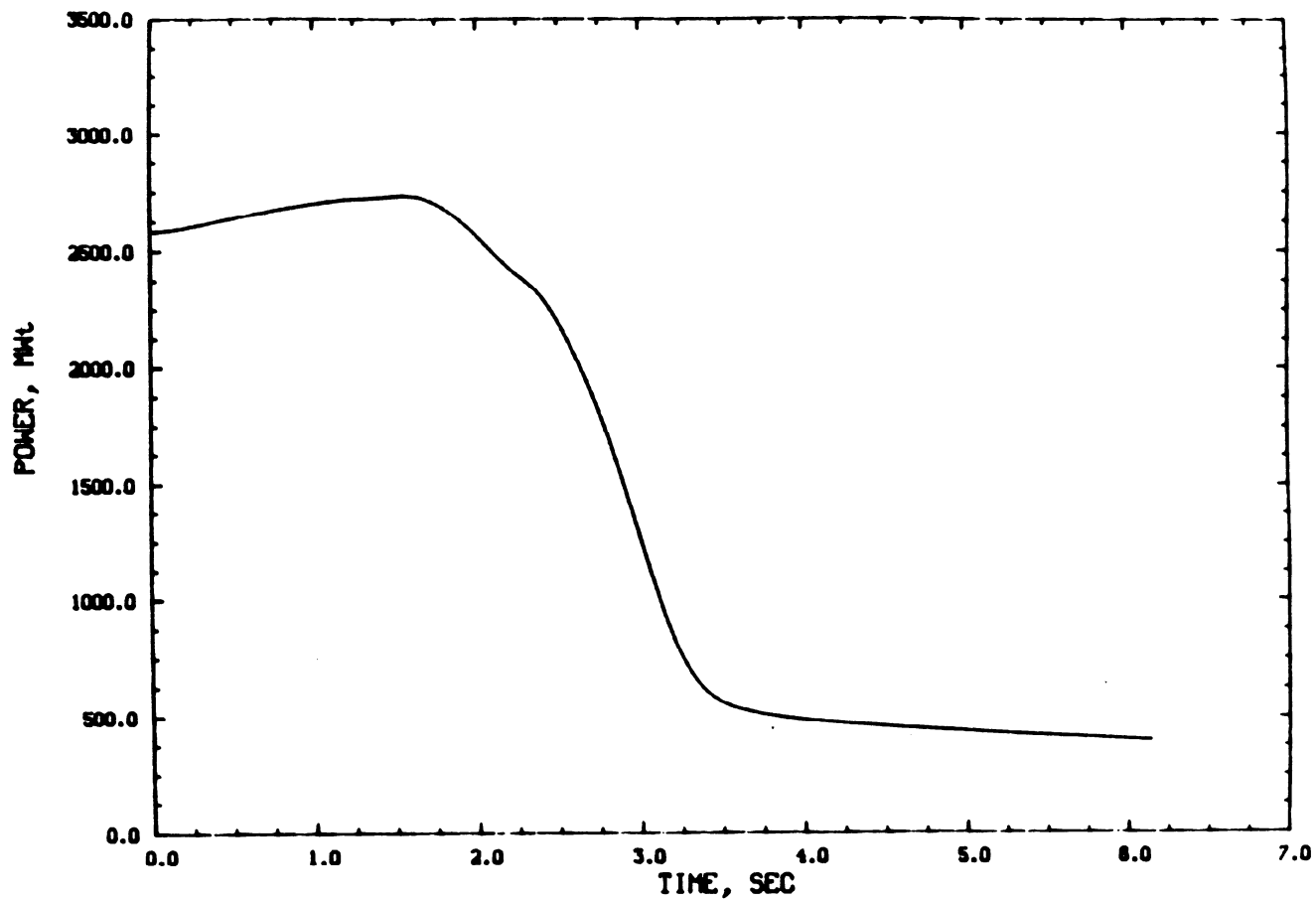


## PRIMARY COOLANT SYSTEM TEMPERATURES FOR LOSS OF FORCED FLOW

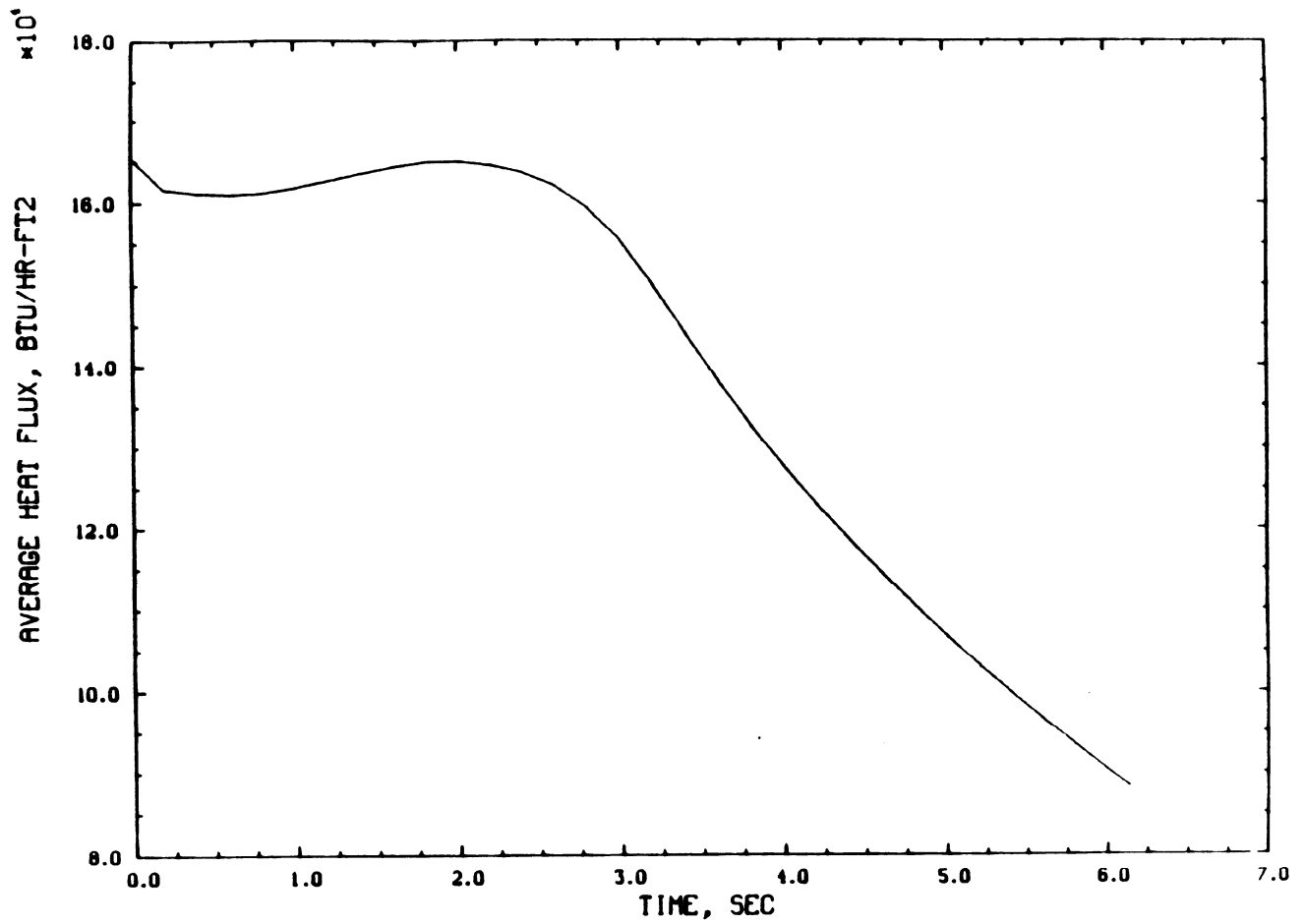


PRIMARY COOLANT SYSTEM MASS FLOW RATE FOR  
REACTOR COOLANT PUMP ROTOR SEIZURE

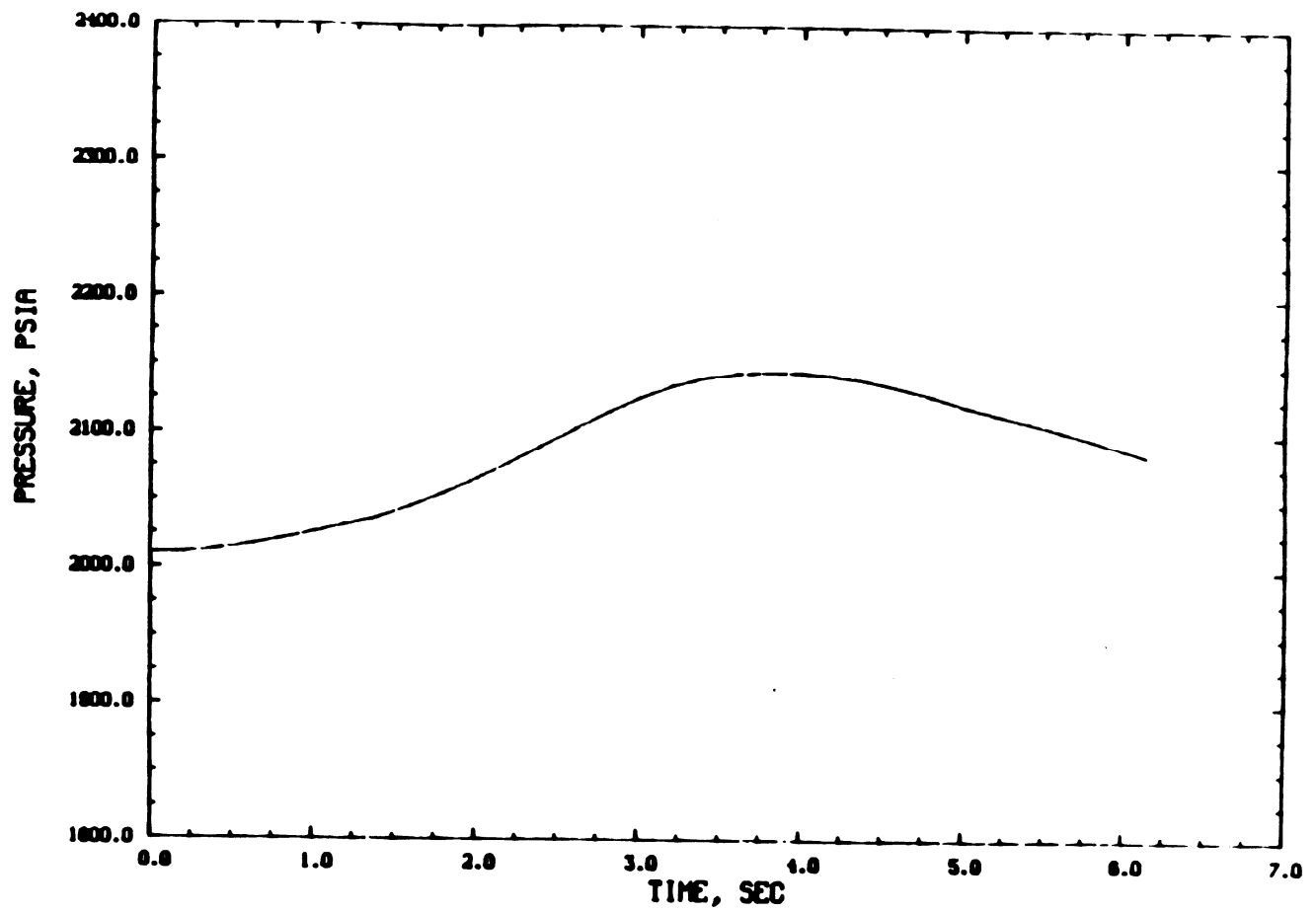
## REACTOR POWER LEVEL FOR REACTOR COOLANT PUMP ROTOR SEIZURE



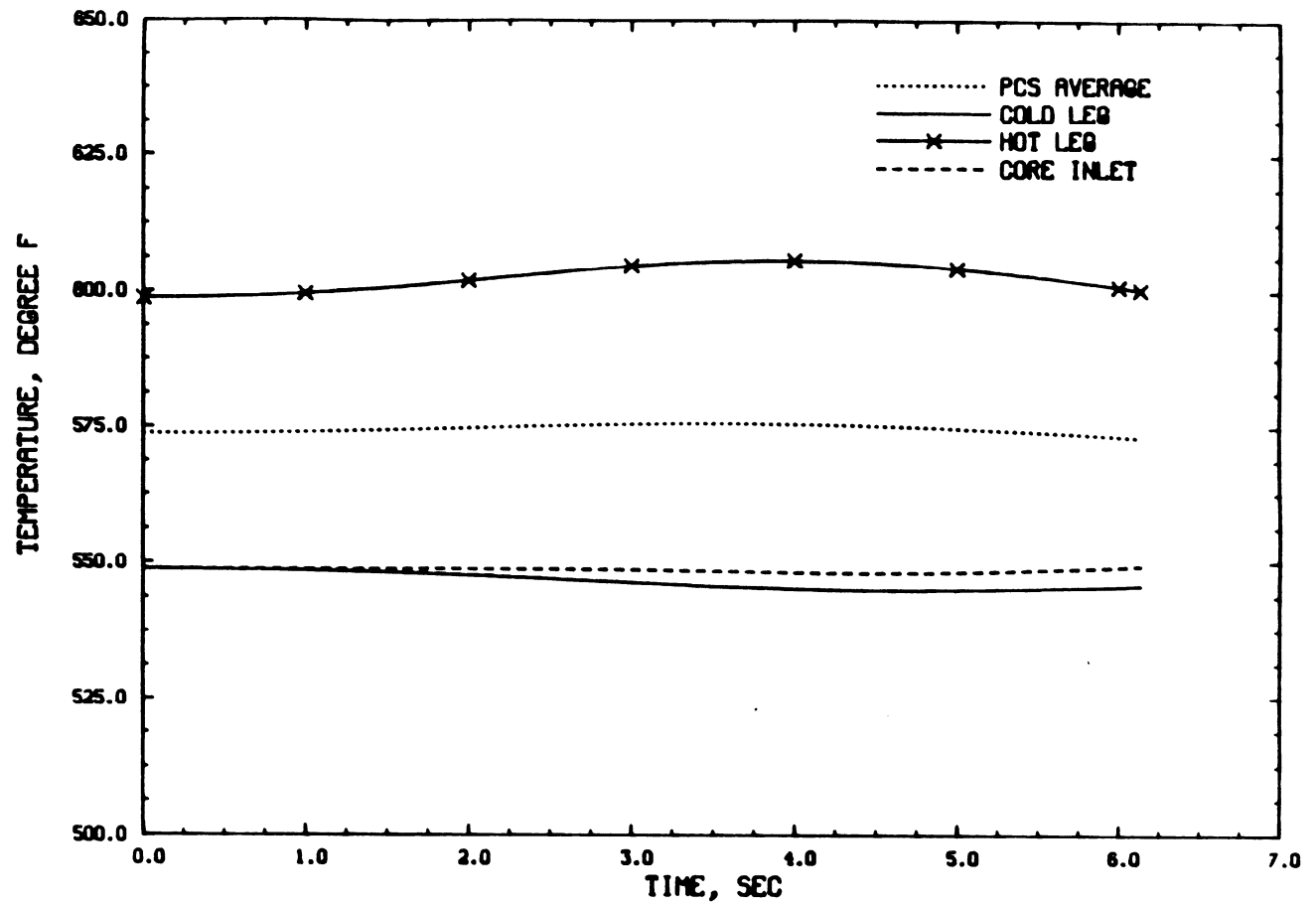
## CORE AVERAGE HEAT FLUX FOR REACTOR COOLANT PUMP ROTOR SEIZURE

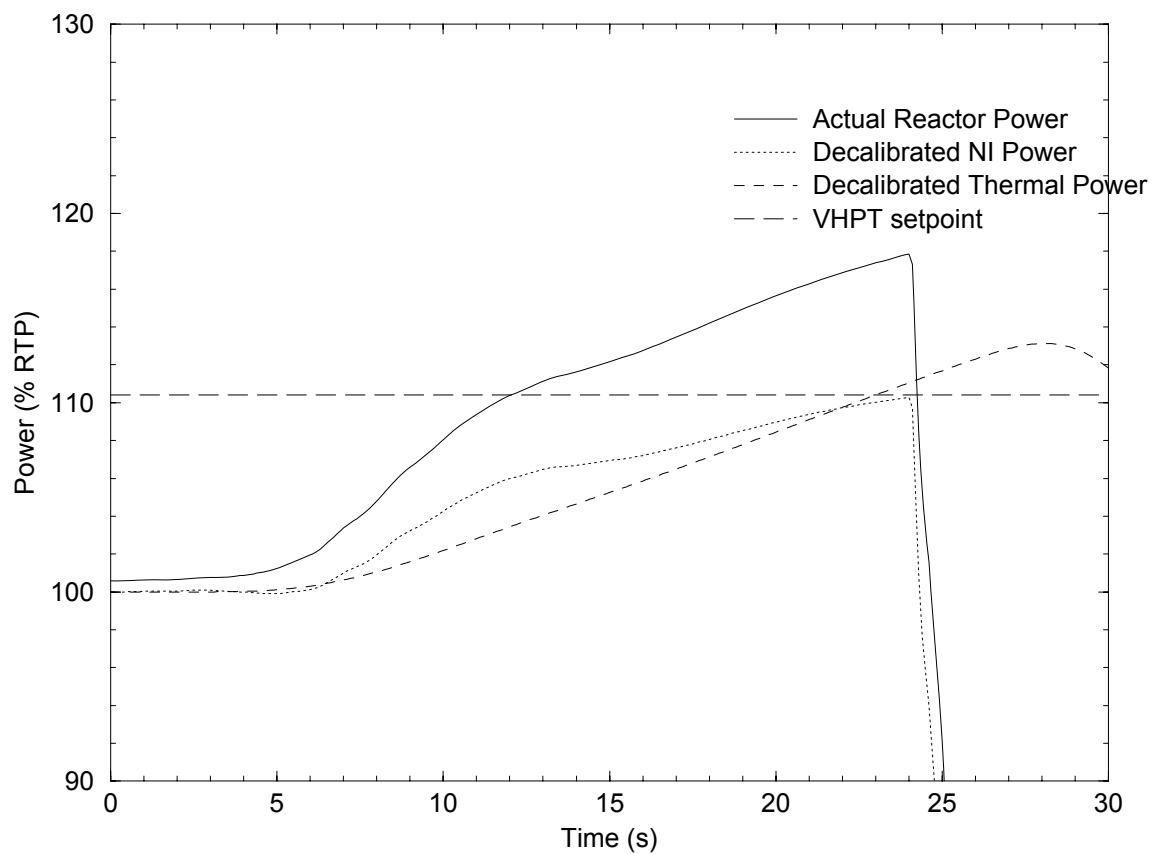


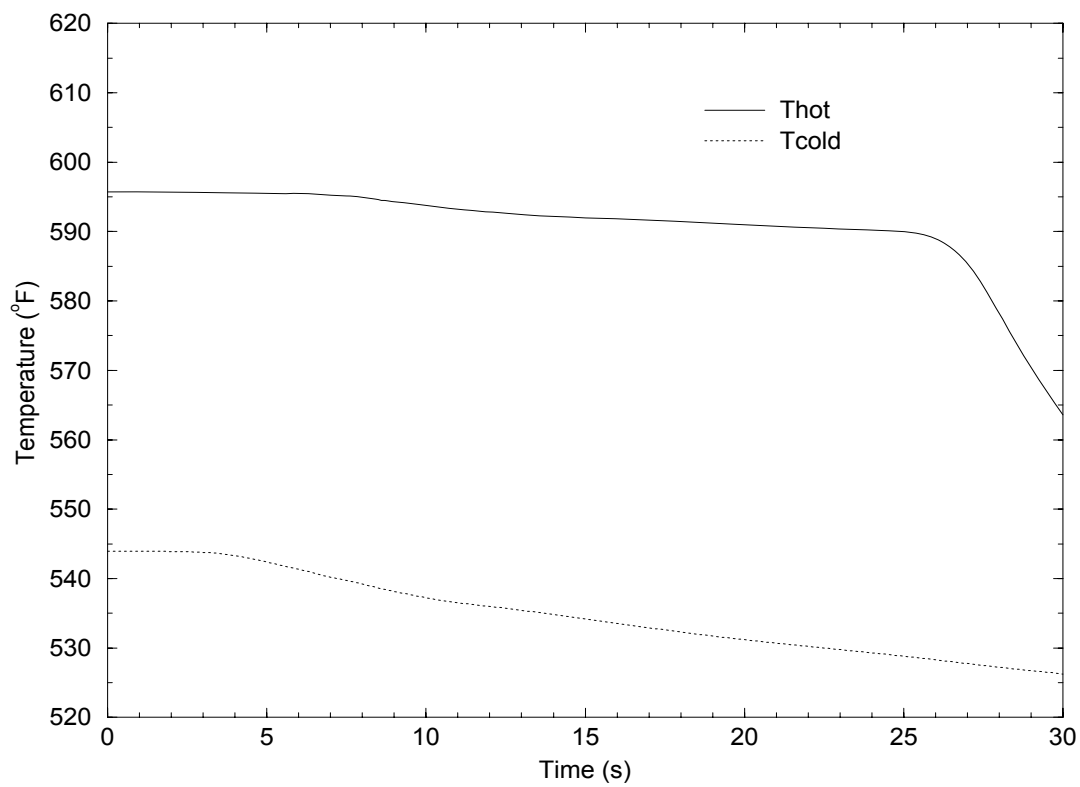
## PRESSURIZER PRESSURE FOR REACTOR COOLANT PUMP ROTOR SEIZURE

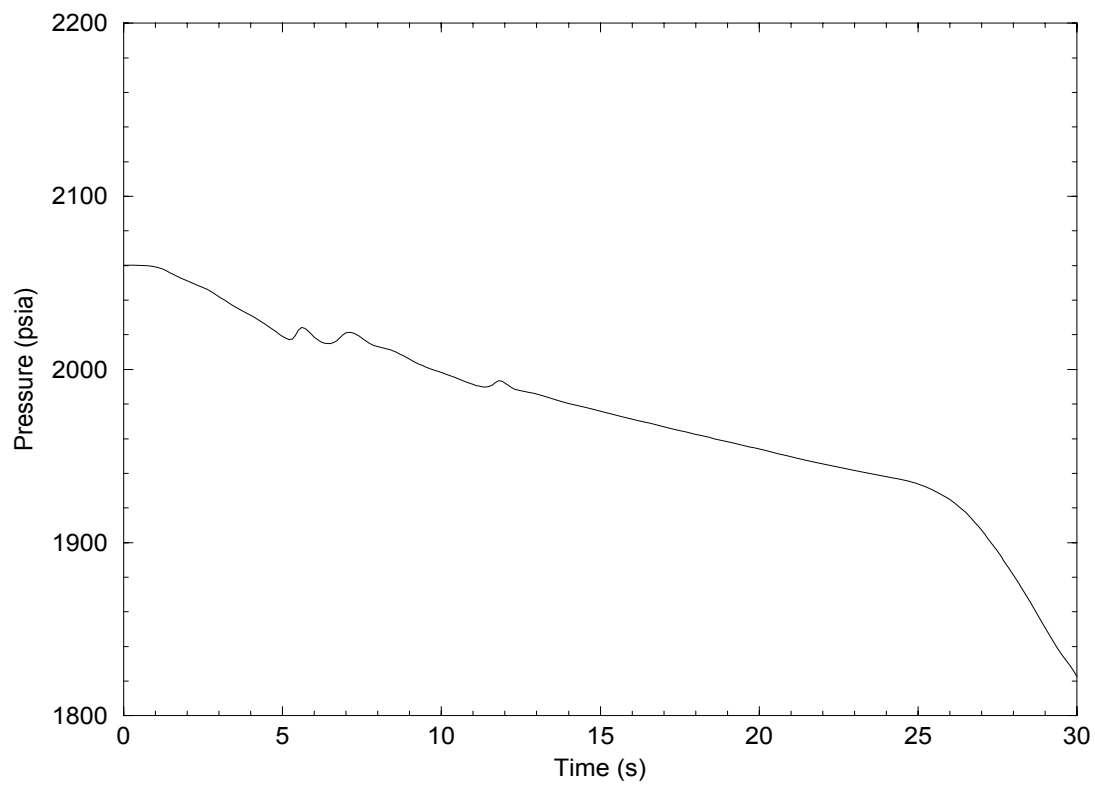


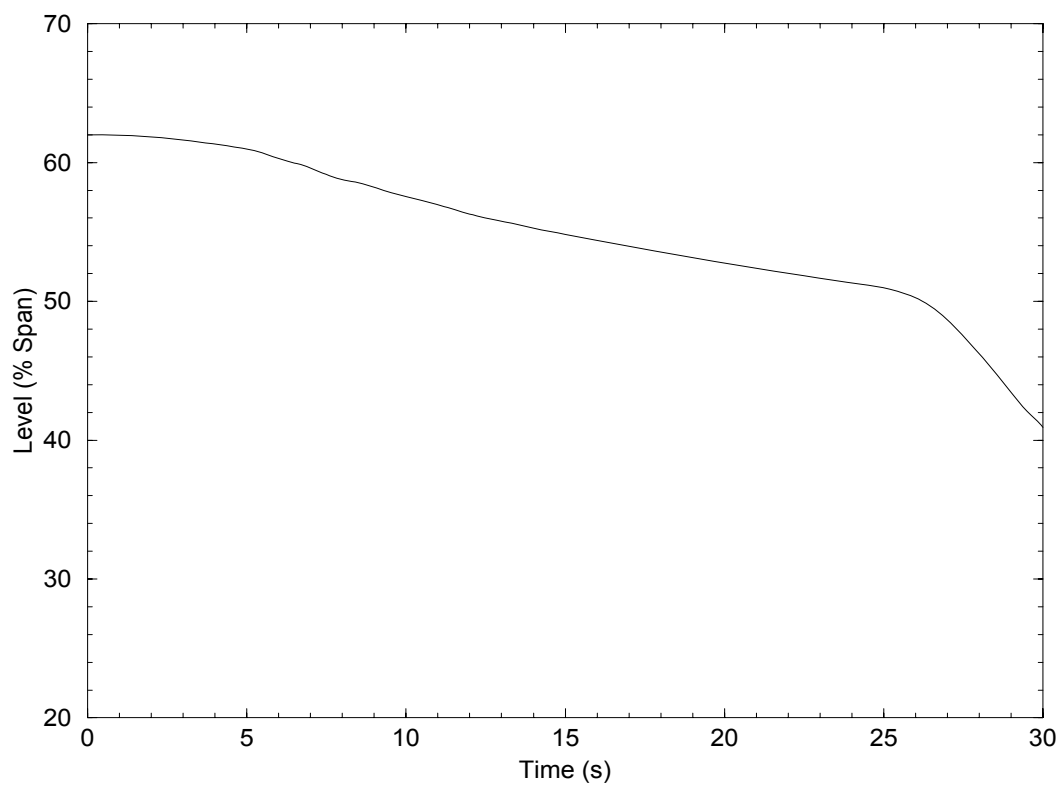
PRIMARY COOLANT SYSTEM TEMPERATURES FOR  
REACTOR COOLANT PUMP ROTOR SEIZURE

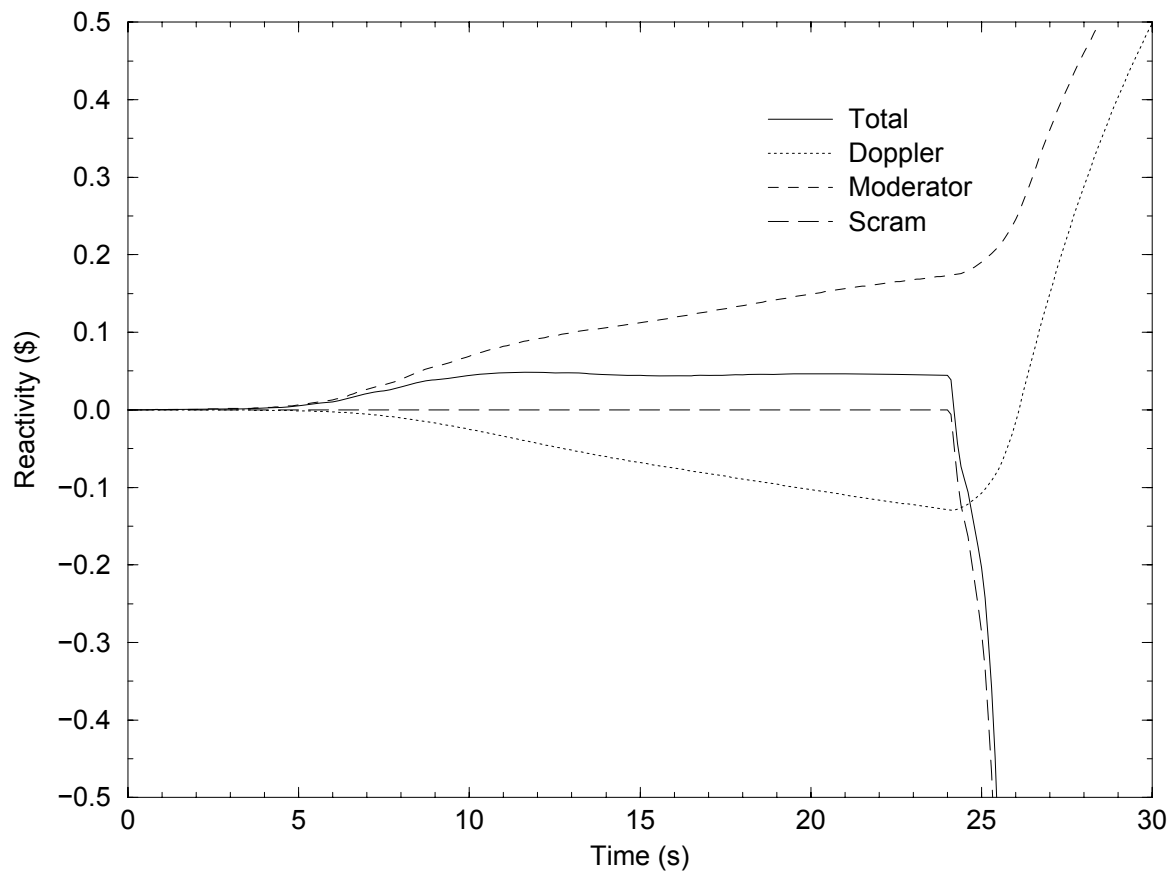


**POWER COMPARISONS – EXCESS LOAD**

**PCS COOLANT TEMPERATURE – EXCESS LOAD**

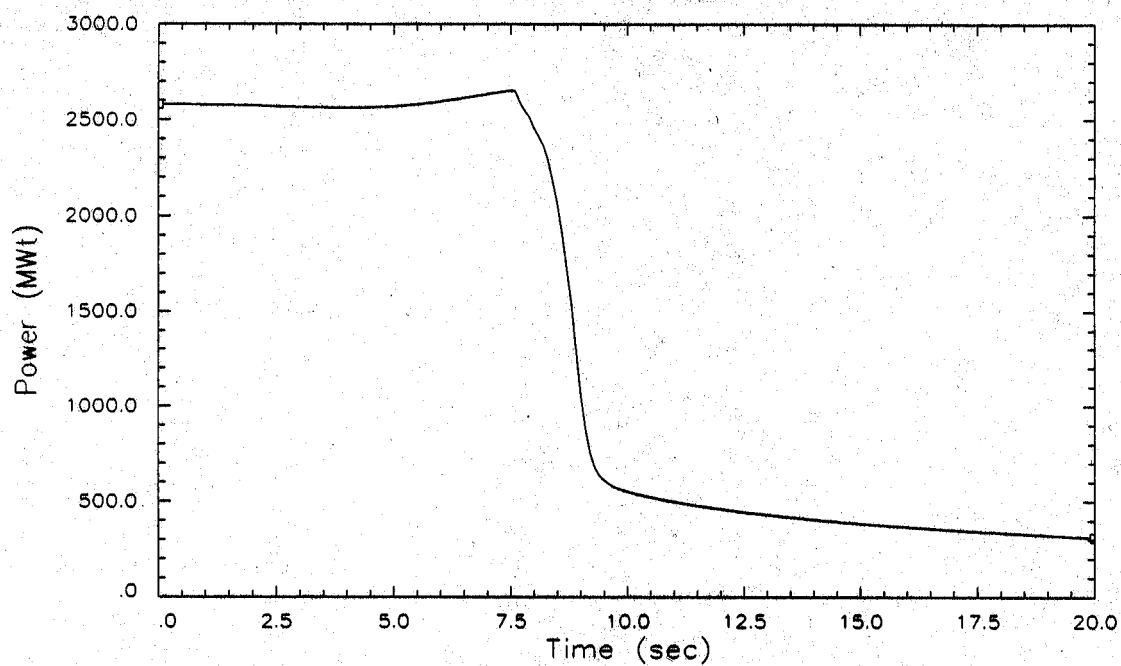
**PRESSURIZER PRESSURE – EXCESS LOAD**

**PRESSURIZER COLLAPSED LIQUID LEVEL – EXCESS LOAD**

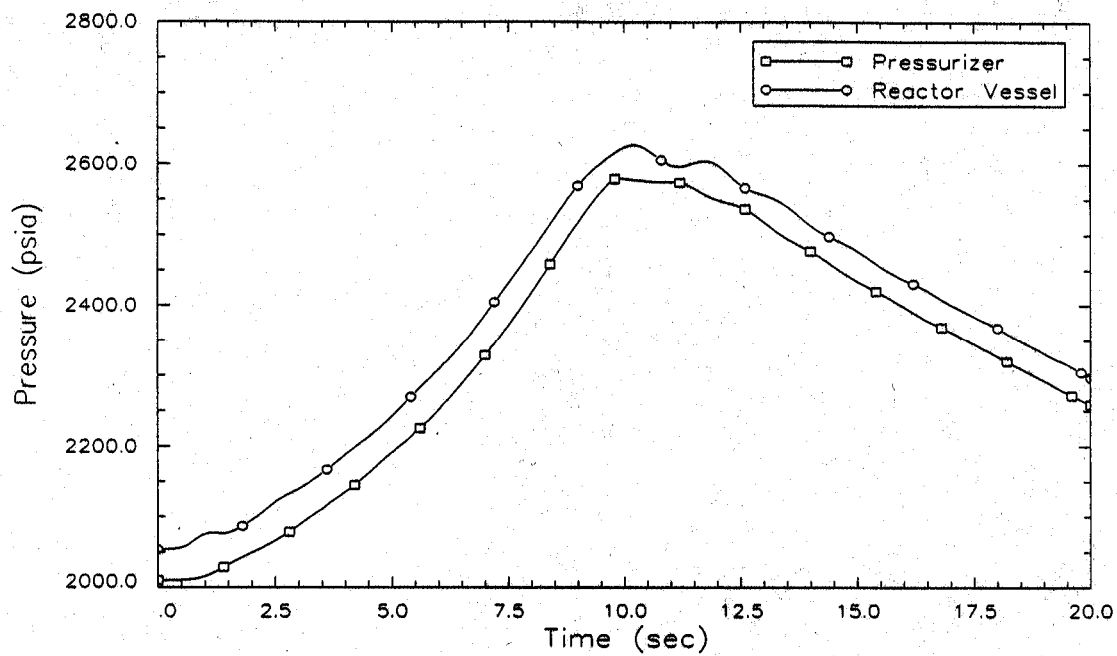
**COMPONENTS OF REACTIVITY – EXCESS LOAD**

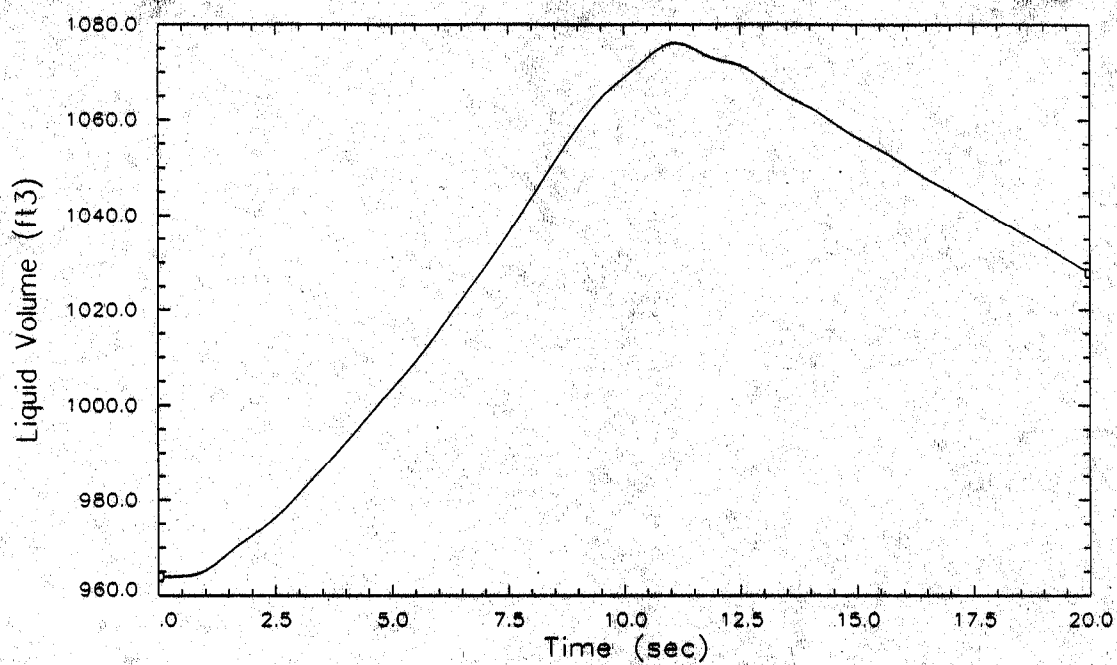
Portions of this page have been  
redacted per 10 CFR 2.390(d)(1).

## REACTOR POWER LEVEL FOR LOSS OF EXTERNAL LOAD EVENT

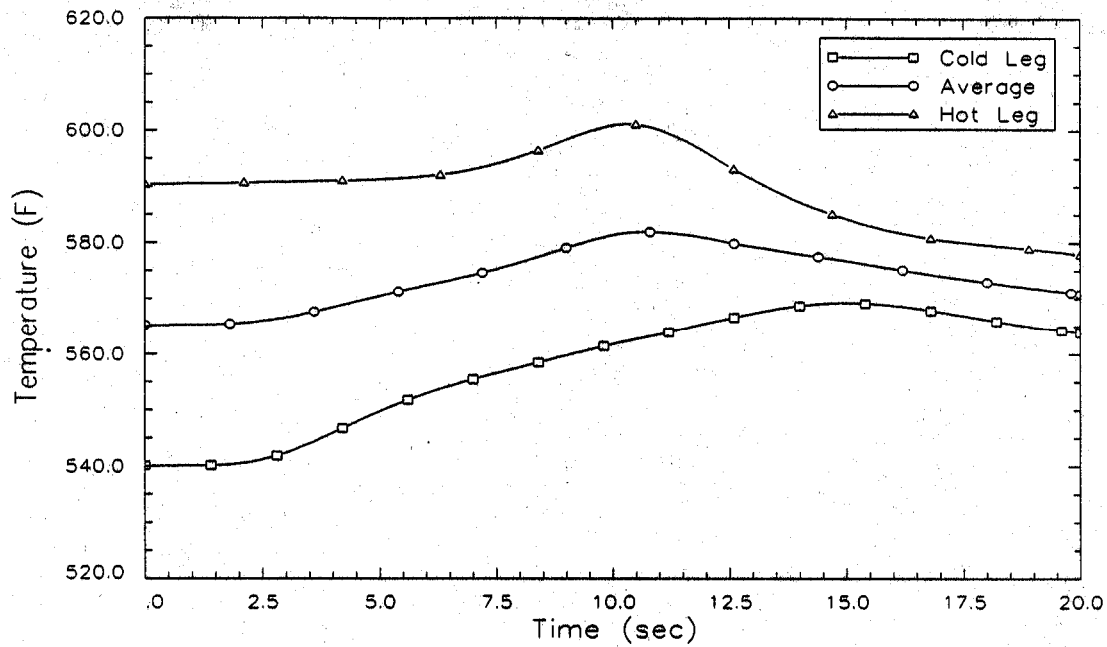


## PRIMARY PRESSURES FOR LOSS OF EXTERNAL LOAD EVENT

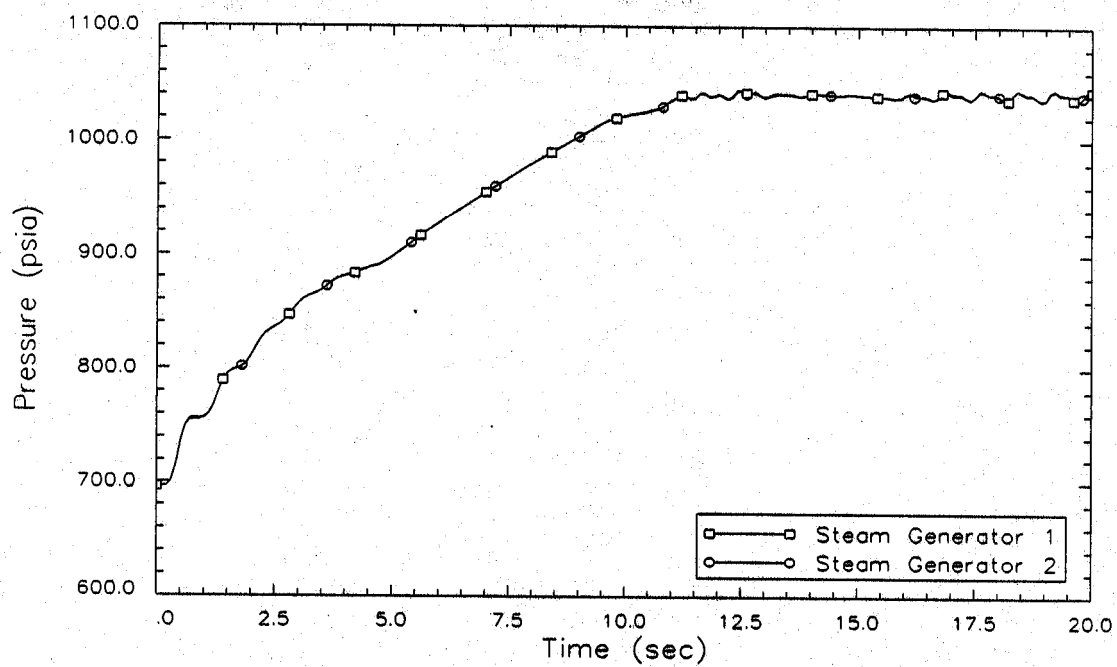


**PRESSURIZER LIQUID VOLUME FOR LOSS OF EXTERNAL LOAD EVENT**

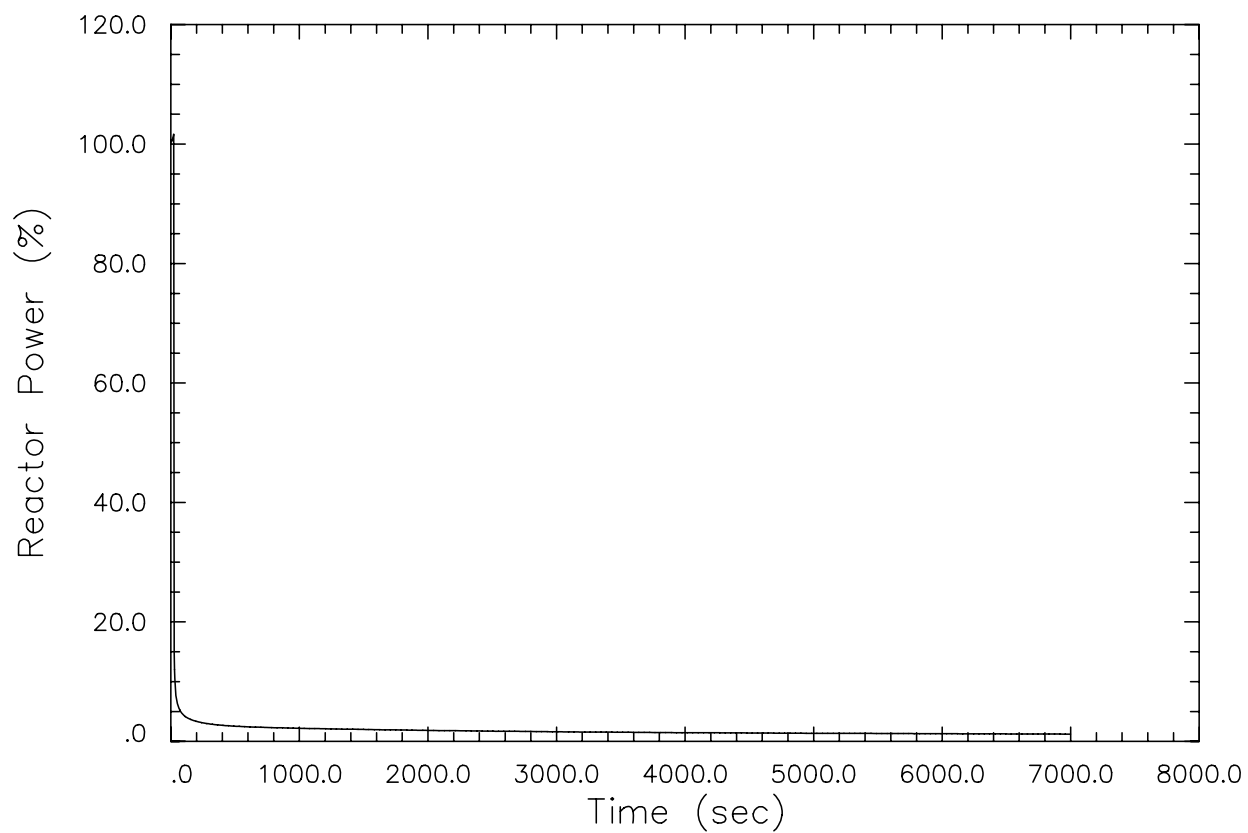
## PRIMARY COOLANT SYSTEM TEMPERATURES FOR LOSS OF EXTERNAL LOAD EVENT



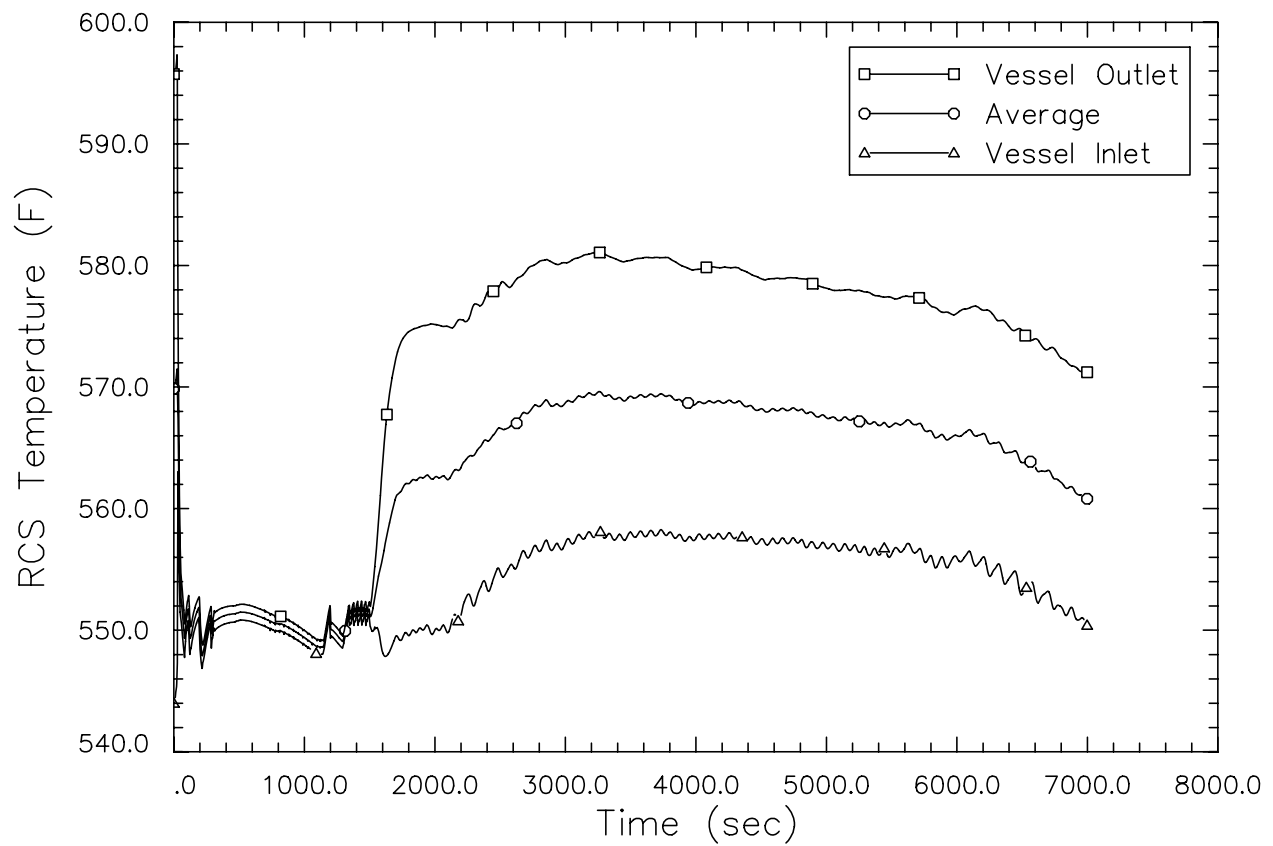
## SECONDARY PRESSURES FOR LOSS OF EXTERNAL LOAD EVENT



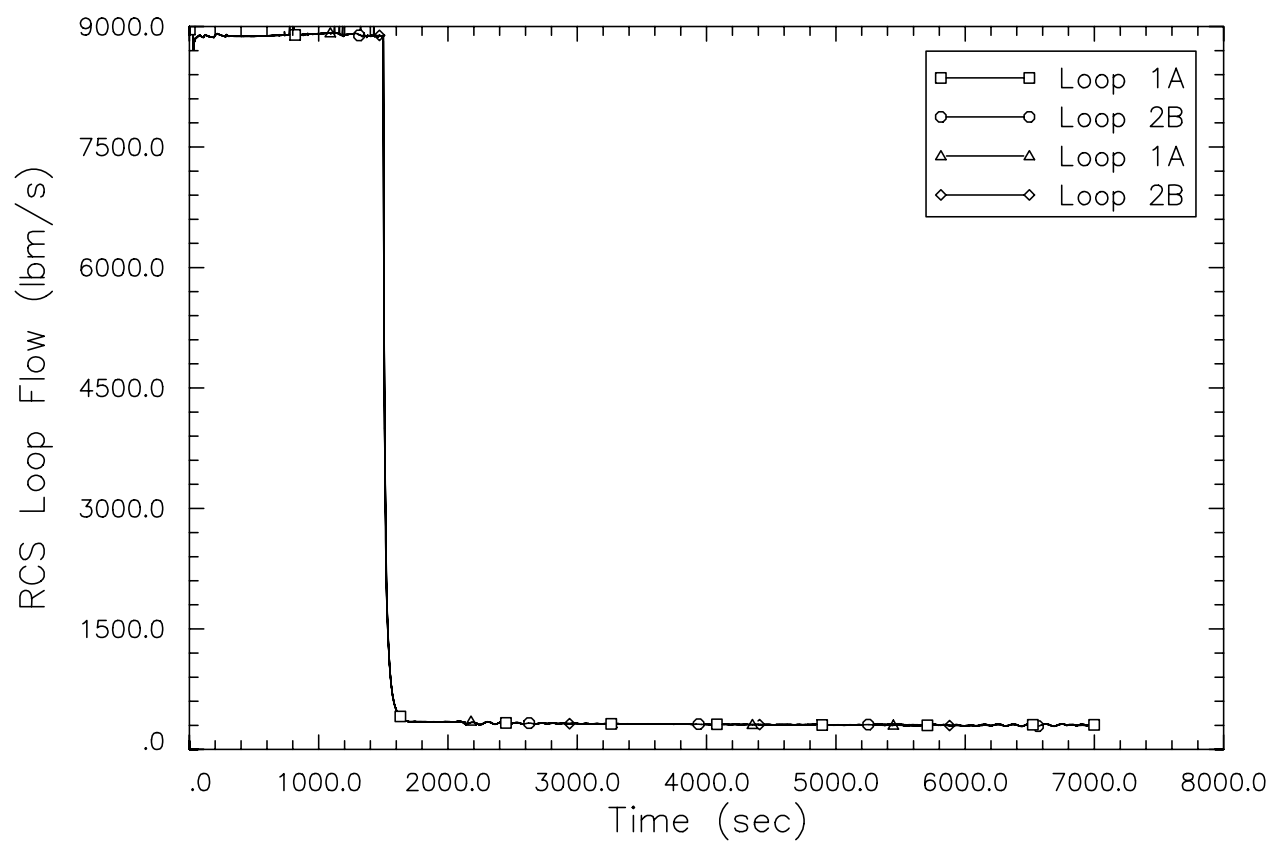
**Reactor Power, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Disabled**



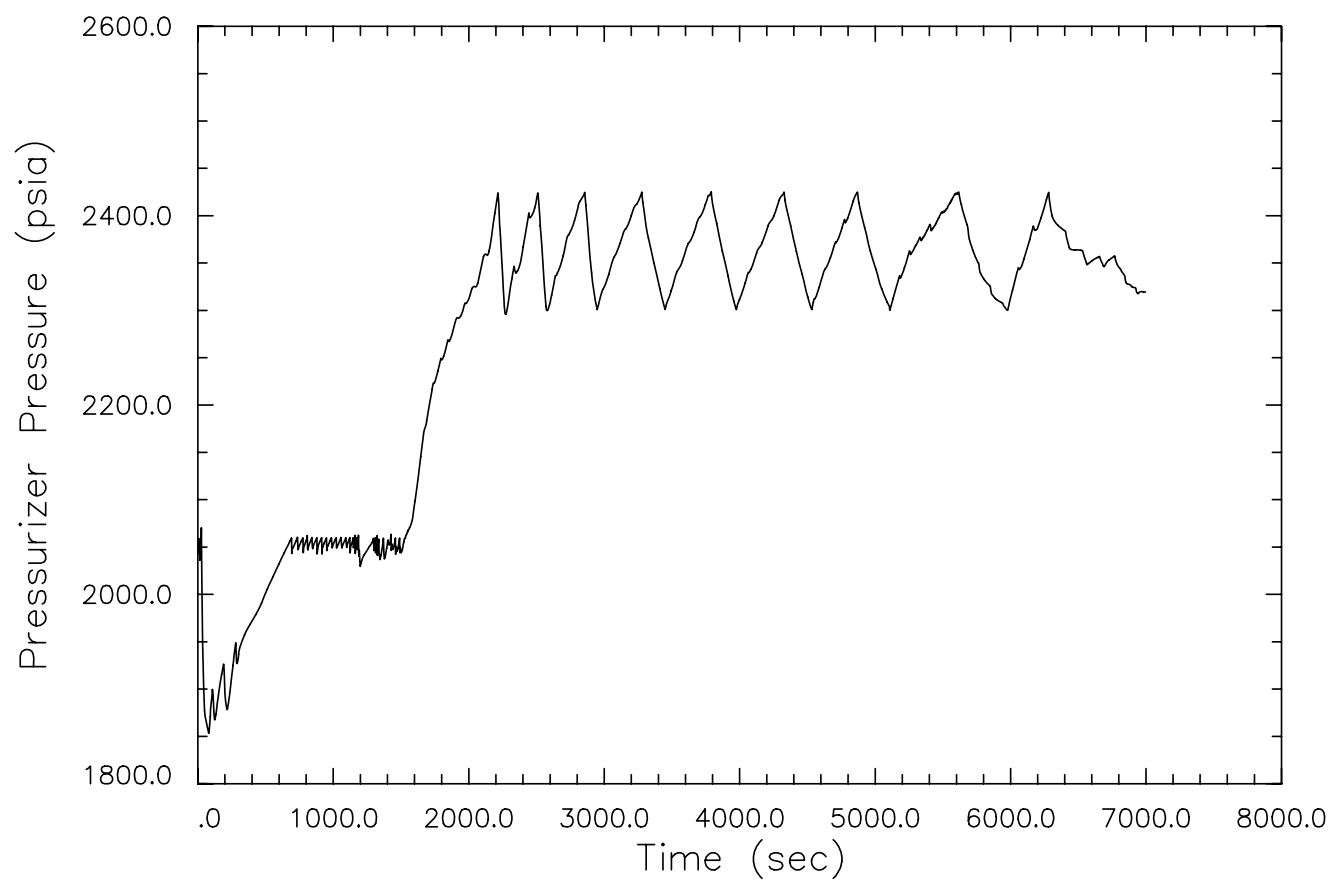
**Primary Coolant System Loop Temperatures, LNFF Analysis with Off-Site  
Power Available and Steam Dump System Disabled**



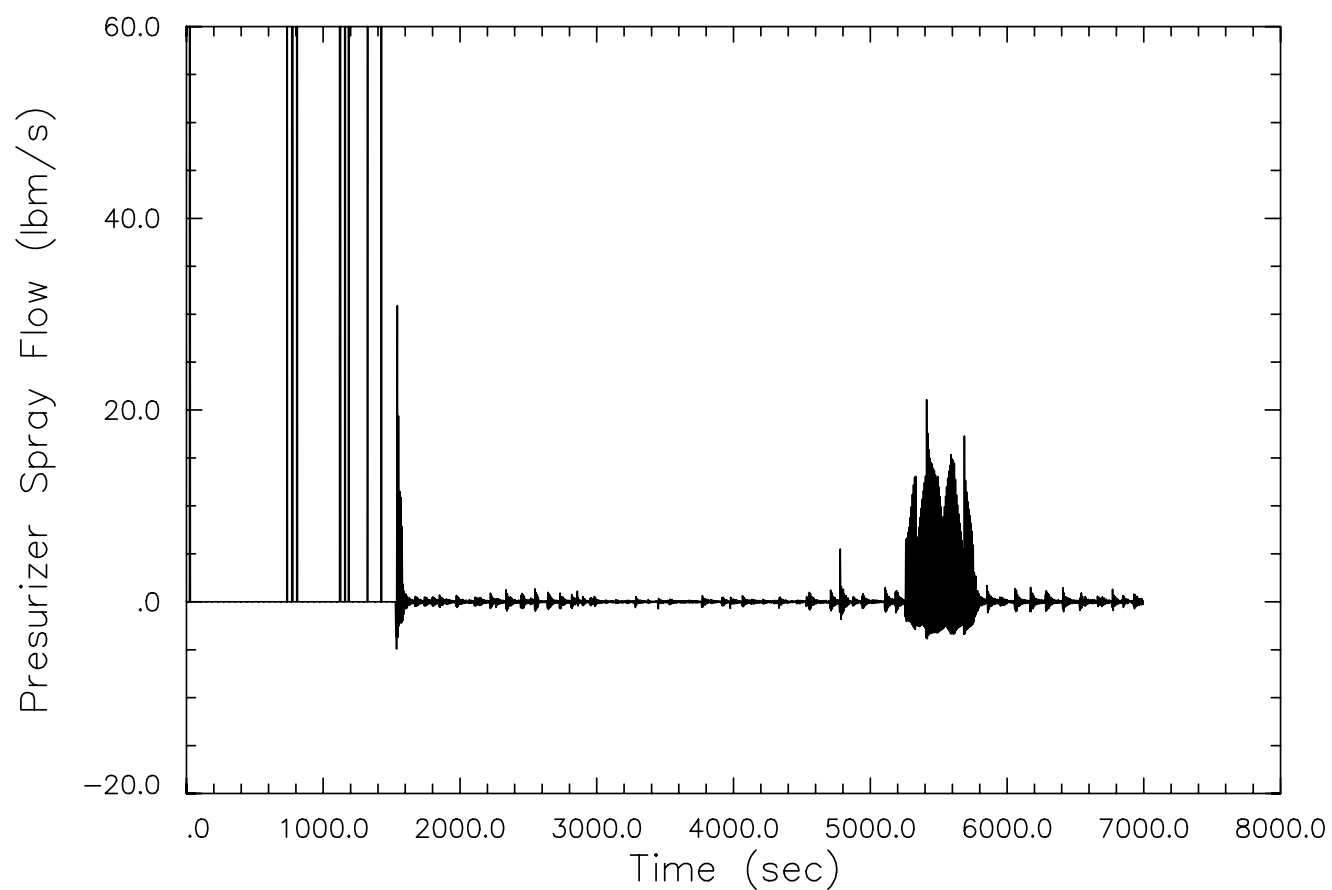
**Primary Coolant System Loop Flow, LNFF Analysis with Off-Site Power  
Available and Steam Dump System Disabled**



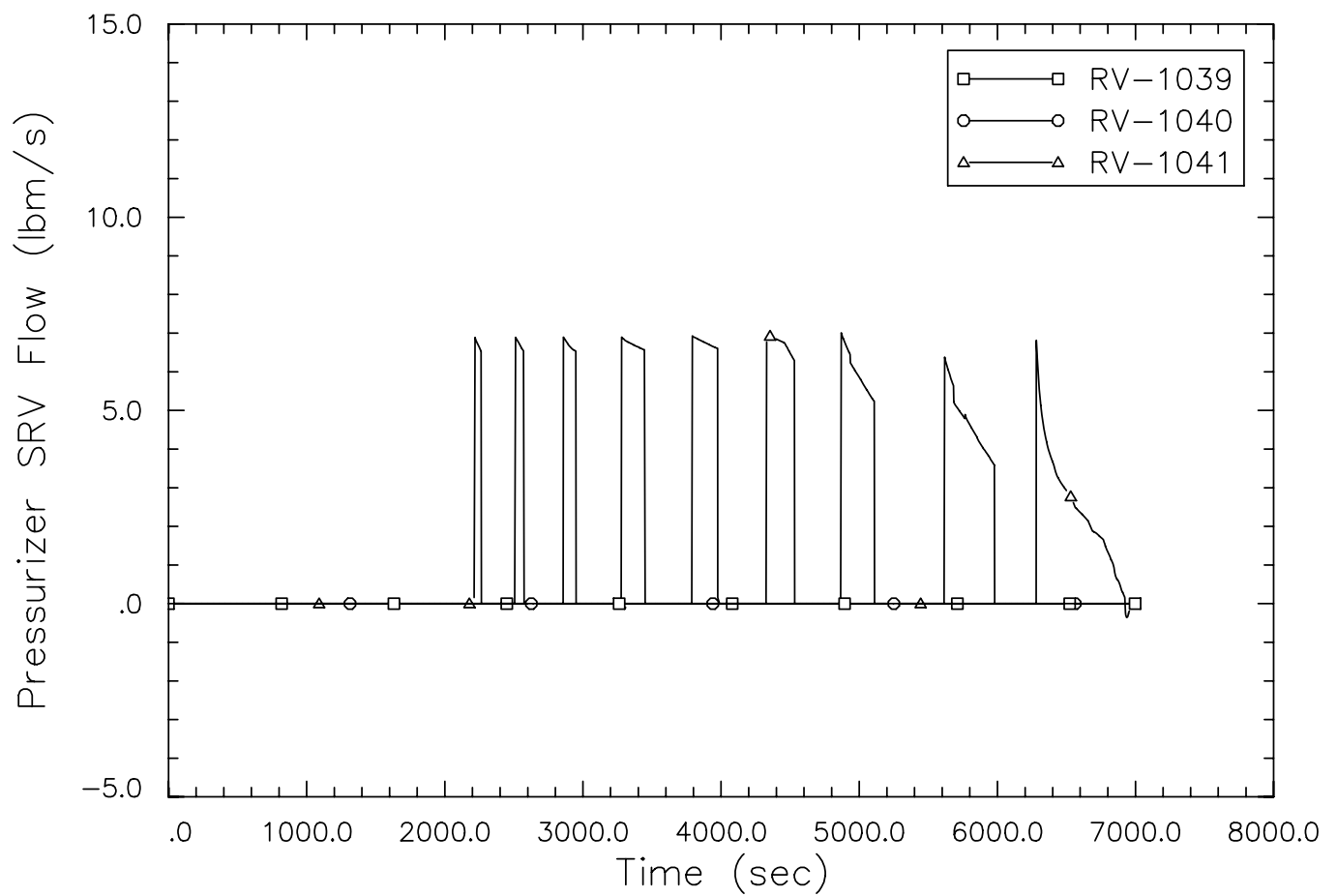
**Pressurizer Pressure, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Disabled**



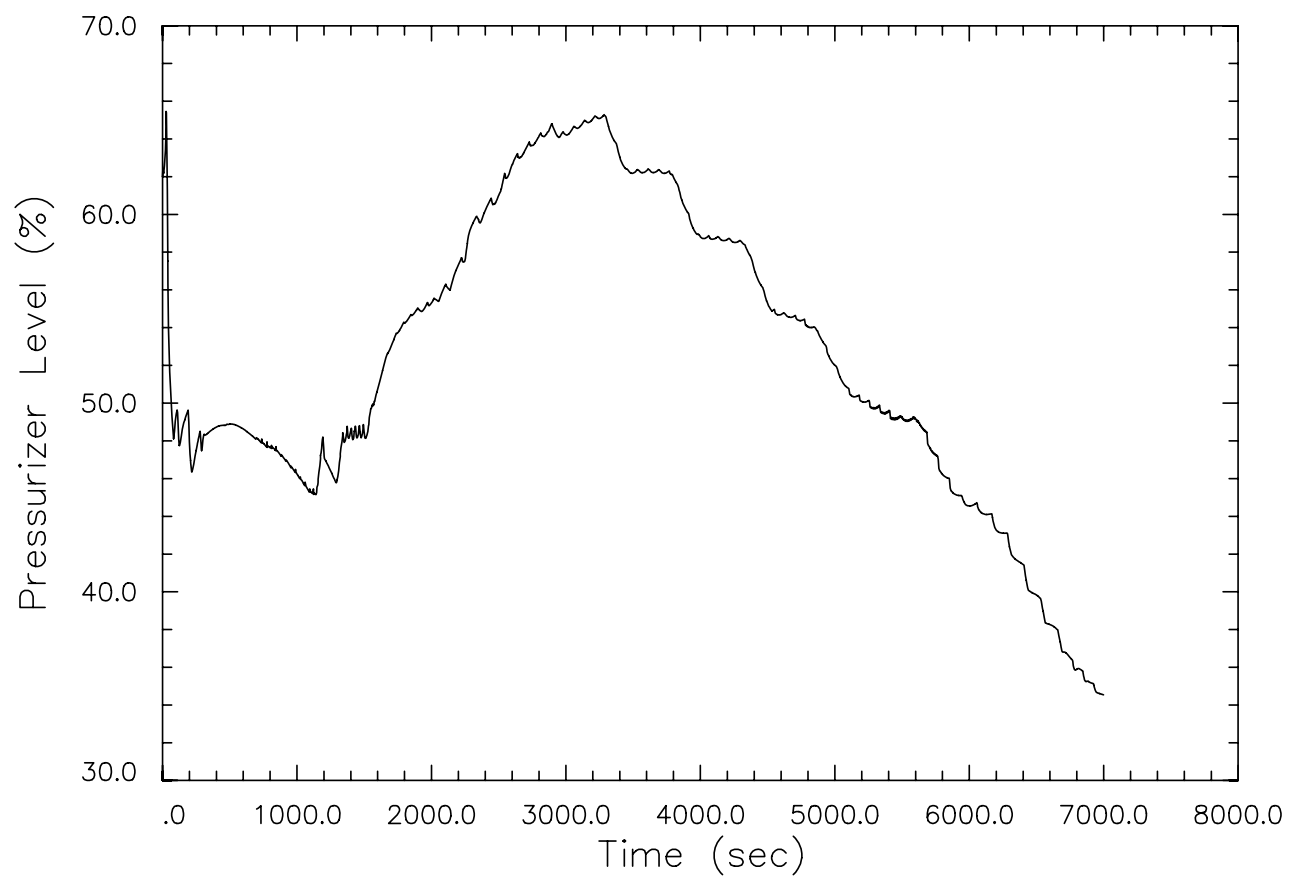
**Pressurizer Spray Flow, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Disabled**



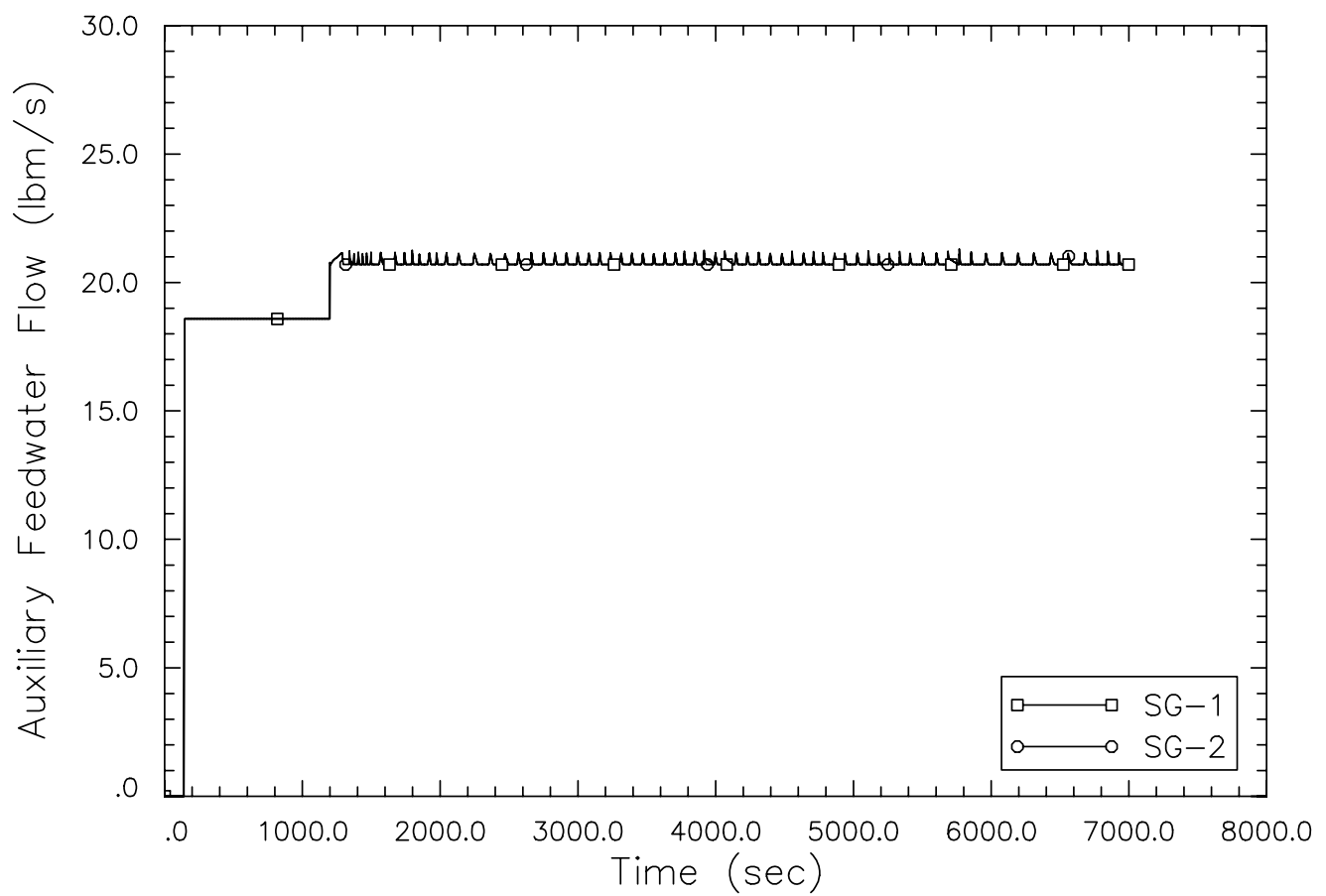
**Pressurizer SRV Flow, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Disabled**



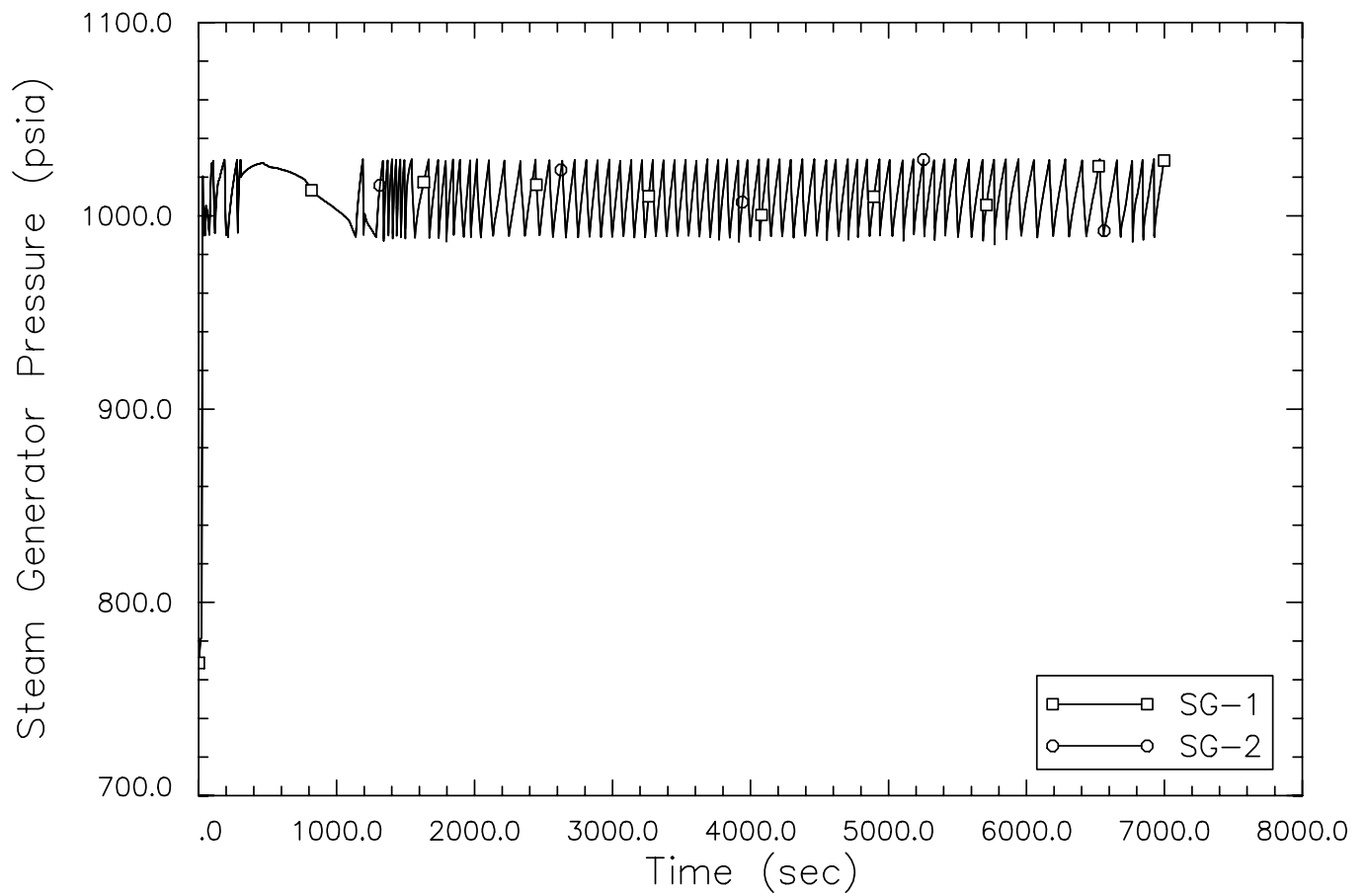
**Pressurizer Level, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Disabled**



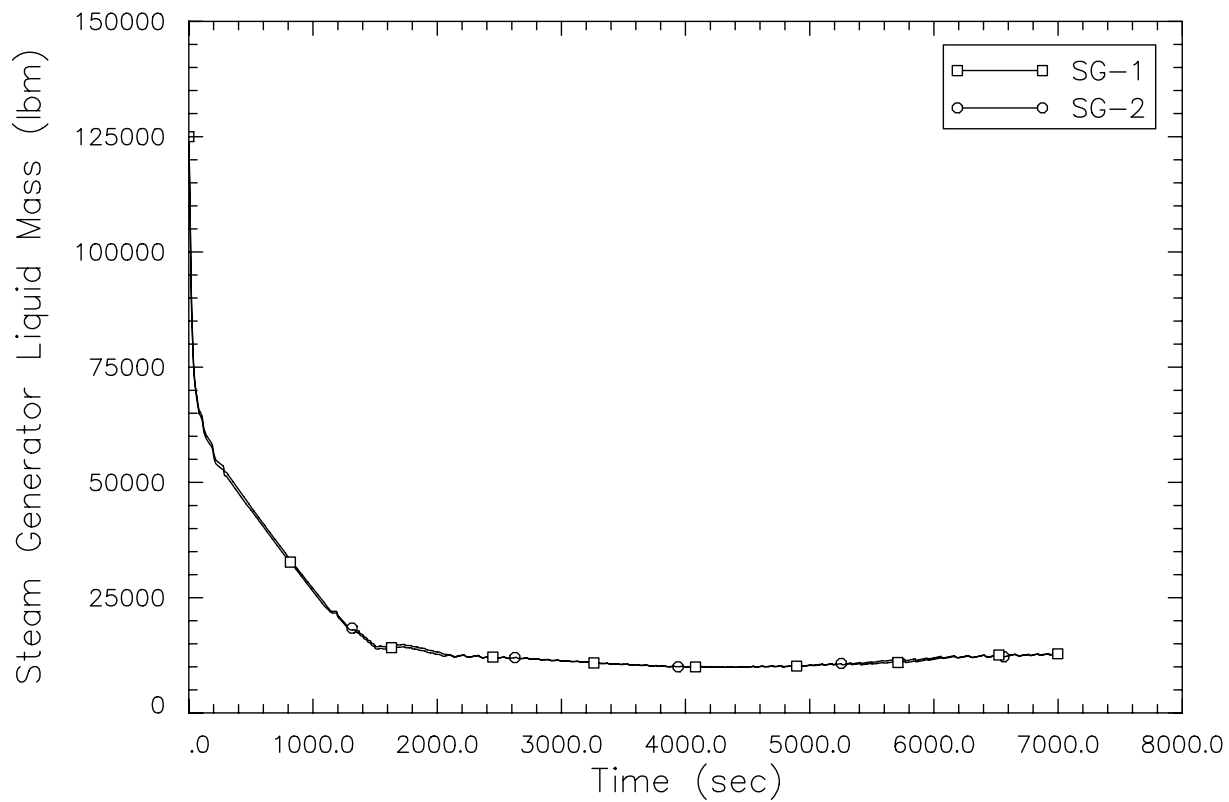
**SG Auxiliary Feedwater Flow, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Disabled**



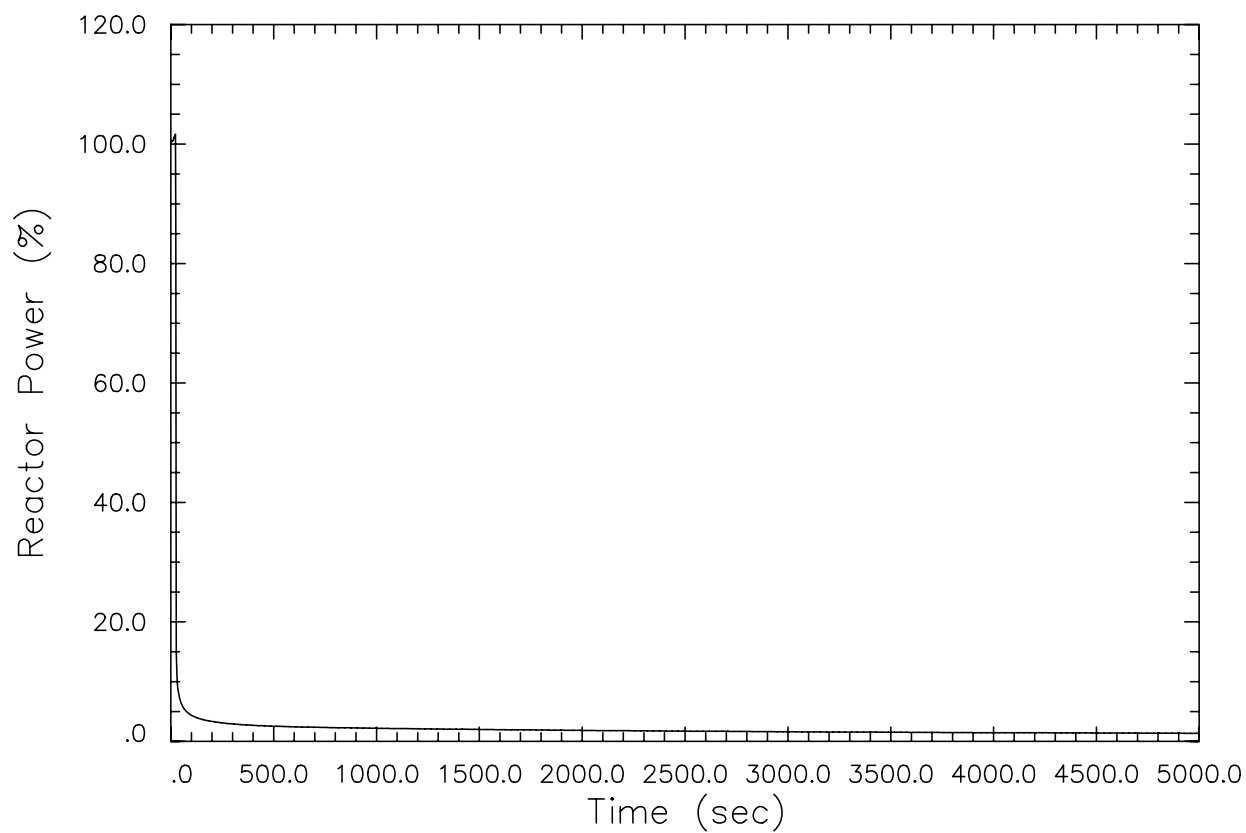
**SG Dome Pressure, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Disabled**



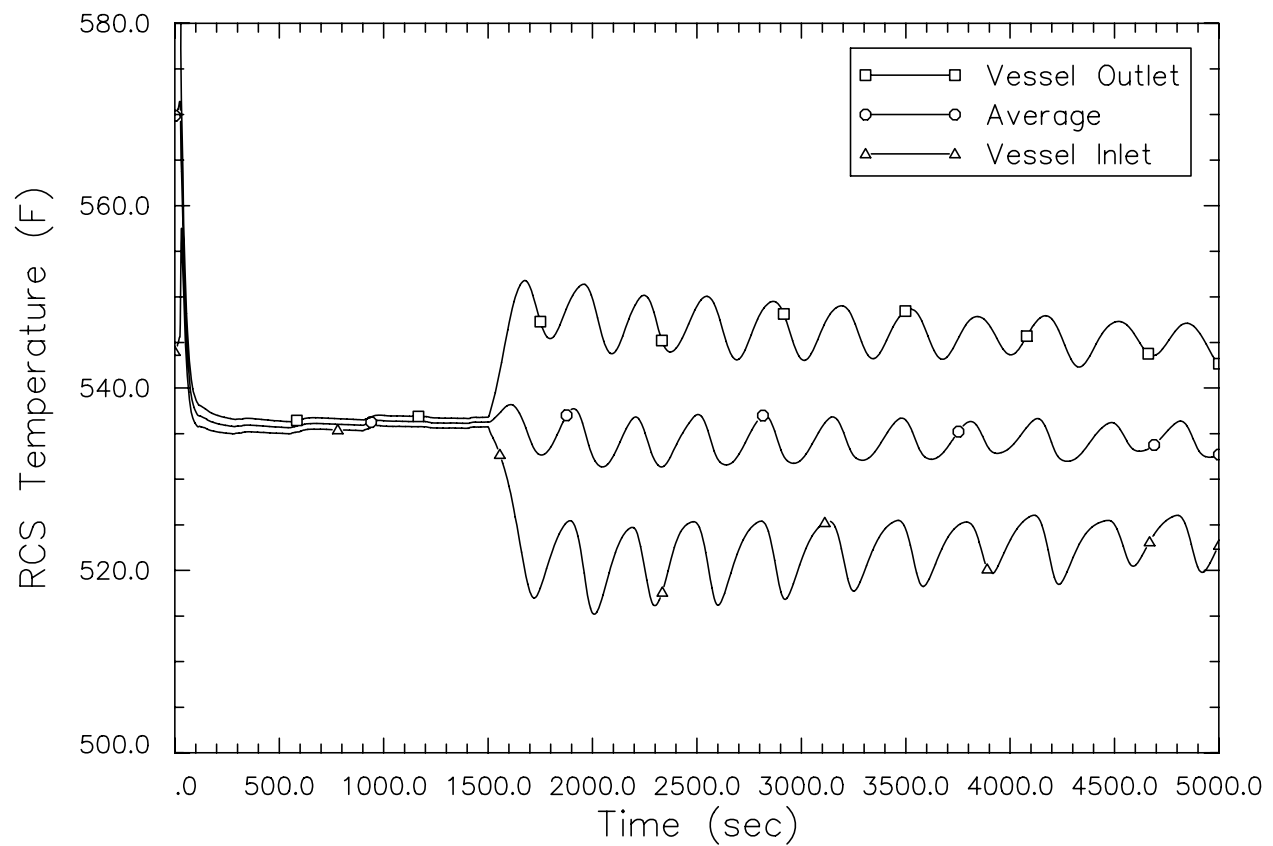
**SG Liquid Mass Inventory, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Disabled**



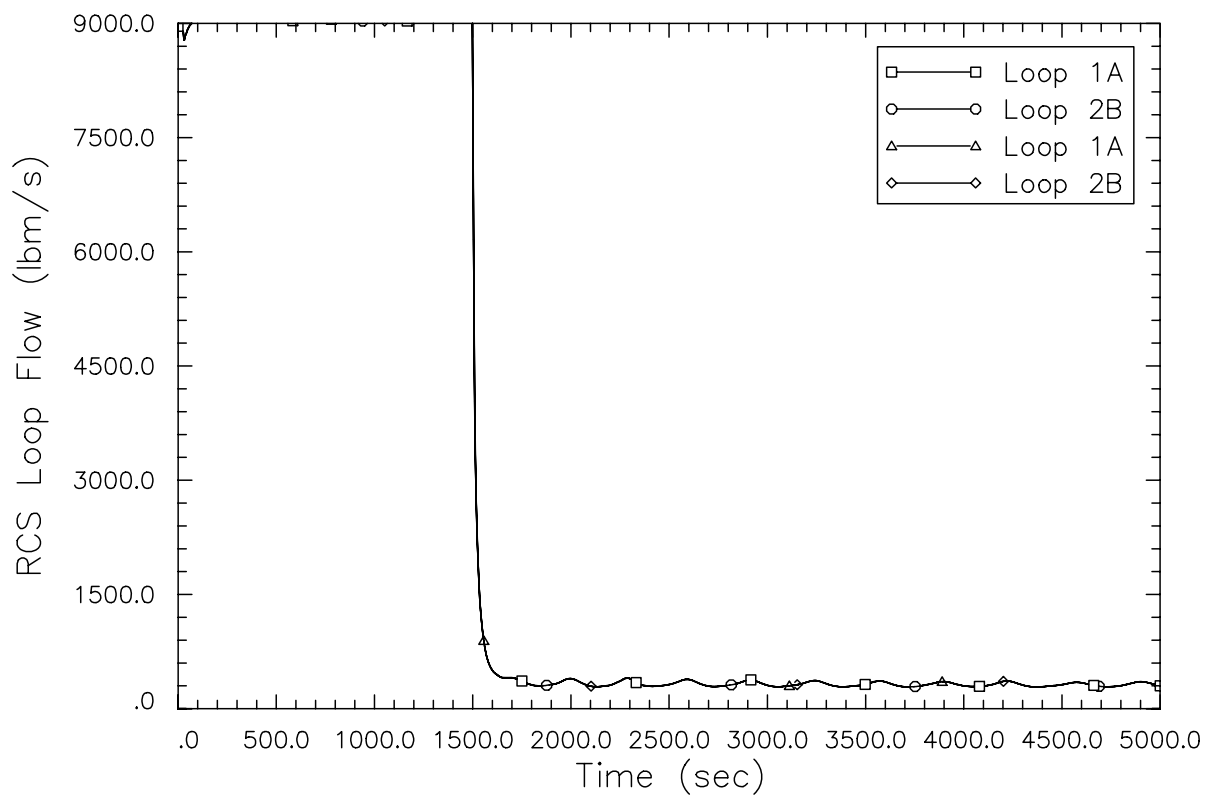
**Reactor Power, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Available**



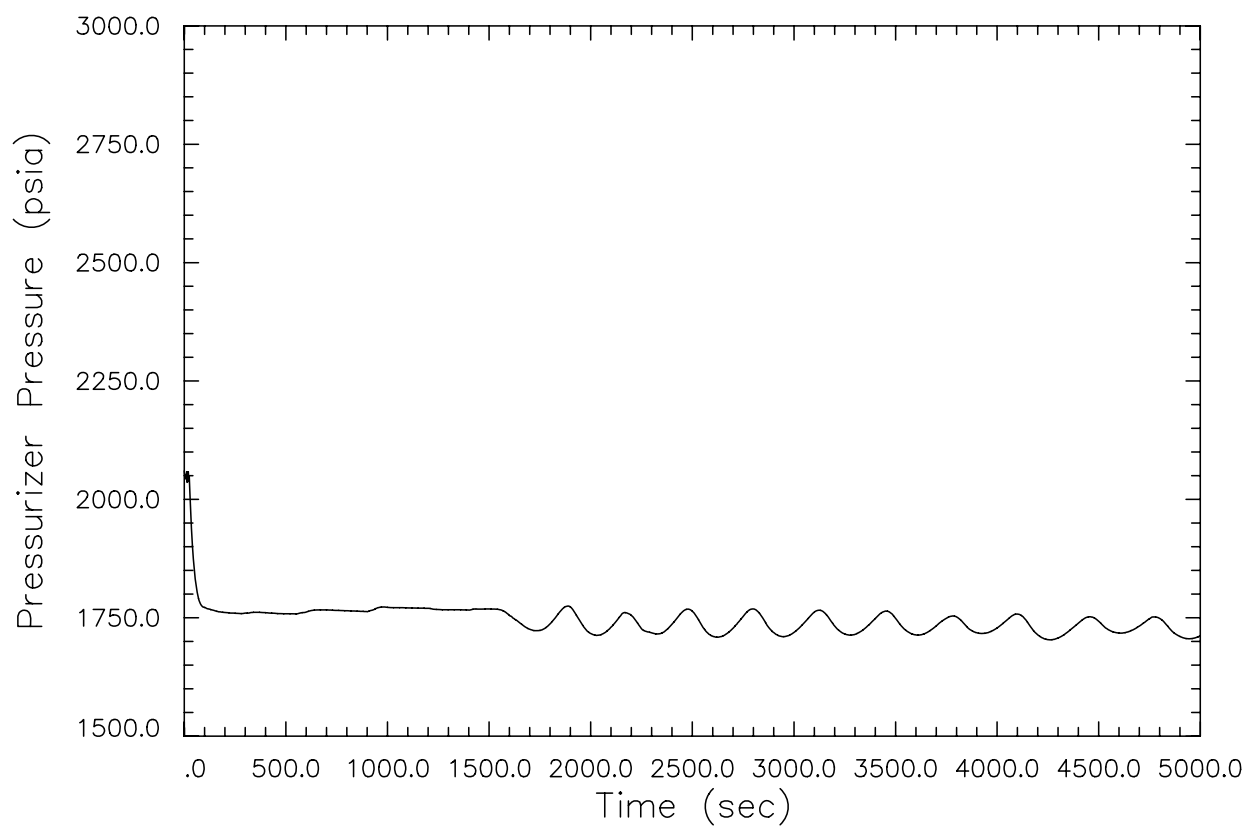
**Primary Coolant System Loop Temperatures, LNFF Analysis with Off-Site  
Power Available and Steam Dump System Available**



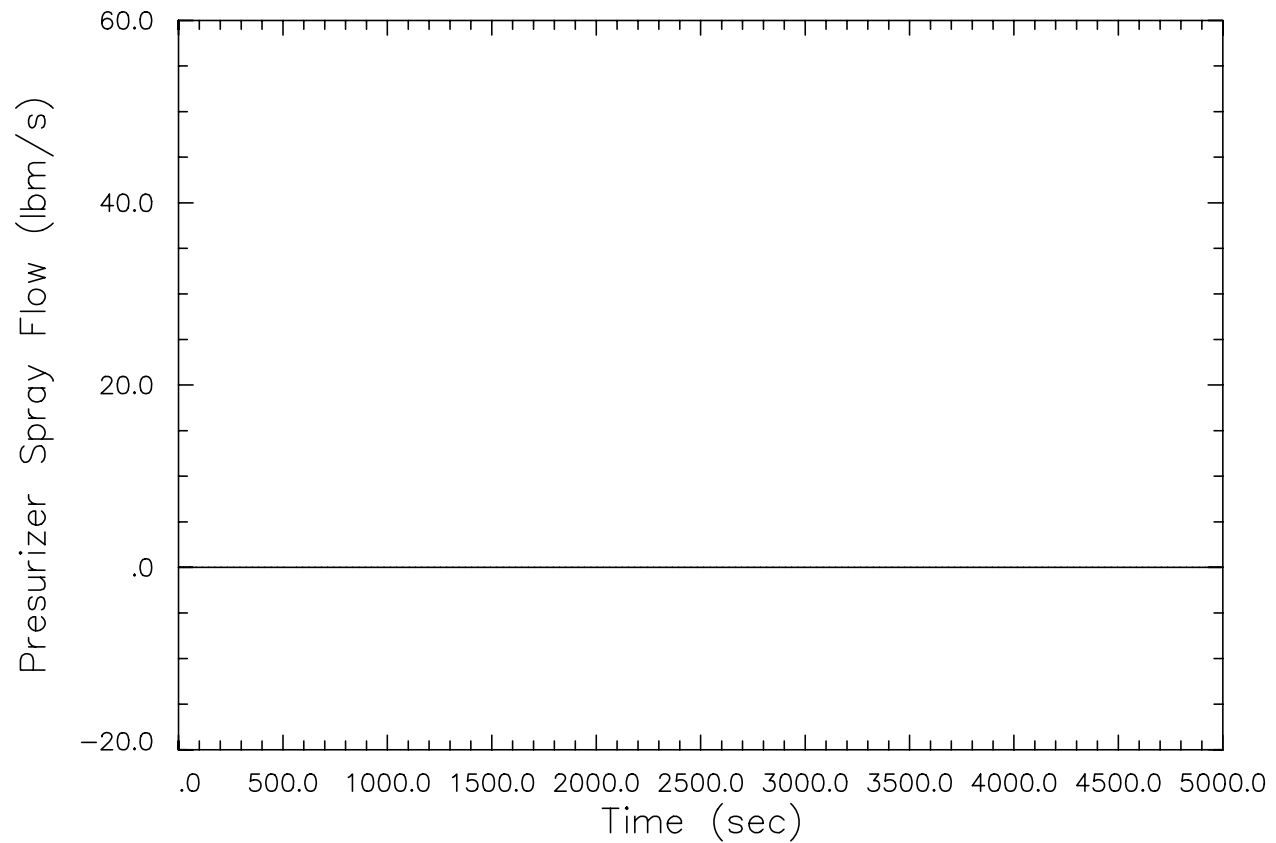
**Primary Coolant System Loop Flow, LNFF Analysis with Off-Site Power  
Available and Steam Dump System Available**



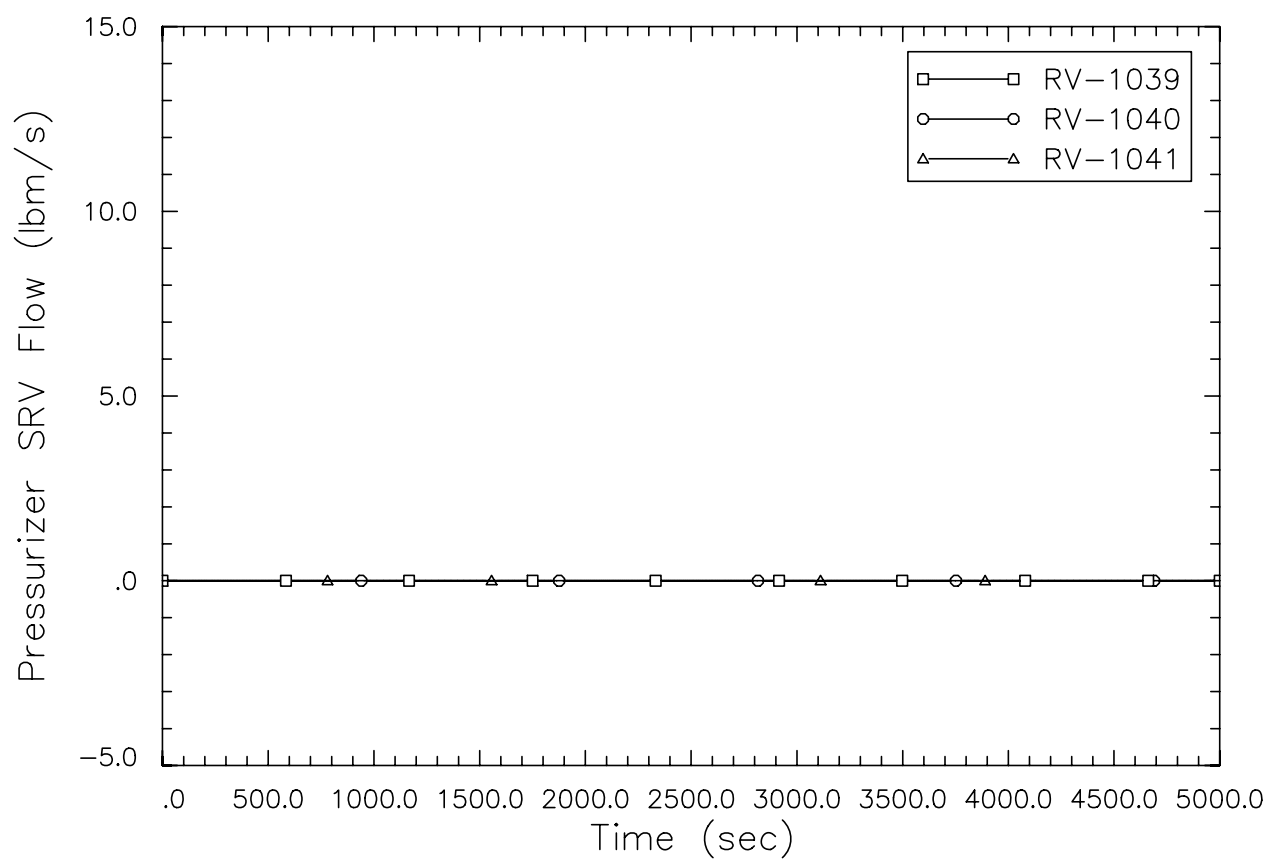
**Pressurizer Pressure, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Available**



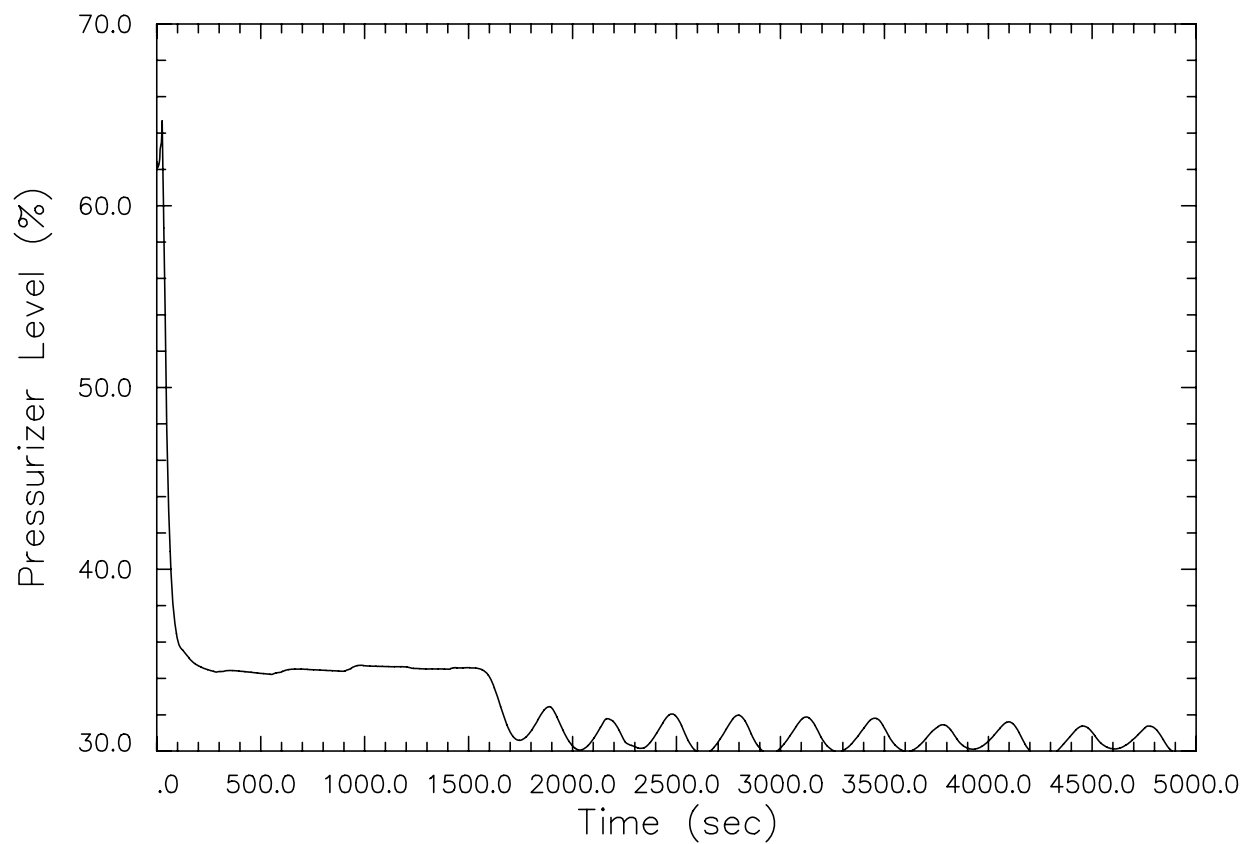
**Pressurizer Spray Flow, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Available**



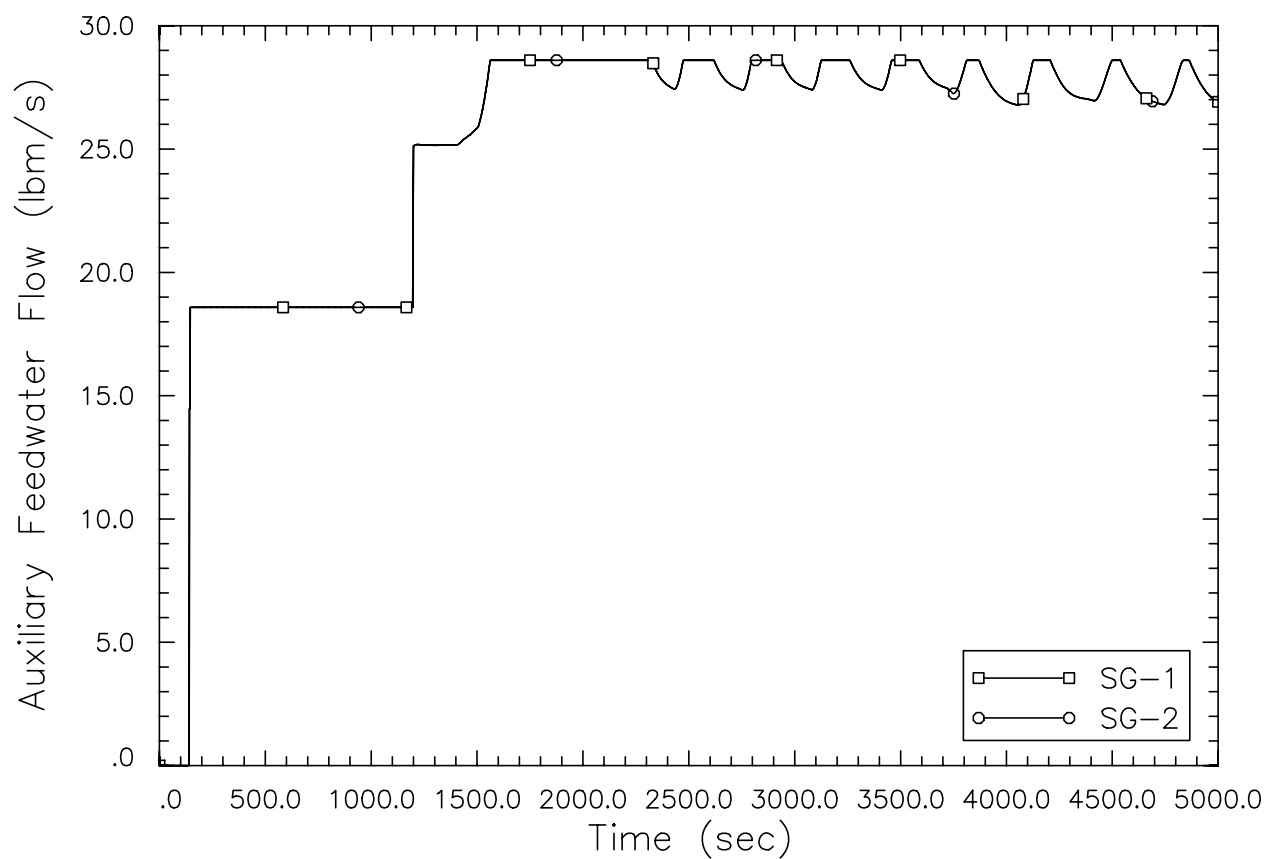
**Pressurizer SRV Flow, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Available**



