

A 05/05/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)  
DISTRIBUTION FOR INCOMING MATERIAL

50-387/388

REC: GRIER B H  
NRC

ORG: CURTIS N W  
PA PWR & LIGHT

DOCDATE: 04/17/78  
DATE RCVD: 05/04/78

DOCTYPE: LETTER NOTARIZED: NO  
SUBJECT:

COPIES RECEIVED  
LTR 1 ENCL 0

FURNISHING INFO RE CONSTRUCTION DEFICIENCY REPT CONCERNING WESTINGHOUSE  
SUPPLIED MEDIUM VOLTAGE, METAL CLAD SWITCHGEAR WHICH MAY NOT BE FULLY CAPABLE  
OF WITHSTANDING THE POSTULATED SEISMIC EVENT FOR SUBJECT FACILITY... ADVISING  
REQUIRED DEFINITIVE REPT WI

PLANT NAME: SUSQUEHANNA - UNIT 1  
SUSQUEHANNA - UNIT 2

REVIEWER INITIAL: XJM  
DISTRIBUTER INITIAL: *me*

\*\*\*\*\* DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS \*\*\*\*\*

'CONSTRUCTION' DEFICIENCY' REPORT (10CFR50.55(E).  
(DISTRIBUTION CODE B004)

FOR ACTION: ASST DIR VASSALLO\*\*LTR ONLY(1) BR CHIEF PARR\*\*LTR ONLY(1)  
PROJ MGR MINER\*\*LTR ONLY(1) LIC ASST RUSHBROOK\*\*LTR ONLY(1)

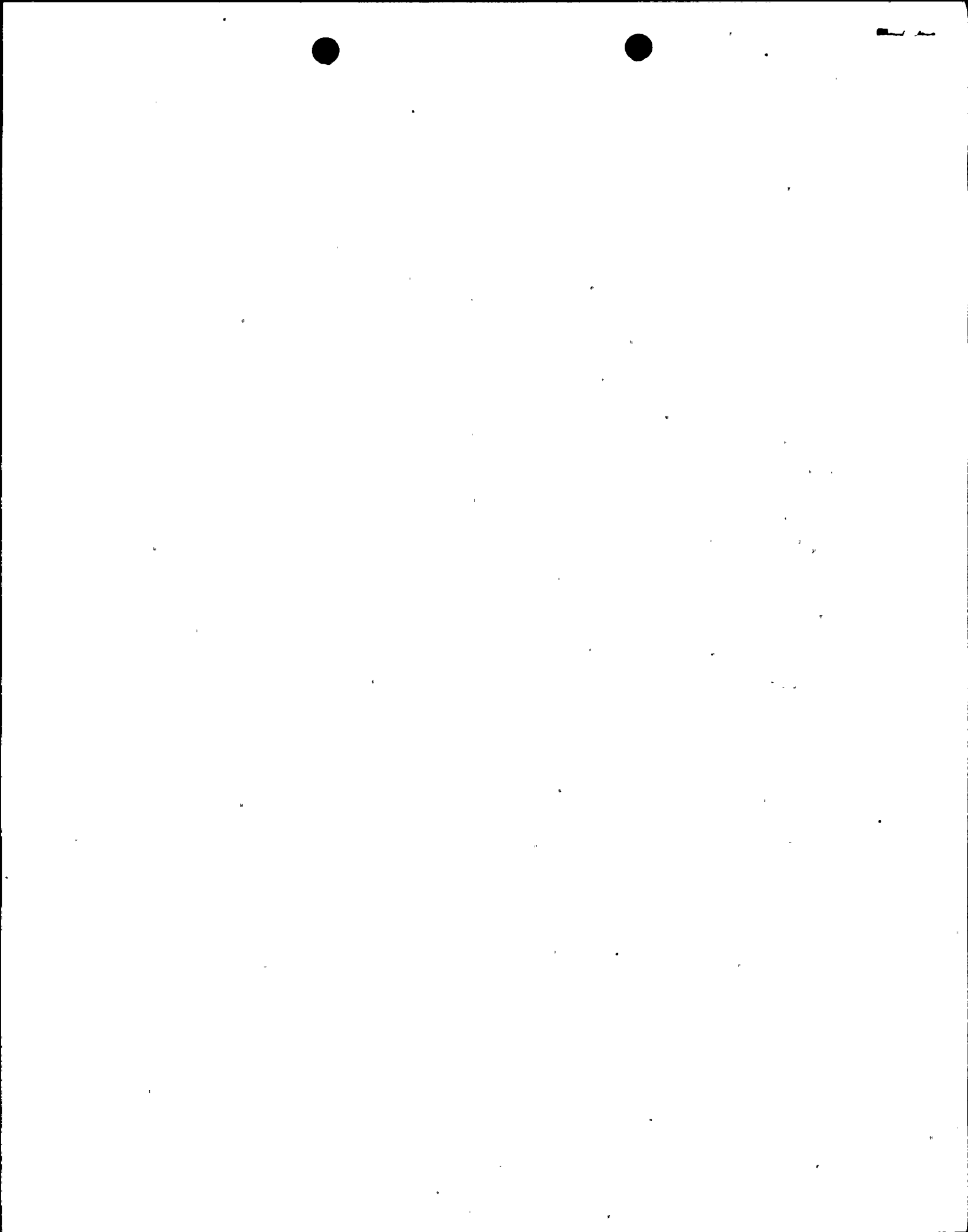
INTERNAL: REG FILE\*\*LTR ONLY(1) NRC PDR\*\*LTR ONLY(1)  
I & E\*\*LTR ONLY(2) OELD\*\*LTR ONLY(1)  
GOSSICK & STAFF\*\*LTR ONLY(1) MIPC\*\*LTR ONLY(1)  
BOYD\*\*LTR ONLY(1) DEYOUNG\*\*LTR ONLY(1)  
HELTEMES\*\*LTR ONLY(1) R. MATTSON\*\*LTR ONLY(1)  
KNIGHT\*\*LTR ONLY(1) ROSS\*\*LTR ONLY(1)  
TEDESCO\*\*LTR ONLY(1) EISENHUT\*\*LTR ONLY(1)  
STANDARDS DEV. \*\*LTR ONLY(1) K SEYFRIT/IE\*\*LTR ONLY(1)

