Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION

P. O BOX 128

SAN CLEMENTE, CALIFORNIA 92672

H. E. MORGAN STATION MANAGER

August 22, 1989

TELEPHONE (714) 368-6241

U. S. Nuclear Regulatory Commission Document Control Desk Washington, D.C. 20555

Subject:

Docket No. 50-206

30-Day Report

Licensee Event Report No. 89-020

San Onofre Nuclear Generating Station, Unit 1

Pursuant to 10 CFR 50.73(d), this submittal provides the required 30-day written Licensee Event Report (LER) for an occurrence involving a condition prohibited by the plant's Technical Specifications. Neither the health and safety of plant personnel or the public was affected by this occurrence.

If you require any additional information, please so advise.

Sincerely,

Enclosure: LER No. 89-020

cc: C. W. Caldwell (USNRC Senior Resident Inspector, Units 1, 2 and 3)

J. B. Martin (Regional Administrator, USNRC Region V)

Institute of Nuclear Power Operations (INPO)

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At approximately 0500 on 7/23/89, with Unit 1 at 75% power, during performance of the monthly emergency siren fuse block removal verification, in accordance with Technical Specification (TS) 4.1.1, the fuse blocks for both breaker 8-1145 and breaker 8-1293A, were found installed. Since the TS surveillance requires that one fuse be removed, this was a condition prohibited by TS. The fuse block to breaker 8-1293A was immediately removed. There is no safety significance to this event since during the time the fuse blocks for both breakers 8-1145 and 8-1293A were installed, breaker 8-1293A remained open.

The root cause of this event was determined to be the failure to document the manipulation and verification of safety related equipment, as required per procedures. Investigation determined that the fuse block to breaker 8-1293A had been inappropriately left installed following maintenance on the fuse block for breaker 8-1145 on 7/10/89. Prior to the maintenance on 7/10/89, proper documentation for the removal of the fuse block had not been implemented. Therefore, upon completion of the maintenance, the Control Operator (CO) only provided general system restoration guidance to the Plant Equipment Operator (PEO). The CO did not specify the sequence of steps for the PEO to perform in order to ensure proper system restoration. This resulted in the PEO leaving the fuse block for breaker 8-1293A installed.

This event has been reviewed with appropriate Operations personnel and disciplinary action has taken place. In addition, it is planned to install a sign in the vicinity of the fuse blocks for both breaker 8-1145 and breaker 8-1293A, stating the TS requirement that only one fuse be installed at any given time.

SAN ONOFRE NUCLEAR GENERATION STATION DOCKET NUMBER LER NUMBER PAGE
UNIT 1 05000206 89-020-00 2 OF 5

Plant: San Onofre Nuclear Generating Station

Unit: One

Reactor Vendor: Westinghouse

Event Date: 07-23-88

Time: 0500

A. CONDITIONS AT TIME OF THE EVENT:

Mode: 1, 75% Power Operation

B. BACKGROUND INFORMATION:

The Unit 1 emergency siren is activated during certain levels of emergencies to alert personnel of pending Protected Area (PA) announcements, or to evacuate the PA and report to assembly areas. The siren is activated either automatically by a safety injection actuation signal or manually at the Unit 1 Control Room.

The emergency siren has two power sources, Motor Control Center (MCC) 1 (Train 'A') and MCC 2 (Train 'B'). Breaker [BKR] 8-1145 connects the siren to power source MCC 1 and breaker 8-1293A connects the siren to power source MCC 2. The Unit 1 Technical Specifications (TS) require, pursuant to Section 4.1.1.B, Table 4.1.2, Item 12, verification that the fuse block [FUB] for either breaker 8-1145 or breaker 8-1293A is removed. This surveillance is required monthly, when the reactor is critical and prior to returning the reactor to criticality when the period of subcriticality extended the test interval beyond one month. The basis of this TS requirement is to eliminate the automatic transfer function of the emergency siren electrical transfer switch [ASU]. This precludes the automatic transfer of a postulated fault in one train to the unaffected train.

C. DESCRIPTION OF THE EVENT:

1. Event:

At approximately 0500 on 7/23/89, during performance of the monthly emergency siren fuse block removal verification, in accordance with TS 4.1.1, the fuse blocks for both breaker 8-1145 and breaker 8-1293A, were found installed. Since the TS surveillance requires that one fuse be removed, this was a condition prohibited by TS. The fuse block to breaker 8-1293A was immediately removed. Subsequent investigation determined that the fuse block to breaker 8-1293A had been inappropriately left installed following maintenance on the fuse block for breaker 8-1145 on 7/10/89.

SAN ONOFRE NUCLEAR GENERATION STATION	DOCKET NUMBER	LER NUMBER	PAGE
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UNIT 1	05000206	89-020-00	3 OF 5
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2. Inoperable Structures, Systems or Components that Contributed to the Event:

None.

3. Sequence of Events:

TIME	<u>DATE</u>	ACTION
1916 approx.	6/26/89	Satisfactorily performed emergency siren electrical transfer switch fuse block removal verification prior to returning the reactor to critical.
1430	7/10/89	Installed the fuse block for breaker 8-1293A in order to perform maintenance on the fuse block for breaker 8-1145. Following maintenance, fuse block left installed.
0500 approx.	7/23/89	Performed monthly emergency siren fuse block removal verification. Discovered the fuse blocks for both breakers 8-1145 and 8-1293A were installed.

4. Method of Discovery:

During performance of the monthly emergency siren electrical transfer switch fuse block removal verification, an operator (utility, non-licensed) discovered that the fuse blocks for both breakers 8-1145 and 8-1293A were installed.

5. Personnel Actions and Analysis of Actions:

An operator (utility, non-licensed) immediately removed the fuse block to breaker 8-1293A and verified that the requirements of TS 4.1.1 were met.

6. Safety System Responses:

SAN ONOFRE NUCLEAR GENERATION STATION	DOCKET NUMBER	LER NUMBER	PAGE
UNIT 1	05000206	89-020-00	4 OF 5

D. CAUSE OF THE EVENT:

1. Root Cause:

The root cause of this event is the failure to document the manipulation and verification of safety related equipment, as required per procedures.

On 7/10/89, maintenance was performed on the fuse block for breaker 8-1145 requiring removal of the fuse block. To ensure that power was maintained to the emergency siren for its continued operability, the fuse block for the redundant power supply breaker 8-1293A was installed and the breaker closed. This work was performed by the Plant Equipment Operator (PEO) (utility, non-licensed), in accordance with direction provided to him in a tailboard meeting (pre-work meeting) by the Control Operator (CO) (utility, licensed). This work was performed without documentation or verification, as required per procedures.

Upon completion of the maintenance on the fuse block for breaker 8-1145, the same CO and PEO discussed system restoration. Since proper documentation of the removal of the fuse block had not implemented, the CO only provided general system restoration guidance to the PEO. The CO did not specify the sequence of steps for the PEO to perform in order to ensure proper system restoration. The PEO, therefore, left the fuse block for breaker 8-1293A installed.

2. Contributing Cause:

The Work Authorization Record (WAR) is the document that is used to control the work process including the removal and restoration of plant equipment. The WAR for this event described the method for maintaining the siren operable, however, it did not address compensatory measures for maintaining electrical train separation. This caused the COs instructions to the PEO to be focused on maintaining the siren operable, and not on the TS requirements.

E. CORRECTIVE ACTIONS:

- 1. Corrective Actions Taken:
 - a) This event has been reviewed with all Unit 1 Operations personnel.
 - b) The CO and PEO have received appropriate disciplinary action.

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UNIT 1	05000206	89-020-00	5 OF 5

2. Planned Corrective Actions:

- a) A sign will be installed in the vicinity of the fuse blocks for both breaker 8-1145 and breaker 8-1293A, stating the TS requirement that only one fuse be installed at any given time.
- b) This event will be discussed with appropriate Operations personnel involved in preparation of WARs to provide additional guidance regarding the completeness of information contained in WARs.

F. SAFETY SIGNIFICANCE OF THE EVENT:

There is no safety significance to this event, since during the time the fuse blocks for both breakers 8-1145 and 8-1293A were installed breaker 8-1293A remained open. Thus, the transfer of an emergency siren power supply could not result in a single fault affecting more than one train. In addition, the emergency siren remained operable at all times.