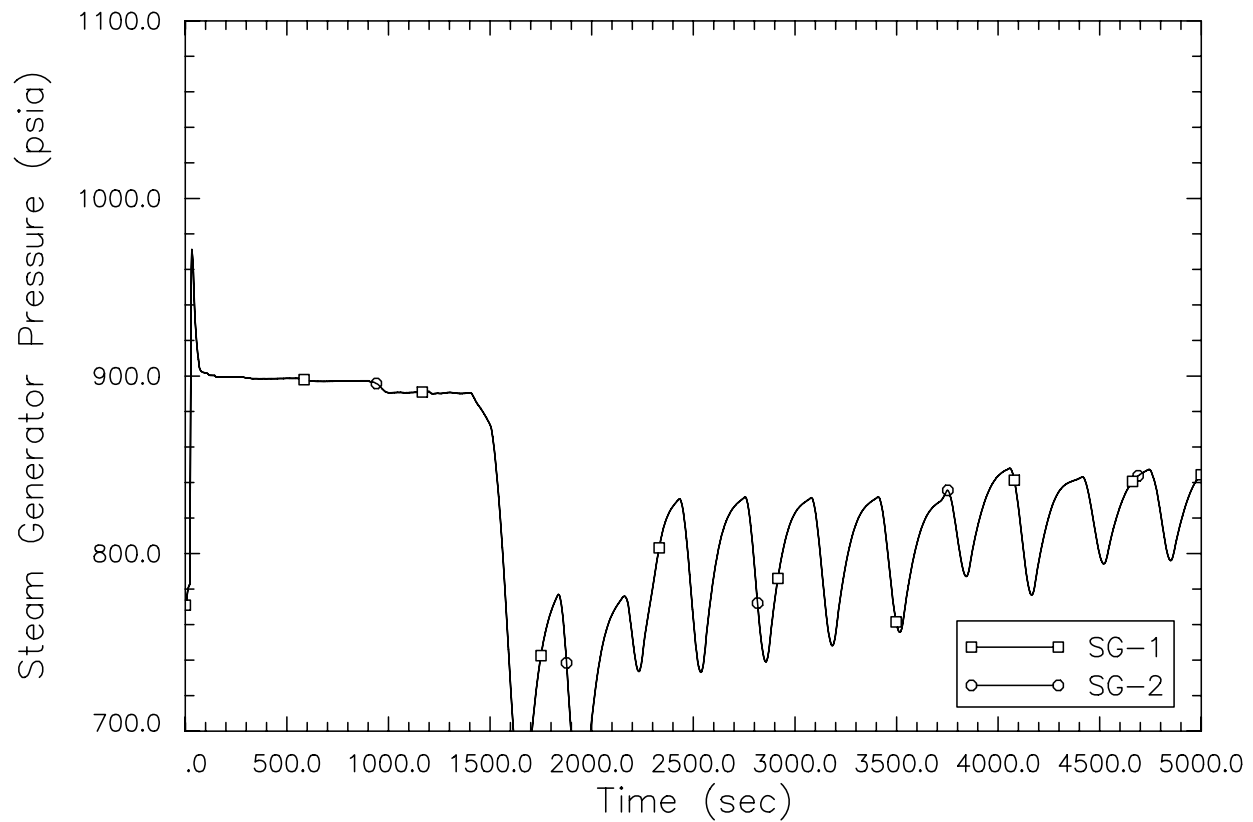
**Pressurizer Level, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Available**



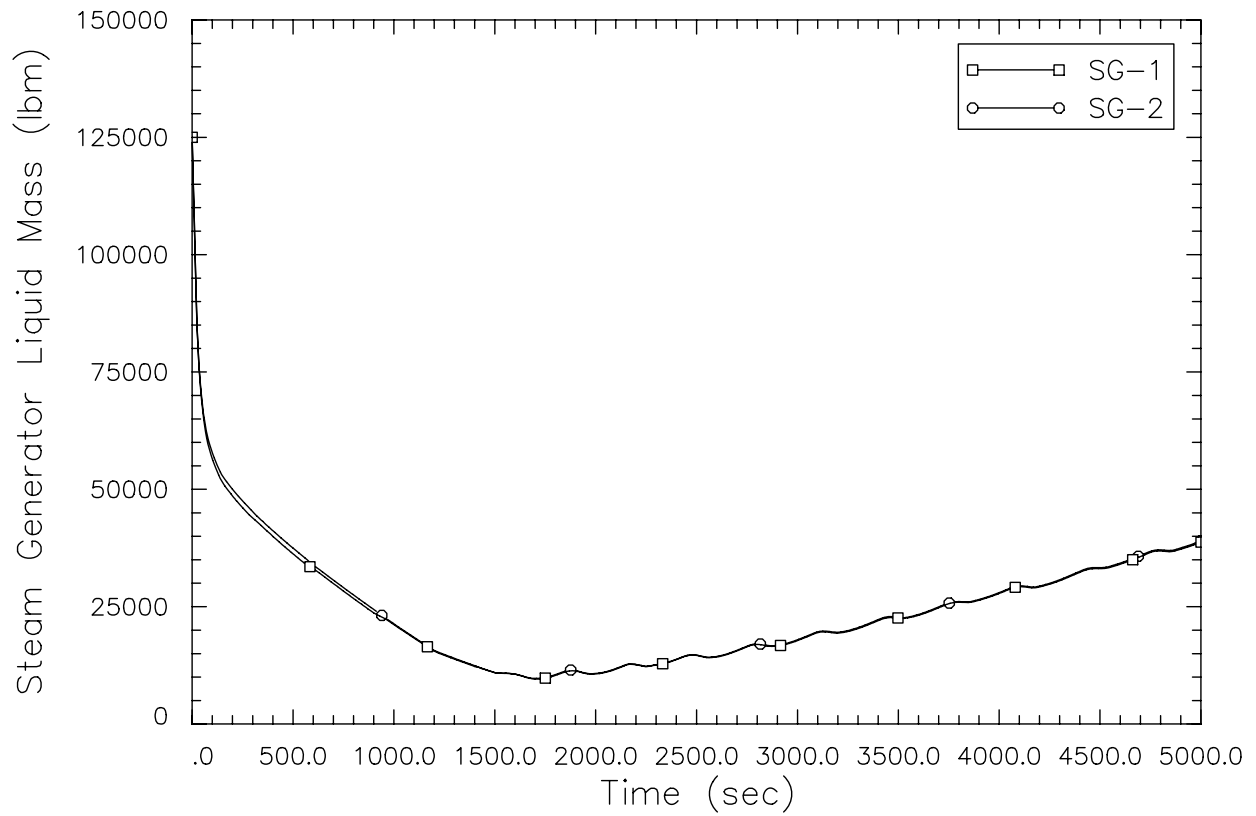
**SG Auxiliary Feedwater Flow, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Available**



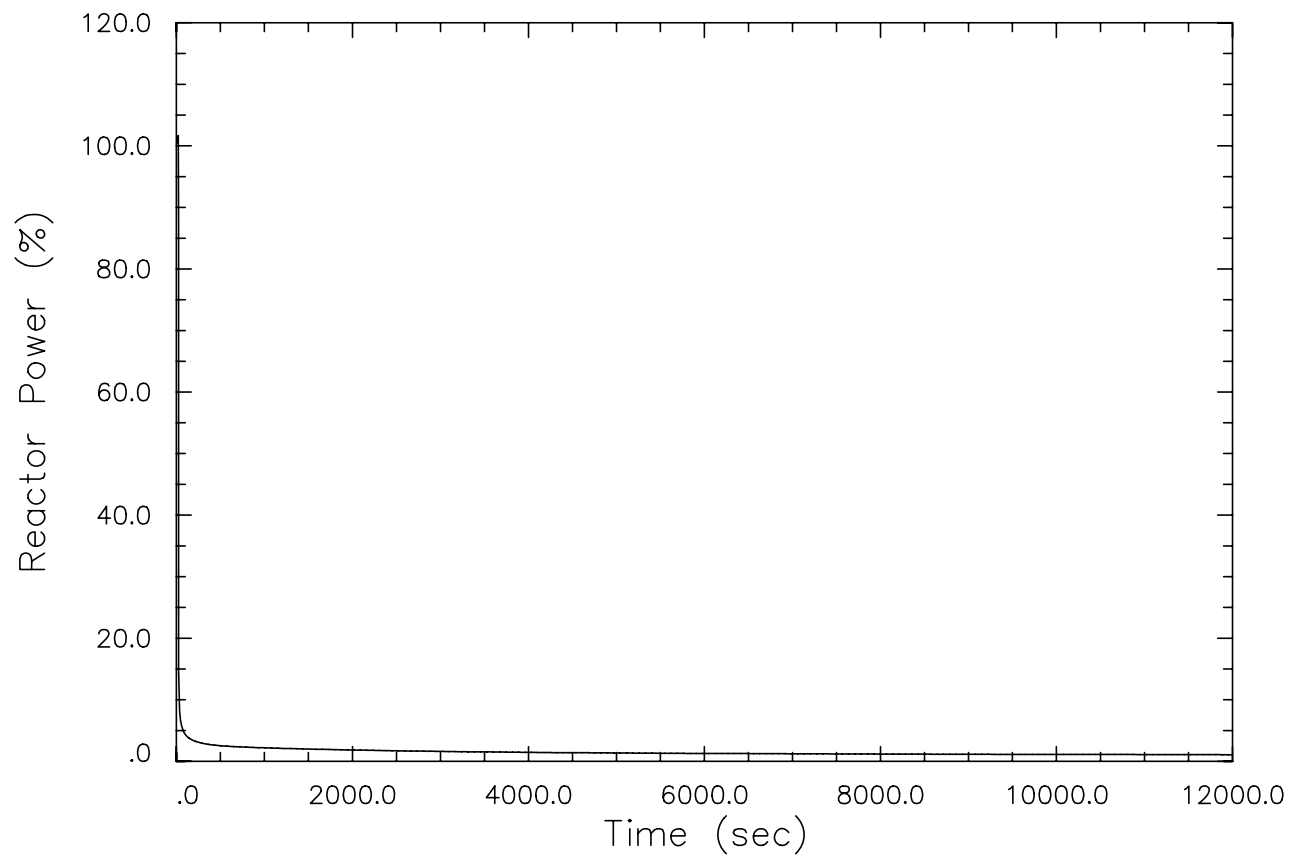
**SG Dome Pressure, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Available**



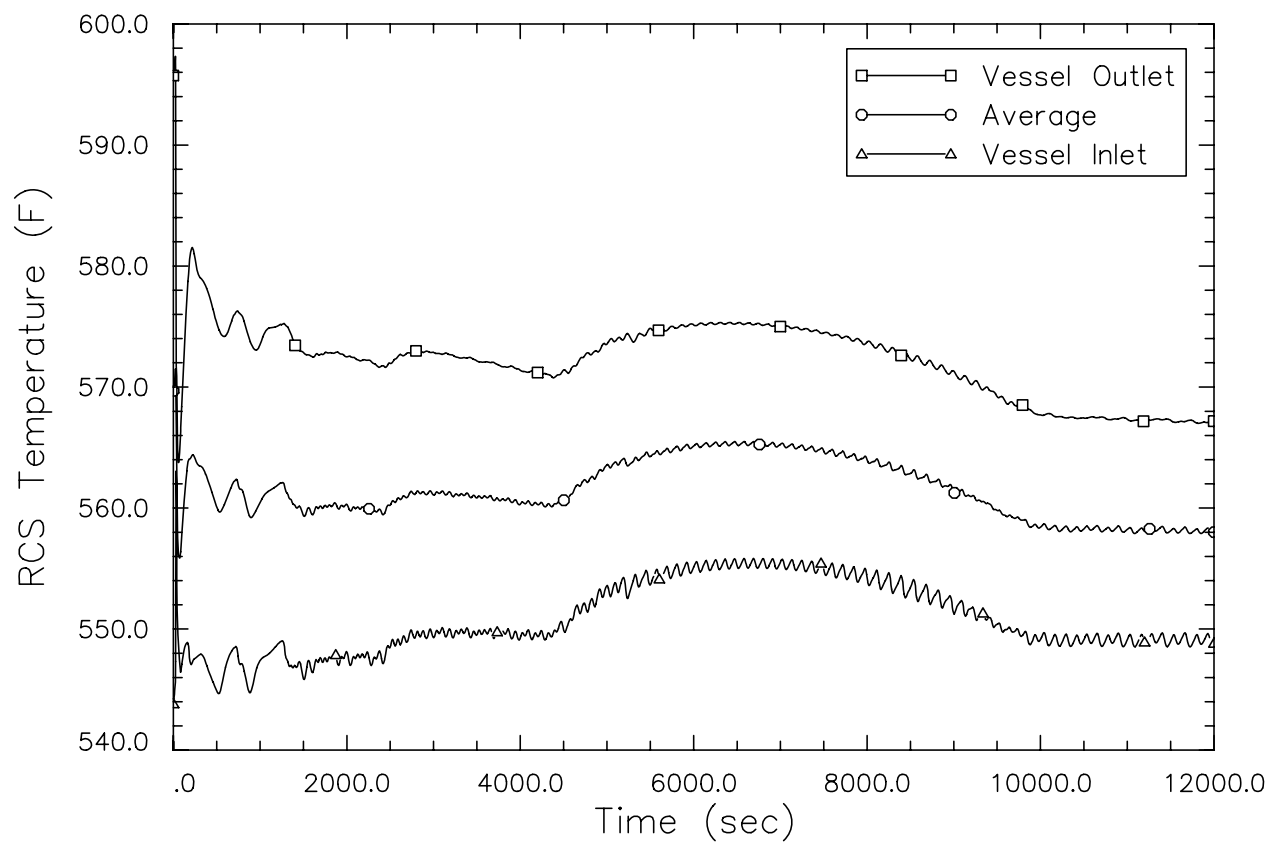
**SG Liquid Mass Inventory, LNFF Analysis with Off-Site Power Available  
and Steam Dump System Available**



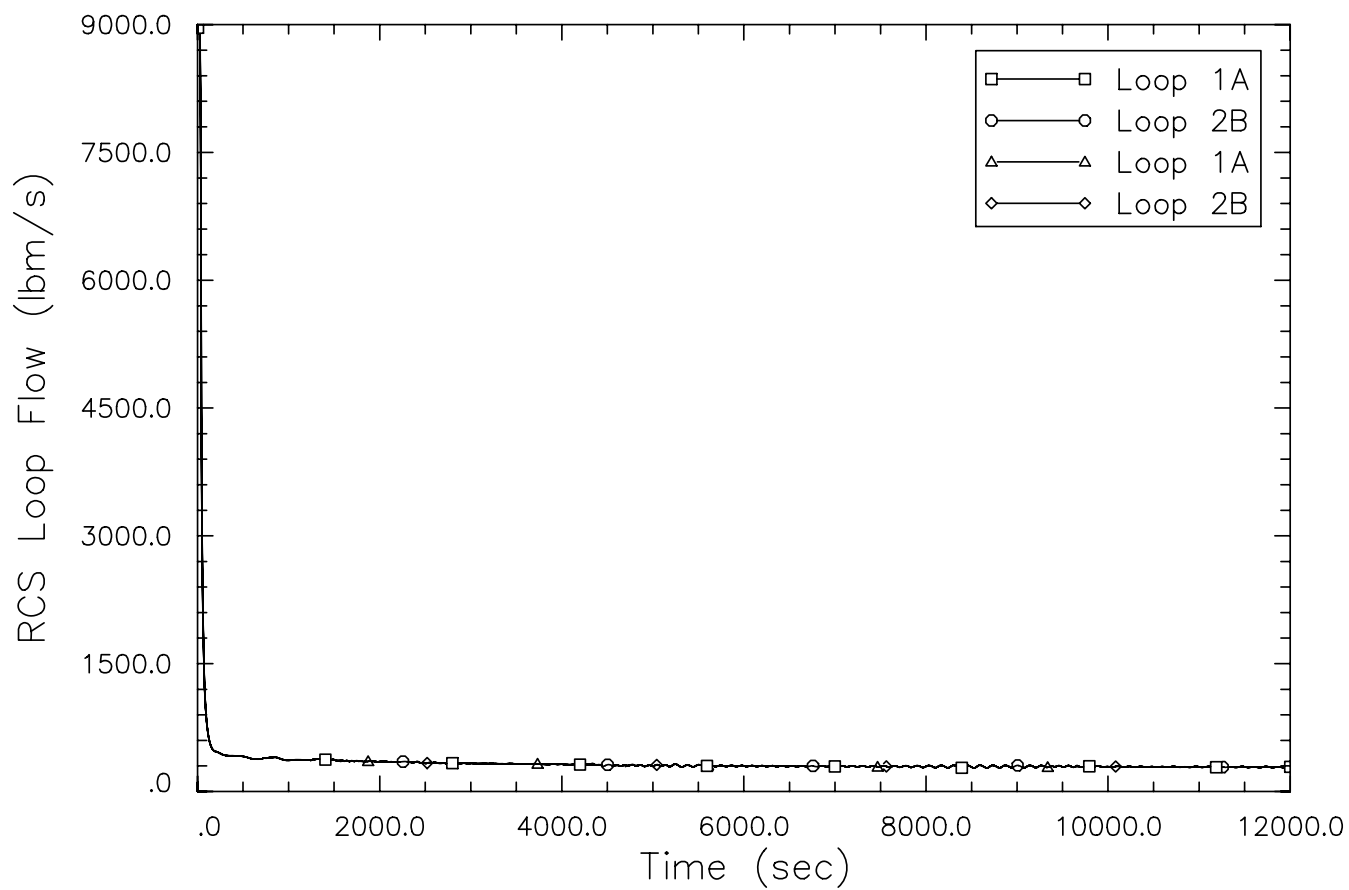
**Reactor Power, LNFF Analysis without Off-Site Power Available  
and Steam Dump Systems Disabled**



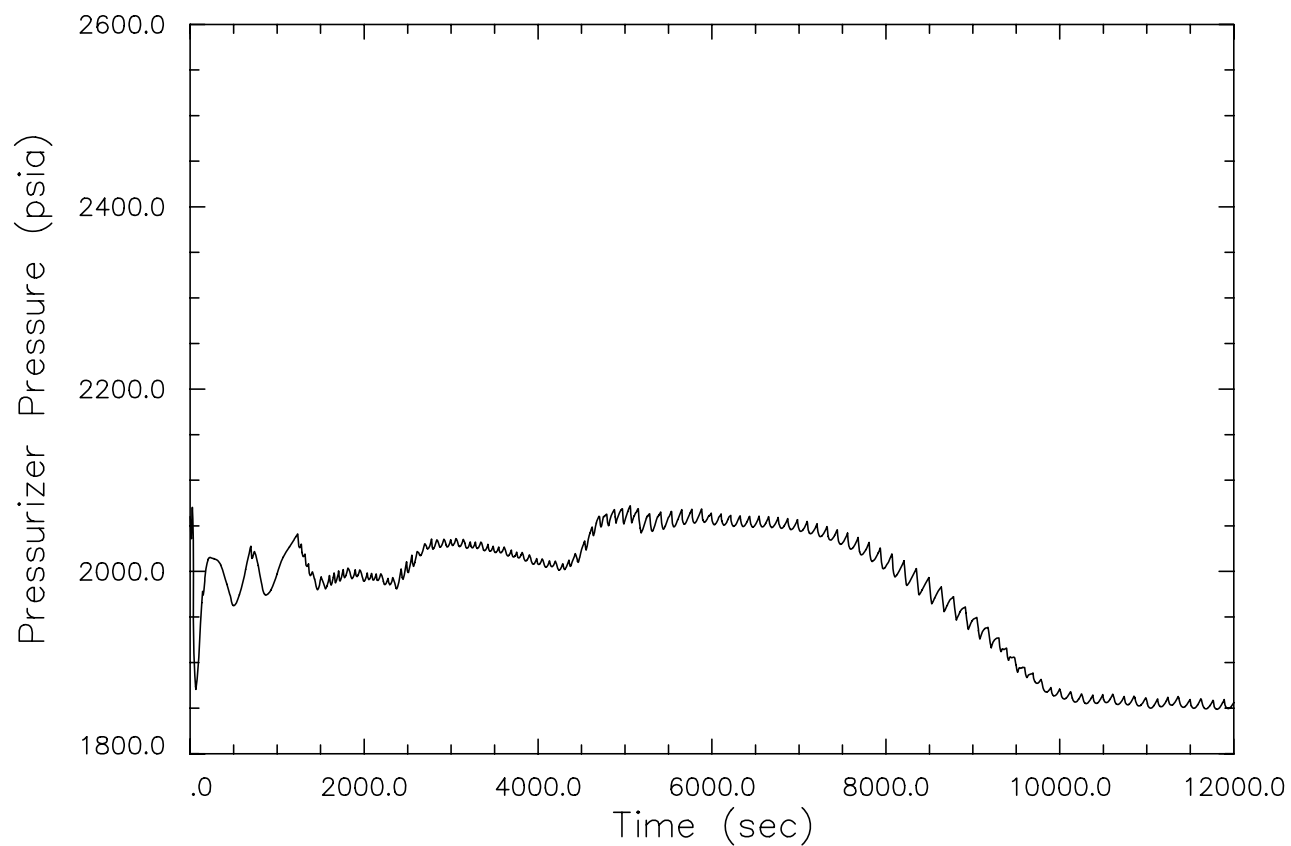
**Primary Coolant System Loop Temperatures, LNFF Analysis without  
Off-Site Power Available and Steam Dump Systems Disabled**



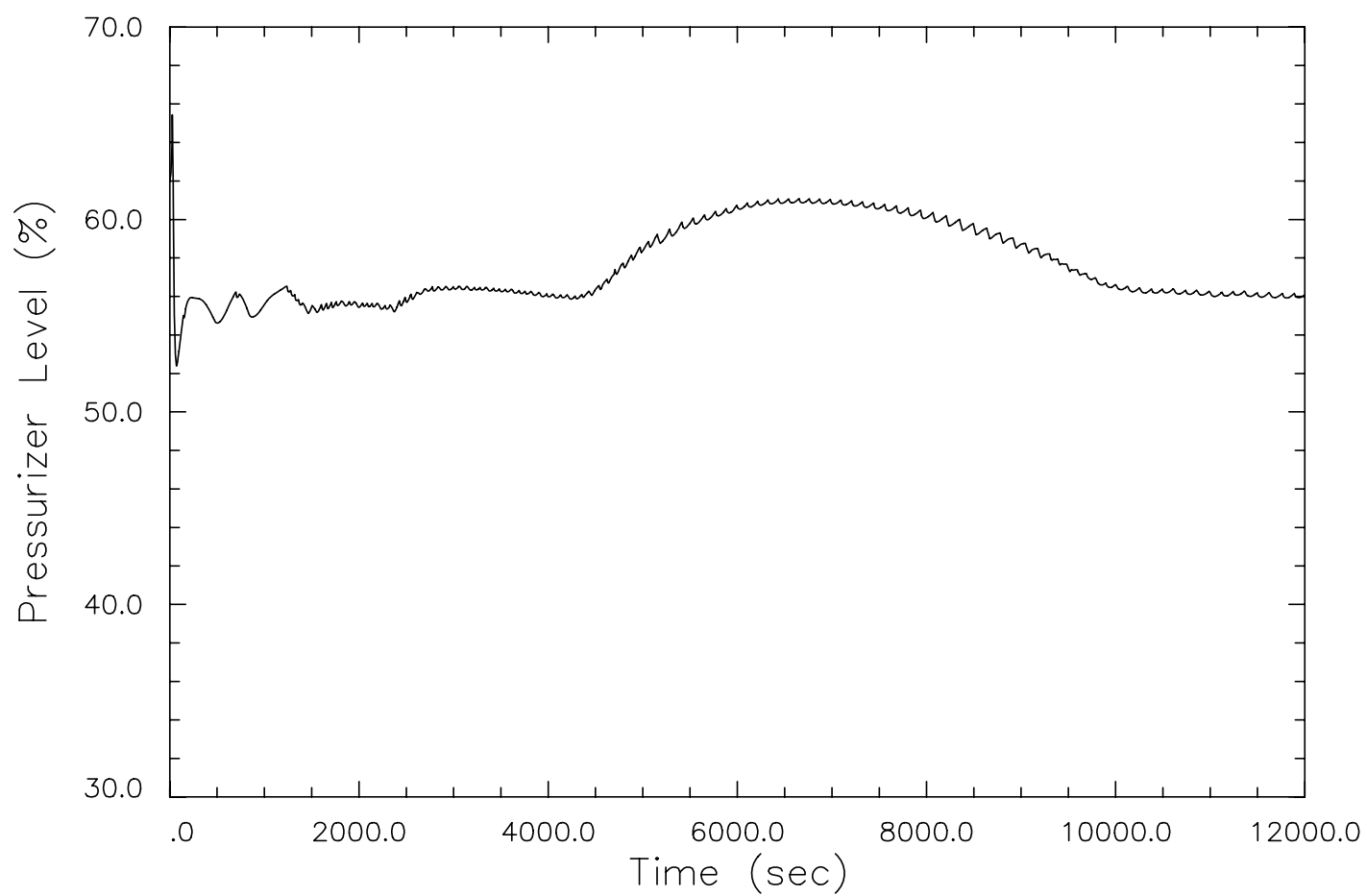
**Primary Coolant System Loop Flow, LNFF Analysis without Off-Site Power  
Available and Steam Dump Systems Disabled**



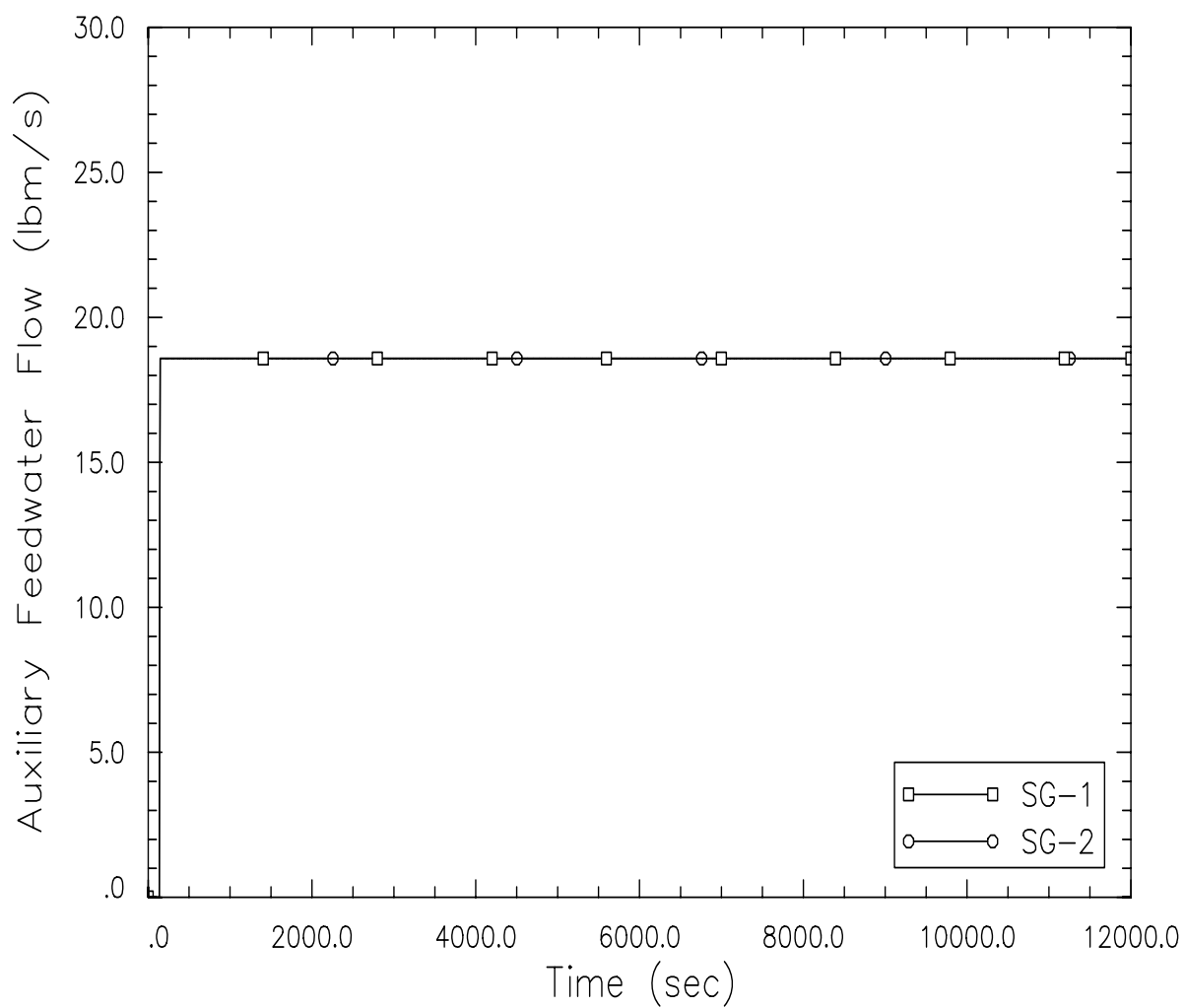
**Pressurizer Pressure, LNFF Analysis without Off-Site Power Available  
and Steam Dump Systems Disabled**



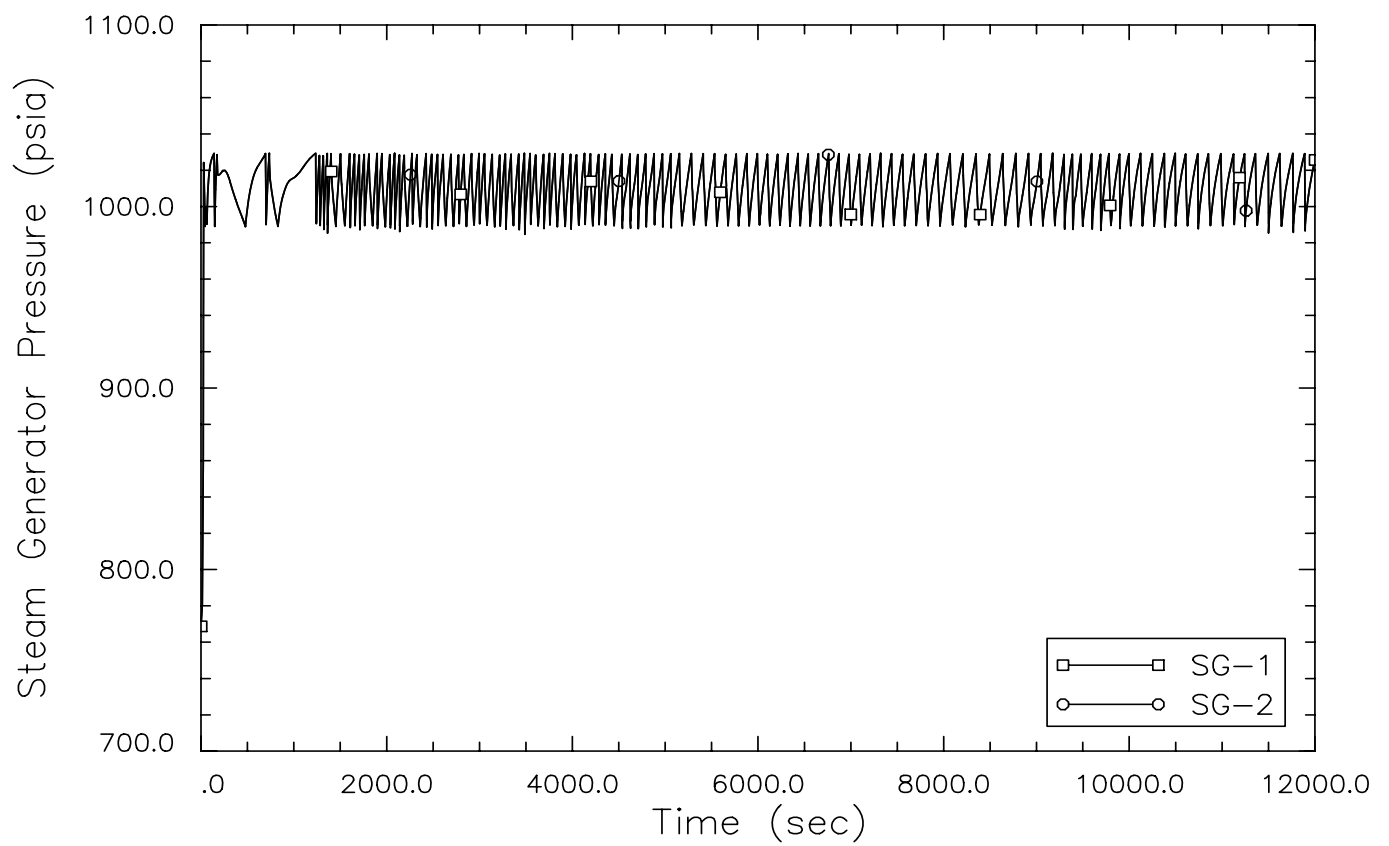
**Pressurizer Level, LNFF Analysis without Off-Site Power Available  
and Steam Dump Systems Disabled**



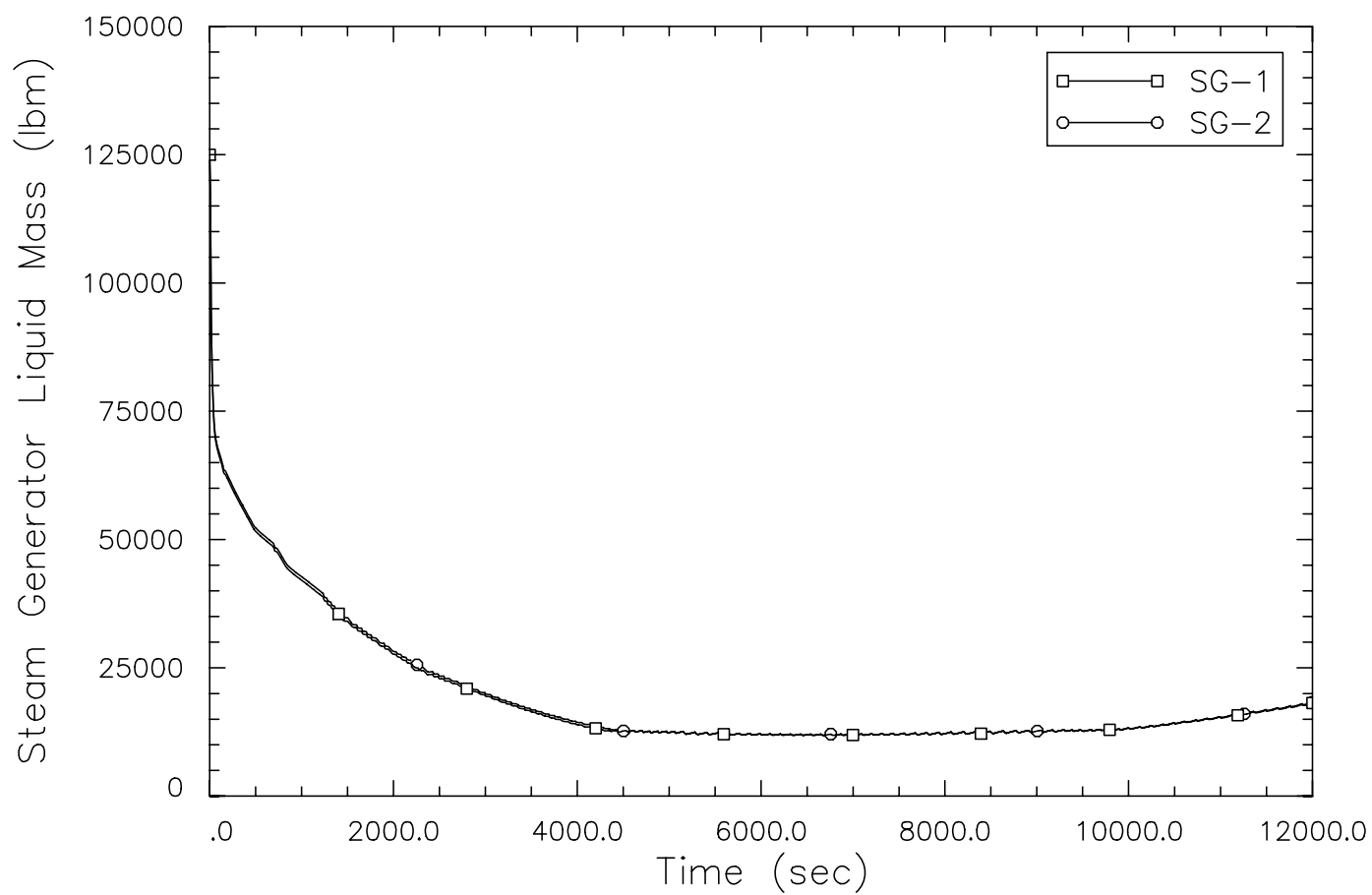
**SG Auxiliary Feedwater Flow, LNFF Analysis without Off-Site Power  
Available and Steam Dump Systems Disabled**



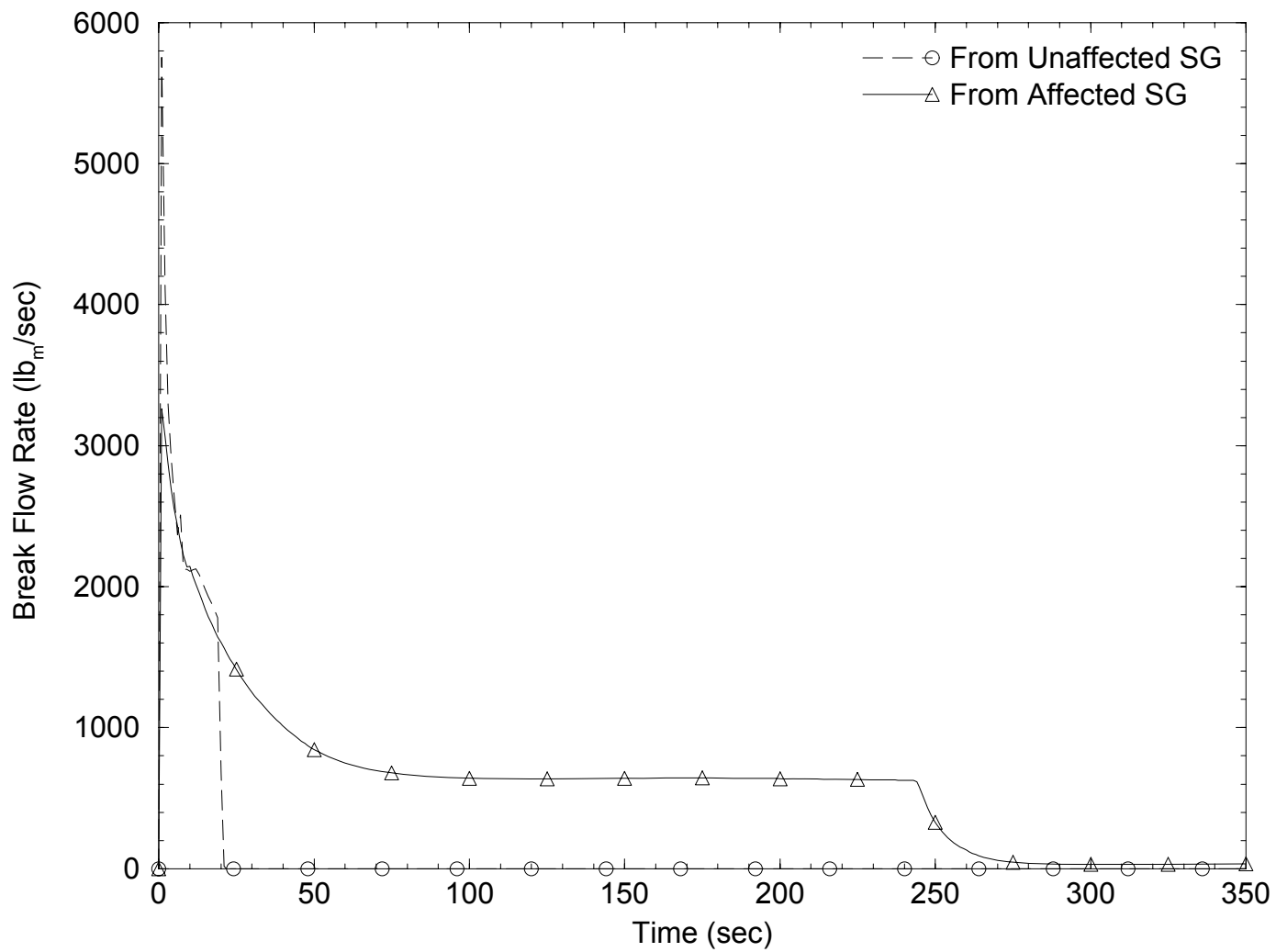
**SG Dome Pressure, LNFF Analysis without Off-Site Power Available  
and Steam Dump Systems Disabled**



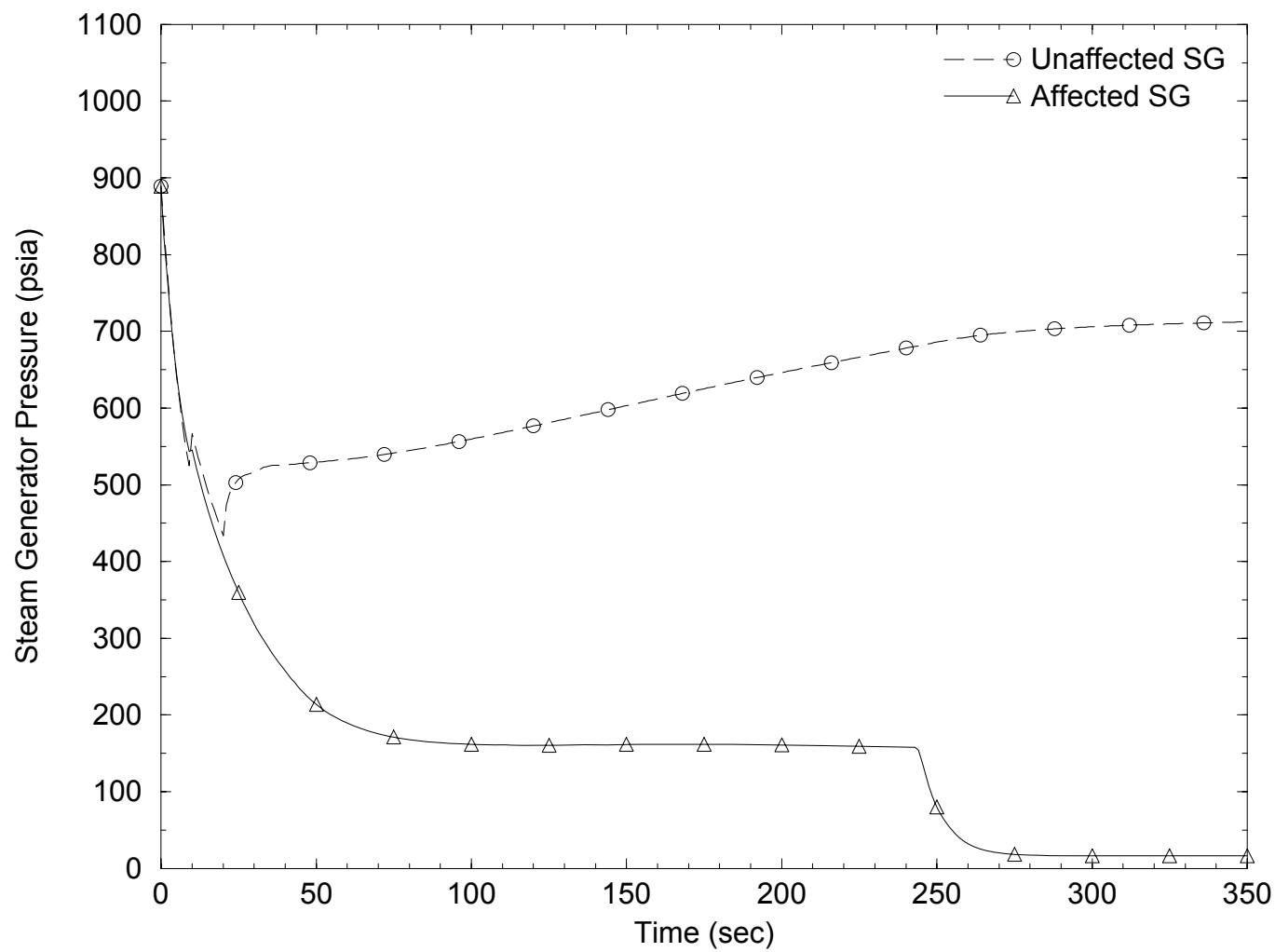
**SG Liquid Mass Inventory, LNFF Analysis without Off-Site Power Available  
and Steam Dump Systems Disabled**

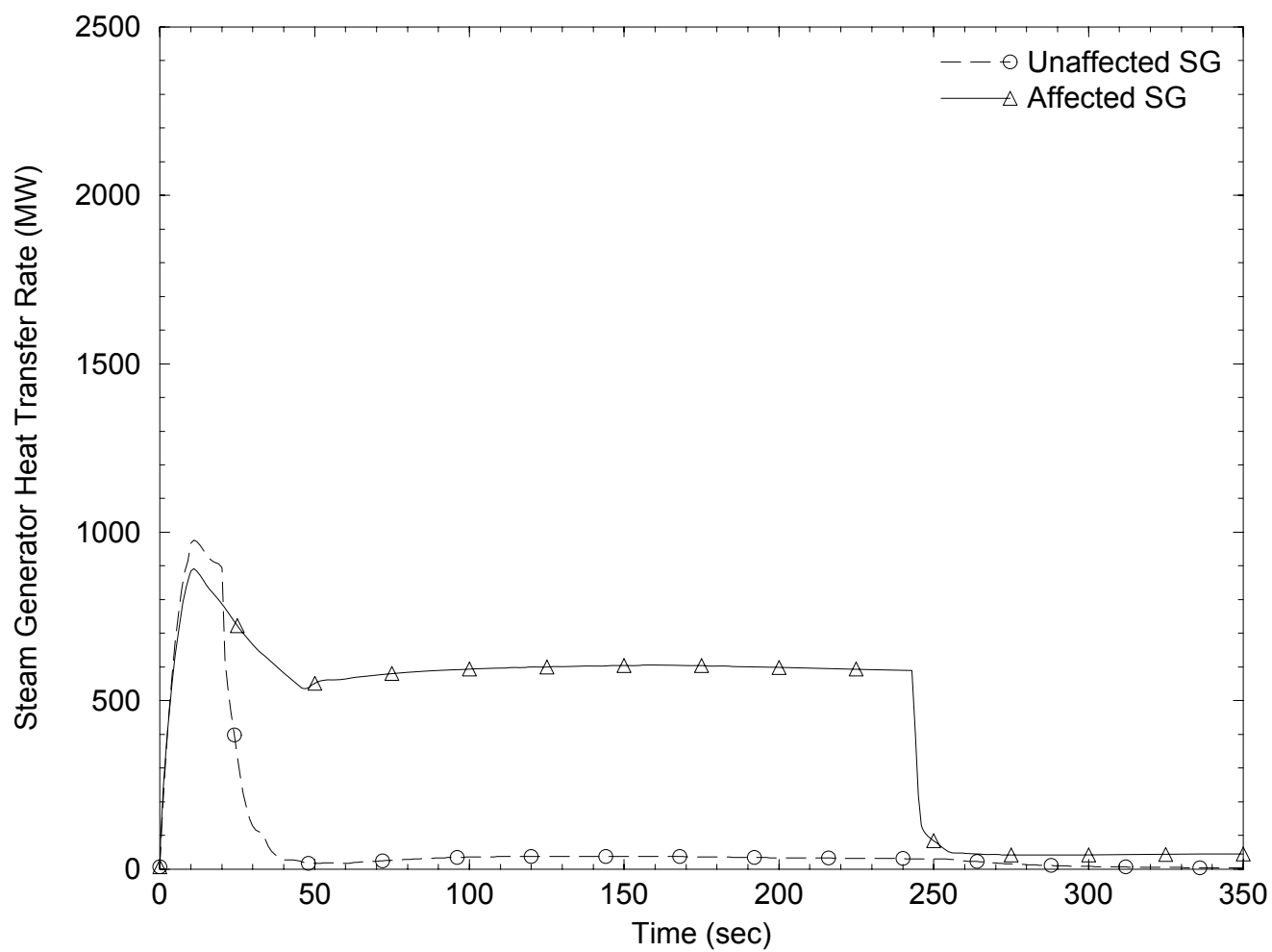


Break Flow Rates During LHR-Limiting Transient

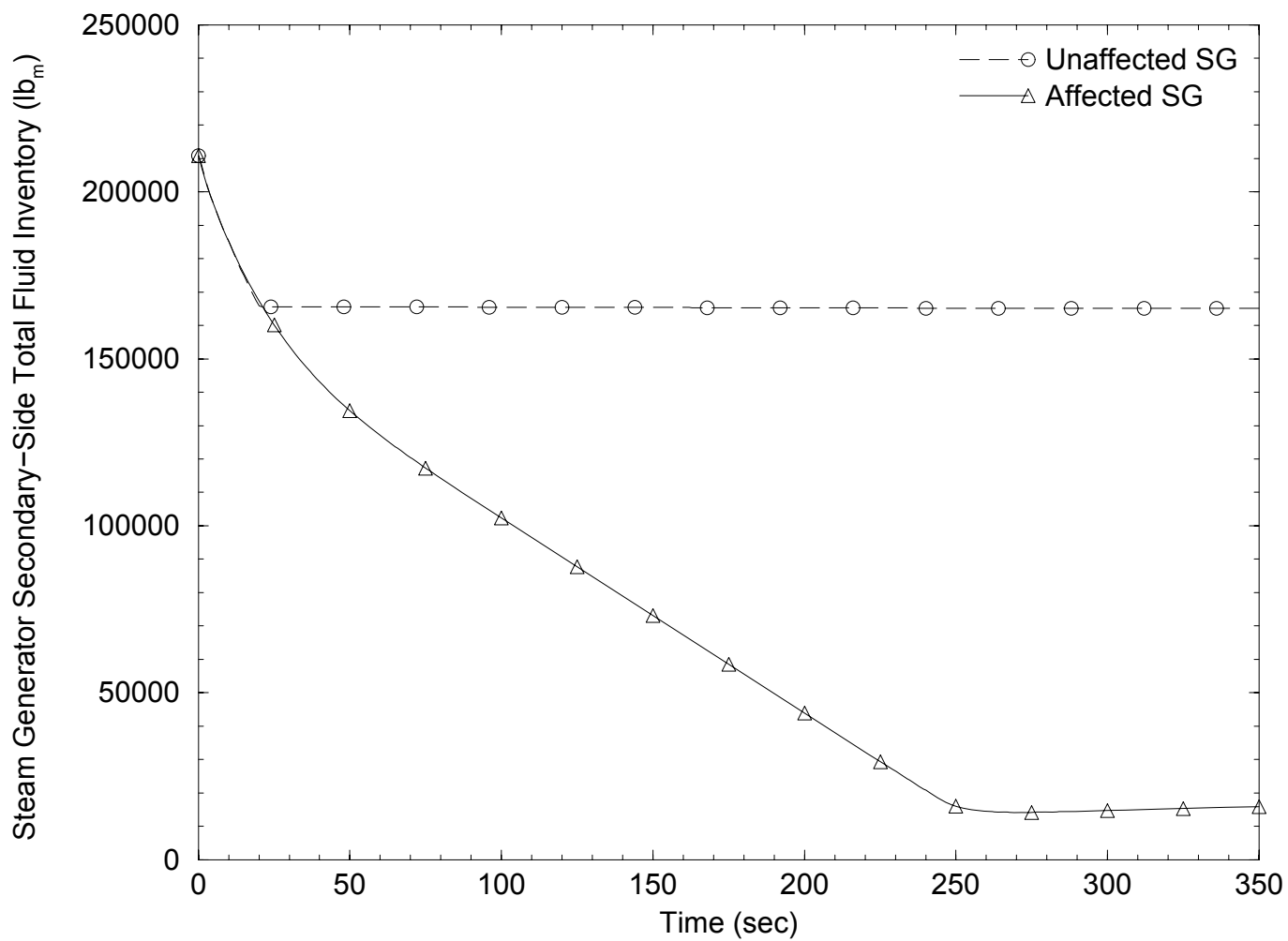


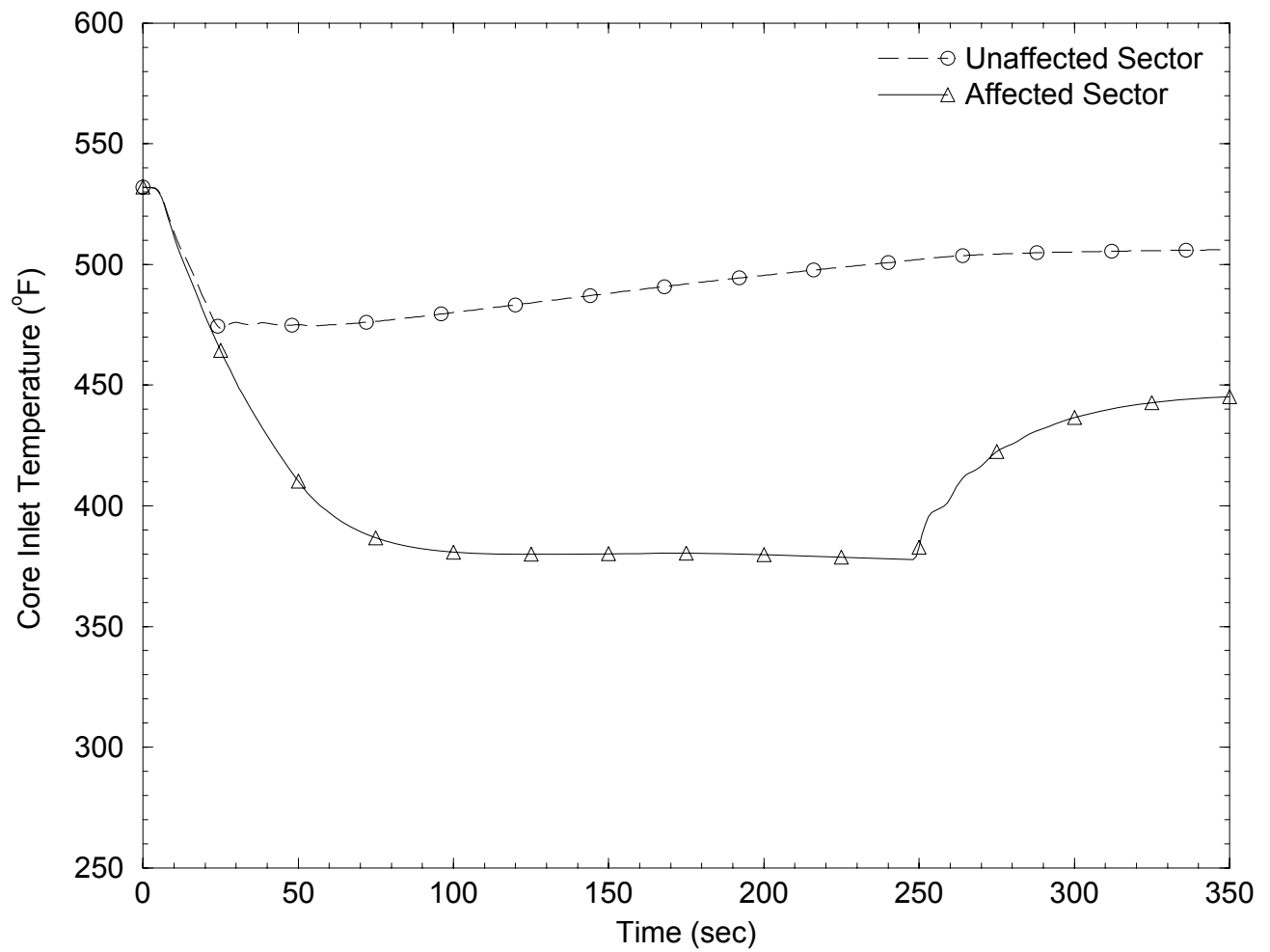
Steam Generator Pressures During LHR-Limiting Transient

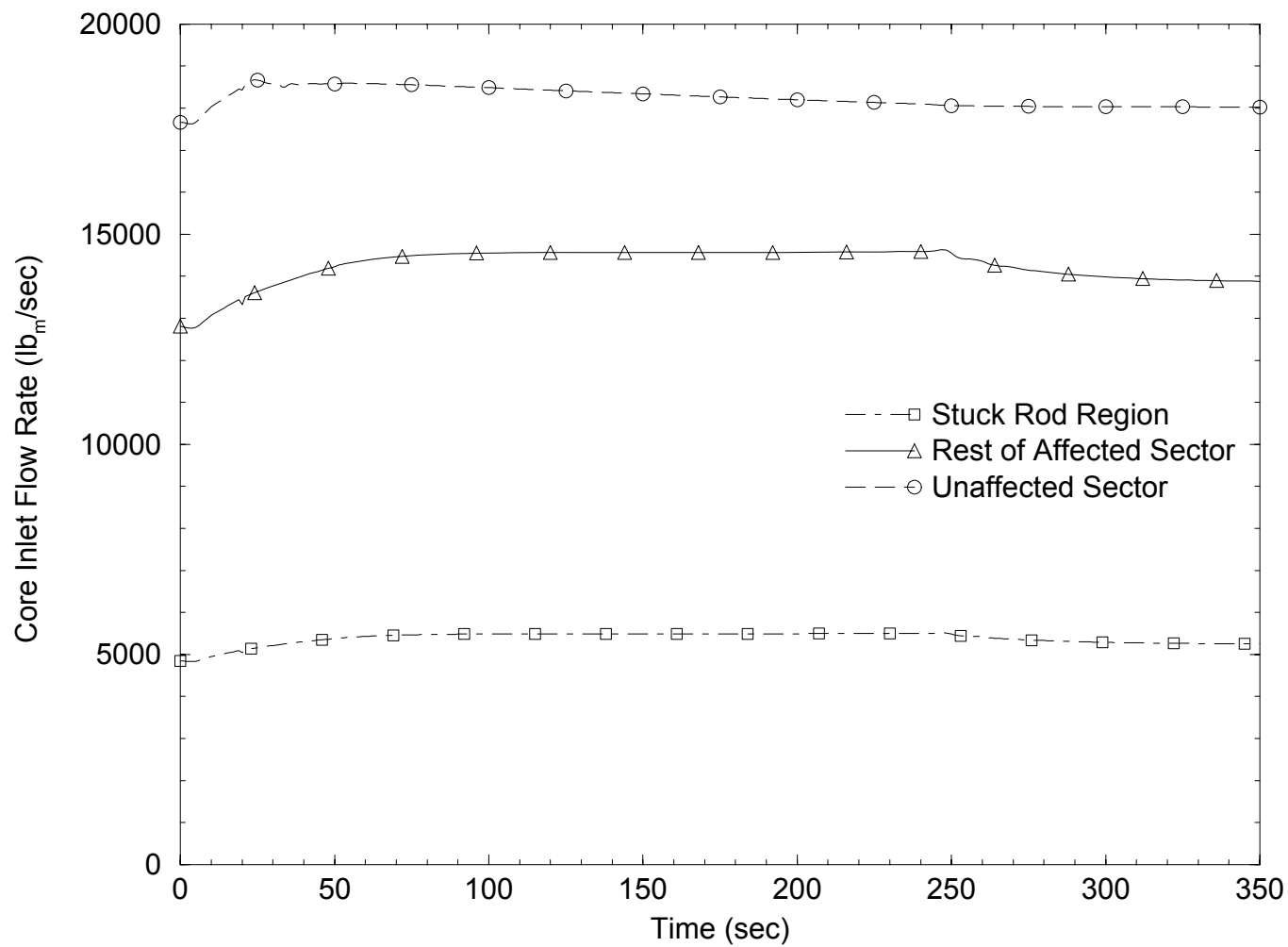


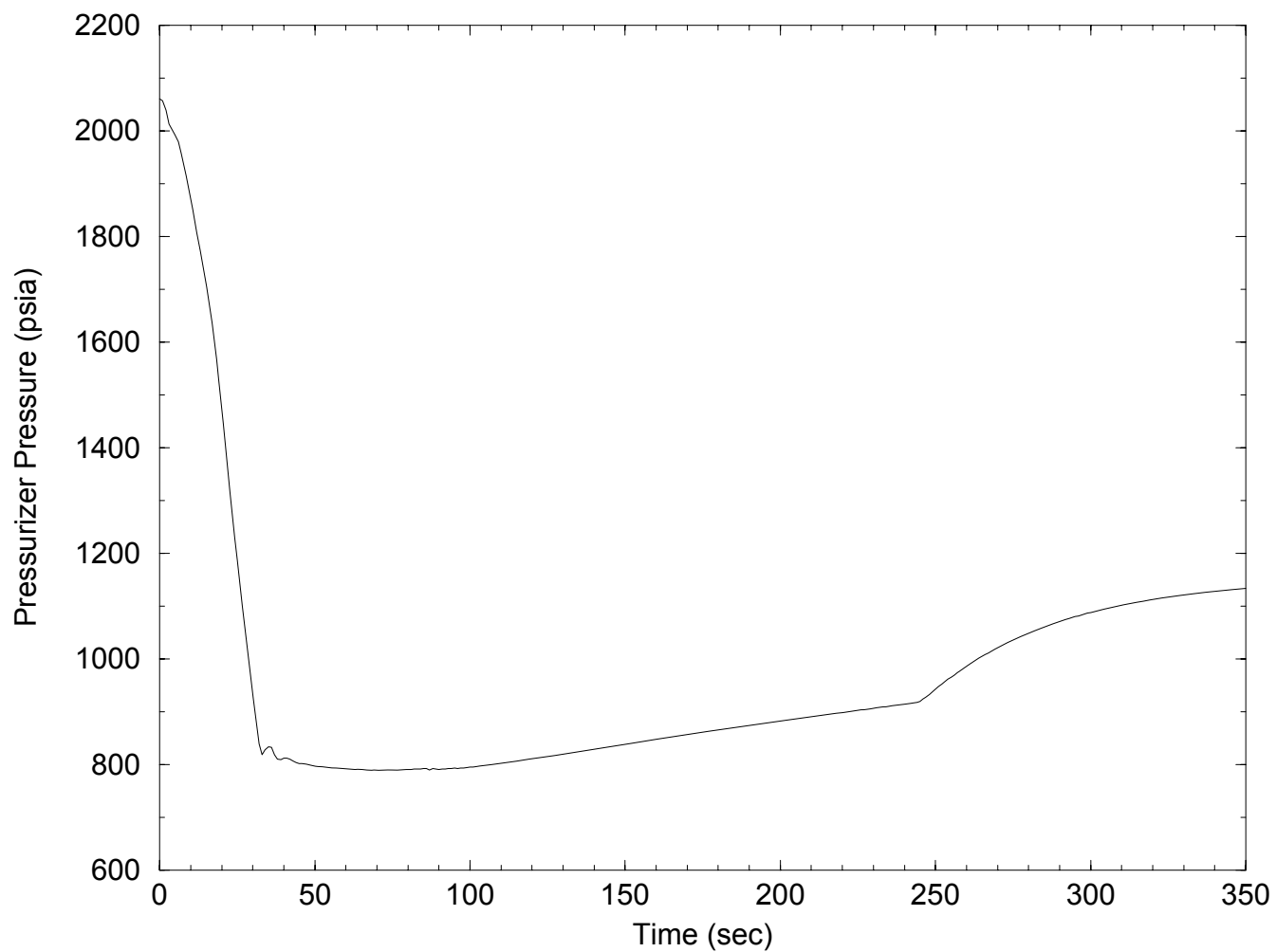
**Steam Generator Heat Transfer Rates During LHR-Limiting Transient**

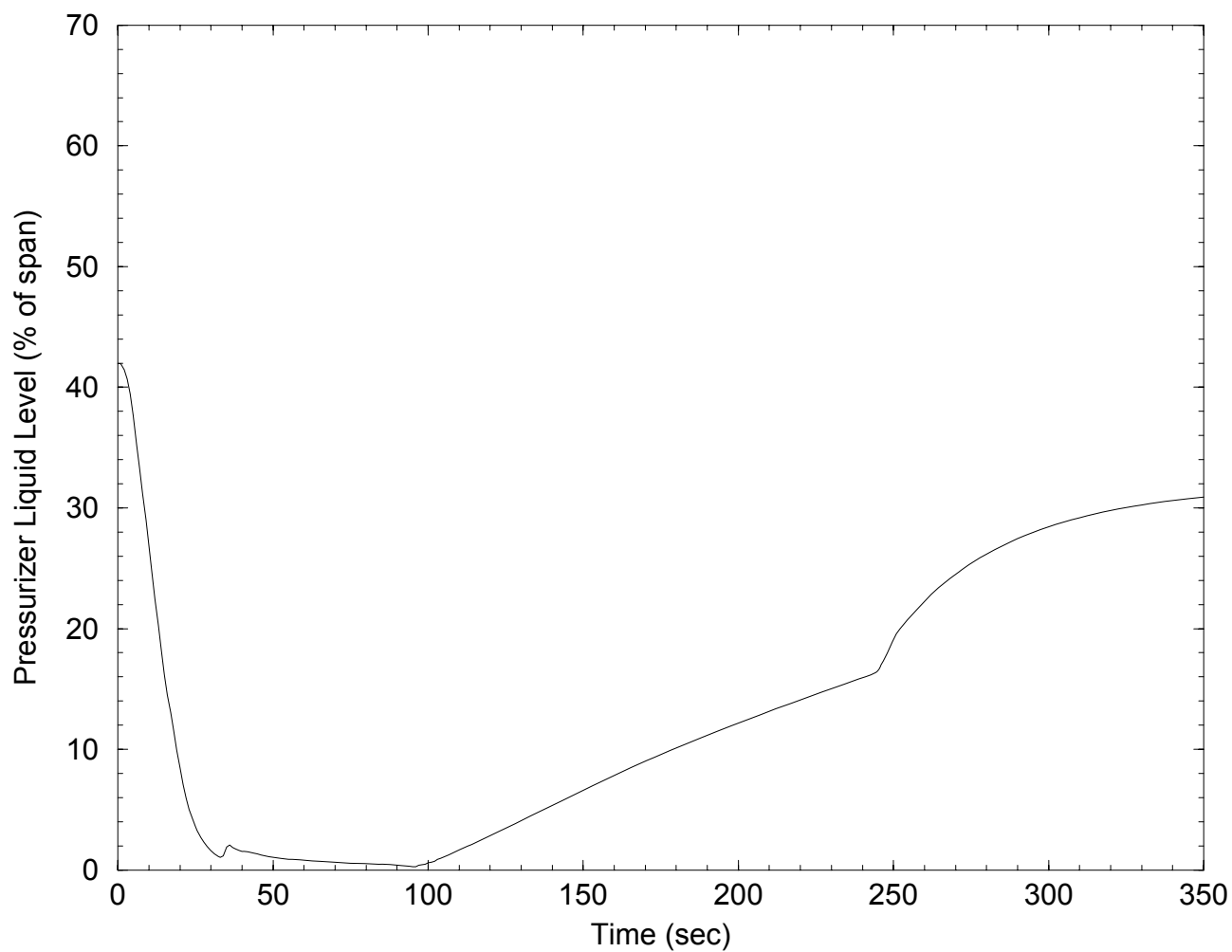
**Steam Generator Secondary-Side Total Fluid Inventories**  
**During LHR-Limiting Transient**



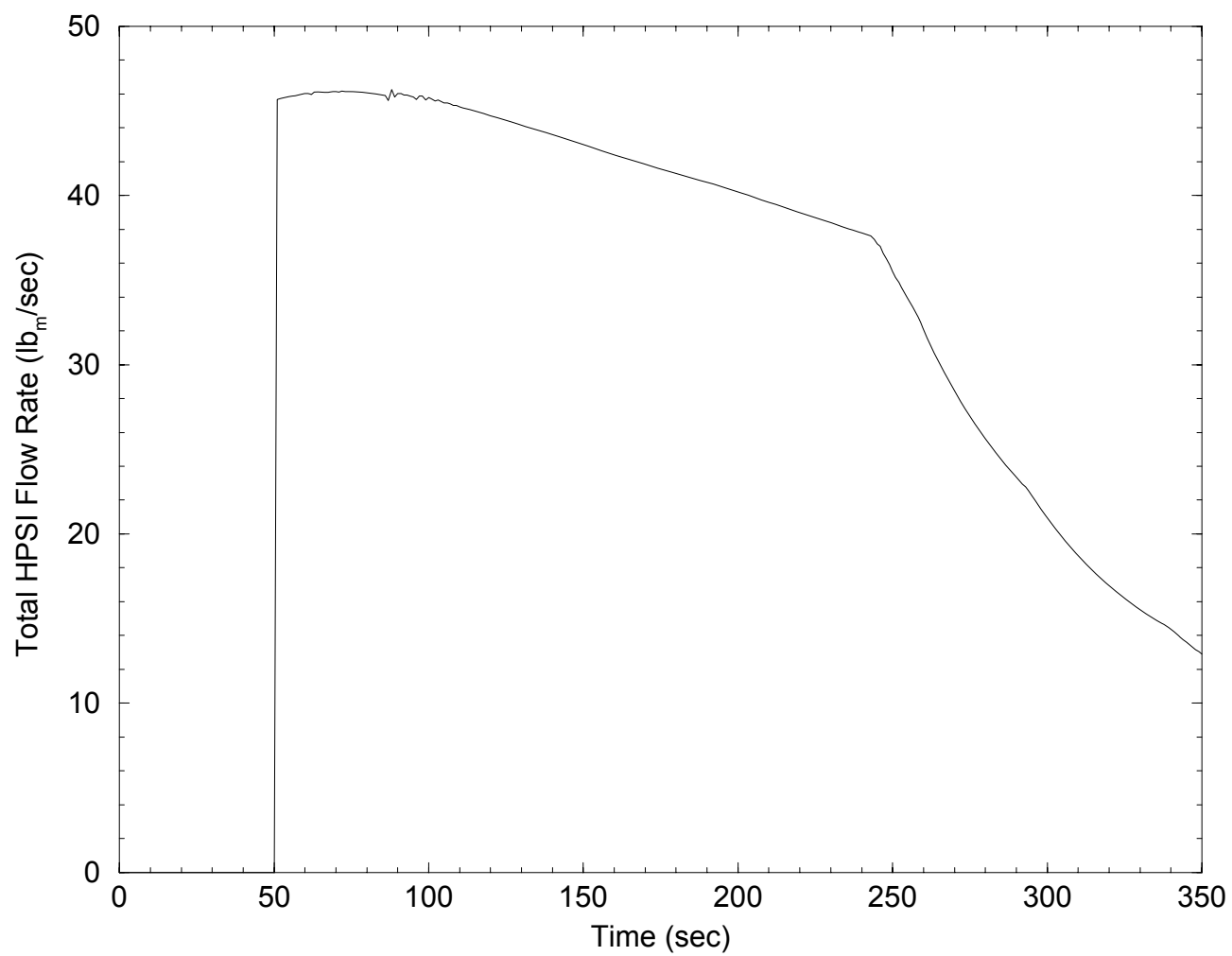
**Core Inlet Temperatures During LHR-Limiting Transient**

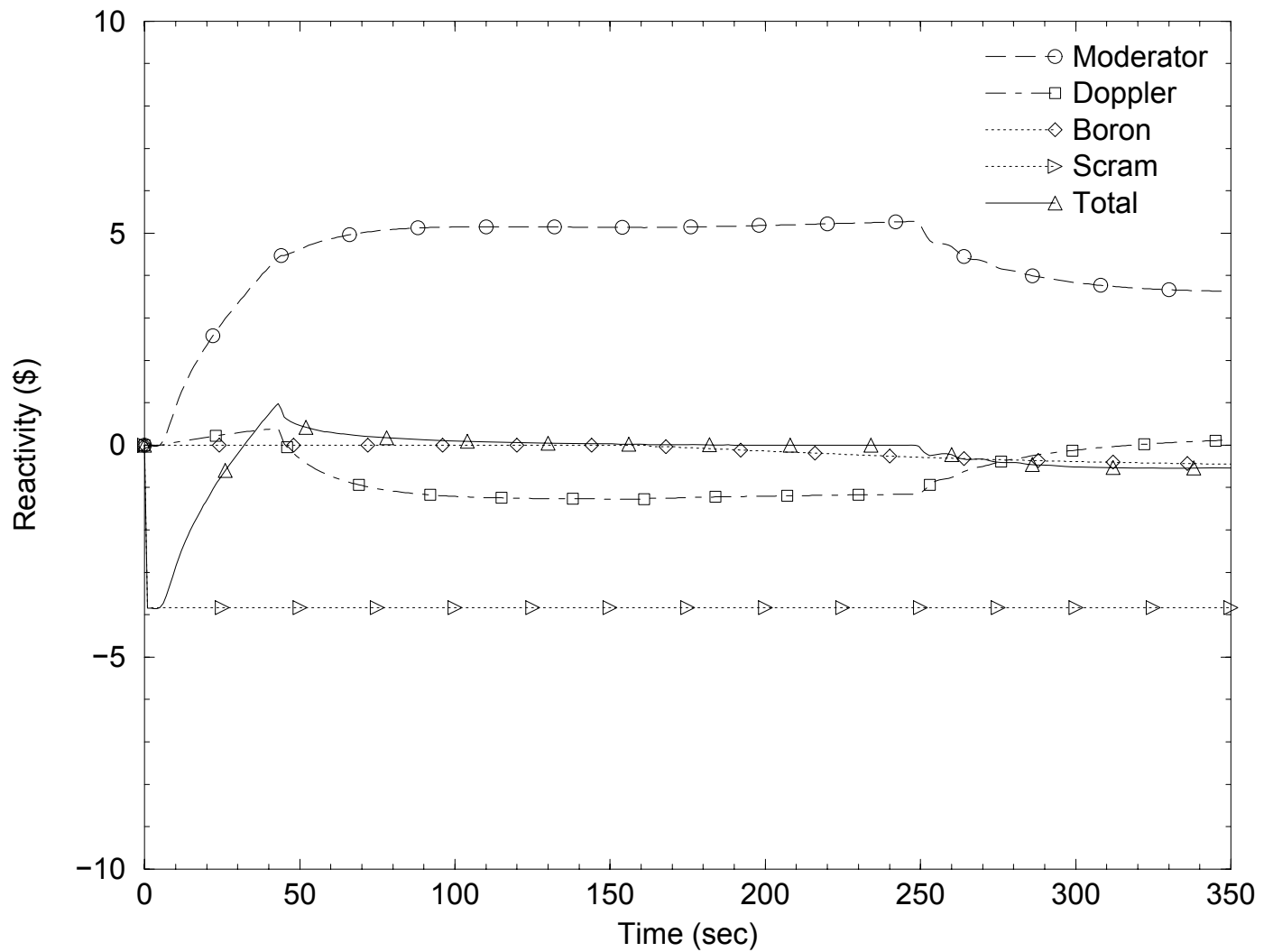
**Core Inlet Flow Rates During LHR-Limiting Transient**

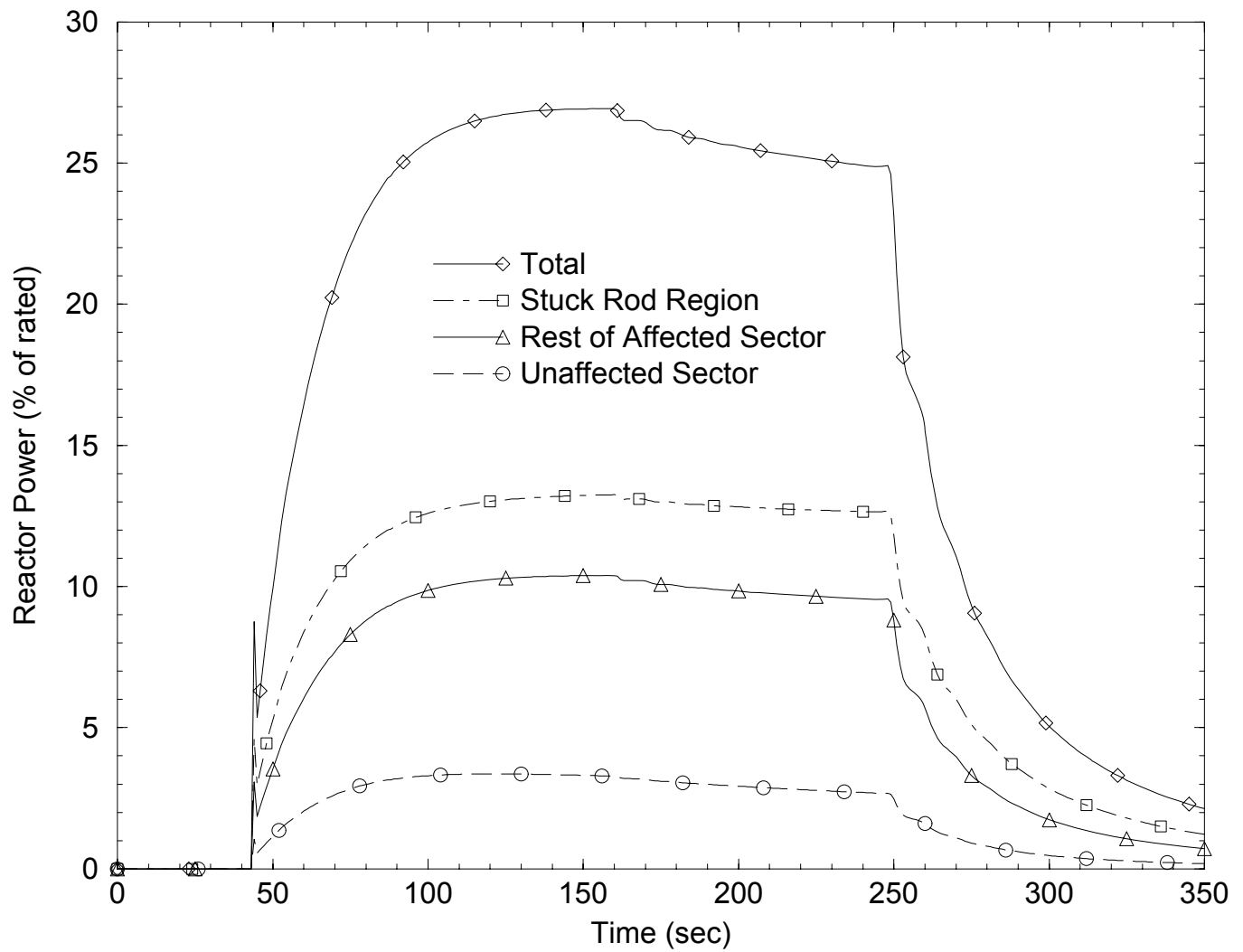
**Pressurizer Pressure During LHR-Limiting Transient**

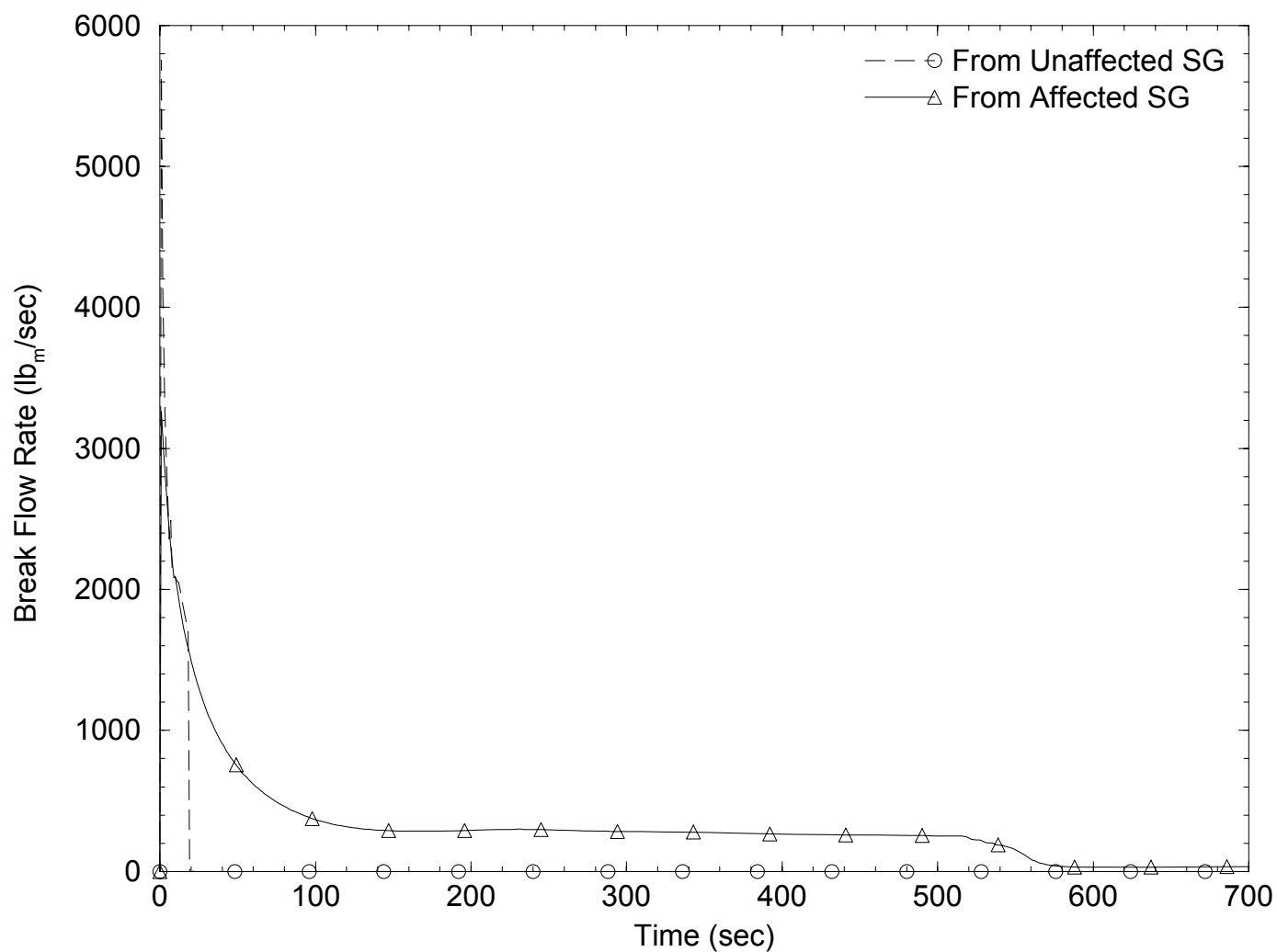
Pressurizer Liquid Level During LHR-Limiting Transient

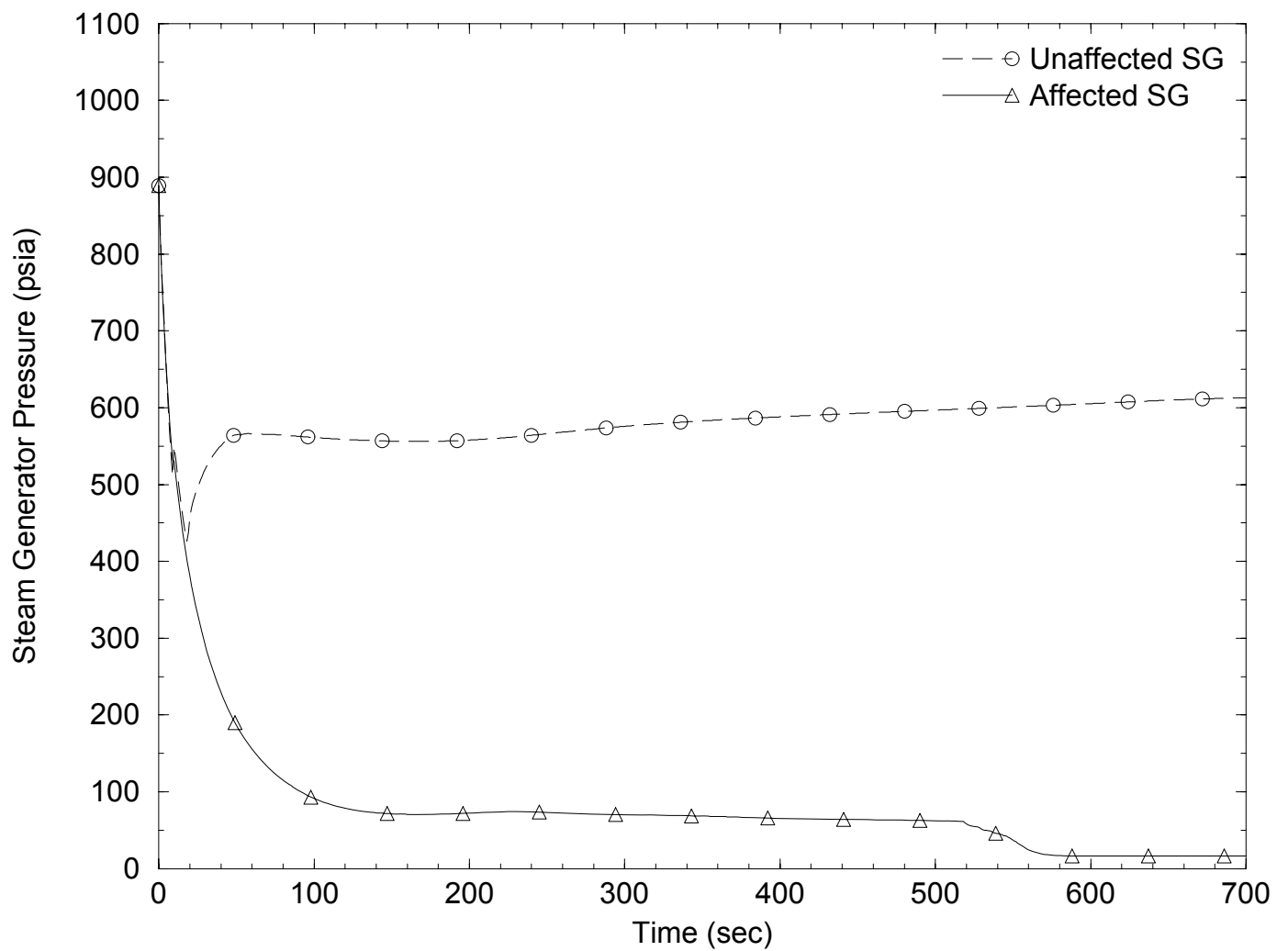
Total HPSI Flow Rate During LHR-Limiting Transient

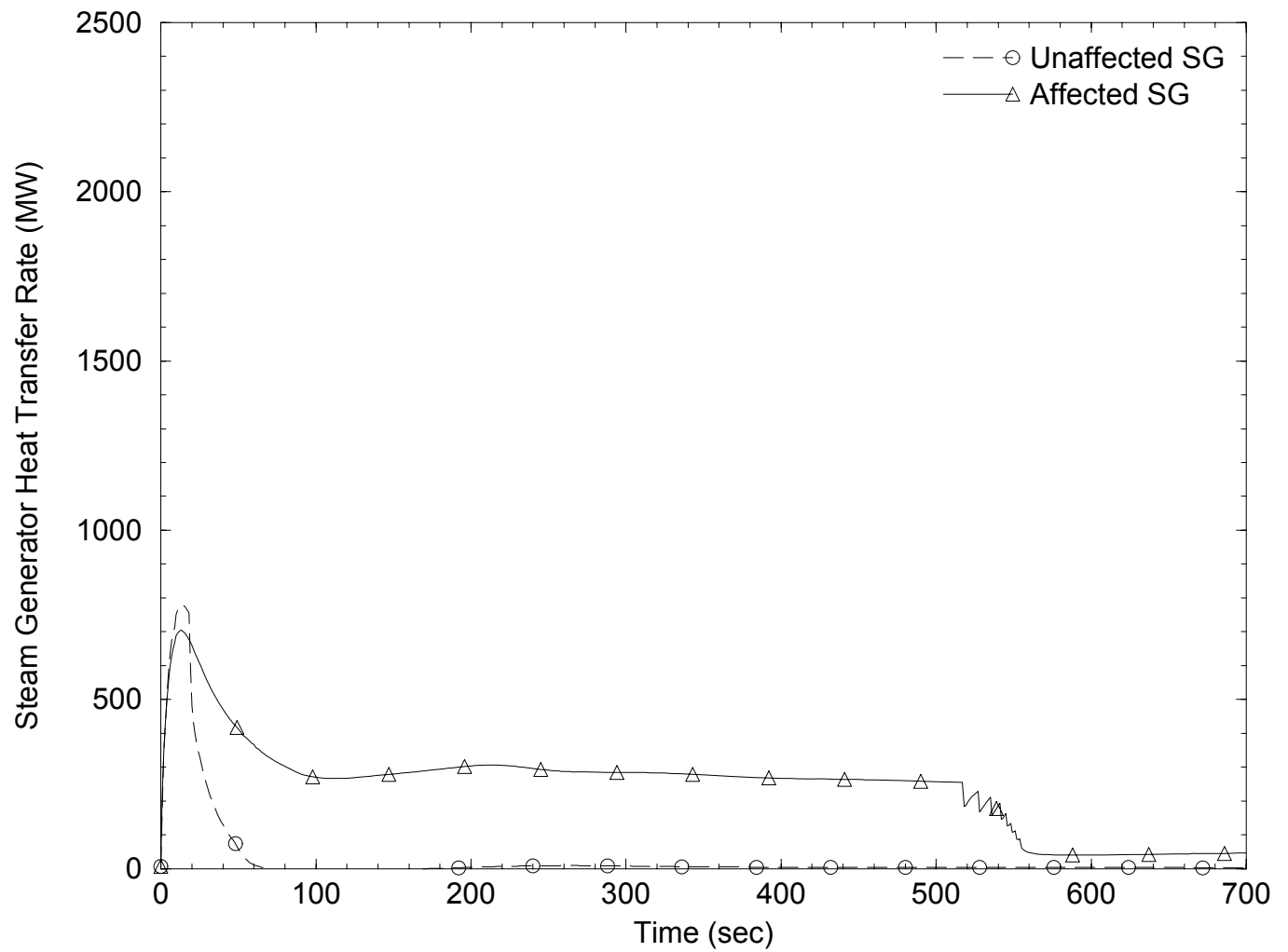


Reactivity During LHR-Limiting Transient

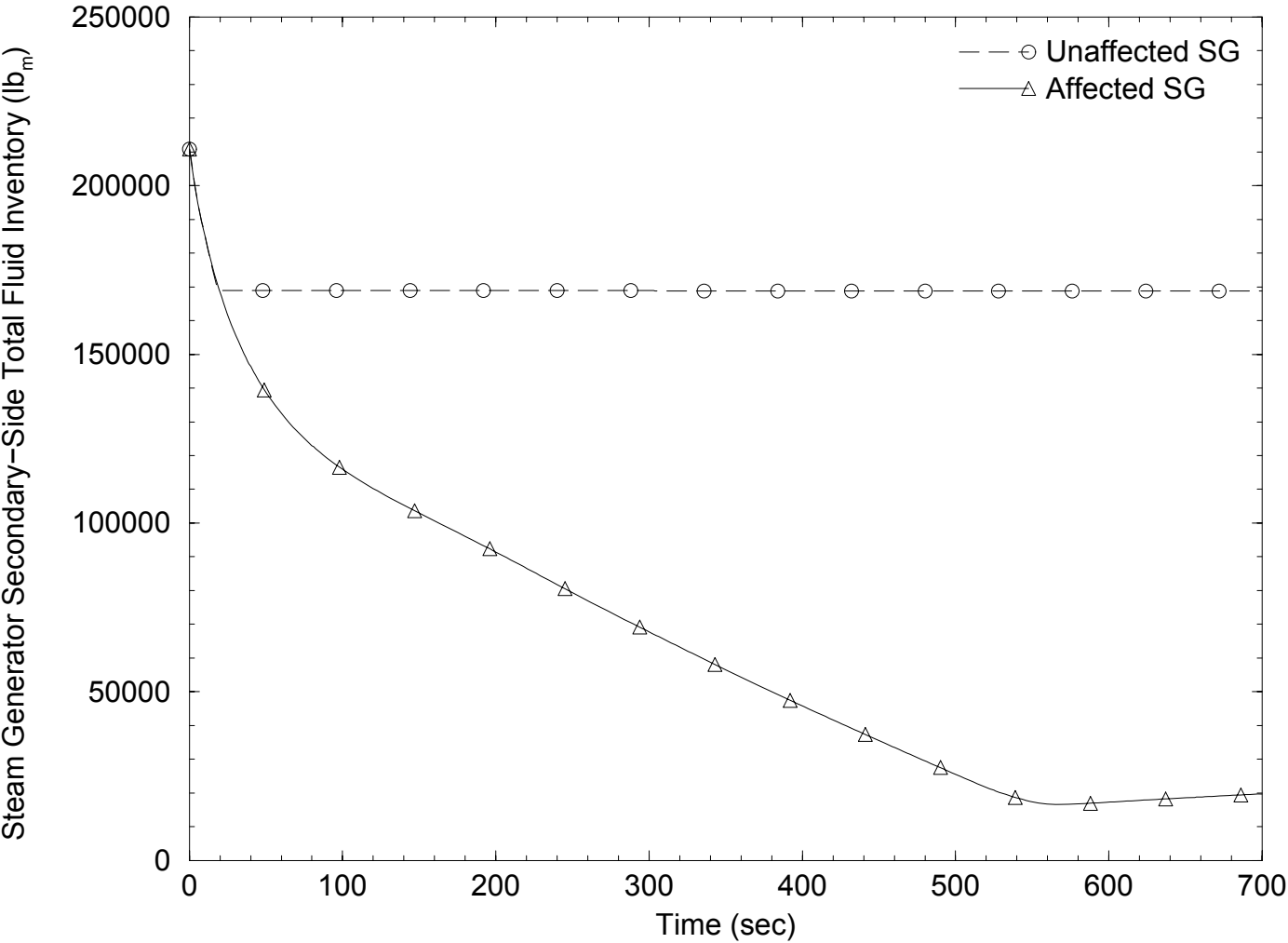
Reactor Power During LHR-Limiting Transient

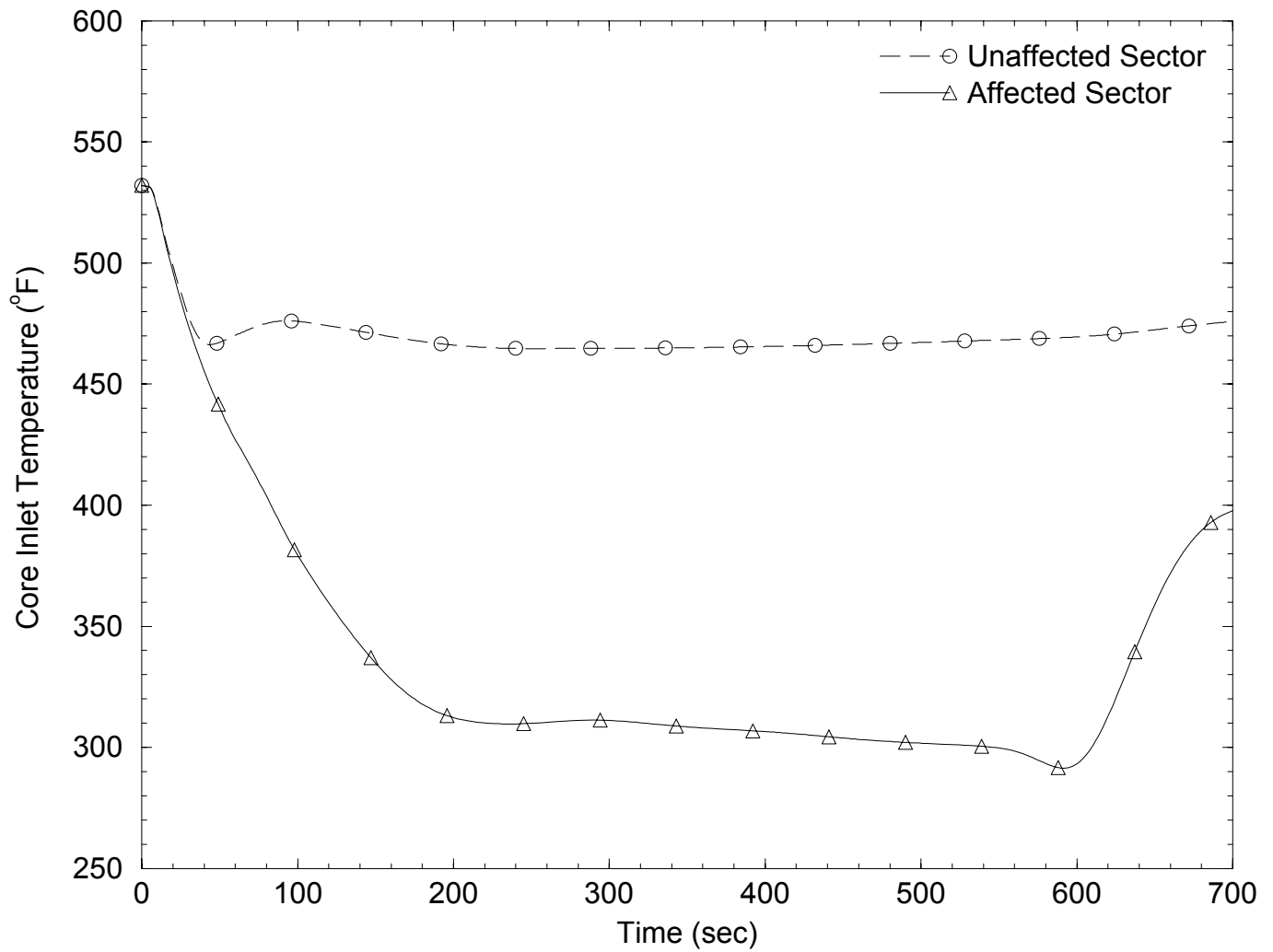
Break Flow Rates During DNBR-Limiting Transient

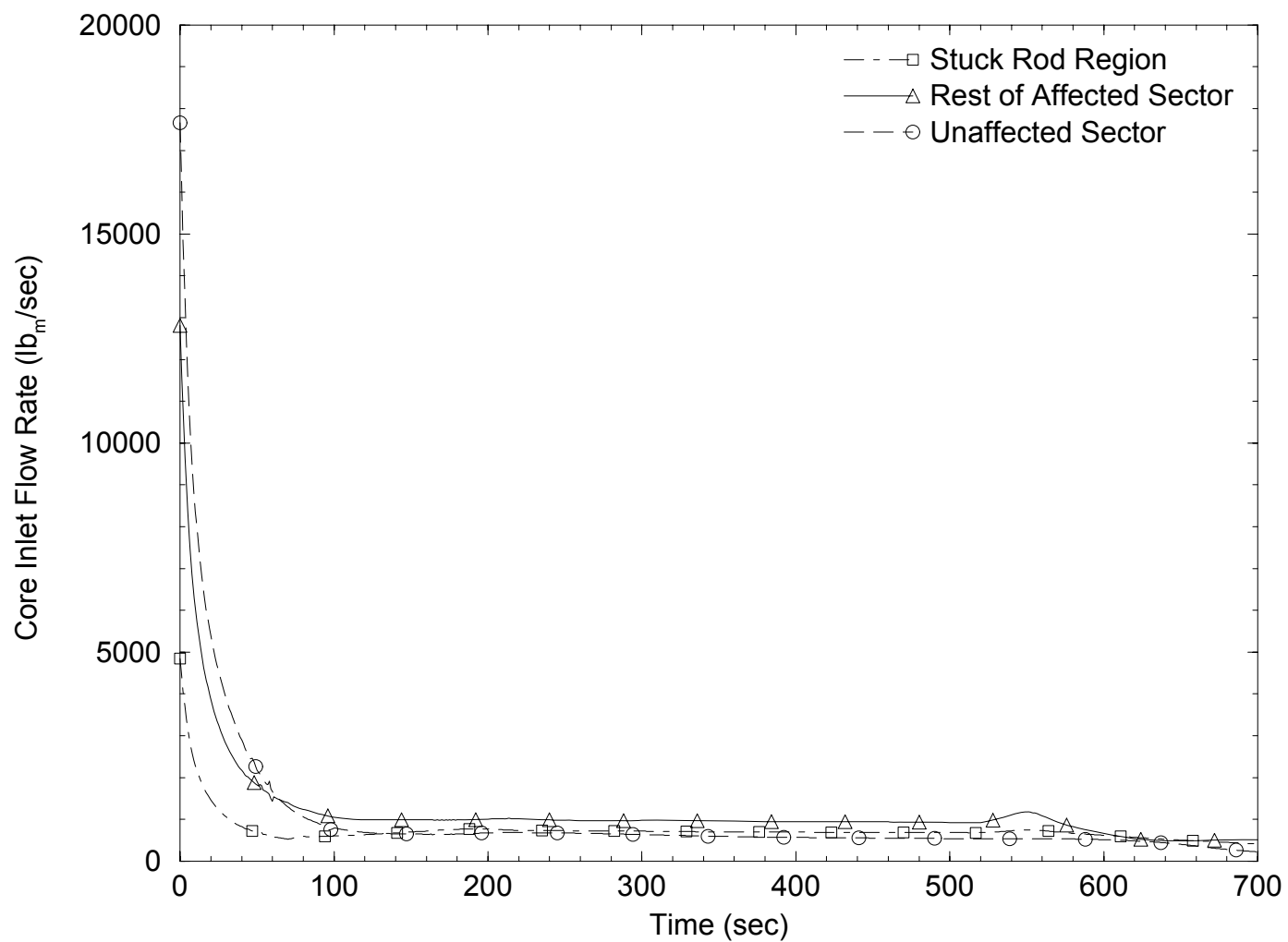
**Steam Generator Pressures During DNBR-Limiting Transient**

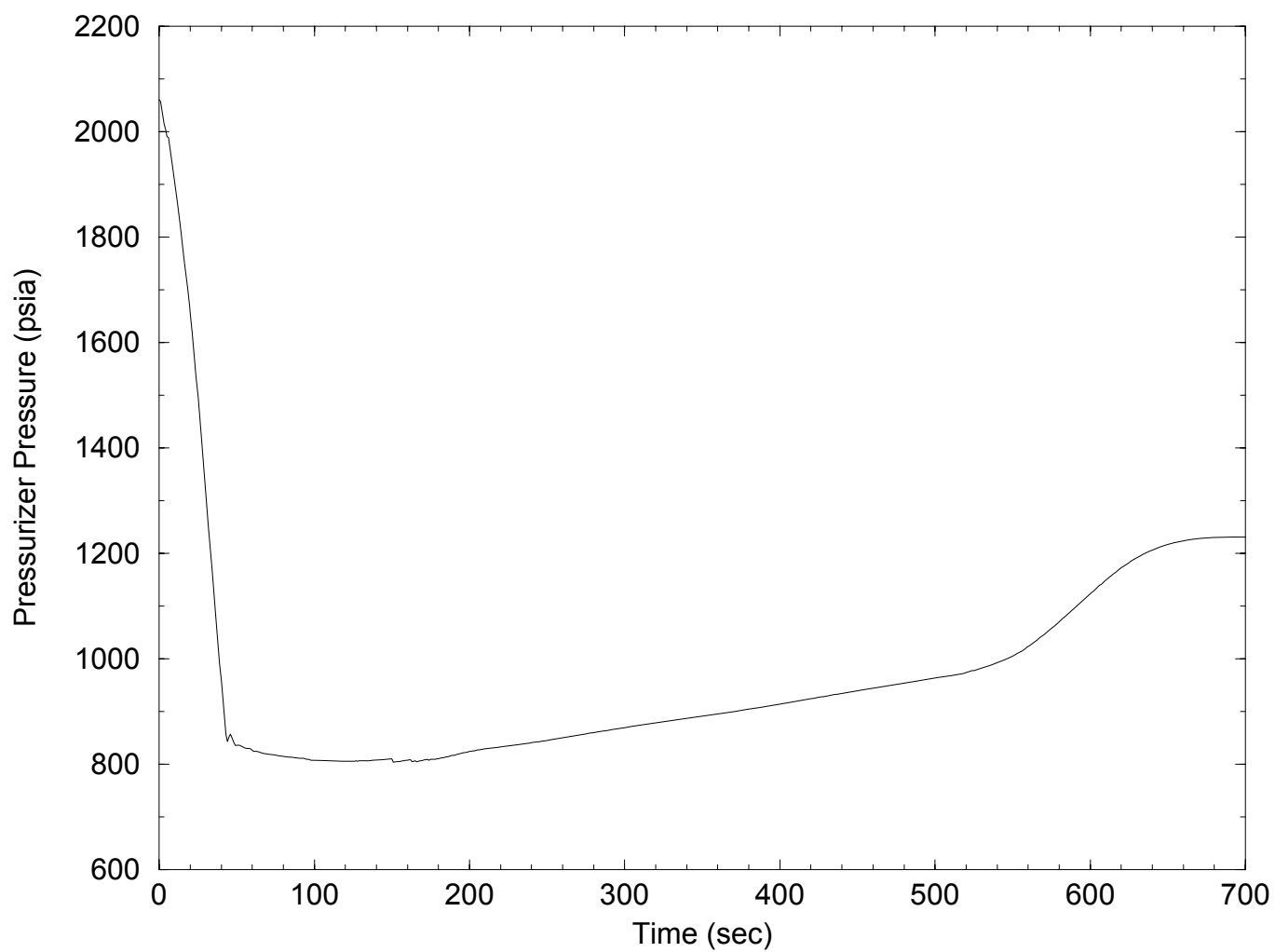
**Steam Generator Heat Transfer Rates During DNBR-Limiting Transient**

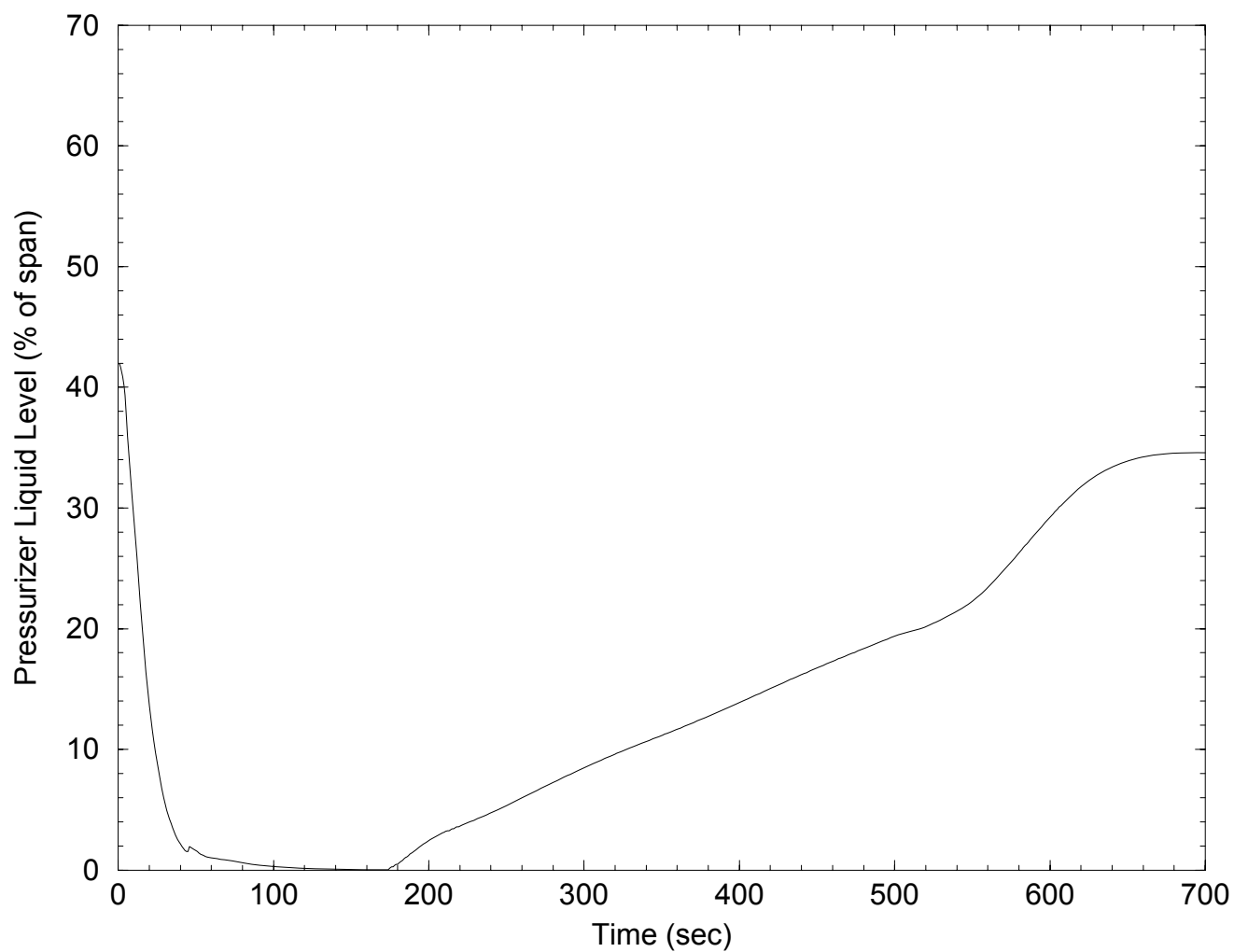
Steam Generator Secondary-Side Total Fluid Inventories  
During DNBR-Limiting Transient

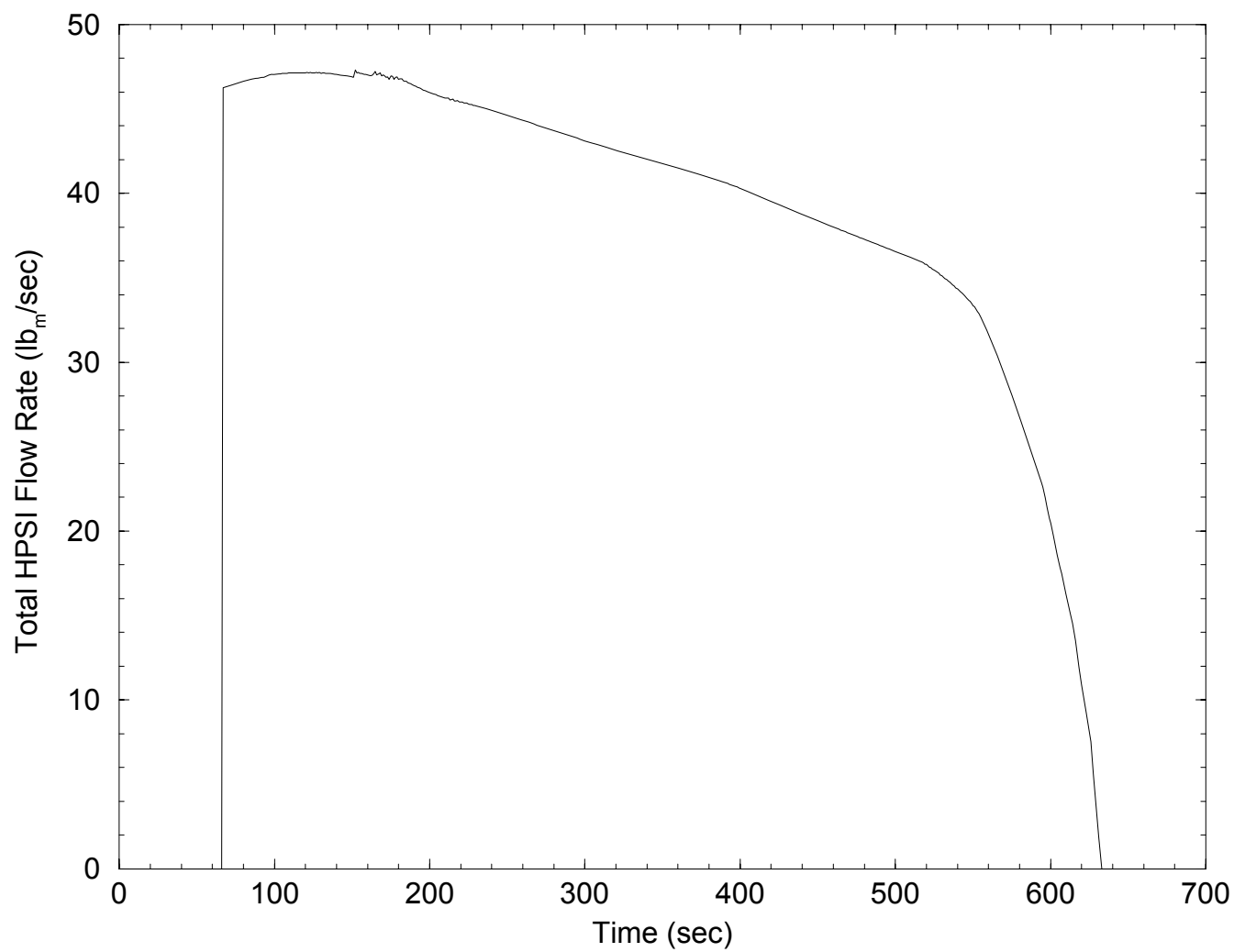


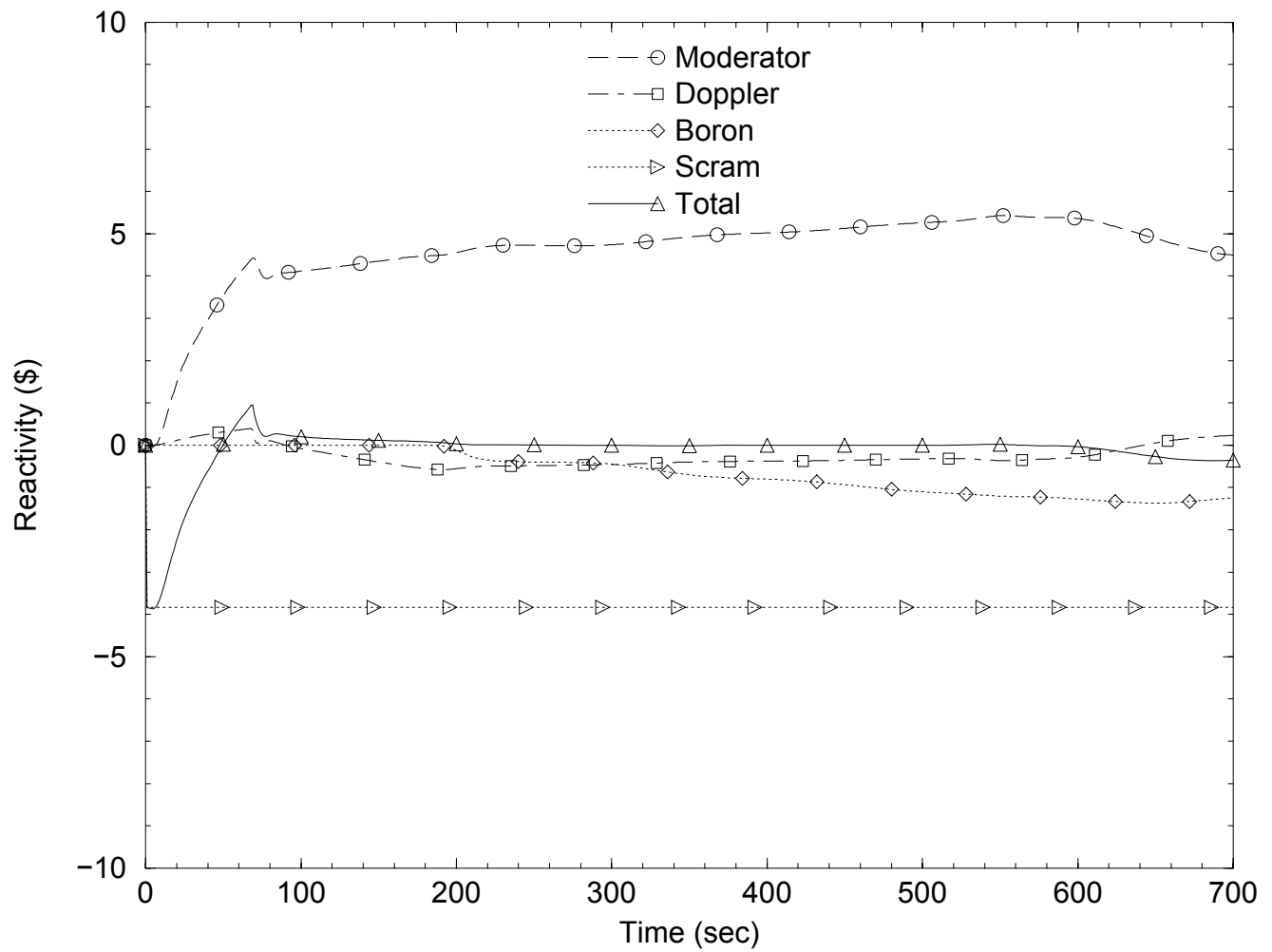
Core Inlet Temperatures During DNBR-Limiting Transient

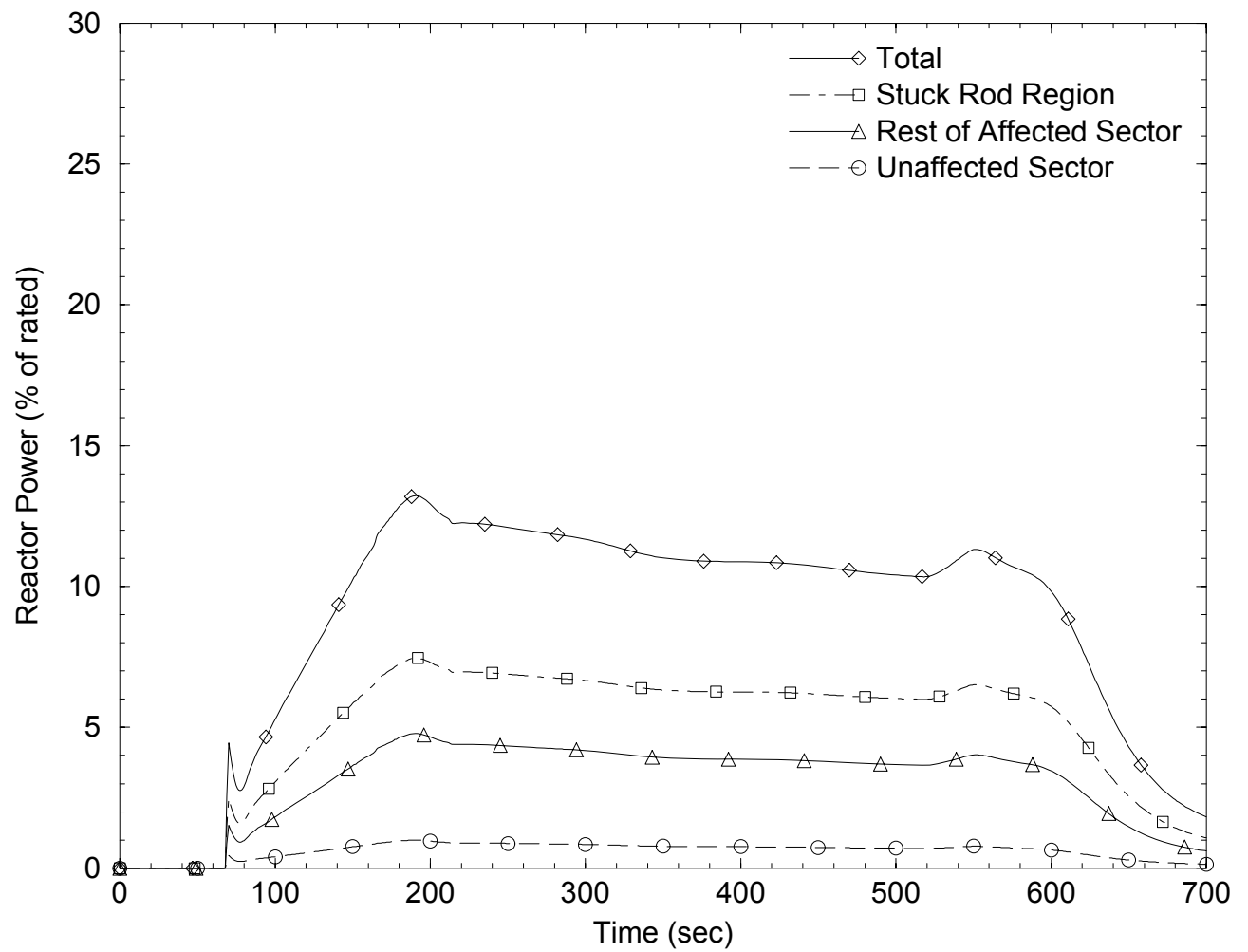
Core Inlet Flow Rates During DNBR-Limiting Transient

**Pressurizer Pressure During DNBR-Limiting Transient**

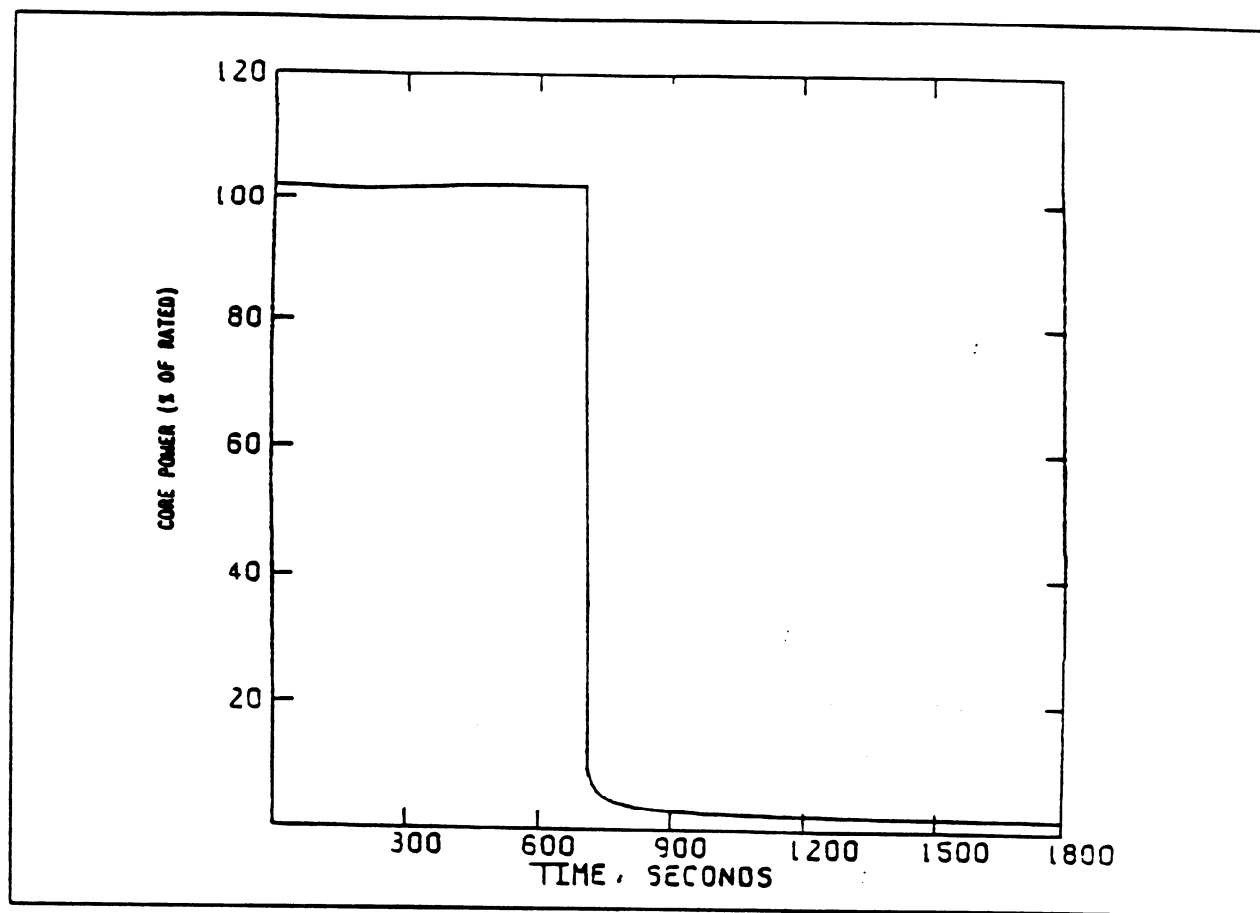
**Pressurizer Liquid Level During DNBR-Limiting Transient**

Total HPSI Flow Rate During DNBR-Limiting Transient

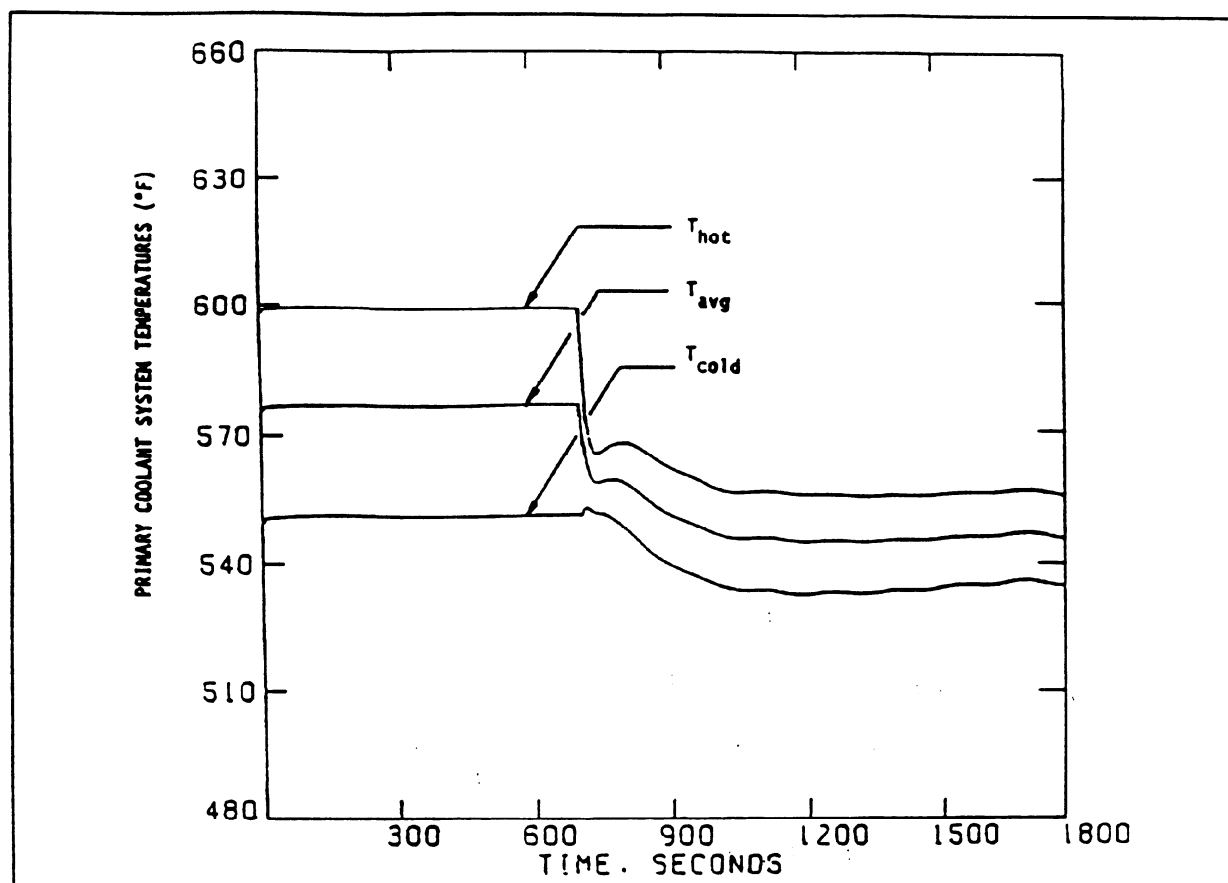
Reactivity During DNBR-Limiting Transient

Reactor Power During DNBR-Limiting Transient

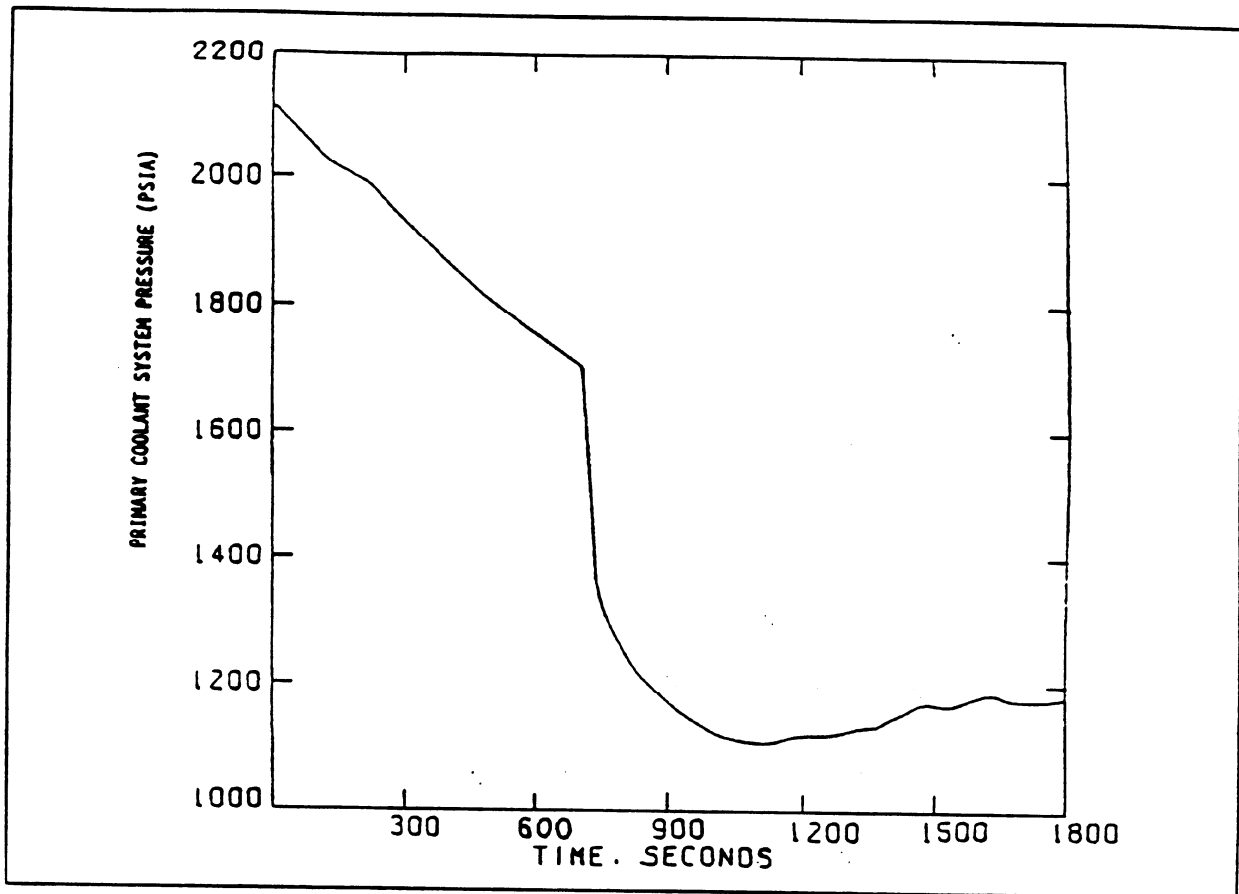
SGTR WITH LOAC: CORE POWER vs TIME



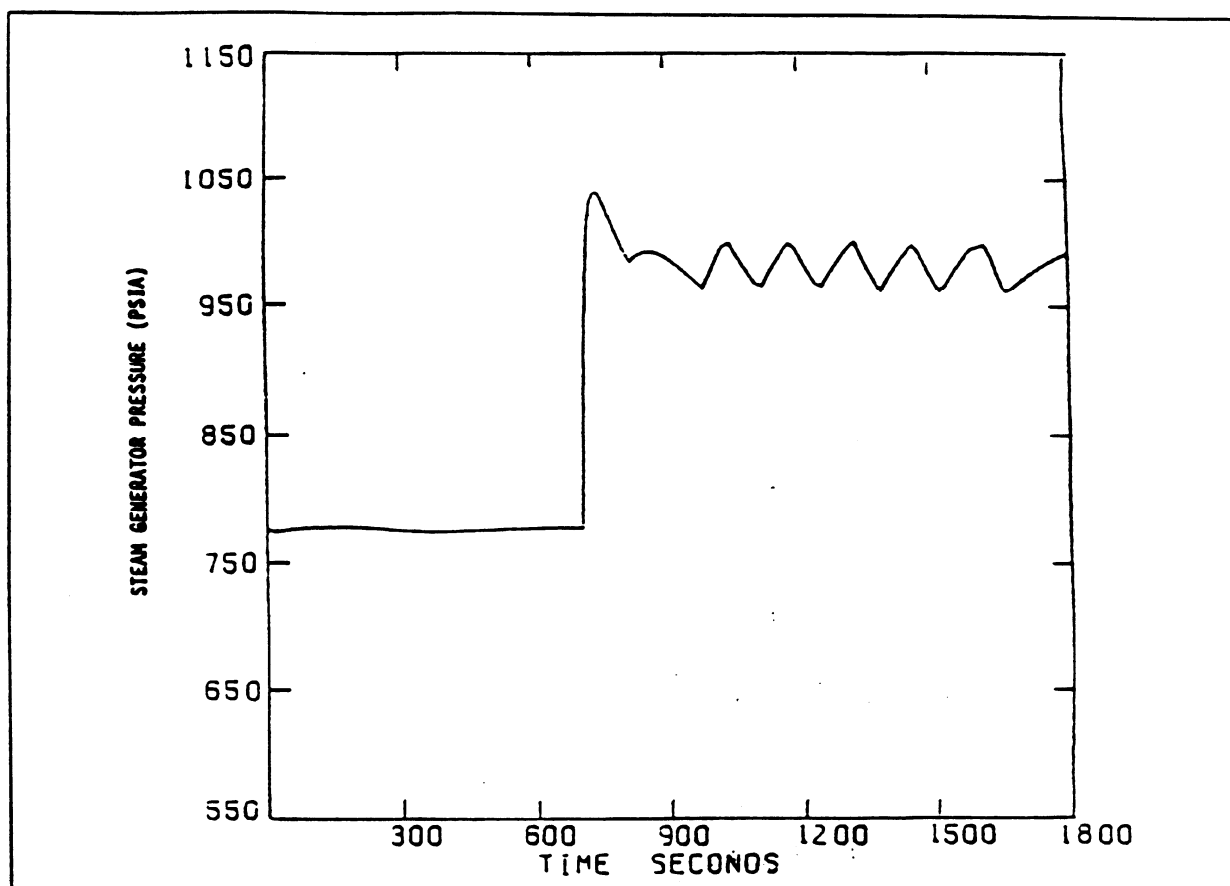
## SGTR WITH LOAC: CORE COOLANT TEMPERATURE vs TIME



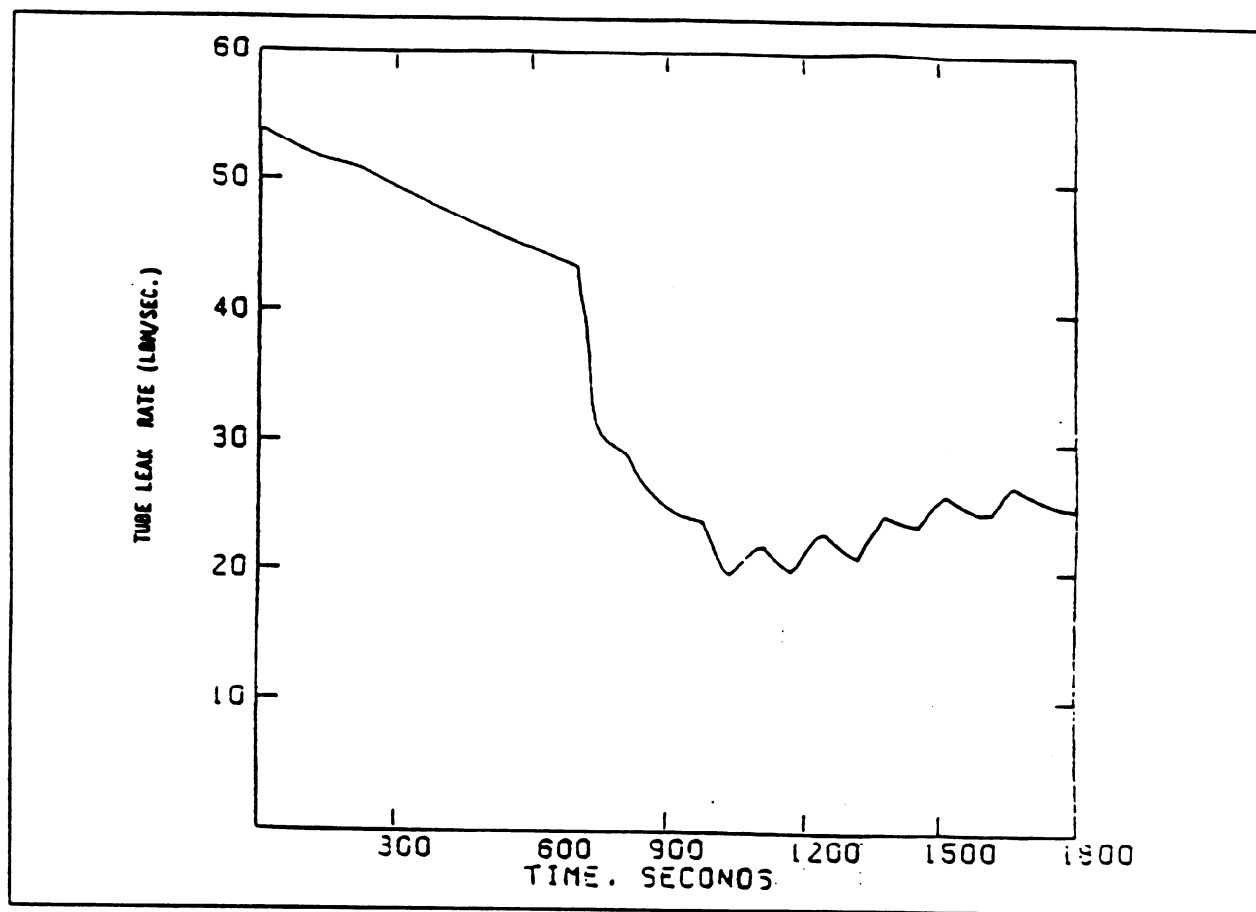
## SGTR WITH LOAC: PRIMARY COOLANT SYSTEM PRESSURE vs TIME



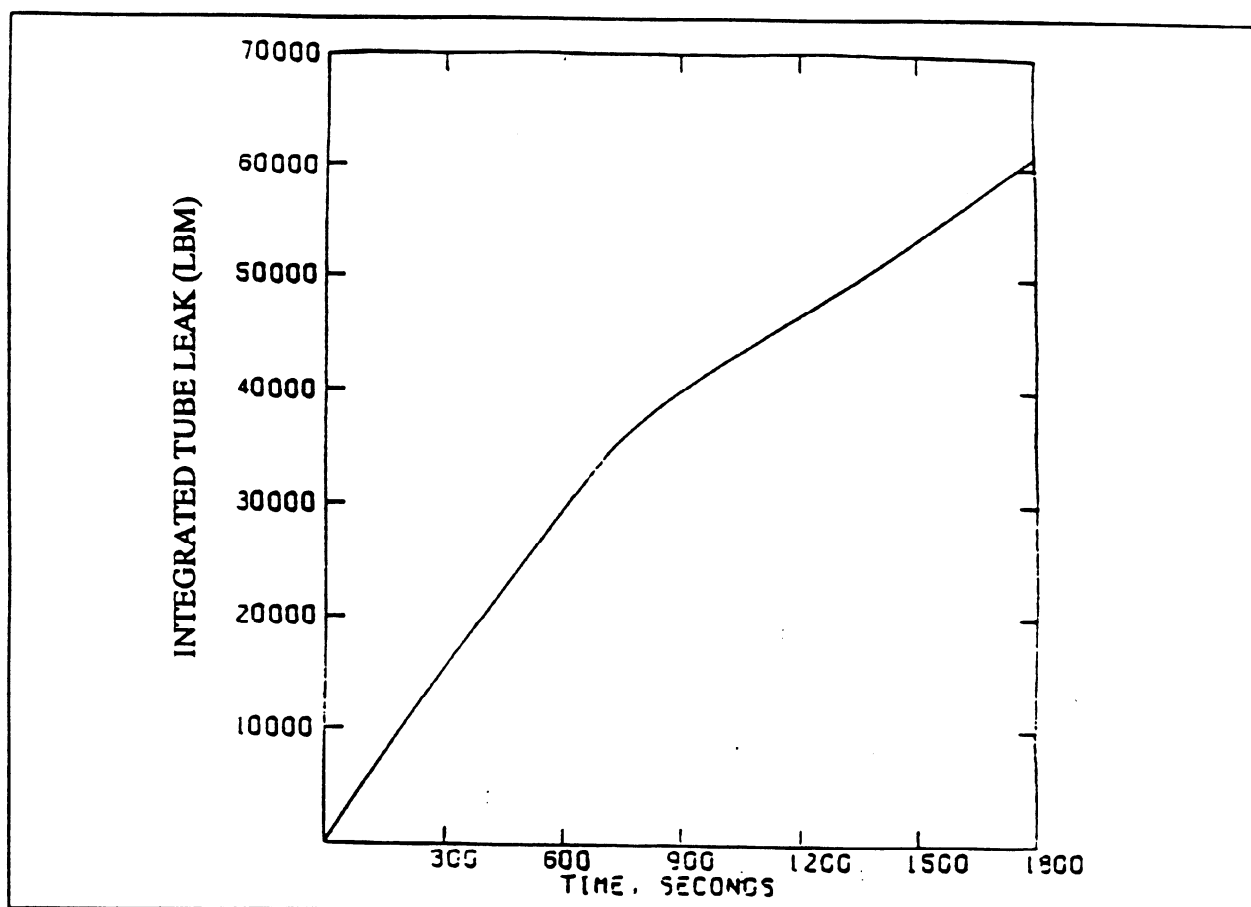
## SGTR WITH LOAC: STEAM GENERATOR PRESSURE vs TIME



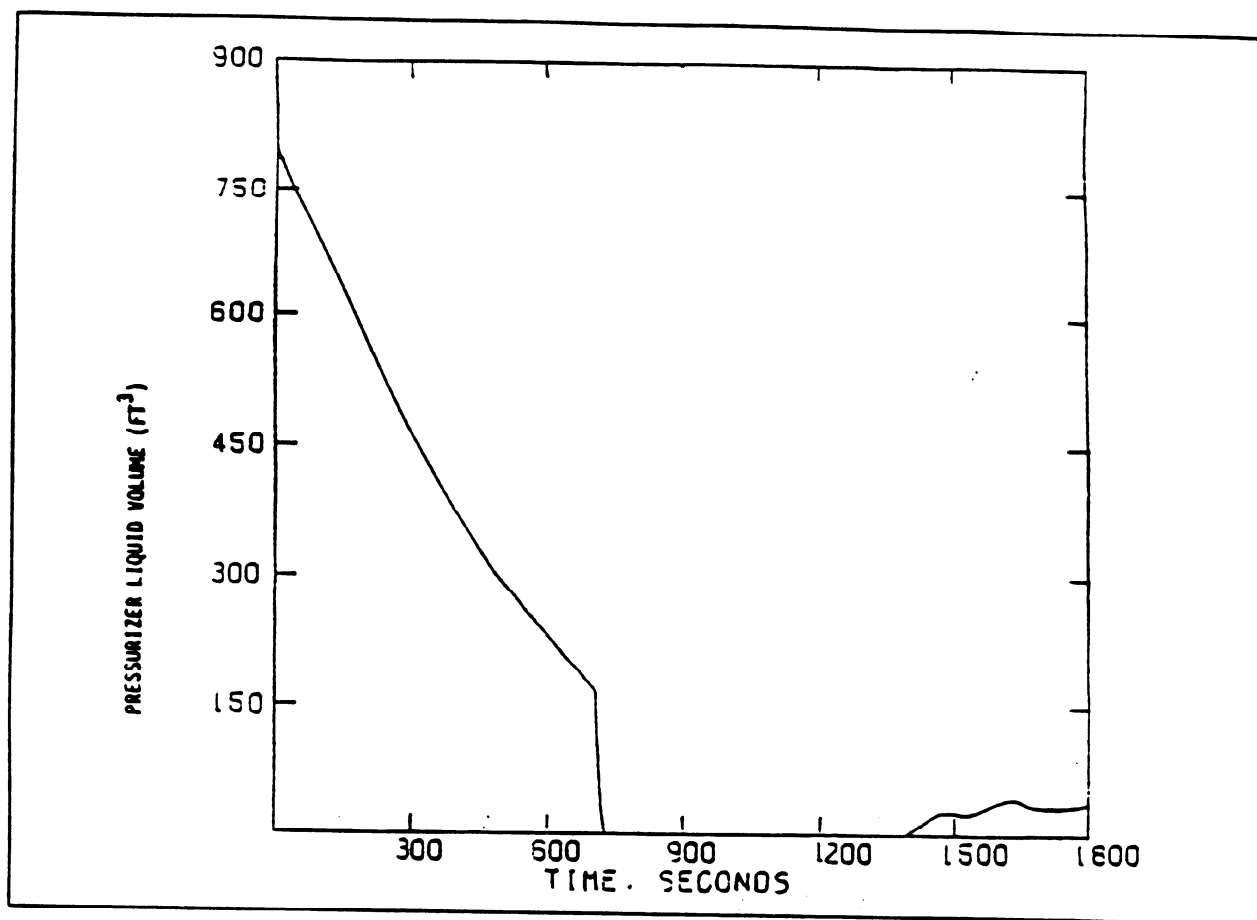
SGTR WITH LOAC: TUBE LEAK FLOW RATE vs TIME



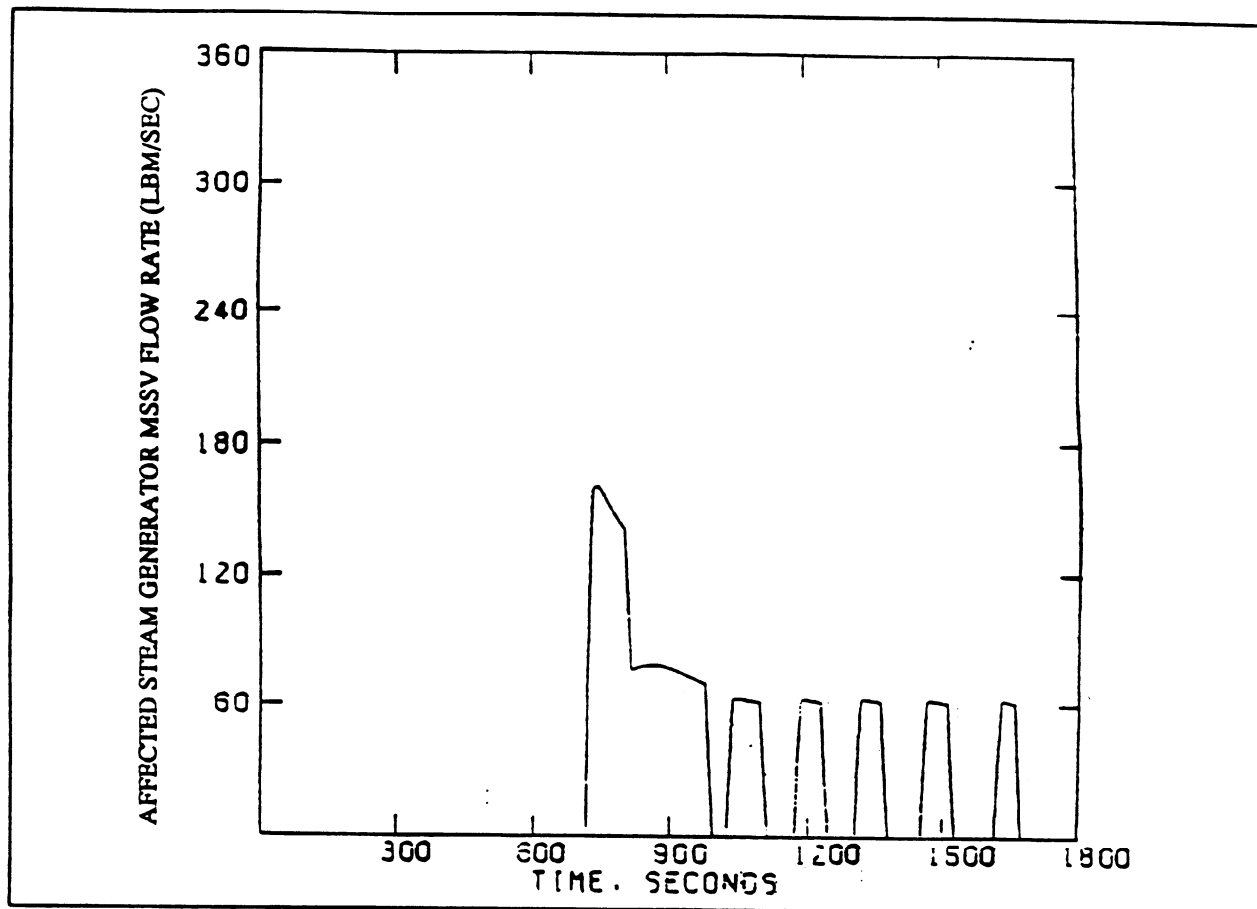
## SGTR WITH LOAC: INTEGRATED TUBE LEAK FLOW vs TIME



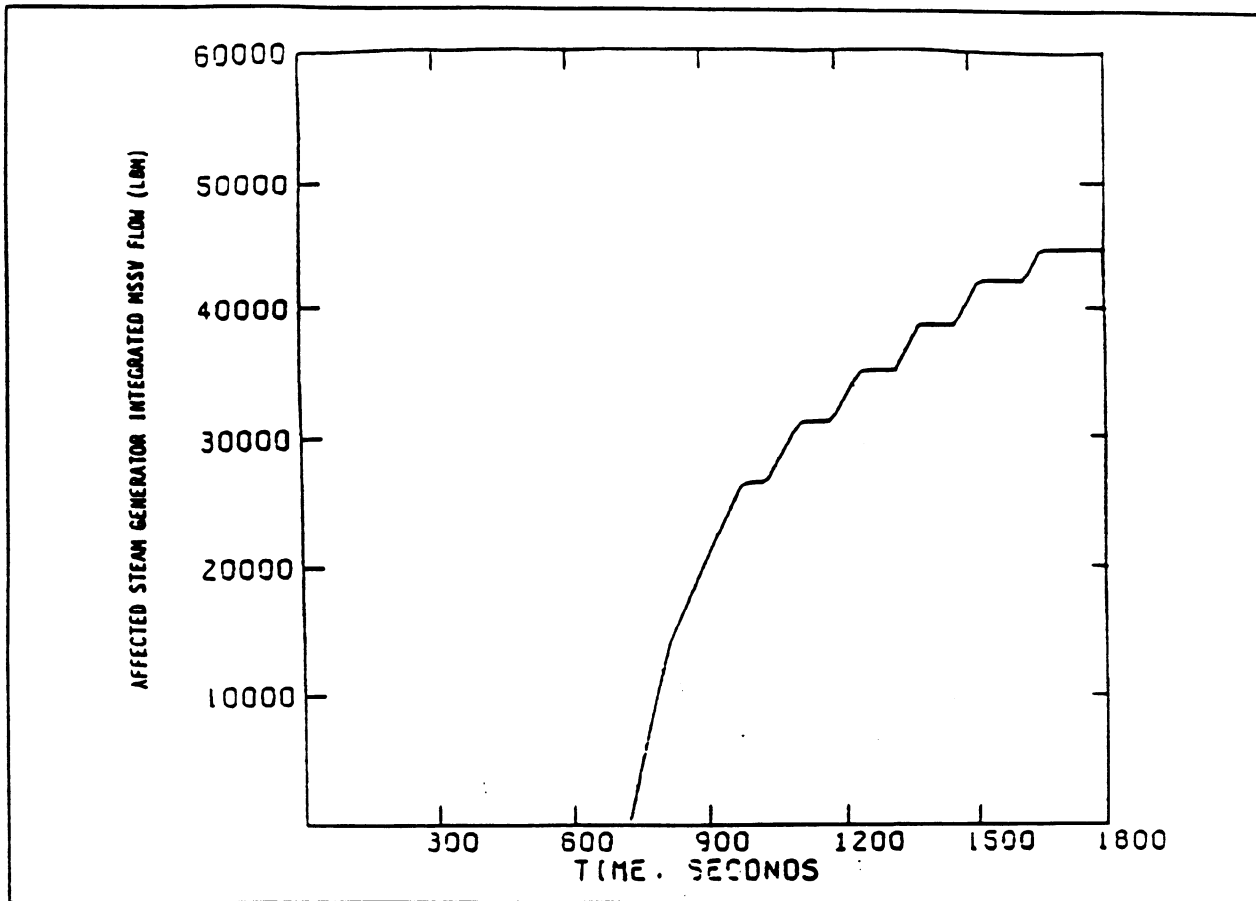
SGTR WITH LOAC: PRESSURIZER LIQUID VOLUME vs TIME



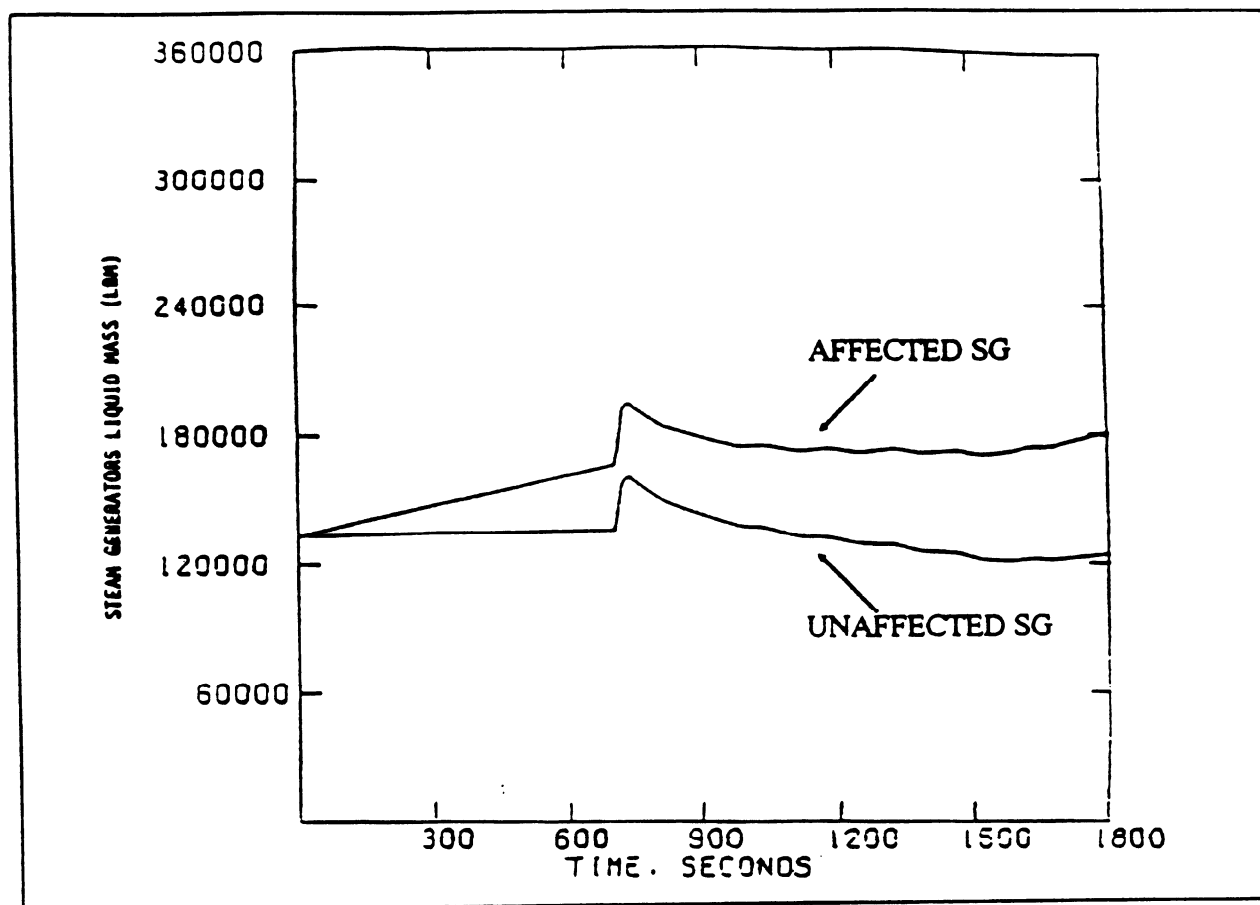
SGTR WITH LOAC: AFFECTED STEAM GENERATOR SAFETY VALVE (MSSV)  
FLOW RATE vs TIME



