AmerGen Energy Company, LLC
Three Mile Island Unit 1
Route 441 South, P.O. Box 480
Middletown, PA 17057

Telephone: 717-948-8000

AmerGen SM

An Exelon Company

July 9, 2008
5928-08-20145

10 CFR 21

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

THREE MILE ISLAND NUCLEAR STATION, UNIT 1 (TMI-1)
OPERATING LICENSE NO. DPR-50
DOCKET NO. 50-289

SUBJECT: 10 CFR 21 NOTIFICATION – IDENTIFICATION OF DEFECT
Issue Report 741412

Pursuant to 10 CFR 21.21(d)(3)(ii), AmerGen Energy Company LLC (AmerGen) is providing the required written notification of the identification of a defect. This information was initially reported to the NRC Operation Center on June 13, 2008. The NRC assigned event number 44295 and Part 21 2008-10-00 to this notification.

The attachment to this letter provides the information requested by 10CFR 21.21 (d)(4). There are no commitments contained in this letter or its attachment.

For additional information contact Adam Miller of TMI Unit 1 Regulatory Assurance at (717) 948-8128.

Sincerely,

William Noll
Vice President TMI, Unit 1

WN/awm

ATTACHMENT: Notification per 10 CFR 21.21 (d)(3)(ii)

cc: TMI Senior Resident Inspector
Administrator, Region I
TMI-1 Senior Project Manager
File No. 08043

IE#9
NRR

Attachment

Notification per 10 CFR 21.21 (d)(3)(ii)

This notification follows the format of and addresses the considerations contained in 10 CFR 21.21 (d)(4)(i) – (viii).

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

William Noll
Vice President TMI, Unit 1
Route 441S
P. O. Box 480
Middletown, PA 17057

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

Facility:

AmerGen Energy Company LLC (AmerGen)
Three Mile Island Nuclear Station, Unit 1
Route 441 S
P. O. Box 480
Middletown, PA 17057

Basic component which fails to comply or contains a defect:

Joslyn Clark Controls
- N/C (Normally Closed) open top contact assemblies
- Vendor Part Numbers:
    1. KPM-44
    2. KPM-46
    3. KPM-6A
    4. KPM-4A

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

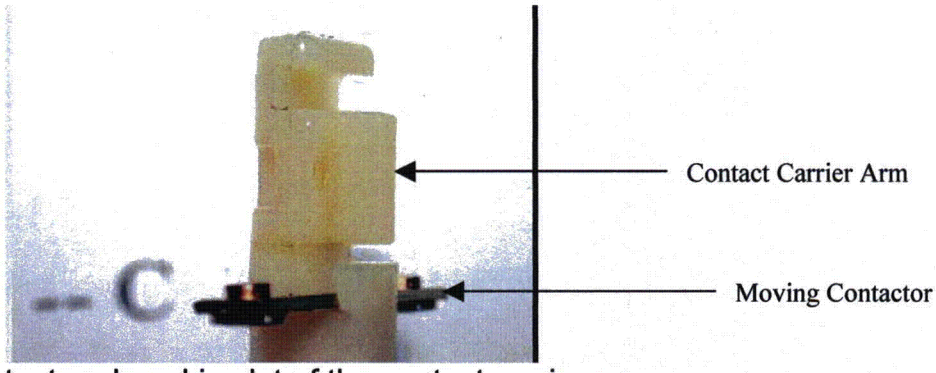
These contact assemblies are commercial grade items dedicated by AmerGen.

Manufactured by: Joslyn Clark Controls Inc. (formerly AO Smith)

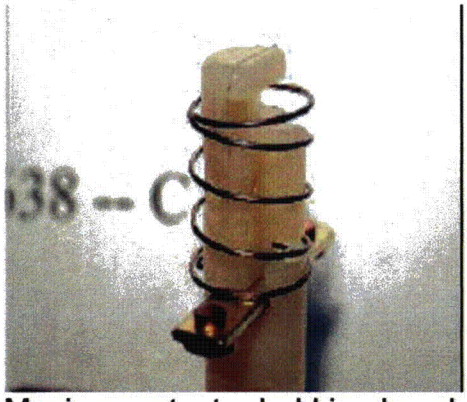
(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

Nature of the defect:

