

Power Reactor

Event # 50191

<b>Site:</b> WATERFORD		<b>Notification Date / Time:</b> 06/12/2014 09:31 (EDT)	
<b>Unit:</b> 3	<b>Region:</b> 4	<b>State :</b> LA	<b>Event Date / Time:</b> 04/18/2014 04:29 (CDT)
<b>Reactor Type:</b> [3] CE		<b>Last Modification:</b> 06/12/2014	
<b>Containment Type:</b> DRY AMB			
<b>NRC Notified by:</b> JOHN JARRELL		<b>Notifications:</b> GREG WERNER R4DO	
<b>HQ Ops Officer:</b> JOHN SHOEMAKER		PART 21 GROUP EMAIL	
<b>Emergency Class:</b> NON EMERGENCY			
<b>10 CFR Section:</b>			
21.21(d)(3)(i)		DEFECTS AND NONCOMPLIANCE	

Unit	Scram Code	RX Crit	Init Power	Initial RX Mode	Curr Power	Current RX Mode
3	N	No	0	Refueling	0	Refueling

#### MASONEILAN ACTUATORS DISCOVERED TO FAIL-CLOSED INSTEAD OF THE REQUIRED FAIL-OPEN CONFIGURATION

"This is a non-emergency notification from Waterford 3 required under 10 CFR PART 21 concerning the deviation of a basic component from manufacturing purchase specifications.

"On 04/18/2014, during pneumatic actuator replacement for Emergency Feedwater [EFW] 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, which is indicative of a Masoneilan model 48 actuator.

"The fail-action of these Masoneilan Sigma-F actuators can be changed in accordance with its technical manual TDM120.0565 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.

"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 on May 12, 2014.

"On 6/9/2014 at approximately 1600 CDT, Entergy 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 in that it could have prevented fulfillment of EFW safety function, and therefore

IE19  
NRR

reportable under 10CFR PART 21. The Waterford 3 Site VP was informed on 06/11/2014."

The licensee has notified the NRC Resident Inspector.

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NRC FORM 361 (12-2000)		REACTOR PLANT EVENT NOTIFICATION WORKSHEET			U.S. NUCLEAR REGULATORY COMMISSION OPERATIONS CENTER	
<b>EN # 50191</b>						
NRC OPERATION TELEPHONE NUMBER: PRIMARY -- 301-816-5100 or 800-532-3469*, BACKUPS -- [1st] 301-951-0550 or 800-449-3694*, [2nd] 301-415-0550 and [3rd] 301-415-0553 *Licensees who maintain their own ETS are provided these telephone numbers.						
NOTIFICATION TIME <b>0831 CDT</b>	FACILITY OR ORGANIZATION <b>Waterford</b>	UNIT <b>3</b>	NAME OF CALLER <b>John Jarrell</b>		CALL BACK # <b>504-739-6685</b>	
EVENT TIME & ZONE <b>0429 CDT</b>	EVENT DATE <b>04/18/2014</b>	POWER/MODE BEFORE <b>0.0% / MODE 6</b>		POWER/MODE AFTER <b>0.0% / MODE 6</b>		
<b>EVENT CLASSIFICATIONS</b>		<b>1-Hr. Non-Emergency 10 CFR 50.72(b)(1)</b>			<input type="checkbox"/> (v)(A) Safe S/D Capability	AINA
<input type="checkbox"/> GENERAL EMERGENCY	GEN/AAEC	<input type="checkbox"/> TS Deviation	ADEV		<input type="checkbox"/> (v)(B) RHR Capability	AINB
<input type="checkbox"/> SITE AREA EMERGENCY	SIT/AAEC	<b>4-Hr. Non-Emergency 10 CFR 50.72(b)(2)</b>			<input type="checkbox"/> (v)(C) Control of Rad Release	AINC
<input type="checkbox"/> ALERT	ALE/AAEC	<input type="checkbox"/> (i) TS Required S/D	ASHU		<input type="checkbox"/> (v)(D) Accident Mitigation	AIND
<input type="checkbox"/> UNUSUAL EVENT	UNU/AAEC	<input type="checkbox"/> (iv)(A) ECCS Discharge to RCS	ACCS		<input type="checkbox"/> (xi) Offsite Medical	AMED
<input type="checkbox"/> 50.72 NON-EMERGENCY	(see next columns)	<input type="checkbox"/> (iv)(B) RPS Actuation (scram)	ARPS		<input type="checkbox"/> (xii) Loss Comm/Asmt/Resp	ACOM
<input type="checkbox"/> PHYSICAL SECURITY (73.71)	DDDD	<input type="checkbox"/> (x) Offsite Notification	APRE		<b>60-Day Optional 10 CFR 50.73(a)(1)</b>	
<input type="checkbox"/> MATERIAL/EXPOSURE	B???	<b>8-Hr. Non-Emergency 10 CFR 50.72(b)(3)</b>			<input type="checkbox"/> Invalid Specified System Actuation	AINV
<input type="checkbox"/> FITNESS FOR DUTY	HFIT	<input type="checkbox"/> (ii)(A) Degraded Condition	ADEG		<b>Other Unspecified Requirement (Identify)</b>	
<input checked="" type="checkbox"/> OTHER UNSPECIFIED REQMT.	(see last column)	<input type="checkbox"/> (ii)(B) Unanalyzed Condition	AUNA		<input checked="" type="checkbox"/> 10 CFR 21.21(d)(3)(i) Defect	NONR
<input type="checkbox"/> INFORMATION ONLY	NNF	<input type="checkbox"/> (iv)(A) Specified System Actuation	AESF		<input type="checkbox"/>	NONR
<b>DESCRIPTION</b>						
This is a <u>non</u> -emergency notification from Waterford 3 required under 10 CFR PART 21 concerning the deviation of a basic component from manufacturing purchase specifications.						
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, which is indicative of a Masoneilan model 48 actuator.						
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.						
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 on May 12, 2014.						
On 6/9/2014 at approximately 1600 CDT, Entergy 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 in that it could have prevented fulfillment of EFW safety function, and therefore reportable under 10CFR PART 21. The Waterford 3 Site VP was informed on 06/11/2014.						
<i>[Note: This notification was made on 6/12/2014 at 0931 EDT, received by officer John Shoemaker, being emailed to HOO.HOC@nrc.gov [Ref. WF3 CR-2014-1833].</i>						
NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR NOT UNDERSTOOD?	<input type="checkbox"/> YES (Explain above)	<input checked="" type="checkbox"/> NO
NRC RESIDENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
STATE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DID ALL SYSTEMS FUNCTION AS REQUIRED?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO (Explain above)
LOCAL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
OTHER GOV AGENCIES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MODE OF OPERATION UNTIL CORRECTED: N/A	ESTIMATED RESTART DATE: N/A	ADDITIONAL INFO ON BACK
MEDIA/PRESS RELEASE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO