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John A. Scalice
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MAY 30 1996

U.S. Nuclear Regulatory Commission
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Gentlemen:

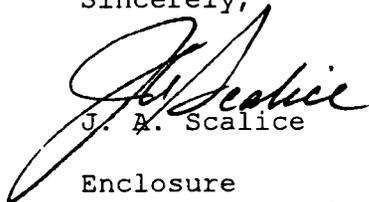
In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - FACILITY OPERATING
LICENSE NPF-90 - LICENSEE EVENT REPORT (LER) 50-390/96017

The enclosure provides LER 50-390/96017 concerning a reportable
event. This LER is provided in accordance with 10 CFR 50.73
(a)(2)(i).

If you should have any questions, please contact P. L. Pace at
(423) 365-1824.

Sincerely,


J. A. Scalice

Enclosure
cc: See page 2

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U.S. Nuclear Regulatory Commission
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cc (Enclosure):

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ENCLOSURE

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-8 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20603.

FACILITY NAME (1)

Watts Bar Nuclear Plant - Unit 1

DOCKET NUMBER (2)

05000390

PAGE (3)

1 OF 5

TITLE (4)

ENGINEERED SAFETY FEATURE INSTRUMENTATION

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
04	30	96	96	017	00	05	30	96		05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9) 2

POWER LEVEL (10) 001

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

20.2201(b)	20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)	50.73(a)(2)(viii)
20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)
20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71
20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER
20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below
20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)	or in NRC Form 366A

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
R. M. Brown, Compliance Licensing Engineer	(423)-365-8195

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On April 30, 1996, at 0107 hours EDT, a reactor startup was performed placing Unit 1 in Mode 2; however, the unit operating crew did not reenergize the main feedwater pump (MFP) turbine trip busses prior to entry as required by applicable procedures. Consequently, the Engineered Safety Feature Actuation System (ESFAS) instrumentation for automatic start of the Auxiliary Feedwater System (AFS) was temporarily disabled for turbine trips involving both MFPs. The root cause of the subject event has been attributed to personnel error for failure to follow procedure. Corrective measures consist of counseling for the individuals involved in the procedural non-compliance and counseling the Shift Technical Adviser (STA) concerning control board walkdown management expectations, include a briefing of this event in the requalification training, and evaluate other general operating action (similar to the MFP) entries into the Licensee Condition for Operation (LCO) tracking log.

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		YEAR	SEQUENTIAL NUMBER	REVISION		
Watts Bar Nuclear Plant, Unit 1	05000				2	OF 5
	05000390	96	017	00		

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

I. PLANT CONDITIONS:

Westinghouse - Pressurized Water Reactor

Pre-Event Conditions

Watts Bar Nuclear Plant Unit 1 was in Mode 3 preparing to enter Mode 2. The turbine trip busses for the MFPs (1-PMP-003-A and 1-PMP-003-B) (EIS code JB/P) were deenergized (out-of-service).

II. DESCRIPTION OF EVENT

A. Event

On April 30, 1996, at 0107 hours EDT, a reactor startup was performed placing Unit 1 in Mode 2; however, the unit operating crew did not reenergize the MFP turbine trip busses prior to entry as required by applicable procedures. Consequently, the ESFAS (EIS code JE) instrumentation for automatic start of the AFS (EIS code BA) was temporarily disabled for turbine trips involving both MFPs.

Problem Evaluation Report WBP960353 was initiated to document the event in the corrective action program.

B. Inoperable Structures, Components, or Systems that Contributed to the Event

Refer to part A, above.

C. Dates and Approximate Times of Major Occurrences

01:07 Unit 1 entered Mode 2.

01:28 Unit 1 reactor reached criticality.

03:55 STA recognized MFPs trip busses were deenergized and entered Technical Specification LCO-3.0.3; LCO condition not met. LCO-3.3.2 requires ESFAS instrumentation circuits to be operable.

04:35 MFP 1-PMP-003-A turbine trip bus was reenergized.

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D. Other Systems or Secondary Functions Affected

There were no failures that rendered a safety train or system inoperable.

E. Method of Discovery

The STA recognized the trip busses were deenergized after entry into Mode 2.

F. Operator Actions

MFP 1-PMP-003-A turbine trip bus was reenergized.

G. Automatic and Manual Safety System Responses

No automatic or manual safety system response was necessary.

III. CAUSE OF EVENT

A. Root Cause

The root cause of the subject event has been attributed to personnel error for failure to follow procedure.

During the previous operating crew shift, the Shift Operating Supervisor (SOS) authorized a deviation to the step sequence of General Operating Instruction (GO)-2, "Unit Startup From Cold Shutdown to Hot Standby." This deviation (permitted by procedures) bypassed the steps to reenergize the MFP turbine trip busses because the system alignment did not allow the MFPs to be reset once energized. At that time, energizing the trip busses would have resulted in an Auxiliary Feedwater (AFW) (EISS code BA) start because the main steam isolation valves (MSIVs) (EISS code ISV) were closed on a clearance and the condenser vacuum pumps (EISS code P) were tagged preventing reset of the MFP turbines (EISS code TRB). This information was communicated during shift turnover; however, the oncoming crew did not fully understand that energizing the MFP turbine trip busses was required for Mode 2 entry. Instead, the oncoming Assistant Shift Operating Supervisor (ASOS) and the SOS understood that the reason for not energizing the MFP trip busses was to prevent the AFW automatic actuation only. Consequently, the applicable procedure steps were bypassed and the MFP turbine trip busses were not energized prior to entry into Mode 2.

B. Contributing Cause

1. The control board walkdown at shift turnover was inadequate.
2. Communications at shift turnover was inadequate.

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- The SOS was actively involved in the task of startup which interfered with his overview role.

IV. ANALYSIS OF EVENT - ASSESSMENT OF SAFETY CONSEQUENCES

At the time of discovery, the MFPs were not in service so there was no safety impact associated with not energizing the trip busses. The standby main feed pump (1-PMP-003-0200) (EIS code P) is normally used for feedwater during startup of the unit and the MFPs would have eventually been placed in service. It is unlikely that discovery of the condition would have gone beyond this point. However, if this part of the ESFAS logic for start of AFW remained inoperable and additional feedwater became necessary, the impending loss of steam generator level would have also actuated the AFW system.

There were no safety implications to the public related to the event.

V. CORRECTIVE ACTIONS

A. Immediate Corrective Actions

The turbine trip bus to MFP 1-PMP-003-A was returned to service.

B. Corrective Actions to Prevent Recurrence

- Counsel individuals involved in the procedure non-compliance concerning expectations of procedure use and adherence.
- Counsel the STA involved concerning expectations of control board walkdown practices.
- Include a briefing of this event in the requalification training. Emphasize the "barrier" concept and how barriers were circumvented by personnel action.
- Evaluate other general operating action entries (similar to MFP) into the LCO tracking.
- Revise the applicable procedures to require entry of deenergized MFP turbine busses into the LCO/Technical Specification equipment out-of-service tracking log and to require a control board walkdown prior to mode changes.
- All of the above actions will be completed by July 25, 1996.

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TEXT CONTINUATION

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	05000390	96	-	017			

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

VI. ADDITIONAL INFORMATION

A. Failed Components

1. Safety Train Inoperability

The turbine trip busses to the MFPs were deenergized.

2. Component/System Failure Information

There were no component or system failures which were associated with the reportable event.

a. Method of Discovery of Each Component or System Failure:

There were no component failures associated with the reportable event.

b. Failure Mode, Mechanism, and Effect of Each Failed Component:

There were no component failures associated with the reportable event.

c. Root Cause of Failure:

There were no component failures associated with the reportable event.

d. For Failed Components With Multiple Functions, List of Systems or Secondary Functions Affected:

There were no component failures associated with the reportable event.

e. Manufacturer and Model Number of Each Failed Component:

There were no component failures associated with the reportable event.

B. Previous Similar Events

LER 50-390/96-010 (WBPER960189) - On March 26, 1996, two Emergency Gas Treatment System (EGTS) control board damper switches were discovered in the standby position causing the automatic function of the EGTS for both trains to be inoperable. The root cause of the event was attributed to personnel error and failure to follow procedure.

VII. COMMITMENTS

All corrective actions listed in V.B (above) will be completed by July 25, 1996.