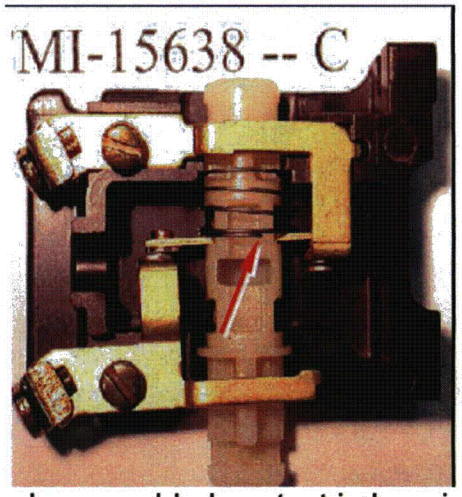
The Joslyn Clark N/C (normally closed) contact assembly consists of a nylon contact carrier arm, a moving contactor that resides in the bottom of a slot in the contact carrier, and a spring that holds the moving contactor in place. These components are encased in a brown housing.



Moving contactor placed in slot of the contact carrier arm.



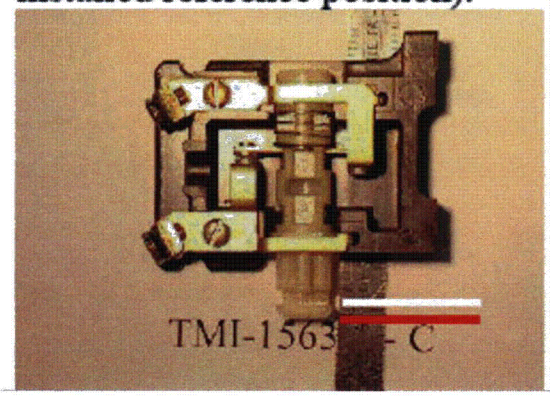
Moving contactor held in place by spring.



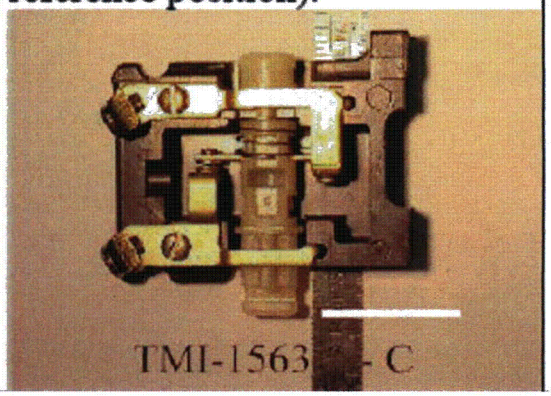
Properly assembled contact in housing.

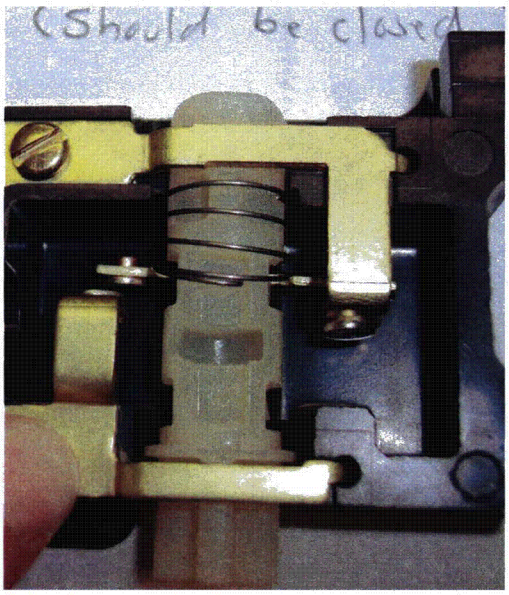
When the nylon carrier is allowed to drop to the full down position as demonstrated below in the picture on the left, the moving contactor is parallel with the lip of the slot, and there is a potential for the moving contactor to become hung-up on the lip of the slot. The nylon carrier is allowed to drop to the full down position prior to installation, and when the magnet kit and coil have been removed from the relay. Once installed in a relay, the magnet kit/coil keep the contact in the reference position as shown in the picture on the right, and the moving contactor cannot become hung-up on the lip of the slot.

Actuator in extreme full down position (-5/32 inch from installed reference position).

