

NRC FORM 366 (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95	
<b>LICENSEE EVENT REPORT (LER)</b>  (See reverse for required number of digits/characters for each block)					
FACILITY NAME (1) <div style="text-align: center;">South Texas Unit 2</div>				DOCKET NUMBER (2) <div style="text-align: center;">05000 499</div>	
PAGE (3) <div style="text-align: right;">1 OF 3</div>					
TITLE (4) <div style="text-align: center;">Inadvertent Engineered Safety Feature Actuation of a Component Cooling Water Pump</div>					
EVENT DATE (5)			LER NUMBER (6)		REPORT DATE (7)
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
04	12	95	95	-- 005 --	00
					MONTH DAY YEAR
					05 11 95
					FACILITY NAME
					DOCKET NUMBER
					05000
					FACILITY NAME
					DOCKET NUMBER
					05000
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
1		20.402(b)		20.405(c) <input checked="" type="checkbox"/> 50.73(a)(2)(iv) 73.71(b)	
POWER LEVEL (10)		20.405(a)(1)(i)		50.36(c)(1) 50.73(a)(2)(v) 73.71(c)	
100		20.405(a)(1)(ii)		50.36(c)(2) 50.73(a)(2)(vii) OTHER	
		20.405(a)(1)(iii)		50.73(a)(2)(i) 50.73(a)(2)(viii)(A) (Specify in Abstract below and in Text, NRC Form 366A)	
		20.405(a)(1)(iv)		50.73(a)(2)(ii) 50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)		50.73(a)(2)(iii) 50.73(a)(2)(x)	
LICENSEE CONTACT FOR THIS LER (12)					
NAME <div style="text-align: center;">Jairo Pinzon - Staff Engineer</div>				TELEPHONE NUMBER (Include Area Code) <div style="text-align: center;">(512) 972-8027</div>	
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)					
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
SUPPLEMENTAL REPORT EXPECTED (14)					
YES (If yes, complete EXPECTED SUBMISSION DATE).				<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)
					MONTH DAY YEAR
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)					
<p>On April 12, 1995, Unit 2 was in Mode 1 at 100% power. At approximately 2346 hours, Unit 2 experienced an inadvertent Engineered Safety Features actuation of a Component Cooling Water pump. Component Cooling Water pump 2C started automatically due to a low pressure signal from the "B" train Essential Cooling Water header when the "C" train Component Cooling Water pump mode selector switch was placed in standby. The cause of the inadvertent start of the pump was due to an Essential Cooling Water system pressure switch being isolated and depressurized contrary to the expected operational condition at the time. When the mode selector switch was placed in standby, a relay appropriately energized and provided the correct logic to start the pump. Corrective actions include verifying the position of the Essential Cooling Water isolation valves for similar instrumentation in both Units and providing this occurrence as a lessons learned to appropriate personnel.</p>					
9505230071 950511 PDR ADOCK 05000499 S PDR					

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
South Texas, Unit 2		05000 499	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
			95	-- 005 --	00	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

DESCRIPTION OF EVENT:

On April 12, 1995, Unit 2 was in Mode 1 at 100% power. At approximately 2346 hours, Unit 2 experienced an inadvertent Engineered Safety Features actuation of a Component Cooling Water pump. Component Cooling Water pump 2C started automatically due to a low pressure signal from the "B" train Essential Cooling Water header when the "C" train Component Cooling Water pump mode selector switch was placed in standby.

The South Texas Project utilizes a three position mode selector switch for each train of Component Cooling Water/Essential Cooling Water. Positioning the selector switch to the "RUN" position inputs a start signal to the corresponding train of Component Cooling Water and Essential Cooling Water pumps. When selected to the "STANDBY" position, an automatic Component Cooling Water/Essential Cooling Water pump start signal is generated on a Component Cooling Water common header low pressure condition or an Essential Cooling Water low pressure condition on two of three Essential Cooling Water trains. These types of signals are non-Engineered Safety Features signals. With the mode selector switch in the "OFF" position, these signals are bypassed.

Prior to the automatic start of Component Cooling Water pump 2C, Essential Cooling Water pump 2A had been secured at 2342 hours. At 2345 hours, the mode selector switch for "A" train was verified in "OFF" position, the "B" train Component Cooling Water pump was placed in "RUN" (B train Component Cooling Water/Essential Cooling Water was already running). The "C" train Component Cooling Water pump mode selector switch was placed in "STANDBY." Subsequently, the "C" train Component Cooling Water pump auto-started.

Investigation revealed that the isolation valve for an Essential Cooling Water pressure switch was in the closed position. As a result, this switch was not sensing the actual system pressure, resulting in the pump starting when the mode selector switch was placed in standby. The pressure switch's isolation valve was opened and Component Cooling Water pump 2C was subsequently secured.

CAUSE OF EVENT:

The cause of the inadvertent start of the pump was due to an Essential Cooling Water system pressure switch being isolated and depressurized. When the mode selector switch was placed in standby, a relay was energized and provided the start circuit with the correct logic to start the Component Cooling Water pump.

After a thorough investigation, it could not be positively determined when or why the pressure switch was isolated, however, the most probable time for the mispositioning to have occurred was during a maintenance activity. The last time that the isolation valve was known to have been manipulated before the opportunity for an inadvertent start was during a calibration performed on April 10, 1995.

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ANALYSIS OF EVENT:

The unplanned actuation of an Engineered Safety Features equipment is reportable pursuant to 10CFR50.73(a)(2)(iv). The Component Cooling Water pump start was the result of a non-Engineered Safety Features signal associated with Component Cooling Water/Essential Cooling Water systems. Since this was a non-Engineered Safety Features signal, no other Engineered Safety Features equipment changed state. Although there was no adverse impact on the plant or public safety, this event was clearly inconsistent with expected performance standards.

CORRECTIVE ACTIONS:

1. The position of instrument isolation valves in the Essential Cooling Water System were verified in both Units.
2. Lessons learned from this occurrence, including self checking and attention to detail, as well as proper system alignment verification were discussed during Instrumentation and Control Maintenance shop meetings.

ADDITIONAL INFORMATION:

There have been three inadvertent Engineered Safety Features actuations of Component Cooling Water pumps at the South Texas Project reported to the Nuclear Regulatory Commission which were the result of human error. These events are documented in Licensee Event Reports 93-016 (Unit 2), 93-013 (Unit 2) and 92-015 (Unit 1)

Three Licensee Event reports were submitted to the Nuclear Regulatory Commission regarding inadvertent Engineered Safety Features actuation of Component Cooling Water Pumps which were attributed to inadequate procedural guidance or an inadequate procedure. These events are documented in Unit 1 Licensee Event Reports 92-016, 92-010 and 92-005.