

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

82 MAY 13 A 8 : 30 MAY 10, 1982

BLRD-50-438/81-66  
BLRD-50-439/81-65

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - ENVIRONMENTAL QUALIFICATION OF  
SAFETY-RELATED ELECTRICAL COMPONENTS - BLRD-50-438/81-66,  
BLRD-50-439/81-65 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector  
R. V. Crlenjak on October 21, 1981 in accordance with 10 CFR 50.55(e) as  
NCRs BLN NEB 8113 through BLN NEB 8118. This was followed by our first  
interim report dated November 16, 1981. Since that time, related NCRs  
BLN NEB 8119, 8120, and 8205 and BLN EEB 8203 have also been reported.  
As discussed with Inspector R. V. Crlenjak on April 6, 1982, enclosed  
is our delayed second interim report. We expect to submit our next report  
by August 16, 1982.

If you have any questions concerning this matter, please get in touch with  
R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*L. M. Mills*  
L. M. Mills, Manager  
Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Mr. James McFarland (Enclosure)  
Senior Project Manager  
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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2  
ENVIRONMENTAL QUALIFICATION OF SAFETY-RELATED ELECTRICAL COMPONENTS  
NCRs BLN NEB 8113, 8114, 8115, 8116, 8117, 8118, 8119, 8120, AND 8205  
AND BLN EEB 8203  
BLRD-50-438/81-66, BLRD-50-439/81-65  
10 CFR 50.55(e)  
SECOND INTERIM REPORT

Description of Deficiency

During TVA's NUREG-0588 environmental qualification program, the components listed in Table I (attached) were identified as potentially deficient because of insufficient documentation to verify that the equipment is environmentally qualified. This equipment was procured before the issuance of NUREG-0588.

Interim Progress

Table I gives a summary of corrective actions for the subject components.

TABLE I (Page 1)

<u>NCR No.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Corrective Action/ Resolution</u>
BLNNEB8113 (Differential Pressure Transmitter)	1NL and 2NL-ILT-001B-B -001A-A -002A-A -002B-B	CF-LT3A2 CF-LT3A1 CF-LT3B1 CF-LT3B2	N2BQ75221X	Bailey Meter Co.	TVA has reviewed all available qualification documentation for this equipment and has concluded that the devices are acceptable for their intended use.
BLNNEB8114 (Pressure Transmitter)	1NC and 2NC-IPT-004B-A -004A-B	RC-PT17-3 RC-PT17-4	1152GP9A92PB	Rosemount, Inc.	TVA has reviewed all available qualification documentation for this equipment and has concluded that the devices are not acceptable for their intended use. To establish full equipment qualification, TVA will replace the devices with fully qualified units or will type-test the devices to qualify fully per the NUREG-0588 guidelines.
BLNNEB8115 (Differential Pressure Transmitter)	1CF and 2CF-ILT-916B-B -916A-A -925A-A -925B-B	SP-LT9A2 SP-LT9A3 SP-LT9B3 SP-LT9B2	N1BQ74221	Bailey Meter Co.	TVA has reviewed all available qualification documentation for this equipment and has concluded that the devices are acceptable for their intended use.

TABLE I (Page 2)

<u>NCR No.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Corrective Action/ Resolution</u>
BLNNEB8116 (Differential Pressure Transmitter)	1NL and 2NL-IPT-001A-A -001B-B -002A-A -002B-B	CF-PT4A1 CF-PT4A2 CF-PT4B1 CF-PT4B2	N2BQ68221X	Bailey Meter Co.	TVA has reviewed all available qualification documentation for this equipment and has concluded that the devices are not acceptable for their intended use. To establish full equipment qualification, TVA will replace the devices with fully qualified units. No type-test of this device will be undertaken as it is not designed to survive a loss-of-coolant accident.
BLNNEB8118 (Differential Pressure Transmitter)	1NC and 2NC-IFT-907E-D -907F-F -907A-E -907B-G -913E-D -913F-F -913A-E -913B-G	RC-FT1A1 RC-FT1A2 RC-FT1A3 RC-FT1A4 RC-FT1B1 RC-FT1B2 RC-FT1B3 RC-FT1B4	N1BQ86221	Bailey Meter Co.	TVA has reviewed all available qualification documentation for this equipment and has concluded that the devices are not acceptable for their intended use. To establish full equipment qualification, TVA will replace the devices with fully qualified units or type-test the devices to qualify fully per the NUREG-0588 guidelines.
(Pressure Transmitter)-IPT	-903D -904F -906D -905F -914G -915E -916G	RC-PT2A1 RC-PT2A2 RC-PT2A3 RC-PT2A4 RC-PT2B1 RC-PT2B2 RC-PT2B3	N1KS69221	Bailey Meter Co.	

