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PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor

Energy Industry Identification System (EIIS) codes are identified in the text as [xx].

IDENTIFICATION OF THE EVENT

Unplanned ESF Actuations (Control Room Air Conditioning [VI] "A" and Reactor Building Standby Ventilation System [BH] "A", and Primary Containment Isolation System [JM]) due to the tripping of a Reactor Protection System [JC] EPA breaker.

Event Date: 12/11/90

Report Date: 01/09/91

CONDITIONS PRIOR TO THE EVENT

Reactor Defueled - All fuel assemblies stored in the Spent Fuel Pool.

Mode Switch - Refuel

RPV Drained

DESCRIPTION OF THE EVENT

At 1257, on 12/11/90, the "A" Reactor Protection System (RPS) bus was deenergized when one of its Electrical Protection Assembly (EPA) breakers tripped. This caused the unplanned automatic initiation of the ESF systems Reactor Building Standby Ventilation System (RBSVS) "A" and Control Room Air Conditioning (CRAC) "A" and also closure of the inboard containment isolation valves for the Reactor Building Floor Drains and Reactor Building Equipment Drains. Plant management personnel were notified of the event and the NRC was notified at 1410 per 10CFR 50.72(b)(2)(ii). The RBSVS and CRAC initiations were reset at 1250 on 12/13/90 (er initial troubleshooting had been

NRC'FORM 366A U.S. NUCLEAR REQULATORY COMMISSION APPROVED DMR NO. 3150-0104 EXPIRES 4/30/92 STIMATED BURDEN PER RESPONSE TO C NFORMATION COLLECTION REQUEST BO COMMENTS REGARDING BURDEN ESTIMATE ND REPORTS MANAGEMENT BRANCH (PS ESTIMATED BURDE LICENSEE EVENT REPORT (LER) TEXT CONTINUATION ISSION, WASHING OF MANAGEMENT AND BUDGET WASHING FACILITY NAME (1) DOCKET NUMBER (2) LER NUMBER IS PAGE 13 NUMBER AEV法(のN) んいい意見た YEAR Shoreham Nuclear Power Station Unit 1 0 5 0 0 0 3 2 2 9 0 -0109-0100130F 014 TEXT III more space is required, use additional NRI, Form 366A () (17)

CAUSE OF THE EVENT

The unplanned actuations of the ESF systems were caused by deenergization of the "A" RPS bus when EPA breaker 1C71-BKR-002B tripped. The most likely cause for this breaker tripping was low output voltage on the "A" RPS MG set. The EPA breaker undervoltage trip setpoint is 116.4V and after the trip the RPS MG set output voltage was only 117.4V instead of its normal value of 121.5V.

The cause for the "A" RPS MG set output voltage being lower than normal could not be determined. However, the following activities did take place on 12/7/90 which was only 4 days before this event. The "A" RPS MG set output breaker was replaced by electrical maintenance personnel. Then a technician functionally tested the overvoltage and undervoltage breaker trips by adjusting the voltage regulator. Then the voltage regulator was set to 121.5V. Later after the operators could not shut the associated EPA breaker they opened up the MG set control panel to check the MG set output breaker. They determined that one lead was loose and this caused the voltage to be zero at the supply side of the EPA breaker. Electrical maintenance personnel were called in to install a missing screw in the breaker. Finally, the operators were able to close the associated EPA breakers. At some point in the above activities, the voltage regulator setpoint changed and it became too close to the EPA breaker undervoltage trip point.

ANALYSIS OF THE EVENT

There was no safety significance to this event. The plant is shutdown and has been defueled since August 1989.

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CORF	ECTIVE ACTIONS											
1.	The "A" RPS MG set voltage was res	et to	121	. 51	V.							
2.	The "A" RPS bus voltage was then m the event and was found to be stea	onitor dy.	ed :	foi	raw	ee}	f fol	low:	ing			
З.	The voltage drop between the RPS Mo measured and found to be normal.	G set	and	tł	ne RP	5 2	us w	as				
4.	SP 23.312.01, 120V AC RPS-MG sets, a technician to verify that the RPs value when the RPS bus is reenergiz RPS MG set.	will S volt zed fo	be i age lloi	rev is vir	vised at : ng ma:	by its int	req pro enan	uiri per ce c	ing on			
5.	The Preventive Maintenance Schedule is used for the breaker functional	ed Act test,	ivit wil	ty 11	Works be re	she vi	et, sed	whic also	ch			
ADDI	TIONAL INFORMATION											
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