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Southern California Edison Company

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IRVINE, CALIFORNIA 92718

R. M. ROSENBLUM
MANAGER OF
NUCLEAR REGULATORY AFFAIRS

August 21, 1992

TELEPHONE
(714) 454-4505

Mr. Ken Perkins, Director
Division of Reactor Safety and Projects
U. S. Nuclear Regulatory Commission, Region V
1450 Maria Lane, Suite 210
Walnut Creek, CA 94596-5368

Dear Mr. Perkins

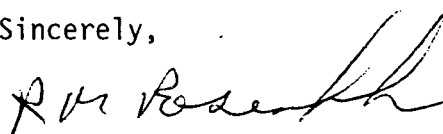
Subject: Docket Nos. 50-206, 50-361, and 50-362
Response to Information Request for
Emergency Diesel Generator Outage Summary
San Onofre Nuclear Generating Station
Units 1, 2, and 3.

Enclosed are outage summaries for the Emergency Diesel Generators (EDGs) at San Onofre Units 1, 2, and 3. This information has been previously provided to the NRC as verbally requested by the Senior Resident Inspector.

The summary sheets for Unit 1 are complete for the full time period requested, June 1990 through May 1992. The summary sheets for Units 2 and 3 are complete for the period of October 1990 through June 1992. Information from June through September 1990 had already been archived and was not recoverable in the short time allowed for the data to be compiled.

If you have any additional questions concerning this matter, please let me know.

Sincerely,



Enclosure

cc: J. B. Martin, Regional Administrator, NRC Region V
George Kalman, NRC Senior Project Manager, San Onofre Unit 1
M. B. Fields, NRC Project Manager, San Onofre Units 2 and 3
C. W. Caldwell, NRC Senior Resident Inspector, San Onofre
Units 1, 2, and 3

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IE-01

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 1

EDG ID/ROW: DG-1/6 NW

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
6/19/90	MODE 1 FULL POWER	14 HOURS 8 MIN.	C-	INSPECTION OF BEARING FOLLOWING ENGINE ROLL BACK REPAIR OF OIL LEAK ON DUPLEX OIL STRAINER
7/1/90	MODE 3	26 MIN	T	PERFORMED FUNCTIONAL TEST OF SIS
7/17/90	MODE 6	5 HRS 1 MIN.	C	INSPECTION OF BEARINGS DUE TO ROLL BACK
8/14/90	MODE 6	6 HRS 50MIN.	C	INSPECTION OF BEARINGS DUE TO ROLL BACK
9/9/90 10/23/90	MODE 6	1056 HRS 2 MTN.	C	REFUELING INTERNAL INSPECTIONS & OVERHAUL
11/5/90 11/9/90	MODE 6	108 HRS 10 MIN.	C	REPAIRS TO BREAKER 152-11C14 AND JACKET WATER LEAK
11/20/90 11/20/90	MODE 6	7 HRS 55 MIN.	T	SIS TRAUMA TEST FOLLOWED BY D.G. LOAD TEST AND BEARING INSPECTION DUE TO ROLL BACK
12/12/90 12/13/90	MODE 6	21 HRS 29 MIN.	C	REPAIRS TO EXCITER CABINET STRIP HEATERS