TABLE I (Page 3)

<u>NCR No.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Corrective Action/ Resolution</u>
BLNNEB8117 (Resistance Temperature Detector)	1NC and 2NC-ITE-900A-A	RC-TE3A1	177 HW	Rosemount, Inc.	TVA has reviewed all available qualification documentation for this equipment and has concluded that the devices are not acceptable for their intended use. To establish full equipment qualification, TVA will replace the devices with fully qualified units or type-test the units to qualify fully per the NUREG-0588 guidelines.
	-902A-D	RC-TE3A2			
	-900B-A	RC-TE3A3			
	-901A-F	RC-TE3A4			
	-919B-B	RC-TE3B1			
	-917A-E	RC-TE3B2			
	-919A-B	RC-TE3B3			
	-918A-G	RC-TE3B4			
	-911B-B	RC-TE4A3			
	-911A-B	RC-TE4A4			
	-908A-D	RC-TE4A5			
	-926A-F	RC-TE4A7			
	-910A-E	RC-TE4A9			
	-912A-G	RC-TE4A11			
	-924B-A	RC-TE4B3			
	-924A-A	RC-TE4B4			
	-922A-D	RC-TE4B5			
	-920A-F	RC-TE4B7			
	-925A-E	RC-TE4B9			
	-923A-G	RC-TE4B11			
	-901B-F	RC-TE3A6			These devices have been added to this NCR by revision 2. They are recent additions to the latest Class IE equipment list.
	-902B-D	RC-TE3A5			
	-917B-E	RC-TE3B5			
	-918B-G	RC-TE3B6			

TABLE I (Page 4)

<u>NCR No.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Corrective Action/ Resolution</u>
BLNNEB8119 (Pressure Transmitter)	1NC and 2NC-IPT-906-D -905-F -916-G -004B-A -004A-B	RC-PT2A3 RC-PT2A4 RC-PT2B3 RC-PT17-3 RC-PT17-4	N1KS69221   1152GP9A92PB	Bailey Meter Co.   Rosemount, Inc.	TVA is reviewing this NCR in conjunction with other NCRs covering these devices in order to determine the alternatives and their impact on achieving full equipment qualification.
(Differential Pressure Transmitter)	1NC and 2NC-IPT-907E-D -907F-F -907A-E -907B-G -913E-D -913F-F -913A-E -913B-G	RC-FT1A1 RC-FT1A2 RC-FT1A3 RC-FT1A4 RC-FT1B1 RC-FT1B2 RC-FT1B3 RC-FT1B4	N1BQ86221	Bailey Meter Co.	
(Pressure Transmitter)	IPT-903-D -904-F -914-G -915-E	RC-PT2A1 RC-PT2A2 RC-PT2B1 RC-PT2B2	N1KS69221	Bailey Meter Co.	
(Differential Pressure Transmitter)	1NC and 2NC-IPT-907E-D -907F-F -907A-E -907B-G -913E-D -913F-F -913A-E -913B-G	Not available at this time.	Not available at this time.	Bailey Meter Co.	
(Pressure Transmitter)	-IPT-903-D -904-F -914-G -915-E				
(Differential Pressure Transmitter)	1NC and 2NC-ILT-004A-D -004B-E -004C-F -004D-G -004E-A -004FAB -951-A -952-B -953-A -954-B	Not available at this time.	Not available at this time.	Bailey Meter Co.	TVA has reviewed available documentation for these devices and has determined that they are suitable for their intended use.

TABLE I (Page 5)

<u>NCR No.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Corrective Action/ Resolution</u>
BLNNEB8119 (Cont'd.) (Differential Pressure Transmitter)	1NL and 2NL-ILT-001B-B -001A-A -002A-A -002B-B 1CF and 2CF-ILT-916B-B -916A-A -925A-A -925B-B 1NV and 2NV-IFT-844A -845A -846B -847B 1KD and 2KD-ILT-003A-A -003B-B 1NV and 2NV-ILT-004A-A 1NB-ILT-026-A 2NB-ILT-027-A 1KE and 2KE-IFT-962B-A -965B-B -968B-B 1KC and 2KC-ILT-004-A -005-B -IFT-006-A -007-B 1NC and 2NC-IEB-004A-A 1NS and 2NS-IPT-904D -906G -905F 1SM and 2SM-IPT-901A-B -901B-A -902A-B -902B-A -903-D -904-G -905-F -910-D -911-G -912-F 1NV and 2NV-IPT-004A	Not available at this time.	Not available at this time.	Bailey Meter Co.	TVA has reviewed available documentation for these devices and has determined that they are suitable for their intended use.

