

# RI - DNMS Licensee Event Report Disposition

Licensee: TVA  
10 CFR 30.50(b)(2) Safety Equipment Failure

Event Description:

03032822

License No:	01-25207-01	Docket No:	03032822	MLER-RI:	2009-021
Event Date:	10/02/09	Report Date:	10/02/09	HQ Ops Event #:	

## 1. REPORTING REQUIREMENT

<input type="checkbox"/>	10 CFR 20.1906 Package Contamination	<input checked="" type="checkbox"/>	10 CFR 30.50 Report
<input type="checkbox"/>	10 CFR 20.2201 Theft or Loss	<input type="checkbox"/>	10 CFR 35.3045 Medical Event
<input type="checkbox"/>	10 CFR 20.2203 30 Day Report	<input type="checkbox"/>	License Condition
<input type="checkbox"/>	Other		

## 2. REGION I RESPONSE

<input type="checkbox"/>	Immediate Site Inspection	Inspector/Date	
<input type="checkbox"/>	Special Inspection	Inspector/Date	
<input type="checkbox"/>	Telephone Inquiry	Inspector/Date	
<input checked="" type="checkbox"/>	Preliminary Notification/Report		Daily Report
<input type="checkbox"/>	Information Entered in RI Log	<input checked="" type="checkbox"/>	Review at Next Inspection
<input type="checkbox"/>	Report Referred To:		

## 3. REPORT EVALUATION

<input checked="" type="checkbox"/>	Description of Event	<input checked="" type="checkbox"/>	Corrective Actions
<input checked="" type="checkbox"/>	Levels of RAM Involved	<input type="checkbox"/>	Calculations Adequate
<input checked="" type="checkbox"/>	Cause of Event	<input type="checkbox"/>	Additional Information Requested from Licensee

## 4. MANAGEMENT DIRECTIVE 8.3 EVALUATION

<input type="checkbox"/>	Release w/Exposure > Limits	<input type="checkbox"/>	Deliberate Misuse w/Exposure > Limits
<input type="checkbox"/>	Repeated Inadequate Control	<input type="checkbox"/>	Pkging Failure > 10 rads/hr or Contamination > 1000x Limits
<input type="checkbox"/>	Exposure 5x Limits	<input type="checkbox"/>	Large# Indivs w/Exp > Limits or Medical Deterministic Effects
<input type="checkbox"/>	Potential Fatality	<input type="checkbox"/>	Unique Circumstances or Safeguards Concerns

If any of the above are involved:

<input type="checkbox"/>	Considered Need for IIT	<input type="checkbox"/>	Considered Need for AIT
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Decision/Made By/Date:

## 5. MANAGEMENT DIRECTIVE 8.10 EVALUATION (additional evaluation for medical events only)

<input type="checkbox"/>	Timeliness - Inspection Meets Requirements (5 days for overdose / 10 days for underdose)
<input type="checkbox"/>	Medical Consultant Used-Name of Consultant/Date of Report:
<input type="checkbox"/>	Medical Consultant Determined Event Directly Contributed to Fatality
<input type="checkbox"/>	Device Failure with Possible Adverse Generic Implications
<input type="checkbox"/>	HQ or Contractor Support Required to Evaluate Consequences

## 6. SPECIAL INSTRUCTIONS OR COMMENTS

Assigned to Bryan Parker for Inspection First Quarter CY 2010

☐ Non-Public

Inspector Signature:

Date:

☒ Public-SUNSI REVIEW COMPLETE

Branch Chief Initials:

Date:

Inform license contact that future mailings correspondence should be sent to NRC RI not RII.

Inspector Signature: Steven R. Cantanale Date: 12/17/2009

Branch Chief Initials: M. Miller Date: 12/17/09

all primary and secondary systems responded as required.

"The plant is in mode 3 with normal RCS pressure and temperature. Decay heat is being removed by dumping steam to the condenser. The station will remain in mode 3 until repairs are complete. Estimated restart date has not been determined."

All control rods fully inserted. The plant is in a normal post-trip electrical lineup with the exception of the balance of plant buses which are on the alternate electrical source.

The licensee will inform State and local agencies and has informed the NRC Resident Inspector.

