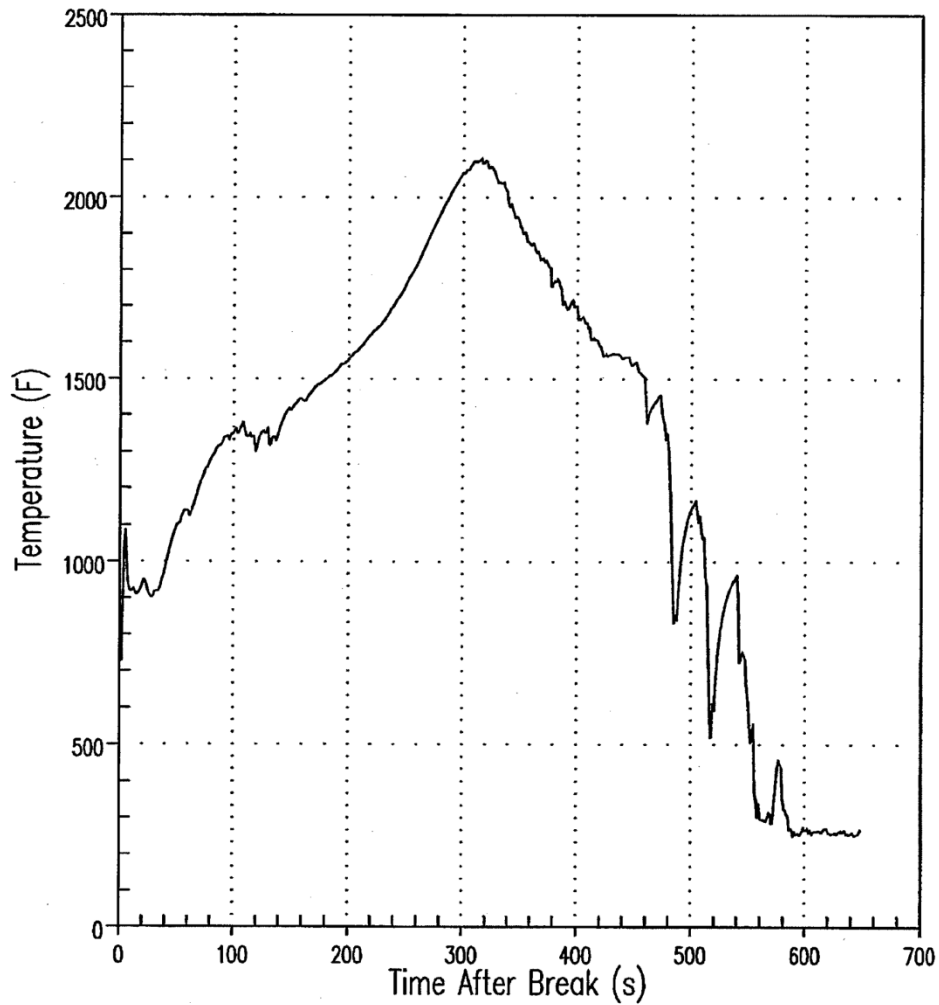


D. C. Cook Unit 2 ASTRUM BELOCA Analysis

ROD 1 PEAK CLADDING TEMPERATURE



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

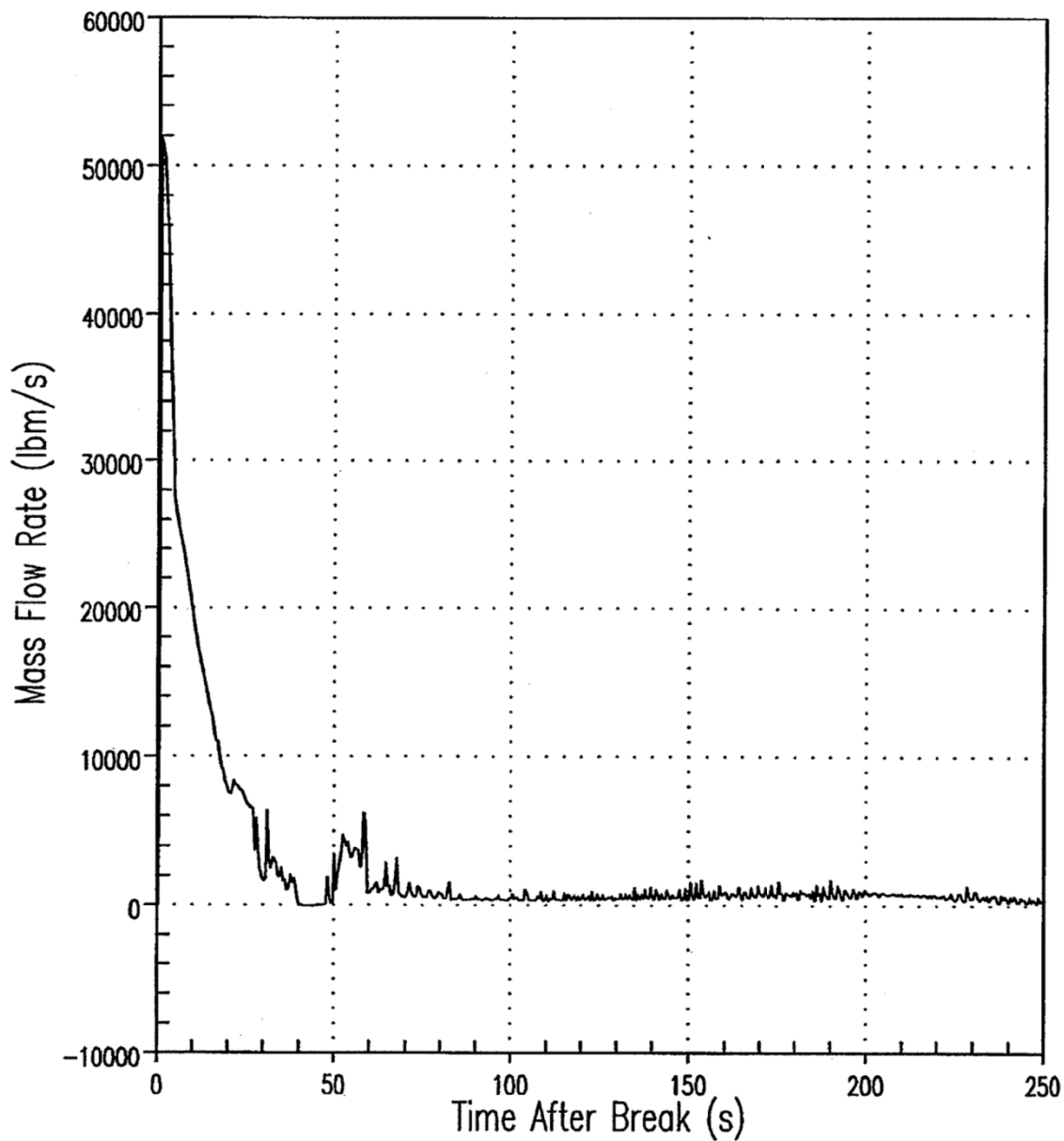
Title: **D.C. Cook Unit 2 Limiting Case
Cladding Temperature at the PCT Elevation**

UFSAR Figure: **14.3.1-1A**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

BREAK FLOW



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

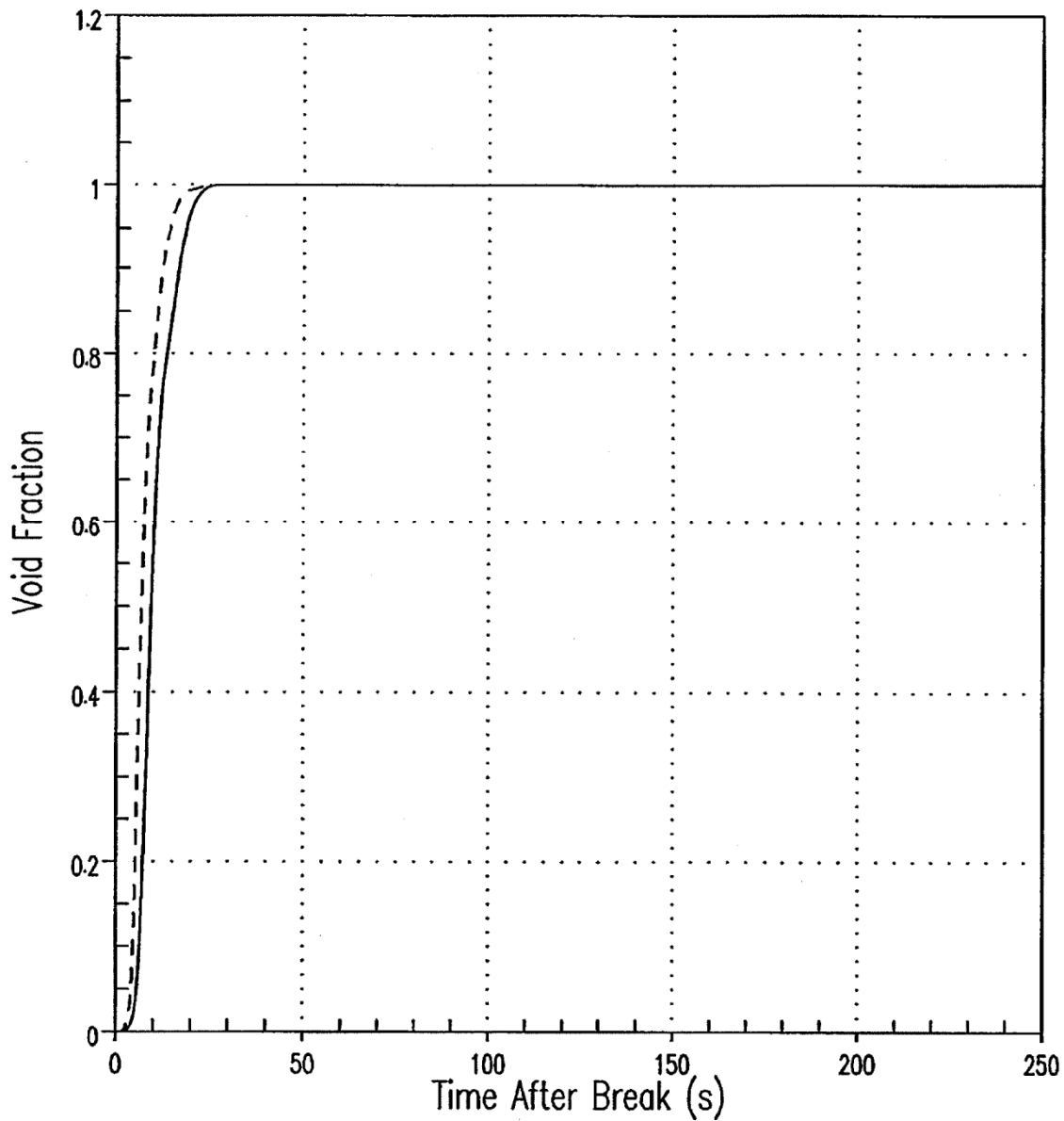
Title: **D.C. Cook Unit 2 Limiting Case
Break Flow**

UFSAR Figure: **14.3.1-1B**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

—— Intact Loop
----- Broken Loop



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

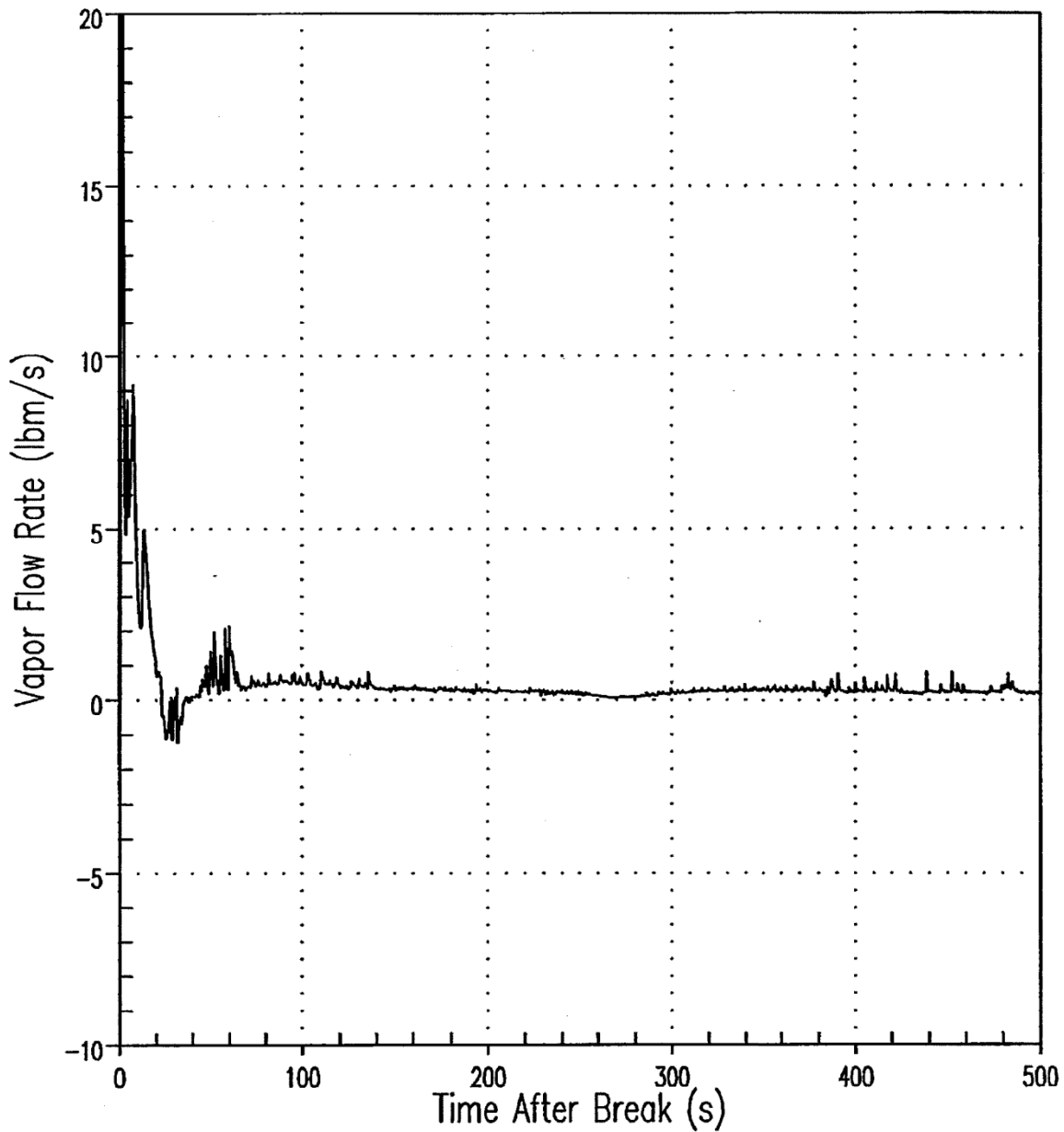
Title: **D.C. Cook Unit 2 Limiting Case
Broken and Intact Loop Pump Void Fraction**

UFSAR Figure: **14.3.1-1C**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

VAPOR FLOW RATE IN CORE HOT ASSEMBLY CHANNEL 19



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

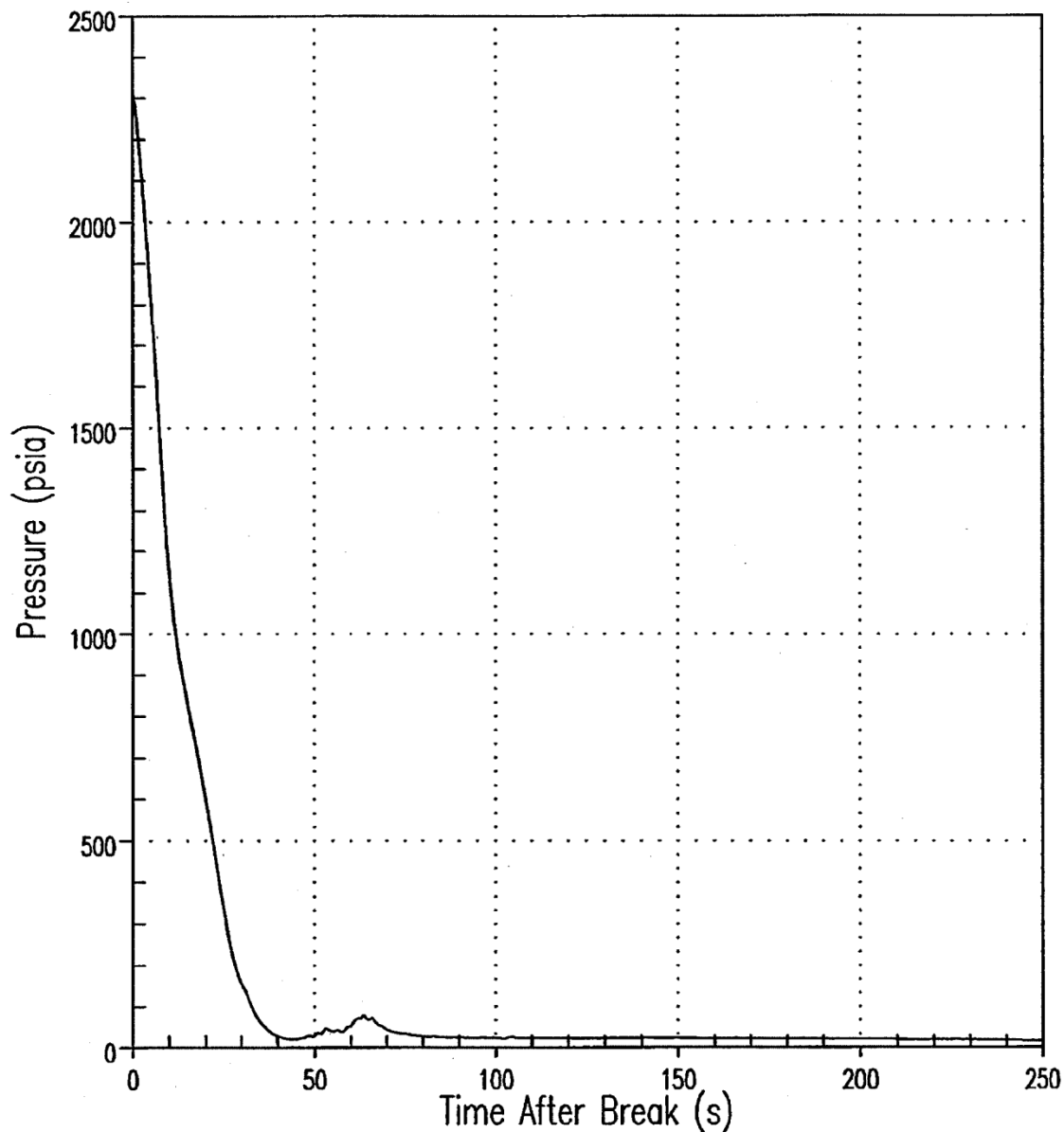
Title: **D.C. Cook Unit 2 Limiting Case
Hot Assembly Top of Core Vapor Flow**

UFSAR Figure: **14.3.1-1D**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

— PRESSURIZER PRESSURE



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
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NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

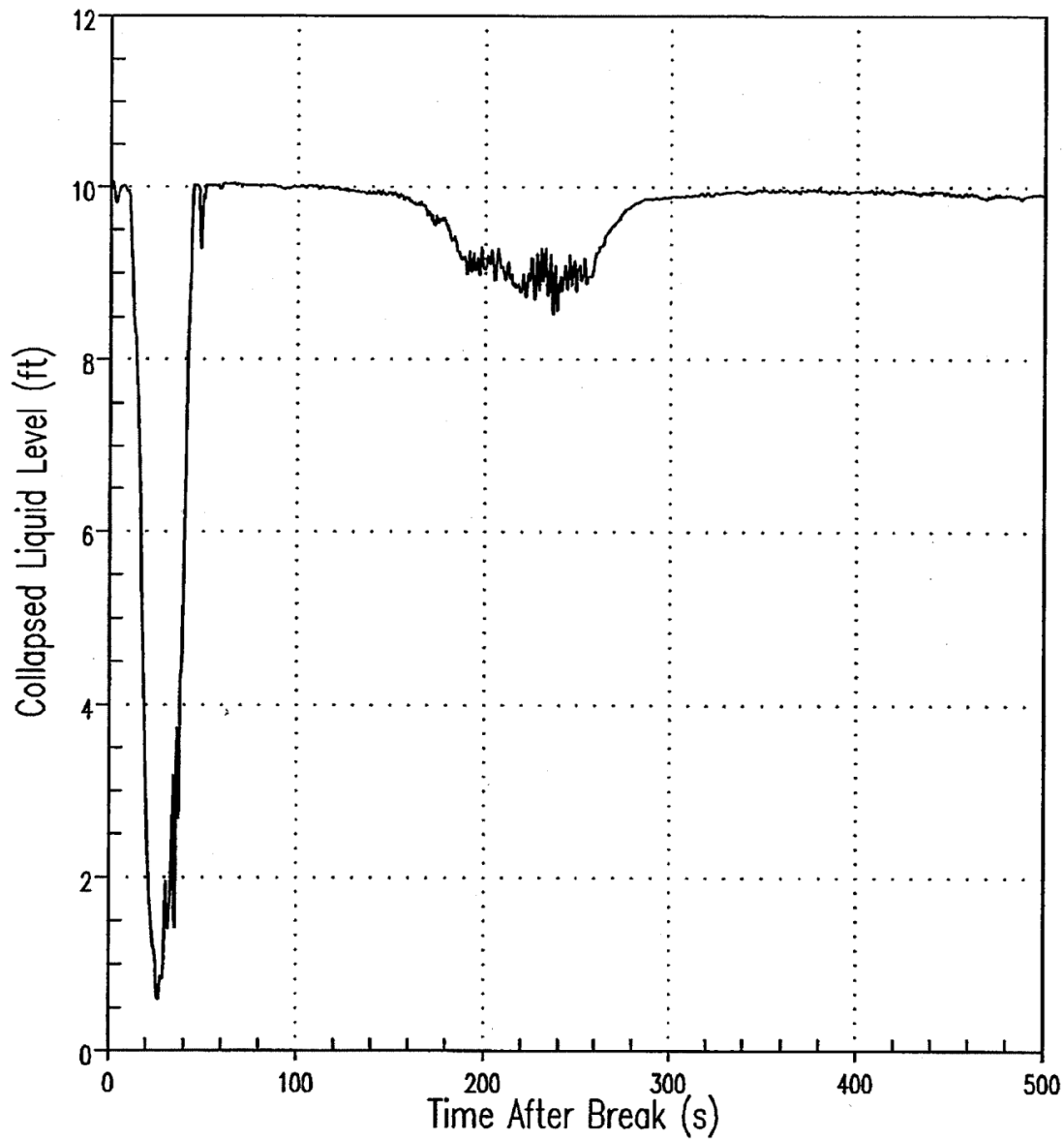
Title: **D.C. Cook Unit 2 Limiting Case
Pressurizer Pressure**

UFSAR Figure: **14.3.1-1E**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

LOWER PLENUM COLLAPSED LIQUID LEVEL



*The reference point for the lower plenum liquid level is the bottom of the vessel (10.1 feet below the bottom of the active fuel).

Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN

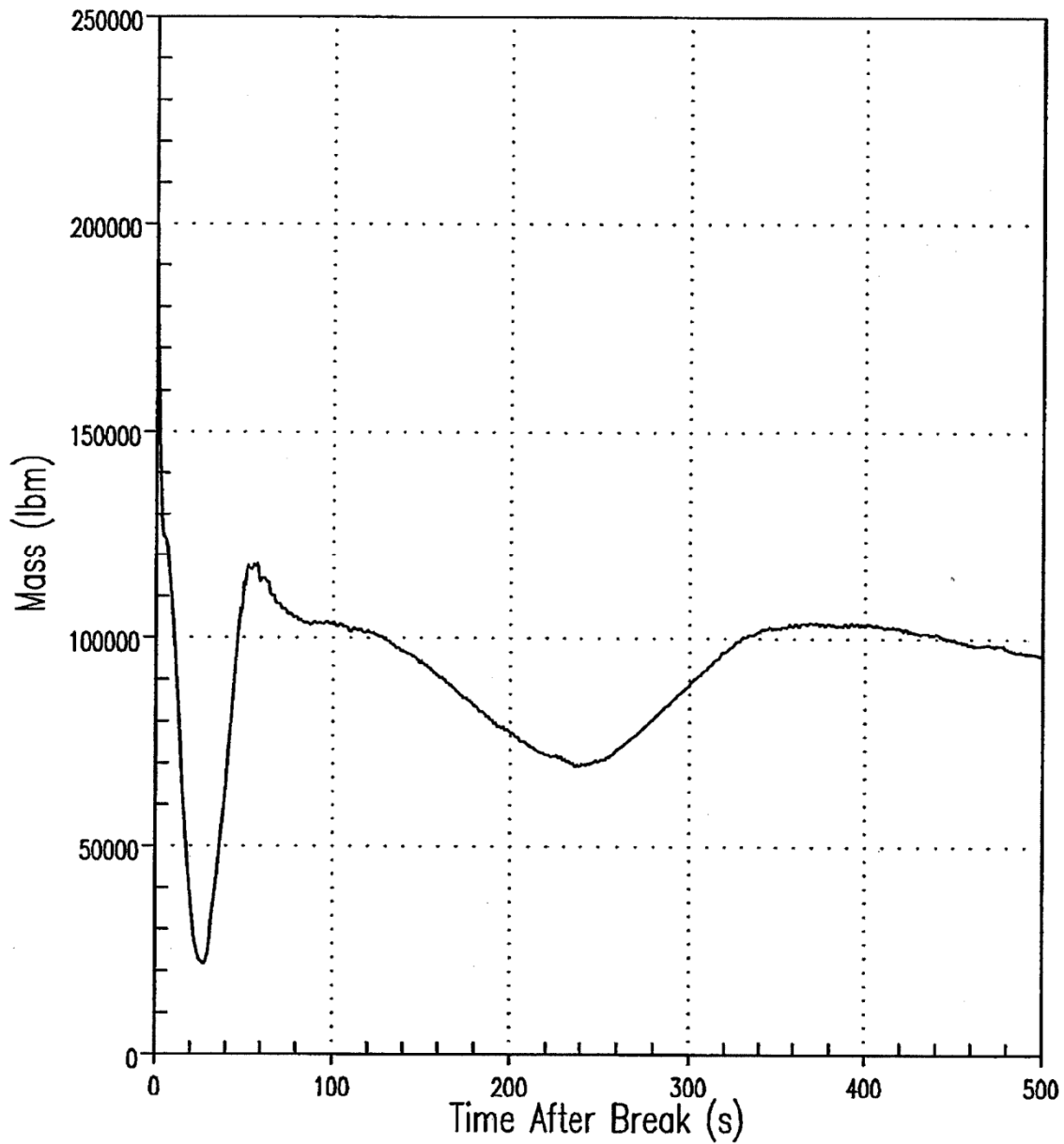
Title: **D.C. Cook Unit 2 Limiting PCT
Lower Plenum Collapsed Liquid Level***

UFSAR Figure: **14.3.1-1F**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

VESSEL LIQUID MASS



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN

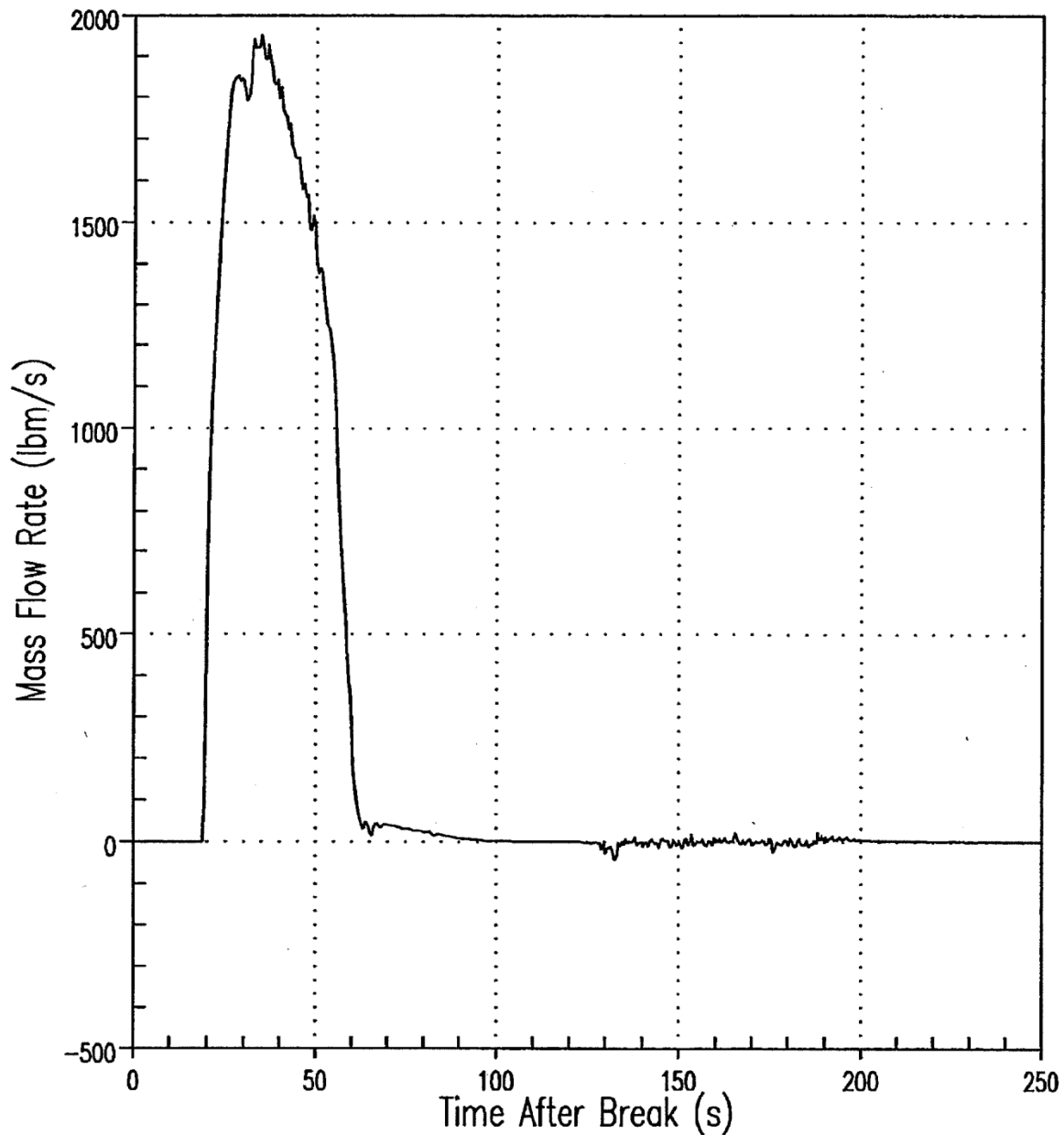
Title: **D.C. Cook Unit 2 Limiting Case
Vessel Fluid Mass**

