SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL℠ Company

Dwight E. Nunn
Vice President

November 13, 2000

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

Gentlemen:

Subject: **Docket No. 50-361**
Special Report: Inservice Inspection of Steam Generator Tubes
San Onofre Nuclear Generating Station, Unit 2

Reference: Steam Generator Program Guidelines, Nuclear Energy Institute Document Number NEI 97-06 [Original], dated December 1997

On November 5, 2000, Southern California Edison (SCE) completed the inservice inspection of steam generator tubes at San Onofre Nuclear Generating Station Unit 2. The attached report satisfies the following reporting requirements of Technical Specification 5.7.2.c:

- Within 15 days of inspection completion, report the number of tubes plugged and tubes sleeved in each steam generator;
- Prior to resumption of plant operation, report the results of the steam generator tube inspections which fall into Category C-3; and
- Within 12 months of inspection completion, report the complete results of steam generator tube inspections.

In addition, the contents of the report were prepared using the guidance contained in the above reference. In accordance with the suggested NEI guidance, the enclosed report includes:

a. Scope of inspections performed;
b. Active Degradation Mechanisms found;
c. Nondestructive Examination (NDE) techniques utilized for each degradation mechanism;
d. Number of tubes plugged or repaired during the inspection for each active degradation mechanism. Repair methods utilized and the number of tubes repaired by each repair method; and

A001

P. O. Box 128
San Clemente, CA 92674-0128
949-368-1480
Fax 949-368-1490

e. Total number and percentage of tubes plugged and/or repaired to date and the effective plugging percentage in each steam generator.

This report contains no new commitments. If you require any additional information, please advise.

Sincerely,

Attachments:

cc: E. W. Merschoff, Regional Administrator, NRC Region IV
L. Raghavan, NRC Project Manager, San Onofre Units 2 & 3
J. A. Sloan, NRC Senior Resident, San Onofre Units 2 & 3
Institute of Nuclear Power Operations (INPO)

SPECIAL REPORT - INSERVICE INSPECTION OF STEAM GENERATOR TUBES

Regulatory Reporting Requirements

Reporting Requirement 5.7.2.c of Appendix A, Technical Specification to Facility Operating License NPF-10, requires the number of tubes plugged and tubes sleeved in each steam generator to be reported to the Nuclear Regulatory Commission within 15 days following completion of the inspection.

Reporting Requirement 5.7.2.c of Appendix A, Technical Specification to Facility Operating License NPF-10, requires the results of steam generator tube inspections which fall into Category C-3 to be reported to the Nuclear Regulatory Commission prior to resumption of plant operation.

Reporting Requirement 5.7.2.c of Appendix A, Technical Specification to Facility Operating License NPF-10, requires the complete results of steam generator tube inspections to be reported to the Nuclear Regulatory Commission within 12 months following completion of the inspection.

Planned Inspection Scope

Table 1 summarizes the planned inspection program. Also, when indications by the bobbin probe were non-quantifiable or distorted, the inspection program included inspection with the Plus-Point Probe. Table 4 provides the list of Nondestructive Examination (NDE) techniques utilized for each degradation mechanism.

Inspection Scope Expansion

Table 2 summarizes significant inspection program scope expansion in response to inspection results. The following explanatory details are provided for these expansions.

The planned inspection scope included Plus-Point Probe examination at all dented (≥ 2 volts) tube support locations in the hot leg of the tubing. An axially oriented indication was detected by the bobbin probe at a 2.2 volt dent at a tube support that is referred to as "VC2." This location was outside the planned Plus-Point Probe examination of hot leg dents. In response to this indication, the inspection was expanded to provide Plus-Point Probe examination of all dented (≥ 2 volts) tube support locations throughout the entire tube bundle.

SCE desired to continue the existing inspection of the U-bends in Rows 1, 2, and 3, but also evaluate the potential benefit of a newly developed inspection technique. The planned inspection scope included mid-range Plus-Point Probe inspection of the U-bends of all (100%), of the U-bends in Rows 1, 2, and 3. The planned inspection scope also included high frequency Plus-Point Probe inspection of a sample of the U-bends in Rows 1, 2, and 3. The evaluation indicated that the high frequency Plus-Point Probe provides some benefit in detection capabilities. The inspection was expanded to include high frequency Plus-Point Probe examination of all (100%) of the U-bends in Rows 1, 2, and 3.

Results

This report satisfies the listed regulatory reporting requirements.

The contents of this report are prepared using the guidance contained in NEI 97-06, Rev. 0, "Steam Generator Program Guidelines." The NEI guidance is an initiative to unify the industry approach towards steam generator issues and strengthen, where necessary, the steam generator program. In accordance with the suggested NEI guidance, the following five report contents are included within this report:

(1) Scope of inspections performed;
(2) Active Degradation Mechanisms found;
(3) Nondestructive Examination (NDE) techniques utilized for each degradation mechanism;
(4) Number of tubes plugged or repaired during the inspection outage for each active degradation mechanism. Repair methods utilized and the number of tubes repaired by each repair method; and
(5) Total number and percentage of tubes plugged and/or repaired to date and the effective plugging percentage in each steam generator.

Table 3 summarizes significant inspection results, and active degradation mechanisms found. Each tube is only counted once in this listing, although it may also have an eddy current indication of a type below the point in the listing where it appears. The Appendices provide the complete results of the steam generator tubing inservice inspection.

Table 5 summarizes in-situ pressure and leak testing results. This particular testing demonstrated the structural and leakage (i.e., there was no leakage) integrity of the tested tubes consistent with EPRI guidelines and recent industry guidance.[1] Eddy current testing results and in-situ pressure and leak testing results provide assurance that performance criteria in the NEI guidance (structural integrity and accident-induced leakage) were met during operation prior to this inspection.

Repair of Tubes

Table 3 lists the number of tubes repaired (removed from service by plugging, or repaired by sleeving) for each steam generator. Table 6 provides an itemized listing of the tubes plugged in steam generator E-088 along with the corresponding Table 3 category specifying the indication orientation/location. Table 7 provides an itemized listing of the tubes sleeved in steam generator E-088 along with the corresponding Table 3 category specifying the indication orientation/location. Table 8 provides an itemized listing of the tubes plugged in steam generator E-089 along with the corresponding Table 3 category specifying the indication orientation/location. Table 9 provides an itemized listing of the tubes sleeved in steam

[1] Letter from Lawrence F. Womack (Pacific Gas and Electric Company) to Steam Generator Management Program Utility Steering Committees, et al., "Steam Generator Management Program (SGMP) Interim Guidelines on In Situ Pressure Testing of Steam Generator Tubes," dated October 13, 2000.

generator E-089 along with the corresponding Table 3 category specifying the indication orientation/location.

Repair Methods, Number of Tubes Repaired and Effective Plugging Percentage

All tube plugging was performed using the design, materials, and installation methods of FRAMATOME Technologies, Inc. (FTI). A "roll" method was used for all tube plugs. Four tubes were "stabilized" in the vicinity of the top of the tubesheet using the design, materials, and installation methods of FTI.

All tube sleeving was performed using the welded sleeve design, materials, and installation methods of Westinghouse (formerly ABB Combustion Engineering). This repair method is specifically addressed in the San Onofre Unit 2 and 3 Technical Specifications.

Thirty-six tubes were plugged, and ninety-six tubes were sleeved in Steam Generator E-088 during the Cycle 11 refueling outage. A total of 724 tubes have been plugged, and to date, 180 sleeved tubes are in service. The design number of tubes is 9350 tubes and the sleeve to plug equivalency ratio is thirty-eight sleeves per plug. The effective plugging percentage for E-088 is 7.8%.

Fifty-seven tubes were plugged, and fifty-two tubes were sleeved in Steam Generator E-089 during the Cycle 11 refueling outage. A total of 765 tubes have been plugged, and to date, 103 sleeved tubes are in service. The design number of tubes is 9350 tubes and the sleeve to plug equivalency ratio is thirty-eight sleeves per plug. The effective plugging percentage for E-089 is 8.2%.

Causes And Corrective Actions

The degradation detected during this inspection remained within the Technical Specification category "C-3". There is no significant update since a previous report of causes and corrective actions for "C-3" category results. Thus, this portion of a previous report is provided below.

Actions have been taken to improve the secondary side chemistry environment for steam generator tubing in both Unit 2 steam generators. These actions have been reviewed by a panel of industry experts for application at SONGS. The expert panel concurs with these measures. The actions include:

1. Chemical cleaning of the entire tube bundle (full bundle) performed during the Cycle 9 refueling outage in December, 1996.

2. Addition of an inhibitor (titanium dioxide) for IGA/SCC immediately after the chemical cleaning for maximum crevice penetration potential.

3. Use of Ethanolamine (ETA) for pH control of the secondary fluids.

4. Boric acid addition in the secondary side to help reduce denting of the tube supports and stress corrosion cracking of tubing.

In addition, SCE reduced the reactor coolant temperature at the steam generator inlet (T-hot) by about 13°F. SCE expects this will reduce stress corrosion cracking of the tubing initiating from the inside diameter of the tubing. The first phase of this change, a reduction of about 4°F, was completed in January 1998. The final phase of this change, a reduction of an additional 9°F, was completed in February 1999.

Description of Tables and Appendices

Table 1	-	Summary of the Planned Inspection Program for the Unit 2 Cycle 11 (U2C11) Refueling Outage
Table 2	-	Summary of Significant Scope Expansion for the U2C11 Refueling Outage
Table 3	-	Number of Tubes Repaired and Active Degradation Mechanisms Found During the U2C11 Refueling Outage
Table 4	-	List of Nondestructive Examination (NDE) Techniques Utilized for Each Degradation Mechanism for the U2C11 Refueling Outage
Table 5	-	Summary of Results of In-Situ Pressure and Leak Testing for the U2C11 Refueling Outage
Table 6	-	U2C11 Refueling Outage Tubes Plugged, Steam Generator E-088
Table 7	-	U2C11 Refueling Outage Tubes Sleeved, Steam Generator E-088
Table 8	-	U2C11 Refueling Outage Tubes Plugged, Steam Generator E-089
Table 9	-	U2C11 Refueling Outage Tubes Sleeved, Steam Generator E-089
Appendix 1	-	Steam Generator Reference Information
Appendix 2	-	Legend for Appendices 3 and 4
Appendix 3	-	Inspection Summary, Steam Generator E-088
Appendix 4	-	Inspection Summary, Steam Generator E-089

TABLE 1 - Summary of the Planned Inspection Program for the Unit 2 Cycle 11 (U2C11) Refueling Outage

	Number of Tubes/Percentage of Tubes Steam Generator	
	E-088	E-089
Full length of tube with the bobbin probe (excluding sleeved regions)	8662 / 100%	8642 / 100%
Hot leg expansion transition at the top-of-tubesheet with the Plus-Point Probe	8577 / 100%	8590 / 100%
Cold leg expansion transition at the top-of-tubesheet with the Plus-Point Probe	4331 / 50%	4325 / 50%
U-bend regions of Rows 1, 2, and 3 with the mid-range frequency Plus-Point Probe	182 / 100%	184 / 100%
Sample of U-bend regions of Rows 1, 2, and 3 with the high frequency Plus-Point Probe	N/A	62 / 17%
Plus-Point Probe examinations of all hot leg tube support intersections at 01H through DBH with dents greater than, or equal to, 2 volts	3951 / 100%	3005 / 100%
Plus-Point Probe examination of all tube support intersections with quantified wear indications by the bobbin probe	246 / 100%	313 / 100%
Full length of sleeves with the Plus-Point Probe	85 / 100%	52 / 100%

TABLE 2 - Summary of Significant Scope Expansion for the U2C11 Refueling Outage

	Number of Tubes/Percentage of Tubes Steam Generator	
	E-088	E-089
Plus-Point Probe examinations of all tube support intersections with dents greater than, or equal to, 2 volts	387 / 100%	168 / 100%
U-bend regions of Rows 1, 2, and 3 with the high frequency Plus-Point Probe	182 / 100%	122 / 100%

TABLE 3 - Number of Tubes Repaired and Active Degradation Mechanisms Found During the U2C11 Refueling Outage

Category	Indication Orientation/Location	Steam Generator E-088	Steam Generator E-089
1	Tubes with axially oriented ID (initiated on the inside-diameter of the tubing wall) indications at tube support locations. (ID Axial @ Support)	3	3
2	Tubes with axially oriented OD (initiated on the outside-diameter of the tubing wall) indications at tube support locations. (OD Axial @ Support)	12	5
3	Tubes with axially oriented OD indications not associated with a tube support (freespan) . (OD Axial @ Freespan)	4	9
4	Tubes with circumferentially oriented ID indications near the expansion transition at the top of the hot leg tubesheet. (ID Circ @ TSH)	47	9
5	Tubes with circumferentially oriented OD indications near the expansion transition at the top of the hot leg tubesheet. (OD Circ @ TSH)	7	7
6	Tubes with axially oriented OD indications in the sludge pile region near the top of the hot leg tubesheet. (OD Axial @ Sludge Pile TSH)	10	14
7	Tubes with axially oriented OD indications near the expansion transition at the top of the hot leg tubesheet. (OD Axial @ TSH)	1	0
8	Tubes with axially oriented ID indications near the expansion transition at the top of the hot leg tubesheet. (ID Axial @ TSH)	1	0
9	Tubes with axially oriented ID indications below the inlet top-of-tubesheet. (ID Axial below TSH)	24	24
10	Tubes with circumferentially oriented ID indications below the inlet top-of-tubesheet. (ID Circ below TSH)	12	10
11	Tubes with indications of wear at tube support locations. (Wear @ Support)	11	22
12	Tubes with volumetric indications. (OD Vol @ Miscellaneous)	0	2
13	Miscellaneous preventative plugging (not an active degradation mechanism). (Prevent @ Miscellaneous)	0	4
	Total	132	109

TABLE 4 - List of Nondestructive Examination (NDE) Techniques Utilized for Each Degradation Mechanism for the U2C11 Refueling Outage

Indication Orientation/Location	Probe Type for Detection	Probe Type for Characterization
Axially oriented ID (initiated on the inside-diameter of the tubing wall) indications at tube support locations	Bobbin Plus Point (Note 1)	Plus Point Plus Point
Axially oriented OD (initiated on the outside-diameter of the tubing wall) indications at tube support locations	Bobbin Plus Point (Note 1)	Plus Point Plus Point
Axially oriented OD indications not associated with a tube support (freespan)	Bobbin	Plus Point
Circumferentially oriented ID indications near or below the expansion transition at the top of the hot leg tubesheet	Plus Point	Plus Point
Circumferentially oriented OD indications near the expansion transition at the top of the hot leg tubesheet	Plus Point	Plus Point
Axially oriented indications in the sludge pile region near the top of the hot leg tubesheet	Plus Point	Plus Point
Axially oriented ID indications near or below the expansion transition at the top of the hot leg tubesheet	Plus Point	Plus Point
Indications of wear at tube support locations	Bobbin	Plus Point

Note 1: Plus-Point technique is used at dents with greater than, or equal to, two volts.

TABLE 5 - Summary of Results of In-Situ Pressure and Leak Testing for the U2C11 Refueling Outage

Steam Generator E-088

TUBE AND EDDY CURRENT INFORMATION											IN-SITU TEST RESULTS			
REGION	TUBE INFORMATION			PLUS POINT DATA					BOBBIN DATA	SELECTION CRITERIA	GPM @ NOPD	GPM @ MSLB	GPM @ NOPD POST MSLB	PRESSURE 3xNOPD
	ROW	COL	LOCATION	LENGTH	VOLTS	Max. Depth %	PDA or Avg. Depth %	ORIENTATION	VOLTS					
EGGCRATE	24	62	07H + 0.09	1.37	0.43	39%	27.4% (AD)	OD AXIAL	0.26	-	0	0	0	5050
TUBESHEET	77	75	TSH - 0.09	0.26	0.73	95%	12.0% (PDA)	ID CIRC	N/A	L	0	0	0	5450
	62	98	TSH + 0.12	2.04	0.54	88%	49.9% (PDA)	OD CIRC	N/A	-	0	0	0	5450

Steam Generator E-089

TUBE AND EDDY CURRENT INFORMATION											IN-SITU TEST RESULTS			
REGION	TUBE INFORMATION			PLUS POINT DATA					BOBBIN DATA	SELECTION CRITERIA	GPM @ NOPD	GPM @ MSLB	GPM @ NOPD POST MSLB	PRESSURE 3xNOPD
	ROW	COL	LOCATION	LENGTH	VOLTS	Max. Depth %	PDA or Avg. Depth %	ORIENTATION	VOLTS					
EGGCRATE	71	73	07H + 0.51	0.57	0.79	54%	45.4% (AD)	ID AXIAL	0.92	-	0	0	0	5050
LOW ROW U-BEND	1	21	DBH + 5.90	N/A	2.4	N/A	N/A	GEOMETRY (GEO)	N/A	-	0	0	0	5050

NOTES: The SELECTION CRITERIA column indicates the EPRI In Situ Testing Guidelines' criteria that prompted selection.
P = Pressure testing for structural integrity criteria
L = Testing for criteria for postulation of accident-induced leakage integrity
GPM = Gallons per Minute
NOPD = Normal Operation Pressure Differential
MSLB = Main Steam Line Break Pressure Differential
N/A = Not Applicable
OD = Degradation initiated on the outside diameter of the tubing
ID = Degradation initiated on the inside diameter of the tubing
CIRC = Circumferential
PDA = Percent degraded area

TABLE 6 - SONGS U2C11 Refueling Outage Tubes Plugged
STEAM GENERATOR E-088

Row	Column	Reason for Plugging Tube (per Table 3)
37	11	OD Axial @ Support
91	25	OD Axial @ Freespan
24	46	ID Axial @ Support
28	48	OD Axial @ Support
2	54	ID Circ below TSH
24	62	OD Axial @ Support
22	68	Wear @ Support
37	73	ID Axial below TSH
41	75	Wear @ Support
77	75	ID Circ @ TSH
85	75	OD Axial @ Support
96	78	ID Circ @ TSH
54	80	Wear @ Support
130	80	OD Axial @ Support
85	83	OD Axial @ Support
143	85	Wear @ Support
52	86	Wear @ Support
54	88	ID Axial below TSH
137	89	OD Axial @ Support
80	90	OD Axial @ Freespan
146	90	Wear @ Support
53	93	Wear @ Support
48	96	Wear @ Support
50	96	Wear @ Support
62	98	OD Circ @ TSH
85	99	OD Axial @ Support
35	103	Wear @ Support
87	103	OD Axial @ Support
76	106	OD Axial @ Freespan
106	108	ID Axial @ Support

TABLE 6 - SONGS U2C11 Refueling Outage Tubes Plugged
STEAM GENERATOR E-088

Row	Column	Reason for Plugging Tube (per Table 3)
43	109	OD Axial @ Support
57	113	ID Axial @ Support
14	120	OD Axial @ Support
64	122	Wear @ Support
85	125	OD Axial @ Support
13	161	OD Axial @ Freespan

TABLE 7 - SONGS U2C11 Refueling Outage Tubes Sleeved
STEAM GENERATOR E-088

Row	Column	Reason for Sleeving Tube (per Table 3)
18	30	ID Axial below TSH
41	45	ID Circ @ TSH
34	46	ID Circ @ TSH
27	47	ID Circ @ TSH
4	48	ID Circ below TSH
5	51	ID Circ below TSH
9	51	ID Circ below TSH
17	51	ID Circ @ TSH
22	52	ID Circ @ TSH
42	52	ID Circ @ TSH
15	53	ID Circ below TSH
17	53	ID Axial below TSH
84	56	ID Circ @ TSH
20	58	ID Circ @ TSH
38	58	ID Axial below TSH
26	60	ID Axial below TSH
28	60	ID Axial below TSH
72	62	ID Circ @ TSH
62	64	ID Circ @ TSH
27	65	ID Axial below TSH
75	65	ID Circ @ TSH
60	66	OD Axial @ Sludge Pile TSH
40	68	ID Axial below TSH
33	69	ID Axial below TSH
77	69	ID Circ @ TSH
84	70	ID Circ @ TSH
97	71	ID Circ @ TSH
44	72	ID Axial below TSH
48	72	ID Axial below TSH
58	72	ID Axial below TSH

TABLE 7 - SONGS U2C11 Refueling Outage Tubes Sleeved
STEAM GENERATOR E-088

Row	Column	Reason for Sleeving Tube (per Table 3)
53	73	ID Axial below TSH
58	74	OD Circ @ TSH
64	76	OD Axial @ Sludge Pile TSH
80	76	ID Circ @ TSH
69	77	ID Circ @ TSH
48	78	ID Circ @ TSH
72	78	ID Circ @ TSH
63	79	OD Circ @ TSH
89	79	ID Circ @ TSH
91	79	ID Circ @ TSH
55	83	OD Axial @ Sludge Pile TSH
94	86	ID Circ @ TSH
69	87	OD Axial @ Sludge Pile TSH
54	90	ID Circ @ TSH
66	90	ID Circ @ TSH
99	91	ID Circ @ TSH
72	92	OD Axial @ Sludge Pile TSH
55	93	ID Axial below TSH
84	94	ID Circ @ TSH
54	96	ID Circ below TSH
69	97	OD Axial @ Sludge Pile TSH
54	98	ID Circ @ TSH
66	98	OD Axial @ Sludge Pile TSH
74	98	OD Circ @ TSH
65	101	OD Axial @ Sludge Pile TSH
73	101	ID Circ @ TSH
79	101	ID Circ @ TSH
42	102	ID Circ below TSH
46	102	ID Axial below TSH
70	102	ID Circ @ TSH
80	102	ID Circ @ TSH

TABLE 7 - SONGS U2C11 Refueling Outage Tubes Sleeved
STEAM GENERATOR E-088

Row	Column	Reason for Sleeving Tube (per Table 3)
39	103	ID Axial below TSH
41	105	ID Axial below TSH
63	107	OD Axial @ Sludge Pile TSH
24	108	OD Circ @ TSH
37	109	ID Axial below TSH
39	109	OD Axial @ Sludge Pile TSH
47	109	ID Circ @ TSH
79	109	ID Circ @ TSH
39	111	ID Axial @ TSH
43	111	ID Axial below TSH
49	111	OD Axial @ TSH
59	111	ID Circ below TSH
34	114	ID Axial below TSH
65	115	ID Axial below TSH
18	116	ID Circ @ TSH
46	120	OD Circ @ TSH
49	121	ID Circ below TSH
75	121	ID Circ @ TSH
42	124	OD Circ @ TSH
25	125	ID Circ @ TSH
41	125	ID Circ @ TSH
16	126	ID Circ @ TSH
95	127	ID Circ @ TSH
51	129	ID Circ @ TSH
24	130	ID Circ below TSH
44	130	ID Circ @ TSH
60	130	ID Circ @ TSH
14	132	ID Circ below TSH
26	132	ID Axial below TSH
40	132	ID Circ @ TSH
23	135	ID Circ @ TSH

TABLE 7 - SONGS U2C11 Refueling Outage Tubes Sleeved
STEAM GENERATOR E-088

Row	Column	Reason for Sleeving Tube (per Table 3)
26	136	ID Axial below TSH
7	145	ID Circ below TSH
14	150	ID Circ @ TSH
10	156	ID Circ @ TSH

TABLE 8 - SONGS U2C11 Refueling Outage Tubes Plugged
STEAM GENERATOR E-089

Row	Column	Reason for Plugging Tube (per Table 3)
45	7	Prevent @ Miscellaneous
25	17	OD Axial @ Freespan
1	21	Prevent @ Miscellaneous
30	28	OD Axial @ Freespan
9	29	ID Circ @ TSH
106	34	OD Axial @ Freespan
94	38	OD Axial @ Support
98	38	OD Axial @ Support
12	40	ID Axial below TSH
123	41	OD Vol @ Miscellaneous
8	44	OD Axial @ Support
60	48	ID Circ @ TSH
47	55	ID Axial @ Support
131	57	ID Axial below TSH
2	60	OD Axial @ Support
47	63	ID Axial @ Support
15	65	OD Axial @ Freespan
64	70	OD Axial @ Sludge Pile TSH
138	70	OD Vol @ Miscellaneous
41	71	Wear @ Support
71	73	ID Axial @ Support
145	73	Wear @ Support
44	76	Wear @ Support
47	79	Wear @ Support
48	82	Wear @ Support
59	83	Wear @ Support
147	83	Wear @ Support
58	84	Wear @ Support
57	85	Wear @ Support
145	85	Wear @ Support

TABLE 8 - SONGS U2C11 Refueling Outage Tubes Plugged
STEAM GENERATOR E-089

Row	Column	Reason for Plugging Tube (per Table 3)
56	86	Wear @ Support
59	87	Wear @ Support
147	87	Wear @ Support
54	88	Wear @ Support
70	88	Wear @ Support
57	89	Wear @ Support
51	91	Wear @ Support
55	93	Wear @ Support
57	93	ID Axial below TSH
72	94	Wear @ Support
57	95	Wear @ Support
42	100	Wear @ Support
78	102	ID Axial below TSH
36	108	ID Axial below TSH
36	110	ID Axial below TSH
5	113	OD Axial @ Freespan
68	114	OD Axial @ Freespan
91	121	ID Axial below TSH
28	124	OD Axial @ Freespan
77	125	Wear @ Support
1	127	ID Circ below TSH
103	133	OD Axial @ Support
10	136	ID Circ below TSH
9	141	OD Axial @ Freespan
3	145	Prevent @ Miscellaneous
103	147	OD Axial @ Freespan
3	157	Prevent @ Miscellaneous

TABLE 9 - SONGS U2C11 Refueling Outage Tubes Sleeved
STEAM GENERATOR E-089

Row	Column	Reason for Sleeving Tube (per Table 3)
16	24	ID Circ @ TSH
83	49	ID Circ @ TSH
8	52	ID Circ below TSH
28	52	OD Circ @ TSH
84	54	ID Circ @ TSH
65	57	OD Axial @ Sludge Pile TSH
62	58	ID Axial below TSH
26	60	ID Axial below TSH
11	63	OD Circ @ TSH
34	64	OD Axial @ Sludge Pile TSH
26	66	ID Axial below TSH
57	67	OD Axial @ Sludge Pile TSH
63	67	ID Circ @ TSH
44	68	OD Axial @ Sludge Pile TSH
58	70	OD Axial @ Sludge Pile TSH
78	82	ID Axial below TSH
56	84	OD Circ @ TSH
120	84	OD Circ @ TSH
83	89	ID Circ @ TSH
107	89	OD Circ @ TSH
64	92	OD Axial @ Sludge Pile TSH
63	93	OD Axial @ Sludge Pile TSH
64	96	ID Axial below TSH
64	98	OD Axial @ Sludge Pile TSH
78	98	ID Axial below TSH
54	102	ID Axial below TSH
41	105	ID Axial below TSH
34	106	ID Axial below TSH
38	106	ID Axial below TSH
56	106	OD Axial @ Sludge Pile TSH

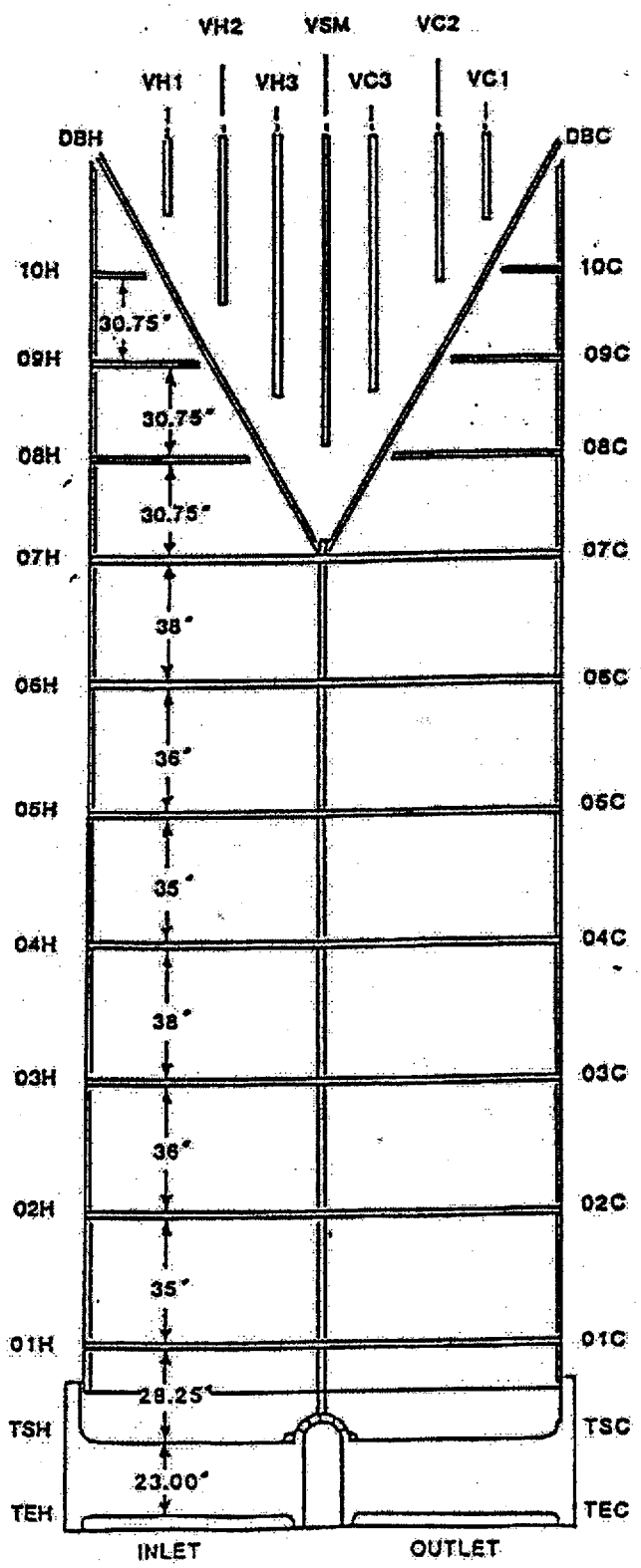
TABLE 9 - SONGS U2C11 Refueling Outage Tubes Sleeved
STEAM GENERATOR E-089

Row	Column	Reason for Sleeving Tube (per Table 3)
37	109	OD Axial @ Sludge Pile TSH
38	110	OD Axial @ Sludge Pile TSH
40	110	OD Axial @ Sludge Pile TSH
29	111	OD Circ @ TSH
21	113	OD Circ @ TSH
37	113	ID Axial below TSH
49	113	OD Axial @ Sludge Pile TSH
59	113	ID Axial below TSH
48	114	ID Axial below TSH
62	116	ID Axial below TSH
68	118	ID Axial below TSH
20	120	ID Circ below TSH
82	122	ID Circ @ TSH
8	124	ID Circ below TSH
9	125	ID Circ below TSH
46	126	ID Circ @ TSH
5	127	ID Circ below TSH
11	129	ID Circ below TSH
7	133	ID Circ below TSH
78	136	ID Axial below TSH
19	139	ID Circ below TSH
8	146	ID Axial below TSH

Appendix 1

Steam Generator Reference Information

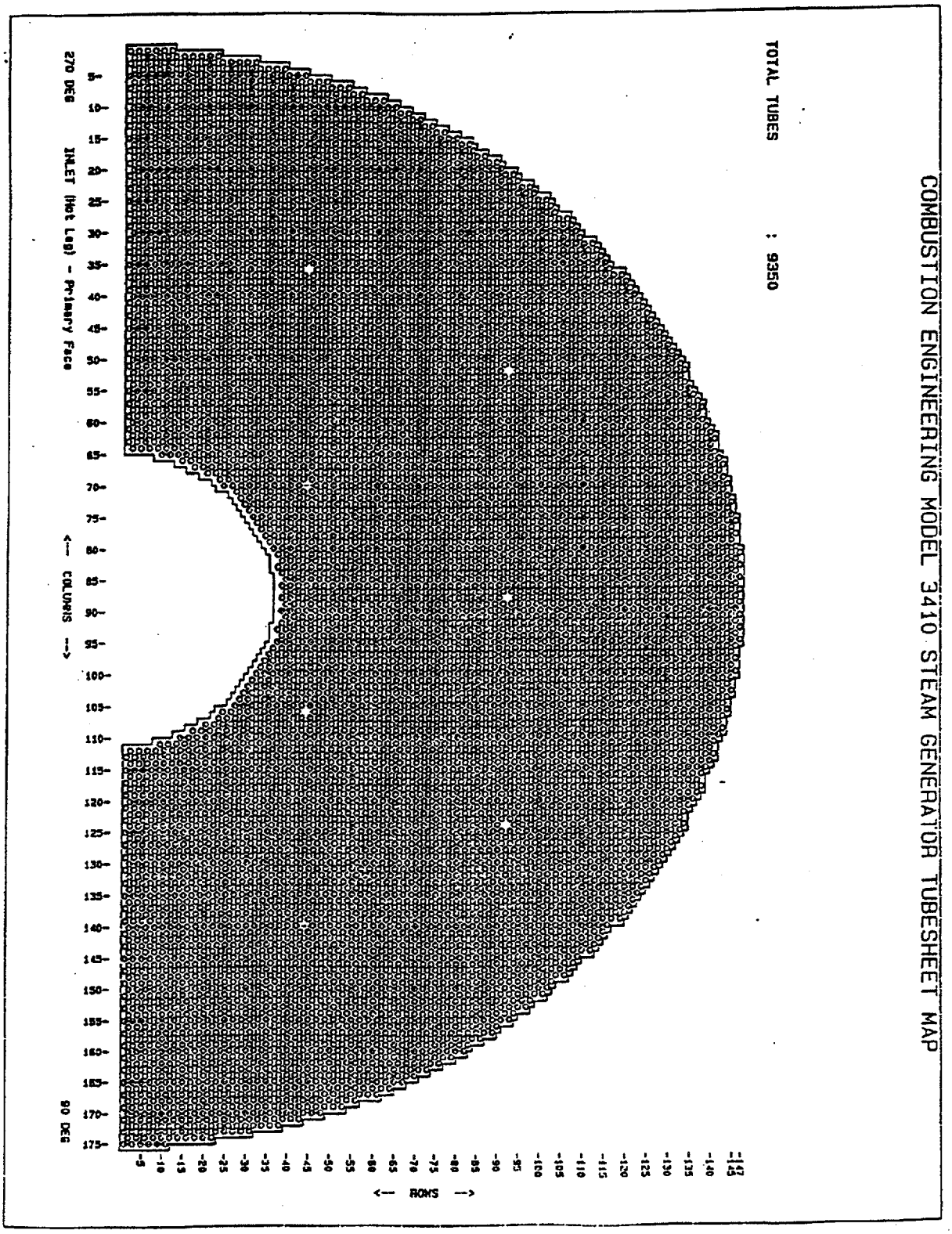
CE MODEL 3410 TUBE SUPPORT DRAWING



CLARIFICATION OF TUBING/SUPPORT INTERFACES

ABOVE THE 7TH FULL EGGCRATE SUPPORT

ROW(S)	TUBING/SUPPORT INTERFACES
120-147	08H,09H,10H,DBH,VH1,VH2,VH3,VSM,VC3,VC2,VC1,DBC,10C,09C,08C
115-119	08H,09H DBH,VH1,VH2,VH3,VSM,VC3,VC2,VC1,DBC 09C,08C
84-114	08H,09H DBH VH2,VH3,VSM,VC3,VC2 DBC 09C,08C
83	08H DBH VH2,VH3,VSM,VC3,VC2 DBC 08C
51-82	08H DBH VH3,VSM,VC3, DBC 08C
49-50	08H DBH VSM DBC 08C
19-48	DBH VSM DBC
1-18	DBH DBC


COMBUSTION ENGINEERING MODEL 3410 STEAM GENERATOR TUBESHEET MAP
TOTAL TUBES : 9350
270 DEG
INLET (Hot Leg) - Primary Face
90 DEG
<-- COLUMNS -->
<-- ROWS -->

Appendix 2

Legend for Appendices 3 and 4

List of Abbreviations and Format Used to Describe
the Indications from Rotating Probe Testing

"I-Code" Abbreviations	Explanation of the Abbreviations
SCI	Single Circumferential Indication
MCI	Multiple Circumferential Indications
SAI	Single Axial Indication
MAI	Multiple Axial Indications
MMI	Mixed Mode Indications
SVI	Single Volumetric Indication (i.e., no special axial or circumferential aspect)
MVI	Multiple Volumetric Indication (i.e., no special axial or circumferential aspect)

Format

In Appendices 3 and 4, a single line of data is associated with each individual rotating probe indication. Below is a descriptive example of the format.

SG	ROW	COL	VOLTS	DEG	PCT	CHAN	LOCATION	FROM	TO	EXTENT	UTIL 1	UTIL 2
11	I 45	I 59	+P VOLTS	+P DEG	CODE	CH #	LOCATION	+0.01		TSHTSH	PAN VOLTS	+ P LEN

1. All "I-code" indications require a single line entry. The example above displays the form of a Resolution report line. The VOLTS field contains the Plus-point P-to-P voltage of the largest, most representative response. The DEG field contains the corresponding phase angle. The PCT field contains the appropriate 3-letter code. The CHAN field contains the reporting channel (i.e. the appropriate 300kHz Plus-point channel). The LOCATION field contains the referenced landmark. The FROM field contains the axial distance from the landmark to the response measured above. The EXTENT field indicates the test extent. The UTIL 1 field contains the 300kHz 0.115" pancake P-to-P voltage of the largest, most representative response. The UTIL 2 field contains the measured Plus-point length of the indication. Exceptions to this general guidance are in paragraphs 2 and 3 below.

2. For axial indications of extended length, the location should be ranged in the FROM and TO fields. If the range of such an indication includes any part of a support structure, it should be referenced from that landmark.

3. For "I-code" indications which have both axial and circumferential extent (i.e. SVI, MVI, and MMI) the location should be ranged in the FROM and TO fields and the UTIL 2 field should contain the circumferential length.

Appendix 3

Inspection Summary

Steam Generator E-088

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

NOV. 8,2000 8:44

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL

PAGE 1

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
1	50	8	0.35	141	14	P 2	VSM	+0.84	TEHTEC			H1748	reso	88C00005	C	600UL
2	52	8	0.39	38	14	P 2	VH3	+0.73	TEHTEC			T9924	seco	88C00004	C	600UL
3	13	9	0.47	78	18	P 2	05H	+0.00	TEHTEC			H1748	reso	88C00005	C	600UL
4	52	10	0.36	35	13	P 2	VH3	+0.68	TEHTEC			T9924	seco	88C00004	C	600UL
5	31	11	0.35	70	11	P 3	DBH	+1.35	TEHTEC			V1371	prim	88C00004	C	600UL
6	37	11	0.37	122	MAI	2	06H	-0.45	06H06H	0.0	0.33	M0554	reso	88H00237	H	600PP
7			0.16	132	SAI	2	06H	+0.78	06H06H	0.27	0.30	M0554	reso	88H00237	H	600PP
8	63	11	0.36	103	13	P 2	VH3	-0.58	TEHTEC			V1371	prim	88C00004	C	600UL
9	67	11	0.42	65	15	P 2	VH3	-0.60	TEHTEC			V1371	prim	88C00004	C	600UL
10	54	12	0.23	125	9	P 2	VH3	-0.56	TEHTEC			V1371	prim	88C00004	C	600UL
11	39	13	0.37	138	14	P 2	VSM	+0.42	TEHTEC			T9924	seco	88C00004	C	600UL
12	24	14	0.31	89	11	P 2	VSM	+0.62	TEHTEC			B3170	prim	88C00007	C	600UL
13	43	19	0.62	130	21	P 2	02H	+0.97	TEHTEC			M0554	reso	88C00006	C	600UL
14	16	20	0.28	140	11	P 3	DBC	+0.51	TEHTEC			W9658	seco	88C00009	C	600UL
15	70	20	0.43	108	16	P 2	VC3	+0.73	TEHTEC			V1371	prim	88C00008	C	600UL
16	43	21	0.27	85	11	P 2	VSM	+0.88	TEHTEC			L9168	prim	88C00008	C	600UL
17	78	22	0.79	129	25	P 2	VC3	-0.83	TEHTEC			D2003	prim	88C00070	C	600UL
18	81	23	0.35	86	12	P 3	DBC	+1.86	TEHTEC			D2003	prim	88C00070	C	600UL
19	35	25	0.60	124	20	P 2	VSM	-0.75	TEHTEC			B5926	seco	88C00068	C	600UL
20	91	25	0.15	122	SAI	2	06H	+24.53	06H07H	0.00	0.26	H1748	reso	88H00239	H	600PP
[illegible]	102	26	0.38	146	15	P 2	06H	+0.87	TEHTEC			D2003	prim	88C00070	C	600UL
[illegible]	18	30	1.58	27	SAI	2	TSH	-4.81	TSHTSH	0.73	0.35	E4963	reso	88H00183	H	600PP
23	106	30	0.51	126	21	P 2	06H	+0.85	TEHTEC			L9168	prim	88C00073	C	600UL
24	94	32	0.52	97	21	P 2	VH2	-0.81	TEHTEC			L9168	prim	88C00073	C	600UL
25	77	33	0.49	96	17	P 2	VSM	+1.04	TEHTEC			D5695	seco	88C00072	C	600UL
26	92	36	0.53	84	19	P 2	VH2	-0.54	TEHTEC			R8278	seco	88C00074	C	600UL
27			0.27	68	11	P 2	VSM	+0.88	TEHTEC			R8278	seco	88C00074	C	600UL
28	108	36	0.24	69	9	P 3	DBC	-1.51	TEHTEC			R8278	seco	88C00074	C	600UL
29	89	37	0.36	123	14	P 2	VH2	-0.54	TEHTEC			L3025	prim	88C00074	C	600UL
30			0.27	97	11	P 2	VH2	+0.60	TEHTEC			L3025	prim	88C00074	C	600UL
31	111	37	0.39	25	16	P 3	DBH	+1.59	TEHTEC			L9168	prim	88C00075	C	600UL
32	113	37	0.23	147	9	P 2	VH2	-0.91	TEHTEC			M7262	reso	88C00074	C	600UL
33	84	38	0.19	109	7	P 2	09C	-1.11	TEHTEC			L3025	prim	88C00074	C	600UL
34	96	38	0.25	65	10	P 2	VH2	-0.78	TEHTEC			R8278	seco	88C00074	C	600UL
35	100	38	0.25	67	10	P 2	VC2	+0.88	TEHTEC			R8278	seco	88C00074	C	600UL
36	120	38	0.21	132	8	P 3	DBC	+1.83	TEHTEC			R8278	seco	88C00074	C	600UL
37	81	39	0.27	63	11	P 2	VSM	+0.85	TEHTEC			L3025	prim	88C00074	C	600UL
38	93	39	0.22	113	8	P 2	VC3	+0.95	TEHTEC			L3025	prim	88C00074	C	600UL
39	113	39	0.36	110	13	P 3	DBH	+1.79	TEHTEC			L3025	prim	88C00074	C	600UL
40	121	39	0.28	127	11	P 2	VH1	-0.67	TEHTEC			L3025	prim	88C00074	C	600UL
41			0.40	74	15	P 2	03C	-0.93	TEHTEC			L3025	prim	88C00074	C	600UL
42	92	40	0.36	81	14	P 2	VSM	-0.73	TEHTEC			L3025	prim	88C00074	C	600UL
43	96	40	0.31	86	12	P 2	VC2	+0.80	TEHTEC			R8278	seco	88C00074	C	600UL
44	77	41	0.23	79	9	P 2	VSM	+0.78	TEHTEC			L3025	prim	88C00074	C	600UL
45	85	41	0.30	140	12	P 2	VH2	-0.80	TEHTEC			R8278	seco	88C00074	C	600UL
46			0.25	88	10	P 2	VH2	+0.80	TEHTEC			R8278	seco	88C00074	C	600UL
[illegible]	113	41	0.48	107	18	P 2	VH2	-0.51	TEHTEC			L3025	prim	88C00074	C	600UL
[illegible]	121	41	0.40	114	15	P 2	VH1	+0.76	TEHTEC			L3025	prim	88C00074	C	600UL
49	123	41	0.33	137	13	P 2	VH1	-0.69	TEHTEC			L3025	prim	88C00074	C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL

NOV. 8,2000 8:44

PAGE 2

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION		EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
50	116	42	0.20	96	8	P 2	VSM		+0.93	TEHTEC			R8278	seco	88C00074	C	600UL
51	71	43	0.39	62	17	P 2	01H		+0.84	TEHTEC			M0554	reso	88C00075	C	600UL
52	85	43	0.23	124	9	P 2	VH2		-0.61	TEHTEC			R8278	seco	88C00074	C	600UL
53	18	44	0.26	80	10	P 3	DBH		-1.75	TEHTEC			T6144	seco	88C00085	C	600UL
54	41	45	0.49	23	SCI	P 1	TSH		-0.11	TSHTSH	0.00	0.20	M7262	reso	88H00192	H	600PP
55	24	46	0.28	22	SAI	2	05H		+0.52	05H05H	.20	.16	P4578	reso	88H00232	H	600PP
56			0.36	117	13	P 2	05H		+0.60	TEHTEC			M7262	reso	88C00086	C	600UL
57			0.33	103	SAI	2	06H		-0.27	06H06H	.49	.22	P4578	reso	88H00232	H	600PP
58			0.56	117	19	P 2	06H		-0.11	TEHTEC			M7262	reso	88C00086	C	600UL
59	34	46	0.32	21	SCI	P 1	TSH		-0.08	TSHTSH	0.00	0.20	M7262	reso	88H00191	H	600PP
60	27	47	0.42	22	SCI	P 1	TSH		-0.18	TSHTSH	0.57	0.16	G4841	reso	88H00194	H	600PP
61	37	47	0.48	126	17	P 2	VSM		+0.92	TEHTEC			B2265	prim	88C00086	C	600UL
62	129	47	0.63	144	22	P 2	VH3		-0.89	TEHTEC			W9213	seco	88C00078	C	600UL
63	4	48	0.93	17	SCI	P 1	TSH		-5.66	TSHTSH	0.57	0.19	G4841	reso	88H00194	H	600PP
64	28	48	0.44	117	SAI	2	07H		+0.48	07H07H	0.0	0.26	M0554	reso	88H00234	H	600PP
65	66	48	0.47	133	17	P 2	VSM		-0.72	TEHTEC			T6144	seco	88C00085	C	600UL
66	96	50	0.42	67	16	P 2	VC2		+0.86	TEHTEC			B2153	seco	88C00078	C	600UL
67	5	51	0.55	20	SCI	P 1	TSH		-4.85	TSHTSH	0.58	0.17	M7262	reso	88H00052	H	600PP
68	9	51	0.39	25	SCI	P 1	TSH		-6.89	TSHTSH	0.32	0.17	M7262	reso	88H00052	H	600PP
69	17	51	0.55	25	SCI	P 1	TSH		-0.04	TSHTSH	0.34	0.11	H7791	reso	88H00053	H	600PP
	43	51	0.79	125	26	P 2	VSM		+0.88	TEHTEC			V1371	prim	88C00049	C	600UL
	89	51	0.35	122	14	P 2	VH3		+0.92	TEHTEC			W9213	seco	88C00090	C	600UL
72	119	51	0.46	131	18	P 2	VH2		-0.58	TEHTEC			B8090	reso	88C00090	C	600UL
73	22	52	0.40	21	SCI	P 1	TSH		-0.08	TSHTSH	0.0	0.18	M7262	reso	88H00053	H	600PP
74	42	52	0.47	17	SCI	P 1	TSH		-0.14	TSHTSH	.23	.17	P4578	reso	88H00106	H	600PP
75	88	52	0.52	18	18	P 2	VH2		+0.87	TEHTEC			P4578	reso	88C00089	C	600UL
76	15	53	1.20	30	SCI	P 1	TSH		-6.60	TSHTSH	1.29	0.32	M7262	reso	88H00053	H	600PP
77	17	53	1.06	27	SCI	P 1	TSH		-5.52	TSHTSH	1.13	0.27	H7791	reso	88H00052	H	600PP
78			0.65	18	SAI	2	TSH		-1.98	TSHTSH	0.56	0.19	H7791	reso	88H00052	H	600PP
79	125	53	0.30	145	12	P 2	VH1		-0.75	TEHTEC			L9168	prim	88C00090	C	600UL
80	2	54	2.06	35	SCI	P 1	TSH		-5.55	TSHTSH	2.45	0.83	H1748	reso	88H00051	H	600PP
81	82	54	0.78	128	25	P 2	VH3		-0.61	TEHTEC			R8278	seco	88C00089	C	600UL
82	21	55	0.28	128	13	P 3	DBH		+1.39	TEHTEC			M7262	reso	88C00053	C	600UL
83	119	55	0.30	73	14	P 3	DBH		+1.66	TEHTEC			P1465	prim	88C00092	C	600UL
84	125	55	0.25	140	11	P 2	VH1		-0.83	TEHTEC			D2003	prim	88C00091	C	600UL
85	133	55	0.28	132	12	P 2	VH1		-0.82	TEHTEC			D2003	prim	88C00091	C	600UL
86	84	56	0.65	27	SCI	P 1	TSH		-0.15	TSHTSH	0.76	0.24	E4963	reso	88H00102	H	600PP
87	132	56	0.29	118	12	P 2	VH1		-0.82	TEHTEC			D2003	prim	88C00091	C	600UL
88	20	58	0.22	20	SCI	P 1	TSH		-0.04	TSHTSH	0.00	0.18	H1748	reso	88H00045	H	600PP
89	38	58	0.40	16	SAI	2	TSH		-0.85	TSHTSH	0.60	0.35	C0360	reso	88H00044	H	600PP
90	44	58	0.37	146	15	P 2	VSM		+0.80	TEHTEC			T6144	seco	88C00054	C	600UL
91	119	59	0.49	103	19	P 2	09H		+0.00	TEHTEC			M7262	reso	88C00092	C	600UL
92			0.37	76	15	P 2	VH1		-0.62	TEHTEC			B8090	reso	88C00092	C	600UL
93	125	59	0.27	155	11	P 2	VH1		-0.78	TEHTEC			D2003	prim	88C00091	C	600UL
94	26	60	0.51	16	SAI	2	TSH		-0.36	TSHTSH	0.50	0.20	H1748	reso	88H00045	H	600PP
95	28	60	1.93	23	SAI	2	TSH		-4.10	TSHTSH	2.25	1.2	H1748	reso	88H00044	H	600PP
	118	60	0.25	154	9	P 2	VC1		-0.75	TEHTEC			E4963	reso	88C00126	C	600UL
9	128	60	0.46	117	19	P 2	10H		-1.00	TEHTEC			G4841	reso	88C00092	C	600UL
98	37	61	0.45	134	17	P 2	VSM		+0.97	TEHTEC			D3858	reso	88C00059	C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 8,2000 8:44
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL PAGE 3

