

# ACCELERATED DOCUMENT DISTRIBUTION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9311040022      DOC.DATE: 93/10/28      NOTARIZED: NO      DOCKET #  
FACIL:50-438 Bellefonte Nuclear Plant, Unit 1, Tennessee Valley Au      05000438  
50-439 Bellefonte Nuclear Plant, Unit 2, Tennessee Valley Au      05000439  
AUTH.NAME      AUTHOR AFFILIATION  
MCCLUSKEY,H.F.      Tennessee Valley Authority  
RECIP.NAME      RECIPIENT AFFILIATION  
Document Control Branch (Document Control Desk)

SUBJECT: Final deficiency rept re insufficient support of cables in vertical cabletrays & conduit runs. Initially reported on 860220. Walkdowns of all class 1E cables will be performed to identify where cable supports required.

DISTRIBUTION CODE: IE27D      COPIES RECEIVED: LTR 1 ENCL 1      SIZE: 4  
TITLE: 50.55(e) Construction Deficiency Report

NOTES:

	RECIPIENT		COPIES		RECIPIENT		COPIES	
	ID CODE/NAME		LTR	ENCL	ID CODE/NAME	LTR	ENCL	
	PD2-4		1	1	THADANI, M	1	1	
INTERNAL:	ACRS		16	16	DEDRO	1	1	
	NRR/DORS/OEAB		1	1	NRR/DRIL/RPEB	1	1	
	<del>NRR/DRIL/RVIB</del>		1	1	OGC/HDS1	1	1	
	REG FILE	02	1	1	RES/DSIR/EIB	1	1	
	RGN2 FILE	01	1	1				
EXTERNAL:	NRC PDR		1	1	NSIC SILVER	1	1	

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK, ROOM P1-37 (EXT. 504-2065) TO ELIMINATE YOUR NAME FROM DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTR 28 ENCL 28

R  
I  
D  
S  
/  
A  
D  
D  
S  
/  
A  
D  
D  
S



Tennessee Valley Authority, Post Office Box 2100, Hollywood, Alabama 35762

H. Fred McCluskey  
Site Vice President, Bellefonte Nuclear Plant

OCT 28 1993

BLRD-50-438/86-05  
BLRD-50-439/86-04

10 CFR 50.55(e)

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Gentlemen:

In the Matter of the Application of )  
Tennessee Valley Authority )

Docket Nos. 50-438  
50-439

BELLEFONTE NUCLEAR PLANT (BLN) - INSUFFICIENT SUPPORT OF CABLES  
IN VERTICAL CABLETRAYS AND CONDUIT RUNS - BLRD-50-438/86-05 AND  
BLRD-50-439/86-04 - FINAL REPORT

The subject deficiency was reported in accordance with 10 CFR 50.55(e)(3) in an  
interim report dated February 20, 1986 as SCR BLN 4657 R1 and to the NRC  
Operations Center on October 4, 1993 as Significant Corrective Action Report (SCAR)  
BLSCA930012. Enclosed is TVA's final report on this subject.

Should there be any questions regarding this information, please telephone Greg Pierce,  
BLN Site Licensing Manager, at (205) 574-8058.

  
H. Fred McCluskey

Enclosures

9311040022 931028  
PDR ADOCK 05000438  
S PDR



IF27  
11

U.S. Nuclear Regulatory Commission

Page 2

OCT 28 1988

cc (Enclosures):

NRC Resident Inspector  
Bellefonte Nuclear Plant  
P. O. Box 2000  
Hollywood, Alabama 35752

Mr. R. V. Crlenjak  
U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Mr. M. C. Thadani, Project Manager  
U.S. Nuclear Regulatory Commission  
One White Flint, North  
11555 Rockville Pike  
Rockville, Maryland 20852

## **ENCLOSURE 1**

### **BELLEFONTE NUCLEAR PLANT (BLN) - UNITS 1 AND 2 INSUFFICIENT SUPPORT OF CABLES IN VERTICAL CABLETRAYS AND CONDUIT RUNS BLRD-50-438/86-05 AND BLRD-50-439/86-04**

#### **FINAL REPORT**

##### **DESCRIPTION OF DEFICIENCY**

On or about August 4, 1993, during a generic applicability review of a condition at Watts Bar Nuclear Plant (WBN), vertical cabletrays were found to have cables installed using cable tie-wraps. This method of cable installation (using tie-wraps) had been approved during the time of cable installation. Subsequently, design requirements were changed to be more restrictive.

A condition similar to this involving cables within vertical conduit runs was identified in Interim Report BLRD-50-438/86-05 and BLRD-50-439/86-04.

##### **SAFETY IMPLICATIONS**

Insufficient support of vertically configured cables could cause excessive tension at cable termination points due to the weight of the cables. Additionally, conductor creep or inadequacies of the affected cables during a seismic event could result from this deficiency. Any of these potential effects could cause a failure of a safety-related cable to perform its safety function.

##### **CAUSE**

The cause of this inadequacy is attributed to insufficient support design for cables in vertical configurations.

##### **CORRECTIVE ACTIONS**

Walkdowns of all class 1E cables will be performed to identify where cable supports are required. The locations of cables requiring these supports will be identified in design documents. Additional cable supports will be installed as necessary.

Current procedures require the use of Kellum grips rather than cable tie-wraps for vertical configurations. Therefore, procedural controls are in place to preclude recurrence.

These corrective actions will be completed prior to transfer of the final system for each unit.

## **ENCLOSURE 2**

**BELLEFONTE NUCLEAR PLANT (BLN) - UNITS 1 AND 2  
BLRD-50-438/86-05 AND BLRD-50-439/86-04**

### **COMMITMENTS**

- Walkdowns of all class 1E cables will be performed to identify where cable supports are required.
- The locations of cables requiring these supports will be identified in design documents.
- Additional cable supports will be installed as necessary.
- These corrective actions will be completed prior to transfer of the final system for each unit.