



December 6, 2018

U.S Nuclear Regulatory Commission
Washington, DC 20555-0001
MSHD.Resource@nrc.gov

Subject: 10 CFR Part 21.21 Report

- Name and address of the individual or individuals informing the Commission.

Shelia Webb
Vice President
Mirion Technologies (Canberra), Inc.
800 Research Parkway
Meriden, CT 06450
swebb@mirion.com
203-639-2000

Stacey Kohan
QA Manager
Mirion Technologies (Canberra), Inc.
800 Research Parkway
Meriden, CT 06450
skohan@mirion.com
203-639-2000

- 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.

US Facilities: Energery ANO – Control Room Emergency Ventilation System, CREV (ADM616)
 TVA Browns Ferry – Control Room Emergency Ventilation, CREV (ADM606)
 OPPD Ft. Calhoun – RM051 Containment Atmosphere Monitor, RM052 Containment
 Atmosphere Vent Gas monitor, RM062 Aux Bldg Stack – Gas

Basic Components: CR600CIP Customer Interface Panel connected to ADM606 Rackmount Ratemeter, and
 in ADM616 Wallmount Ratemeter
 Containing:
 Potter & Bromfield Product Code R10-E1-X2-J1.0K, Cradle Style Relay with C-Form
 contacts Used in Radiation Monitoring Systems to output Alarm and Fault States

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

Mirion Technologies (Canberra), Inc.
(fka Canberra Industries, Inc.)
800 Research Parkway
Meriden, CT 06450

- Nature of the defect or failure to comply and the safety hazard which is created or would be created by such defect or failure to comply.

These relays exhibited chatter in a de-energized state during a seismic test. If the relay is normally de-energized and chatters during a seismic event, it may actuate or indicate incorrectly.

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

Non-conformance was determined on: July 5, 2018, Technical Evaluation to determine failure to comply was concluded on 5 December 2018.

- 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.



These relays are used in a normally de-energized state in five, safety-related, radiation monitoring system, installations in the United States, at Entergy ANO, at TVA Browns Ferry, and OPPD Ft. Calhoun.

US Facilities: Entergy ANO – Control Room Emergency Ventilation System, CREV (ADM616)
 TVA Browns Ferry – Control Room Emergency Ventilation, CREV (ADM606)
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- 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.
 - Review previous Radiation Monitoring (Safety Related) projects to determine the extent and possible impact – Complete, Mirion (Canberra), Reference Product Performance Report, PPR 3883
 - Review monitor interconnection with plant systems to identify specifically the relays and plants connections to assess impact – Each Site, 6 months, June 28, 2019
 - Develop mitigations which could include using alternative relay output (CR600TP termination panel for ADM606) and/or change rate meter firmware to normally energize relay – Mirion (Canberra), 6 months, June 28, 2019
- 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.

The ADM606 and ADM616 are only being supplied as replacement parts to extend service life of installed monitors.

- In the case of an early site permit, the entities to which an early site permit was transferred.

Not applicable

Regards,

Shelia Webb

Stacey Kohan

Cc: TVA Nuclear
 Nuclear Assurance and Licensing
 Attn: Manager, Operating Experience
 1101 Market St.
 Chattanooga, TN 37402-2801

Fleet Manager, Corrective Action and Operating Experience
Entergy Nuclear Operations
1340 Echelon Parkway
M-ECH-25

Fleet_OE@Entergy.com, Subject: Fleet Manager, Corrective Action & Operating Experience: Part 21

Manager – Nuclear Licensing
Fort Calhoun Nuclear Station
Omaha Public Power District
9610 Power Lane
Blair, NE 68008



MIRION
TECHNOLOGIES

Mirion Technologies (Canberra), Inc.
800 Research Parkway
Meriden, Connecticut 06450

Toll Free 800-243-4422
Tel. 203-238-2351
www.canberra.com

FCSLicensingMgr@oppd.com

CANBERRA