

Part 21 (PAR)

Event # 50726

<b>Rep Org:</b> AZZ - NUCLEAR LOGISTICS INC.	<b>Notification Date / Time:</b> 01/08/2015 18:42 (EST)
<b>Supplier:</b> AZZ - NUCLEAR LOGISTICS INC.	<b>Event Date / Time:</b> 01/08/2015 (CST)
	<b>Last Modification:</b> 01/08/2015
<b>Region:</b> 4	<b>Docket #:</b>
<b>City:</b> FORT WORTH	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> TX	
<b>NRC Notified by:</b> TRACY BOLT	<b>Notifications:</b> DON JACKSON R1DO
<b>HQ Ops Officer:</b> JEFF ROTTON	MICHAEL F. KING R2DO
<b>Emergency Class:</b> NON EMERGENCY	GREG PICK R4DO
<b>10 CFR Section:</b>	PART 21 GROUP EMAIL
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE	

POTENTIAL FAILURE OF SBM TYPE SWITCHES

The following is a summary of information that was provided by the reporting organization via facsimile:

"Pursuant to 10CFR 21.21 (b), AZZ - NLI [AZZ - Nuclear Logistics Inc.] has provided written notification to the affected licensees of the potential failure of GEH SBM type switches manufactured (by GEH) [General Electric - Hitachi] in the period from January 2012 to December 2014.

"This condition has been reported in GEH document SC 14-19 (dated Dec. 11, 2014) in which GEH notified their affected licensees of the potential failure of SBM type switches, manufactured and shipped January 2012 through December 2014, due to incorrect installation of a conical spring. AZZ - NLI procured and dedicated commercial grade SBM type switches, manufactured during this time-frame, and subsequently provided to: Exelon - Peach Bottom; OPPD - Fort Calhoun; TVA- Watts Bar; KHNP [Korea Hydro & Nuclear Power].

"On the basis of our evaluation, it is determined that AZZ - NLI does not have sufficient information to determine if the subject condition would, or has, created a Substantial Safety Hazard or would have created a Technical Specification Safety Limit violation as it relates to the subject plant applications.

"Therefore, purchasers are being advised to perform a visual inspection of the switches at the earliest opportunity to determine if the condition exists.

"The following information is provided per 10CFR 21.21(d) (4). Name and address of the individual or individuals informing the Commission: Tracy Bolt, Director of Quality Assurance, AZZ - Nuclear Logistics Inc., 7410 Pebble Drive, Ft. Worth, TX 76118"

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IE19  
NRR

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# Fax

**To:** NRC Operations Center **From:** Tracy Bolt – Director of Quality Assurance

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**Fax:** 301-816-6151 **Pages:** 5

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**Phone:** 301-816-5100 **Date:** 8 January 2015

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**Re:** NRC Operations Center **CC:**

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AZZ|NLI Contact email: [tracybolt@azz.com](mailto:tracybolt@azz.com)



January 08, 2015

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

Subject: Report No: P21-01072015. Report of potential failure of GE Hitachi (GEH) SBM type Switches per 10CFR Part 21

Pursuant to 10CFR 21.21 (b), AZZ|NLI has provided written notification to the affected licensees of the potential failure of GEH SBM type switches manufactured (by GEH) in the period from January 2012 to December 2014.

This condition has been reported in GEH document SC 14-19 (dated Dec. 11, 2014) in which GEH notified their affected licensees of the potential failure of SBM type switches, manufactured and shipped January 2012 through December 2014, due to incorrect installation of a conical spring (see Figure 1). AZZ|NLI procured and dedicated commercial grade SBM type switches, manufactured during this time-frame, and subsequently provided to:

- Exelon - Peach Bottom
- OPPD - Fort Calhoun
- TVA - Watts Bar
- KHNP

On the basis of our evaluation, it is determined that AZZ|NLI does not have sufficient information to determine if the subject condition would, or has, created a Substantial Safety Hazard or would have created a Technical Specification Safety Limit violation as it relates to the subject plant applications.

Therefore, purchasers are being advised to perform a visual inspection of the switches at the earliest opportunity to determine if the condition exists.

The following information is provided per 10CFR 21.21 (d) (4).

**(i) Name and address of the individual or individuals informing the Commission.**

Tracy Bolt, Director of Quality Assurance  
AZZ | Nuclear Logistics Inc.  
7410 Pebble Drive  
Ft. Worth, TX 76118

Page 2 of 4

- (ii) Identification of the facility, activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.**

The specific part which has the potential failure:

GEH SBM type switches provided in a variety of configurations used for low voltage DC switching applications. GEH has attributed the root cause of this spring orientation condition to a change in sub-supplier for the contact carrier assembly. This change in sub-supplier occurred in 2011 and GEH received shipment of switches with the change in sub supplier no earlier than January 2012.

- (iii) Identification of the firm constructing or supplying the basic component which fails to comply or contains a defect.**

Commercial grade GEH SBM type switches procured from December 2012 through May 2014 and dedicated for Safety Related use by AZZ | NLI.

- (iv) Nature of defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.**

The cause of the failure was incorrect installation of a conical spring, which subsequently shifted and resulted in the switch failure. GEH determined that SBM switches shipped in the period from January 2012 to December 2014 may have the subject condition.

AZZ|NLI does not have sufficient information to determine if the subject condition would, or has, created a Substantial Safety Hazard or would have created a Technical Specification Safety Limit violation as it relates to the subject plant applications.

The GEH notification (document SC 14-19) was not provided to AZZ|NLI, since AZZ|NLI does not procure SBM type switches from GEH as a basic component.