UFSAR Figure: **14.3.1-1G**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

INTACT LOOP 2 ACCUMULATOR MASS FLOW RATE



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

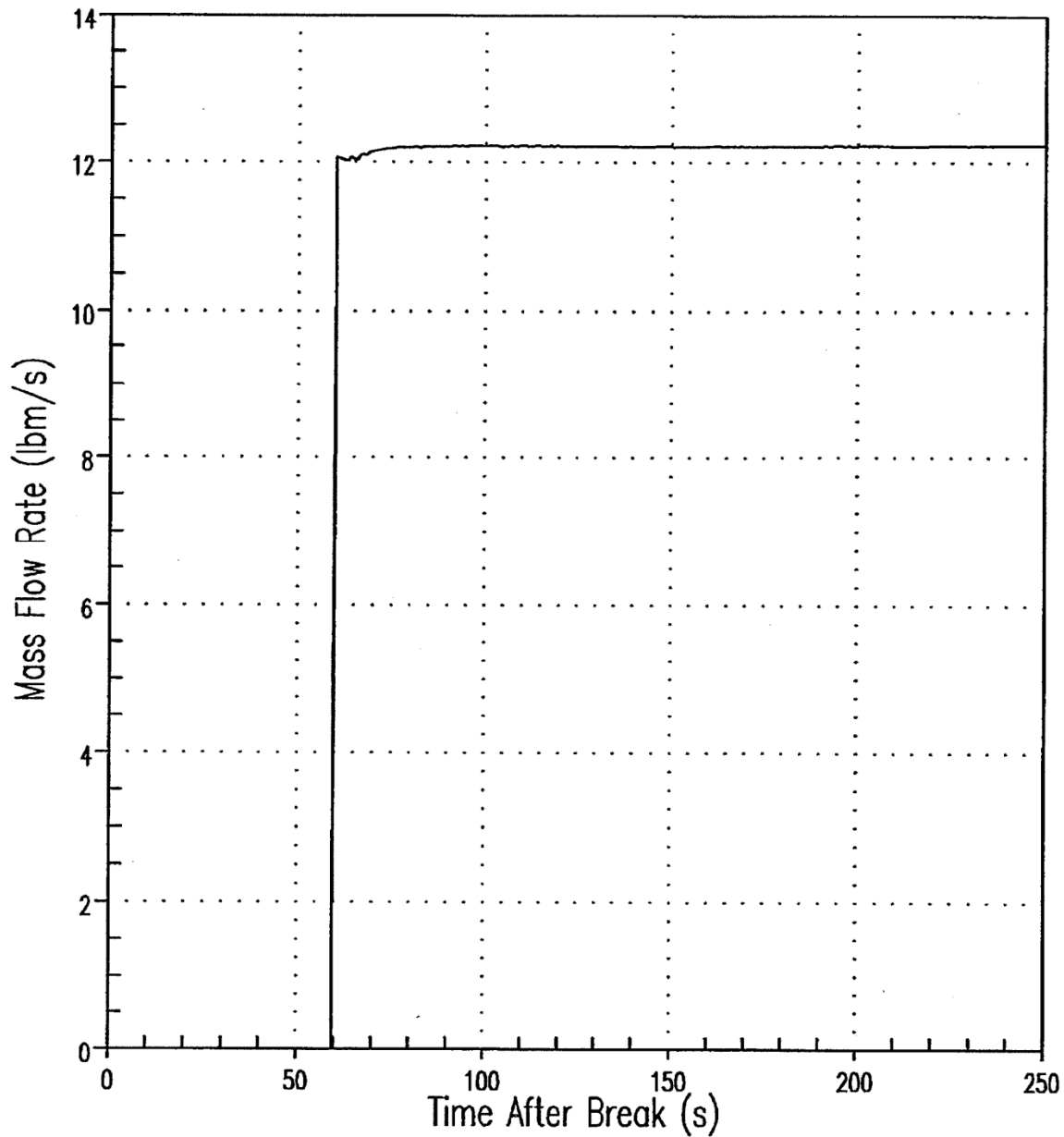
Title: **D.C. Cook Unit 2 Limiting Case
Loop 2 Accumulator Flow**

UFSAR Figure: **14.3.1-1H**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

INTACT LOOP 2 CHARGING SI MASS FLOW RATE



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

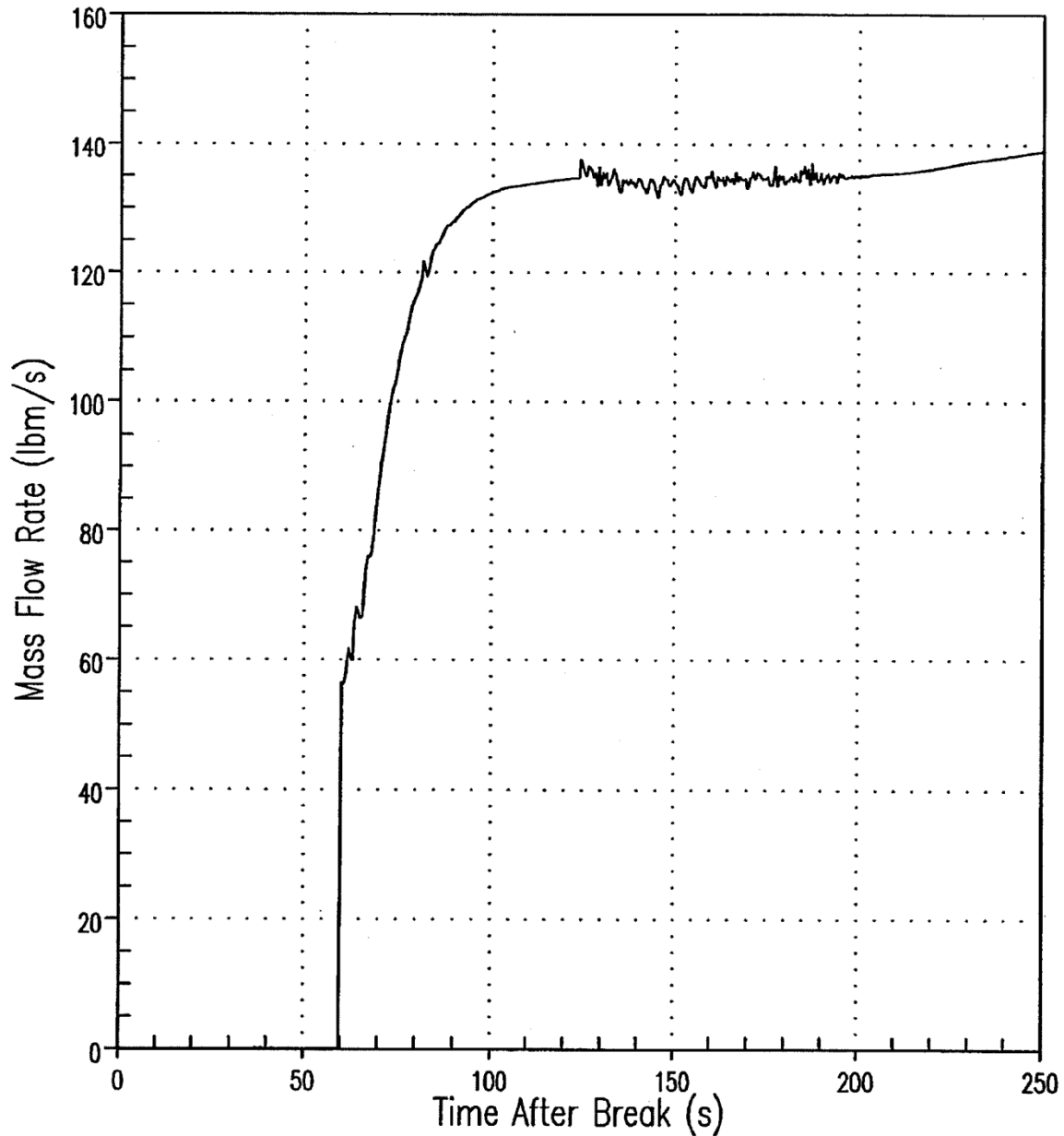
Title: **D.C. Cook Unit 2 Limiting Case
Loop 2 Charging Safety Injection Flow**

UFSAR Figure: **14.3.1-II**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

INTACT LOOP 2 RHR + HHSI MASS FLOW RATE



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

AMERICAN ELECTRIC POWER
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NUCLEAR GENERATION GROUP
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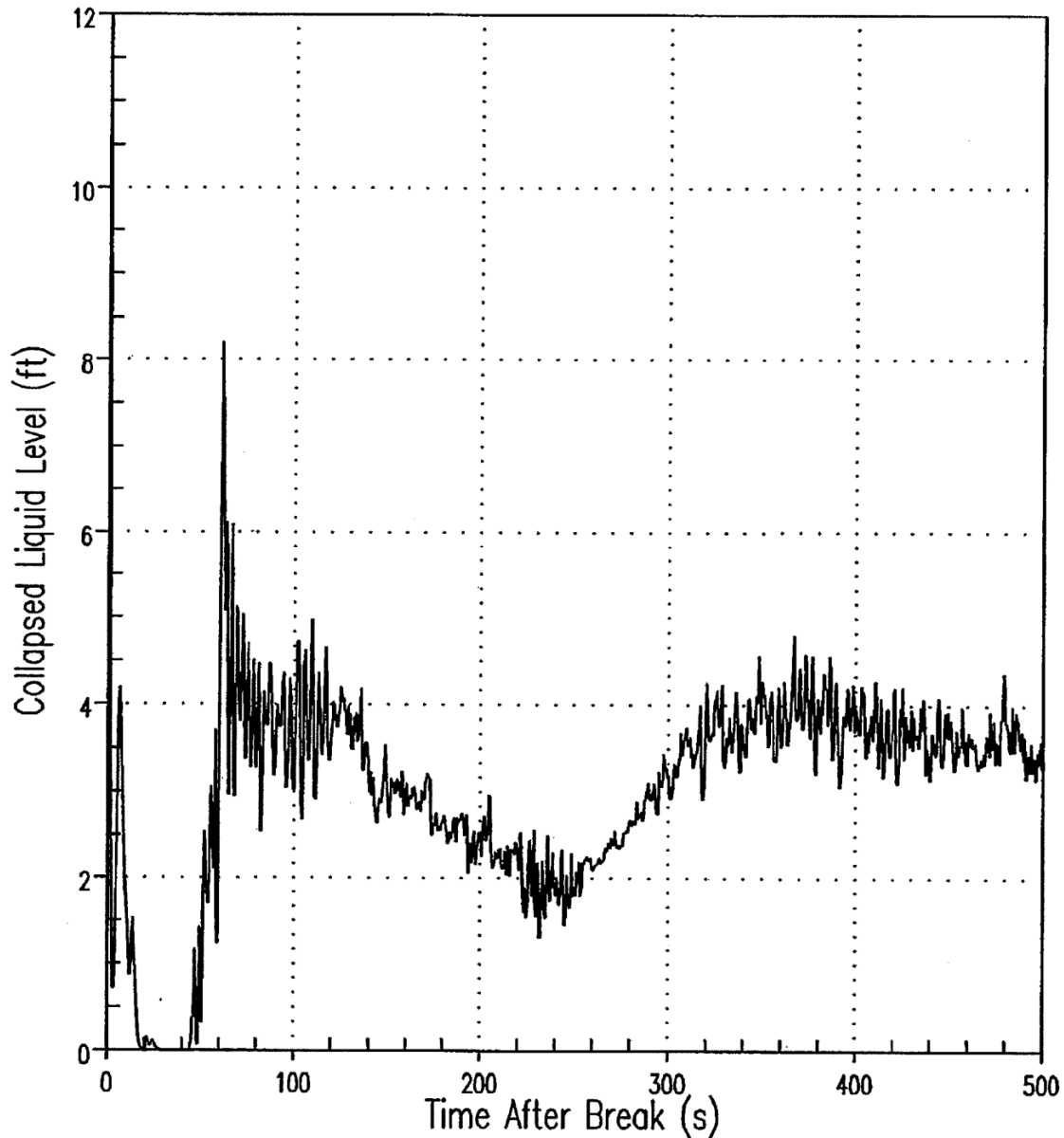
Title: **D.C. Cook Unit 2 Limiting Case
Loop 2 RHR and HHSI Flow**

UFSAR Figure: **14.3.1-1J**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

COLLAPSED LIQUID LEVEL IN CORE AVERAGE CHANNEL 17



*The reference point for the downcomer liquid level is the bottom of the active fuel.

Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
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NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

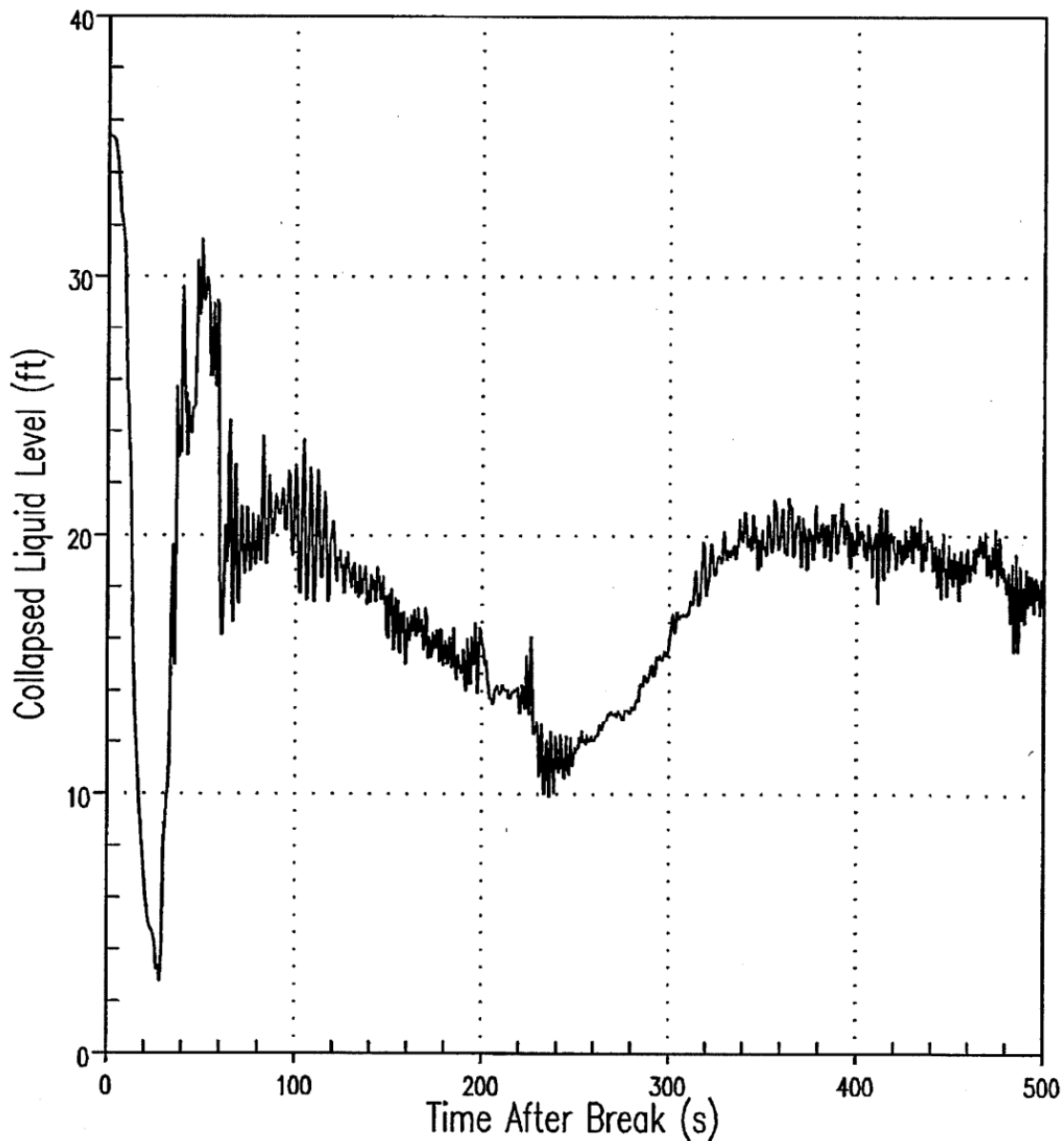
Title: **D.C. Cook Unit 2 Limiting Case
Core Average Channel Collapsed Liquid Level***

UFSAR Figure: **14.3.1-1K**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

LIQUID LEVEL IN INTACT LOOP 2 DOWNCOMER



*The reference point for the downcomer liquid level is the bottom of the vessel.

Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

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NUCLEAR GENERATION GROUP
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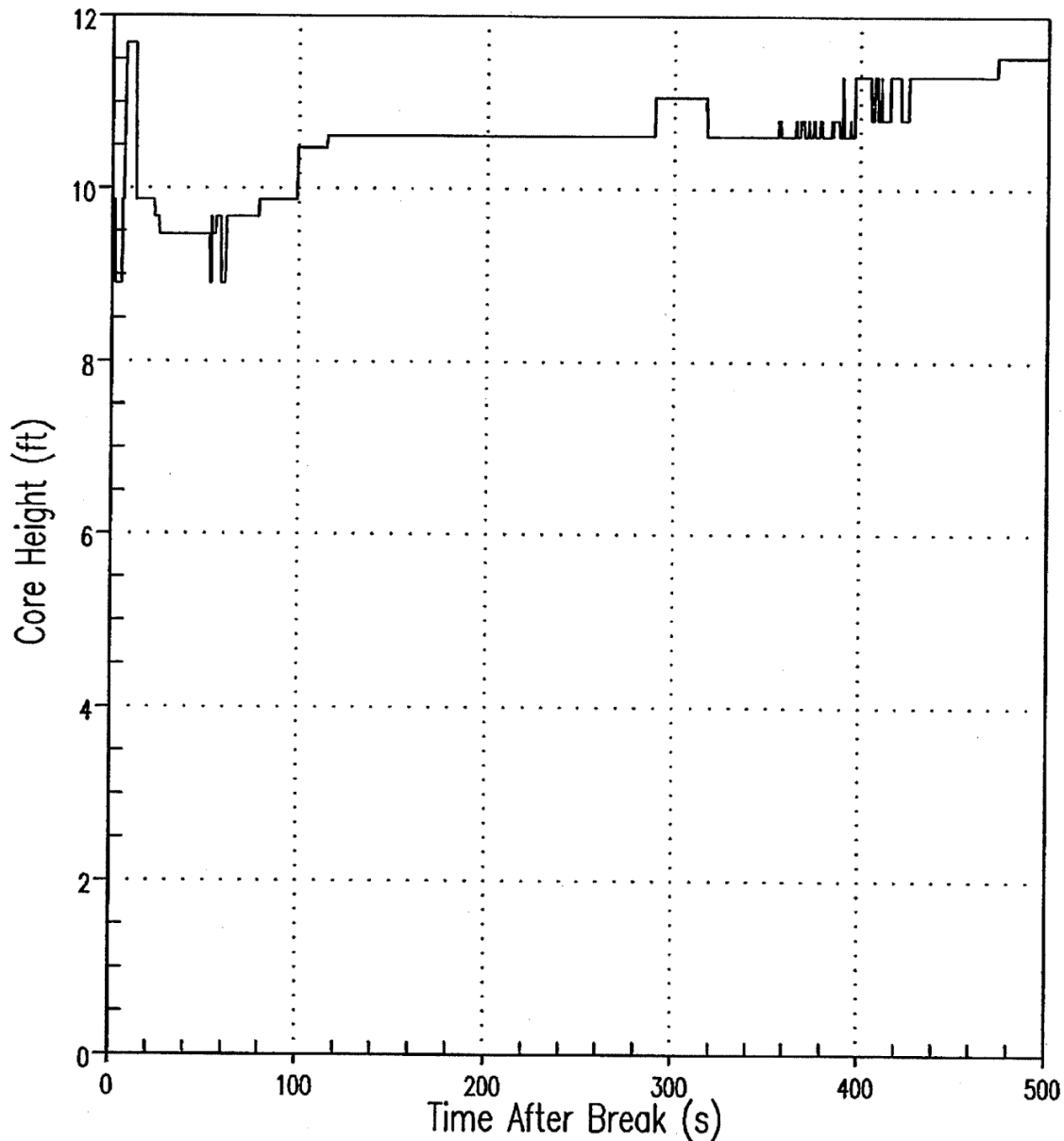
Title: **D.C. Cook Unit 2 Limiting Case
Loop 2 Downcomer Collapsed Liquid Level***

UFSAR Figure: **14.3.1-1L**

Sheet 1 of 1

D. C. Cook Unit 2 ASTRUM BELOCA Analysis

ROD 1 PEAK CLADDING TEMPERATURE LOCATION



*The reference point for the PCT location is the bottom of the active fuel.

Revision: **24.0**

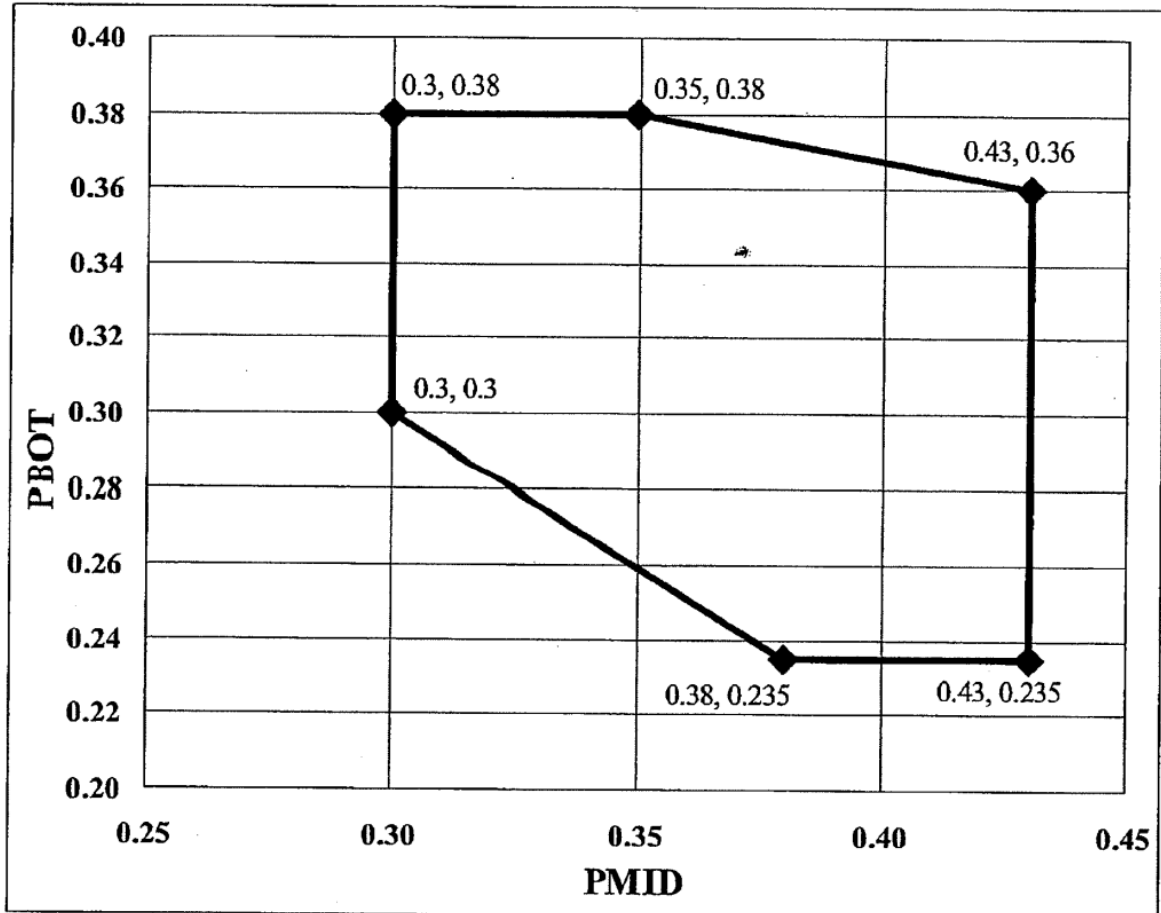
Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **D.C. Cook Unit 2 Limiting Case
PCT Location***

UFSAR Figure: **14.3.1-1M**

Sheet 1 of 1



PBOT = integrated power fraction in the bottom third of the core

PMID = integrated power fraction in the middle third of the core

Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
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NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

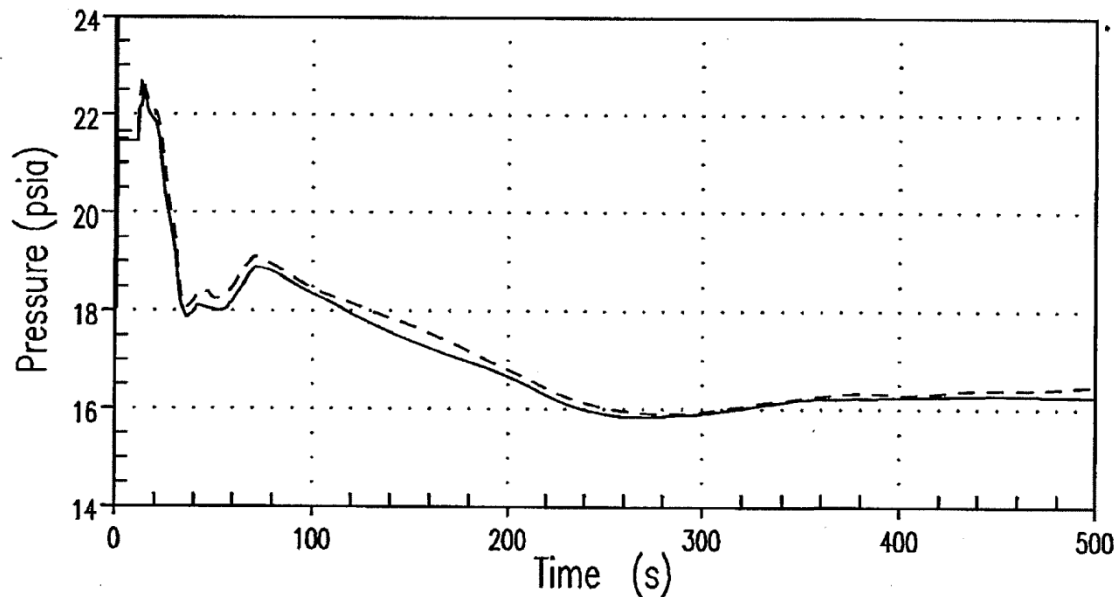
Title: **D.C. Cook Unit 2 BELOCA Analysis
Axial Power Shape Operating Space Envelope**

UFSAR Figure: **14.3.1-2**

Sheet 1 of 1

DC Cook Unit 2 Containment Backpressure Comparison

——— WCOBRA/TRAC Containment Backpressure
 - - - - LOTIC2 Calculated Containment Backpressure



Notes:

1. Due to errors identified with the LOTIC2 containment backpressure calculation, an evaluation was performed assuming a revised initial CTS temperature. See Section 14.3.1.5 for more information.

Revision: **24.0**

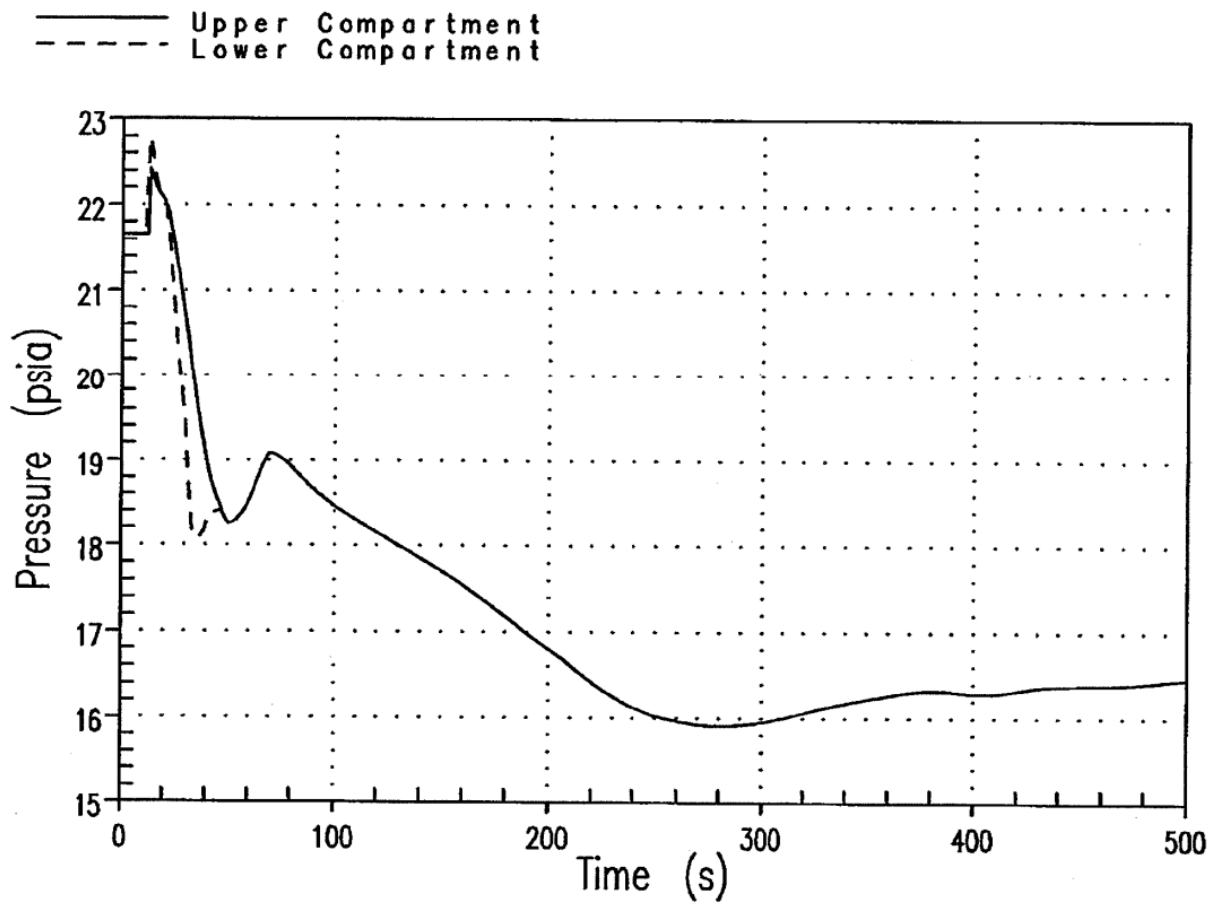
Change Description: **UCR-1974, Rev. 0**

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 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title: **D.C. Cook Unit 2**
Lower Bound Containment Pressure

UFSAR Figure: **14.3.1-3**

Sheet 1 of 1



Notes:

1. Due to errors identified with the LOTIC2 containment backpressure calculation, an evaluation was performed assuming a revised initial CTS temperature. See Section 14.3.1.5 for more information.

* The lower compartment trace in the plot is identical to the LOTIC2 trace in Figure 14.3.1-3.

Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

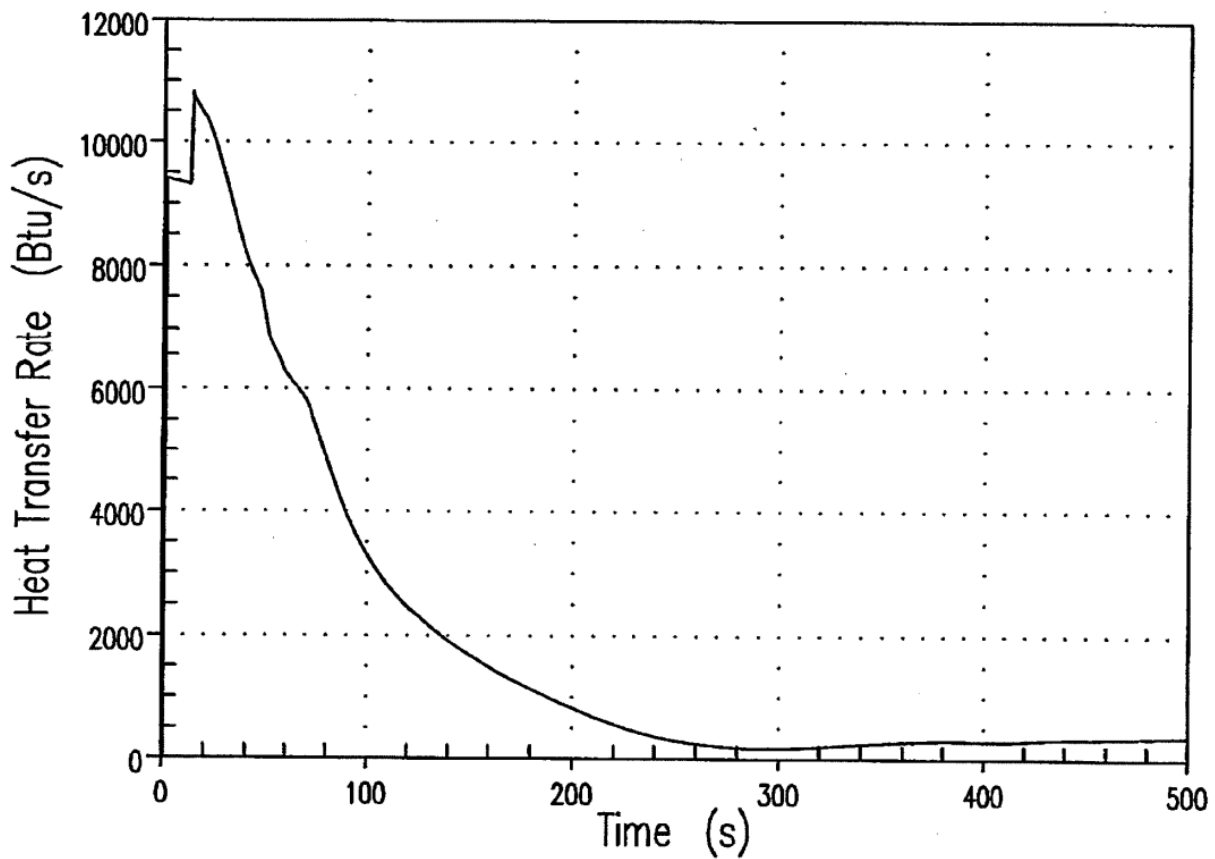
AMERICAN ELECTRIC POWER
 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title:

D.C. Cook Unit 2
Containment Pressure*

UFSAR Figure: **14.3.1-4**

Sheet 1 of 1



Revision: **24.0**

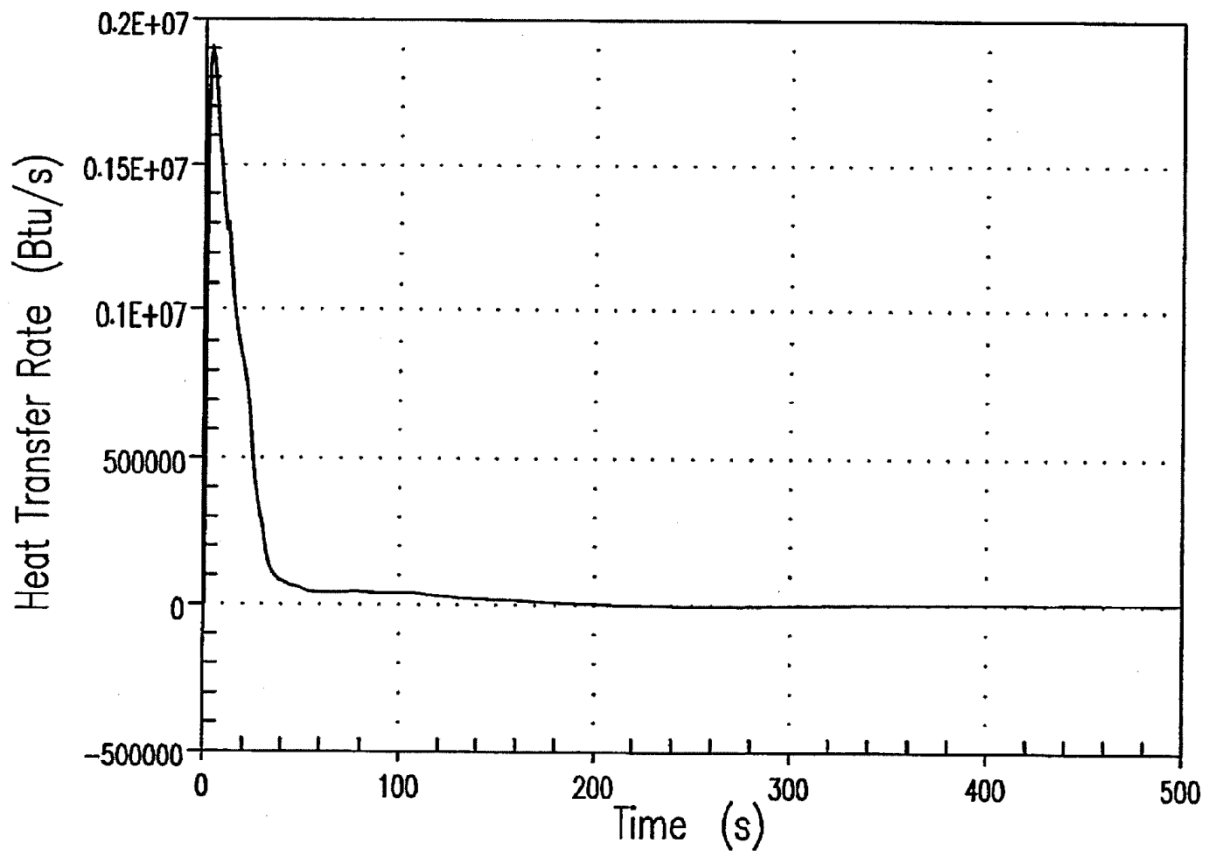
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **D.C. Cook Unit 2
Structural Heat Removal Rate**

UFSAR Figure: **14.3.1-5**

Sheet 1 of 1



Revision: **24.0**

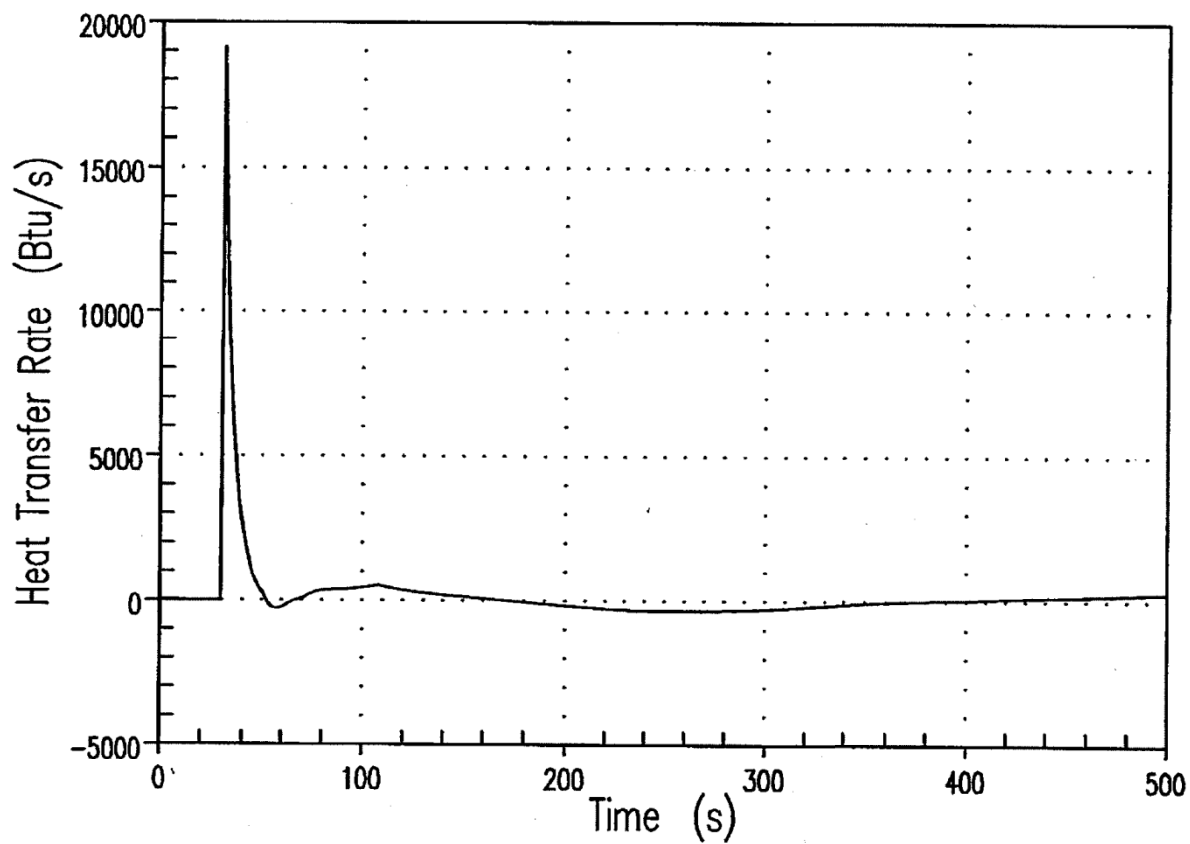
Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
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Title: **D.C. Cook Unit 2 Lower Compartment
Structural Heat Removal Rate**

UFSAR Figure: **14.3.1-6**

Sheet 1 of 1



Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

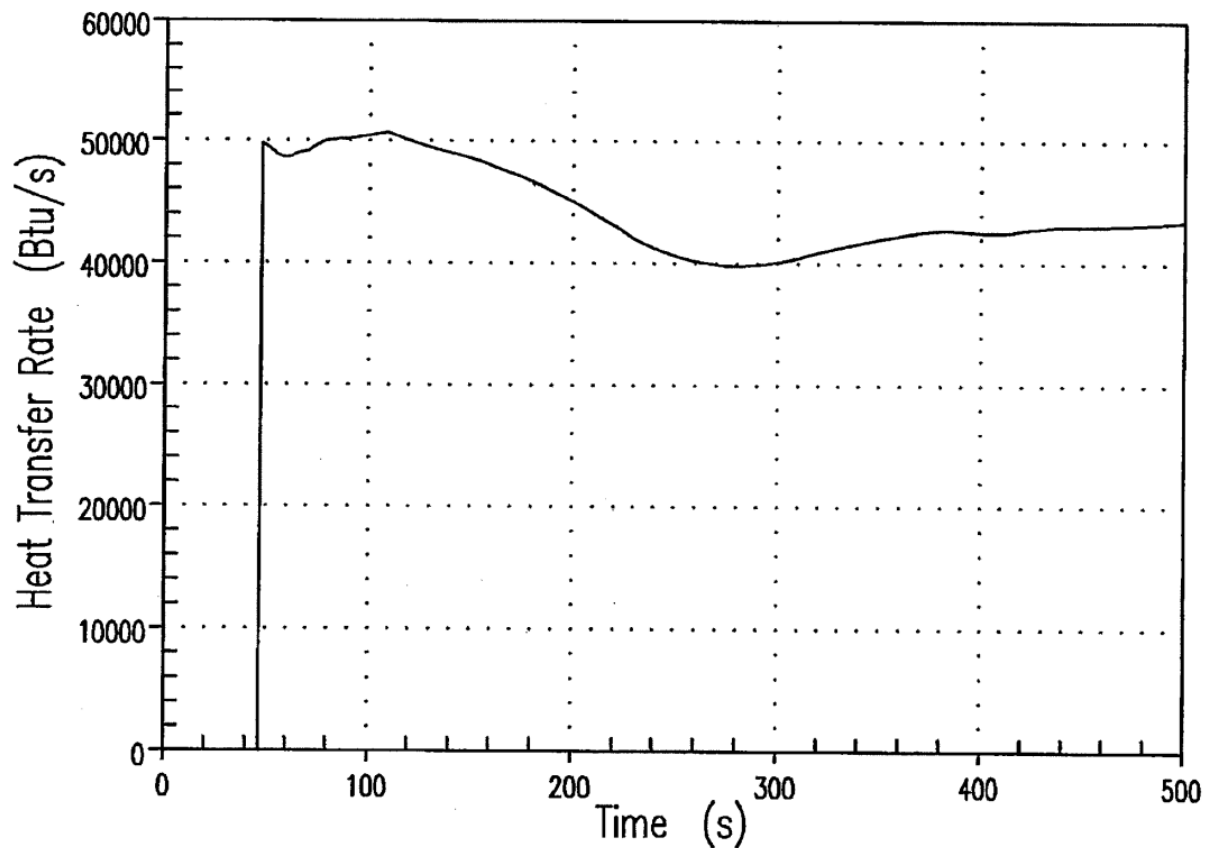
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title:

**D.C. Cook Unit 2
Heat Removal by Sump**

UFSAR Figure: **14.3.1-7**

Sheet 1 of 1



Notes:

1. Due to errors identified with the LOTIC2 containment backpressure calculation, an evaluation was performed assuming a revised initial CTS temperature. See Section 14.3.1.5 for more information.

Revision: **24.0**

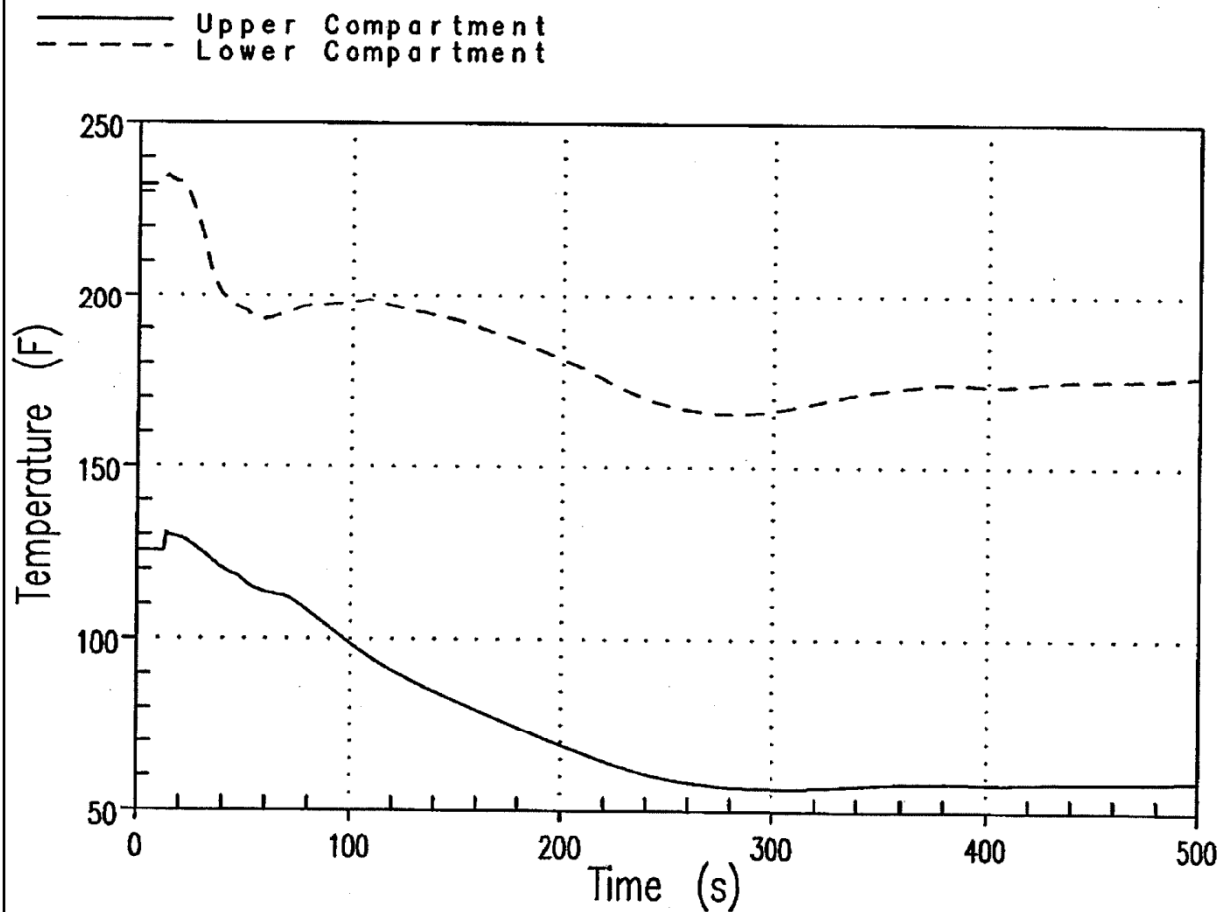
Change Description: **UCR-1974, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **D.C. Cook Unit 2
Heat Removal by Lower Compartment Spray**

UFSAR Figure: **14.3.1-8**

Sheet 1 of 1



Notes:

1. Due to errors identified with the LOTIC2 containment backpressure calculation, an evaluation was performed assuming a revised initial CTS temperature. See Section 14.3.1.5 for more information.

** Note that Upper Compartment Temperature pictured is "Air Temperature", while the Lower Compartment Temperature pictured is "Steam Temperature".*

Revision: **24.0**

Change Description: **UCR-1974, Rev. 0**

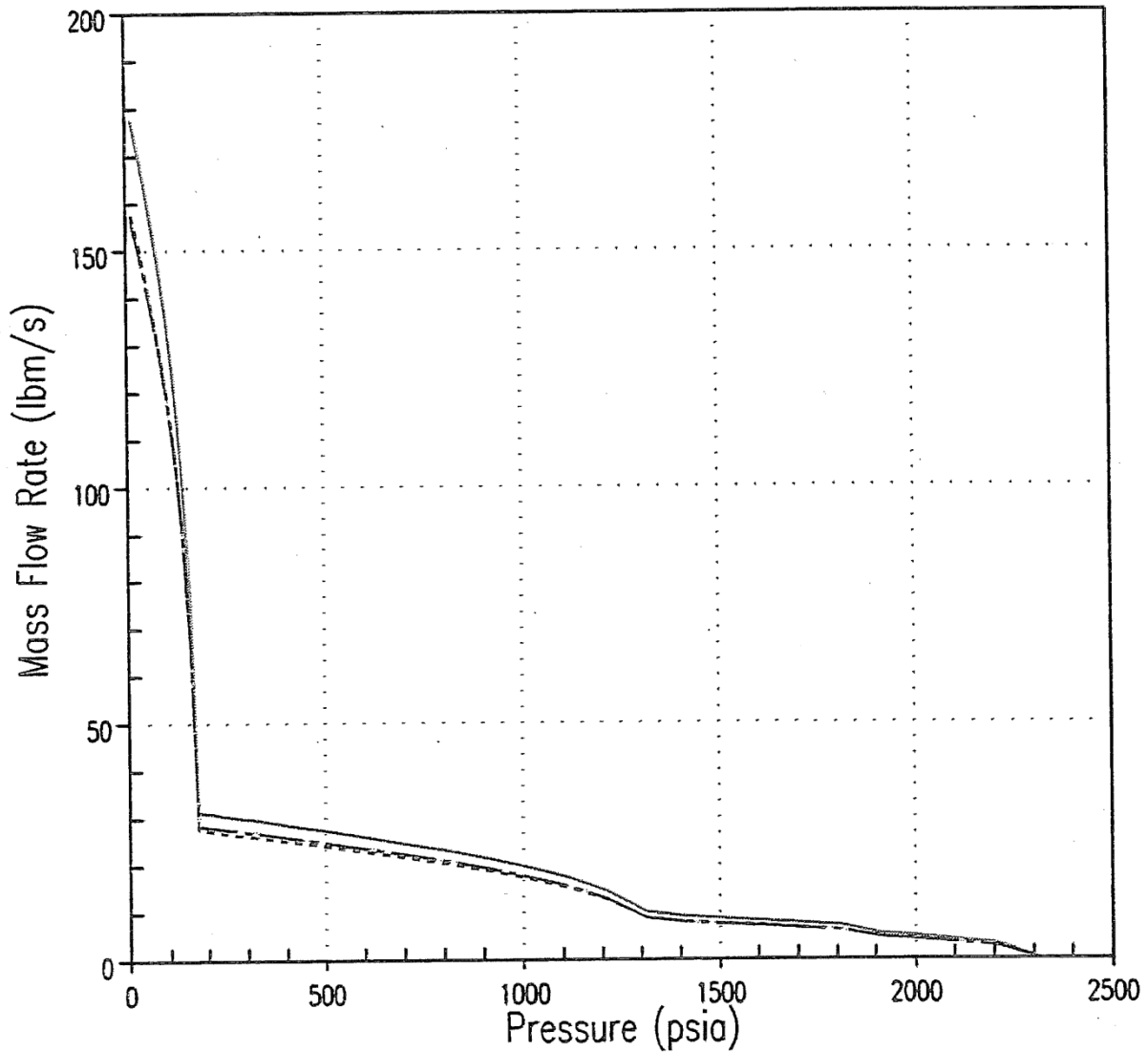
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **D.C. Cook Unit 2
Containment Temperature***

UFSAR Figure: **14.3.1-9**

Sheet 1 of 1

————	L1 (Broken Loop)
.....	L2 (Intact Loop)
-----	L3 (Intact Loop)
- - - - -	L4 (Intact Loop)



Revision: **24.0**

Change Description: **UCR-1966, Rev. 0**

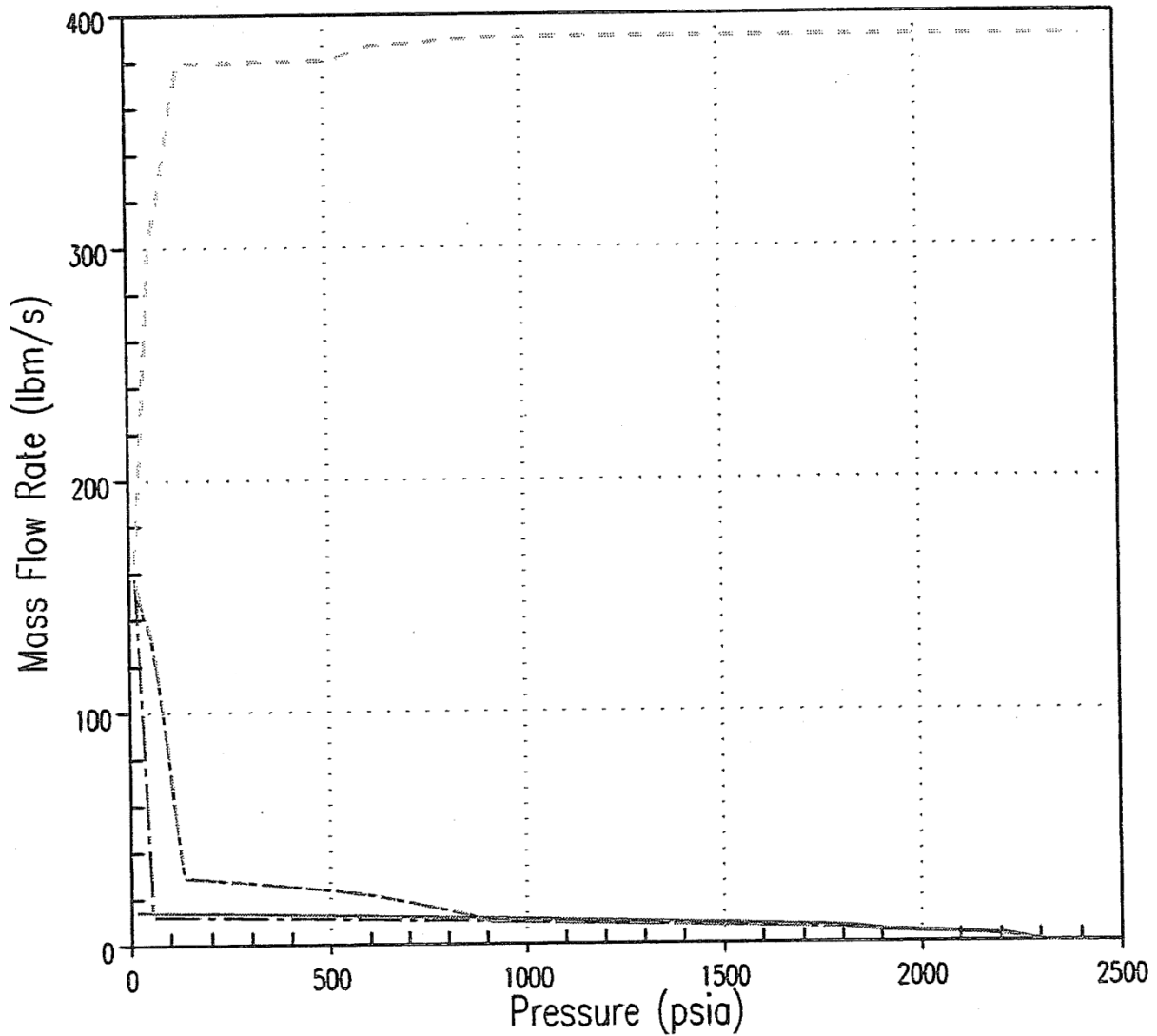
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Pumped Safety Injection Flow Rate- Injection Phase
Faulted Loop Spilling to Reactor Coolant System Pressure**

UFSAR Figure: **14.3.2-1**

Sheet 1 of 1

— L1 (Broken Loop - CHG Flow)
 - - L1 (Broken Loop - HHSI/RHR Flow)
 - - L2 (Intact Loop)
 — L3 (Intact Loop)
 - - L4 (Intact Loop)



Revision: **24.0**

Change Description: **UCR-1966, Rev. 0**

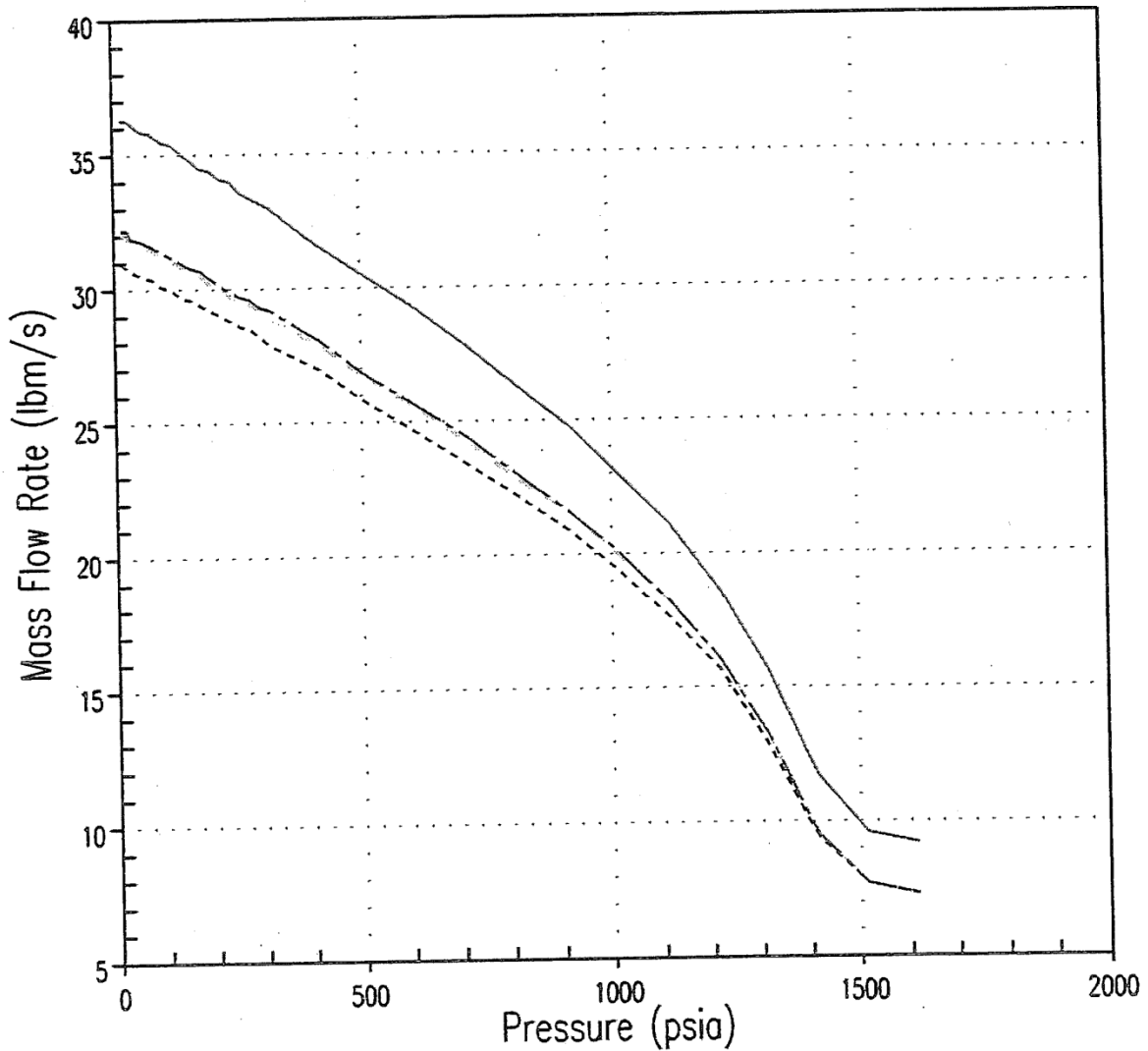
AMERICAN ELECTRIC POWER
 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title: **Pumped Safety Injection Flow Rate- Injection Phase**
 - Faulted Loop CHG Spilling to RCS Pressure -
 Faulted Loop HHSI / RHR Spilling to Containment Pressure

UFSAR Figure: **14.3.2-2**

Sheet 1 of 1

—	L1 (Broken Loop)
·····	L2 (Intact Loop)
- - - -	L3 (Intact Loop)
- · - ·	L4 (Intact Loop)



Revision: **24.0**

Change Description: **UCR-1966, Rev. 0**

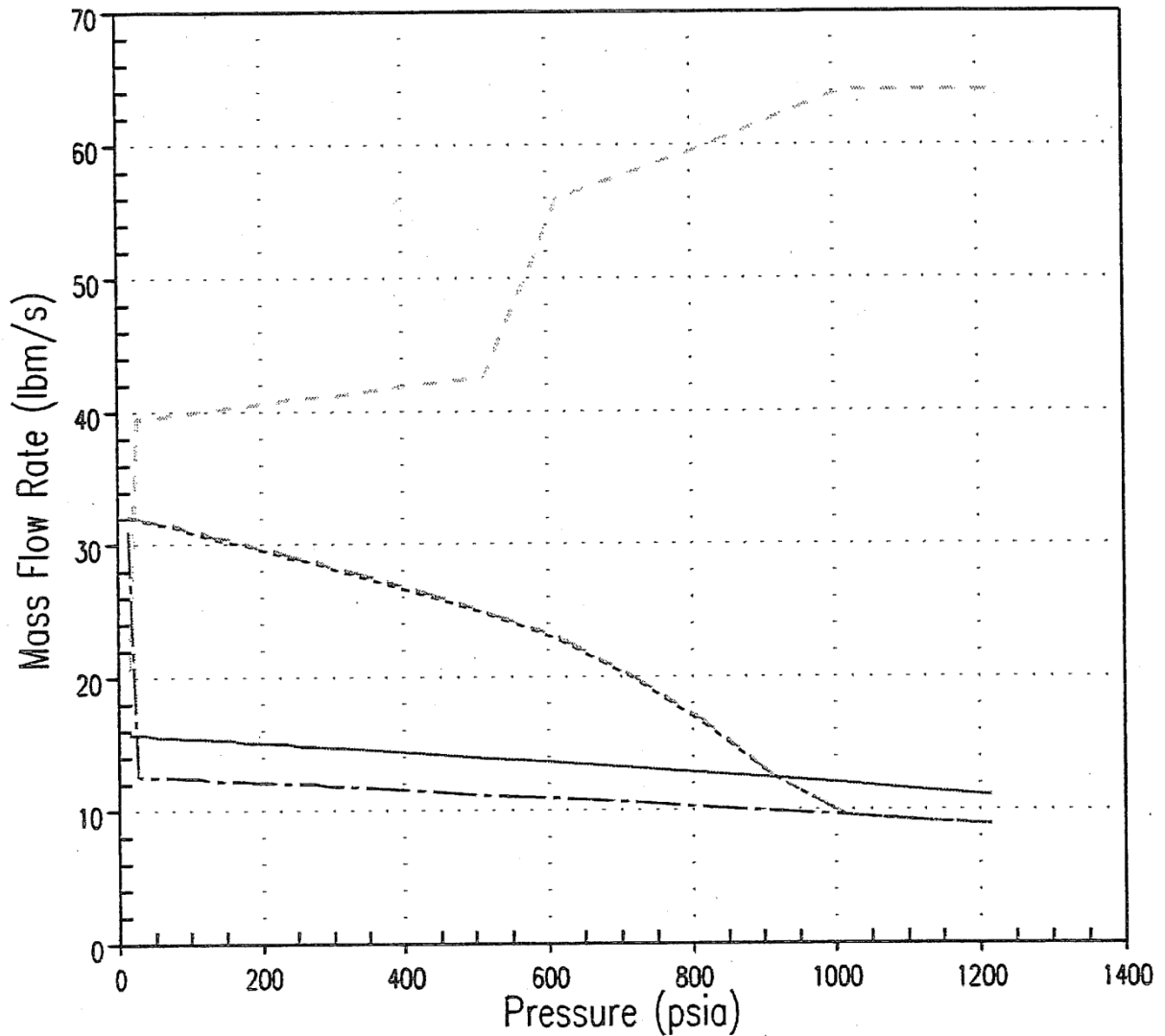
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Pumped Safety Injection Flow Rate
- Recirculation Phase -
Faulted Loop Spilling to Reactor Coolant System Pressure**

UFSAR Figure: **14.3.2-3**

Sheet 1 of 1

————	L1 (Broken Loop - CHG Flow)
-----	L1 (Broken Loop - HHSI/RHR Flow)
-----	L2 (Intact Loop)
-----	L3 (Intact Loop)
-----	L4 (Intact Loop)



Revision: **24.0**

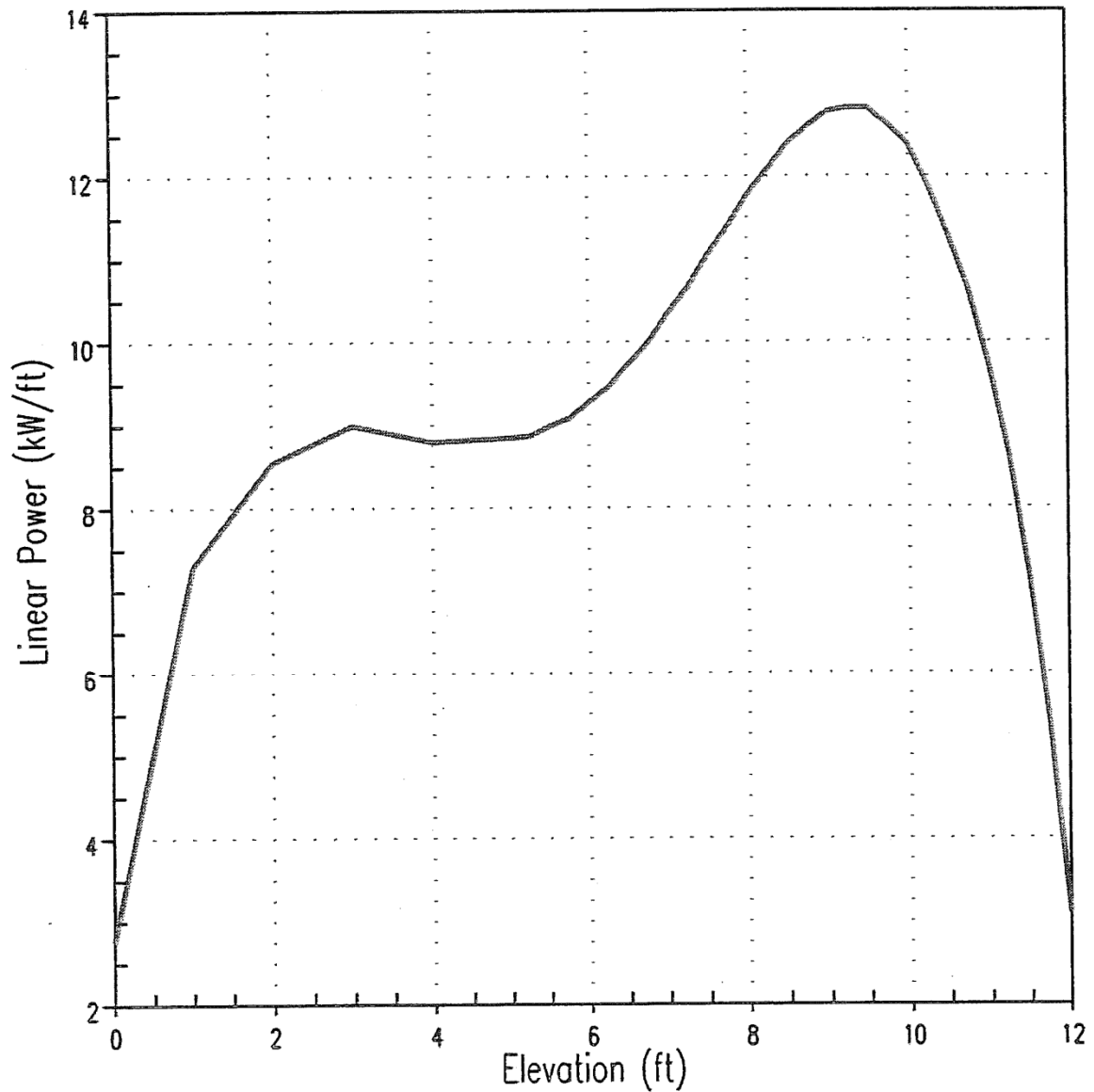
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

**Title: Pumped Safety Injection Flow Rate -
Recirculation Phase - Faulted Loop Spilling to RCS Pressure
Faulted Loop HHSI / RHR Spilling to Containment Pressure**

UFSAR Figure: **14.3.2-4**

Sheet 1 of 1



Revision: **24.0**

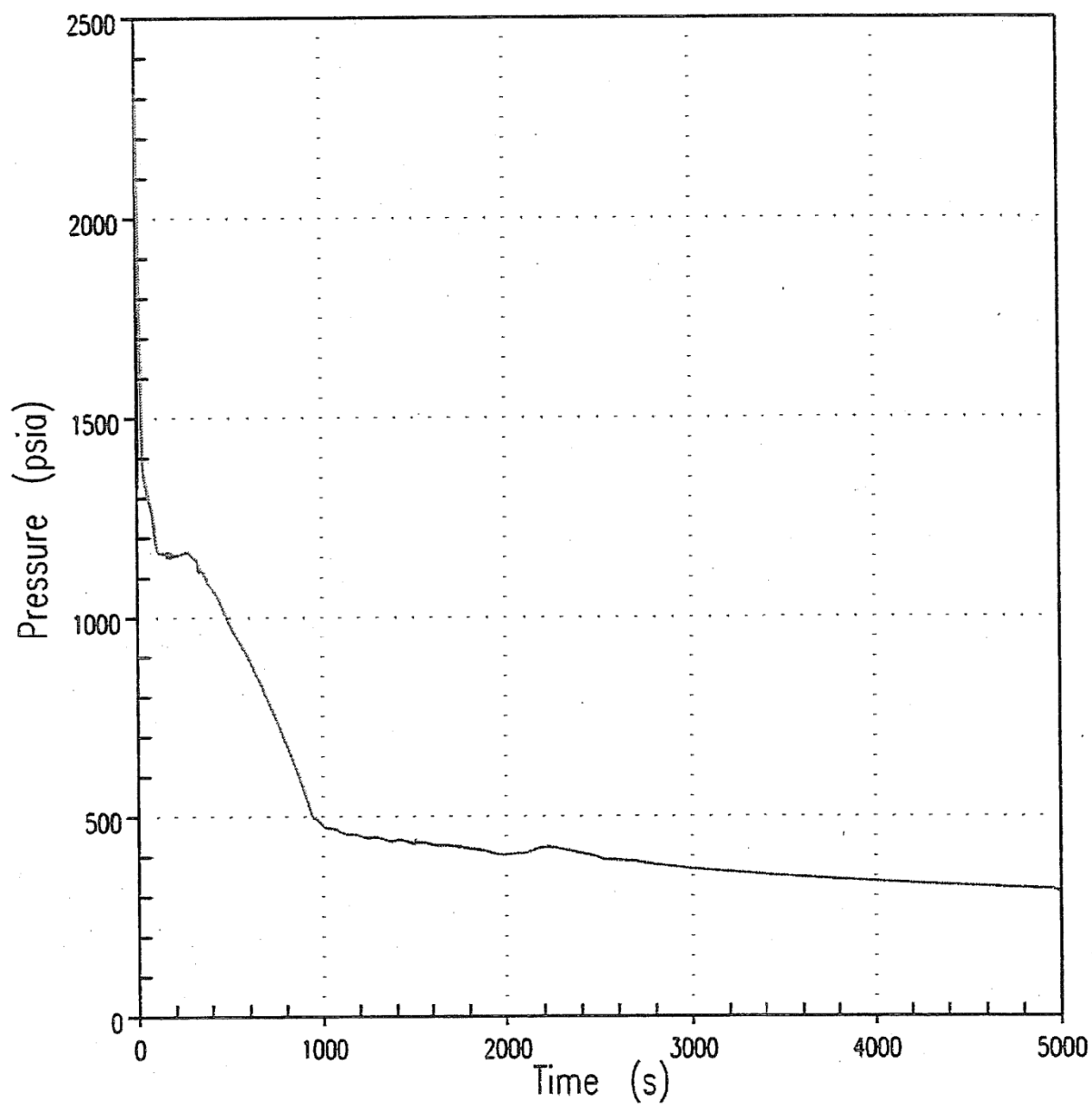
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Hot Rod Axial Power Shape**

UFSAR Figure: **14.3.2-5**

Sheet 1 of 1



Revision: **24.0**

Change Description: **UCR-1966, Rev. 0**

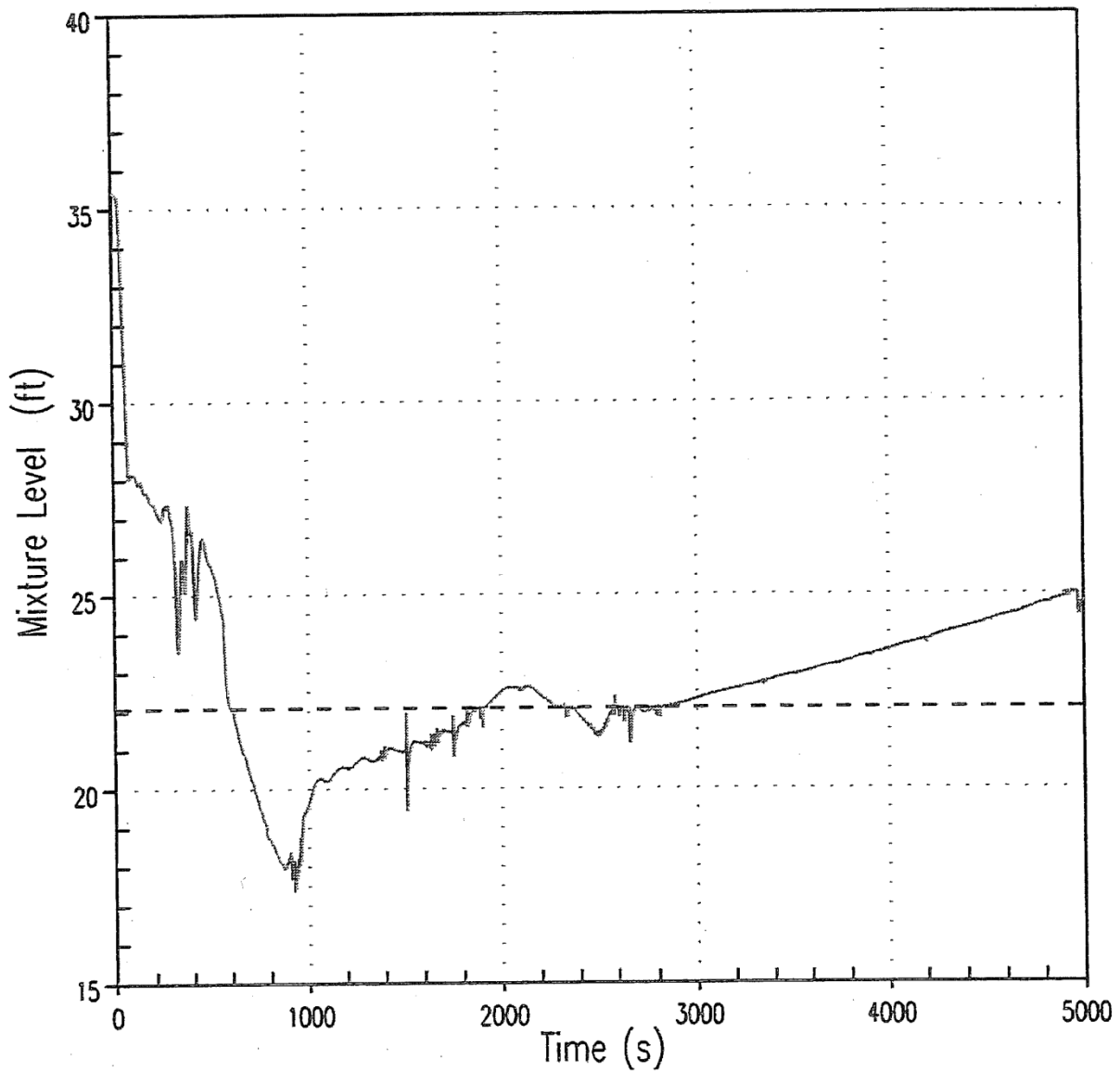
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Reactor Coolant System Pressure
4-inch**

UFSAR Figure: **14.3.2-6**

Sheet 1 of 1

— Core Mixture Level
 - - - Top of Core = 22.0778 ft



Revision: **24.0**

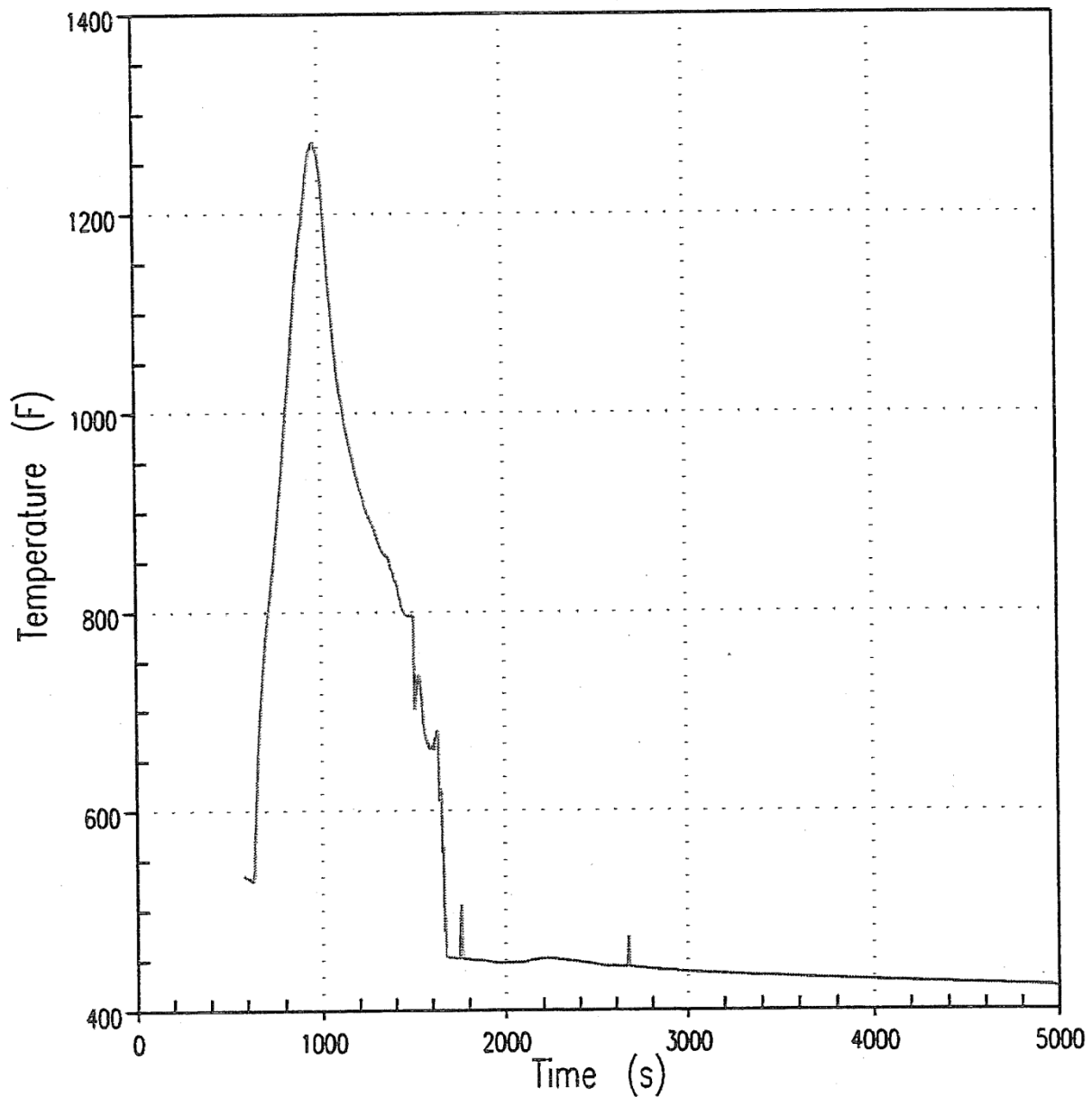
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AMERICAN ELECTRIC POWER
 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title: **Core Mixture Level**
4-inch

UFSAR Figure: **14.3.2-7**

Sheet 1 of 1



Revision: **24.0**

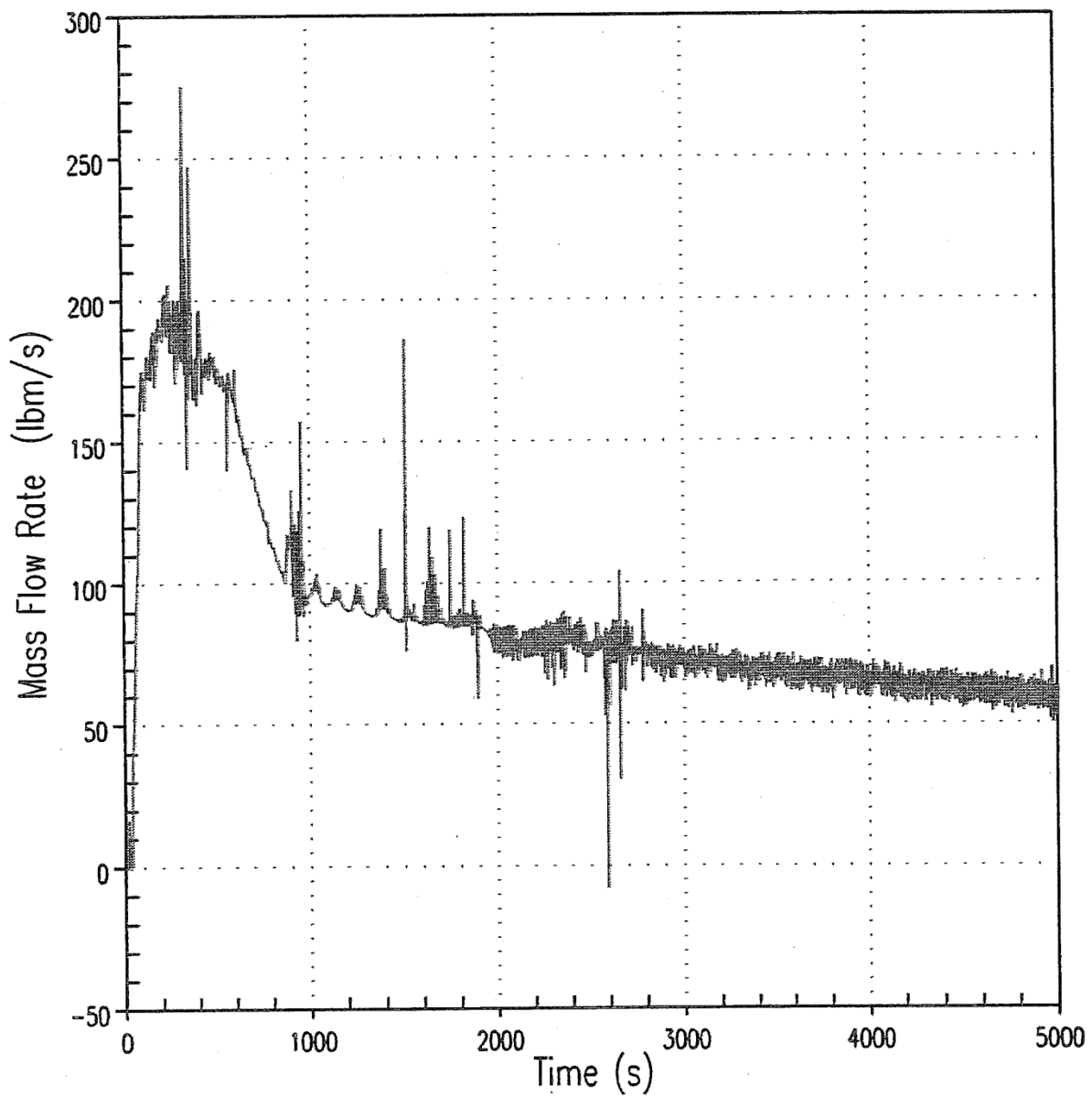
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Clad Temperature at Peak Clad
Temperature Elevation (11.25 ft) 4-inch**

UFSAR Figure: **14.3.2-8**

Sheet 1 of 1



Revision: **24.0**

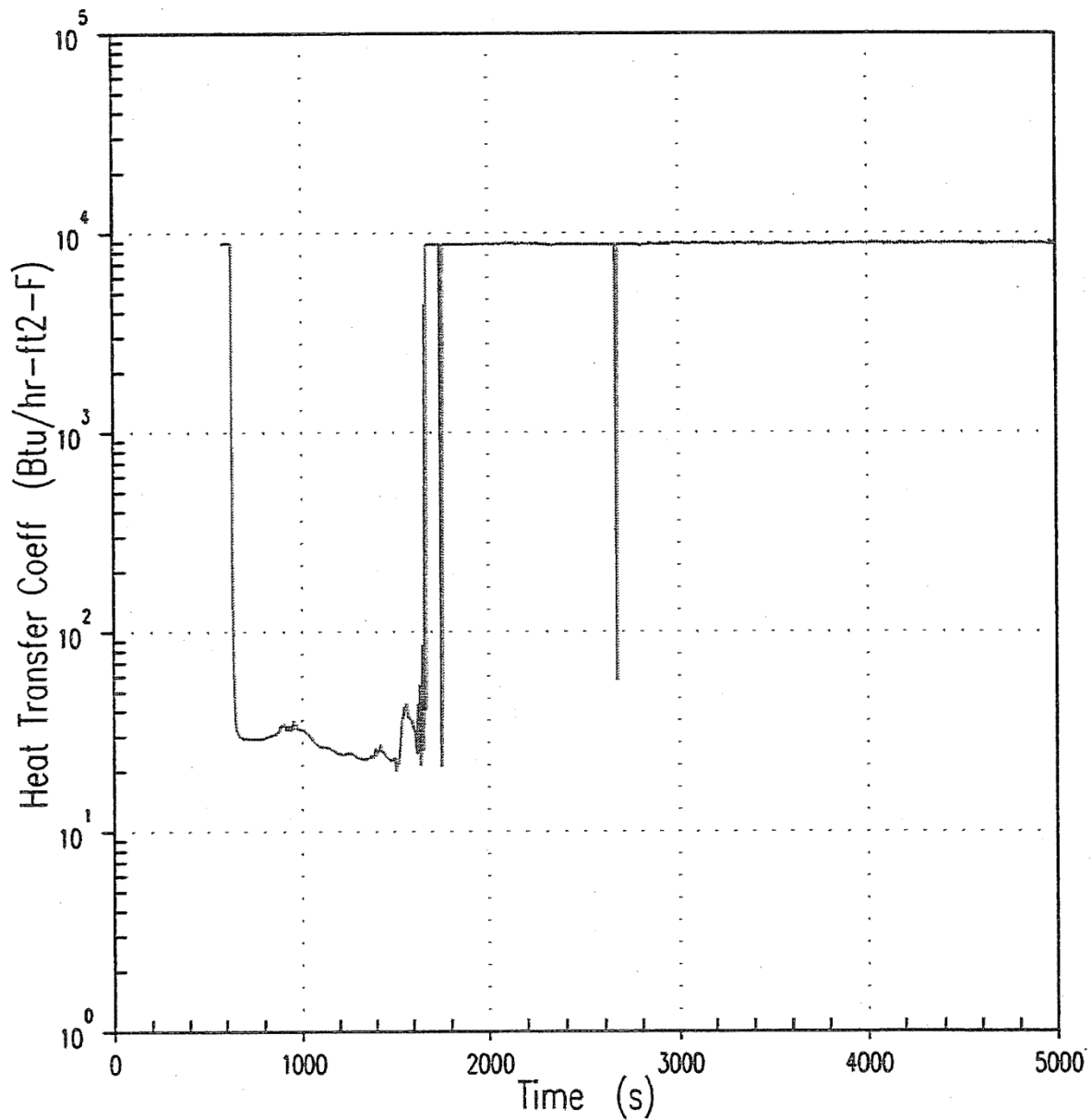
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Vapor Mass Flow Rate
Out of Top of Core - 4-inch**

UFSAR Figure: **14.3.2-9**

Sheet 1 of 1



Revision: **24.0**

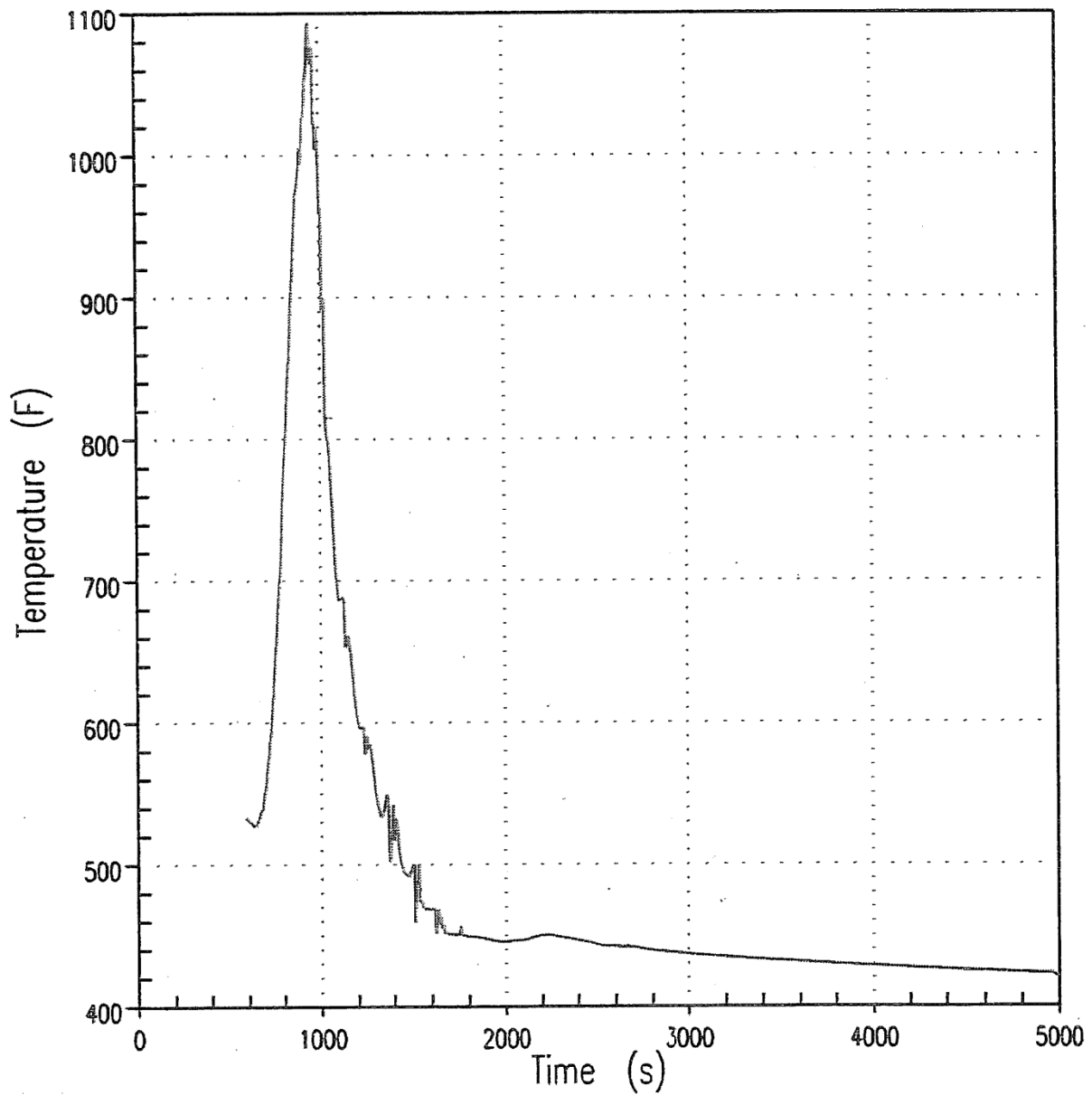
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Clad Surface Heat Transfer Coefficient
at Peak Clad Temperature Elevation - 4-inch**

