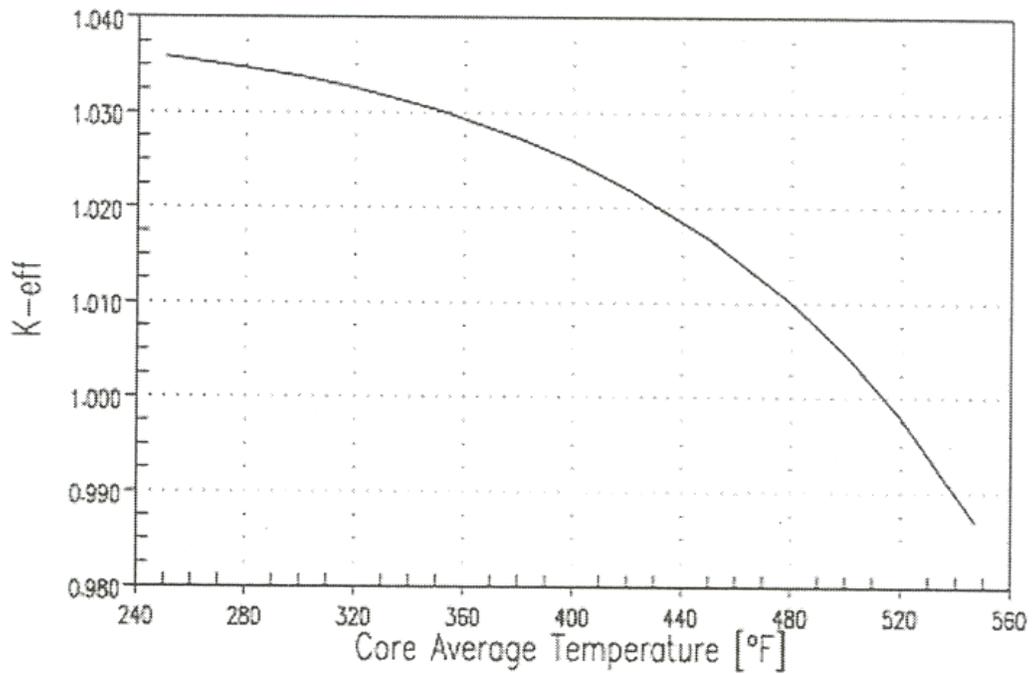


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Revision: **23**

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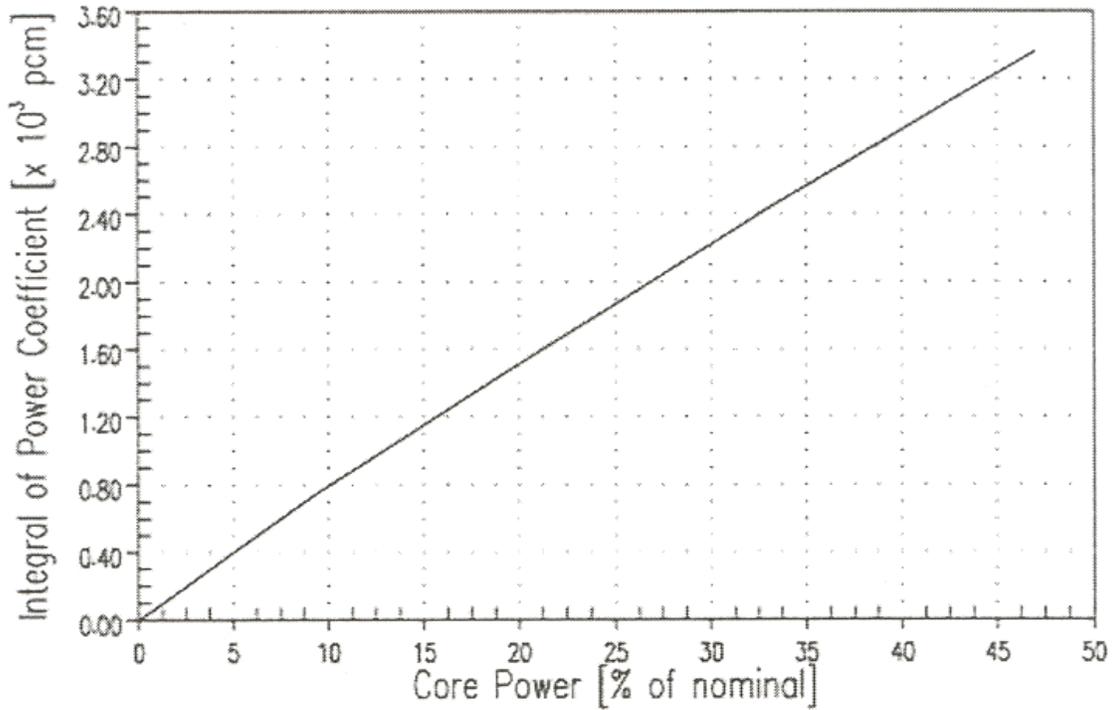
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Variation of Reactivity with Core Temperature at 1050 psia for the End of Life Rodded Core with One Control Rod Assembly Stuck (Zero Power) for the Steamline Break Double Ended Rupture Event**

UFSAR Figure: **14.2.5-1**

Sheet 1 of 1

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Revision: **23**

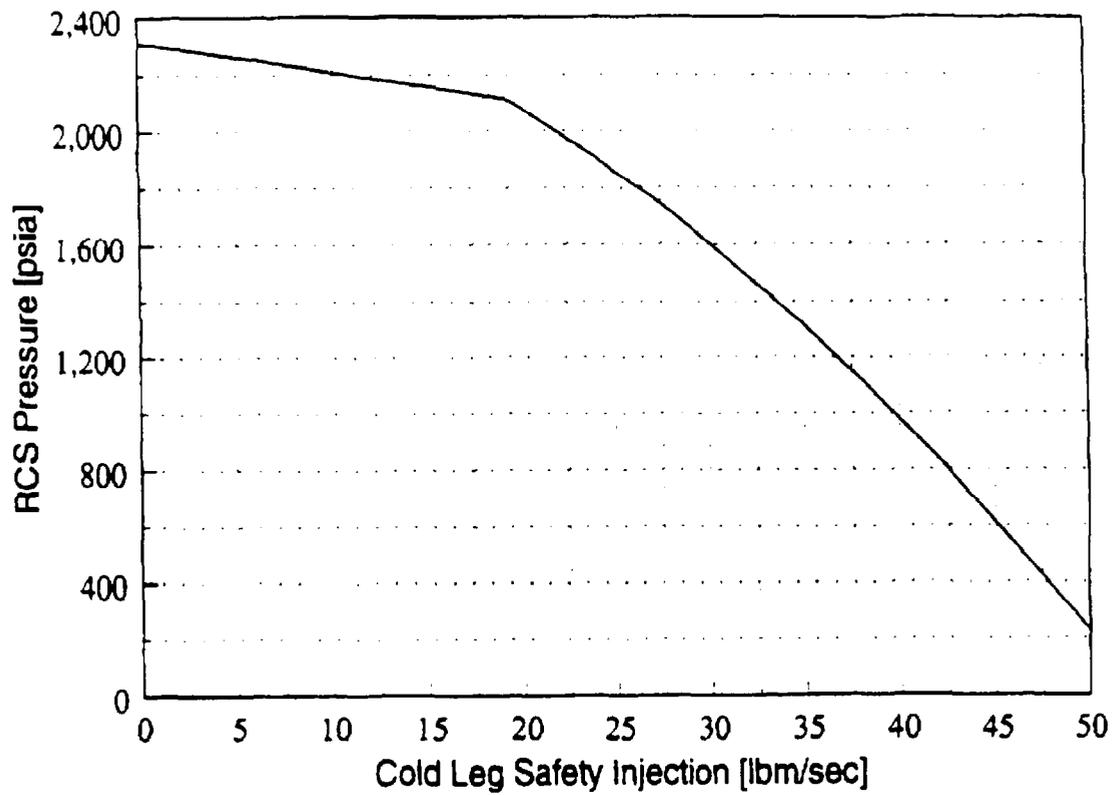
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**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Doppler Power Feedback for the Steamline Break
Double Ended Rupture Event**