TABLE I (Page 6)

<u>NCR No.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Corrective Action/ Resolution</u>
BLNNEB8119		Not	Not	Bailey Meter Co.	TVA has reviewed available documentation for these devices and has determined that they are suitable for their intended use.
(Cont'd.)	1NV and 2NV-IFT-841-A	available	available		
(Differential	-842-B	at this	at this		
Pressure	-848-A	time.	time.		
Transmitter)	-849-B				
	1NS and 2NS-ILT-003A-A				
	-003B-B				
	IFT-900-A				
	-901-B				
	1ND and 2ND-IFT-902-B				
	-907-A				
BLNNEB8120	1NC and 2NC-ITE-900A-A	RC-TE3A1	177HW	Rosemount, Inc.	TVA has reviewed all available qualification documentation for this equipment and has concluded that the devices are not suitable for their intended use. Since NCR BLNNEB8117 concerns these same devices, this NCR will be closed and further resolution of this problem will be addressed in NCR BLNNEB8117.
(Resistance	-900B-A	RC-TE3A3			
Temperature	-919B-B	RC-TE3B1			
Detector)	-919A-B	RC-TE3B3			
	-911B-B	RC-TE4A3			
	-911A-B	RC-TE4A4			
	-924B-A	RC-TE4B3			
	-924A-A	RC-TE4B4			



TABLE I (Page 7)

<u>NCR No.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Resolution</u>
BLNEEB8203 (Seal-Tite Type EF Flexible Conduit on Local Panels)	1IX and 2IX-ILPA-004-A -052-A -056-A -058-A -070-A -072-A -081-A -083-A -085-A -086-A -094-A -101-A -119-B -120-B -121-A -122-A -123-A -141-A -177-A -178-A 2IX-ILPA-179-B 1IX and 2IX-ILPR-001-D -002-A -003-F -004-E -005-B -006-G	NA	NA	York Electro- Panel Control	Investigations are under- way to find a conduit system suitable for the conditions.

TABLE I (Page 8)

<u>NCR No.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Corrective Action/ Resolution</u>
BLNEEB8203 1IX and 2IX-ILPR-009-D (cont'd.)	-011-B	NA	NA	York Electro- Panel Control	Investigations are underway to find a conduit system suitable for the conditions.
	-012-A				
	-013-A				
	-014-B				
	-016-A				
	-019-A				
	-020-B				
	-021-A				
	-022-B				
	-023-D				
	-024-E				
	-025-F				
	-026-G				
	-027-A				
	-028-B				
	-029-A				
	-034-B				
	-035-A				
	-036-B				
	-038-B				
	-039-F				
	-040-G				
	-041-A				
	-042-B				
	-043-A				
	-044-B				
	-045-A				
	-049-A				
	-050-B				
	-051-A				
	-058-A				
	-060-A				
	-061-A				
	-062-B				
	-066-A				
	-067-B				
	-017-B				
	-059-B				

TABLE I (Page 9)

<u>NCR NO.</u>	<u>TVA UNID No.</u>	<u>B&amp;W Component No.</u>	<u>Model</u>	<u>Manufacturer</u>	<u>Corrective Action/ Resolution</u>
BLNNEB8205	NV-EMOT-001A	NA	900 HP Motor	Westinghouse	TVA will continue to search for documentation to demonstrate adequacy of the motors to meet or exceed the requirements of the environment to which they may be subjected. Motor NV-EMOT-856A was inadvertently included in this NCR and is being deleted.
	NV-EMOT-002A				
	NV-EMOT-003B				
	ND-EMOT-001A		700 HP Motor	Westinghouse	
	ND-EMOT-002B				
	KC-EMOT-001A		700 HP Motor	Allis-Chalmers	
	KC-EMOT-002B				
	KC-EMOT-003A				
	NS-EMOT-001A		500 HP Motor	Allis-Chalmers	
	NS-EMOT-002B				
	ND-EMOT-216A		1 HP Motor	General Electric	
	ND-EMOT-221B				
	NV-EMOT-838B		1 HP Motor	General Electric	
	NV-EMOT-858A				
	NV-EMOT-860A				