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
99	117	61	0.26	77	9	P 2	VH2	+0.80	TEHTEC			B2027	prim	88C00093	C	600UL
100	133	61	0.25	109	9	P 2	VH1	-0.85	TEHTEC			B2027	prim	88C00093	C	600UL
101	24	62	0.43	92	SAI	2	07H	+0.09	07H07H	0.31	1.37	W3386	reso	88H00160	H	600PP
102	72	62	0.40	17	SCI	P 1	TSH	-0.06	TSHTSH	0.0	0.18	W3386	reso	88H00100	H	600PP
103	92	62	0.45	57	16	P 2	VH2	+0.84	TEHTEC			B2027	prim	88C00093	C	600UL
104	120	62	0.34	122	12	P 2	VH1	-1.11	TEHTEC			B2027	prim	88C00093	C	600UL
105			0.25	137	9	P 2	VH1	+0.33	TEHTEC			B2027	prim	88C00093	C	600UL
106	126	62	0.65	100	24	P 2	10H	-0.96	TEHTEC			L3025	prim	88C00094	C	600UL
107	23	63	0.46	108	16	P 2	01H	+1.06	TEHTEC			R8278	seco	88C00058	C	600UL
108	129	63	0.22	143	4	P 2	10H	-0.06	TEHTEC			T4180	seco	88C00093	C	600UL
109	62	64	0.38	25	SCI	P 1	TSH	-0.10	TSHTSH	0.91	0.21	H7791	reso	88H00041	H	600PP
110	124	64	0.52	44	17	P 2	10H	-0.92	TEHTEC			T4180	seco	88C00093	C	600UL
111	27	65	4.41	38	MCI	P 1	TSH	-6.02	TSHTSH	5.38	0.24	H7791	reso	88H00040	H	600PP
112			0.44	11	SAI	2	TSH	-0.60	TSHTSH	0.80	0.10	H7791	reso	88H00040	H	600PP
113	75	65	0.29	29	SCI	P 1	TSH	-0.16	TSHTSH	0.79	0.21	W3386	reso	88H00099	H	600PP
114	93	65	0.29	145	11	P 2	VH2	-0.91	TEHTEC			B2027	prim	88C00093	C	600UL
115	123	65	0.40	129	18	P 3	DBH	+0.35	TEHTEC			G4841	reso	88C00094	C	600UL
116	141	65	0.35	140	14	P 2	08C	+0.71	TEHTEC			T6144	seco	88C00130	C	600UL
117	50	66	0.44	86	17	P 2	08C	+1.68	STHTEC	LAR		M7262	reso	88C00061	C	600UL
118	60	66	0.19	83	SAI	2	TSH	+1.12	TSHTSH	0.30	0.38	H7791	reso	88H00041	H	600PP
	85	67	0.36	76	13	P 2	VH2	-0.48	TEHTEC			B2027	prim	88C00093	C	600UL
	123	67	0.31	132	14	P 2	VH1	-0.80	TEHTEC			D2003	prim	88C00096	C	600UL
121	137	67	0.24	153	11	P 2	VH1	-0.78	TEHTEC			D2003	prim	88C00096	C	600UL
122	22	68	1.10	66	32	P 2	VSM	+0.84	TEHTEC			D3858	reso	88C00061	C	600UL
123	40	68	0.65	21	SAI	2	TSH	-0.90	TSHTSH	1.05	0.25	H7791	reso	88H00036	H	600PP
124	98	68	0.45	49	18	P 2	VH2	-0.71	TEHTEC			E4963	reso	88C00096	C	600UL
125			0.42	148	17	P 2	VC2	+0.86	TEHTEC			E4963	reso	88C00096	C	600UL
126	33	69	0.61	22	SAI	2	TSH	-0.26	TSHTSH	0.54	0.12	H7791	reso	88H00036	H	600PP
127	77	69	0.40	24	SCI	P 1	TSH	-0.07	TSHTSH	0.00	0.19	M7262	reso	88H00096	H	600PP
128	72	70	0.43	108	18	P 2	VC3	-0.53	TEHTEC			W9658	seco	88C00096	C	600UL
129	84	70	0.35	26	MCI	P 1	TSH	-0.05	TSHTSH	0.00	0.39	M7262	reso	88H00096	H	600PP
130	130	70	0.50	127	20	P 2	VH1	-0.80	TEHTEC			D2003	prim	88C00096	C	600UL
131	33	71	0.38	154	18	P 3	DBC	-1.31	TEHTEC			D3858	reso	88C00061	C	600UL
132	49	71	0.33	150	13	P 2	VSM	-0.80	TEHTEC			D3858	reso	88C00061	C	600UL
133	97	71	0.40	20	SCI	P 1	TSH	-0.09	TSHTSH	0.00	0.18	M7262	reso	88H00096	H	600PP
134	123	71	0.30	128	13	P 2	VH1	-0.70	TEHTEC			L9168	prim	88C00098	C	600UL
135	34	72	0.53	103	23	P 3	DBC	+1.21	TEHTEC			D3858	reso	88C00061	C	600UL
136	44	72	0.56	15	SAI	2	TSH	-1.65	TSHTSH	0.42	0.17	C0360	reso	88H00035	H	600PP
137	48	72	0.25	11	SAI	2	TSH	-4.05	TSHTSH	0.00	0.17	C0360	reso	88H00035	H	600PP
138	58	72	0.65	18	SAI	2	TSH	-2.42	TSHTSH	0.82	0.13	H7791	reso	88H00034	H	600PP
139	120	72	0.68	87	23	P 2	09C	-1.07	TEHTEC			P1465	prim	88C00097	C	600UL
140	142	72	0.58	54	20	P 3	DBC	+1.58	TEHTEC			C4330	prim	88C00130	C	600UL
141	37	73	0.58	18	SAI	2	TSH	-5.20	TSHTSH	0.61	0.14	C0360	reso	88H00035	H	600PP
142			1.28	89	38	P 3	DBH	-1.49	TEHTEC			D3858	reso	88C00061	C	600UL
143	41	73	0.34	130	14	P 2	VSM	+0.87	TEHTEC			D2003	prim	88C00061	C	600UL
144	45	73	0.32	131	15	P 3	DBC	-1.36	STHTEC			D3858	reso	88C00061	C	600UL
	53	73	0.34	11	SAI	2	TSH	-1.01	TSHTSH	0.66	0.13	H7791	reso	88H00034	H	600PP
	73	73	0.57	123	21	P 2	VSM	+0.92	TEHTEC			T0854	seco	88C00099	C	600UL
147	89	73	0.28	76	12	P 2	VC2	-1.18	TEHTEC			T0854	seco	88C00099	C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL

NOV. 8,2000 8:44

PAGE 4

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE SIZE
148	129	73	0.33	148	14	P 2	VH1	-0.76	TEHTEC			B3170	prim	88C00099		C	600UL
149	133	73	0.34	140	15	P 2	VH1	-0.78	TEHTEC			B3170	prim	88C00099		C	600UL
150	145	73	0.84	92	27	P 3	DBH	+2.07	TEHTEC			C4330	prim	88C00130		C	600UL
151	46	74	0.96	112	29	P 2	VSM	-0.69	TEHTEC			M7262	reso	88C00062		C	600UL
152			0.49	63	18	P 2	VSM	+0.81	TEHTEC			M7262	reso	88C00062		C	600UL
153	58	74	0.14	128	SCI	P 1	TSH	-0.02	TSHTSH	0	0.18	R5555	reso	88H00034		H	600PP
154	98	74	0.27	153	12	P 2	VC2	+0.75	TEHTEC			B3170	prim	88C00099		C	600UL
155	120	74	0.27	120	11	P 2	10H	-1.10	TEHTEC			M7262	reso	88C00097		C	600UL
156	130	74	0.77	91	26	P 2	10H	-1.02	TEHTEC			B3170	prim	88C00099		C	600UL
157	136	74	0.55	105	20	P 2	10H	-1.00	TEHTEC			C4330	prim	88C00097		C	600UL
158	138	74	0.31	54	14	P 2	VH1	-0.75	TEHTEC			B3170	prim	88C00099		C	600UL
159	41	75	1.47	76	38	P 3	DBC	+1.38	STHTEC			R8278	seco	88C00063		C	600UL
160	43	75	0.49	124	18	P 2	VSM	+0.89	TEHTEC			B2027	prim	88C00062		C	600UL
161	45	75	0.91	77	29	P 3	DBH	-1.70	TEHTEC			R8278	seco	88C00063		C	600UL
162			0.76	138	26	P 3	DBC	+1.01	TEHTEC			E4963	reso	88C00063		C	600UL
163	49	75	0.36	92	15	P 3	DBH	-1.70	TEHTEC			R8278	seco	88C00063		C	600UL
164	77	75	0.73	31	SCI	P 1	TSH	-0.09	TSHTSH	1.03	0.26	M7262	reso	88H00096		H	600PP
165	79	75	0.42	99	16	P 2	VH3	+0.81	TEHTEC			T0854	seco	88C00099		C	600UL
166	85	75	0.49	78	18	P 2	09C	+1.24	TEHTEC			H1748	reso	88C00097		C	600UL
167			0.20	101	SAI	2	09C	+1.41	09CDBC	0.18	0.36	W3386	reso	88C00194		C	600PP
[illegible]	121	75	0.32	134	12	P 2	VH1	-0.86	TEHTEC			G4841	reso	88C00126		C	600UL
[illegible]			0.25	139	11	P 2	VH1	-0.62	TSHTEC			H1748	reso	88C00097		C	600UL
170	125	75	0.59	120	21	P 2	10H	-0.91	TEHTEC			C4330	prim	88C00097		C	600UL
171	127	75	0.30	147	13	P 2	VH1	-0.82	TEHTEC			B3170	prim	88C00099		C	600UL
172			0.31	143	14	P 2	VH1	+0.88	TEHTEC			B3170	prim	88C00099		C	600UL
173	131	75	0.29	139	13	P 2	VH1	-0.86	TEHTEC			B3170	prim	88C00099		C	600UL
174	133	75	0.46	104	14	P 3	DBH	+1.98	TEHTEC			M7262	reso	88C00097		C	600UL
175	145	75	0.61	87	21	P 3	DBH	+2.05	TEHTEC			B8090	reso	88C00130		C	600UL
176			0.32	148	11	P 2	VH1	-0.84	TEHTEC			C4330	prim	88C00130		C	600UL
177	46	76	0.83	15	28	P 3	DBH	+1.78	TEHTEC			R8278	seco	88C00063		C	600UL
178	50	76	0.65	121	24	P 3	DBC	-1.33	TEHTEC			R8278	seco	88C00063		C	600UL
179	54	76	0.28	137	12	P 3	DBC	-1.24	TEHTEC			R8278	seco	88C00063		C	600UL
180	64	76	0.25	104	MAI	2	TSH	+0.71	TSHTSH	0.17	0.35	H1748	reso	88H00033		H	600PP
181	80	76	0.61	26	SCI	P 1	TSH	-0.12	TSHTSH	0.52	0.41	M7262	reso	88H00096		H	600PP
182	124	76	0.33	129	14	P 2	VH1	-0.78	TEHTEC			K3270	seco	88C00103		C	600UL
183	51	77	0.56	143	21	P 3	DBC	-1.51	TEHTEC			R8278	seco	88C00063		C	600UL
184	69	77	0.39	25	SCI	P 1	TSH	-0.01	TSHTSH	0.30	0.25	H1748	reso	88H00032		H	600PP
185	123	77	0.36	127	14	P 2	VH2	-0.80	TEHTEC			B4014	prim	88C00101		C	600UL
186	131	77	0.61	29	21	P 3	DBH	+2.00	TEHTEC			V1371	prim	88C00100		C	600UL
187			0.35	117	15	P 2	VH1	-0.85	TEHTEC			E4963	reso	88C00100		C	600UL
188	48	78	0.61	18	SCI	P 1	TSH	-0.09	TSHTSH	0.39	0.19	E4963	reso	88H00030		H	600PP
189	72	78	0.36	20	SCI	P 1	TSH	-0.05	TSHTSH	0.89	0.22	M7262	reso	88H00095		H	600PP
190	90	78	0.59	98	20	P 2	03H	-1.14	TEHTEC			G7112	seco	88C00104		C	600UL
191	96	78	0.41	26	SCI	P 1	TSH	-0.04	TSHTSH	0.60	0.19	M7262	reso	88H00094		H	600PP
192			0.17	82	SVI	2	TSC	+4.69 TO+5.22	TSC01C	0.79	0.53	G4841	reso	88C00194		C	600PP
193	134	78	0.39	127	14	P 2	VH1	-0.80	TEHTEC			V1371	prim	88C00126		C	600UL
[illegible]			0.24	117	9	P 2	VH1	+0.91	TEHTEC			V1371	prim	88C00126		C	600UL
[illegible]	138	78	0.43	102	15	P 2	VH1	-0.75	TEHTEC			V1371	prim	88C00126		C	600UL
196			0.28	90	10	P 2	VH1	+0.97	TEHTEC			V1371	prim	88C00126		C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 8,2000 8:44
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL PAGE 5

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
197	51	79	0.45	90	15	P 3	DBC	-2.00	TEHTEC			B2153	seco	88C00064	C	600UL
198	63	79	0.19	103	SCI	P 1	TSH	+0.14	TSHTSH	0.47	0.29	E4963	reso	88H00031	H	600PP
199	89	79	0.38	23	SCI	P 1	TSH	-0.08	TSHTSH	0.00	0.17	M7262	reso	88H00094	H	600PP
200	91	79	0.46	18	SCI	P 1	TSH	-0.16	TSHTSH	0.36	0.16	M7262	reso	88H00095	H	600PP
201	119	79	0.46	120	17	P 3	DBH	+1.60	TEHTEC			B8090	reso	88C00105	C	600UL
202	141	79	0.33	146	13	P 2	VC1	+0.95	TEHTEC			T6144	seco	88C00130	C	600UL
203			0.87	85	28	P 3	DBC	+1.63	TEHTEC			T6144	seco	88C00130	C	600UL
204	54	80	1.35	87	36	P 3	DBC	-2.00	TEHTEC			V1371	prim	88C00065	C	600UL
205	64	80	0.45	111	15	P 3	DBH	+1.83	TEHTEC			L9168	prim	88C00124	C	600UL
206	80	80	0.32	126	13	P 2	VSM	-0.64	TEHTEC			B2027	prim	88C00104	C	600UL
207	120	80	0.31	119	10	P 3	DBH	-1.86	TEHTEC			C4330	prim	88C00104	C	600UL
208	130	80	0.26	94	SAI	2	04H	-0.31	04H04H	0.0	0.38	M0554	reso	88H00243	H	600PP
209	144	80	0.41	129	16	P 3	DBH	+2.00	TEHTEC			T6144	seco	88C00130	C	600UL
210	53	81	0.77	96	24	P 3	DBH	-1.26	TEHTEC			W3386	reso	88C00064	C	600UL
211	135	81	0.34	133	14	P 2	VH1	-0.79	TEHTEC			R5555	reso	88C00104	C	600UL
212	145	81	0.43	146	16	P 2	VH1	-0.91	TEHTEC			T6144	seco	88C00130	C	600UL
213			0.80	97	26	P 3	DBC	-1.42	TEHTEC			T6144	seco	88C00130	C	600UL
214	74	82	0.42	138	19	P 2	VSM	-0.89	TEHTEC			L3025	prim	88C00105	C	600UL
215			0.74	132	28	P 2	VSM	+0.89	TEHTEC			M0155	seco	88C00105	C	600UL
216	142	82	0.52	115	18	P 3	DBC	-0.24	TEHTEC			C4330	prim	88C00130	C	600UL
[illegible]	144	82	0.68	107	23	P 3	DBC	+1.62	TEHTEC			T6144	seco	88C00130	C	600UL
[illegible]	55	83	0.17	108	SAI	2	TSH	+0.96	TSHTSH	0.00	0.19	E4963	reso	88H00030	H	600PP
219			0.28	98	10	P 3	DBH	-1.27	TEHTEC			W3386	reso	88C00064	C	600UL
220	85	83	0.09	97	SAI	2	09C	+1.49	09C09C	0.00	0.20	M7262	reso	88C00194	C	600PP
221	125	83	0.85	139	26	P 2	10H	-0.91	TEHTEC			G7112	seco	88C00104	C	600UL
222			0.63	121	19	P 3	DBH	+2.17	TEHTEC			G7112	seco	88C00104	C	600UL
223	131	83	0.23	70	10	P 3	DBH	-1.92	TEHTEC			L3025	prim	88C00105	C	600UL
224	133	83	0.37	94	15	P 2	10H	-0.97	TEHTEC			G4841	reso	88C00104	C	600UL
225	145	83	0.33	64	13	P 2	VC1	+0.89	TEHTEC			T6144	seco	88C00130	C	600UL
226	76	84	0.37	132	16	P 2	VH3	-0.83	TEHTEC			L3025	prim	88C00107	C	600UL
227			0.28	138	12	P 2	VH3	+1.03	TEHTEC			L3025	prim	88C00107	C	600UL
228	94	84	0.31	130	13	P 2	VH3	+0.83	TEHTEC			G7112	seco	88C00107	C	600UL
229	114	84	0.23	140	10	P 2	VH2	-0.70	TEHTEC			M7262	reso	88C00107	C	600UL
230	132	84	0.69	123	22	P 2	09H	-0.94	TEHTEC			G7112	seco	88C00106	C	600UL
231	134	84	0.47	114	19	P 2	10H	-1.03	TEHTEC			L3025	prim	88C00107	C	600UL
232	144	84	0.54	97	19	P 3	DBC	+1.49	TEHTEC			C4330	prim	88C00130	C	600UL
233	67	85	0.68	88	21	P 3	DBC	-1.85	TEHTEC			B2153	seco	88C00064	C	600UL
234	71	85	0.80	76	27	P 3	DBC	-1.35	TEHTEC			L3025	prim	88C00107	C	600UL
235	125	85	0.35	123	15	P 2	VH1	-0.65	TEHTEC			L3025	prim	88C00107	C	600UL
236			0.30	83	13	P 2	VH2	-0.85	TEHTEC			L3025	prim	88C00107	C	600UL
237	143	85	0.37	131	14	P 2	VC2	-0.90	TEHTEC			R3710	prim	88C00208	C	600UL
238			0.31	152	11	P 2	VC2	-0.86	TEHTEC			C4330	prim	88C00130	C	600UL
239			1.40	116	35	P 2	VC1	-0.82	TEHTEC			C4330	prim	88C00130	C	600UL
240			0.39	95	14	P 2	VC1	+0.83	TEHTEC			R3710	prim	88C00208	C	600UL
241			0.40	140	14	P 2	VC1	+0.89	TEHTEC			C4330	prim	88C00130	C	600UL
242	147	85	0.30	115	12	P 3	DBH	-1.75	TEHTEC			T6144	seco	88C00130	C	600UL
[illegible]			0.29	127	12	P 2	VH1	+0.86	TEHTEC			T6144	seco	88C00130	C	600UL
[illegible]			0.53	150	19	P 2	VC1	-0.84	TEHTEC			T6144	seco	88C00130	C	600UL
245			0.97	115	29	P 2	VC1	+0.50	TEHTEC			T6144	seco	88C00130	C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 8,2000 8:44
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL PAGE 6