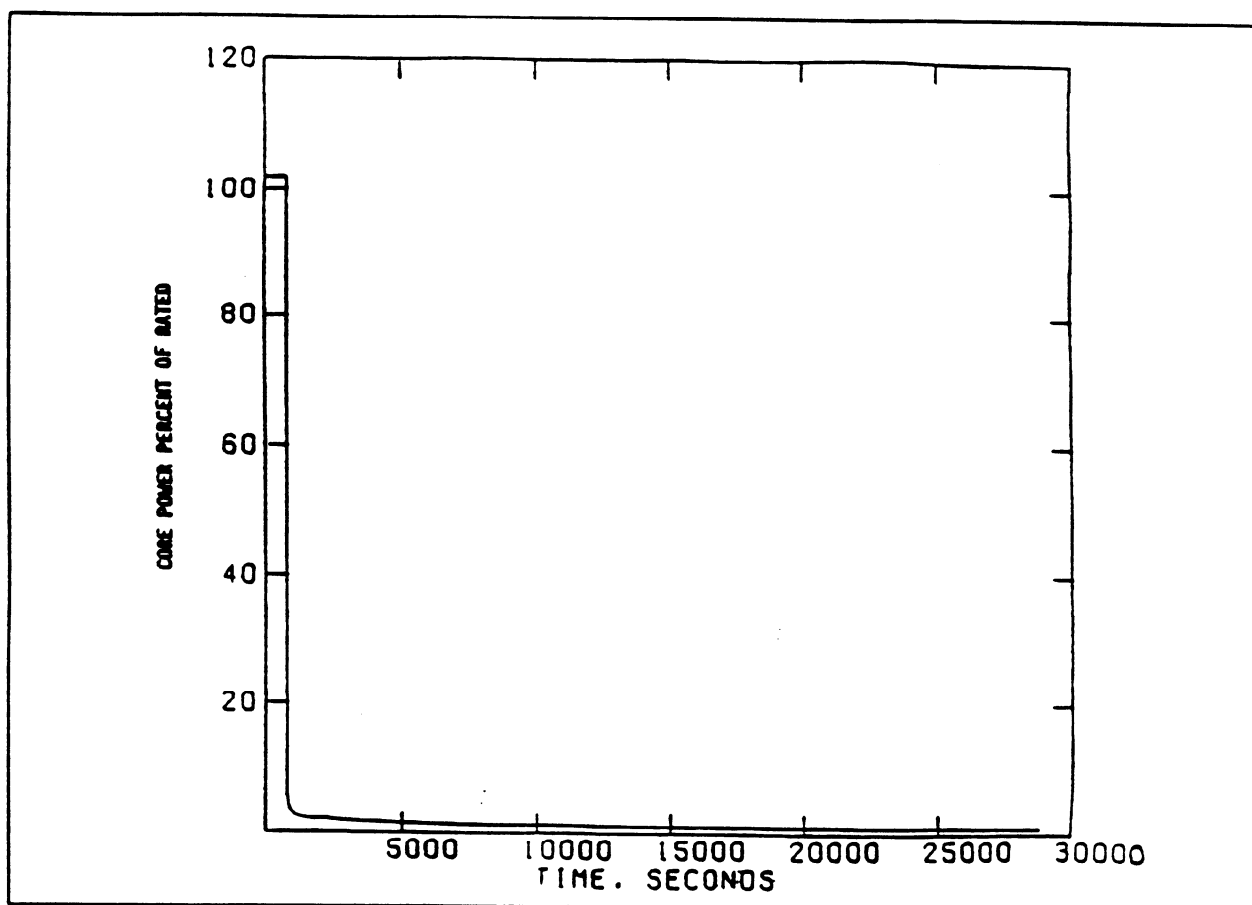
**SGTR WITH LOAC: AFFECTED STEAM GENERATOR SAFETY VALVE (MSSV)  
INTEGRATED FLOW vs TIME**



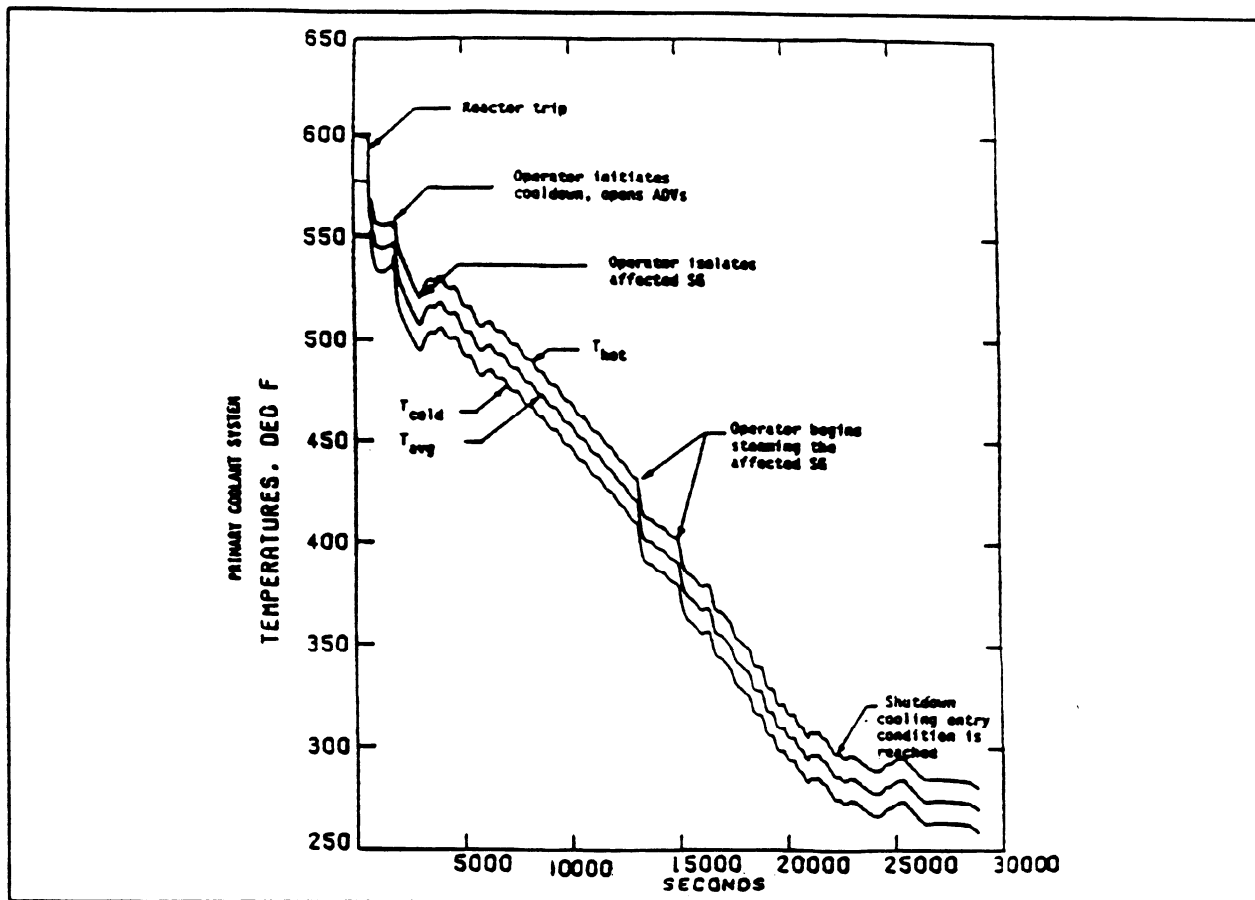
## SGTR WITH LOAC: STEAM GENERATORS LIQUID MASS vs TIME



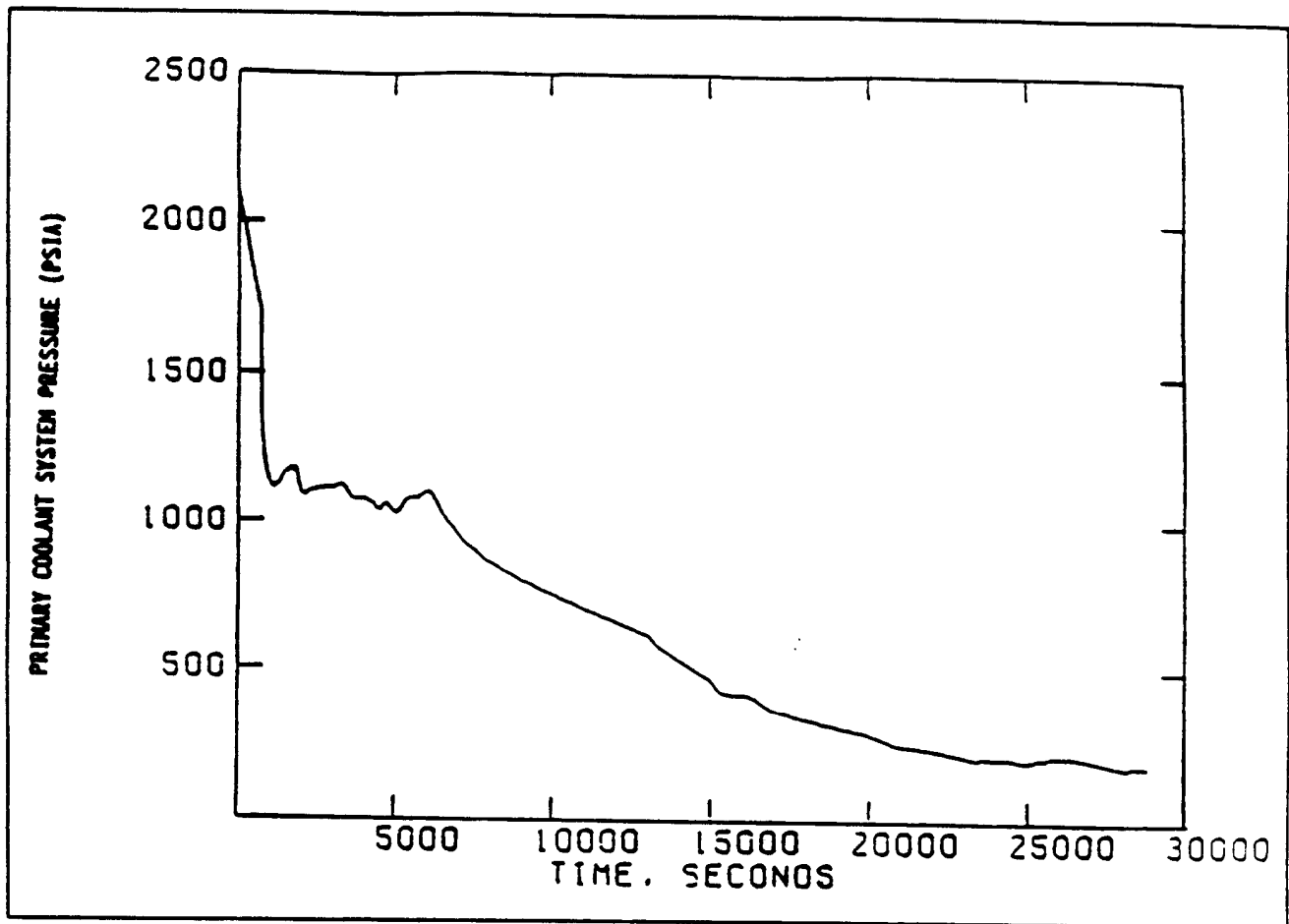
## SGTR WITH LOAC: CORE POWER vs TIME



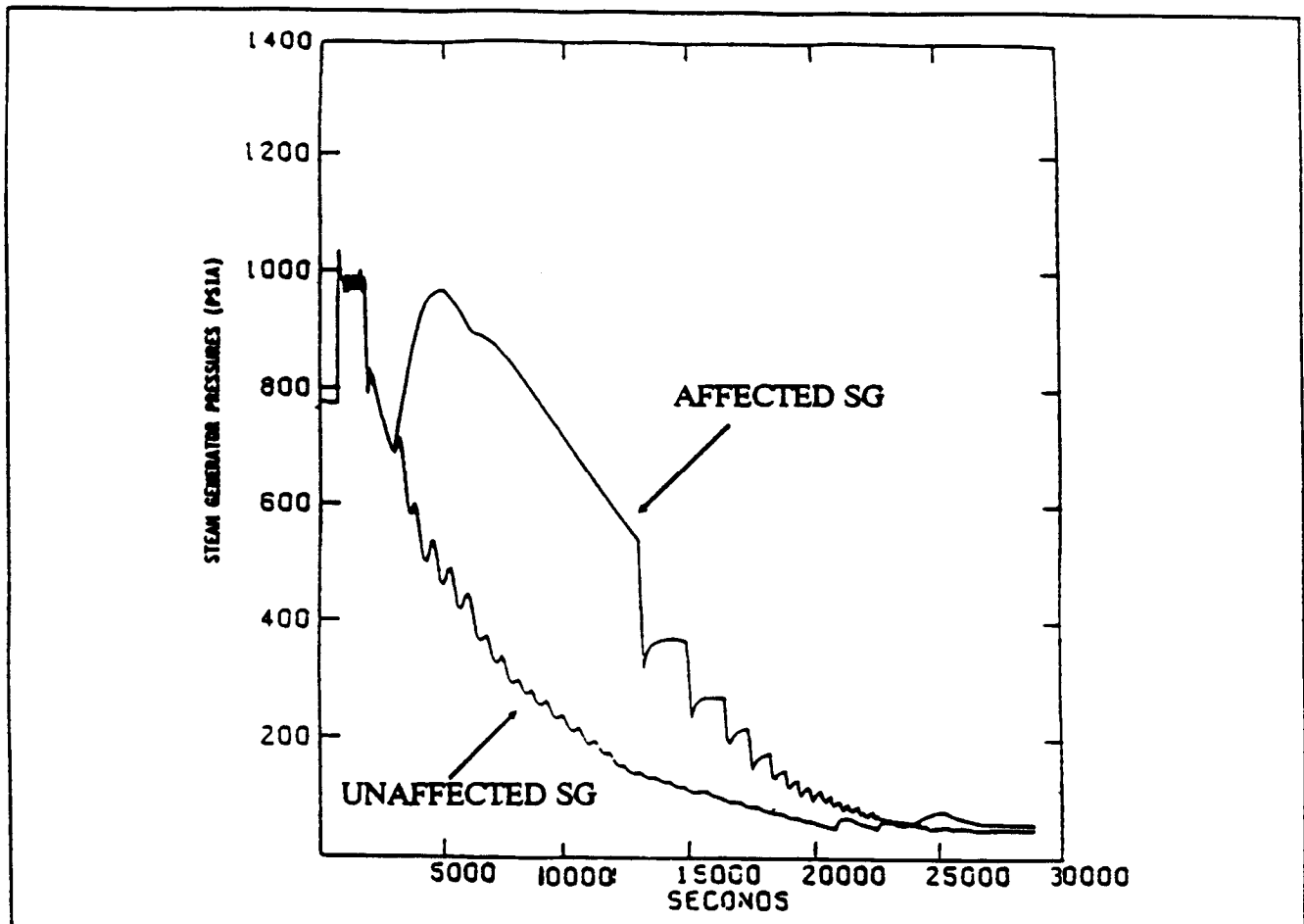
## SGTR WITH LOAC: CORE COOLANT TEMPERATURES vs TIME



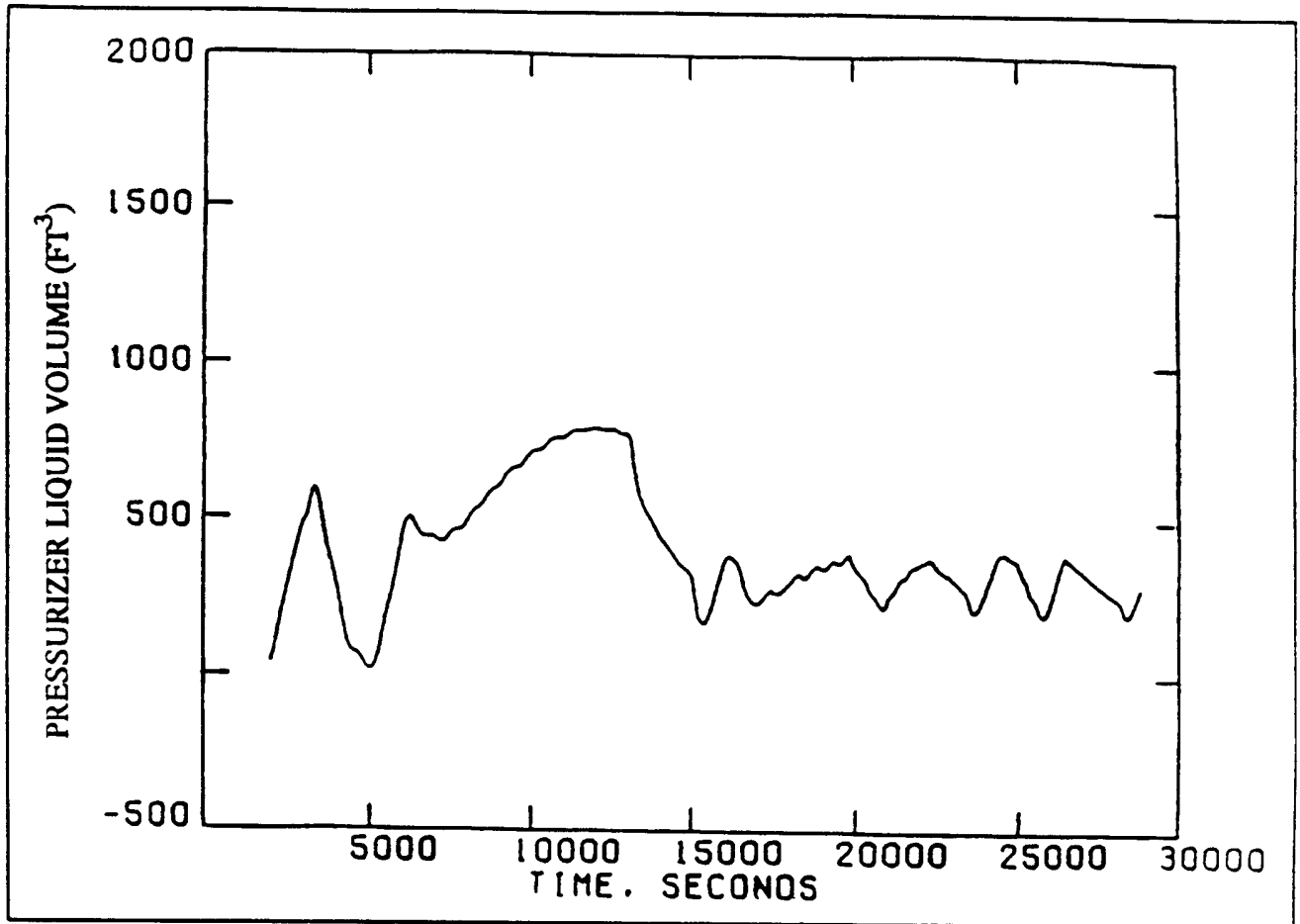
## SGTR WITH LOAC: PRIMARY COOLANT SYSTEM PRESSURE vs TIME



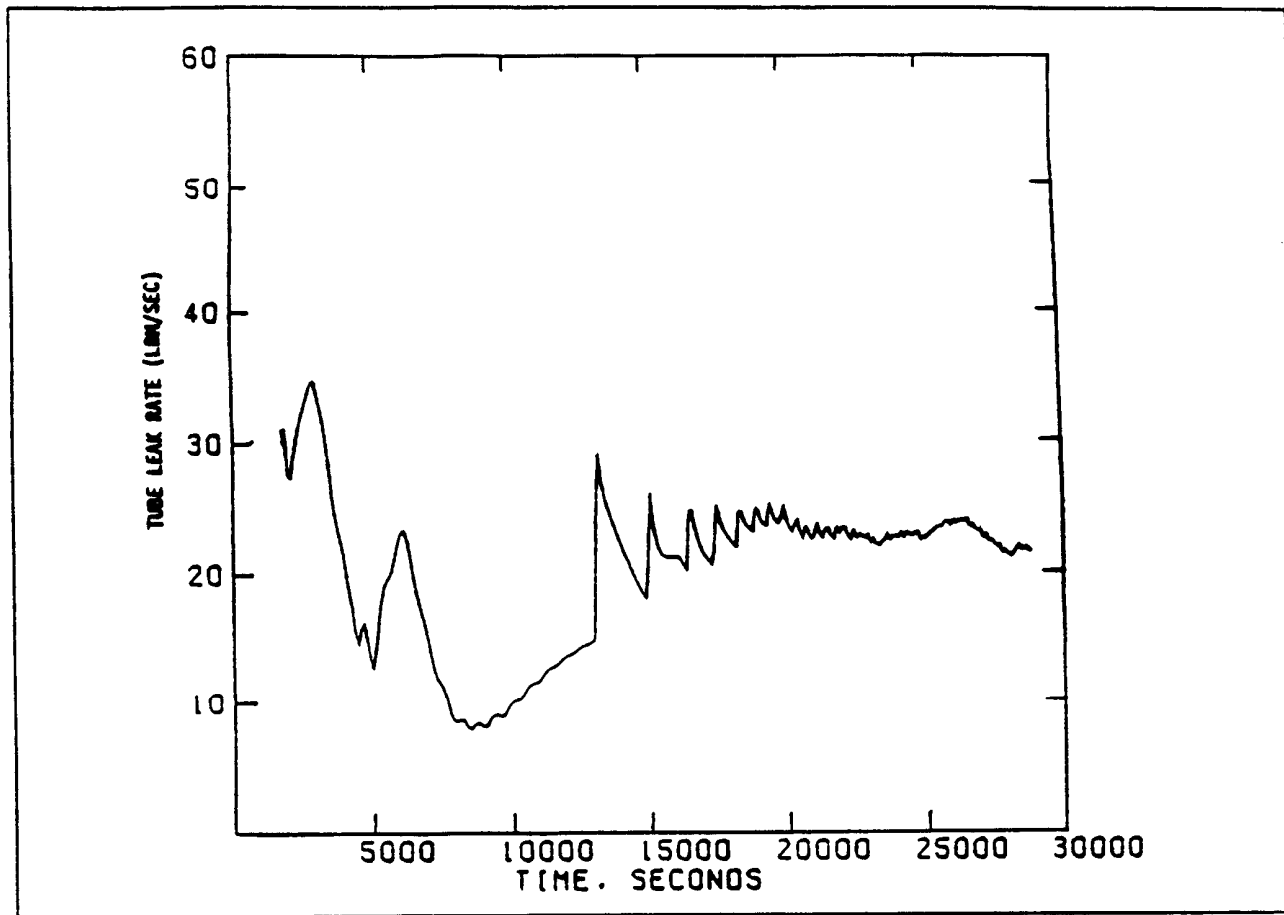
## SGTR WITH LOAC: STEAM GENERATORS PRESSURE vs TIME



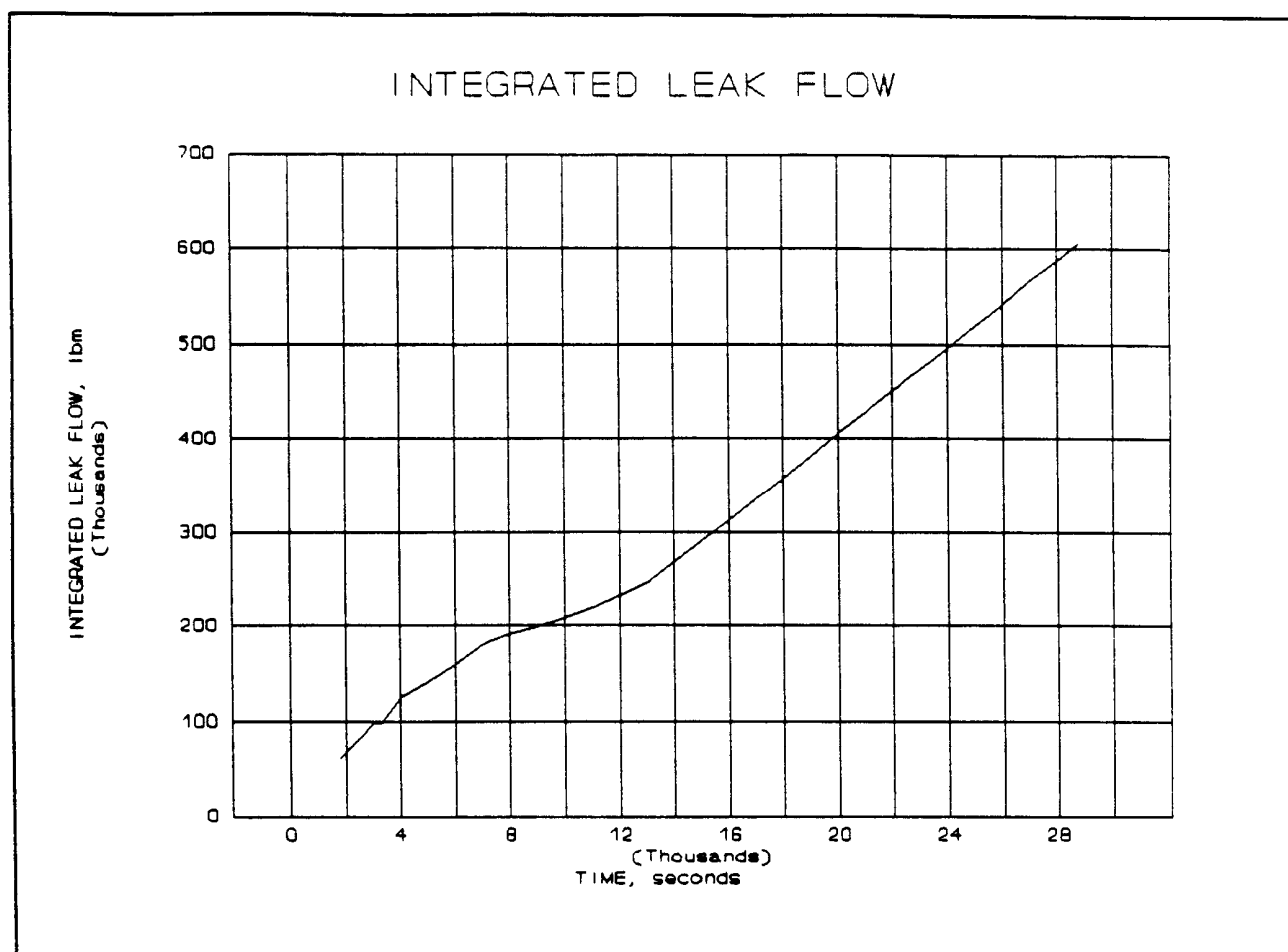
SGTR WITH LOAC: PRESSURIZER LIQUID VOLUME vs TIME



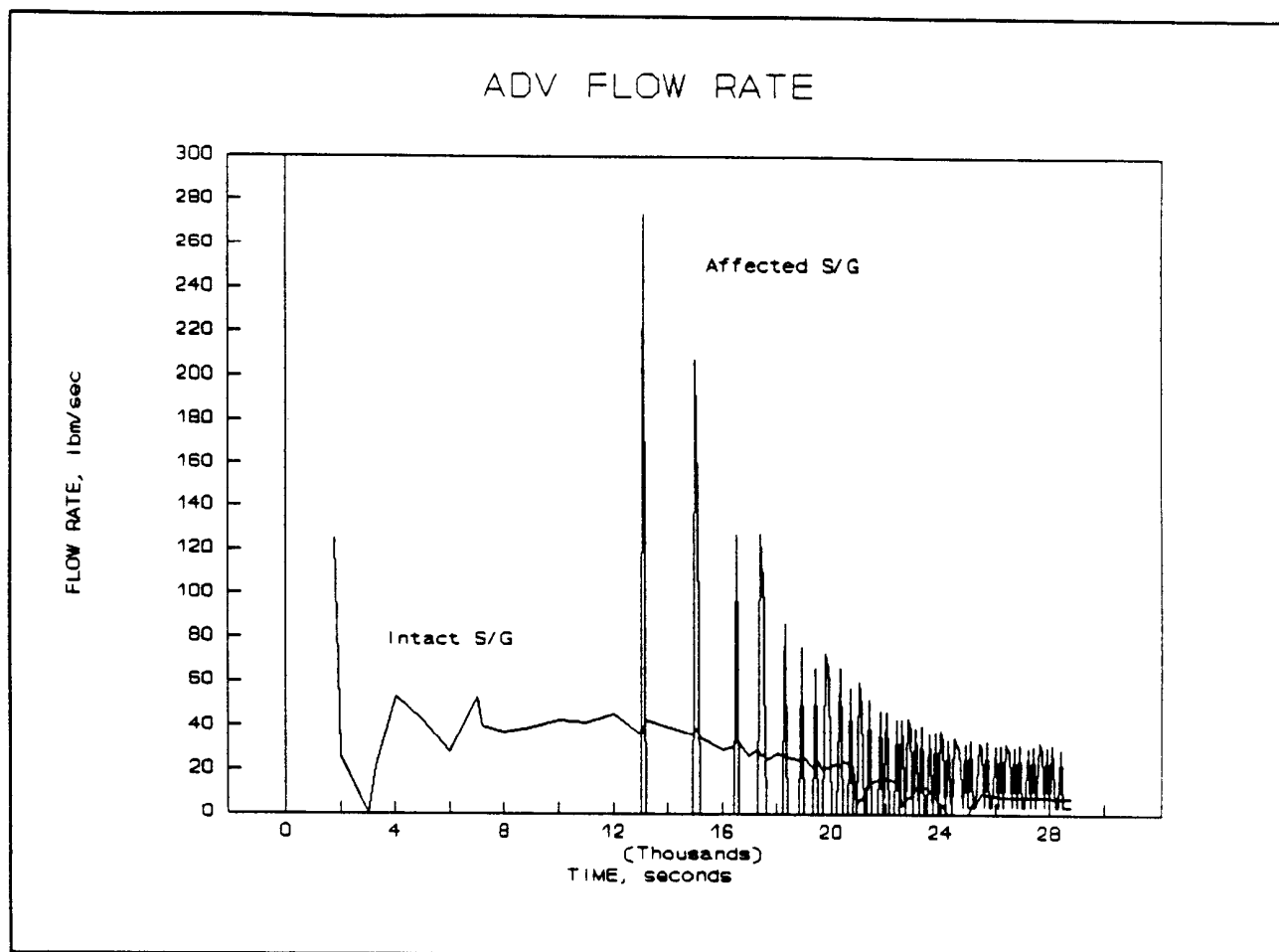
## SGTR WITH LOAC: TUBE LEAK FLOW RATE vs TIME



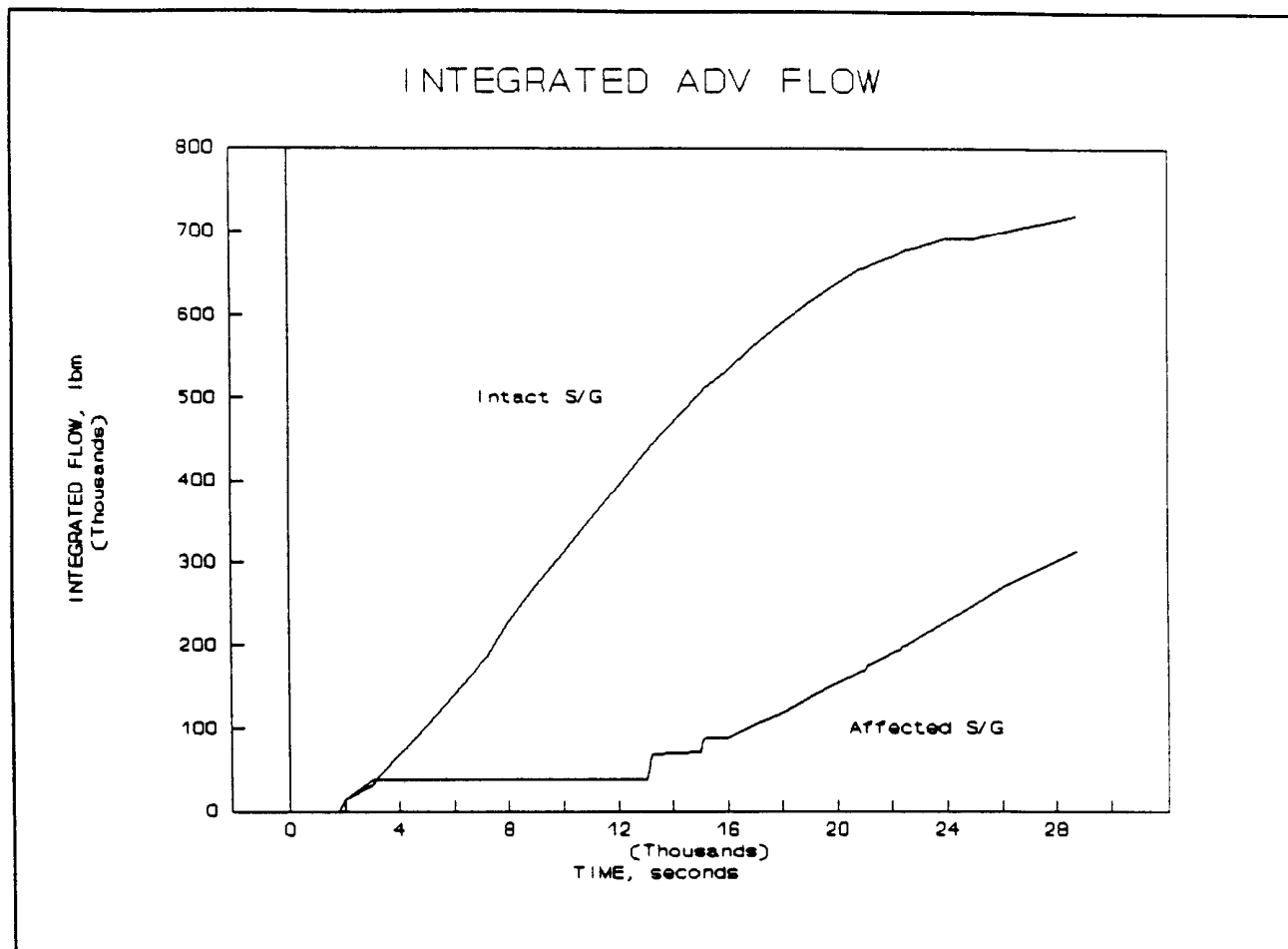
## SGTR INTEGRATED LEAK FLOW vs TIME



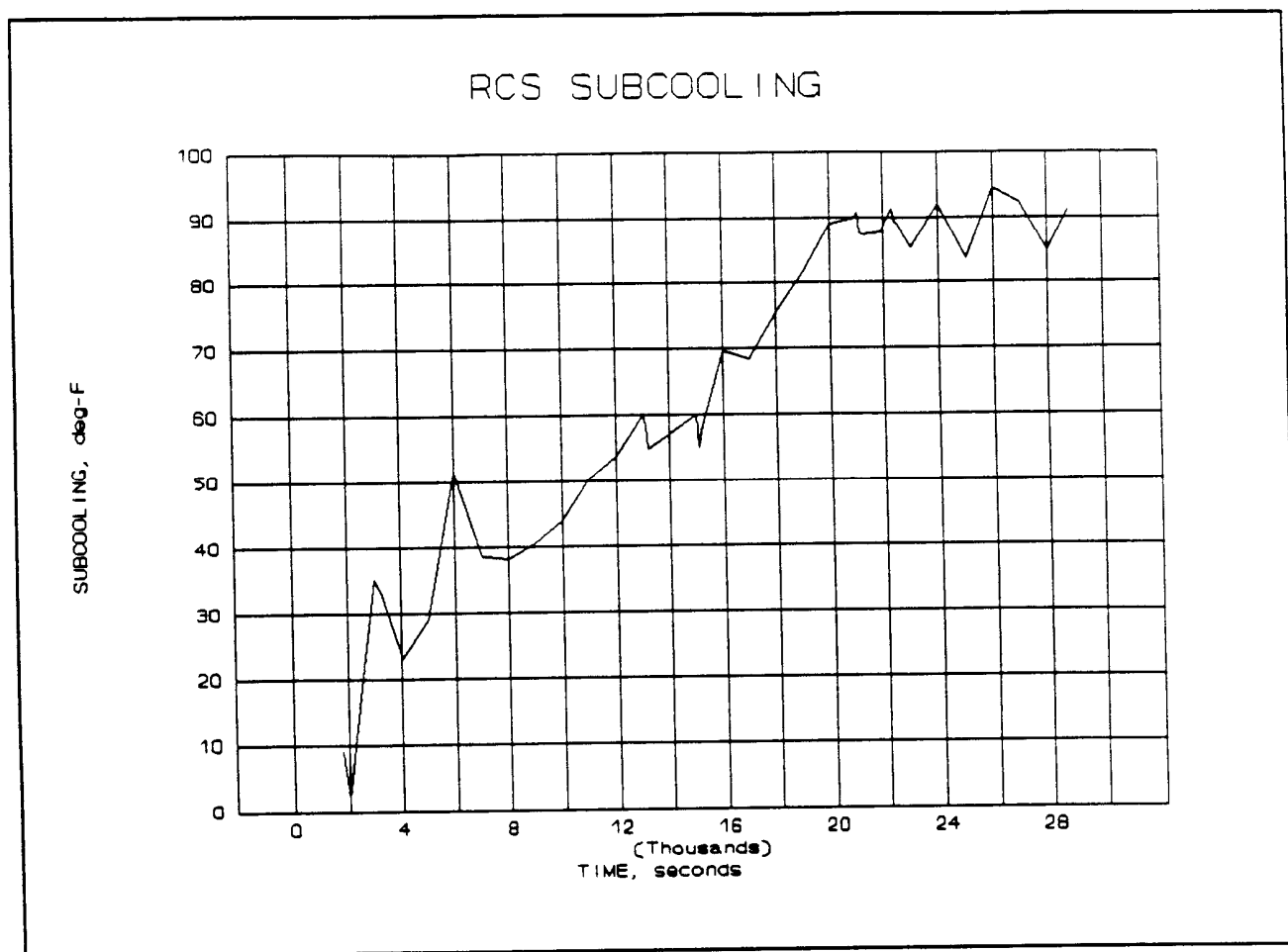
## SGTR ADV FLOW RATE vs TIME



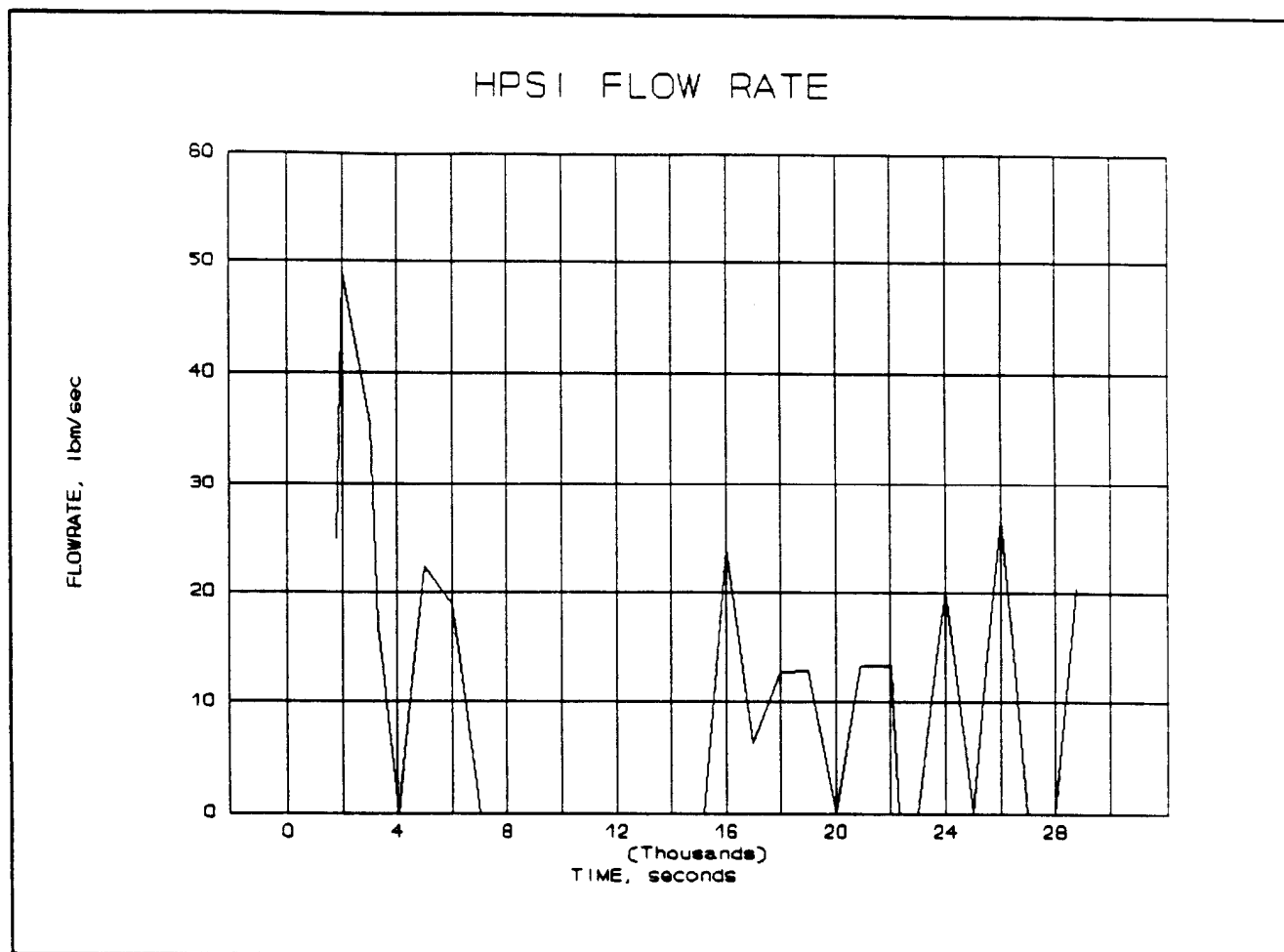
## SGTR INTEGRATED ADV FLOW vs TIME



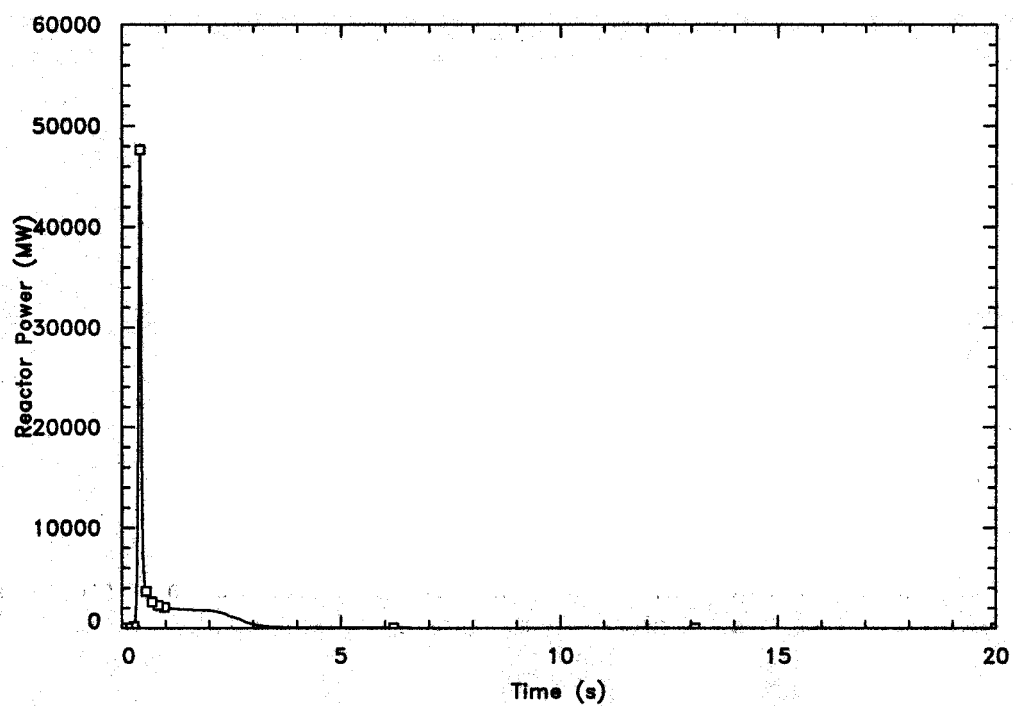
## SGTR PCS SUBCOOLING vs TIME



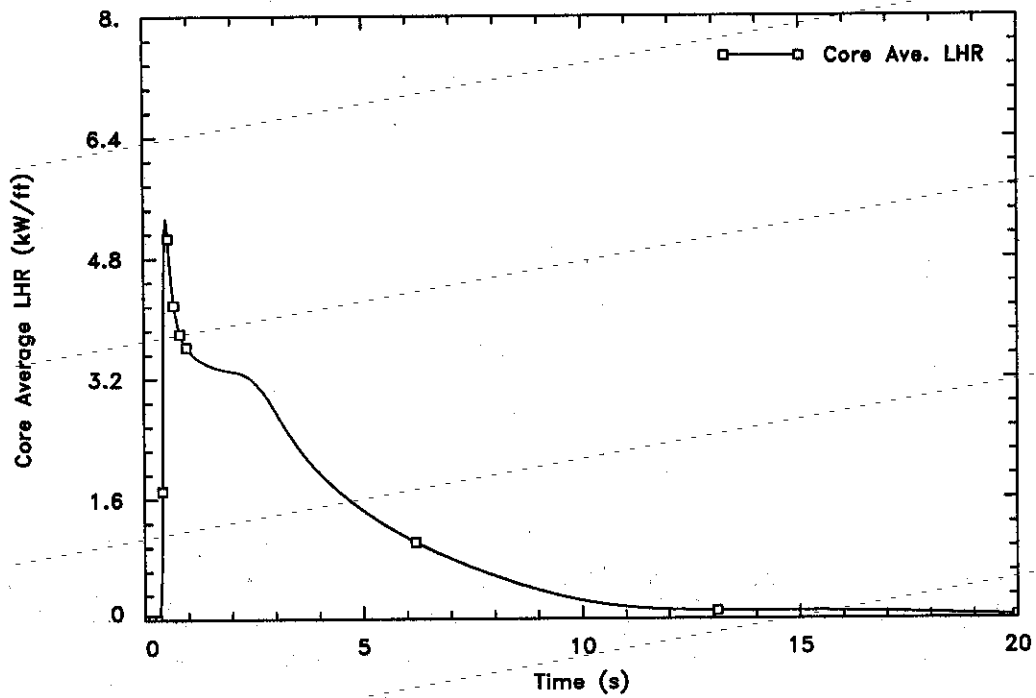
## SGTR HPSI FLOW RATE vs TIME



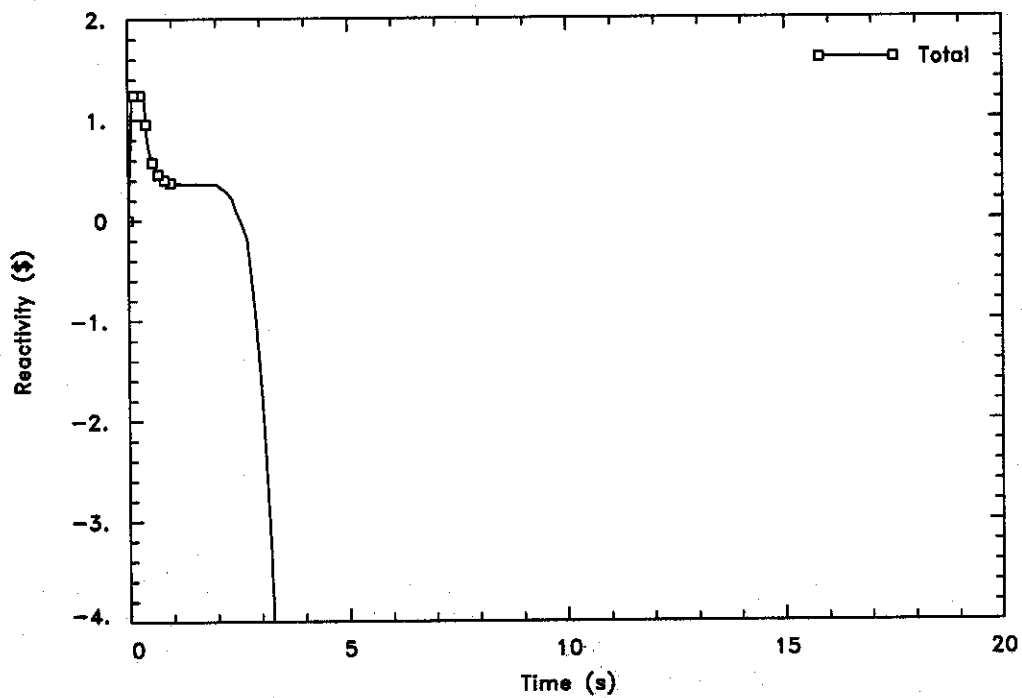
## CONTROL ROD EJECTION, EOC HZP CASE: CORE POWER



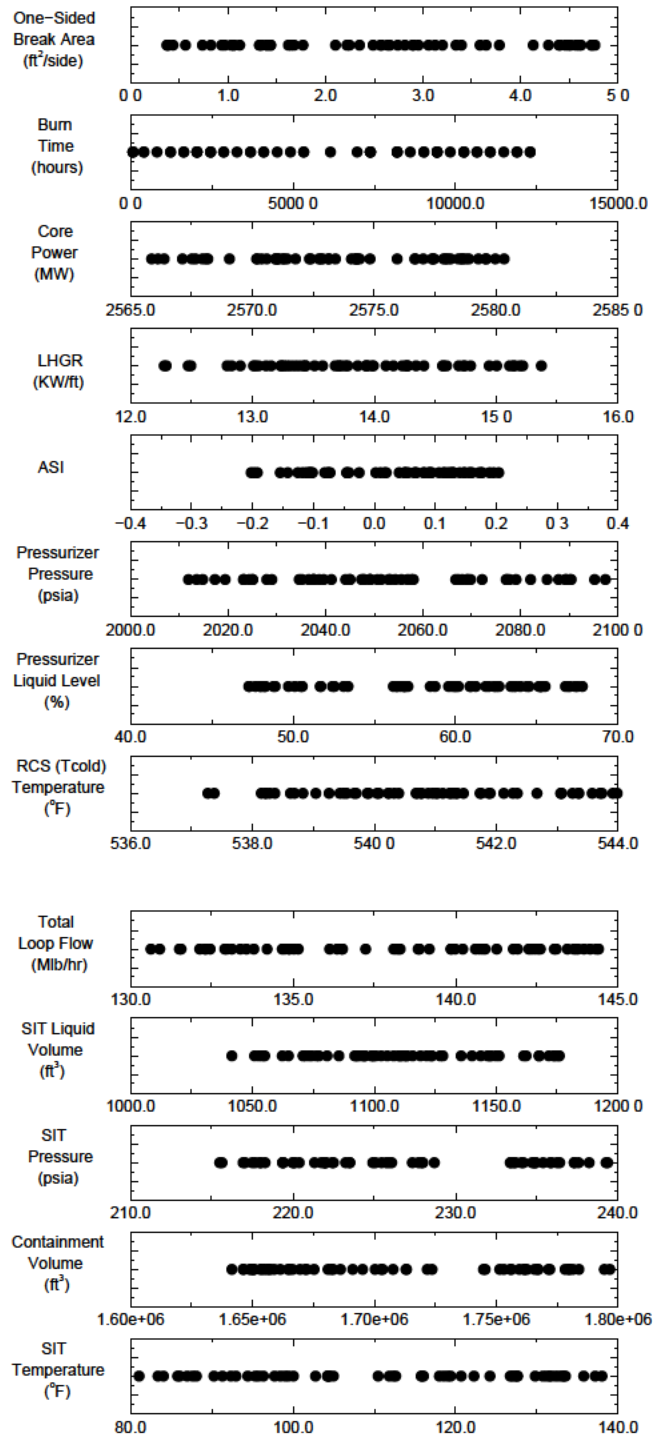
## CONTROL ROD EJECTION, EOC HZP CASE: CORE AVERAGE HEAT-FLUX-BASED LHR



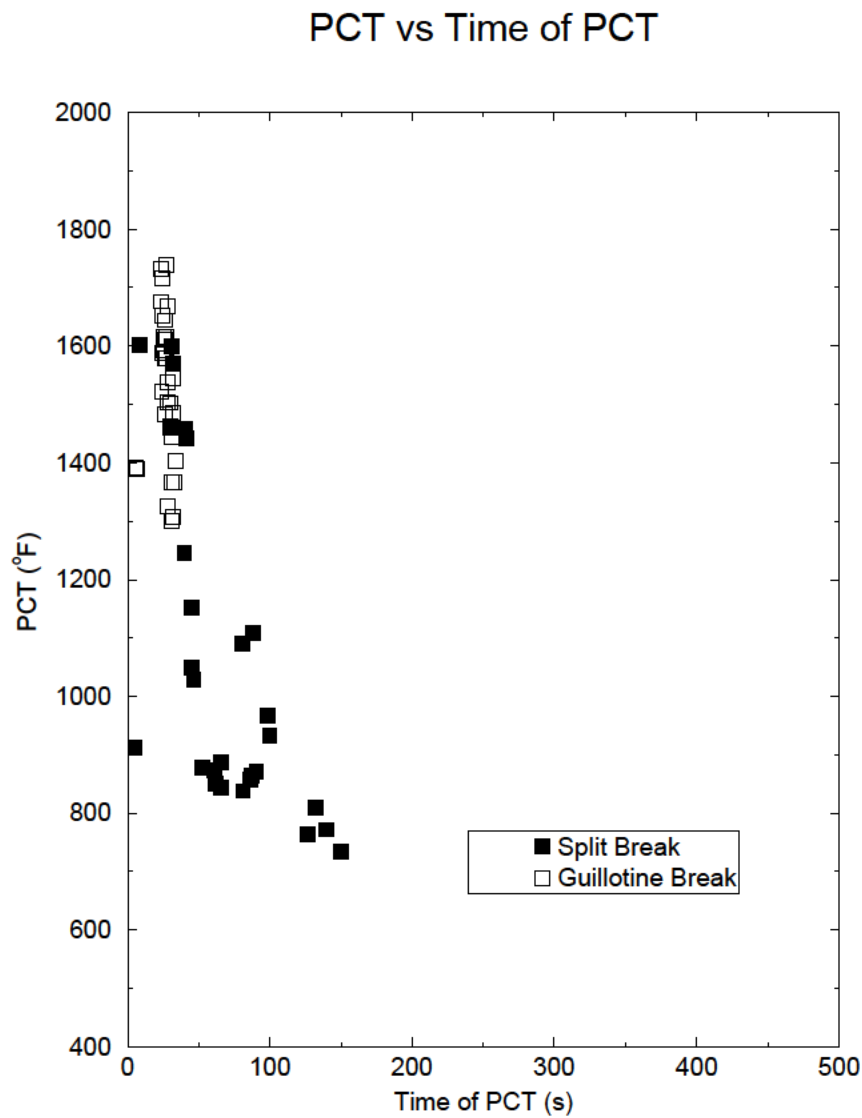
## CONTROL ROD EJECTION, EOC HZP CASE: TOTAL CORE REACTIVITY

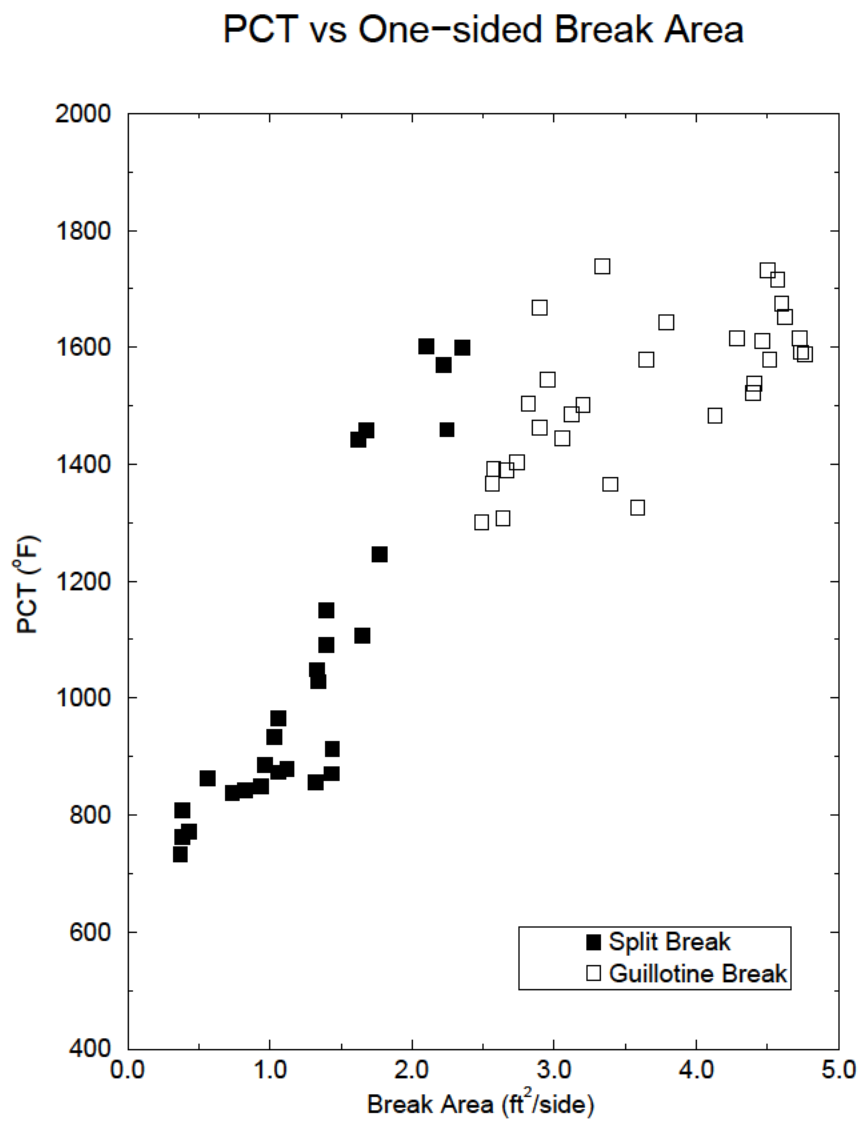


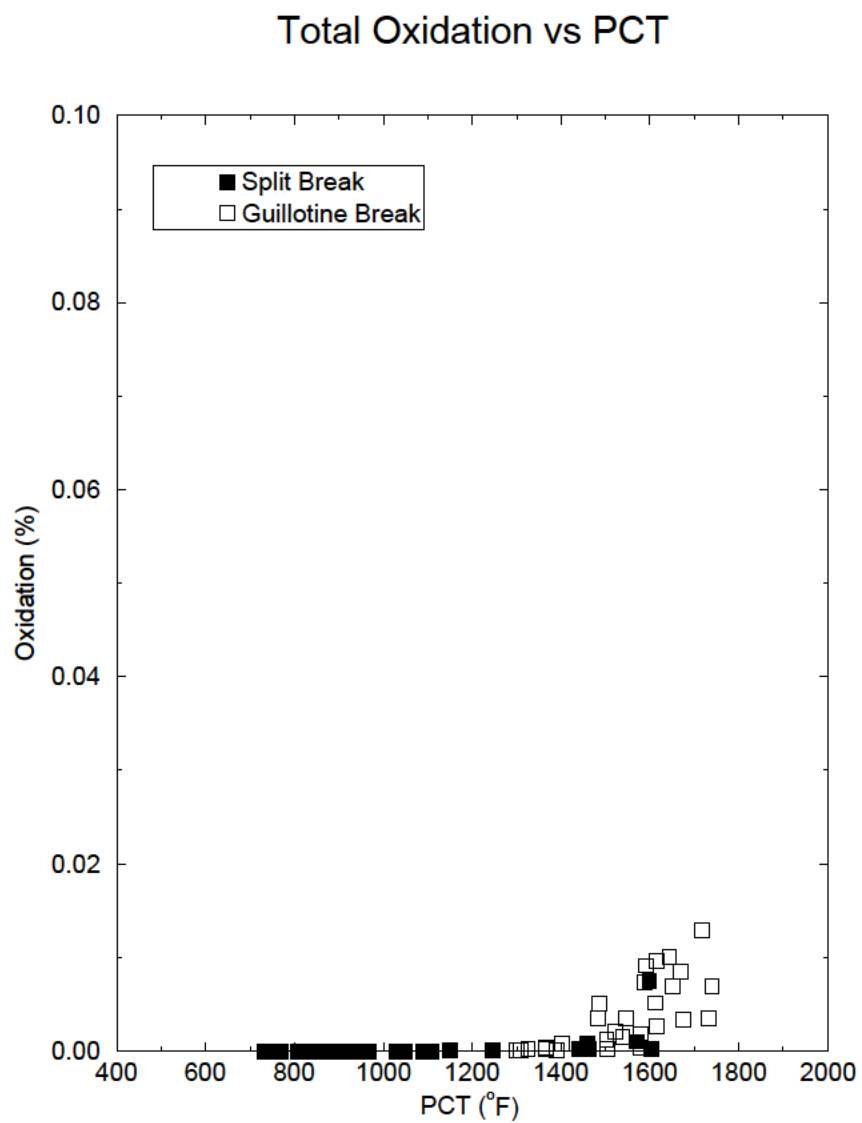
## SCATTER PLOT OF OPERATIONAL PARAMETERS

