

GENERAL  ELECTRIC

NUCLEAR POWER  
SYSTEMS DIVISION

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September 27, 1979

MFN-241-79  
LB-146-79

U. S. Nuclear Regulatory Commission  
Division of Systems Safety  
Office of Reactor Regulation  
Washington, D. C. 20555

Attention: Frank Schroeder, Acting Director  
Division of Systems Safety

Gentlemen:

SUBJECT: BWR/6 218-624 STANDARD PLANT ECCS ANALYSIS RESULTS

Enclosed herewith are ECCS analysis results for the General Electric BWR/6 218-624 Standard Plant, as requested by your staff (Mr. Larry Phillips) to support the NRC audit calculation effort. The enclosed results were generated using our currently approved Appendix K models.

Please refer any questions related to this information to Dr. Luis F. Rodriguez of my staff at (408) 925-2460.

Very truly yours,

*R. H. Buchholz*  
for

R. H. Buchholz, Manager  
BWR Systems Licensing  
Safety and Licensing Operation

RHB:mm/1521

Enclosure

cc: L. Gifford (Bethesda)  
L. Phillips (NRC)

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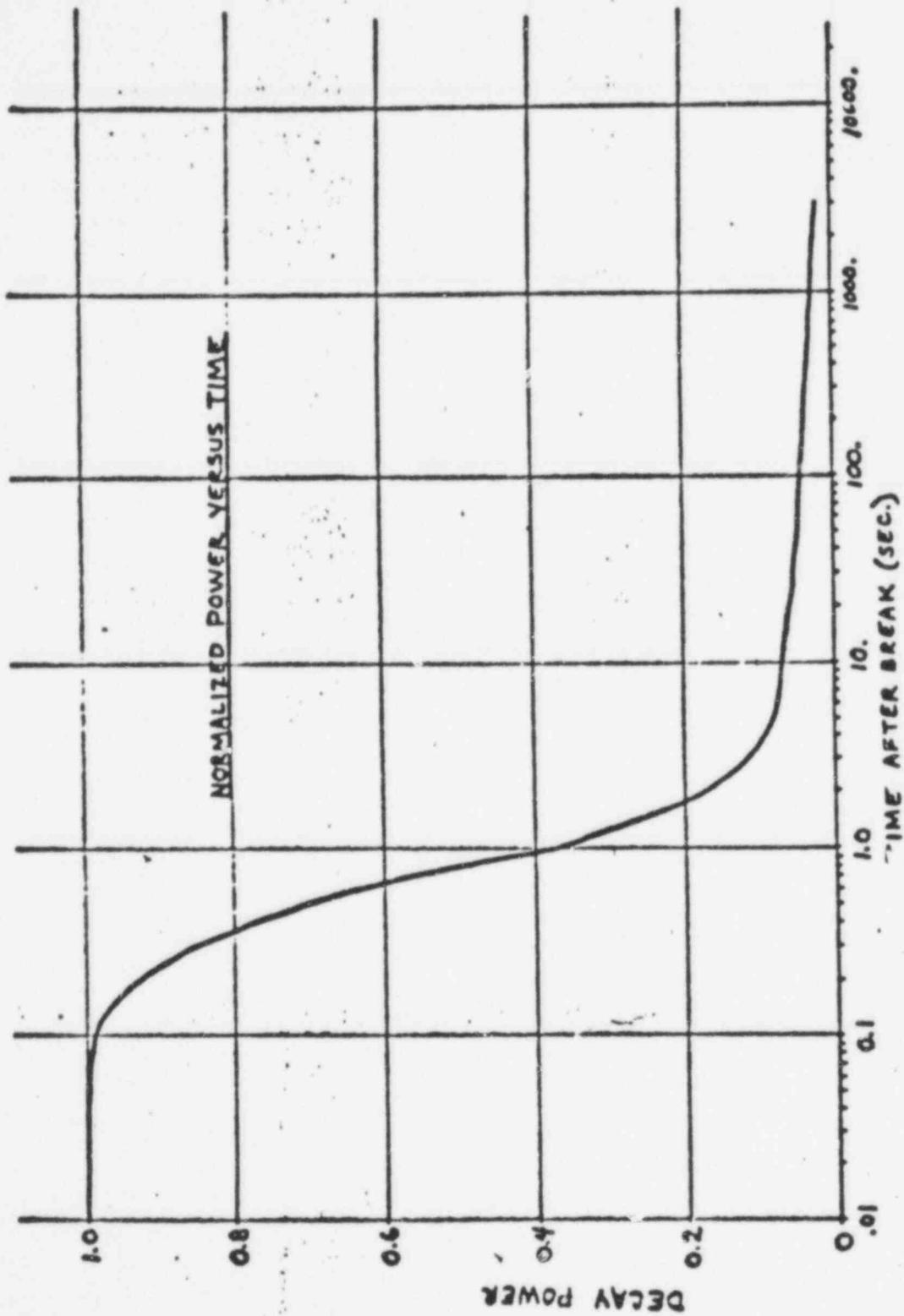
TABLE 1  
BWR/6 218-624 STANDARD PLANT  
RESULTS OF LOSS OF COOLANT ACCIDENT ANALYSIS (DBA)

<u>Break Size, Location, Single Failure</u>	<u>Peak Cladding Temperature (°F)</u>	<u>Peak Local Oxidation (%)</u>
2.2 ft <sup>2</sup> (DBA) Recirculation Suction LPCI Diesel Generator	2066 (a)	1.7

(a) CHASTE - Large Break Methods

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Figure 1: Normalized Power Versus Time

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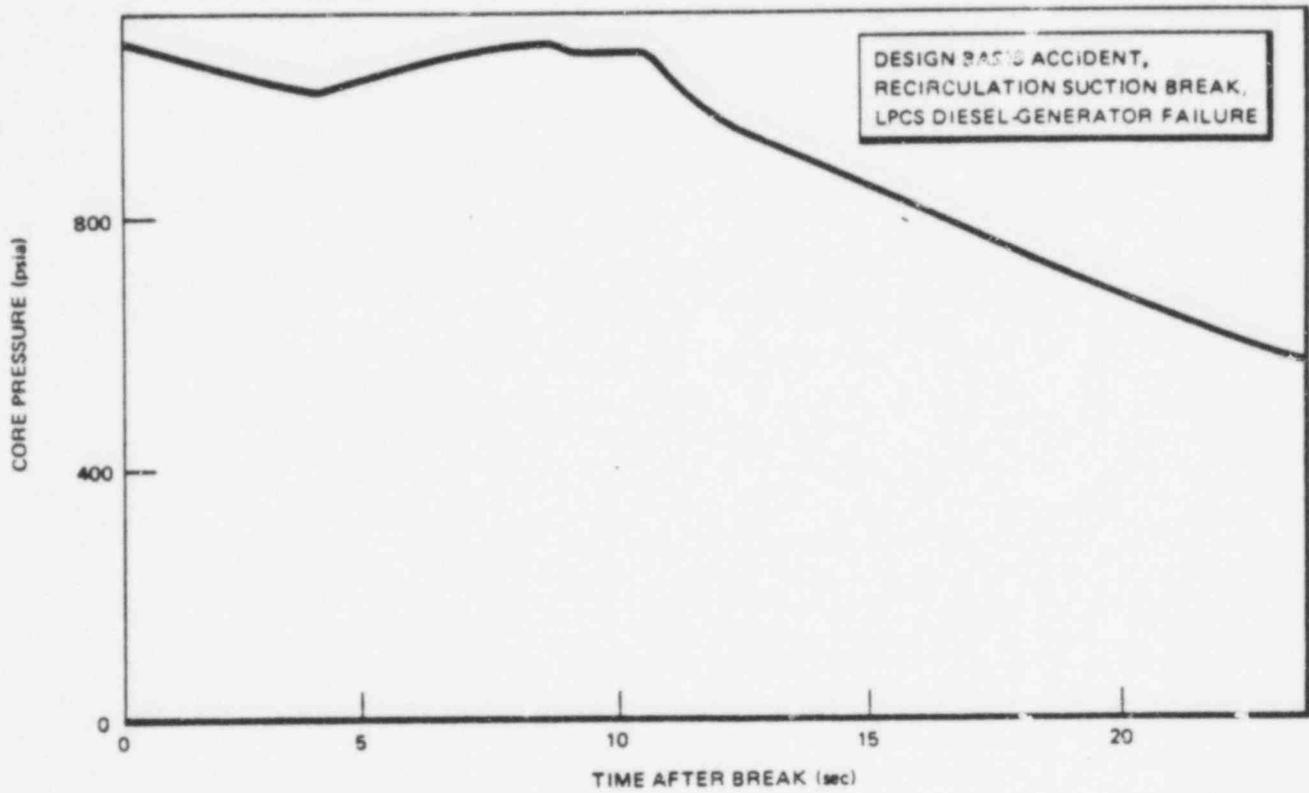


Figure 2: Core Average Pressure Versus Time After Break

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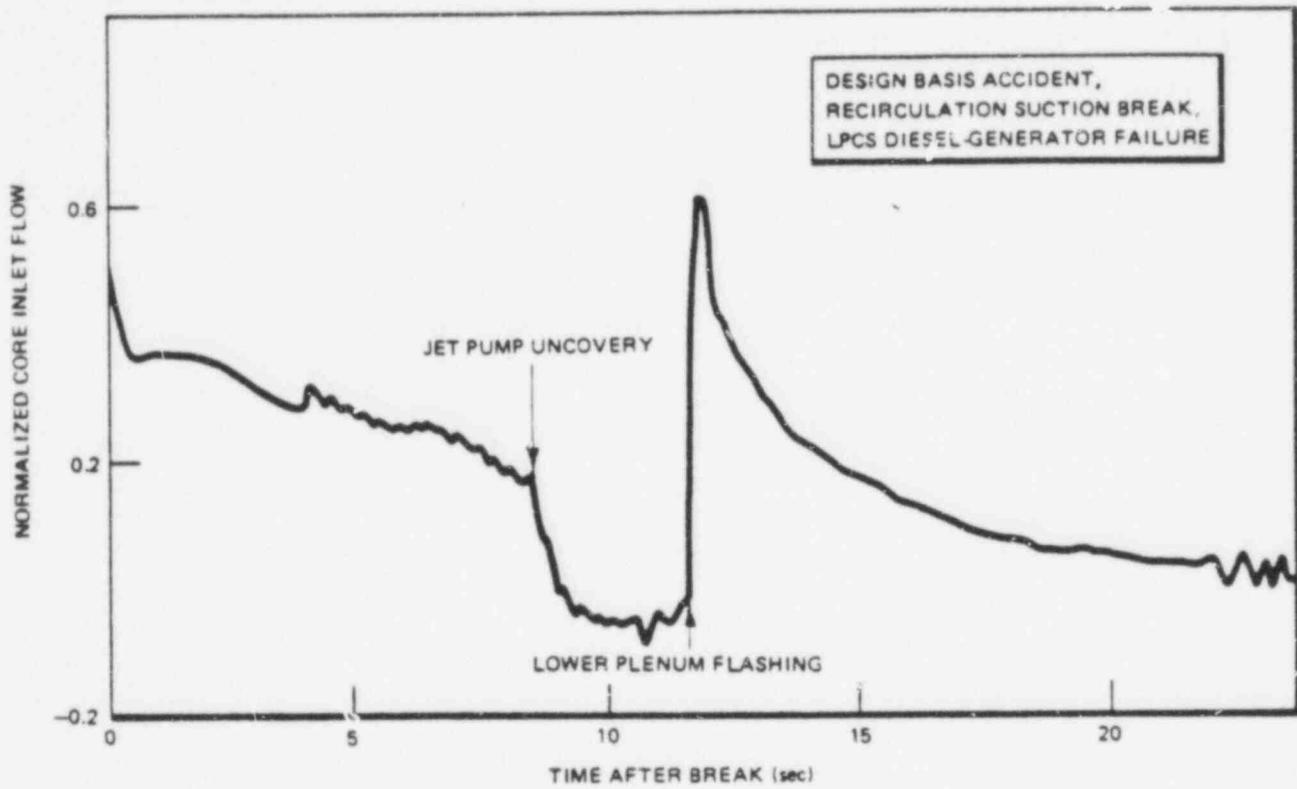


Figure 3: Normalized Core Average Inlet Flow Versus Time After Break

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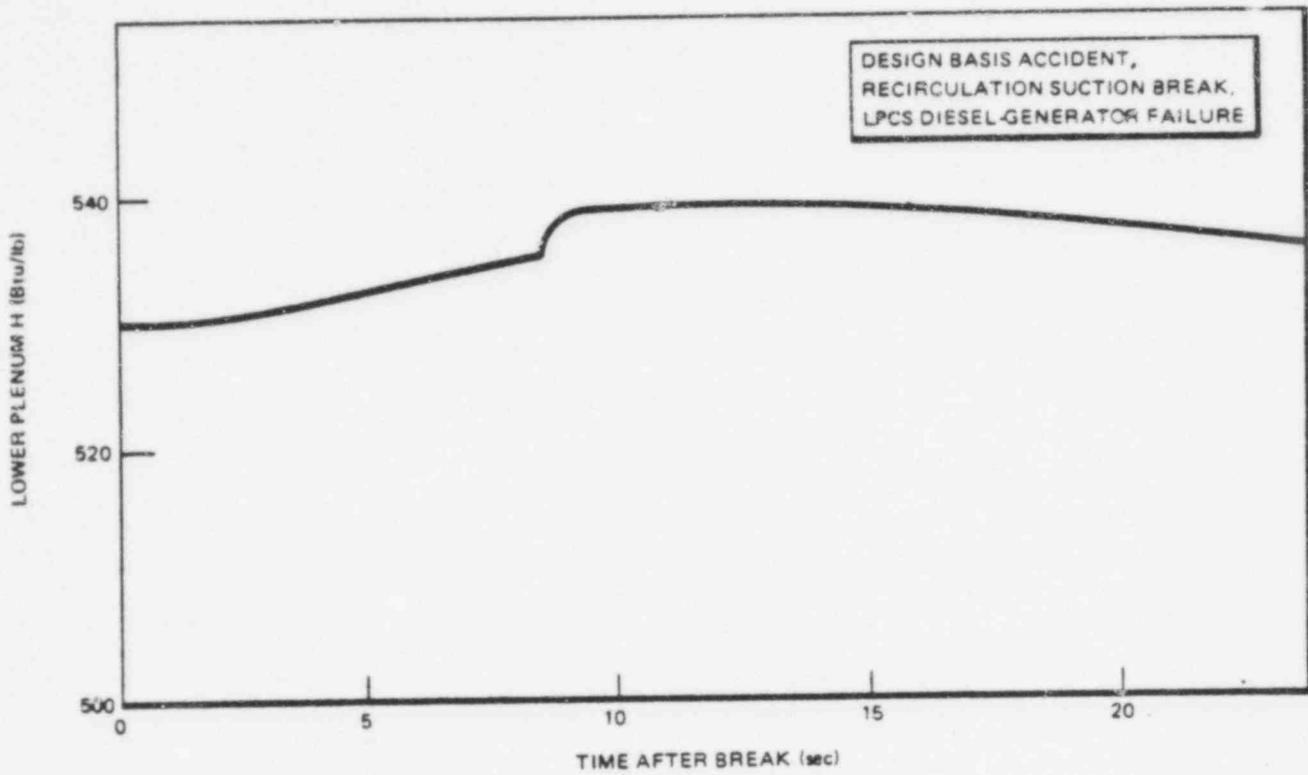


