

GPU Nuclear

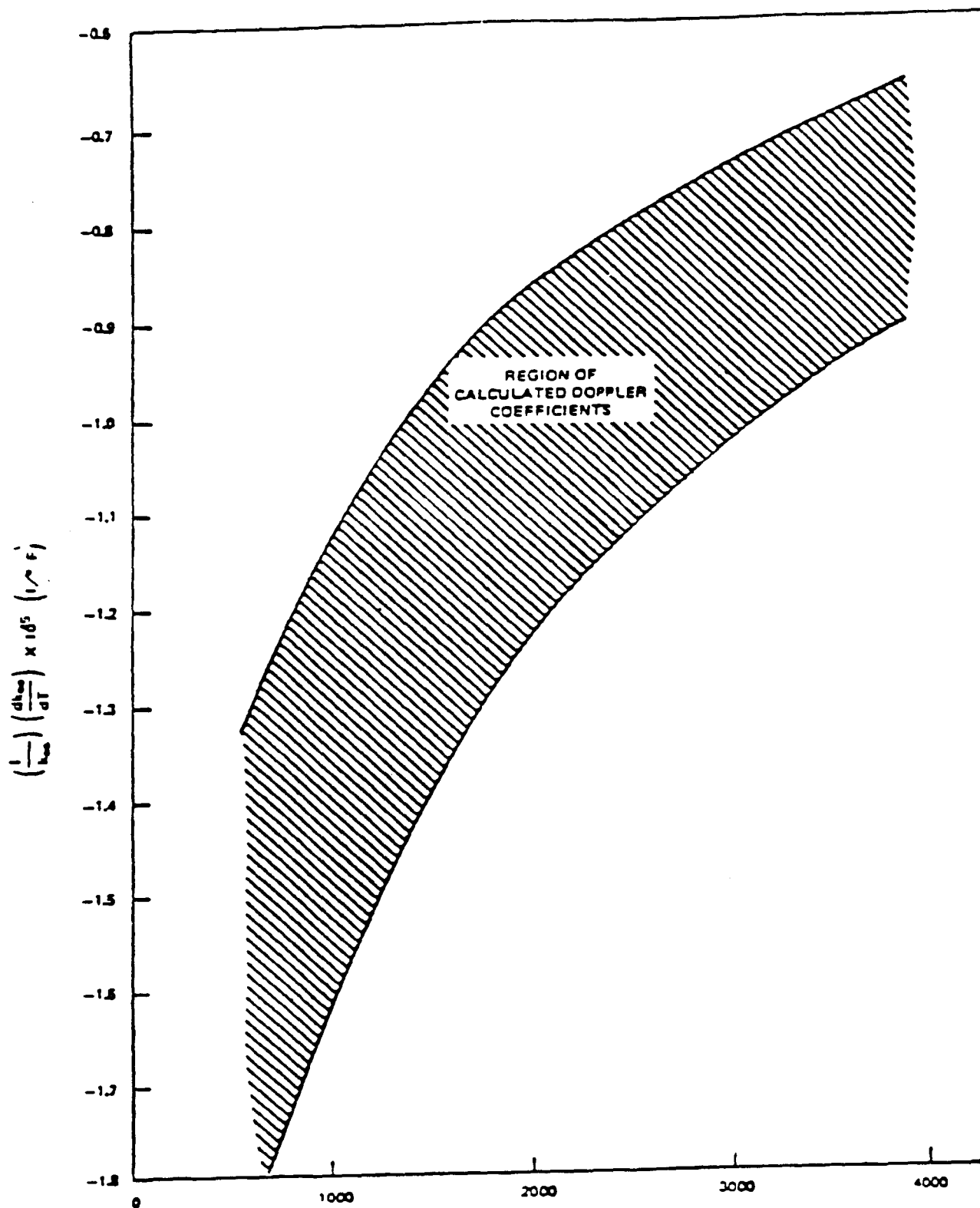
Update - 5

Oyster Creek

12/90

Envelope of Doppler Coefficient Versus
Temperature, E=200 MWd/t

Fig. 4.3-1



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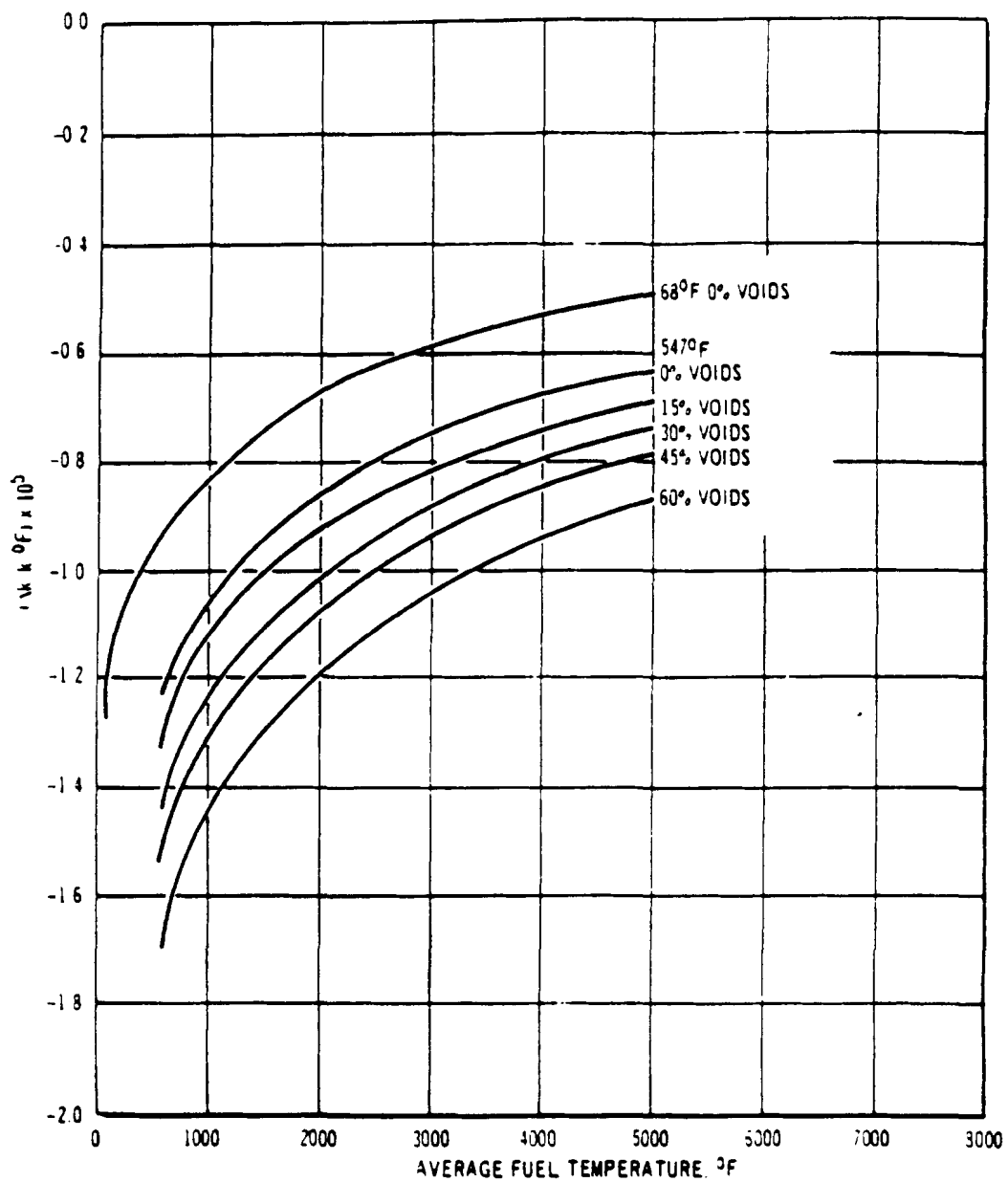
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Envelope of Doppler Coefficient Versus
Temperature, E=15,000 MWd/t

Fig. 4.3-2



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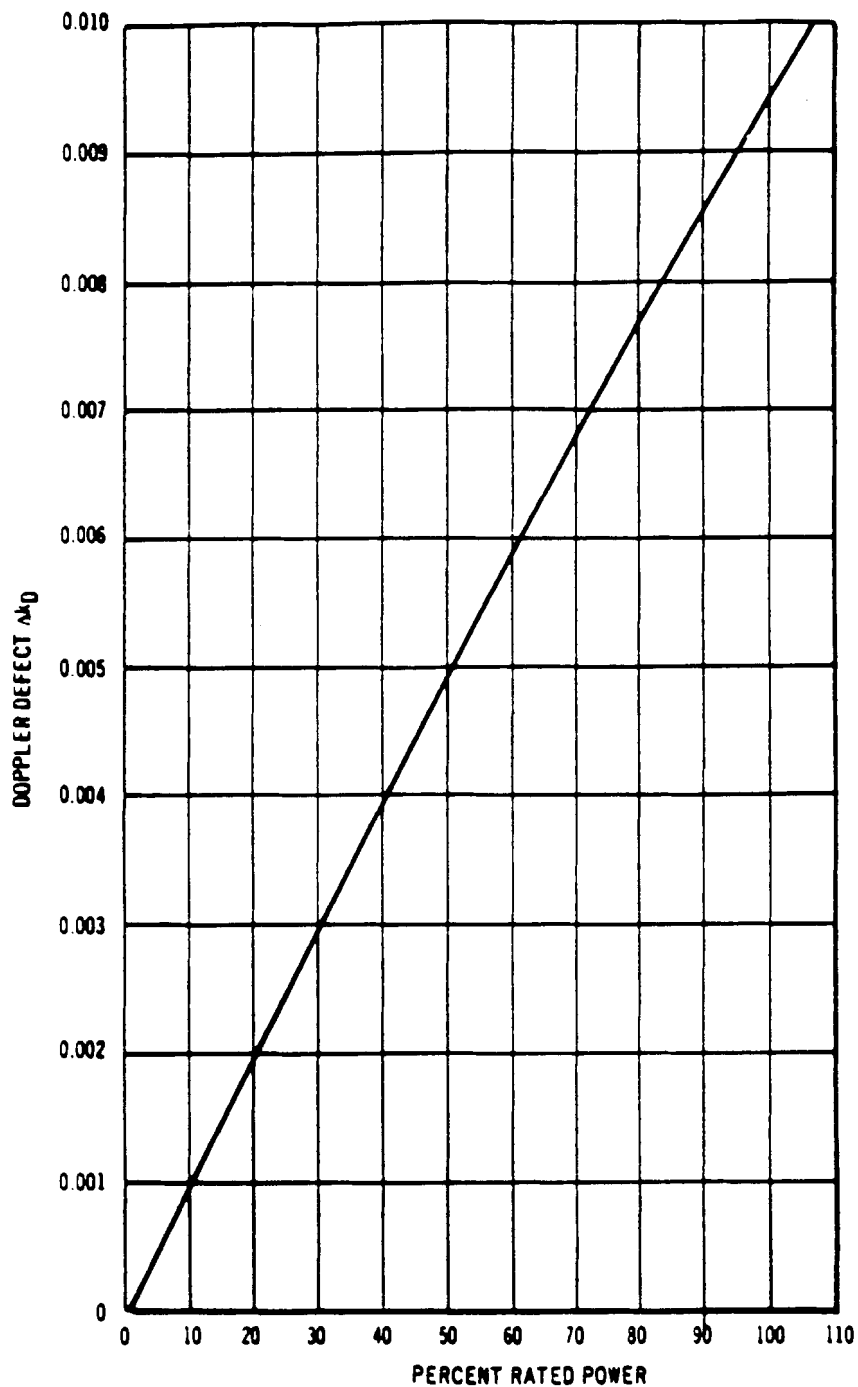
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**Doppler Coefficient of Reactivity —
Unirradiated Fuel**