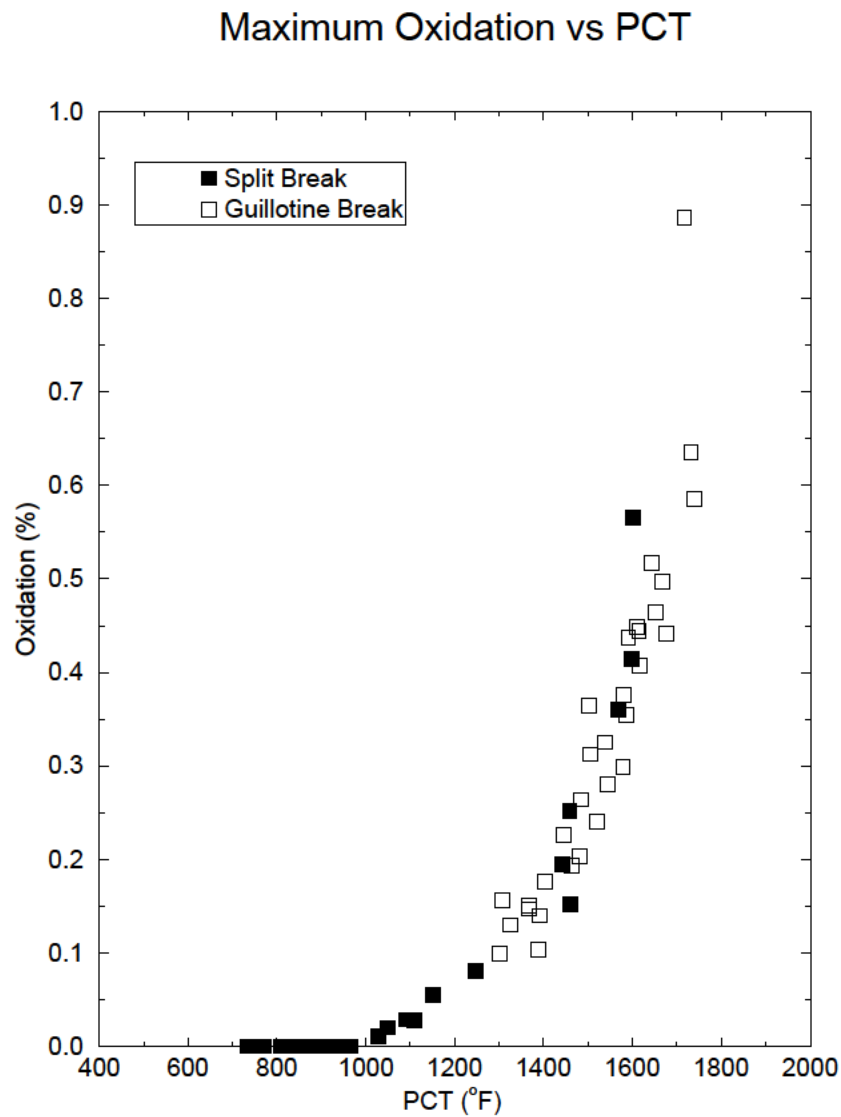


PCT VERSUS PCT TIME SCATTER PLOT FROM TRANSIENT CALCULATIONS

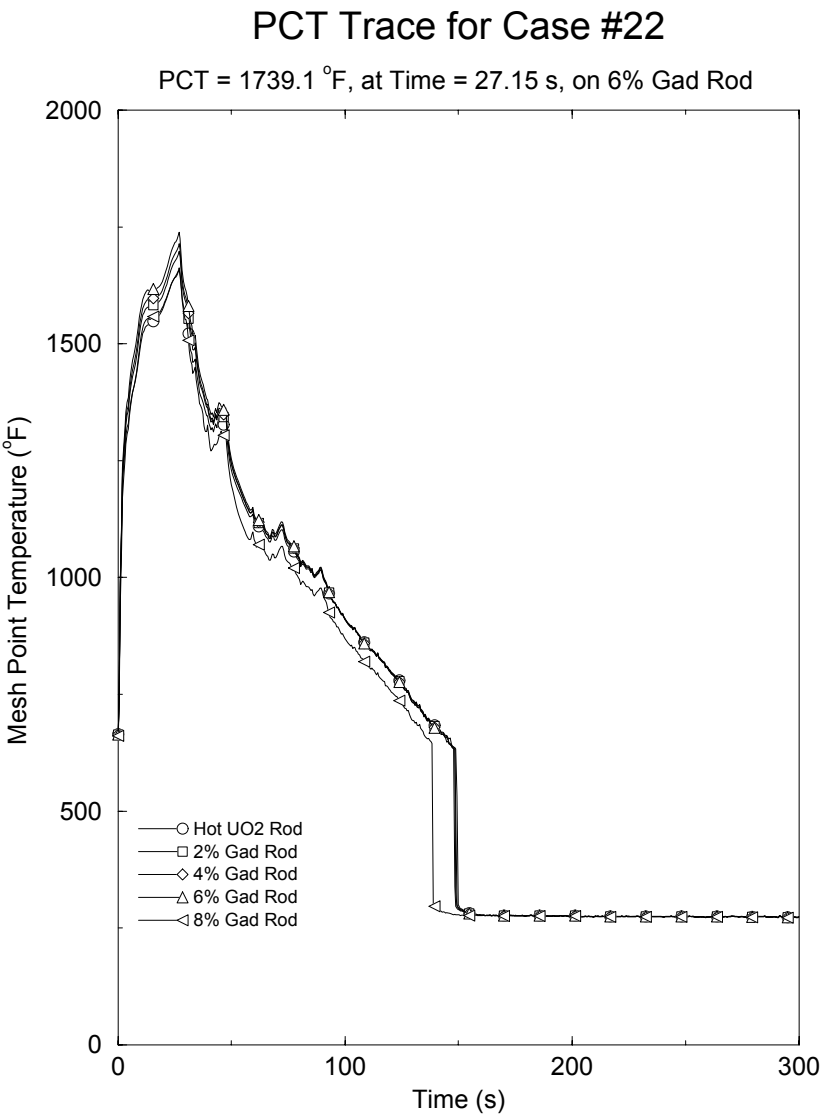


**PCT VERSUS BREAK SIZE SCATTER PLOT FROM TRANSIENT CALCULATIONS**

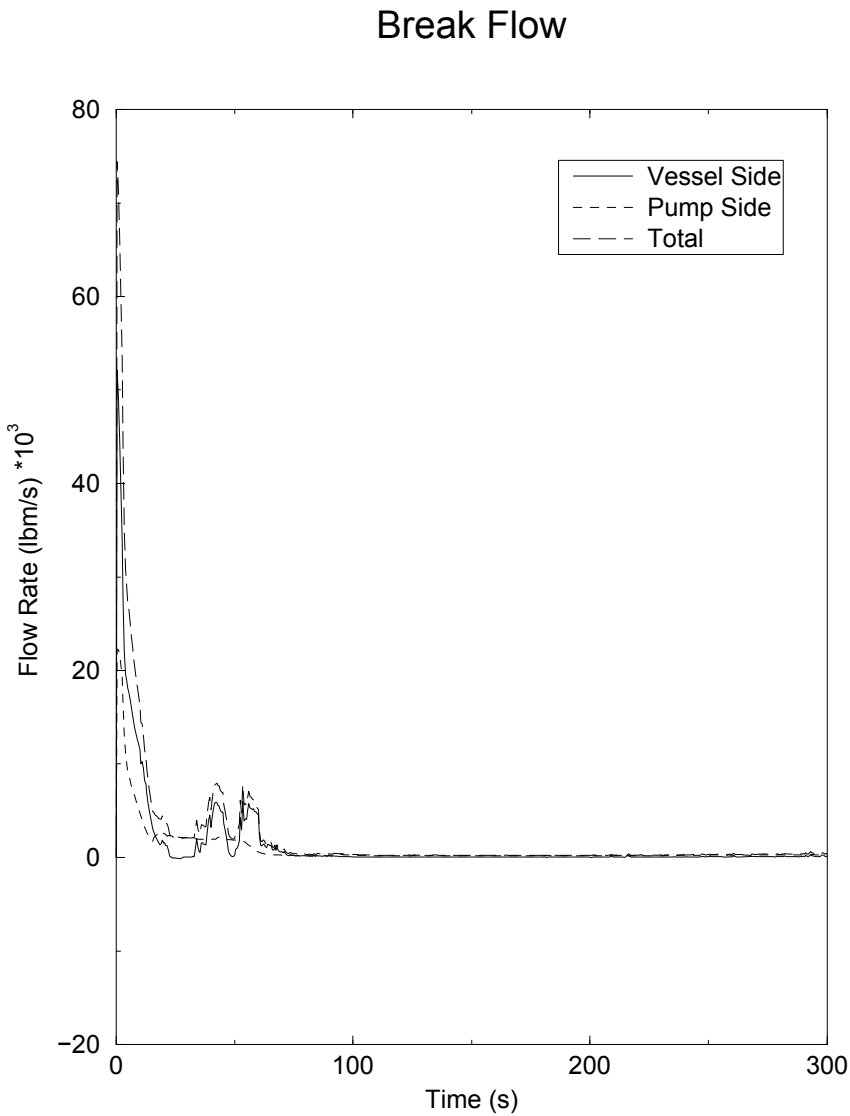
**TOTAL OXIDATION VS. PCT SCATTER PLOT FROM TRANSIENT CALCULATIONS**

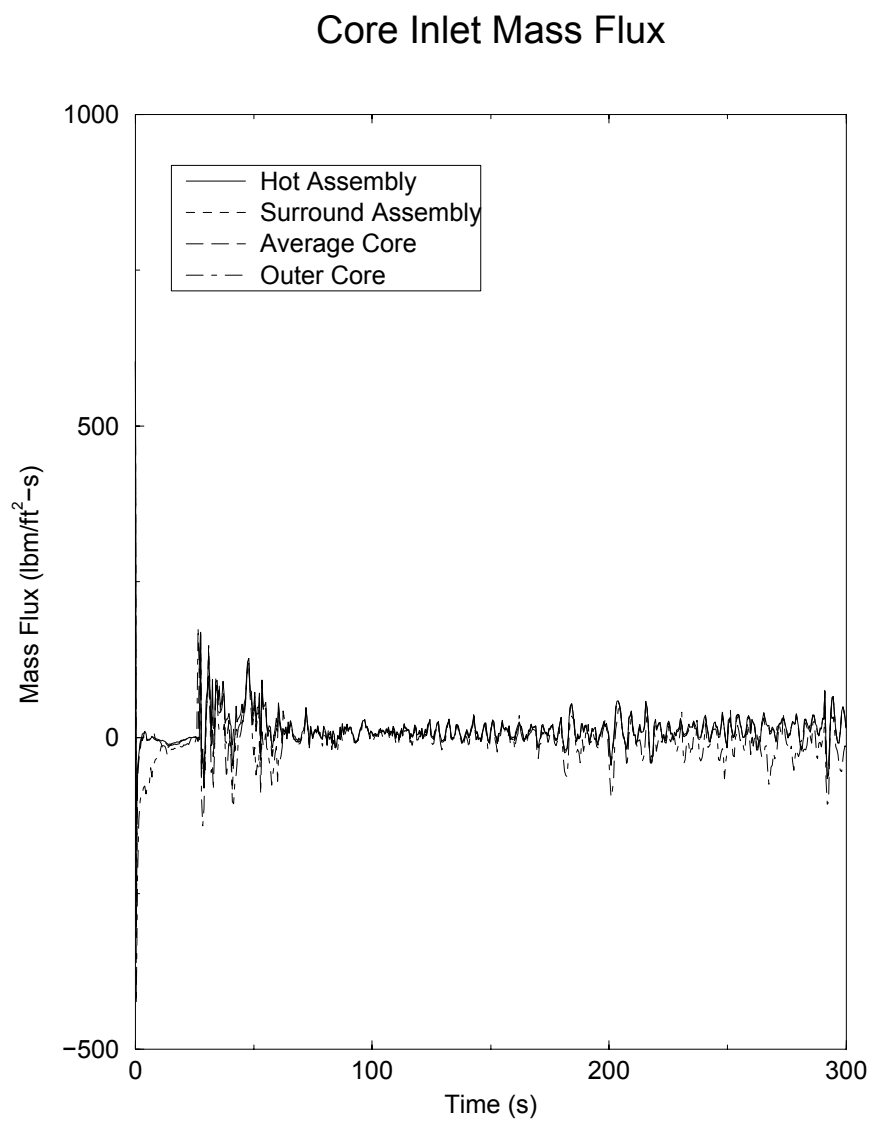
**MAXIMUM OXIDATION VERSUS PCT SCATTER PLOT  
FROM TRANSIENT CALCULATIONS**

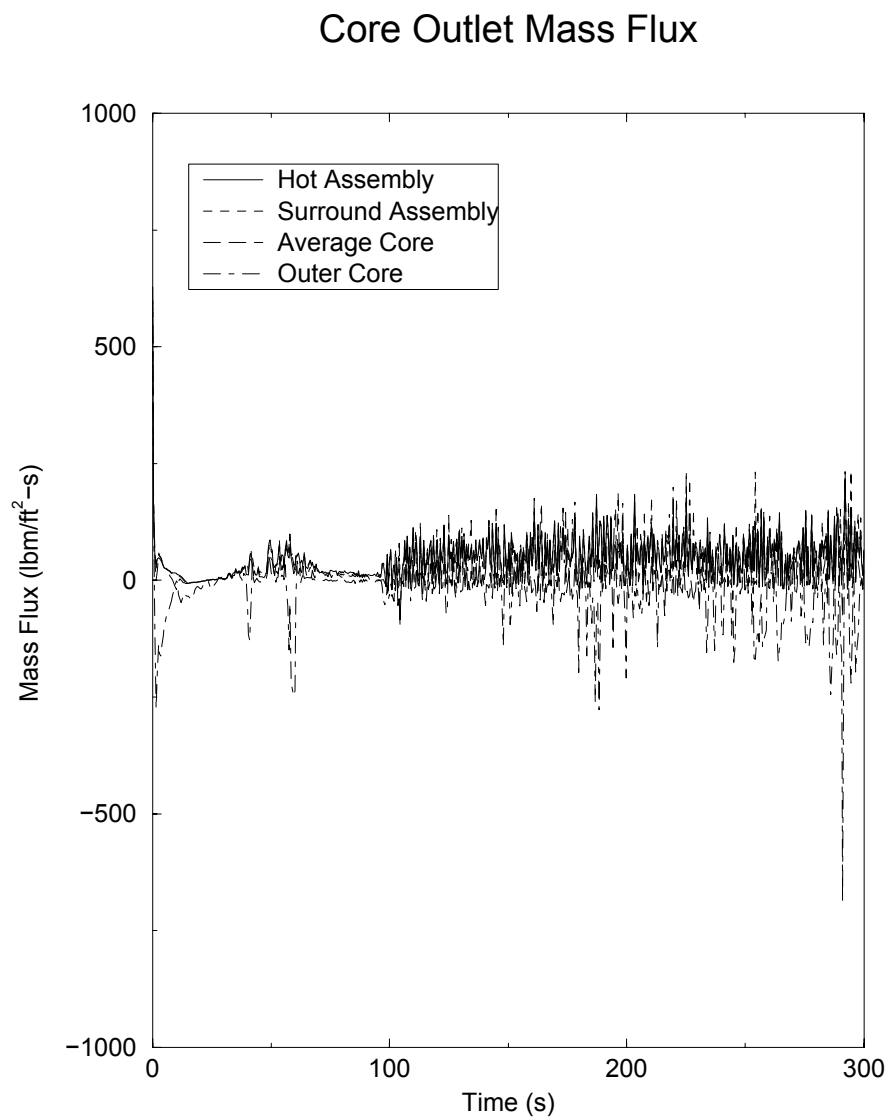
PEAK CLADDING TEMPERATURE FOR THE LIMITING CASE

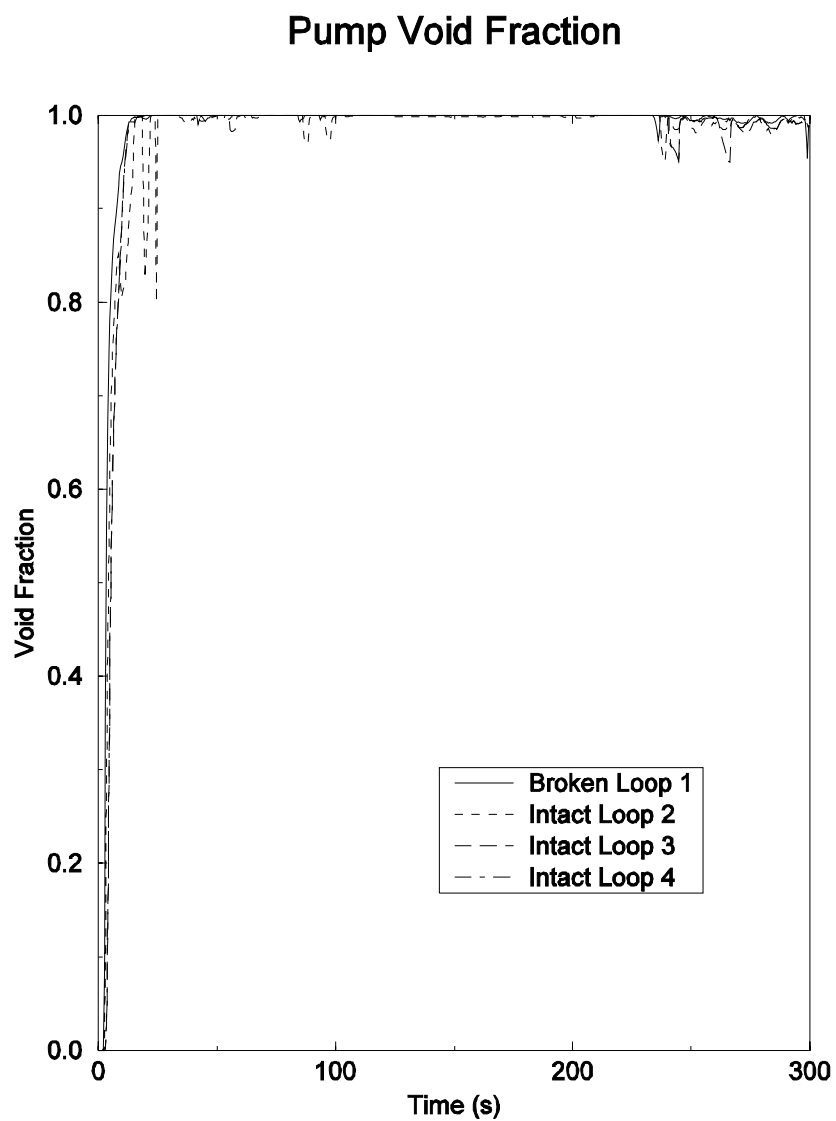


BREAK FLOW FOR THE LIMITING CASE

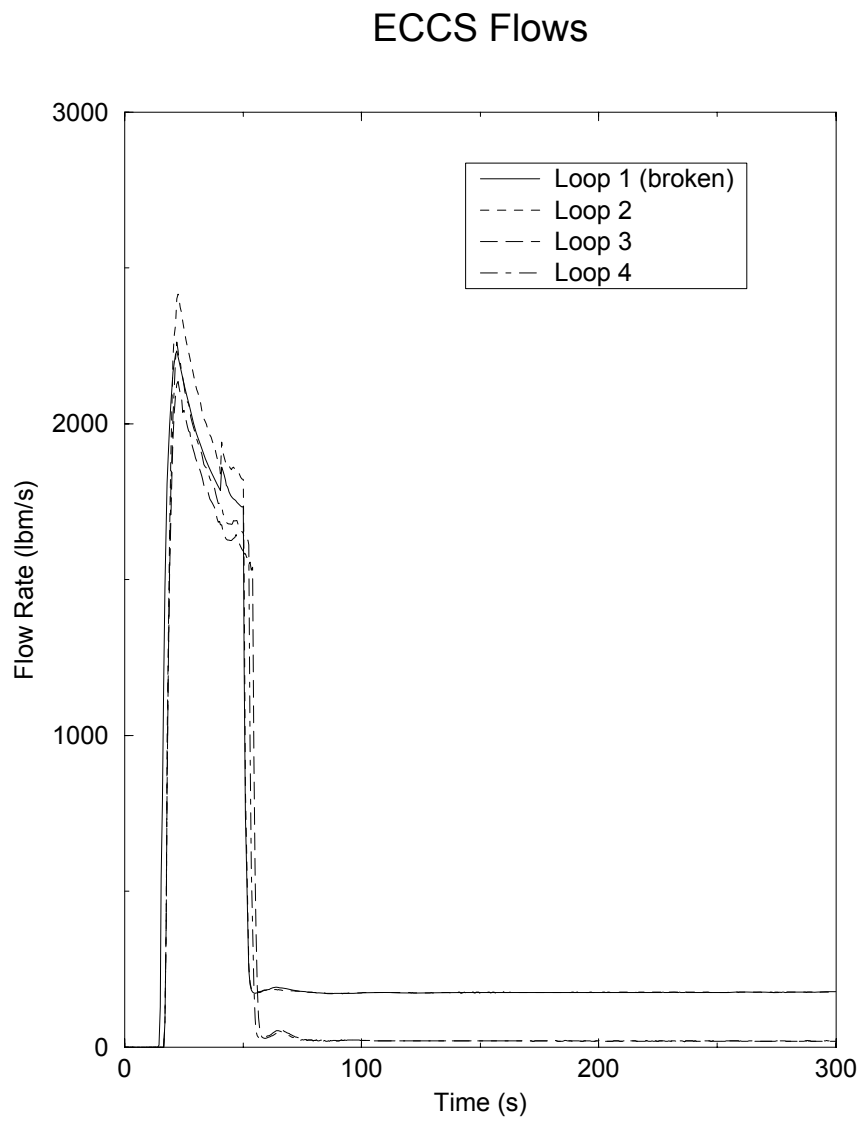


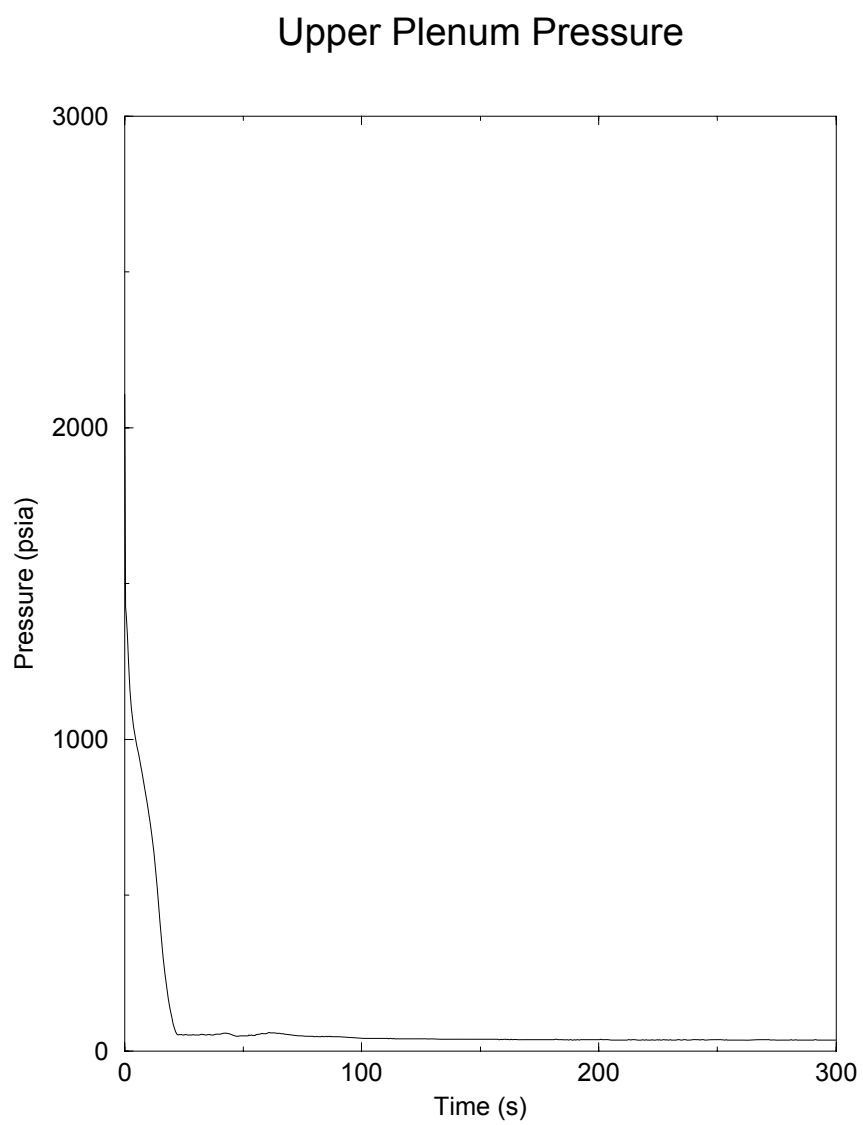
**CORE INLET MASS FLUX FOR THE LIMITING CASE**

**CORE OUTLET MASS FLUX FOR THE LIMITING CASE**

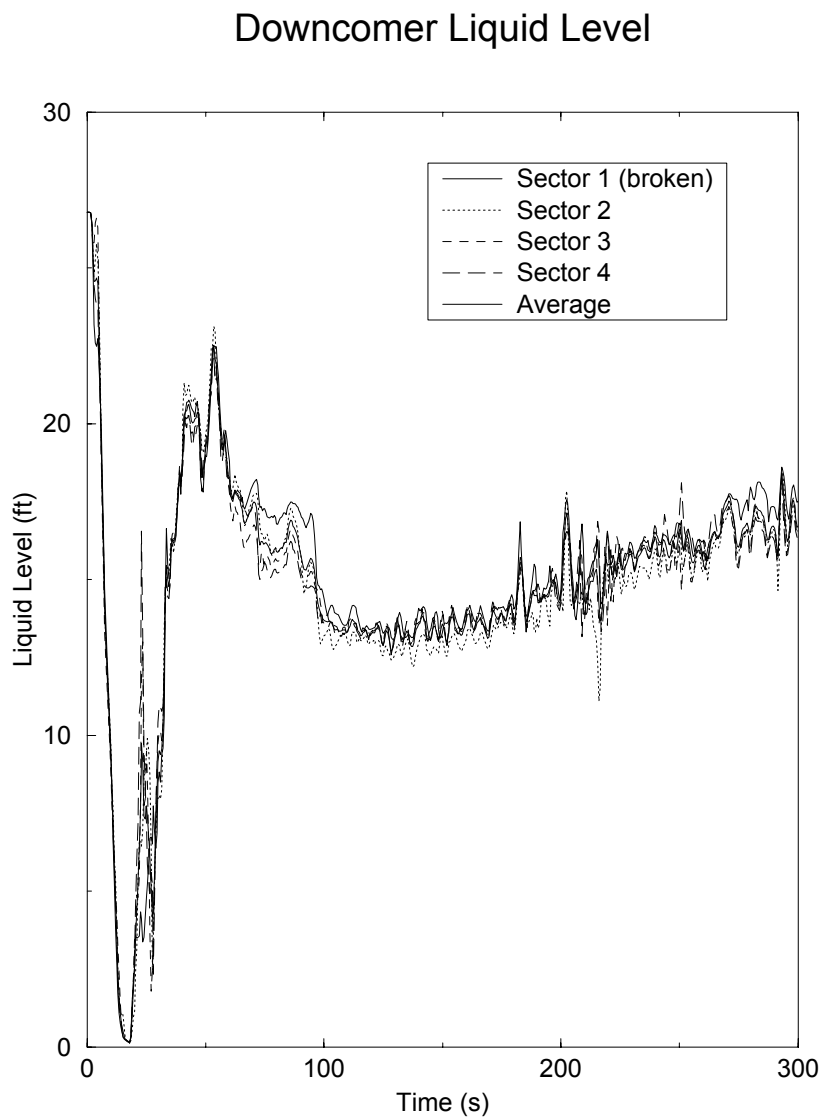
**VOID FRACTION AT PCS PUMPS FOR THE LIMITING CASE**

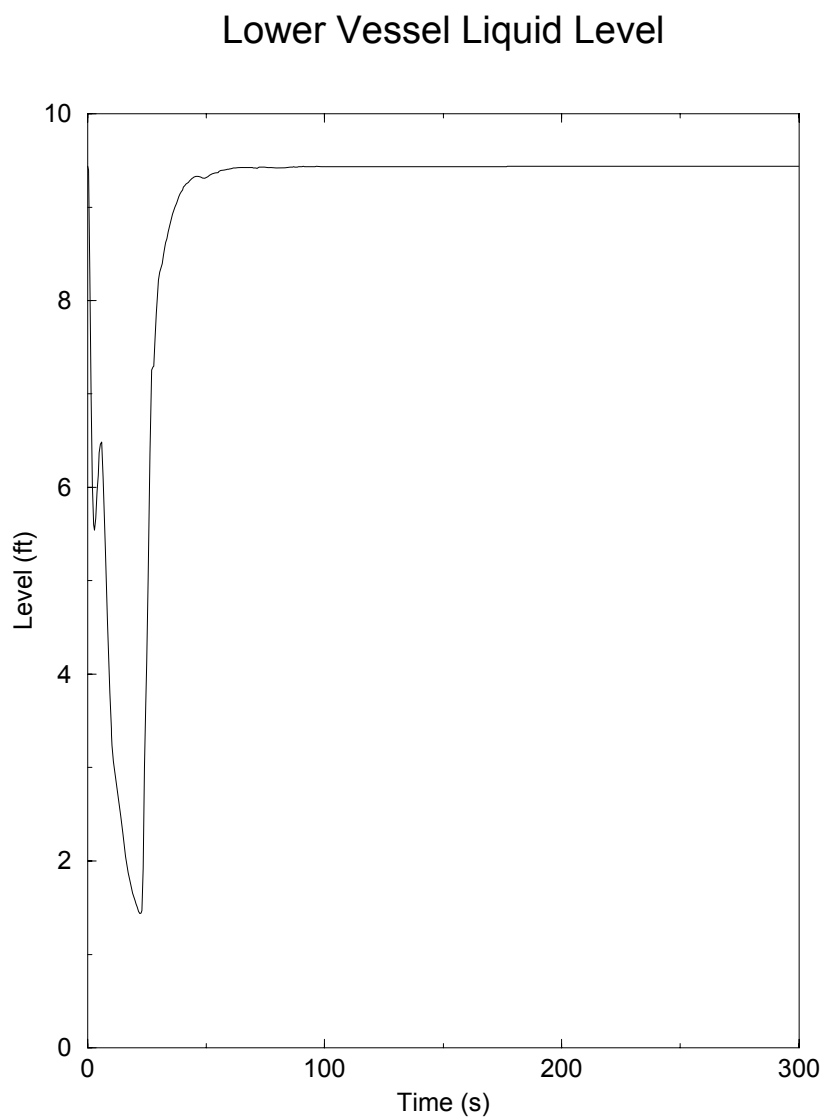
ECCS FLOW (INCLUDES SIT, HPSI, AND LPSI) FOR THE LIMITING CASE

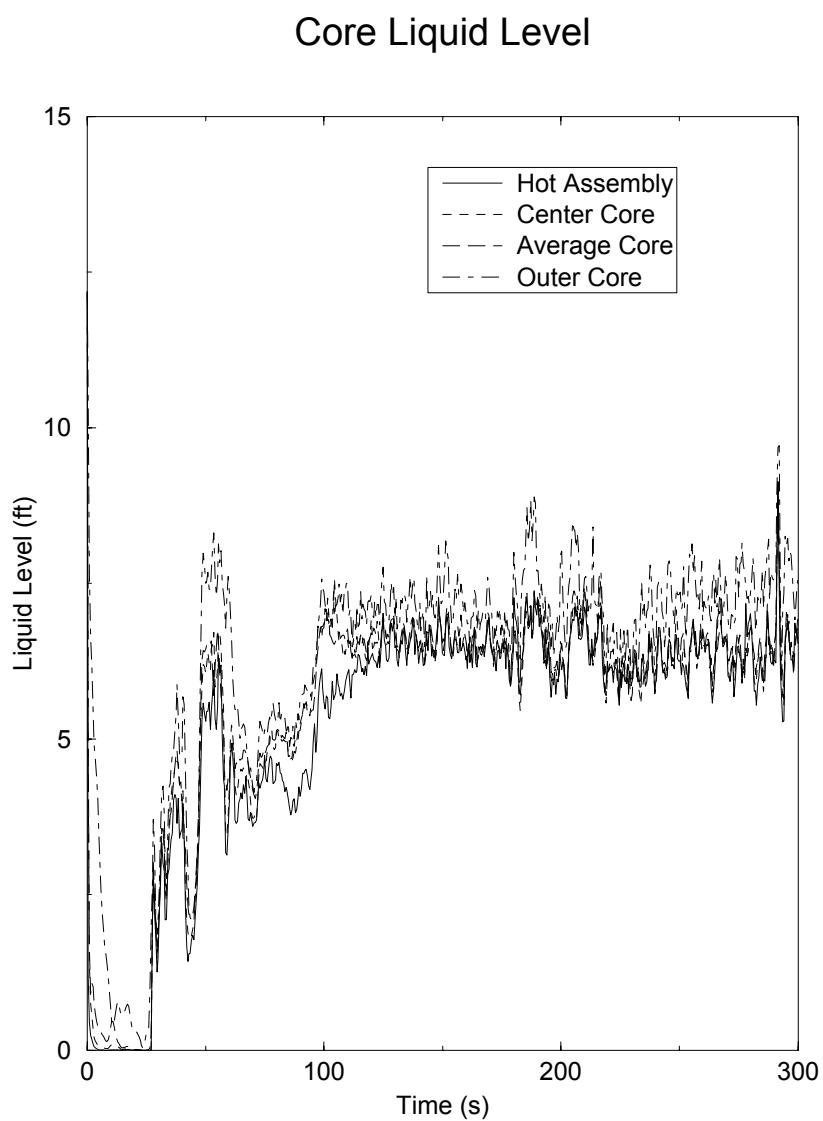


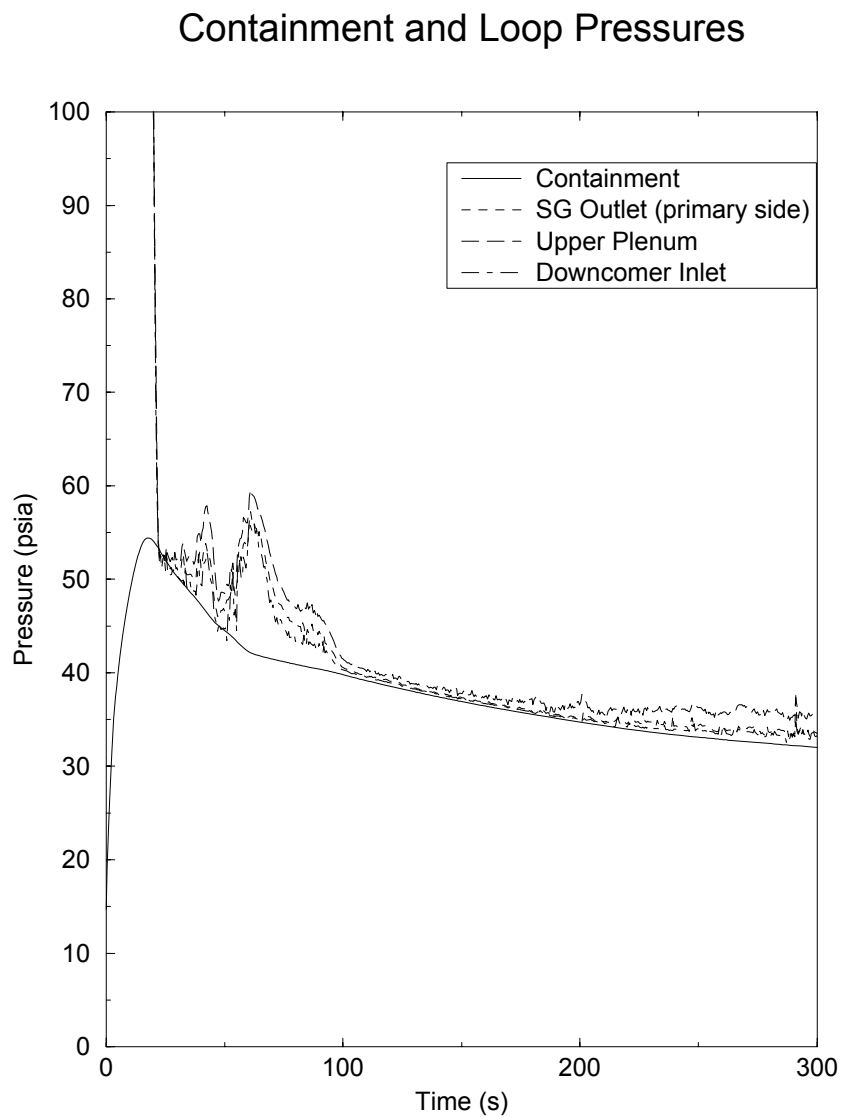
**UPPER PLENUM PRESSURE FOR THE LIMITING CASE**

COLLAPSED LIQUID LEVEL IN THE DOWNCOMER FOR THE LIMITING CASE



**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**

**CORE EFFECTIVE FLOODING RATE**

DELETED in Revision 28

**CORE COLLAPSED LIQUID LEVEL**

DELETED in Revision 28

**CORE QUENCH LEVEL**

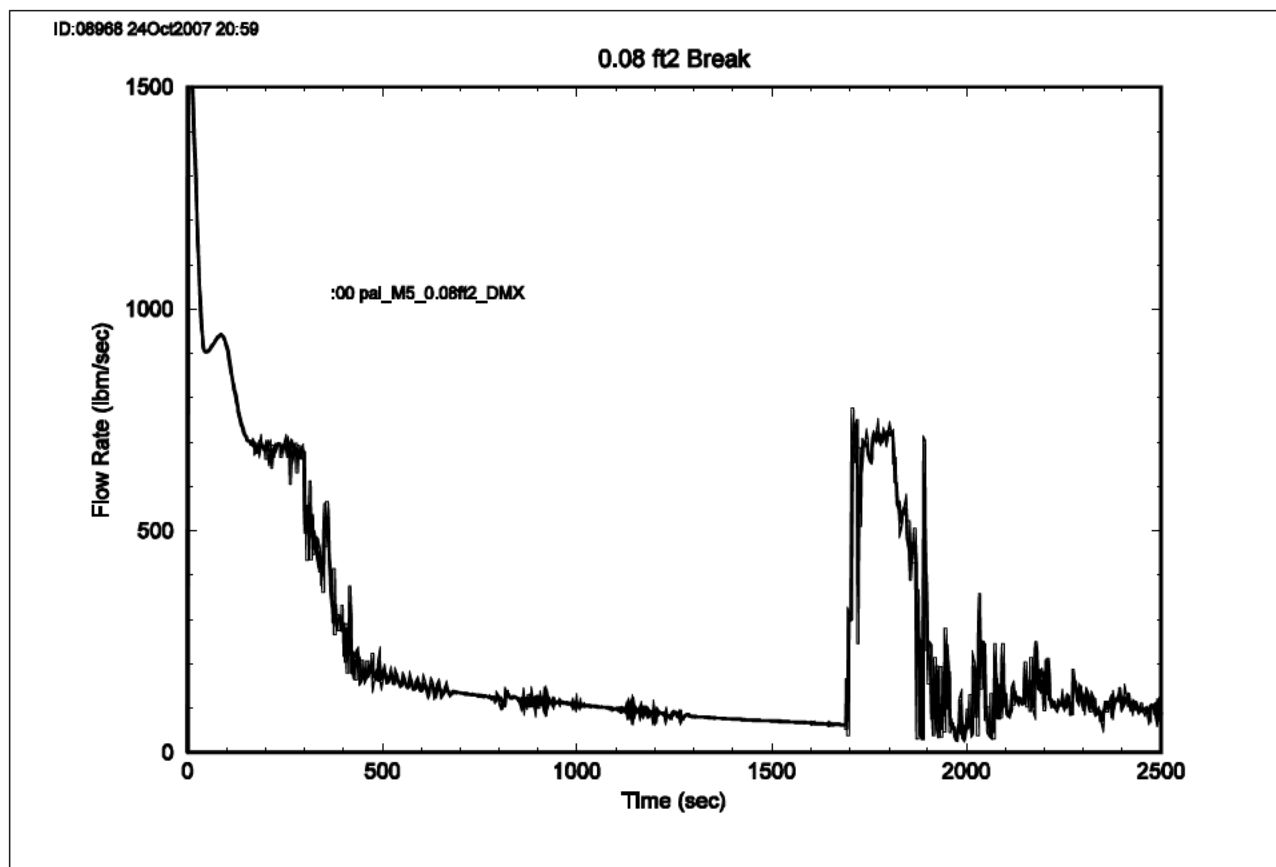
DELETED in Revision 28

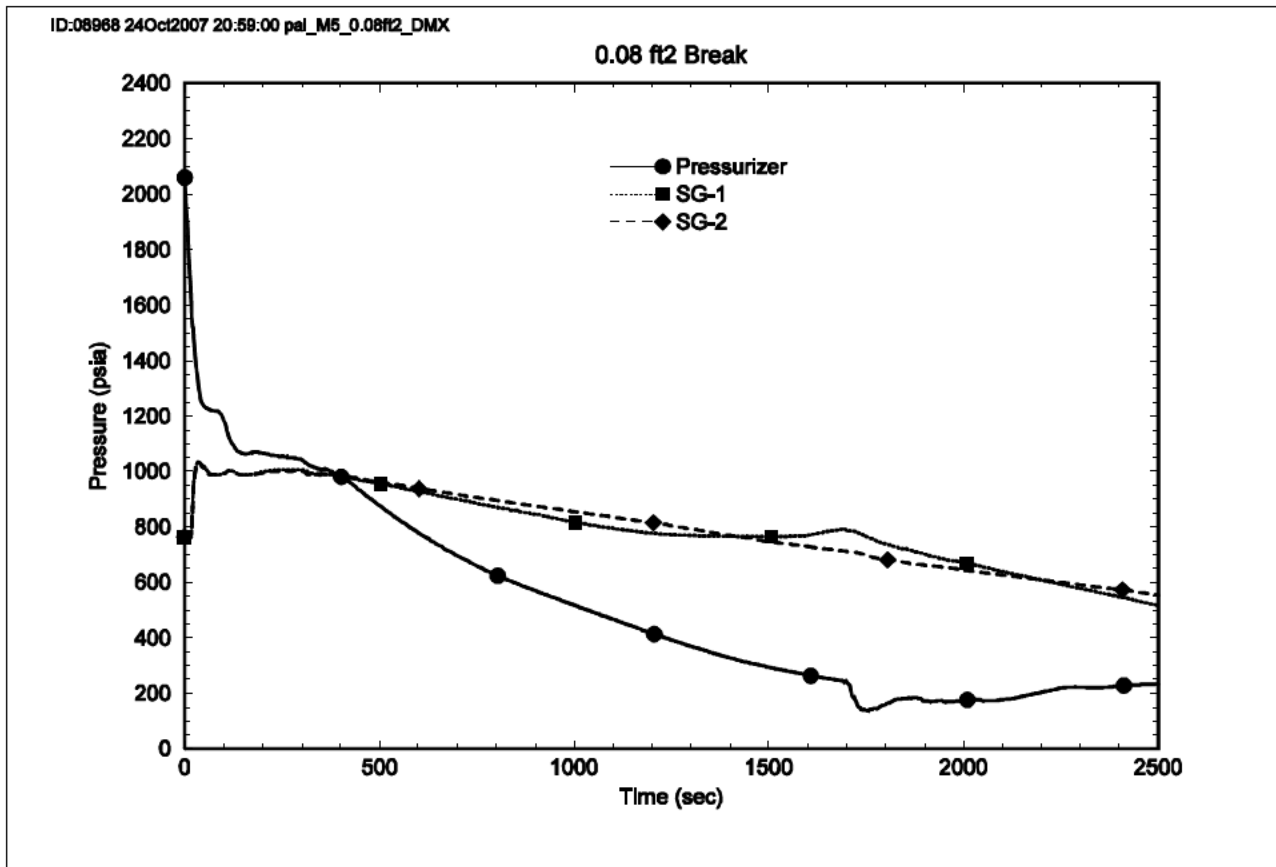
**PCT-NODE HEAT TRANSFER COEFFICIENT**

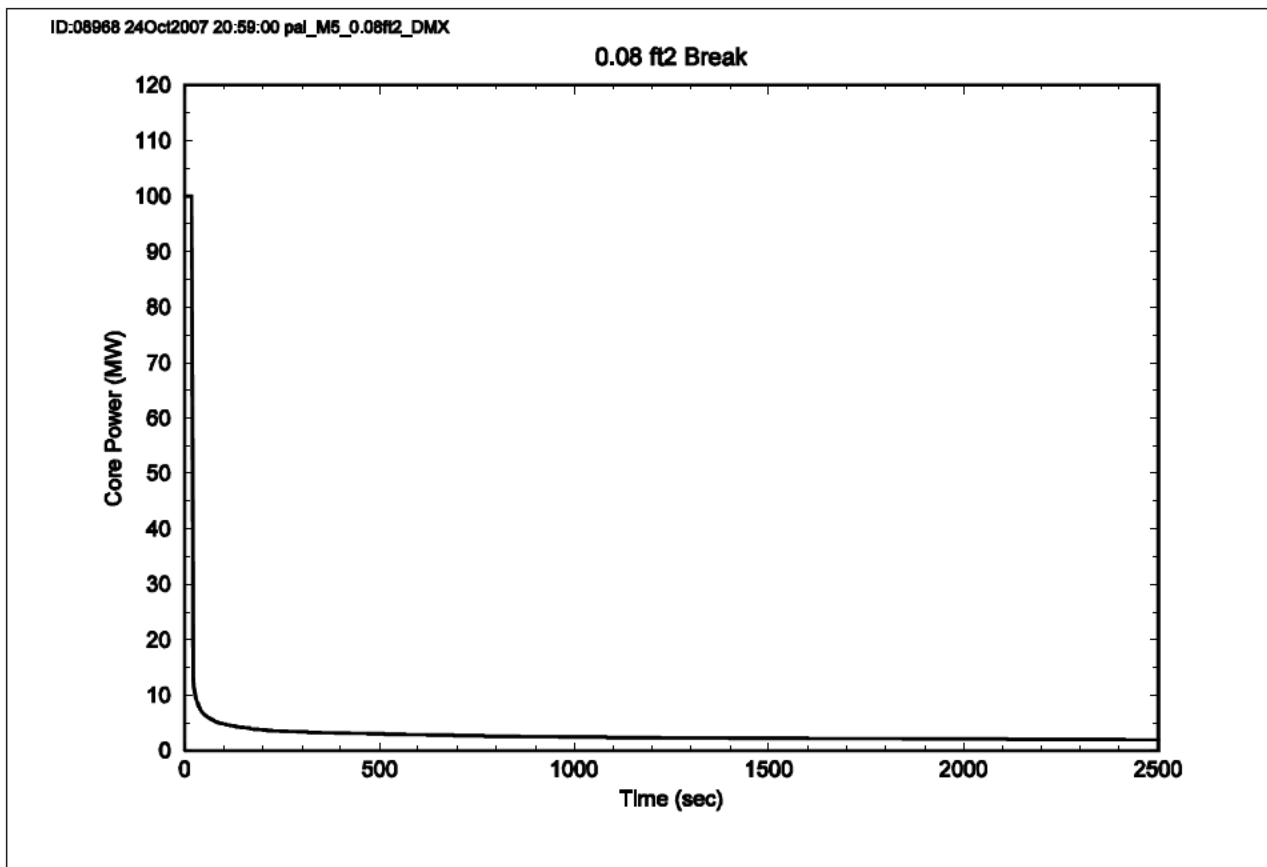
DELETED in Revision 28

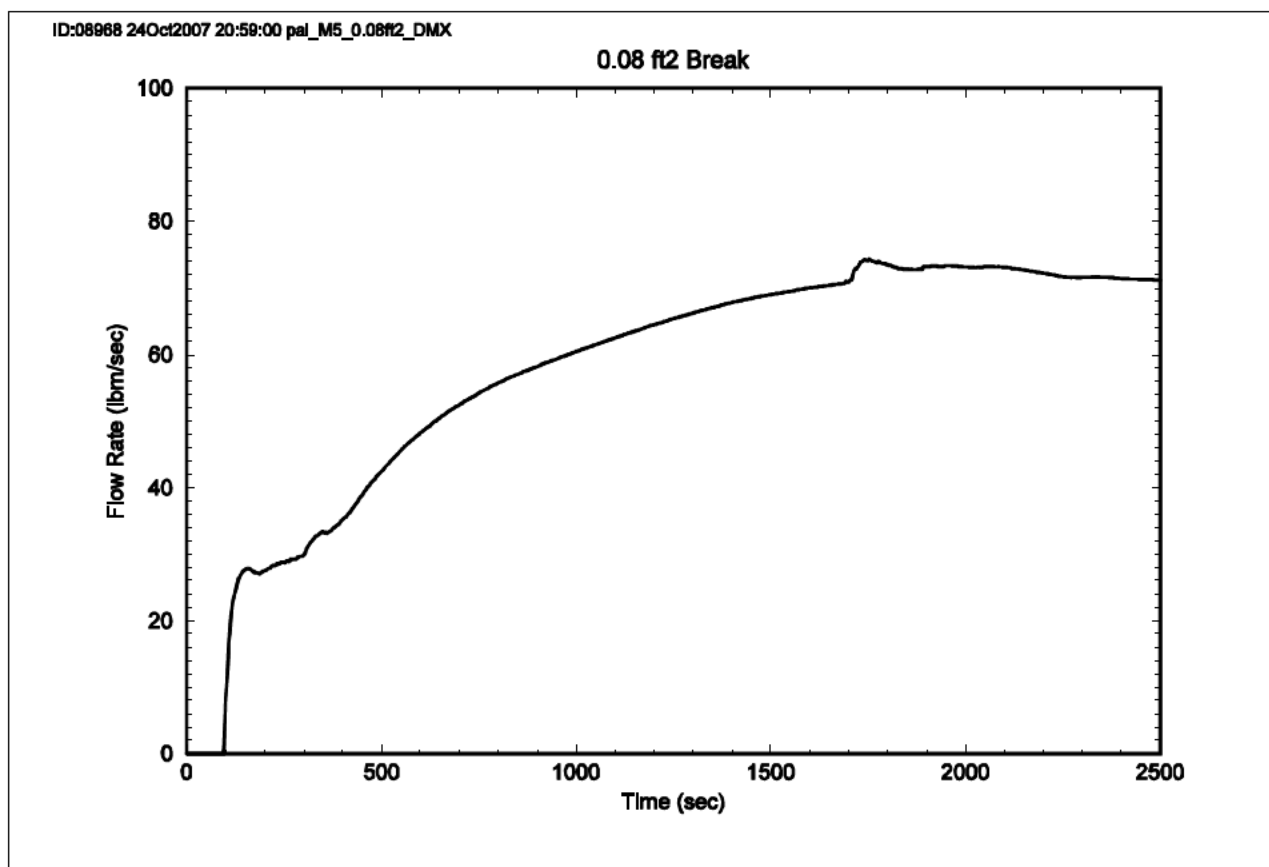
**PEAK CLADDING AND RUPTURE LOCATION CLADDING TEMPERATURE  
FOR THE LIMITING CASE**