UFSAR Figure: **14.2.5-2**

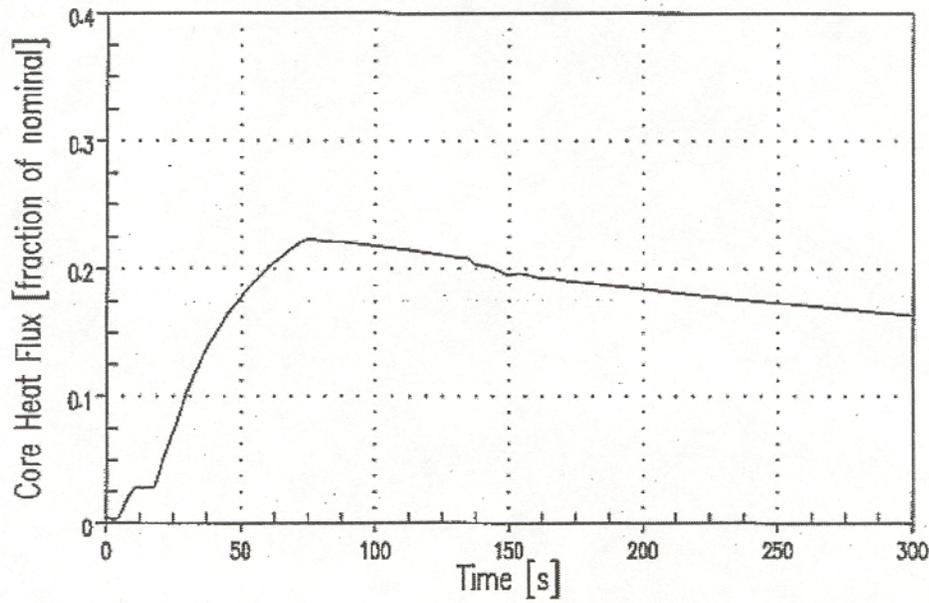
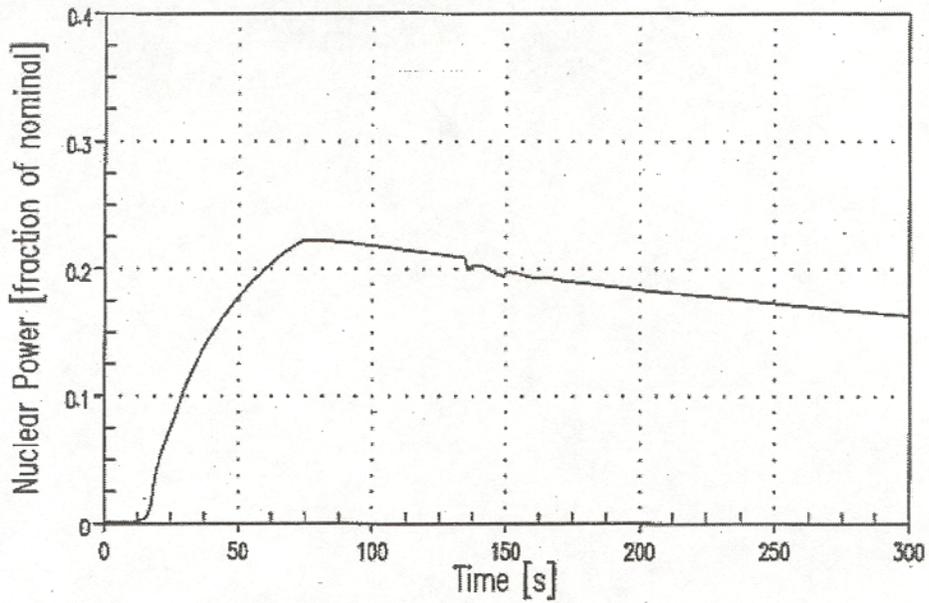
Sheet 1 of 1



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NUCLEAR PLANT
UNIT 1**

FIGURE 14.2.5-3

**Safety Injection Flow Supplied By One Charging Pump
For The Steamline Break Double Ended Rupture Event**



Revision: **23**

Change Description: **UCR-1969**

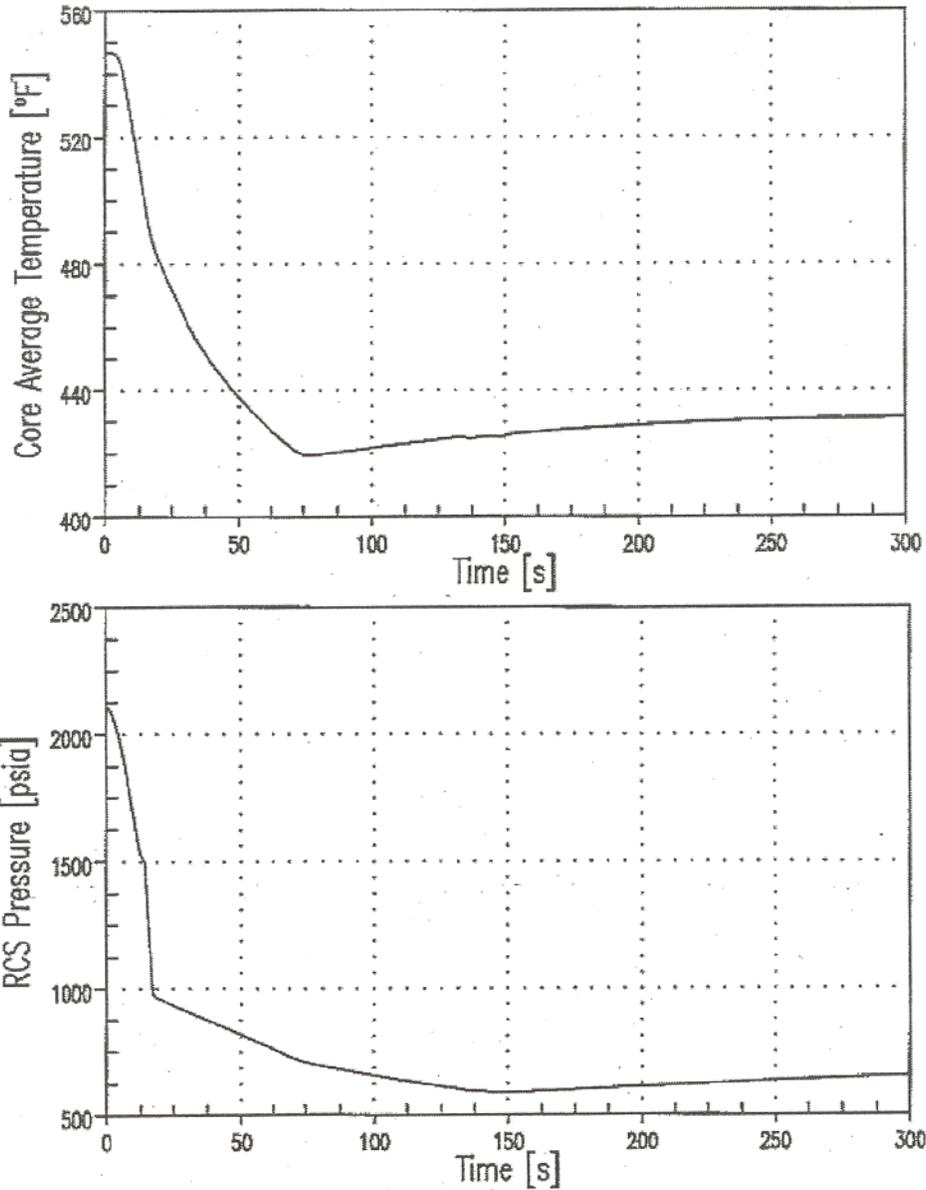
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Nuclear Power and Core Heat Flux vs. Time for the
Steamline Break Double Ended Rupture Event
[Downstream of the Flow Restrictor with Offsite Power Available]**

