

Part 21 (PAR)

Event # 50017

<b>Rep Org:</b> BALDOR ELECTRIC CO.	<b>Notification Date / Time:</b> 04/09/2014 15:19 (EDT)
<b>Supplier:</b> BALDOR ELECTRIC CO.	<b>Event Date / Time:</b> 03/19/2014 (EDT)
	<b>Last Modification:</b> 04/09/2014
<b>Region:</b> 1	<b>Docket #:</b>
<b>City:</b> FLOWERY BRANCH	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> GA	
<b>NRC Notified by:</b> JAMES THIGPEN	<b>Notifications:</b> MALCOLM WIDMANN R2DO
<b>HQ Ops Officer:</b> STEVE SANDIN	PATTY PELKE R3DO
<b>Emergency Class:</b> NON EMERGENCY	NRR PART 21 GROUP EMAIL
<b>10 CFR Section:</b> 21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE	

## PART 21 - POTENTIAL DEFECT IN MOTORS SHIPPED TO DTE ELECTRIC COMPANY

The following is excerpted from a report received by fax:

## "NUCLEAR NONCONFORMANCE REPORT

"1. CUSTOMER: DTE Electric Company, P.O. BOX 44440, DETROIT MI 48244

"2. PURCHASE ORDER: 4700670925 - QTY 2

"3. PART/COMPONENT NAME: AC MOTORS

"4. PART/COMPONENT#: B1038686-010 T1/DTE P/N 100309425 and B1038686-010 T2/DTE P/N 100309425

"5. QUANTITY ON HAND - 1 SHIPPED- 2

"6. LOCATION OF ALL UNITS: Motor in service at DTE, Enrico Fermi Power Plant 2 (Qty 1) and at Baldor Gainesville Motor Plant (Qty 1)

"7. DATE NONCONFORMANCE ASCERTAINED: March 13, 2014

"8. DESCRIPTION OF DEFECT/NONCONFORMANCE: This is a reportable 10CFR21 notification because we believe it is possible that the B1038686-010 T1, 1E motor shipped by Baldor Electric, contains a design where the shaft journal is not long enough to allow the proper fit between the motor shaft and the o-ring of the inpro seal rotating element.

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NRR

"The motor (B1038686-010 T2) returned for evaluation under RA310488951 was in response to the inpro seal separating. Upon inspection Baldor has determined the shaft journal is not long enough to allow the proper fit between the motor shaft and the o-ring of the in pro seal rotating clement.

"9. CORRECTIVE ACTION TAKEN: Baldor has notified DTE Electric Company's Quality Assurance of our findings. Through them we have initiated replacement of the motor identified as located at DTE, Enrico Fermi Power Plant 2.

"A review was completed by design engineering to determine this design issue has only occurred for the Specification ID B1038686, of which Baldor has only shipped the 2 motors identified above. The design of the shaft/inpro seal fit has been completed to correct the issue.

"10. ANY ADVICE RELATED TO DEFECT/NONCONFORMANCE: Separation of the rotating element from the in pro seal obviously reduces the full effectiveness of the in pro seal. However, if this were to occur, the motor is still functional. Baldor has confirmed the motor with a failed inpro seal as received is still equivalent to IP55. Grease from the DE bearing will still be retained as intended, and water ingress into the motor would only occur if sprayed directly. Baldor recommends continued use of B1038686-010T1 until the next outage unless direct spray is expected. B1038686-010T2, which is currently in Baldor's possession, will be repaired by changing the rotating assembly. Baldor has notified DTE that we will be manufacturing a complete motor per the revised bill of material to replace B1038686-010T1 which is currently in service.

"11. INDIVIDUAL COMPLETING THIS REPORT: James Thigpen, QA Manager, Baldor Electric, Gainesville, GA 30506, April 09, 2014"

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# FAX



Date 04/09/2014

Number of pages including cover sheet 3

To: NRC Operations Center

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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone 301-816-5100

Fax Phone 301-816-5151

Cc: \_\_\_\_\_

From: James Thigpen

Quality Assurance Mgr.

