NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01	Licensee Code (2)	N Y I P S 3
	License Number (3)	0 0 - 0 0 0 0 0 - 0 0
	License Type (4)	4 1 1 1 1
	CAT (5)	
CON'T 01	Report Source (6)	L
	Docket Number (7)	0 5 0 0 0 2 8 6
	Event Date (8)	0 3 2 8 7 9
	Report Date (9)	0 4 0 3 7 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During normal operation, we were informed by our NSSS, Westinghouse
03 Electric Corporation, that a review of their safety analysis methodology
04 for the single dropped rod indicates the potential for this event
05 to lead to calculated DNB ratios less conservative than previously
06 reported to the NRC staff. Performance of the reactor was not affected
07 by this incident. No similar events have been recorded to date.
08

09	System Code (11)	Cause Code (12)	Cause Subcode (13)	Component Code (14)	Comp. Subcode (15)	Valve Subcode (16)
	Z Z	B	A	Z Z Z Z Z Z	Z	Z

(17) LER/RO REPORT NUMBER

Event Year		Sequential Report No.		Occurrence Code	Report Type		Revision No.
7 9	—	0 0 3	/	0 1	T	—	0

Action Taken (18)	Future Action (19)	Effect on Plant (20)	Shutdown Method (21)	Hours (22)	Attachment Submitted (23)	NPRD-4 Form Sub. (24)	Prime Comp. Supplier (25)	Component Manufacturer (26)
X	X	Z	Z	0 0 0 0	Y	N	Z	Z 9 9 9

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 It was felt both by Westinghouse and the Power Authority that, due
11 to the mitigating effects of several factors relevant to this event,
12 no immediate action was necessary.
13
14

15	Facility Status (28)	% Power (29)	Other Status (30)	Method of Discovery (31)	Discovery Description (32)
	E	0 9 8	NA	D	Notification from NSSS

16	Activity Released (33)	Content of Release (34)	Amount of Activity (35)	Location of Release (36)
	Z	Z	NA	NA

PERSONNEL EXPOSURES

17	Number (37)	Type (38)	Description (39)
	0 0 0	Z	NA

PERSONNEL INJURIES

18	Number (40)	Description (41)
	0 0 0	NA

LOSS OF OR DAMAGE TO FACILITY (43)

19	Type (42)	Description
	Z	NA

7904100355

PUBLICITY

20	Issued (44)	Description (45)	NRC USE ONLY
	N	NA	

NAME OF PREPARER Floyd W. Gumble

PHONE: 914-739-8200 X217

GPO 917-926

ATTACHMENT 1

Docket No. 50-286
LER 79-003/01T-0

Power Authority of the
State of New York

On March 28, 1979, the Power Authority was notified by our Nuclear Steam Supplier, the Westinghouse Electric Corporation, that a review of their safety analysis methodology for the single dropped rod indicates the potential for this event to lead to calculated DNB ratios less conservative than previously reported to the NRC Staff. This potential inconsistency arises from the assumption that the existing rod controller can potentially measure the core average power level incorrectly during certain rod drop events.

The problem is most relevant to three loop plants where the control signal is taken from a single sensor which could perceive a greater power reduction than is representative for the core and attempt to overcompensate on the subsequent control bank withdrawal. On many two and four loop plants, including Indian Point 3, the control signal is taken from the average of all NIS channels, reducing the probability that the above event would take place.

Westinghouse maintains, and the Power Authority concurs, that there are several mitigating effects that significantly reduce the consequences of this transient. Among these effects are: 1) the small amount of positive reactivity (typically less than 100 pcm and in the case of Indian Point 3, typically less than 50 pcm) maintained in the partially inserted control bank due to the severe axial offset requirements imposed by Technical Specifications. 2) The dropped rod assumed is the most limiting rod in terms of the resulting increase in $F_{\Delta h}$. The majority of rods, if dropped, would result in much lower increases in $F_{\Delta h}$. 3) Reduction in the power overshoot by use of actual moderator and Doppler coefficients rather than the more limiting FSAR assumptions. 4) The FSAR analysis did not assume the operation of the over power rod block because it is control grade equipment. This block is expected to be in operation and would terminate rod motion when power increases beyond the preset limit. 5) The fact that in the case of Indian Point 3 a turbine runback would be initiated in the event of a dropped rod sensed by the excore detectors and/or the rod bottom bistable off the RPI.

It is the conclusion of the Power Authority that plant operation is sufficiently conservative not to warrant any changes at this time due to the postulated event. It should be noted that Westinghouse has proposed discussing this generic postulated transient with the staff. The outcome of these discussions will indicate future actions, if any.