UFSAR Figure: **14.2.5-4**

Sheet 1 of 1

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Revision: **23**

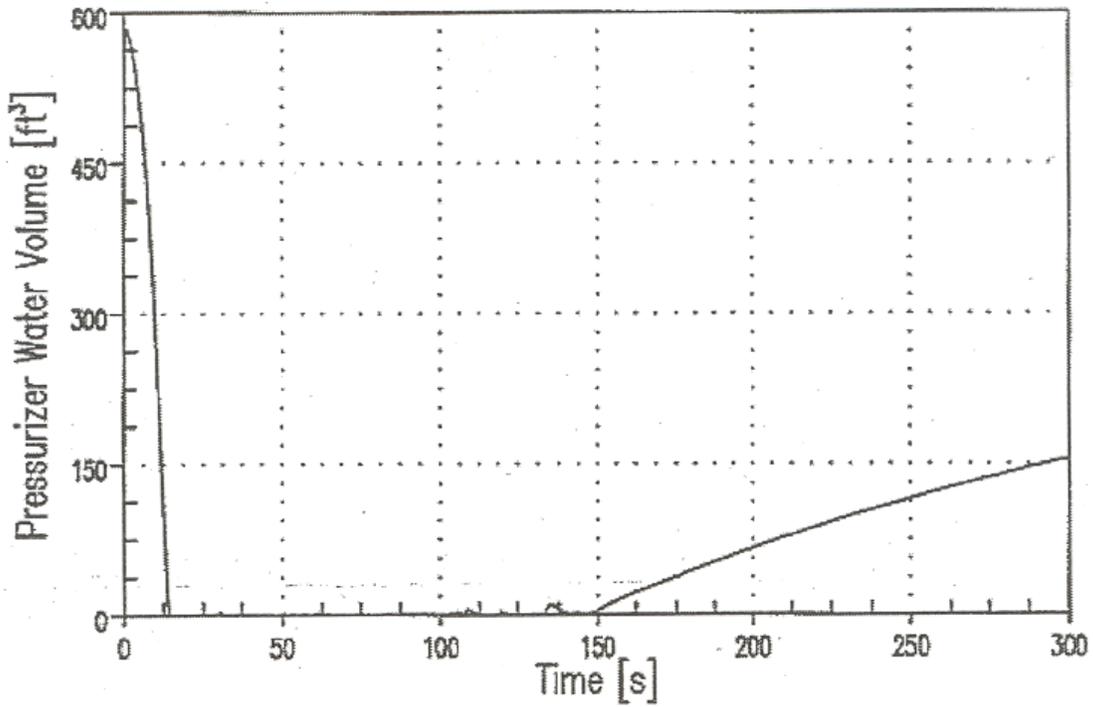
Change Description: **UCR-1969**

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

Title: **Core Average Temperature and RCS Pressure vs. Time
for the Steamline Break Double Ended Rupture Event
[Downstream of the Flow Restrictor with Offsite Power Available]**

UFSAR Figure: **14.2.5-5**

Sheet 1 of 1



Revision: **23**

Change Description: **UCR-1969**

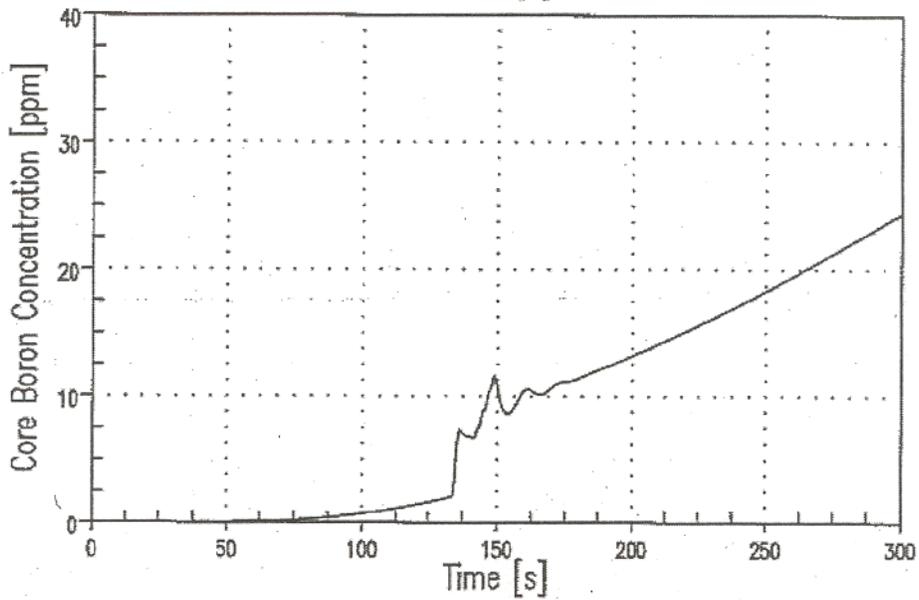
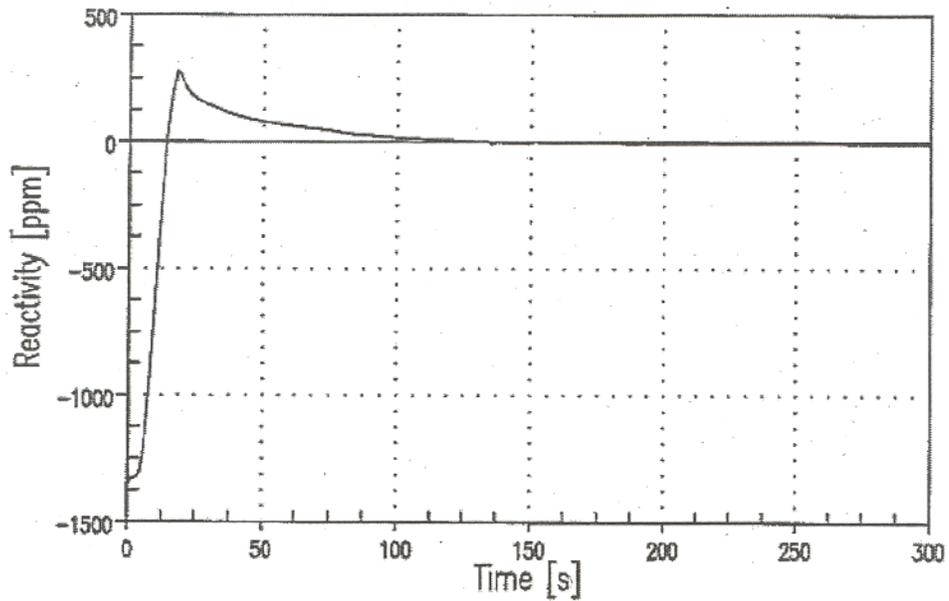
**AMERICAN ELECTRIC POWER
COOK NUCLEAR PLANT
NUCLEAR GENERATION GROUP
BRIDGMAN, MICHIGAN**

Title: **Pressurizer Water Volume vs. Time for the Steamline
Break Double Ended Rupture Event
[Downstream of the Flow Restrictor with Offsite Power Available]**

UFSAR Figure: **14.2.5-6**

Sheet 1 of 1

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Revision: **23**

Change Description: **UCR-1969**

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

Title: **Reactivity and Core Boron Concentration vs. Time for the Steamline Break Double Ended Rupture Event [Downstream of the Flow Restrictor with Offsite Power Available]**

UFSAR Figure: **14.2.5-7**

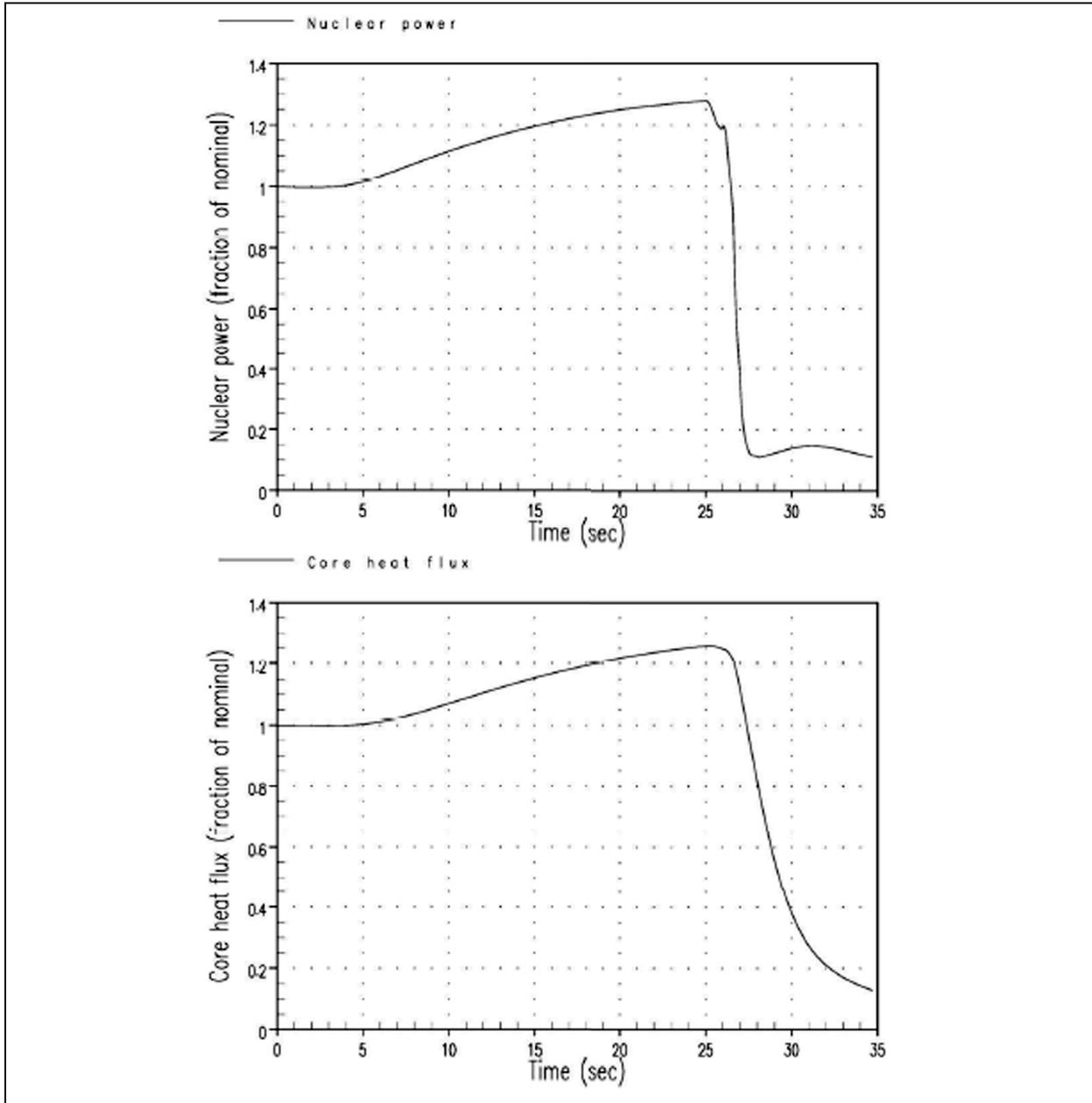
Sheet 1 of 1

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INDIANA MICHIGAN POWER D. C. COOK NUCLEAR PLANT UPDATED FINAL SAFETY ANALYSIS REPORT

Revised: 27.0
Chapter: 14
Sheet: 1 of 1



UFSAR Figure: 14.2.5-8

Change Description:
UCR-2054, Rev. 0

Unit 1

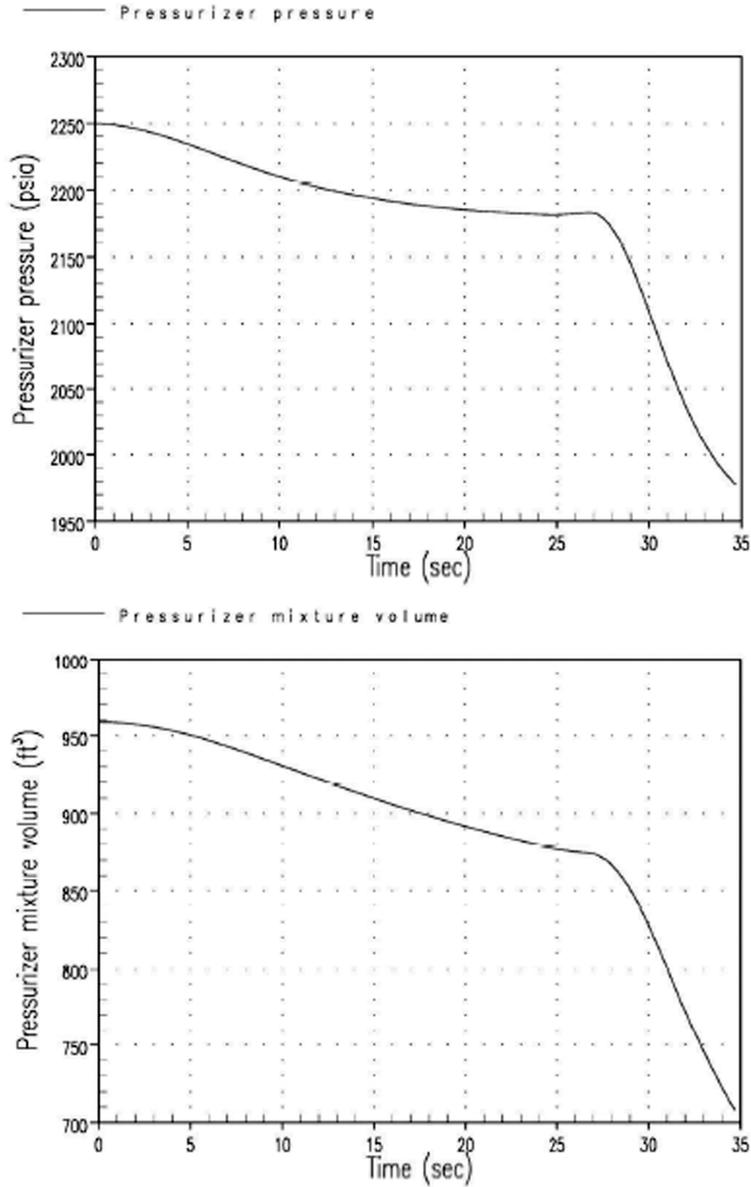
Title: Nuclear Power and Core Heat Flux vs Time for the Rupture of a Steam Pipe from Hot Full Power Event - (0.89 ft² Break, Largest Break Size to Trip on OPΔT)

UFSAR Revision 30.0



**INDIANA MICHIGAN POWER
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UPDATED FINAL SAFETY ANALYSIS REPORT**

Revised: 27.0
Chapter: 14
Sheet: 1 of 1



Note: The pressurizer mixture volume includes the pressurizer surge line volume.

UFSAR Figure: 14.2.5-9

Change Description:
UCR-2054, Rev. 0

Unit 1

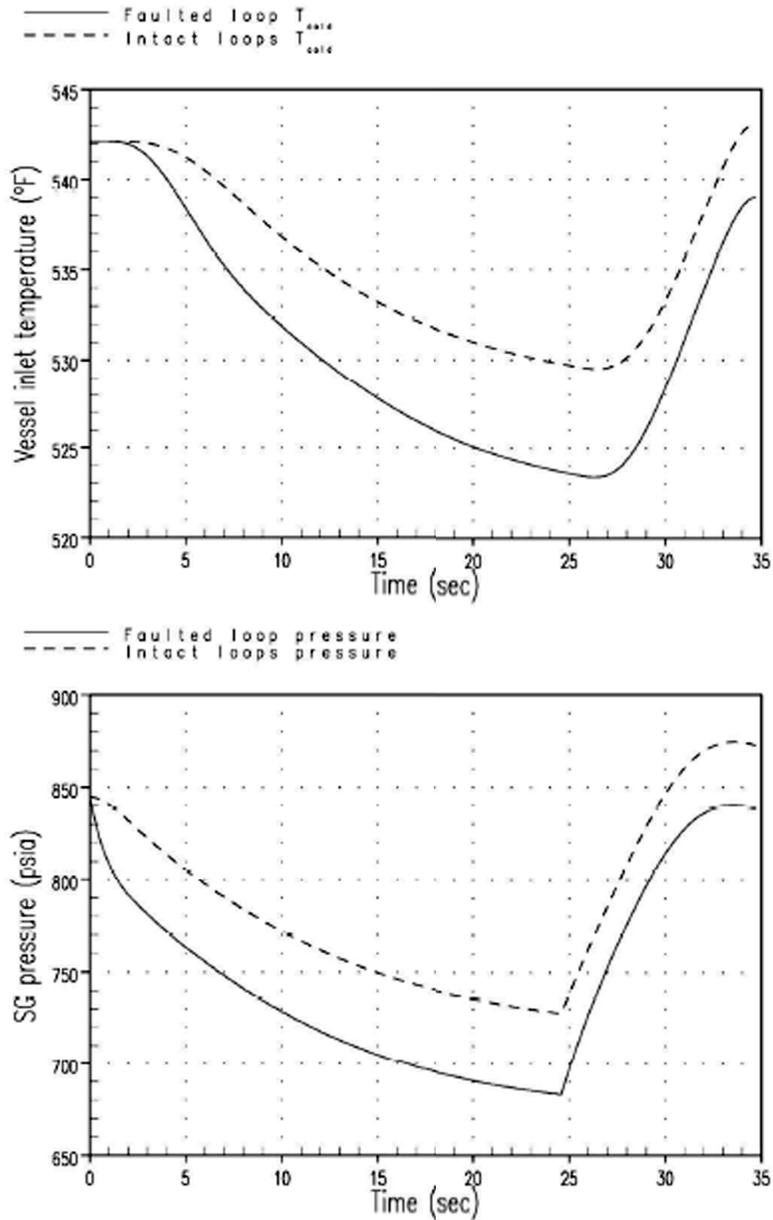
Title: Pressurizer Pressure and Mixture Volume vs Time for the Rupture of a Steam Pipe from Hot Full Power Event - (0.89 ft² Break, Largest Break Size to Trip on OPΔT)