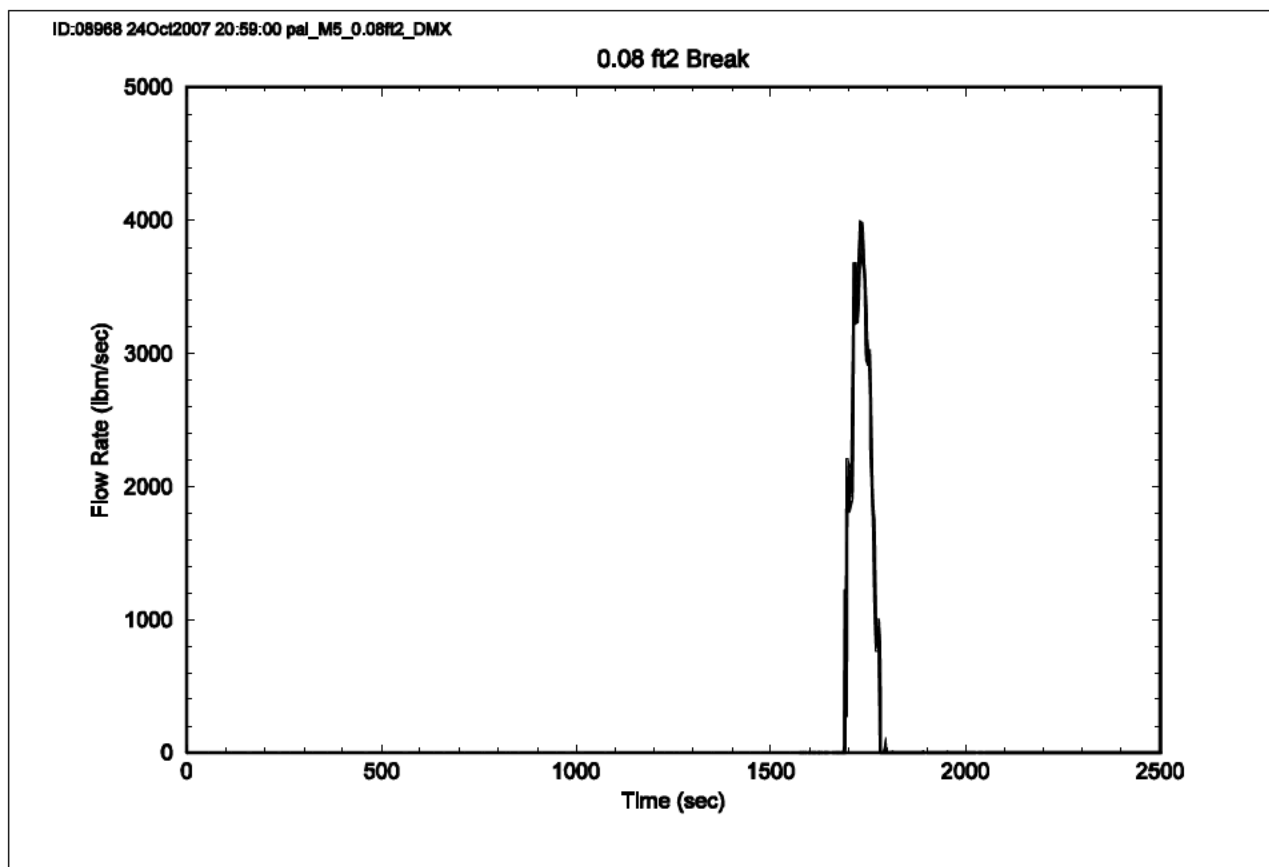
DELETED in Revision 28

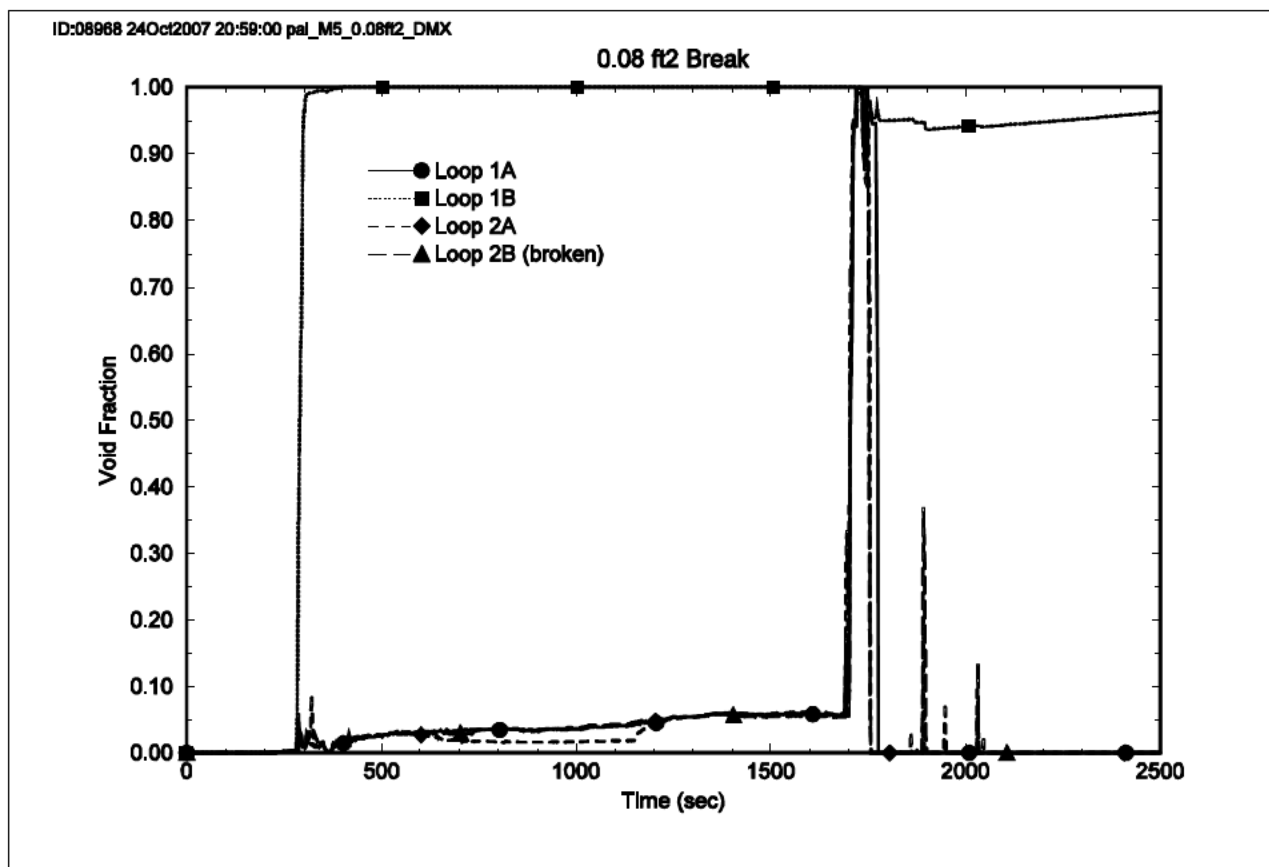
Break Mass Flow Rate (Limiting Case)

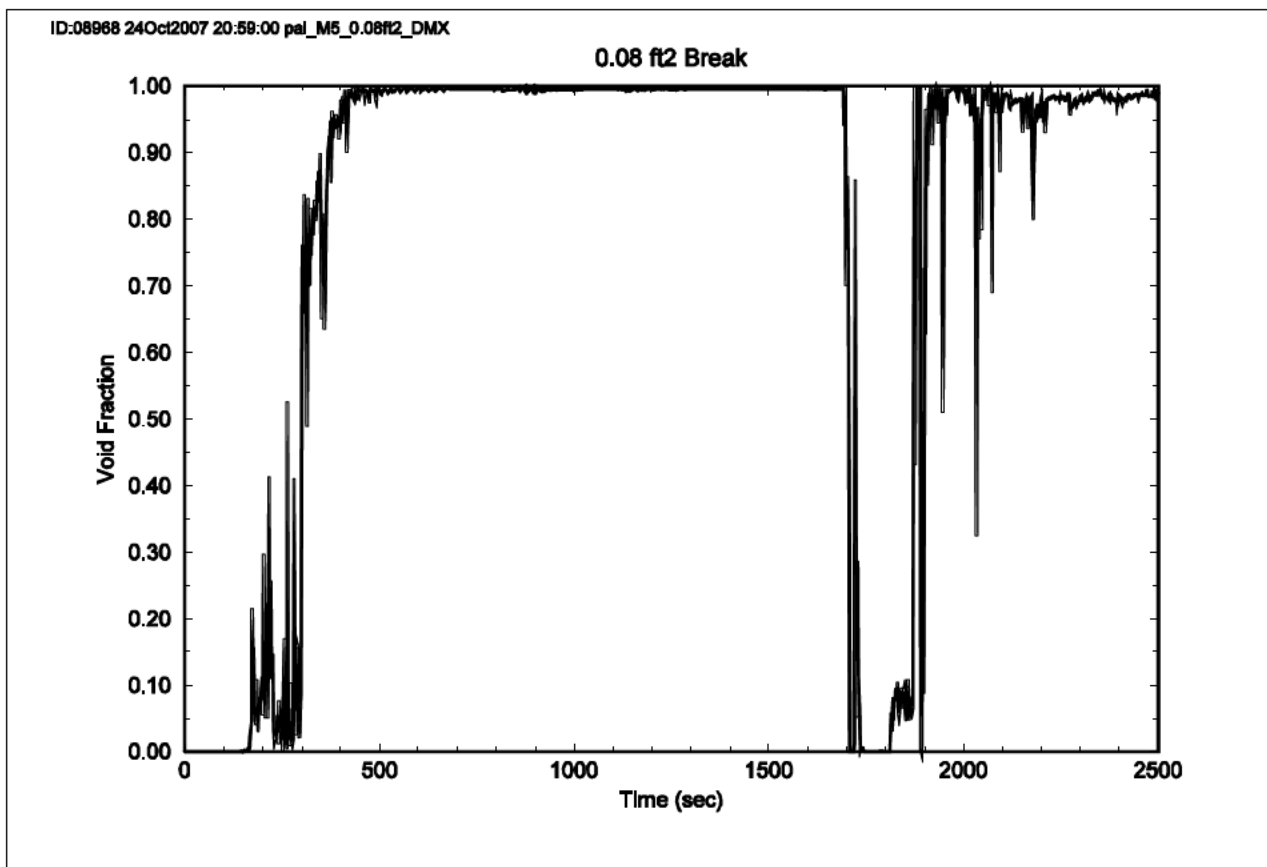
Primary and Secondary Pressures (Limiting Case)

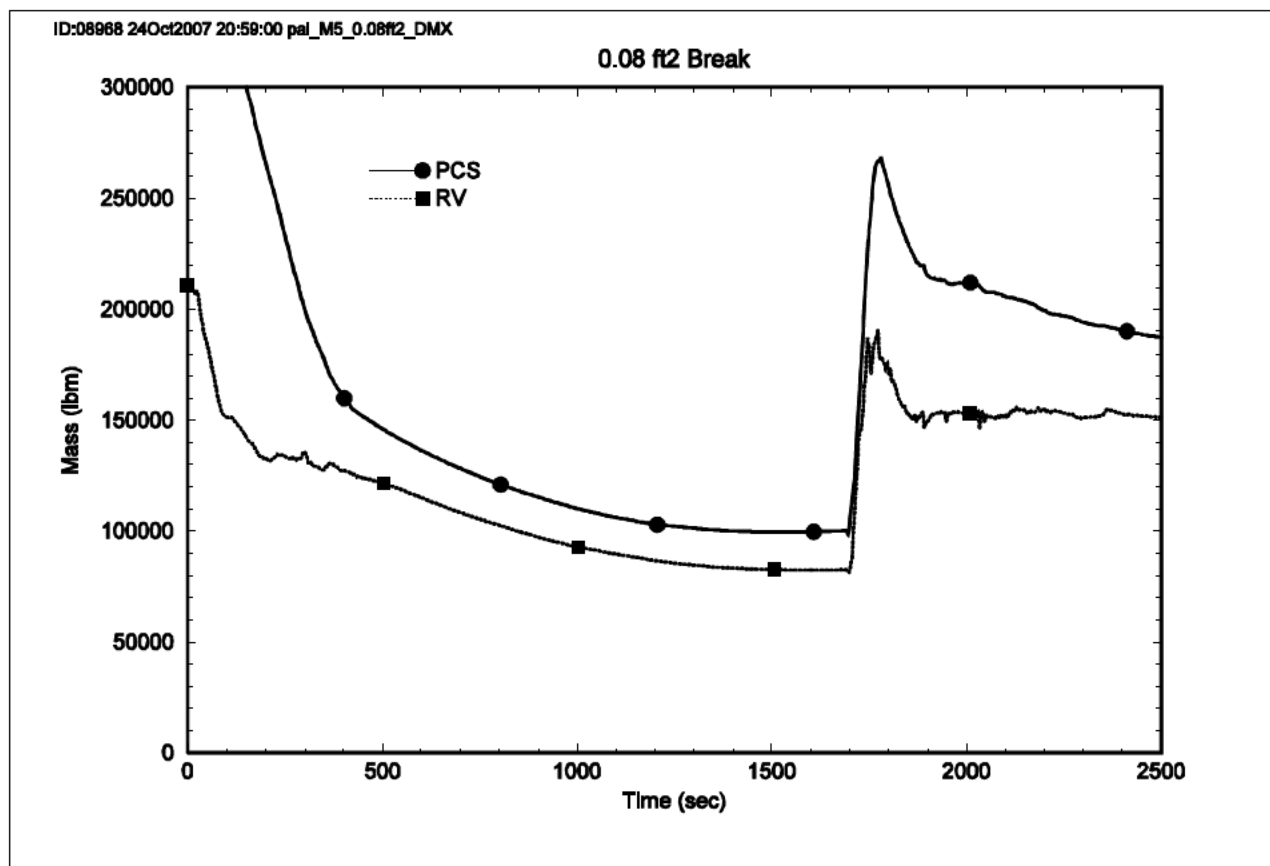
Normalized Reactor Power (Limiting Case)

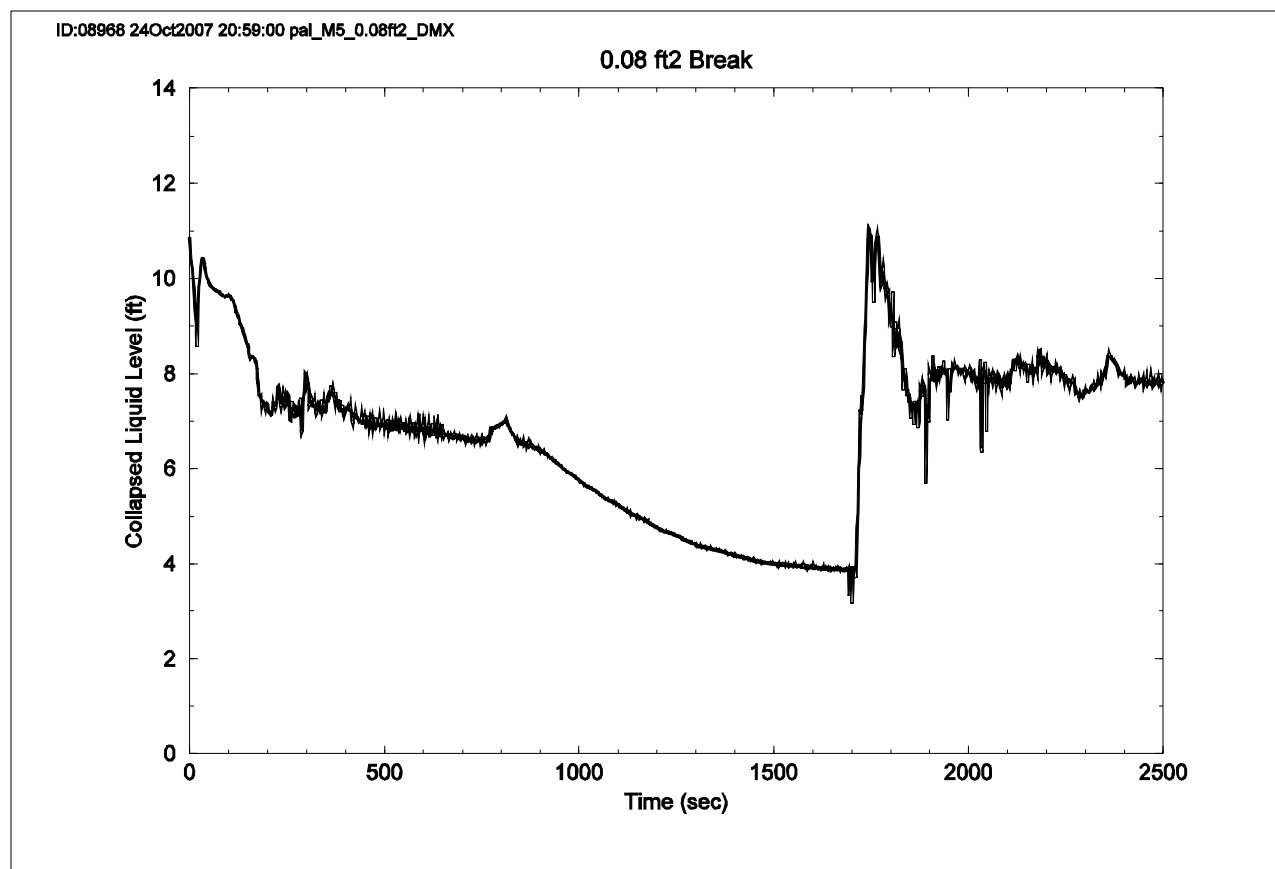
Total HPSI Mass Flow Rate (Limiting Case)

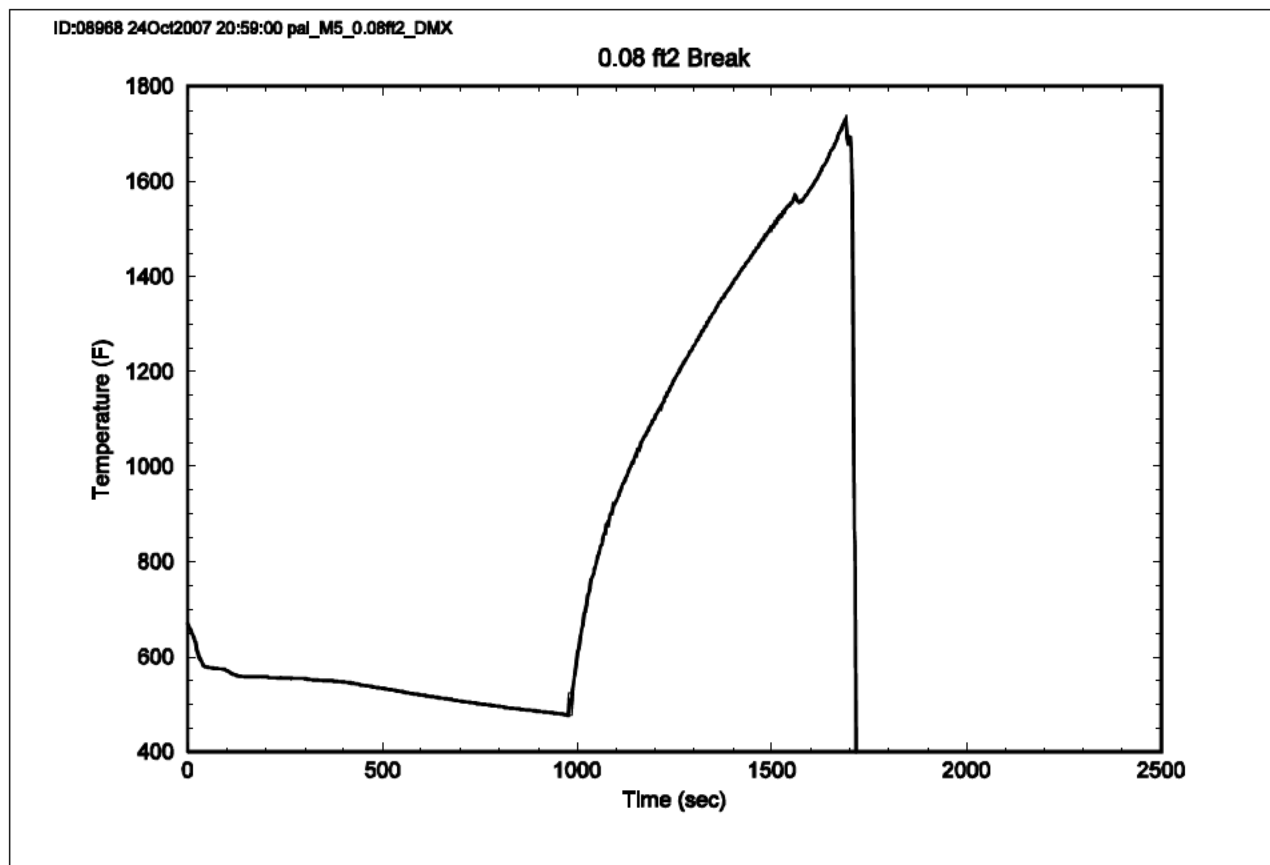
Total SIT Mass Flow Rate (Limiting Case)

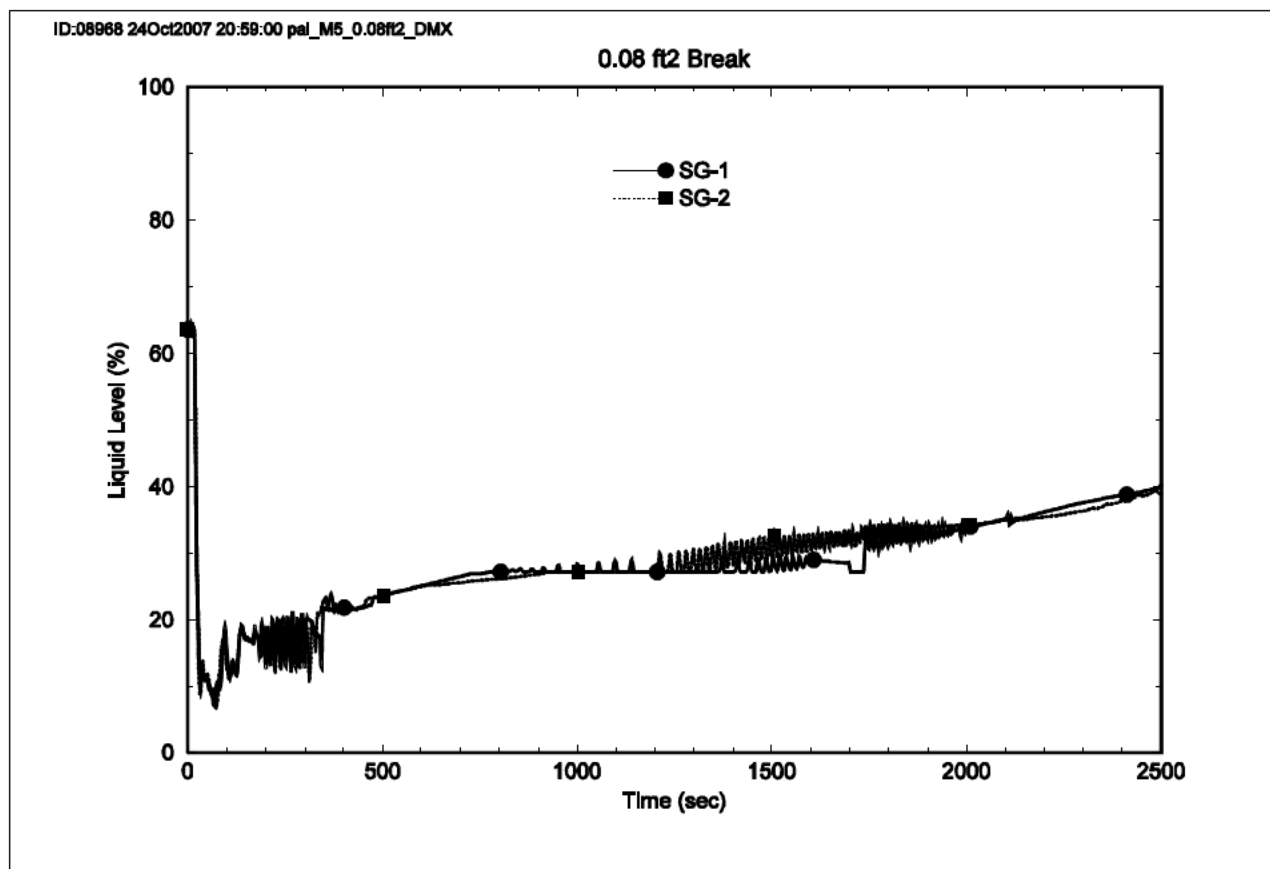
Loop Seal Void Fractions (Limiting Case)

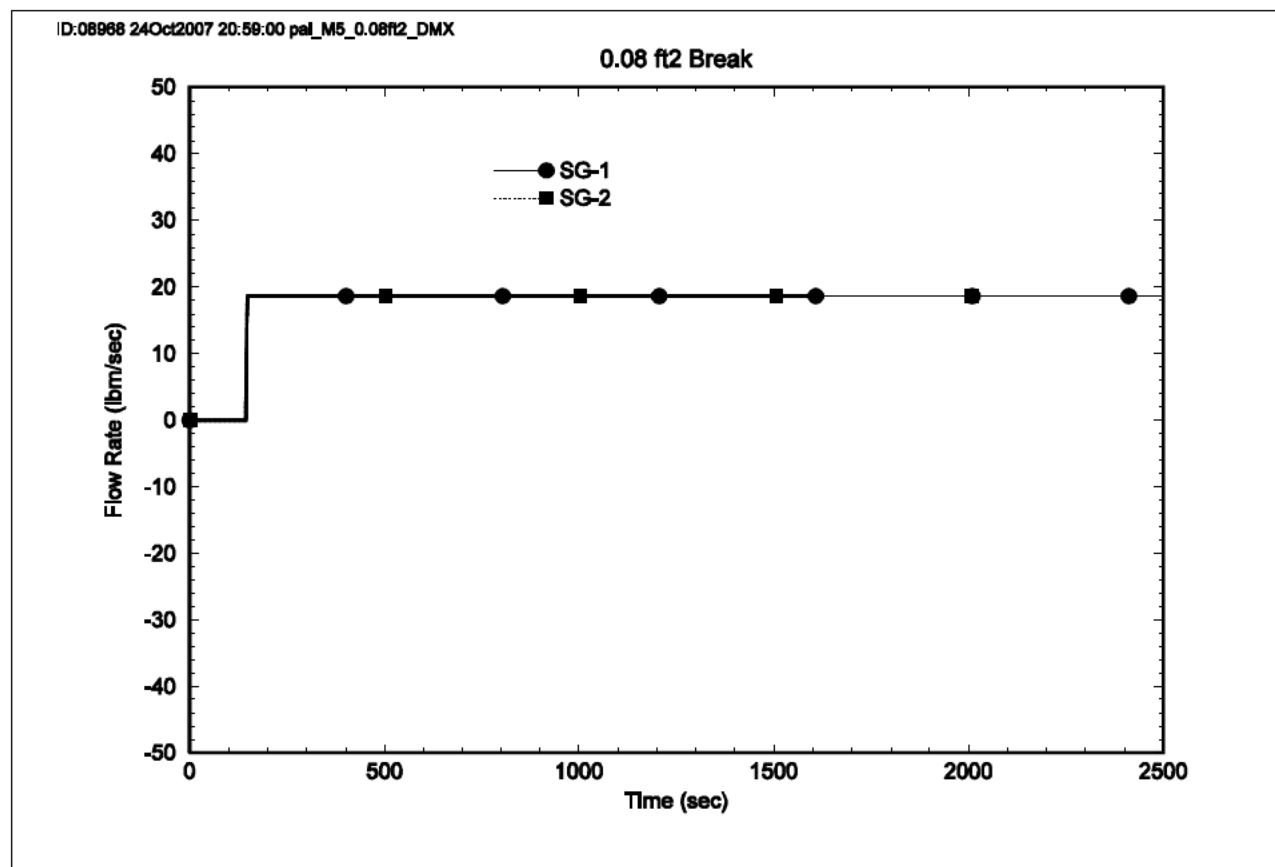
Break Void Fraction (Limiting Case)

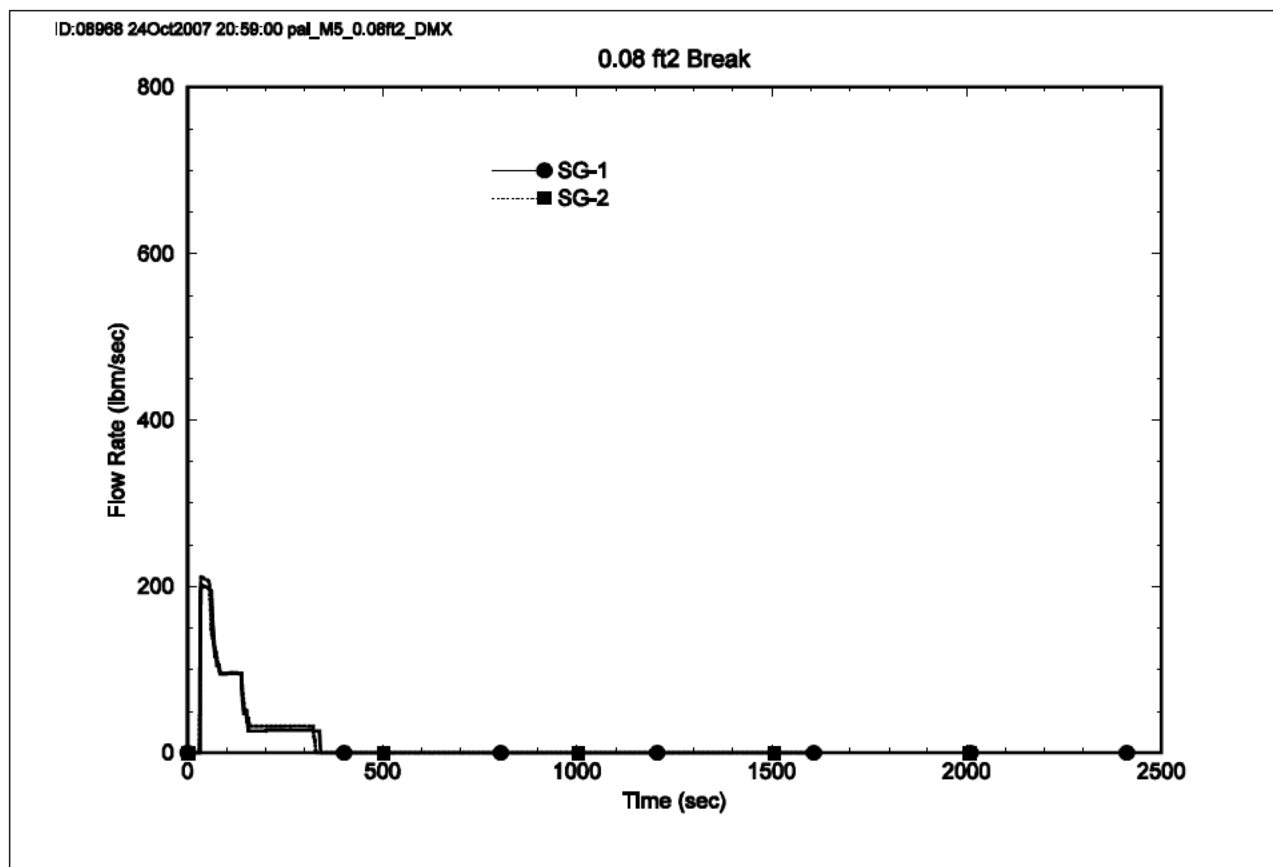
Reactor Vessel and PCS Mass Inventories (Limiting Case)

Hot Channel Collapsed Level (Limiting Case)

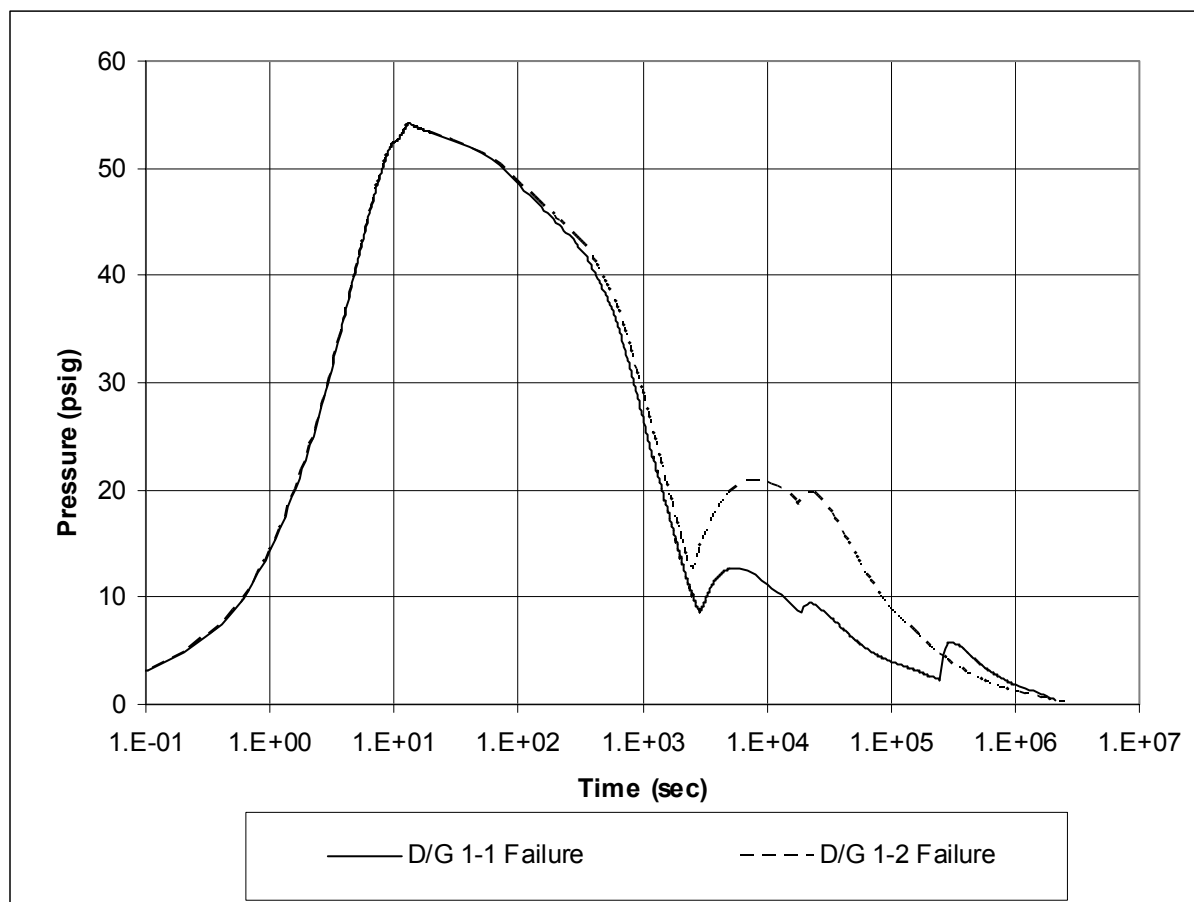
Fluid and Cladding Temperatures (Limiting Case)

SG Narrow Range Liquid Levels (Limiting Case)

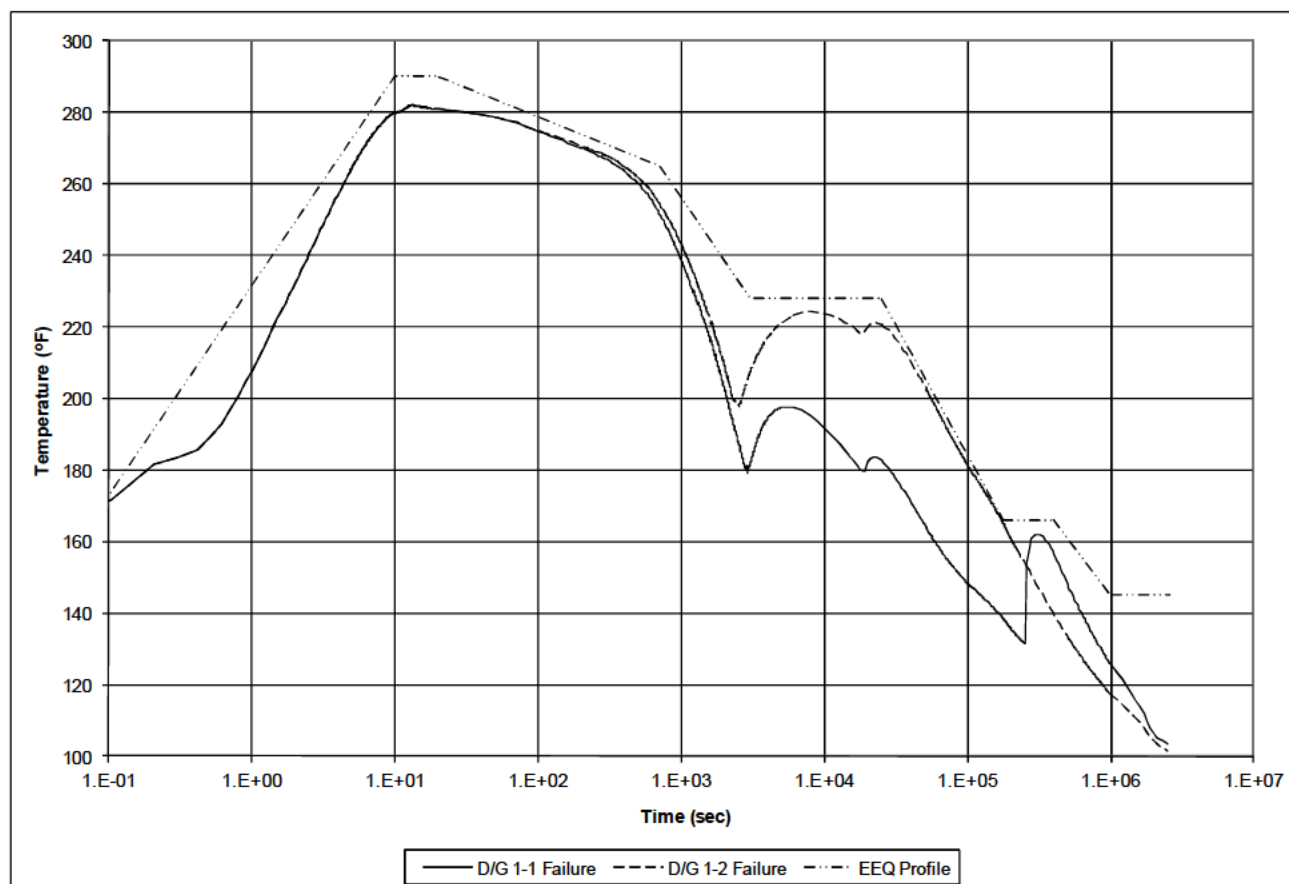
AFW Flow Rates (Limiting Case)

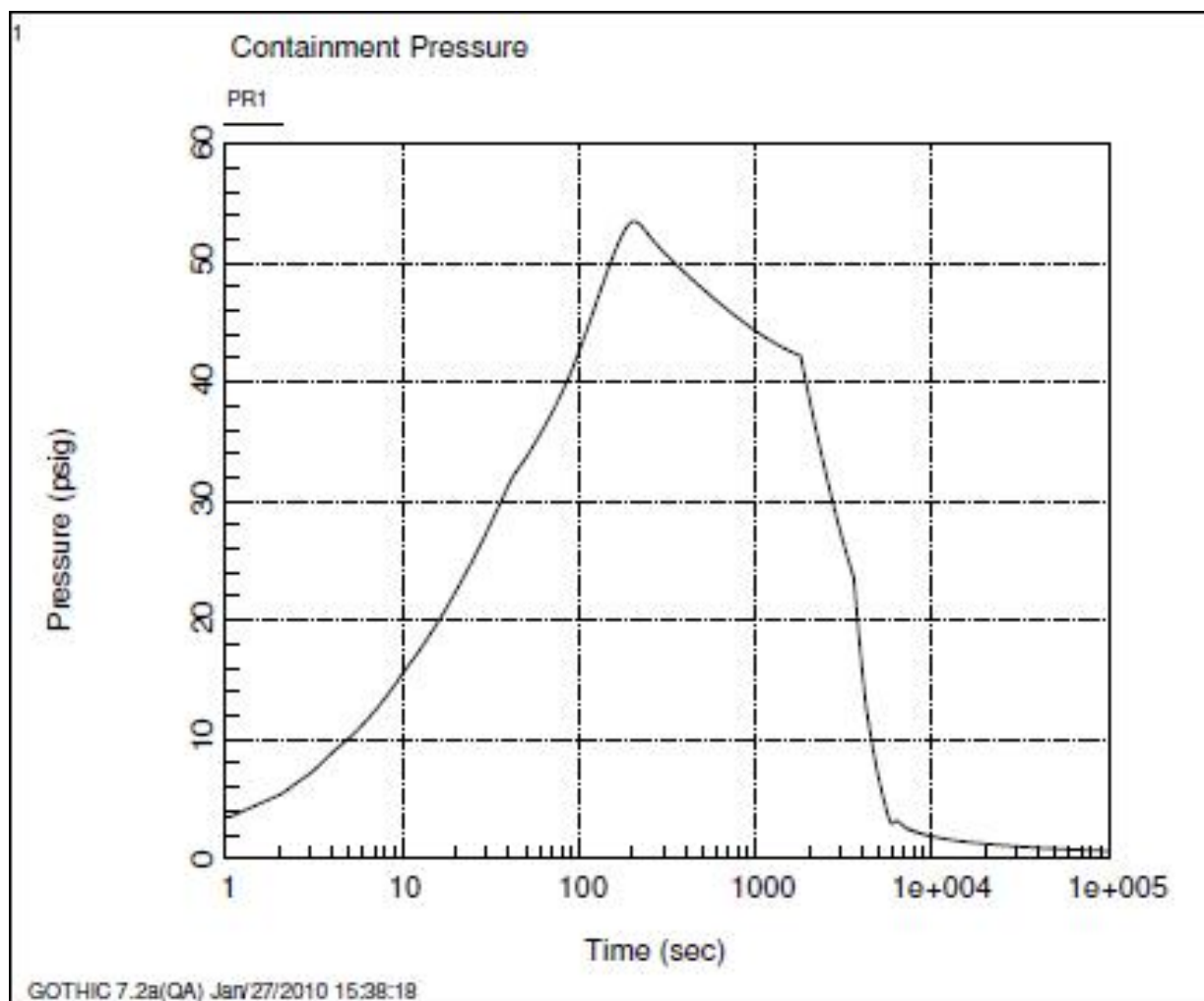
Total MSSV Flow (Limiting Case)

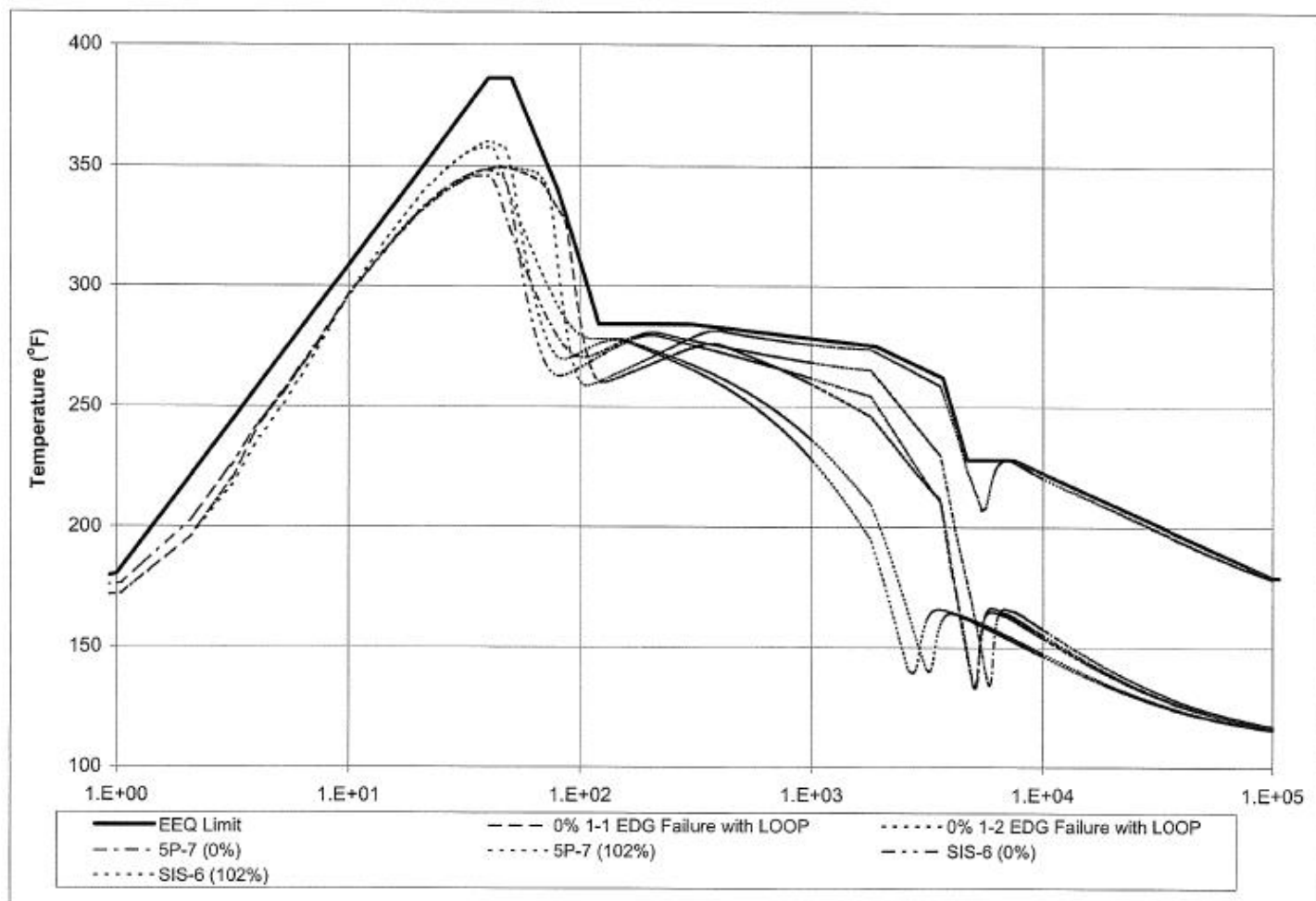
## LOCA CONTAINMENT PRESSURE PROFILE



## LOCA CONTAINMENT TEMPERATURE PROFILE



**MSLB CONTAINMENT RESPONSE  
MAXIMUM PRESSURE PROFILE**



**PALISADES CONTAINMENT HYDROGEN ANALYSIS**

| Deleted per FSAR-2479

**CONTAINMENT TEMPERATURE FOR H2 GENERATION**

| Deleted per FSAR-2479