Fig. 4.3-3



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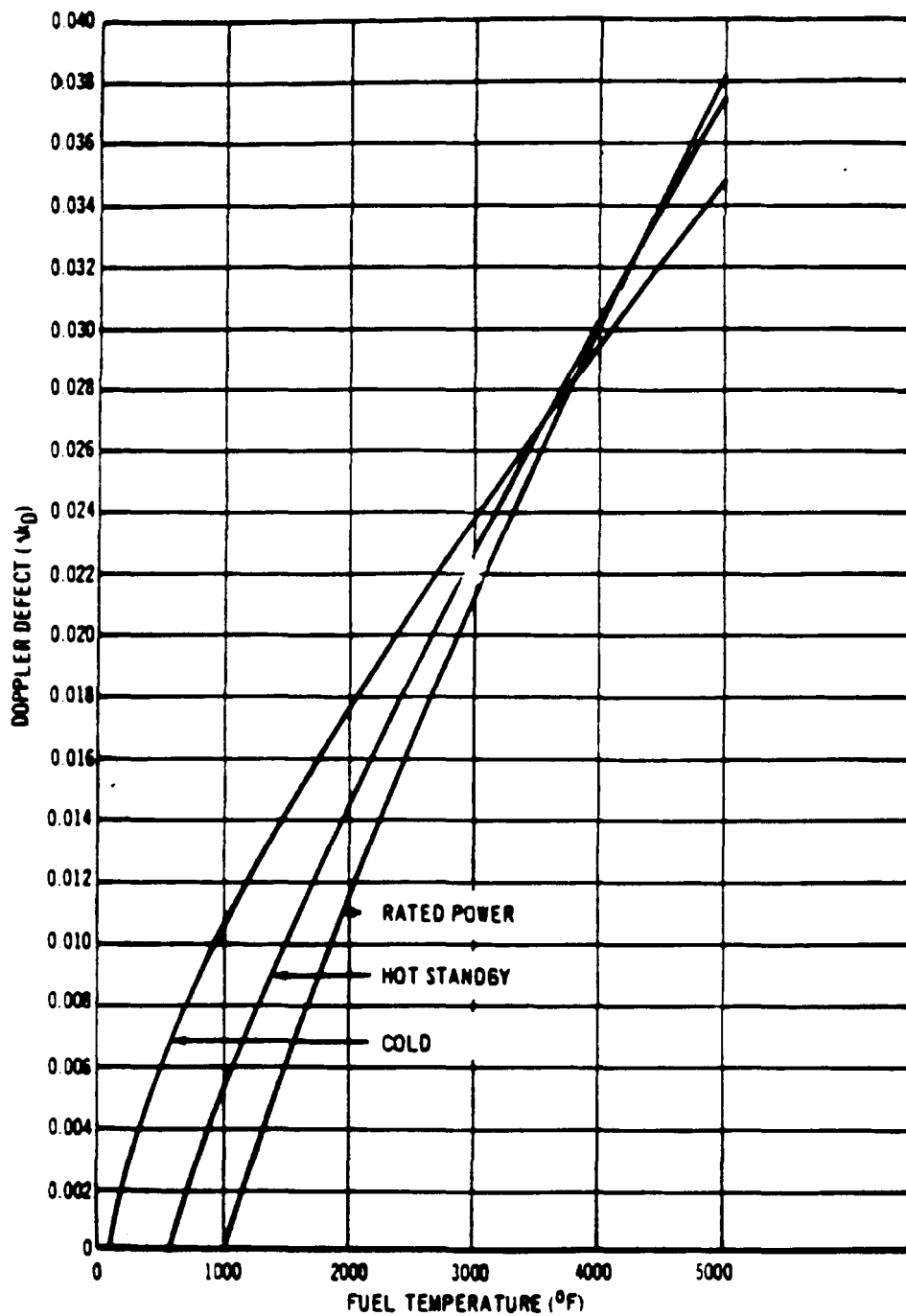
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Core Average Doppler Defect Versus
Core Power Level

Fig. 4.3-4



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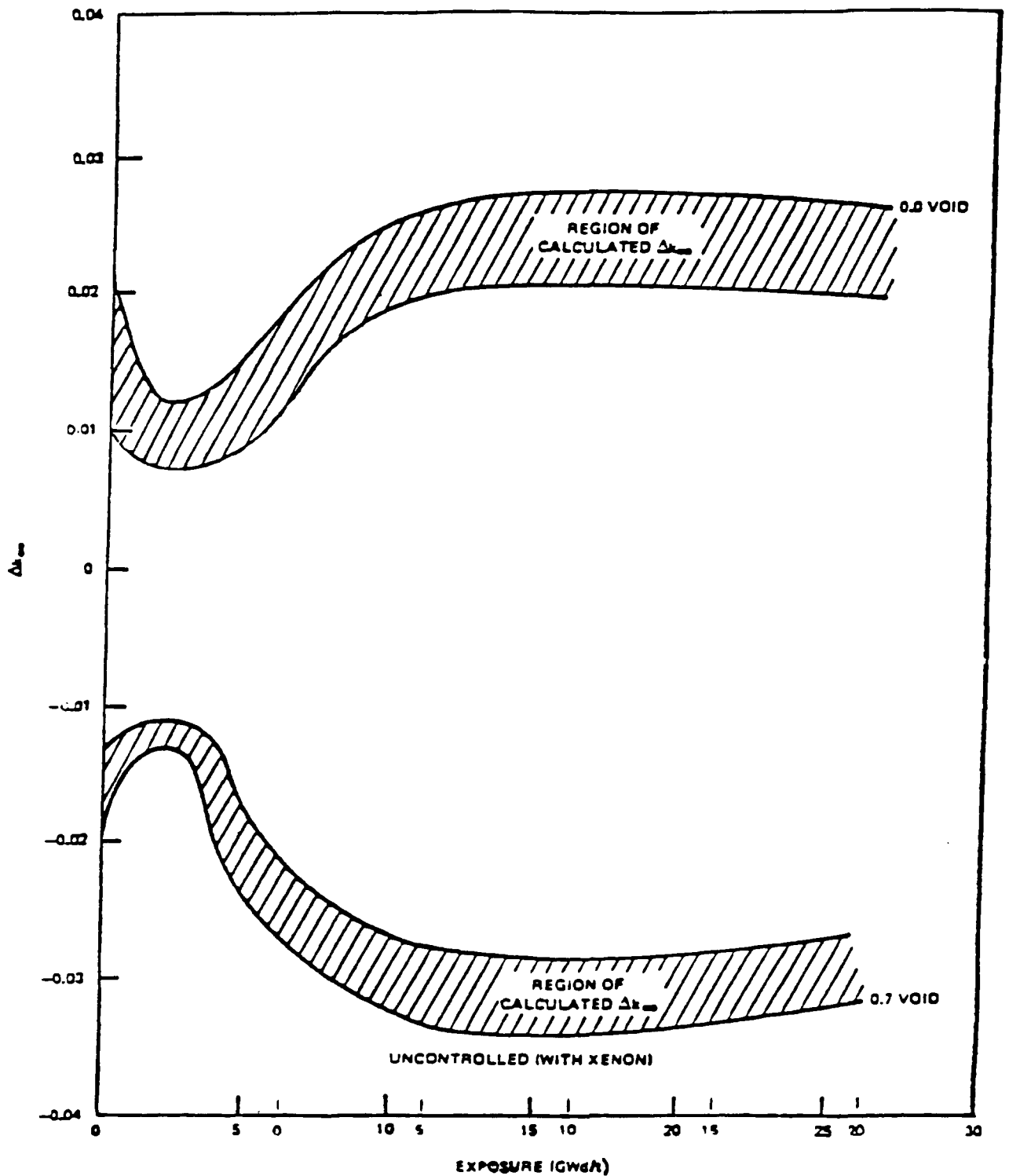
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Doppler Defect Versus Fuel Temperature

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Fig. 4.3-5



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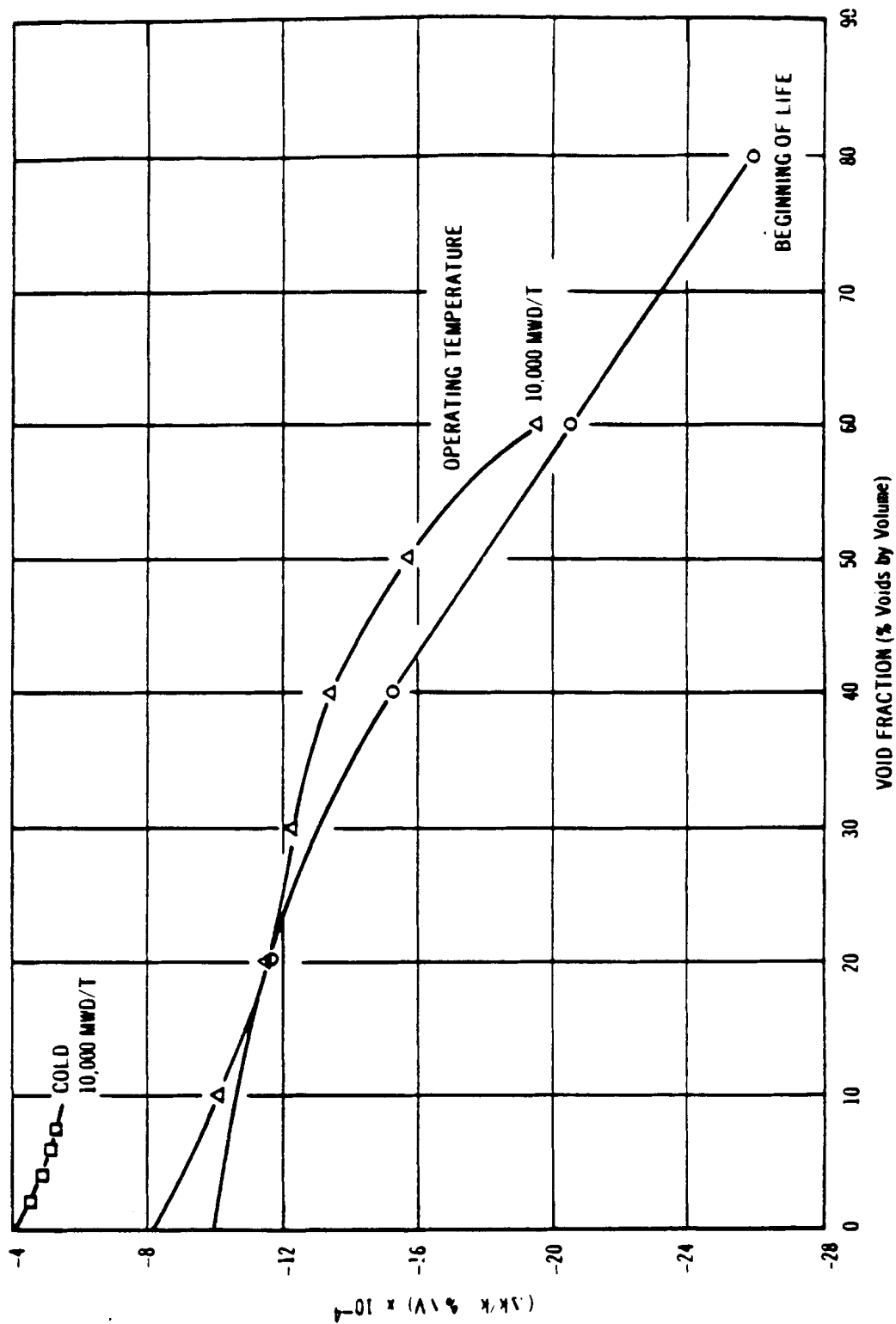
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Envelope of Delta-k - Infinity (From 0.4 Void to
Other Voids) Versus Exposure

Fig. 4.3-6



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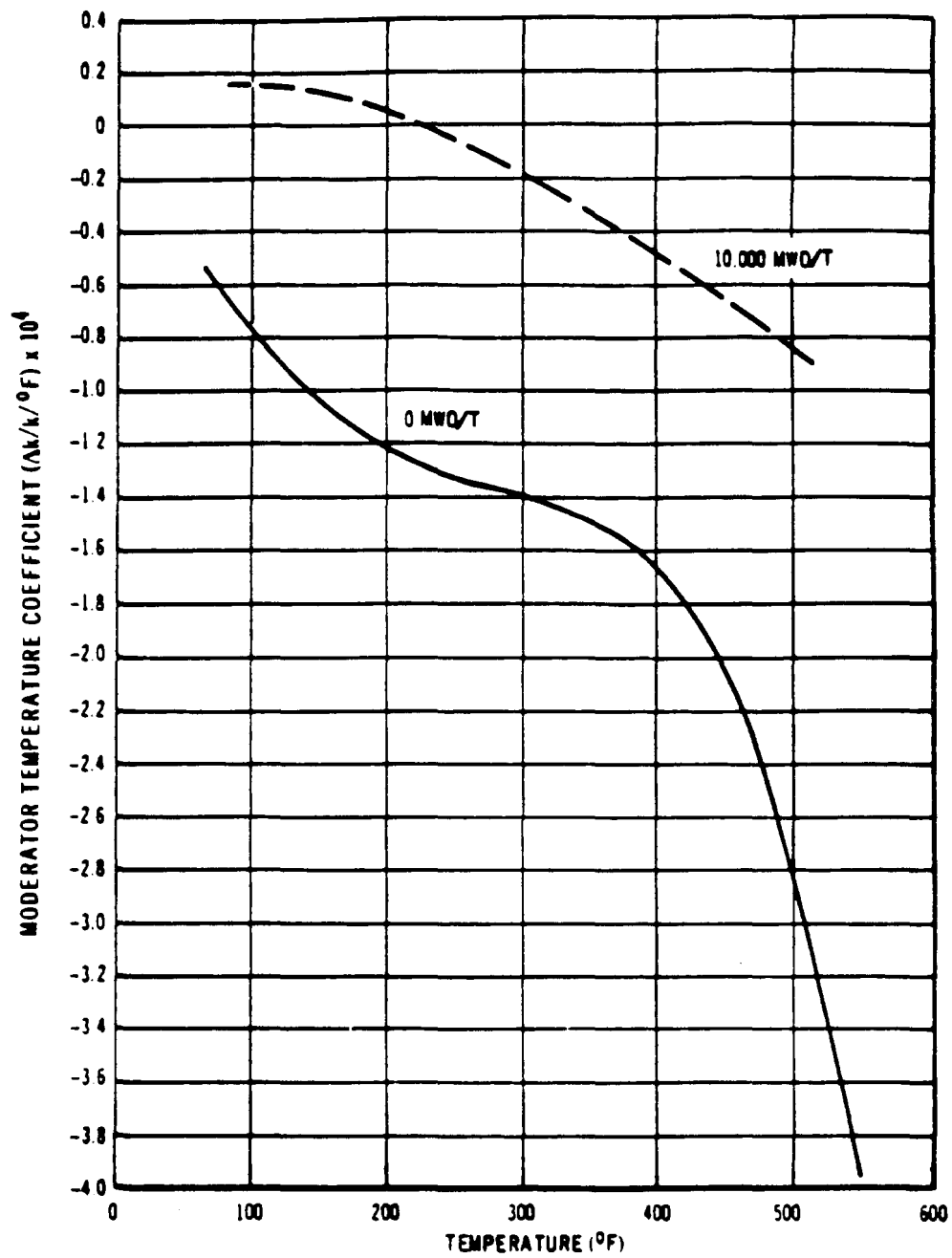
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Moderator Void Coefficients of Reactivity

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Fig. 4.3-7



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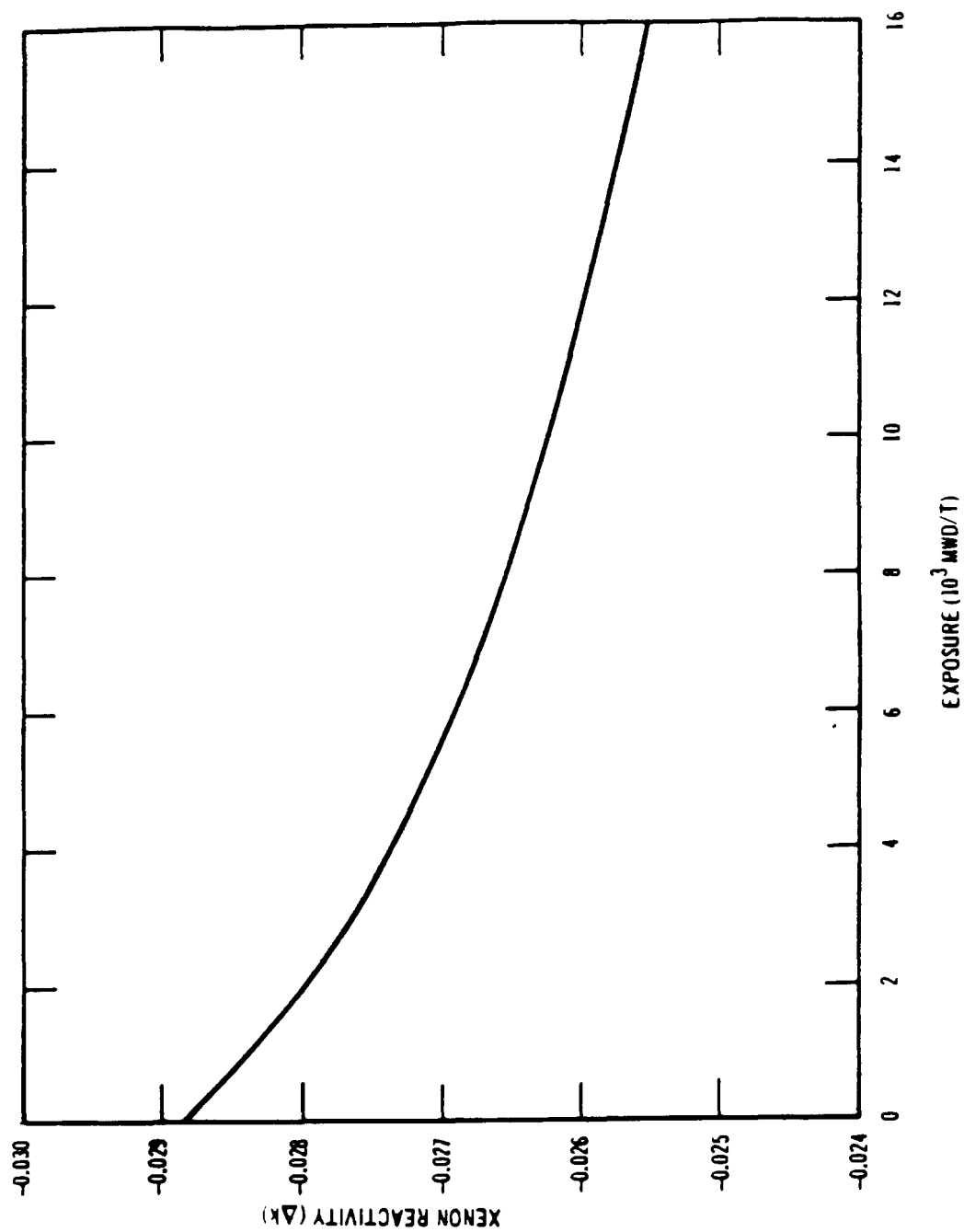
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Moderator Temperature Coefficients of Reactivity

Fig. 4.3-8



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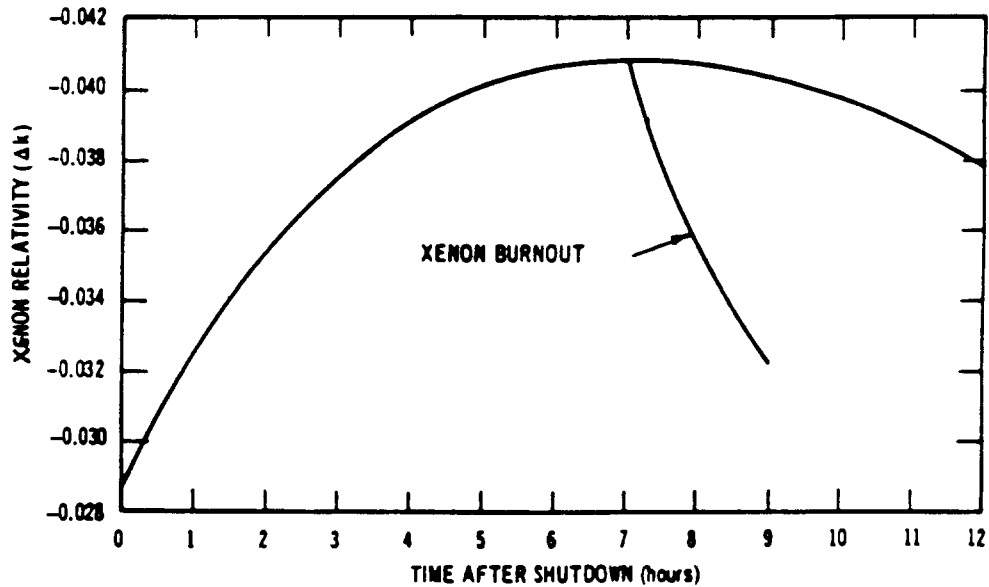
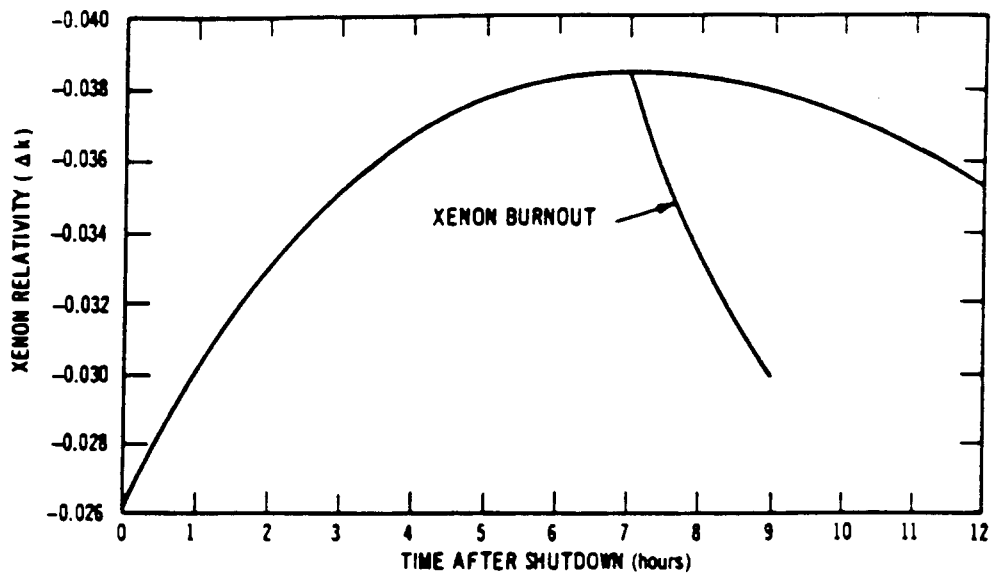
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Xenon Reactivity as a Function of Exposure at
Rated Power Density with 35 Percent Voids

Fig. 4.3-9



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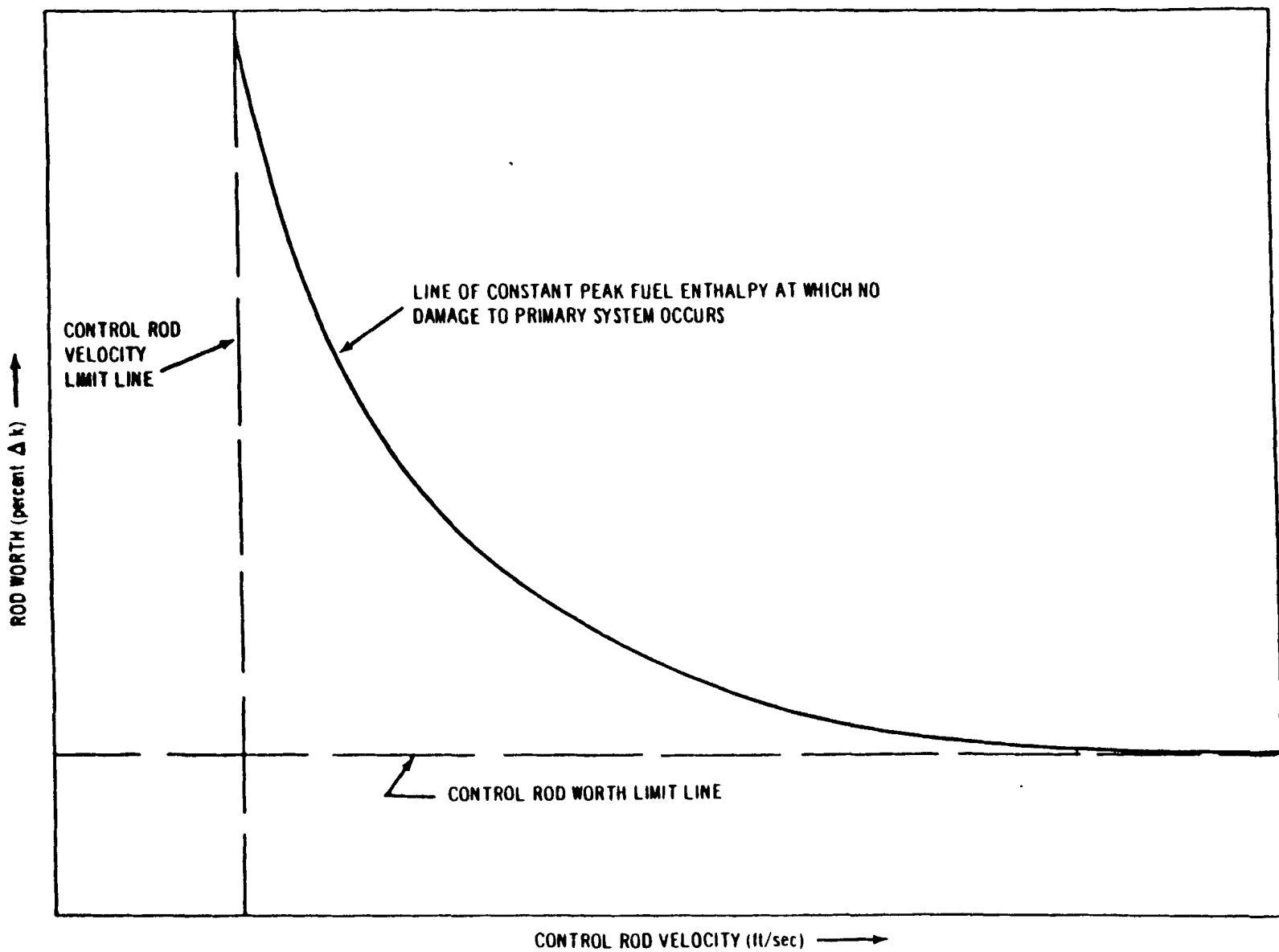
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Xenon Reactivity Buildup After Shutdown and
Burnout on Return to Full Power from Maximum
Shutdown Xenon Buildup at EOL and BOL

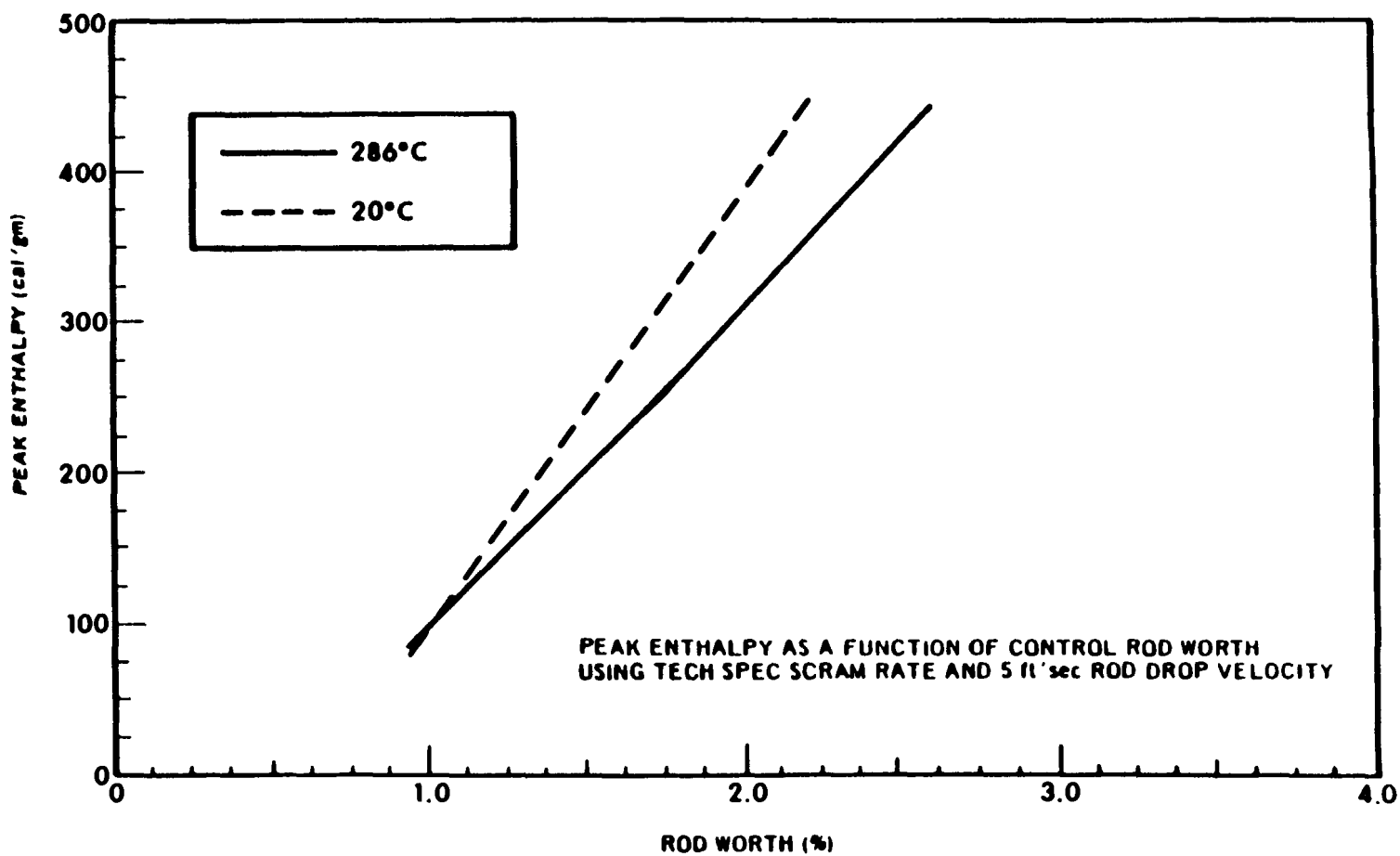
Fig. 4.3-10



GE Nuclear
Oyster Creek
 Control Rod Drop Accident Determination
 of Allowable Rod Worths Versus Rod
 Drop Velocity

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Fig. 4.3-11



GP7 Nuclear

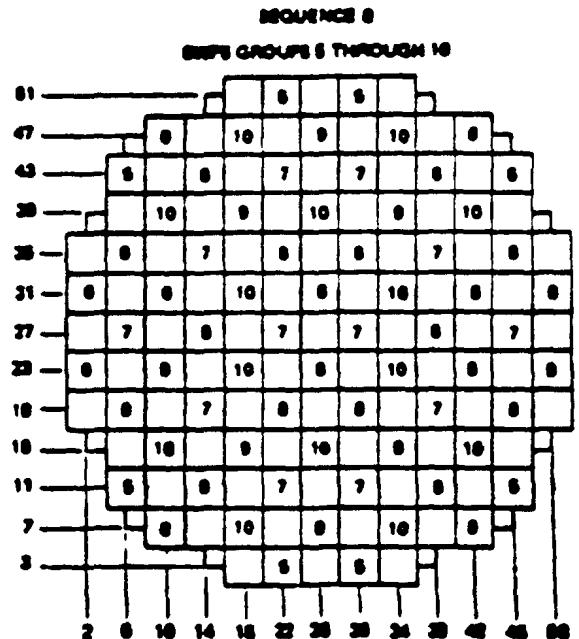
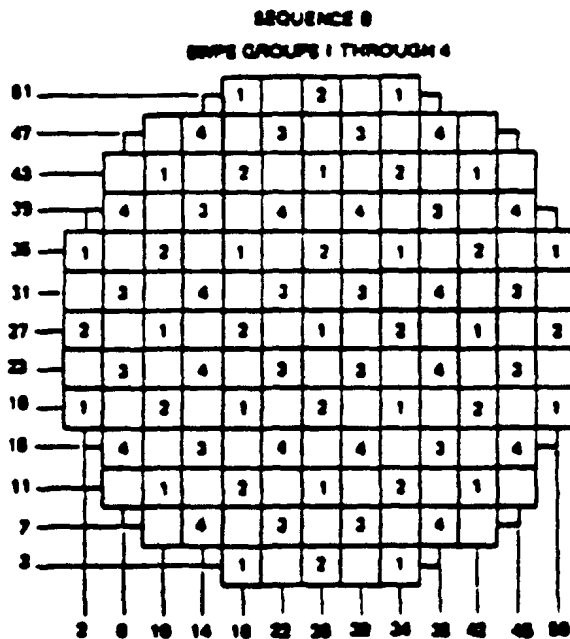
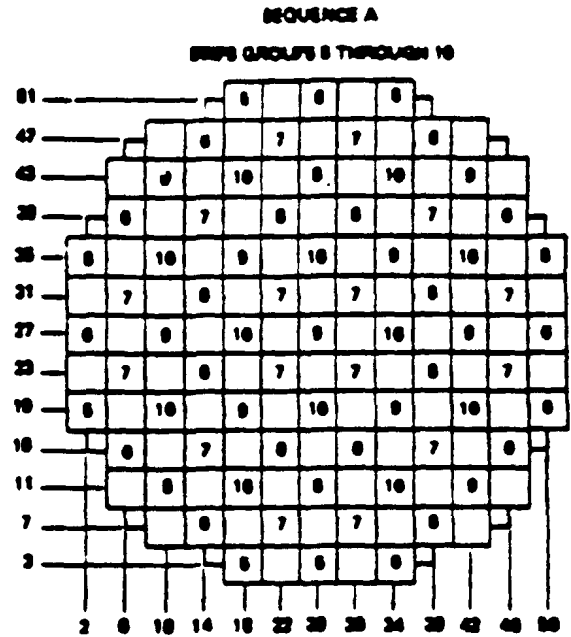
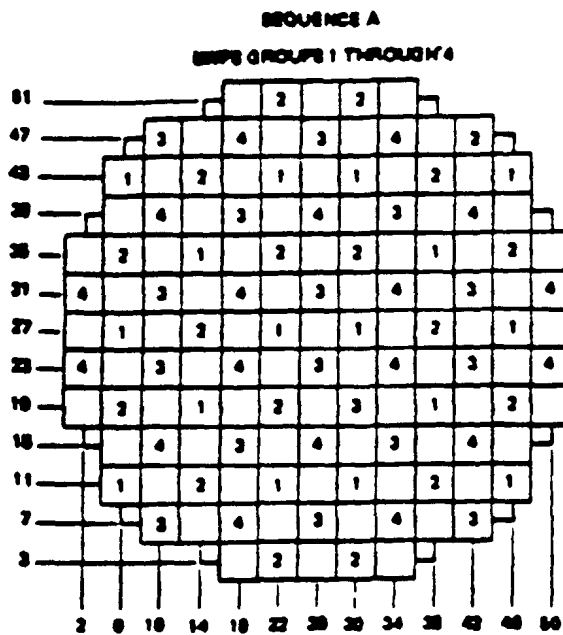
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Peak Fuel Enthalpy — Rod Drop
Accident at Hot Standby Condition

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Fig. 4.3-12



NOTE:

The maximum rod worth is determined by the Rod Drop Analysis, and the RWM is programmed to assure the 280 cal/gm limit is met. These groups may be subdivided to assure compliance with this limit.

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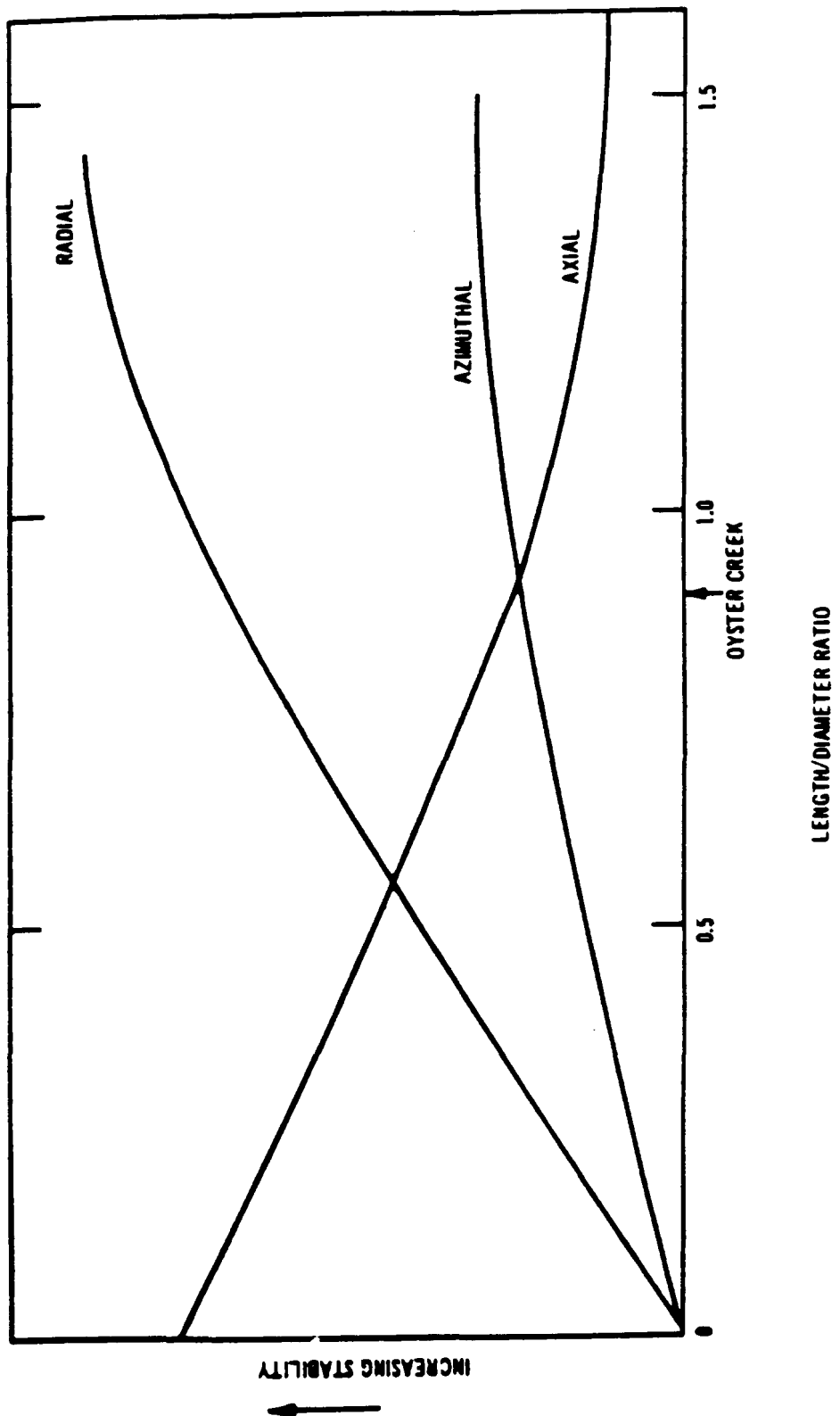
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Control Rod Withdrawal Sequences

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Fig. 4.3-13



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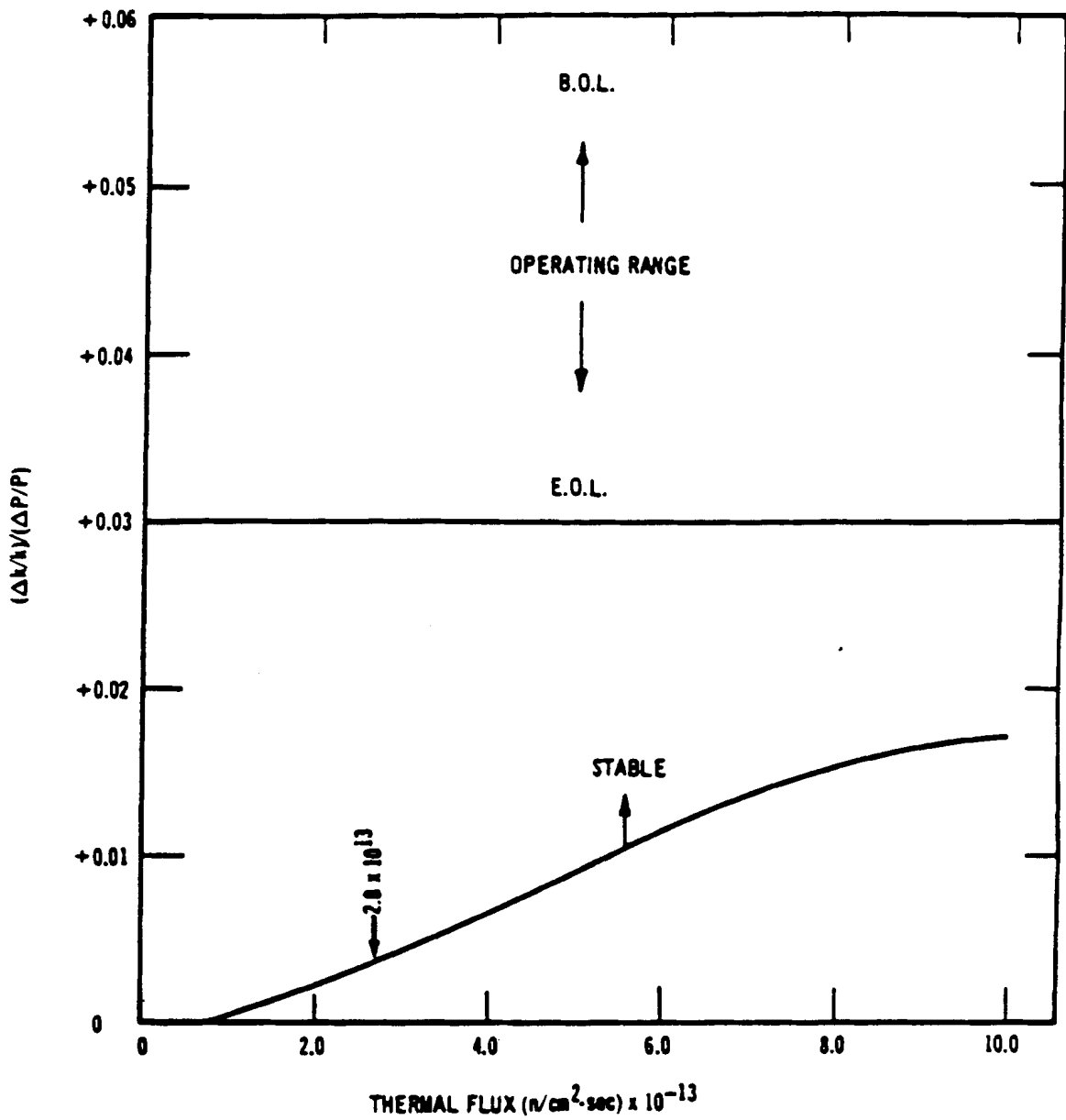
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Relative Xenon Stability with No Flux Flattening

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Fig. 4.3-14



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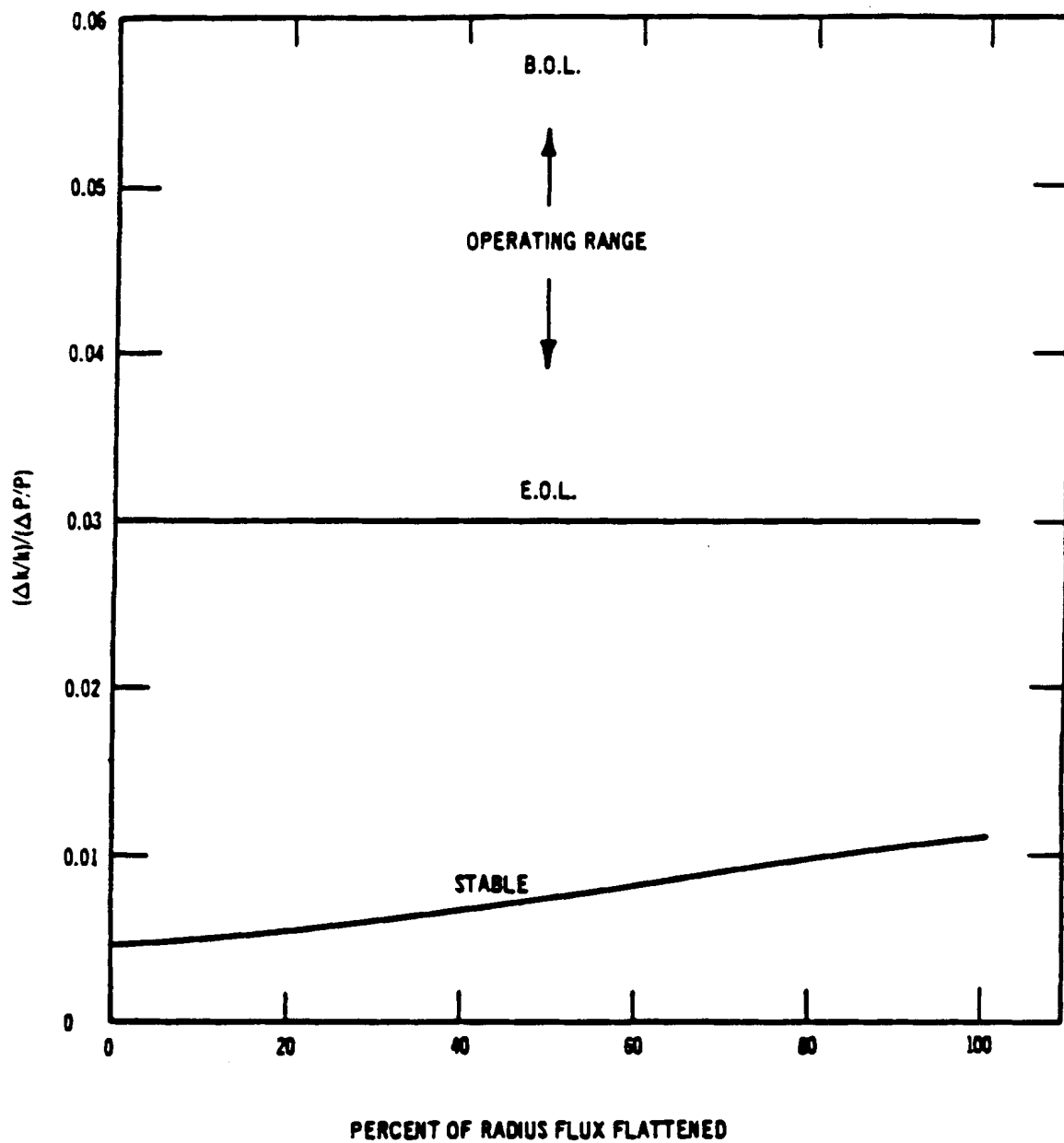
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Effect of Power Density on Axial Xenon
Stability Including Void Transport

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Fig. 4.3-15



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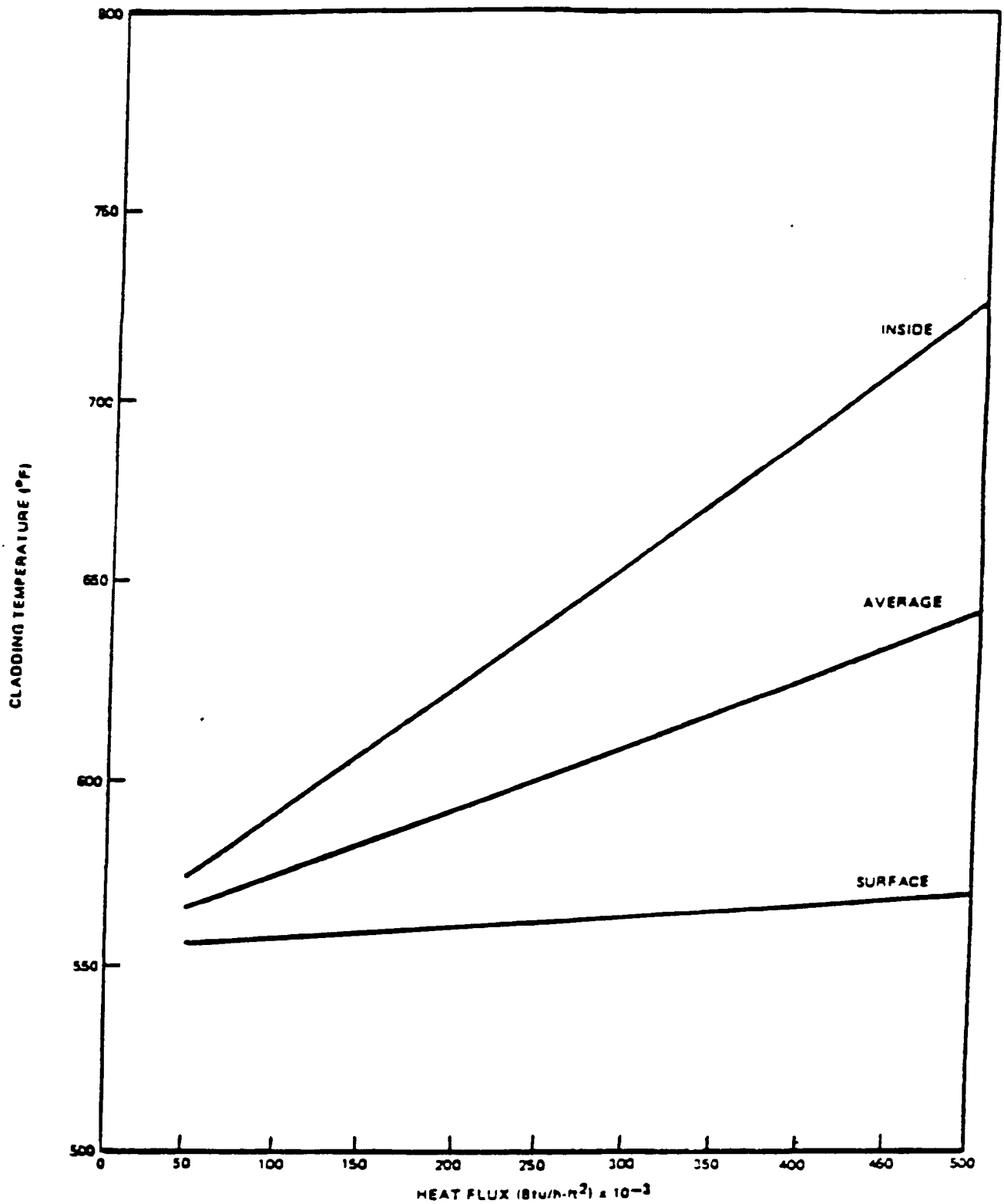
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Azimuthal Xenon Stability

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Fig. 4.3-16



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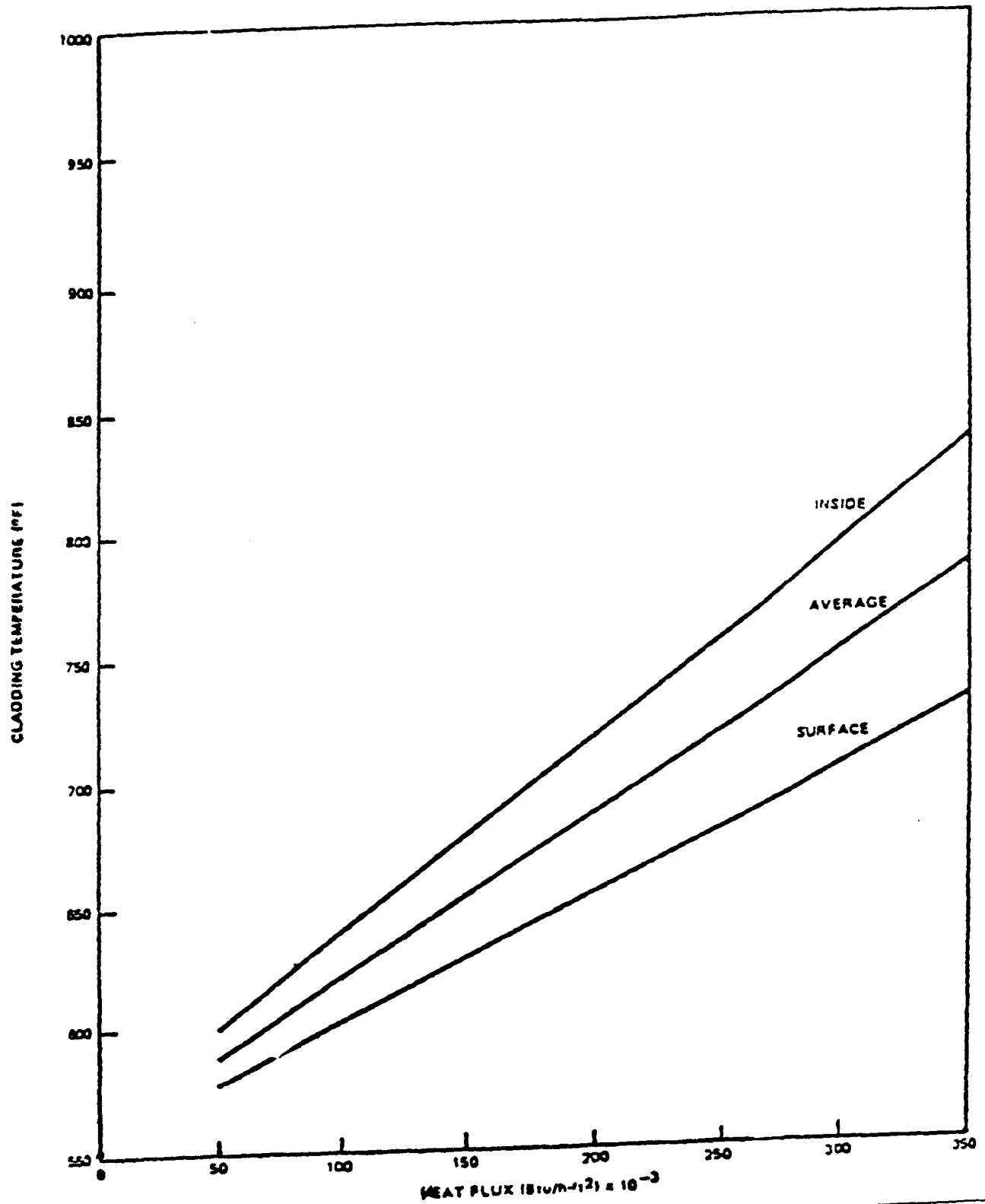
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Cladding Temperature Versus Heat Flux
at Beginning of Life (BOL) P8x8R Fuel

Fig. 4.4-1



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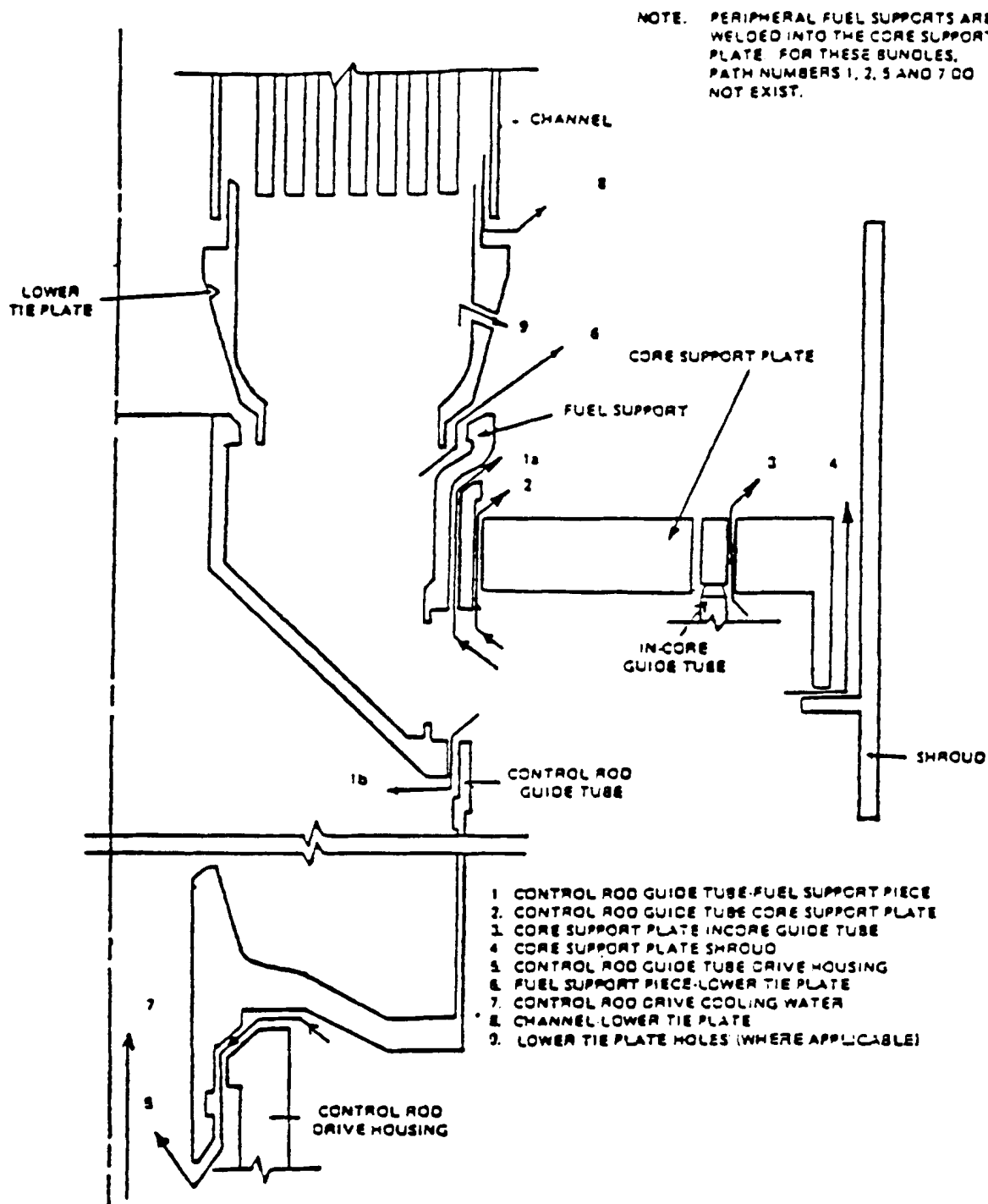
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Cladding Temperature Versus Heat Flux at
End of Life (EOL) P8x8R Fuel

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12/90

Fig. 4.4-2



GPU Nuclear

Update - 5

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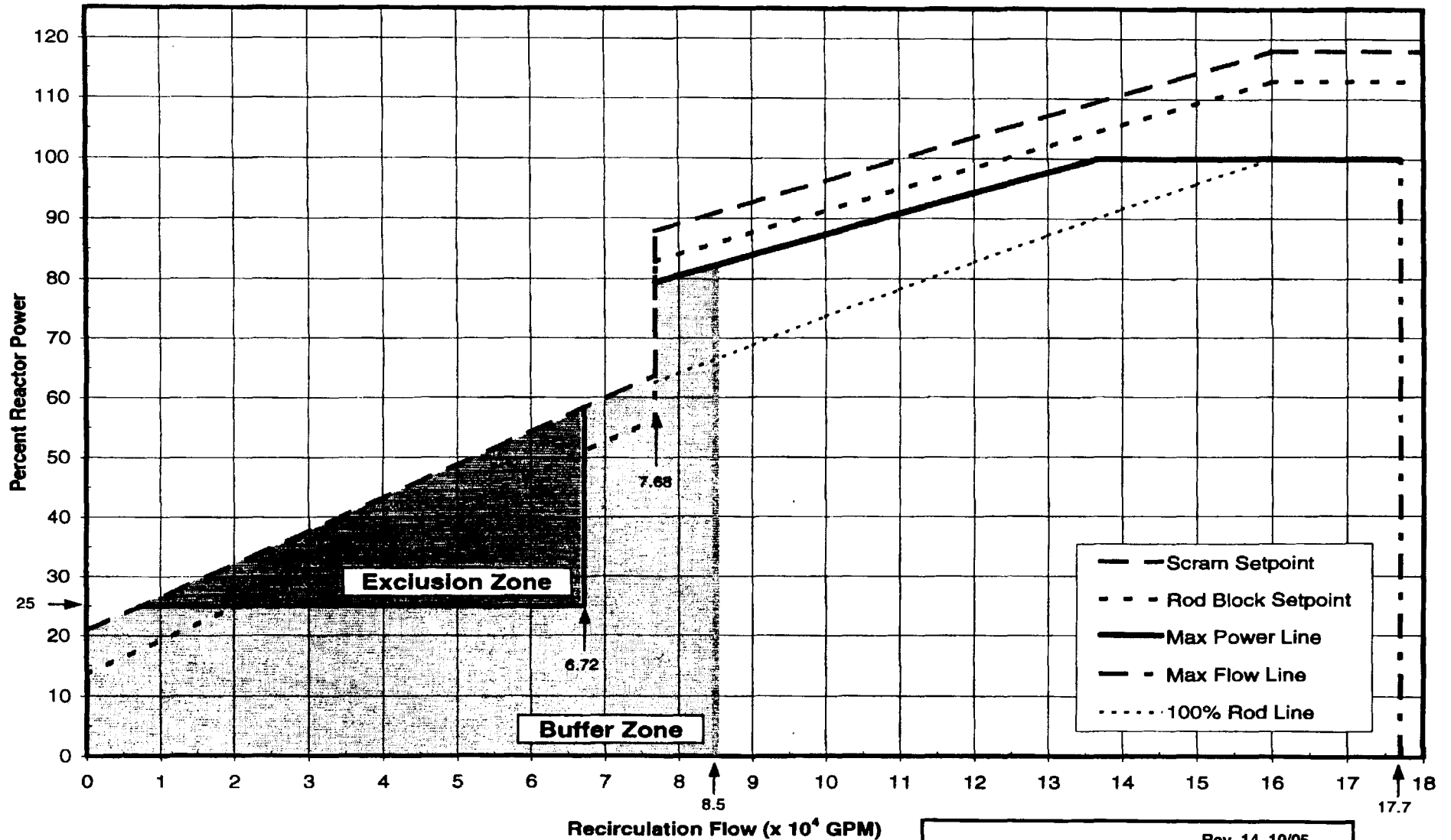
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Schematic of Reactor Assembly Showing the
Bypass Flow Paths

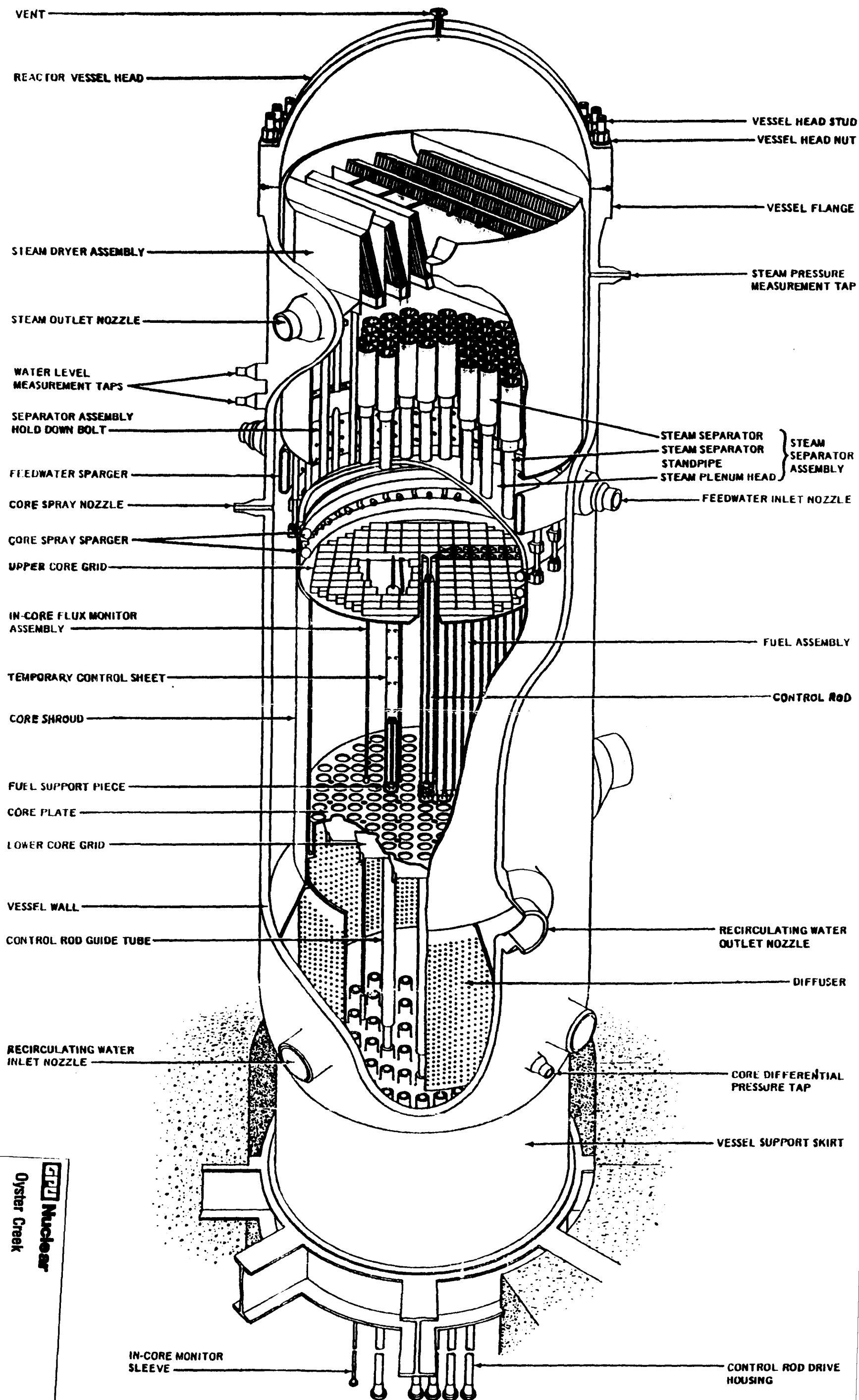
Fig. 4.4-3

OCNGS
FSAR Update

Oyster Creek Power Operations Curve



Rev. 14 10/05
OYSTER CREEK NUCLEAR GENERATING STATION
Reactor Power-Flow Relationship
FIGURE 4.4-4



GE Nuclear

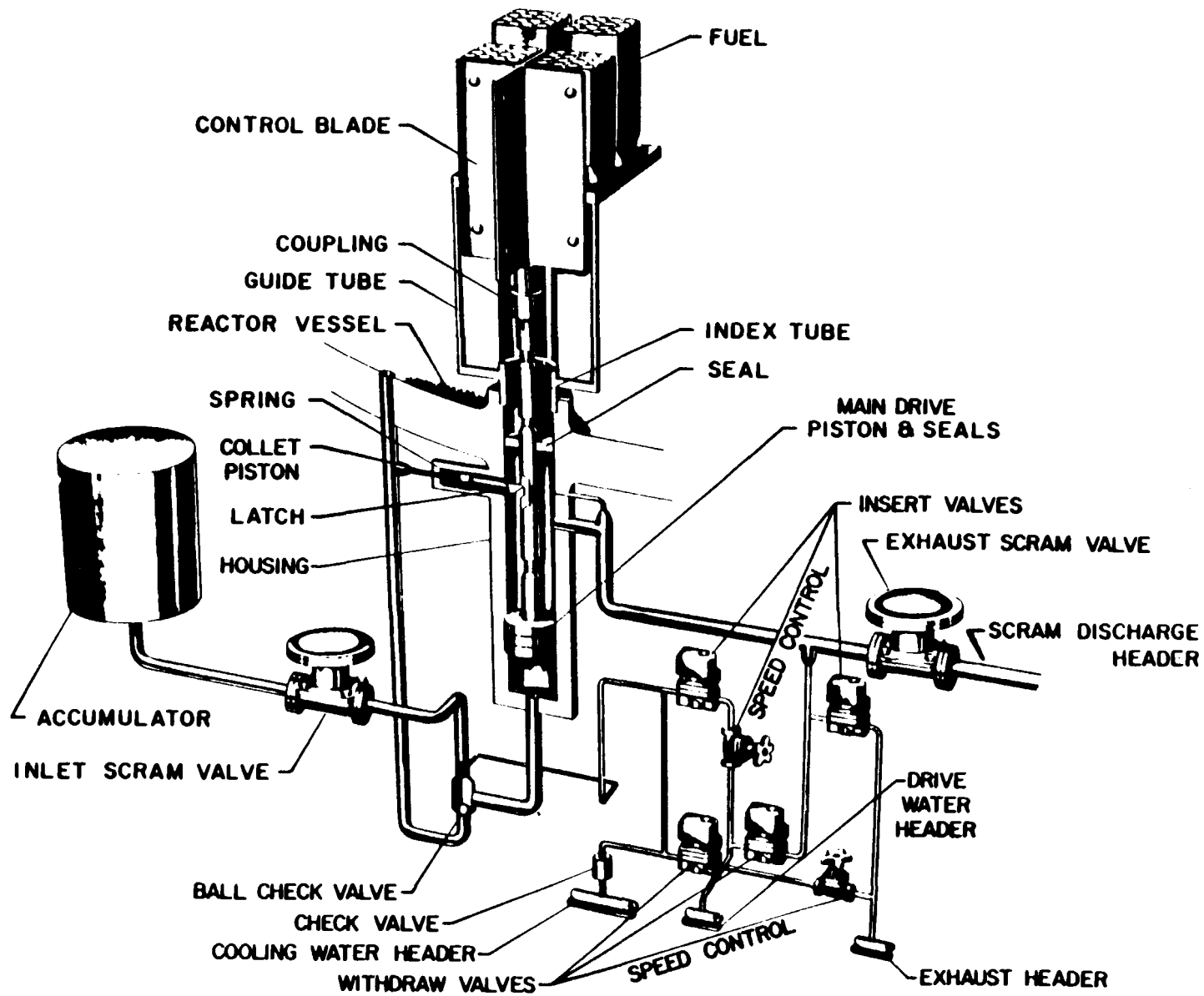
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Reactor Vessel Isometric

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Fig. 4.5-1



GT Nuclear

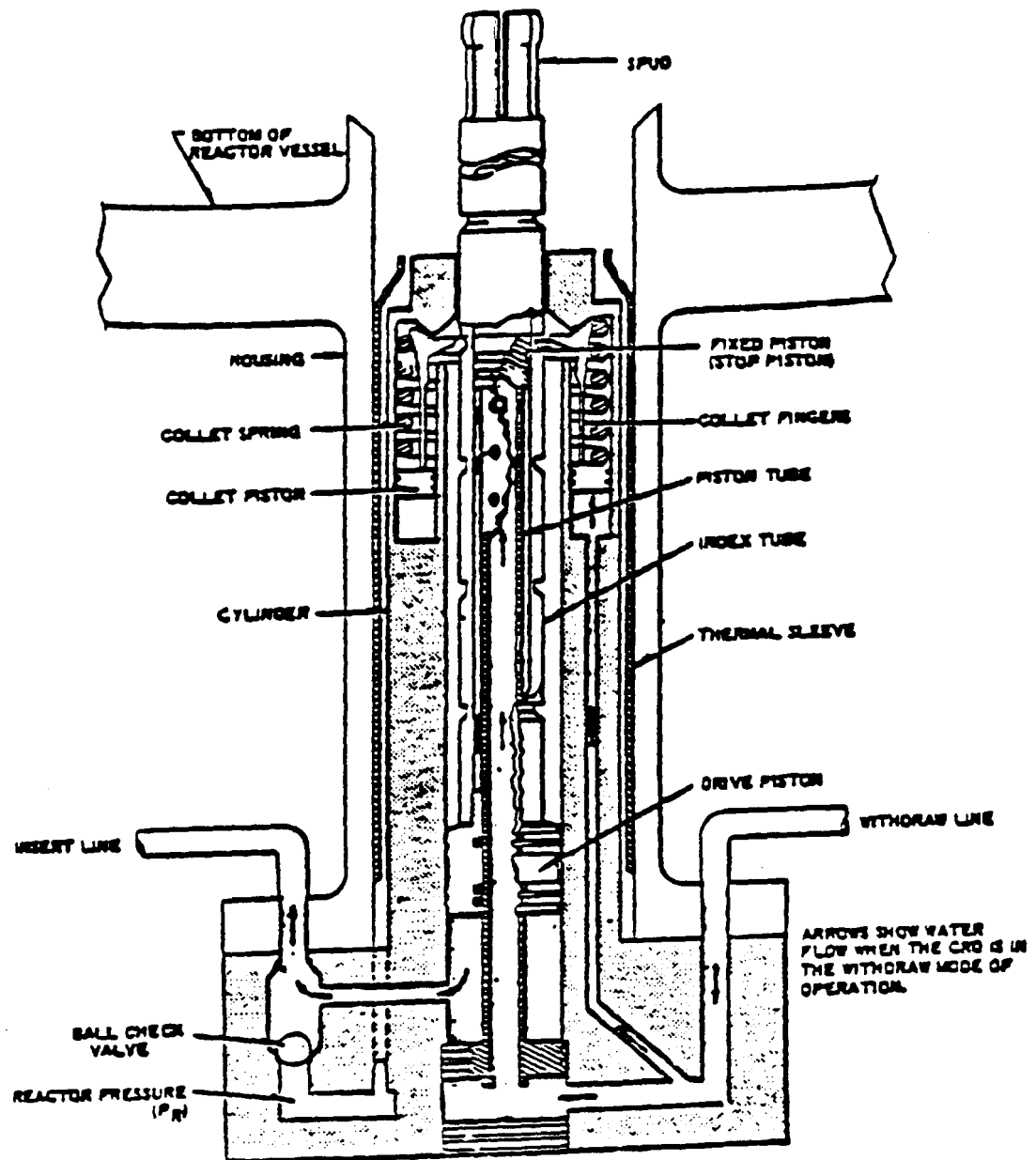
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Control Rod Drive System — Simplified
Component Illustration

Fig. 4.6-1



GPU Nuclear

Oyster Creek

Control Rod Drive — Cutaway

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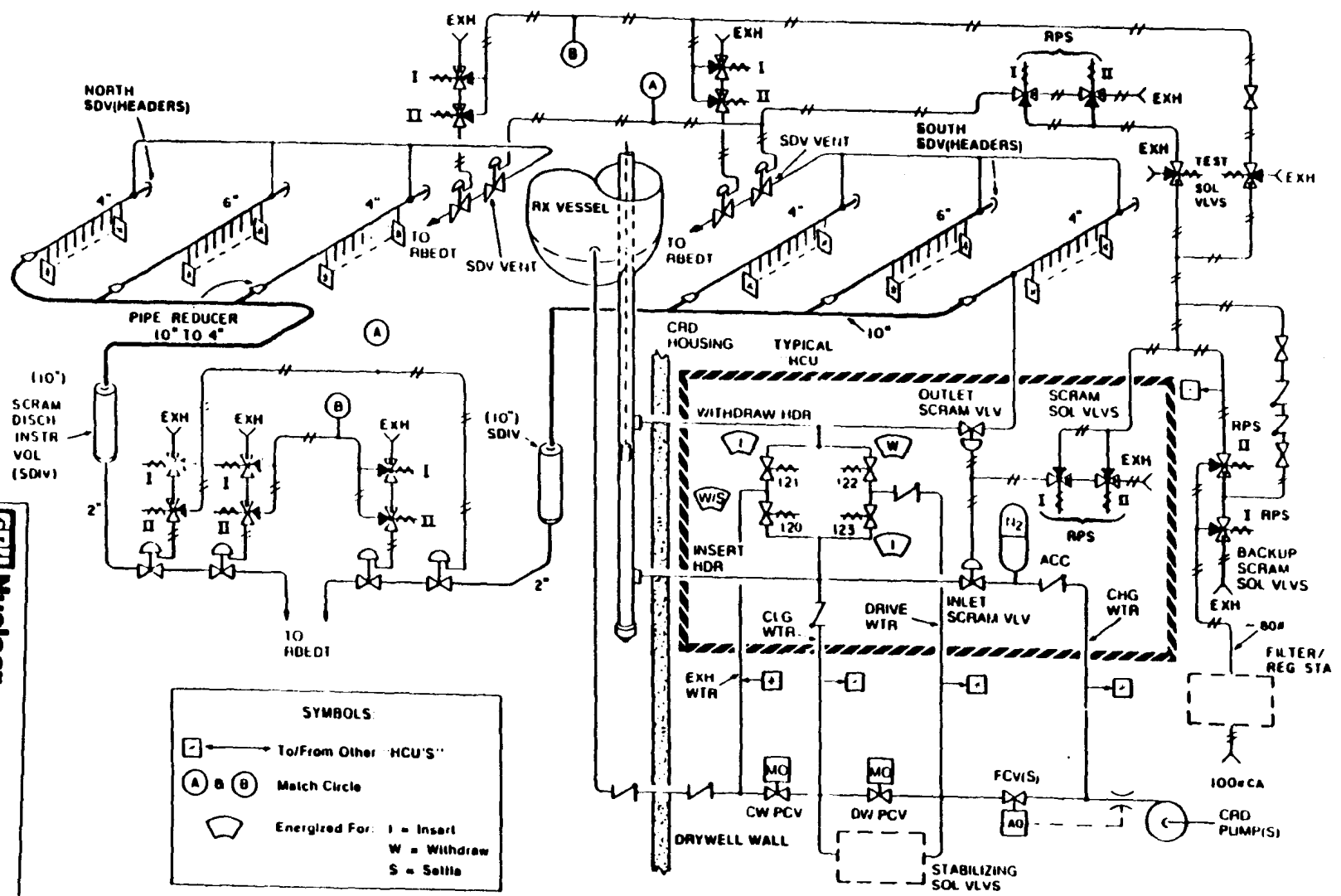
12/90

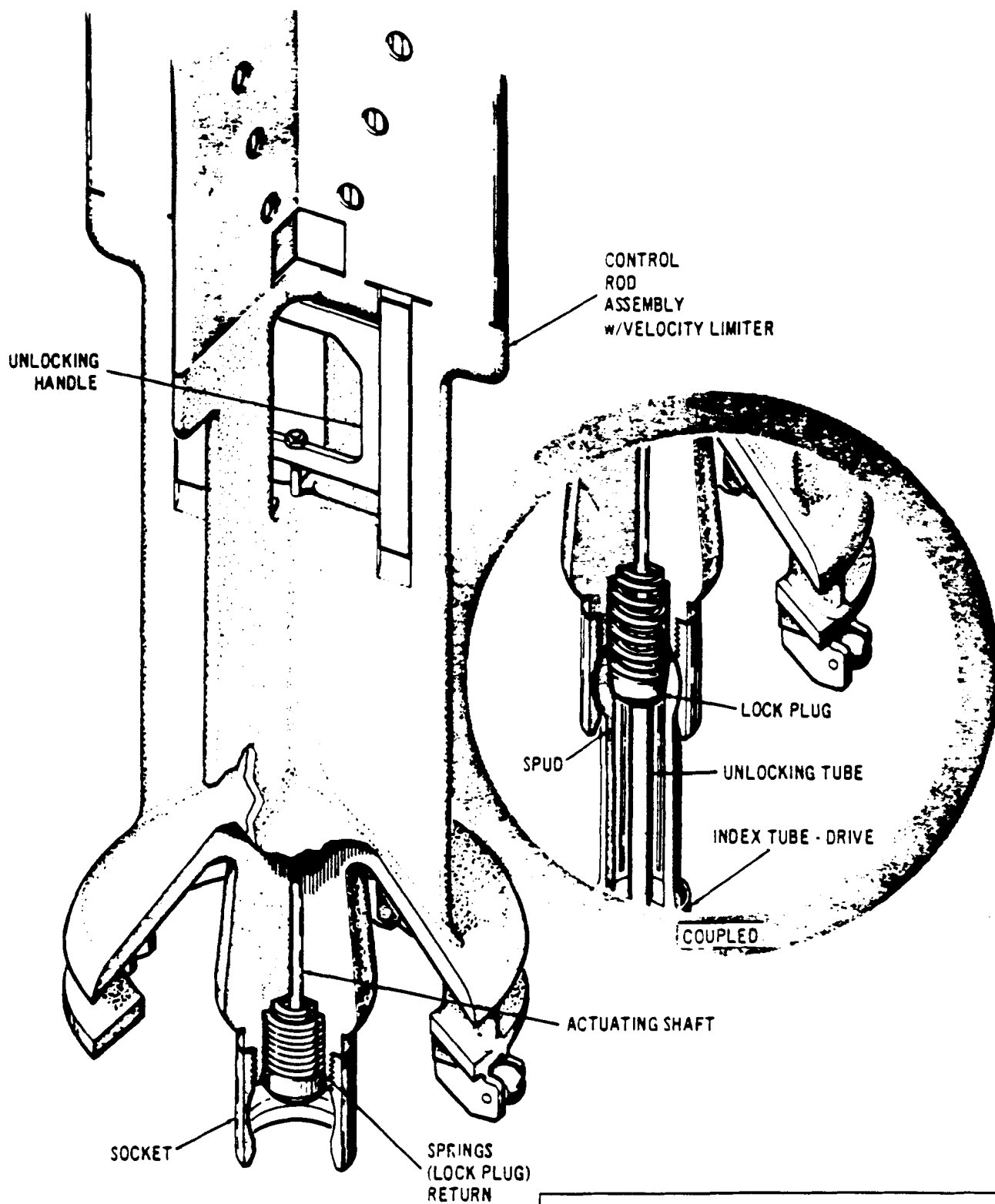
Fig. 4.6-2

GP Nuclear
Oyster Creek
 Oyster Creek Control Rod Drive Hydraulic
 Control Units, Scram Discharge Volumes
 and Scram Air Valving — Simplified Sketch

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 12/90

Fig. 4.6-3





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Oyster Creek

Control-Rod-To-Drive Coupling — Isometric

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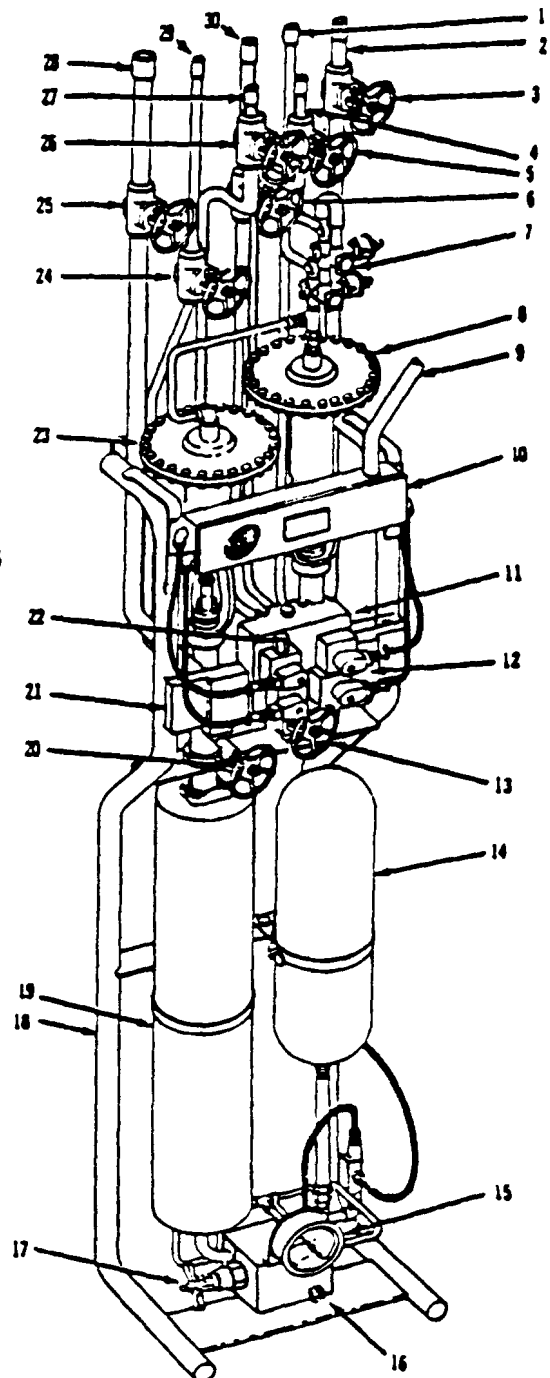
Fig. 4.6-4

OCNGS UFSAR

Figure 4.6-5

Deleted

1. ACCUMULATOR CHARGING WATER RISER
2. DRIVE - WITHDRAW RISER
3. ISOLATION VALVE — DRIVE-WITHDRAW RISER (EP 102)
4. DRIVE WATER RISER
5. ISOLATION VALVE — DRIVE WATER RISER (EP 103)
6. ISOLATION VALVE — SCRAM DISCHARGE RISER (EP 108 OR EP 112)
7. SCRAM PILOT VALVE ASSEMBLY (EP 117, 118)
8. OUTLET SCRAM VALVE AND ACTUATOR (EP 127)
9. TYPICAL ELECTRICAL CONNECTION
10. WIRING TROUGH ASSEMBLY
11. MANIFOLD (PART OF PIPING ASSEMBLY)
12. DIRECTIONAL CONTROL VALVES (4 EACH) (EP 120, 121, 122, 123)
13. ISOLATION VALVE — ACCUMULATOR CHARGING WATER RISER (EP 106)
14. SCRAM ACCUMULATOR — NITROGEN CYLINDER (EP 128)
15. ACCUMULATOR GAS PRESSURE INDICATOR (EP 131)
16. ACCUMULATOR INSTRUMENTATION ASSEMBLY
17. NEEDLE VALVE — ACCUMULATOR GAS CHARGING (EP 111)
18. FRAME
19. SCRAM ACCUMULATOR — WATER CYLINDER (EP 125)
20. NEEDLE VALVE — ACCUMULATOR WATER CYLINDER DRAIN (EP 107)
21. COOLING CHECK VALVE (IN MANIFOLD)
22. SPEED CONTROL VALVES (2 EACH)
23. INLET SCRAM VALVE AND ACTUATOR (EP 126)
24. ISOLATION VALVE — COOLING WATER RISER (EP 104)
25. ISOLATION VALVE — DRIVE-INSERT RISER (EP 101)
26. ISOLATION VALVE — EXHAUST WATER RISER (EP 105)
27. EXHAUST WATER RISER
28. DRIVE-INSERT RISER
29. COOLING WATER RISER
30. SCRAM DISCHARGE RISER



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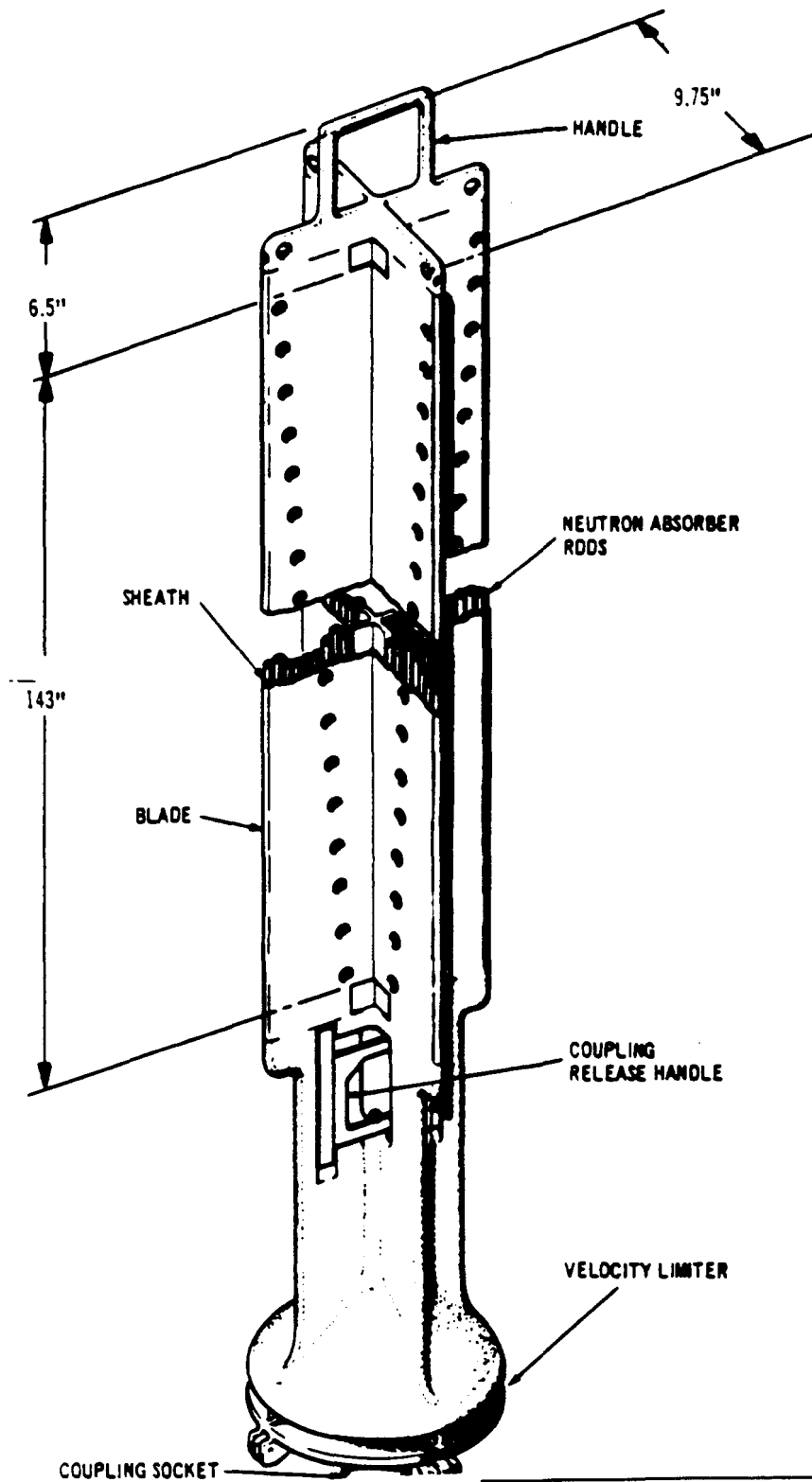
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Control Rod Drive Hydraulic Control
Unit— Isometric

Fig. 4.6-6



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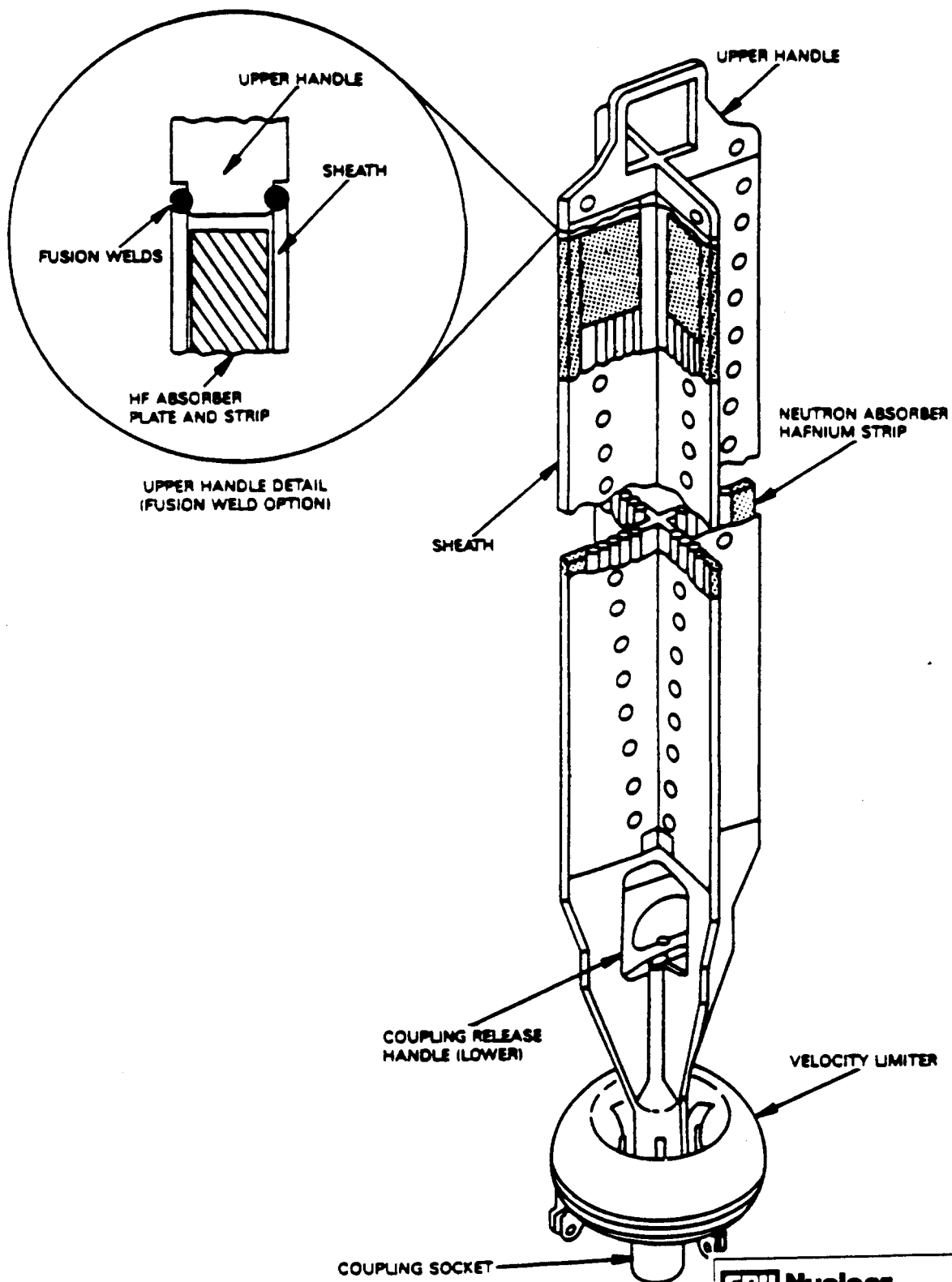
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Control Rod — Isometric

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12/90

Fig. 4.6-7



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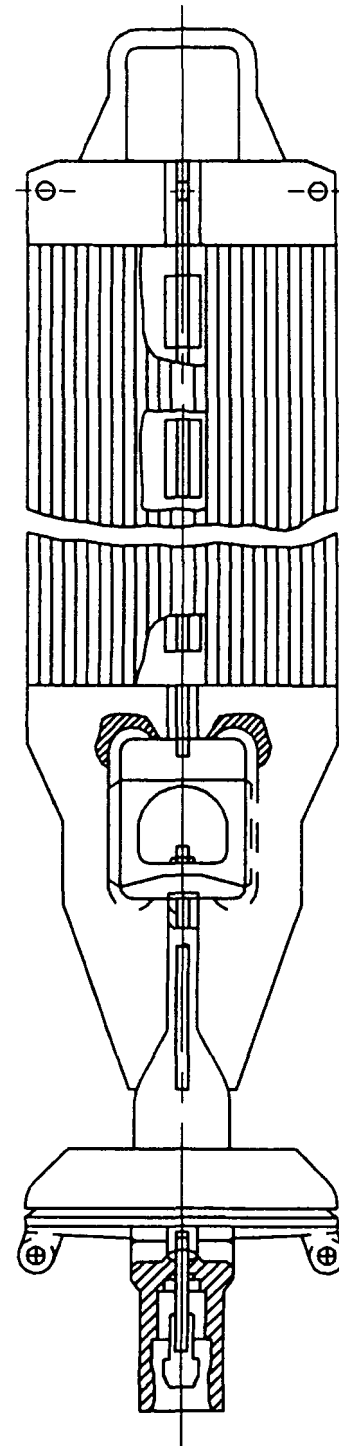
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Control Rod -- Isometric

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Fig. 4.6-8



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Update-8

8/93

Oyster Creek

Illustration of Typical Marathon
Control Rod (BWR/2-4 D-Lattice)

S3B,SKM,00,0570,001-.0001

Fig.4.6-9