Other Nuclear Material	Event Number: 45405
Rep Org: TENNESSEE VALLEY AUTHORITY Licensee: WIDOWS CREEK FOSSIL PLANT Region: 1 City: CHATTANOOGA State: TN County: License #: 01-25207-01 Agreement: Y Docket: NRC Notified By: KEVIN CASEY HQ OPS Officer: CHARLES TEAL	Notification Date: 10/02/2009 Notification Time: 12:53 [ET] Event Date: 10/02/2009 Event Time: [EDT] Last Update Date: 10/02/2009
Emergency Class: NON EMERGENCY 10 CFR Section: 30.50(b)(2) - SAFETY EQUIPMENT FAILURE	Person (Organization): MIKE ERNSTES (R2DO) DENNIS DAMON (NMSS) TERRENCE REIS (FSME)

#### Event Text

##### SHUTTER ON NUCLEAR GAUGE FAILED TO CLOSE

"It was discovered on October 1, 2009, that a twenty-four hour event notification was not reported. The notification was required per 10 CFR 30.50(b)(2) due to [the] inability to close a fixed gauge shutter at TVA's (Tennessee Valley Authority) Widows Creek Fossil Plant. The gauge is a Texas Nuclear unit and contains 100 mCi of Cesium-137. The gauge is used to monitor the slurry surge tank in the U7 and U8 Limestone Ball Mill Building."

This gauge is used under an NRC license to TVA at the Widows Creek Fossil Plant in Stevenson, Alabama.

"The shutter failure discovery was made during a routine shutter check on August 4, 2009. Corrective actions were taken to repair the shutter and the shutter check was successfully completed on August 17, 2009. No personnel radiation exposure was received. These corrective actions were reported in the Corrective Action Program."

Power Reactor	Event Number: 45406
Facility: PRAIRIE ISLAND Region: 3 State: MN Unit: [1] [2] [ ] RX Type: [1] W-2-LP,[2] W-2-LP NRC Notified By: JOHN KEMPKE HQ OPS Officer: DONALD NORWOOD	Notification Date: 10/02/2009 Notification Time: 15:14 [ET] Event Date: 10/02/2009 Event Time: 11:49 [CDT] Last Update Date: 10/02/2009
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(xi) - OFFSITE NOTIFICATION	Person (Organization): ROBERT DALEY (R3DO)



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

December 2, 2009

10 CFR 30.6(a)

ATTN: NRC Document Control Desk  
Director, Office of Federal and State Materials  
and Environmental Management Programs  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Material License No. 01-25207-01  
NRC Docket No. 030-32822

Subject: **Supplemental Information for 30-Day Report in Accordance with  
10 CFR 30.50(c)(2) for Material License No. 01-25207-01**

Reference: Letter from TVA to NRC, "Submittal of 30-Day Report in Accordance  
with 10 CFR 30.50(c)(2) for Material License No. 01-25207-01," dated  
November 2, 2009

By letter dated November 2, 2009, the Tennessee Valley Authority (TVA) submitted a 30-day written report in accordance with 10 CFR 30.50(c)(2) regarding an event in which equipment was disabled or failed to function as designed. This letter provides the supplemental information as specified in the referenced letter.

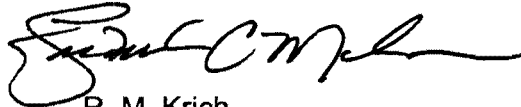
As previously reported, during a routine shutter check on August 4, 2009, a fixed gauge shutter failure was discovered. The external shutter, which slides across the aperture, was missing from the gauge. The gauge was a Texas Nuclear Unit, Model Number 5190, Serial Number B2508. The probable cause of the event was that the shutter was not recognized as equipment and was discarded during a plant-wide clean-up. In order to prevent recurrence of this type of shutter failure, a new shutter has been secured to the device. Additionally, the shutter has been tagged, and the tag includes the Radiation Safety Officer's contact information. Other fixed gauges at TVA's fossil plants are not susceptible to this type of shutter failure since they do not have detached shutters.

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U. S. Nuclear Regulatory Commission  
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December 2, 2009

There are no regulatory commitments contained in this letter. If you have any questions concerning this matter, please contact Kevin Casey at (423) 751-7737.

Respectfully,

A handwritten signature in black ink, appearing to read "R. M. Krich", written in a cursive style.

*for*  
R. M. Krich  
Vice President  
Nuclear Licensing

cc: NRC Regional Administrator – Region II



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

November 2, 2009

10 CFR 30.6(a)

ATTN: NRC Document Control Desk  
Director, Office of Federal and State Materials  
and Environmental Management Programs  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Material License No. 01-25207-01  
NRC Docket No. 030-32822

**Subject: Submittal of 30-Day Report in Accordance with 10 CFR 30.50(c)(2)  
for Material License No. 01-25207-01**

**Reference:** NRC Information Notice 2009-18: "Performance of Required Shutter  
Checks and Reporting of Gauge Shutter Failures," dated  
September 18, 2009

In accordance with 10 CFR 30.50(c)(2), the Tennessee Valley Authority (TVA) submits the following report regarding an event in which equipment is disabled or fails to function as designed. This event was verbally reported to the Nuclear Regulatory Commission (NRC) on October 1, 2009 on Event Notification Number 45405. Enclosed is NRC Form 361A which was used to document the initial notification. The event occurred on Material License No. 01-25207-01 used at TVA's Widow's Creek Fossil Plant, located in Stevenson, Alabama. This letter also serves as notification to the NRC Regional Administrator.

