



Entergy Nuclear Northeast  
Entergy Nuclear Operations, Inc.  
Indian Point Energy Center  
295 Broadway, Suite 1  
P.O. Box 249  
Buchanan, NY 10511-0249

April 24, 2002

Re: Indian Point Unit No. 2  
Docket No. 50-247  
NL 02-057

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Stop O-P1-17  
Washington, D.C. 20555-0001

Subject: Annual 10 CFR 50.46 Report for Indian Point Unit 2

Dear Sir:

Pursuant to 10 CFR 50.46(a)(3)(ii), Entergy Nuclear Operations, Inc. (ENO) hereby submits the annual reports (attached) pertaining to the emergency core cooling system (ECCS) evaluation models which affect peak cladding temperature (PCT) for the limiting transients at Indian Point Unit 2 (IP-2).

ENO's vendor for performing the large and small break loss of coolant accident (LOCA) analyses, Westinghouse Electric Company, has reviewed the year 2001 analyses for IP-2 and has advised ENO of the changes which have been made to the ECCS evaluation models. The values provided in these reports are the result of plant specific evaluations and sensitivity studies and demonstrate that the current PCT penalty and peak cladding temperatures are within acceptable limits. The current large break LOCA peak cladding temperature (PCT) is 2188F, and the current small break LOCA PCT is 2116F. These values remain unchanged from previously reported values. Because of changes to 10 CFR 50.59 reporting requirements, minor title revisions were made to Sections B and C in the reports.

No new regulatory commitments are made by ENO in this correspondence.

Should you or your staff have any concerns regarding this matter, please contact Mr. John F. McCann, Manager, Nuclear Safety and Licensing, at (914) 734-5074.

Sincerely,

A handwritten signature in black ink, appearing to read "Fred Dacimo".

Fred Dacimo  
Vice President - Operations  
Indian Point 2

Attachments

A001

C: Mr. Patrick D. Milano  
Senior Project Manager - Project Directorate I-1  
Division of Licensing Project Management  
U.S. Nuclear Regulatory Commission  
Mail Stop O-8-2C  
Washington, DC 20555-0001

Mr. Hubert J. Miller  
Regional Administrator - Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
Indian Point Unit 2  
P.O. Box 38  
Buchanan, NY 10511

ATTACHMENT 1

10 CFR 50.46 Report

Best Estimate Large Break Loss of Coolant Accident

Entergy Nuclear Operations, Inc.  
Indian Point Unit No. 2  
Docket No. 50-247

Westinghouse LOCA Peak Clad Temperature Summary For Best Estimate Large Break

	<u>Clad Temp (°F)</u>
LICENSING BASIS	
Analysis-Of-Record PCT	2152
MARGIN ALLOCATIONS (Delta PCT)	
A. PRIOR PERMANENT ECCS MODEL ASSESSMENTS	
1. Total- previously reported	28
B. PLANNED PLANT CHANGE EVALUATIONS	
1. Missing Fuel Assembly Alignment Pin	5
2. Reduced Power in Peripheral Assemblies	4
3. Replacement Steam Generators (44 to 44F)	7
4. Changes to Containment Pressure Calculation Assumptions	11
5. Reduction in F delta H from 1.72 to 1.7	-8
6. Reduction in SGTP from 25% to 20%	-15
C. CURRENT YEAR PERMANENT ECCS MODEL ASSESSMENTS (Permanent Assessments of PCT Margin)	
1. None	0
D. TEMPORARY ECCS MODEL ISSUES	
1. None	0
E. OTHER	
1. Increase in Maximum Accumulator Pressure	4
<hr/> LICENSING BASIS PCT + MARGIN ALLOCATIONS	<hr/> 2188

ATTACHMENT 2

10 CFR 50.46 Report

Small Break Loss of Coolant Accident

Entergy Nuclear Operations, Inc.  
Indian Point Unit No. 2  
Docket No. 50-247

Westinghouse LOCA Peak Clad Temperature Summary For Small Break

	<u>Clad Temp (°F)</u>
LICENSING BASIS	
Analysis-Of-Record PCT	1766
MARGIN ALLOCATIONS (Delta PCT)	
A. PRIOR PERMANENT ECCS MODEL ASSESSMENTS	
1. Total – Previously reported	25
B. PLANNED PLANT CHANGE EVALUATIONS	
1. Previously reported	136
C. CURRENT YEAR PERMANENT ECCS MODEL ASSESSMENTS (Permanent Assessments of PCT Margin)	
1. None	0
D. TEMPORARY ECCS MODEL ISSUES	
1. None	0
E. OTHER	
1. Tavg Uncertainty- Previously reported	5
2. Burst and Blockage/Time in Life - Previously reported	184
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LICENSING BASIS PCT + MARGIN ALLOCATIONS	2116