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

April 6, 2000
NOC-AE-00000815
File No.: G26
10CFR50.73
STI: 31082825

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 00-004
Noncompliance with Technical Specification 3.9.9 Requirements

Pursuant to 10CFR50.73, South Texas Project submits the attached Unit 1 Licensee Event Report 00-004 regarding a noncompliance with Technical Specifications. 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.

G. L. Parkey
Plant General Manager

JRM

Attachment: LER 00-004 (South Texas, Unit 1)

O:\WP\NL\NRC-AP\LER-00\1-00-004.doc

IE22

cc:

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U. S. Nuclear Regulatory Commission
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NRC FORM 366 (6-1998) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

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

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
South Texas Unit 1	05000 498	1 of 5

TITLE (4)

Noncompliance with Technical Specification 3.9.9 Requirements

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
										05000
03	10	2000	2000	0 0 4	00	04	06	2000	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	6	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)					
POWER LEVEL (10)	0%	20.2201(b)	20.2203(a)(2)(v)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)
		20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71
		20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)		OTHER
		20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A
		20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Scott Head - Licensing Supervisor	(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)			EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On March 6, 2000, with Unit 1 in Mode 6, a temporary modification was installed in Class 1E Load Center E1B to provide temporary power to Spent Fuel Pool Pump 1A in support of an up-coming Train B electrical outage. It was not adequately communicated that this rendered Load Center E1B inoperable. Subsequently, the Containment Ventilation Isolation System powered by Train B was not declared inoperable, and the normal containment purge penetration was not closed. Contrary to Technical Specification 3.9.9 requirements, core alterations (core off-load) were performed, with containment normal purge in operation. The incorrect condition was identified on March 8, 2000, and at 2247 on March 8, core alterations were suspended and the containment normal purge system was secured. After all core alteration requirements were re-verified, core off-load was re-commenced on March 8, 2000 at 2355. This event resulted in a non-compliance with Technical Specification actions, which is a condition prohibited by Technical Specifications per 50.73 (a)(2)(i)(B); and a 24-hour notification was required by section 2G of the Operating License. The root cause of the event was that special circumstances or conditions associated with installation of the temporary modification in Modes 5 and 6 were not recognized during outage planning. It was incorrectly understood that the components powered from a functional, but inoperable, Load Center E1B would remain operable. Corrective actions include development of administrative tools to specify and verify the electrical power needs for equipment in Modes 5 and 6, and development of guidance on determining whether functional attendant equipment is adequate to support operable equipment in Modes 5 and 6.

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
South Texas Unit 1	05000 498	2000	-- 004	-- 00	2 of 5

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

DESCRIPTION OF EVENT

On March 6, 2000 at 0750, with Unit 1 in Mode 6, Temporary Modification T1-99-15344-19 was installed to provide temporary power to Spent Fuel Pool Pump 1A in support of the up-coming Train B electrical outage. The temporary modification involved supplying temporary power cables from Non-class 1E Load Center 1K to the Spent Fuel Pool pump supply breaker on Class 1E Load Center E1B so the pump would be energized to supply cooling to the Spent Fuel Pool during core off-load. The temporary modification package stated that Load Center E1B would be inoperable while the temporary modification was installed due to electrical separation criteria. An Operability Assessment System tracking item was initiated to track the inoperability of Spent Fuel Pool Pump 1A, but not the inoperability of Load Center E1B. Personnel responsible for granting permission to install the temporary modification were aware that the temporary modification would make Load Center E1B inoperable. However, they did not ensure the appropriate Technical Specification actions were taken.

During the evening of March 8, 2000, while core off-load was in progress, a question concerning the operability of Load Center E1B was raised by station personnel. Since the actuation circuitry for the Train B Fuel Handling Building and Control Room Envelope Heating Ventilation and Air Conditioning systems was potentially rendered inoperable, conservative action was subsequently taken to actuate Trains A and C ventilation systems into the emergency recirculation mode of operation per Technical Specification 3.3.2 Actions 27 and 30. A field walkdown of Load Center E1B was performed and it was determined the Load Center did not meet the separation criteria guidelines. A decision was made on March 8, 2000 at 2138 to declare Load Center E1B and Class 1E Battery E1B11 inoperable as of the time the temporary modification was installed (March 6, 2000 at 0750). Core off-load was suspended on March 8, 2000 at 2247 until all core alteration pre-requisites could be re-verified with the bus and the battery inoperable. Additionally, since the Train B containment isolation valve for the Containment Normal Purge system is powered by Load Center E1B, this valve was rendered inoperable. The Containment Normal Purge system was secured per Technical Specification 3.9.9 Action 'a', which requires isolation of Containment Normal Purge with the Containment Ventilation Isolation System inoperable, whenever core alterations or movement of irradiated fuel within the containment are in progress.