*Description of Incident*

During a routine shutter check on August 4, 2009, a fixed gauge shutter failure was discovered. The external shutter, which slides across the aperture, was missing from the gauge. The gauge is a Texas Nuclear unit and contains 100 mCi of Cesium 137. The gauge is located at TVA's Widow's Creek Fossil Plant in the Units 7 and 8 Limestone Ball Mill Building and is used to monitor the slurry surge tank. Corrective actions were taken to repair the shutter and the shutter check was successfully completed on August 17, 2009. No personnel radiation exposure was received. This event was documented in the site's Corrective Action Program. Corrective actions

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to prevent recurrence of shutter failures, including the results of any evaluations or assessments performed, will be provided in a supplement to this report by December 2, 2009.

During review of the referenced NRC Information Notice, it was discovered that the event described above should have been reported in accordance with 10 CFR 30.50(b)(2). On October 1, 2009, a twenty-four hour report was made to the NRC on Event Notification Number 45405. The missed report of the shutter failure described above was entered in TVA's Corrective Action Program.

*Corrective Actions Planned to Address the Missed Report*

As required by TVA's Corrective Action Program, an apparent cause evaluation of the late NRC notification of this event will be performed. The purpose of the evaluation will be to identify the cause of not making the required twenty-four hour report upon discovery of the event. After the cause has been determined, corrective actions will be developed and assigned to prevent recurrence of this type of event. The apparent cause evaluation and corrective actions will be documented in accordance with the Correction Action Program.

There are no regulatory commitments contained in this letter. If you have any questions concerning this report, please contact Kevin Casey at (423) 751-8523.

Respectfully,



R. M. Krich  
Vice President  
Nuclear Licensing

Enclosure  
cc(Enclosure):

NRC Regional Administrator – Region II

NRC FORM 361A (10-2003)		<b>U.S. NUCLEAR REGULATORY COMMISSION</b>			LICENSE NUMBER  01-25207-01	
<b>FUEL CYCLE AND MATERIALS EVENT NOTIFICATION WORKSHEET</b>						
REPORT TIME <b>1143 EDT</b>	FACILITY OR ORGANIZATION <b>TVA - Widows Creek Fossil Plant</b>	NAME OF CALLER <b>Kevin Casey</b>	CALL BACK TELEPHONE NO. <b>(423) 751-8523</b>			
EVENT TIME <b>1400 EDT</b>	EVENT DATE <b>10/01/2009</b>	LOCATION OF EVENT (Include County and State) <b>Widows Creek Fossil Plant, Stevenson, AL</b>		PORTION OF PLANT AFFECTED <b>U7 &amp; U8 Limestone Ball Mill Building</b>		
<b>EVENT CLASSIFICATIONS</b>		<b>EVENT TYPES</b>		<b>INCIDENT REPORTS (30.50, 40.60, 70.50)</b>		
<input type="checkbox"/> GENERAL EMERGENCY *		<input type="checkbox"/> FUEL CYCLE		<input type="checkbox"/> 20.2201 LOSS / THEFT		
<input type="checkbox"/> SITE AREA EMERGENCY		<input type="checkbox"/> MEDICAL / ACADEMIC		<input type="checkbox"/> 20.2202 ACTUAL / THREATENED OVEREXPOSURE		
<input type="checkbox"/> ALERT		<input type="checkbox"/> TRANSPORTATION		<input type="checkbox"/> 20.2202 ACTUAL / THREATENED RELEASE		
<input type="checkbox"/> NOTIFICATION OF UNUSUAL EVENT *		<input type="checkbox"/> WASTE MANAGEMENT		<input type="checkbox"/> 21.21 DEFECT / NONCOMPLIANCE		
<input checked="" type="checkbox"/> INCIDENT REPORT		<input type="checkbox"/> INDUSTRIAL / COMMERCIAL		<input type="checkbox"/> 26.73 FITNESS FOR DUTY		
<input type="checkbox"/> TRANSPORTATION EVENT		<input type="checkbox"/> FOREIGN EVENT		<input type="checkbox"/> 35.33 MISADMINISTRATION		
<input type="checkbox"/> INFORMATION ONLY		<input type="checkbox"/> OTHER (Specify)		<input type="checkbox"/> 36.83 IRRADIATOR EVENT		
<input type="checkbox"/> OTHER (Specify)				<input type="checkbox"/> 39.77 RUPTURED WELL LOGGING SOURCE		
				<input type="checkbox"/> 39.77 IRRETRIEVABLE WELL LOGGING SOURCE		
				<input type="checkbox"/> 40.26 TAILINGS / WASTE DAM FAILURE		
* ONLY UNDER OLD 1981 ORDER				<input type="checkbox"/> (a) PROTECTIVE ACTION PREVENTED		
				<input type="checkbox"/> (b)(1) UNPLANNED CONTAMINATION		
				<input checked="" type="checkbox"/> (b)(2) SAFETY EQUIPMENT FAILURE		
				<input type="checkbox"/> (b)(3) MEDICAL TREATMENT WITH CONTAMINATION		
				<input type="checkbox"/> (b)(4) FIRE / EXPLOSION		
				<input type="checkbox"/> 70.52 CRITICALITY / SNM LOST		
				<input type="checkbox"/> 70.52 ACTUAL / ATTEMPTED THEFT		
				<input type="checkbox"/> CRITICALITY CONTROL 4-HOUR (BULLETIN 91-01)		
				<input type="checkbox"/> CRITICALITY CONTROL 24-HOUR (BULLETIN 91-01)		
				<input type="checkbox"/> OTHER NON-CFR REQUIREMENT		
<b>NOTIFICATIONS</b>		<b>YES</b>	<b>NO</b>	<b>WILL BE</b>		
NRC REGION?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ANYTHING UNUSUAL OR NOT UNDERSTOOD?	<input type="checkbox"/> YES (Explain below)	
STATE?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/> NO	
LOCAL?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DID ALL SYSTEMS FUNCTION AS REQUIRED?	<input checked="" type="checkbox"/> YES	
OTHER GOVERNMENT AGENCIES?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> NO (Explain below)	
PRESS RELEASE?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ADDITIONAL INFORMATION ON PAGE 2?	<input type="checkbox"/> YES	
					<input checked="" type="checkbox"/> NO	
<b>EVENT DESCRIPTION (Continue on Page 2 if necessary)</b>						
<p>It was discovered on October 1, 2009, that a twenty-four hour event notification was not reported. The notification was required per 10 CFR 30.50(b)(2) due to inability to close a fixed gauge shutter at TVA's Widows Creek Fossil Plant. The gauge is a Texas Nuclear unit and contains 100 mCi of Cesium 137. The gauge is used to monitor the slurry surge tank in the U7 &amp; U8 Limestone Ball Mill Building.</p> <p>The shutter failure discovery was made during a routine shutter check on August 4, 2009. Corrective actions were taken to repair the shutter and the shutter check was successfully completed on August 17, 2009. No personnel radiation exposure was received. These corrective actions were reported in the Corrective Action Program.</p>						

