



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

July 10, 2000  
NOC-AE-00000883  
File No.: G26  
10CFR50.73  
STI: 31132560

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

South Texas Project  
Unit 1  
Docket No. STN 50-498  
Licensee Event Report 00-003  
Inoperable Battery Event

Pursuant to 10CFR50.73, South Texas Project submits the attached Unit 1 Licensee Event Report 00-003 regarding an event involving inoperable batteries. License Condition 2.G requires 24-hour notification and a follow-up written report within 30 days for a violation of Technical Specification requirements. This event did not have an adverse effect on the health and safety of the public.

Licensee commitments are listed in the Corrective Action section of the attachment. If there are any questions on this submittal, please contact either Mr. S. M. Head at (361) 972-7136 or me at (361) 972-7800.

A handwritten signature in black ink, appearing to read "G. L. Parkey".

G. L. Parkey  
Plant General Manager

kaw

Attachment: LER 00-003 (South Texas, Unit 1)

IE22

cc:

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Washington, D.C. 20555-0001

**LICENSEE EVENT REPORT (LER)**(See reverse for required number of  
digits/characters for each block)

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), 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. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information

FACILITY NAME (1)

South Texas Unit 1

DOCKET NUMBER (2)

05000 498

PAGE (3)

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TITLE (4)

Inoperable Battery Event

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	08	2000	2000	0 0 3	00	07	08	2000	FACILITY NAME	DOCKET NUMBER
										05000
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)										
OPERATING MODE (9)		1	20.2201(b)			20.2203(a)(2)(v)			50.73(a)(2)(i)	
POWER LEVEL (10)		100%	20.2203(a)(1)			20.2203(a)(3)(i)			50.73(a)(2)(ii)	
			20.2203(a)(2)(i)			20.2203(a)(3)(ii)			50.73(a)(2)(iii)	
			20.2203(a)(2)(ii)			20.2203(a)(4)			50.73(a)(2)(iv)	
			20.2203(a)(2)(iii)			50.36(c)(1)			50.73(a)(2)(v)	
			20.2203(a)(2)(iv)			50.36(c)(2)			50.73(a)(2)(vii)	
Specify in Abstract below or in NRC Form 366A										

## LICENSEE CONTACT FOR THIS LER (12)

NAME

Scott Head - Licensing Supervisor

TELEPHONE NUMBER (Include Area Code)

(361) 972-7136

## COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

## SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE):	x	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On June 8, 2000, with Unit 1 at 100% power, it was determined that from May 15 through May 30, the E1A11 battery was inoperable. On May 15, 2000, a surveillance test was performed on the E1A11 battery. During the surveillance the electrolyte level in cell #18 was recorded as + 1/4 inch above the high level line on the cell which exceeded the acceptance criterion as stated in the procedure. The acceptance criterion, as stated in the surveillance procedure, for the electrolyte level is "Highest electrolyte level is < +1/4 inch..." The acceptance criterion was misread and understood to mean less than or equal to +1/4 inch. This condition was not recognized during review of surveillance data. Tech Spec Surveillance 4.8.2.1.b.1 allows 7 days to restore electrolyte level within the Category B limits or declare the battery inoperable. The LCO for an inoperable battery, which is 2 hours to restore to operable or be in hot standby within 6 hours, was not met. This was a violation of Technical Specification 3.8.2.1.a. which is reportable to the Nuclear Regulatory Commission in accordance with Operating License Condition 2.G. The condition was corrected on May 30, 2000. The root cause for this event is workers' lack of attention to detail while reviewing the acceptance criteria. Corrective actions include reviewing the event with Electrical Maintenance personnel, and addressing personal accountability issues with the Maintenance personnel involved in accordance with site policies.