UFSAR Figure: **14.3.2-10**

Sheet 1 of 1



Revision: **24.0**

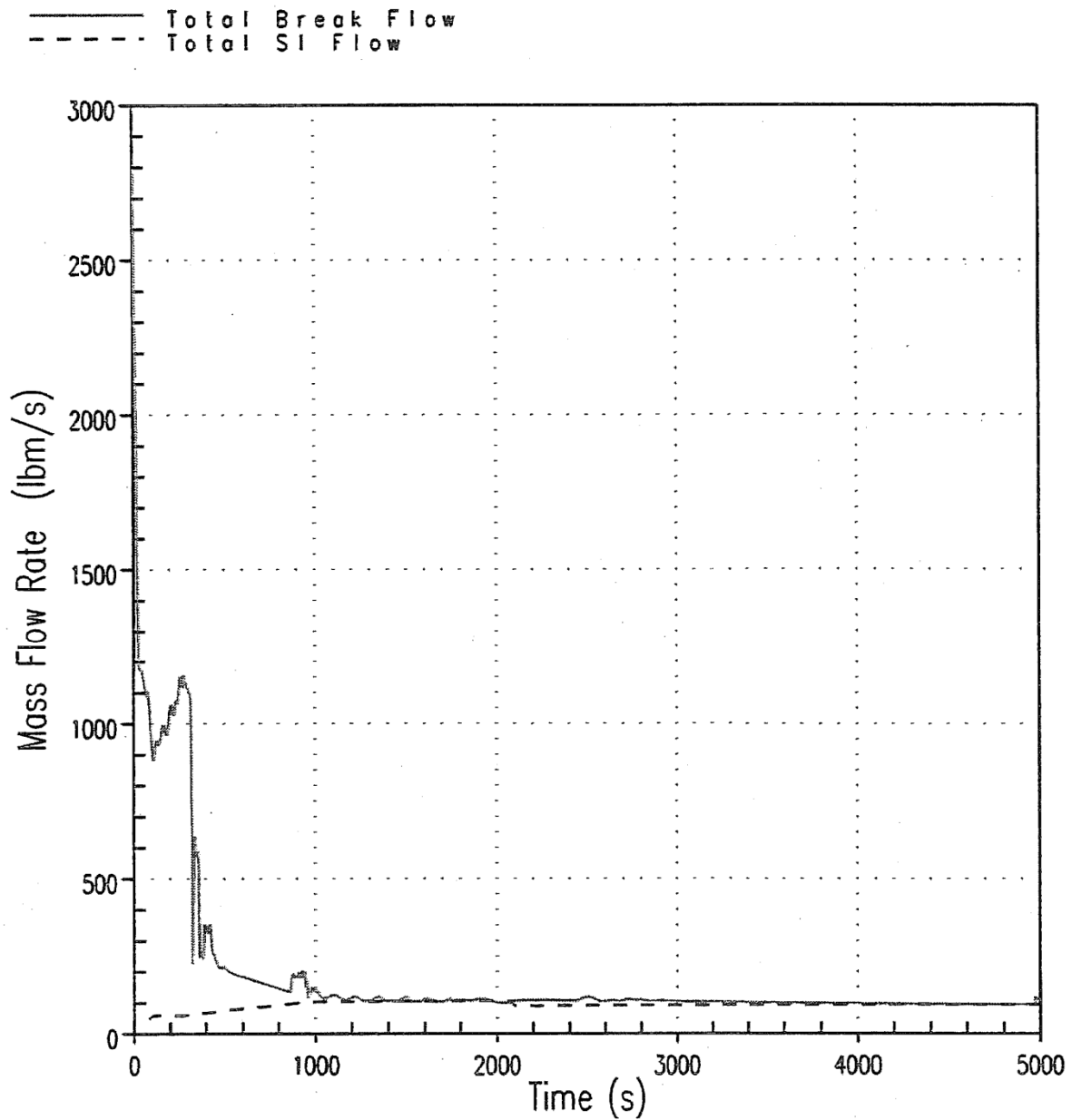
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Fluid Temperature
at Peak Clad Temperature Elevation - 4-inch**

UFSAR Figure: **14.3.2-11**

Sheet 1 of 1



Revision: **24.0**

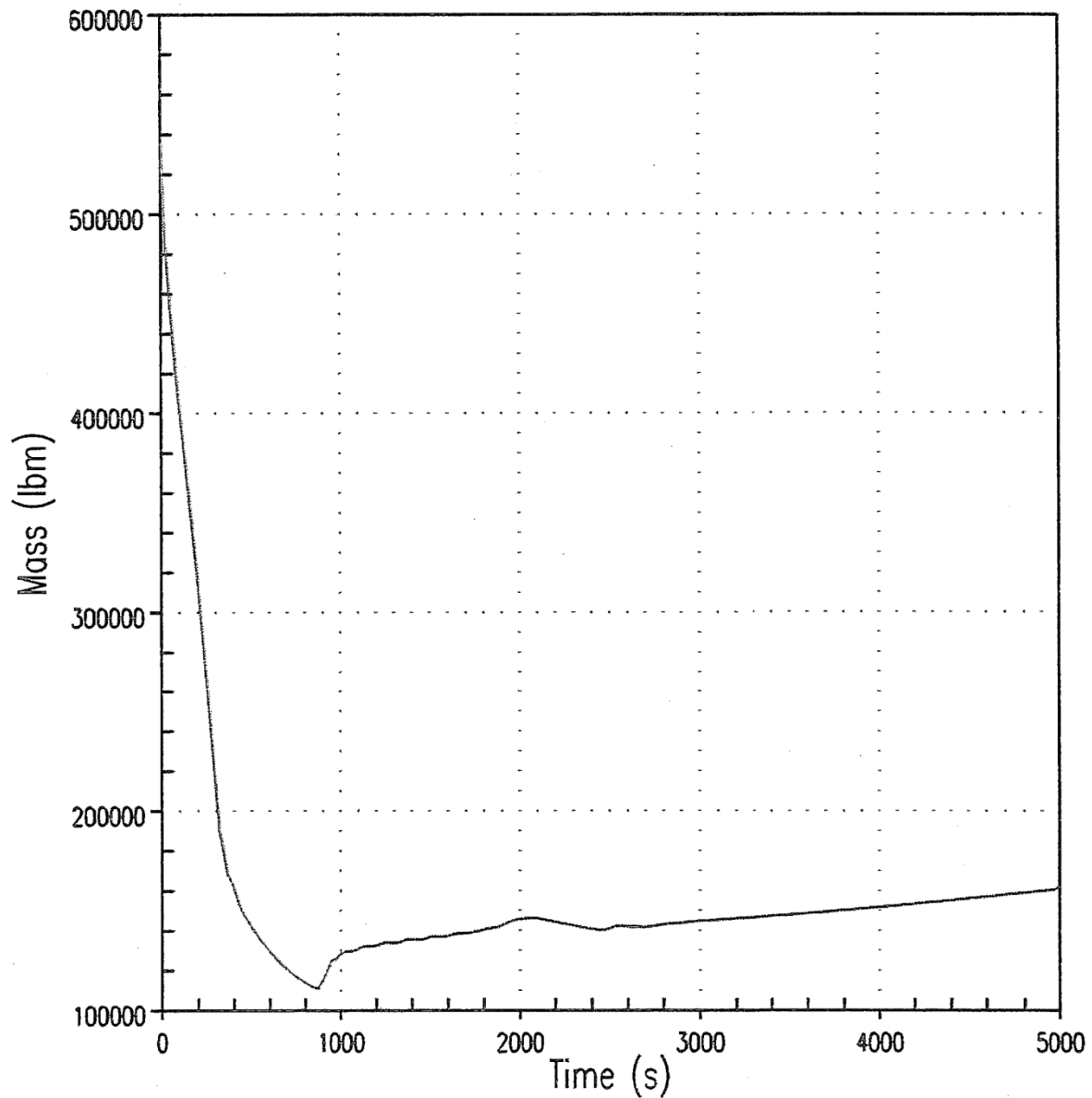
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Total Break Flow and Safety Injection Flow
4-inch**

UFSAR Figure: **14.3.2-12**

Sheet 1 of 1



Revision: **24.0**

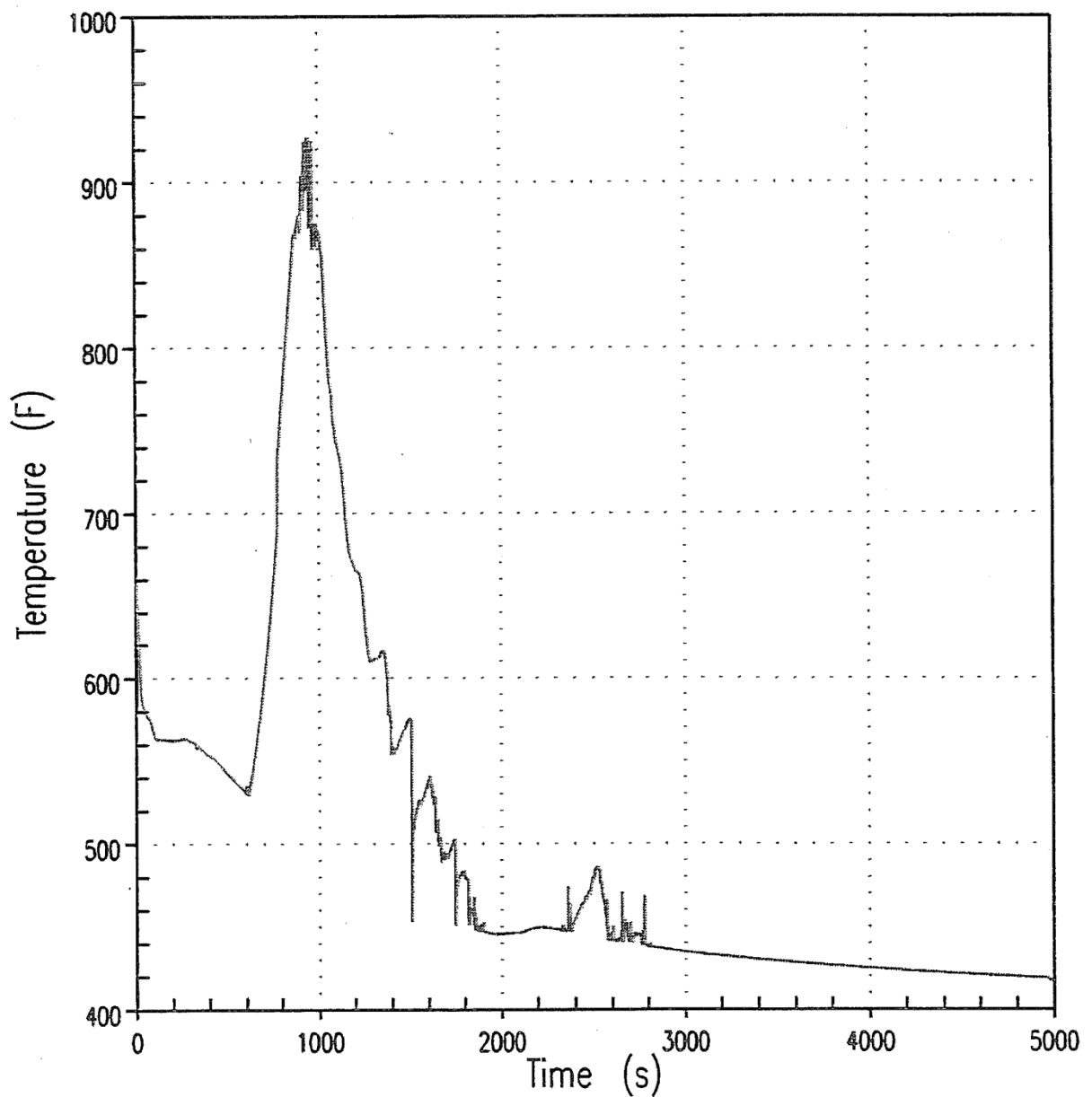
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Total Reactor Coolant System Mass
4-inch**

UFSAR Figure: **14.3.2-13**

Sheet 1 of 1



Revision: **24.0**

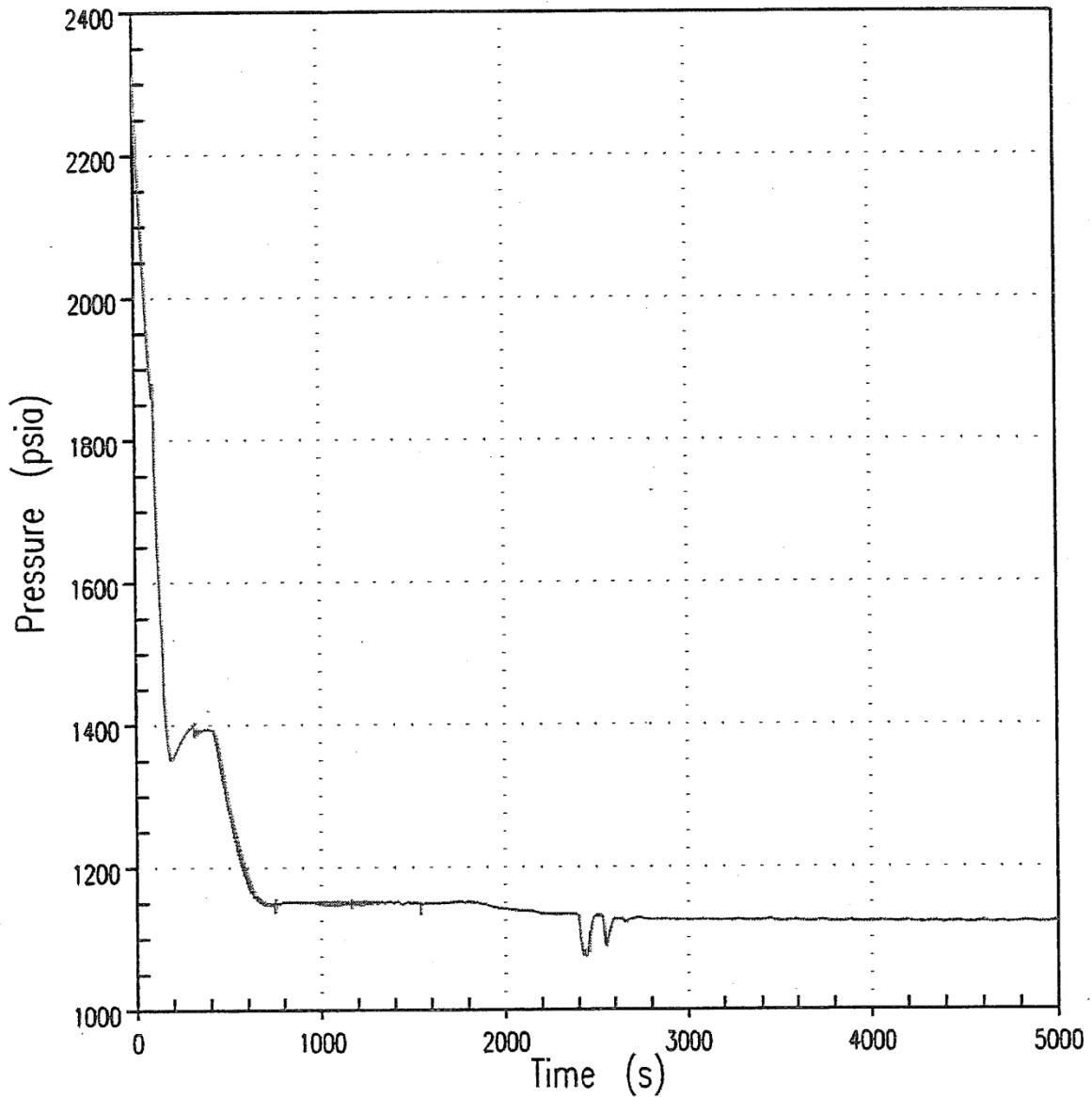
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Top of Core Vapor Temperature
4-inch**

UFSAR Figure: **14.3.2-14**

Sheet 1 of 1



Revision: **24.0**

Change Description: **UCR-1966, Rev. 0**

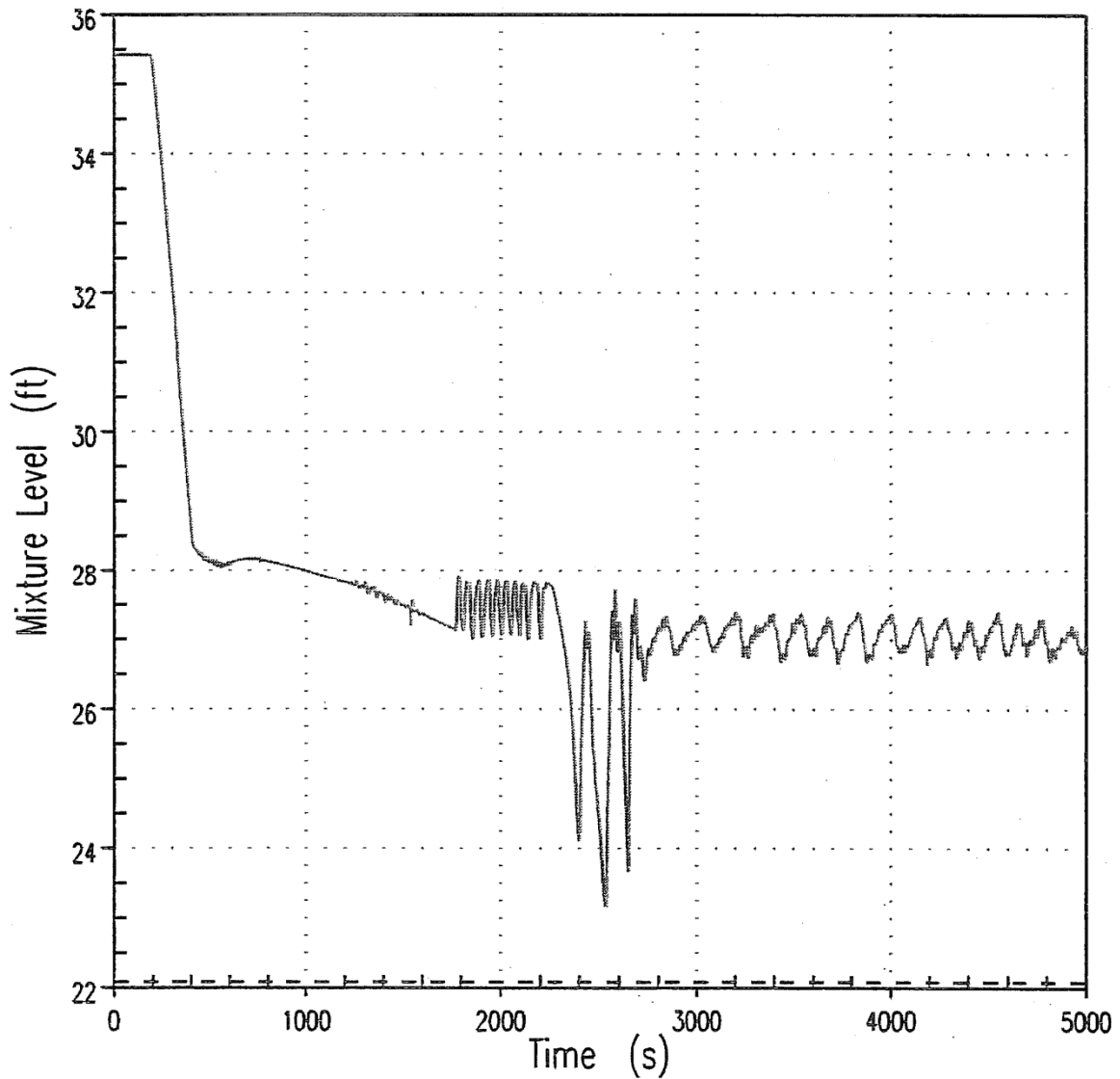
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Reactor Coolant System Pressure
1.5-inch**

UFSAR Figure: **14.3.2-15**

Sheet 1 of 1

— Core Mixture Level
 - - - Top of Core = 22.0778 ft



Revision: **24.0**

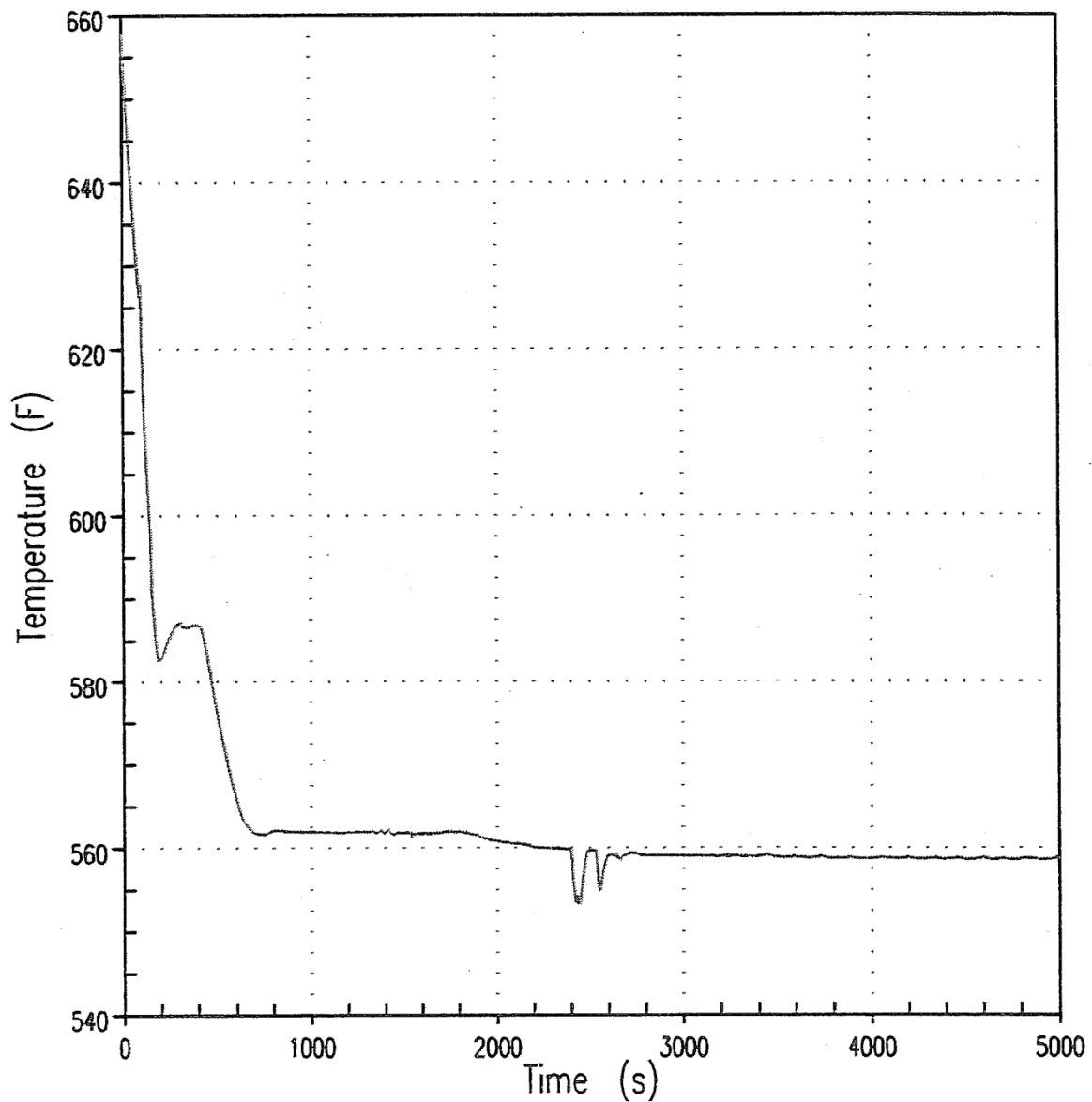
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AMERICAN ELECTRIC POWER
 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title: **Core Mixture Level**
1.5-inch

UFSAR Figure: **14.3.2-16**

Sheet 1 of 1



Revision: **24.0**

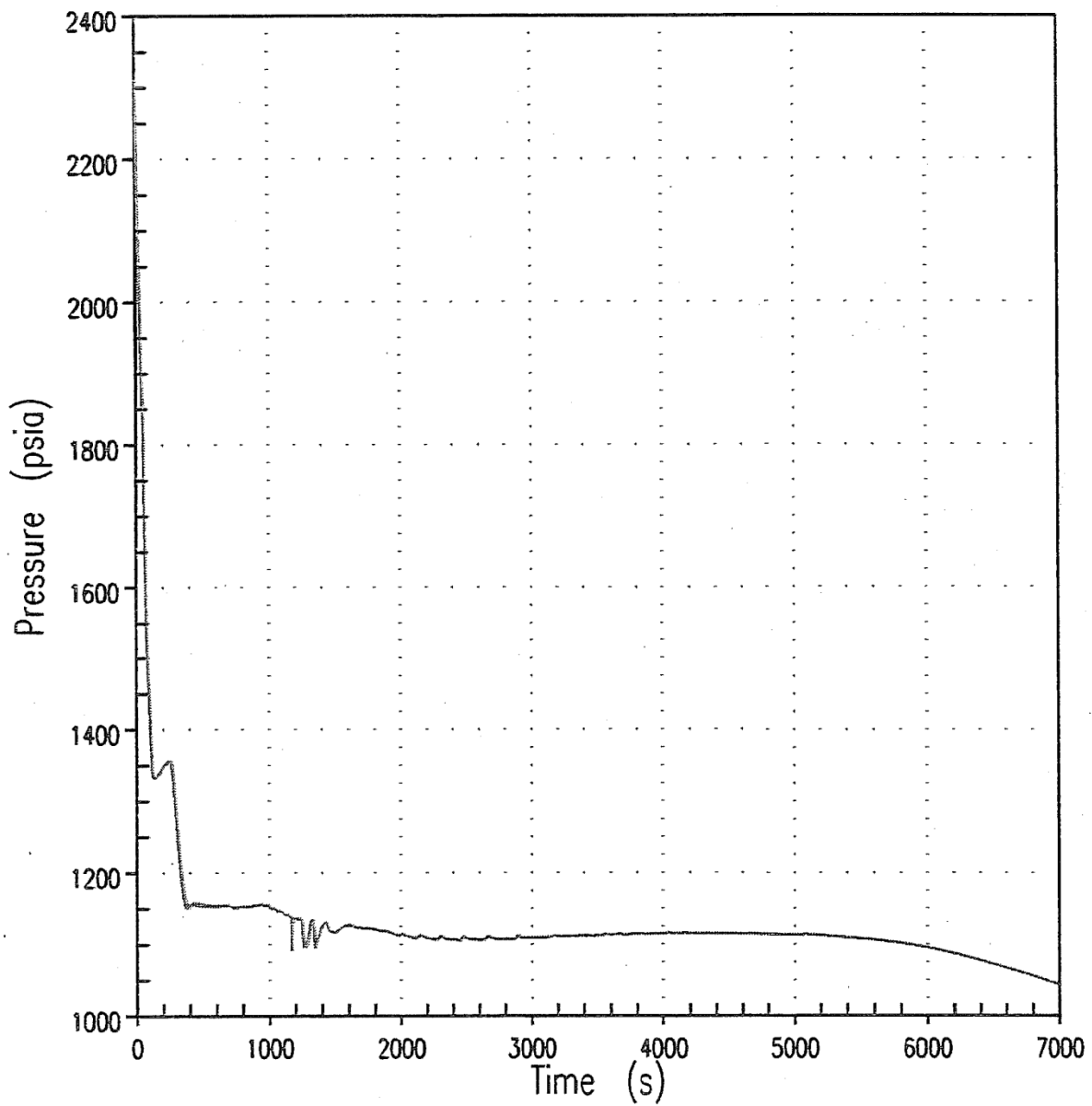
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Top of Core Vapor Temperature
1.5-inch**

UFSAR Figure: **14.3.2-17**

Sheet 1 of 1



Revision: **24.0**

Change Description: **UCR-1966, Rev. 0**

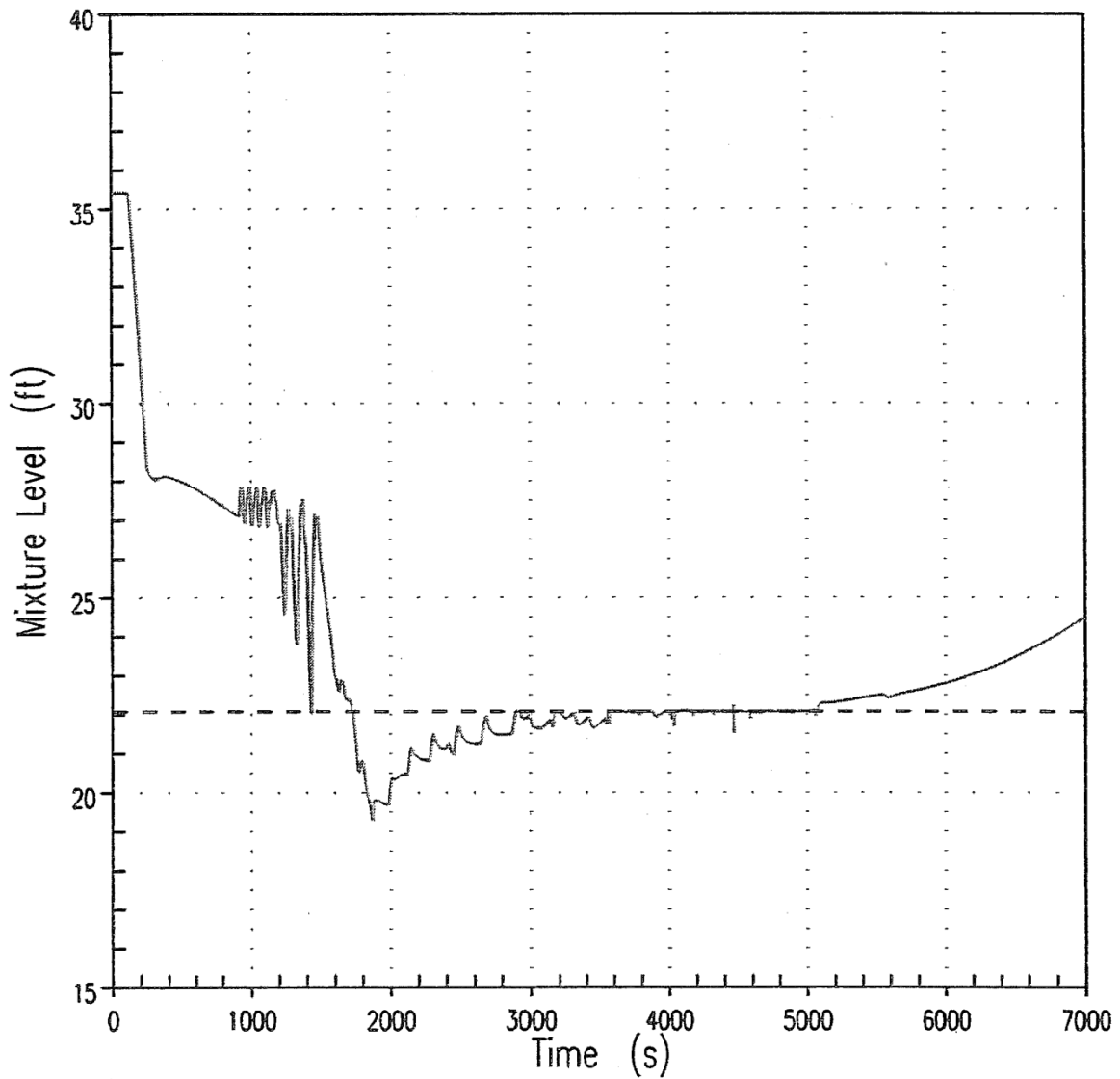
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Reactor Coolant System Pressure
2-inch**