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 1

EDG ID/KW: DGI

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Fix Status (at Power or S/D)	OOS Duration (hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
12/19/90 12/20/90	MODE 6 DEFUELED	32 HRS 7 MIN.	C	REPAIR TO OUTPUT BREAKER 152 - 11C14 AND SEQUENCER 1 MODIFICATIONS (SEQ. REMAINS INOP)
1/7/91 1/8/91	MODE 6 DEFUELED	29 HRS 48 MIN.	T	TESTING OF BATTERY BANK 1
3/16/91 3/16/91	MODE 3	23 MIN.	C	LOW LUBE OIL TEMPERATURE DUE TO FAILURE OF OIL HEATER IN AUTO
3/20/91 3/20/91	MODE 2 RED DROP TEST	9 HRS. 6 MIN.	T	INSPECTION OF BEARING WHEN ENGINE ROLLED BACKWARDS DURING AIR ROLL.
4/9/91 4/9/91	MODE 1	7 HRS 58 MIN.	C	INSPECT BEARINGS FOLLOWING ROLL BACK DURING AIR ROLL FOR MONTHLY LOAD TEST.
5/6/91 5/7/91	MODE 5	7 HRS 19 MIN.	C	MAINTENANCE TO REROUTE BREAKER CLOSING CIRCUIT WTRING-INSPECTION OF BEARING DUE TO ROLL BACK.
6/4/91 6/4/91	MODE 1	7 HRS 37 MIN.	C	INSPECTION OF BEARING FOLLOWING ROLL BACK DURING AIR ROLL.
9/24/91 9/24/91	MODE 1	4 HRS 26 MIN.	C	QUARTERLY INSPECTION OF BEARING.

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 1

EDG ID/TOW: DG -2/6 MW

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
6/21/90	MODE 1 FULL POWER	5 HRS 49 MIN.	C	REPAIR OF RV-205 AND DSN-357 (FAILED IST)
7/1/90	MODE 3	26 MIN.	T	PERFORMED FUNCTIONAL TEST OF SIS.
7/23/90	MODE 6 DEFUELING	1164 HRS 27 MIN.	C	REFUELING INSPECTION & OVER HAUL
11/20/90 11/30/90	MODE 6 DEFUELED	241 HRS	T	SIS TRAIN B TESTING FOLLOWED BY DG LOAD TEST DG REMAINED INOP DUE TO SEQUENCE FAILURE.
12/17/90 12/19/90	MODE 6 DEFUELED	49 HRS 30 MIN.	C	REPAIR TO JACKET WATER SYSTEM HEATERS.
3/26/91 3/27/91	MODE 3	11 HRS 14 MIN.	C	VOLTAGE REGULATOR MAINTENANCE.
9/11/91 9/11/91	MODE 1	2 HRS 40 MIN.	C	JUMPED INSTALLED TO KEEP WARM PUMP CONTROLS TO ENERGIZE HEATERS
11/5/91 11/5/91	MODE 1	7 HRS 58 MIN.	C	GOVERNOR INSPECTIONS AND ADJUSTMENTS

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

PLANT NAME, UNIT: SONGS UNIT 1
EDG ID/OW: DG-2
EDGs PER UNIT: 2

OUTAGE CODES

P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
12/3/91 12/4/91	MODE 1	20 HRS 57 MIN.	C	REPLACEMENT OF CRANKCASE FAN CABLE AND REPAIR TO FANS.
1/27/91 1/29/92	MODE 1	61 HRS 30 MIN.	C	PREVENTIVE AND CORRECTIVE MAINTENANCE.
2/25/92 2/27/92	MODE 1	50 HRS 30 MIN.	C	REPAIR AND ADJUSTMENTS TO GOVERNOR.
3/24/92 3/24/92	MODE 1	15 HRS 45 MIN.	C	MINOR MAINTENANCE
4/21/92 4/22/92	MODE 1	23 HRS 50 MIN.	C	REPLACE LUBE OIL HEATERS AND REPAIR LEAKS.

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 2

EDG ID/KW: S22420MG002

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
01/09/91	MODE 1	28 HRS 49 MIN	P	WAR C-9005835 BOW
01/22/91	MODE 1	1 HR 1 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/04/91	MODE 1	42 HRS 15 MIN	C	WAR C-9100370 R/R AIR START SOLENOIDS
02/28/91	MODE 1	5 HRS 40 MIN	C	NCR 91020197 CONTROL ROOM INDICATION
04/02/91	MODE 2	37 HRS 13 MIN	P	WAR C-9100865 BOW
04/26/91	MODE 6	15 HRS 33 MIN	T	WAR C-9101749 REFUELING INTERVAL TEST
04/30/91	MODE 6	0 HRS 39 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
05/28/91	MODE 1	0 HRS 43 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY
(JUNE 1990 - MAY 1992)

PLAINT NAME, UNIT: SONGS UNIT 2

EDQ ID: 777 S22420MC002

EDGS PER UNIT: 2

OCS - Out of Service

OUTAGE CODES

P - Scheduled Preventive

Wakabayashi

C - Corrected Hindrance

T-Tool

OOS Start Date	Pbx Status (24 Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
06/11/91	MODE 1	0 HRS 25 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
06/27/91	MODE 1	0 HRS 27 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
06/28/91	MODE 1	15 HRS 26 MIN	P	WAR C-9102694 BOW
07/05/91	MODE 1	0 HRS 27 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/05/91	MODE 1	3 HRS 48 MIN	T	OP TEST TRN A AIR START
07/23/91	MODE 1	3 HRS 13 MIN	T	OP TEST TRN B AIR START
07/23/91	MODE 1	0 HRS 22 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
08/22/91	MODE 5	727 HRS 57 MIN	P	WAR C-9101244 EXPANSION TANK RELIEF DC

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY

(JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 2

EDG ID#(KW): S22420MG002

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
11/02/91	MODE 5	64 HRS 50 MIN	P	WAR C-9103957 OUTAGE WORK
11/06/91	MODE 5	20 HRS 16 MIN	P	WAR G9104856 GOVERNOR ADJUSTMENT
11/11/91	MODE 5	13 HRS 46 MIN	C	WAR C-9104931 MAINTENANCE LOCK-OUT ALARM
12/10/91	MODE 1	0 HRS 42 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/07/92	MODE 1	1 HR 0 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/05/92	MODE 1	0 HRS 30 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/20/92	MODE 1	0 HRS 20 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
03/04/92	MODE 1	1 HR 25 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY
(JUNE 1990 - MAY 1992)

PLANT NAME, UNIT: SONGS UNIT 2

EDG ID: 107 S22420MC002

EDGE PER UNIT 2

OOS - Out of Service

OUTAGE CODES

P - Scheduled Protective Maintenance

C - Correcting Misspellings

I - Test

[illegible]

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY

(JUNE 1990 - MAY 1992)

OUTAGE CODES
 P - Scheduled Preventive Maintenance
 C - Corrective Maintenance
 T - Test

PLANT NAME, UNIT: SONGS UNIT 2

EDG ID/KW: S22420MCG003

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
10/26/90	MODE 1	5 HRS	C	CHANGE OUT MAINTENANCE LOCKOUT SWITCH
01/09/91	MODE 1	45 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/23/91	MODE 1	67 HRS 50 MIN	P	WAR C-9100042 BOW
02/14/91	MODE 1	5 HRS 15 MIN	C	WAR C-9100607 DAY TANK ALARM REPAIR
02/19/91	MODE 1	25 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/27/91	MODE 1	40 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
03/20/91	MODE 1	22 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
04/02/91	MODE 1	35 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY

(JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 2

EDG ID/KW: S22420MG003

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
04/12/91	MODE 5/6	55 HRS 25 MIN	P	WAR C-9101360 BOW
05/16/91	MODE 1	33 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
05/17/91	MODE 1	20 HRS 33 MIN	C	WAR C-9102210 LOSS OF EXCITATION
05/20/91	MODE 1	18 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
05/27/91	MODE 1	28 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
06/03/91	MODE 1	30 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
06/11/91	MODE 1	33 HRS 05 MIN	P	WAR C-9102402 BOW REPLACE CAM GEARS
06/17/91	MODE 1	20 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 2

EDG ID#1W: S22420MG003

EDGs PER UNIT: 2 CDS - Out of Service

OOS Start Date	Fdx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
06/17/91	MODE 1	4.5 HRS 1.5 MIN.	C	WAR C-9102737 WATER FROM CYLINDER
06/26/91	MODE 1	30 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/02/91	MODE 1	27 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/03/91	MODE 1	5 HRS 25 MIN	C	INVESTIGATE STICKY ALARM RELAY
07/08/91	MODE 1	31 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/16/91	MODE 1	32 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/22/91	MODE 1	27 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/30/91	MODE 1	25 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 2

EDG ID/KNW: S22420NG003

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
08/05/91	MODE 1	45 MIN	T	HANDBARRING PRIOR TO SRUVEILLANCE RUN
08/13/91	MODE 1	35 MIN	T	HANDBARRING PRIOR TO SRUVEILLANCE RUN
08/20/91	MODE 5	2 HRS 25 MIN	T	HANDBARRING PRIOR TO SRUVEILLANCE RUN
09/16/91	MODE 6	925 HRS 35 MIN	C	WAR C-9100848 CAM SHAFT FAILURE AND OUTAGE WORK
10/27/91	MODE 5	25 HRS 09 MIN	C	WAR C-9104616 ALARM POWER FAILURE
11/02/91	MODE 5	9 HRS 10 MIN	C	WAR C-9104781 FAN A276 AGASTAT FAILURE
11/04/91	MODE 5	47 HRS 46 MIN	C	WAR C-9104842 TRIP AFTER WEEKLY RUN
11/08/91	MODE 5	03 MIN	T	EMERGENCY BUS TRANSFER TEST

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 2

EDG ID/KW: S22420MG003

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
11/12/91	MODE 5	0 HRS 15 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
11/19/91	MODE 2	0 HRS 30 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
11/25/91	MODE 1	0 HRS 28 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
12/02/91	MODE 1	0 HRS 49 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
12/03/91	MODE 1	15 HRS 10 MIN	C	WAR C-9105290 FAN A277 TRIP
12/09/91	MODE 1	0 HRS 49 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
12/15/91	MODE 1	1 HR 3 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
12/23/91	MODE 1	0 HRS 45 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

PLANT NAME, UNIT: SONGS UNIT 2
 EDG ID/OW: S22420MG003
 EDGs PER UNIT: 2

OOS - Out of Service

OUTAGE CODES
 P - Scheduled Preventive Maintenance
 C - Corrective Maintenance
 T - Test

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
12/31/91	MODE 1	0 HRS 25 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/07/92	MODE 1	0 HRS 35 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/13/92	MODE 1	0 HRS 22 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/20/92	MODE 1	0 HRS 45 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/04/92	MODE 1	0 HRS 47 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/17/92	MODE 1	0 HRS 35 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/18/92	MODE 1	22 HRS 40 MIN	C	WAR C-9200450 GOVERNOR/AVR PROBLEM
02/24/92	MODE 1	0 HRS 45 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY
(JUNE 1990 - MAY 1992)

PLANT NAME, UNIT: _____ SONGS UNIT 2

EDQ ID: 177
S224204C003

EDGS PER UNIT 2

00S - Out of Service

OUTAGE CODES

P - Scheduled Preventive Maintenance

C - Carrocinógeno B₁ (Nitrofluoreno)

T-Tool

[illegible]

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

PLANT NAME, UNIT: SONGS UNIT 3

EDG ID/OW: S32420MG002

EDGs PER UNIT: 2

OOS - Out of Service

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

OOS Start Date	Box Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
10/01/90	MODE 1	5 HRS 35 MIN	C	CHANGE OUT MAINTENANCE LOCKOUT SWITCH
10/16/90	MODE 1	1 HR 5 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
10/23/90	MODE 1	15 HRS 30 MIN	P	WAR C-9005253 BOW
10/30/90	MODE 1	0 HRS 30 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/17/91	MODE 1	0 HRS 47 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/04/91	MODE 1	13 HRS 43 MIN	T	OP TEST WITH BOTH AIR START TRAINS
02/12/91	MODE 1	26 HRS 25 MIN	C	WAR C-9100541 REPLACE AIR START SOLENOIDS
02/24/91	MODE 1	0 HRS 30 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 3

