

*** This Event has been retracted !!!

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Part 21 (PAR)

Event # 51743

Rep Org: NUCLEAR LOGISTICS INC	Notification Date / Time: 02/18/2016 18:29 (EST)
Supplier: NUCLEAR LOGISTICS INC	Event Date / Time: 02/18/2016 (CST)
	Last Modification: 02/26/2016
Region: 4	Docket #:
City: FORT WORTH	Agreement State: Yes
County:	License #:
State: TX	
NRC Notified by: TRACY BOLT	Notifications: GLENN DENTEL R1DO
HQ Ops Officer: STEVEN VITTO	SHANE SANDAL R2DO
Emergency Class: NON EMERGENCY	ROBERT ORLIKOWSKI R3DO
10 CFR Section:	GREG WERNER R4DO
21.21(a)(2) INTERIM EVAL OF DEVIATION	PART 21/50.55 REACTORS EMAIL

PART 21 - CONTACTOR MAKING NOISE

The following was received via fax:

"Initial notification of a potential 10 CFR Part 21 condition.

"Pursuant to the rules of 10 CFR 21.21 this initial notification is being submitted to the NRC to identify a potential reportable condition that is currently under evaluation.

"FPL [Florida Power & Light] Turkey Point has identified a contactor that was making a considerable amount of noise that was not expected. The unit was continuing to functionally operate, however the source of the noise is cause for investigation.

"The contactors are a non-standard Size 3 and Size 4 Freedom Series Starter/Contactor. These units are currently under evaluation and review by NLI [Nuclear Logistics Inc.] to determine the root cause of the identified condition to determine if the contactor contains a defect.

"To date there have been no reported failures of this item to perform the intended safety function. These components were first supplied in September 2002 to Duke Oconee with no reported issues identified. The units reported by FPL Turkey point were supplied in May and December 2011. They have been installed into other facilities including the Duke Shearon Harris plant in December 2013. Although the increased noise is undesirable, it is not presenting a significant condition adverse to quality that could create a substantial safety hazard. Preliminary testing has confirmed that the safety related performance characteristics have not been degraded. However, due to the number of utilities which may have these components in service, this notification is being submitted to identify the condition to the industry.

IE19
NRR

"NLI plans to have the completed report submitted by 3/15/2016."

*** RETRACTION FROM TRACY BOLT TO JOHN SHOEMAKER AT 1847 EST ON 2/26/16 ***

This retraction is a brief summary from a report received from Nuclear Logistics Inc. via email:

"This retraction is being submitted to the NRC to provide additional information for the initial notification provided on 2/18/2016. After evaluating the identified condition, it has determined that there is no defect within the contactor that if left uncorrected would create a substantial safety hazard. This issue is not considered reportable per the rules of 10 CFR Part 21."

Notified R1DO (Ferdas), R2DO (Shaeffer), R3DO (Stone), R4DO (Whitten), and Part 21/50.55 Reactors via email.



2/26/2016

NLI-QA-3503

To: NRC Operations Center
Fax: (301) 816 - 5151

From: Tracy Bolt
Director of Quality Assurance

Subject: Formal Retraction of Initial Notification for potential 10CFR Part 21 condition.

This retraction is being submitted to the NRC to provide additional information for the initial notification provided on 2/18/2016. After evaluating the identified condition, it has determined that there is no defect within the contactor that if left uncorrected would create a substantial safety hazard. **This issue is not considered reportable per the rules of 10CFR Part 21.**

FPL Turkey Point identified that two of five contactors were making a "buzzing" noise that was not expected. In addition they indicated that based on visual inspection, all of the coils in the five contactors exhibited cracking in the coil potting material. The units continued to functionally operate, however the source of the noise was cause for investigation. After receiving information regarding the Turkey Point contactors, Shearon Harris plant performed inspections of their contactors and provided the results to NLI. Shearon Harris plant did not experience any loud buzzing or failure to properly operate, however they did identify cracking of the contactor coil potting material.

The contactors included in this evaluation are a Size 3, Size 4 and Size 5 Freedom Series Starter/Contactor with NLI coils installed. NLI coil part numbers 057018-COIL-3 (for Size 3) and 057025-COIL-5 for (sizes 4 and 5). The coils supplied for these units were designed for a specific safety function of being able to operate during a degraded voltage condition. Operation during the degraded voltage condition could not be achieved utilizing the standard commercial grade coil. Note: This issue is not prevalent on the Size 1 and Size 2 Freedom Series contactors with the NLI coils installed.

NLI performed testing on the contactors returned from Turkey Point that had been in service for approximately 36 months to determine if the safety function of the contactor was impacted by the reported condition. NLI has determined that there is no defect within the contactor that if left uncorrected would create a substantial safety hazard. The "buzzing" noise was confirmed to be coming from the contactor after the shading coil ring fell off of the iron core. The shading coil is a brass ring that is affixed to the iron core, equipped in the original contactor from the commercial manufacturer. After extensive testing and engineering evaluation, it is concluded that when or if the shading coil comes loose from the iron core, it will not affect the contactor's safety related function.

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This was confirmed through multiple tests at varied voltages. The loud "buzzing" noise does not affect the contactor safety related performance characteristics. The cracks in the coil potting material are attributed to the thermal expansion of the coil windings and heat stresses during continuous duty operation. The purpose of the potting material is to retain the shape for the coil windings in the installed configuration. There was no degradation in the dielectric strength of the insulating system. Therefore, although the coils may exhibit cracking in the potting material, the safety related performance characteristics have not been degraded.

To date, there have been no reported failures of this item to perform the intended safety function. These components were first supplied in September 2002 to Duke Oconee with no reported issues identified. The units reported by FPL Turkey point were installed: June 2012 (qty 3), October 2013 (qty 1) and April 2014 (qty 1). The units identified at Turkey point operate in a continuous duty for 18 months at a time. They have been installed into other facilities including the DUKE Shearon Harris plant in December 2013.

Although the increased noise is undesirable, it is not presenting a significant condition adverse to quality that could create a substantial safety hazard. Extensive testing has confirmed that the safety related performance characteristics have not been degraded. However, due to the number of utilities which may have these components in service, this notification is being submitted to identify the condition to the industry.

NLI will complete the evaluation report and will submit copies to the applicable utilities.

Sincerely,



Tracy Bolt
Director of Quality Assurance