UFSAR Figure: **14.3.2-18**

Sheet 1 of 1

— Core Mixture Level
 - - - Top of Core = 22.0778 ft



Revision: **24.0**

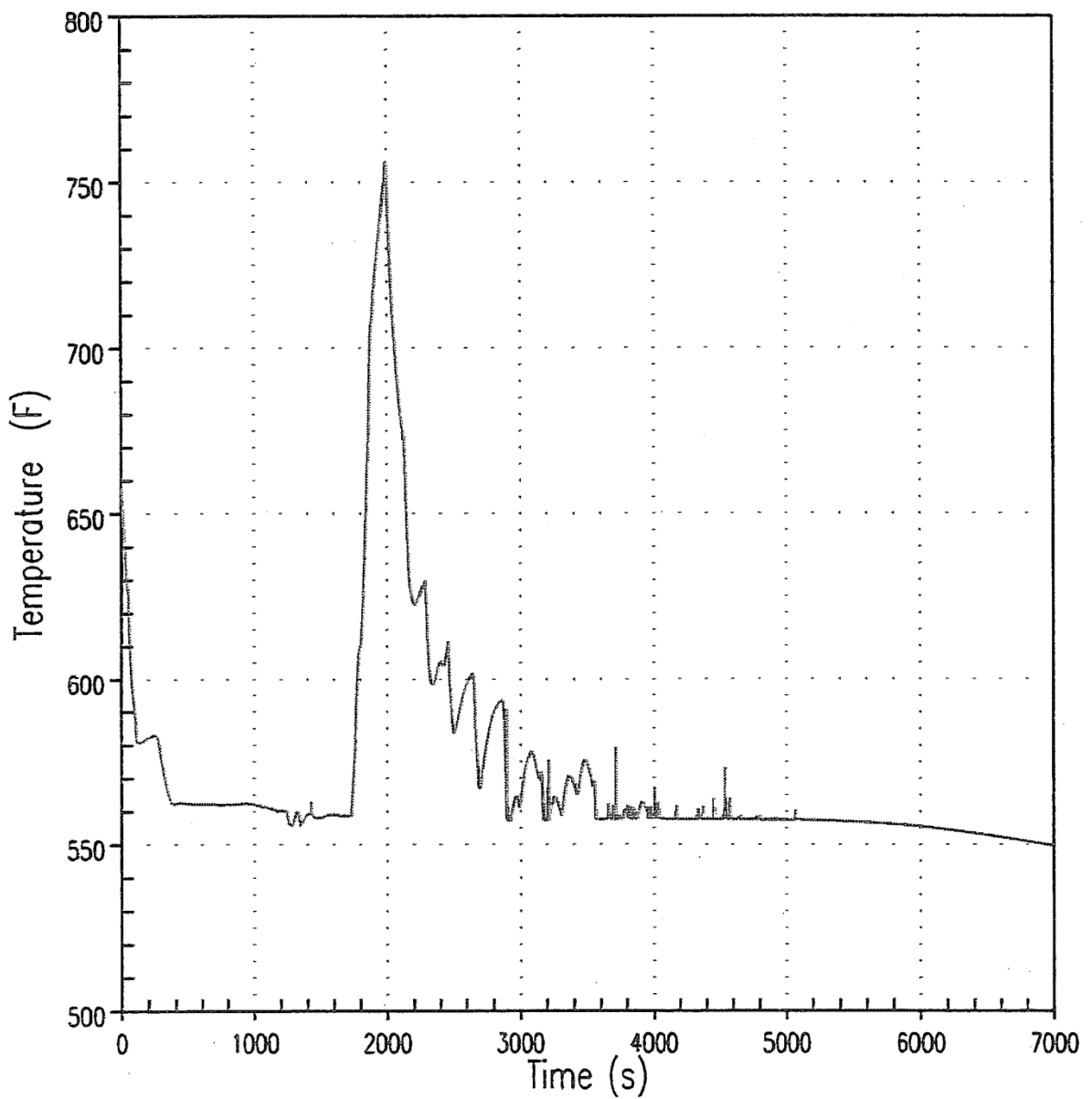
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AMERICAN ELECTRIC POWER
 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title: **Core Mixture Level
 2-inch**

UFSAR Figure: **14.3.2-19**

Sheet 1 of 1



Revision: **24.0**

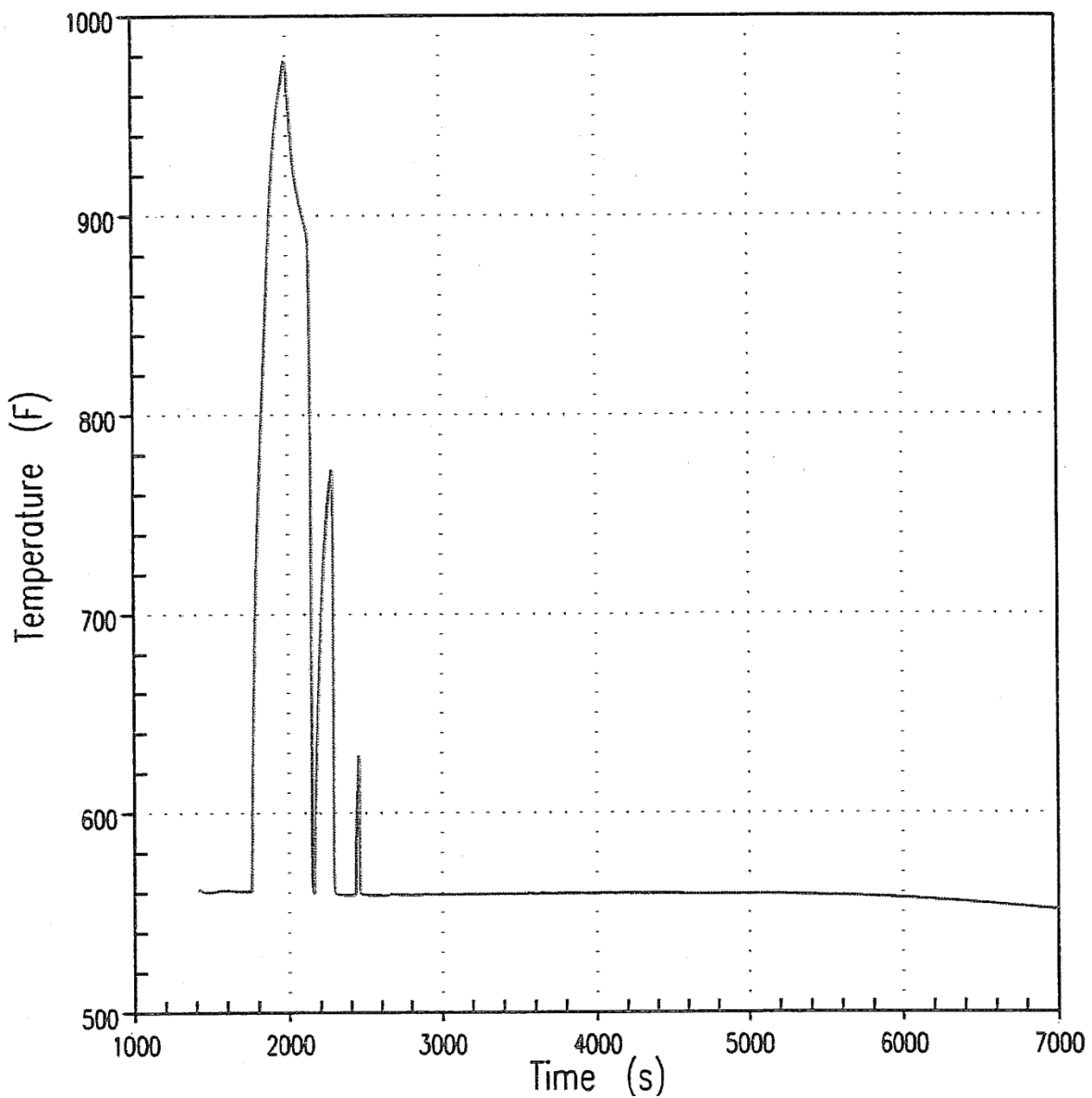
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Top of Core Vapor Temperature
2-inch**

UFSAR Figure: **14.3.2-20**

Sheet 1 of 1



Revision: **24.0**

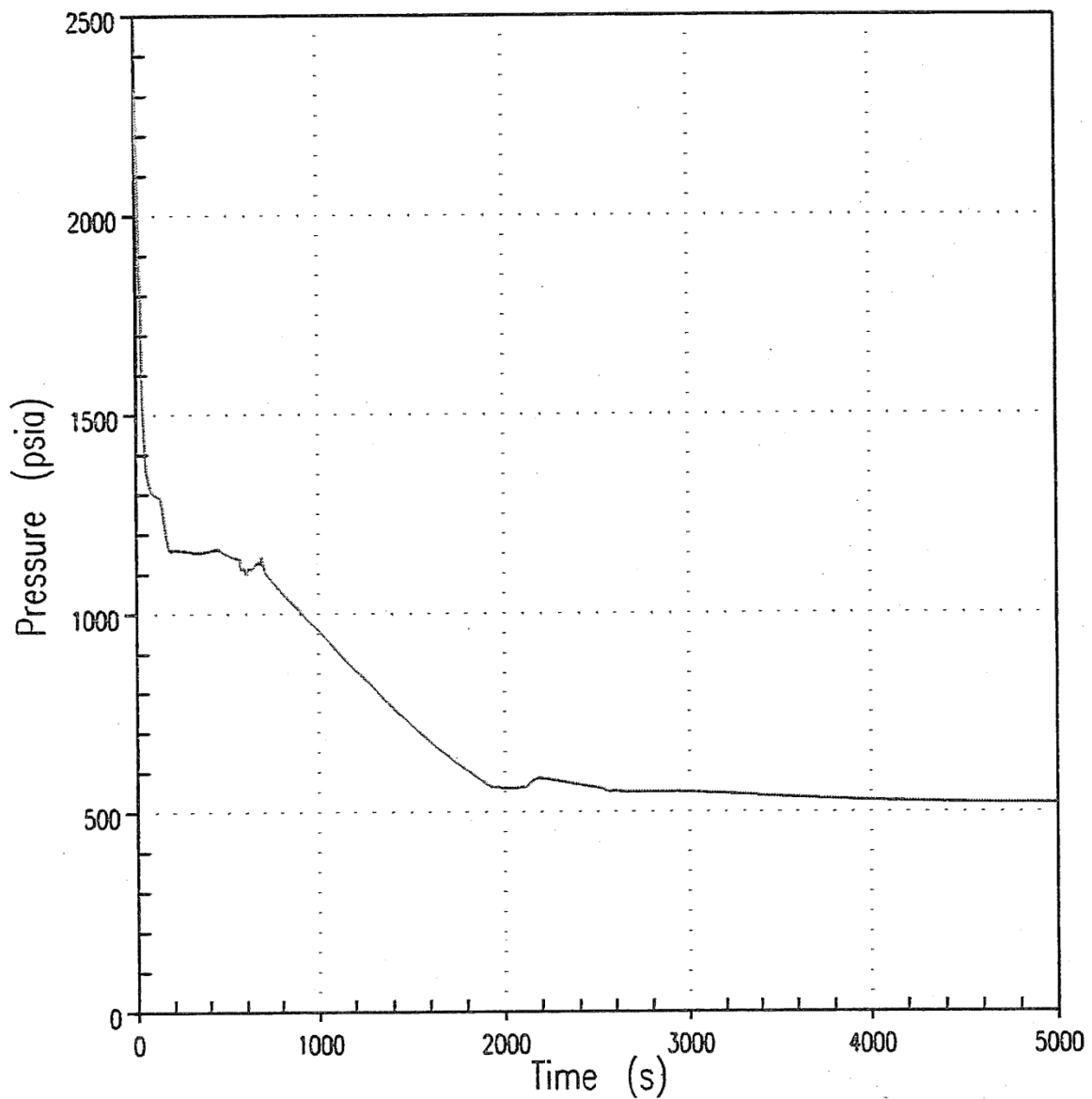
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Clad Temperature at Peak Clad
Temperature Elevation (11.00 ft) - 2-inch**

UFSAR Figure: **14.3.2-21**

Sheet 1 of 1



Revision: **24.0**

Change Description: **UCR-1966, Rev. 0**

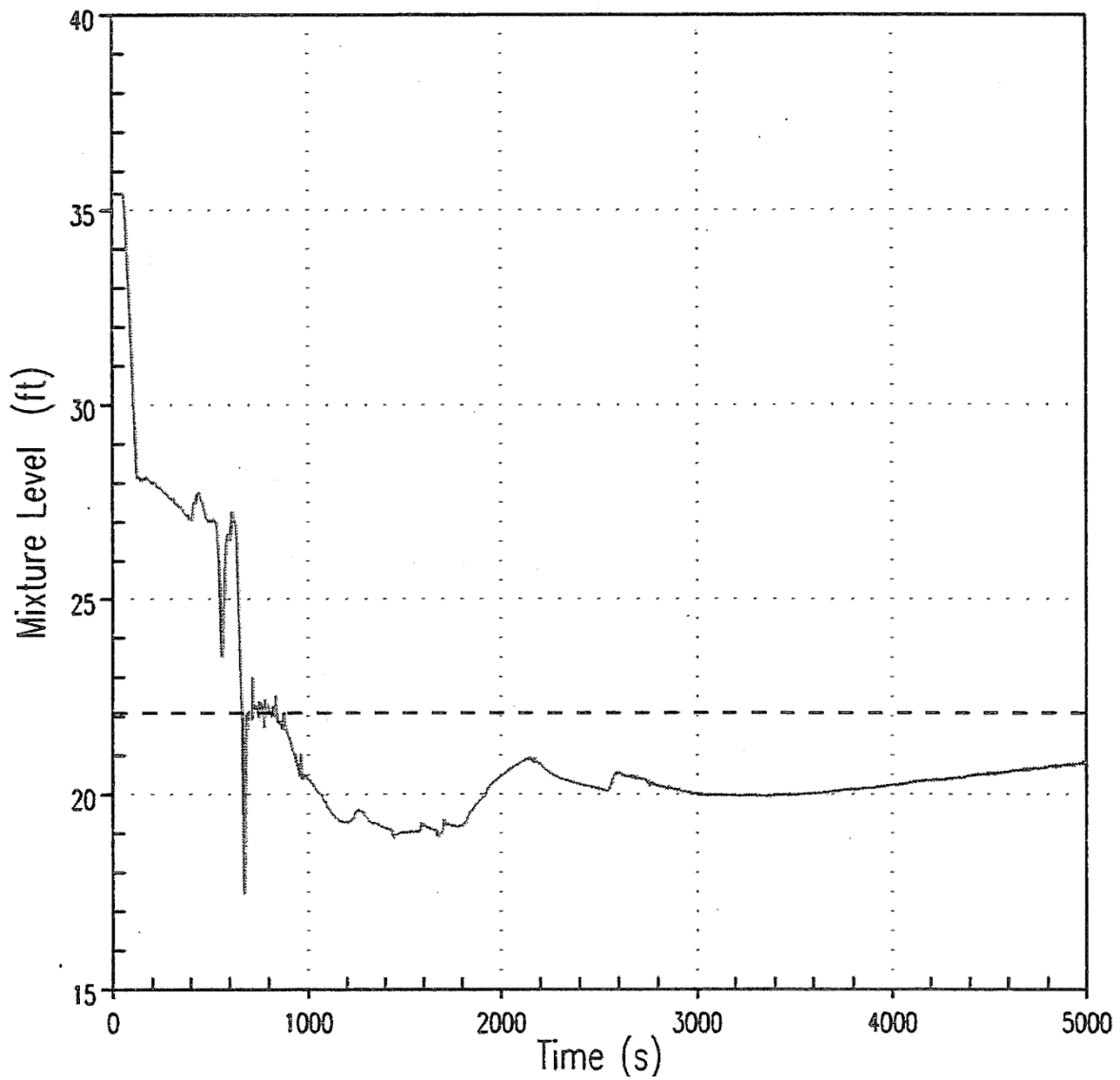
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Reactor Coolant System Pressure
3-inch**

UFSAR Figure: **14.3.2-22**

Sheet 1 of 1

— Core Mixture Level
 - - - Top of Core = 22.0778 ft



Revision: **24.0**

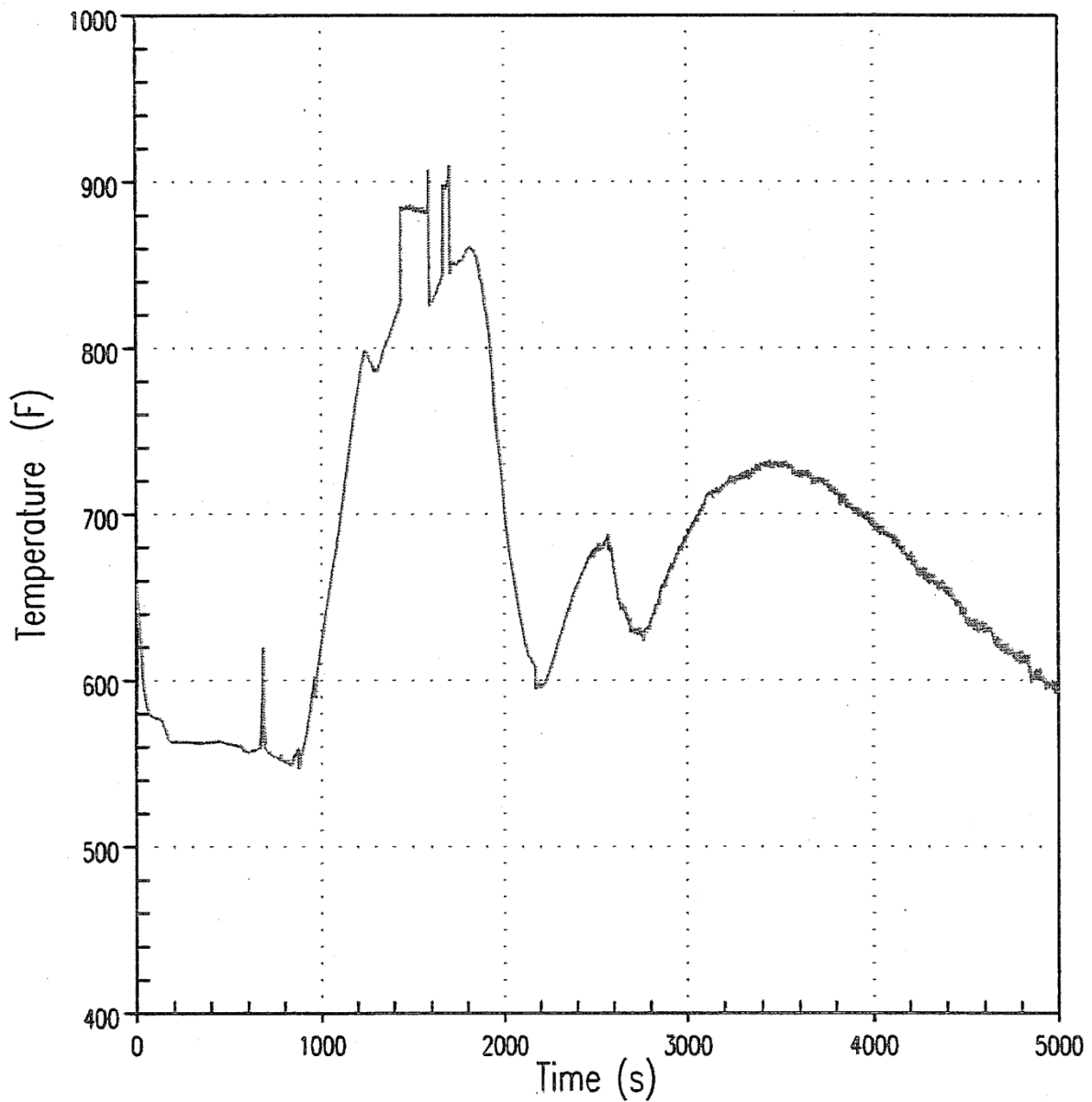
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AMERICAN ELECTRIC POWER
 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title: **Core Mixture Level
 3-inch**

UFSAR Figure: **14.3.2-23**

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Revision: **24.0**

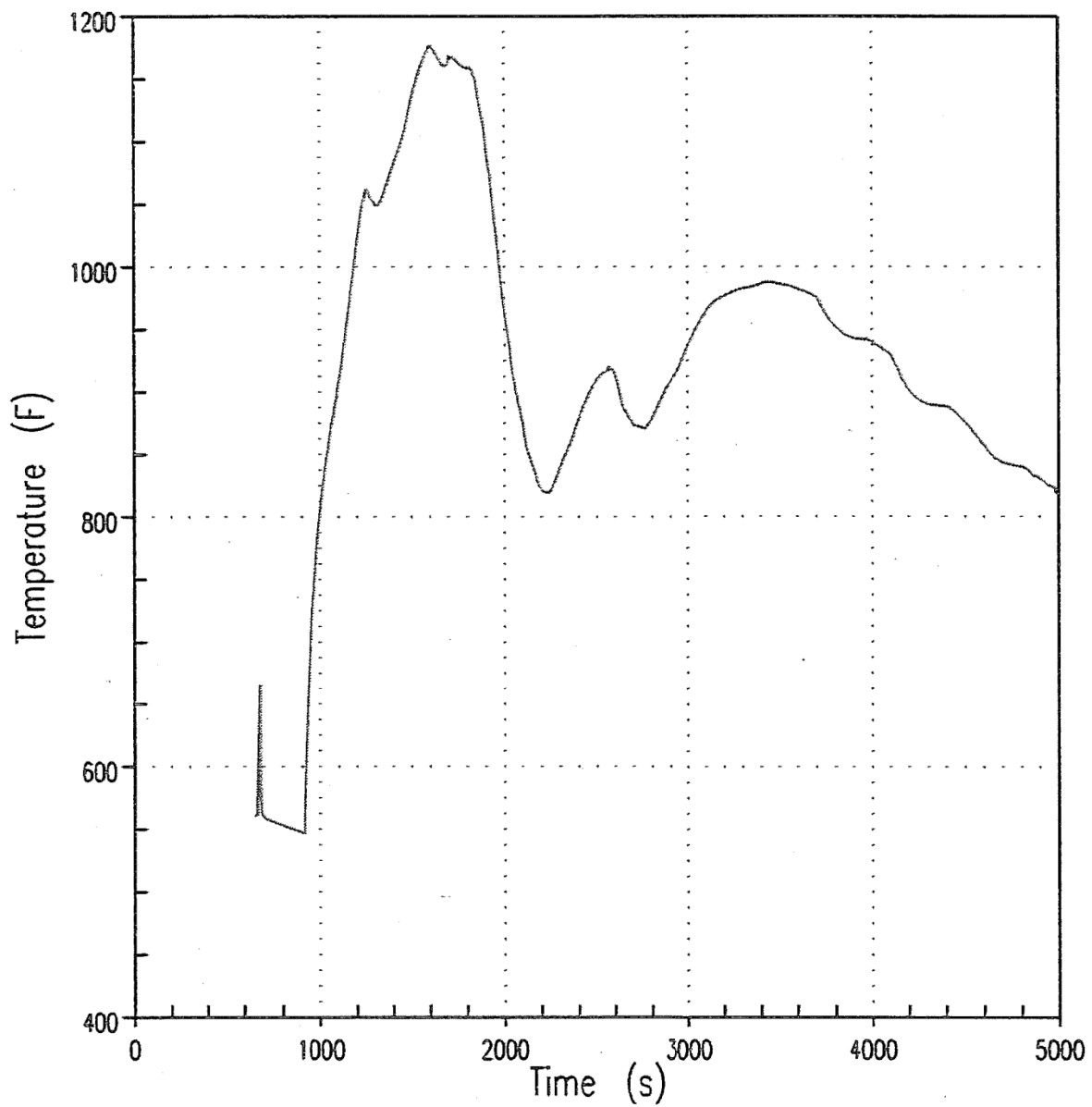
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Top of Core Vapor Temperature
3-inch**

UFSAR Figure: **14.3.2-24**

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Revision: **24.0**

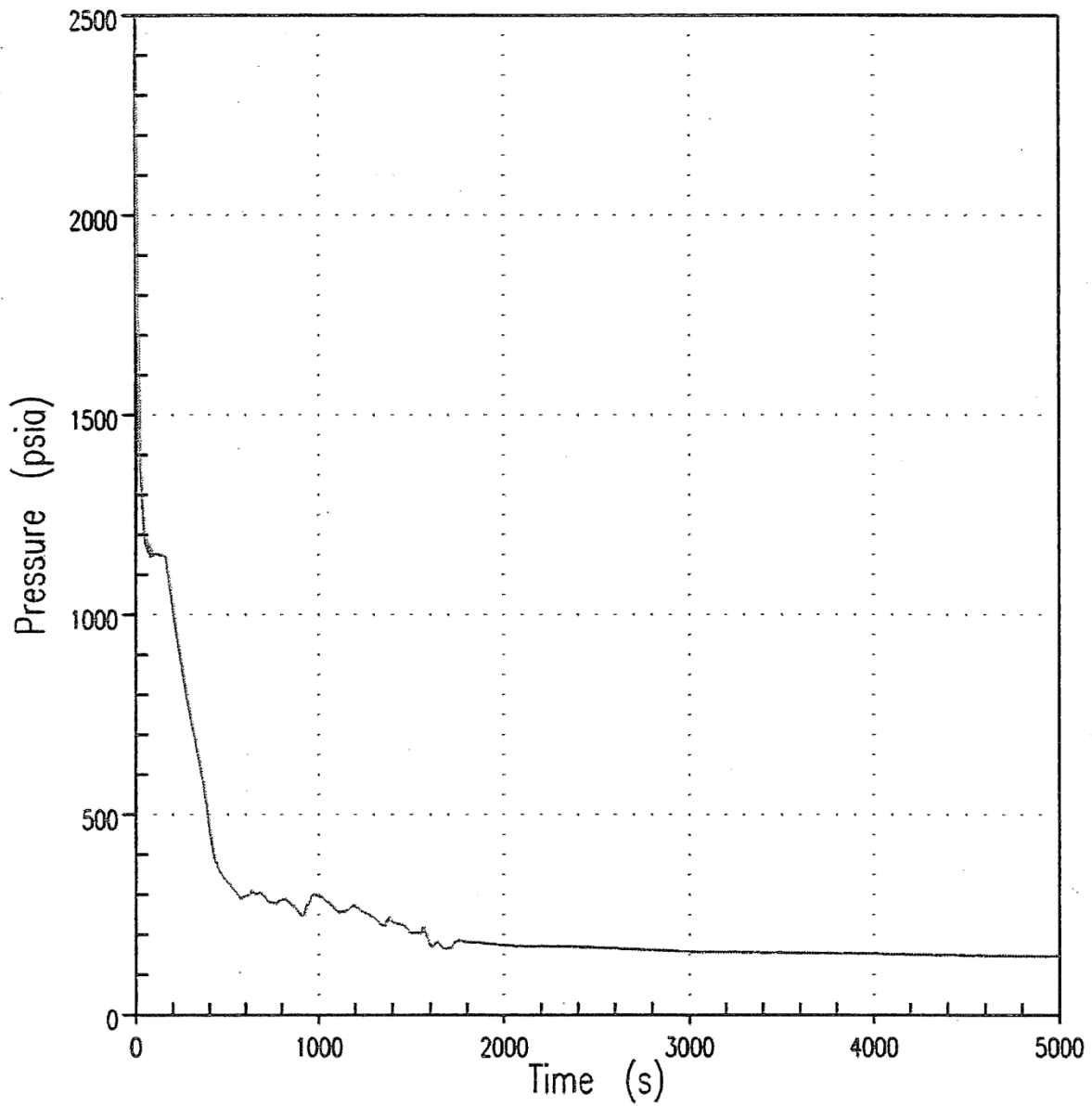
Change Description: **UCR-1966, Rev. 0**

**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Clad Temperature at Peak Clad
Temperature Elevation (11.25 ft) - 3-inch**