G. ADDITIONAL INFORMATION:

1. Component Failure Information:

Not applicable.

2. Previous LERs for Similar Events:

None.

3. Results of NPRDS Search:

Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION

P. O. BOX 128

SAN CLEMENTE, CALIFORNIA 92672

H. E. MORGAN STATION MANAGER TELEPHONE (714) 368-6241

August 22, 1989

U. S. Nuclear Regulatory Commission Document Control Desk Washington, D.C. 20555

Subject:

Docket No. 50-206

30-Day Report

Licensee Event Report No. 89-020

San Onofre Nuclear Generating Station, Unit 1

Pursuant to 10 CFR 50.73(d), this submittal provides the required 30-day written Licensee Event Report (LER) for an occurrence involving a condition prohibited by the plant's Technical Specifications. Neither the health and safety of plant personnel or the public was affected by this occurrence.

If you require any additional information, please so advise.

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Enclosure: LER No. 89-020

cc: C. W. Caldwell (USNRC Senior Resident Inspector, Units 1, 2 and 3)

J. B. Martin (Regional Administrator, USNRC Region V)

Institute of Nuclear Power Operations (INPO)

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The root cause of this event was determined to be the failure to document the manipulation and verification of safety related equipment, as required per procedures. Investigation determined that the fuse block to breaker 8-1293A had been inappropriately left installed following maintenance on the fuse block for breaker 8-1145 on 7/10/89. Prior to the maintenance on 7/10/89, proper documentation for the removal of the fuse block had not been implemented. Therefore, upon completion of the maintenance, the Control Operator (CO) only provided general system restoration guidance to the Plant Equipment Operator (PEO). The CO did not specify the sequence of steps for the PEO to perform in order to ensure proper system restoration. This resulted in the PEO leaving the fuse block for breaker 8-1293A installed.

This event has been reviewed with appropriate Operations personnel and disciplinary action has taken place. In addition, it is planned to install a sign in the vicinity of the fuse blocks for both breaker 8-1145 and breaker 8-1293A, stating the TS requirement that only one fuse be installed at any given time.

SAN ONOFRE NUCLEAR GENERATION STATION DOCKET NUMBER LER NUMBER PAGE UNIT 1 05000206 89-020-00 2 OF 5

Plant: San Onofre Nuclear Generating Station

Unit: One

Reactor Vendor: Westinghouse

Event Date: 07-23-88

Time: 0500

A. CONDITIONS AT TIME OF THE EVENT:

Mode: 1, 75% Power Operation

B. BACKGROUND INFORMATION:

The Unit 1 emergency siren is activated during certain levels of emergencies to alert personnel of pending Protected Area (PA) announcements, or to evacuate the PA and report to assembly areas. The siren is activated either automatically by a safety injection actuation signal or manually at the Unit 1 Control Room.

The emergency siren has two power sources, Motor Control Center (MCC) 1 (Train 'A') and MCC 2 (Train 'B'). Breaker [BKR] 8-1145 connects the siren to power source MCC 1 and breaker 8-1293A connects the siren to power source MCC 2. The Unit 1 Technical Specifications (TS) require, pursuant to Section 4.1.1.B, Table 4.1.2, Item 12, verification that the fuse block [FUB] for either breaker 8-1145 or breaker 8-1293A is removed. This surveillance is required monthly, when the reactor is critical and prior to returning the reactor to criticality when the period of subcriticality extended the test interval beyond one month. The basis of this TS requirement is to eliminate the automatic transfer function of the emergency siren electrical transfer switch [ASU]. This precludes the automatic transfer of a postulated fault in one train to the unaffected train.

C. DESCRIPTION OF THE EVENT:

1. Event:

At approximately 0500 on 7/23/89, during performance of the monthly emergency siren fuse block removal verification, in accordance with TS 4.1.1, the fuse blocks for both breaker 8-1145 and breaker 8-1293A, were found installed. Since the TS surveillance requires that one fuse be removed, this was a condition prohibited by TS. The fuse block to breaker 8-1293A was immediately removed. Subsequent investigation determined that the fuse block to breaker 8-1293A had been inappropriately left installed following maintenance on the fuse block for breaker 8-1145 on 7/10/89.