RADIOLOGICAL / CHEMICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS							
ISOTOPE	ACTIVITY	PHYSICAL FORM	CHEMICAL FORM		STACK	LIQUID EFFLUENT	OTHER
				MONITOR READING			
				ALARM SETPOINT			
<input type="checkbox"/> ONGOING RELEASE <input type="checkbox"/> TERMINATED RELEASE <input type="checkbox"/> OFFSITE RELEASE <input type="checkbox"/> ONSITE AREAS EVACUATED <input type="checkbox"/> OFFSITE PROTECTIVE ACTION RECOMMENDED		PERSONNEL EXPOSURE / CONTAMINATION DATA					
		NUMBER OF PERSONNEL EXPOSED:			NUMBER OF PERSONNEL CONTAMINATED:		
		MAXIMUM EXTERNAL DOSE:			MAXIMUM EXTERNAL LEVEL:		
		MAXIMUM INTERNAL DOSE:			MAXIMUM INTERNAL LEVEL:		
		CRITICAL ORGAN (if known)			CRITICAL ORGAN (if known):		
DEGRADED CRITICALITY SAFETY CONTROLS FOR ACCIDENT SCENARIO(S) (BULLETIN 91-01)							
<input type="checkbox"/> ALL CONTROLS LOST <input type="checkbox"/> ALL BUT SINGLE CONTROLS LOST <input type="checkbox"/> DEFICIENT SAFETY ANALYSIS <input type="checkbox"/> SAFETY SIGNIFICANCE UNKNOWN <input type="checkbox"/> >45% MINIMUM CRITICAL MASS PRESENT OR READILY AVAILABLE							
NUMBER AND TYPES OF CONTROLS NECESSARY UNDER NORMAL OPERATING CONDITIONS							
NUMBER AND TYPES OF CONTROLS WHICH FUNCTIONED PROPERLY UNDER UPSET CONDITIONS							
NUMBER AND TYPES OF CONTROLS NECESSARY TO RESTORE A SAFE SITUATION							
SAFETY SIGNIFICANCE OF EVENTS							
SAFETY EQUIPMENT STATUS							
STATUS OF CORRECTIVE ACTIONS							
EVENT DESCRIPTION (Continued)							