UFSAR Figure: **14.3.2-25**

Sheet 1 of 1



Revision: **24.0**

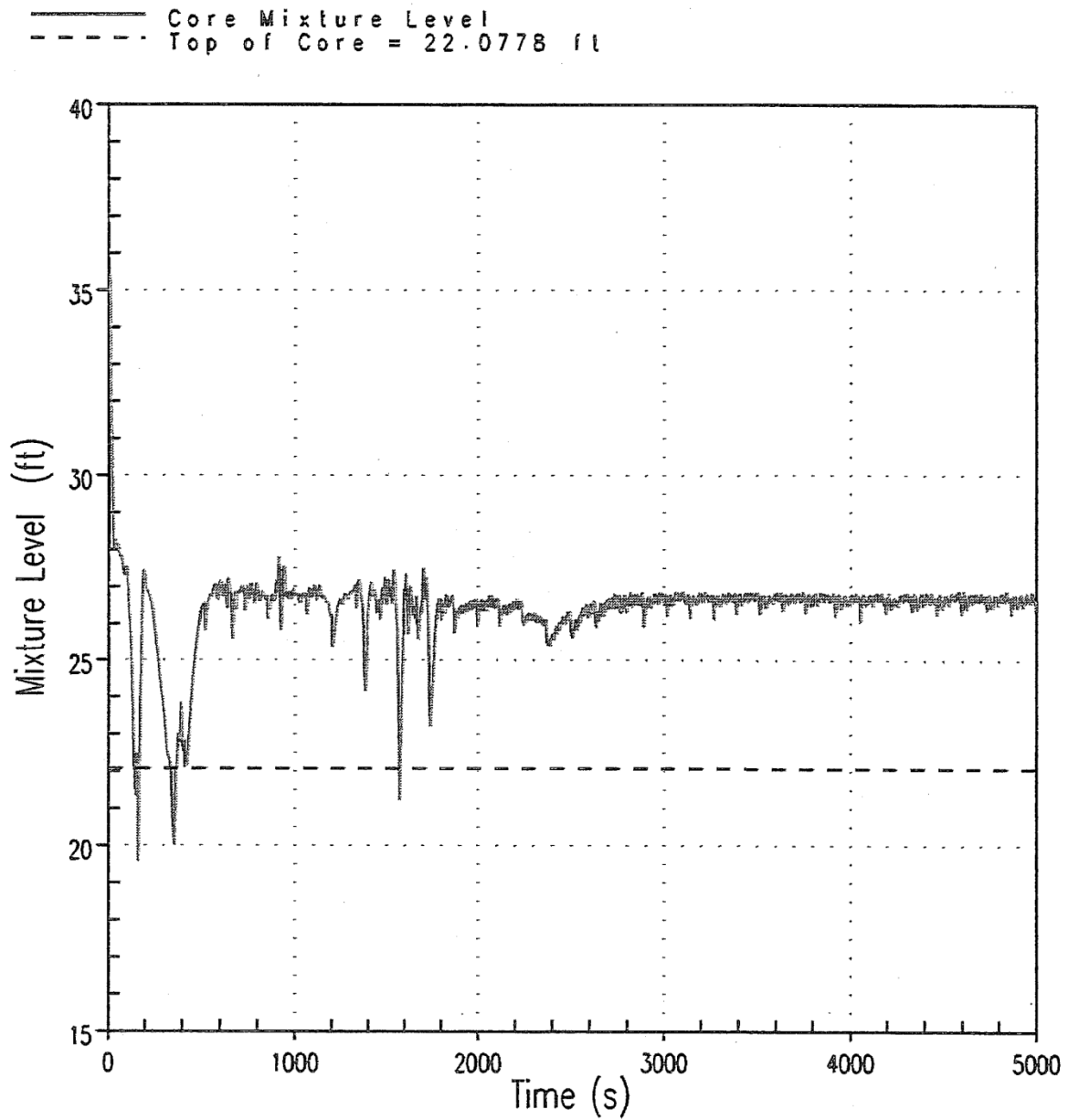
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Reactor Coolant System Pressure
6-inch**

UFSAR Figure: **14.3.2-26**

Sheet 1 of 1



Revision: **24.0**

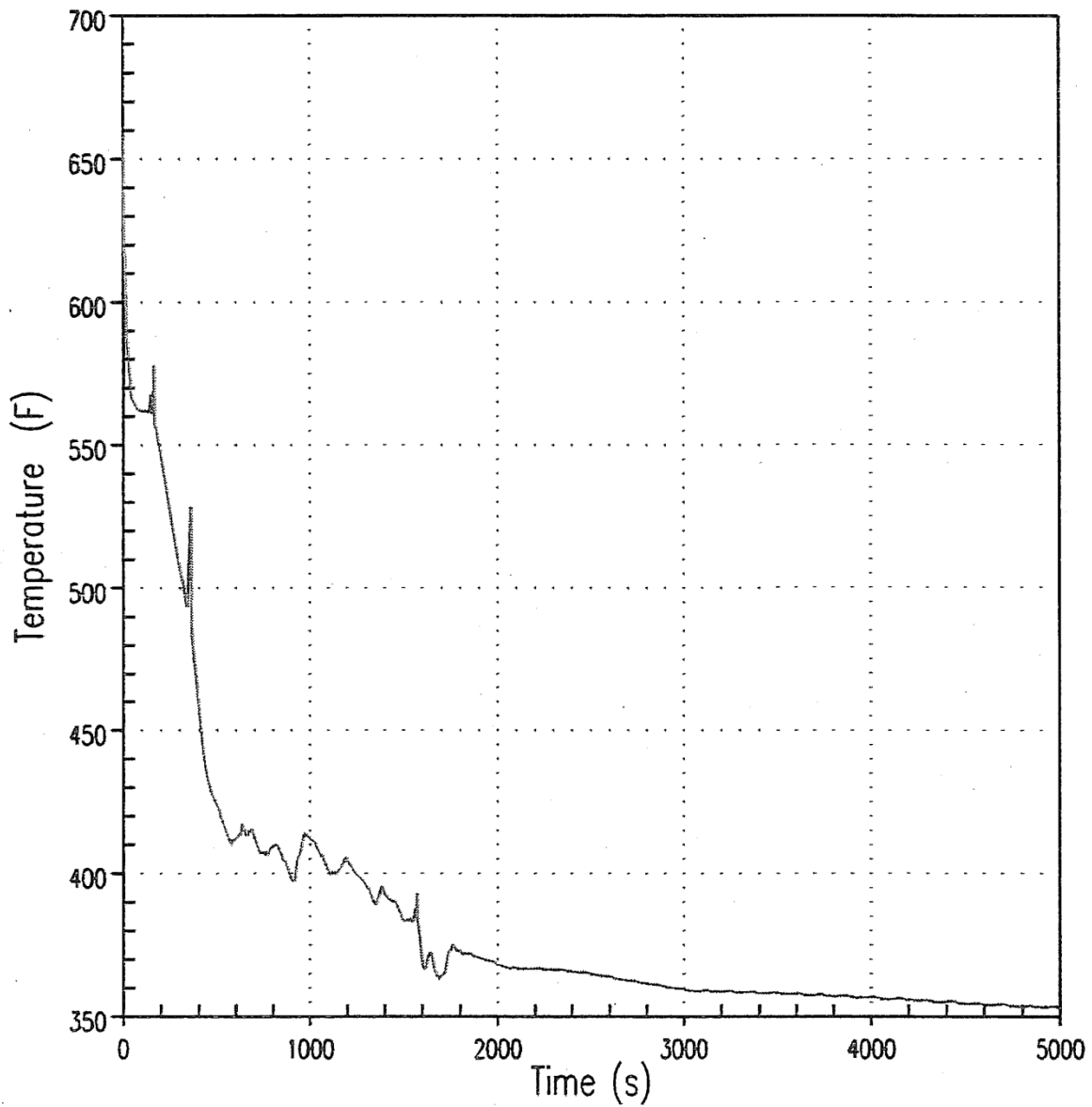
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AMERICAN ELECTRIC POWER
 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title: **Core Mixture Level**
6-inch

UFSAR Figure: **14.3.2-27**

Sheet 1 of 1



Revision: **24.0**

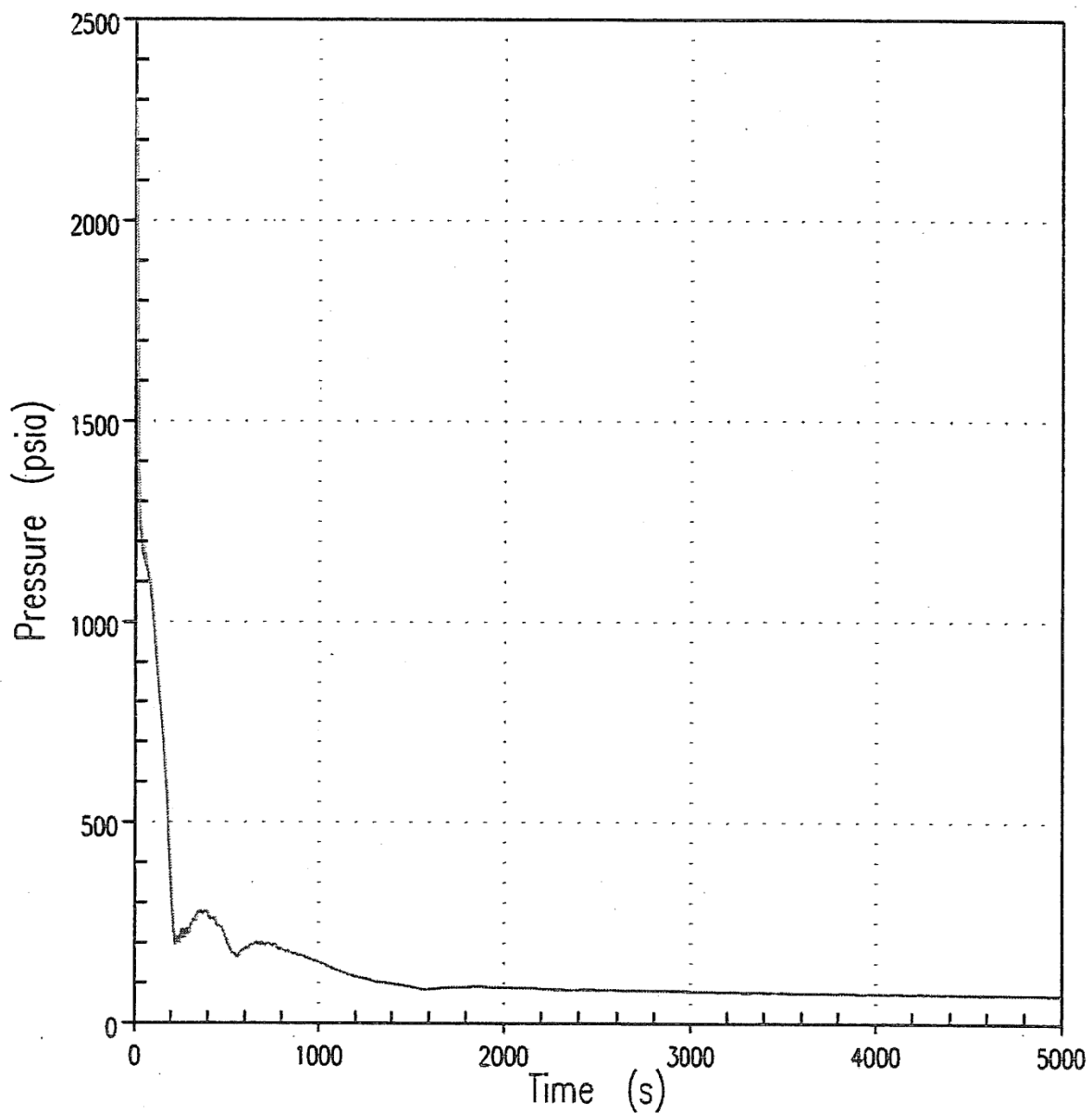
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Top of Core Vapor Temperature
6-inch**

UFSAR Figure: **14.3.2-28**

Sheet 1 of 1



Revision: **24.0**

Change Description: **UCR-1966, Rev. 0**

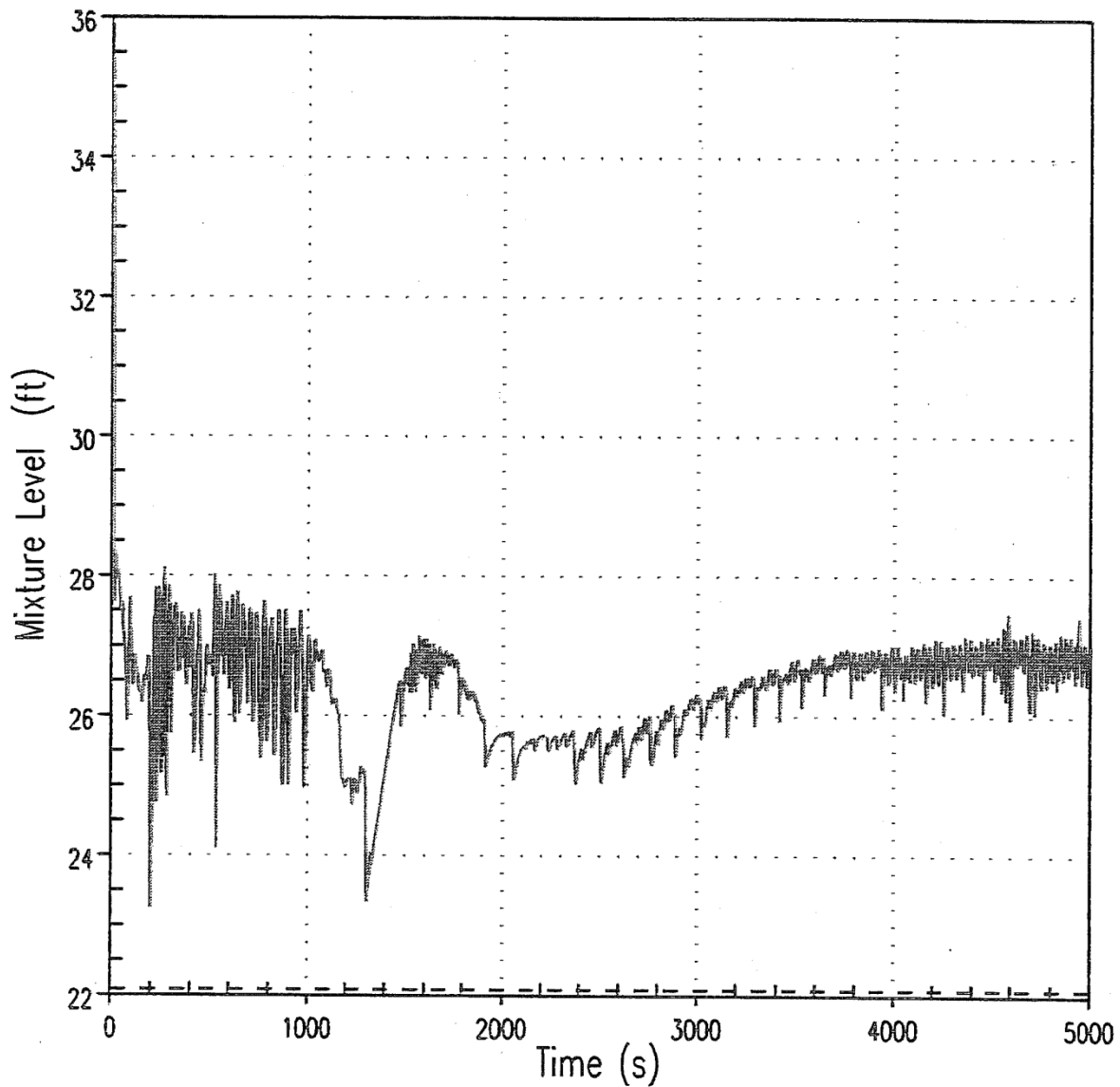
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Reactor Coolant System Pressure
8.75-inch**

UFSAR Figure: **14.3.2-29**

Sheet 1 of 1

_____ Core Mixture Level
 - - - - - Top of Core = 22.0778 ft



Revision: **24.0**

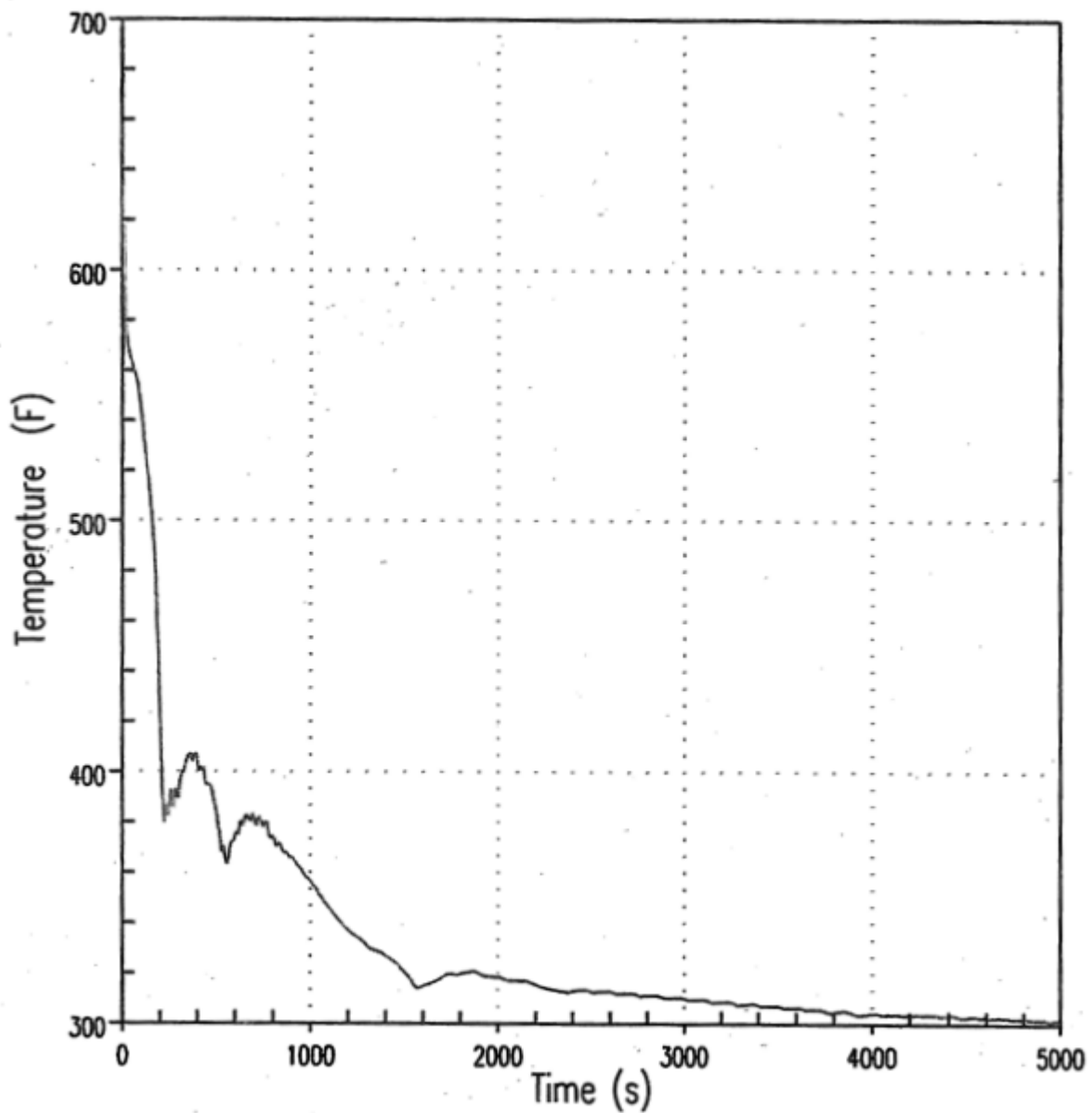
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AMERICAN ELECTRIC POWER
 COOK NUCLEAR PLANT
 NUCLEAR GENERATION GROUP
 BRIDGMAN, MICHIGAN

Title: **Core Mixture Level**
8.75-inch

UFSAR Figure: **14.3.2-30**

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Revision: **24.0**

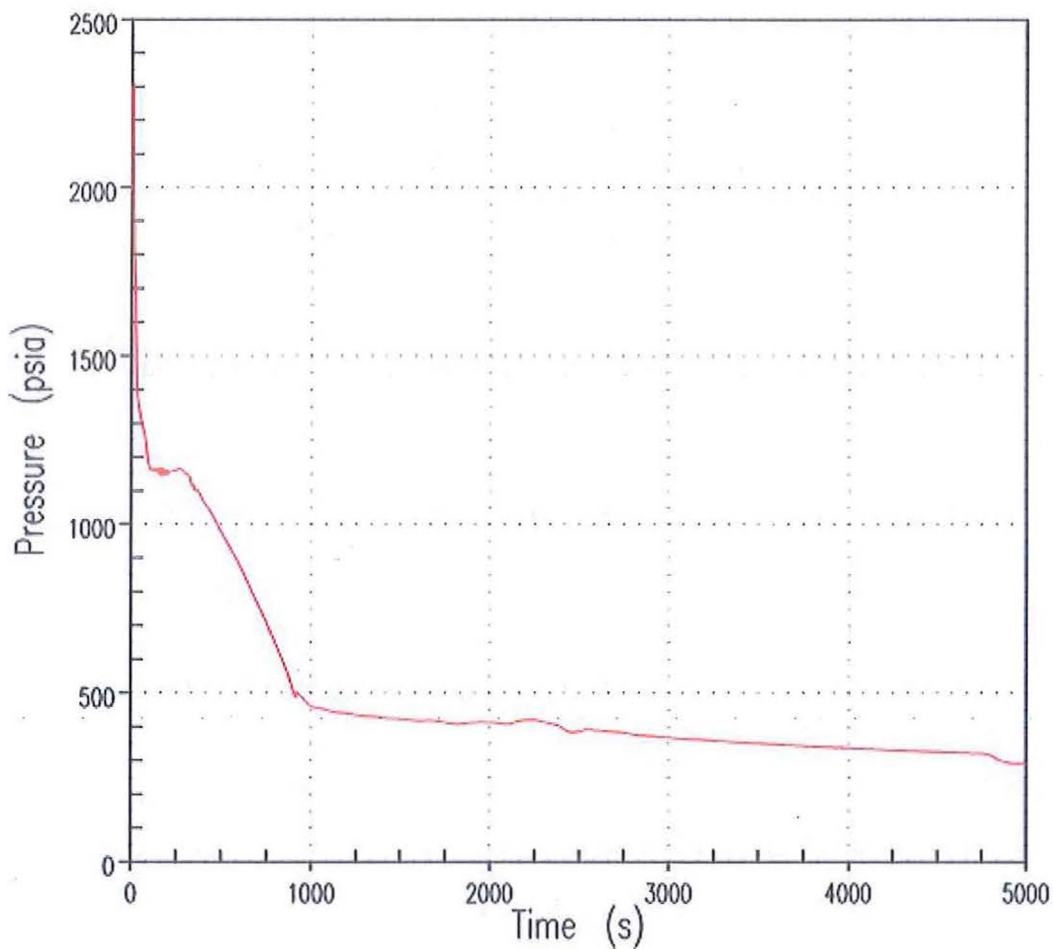
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Top of Core Vapor Temperature
8.75-inch**

UFSAR Figure: **14.3.2-31**

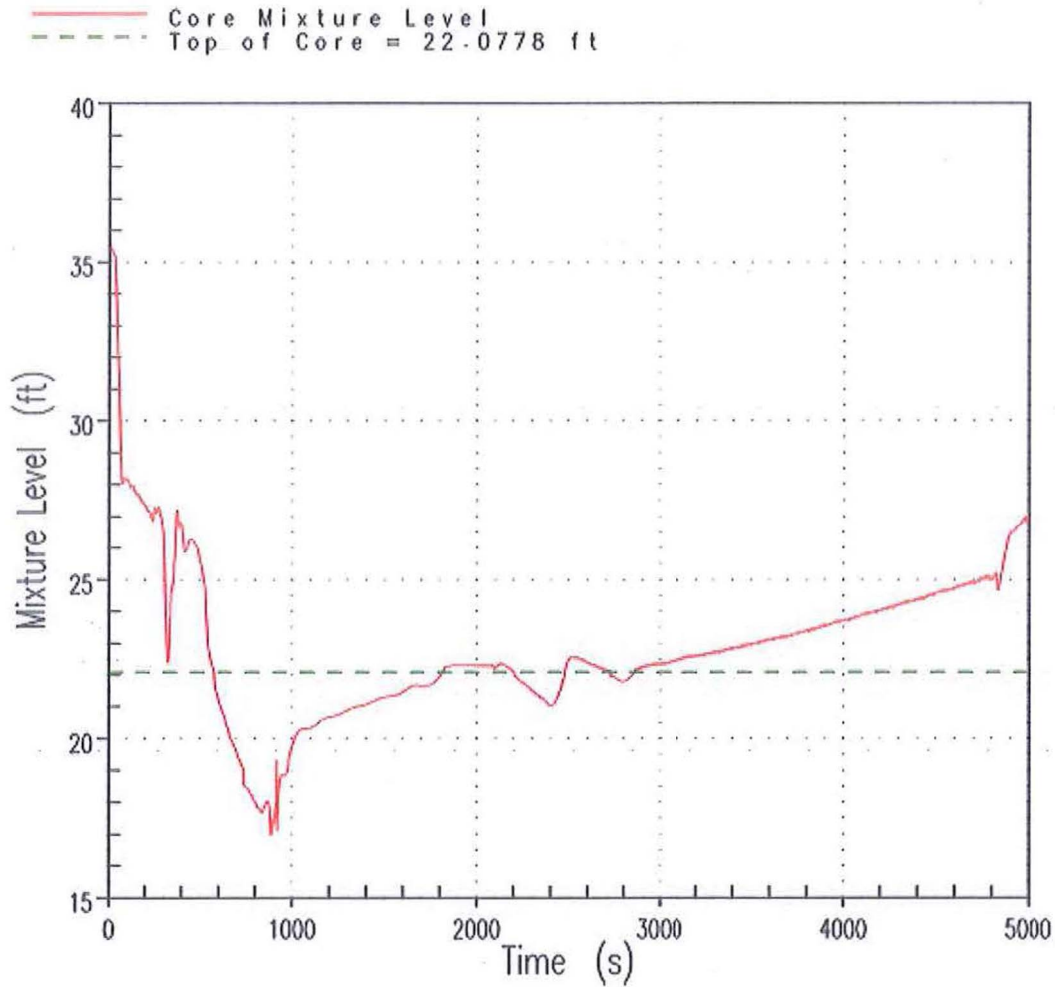
Sheet 1 of 1



UFSAR Figure: 14.3.2-32a

Unit: 2

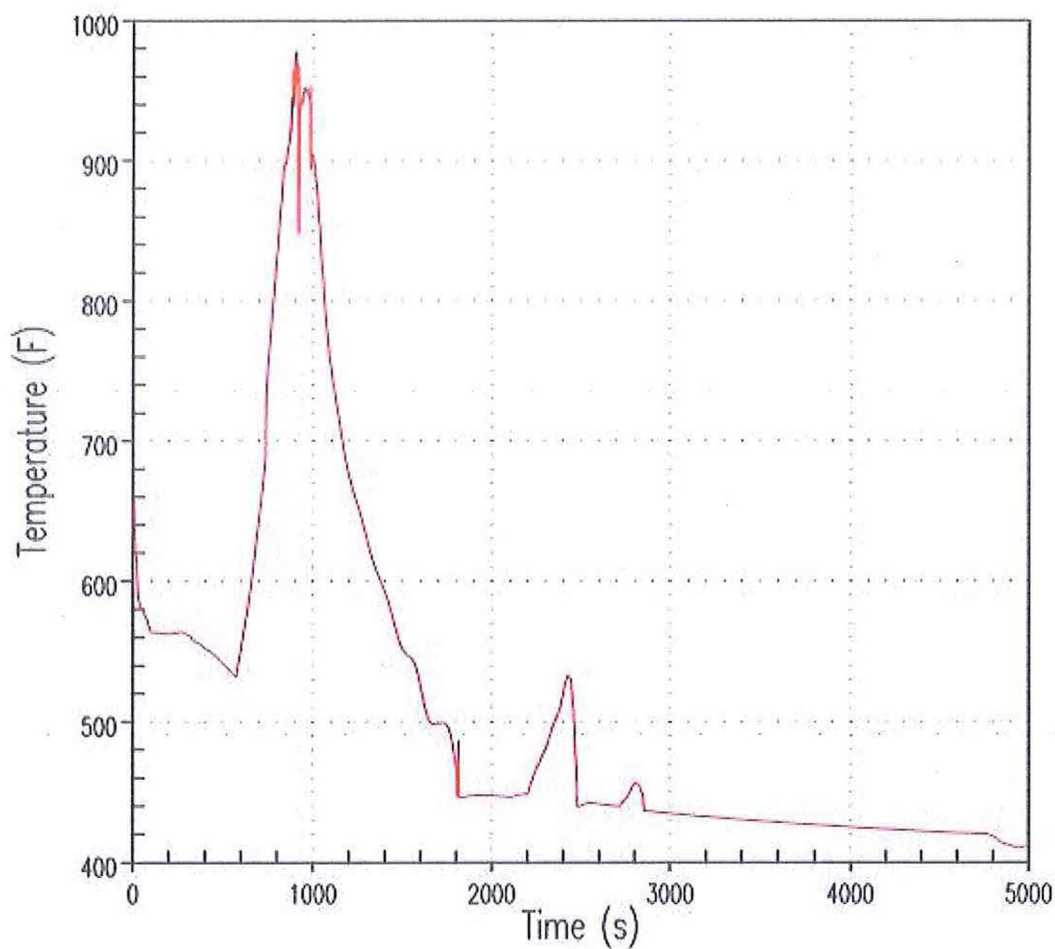
Title: Reactor Coolant System Pressure Upflow Conversion 4-inch



UFSAR Figure: 14.3.2-32b

Unit: 2

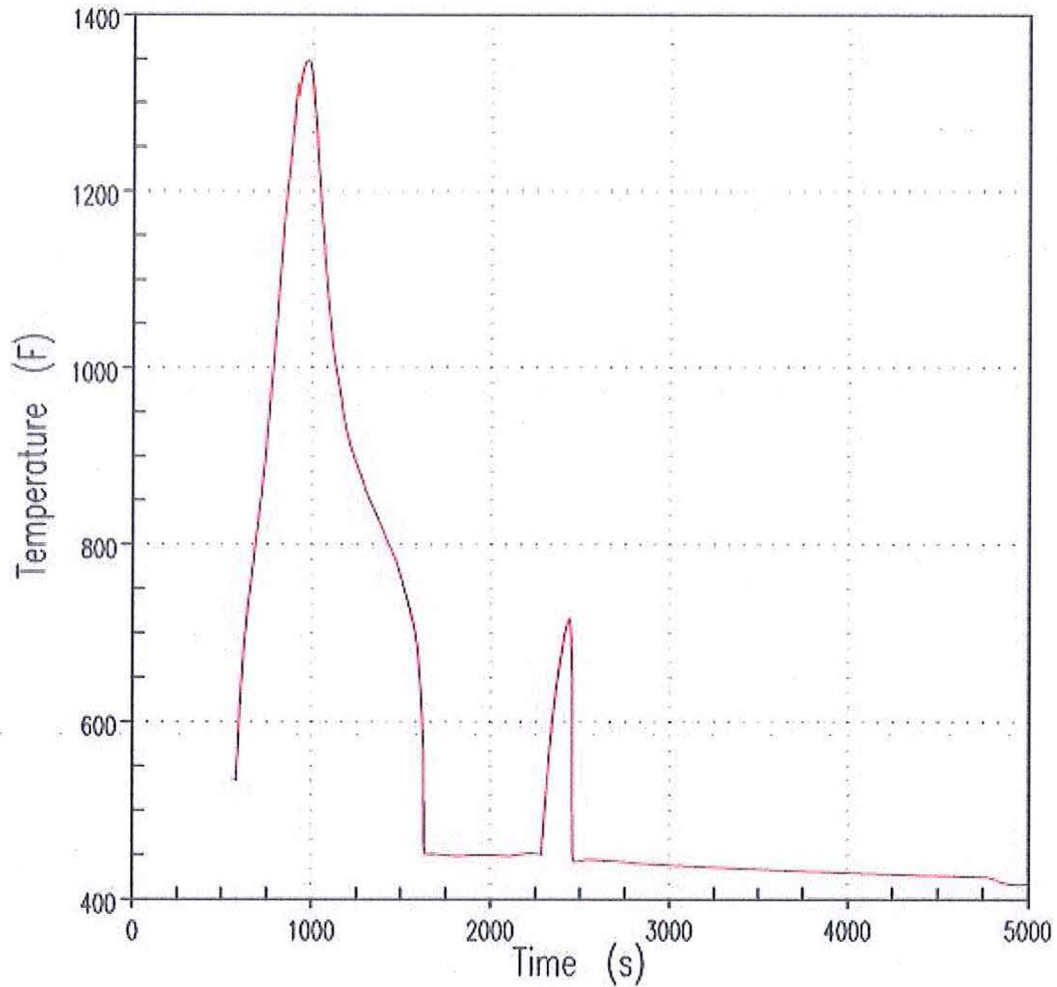
Title: **Core Mixture Level Upflow Conversion 4-inch**