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
246			0.97	132	29	P 2	VC1	+0.82	TEHTEC			T6144	seco	88C00130	C	600UL
247			0.59	69	20	P 3	DBC	+1.66	TEHTEC			C4330	prim	88C00130	C	600UL
248	52	86	0.90	66	20	P 3	DBH	-1.57	TEHTEC			W9213	seco	88C00208	C	600UL
249			1.95	105	37	P 3	DBH	+1.72	TEHTEC			W9213	seco	88C00208	C	600UL
250	56	86	1.05	79	23	P 3	DBH	-1.71	TEHTEC			R3710	prim	88C00208	C	600UL
251	94	86	0.35	16	SCI	P 1	TSH	-0.10	TSHTSH	0.32	0.22	M7262	reso	88H00093	H	600PP
252	100	86	0.32	80	14	P 2	VH2	-0.69	TEHTEC			L3025	prim	88C00107	C	600UL
253	120	86	0.38	122	16	P 2	10H	+0.85	TEHTEC			L3025	prim	88C00107	C	600UL
254			0.20	167	9	P 3	DBH	-0.70	TEHTEC			L3025	prim	88C00107	C	600UL
255	126	86	0.36	110	12	P 3	DBH	+1.73	TEHTEC			G7112	seco	88C00106	C	600UL
256	134	86	0.53	129	18	P 2	09H	-0.95	TEHTEC			G7112	seco	88C00106	C	600UL
257			0.50	85	17	P 2	10H	-0.95	TEHTEC			G7112	seco	88C00106	C	600UL
258	136	86	0.55	124	19	P 2	10H	-1.02	TEHTEC			G7112	seco	88C00106	C	600UL
259	142	86	0.30	130	12	P 3	DBH	+2.00	TEHTEC			T6144	seco	88C00130	C	600UL
260	144	86	0.24	147	10	P 3	DBH	+2.00	TEHTEC			T6144	seco	88C00130	C	600UL
261	69	87	0.15	106	SAI	4	TSH	+0.69	TSHTSH	0.00	0.31	W3386	reso	88H00216	H	600PP
262	81	87	0.22	140	10	P 2	VC3	-0.68	TEHTEC			L3025	prim	88C00107	C	600UL
263	127	87	0.29	115	11	P 2	09H	-1.02	TEHTEC			G7112	seco	88C00106	C	600UL
264			0.30	47	11	P 2	10H	-1.08	TEHTEC			G7112	seco	88C00106	C	600UL
265	133	87	0.30	127	13	P 2	VH1	-0.88	TEHTEC			L3025	prim	88C00107	C	600UL
[illegible]	135	87	0.35	50	13	P 2	09H	-0.99	TEHTEC			G7112	seco	88C00106	C	600UL
[illegible]			0.28	94	11	P 2	10H	-0.94	TEHTEC			G7112	seco	88C00106	C	600UL
268	54	88	0.51	20	SAI	2	TSH	-0.92	TSHTSH	.27	.38	P4578	reso	88H00199	H	600PP
269			0.99	81	22	P 3	DBC	-1.76	TEHTEC			W9213	seco	88C00208	C	600UL
270	56	88	0.48	98	12	P 3	DBC	-1.80	TEHTEC			W9213	seco	88C00208	C	600UL
271	58	88	0.32	119	8	P 3	DBC	-1.63	TEHTEC			W9213	seco	88C00208	C	600UL
272	72	88	0.54	119	21	P 3	DBC	-1.55	TEHTEC			L3025	prim	88C00107	C	600UL
273	76	88	0.28	136	12	P 2	VSM	-0.90	TEHTEC			L3025	prim	88C00107	C	600UL
274			0.32	94	14	P 2	VC3	-0.90	TEHTEC			L3025	prim	88C00107	C	600UL
275	98	88	0.36	110	15	P 2	VH2	-0.76	TEHTEC			L3025	prim	88C00107	C	600UL
276	118	88	0.31	70	14	P 2	VH1	-0.68	TEHTEC			E4963	reso	88C00107	C	600UL
277			0.35	109	15	P 2	VH1	+0.83	TEHTEC			W3386	reso	88C00107	C	600UL
278	128	88	0.55	122	19	P 2	10H	-0.98	TEHTEC			G7112	seco	88C00106	C	600UL
279	132	88	0.49	145	17	P 2	09H	-0.96	TEHTEC			G7112	seco	88C00106	C	600UL
280	136	88	0.65	136	21	P 2	09H	-0.98	TEHTEC			G7112	seco	88C00106	C	600UL
281	140	88	0.22	137	8	P 3	DBH	+1.88	TEHTEC			G7112	seco	88C00106	C	600UL
282	144	88	0.77	70	25	P 3	DBC	+1.66	TEHTEC			C4330	prim	88C00130	C	600UL
283	123	89	0.72	96	23	P 2	10H	-0.89	TEHTEC			G7112	seco	88C00106	C	600UL
284	127	89	0.33	154	12	P 2	09H	-1.00	TEHTEC			G7112	seco	88C00106	C	600UL
285			0.46	91	16	P 2	10H	-1.00	TEHTEC			G7112	seco	88C00106	C	600UL
286	131	89	0.70	137	22	P 2	09H	-0.98	TEHTEC			G7112	seco	88C00106	C	600UL
287			0.64	124	21	P 2	10H	+0.98	TEHTEC			G7112	seco	88C00106	C	600UL
288	135	89	0.75	137	23	P 2	09H	-0.95	TEHTEC			G7112	seco	88C00106	C	600UL
289			0.42	124	15	P 2	10H	-1.02	TEHTEC			G7112	seco	88C00106	C	600UL
290	137	89	0.36	136	SAI	2	06H	+0.11	06H06H	0.00	0.41	M7262	reso	88H00144	H	600PP
291	143	89	0.26	40	11	P 3	DBH	-1.75	TEHTEC			B8090	reso	88C00130	C	600UL
[illegible]	145	89	0.35	123	12	P 2	VC1	+0.80	TEHTEC			C4330	prim	88C00130	C	600UL
[illegible]	147	89	0.86	130	27	P 2	VC1	+0.84	TEHTEC			C4330	prim	88C00130	C	600UL
294	52	90	0.95	86	21	P 3	DBH	-2.07	STHTEC			R3710	prim	88C00208	C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL

NOV. 8,2000 8:44

PAGE 7

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
295	54	90	0.36	17	SCI	P 1	TSH	+0.08	TSHTSH	0.00	0.20	M7262	reso	88H00199	H	600PP
296			1.18	63	25	P 3	DBH	-1.99	TEHTEC			R3710	prim	88C00208	C	600UL
297			0.58	143	14	P 3	DBH	+1.15	TEHTEC			W9213	seco	88C00208	C	600UL
298	66	90	0.27	23	SCI	P 1	TSH	-0.10	TSHTSH	0	.14	P4578	reso	88H00199	H	600PP
299	72	90	0.60	132	24	P 2	VSM	+0.97	TEHTEC			L8038	prim	88C00109	C	600UL
300	76	90	0.50	61	21	P 2	VSM	+0.00	TEHTEC			L8038	prim	88C00109	C	600UL
301	80	90	0.18	93	SAI	2	02H	+9.60	02H02H	0.00	0.23	W3386	reso	88H00240	H	600PP
302			0.26	100	SAI	2	02H	+9.96	02H02H	0.00	0.26	W3386	reso	88H00240	H	600PP
303	126	90	0.42	121	17	P 3	DBH	+2.00	TEHTEC			L8038	prim	88C00109	C	600UL
304	128	90	0.37	99	13	P 2	10H	+0.94	TEHTEC			P1465	prim	88C00108	C	600UL
305	142	90	0.26	129	11	P 3	DBH	+2.00	TEHTEC			T6144	seco	88C00130	C	600UL
306	144	90	0.64	40	22	P 3	DBC	+1.70	TEHTEC			T6144	seco	88C00130	C	600UL
307	146	90	1.14	64	33	P 3	DBC	+1.60	TEHTEC			C4330	prim	88C00130	C	600UL
308	85	91	0.41	82	15	P 2	09H	-0.15	TEHTEC			W9213	seco	88C00132	C	600UL
309	99	91	0.41	11	SCI	P 1	TSH	-0.14	TSHTSH	0.37	0.16	R5555	reso	88H00091	H	600PP
310	125	91	0.30	140	13	P 3	DBH	+1.96	TEHTEC			L8038	prim	88C00109	C	600UL
311	137	91	0.43	140	19	P 2	10H	-1.08	TEHTEC			L8038	prim	88C00109	C	600UL
312	145	91	0.30	151	10	P 2	VH2	+0.76	TEHTEC			C4330	prim	88C00130	C	600UL
313	147	91	0.39	152	14	P 2	VC1	-0.82	TEHTEC			C4330	prim	88C00130	C	600UL
314	72	92	0.18	104	SAI	2	TSH	+1.53	TSHTSH	0	0.40	M7262	reso	88H00091	H	600PP
			0.10	119	SAI	2	TSH	+2.38	TSHTSH	0.00	0.20	M7262	reso	88H00091	H	600PP
	112	92	0.37	62	13	P 2	VH2	-0.61	TEHTEC			P1465	prim	88C00108	C	600UL
317	120	92	0.37	85	13	P 3	DBH	-1.89	TEHTEC			R8278	seco	88C00108	C	600UL
318	126	92	0.26	119	12	P 2	VH1	-0.84	TEHTEC			B3170	prim	88C00109	C	600UL
319	138	92	0.28	148	13	P 2	VH1	-0.73	TEHTEC			B3170	prim	88C00109	C	600UL
320	53	93	1.49	64	34	P 3	DBH	-1.84	07HTEC			B4165	prim	88C00207	C	600UL
321	55	93	0.81	17	SAI	2	TSH	-1.46	TSHTSH	1.36	.75	P4578	reso	88H00199	H	600PP
322	135	93	0.29	118	11	P 2	10H	+0.94	TEHTEC			P1465	prim	88C00108	C	600UL
323	147	93	0.26	76	8	P 2	VC1	-0.47	TEHTEC			C4330	prim	88C00130	C	600UL
324			0.78	112	25	P 2	VC1	+0.97	TEHTEC			C4330	prim	88C00130	C	600UL
325			0.22	52	10	P 3	DBC	-1.90	TEHTEC			G4841	reso	88C00130	C	600UL
326	52	94	0.35	134	11	P 3	DBC	-1.80	TEHTEC			R5555	reso	88C00207	C	600UL
327	84	94	0.31	22	SCI	P 1	TSH	-0.12	TSHTSH	0.29	0.21	M7262	reso	88H00090	H	600PP
328	122	94	0.25	80	9	P 3	DBH	+1.99	TEHTEC			R8278	seco	88C00108	C	600UL
329	130	94	0.42	128	15	P 2	10H	-0.95	TEHTEC			G4841	reso	88C00108	C	600UL
330	132	94	0.66	64	25	P 2	10H	+0.90	TEHTEC			B3170	prim	88C00109	C	600UL
331	119	95	0.43	115	14	P 3	DBH	-1.82	TEHTEC			R8278	seco	88C00110	C	600UL
332	127	95	0.25	156	10	P 2	VH1	-0.85	TEHTEC			R8278	seco	88C00110	C	600UL
333	129	95	0.43	91	17	P 3	DBH	+2.04	TEHTEC			L3025	prim	88C00111	C	600UL
334	48	96	1.18	116	30	P 3	DBH	-1.75	TEHTEC			R5555	reso	88C00207	C	600UL
335	50	96	3.12	19	49	P 3	DBH	+0.00	TEHTEC	LAR		M7262	reso	88C00207	C	600UL
336			0.86	110	24	P 3	DBC	-1.98	TEHTEC			R5555	reso	88C00207	C	600UL
337	54	96	0.38	33	SCI	P 1	TSH	-2.14	TSHTSH	0.66	0.28	M7262	reso	88H00199	H	600PP
338			0.41	62	13	P 3	DBH	-1.75	TEHTEC			R5555	reso	88C00207	C	600UL
339	114	96	0.29	152	12	P 2	VH3	-0.87	TEHTEC			R8278	seco	88C00110	C	600UL
340	122	96	0.41	120	13	P 3	DBH	+2.01	TEHTEC			L9168	prim	88C00110	C	600UL
	134	96	0.37	121	15	P 2	VH1	-0.72	TEHTEC			L9168	prim	88C00110	C	600UL
	144	96	0.39	125	13	P 3	DBH	+2.11	TEHTEC			C4330	prim	88C00130	C	600UL
343	69	97	0.15	98	SAI	2	TSH	+1.45	TSHTSH	0	0.26	R5555	reso	88H00091	H	600PP

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

NOV. 8,2000 8:44

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL

PAGE 8

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
344	125	97	0.38	136	14	P 2	VH1	-0.90	TEHTEC			B8589	seco	88C00111	C	600UL
345	135	97	0.21	146	10	P 2	10H	-0.94	TEHTEC			L9168	prim	88C00110	C	600UL
346			0.26	130	12	P 2	10H	+0.97	TEHTEC			L9168	prim	88C00110	C	600UL
347	50	98	0.36	34	14	P 2	VSM	-0.76	TEHTEC			W3386	reso	88C00207	C	600UL
348	54	98	0.44	18	SCI	P 1	TSH	-0.01	TSHTSH	.57	.17	P4578	reso	88H00199	H	600PP
349	62	98	0.54	84	MCI	P 1	TSH	+0.12	TSHTSH	.56	.94	P4578	reso	88H00199	H	600PP
350	66	98	0.22	97	SAI	2	TSH	+0.19	TSHTSH	0	.16	P4578	reso	88H00199	H	600PP
351			0.19	103	MAI	2	TSH	+0.93	TSHTSH	0	.22	P4578	reso	88H00199	H	600PP
352	74	98	0.23	103	SCI	P 1	TSH	+0.00	TSHTSH	0	0.38	R5555	reso	88H00091	H	600PP
353	47	99	0.90	136	25	P 3	DBH	-1.87	TEHTEC			R5555	reso	88C00207	C	600UL
354			0.52	48	16	P 3	DBC	-1.95	TEHTEC			R5555	reso	88C00207	C	600UL
355	51	99	0.60	77	18	P 3	DBH	-1.92	TEHTEC			B4165	prim	88C00207	C	600UL
356	85	99	0.56	122	19	P 2	09C	+1.28	TEHTEC	LAR		M7262	reso	88C00111	C	600UL
357			0.19	103	SAI	2	09C	+1.50	09C09C	0.00	0.30	H1748	reso	88C00192	C	600PP
358	113	99	0.32	91	14	P 2	VH2	-0.75	TEHTEC			H1748	reso	88C00110	C	600UL
359	133	99	0.22	60	10	P 2	VH1	-0.78	TEHTEC			V1371	prim	88C00110	C	600UL
360	44	100	0.52	83	16	P 3	DBC	-1.98	TEHTEC			R5555	reso	88C00207	C	600UL
361			0.77	95	22	P 3	DBC	+1.90	TEHTEC			G4841	reso	88C00207	C	600UL
362	134	100	0.36	105	15	P 2	10H	+1.11	TEHTEC			V1371	prim	88C00110	C	600UL
363	146	100	0.71	130	24	P 3	DBH	-1.98	TEHTEC			C4330	prim	88C00130	C	600UL
[illegible]	39	101	0.83	50	23	P 3	DBC	+1.98	TEHTEC			B4165	prim	88C00207	C	600UL
[illegible]	41	101	0.30	114	12	P 2	VSM	-0.73	TEHTEC			B4165	prim	88C00207	C	600UL
366	43	101	0.40	73	13	P 3	DBC	-2.11	TEHTEC			B4165	prim	88C00207	C	600UL
367	65	101	0.16	108	SAI	2	TSH	+1.01	TSHTSH	0	.39	P4578	reso	88H00199	H	600PP
368	73	101	0.25	29	SCI	P 1	TSH	-0.11	TSHTSH	0.00	0.19	G4841	reso	88H00090	H	600PP
369	79	101	0.45	27	SCI	P 1	TSH	-0.03	TSHTSH	.24	.27	P4578	reso	88H00088	H	600PP
370	111	101	0.22	92	8	P 3	DBH	-0.86	TEHTEC			W9213	seco	88C00132	C	600UL
371	119	101	0.43	136	13	P 3	DBH	-1.62	TEHTEC			P4578	reso	88C00110	C	600UL
372	127	101	0.34	122	14	P 2	VH1	-0.78	TEHTEC			V1371	prim	88C00110	C	600UL
373			0.23	91	10	P 2	VH3	+0.82	TEHTEC			V1371	prim	88C00110	C	600UL
374	36	102	1.00	49	28	P 3	DBC	+2.07	TEHTEC			W9213	seco	88C00205	C	600UL
375	42	102	0.49	20	MCI	P 1	TSH	-6.43	TSHTSH	.33	.31	P4578	reso	88H00199	H	600PP
376	46	102	0.85	14	SAI	2	TSH	-0.52	TSHTSH	.85	.16	P4578	reso	88H00199	H	600PP
377	70	102	0.56	23	SCI	P 1	TSH	-0.06	TSHTSH	.86	.14	P4578	reso	88H00199	H	600PP
378	80	102	0.34	25	SCI	P 1	TSH	+0.00	TSHTSH	.31	.14	P4578	reso	88H00089	H	600PP
379	116	102	0.31	118	13	P 3	DBH	+1.04	TEHTEC			B5926	seco	88C00113	C	600UL
380	35	103	1.44	79	35	P 3	DBH	-1.43	TEHTEC			F0037	prim	88C00205	C	600UL
381			0.42	43	16	P 2	VSM	-0.60	TEHTEC			W9213	seco	88C00205	C	600UL
382	39	103	1.93	24	SAI	2	TSH	-5.68	TSHTSH	2.40	0.19	R5555	reso	88H00200	H	600PP
383	87	103	0.35	116	SAI	2	07H	-0.37	07H07H	0.00	0.40	M7262	reso	88H00138	H	600PP
384	36	104	0.74	108	23	P 3	DBH	-1.74	STHTEC			W3386	reso	88C00205	C	600UL
385	84	104	0.49	89	14	P 2	09H	-1.31	TEHTEC	LAR		M7262	reso	88C00112	C	600UL
386	41	105	0.67	20	SAI	2	TSH	-0.69	TSHTSH	.87	.18	P4578	reso	88H00211	H	600PP
387	139	105	0.49	61	16	P 2	10H	+0.86	TEHTEC			F0037	prim	88C00112	C	600UL
388	42	106	0.63	128	21	P 2	VSM	-0.72	TEHTEC			B3170	prim	88C00203	C	600UL
389	76	106	0.14	65	SAI	2	02H	-7.79	02H02H	0.11	0.19	E4963	reso	88H00242	H	600PP
[illegible]	128	106	0.29	147	9	P 2	10H	-0.83	TEHTEC			B3170	prim	88C00113	C	600UL
[illegible]	130	106	0.43	64	14	P 2	VH1	-0.77	TEHTEC			F0037	prim	88C00112	C	600UL
392	144	106	1.08	97	24	P 3	DBC	+1.70	TEHTEC			R3710	prim	88C00208	C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL

NOV. 8,2000 8:44

PAGE 9

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION		EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
393	63	107	0.11	99	SAI	2	TSH	+2.32		TSHTSH	.16	.16	B8090	reso	88H00201	H	600PP
394	127	107	0.40	157	17	P 2	VH1	-0.75		TEHTEC			V1371	prim	88C00114	C	600UL
395	24	108	0.15	109	SCI	P 1	TSH	+0.01		TSHTSH	0.11	0.31	W3386	reso	88H00201	H	600PP
396	48	108	0.62	113	21	P 2	VSM	-0.12		TEHTEC			M7262	reso	88C00203	C	600UL
397	106	108	0.65	17	SAI	2	VC2	+1.07		VC2VC2	0.67	0.43	W3386	reso	88C00249	C	560PP
398	128	108	0.33	145	11	P 2	VH1	-0.87		TEHTEC			T9924	seco	88C00114	C	600UL
399	23	109	0.54	131	19	P 2	VSM	+1.06		TEHTEC			W9213	seco	88C00203	C	600UL
400	37	109	0.61	14	SAI	2	TSH	-5.25		TSHTSH	.44	.13	P4578	reso	88H00211	H	600PP
401			0.75	20	SAI	2	TSH	-3.79		TSHTSH	.73	.18	P4578	reso	88H00211	H	600PP
402	39	109	0.19	80	SAI	2	TSH	+1.05		TSHTSH	.14	.13	B8090	reso	88H00201	H	600PP
403	43	109	0.20	98	SAI	2	01H	+0.71		01H01H	0.00	0.20	E4963	reso	88H00265	H	600PP
404			0.50	100	17	P 2	01H	+0.82		TEHTEC			M7262	reso	88C00203	C	600UL
405	47	109	1.07	18	SAI	2	TSH	-1.36	TO-0.99	TSHTSH	.81	.36	P4578	reso	88H00211	H	600PP
406			0.37	22	SCI	P 1	TSH	-0.15		TSHTSH	.21	.13	P4578	reso	88H00211	H	600PP
407			0.27	123	11	P 2	VSM	+0.94		TEHTEC			W9213	seco	88C00203	C	600UL
408	79	109	0.39	19	SCI	P 1	TSH	-0.07		TSHTSH	0.43	0.19	W3386	reso	88H00084	H	600PP
409	111	109	0.24	50	11	P 2	VH3	+1.14		TEHTEC			V1371	prim	88C00114	C	600UL
410	123	109	0.47	144	16	P 2	VH1	-0.95		TEHTEC			T9924	seco	88C00114	C	600UL
411	143	109	0.22	131	9	P 3	DBH	-1.54		TEHTEC			V1371	prim	88C00131	C	600UL
412	78	110	0.36	115	12	P 2	VH3	-0.74		TEHTEC			T9924	seco	88C00114	C	600UL
			0.39	138	13	P 2	VC3	-0.74		TEHTEC			T9924	seco	88C00114	C	600UL
	86	110	0.41	67	18	P 2	VC2	-0.66		TEHTEC			B2265	prim	88C00115	C	600UL
415	114	110	0.32	108	16	P 3	DBH	-1.59		TEHTEC			B2265	prim	88C00115	C	600UL
416	142	110	0.51	55	18	P 3	DBH	+1.86		TEHTEC			V1371	prim	88C00131	C	600UL
417	39	111	0.65	19	SAI	2	TSH	-0.01		TSHTSH	0.63	0.18	W3386	reso	88H00201	H	600PP
418	43	111	0.55	11	SAI	2	TSH	-4.34		TSHTSH	0.83	0.21	M7262	reso	88H00201	H	600PP
419			0.76	20	SAI	2	TSH	-3.05		TSHTSH	2.25	0.34	M7262	reso	88H00201	H	600PP
420			0.43	15	SCI	P 1	TSH	-2.66		TSHTSH	0.68	0.14	M7262	reso	88H00201	H	600PP
421			1.14	13	SAI	2	TSH	-0.44		TSHTSH	1.67	0.16	M7262	reso	88H00201	H	600PP
422	49	111	0.28	80	SAI	2	TSH	+0.13		TSHTSH	.27	.18	P4578	reso	88H00211	H	600PP
423	59	111	0.80	21	SCI	P 1	TSH	-3.64		TSHTSH	.67	.20	P4578	reso	88H00211	H	600PP
424			0.43	108	15	P 2	01H	+1.25		TEHTEC			M7262	reso	88C00203	C	600UL
425	123	111	0.58	32	19	P 3	DBH	+1.99		TEHTEC			R8278	seco	88C00134	C	600UL
426	122	112	0.29	34	11	P 2	10H	-0.86		TEHTEC			B2027	prim	88C00133	C	600UL
427	126	112	0.46	23	14	P 3	DBH	+1.78		TEHTEC			B2027	prim	88C00133	C	600UL
428	57	113	0.58	10	SAI	2	07H	+0.23		07H07H	0	.11	P4578	reso	88H00223	H	600PP
429	34	114	3.25	30	SCI	P 1	TSH	-6.03		TSHTSH	6.29	0.51	W3386	reso	88H00201	H	600PP
430			1.00	20	MCI	P 1	TSH	-5.54		TSHTSH	1.15	0.28	W3386	reso	88H00201	H	600PP
431			0.38	17	SCI	P 1	TSH	-5.10		TSHTSH	0.76	0.14	W3386	reso	88H00201	H	600PP
432			1.11	21	SCI	P 1	TSH	-4.58		TSHTSH	2.50	0.28	W3386	reso	88H00201	H	600PP
433			0.38	14	SAI	2	TSH	-1.75	TO-6.20	TSHTSH	1.0	4.45	W3386	reso	88H00201	H	600PP
434	122	114	0.31	55	15	P 2	10H	+0.92		TEHTEC			B3170	prim	88C00117	C	600UL
435	65	115	0.90	18	SAI	2	TSH	-5.80		TSHTSH	1.42	1.57	P4578	reso	88H00211	H	600PP
436			0.91	18	SAI	2	TSH	-2.80		TSHTSH	1.21	.15	P4578	reso	88H00211	H	600PP
437	107	115	0.43	51	16	P 2	VH2	+0.72		TECTEH			J9815	prim	88H00260	C	580SF
438			0.33	121	12	P 2	VH2	+0.85		TEHTEC			G4841	reso	88C00133	C	600UL
	133	115	0.41	69	19	P 2	10H	+0.92		TEHTEC			B3170	prim	88C00117	C	600UL
	18	116	0.35	28	SCI	P 1	TSH	-0.10		TSHTSH	0	0.16	R5555	reso	88H00204	H	600PP
441	46	116	0.83	50	28	P 2	VSM	-0.67		TEHTEC			L8038	prim	88C00230	C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL

NOV. 8,2000 8:44

PAGE 10

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
442	112	116	0.20	72	11	P 2	VH3	-0.77	TEHTEC			B3170	prim	88C00117	C	600UL
443	85	119	0.49	84	18	P 2	09H	+1.71	TEHTEC	LAR		G4841	reso	88C00132	C	600UL
444	129	119	0.35	126	13	P 2	VH1	-0.78	TEHTEC			B8090	reso	88C00132	C	600UL
445	14	120	0.48	38	15	P 2	05H	+0.51	TEHTEC			M0554	reso	88C00199	C	600UL
446			0.35	124	SAI	2	05H	+0.63	05H05H	0.00	0.63	H8259	reso	88H00267	H	600PP
447	46	120	0.19	100	SCI	P 1	TSH	+0.12	TSHTSH	0.30	0.23	B4260	reso	88H00205	H	600PP
448	49	121	0.85	21	SCI	P 1	TSH	-2.87	TSHTSH	1.85	0.37	W3386	reso	88H00205	H	600PP
449	75	121	0.19	19	SCI	P 1	TSH	-0.07	TSHTSH	0.08	0.16	C0360	reso	88H00078	H	600PP
450	123	121	0.47	124	17	P 2	VH1	-0.86	TEHTEC			W9213	seco	88C00132	C	600UL
451	133	121	0.55	156	27	P 2	VH1	-0.74	TEHTEC			T6144	seco	88C00118	C	600UL
452	64	122	1.73	96	36	P 2	VH3	+0.90	TEHTEC			L9168	prim	88C00198	C	600UL
453	100	122	0.32	104	17	P 2	VH3	-0.77	TEHTEC			P1465	prim	88C00118	C	600UL
454	89	123	0.46	137	17	P 2	VH2	-1.04	TSHTEC			L3025	prim	88C00121	C	600UL
455			0.33	119	13	P 2	VH2	-0.81	TEHTEC			M7262	reso	88C00132	C	600UL
456	99	123	0.37	115	13	P 2	VC2	+0.84	TEHTEC			M7262	reso	88C00120	C	600UL
457	42	124	0.11	66	SCI	P 1	TSH	+0.10	TSHTSH	0.00	0.17	W3386	reso	88H00205	H	600PP
458	100	124	0.31	83	11	P 2	VSM	-0.71	TEHTEC			B2027	prim	88C00120	C	600UL
459	122	124	0.50	137	15	P 3	DBH	+1.79	TEHTEC			J0927	seco	88C00120	C	600UL
460	25	125	0.60	18	MCI	P 1	TSH	-0.12	TSHTSH	1.25	0.25	B4260	reso	88H00206	H	600PP
461	41	125	0.42	16	SCI	P 1	TSH	-0.20	TSHTSH	0.26	0.20	B4260	reso	88H00205	H	600PP
	43	125	0.40	136	14	P 2	VSM	-0.80	TEHTEC			V1371	prim	88C00198	C	600UL
	85	125	0.65	118	21	P 2	09C	+1.35	TEHTEC	LAR		M7262	reso	88C00120	C	600UL
464			0.32	117	SAI	2	09C	+1.52	09CDBC	0.00	0.32	H1748	reso	88C00192	C	600PP
465	87	125	0.38	118	13	P 2	VH2	-0.71	TEHTEC			B2027	prim	88C00120	C	600UL
466	89	125	0.40	73	14	P 2	VH2	-0.62	TEHTEC			B2027	prim	88C00120	C	600UL
467	107	125	0.17	98	4	P 3	DBH	-1.44	TEHTEC			J0927	seco	88C00120	C	600UL
468	121	125	0.32	87	11	P 2	10H	+0.60	TEHTEC			B2027	prim	88C00120	C	600UL
469	125	125	0.36	127	13	P 2	VH1	-0.73	TEHTEC			B2027	prim	88C00120	C	600UL
470	127	125	0.36	93	13	P 2	VH1	-0.64	TEHTEC			B2027	prim	88C00120	C	600UL
471	16	126	0.19	21	SCI	P 1	TSH	-0.08	TSHTSH	.24	.14	P4578	reso	88H00075	H	600PP
472	39	127	0.36	83	13	P 2	VSM	-0.69	TEHTEC			B2265	prim	88C00047	C	600UL
473	89	127	0.37	148	15	P 2	VH2	-0.72	TEHTEC			T6144	seco	88C00032	C	600UL
474			0.20	160	8	P 2	VSM	-0.72	TEHTEC			B2265	prim	88C00032	C	600UL
475	95	127	0.23	19	SCI	P 1	TSH	-0.08	TSHTSH	0.21	0.16	H7791	reso	88H00054	H	600PP
476	131	127	0.50	130	19	P 2	03C	+0.82	TEHTEC			T6144	seco	88C00032	C	600UL
477	90	128	0.29	106	12	P 2	VH2	+0.85	TEHTEC			T0854	seco	88C00034	C	600UL
478	130	128	0.32	65	13	P 2	VH2	-0.51	TEHTEC			T6144	seco	88C00032	C	600UL
479	51	129	0.53	19	SCI	P 1	TSH	-0.08	TSHTSH	0.19	0.16	R5555	reso	88H00074	H	600PP
480	83	129	0.39	133	16	P 2	VC2	+0.82	TEHTEC			G4841	reso	88C00033	C	600UL
481	85	129	0.22	102	9	P 2	VH2	-0.63	TEHTEC			T6144	seco	88C00032	C	600UL
482	24	130	0.54	22	SCI	P 1	TSH	-5.65	TSHTSH	0.48	0.16	R5555	reso	88H00074	H	600PP
483	44	130	0.21	20	SCI	P 1	TSH	-0.10	TSHTSH	0	0.19	R5555	reso	88H00074	H	600PP
484	60	130	0.37	24	SCI	P 1	TSH	-0.11	TSHTSH	0.38	0.16	R5555	reso	88H00074	H	600PP
485	86	130	0.37	122	14	P 2	VC2	+0.87	TEHTEC			B4014	prim	88C00033	C	600UL
486	90	130	0.45	147	17	P 2	VH2	-0.85	TEHTEC			T0854	seco	88C00033	C	600UL
487	14	132	0.58	18	SCI	P 1	TSH	-5.42	TSHTSH	.64	.14	P4578	reso	88H00072	H	600PP
	26	132	0.61	12	SAI	2	TSH	-5.25	TSHTSH	.46	.14	P4578	reso	88H00072	H	600PP
			0.85	14	SAI	2	TSH	-3.78	TSHTSH	.77	.17	P4578	reso	88H00072	H	600PP
490	40	132	0.40	21	SCI	P 1	TSH	-0.10	TSHTSH	.27	.14	P4578	reso	88H00071	H	600PP

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL

NOV. 8,2000 8:44

PAGE 11

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
491	47	133	0.34	143	12	P 2	VSM	-0.74	TEHTEC			R8278	seco	88C00045	C	600UL
492	73	133	0.42	96	16	P 2	VH3	+1.00	TEHTEC			G4841	reso	88C00030	C	600UL
493	72	134	0.32	119	13	P 2	VH3	-1.08	TEHTEC			F0037	prim	88C00031	C	600UL
494	76	134	0.42	142	16	P 2	VH3	+0.65	TEHTEC			F0037	prim	88C00031	C	600UL
495	23	135	0.23	14	SCI	P 1	TSH	-0.13	TSHTSH	.37	.11	P4578	reso	88H00071	H	600PP
496	59	135	0.48	28	18	P 2	VC3	-0.83	TEHTEC			V1371	prim	88C00046	C	600UL
497	89	135	0.42	115	16	P 2	VH2	-0.72	TEHTEC			B3170	prim	88C00030	C	600UL
498			0.26	62	10	P 2	VSM	+0.89	TEHTEC			B3170	prim	88C00030	C	600UL
499	26	136	1.36	31	SCI	P 1	TSH	-5.18	TSHTSH	2.46	.41	P4578	reso	88H00072	H	600PP
500			1.22	22	SAI	2	TSH	-4.87	TSHTSH	.93	.14	P4578	reso	88H00072	H	600PP
501			0.80	15	SAI	2	TSH	-4.49	TSHTSH	1.03	.09	P4578	reso	88H00072	H	600PP
502			0.44	14	SCI	P 1	TSH	-4.48	TSHTSH	0.0	0.15	M7262	reso	88H00072	H	600PP
503			0.48	13	SAI	2	TSH	-4.12	TSHTSH	.64	.09	P4578	reso	88H00072	H	600PP
504	78	136	0.51	60	17	P 3	DBH	-2.10	TEHTEC			G4841	reso	88C00030	C	600UL
505	94	138	0.28	114	11	P 2	VSM	-0.76	TEHTEC			T6144	seco	88C00028	C	600UL
506	110	138	0.45	139	17	P 2	VC3	-0.84	TEHTEC			B4014	prim	88C00029	C	600UL
507	120	138	0.48	73	16	P 3	DBH	-1.62	TEHTEC			R8278	seco	88C00028	C	600UL
508	75	139	0.34	158	13	P 2	VH3	+0.87	TEHTEC			B4014	prim	88C00029	C	600UL
509			0.61	108	21	P 2	VSM	+0.39	TEHTEC			B4014	prim	88C00029	C	600UL
510	93	139	0.31	148	12	P 2	VH2	-0.61	TEHTEC			R8278	seco	88C00028	C	600UL
[illegible]	85	141	0.43	141	16	P 2	09H	+1.18	TEHTEC	LAR		M7262	reso	88C00028	C	600UL
[illegible]	89	141	0.37	102	14	P 2	VH2	+0.73	TEHTEC			R8278	seco	88C00028	C	600UL
513			0.28	148	11	P 2	VC2	+1.01	TEHTEC			R8278	seco	88C00028	C	600UL
514	97	141	0.28	135	11	P 2	VH2	+0.86	TEHTEC			C4330	prim	88C00028	C	600UL
515	78	142	0.43	127	17	P 2	VH3	+0.85	TEHTEC			L9168	prim	88C00027	C	600UL
516	79	143	0.20	134	8	P 3	DBC	-1.33	TEHTEC			L9168	prim	88C00027	C	600UL
517	95	143	0.40	119	16	P 2	VH2	-0.62	TEHTEC			D2003	prim	88C00026	C	600UL
518	54	144	0.35	133	12	P 2	VH3	+0.70	TEHTEC			P4578	reso	88C00019	C	600UL
519	112	144	0.70	165	21	P 3	DBH	+2.23	TEHTEC			W3386	reso	88C00026	C	600UL
520	7	145	2.44	34	SCI	P 1	TSH	-4.32	TSHTSH	3.33	.44	P4578	reso	88H00069	H	600PP
521	68	146	0.53	119	19	P 2	VC3	-0.73	TEHTEC			B2027	prim	88C00042	C	600UL
522	74	146	0.63	136	22	P 2	VH3	-0.82	TEHTEC			L9168	prim	88C00027	C	600UL
523			0.86	140	27	P 2	VC3	-0.89	TEHTEC			L9168	prim	88C00027	C	600UL
524			0.61	51	22	P 2	VC3	+0.91	TEHTEC			L9168	prim	88C00027	C	600UL
525	101	147	0.40	160	16	P 2	VSM	-0.65	TEHTEC			G7112	seco	88C00024	C	600UL
526	74	148	0.23	126	10	P 2	VH3	-0.83	TEHTEC			G7112	seco	88C00024	C	600UL
527	78	148	0.47	144	18	P 2	08C	-0.94	TEHTEC			G7112	seco	88C00024	C	600UL
528	90	148	0.43	50	17	P 2	VH2	+0.83	VH2TEC			W9658	seco	88C00022	C	600UL
529			0.46	57	16	P 2	VH2	+0.88	TEHTEC			G4841	reso	88C00122	C	600UL
530	65	149	0.38	125	15	P 2	04H	+0.49	TEHTEC			H7791	reso	88C00042	C	600UL
531	14	150	0.89	23	SCI	P 1	TSH	-0.06	TSHTSH	0.45	0.19	M7262	reso	88H00007	H	600PP
532	86	150	0.27	149	11	P 2	VH2	+0.84	TEHTEC			W9658	seco	88C00022	C	600UL
533	96	150	0.40	129	16	P 2	VH2	-0.85	TEHTEC			B3170	prim	88C00023	C	600UL
534	81	151	0.25	137	11	P 2	VH3	+0.87	TEHTEC			W9658	seco	88C00022	C	600UL
535	85	151	0.37	109	15	P 2	VH2	+0.85	TEHTEC			W9658	seco	88C00022	C	600UL
536	99	151	0.38	149	15	P 2	VH2	-0.69	TEHTEC			B3170	prim	88C00023	C	600UL
[illegible]	93	153	0.53	39	19	P 2	05C	-1.01	TEHTEC			B3170	prim	88C00021	C	600UL
[illegible]			0.44	73	16	P 2	03C	+0.89	TEHTEC			B3170	prim	88C00021	C	600UL
539	78	154	0.39	136	15	P 2	VC3	+0.88	TEHTEC			W4786	seco	88C00020	C	600UL

SG88 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 8,2000 8:44
PLANT: San Onofre
UNIT: 2
SG: 88
DATABASE: SONGS_U2_1000_SG88_FINAL PAGE 12

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
540	10	156	0.63	22	MCI	P 1	TSH	-0.05	TSHTSH	0.28	0.31	M7262	reso	88H00013	H	600PP
541	74	156	0.45	42	16	P 2	VH3	+0.99	TEHTEC			B3170	prim	88C00021	C	600UL
542	21	159	0.46	130	18	P 2	06H	+0.88	TEHTEC			M7262	reso	88C00038	C	600UL
543	18	160	0.47	117	18	P 2	06H	-0.24	TEHTEC			B8090	reso	88C00038	C	600UL
544			0.48	107	19	P 2	06H	+0.95	TEHTEC			B8090	reso	88C00038	C	600UL
545	40	160	0.30	145	13	P 2	VSM	-0.66	TEHTEC			T4180	seco	88C00038	C	600UL
546	13	161	0.14	98	MAI	4	06H	+14.00	07H06H	0.33	0.88	H1748	reso	88H00276	H	600PP
547	17	161	0.34	157	12	P 2	06H	+0.86	TEHTEC			R8278	seco	88C00037	C	600UL
548	64	162	0.30	115	13	P 2	VH3	-0.66	TEHTEC			L3025	prim	88C00038	C	600UL
549			0.29	48	13	P 2	VH3	+0.81	TEHTEC			H1748	reso	88C00038	C	600UL
550	51	163	0.46	57	18	P 2	VH3	+0.84	TEHTEC			L3025	prim	88C00038	C	600UL
551	50	164	0.39	89	14	P 2	VSM	+0.95	TEHTEC			R8278	seco	88C00037	C	600UL
552	15	165	0.55	145	19	P 2	07H	-0.30	TEHTEC			M7262	reso	88C00035	C	600UL
553	67	165	0.71	116	24	P 2	VH3	-0.75	TEHTEC			L9168	prim	88C00035	C	600UL
554	57	167	0.47	150	17	P 2	02C	+0.81	TEHTEC			L9168	prim	88C00035	C	600UL
555	3	169	0.50	63	18	P 2	05H	-0.26	DBHTEH			M7262	reso	88H00119	H	600UL

QUERY REPORT SUMMARY:

QUERY PARAMETER	ENTRIES	TUBES
0 to 100 Percent	411	348
MAI Indication Code	4	4
MCI Indication Code	7	7
MMI Indication Code	0	0
MVI Indication Code	0	0
SAI Indication Code	64	54
SCI Indication Code	68	65
SVI Indication Code	1	1

TOTAL ENTRIES: 555
TOTAL TUBES: 456

Appendix 4

Inspection Summary

Steam Generator E-089

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 1

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION		EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE SIZE
1	1	1	0.21	64	11	P 2	DBH	+1.01		07HTEC			M7262	reso	89C00110	C	1	560SF
2	22	2	0.49	146	19	P 2	VSM	-0.94		TEHTEC			B2265	prim	89C00001	C	0	600UL
3	38	4	0.35	93	15	P 2	02C	-0.92		TEHTEC			B4260	reso	89C00001	C	0	600UL
4			0.35	45	15	P 2	01C	+0.18		TEHTEC			B4260	reso	89C00001	C	0	600UL
5	48	6	0.50	85	19	P 2	08C	-1.84		TEHTEC	LAR		M7262	reso	89C00001	C	0	600UL
6	32	10	0.34	89	14	P 2	03H	+0.97		TEHTEC			R8278	seco	89C00001	C	0	600UL
7	36	10	0.25	150	11	P 2	VSM	+0.93		TEHTEC			R8278	seco	89C00001	C	0	600UL
8	64	10	0.54	114	20	P 2	03C	-1.04		TEHTEC			R8278	seco	89C00001	C	0	600UL
9	73	13	0.35	48	14	P 2	VH3	+0.95		TEHTEC			V1371	prim	89C00085	C	0	600UL
10	25	17	0.18	80	SAI	2	05H	+9.67		05H05H	0.00	0.34	W3386	reso	89H00206	H	2	600PP
11	44	18	0.32	141	12	P 2	VSM	-0.84		TEHTEC			B2027	prim	89C00005	C	0	600UL
12	93	23	0.81	94	28	P 2	02C	+0.87		TEHTEC			B3170	prim	89C00086	C	0	600UL
13	16	24	0.58	19	SCI	P 1	TSH	+0.01		TSHTSH	0.42	0.22	E4963	reso	89H00147	H	0	600PP
14	90	24	0.36	123	14	P 2	VH2	-0.84		TEHTEC			T6144	seco	89C00085	C	0	600UL
15			0.37	79	14	P 2	VSM	-0.83		TEHTEC			T6144	seco	89C00085	C	0	600UL
16	59	25	0.37	69	16	P 2	VH3	-0.62		TEHTEC			B2027	prim	89C00070	C	0	600UL
17	72	26	0.43	97	18	P 2	VC3	+0.85		TEHTEC			B3170	prim	89C00086	C	0	600UL
18	90	26	0.39	74	15	P 2	VH2	-0.68		TEHTEC			V1371	prim	89C00085	C	0	600UL
19	92	26	0.31	138	13	P 2	VH2	+0.00		TEHTEC			B3170	prim	89C00086	C	0	600UL
20	94	26	0.34	87	14	P 2	VH2	+0.98		TSHTEC			V1371	prim	89C00085	C	0	600UL
21	96	26	0.22	31	10	P 2	VH2	-0.70		TEHTEC			B3170	prim	89C00086	C	0	600UL
22	30	28	0.13	108	SAI	2	02H	+17.16		02H02H	0.25	0.44	W3386	reso	89H00206	H	2	600PP
23	82	28	0.18	151	9	P 2	VH3	-0.43		TEHTEC			D5695	seco	89C00086	C	0	600UL
24	9	29	0.55	16	SCI	P 1	TSH	-0.07		TSHTSH	0.52	0.46	E4963	reso	89H00147	H	0	600PP
25	99	29	0.32	80	12	P 2	VH2	+0.85		TEHTEC			T6144	seco	89C00085	C	0	600UL
26	2	30	0.50	87	18	P 2	04H	+0.74		DBHTEH			J9815	prim	89H00183	H	1	600UL
27	88	30	0.43	60	17	P 2	VH2	-0.68		TEHTEC			L9168	prim	89C00085	C	0	600UL
28	94	30	0.29	126	13	P 2	VH2	-1.00		TEHTEC			P4578	reso	89C00086	C	0	600UL
29	97	31	0.36	95	14	P 2	VH2	-0.78		TEHTEC			L9168	prim	89C00085	C	0	600UL
30	72	32	0.29	133	13	P 2	08C	-0.95		TEHTEC			M7262	reso	89C00086	C	0	600UL
31	47	33	0.44	64	24	P 3	DBH	+1.83		TEHTEC			M7262	reso	89C00074	C	0	600UL
32	106	34	0.34	101	SAI	2	06H	+2.29	TO+3.75	06H07H	0.21	0.87	M0554	reso	89H00212	H	2	600PP
33	110	34	0.32	132	12	P 2	VH2	+1.04		TEHTEC			R8278	seco	89C00087	C	0	600UL
34	63	35	0.25	98	12	P 2	VH3	-0.54		TEHTEC			G7112	seco	89C00074	C	0	600UL
35	97	35	0.31	155	16	P 2	VH2	-0.67		TEHTEC			P1465	prim	89C00088	C	0	600UL
36	101	35	0.33	71	16	P 2	VH3	-0.61		TEHTEC			P1465	prim	89C00088	C	0	600UL
37	107	35	0.35	82	13	P 3	DBC	+1.39		TEHTEC			R8278	seco	89C00087	C	0	600UL
38	89	37	0.18	59	7	P 2	VC3	+0.79		TEHTEC			D2003	prim	89C00087	C	0	600UL
39	97	37	0.42	142	19	P 2	VC3	+0.89		TEHTEC			P1465	prim	89C00088	C	0	600UL
40	70	38	0.31	146	12	P 2	VC3	+1.20		TEHTEC			B2027	prim	89C00075	C	0	600UL
41	82	38	0.21	128	11	P 2	01H	+0.92		TEHTEC			T4180	seco	89C00088	C	0	600UL
42	94	38	0.37	67	17	P 2	06H	+0.60		TEHTEC			M7262	reso	89C00088	C	0	600UL
43			0.22	83	SAI	2	06H	+0.61		06H06H	0.00	0.25	M7262	reso	89H00213	H	2	600PP
44	98	38	0.29	101	SAI	2	06H	+0.52		06H06H	0.64	0.32	M7262	reso	89H00213	H	2	600PP
45			0.45	136	20	P 2	06H	+0.77		TEHTEC			M7262	reso	89C00088	C	0	600UL
46	108	38	0.31	108	11	P 2	VH2	+0.92		TEHTEC			R8278	seco	89C00087	C	0	600UL
47	9	39	0.32	89	13	P 2	03H	+0.93		TEHTEC			W3386	reso	89C00075	C	0	600UL
48	121	39	0.30	95	12	P 2	10H	-1.79		TEHTEC	LAR		M7262	reso	89C00087	C	0	600UL
49	12	40	1.01	11	SAI	2	TSH	-2.53		TSHTSH	0.90	0.20	H1748	reso	89H00149	H	0	600PP