SAN ONOFRE NUCLEAR GENERATION STATION	DOCKET NUMBER	LER NUMBER	PAGE
UNIT 1	05000206	89-020-00	3 OF 5

2. Inoperable Structures, Systems or Components that Contributed to the Event:

None.

3. Sequence of Events:

<u>TIME</u>	DATE	ACTION
1916 approx.	6/26/89	Satisfactorily performed emergency siren electrical transfer switch fuse block removal verification prior to returning the reactor to critical.
1430	7/10/89	Installed the fuse block for breaker 8-1293A in order to perform maintenance on the fuse block for breaker 8-1145. Following maintenance, fuse block left installed.
0500 approx.	7/23/89	Performed monthly emergency siren fuse block removal verification. Discovered the fuse blocks for both breakers 8-1145 and 8-1293A were installed.

4. Method of Discovery:

During performance of the monthly emergency siren electrical transfer switch fuse block removal verification, an operator (utility, non-licensed) discovered that the fuse blocks for both breakers 8-1145 and 8-1293A were installed.

5. Personnel Actions and Analysis of Actions:

An operator (utility, non-licensed) immediately removed the fuse block to breaker 8-1293A and verified that the requirements of TS 4.1.1 were met.

6. Safety System Responses:

SAN ONOFRE NUCLEAR GENERATION STATION	DOCKET NUMBER	LER NUMBER	PAGE
UNIT 1	05000206	89-020-00	4 OF 5

D. CAUSE OF THE EVENT:

1. Root Cause:

The root cause of this event is the failure to document the manipulation and verification of safety related equipment, as required per procedures.

On 7/10/89, maintenance was performed on the fuse block for breaker 8-1145 requiring removal of the fuse block. To ensure that power was maintained to the emergency siren for its continued operability, the fuse block for the redundant power supply breaker 8-1293A was installed and the breaker closed. This work was performed by the Plant Equipment Operator (PEO) (utility, non-licensed), in accordance with direction provided to him in a tailboard meeting (pre-work meeting) by the Control Operator (CO) (utility, licensed). This work was performed without documentation or verification, as required per procedures.

Upon completion of the maintenance on the fuse block for breaker 8-1145, the same CO and PEO discussed system restoration. Since proper documentation of the removal of the fuse block had not implemented, the CO only provided general system restoration guidance to the PEO. The CO did not specify the sequence of steps for the PEO to perform in order to ensure proper system restoration. The PEO, therefore, left the fuse block for breaker 8-1293A installed.

2. Contributing Cause:

The Work Authorization Record (WAR) is the document that is used to control the work process including the removal and restoration of plant equipment. The WAR for this event described the method for maintaining the siren operable, however, it did not address compensatory measures for maintaining electrical train separation. This caused the COs instructions to the PEO to be focused on maintaining the siren operable, and not on the TS requirements.

E. CORRECTIVE ACTIONS:

1. Corrective Actions Taken:

- a) This event has been reviewed with all Unit 1 Operations personnel.
- b) The CO and PEO have received appropriate disciplinary action.

SAN ONOFRE NUCLEAR GENERATION STATION	DOCKET NUMBER	LER NUMBER	PAGE
UNIT 1	05000206	89-020-00	5 OF 5

2. Planned Corrective Actions:

- a) A sign will be installed in the vicinity of the fuse blocks for both breaker 8-1145 and breaker 8-1293A, stating the TS requirement that only one fuse be installed at any given time.
- b) This event will be discussed with appropriate Operations personnel involved in preparation of WARs to provide additional guidance regarding the completeness of information contained in WARs.

F. SAFETY SIGNIFICANCE OF THE EVENT:

There is no safety significance to this event, since during the time the fuse blocks for both breakers 8-1145 and 8-1293A were installed breaker 8-1293A remained open. Thus, the transfer of an emergency siren power supply could not result in a single fault affecting more than one train. In addition, the emergency siren remained operable at all times.

G. ADDITIONAL INFORMATION:

1. Component Failure Information:

Not applicable.

2. Previous LERs for Similar Events:

None.

3. Results of NPRDS Search:

Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION

P. O. BOX 128

SAN CLEMENTE. CALIFORNIA 92672

H. E. MORGAN STATION MANAGER

August 22, 1989

TELEPHONE (714) 368-6241

U. S. Nuclear Regulatory Commission Document Control Desk Washington, D.C. 20555

Subject:

Docket No. 50-206

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Licensee Event Report No. 89-020

San Onofre Nuclear Generating Station, Unit 1

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Sincerely,

Enclosure: LER No. 89-020

cc: C. W. Caldwell (USNRC Senior Resident Inspector, Units 1, 2 and 3)

J. B. Martin (Regional Administrator, USNRC Region V)

Institute of Nuclear Power Operations (INPO)

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Yes (If yes, complete EXPECTED SUBMISSION DATE) XX NO Submission Date (ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)												(15													

At approximately 0500 on 7/23/89, with Unit 1 at 75% power, during performance of the monthly emergency siren fuse block removal verification, in accordance with Technical Specification (TS) 4.1.1, the fuse blocks for both breaker 8-1145 and breaker 8-1293A, were found installed. Since the TS surveillance requires that one fuse be removed, this was a condition prohibited by TS. The fuse block to breaker 8-1293A was immediately removed. There is no safety significance to this event since during the time the fuse blocks for both breakers 8-1145 and 8-1293A were installed, breaker 8-1293A remained open.

The root cause of this event was determined to be the failure to document the manipulation and verification of safety related equipment, as required per procedures. Investigation determined that the fuse block to breaker 8-1293A had been inappropriately left installed following maintenance on the fuse block for breaker 8-1145 on 7/10/89. Prior to the maintenance on 7/10/89, proper documentation for the removal of the fuse block had not been implemented. Therefore, upon completion of the maintenance, the Control Operator (CO) only provided general system restoration guidance to the Plant Equipment Operator (PEO). The CO did not specify the sequence of steps for the PEO to perform in order to ensure proper system restoration. This resulted in the PEO leaving the fuse block for breaker 8-1293A installed.

This event has been reviewed with appropriate Operations personnel and disciplinary action has taken place. In addition, it is planned to install a sign in the vicinity of the fuse blocks for both breaker 8-1145 and breaker 8-1293A, stating the TS requirement that only one fuse be installed at any given time.

SAN ONOFRE NUCLEAR GENERATION STATION DOCKET NUMBER LER NUMBER PAGE UNIT 1 05000206 89-020-00 2 OF 5

Plant: San Onofre Nuclear Generating Station

Unit: One

Reactor Vendor: Westinghouse

Event Date: 07-23-88

Time: 0500

A. CONDITIONS AT TIME OF THE EVENT:

Mode: 1, 75% Power Operation

B. BACKGROUND INFORMATION:

The Unit 1 emergency siren is activated during certain levels of emergencies to alert personnel of pending Protected Area (PA) announcements, or to evacuate the PA and report to assembly areas. The siren is activated either automatically by a safety injection actuation signal or manually at the Unit 1 Control Room.

The emergency siren has two power sources, Motor Control Center (MCC) 1 (Train 'A') and MCC 2 (Train 'B'). Breaker [BKR] 8-1145 connects the siren to power source MCC 1 and breaker 8-1293A connects the siren to power source MCC 2. The Unit 1 Technical Specifications (TS) require, pursuant to Section 4.1.1.B, Table 4.1.2, Item 12, verification that the fuse block [FUB] for either breaker 8-1145 or breaker 8-1293A is removed. This surveillance is required monthly, when the reactor is critical and prior to returning the reactor to criticality when the period of subcriticality extended the test interval beyond one month. The basis of this TS requirement is to eliminate the automatic transfer function of the emergency siren electrical transfer switch [ASU]. This precludes the automatic transfer of a postulated fault in one train to the unaffected train.

C. DESCRIPTION OF THE EVENT:

1. Event:

At approximately 0500 on 7/23/89, during performance of the monthly emergency siren fuse block removal verification, in accordance with TS 4.1.1, the fuse blocks for both breaker 8-1145 and breaker 8-1293A, were found installed. Since the TS surveillance requires that one fuse be removed, this was a condition prohibited by TS. The fuse block to breaker 8-1293A was immediately removed. Subsequent investigation determined that the fuse block to breaker 8-1293A had been inappropriately left installed following maintenance on the fuse block for breaker 8-1145 on 7/10/89.