UFSAR Revision 30.0



INDIANA MICHIGAN POWER D. C. COOK NUCLEAR PLANT UPDATED FINAL SAFETY ANALYSIS REPORT

Revised: 27.0
Chapter: 14
Sheet: 1 of 1



UFSAR Figure: 14.2.5-10

Change Description:
UCR-2054, Rev. 0

Unit 1

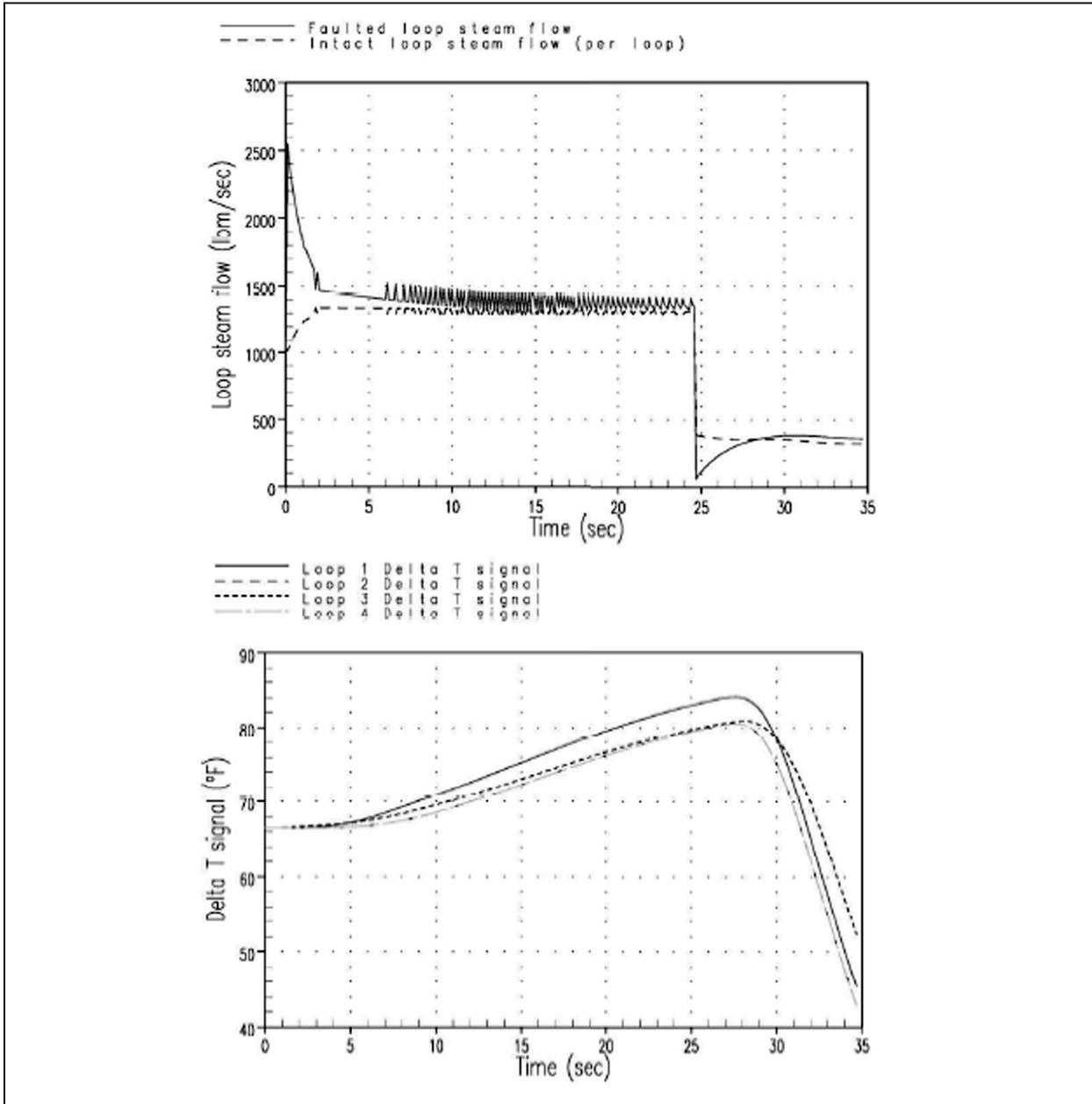
Title: Vessel Inlet Temperature and SG Pressure vs Time for the Rupture of a Steam Pipe from Hot Full Power Event - (0.89 ft² Break, Largest Break Size to Trip on OPΔT)

UFSAR Revision 30.0



INDIANA MICHIGAN POWER D. C. COOK NUCLEAR PLANT UPDATED FINAL SAFETY ANALYSIS REPORT

Revised: 27.0
Chapter: 14
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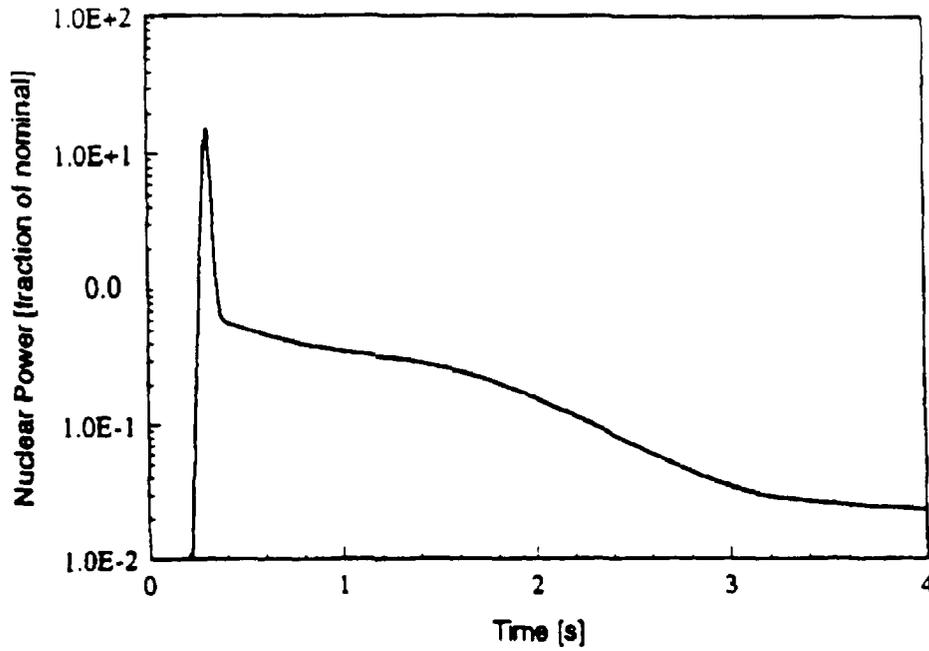


UFSAR Figure: 14.2.5-11

Change Description:
UCR-2054, Rev. 0

Unit 1

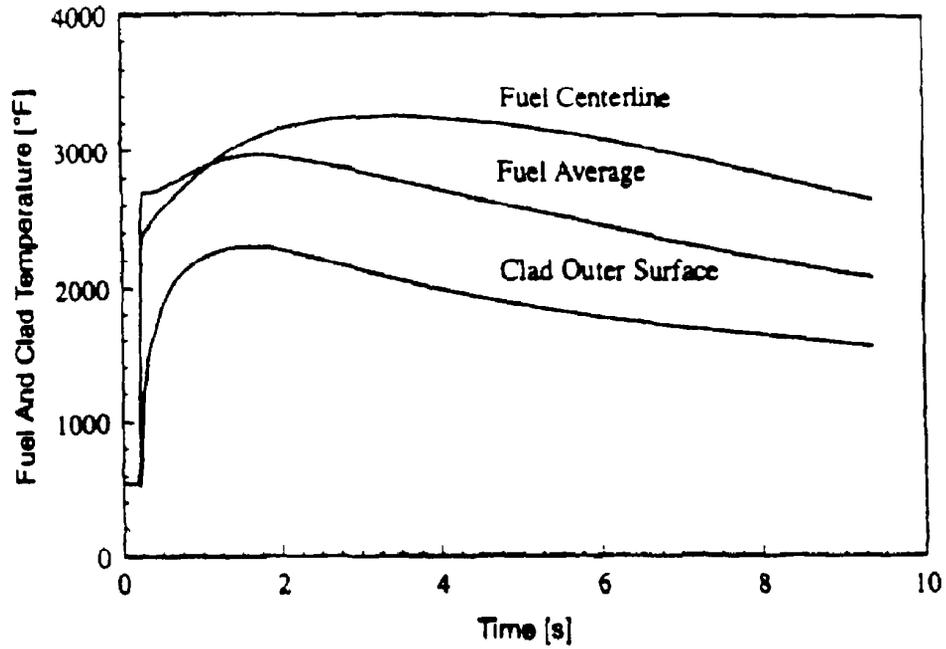
Title: Loop Steam Flow and ΔT Signal vs Time for the Rupture of a Steam Pipe from Hot Full Power Event - (0.89 ft² Break, Largest Break Size to Trip on OP ΔT)