After the above actions were taken, core off-load was re-commenced on March 8, 2000 at 2355.

The temporary modification was installed per the outage schedule four days prior to the major Train 'B' electrical work window. This was different from previous outages because in the past similar temporary modifications involving temporary power to Spent Fuel Pool pumps had been installed as part of a major electrical train work window. The temporary modification was composed of two parts, the installation and the removal, each of which takes approximately eight hours. The Spent Fuel Pool pump would be unavailable during the installation and removal of the temporary modification. The decision was made during outage preparation meetings to move the installation to prior to core off-load. This scheduling change removed one of the eight-hour Spent Fuel Pool pump unavailable windows while the core was in the Spent Fuel Pool and reduced overall outage risk. During the pre-outage Shutdown Risk Assessment meeting discussions, it was decided that since the Load Center E1B would be energized and functional for the entire four day period during

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DESCRIPTION OF EVENT (Continued)

core off-load, then all of the components fed from the Load Center E1B would remain operable. This is consistent with past outage philosophy, but is incorrect reasoning. Although the Load Center was functional, it did not meet electrical separation criteria, and therefore the equipment powered from it could not be considered operable. Neither the temporary modification installation nor removal was indicated on the Train B electrical work window schedule.

CAUSE OF EVENT

The root cause for this event was that special circumstances or conditions associated with installation of the temporary modification in Modes 5 and 6 were not recognized during outage planning. It was incorrectly understood that the components powered from Load Center E1B would remain operable with Load Center E1B inoperable but functional and energized. The philosophy that the functional, but inoperable, Load Center E1B could supply the operable B Train systems led to the temporary modification installation being scheduled and implemented during the core off-load window.

ANALYSIS OF EVENT

The Nuclear Regulatory Commission was notified on March 11, 2000 at 0824 (EST) that Unit 1 did not comply with Technical Specification 3.9.9 LCO actions statements regarding failure to close an inoperable penetration during core alterations. A failure to meet Technical Specification requirements is reportable to the Nuclear Regulatory Commission pursuant to 10CFR50.73(a)(2)(i)(B). No personnel injuries, radiological consequences, or equipment damage resulted from this event.

The OPERABILITY of the containment ventilation isolation system as required by Technical Specifications 3.9.9 ensures that the containment purge and exhaust penetrations will be automatically isolated upon detection of high radiation levels in the purge exhaust. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

Although Load Center E1B was considered inoperable due to electrical separation criteria, it remained energized for the entire duration of the event. Therefore, the Containment Ventilation Isolation system would have actuated upon receipt of a valid Engineered Safety Features signal if needed. Thus, there were no adverse safety or radiological effects on the health and safety of the public as a result of this event.

This occurrence was reviewed for its effect on plant risk and was found to have no impact on plant risk during this period.

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

CORRECTIVE ACTIONS

The following corrective actions have been or will be taken as a result of this event:

1. All currently installed temporary modifications were reviewed to ensure applicable Technical Specifications were satisfied. This action was completed March 9, 2000.

2. Electrical work scheduled for the up-coming outage electrical train work windows was reviewed to ensure the outage schedule accurately reflected the correct application of Technical Specifications. This action was completed March 9, 2000.

3. All other temporary modifications to be installed during the remainder of the Unit 1 outage were reviewed to identify any conditions requiring Operability Assessment System tracking or Technical Specification action. This action was completed March 9, 2000.

4. Interim guidance was provided to Operations and outage coordinators regarding what equipment is required for OPERABILITY of equipment required to be OPERABLE in Modes 5 and 6. This action was completed March 31, 2000.

5. Develop administrative guidelines that clearly identify what necessary portions of AC, DC, and AC vital bus electrical power distribution subsystems are required to be OPERABLE to support equipment required to be OPERABLE in Modes 5 and 6 by August 31, 2000.

6. Incorporate the administrative guidance from corrective action #5 into the appropriate surveillance procedure that satisfies the surveillance requirements for Technical Specifications 3.8.2.2 and 3.8.3.2 by December 31, 2000.

7. Develop guidance on determining whether functional attendant equipment is adequate to support OPERABLE equipment in Modes 5 and 6. This action will be completed by August 31, 2000.

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
South Texas Unit 1	05000 498	2000	-- 004 --	00	5 of 5

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

ADDITIONAL INFORMATION

South Texas Project LER 1-00-002 also reported an event in which operability of Technical Specification equipment was incorrectly determined resulting in noncompliance with Technical Specification Action Statements. This Licensee Event Report described a recent event in which the operability of a Source Range NI and an Extended Range NI were incorrectly determined to be operable, when the attendant Class 1E battery was inoperable.