Figure 4: Core Inlet Enthalpy Versus Time After Break

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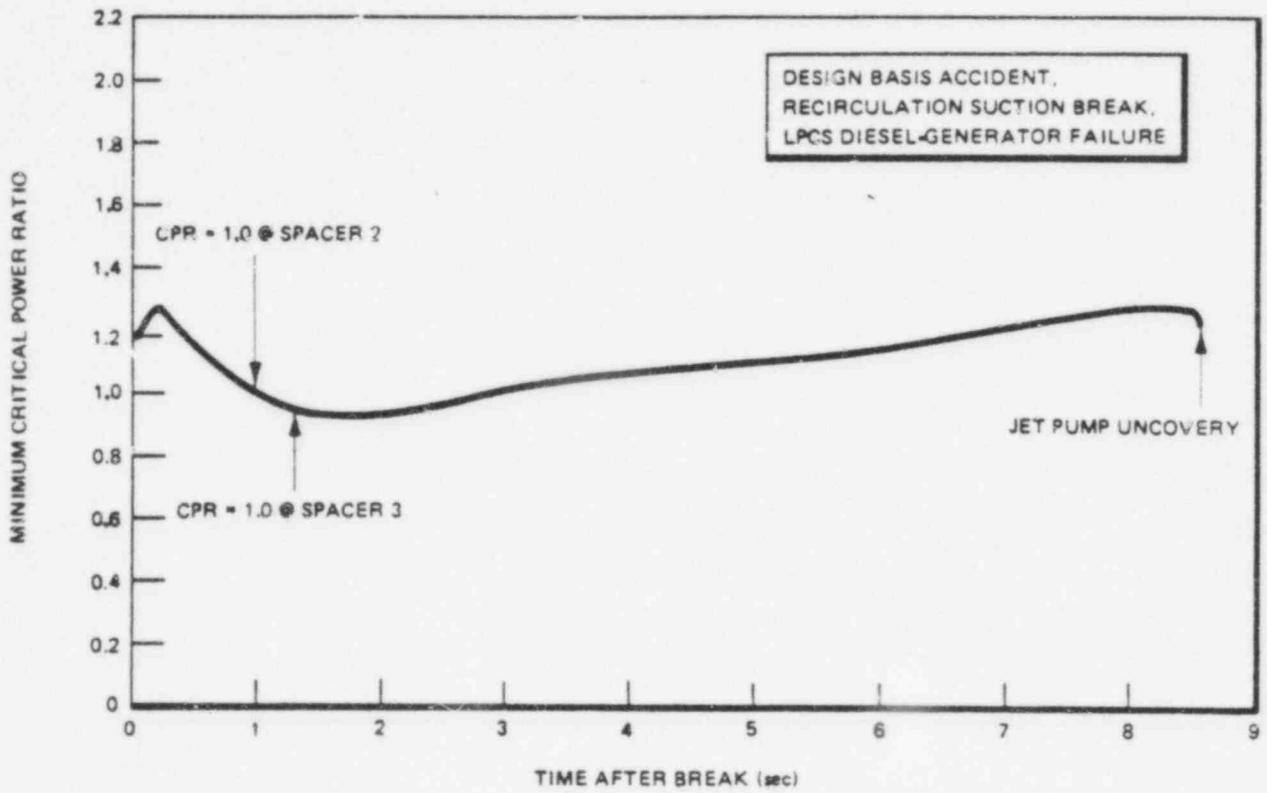


Figure 5: Minimum Critical Power Ratio Versus Time After Break

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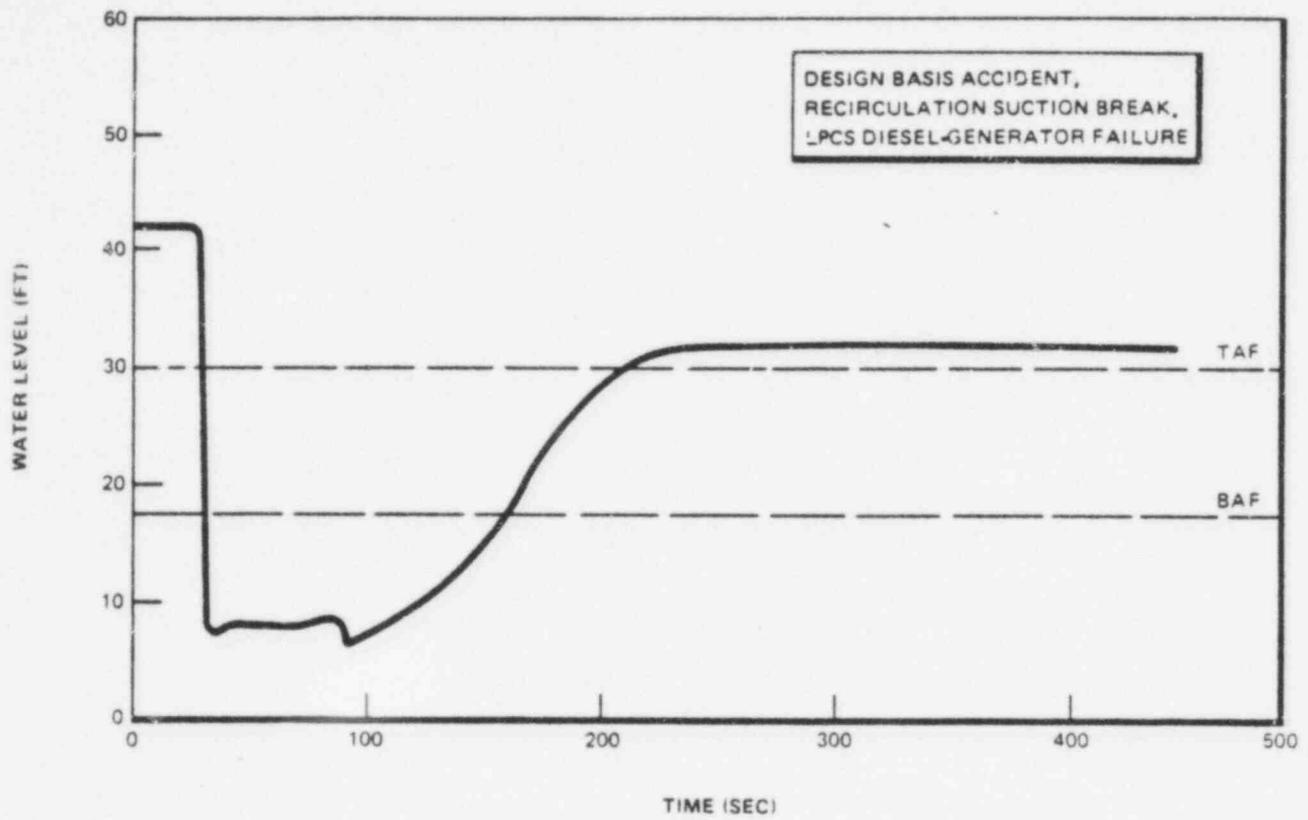


Figure 6: Water Level Inside the Shroud Versus Time After Break

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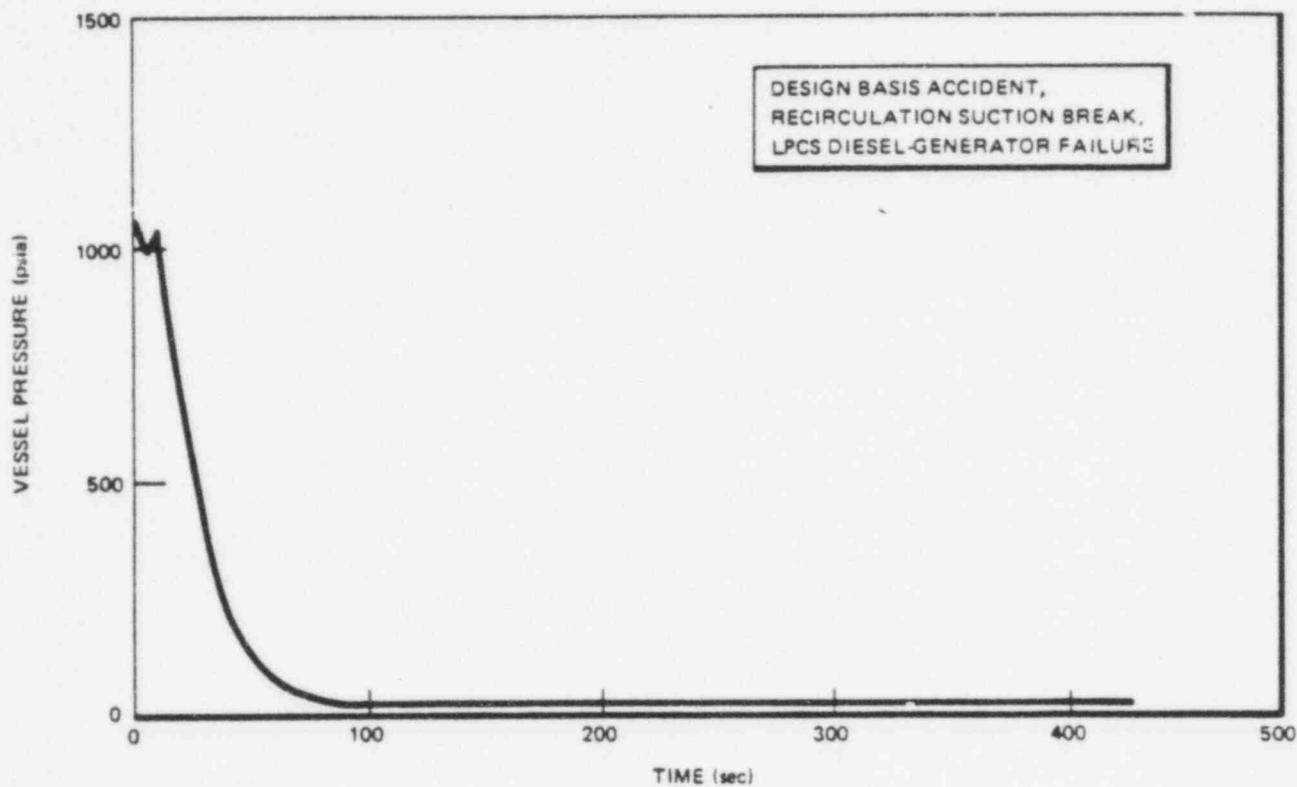


Figure 7: Reactor Vessel Pressure Versus Time After Break

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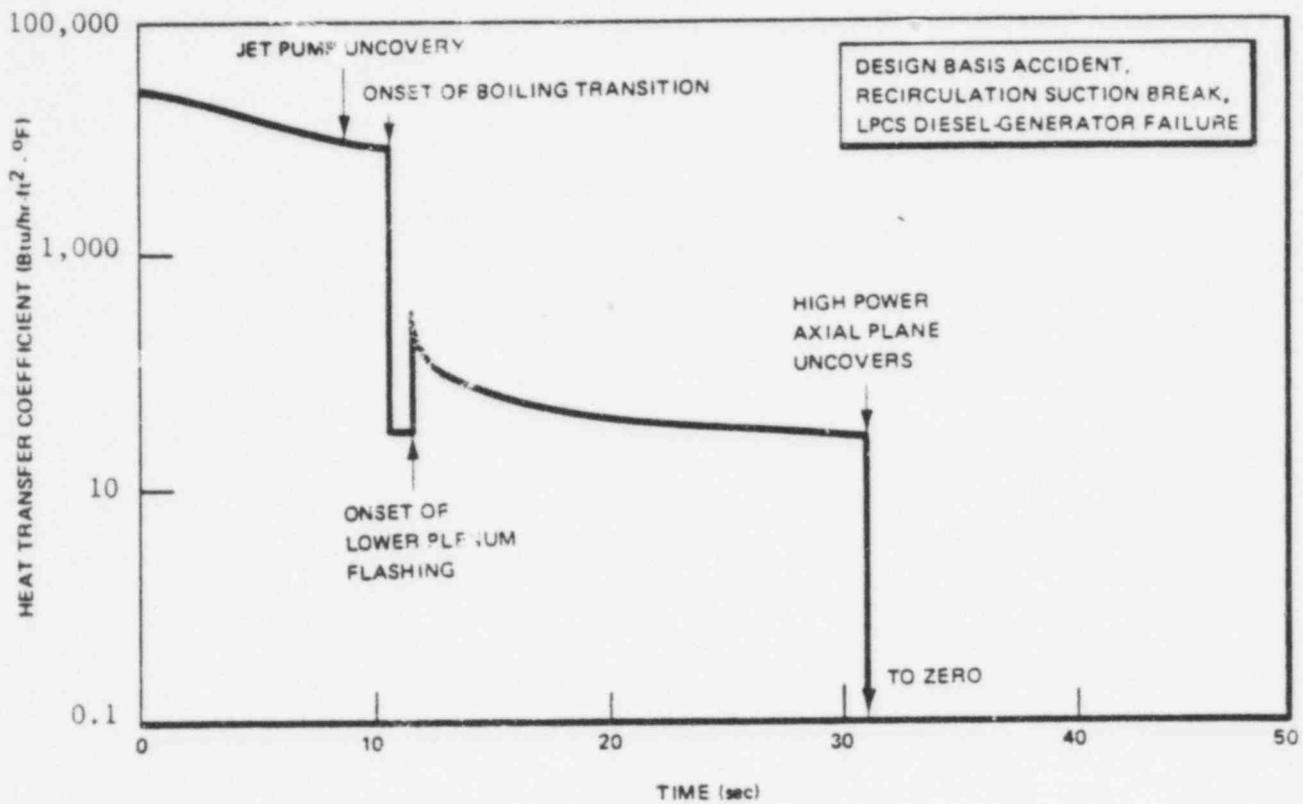


Figure 8: Fuel Rod Convective Heat Transfer Coefficient Versus Time After Break (Large Break Model)

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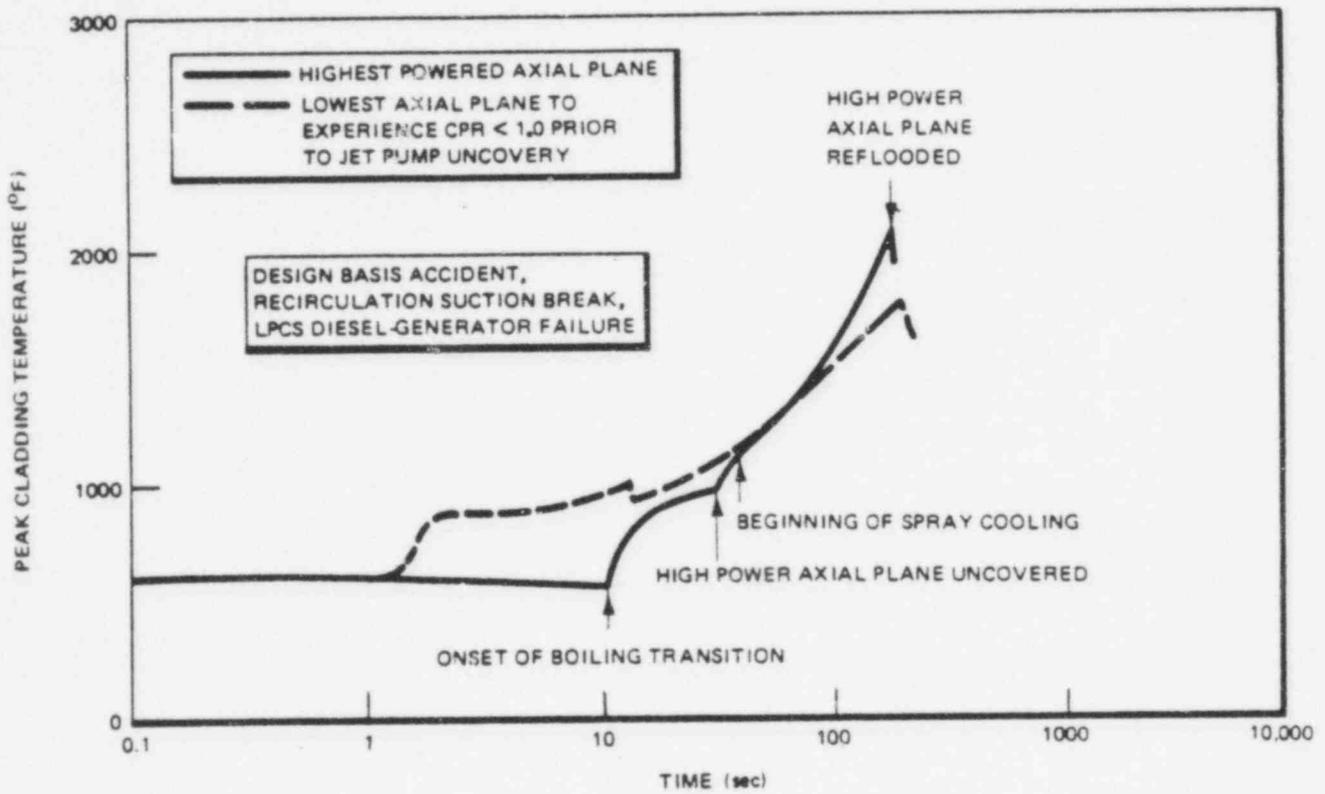


Figure 9: Peak Cladding Temperature Versus Time After Break

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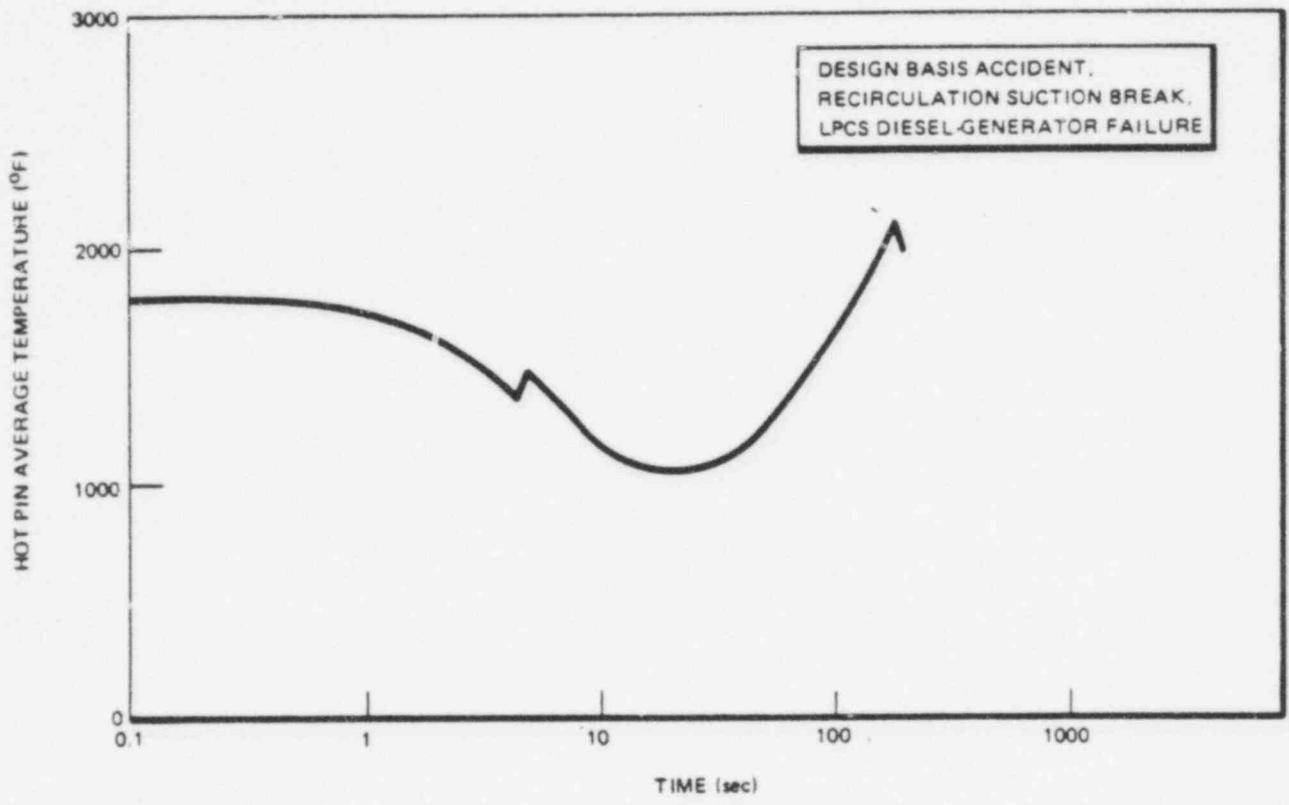


Figure 10: Hot Pin Fuel Average Temperature Versus Time After Break

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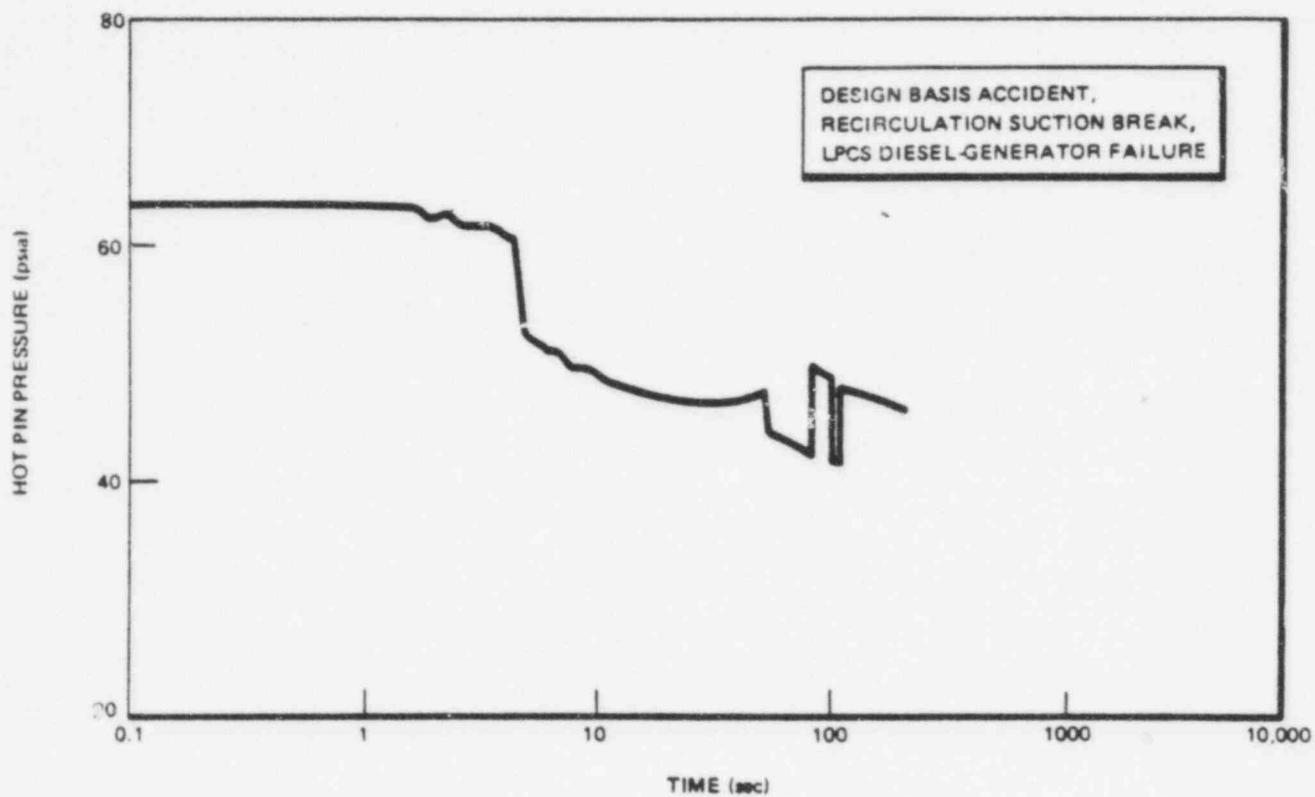


Figure 11: Hot Pin Pressure Versus Time After Break

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