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UNIT 1**

FIGURE 14.2.6-1

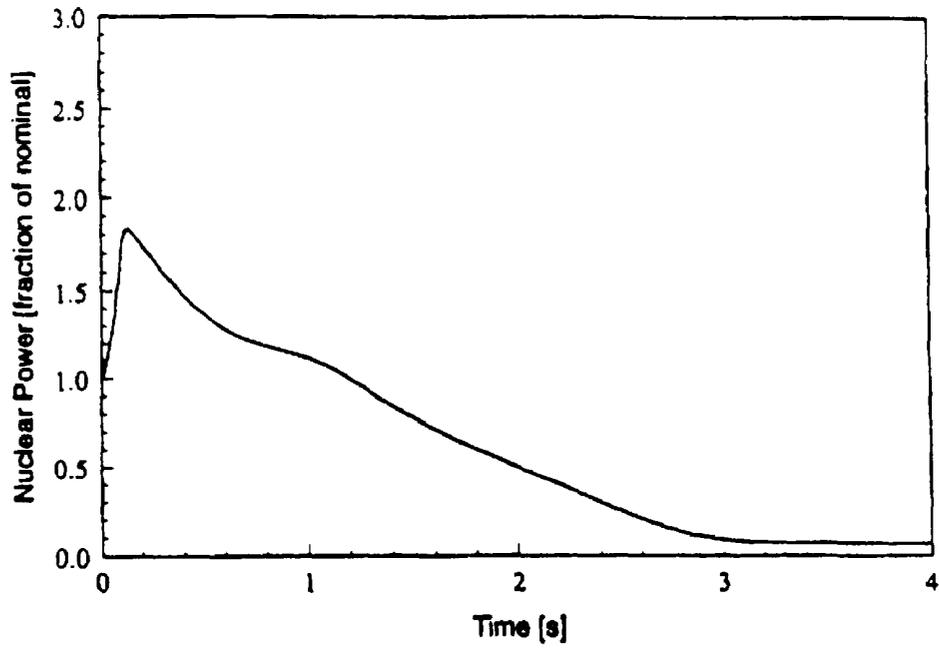
**Nuclear Power vs. Time For The Rod Ejection Event,
Hot Zero Power, End Of Life**



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UNIT 1**

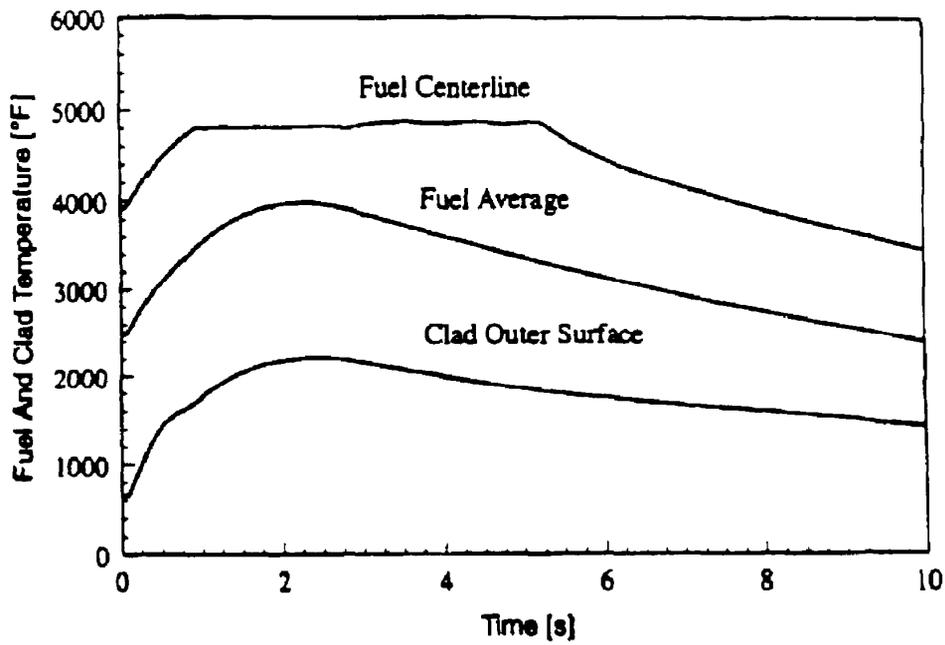
FIGURE 14.2.6-2

**Fuel Centerline, Fuel Average, and
Clad Outer Surface Temperature vs. Time For The Rod
Ejection Event, Hot Zero Power, End Of Life**



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UNIT 1**

**FIGURE 14.2.6-3
Nuclear Power vs. Time For The Rod Ejection Event,
Hot Full Power, End Of Life**



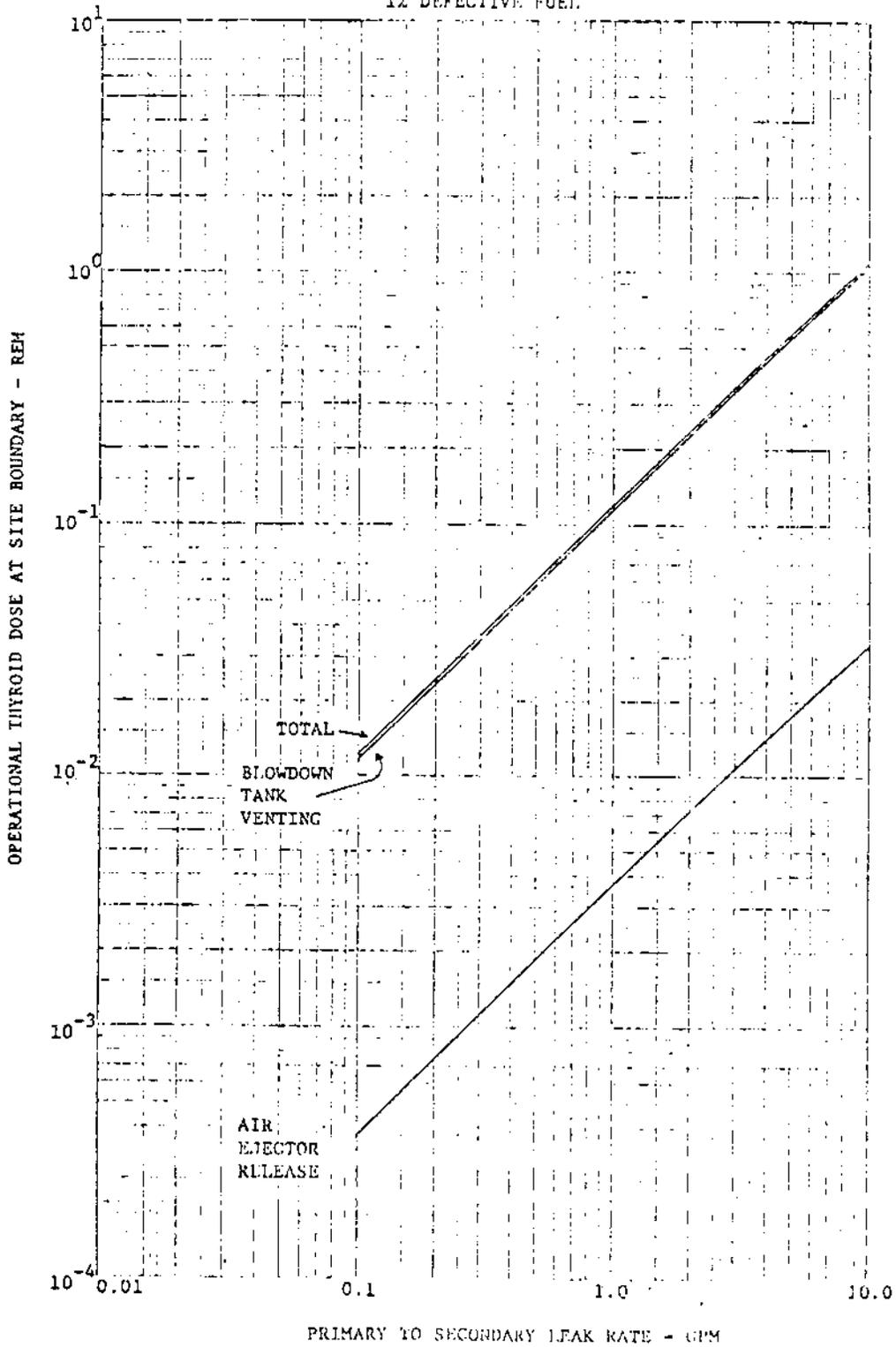
**DONALD C. COOK
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UNIT 1**

FIGURE 14.2.6-4

**Fuel Centerline, Fuel Average, and
Clad Outer Surface Temperature vs. Time For The Rod
Ejection Event, Hot Full Power, End Of Life**

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FIGURE 14.2.7-1 ANNUAL OPERATIONAL THYROID DOSES AT SITE BOUNDARY
1% DEFECTIVE FUEL.



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FIGURE 14.2.7-2 ANNUAL OPERATIONAL WHOLE BODY DOSES
AT SITE BOUNDARY
1% DEFECTIVE FUEL

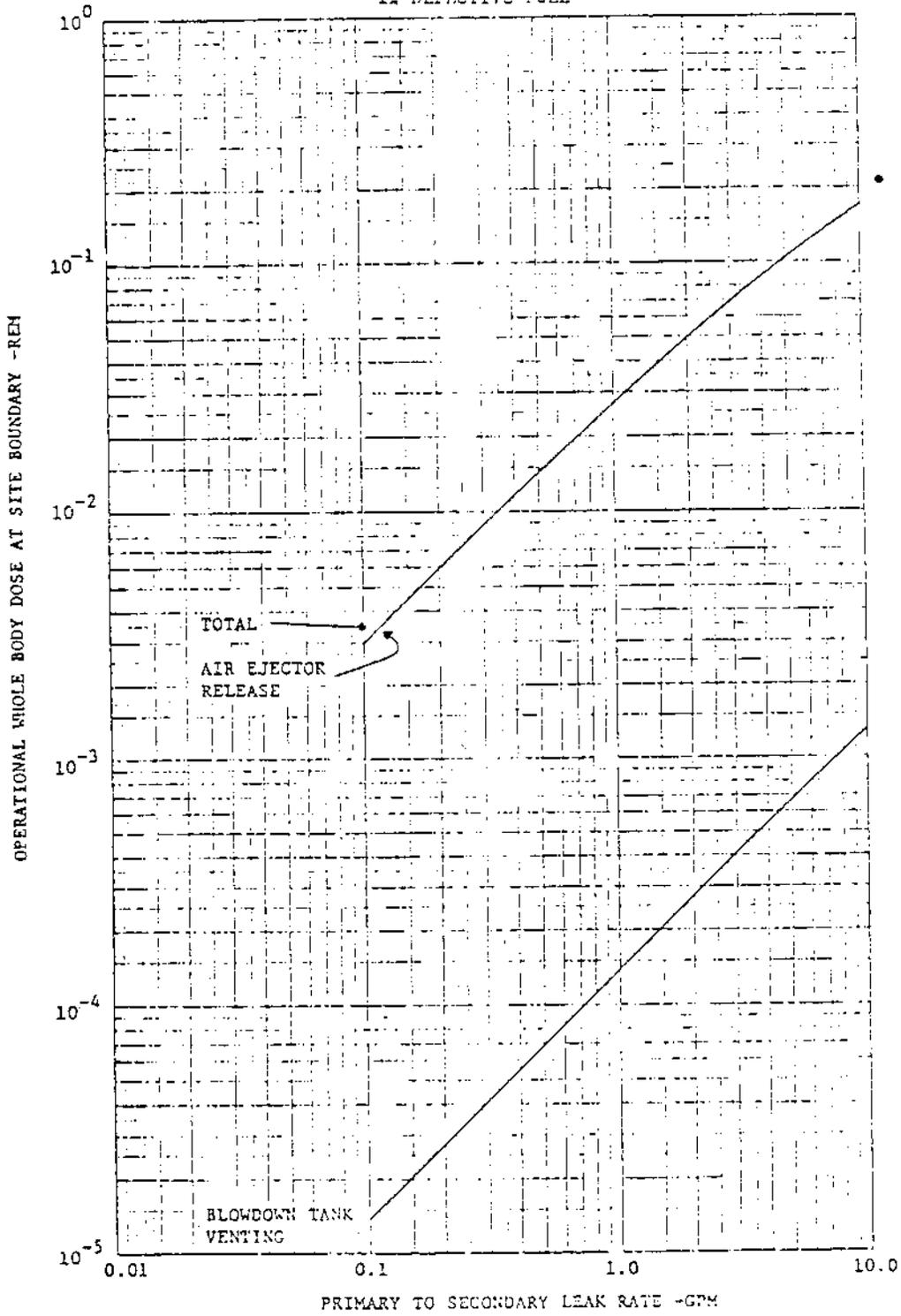


FIGURE 14.2.7-3 ANNUAL OPERATIONAL THYROID DOSES AT THE BOUNDARY OF LOW POPULATION ZONE
1% DEFECTIVE FUEL

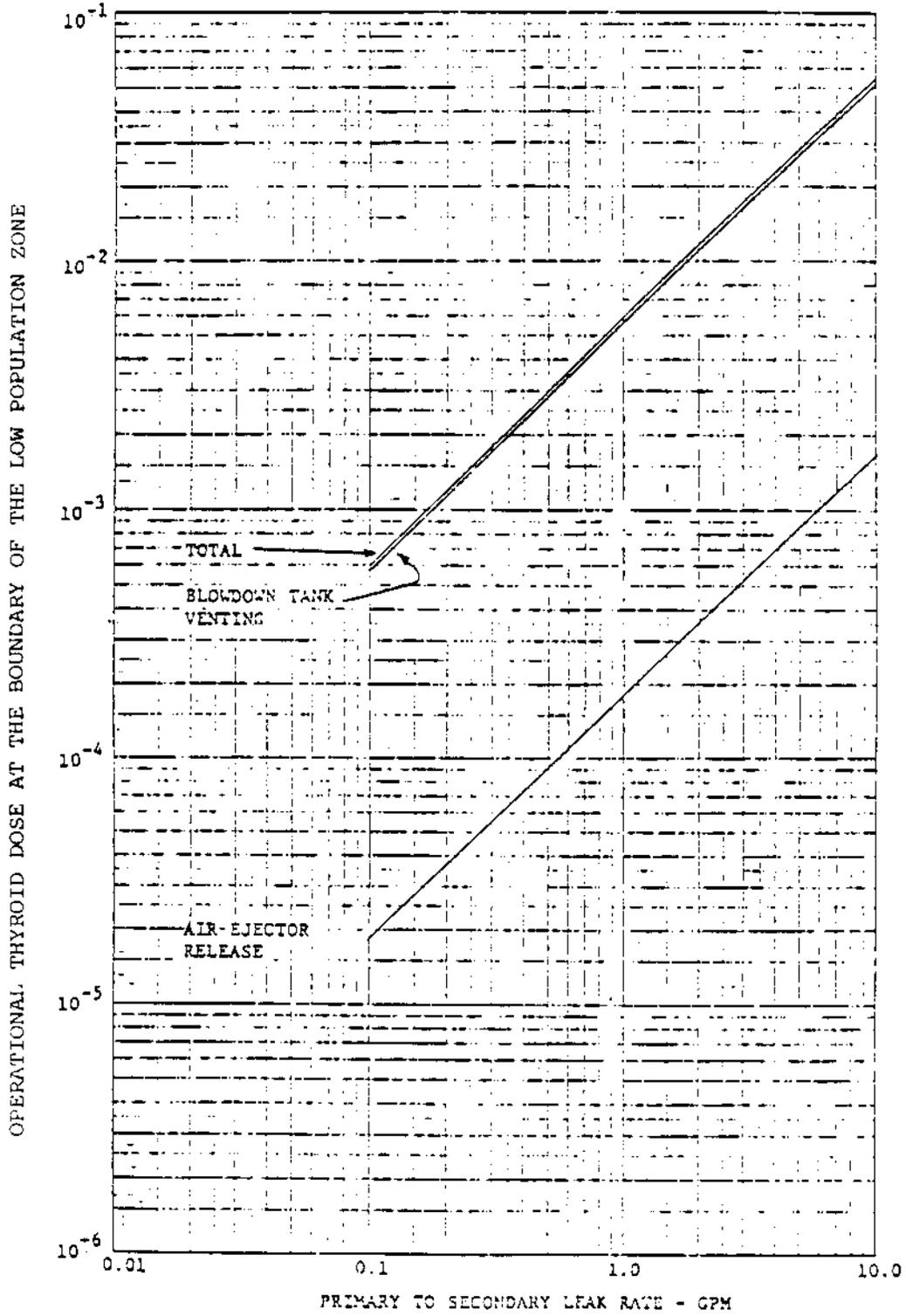
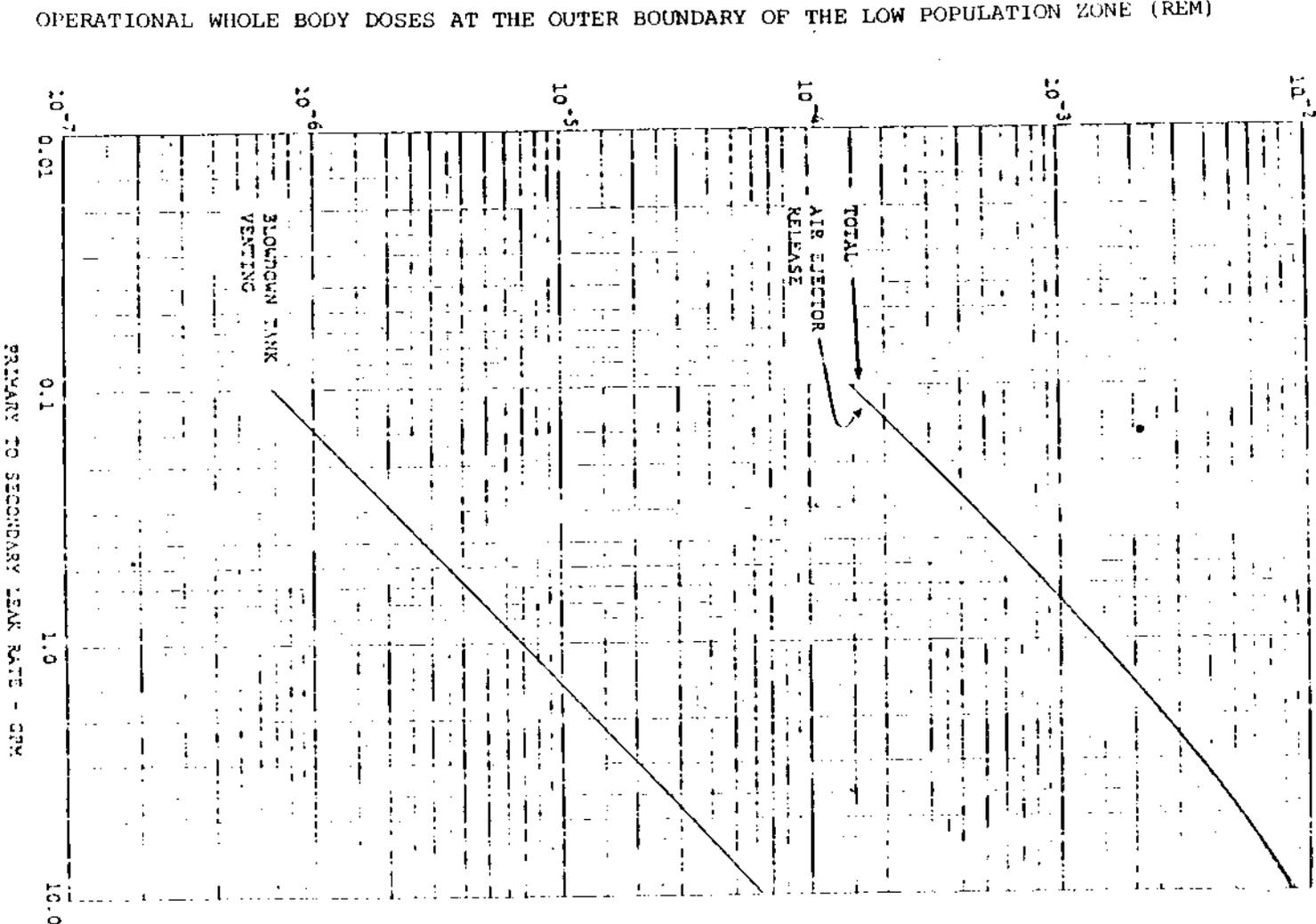


FIGURE 14.2.7-1 ANNUAL OPERATIONAL WHOLE BODY DOSES AT THE BOUNDARY OF LOW POPULATION ZONE
* DEFENSIVE POEL

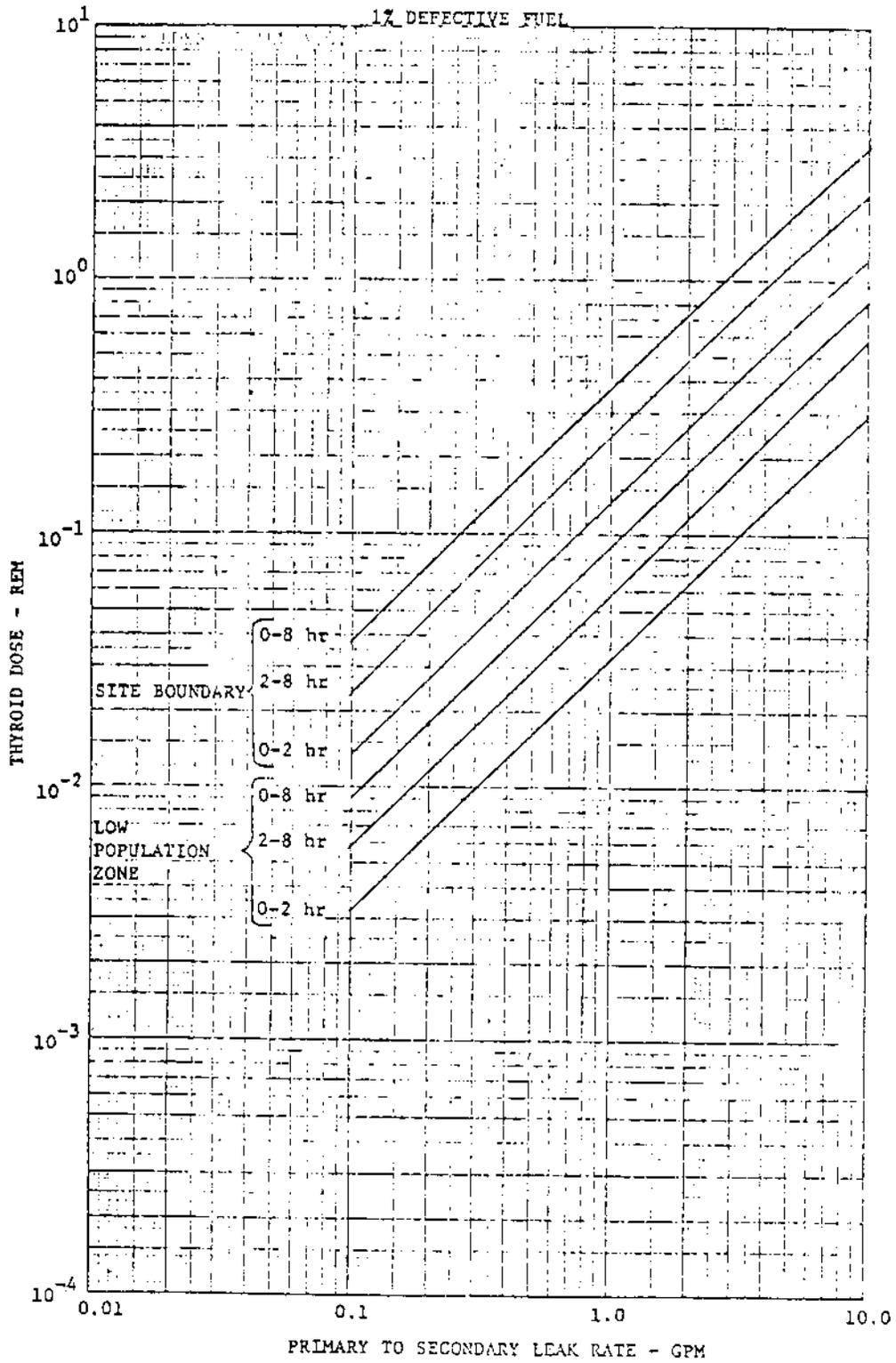


UNIT 1

July, 1987

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FIGURE 14.2.7-5 LOSS OF ALL A.C. POWER TO THE PLANT AUXILIARIES



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FIGURE 14.2.7-6

LOSS OF A.C. POWER TO THE PLANT AUXILIARIES
1% DEFECTIVE FUEL