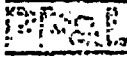
EXTERNAL: LPDR'S  
WILKES BARRE, PA\*\*LTR ONLY(1)  
TIC\*\*LTR ONLY(1)  
NSIC\*\*LTR ONLY(1)  
FERD DREHER/IE\*\*LTR ONLY(1)  
ACRS CAT B\*\*LTR ONLY(16)

DISTRIBUTION: LTR 41 ENCL 0  
SIZE: 2P

CONTROL NBR: 781240031  
*ME*  
*GD*

\*\*\*\*\* THE END \*\*\*\*\*





TWO NORTH NINTH STREET, ALLENTOWN, PA. 18101 PHONE: (215) 821-5151

NORMAN W CURTIS  
Vice President-Engineering & Construction  
821-5381

April 17, 1978

Mr. Boyce H. Grier  
Director, Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

REGULATORY DOCKET FILE COPY

U.S. NUCLEAR REGULATORY COMMISSION  
REGULATORY SERVICES UNIT

1978 MAY 4 PM 10 28

REGULATORY SERVICES UNIT

SUSQUEHANNA STEAM ELECTRIC STATION  
INTERIM REPORT OF REPORTABLE DEFICIENCY  
REGARDING POTENTIAL TRANSFORMERS ON 4.16KV SWITCHGEAR  
DOCKET NOS: 50-387, 50-388  
LICENSE NOS: CPPR-101, CPPR-102  
ERS 100450/100508 FILE 840-4  
PLA-246

Dear Mr. Grier:

This relates to a reportable deficiency, under the provision of 10CFR 50.55(e), which was identified to Mr. A. Toth, NRC, Region I by Mr. A. R. Sabol, PP&L during a telephone conversation on 3/31/78. The deficiency involves Westinghouse supplied medium voltage, metal clad switchgear which may not be fully capable of withstanding the postulated seismic event for the Susquehanna plant..

Specifically, Westinghouse has advised that the potential transformer secondary disconnecting contact assemblies on equipment similar to that supplied for Susquehanna have failed to withstand recent seismic tests. Westinghouse further stated that, under seismic conditions, it is possible that the secondary contacts could be dislodged from their normal positions causing open circuiting or shorting of the secondary circuits.

It has been established that eight of the sixteen units, purchased for use in safety related applications, have been shipped to the SSES plant site. To preclude installation of this equipment, Bechtel has identified (3/16/78) these eight units in a QA Stop Work Report (No. 78-06) as being nonconforming. As a result, Bechtel QC has written a Nonconformance Report (NCR No. 2514) and each switchgear unit has had a "Hold Tag" attached.

Bechtel Engineering has reviewed the system design and they have concluded that the worst condition exists with the loss, on each switchgear bus, of the potential transformers on both incoming feeders coupled with the loss of one, or both, of the bus voltage monitoring transformers.

781240031

Boyd  
5/18



April 17, 1978

Under this condition, the incoming bus feeders from the safeguard transformers would be automatically disconnected and the diesel generator power source connected restoring power to the bus.

The feeder breakers supplying power to the shutdown loads are normally open. A LOCA occurring during or after the postulated seismic event would initiate a closing signal to the motor feeder breakers of the shutdown loads, i.e. RHR and Core Spray Pumps.

These feeder breakers would close and immediately trip due to the false undervoltage indication as sensed by the undervoltage relay. The circuit breakers would be unable to close again because of the permanent undervoltage trip signal imposed on them.

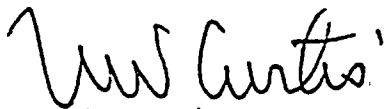
The above analysis assumes that the failures concurrently occur on all redundant switchgear buses.

Bechtel Engineering has further concluded that this loss of capability to supply power to shutdown equipment under a LOCA constitutes a safety hazard to the operation of the plant and represents a deficiency in final design.

As proposed remedial action, Westinghouse has advised that modification kits are available which, when installed, would eliminate the faulty secondary disconnecting assemblies from the circuit. This is accomplished by hard wiring the secondary to the load circuits. Bechtel Engineering is considering the use of these modification kits pending assurance from Westinghouse that this modification will meet all the requirements of the technical specification.

We anticipate submittal of the required definitive report of the deficiency by 7/31/78.

Very truly yours,



N. W. Curtis  
Vice President-Engineering & Construction

WHG/ARS:mcb

cc: Ms. M. C. Barto	- N4	Mr. H. F. Lilligh	- Bechtel SSES
Mr. N. W. Curtis	- N4	Mr. E. M. Mead	- N5
Mr. R. L. Emery	- N4	Mr. M. R. Muir	- Bechtel SFHO
Mr. J. W. Geiling	- N5	Mr. J. R. Schmiedel	- Bechtel SFHO
Mr. J. D. Green	- SSES	Mr. R. J. Shovlin	- N4
Mr. H. L. Harris	- SSES	SP&E Correspondence File	- N3
Mr. J. T. Kauffman	- TW16	Susquehanna Letter File	- N3