Baldor Electric Co.

4349 Avery Drive

PO Box 250

Flowery Branch, Ga. 30542

email jlthigpen@baldor.com

Phone (678) 947-7272

Fax Phone 678-947-7295

**Remarks:**

- Urgent
  For your review
  Reply ASAP
  Please comment

I have attached a Nuclear Nonconformance Report which I am submitting in accordance with our quality plan procedure RGG SOP-0047 rev. 3, Procedure for 10CFR21 Implementation. I will need to know what event number you have assigned to this nonconformance report so I can complete a formal notification as required by the procedures.

Thank you,  
James Thigpen

**BALDOR**  
A MEMBER OF THE ABB GROUPReliance Electric  
P. O. Box 250, 4349 Avery Drive  
Flowery Branch, GA 30542 USA  
Tel 678.947.7350

April 09, 2014

**TITLE: Initial Notification Report-****To: NRC Operations Center  
Phone 301-816-5100  
Fax 301-816-5151**

Dear Sir or Madam:

**NUCLEAR NONCONFORMANCE REPORT**

1. **CUSTOMER:** DTE Electric Company  
P.O. BOX 44440  
DETROIT MI 48244
2. **PURCHASE ORDER:** 1) 4700670925 – QTY 2
3. **PART/COMPONENT NAME:** AC MOTORS
4. **PART/COMPONENT #:** 1) B1038686-010 T1 DTE P/N 100309425  
2) B1038686-010 T2 DTE P/N 100309425
5. **QUANTITY ON HAND – 1 SHIPPED - 2**
6. **LOCATION OF ALL UNITS** 1) Motor in service at DTE, Enrico Fermi Power Plant 2 (Qty 1)  
2) At Baldor Gainesville Motor Plant (Qty 1)
7. **DATE NONCONFORMANCE ASCERTAINED:** March 13, 2014
8. **DESCRIPTION OF DEFECT/NONCONFORMANCE:** This is a reportable 10CFR21 notification because we believe it is possible that the B1038686-010 T1, 1E motor shipped by Baldor Electric, contains a design where the shaft journal is not long enough to allow the proper fit between the motor shaft and the o-ring of the inpro seal rotating element. The motor (B1038686-010 T2) returned for evaluation under RA310488951 was in response to the inpro seal separating. Upon inspection Baldor has determined the shaft journal is not long enough to allow the proper fit between the motor shaft and the o-ring of the inpro seal rotating element.



Reliance Electric  
P. O. Box 250, 4349 Avery Drive  
Flowery Branch, GA 30542 USA  
Tel 678.947.7350

9. **CORRECTIVE ACTION TAKEN:** Baldor has notified DTE Electric Company's Quality Assurance of our findings. Through them we have initiated replacement of the motor identified as located at DTE, Enrico Fermi Power Plant 2.  
A review was completed by design engineering to determine this design issue has only occurred for the Specification ID B1038686, of which Baldor has only shipped the 2 motors identified above. The design of the shaft/inpro seal fit has been completed to correct the issue.
10. **ANY ADVICE RELATED TO DEFECT/NONCONFORMANCE:** Separation of the rotating element from the inpro seal obviously reduces the full effectiveness of the inpro seal. However, if this were to occur, the motor is still functional. Baldor has confirmed the motor with a failed inpro seal as received is still equivalent to IP55. Grease from the DE bearing will still be retained as intended, and water ingress into the motor would only occur if sprayed directly. Baldor recommends continued use of B1038686-010T1 until the next outage unless direct spray is expected. B1038686-010T2, which is currently in Baldor's possession, will be repaired by changing the rotating assembly. Baldor has notified DTE that we will be manufacturing a complete motor per the revised bill of material to replace B1038686-010T1 which is currently in service.
11. **INDIVIDUAL COMPLETING THIS REPORT**

James Thigpen  
QA Manager, Baldor Electric  
Gainesville, GA 30506  
April 09, 2014