EDG ID#KW: S32420MC002

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
02/27/91	MODE 1	1 HR 20 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
03/13/91	MODE 1	1 HR 23 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
04/09/91	MODE 1	0 HRS 38 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
04/22/91	MODE 1	59 HRS 47 MIN	C	WAR C-9101697 REPLACE FUEL OIL
05/07/91	MODE 1	0 HRS 55 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
05/20/91	MODE 3	37 HRS 31 MIN	C	WAR C-9102241 FILTER FUEL OIL
06/05/91	MODE 2	0 HRS 38 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/02/91	MODE 1	0 HRS 45 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 3
EDG ID#KWF: S32420M002
EDGs PER UNIT: 2

OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
07/30/91	MODE 1	33 HRS 20 MIN	P	WAR C-9102852 BOW
08/27/91	MODE 1	0 HRS 48 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
10/09/91	MODE 1	34 HRS 30 MIN	P	WAR C-9104019 BOW
10/23/91	MODE 1	1 HR 0 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
11/20/91	MODE 1	0 HRS 50 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
12/18/91	MODE 1	0 HRS 30 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/14/92	MODE 1	0 HRS 37 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/15/92	MODE 6	556 HRS 15 MIN	P	WAR C-9104425 U3C6 OUTAGE

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 3

EDG ID/KW: S32420MG002

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
03/13/92	MODE 5	2 HRS 57 MIN	P	MAINTENANCE LOCKOUT WHILE DEENERGIZING 3BD DURING 3A07 BUSS OUTAGE
03/17/92	MODE 5	10 HRS 34 MIN	P	WAR C-9201127 BOW
03/18/92	MODE 5	0 HRS 25 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
04/08/92	MODE 1	0 HRS 40 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 3

EDG ID, KW: S32420MG0003

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Box Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
01/03/91	MODE 1	0 HRS 25 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/22/91	MODE 1	0 HRS 55 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/30/91	MODE 1	0 HRS 18 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
02/25/91	MODE 1	60 HRS 25 MIN	P	WAR C-9100582 BOW
03/27/91	MODE 1	1 HR 1 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
04/29/91	MODE 1	0 HRS 22 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
05/16/91	MODE 1	1 HR 34 MIN	C	WAR C-9102190 INVESTIGATE TROUBLE ALARM
05/22/91	MODE 3	46 HRS 40 MIN	C	WAR C-9102303 FILTER FUEL OIL

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY

(JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 3

EDG ID/KW: S32420MG0003

EDGs PER UNIT: 2 OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
06/19/91	MODE 1	0 HRS 16 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/17/91	MODE 1	0 HRS 22 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
07/30/91	MODE 1	0 HRS 20 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
08/15/91	MODE 1	0 HRS 30 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
09/12/91	MODE 1	0 HRS 46 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
10/01/91	MODE 1	65 HRS 10 MIN	P	WAR C-9103782 BOW & REPLACE CAM GEAR
10/09/91	MODE 1	1 HR 4 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
12/03/91	MODE 1	0 HRS 24 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN

EMERGENCY DIESEL GENERATOR OUTAGE SUMMARY (JUNE 1990 - MAY 1992)

OUTAGE CODES
P - Scheduled Preventive Maintenance
C - Corrective Maintenance
T - Test

PLANT NAME, UNIT: SONGS UNIT 3
EDG ID#(KW): S32420MG0003
EDGs PER UNIT: 2

OOS - Out of Service

OOS Start Date	Rx Status (at Power or S/D)	OOS Duration (Hrs)	Outage Code	Comments (optional) (e.g., Reasons for OOS)
01/01/92	MODE 1	0 HRS 35 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN
01/27/92	MODE 5	436 HRS 5 MIN	P	WAR C-9104427 U3C6 OUTAGE
03/15/92	MODE 5	45 HRS 6 MIN	C	WAR C-9200743 WIRE RELUG
03/18/92	MODE 5	0 HRS 9 MIN	T	ESFAS RELAY TEST
03/25/92	MODE 3	0 HRS 35 MIN	T	HANDBARRING PRIOR TO SURVEILLANCE RUN