- (v) The date on which the information of such defect or failure to comply was obtained.**

On December 23, 2014, AZZ|NLI was initially notified of the GEH documentation regarding the potential failure of SMB type switches via email from an affected licensee in receipt of the GEH documentation.

- (vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for being supplied for, or may be supplied for, manufactured or being manufactured for one or more facilities or activities subject to the regulations in this part.**

## Page 3 of 4

NLI has supplied the same GEH SBM type switches, shipped by GEH from January 2012 through December 2014, to OPPD - Fort Calhoun, TVA - Watts Bar, Exelon - Peach Bottom and KHNP.

The following switch serial numbers are listed for inspection:

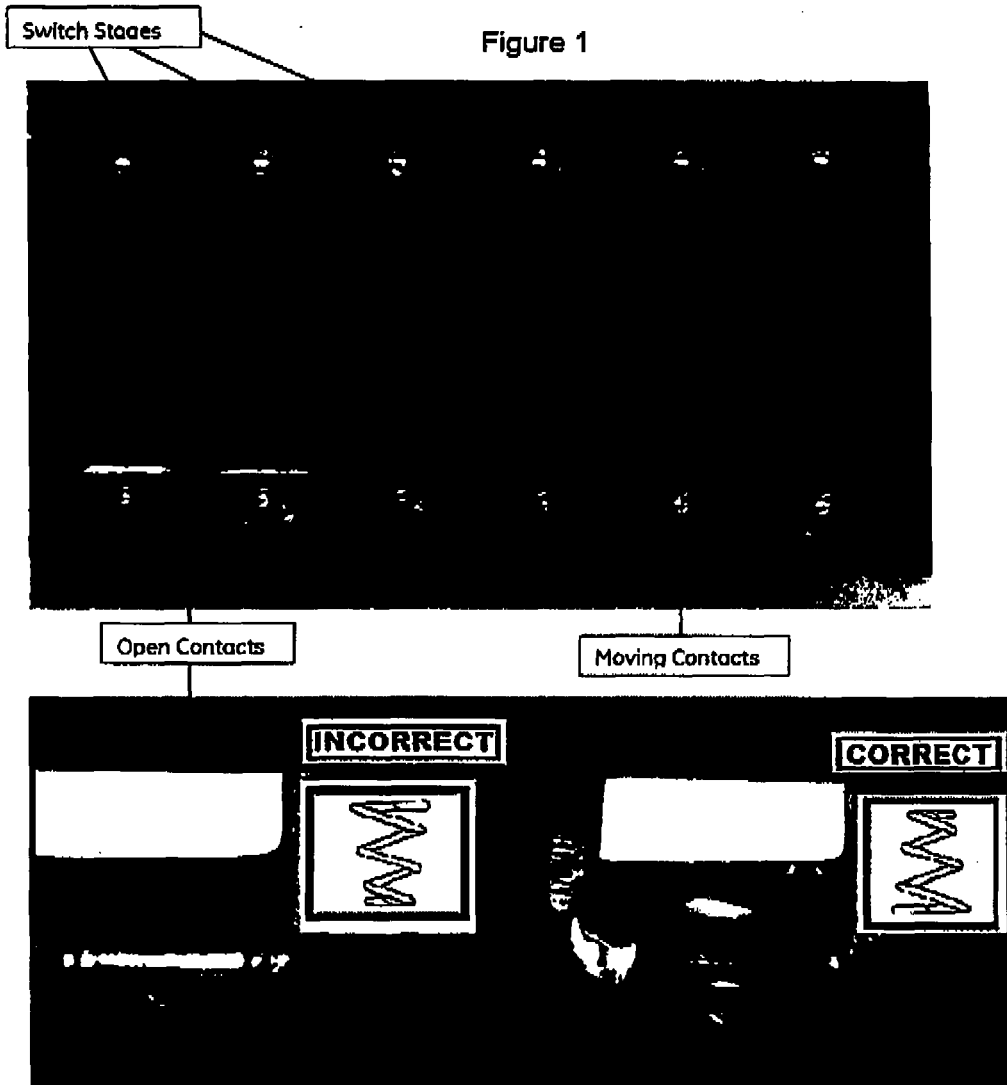
Licensee \ Plant Name	Quantity	Serial Number
KHNP	2	39246-005-00001, 39246-005-00002
OPPD-Fort Calhoun	9	40447-001-00001, 40447-001-00002, 40447-001-00003, 40447-001-00004, 40447-001-00005, 40447-002-00002, 40447-002-00003, 52257-001-00001, 52257-001-00002
Exelon - Peach Bottom	10	58122-002-00002, 58122-001-00001, 58122-001-00002, 58122-001-00003, 58122-004-00001, 58122-004-00002, 58122-004-00003, 58122-004-00004, 58122-003-00001, 59062-001-00001
TVA-Watts Bar	2	50773-001-00002, 50773-001-00003

- (vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

Action	Responsible Organization	Status
Document issue via NCR	AZZ   NLI Quality Assurance	Complete
Review GEH failure analysis	AZZ   NLI Quality Assurance	Complete
Identify extent of condition	AZZ   NLI Quality Assurance	Complete
Place existing stock on hold	AZZ   NLI Quality Assurance	Complete
Evaluate and revise as necessary AZZ   NLI SBM switch Verification Plan(s)	AZZ   NLI Engineering	Pending

- (viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

NLI recommends that all identified GEH SBM type switches be inspected at the next available interval (as determined by the plant) to verify the spring orientation. Licensees may request further guidance from AZZ|NLI regarding inspection methodology.



Please contact me with any questions or comments.

Sincerely,

Tracy Bolt  
Director of Quality Assurance