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Michael R. Chisum
Site Vice President
Waterford 3

10 CFR 21.21

W3F1-2014-0042

July 9, 2014

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Subject: Part 21 Report of Pneumatic Valve Actuator Reverse Action
Waterford Steam Electric Station, Unit 3 (Waterford 3)
Docket No. 50-382
License No. NPF-38

Dear Sir or Madam:

Pursuant to 10 CFR 21.21(d)(3)(ii), Entergy is providing the Waterford Steam Electric Station, Unit 3 (Waterford 3) required written notification of the identification of a defect associated with pneumatic valve actuator reverse action. This information was initially reported to the NRC Operations Center on June 12, 2014.

The attachment to this letter provides the information required by 10 CFR 21.21, including details associated with pneumatic valve actuators that were found outside of the specified action configuration at Waterford 3.

This report contains no new commitments. Please contact John P. Jarrell, Regulatory Assurance Manager, at (504) 739-6685 if you have questions regarding this information.

Sincerely,

K. Cook for M. Chisum

MRC/JDW

Attachment: Waterford 3 Part 21 Report of Pneumatic Valve Actuator Reverse Action

cc: Mr. Marc L. Dapas, Regional Administrator
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Attachment to

W3F1-2014-0042

Waterford 3 Part 21 Report of Pneumatic Valve Actuator Reverse Action

Waterford 3 Part 21 Report of Pneumatic Valve Actuator Reverse Action

This written notification information follows the format of and addresses the considerations contained in 10CFR21.21(d)(4)(i)-(ix).

I. Name and Address

Michael R. Chisum
17265 River Road
Killona, LA 70057

II. Facility, Activity or Component

The basic component is a pneumatic valve actuator supplied as safety related for use at Waterford Steam Electric Station, Unit 3 (Waterford 3).

III. Constructor or Supplier

The basic component containing a defect was supplied by Dresser Inc., Masoneilan Operation, who has been notified of the 10CFR Part 21 concern and the associated initial notification made to NRC Headquarters.

IV. Defect and Safety Hazard

Nature of the defect:
On 04/18/2014, during pneumatic actuator replacement for Emergency Feedwater valve EFW-224A (EFW to Steam Generator #1 Primary Flow Control Valve), it was identified that the fail action of the actuator was incorrect in that it was in a fail-closed instead of fail-open configuration. The actuator model, as identified in Waterford 3 site receipt/acceptance document and the actuator's name plate data, was a Masoneilan model 47 Sigma-F, which is specified as a fail-open actuator. However, the actuator was discovered to have a fail closed action.

Safety hazard which could have been created:
For those potential applications of this valve operator model in the Waterford 3 Emergency Feedwater (EFW) system, had they been installed without correcting the deviation, it could have created a substantial safety hazard as defined in 10CFR21. If the item would have been installed and accepted with an incorrect failure mode, the safety function of the Emergency Feedwater System would have been adversely affected.

V. Date

On 6/9/2014 at approximately 1600 CDT, Engineering concluded that for those potential applications of this valve operator model in the EFW system, had they been installed without correcting the deviation, it could have resulted in a substantial safety hazard as defined in 10CFR21. The Waterford 3 Site Vice President (responsible officer) was

provided information of the Defect on 6/11/2014. NRC Headquarters Operations Center was notified by telephone on 6/12/2014 (Ref. EN# 50191).

VI. Location and Number of Defective Components

Two of these actuators were received and accepted as Masoneilan model 47 Sigma-F (fail-open) actuators in September of 2010, both of which were labeled as such, yet configured in the fail-closed action. One of these two actuators remains in the warehouse and has been placed on hold. The vendor, Dresser Masoneilan, has been notified in writing.

VII. Corrective Action

The fail-action of these Masoneilan Sigma-F actuators can be changed in accordance with its technical manual TD-M120.0565 with no additional parts; therefore, Waterford 3 corrected the fail action of EFW-224A's replacement actuator (to fail-open) and ensured the handwheel indicator was corrected prior to entering mode 4. The other actuator in the warehouse has been placed on hold.

VIII. Advice

Be aware that valve actuators may be shipped/supplied in an inconspicuously gagged condition and the stem position might not be consistent with its fail action (fail-open / fail-closed)

IX. Early Site Permit

This is not an early site permit concern.