UFSAR Figure: 14.3.2-32c

Unit: 2

Title: **Top of Core Vapor Temperature Upflow Conversion 4-inch**



UFSAR Figure: 14.3.2-32d

Unit: 2

Title: **Clad Temperature at Peak Clad Temperature Elevation (11.50 ft) Upflow Conversion 4-inch**

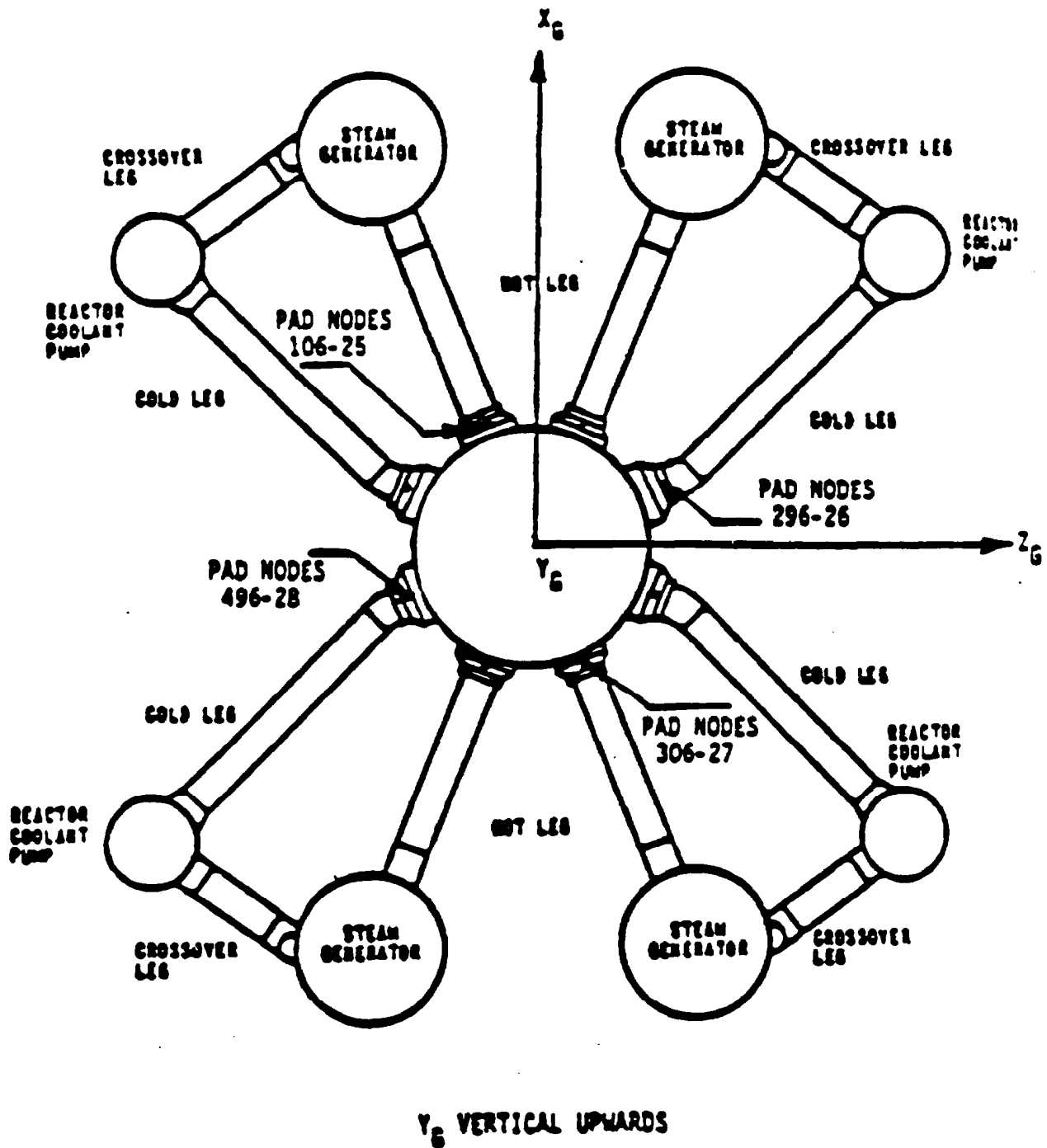


Figure 14.3.3-1 Loop Layout and Global Coordinates

July 1994

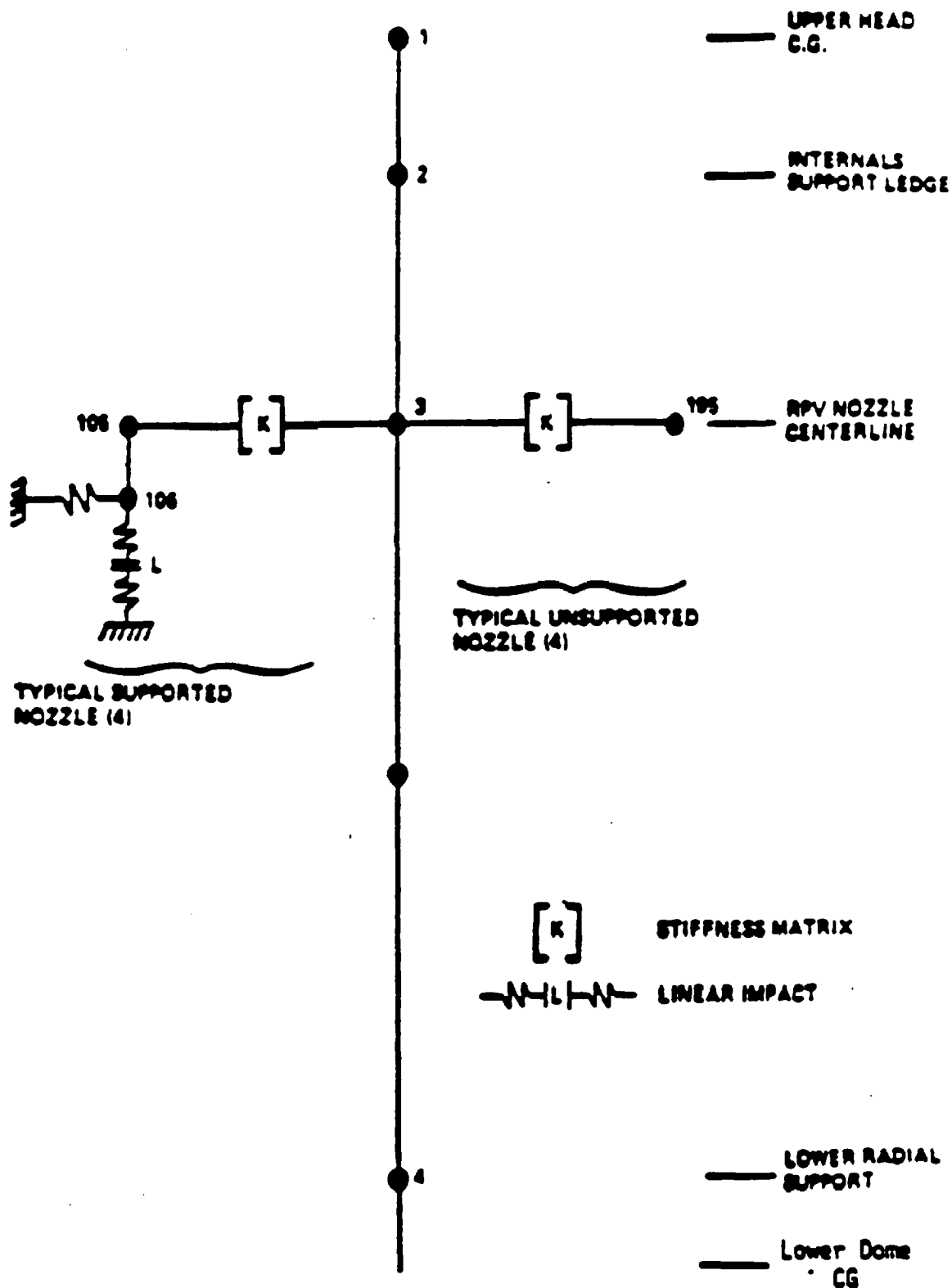


Figure 14.3.3-2 RPV Shell Submodel

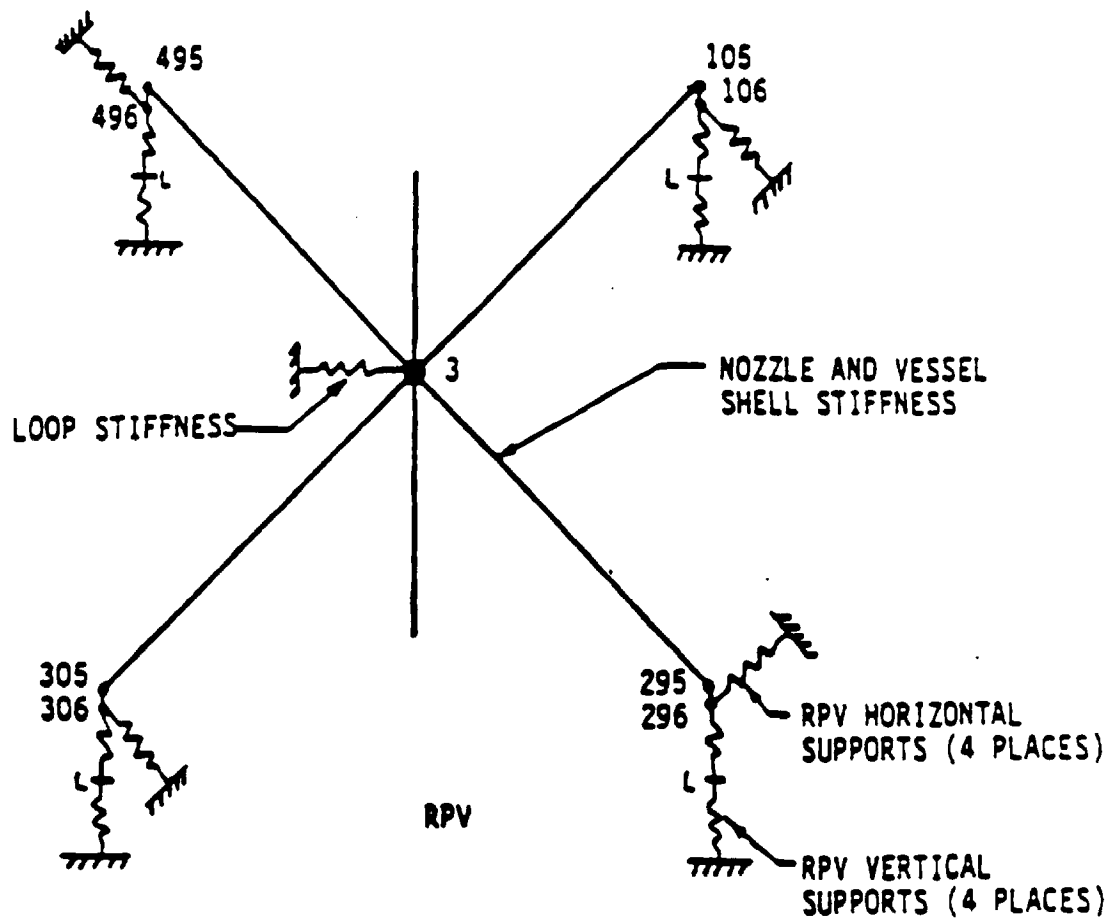


Figure 14.3.3-3 RPV Support Model

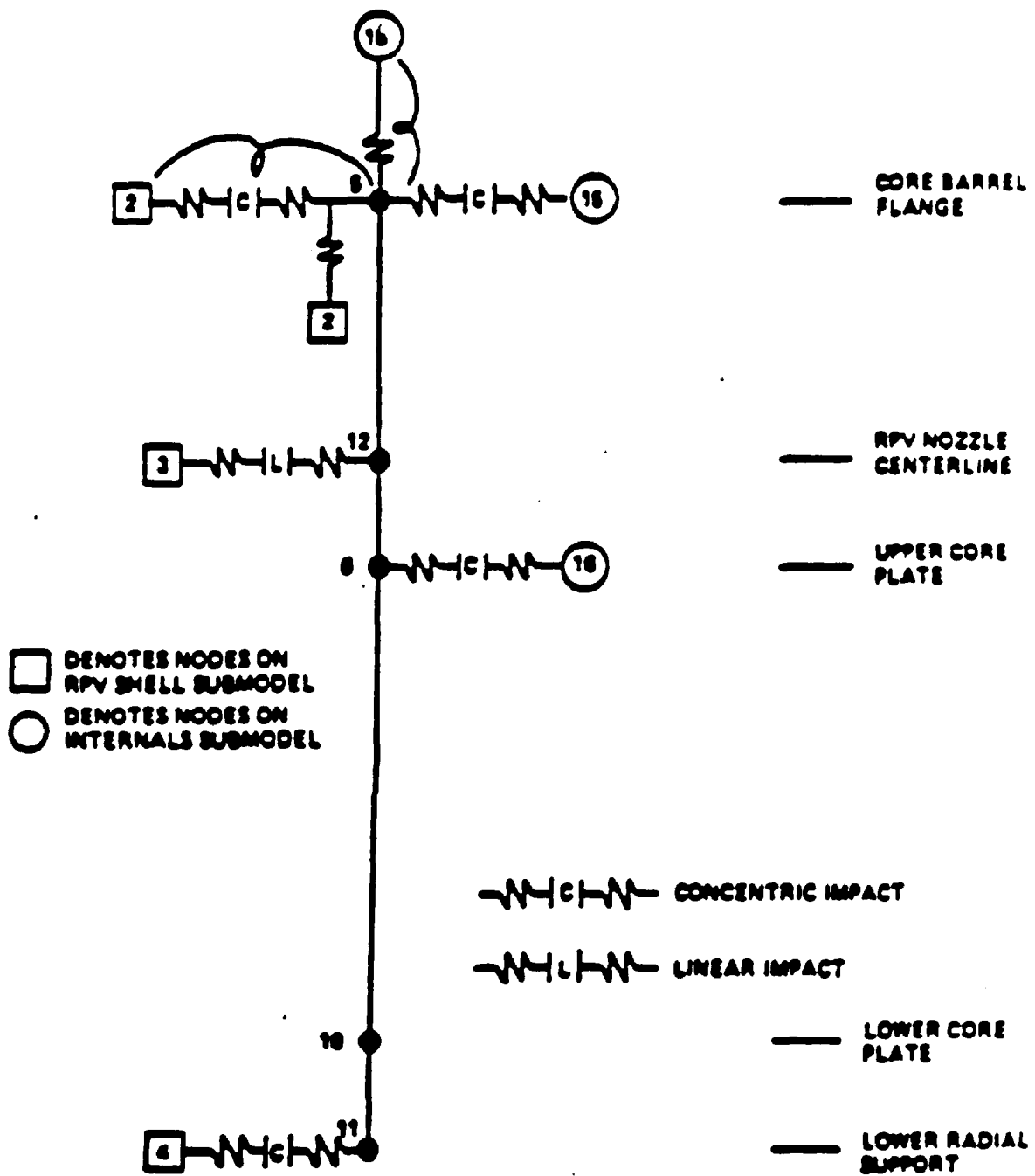


Figure 14.3.3-4 Core Barrel Submodel

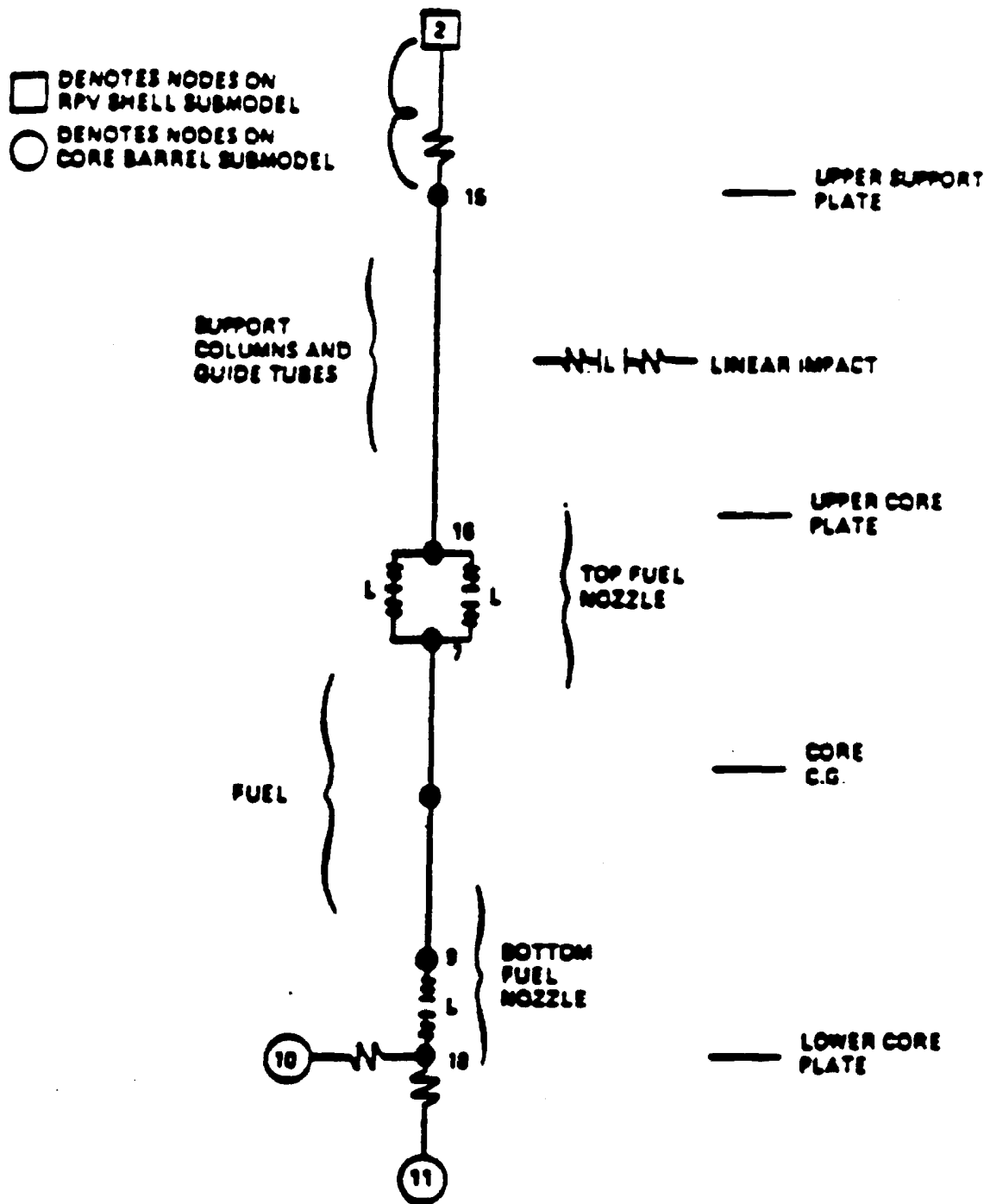
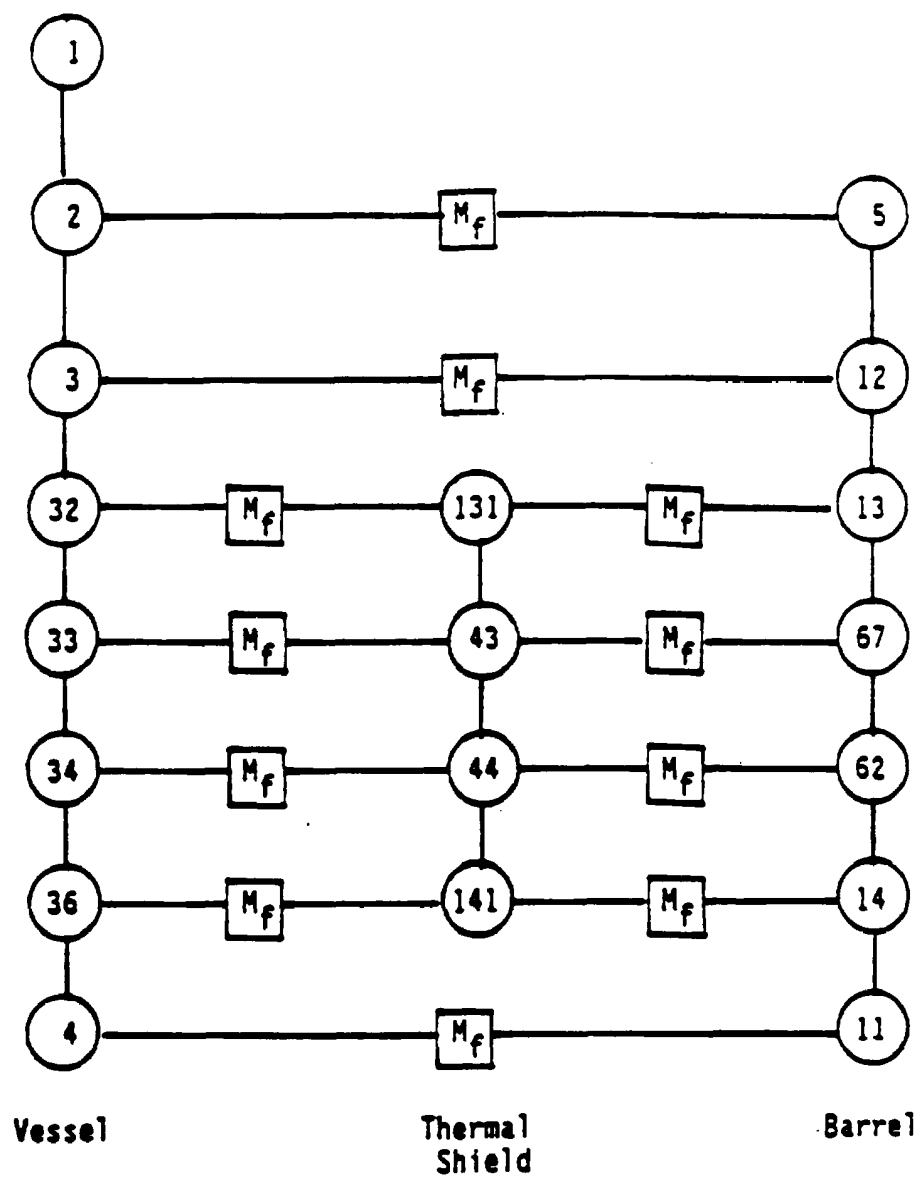


Figure 14.3.3-5 Internals Submodel



○ — Node
 — Hydrodynamic Mass Element — □
 Not to Scale

Figure 14.3.3-6

Hydrodynamic Masses in Vessel/Barrel
Downcomer Annulus

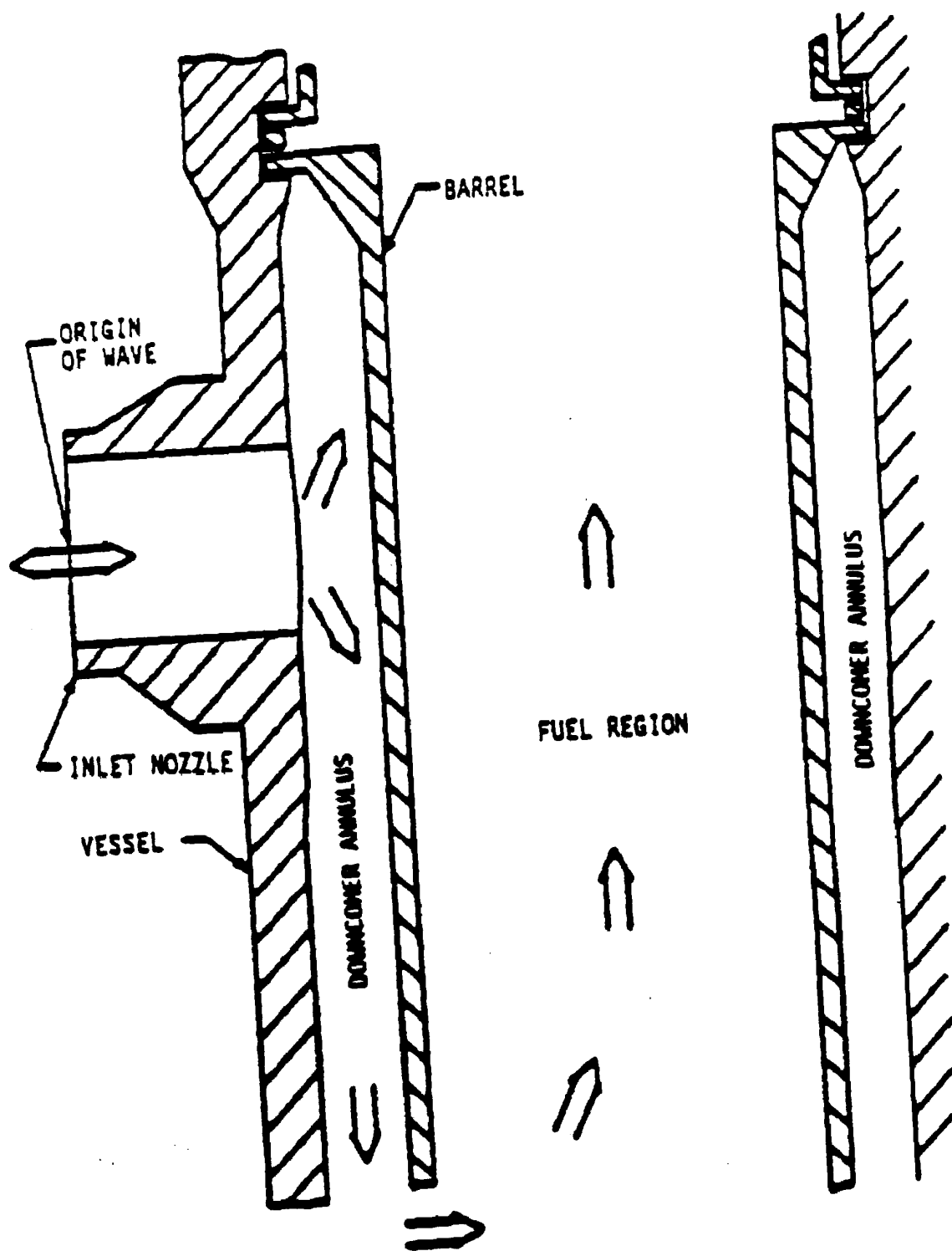


Figure 14.3.3-7 Wave Path for Depressurization Waves Entering RPV Inlet Nozzle (Cold Leg)

July 1994

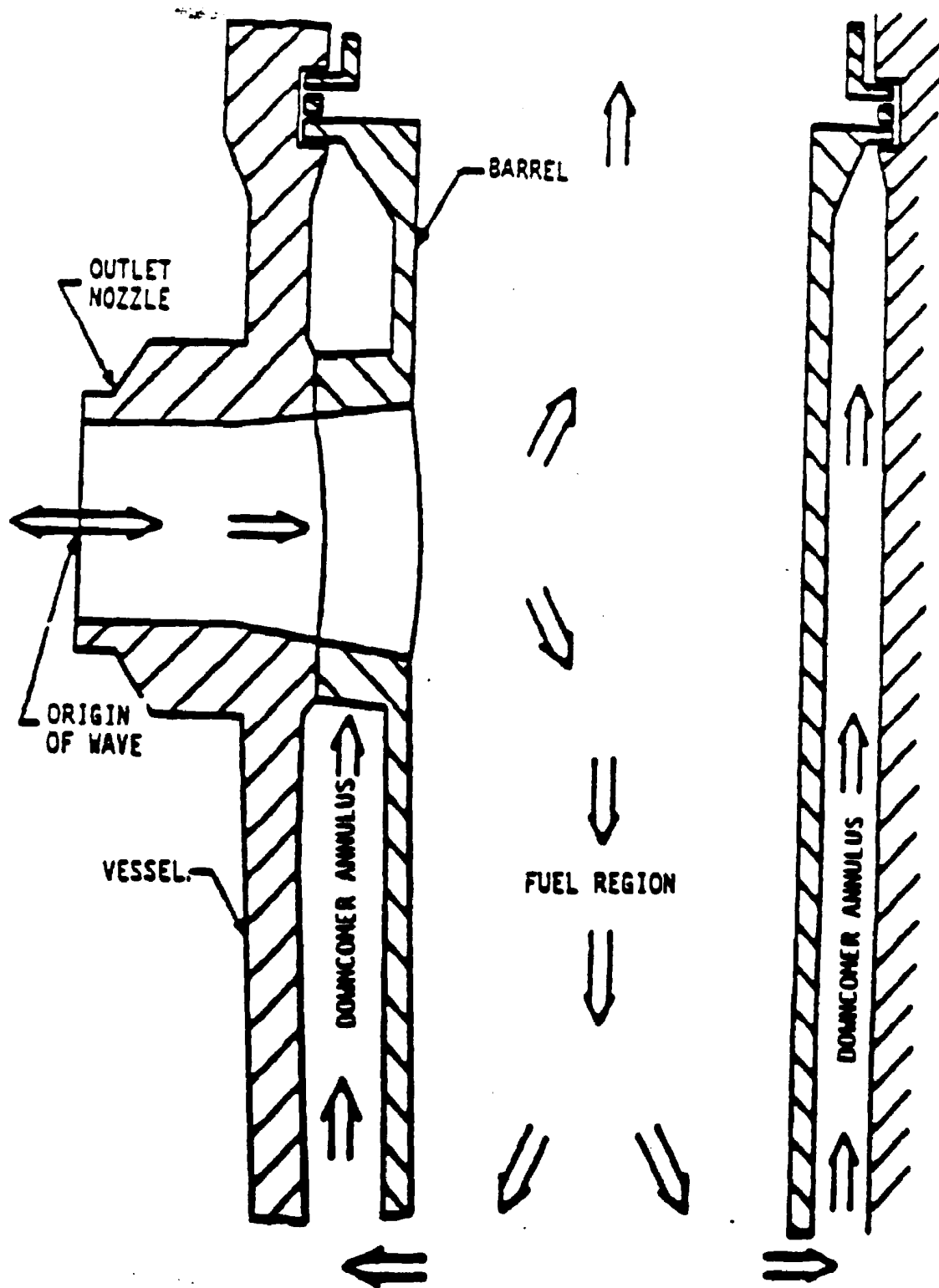


Figure 14.3.3-8

Wave Path for Depressurization Waves Entering
RPV Outlet Nozzle (Hot Leg).