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 2

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION		EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
50	34	40	0.34	114	12	P 2	02H		-1.17	TEHTEC			R8278	seco	89C00077	C 0	600UL
51	114	40	0.51	87	18	P 3	DBH		+1.95	TEHTEC			D2003	prim	89C00087	C 0	600UL
52	122	40	0.18	44	7	P 2	02C		-0.20	TEHTEC			D2003	prim	89C00087	C 0	600UL
53	103	41	0.27	144	13	P 2	09H		-1.06	TEHTEC			T4180	seco	89C00090	C 0	600UL
54	107	41	0.31	48	15	P 2	09H		-1.10	TEHTEC			T4180	seco	89C00090	C 0	600UL
55	123	41	0.14	115	SVI	2	TSH		+7.55	TSH01H	0.27	0.33	M0554	reso	89H00212	H 2	600PP
56	36	42	0.26	88	13	P 2	VSM		-0.67	TEHTEC			B5926	seco	89C00078	C 0	600UL
57	40	42	0.21	119	10	P 2	VSM		-0.76	TEHTEC			B5926	seco	89C00078	C 0	600UL
58	76	42	0.32	129	19	P 3	DBC		-1.76	TEHTEC			D2003	prim	89C00090	C 0	600UL
59	94	42	0.41	62	16	P 2	VH2		+0.74	TEHTEC			L9168	prim	89C00089	C 0	600UL
60	108	42	0.40	127	16	P 3	DBH		-2.00	TEHTEC			C0360	reso	89C00089	C 0	600UL
61			0.39	123	16	P 3	DBH		+2.00	TEHTEC			C0360	reso	89C00089	C 0	600UL
62	122	42	0.39	129	22	P 3	DBC		-2.19	TEHTEC			E4963	reso	89C00090	C 0	600UL
63	77	43	0.23	143	12	P 2	VH3		+0.74	TEHTEC			D2003	prim	89C00090	C 0	600UL
64	81	43	0.59	129	25	P 2	VSM		-0.82	TEHTEC			T4180	seco	89C00090	C 0	600UL
65	8	44	0.33	94	SAI	2	05H		-0.77	05H05H	0.0	0.85	M7262	reso	89H00196	H 0	600PP
66	50	44	0.26	149	9	P 2	VSM		-0.70	TEHTEC			T6144	seco	89C00077	C 0	600UL
67	56	44	0.25	60	12	P 2	VH3		+0.09	TEHTEC			H1748	reso	89C00078	C 0	600UL
68	74	44	0.56	134	20	P 2	VH3		-0.74	TEHTEC			L9168	prim	89C00089	C 0	600UL
69	88	44	0.35	153	17	P 2	VH2		-0.67	TEHTEC			E4963	reso	89C00090	C 0	600UL
70	121	45	0.59	91	21	P 2	VC2		-0.50	TEHTEC			L9168	prim	89C00089	C 0	600UL
71	88	46	0.24	96	12	P 2	VH2		-0.69	TEHTEC			D2003	prim	89C00090	C 0	600UL
72	126	46	0.23	105	11	P 2	VH1		-1.06	TEHTEC			D2003	prim	89C00090	C 0	600UL
73	97	47	0.25	91	12	P 2	VH2		+0.89	TEHTEC			T4180	seco	89C00090	C 0	600UL
74	101	47	0.17	64	9	P 2	VC2		+0.82	TEHTEC			D2003	prim	89C00090	C 0	600UL
75	103	47	0.32	53	13	P 2	VH2		-0.78	TEHTEC			L9168	prim	89C00089	C 0	600UL
76	109	47	0.23	144	12	P 2	VSM		-0.93	TEHTEC			D2003	prim	89C00090	C 0	600UL
77			0.22	98	11	P 2	VC3		-0.82	TEHTEC			D2003	prim	89C00090	C 0	600UL
78	121	47	0.35	90	17	P 2	10H		+0.79	TEHTEC			M7262	reso	89C00090	C 0	600UL
79	60	48	0.85	17	SCI	P 1	TSH		-0.06	TSHTSH	0.40	0.19	H7791	reso	89H00151	H 0	600PP
80	124	48	0.41	122	19	P 2	VH1		-0.83	TEHTEC			D2003	prim	89C00090	C 0	600UL
81	49	49	0.30	94	13	P 2	08H		+1.80	TEHTEC	LAR		M7262	reso	89C00084	C 0	600UL
82	65	49	0.42	117	18	P 2	VH3		+1.00	TEHTEC			B4014	prim	89C00084	C 0	600UL
83	73	49	0.30	76	12	P 2	02H		+0.89	TEHTEC			L9168	prim	89C00089	C 0	600UL
84	83	49	0.41	17	SCI	P 1	TSH		-0.14	TSHTSH	0.91	0.19	W3386	reso	89H00160	H 0	600PP
85	87	49	0.16	97	8	P 2	VH2		+0.73	TEHTEC			D2003	prim	89C00090	C 0	600UL
86	107	49	0.23	97	12	P 2	VC3		-0.76	TEHTEC			D2003	prim	89C00090	C 0	600UL
87	125	49	0.19	139	10	P 2	VH1		-0.83	TEHTEC			D2003	prim	89C00090	C 0	600UL
88	129	49	0.19	146	10	P 2	VH1		-0.85	TEHTEC			D2003	prim	89C00090	C 0	600UL
89			0.21	130	11	P 2	VH1		+0.63	TEHTEC			D2003	prim	89C00090	C 0	600UL
90	94	50	0.25	119	12	P 2	05C		-0.17	TEHTEC			D2003	prim	89C00092	C 0	600UL
91	126	50	0.23	86	11	P 2	VH1		-0.97	TEHTEC			D2003	prim	89C00092	C 0	600UL
92	128	50	0.22	128	9	P 2	VH1		-0.93	TEHTEC			B2027	prim	89C00091	C 0	600UL
93	75	51	0.16	108	9	P 3	DBH		-1.63	TEHTEC			D2003	prim	89C00092	C 0	600UL
94	8	52	0.68	19	SCI	P 1	TSH		-3.14	TSHTSH	0.88	0.19	C0360	reso	89H00051	H 0	600PP
95	10	52	0.32	102	11	P 2	01C		+0.07	TEHTEC			D3858	reso	89C00032	C 0	600UL
96	28	52	0.20	120	SCI	P 1	TSH		+0.18	TSHTSH	0.32	0.17	H7791	reso	89H00051	H 0	600PP
97	130	52	0.23	155	11	P 2	VH1		-0.83	TEHTEC			D2003	prim	89C00092	C 0	600UL
98	47	53	0.22	86	9	P 2	VSM		-0.65	STHTEC			G4841	reso	89C00034	C 0	600UL

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 3

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION		EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE SIZE
99	49	53	0.43	129	19	P 2	08C	-1.31		TEHTEC	LAR		M7262	reso	89C00035	C	0	600UL
100	125	53	0.37	131	14	P 2	VH1	-0.79		TEHTEC			B2027	prim	89C00091	C	0	600UL
101	74	54	0.14	144	7	P 3	DBH	-2.03		TEHTEC			H1748	reso	89C00091	C	0	600UL
102	84	54	0.37	18	SCI	P 1	TSH	-0.04		TSHTSH	0.41	0.21	W3386	reso	89H00091	H	0	600PP
103	88	54	0.25	130	10	P 2	VH2	-0.74		TEHTEC			B2027	prim	89C00091	C	0	600UL
104			0.25	133	10	P 2	VH2	+0.85		TEHTEC			B2027	prim	89C00091	C	0	600UL
105	120	54	0.35	148	14	P 2	VH1	-0.68		TEHTEC			B2027	prim	89C00091	C	0	600UL
106			0.38	104	15	P 2	VH1	+0.70		TEHTEC			B2027	prim	89C00091	C	0	600UL
107	130	54	0.34	116	16	P 2	VH1	-0.74		TEHTEC			D2003	prim	89C00092	C	0	600UL
108	47	55	1.08	14	SAI	2	07H	-0.16		07H07H	0.0	0.15	M7262	reso	89H00049	H	5	600PP
109	49	55	0.45	88	20	P 2	08C	-1.11		08HTEC			B3170	prim	89C00035	C	0	600UL
110	109	55	0.32	118	13	P 2	VH2	-0.94		TEHTEC			B2027	prim	89C00091	C	0	600UL
111	74	56	0.27	81	16	P 3	DBH	+1.18		TEHTEC			P1465	prim	89C00094	C	0	600UL
112	126	56	0.38	116	14	P 2	VH1	-1.02		TEHTEC			B2027	prim	89C00091	C	0	600UL
113	65	57	0.13	94	SAI	2	TSH	+2.12		TSHTSH	0.00	0.19	W3386	reso	89H00045	H	0	600PP
114	131	57	0.85	14	SAI	2	TSH	-5.66		TSHTSH	1.08	0.15	G4841	reso	89H00124	H	0	600PP
115			1.35	20	SAI	2	TSH	-5.16		TSHTSH	2.21	0.26	G4841	reso	89H00124	H	0	600PP
116	16	58	0.31	119	14	P 2	07H	-0.11		TEHTEC			B4260	reso	89C00035	C	0	600UL
117	20	58	0.39	126	18	P 2	01H	+0.86		TEHTEC			H7791	reso	89C00035	C	0	600UL
118	50	58	0.42	111	16	P 2	02H	-1.21		TEHTEC			M7262	reso	89C00034	C	0	600UL
119	62	58	1.34	18	SAI	2	TSH	-6.37		TSHTSH	1.29	0.12	H7791	reso	89H00046	H	0	600PP
120	102	58	0.22	109	9	P 2	VC3	-1.10		TEHTEC			B4260	reso	89C00093	C	0	600UL
121	124	58	0.39	122	15	P 2	VH1	-0.75		TEHTEC			B2153	seco	89C00093	C	0	600UL
122	2	60	0.17	92	SAI	2	02H	+0.46		02H02H	0.00	0.31	H1748	reso	89H00134	H	2	600PP
123	6	60	0.31	48	13	P 2	02H	-1.23		TEHTEC			W9213	seco	89C00037	C	0	600UL
124	26	60	0.47	16	SAI	2	TSH	-2.29		TSHTSH	0.99	0.10	H7791	reso	89H00041	H	0	600PP
125	51	61	0.35	82	15	P 2	08C	-0.73		TEHTEC			W9213	seco	89C00037	C	0	600UL
126	139	61	0.20	98	10	P 2	09C	-1.08		TEHTEC			C4330	prim	89C00094	C	0	600UL
127	74	62	0.23	37	13	P 3	DBC	-2.00		STHTEC			T6144	seco	89C00096	C	0	600UL
128	106	62	0.28	56	11	P 2	VC2	-0.85		TEHTEC			T3513	prim	89C00138	C	0	600UL
129	114	62	0.35	127	12	P 3	DBH	-1.79		TEHTEC			R8278	seco	89C00138	C	0	600UL
130	11	63	0.47	13	SAI	2	TSH	-0.74		TSHTSH	0.0	0.22	H1748	reso	89H00035	H	0	600PP
131			0.17	116	SCI	P 1	TSH	+0.11		TSHTSH	0.0	0.22	H1748	reso	89H00035	H	0	600PP
132	47	63	0.70	15	SAI	2	07H	-0.12		07H07H	0.0	0.14	M7262	reso	89H00036	H	5	600PP
133	34	64	0.12	97	SAI	2	TSH	+1.31		TSHTSH	0.0	0.20	H1748	reso	89H00035	H	0	600PP
134	56	64	0.22	124	10	P 2	VH3	-0.66		TEHTEC			D2003	prim	89C00039	C	0	600UL
135	134	64	0.27	124	12	P 2	VH3	-0.86		TEHTEC			T6144	seco	89C00096	C	0	600UL
136			0.31	146	12	P 2	VC3	-0.82		TEHTEC			B4014	prim	89C00096	C	0	600UL
137	15	65	0.07	123	SAI	2	02H	+10.12		02H03H	0.00	0.17	H1748	reso	89H00134	H	0	600PP
138			0.20	87	SAI	2	02H	+11.44		02H03H	0.30	0.40	H1748	reso	89H00134	H	2	600PP
139	49	65	0.23	122	11	P 2	VSM	-0.62		TEHTEC			D2003	prim	89C00039	C	0	600UL
140	26	66	0.34	14	SAI	2	TSH	-3.63		TSHTSH	0.18	0.13	P4578	reso	89H00031	H	0	600PP
141	48	66	0.58	165	23	P 2	VSM	-0.66		TEHTEC			D3858	reso	89C00039	C	0	600UL
142	57	67	0.21	92	SAI	2	TSH	+3.38		TSHTSH	0.11	0.15	P4578	reso	89H00031	H	0	600PP
143			0.17	110	SAI	2	TSH	+3.51		TSHTSH	0.08	0.13	P4578	reso	89H00031	H	0	600PP
144	63	67	0.52	29	SCI	P 1	TSH	-0.14		TSHTSH	0.27	0.19	P4578	reso	89H00032	H	0	600PP
145	141	67	0.34	101	13	P 2	09C	-1.07		TEHTEC			W3386	reso	89C00141	C	0	600UL
146	44	68	0.19	82	MAI	2	TSH	+0.55	TO+1.08	TSHTSH	0.0	0.53	M7262	reso	89H00029	H	0	600PP
147	78	68	0.32	54	13	P 2	VH3	+0.86		TEHTEC			B4014	prim	89C00098	C	0	600UL

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 4

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION		EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
148	82	68	0.59	135	21	P 2	VH3	-0.86		TEHTEC			B4014	prim	89C00098	C 0	600UL
149			0.31	155	12	P 2	VH3	+0.84		TEHTEC			B4014	prim	89C00098	C 0	600UL
150	132	68	0.26	134	12	P 2	VH1	-0.76		TEHTEC			T6144	seco	89C00096	C 0	600UL
151	136	68	0.42	122	17	P 2	VH1	-0.74		TEHTEC			B4014	prim	89C00096	C 0	600UL
152	137	69	0.26	80	10	P 2	VH1	+0.65		TEHTEC			B4014	prim	89C00098	C 0	600UL
153	58	70	0.14	93	SAI	2	TSH	+2.53		TSHTSH	0.0	0.28	M7262	reso	89H00030	H 0	600PP
154	64	70	0.14	111	SAI	2	TSH	+3.84		TSHTSH	0.22	0.29	H7791	reso	89H00029	H 0	600PP
155	128	70	0.26	75	11	P 2	VH3	+0.80		TEHTEC			T6144	seco	89C00098	C 0	600UL
156	138	70	0.54	99	SVI	2	DBH	+0.30	TO+1.00	DBHDBH	0.42	0.35	G4841	reso	89H00217	H10	560PP
157			0.42	74	16	P 3	DBH	+0.71		TEHTEC			T3513	prim	89C00138	C 0	600UL
158	31	71	0.32	65	15	P 3	DBH	-1.73		TEHTEC			M7262	reso	89C00041	C 0	600UL
159			0.25	146	10	P3	DBC	-1.76		TEHTEC			M7262	reso	89C00041	C 0	600UL
160	41	71	0.44	123	19	P 2	VSM	-0.82		TEHTEC			T3513	prim	89C00041	C 0	600UL
161			0.61	129	24	P 2	VSM	-0.66		TEHTEC			T3513	prim	89C00041	C 0	600UL
162			0.86	123	30	P 2	VSM	-0.11		TEHTEC			T3513	prim	89C00041	C 0	600UL
163	133	71	0.33	87	13	P 2	VH1	-0.80		TEHTEC			B4014	prim	89C00098	C 0	600UL
164			0.29	56	11	P 2	VH1	+0.85		TEHTEC			B4014	prim	89C00098	C 0	600UL
165	137	71	0.28	81	15	P 3	DBH	-1.62		TEHTEC			B4014	prim	89C00098	C 0	600UL
166	143	71	0.39	139	16	P 3	DBH	+1.98		TEHTEC			B5926	seco	89C00141	C 0	600UL
167			0.47	96	16	P 2	VH1	-0.80		TEHTEC			B5926	seco	89C00141	C 0	600UL
168			0.27	46	10	P 2	VH1	+0.84		TEHTEC			B5926	seco	89C00141	C 0	600UL
169	112	72	0.31	80	12	P 2	VH3	+0.90		TEHTEC			B4014	prim	89C00098	C 0	600UL
170	120	72	0.31	150	13	P 2	10H	-1.00		TEHTEC			T6144	seco	89C00098	C 0	600UL
171	128	72	0.34	98	14	P 2	10H	+0.90		TEHTEC			B4014	prim	89C00098	C 0	600UL
172	39	73	0.45	134	22	P 3	DBC	-1.59		TEHTEC			M7262	reso	89C00041	C 0	600UL
173	71	73	0.79	19	SAI	2	07H	+0.43		07H07H	1.58	0.30	W3386	reso	89H00213	H 2	600PP
174			0.58	23	SAI	2	07H	+0.76		07H07H	0.00	0.15	M7262	reso	89H00213	H 2	600PP
175	129	73	0.18	107	11	P 3	DBH	+1.83		TEHTEC			T6144	seco	89C00098	C 0	600UL
176	143	73	0.34	144	15	P 3	DBC	-1.33		TEHTEC			B4014	prim	89C00141	C 0	600UL
177			0.26	116	12	P 3	DBC	+1.72		TEHTEC			B4014	prim	89C00141	C 0	600UL
178	145	73	1.60	111	36	P 2	VC1	-0.84		TEHTEC			B4014	prim	89C00141	C 0	600UL
179			0.62	114	23	P 3	DBC	+1.42		TEHTEC			B4014	prim	89C00141	C 0	600UL
180	50	74	0.26	129	12	P 3	DBC	-2.19		TEHTEC			B5926	seco	89C00040	C 0	600UL
181			0.39	87	17	P 3	DBC	+1.74		TEHTEC			B5926	seco	89C00040	C 0	600UL
182	120	74	0.44	129	17	P 2	10H	+0.33		TEHTEC			R5555	reso	89C00098	C 0	600UL
183	130	74	0.25	76	7	P 2	10H	+0.94		TEHTEC			B4014	prim	89C00097	C 0	600UL
184	144	74	0.66	96	22	P 2	VC1	+1.01		TEHTEC			B4014	prim	89C00141	C 0	600UL
185	81	75	0.34	111	11	P 2	VC3	+0.78		TEHTEC			V1371	prim	89C00099	C 0	600UL
186	145	75	0.47	81	19	P 3	DBH	+2.06		TEHTEC			B4014	prim	89C00141	C 0	600UL
187	44	76	1.03	117	32	P 3	DBC	-1.50		TEHTEC			B3170	prim	89C00040	C 0	600UL
188	50	76	0.27	131	12	P 3	DBC	-1.61		TEHTEC			B3170	prim	89C00040	C 0	600UL
189	52	76	0.24	94	10	P 3	DBC	-1.51		TEHTEC			D3858	reso	89C00041	C 0	600UL
190	138	76	0.31	98	10	P 2	VH1	-0.79		TEHTEC			V1371	prim	89C00099	C 0	600UL
191	53	77	0.31	74	14	P 3	DBC	-1.88		TEHTEC			B3170	prim	89C00040	C 0	600UL
192	125	77	0.31	127	13	P 2	VH1	+0.85		TEHTEC			M6664	prim	89C00100	C 0	600UL
193	72	78	0.43	117	17	P 2	VH3	-0.77		TEHTEC			D5695	seco	89C00100	C 0	600UL
194			0.20	152	9	P 2	VC3	+1.05		TEHTEC			D5695	seco	89C00100	C 0	600UL
195	76	78	0.50	106	15	P 2	VC3	-1.07		TEHTEC			L9168	prim	89C00099	C 0	600UL
196			0.29	131	9	P 2	VC3	+1.03		TEHTEC			L9168	prim	89C00099	C 0	600UL

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 5

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
197	130	78	0.26	129	11	P 2	10H	-1.04	TEHTEC			M6664	prim	89C00100	C 0	600UL
198	146	78	0.50	115	20	P 3	DBH	-0.12	TEHTEC			B4014	prim	89C00141	C 0	600UL
199	47	79	1.12	119	38	P 3	DBC	+1.40	TEHTEC			K3270	seco	89C00041	C 0	600UL
200	63	79	0.71	53	26	P 3	DBC	-1.38	TEHTEC			G7112	seco	89C00040	C 0	600UL
201	65	79	0.27	149	12	P 3	DBC	-1.39	TEHTEC			K3270	seco	89C00041	C 0	600UL
202	71	79	0.41	140	18	P 3	DBC	-1.85	TEHTEC			M6664	prim	89C00100	C 0	600UL
203	75	79	0.38	131	17	P 3	DBC	-2.05	TEHTEC			M6664	prim	89C00100	C 0	600UL
204	81	79	0.59	70	17	P 2	VH3	-0.89	TEHTEC			L9168	prim	89C00099	C 0	600UL
205	119	79	0.61	140	18	P 2	VH3	+0.89	TEHTEC			L9168	prim	89C00099	C 0	600UL
206	52	80	0.40	83	17	P 3	DBC	-1.70	TEHTEC			B4260	reso	89C00040	C 0	600UL
207	66	80	0.30	104	13	P 3	DBC	+1.60	TEHTEC			B3170	prim	89C00040	C 0	600UL
208	72	80	0.28	150	13	P 2	VC3	+0.92	TEHTEC			D2003	prim	89C00102	C 0	600UL
209	55	81	0.53	84	21	P 3	DBC	-1.81	TEHTEC			B3170	prim	89C00040	C 0	600UL
210	121	81	0.17	35	8	P 2	VH3	-0.76	TEHTEC			W9213	seco	89C00102	C 0	600UL
211	133	81	0.41	131	18	P 2	VH1	+0.92	TEHTEC			D2003	prim	89C00102	C 0	600UL
212	143	81	0.32	55	12	P 2	VC1	-0.86	TEHTEC			B4014	prim	89C00141	C 0	600UL
213	145	81	0.73	111	23	P 2	VH1	+0.92	TEHTEC			B4014	prim	89C00141	C 0	600UL
214	147	81	0.59	93	22	P 3	DBC	+1.86	TEHTEC			W3386	reso	89C00141	C 0	600UL
215	48	82	1.23	131	39	P 3	DBH	-1.75	TEHTEC			G4841	reso	89C00041	C 0	600UL
216			0.85	71	33	P 3	DBH	+2.00	TEHTEC			G4841	reso	89C00041	C 0	600UL
217			0.96	103	35	P 3	DBC	-1.85	TEHTEC			G4841	reso	89C00041	C 0	600UL
218			0.66	127	29	P 3	DBC	+1.75	TEHTEC			G4841	reso	89C00041	C 0	600UL
219	54	82	0.57	80	26	P 3	DBC	+1.23	TEHTEC			D3858	reso	89C00041	C 0	600UL
220	56	82	0.67	103	23	P 2	VH3	-0.84	TEHTEC			B3170	prim	89C00040	C 0	600UL
221			0.27	119	11	P 2	VH3	+0.99	TEHTEC			B3170	prim	89C00040	C 0	600UL
222	64	82	0.38	103	18	P 3	DBC	+1.29	TEHTEC			D3858	reso	89C00041	C 0	600UL
223	78	82	0.95	18	SAI	2	TSH	-6.23	TSHTSH	.75	.17	P4578	reso	89H00084	H 0	600PP
224	126	82	0.24	77	10	P 2	VH2	+0.93	TEHTEC			D2003	prim	89C00140	C 0	600UL
225	53	83	0.26	125	11	P 3	DBH	+1.72	TEHTEC			K3270	seco	89C00041	C 0	600UL
226			0.45	119	21	P 3	DBC	-1.33	TEHTEC			K3270	seco	89C00041	C 0	600UL
227	55	83	0.67	82	25	P 3	DBC	-1.72	TEHTEC			B3170	prim	89C00040	C 0	600UL
228	57	83	0.48	74	22	P 3	DBC	-1.53	TEHTEC			D3858	reso	89C00041	C 0	600UL
229	59	83	1.14	102	34	P 3	DBC	-1.64	TEHTEC			G7112	seco	89C00040	C 0	600UL
230	63	83	0.51	137	27	P 3	DBC	-1.76	TEHTEC			D2003	prim	89C00043	C 0	600UL
231	67	83	0.28	55	18	P 3	DBH	-1.59	TEHTEC			B8589	seco	89C00043	C 0	600UL
232			0.47	95	26	P 3	DBC	-1.57	TEHTEC			B8589	seco	89C00043	C 0	600UL
233	121	83	0.39	137	18	P 2	VC3	-0.84	TEHTEC			D2003	prim	89C00102	C 0	600UL
234	133	83	0.27	64	11	P 2	VH2	-0.73	TEHTEC			D2003	prim	89C00140	C 0	600UL
235	147	83	0.34	71	13	P 2	09H	-1.03	TEHTEC			B4014	prim	89C00141	C 0	600UL
236			0.30	123	11	P 2	10H	-0.19	TEHTEC			B4014	prim	89C00141	C 0	600UL
237			1.12	104	32	P 3	DBH	+1.75	TEHTEC			B4014	prim	89C00141	C 0	600UL
238			0.52	52	18	P 2	VH1	+0.88	TEHTEC			B4014	prim	89C00141	C 0	600UL
239	56	84	0.23	98	SCI	P 1	TSH	+0.04	TSHTSH	0.0	0.40	B4260	reso	89H00024	H 0	600PP
240			0.22	101	11	P 3	DBH	+1.89	TEHTEC			D2003	prim	89C00043	C 0	600UL
241			0.27	154	18	P 3	DBC	-1.85	TEHTEC			B8589	seco	89C00043	C 0	600UL
242	58	84	0.35	120	16	P 3	DBH	+1.78	TEHTEC			L3025	prim	89C00042	C 0	600UL
243			0.78	114	27	P 3	DBC	-1.90	TEHTEC			G4841	reso	89C00042	C 0	600UL
244			1.20	128	34	P 3	DBC	+1.80	TEHTEC			G4841	reso	89C00042	C 0	600UL
245	62	84	0.60	101	24	P 3	DBH	-1.64	TEHTEC			L3025	prim	89C00042	C 0	600UL