**LICENSEE EVENT REPORT (LER)**  
TEXT CONTINUATION

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

**DESCRIPTION OF EVENT**

On May 15, 2000, during Unit 1 Refueling Outage IRE09, a Class 1E Battery Quarterly Surveillance Test procedure was performed on the E1A11 battery. During the surveillance the electrolyte level in cell #18 was recorded as + 1/4 inch. The acceptance criterion for electrolyte level is < 1/4 inch above the high level line. The reference for electrolyte level is the high level line on the cell. Therefore, the level exceeded the acceptance criterion of < 1/4 inch stated in Technical Specification Table 4.8-2 Category B limits. During review of the data by the Maintenance craftsmen, Maintenance supervisor, and surveillance coordinator, the condition was not recognized as exceeding the acceptance criterion.

On May 27, 2000, Operations personnel notified the Duty Maintenance Supervisor that the electrolyte level in E1A11 battery cell #18 appeared high. The Duty Maintenance Supervisor confirmed that the level in #18 battery cell appeared higher than the other cells and requested an engineering evaluation from the system engineer. The system engineer performed a walk down of the battery on May 30, 2000, and observed the electrolyte level to be higher than the other batteries (although the actual level was not measured). The cell was mechanically agitated to degas the cell and the level was observed to drop to approximately +1/8 inch (not measured) above the high level line. The Shift Supervisor was notified and the Technical Specifications reviewed to determine if an out-of-tolerance condition existed. Although the level was not above the Category B limit of Technical Specification Table 4.8-2, there was concern that gas build up in the cell could result in an out-of-tolerance condition in the future. Therefore, the decision was made to initiate a work order to reduce the cell level by removing electrolyte. The work was completed on June 5, 2000. Also on June 5, 2000, additional review by the System Engineer identified the out-of-tolerance condition that was recorded on the original May 15, 2000, surveillance test.

There were no adverse effects on the health and safety of the public as a result of this condition.

**CAUSE OF EVENT**

The root cause for this event is workers' lack of attention to detail while reviewing the acceptance criteria.

While the craftsmen were recording readings they failed to understand that the data taken from cell #18 did not meet the procedure's acceptance criterion. While reviewing the acceptance criterion from the body of the procedure and referring to the data sheet, the craftsmen thought that the acceptance criterion was satisfied if the electrolyte level was equal to the + 1/4 inch.



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

**CORRECTIVE ACTIONS**

The following corrective actions will be taken:

1. The event was reviewed with Electrical Maintenance personnel to discuss the Class 1E battery surveillance acceptance criteria. This action was completed on June 14, 2000.
2. Personal accountability issues have been addressed with personnel involved in accordance with site policies.

**ANALYSIS OF EVENT**

This event is reportable based on a violation of Technical Specification 3.8.2.1.a. License Condition 2.G requires a 24-hour notification and a follow-up written report within 30 days. The event was reported to the Nuclear Regulatory Commission at 1559 Eastern Daylight Time on June 8, 2000.

There is no safety significance to this event. This event did not involve any personnel injury, radiation exposure, offsite dose release, or damage to equipment important to safety. The electrolyte level in cell #18 at no time compromised the ability of the E1A11 battery to perform its design function. Electrolyte level is monitored to ensure the plates remain covered and level is not high enough to overflow during an equalize charge. As long as the plates remain covered, the ability of the cell to produce and conduct electricity is not affected. High level is a maintenance issue since electrolyte overflow during an equalize charge can damage battery racks and floor mountings. Due to the large head space for electrolyte expansion in these cells, overflow during equalize charge from the +1/4 inch level is very unlikely. Therefore, there was no safety significance to this event. The primary issue was failure to recognize when the surveillance test acceptance criterion was exceeded on May 15, 2000 and failure to take corrective action within the technical specification allowed time of 7 days, which expired on May 22, 2000.

**ADDITIONAL INFORMATION**

One previous Licensee Event Report was identified involving Class 1E battery surveillances. On December 5, 1988, failure to perform the weekly battery surveillance test on Battery E1D11 within the required time frame was reported to the Nuclear Regulatory Commission.