



Phil Hansett
Site Vice President
River Bend Station
225-381-4374

RBG-48245

10 CFR 21.21

August 24, 2023

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Part 21 Notification of a Failure to Comply Identified During Preinstallation
Testing on a Motor Driven Relay

River Bend Station, Unit 1
NRC Docket No. 050-458
Renewed Facility Operating License No. NPF-47

In accordance with the requirements of 10 CFR 21.21(d)(3)(ii), Entergy Operations, Inc. (Entergy) hereby submits the attached River Bend Station (RBS) written notification of a defect or failure to comply. This information was initially reported to the Nuclear Regulatory Commission (NRC) Operations Center on July 26, 2023 (Event Notification 56641). The information provided in the attachment meets the reporting requirements of 10 CFR 21.21(d)(4).

This letter contains no new commitments.

Should you have any questions concerning this issue, please contact Randy Crawford, Manager, Regulatory Assurance, at 225-381-4177.

Respectfully,

A handwritten signature in black ink that reads 'Phil Hansett'.

Phil Hansett

PH/ twf

Enclosure: 10 CFR Part 21 Notification: Motor Driven Relay Bench Test Failure

cc: NRC Regional Administrator – Region IV
NRC Senior Resident Inspector – River Bend Station
NRC Document Control Desk

Enclosure

RBG-48245

**10 CFR Part 21 Notification:
Motor Driven Relay Bench Test Failure**

**10 CFR Part 21 Notification:
Motor Driven Relay Bench Test Failure**

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

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

Philip Hansett
Site Vice President
River Bend Station
5485 US Highway 61N
St. Francisville, LA 70775

(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: River Bend Station, Unit 1
Docket No. 050-458
Renewed Facility Operating License No. NPF-47
Basic Component: Motor Driven Relay MDR 66-4 serial number 29

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

The MDR-66-4 relays were supplied by Curtiss-Wright Nuclear Division, formerly known as QualTech NP (a division of Curtiss-Wright).

Curtiss-Wright Nuclear Division
4600 East Tech Drive
Cincinnati, OH 45245

(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.

MDR 66-4 relay serial number 29 failed preinstallation bench testing. The relay was sent to an independent facility for failure analysis, which determined that the failure was due to buildup of corrosion between the rotor and relay core. The lamination where the corrosion was observed should have been fully protected by transformer varnish but was not.

These MDR relays are used in the Remote Shutdown System to transfer control from the Main Control Room to the Remote Shutdown Panel when the Main Control Room must be abandoned.

NEI 14-09 states, "Major Degradation is considered to be a loss of redundancy in essential safety related equipment if, in conjunction with a single failure, a required safety function could not be performed". This condition could cause the failure of a relay in such a way that control from the Remote Shutdown Panel would be unavailable for the system/component in which the faulted relay is installed. Therefore, this condition is considered a Substantial Safety Hazard.

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

May 23, 2023

(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.

There are 24 of these relays currently installed in various electrical panels throughout the plant.

(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.

All affected material controlled by the River Bend Station Procurement Department has been confirmed to be either on repair hold or warehouse hold, which makes it unavailable for issue to the plant. Satisfactory pre-installation bench testing has been verified for all relays of this type that are currently in use.

(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

(ix) In the case of an early site permit, the entities to whom an early site permit was transferred.

This event does not involve an early site permit.