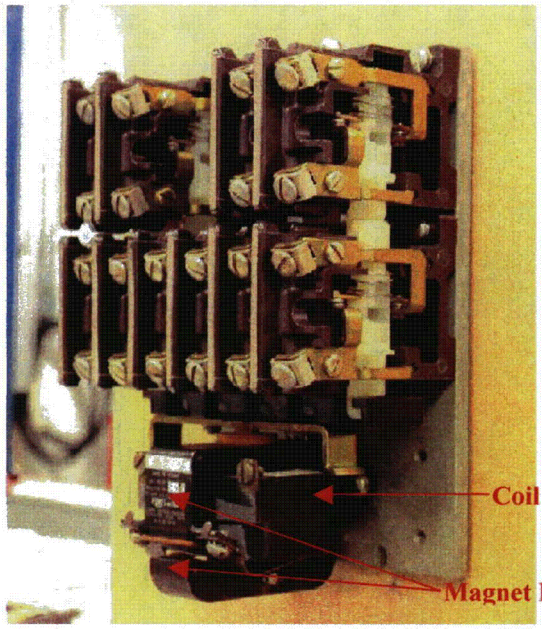


Actuator in installed down position (0.0 inches installed reference position).



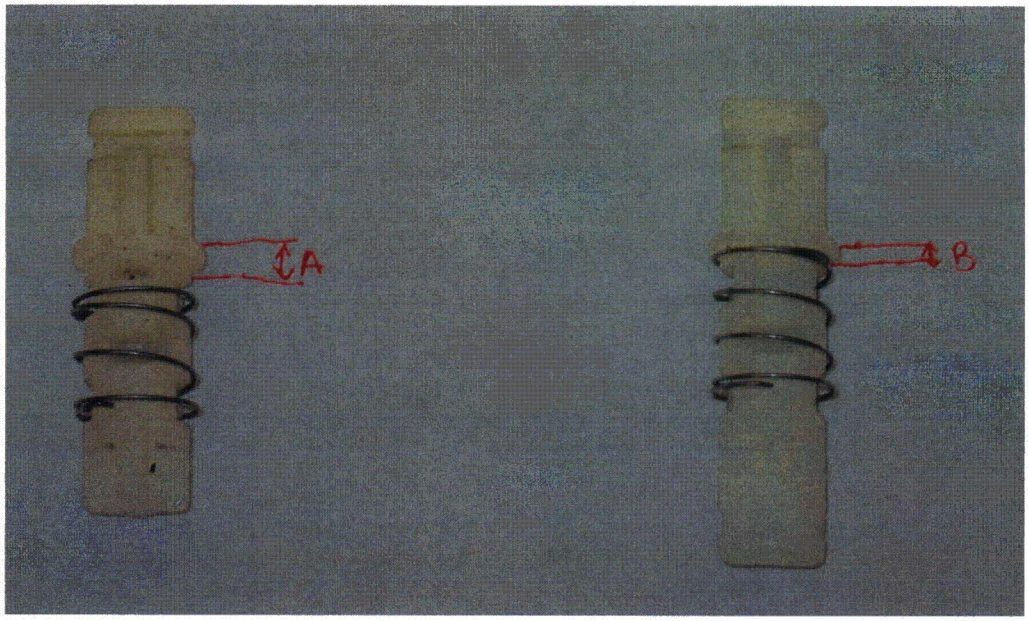


Moving contactor shown hung-up on the lip. Note the contact should be closed in this state, but is not able to fully close due to being hung-up.



Fully assembled relay with magnet kit and coil.

Only the open top N/C contact assemblies are subject to this vulnerability, due to the difference in the size of a retaining ring between the closed top and open top assemblies. The larger ring utilized in the closed top contact assemblies prevents the nylon arm from dropping down. (A in the picture below) The smaller ring utilized in the open-top assemblies allows the nylon arm to drop down. (B in the picture below)



Safety hazard which could be created by such defect:

The potential for a N/C Joslyn Clark contact to become hung-up does result in a substantial safety hazard since it jeopardizes the capability to actuate emergency core cooling components that are utilized to mitigate the consequences of accidents that could result in potential offsite exposure.

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

The technical evaluation that concluded that this defect constituted a Part 21 notification was approved on June 13, 2008.

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

These specific contact assemblies were purchased as Commercial Grade Items and were dedicated by AmerGen for it's own use.

(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.

Corrective actions taken or planned:

1. The Commercial Grade Dedication (CGD) plans as well as the maintenance procedures have been enhanced to prevent a relay from being placed into service with an improperly configured contact. The CGD plans have been revised such that the contacts are verified to be configured correctly during receipt inspection. Maintenance procedures have also been revised to ensure the contact configuration is correct after the relay is fully assembled and following maintenance involving magnet kit/coil replacement, contact replacement, or entire relay replacement. This type of maintenance creates a scenario where the contact carrier is allowed to drop down, which creates a potential for the moving contactor to get hung-up.

(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.

None