

Consolidated Edison Company of New York, Inc. Indian Point Station Broadway & Bleakley Avenue Buchanan, NY 10511 Telephone (914) 734-5340 Fax: (914) 734-5923

November 28, 1997

Re: Indian Point Unit No. 2 Docket No. 50-247 LER 97-22-00

Document Control Desk US Nuclear Regulatory Commission Mail Station PI-137 Washington, DC 20555

The attached Licensee Event Report 97-22-00 is hereby submitted in accordance with the requirements of 10CFR 50.73.

Very truly yours,

Paul 1/ Ich

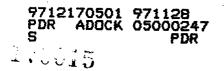
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Mr. Hubert J. Miller Regional Administrator - Region I US Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

Mr. Jefferey Harold, Project Manager Project Directorate I-1 Division of Reactor Projects I/II US Nuclear Regulatory Commission Mail Stop 14B-2 Washington, DC 20555

Senior Resident Inspector US Nuclear Regulatory Commission PO Box 38 Buchanan, NY 10511



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LICENSEE EVENT REPORT (LER)											APPROVED OMB NO. 3150-104 EXPIRES: 4/30/92 ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC								RD HE .S.								
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screening criteria, plants with integral burnable absorber fuel rods (IFBA) in the first half of their operating cycle or returning from refueling outage are determined to be compliance due to either no gap reopening or low levels of pre-transient oxidation due to steady-state corrosion accumulation. Indian Point 2 (IP2) will not complete the first half of the current operating cycle until approximately mid-1998. Prior to mid-1998, site specific analyses will be completed. Westinghouse has notified Con Edison that IP2 will not have a concern with this issue at least until midcycle. A long term plan has been presented by Westinghouse to the NRC to resolve the PAD code concerns and implement the code improvements.

NRC FORM 366 (6-89)	U.S. NUCLEAR REGULATORY COMMIS	APPROVED OMB NO. 3150-104						
LICENSEE EVEN TEXT CON	EXPIRES: 4/30/92 ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P530). U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0164), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.							
FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)					
Indian Point Unit No. 2		YEAR SEQUENTIAL NUMBER REVISION NUMBER 9 7 - 0 2 2 - 0 0	0 2 OF 0 4					

PLANT AND SYSTEM IDENTIFICATION:

Westinghouse 4-Loop Pressurized Water Reactor

IDENTIFICATION OF OCCURRENCE:

Receipt of Revised Westinghouse Analysis regarding 10CFR 50.46 cladding calculations

EVENT DATE:

October 28, 1997

REPORT DUE DATE:

November 28, 1997

REFERENCES:

CITRS # 97-E03772, Westinghouse Letter # NSD-NRC-97-5404, dated October 28, 1997, and Telecon on 10-28-97

PAST SIMILAR OCCURRENCE:

None

DESCRIPTION OF OCCURRENCE:

IP 2 was notified by Westinghouse that when the effects of increased Zircaloy-4 (Zirc-4) corrosion are incorporated into the current licensed version of Westinghouse fuel performance code, called PAD, gap reopening may be predicted for high duty (determined by power histories and coolant temperatures) integral burnable absorber fuel rods as early as the second half of their second duty cycle. One of the fuel design criteria for Westinghouse fuel is that pellet clad gap reopening will not occur.

NRC FORM 366 (6-89)	U.S. NUCLEAR REGULATORY C	APPROVED OMB NO. 3150-104
		EXPIRES: 4/30/92
LICENSEE EVENT RE	INFORMATION COLLECTION REQUEST: 50.0 HRS. FORM COMMENTS REGARDING BURDEN ESTIMATE TO THE RECO	
TEXT CONTINU	ATION	AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCI REGULATORY COMMISSION, WASHINGTON, DC 20555, ANI THE PAPERWORK REDUCTION PROJECT (3150-0104), OF
		OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.
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Indian Point Unit No. 2 EXT (If more space is required, use additional NRC Form 366A's) (17)	0 5 0 0 0 2	4 7 9 7 - 0 2 2 - 0 0 0 3 OF (
ANALYSIS OF OCCURRENCE:		
Reporting of the revised Zirc-4 corrosion rates	s is made pursuant to 10CFR 50.	.73(a)(2)(ii) because the unit
potentially operated in a condition outside the	fuel rod design criteria.	
· · · · · · · · · · · · · · · · · · ·		ч -
Westinghouse has performed a generic safety		
concern and has had ongoing discussions with implications of this pre-condition for the analy		
levels as considered in the original design basi		
were created by the gap reopened conditions.	to e and a contraction of the co	account section of the section of th
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The results show that plant safety analyses ren	-	
thermal-hydraulic analyses, core neutronic ana		
to exceed the no-gap reopening design criteria		
17 percent maximum cladding oxidation criter failures and since previously analyzed design l	100 of 10CFR 50.46. Since gap	reopening does not lead to fuel rod
concluded that gap reopening is of low safety	significance	bounding, westinghouse has
81 1		
CAUSE OF OCCURRENCE:		
CAUSE OF OCCURRENCE.		· .
When the effects of the new corrosion model,	as developed by Westinghouse,	are incorporated into the current
licensed PAD code, gap reopening may be pre-	dicted for high duty integral bur	nable absorber fuel rods (IFBA).
Consequently, the 17 percent maximum claddi	ng oxidation criterion delineated	d in 10CFR 50.46 may be exceeded.
CORRECTIVE ACTION:		
IMMEDIATE Action		
Westinghouse has informed Con Edison that si	ngo ID2 is in the first helf its on	anding and it is in something the
to either no gap reopening or low levels of pre-	transient oxidation due to stead	v state oxidation accumulation. The
screening criteria will not be exceeded before	11.300 MWD/MTU burnup (ap	proximately mid-1998) Continued
operation past 11,300 MWD/MTU burnup is a	inticipated with subsequent West	tinghouse analysis.
LONG-TERM Resolution Plan		
Westinghouse has developed a comprehensive	plan to resolve the fuel rod inte	rnal pressure issue. This plan of
resolution involves three steps: (1) review and	improvement of analytical mode	els: (2) gathering of additional data
and (3) performance of plant-by-plant assessme		, 2) buttoring of auditional liala,

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(If more space is required, use additional NRC Form 366A's) (17) The focus of this Westinghouse plan will be on the fue elieves that sufficient conservatism exists in the PAD			
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