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 6

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE SIZE
246	64	84	0.26	72	14	P 3	DBH	+1.61	TEHTEC			D2003	prim	89C00043	C	0	600UL
247	68	84	0.21	35	11	P 2	VSM	-0.78	TEHTEC			B8589	seco	89C00043	C	0	600UL
248	72	84	0.23	132	11	P 2	VH3	-0.88	TEHTEC			D2003	prim	89C00102	C	0	600UL
249			0.19	49	10	P 2	VC3	-0.85	TEHTEC			D2003	prim	89C00102	C	0	600UL
250			0.36	136	20	P 3	DBC	-2.00	TEHTEC			D2003	prim	89C00102	C	0	600UL
251	106	84	0.32	88	13	P 2	VH3	+0.80	TEHTEC			D2003	prim	89C00140	C	0	600UL
252	118	84	0.35	95	14	P 2	VC2	+0.57	TEHTEC			B4014	prim	89C00140	C	0	600UL
253	120	84	0.25	58	SCI	P 1	TSH	+0.02	TSHTSH	0.00	0.40	M7262	reso	89H00083	H	0	600PP
254	57	85	0.48	88	20	P 3	DBH	-1.78	TEHTEC			L3025	prim	89C00042	C	0	600UL
255			1.17	96	34	P 3	DBH	+1.76	TEHTEC			L3025	prim	89C00042	C	0	600UL
256	75	85	0.23	72	14	P 3	DBC	+1.30	TEHTEC			E4963	reso	89C00102	C	0	600UL
257	81	85	0.25	60	12	P 2	VH3	+0.87	TEHTEC			D2003	prim	89C00102	C	0	600UL
258	89	85	0.32	105	15	P 2	VH2	-0.79	TEHTEC			W9213	seco	89C00102	C	0	600UL
259	145	85	1.14	111	32	P 3	DBC	+1.70	TEHTEC			B4014	prim	89C00141	C	0	600UL
260	56	86	0.97	98	33	P 3	DBC	+2.11	TEHTEC			C4330	prim	89C00184	C	0	600UL
261	132	86	0.30	128	12	P 2	VH1	-0.85	TEHTEC			L3025	prim	89C00066	C	0	600UL
262	59	87	0.96	90	33	P 3	DBH	+1.70	STHTEC			W3386	reso	89C00184	C	0	600UL
263	63	87	0.52	110	24	P 3	DBH	-1.54	STHTEC			C4330	prim	89C00184	C	0	600UL
264	75	87	0.29	146	12	P 3	DBC	-1.98	TEHTEC			B4165	prim	89C00066	C	0	600UL
265	143	87	0.53	85	20	P 3	DBC	+1.66	TEHTEC			B5926	seco	89C00141	C	0	600UL
266			0.31	136	12	P 2	10C	+0.76	TEHTEC			B4014	prim	89C00141	C	0	600UL
267	147	87	0.42	139	15	P 2	09H	-1.07	TEHTEC			B4014	prim	89C00141	C	0	600UL
268			0.60	145	20	P 2	10H	+0.66	TEHTEC			B4014	prim	89C00141	C	0	600UL
269			1.38	89	35	P 3	DBC	+1.84	TEHTEC			B4014	prim	89C00141	C	0	600UL
270	54	88	0.87	99	32	P 3	DBH	+1.64	TEHTEC			C4330	prim	89C00184	C	0	600UL
271			0.48	116	27	P 3	DBH	+2.00	TEHTEC			T6144	seco	89C00184	C	0	600UL
272			0.35	37	14	P 2	VSM	-0.79	TEHTEC			C4330	prim	89C00184	C	0	600UL
273			0.55	146	25	P 3	DBC	-1.89	TEHTEC			W3386	reso	89C00184	C	0	600UL
274	56	88	0.94	117	29	P 3	DBH	+1.42	TEHTEC			B3170	prim	89C00183	C	0	600UL
275	58	88	0.71	110	29	P 3	DBH	+2.19	TEHTEC			W3386	reso	89C00184	C	0	600UL
276	60	88	0.49	127	19	P 3	DBH	+1.80	TEHTEC			P4578	reso	89C00183	C	0	600UL
277	70	88	0.94	111	30	P 3	DBC	+1.44	TEHTEC			B3170	prim	89C00183	C	0	600UL
278	134	88	0.35	96	15	P 2	VH1	+0.80	TEHTEC			L9168	prim	89C00067	C	0	600UL
279	146	88	0.64	64	23	P 3	DBC	+1.72	TEHTEC			B4014	prim	89C00141	C	0	600UL
280	57	89	1.04	91	35	P 3	DBC	+1.39	TEHTEC			W3386	reso	89C00184	C	0	600UL
281	65	89	0.49	154	23	P 3	DBH	+1.83	TEHTEC			W3386	reso	89C00184	C	0	600UL
282	83	89	0.43	23	SCI	P 1	TSH	-0.11	TSHTSH	0.46	0.21	E4963	reso	89H00083	H	0	600PP
283	107	89	0.21	99	SCI	P 1	TSH	+0.07	TSHTSH	0.00	0.40	M7262	reso	89H00082	H	0	600PP
284	145	89	0.39	99	14	P 2	VC2	+0.87	TEHTEC			B4014	prim	89C00141	C	0	600UL
285	56	90	0.71	91	29	P 3	DBH	-1.29	TEHTEC			W3386	reso	89C00184	C	0	600UL
286	58	90	0.58	107	22	P 3	DBH	-1.86	TEHTEC			B3170	prim	89C00183	C	0	600UL
287	68	90	0.68	71	28	P 3	DBC	-1.98	TEHTEC			C4330	prim	89C00184	C	0	600UL
288	72	90	0.26	83	16	P 3	DBC	-2.01	TEHTEC			M7262	reso	89C00065	C	0	600UL
289	51	91	2.47	80	46	P 3	DBH	+1.66	TEHTEC			C4330	prim	89C00184	C	0	600UL
290			0.37	126	19	P 3	DBC	-2.18	TEHTEC			C4330	prim	89C00184	C	0	600UL
291	71	91	0.23	148	15	P 3	DBC	-2.11	TEHTEC			M7262	reso	89C00065	C	0	600UL
292	145	91	0.82	45	27	P 3	DBC	+1.64	TEHTEC			B4014	prim	89C00141	C	0	600UL
293	52	92	0.43	85	16	P 2	02H	+0.86	TEHTEC			P4578	reso	89C00184	C	0	600UL
294			0.55	70	25	P 3	DBH	-1.72	TEHTEC			C4330	prim	89C00184	C	0	600UL

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL

NOV. 7,2000 17:13

PAGE 7

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL GROUP	LEG	PROBE SIZE
295			0.55	79	25	P 3	DBH	+1.91	TEHTEC			C4330	prim	89C00184	C 0	600UL
296	54	92	0.87	101	28	P 3	DBH	-1.65	TEHTEC			B3170	prim	89C00183	C 0	600UL
297			0.74	138	26	P 3	DBC	+2.03	TEHTEC			M7262	reso	89C00183	C 0	600UL
298	64	92	0.14	102	SAI	2	TSH	+1.77	TSHTSH	0.12	0.25	H7791	reso	89H00159	H 0	600PP
299	142	92	0.35	93	13	P 2	VH1	-0.92	TEHTEC			B4014	prim	89C00141	C 0	600UL
300	146	92	0.57	92	21	P 3	DBC	+1.63	TEHTEC			B4014	prim	89C00141	C 0	600UL
301	55	93	1.58	120	40	P 3	DBH	-1.76	TEHTEC			W3386	reso	89C00184	C 0	600UL
302	57	93	8.22	22	SAI	4	SBH	-0.27	STHSBH	N/A	0.25	H1748	prim	89H00235	H16	500SP
303			0.68	17	SAI	2	TSH	-5.73	TSHTSH	0.71	0.19	H7791	reso	89H00159	H 0	600PP
304			0.46	14	SAI	2	TSH	-1.26	TSHTSH	0.50	0.17	H7791	reso	89H00159	H 0	600PP
305	63	93	0.15	89	SAI	2	TSH	+1.32	TSHTSH	0	0.25	H7791	reso	89H00159	H 0	600PP
306	54	94	0.56	104	25	P 3	DBH	-1.60	TEHTEC			C4330	prim	89C00184	C 0	600UL
307	56	94	0.46	53	26	P 3	DBH	-1.75	TEHTEC			T6144	seco	89C00184	C 0	600UL
308	60	94	0.42	148	21	P 3	DBC	-2.02	TEHTEC			C4330	prim	89C00184	C 0	600UL
309	62	94	0.42	110	17	P 3	DBC	+2.00	TEHTEC			T6144	seco	89C00183	C 0	600UL
310	66	94	0.25	77	11	P 2	VSM	-0.76	TEHTEC			B3170	prim	89C00183	C 0	600UL
311			0.48	99	19	P 3	DBC	+1.75	TEHTEC			T6144	seco	89C00183	C 0	600UL
312	72	94	0.32	96	14	P 2	VH3	-0.92	TEHTEC			B2153	seco	89C00065	C 0	600UL
313			0.57	99	22	P 2	VH3	+0.88	TEHTEC			B2153	seco	89C00065	C 0	600UL
314			0.64	83	23	P 2	VSM	-0.66	TEHTEC			B2153	seco	89C00065	C 0	600UL
315			0.18	104	8	P 2	VSM	+0.94	TEHTEC			B2153	seco	89C00065	C 0	600UL
316			0.65	119	24	P 2	VC3	-0.81	TEHTEC			B2153	seco	89C00065	C 0	600UL
317			1.08	109	32	P 2	VC3	+0.90	TEHTEC			B2153	seco	89C00065	C 0	600UL
318	90	94	0.29	140	12	P 2	VSM	-0.96	TEHTEC			T6144	seco	89C00064	C 0	600UL
319	104	94	0.45	123	18	P 2	VSM	-0.77	TEHTEC			B8090	reso	89C00065	C 0	600UL
320	146	94	0.44	85	18	P 3	DBH	+1.90	TEHTEC			B4014	prim	89C00141	C 0	600UL
321			0.75	65	26	P 3	DBC	+1.81	TEHTEC			B4014	prim	89C00141	C 0	600UL
322	55	95	1.03	112	25	P 3	DBC	+1.90	TEHTEC			C4330	prim	89C00209	C 0	600UL
323	57	95	1.09	72	30	P 3	DBH	-1.52	TEHTEC			C4330	prim	89C00181	C 0	600UL
324			0.69	81	22	P 3	DBC	+1.89	TEHTEC			C4330	prim	89C00181	C 0	600UL
325	109	95	0.27	86	12	P 2	VSM	+0.51	TEHTEC			B2153	seco	89C00065	C 0	600UL
326	117	95	0.46	128	24	P 3	DBC	+0.60	TEHTEC			B3170	prim	89C00065	C 0	600UL
327	64	96	0.48	14	SAI	2	TSH	-0.92	TSHTSH	0.43	0.23	W3386	reso	89H00160	H 0	600PP
328	74	96	0.42	63	16	P 2	02H	-1.22	TEHTEC			M0554	reso	89C00062	C 0	600UL
329	51	97	0.89	124	22	P 3	DBC	-2.00	TEHTEC			W4786	seco	89C00209	C 0	600UL
330	71	97	0.70	61	25	P 2	VSM	-0.02	TEHTEC			C4330	prim	89C00063	C 0	600UL
331	75	97	0.29	83	13	P 2	VC3	-0.77	TEHTEC			C4330	prim	89C00063	C 0	600UL
332	95	97	0.29	62	13	P 2	VH3	-0.79	TEHTEC			C4330	prim	89C00063	C 0	600UL
333	64	98	0.15	122	SAI	2	TSH	+0.63	TSHTSH	0.00	0.20	M7262	reso	89H00160	H 0	600PP
334	78	98	0.96	13	SAI	2	TSH	-6.09	TSHTSH	1.19	0.18	W3386	reso	89H00079	H 0	600PP
335	45	99	0.66	51	18	P 3	DBH	-1.90	TEHTEC			G4841	reso	89C00209	C 0	600UL
336			0.86	71	22	P 3	DBC	-1.90	TEHTEC			G4841	reso	89C00209	C 0	600UL
337	49	99	0.48	59	14	P 3	DBH	-1.66	TEHTEC			C4330	prim	89C00209	C 0	600UL
338			0.51	57	15	P 3	DBC	-2.25	TEHTEC			G4841	reso	89C00209	C 0	600UL
339	51	99	0.29	50	10	P 2	VH3	+0.86	TEHTEC			C4330	prim	89C00181	C 0	600UL
340			0.59	122	19	P 2	VSM	+0.91	TEHTEC			C4330	prim	89C00181	C 0	600UL
341			0.46	42	16	P 2	VC3	+0.84	TEHTEC			C4330	prim	89C00181	C 0	600UL
342			0.89	116	26	P 3	DBC	-2.11	TEHTEC			C4330	prim	89C00181	C 0	600UL
343	79	99	0.27	117	12	P 2	VSM	+0.93	TEHTEC			B5926	seco	89C00063	C 0	600UL

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL

NOV. 7,2000 17:13

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE SIZE
344	111	99	0.41	70	16	P 2	09C	+0.46	TEHTEC			M7262	reso	89C00062	C	0	600UL
345	42	100	2.32	85	40	P 3	DBC	+1.93	TEHTEC			C4330	prim	89C00209	C	0	600UL
346	38	102	0.86	120	26	P 3	DBH	-1.82	TEHTEC			M0554	reso	89C00181	C	0	600UL
347	50	102	0.35	133	12	P 2	08H	-1.20	TEHTEC			C4330	prim	89C00181	C	0	600UL
348	54	102	0.76	16	SAI	2	TSH	-5.96	TSHTSH	0.46	0.12	M0554	reso	89H00164	H	0	600PP
349	78	102	5.35	29	SAI	2	TEH	+14.73	TEHTEH	6.75	1.24	M7262	reso	89H00214	H	0	600PP
350	80	102	0.18	141	8	P 2	VH3	-0.69	TEHTEC			B5926	seco	89C00061	C	0	600UL
351			0.23	65	10	P 2	VSM	-0.73	TEHTEC			B5926	seco	89C00061	C	0	600UL
352			0.28	46	12	P 2	VC3	+0.84	TEHTEC			B5926	seco	89C00061	C	0	600UL
353	144	102	0.30	96	13	P 3	DBH	-1.69	TEHTEC			B4014	prim	89C00141	C	0	600UL
354	41	103	0.30	116	11	P 2	VSM	+0.92	TEHTEC			V1371	prim	89C00182	C	0	600UL
355	73	103	0.39	95	15	P 2	02H	-1.18	TEHTEC			L8038	prim	89C00108	C	0	600UL
356	107	103	0.32	37	14	P 2	VH2	-1.09	TEHTEC			B5926	seco	89C00061	C	0	600UL
357	115	103	0.23	37	10	P 2	VH2	+0.83	TEHTEC			E4963	reso	89C00061	C	0	600UL
358	119	103	0.27	63	12	P 2	VH2	-0.69	TEHTEC			B5926	seco	89C00061	C	0	600UL
359	139	103	0.51	119	20	P 2	VH2	+0.94	TSHTEC			B2265	prim	89C00061	C	0	600UL
360	141	103	0.30	65	12	P 2	VH3	-0.88	TEHTEC			B4014	prim	89C00141	C	0	600UL
361	143	103	0.75	138	25	P 3	DBH	+1.94	TEHTEC			B4014	prim	89C00141	C	0	600UL
362	145	103	0.75	122	26	P 3	DBH	+1.40	TEHTEC			B4014	prim	89C00141	C	0	600UL
363	46	104	0.54	91	18	P 2	VSM	-1.05	TEHTEC	LAR		G4841	reso	89C00181	C	0	600UL
364			0.55	89	18	P 2	VSM	-0.75	TEHTEC			M0554	reso	89C00181	C	0	600UL
365	70	104	0.24	121	9	P 2	08C	+0.09	TEHTEC			M7262	reso	89C00181	C	0	600UL
366	138	104	0.31	51	13	P 2	VH1	-0.58	TEHTEC			B5926	seco	89C00061	C	0	600UL
367			0.24	45	11	P 2	VH1	+0.75	TEHTEC			B5926	seco	89C00061	C	0	600UL
368	37	105	0.31	74	11	P 2	VSM	+0.75	TEHTEC			B5926	seco	89C00181	C	0	600UL
369	41	105	0.59	14	SAI	2	TSH	-3.24	TSHTSH	0.84	0.14	B8090	reso	89H00163	H	0	600PP
370	55	105	0.58	101	19	P 2	08H	+1.00	TEHTEC			V1371	prim	89C00182	C	0	600UL
371	69	105	0.45	107	16	P 2	02H	-1.17	TEHTEC			M0554	reso	89C00181	C	0	600UL
372	73	105	0.44	148	18	P 2	VH3	-0.88	TEHTEC			B2265	prim	89C00061	C	0	600UL
373			0.42	70	18	P 2	VSM	-0.83	TEHTEC			B2265	prim	89C00061	C	0	600UL
374			0.64	140	23	P 2	VC3	-0.66	TEHTEC			B5926	seco	89C00061	C	0	600UL
375	75	105	0.40	125	16	P 2	VH3	-0.61	TEHTEC			T0854	seco	89C00060	C	0	600UL
376			0.46	121	17	P 2	VSM	-0.11	TEHTEC			T0854	seco	89C00060	C	0	600UL
377	81	105	0.44	137	18	P 2	VH3	+0.93	TEHTEC			B2265	prim	89C00061	C	0	600UL
378			0.20	73	9	P 2	VSM	+0.93	TEHTEC			B2265	prim	89C00061	C	0	600UL
379	34	106	1.42	19	SAI	2	TSH	-4.71	TSHTSH	2.19	0.30	M0554	reso	89H00164	H	0	600PP
380	38	106	0.50	15	SAI	2	TSH	-0.61	TSHTSH	0.43	0.21	M0554	reso	89H00164	H	0	600PP
381	56	106	0.22	93	SAI	2	TSH	+0.82	TSHTSH	0.00	0.26	M7262	reso	89H00164	H	0	600PP
382	80	106	0.28	40	13	P 2	VH3	+0.87	TEHTEC			K3270	seco	89C00061	C	0	600UL
383	126	106	0.27	30	12	P 2	VH2	+0.97	TEHTEC			B2265	prim	89C00061	C	0	600UL
384	132	106	0.20	36	8	P 2	10H	-1.02	TEHTEC			T0854	seco	89C00060	C	0	600UL
385	143	107	0.19	22	7	P 2	VC1	+0.93	TEHTEC			B4014	prim	89C00144	C	0	600UL
386	30	108	0.36	48	13	P 2	06C	-0.95	TEHTEC			M0155	seco	89C00182	C	0	600UL
387	36	108	0.67	10	SAI	2	TSH	-1.16	TSHTSH	1.19	0.29	M0554	reso	89H00164	H	0	600PP
388	56	108	0.39	43	14	P 2	VSM	+0.38	TEHTEC			M0155	seco	89C00182	C	0	600UL
389	132	108	0.39	100	16	P 2	VH1	-0.91	TEHTEC			B2265	prim	89C00061	C	0	600UL
390	37	109	0.16	93	SAI	2	TSH	+1.30	TSHTSH	0.18	0.26	M0554	reso	89H00164	H	0	600PP
391	121	109	0.56	82	23	P 2	10H	-1.48	TEHTEC	LAR		M7262	reso	89C00059	C	0	600UL
392	129	109	0.29	139	14	P 2	10H	-0.94	TEHTEC			B4165	prim	89C00059	C	0	600UL

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 9

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE	SIZE
393	141	109	0.51	88	18	P 2	VH3	+0.00	TEHTEC			B4014	prim	89C00144	C	0	600UL	
394	143	109	0.60	100	21	P 3	DBC	-1.78	TEHTEC			B4014	prim	89C00144	C	0	600UL	
395	36	110	0.63	15	SAI	2	TSH	-3.46	TSHTSH	0.0	0.20	M0554	reso	89H00164	H	0	600PP	
396			1.21	18	SAI	2	TSH	-1.34	TSHTSH	1.62	0.23	M0554	reso	89H00164	H	0	600PP	
397			0.66	8	SAI	2	TSH	-0.65	TSHTSH	0.0	0.17	M0554	reso	89H00164	H	0	600PP	
398	38	110	0.27	108	SAI	2	TSH	+1.01	TSHTSH	0.21	0.37	W3386	reso	89H00163	H	0	600PP	
399	40	110	0.12	103	SAI	2	TSH	+2.13	TSHTSH	0.05	0.17	M0554	reso	89H00164	H	0	600PP	
400	42	110	0.64	68	20	P 2	VSM	-0.17	TEHTEC			D1279	prim	89C00179	C	0	600UL	
401	116	110	0.27	59	13	P 2	VH1	+0.84	TEHTEC			B8589	seco	89C00059	C	0	600UL	
402			0.22	42	10	P 2	VH2	+0.99	TEHTEC			B8589	seco	89C00059	C	0	600UL	
403	130	110	0.30	143	14	P 2	VH1	-0.95	TEHTEC			B8589	seco	89C00059	C	0	600UL	
404			0.28	103	13	P 2	VH2	-0.80	TEHTEC			B4165	prim	89C00059	C	0	600UL	
405	29	111	0.21	90	SCI	P 1	TSH	+0.02	TSHTSH	0.0	0.30	W3386	reso	89H00163	H	0	600PP	
406	75	111	0.43	124	19	P 2	VH3	+0.04	TEHTEC			L3025	prim	89C00059	C	0	600UL	
407			0.63	124	25	P 2	VC3	+1.01	TEHTEC			W3386	reso	89C00059	C	0	600UL	
408	91	111	0.23	76	11	P 2	VH2	+0.87	TEHTEC			B8589	seco	89C00059	C	0	600UL	
409	44	112	0.54	137	19	P 2	VSM	-0.78	TEHTEC			T6144	seco	89C00180	C	0	600UL	
410	70	112	0.61	141	19	P 2	03C	-0.15	TEHTEC			M7262	reso	89C00179	C	0	600UL	
411	5	113	0.15	110	SAI	2	02H	-1.31	02H02H	0	0.32	G4841	reso	89H00188	H	2	600PP	
412	21	113	0.51	72	SCI	P 1	TSH	+0.03	TSHTSH	0.00	0.43	M7262	reso	89H00164	H	0	600PP	
413	37	113	0.97	15	SAI	2	TSH	-1.94	TSHTSH	1.13	0.20	M0554	reso	89H00164	H	0	600PP	
414	49	113	0.11	107	SAI	2	TSH	+1.71	TSHTSH	0.15	0.23	M0554	reso	89H00164	H	0	600PP	
415	59	113	2.80	20	SAI	2	TSH	-5.68	TSHTSH	3.61	0.27	M0554	reso	89H00164	H	0	600PP	
416			1.25	17	SAI	2	TSH	-5.27	TSHTSH	0.70	0.30	M0554	reso	89H00164	H	0	600PP	
417	77	113	0.21	92	10	P 2	VH3	-1.05	TEHTEC			L3025	prim	89C00059	C	0	600UL	
418			0.14	28	7	P 2	VH3	+0.81	TEHTEC			L3025	prim	89C00059	C	0	600UL	
419	125	113	0.27	111	10	P 2	09H	-1.07	TEHTEC			B4260	reso	89C00058	C	0	600UL	
420	48	114	0.48	21	SAI	2	TSH	-5.03	TSHTSH	0.92	0.14	M7262	reso	89H00163	H	0	600PP	
421	68	114	0.16	121	SAI	2	01H	+16.36	01H01H	0	.20	P4578	reso	89H00187	H	2	600PP	
422	72	114	0.24	54	11	P 2	VC3	+0.81	TEHTEC			B2027	prim	89C00057	C	0	600UL	
423	76	114	0.33	43	15	P 2	VH3	-0.89	TEHTEC			B5926	seco	89C00057	C	0	600UL	
424	92	114	0.29	38	14	P 2	VH2	-0.66	TEHTEC			B5926	seco	89C00057	C	0	600UL	
425	130	114	0.32	62	15	P 2	VH1	-0.86	TEHTEC			L3025	prim	89C00059	C	0	600UL	
426			0.31	55	14	P 2	VH1	+0.80	TEHTEC			L3025	prim	89C00059	C	0	600UL	
427	132	114	0.31	39	11	P 2	VH1	-0.48	TEHTEC			J0927	seco	89C00058	C	0	600UL	
428			0.27	141	10	P 2	VH1	+1.01	TEHTEC			J0927	seco	89C00058	C	0	600UL	
429	140	114	0.24	135	10	P 2	VH2	+0.81	TEHTEC			P1465	prim	89C00058	C	0	600UL	
430	81	115	0.17	86	9	P 2	VH3	+0.86	TEHTEC			B5926	seco	89C00057	C	0	600UL	
431	105	115	0.26	60	13	P 2	VH2	-1.14	TEHTEC			B5926	seco	89C00057	C	0	600UL	
432	109	115	0.18	32	9	P 2	VH2	-0.77	TEHTEC			B5926	seco	89C00057	C	0	600UL	
433			0.20	35	10	P 2	VH2	+0.81	TEHTEC			B5926	seco	89C00057	C	0	600UL	
434	131	115	0.25	119	12	P 2	VH1	-0.69	TEHTEC			B5926	seco	89C00057	C	0	600UL	
435			0.23	49	11	P 2	VH1	+1.06	TEHTEC			B5926	seco	89C00057	C	0	600UL	
436			0.22	53	11	P 2	VH2	-0.73	TEHTEC			B5926	seco	89C00057	C	0	600UL	
437			0.18	130	9	P 2	VH2	+0.95	TEHTEC			B5926	seco	89C00057	C	0	600UL	
438	14	116	0.57	90	20	P 2	07H	-0.15	TEHTEC			M7262	reso	89C00180	C	0	600UL	
439	62	116	1.20	21	SAI	2	TSH	-6.31	TSHTSH	1.72	0.24	M0554	reso	89H00166	H	0	600PP	
440			1.02	21	SAI	2	TSH	-5.80	TSHTSH	0.68	1.01	M0554	reso	89H00166	H	0	600PP	
441	80	116	0.24	26	12	P 2	VH3	-0.62	TEHTEC			B5926	seco	89C00057	C	0	600UL	

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 10

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE	SIZE
442			0.18	81	9	P 2	VH3	+0.79	TEHTEC			B5926	seco	89C00057	C	0	600UL	
443			0.20	37	10	P 2	VC3	-0.86	TEHTEC			B5926	seco	89C00057	C	0	600UL	
444	126	116	0.21	65	10	P 2	VH2	-0.67	TEHTEC			B5926	seco	89C00057	C	0	600UL	
445			0.24	124	12	P 2	VH2	+0.84	TEHTEC			B5926	seco	89C00057	C	0	600UL	
446	130	116	0.38	58	17	P 2	VH1	-0.78	TEHTEC			B5926	seco	89C00057	C	0	600UL	
447			0.23	58	11	P 2	VH1	+0.84	TEHTEC			B5926	seco	89C00057	C	0	600UL	
448			0.21	110	10	P 2	VH2	-0.86	TEHTEC			B5926	seco	89C00057	C	0	600UL	
449	138	116	0.24	48	11	P 2	VH1	-0.68	TEHTEC			B5926	seco	89C00057	C	0	600UL	
450			0.19	112	9	P 2	VH1	+0.75	TEHTEC			B5926	seco	89C00057	C	0	600UL	
451	31	117	0.37	133	12	P 2	07C	+0.40	TEHTEC			T6144	seco	89C00178	C	0	600UL	
452	123	117	0.17	97	9	P 2	VH1	-0.62	TEHTEC			B5926	seco	89C00057	C	0	600UL	
453			0.19	91	9	P 2	VH2	-0.78	TEHTEC			B5926	seco	89C00057	C	0	600UL	
454			0.19	54	9	P 2	VH3	+0.84	TEHTEC			B5926	seco	89C00057	C	0	600UL	
455			0.15	81	8	P 2	VSM	-0.71	TEHTEC			B5926	seco	89C00057	C	0	600UL	
456	68	118	0.52	17	SAI	2	TSH	-5.18	TSHTSH	0.59	0.21	M0554	reso	89H00168	H	0	600PP	
457	119	119	0.66	42	23	P 2	09H	-1.00	TEHTEC			G7112	seco	89C00056	C	0	600UL	
458			0.47	44	18	P 2	10H	-1.01	TEHTEC	LAR		M7262	reso	89C00056	C	0	600UL	
459	133	119	0.37	88	15	P 2	VH1	+0.79	TEHTEC			D3858	reso	89C00056	C	0	600UL	
460	20	120	1.55	24	SCI	P 1	TSH	-6.87	TSHTSH	0.68	0.22	M7262	reso	89H00168	H	0	600PP	
461	62	120	0.57	42	19	P 2	02H	-1.17	TEHTEC			P1465	prim	89C00177	C	0	600UL	
462	47	121	0.29	147	11	P 2	VSM	-0.84	TEHTEC			P1465	prim	89C00177	C	0	600UL	
463	79	121	0.33	84	13	P 2	02H	+1.00	TEHTEC			J0927	seco	89C00054	C	0	600UL	
464			0.59	115	21	P 2	VH3	-1.12	TEHTEC			D2003	prim	89C00054	C	0	600UL	
465	91	121	3.18	28	SAI	2	TEH	+5.09	TEHTEH	3.42	0.31	E4963	reso	89H00214	H	2	600PP	
466	119	121	0.52	113	19	P 2	10H	-2.08	TEHTEC	LAR		M7262	reso	89C00054	C	0	600UL	
467	123	121	0.28	116	11	P 2	VH1	-0.68	TEHTEC			D2003	prim	89C00054	C	0	600UL	
468	36	122	0.37	81	14	P 2	03H	-1.03	TEHTEC			W3386	reso	89C00177	C	0	600UL	
469	78	122	0.26	132	11	P 2	08H	+0.82	TEHTEC			D2003	prim	89C00054	C	0	600UL	
470	82	122	0.49	18	SCI	P 1	TSH	-0.09	TSHTSH	.16	.13	P4578	reso	89H00073	H	0	600PP	
471	102	122	0.32	84	13	P 2	VC2	-0.79	TEHTEC			D2003	prim	89C00054	C	0	600UL	
472	118	122	0.34	63	14	P 2	09H	-1.13	TEHTEC			D2003	prim	89C00054	C	0	600UL	
473	15	123	0.45	49	16	P 2	03H	+0.86	TEHTEC			P1465	prim	89C00177	C	0	600UL	
474	19	123	0.44	82	16	P 2	01H	+0.88	TEHTEC			P1465	prim	89C00177	C	0	600UL	
475	127	123	0.31	137	13	P 2	09C	-1.24	TEHTEC			M7262	reso	89C00054	C	0	600UL	
476	8	124	3.49	36	SCI	P 1	TSH	-5.14	TSHTSH	4.38	0.80	M0554	reso	89H00169	H	0	600PP	
477	28	124	0.31	96	SAI	2	02H	+8.05	02H03H	0.79	0.52	M7262	reso	89H00190	H	2	600PP	
478	134	124	0.20	139	9	P 2	VC3	+0.64	TEHTEC			B2153	seco	89C00109	C	0	580SF	
479	9	125	0.30	23	SCI	P 1	TSH	-6.44	TSHTSH	0.71	0.26	M0554	reso	89H00170	H	0	600PP	
480			0.42	23	SCI	P 1	TSH	-4.95	TSHTSH	0.29	0.19	M0554	reso	89H00170	H	0	600PP	
481	67	125	0.32	45	12	P 2	VH3	+0.76	TEHTEC			P1465	prim	89C00177	C	0	600UL	
482	77	125	0.37	120	17	P 2	VH3	-0.73	TEHTEC			G7112	seco	89C00053	C	0	600UL	
483			0.40	145	18	P 2	VSM	-0.77	TEHTEC			G7112	seco	89C00053	C	0	600UL	
484			0.34	124	16	P 2	VSM	+0.86	TEHTEC			G7112	seco	89C00053	C	0	600UL	
485			0.89	114	30	P 2	VC3	-0.82	TEHTEC			G7112	seco	89C00053	C	0	600UL	
486			0.98	96	31	P 2	VC3	-0.77	TEHTEC			G7112	seco	89C00053	C	0	600UL	
487			0.68	92	26	P 2	VC3	+0.00	TEHTEC			G7112	seco	89C00053	C	0	600UL	
488	46	126	0.28	19	SCI	P 1	TSH	-0.10	TSHTSH	0.00	0.14	M7262	reso	89H00072	H	0	600PP	
489	72	126	0.38	119	17	P 2	VSM	-0.74	TEHTEC			W9658	seco	89C00027	C	0	600UL	
490	1	127	0.44	9	SCI	P 1	TSH	-6.11	TSHTSH	.58	.19	P4578	reso	89H00073	H	0	600PP	

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison, NOV. 7,2000 17:13
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL PAGE 11

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE SIZE
491	5	127	1.42	34	SCI	P 1	TSH	-5.86	TSHTSH	1.65	0.21	M7262	reso	89H00073	H	0	600PP
492	66	128	0.20	79	8	P 2	VSM	-0.66	TEHTEC			W9213	seco	89C00050	C	0	600UL
493	68	128	0.29	49	14	P 2	VH3	-0.73	TEHTEC			L3025	prim	89C00051	C	0	600UL
494	112	128	0.23	128	11	P 2	VH2	+0.19	TEHTEC			D3858	reso	89C00025	C	0	600UL
495	118	128	0.25	52	10	P 2	05H	+0.67	TEHTEC			L8038	prim	89C00024	C	0	600UL
496	11	129	0.89	24	MCI	P 1	TSH	-3.84	TSHTSH	1.91	.19	P4578	reso	89H00070	H	0	600PP
497	78	130	0.31	96	13	P 2	VSM	-1.11	TEHTEC			L8038	prim	89C00024	C	0	600UL
498	74	132	0.26	111	11	P 2	VC3	-0.70	TEHTEC			H7791	reso	89C00024	C	0	600UL
499	7	133	0.81	30	SCI	P 1	TSH	-7.46	TSHTSH	.62	.16	P4578	reso	89H00070	H	0	600PP
500	13	133	0.42	126	18	P 3	DBH	+2.23	TEHTEC			B3170	prim	89C00050	C	0	600UL
501	103	133	0.21	104	SAI	2	02H	+0.39	02H02H	0.00	0.38	M7262	reso	89H00127	H	2	600PP
502	58	134	0.31	31	15	P 2	VSM	+1.04	TEHTEC			B2265	prim	89C00049	C	0	600UL
503	77	135	0.39	132	15	P 3	DBC	+2.16	TEHTEC			M0554	reso	89C00022	C	0	600UL
504	81	135	0.33	139	14	P 2	VH3	+0.70	TEHTEC			P1465	prim	89C00022	C	0	600UL
505	117	135	0.27	117	12	P 2	VH2	+0.71	TEHTEC			P1465	prim	89C00022	C	0	600UL
506	10	136	2.62	32	MCI	P 1	TSH	-4.70	TSHTSH	3.24	0.72	W3386	reso	89H00069	H	0	600PP
507	32	136	0.40	61	15	P 2	VSM	+0.96	TEHTEC			W9658	seco	89C00048	C	0	600UL
508	78	136	3.15	31	SAI	2	TSH	-7.48	TSHTSH	5.05	0.72	W3386	reso	89H00060	H	0	600PP
509			1.05	20	SAI	2	TSH	-6.86	TSHTSH	1.03	0.22	W3386	reso	89H00060	H	0	600PP
510			0.26	150	11	P 2	VC3	-0.96	TEHTEC			P1465	prim	89C00022	C	0	600UL
511	106	136	0.28	118	12	P 2	VH2	-0.71	TEHTEC			P1465	prim	89C00022	C	0	600UL
512	114	136	0.35	151	15	P 2	VC3	+0.82	TEHTEC			P1465	prim	89C00022	C	0	600UL
513	77	137	0.63	114	21	P 2	VSM	-0.95	TEHTEC			L3025	prim	89C00020	C	0	600UL
514	79	137	0.29	133	14	P 2	VSM	-0.87	TEHTEC			D2003	prim	89C00021	C	0	600UL
515	113	137	0.25	59	11	P 2	VH2	-0.68	TEHTEC			P1465	prim	89C00022	C	0	600UL
516	66	138	0.31	104	13	P 2	08C	-0.94	TEHTEC			H1748	reso	89C00048	C	0	600UL
517	19	139	1.11	28	SCI	P 1	TSH	-5.04	TSHTSH	1.61	0.26	R5555	reso	89H00003	H	0	600PP
518	77	139	0.32	100	12	P 2	VH3	-0.88	TEHTEC			L3025	prim	89C00020	C	0	600UL
519			0.67	144	22	P 2	VC3	+1.18	TEHTEC			L3025	prim	89C00020	C	0	600UL
520	32	140	0.24	65	12	P 2	VSM	-0.56	TEHTEC			B5926	seco	89C00047	C	0	600UL
521	40	140	0.23	33	12	P 2	VSM	-0.69	TEHTEC			B5926	seco	89C00047	C	0	600UL
522	60	140	0.41	40	19	P 2	VSM	+0.84	TEHTEC			B5926	seco	89C00047	C	0	600UL
523	88	140	0.37	116	14	P 2	VH2	-0.79	TEHTEC			H7791	reso	89C00020	C	0	600UL
524			0.42	104	15	P 2	VH2	+0.92	TEHTEC			H7791	reso	89C00020	C	0	600UL
525	9	141	0.14	114	MAI	2	02H	-1.72	02H02H	0.00	0.47	M7262	reso	89H00122	H	0	600PP
526	49	141	0.53	33	22	P 2	08C	+1.80	TEHTEC	LAR		M7262	reso	89C00047	C	0	600UL
527	76	142	0.21	124	10	P 2	08C	-0.58	TEHTEC			D2003	prim	89C00021	C	0	600UL
528	59	143	0.25	134	13	P 2	VH3	-0.54	TEHTEC			B5926	seco	89C00047	C	0	600UL
529	71	143	0.24	108	12	P 2	VH3	-0.73	TEHTEC			G7112	seco	89C00021	C	0	600UL
530			0.24	109	11	P 2	04C	-0.17	TEHTEC			D3858	reso	89C00021	C	0	600UL
531	66	144	0.34	58	16	P 2	VH3	-0.73	TEHTEC			B4014	prim	89C00047	C	0	600UL
532			0.46	81	20	P 2	VSM	-0.80	TEHTEC			B4014	prim	89C00047	C	0	600UL
533	70	144	0.35	96	13	P 2	VC3	-0.53	TEHTEC			B3170	prim	89C00046	C	0	600UL
534	112	144	0.61	124	18	P 3	DBC	+2.15	TEHTEC			R5555	reso	89C00020	C	0	600UL
535	45	145	0.22	68	12	P 2	VSM	-0.86	TEHTEC			B5926	seco	89C00047	C	0	600UL
536	49	145	0.52	99	22	P 2	08H	-1.19	TEHTEC			M7262	reso	89C00047	C	0	600UL
537	57	145	0.26	60	12	P 2	VC3	-0.69	TEHTEC			C4330	prim	89C00045	C	0	600UL
538	63	145	0.40	110	15	P 2	VH3	+0.85	TEHTEC			B5926	seco	89C00044	C	0	600UL
539	67	145	0.27	37	13	P 2	VH3	-0.64	TEHTEC			G4841	reso	89C00045	C	0	600UL

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL

NOV. 7,2000 17:13

PAGE 12

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE	SIZE
540	8	146	0.59	15	SAI	2	TSH	-6.46	TSHTSH	0.00	0.43	G4841	reso	89H00006	H	0	600PP	
541	56	146	0.44	106	16	P 2	VH3	-0.75	TEHTEC			B4165	prim	89C00044	C	0	600UL	
542	58	146	0.33	32	15	P 2	VH3	-0.45	TEHTEC			C4330	prim	89C00045	C	0	600UL	
543	74	146	0.37	70	19	P 2	VH3	+0.86	TEHTEC			L9168	prim	89C00019	C	0	600UL	
544	94	146	0.25	131	14	P 2	VH3	-0.87	TEHTEC			L9168	prim	89C00019	C	0	600UL	
545	35	147	0.22	41	11	P 2	VSM	+0.88	TEHTEC			C4330	prim	89C00045	C	0	600UL	
546	45	147	0.24	150	9	P 2	VSM	-0.86	TEHTEC			B5926	seco	89C00044	C	0	600UL	
547	57	147	0.31	105	12	P 2	VH3	+0.68	TEHTEC			B5926	seco	89C00044	C	0	600UL	
548	59	147	0.29	73	14	P 2	VH3	+0.75	TEHTEC			K3270	seco	89C00045	C	0	600UL	
549	71	147	0.51	115	24	P 2	VH3	-0.91	TEHTEC			L9168	prim	89C00019	C	0	600UL	
550			0.41	124	20	P 2	VC3	-0.82	TEHTEC			L9168	prim	89C00019	C	0	600UL	
551	79	147	0.24	121	13	P 2	VH3	+0.93	TEHTEC			T4180	seco	89C00019	C	0	600UL	
552	103	147	0.16	67	SAI	2	04H	-1.87	04H04H	0	.23	P4578	reso	89H00127	H	2	600PP	
553	74	148	0.46	85	15	P 2	VH3	-0.86	TEHTEC			B4165	prim	89C00018	C	0	600UL	
554	82	148	0.67	131	21	P 2	VH3	-0.72	TEHTEC			B4165	prim	89C00018	C	0	600UL	
555	84	148	0.32	60	17	P 2	VH2	+0.87	TEHTEC			L9168	prim	89C00019	C	0	600UL	
556	88	148	0.26	114	14	P 2	VC3	-0.76	TEHTEC			G4841	reso	89C00019	C	0	600UL	
557	31	149	0.31	131	12	P 2	VSM	+0.90	TEHTEC			B4165	prim	89C00044	C	0	600UL	
558	35	149	0.36	107	14	P 2	VSM	+0.83	TEHTEC			B4165	prim	89C00044	C	0	600UL	
559	79	149	0.26	69	15	P 2	VSM	+1.01	TEHTEC			L9168	prim	89C00019	C	0	600UL	
560	52	150	0.23	72	11	P 2	VC3	-0.96	TEHTEC			C4330	prim	89C00045	C	0	600UL	
561	78	150	0.45	55	15	P 2	VH3	-0.64	TEHTEC			B4165	prim	89C00018	C	0	600UL	
562	91	151	0.31	54	17	P 2	VH2	-0.66	TEHTEC			L9168	prim	89C00019	C	0	600UL	
563	56	152	0.27	54	17	P 3	DBH	+1.07	TEHTEC			C4330	prim	89C00045	C	0	600UL	
564	66	152	0.32	131	12	P 2	VH3	-0.70	TEHTEC			B4165	prim	89C00044	C	0	600UL	
565	80	152	0.56	137	25	P 2	VSM	-0.69	TEHTEC			V1371	prim	89C00019	C	0	600UL	
566			0.40	134	20	P 2	VSM	+0.94	TEHTEC			V1371	prim	89C00019	C	0	600UL	
567			0.66	103	28	P 2	VC3	-0.56	TEHTEC			V1371	prim	89C00019	C	0	600UL	
568			0.63	97	27	P 2	VC3	+0.97	TEHTEC			V1371	prim	89C00019	C	0	600UL	
569	69	153	0.37	112	14	P 2	VH3	-0.94	TEHTEC			B4165	prim	89C00042	C	0	600UL	
570	73	153	0.30	100	11	P 2	VH3	-0.88	TEHTEC			B4165	prim	89C00018	C	0	600UL	
571	71	155	0.28	105	15	P 2	VH3	-0.88	TEHTEC			M7262	reso	89C00019	C	0	600UL	
572			0.28	140	15	P 2	VH3	+0.65	TEHTEC			B2153	seco	89C00019	C	0	600UL	
573	75	155	0.26	152	14	P 2	VH3	-0.83	TEHTEC			B2153	seco	89C00019	C	0	600UL	
574	36	156	0.29	61	14	P 2	VSM	-0.35	TEHTEC			B8589	seco	89C00043	C	0	600UL	
575	46	156	0.27	119	11	P 2	VSM	-0.92	TEHTEC			B4165	prim	89C00042	C	0	600UL	
576	54	156	0.29	106	14	P 2	VH3	-0.67	TEHTEC			B8589	seco	89C00043	C	0	600UL	
577	58	156	0.31	76	15	P 2	VH3	-0.84	TEHTEC			B8090	reso	89C00043	C	0	600UL	
578	66	156	0.33	106	16	P 2	VH3	-0.58	TEHTEC			B8589	seco	89C00043	C	0	600UL	
579	72	156	0.21	112	12	P 2	VC3	-0.90	TEHTEC			B2153	seco	89C00019	C	0	600UL	
580	74	156	0.45	107	15	P 2	VH3	-0.90	TEHTEC			B4165	prim	89C00018	C	0	600UL	
581			0.45	79	15	P 2	VSM	-0.90	TEHTEC			B4165	prim	89C00018	C	0	600UL	
582			0.61	70	19	P 2	VC3	-0.64	TEHTEC			B4165	prim	89C00018	C	0	600UL	
583	71	157	0.25	93	14	P 2	VH3	-0.88	TEHTEC			B2153	seco	89C00019	C	0	600UL	
584			0.29	96	15	P 2	VH3	+1.08	TEHTEC			B2153	seco	89C00019	C	0	600UL	
585	56	158	0.42	107	20	P 2	VH3	-0.66	TEHTEC			T0854	seco	89C00029	C	0	600UL	
586	41	159	0.29	87	12	P 2	01H	+1.19	TEHTEC			D3858	reso	89C00028	C	0	600UL	
587	79	159	0.40	69	20	P 2	VH3	+0.85	TEHTEC			V1371	prim	89C00019	C	0	600UL	
588			0.33	76	17	P 2	VC3	-0.62	TEHTEC			V1371	prim	89C00019	C	0	600UL	

SG89 MAI, MCI, MMI, MVI, SAI, SCI, SVI, 0-100%TWD

UTILITY: Southern California Edison,
PLANT: San Onofre
UNIT: 2
SG: 89
DATABASE: SONGS_U2_1000_SG89_FINAL

NOV. 7,2000 17:13

PAGE 13

	ROW	COL	VOLTS	DEG	PCT	CHN	FLAW	LOCATION	EXTENT	UTIL1	UTIL2	NAME	TYPE	CAL	GROUP	LEG	PROBE	SIZE
589	74	160	0.86	114	25	P 2	VH3	-0.79	TEHTEC			B4165	prim	89C00018	C 0	600UL		
590			0.51	136	18	P 2	VC3	-0.77	TEHTEC			B8589	seco	89C00018	C 0	600UL		
591	46	162	0.29	109	12	P 2	VSM	+1.08	TEHTEC			D3858	reso	89C00028	C 0	600UL		
592	11	167	0.37	49	18	P 2	03H	+1.03	TEHTEC			B4260	reso	89C00017	C 0	600UL		
593	45	167	0.36	98	17	P 2	VSM	-0.91	TEHTEC			K3270	seco	89C00017	C 0	600UL		
594	42	168	0.56	150	20	P 2	VSM	+0.96	TEHTEC			B4165	prim	89C00026	C 0	600UL		
595	42	170	0.61	101	21	P 2	VSM	-0.30	TEHTEC			F0037	prim	89C00026	C 0	600UL		
596	39	171	0.26	63	10	P 2	03H	+0.13	TEHTEC			B4260	reso	89C00026	C 0	600UL		
597	19	173	0.24	136	10	P 2	VSM	+1.01	TEHTEC			K3270	seco	89C00026	C 0	600UL		
598	7	175	0.29	80	11	P 2	02C	+0.82	TEHTEC			P1465	prim	89C00026	C 0	600UL		

QUERY REPORT SUMMARY:

QUERY PARAMETER	ENTRIES	TUBES
0 to 100 Percent	502	396
MAI Indication Code	2	2
MCI Indication Code	2	2
MMI Indication Code	0	0
MVI Indication Code	0	0
SAI Indication Code	65	54
SCI Indication Code	25	24
SVI Indication Code	2	2

TOTAL ENTRIES: 598
TOTAL TUBES: 474