NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

0 1	LICENSEE CODE: N Y I P S 3 (2)	LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3)	LICENSE TYPE: 4 1 1 1 1 (4)	CAT: (5)
CON'T 0 1	REPORT SOURCE: L (6)	DOCKET NUMBER: 0 5 0 0 0 2 8 6 (7)	EVENT DATE: 0 6 2 1 7 9 (8)	REPORT DATE: 0 7 0 5 7 9 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 While operating at 100 percent power, we were informed by our NSSS, the
0 3 Westinghouse Electric Corporation, of an error in the less conservative
0 4 direction in their analysis of high energy line breaks inside containment.
0 5 Since this effects the low-low steam generator level indicator, which in
0 6 turn controls reactor trip and auxiliary feedwater initiation, plant
0 7 protection systems could be delayed from activation when needed.
0 8

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	I A (11)	B (12)	A (13)	Z Z Z Z Z Z (14)	Z (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	7 9	—	0 0 6	/	0 1	T	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
X (18)	X (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	N (25)	Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Westinghouse has calculated that raising the steam generator low-low level
1 1 setpoint as a function of temperature would adequately compensate for this
1 2 error. Since the Power Authority presently uses a level value 10 percent
1 3 higher than that indicated by Technical Specifications, this suggested
1 4 change is already in effect up to a maximum containment temperature of 280°F.

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	E (28)	1 0 0 (29)	NA	D (31)	Notification from NSSS

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	NA

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	NA

PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	NA	

7907100452

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GPO 917-926

ATTACHMENT 1

Docket No. 50-286
LER 79-006/01T0

Power Authority of the
State of New York

The plant was operating at 100 percent power in the steady state.

On June 21, 1979, the Power Authority was notified by our Nuclear Steam Supplier, the Westinghouse Electric Corporation, of an error in the less conservative direction in their analysis of high energy line breaks inside containment. Breaks of this type can result in heatup of the steam generator level measurement reference leg, resulting in a decrease of the water column density with a consequent apparent increase in the indicated steam generator water level (i.e., apparent level exceeding actual level). This potential level bias could result in delayed protection signals (reactor trip and auxiliary feedwater initiation) which are based on low-low steam generator water level. In the case of a feedline rupture, this adverse environment could be present and could delay or prevent the primary signal arising from declining steam generator water level (Low-low steam generator level). Containment pressure and safety injection provides a backup signal which initiates a trip before a high containment temperature setpoint is reached. This trip is conservatively set at 3.0 psig.

Westinghouse has provided a table indicating the required percentage increase in span of steam generator low-low level setpoint as a function of temperature to offset this error. The Power Authority presently uses a level value ten per cent higher than that indicated by Technical Specifications, which corresponds to a maximum permissable temperature of 280° F. according to Westinghouse. Since containment temperature is estimated to be less than this in the event of a break, this suggested setpoint change is already in effect.

Further evaluation will be conducted to determine final setpoint adjustments.

For other high energy line breaks which could introduce a similar positive bias to the steam generator water level measurement, steam generator level does not provide the primary trip function and the potential bias would not interfere with needed protective system actuation.

The effects of the temperature increase on other level instrumentation in containment for post accident monitoring is being reviewed and appropriate guidance will be given to the operators.

Plant operation was not affected by this incident. No similar events have been recorded to date.