



FPL Energy
Seabrook Station

FPL Energy Seabrook Station
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June 3, 2003

Docket No. 50-443
NYN-03046

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Seabrook Station
Annual Reporting of Changes to, or Errors In
Emergency Core Cooling System Models or Applications

In accordance with the requirements of 10 CFR 50.46(a)(3)(ii), FPL Energy Seabrook, LLC submits a tabulation of the current Small Break and Large Break LOCA PCT margin utilization tables applicable to Seabrook Station. The Small Break and Large Break LOCA utilization tables are consistent with the tables provided in North Atlantic's 2001 10 CFR 50.46 Report, NYN-02060, dated June 26, 2002.

Should you have any questions regarding this report, please contact Mr. Paul V. Gurney, Reactor Engineering Manager at (603) 773-7776.

Very truly yours,

FPL Energy Seabrook, LLC

James M. Peschel
Regulatory Programs Manager

cc: H. J. Miller, NRC Region I Administrator
V. Nerses, NRC Project Manager, Project Directorate I-2
G.T. Dentel, NRC Senior Resident Inspector

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ENCLOSURE TO NYN-03046

**Small Break Peak Clad Temperature Margin Utilization
ECCS EVALUATION MODEL REVISIONS/ERRORS
10 CFR 50.46 ANNUAL REPORT**

Evaluation Model: NOTRUMP Fuel: 17x17 V5H FQ=2.5
 F Δ H=1.65 SGTP=13% 3411 MWt
 Limiting Break: 4 inch

	<u>Clad Temperature (°F)</u>
ANALYSIS OF RECORD	
MARGIN ALLOCATIONS (Delta PCT)	1082
A. PRIOR PERMANENT ECCS MODEL ASSESSMENTS	
1. Effect of SI in Broken Loop	150
2. Effect of Improved COSI	-150
3. Drift Flux Flow Regime Errors	-13
4. LUCIFER Error Corrections	-16
5. Boiling Heat Transfer Correlation Error	-6
6. Steam Line Isolation Logic Error	30
7. Axial Nodalization, RIP Model Revision and SBLOCTA Error Corrections	13
8. NOTRUMP Specific Enthalpy Error	20
9. SBLOCTA Fuel Rod Initialization Error	10
10. NOTRUMP Mixture Level Tracking / Region Depletion Errors	13
B. PLANNED PLANT CHANGE EVALUATIONS	
1. Increased Safety Injection Pump Head Degradation Limiting Case Evaluation	105
2. Annular Blankets	10
C. 2002 10 CFR 50.46 MODEL ASSESSMENTS (Permanent Assessments of PCT Margin)	
1. None	0
D. TEMPORARY ECCS MODEL ISSUES	
1. None	0
E. OTHER	
1. Increased T-Avg Uncertainty for RTD Bypass Elimination	8
2. +/-3°F T-Avg Window	24
3. Increase of 2°F to T-AvgWindow	16
4. AFW Actuation on SI Signal Only	5
LICENSING BASIS PCT + MARGIN ALLOCATIONS	PCT Total = 1301°F

**Large Break Peak Clad Temperature Margin Utilization
ECCS EVALUATION MODEL REVISIONS/ERRORS
10 CFR 50.46 ANNUAL REPORT**

Evaluation Model : BASH	Fuel: 17x17 V5H	FQ=2.5
F Δ H=1.65	SGTP=13%	3411 MWt
Limiting Break Size: Cd = 0.6		

	<u>Clad Temperature (F°)</u>
ANALYSIS OF RECORD	
MARGIN ALLOCATIONS (Delta PCT)	1889
A. PRIOR PERMANENT ECCS MODEL ASSESSMENTS	
1. None	0
B. PLANNED PLANT CHANGE EVALUATIONS	
1. None	0
C. 2002 10 CFR 50.46 MODEL ASSESSMENTS (Permanent Assessments of PCT Margin)	
1. None	0
D. TEMPORARY ECCS MODEL ISSUES	
1. None	0
E. OTHER	
1. Increased T-Avg Uncertainty for RTD Bypass Elimination	5
2. +/-3°F T-Avg Window	15
3. Increase of 2°F to T-Avg Window	10
4. V5H AOR Limiting Case w/IFMs Reanalysis	-51
5. Transition Core Penalty	50
6. RFA Fuel Evaluation	33
LICENSING BASIS PCT + MARGIN ALLOCATIONS	PCT Total = 1951°F