SAN ONOFRE NUCLEAR GENERATION STATION	DOCKET NUMBER	LER NUMBER	PAGE
UNIT 1	05000206	89-020-00	3 OF 5

2. Inoperable Structures, Systems or Components that Contributed to the Event:

None.

3. Sequence of Events:

TIME	<u>DATE</u>	ACTION	
1916 approx.	6/26/89	Satisfactorily performed emergency siren electrical transfer switch fuse block removal verification prior to returning the reactor to critical.	
1430	7/10/89	Installed the fuse block for breaker 8-1293A in order to perform maintenance on the fuse block for breaker 8-1145. Following maintenance, fuse block left installed.	
0500 approx.	7/23/89	Performed monthly emergency siren fuse block removal verification. Discovered the fuse blocks for both breakers 8-1145 and 8-1293A were installed.	

4. Method of Discovery:

During performance of the monthly emergency siren electrical transfer switch fuse block removal verification, an operator (utility, non-licensed) discovered that the fuse blocks for both breakers 8-1145 and 8-1293A were installed.

5. Personnel Actions and Analysis of Actions:

An operator (utility, non-licensed) immediately removed the fuse block to breaker 8-1293A and verified that the requirements of TS 4.1.1 were met.

6. Safety System Responses:

SAN ONOFRE NUCLEAR GENERATION STATION	DOCKET NUMBER	LER NUMBER	PAGE
	DOCKET HOUDER	LEK NOUDEK	PAGE
UNIT 1	05000206	00 000 00	# OF F
01111	03000200	89-020-00	4 OF 5

D. CAUSE OF THE EVENT:

1. Root Cause:

The root cause of this event is the failure to document the manipulation and verification of safety related equipment, as required per procedures.

On 7/10/89, maintenance was performed on the fuse block for breaker 8-1145 requiring removal of the fuse block. To ensure that power was maintained to the emergency siren for its continued operability, the fuse block for the redundant power supply breaker 8-1293A was installed and the breaker closed. This work was performed by the Plant Equipment Operator (PEO) (utility, non-licensed), in accordance with direction provided to him in a tailboard meeting (pre-work meeting) by the Control Operator (CO) (utility, licensed). This work was performed without documentation or verification, as required per procedures.

Upon completion of the maintenance on the fuse block for breaker 8-1145, the same CO and PEO discussed system restoration. Since proper documentation of the removal of the fuse block had not implemented, the CO only provided general system restoration guidance to the PEO. The CO did not specify the sequence of steps for the PEO to perform in order to ensure proper system restoration. The PEO, therefore, left the fuse block for breaker 8-1293A installed.

2. Contributing Cause:

The Work Authorization Record (WAR) is the document that is used to control the work process including the removal and restoration of plant equipment. The WAR for this event described the method for maintaining the siren operable, however, it did not address compensatory measures for maintaining electrical train separation. This caused the COs instructions to the PEO to be focused on maintaining the siren operable, and not on the TS requirements.

E. CORRECTIVE ACTIONS:

- 1. Corrective Actions Taken:
 - a) This event has been reviewed with all Unit 1 Operations personnel.
 - b) The CO and PEO have received appropriate disciplinary action.

SAN ONOFRE NUCLEAR GENERATION STATION	DOCKET NUMBER	LER NUMBER	PAGE
UNIT 1	05000206	89-020-00	5 OF 5

2. Planned Corrective Actions:

- a) A sign will be installed in the vicinity of the fuse blocks for both breaker 8-1145 and breaker 8-1293A, stating the TS requirement that only one fuse be installed at any given time.
- b) This event will be discussed with appropriate Operations personnel involved in preparation of WARs to provide additional guidance regarding the completeness of information contained in WARs.

F. SAFETY SIGNIFICANCE OF THE EVENT:

There is no safety significance to this event, since during the time the fuse blocks for both breakers 8-1145 and 8-1293A were installed breaker 8-1293A remained open. Thus, the transfer of an emergency siren power supply could not result in a single fault affecting more than one train. In addition, the emergency siren remained operable at all times.

G. ADDITIONAL INFORMATION:

1. Component Failure Information:

Not applicable.

2. Previous LERs for Similar Events:

None.

3. Results of NPRDS Search: