



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37379-2000

May 19, 1997

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

Gentlemen:

In the Matter of )  
Tennessee Valley Authority )

Docket Nos. 50-327

SEQUOYAH NUCLEAR PLANT (SQN) - EMERGENCY RESPONSE DATA SYSTEM  
(ERDS) - DATA POINT LIBRARY UPDATE

In accordance with 10 CFR 50 Appendix VI.3.a, TVA is providing an updated Data Point Library for SQN Unit 1. The enclosure contains a copy of the revised listing.

If you have any questions concerning this matter, please telephone J. W. Proffitt at (423) 843-6651.

Sincerely,

R. H. Shell  
Site Licensing and Industry Affairs Manager

Enclosure  
cc: See page 2

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F PDR



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U.S. Nuclear Regulatory Commission

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**SEQUOYAH UNITS 1 AND 2**

**ERDS TRANSMITTALS TO NRC  
RESULTING FROM ICS INSTALLATION**

**TENNESSEE VALLEY AUTHORITY**

**SEQUOYAH NUCLEAR PLANT**

**ENCLOSURE**



## SEQUOYAH UNIT 1 - ERDS DATA POINT LIBRARY

1	NL	SIMULATION	INDICATES REAL OR SIMULATED DATA
2	NI POWER RNG	1UN2000	POWER RANGE AVERAGE
3	NI INTER RNG	1UN1015	INTERMEDIATE RANGE FLUX
4	NI SOURC RNG	1UN1014	SOURCE RANGE FLUX
5	REAC VES LEV	1UL6000	RVLIS LOWER RANGE AVERAGE
6	TEMP CORE EX	1UT1003	CORE EXIT TEMP MAX
7	SUB MARGIN	1UT1005	MIN SUBCOOL
8	SG LEVEL 1/A	1UL1001	SG #1 NR LEVEL AVG
9	SG LEVEL 2/B	1UL1002	SG #2 NR LEVEL AVG
10	SG LEVEL 3/C	1UL1003	SG #3 NR LEVEL AVG
11	SG LEVEL 4/D	1UL1004	SG #4 NR LEVEL AVG
12	SG PRESS 1/A	1UP1002	SG #1 MS PRESSURE AVG
13	SG PRESS 2/B	1UP1003	SG #2 MS PRESSURE AVG
14	SG PRESS 3/C	1UP1004	SG #3 MS PRESSURE AVG
15	SG PRESS 4/D	1UP1005	SG #4 MS PRESSURE AVG
16	MN FD FL 1/A	1U0410C	SG #1 CORR FW 1/2 AVG
17	MN FD FL 2/B	1U0430C	SG #2 CORR FW 1/2 AVG
18	MN FD FL 3/C	1U0450C	SG #3 CORR FW 1/2 AVG
19	MN FD FL 4/D	1U0470C	SG #4 CORR FW 1/2 AVG
20	AX FW FL 1/A	1U0066	SG #1 AUX FEEDWATER FLOW
21	AX FW FL 2/B	1U0067	SG #2 AUX FEEDWATER FLOW
22	AX FW FL 3/C	1U0068	SG #3 AUX FEEDWATER FLOW
23	AX FW FL 4/D	1U0069	SG #4 AUX FEEDWATER FLOW
24	HL TEMP 1/A	1T0419A	LOOP 1 HOT LEG WIDE RANGE TEMP
25	HL TEMP 2/B	1T0439A	LOOP 2 HOT LEG WIDE RANGE TEMP
26	HL TEMP 3/C	1T0459A	LOOP 3 HOT LEG WIDE RANGE TEMP
27	HL TEMP 4/D	1T0479A	LOOP 4 HOT LEG WIDE RANGE TEMP
28	CL TEMP 1/A	1T0406A	LOOP 1 COLD LEG WIDE RANGE TEMP
29	CL TEMP 2/B	1T0426A	LOOP 2 COLD LEG WIDE RANGE TEMP
30	CL TEMP 3/C	1T0446A	LOOP 3 COLD LEG WIDE RANGE TEMP
31	CL TEMP 4/D	1T0466A	LOOP 4 COLD LEG WIDE RANGE TEMP
32	RCS PRESSURE	1UP1000	RCS WIDE RANGE PRESSURE AVERAGE

33	PRZR LEVEL	1UL1005	PZR LEVEL AVERAGE
34	RCS CHG/MU	1UF1016	NET CHG FLO
35	HP SI FLOW	1UF1010	SI FLOW TOTAL
36	LP SI FLOW	1UF1011	RHR COLD LEG TOTAL FLOW
37	CNTMT SMP WR	1UL1011	CONTAINMENT SUMP LEV AVG
38	EFF GAS RAD	1R9102A	UNIT 1 SHIELD BLDG RELEASE RATE
39	EFF GAS RAD	1R9102XA	UNIT 2 SHIELD BLDG RELEASE RATE
40	EFF LIQ RAD	0R1022A	WDS LIQUID EFFLUENT RADIATION
41	COND A/E RAD	1UR1006	COND VAC EXH LOW RNG RELEASE RATE
42	COND A/E RAD	1UR1007	COND VAC EXH MID RNG RELEASE RATE
43	COND A/E RAD	1UR1008	COND VAC EXH HI RNG RELEASE RATE
44	CNTMNT RAD	1UR6021	UPPER CNTMT RADIATION
45	CNTMNT RAD	1UR6022	LOWER CNTMT RADIATION
46	MAIN SL 1/A	1UR1001	SG #1 RELEASE RATE
47	MAIN SL 2/B	1UR1002	SG #2 RELEASE RATE
48	MAIN SL 3/C	1UR1003	SG #3 RELEASE RATE
49	MAIN SL 4/D	1UR1004	SG #4 RELEASE RATE
50	SG BD RAD 1A	1R1020A	SG BLOWDOWN RADIATION
51	SG BD RAD 1B	1R1021A	SG BLOWDOWN RADIATION
52	CTMNT PRESS	1UP6000	CNTMT PRESSURE AVERAGE
53	CTMNT TEMP	1QV0020	CALCULATED LOWER CTMT TEMP - LCTTEMP
54	H2 CONC	1UY1005	H2 CONC AVG
55	RWST LEVEL	1UL1000	RWST LEV AVG
56	WIND SPEED	MET001	91M VECTOR WIND SPEED (15 MIN AVG)
57	WIND SPEED	MET002	46M VECTOR WIND SPEED (15 MIN AVG)
58	WIND SPEED	MET003	10M VECTOR WIND SPEED (15 MIN AVG)
59	WIND DIR	MET004	91M VECTOR WIND DIR (15 MIN AVG)
60	WIND DIR	MET005	46M VECTOR WIND DIR (15 MIN AVG)
61	WIND DIR	MET006	10M VECTOR WIND DIR (15 MIN AVG)
62	STAB CLASS	MET007	Stability Class Upper
63	STAB CLASS	MET008	Stability Class Intermediate
64	STAB CLASS	MET009	Stability Class Lower
65	SG LEVEL 1/A	1L0403A	SG #1 WIDE RANGE LEVEL
66	SG LEVEL 2/B	1L0423A	SG #2 WIDE RANGE LEVEL

67	SG LEVEL 3/C	1L0443A	SG #3 WIDE RANGE LEVEL
68	SG LEVEL 4/D	1L0463A	SG #4 WIDE RANGE LEVEL
69	CORE FLOW	1PA003	TOTAL REACTOR COOLANT FLOW

ERDS Point Number: 1 NL

SIMULATION Real/Simulated Data

Date: 5/14/97

Reactor Unit: SE1

Data Feeder: N/A

NRC ERDS Parameter: NL

Point ID: SIMULATION

Plant Specific Point Desc: INDICATES REAL OR SIMULATED DATA

Generic Cond Desc: Real/Simulated Data

Analog/Digital: D

Engr Units/Units States: REAL/SIMUL

Engr Units Conversion: N/A

Minimum Instr Range: N/A

Maximum Instr Range: N/A

Zero Point Reference: N/A

Reference Point Notes: N/A

PROC or SENS: P

Number of Sensors: 0

How Processed: 0 If Real, 1 If Simulated

Sensor Locations: N/A

Alarm/Trip Set Points: N/A

NID Power Cutoff Level: N/A

NID Power Cut-On Level: N/A

Instrument Failure Mode: N/A

Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: This Point is used to indicate whether the data is coming from the Unit or from the Simulator.

ERDS Point Number: 2    NI POWER RNG    1UN2000    Reactor Power - Power Range

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: NI POWER RNG  
Point ID: 1UN2000  
Plant Specific Point Desc: POWER RANGE AVERAGE  
Generic Cond Desc: Reactor Power - Power Range

Analog/Digital: A  
Engr Units/Dig States: %  
Engr Units Conversion: 0-10V = 0-120% Power (Linear)  
Minimum Instr Range: 0  
Maximum Instr Range: 120  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 8  
How Processed: Average  
Sensor Locations: Upper & Lower excore detectors  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Probable Downscale (No forcing function)  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Upper & Lower detection inputs for  
1-NE-92-41, -42, -43, -44. Average of 1-XM-92-5005E (N-41),  
-5006E (N-42), -5007E (N-43), -5008E (N-44). Input from  
Point ID's 1N0049A, 1N0050A, 1N0051A, 1N0052A.

ERDS Point Number: 3      NI INTER RNG      1UN1015      Reactor Power - Intermediate Rng

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: NI INTER RNG  
Point ID: 1UN1015  
Plant Specific Point Desc: INTERMEDIATE RANGE FLUX  
Generic Cond Desc: Reactor Power - Intermediate Rng

Analog/Digital: A  
Engr Units/Dig States: %  
Engr Units Conversion: 0-10.3V = 10E-8-200  
Minimum Instr Range: 10E-8  
Maximum Instr Range: 200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: AZ 0 deg & 180 deg Excore  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Probable Downscale (no forcing function)  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Average of XX-92-5003 (channel N35) and -5004 (channel N36).  
Input from Point ID's 1N0035A and 1N0036A.  
Engineering Units Conversion is logarithmic.

ERDS Point Number: 4      NI SOURC RNG      1UN1014      Reactor Power - Source Range

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: NI SOURC RNG  
Point ID: 1UN1014  
Plant Specific Point Desc: SOURCE RANGE FLUX  
Generic Cond Desc: Reactor Power - Source Range

Analog/Digital: A  
Engr Units/Dig States: CPS  
Engr Units Conversion: 0-10V = 1-1E6  
Minimum Instr Range: 1.0 E0  
Maximum Instr Range: 1.0 E6  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Average  
Sensor Locations: AZ 0 deg. & 180 deg. Excore  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Probable Downscale (No forcing function)  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Average of XX-92-5001(channel N31) & -5002 (channel N32)  
(2 chambers/detector).  
Input from Point ID's 1N0031A and 1N0032A.  
Engineering Units Conversion is logarithmic.

ERDS Point Number: 5 REAC VES LEV 1UL6000 Reactor Vessel Water Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: REAC VES LEV  
Point ID: 1UL6000  
Plant Specific Point Desc: RVLIS LOWER RANGE AVERAGE  
Generic Cond Desc: Reactor Vessel Water Level

Analog/Digital: A  
Engr Units/Dig States: %  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 70  
Zero Point Reference: RV BOT  
Reference Point Notes: TAF = 62%

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote location in the Penetration Rooms  
Alarm/Trip Set Points: High at 50 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET

Unique System Desc: This is the lower range portion of the Rx Vessel level indication. The lower range provides indication of the reactor vessel level from the bottom of the vessel to the hot leg during natural circulation conditions. Average of 1-LM-68-368E and -371E. Top of core = 62.3%.  
Input from computer point ID's 1L2307A and 1L2308A.



ERDS Point Number: 6      TEMP CORE EX      1UT1003      Highest Core Exit Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: TEMP CORE EX  
Point ID: 1UT1003  
Plant Specific Point Desc: CORE EXIT TEMP MAX  
Generic Cond Desc: Highest Core Exit Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: TYPE K TC Table  
Minimum Instr Range: 200  
Maximum Instr Range: 2300  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 65  
How Processed: Highest  
Sensor Locations: Throughout core  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Eliminates open TC's  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: INCORE Thermocouples processed through "Exosensor" System.  
The system is divisionalized into 2 divisions. Total of  
65 elements. The numeric is the higher of  
1T1081A (1-XM-94-101-69) and 1T1087A (1-XM-94-102-75).  
200 DEGF is lower calibrated range but will read lower than  
this.

ERDS Point Number: 7      SUB MARGIN      1UT1005      Saturation Temp. - Highest CET

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SUB MARGIN  
Point ID: 1UT1005  
Plant Specific Point Desc: MIN SUBCOOL  
Generic Cond Desc: Saturation Temp. - Highest CET

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: TYPE K TC Table  
Minimum Instr Range: -35  
Maximum Instr Range: 200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 67  
How Processed: Lowest Subcooling  
Sensor Locations: CETs throughout core/Remote Pentr Rm PT  
Alarm/Trip Set Points: Low at 15 DEGF, High at 130 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Eliminates open TC's  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: INCORE Thermocouples processed through "Exosensor" System.  
The system is divisionalized into 2 divisions. Total of 65 thermocouples and 2 pressure transmitters. Uses highest CET with lowest RCS pressure (1-PT-68-66-78 and 1-PT-68-69-79).  
Input from 1T1074A (1-XM-94-101-66) and 1T1077A (1-XM-94-102-72)

ERDS Point Number: 8 SG LEVEL 1/A 1UL1001 Steam Generator 1 Water Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 1/A  
Point ID: 1UL1001  
Plant Specific Point Desc: SG #1 NR LEVEL AVG  
Generic Cond Desc: Steam Generator 1 Water Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Above "U" tubes

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Located outside of Polar Crane Wall  
Alarm/Trip Set Points: Low at 25 %, High at 70 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #1 Water Level Avg. of 1-LT-3-39 and -42.  
0-100% span on SG narrow range level transmitters corresponds to 75-100% span on the SG wide range level instrumentation. Top of "U" tubes is approximately 71% on the wide range. Therefore, the entire narrow range span is above the "U" tubes. Input from Point ID's 1L0401A and 1L0400A.

ERDS Point Number: 9 SG LEVEL 2/B 1UL1002 Steam Generator 2 Water Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 2/B  
Point ID: 1UL1002  
Plant Specific Point Desc: SG #2 NR LEVEL AVG  
Generic Cond Desc: Steam Generator 2 Water Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Above "U" tubes

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Located outside of Polar Crane Wall  
Alarm/Trip Set Points: Low at 25 %, High at 70 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #2 Water Level. Avg. of 1-LT-3-52 and -55.  
0-100% span on SG narrow range level transmitters corresponds to 75-100% span on the SG wide range level instrumentation. Top of "U" tubes is approximately 71% on the wide range. Therefore, the entire narrow range span is above the "U" tubes. Input from Point ID's 1L0421A and 1L0420A.

ERDS Point Number: 10 SG LEVEL 3/C 1UL1003 Steam Generator 3 Water Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 3/C  
Point ID: 1UL1003  
Plant Specific Point Desc: SG #3 NR LEVEL AVG  
Generic Cond Desc: Steam Generator 3 Water Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Above "U" tubes

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Located outside of Polar Crane Wall  
Alarm/Trip Set Points: Low at 25 %, High at 70 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET

Unique System Desc: Steam Generator #3 Water Level. Avg. of 1-LT-3-94 and -97.  
0-100% span on SG narrow range level transmitters corresponds to 75-100% span on the SG wide range level instrumentation. Top of "U" tubes is approximately 71% on the wide range. Therefore, the entire narrow range span is above the "U" tubes. Input from Point ID's 1L0441A and 1L0440A.

ERDS Point Number: 11 SG LEVEL 4/D 1UL1004 Steam Generator 4 Water Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG #4 NR LEVEL AVG  
Point ID: 1UL1  
Plant Specific Point Desc: SG #4 NR LEVEL AVG  
Generic Cond Desc: Steam Generator 4 Water Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Above "U" tubes

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Located outside of Polar Crane Wall  
Alarm/Trip Set Points: Low at 25 %, High at 70 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #4 Water Level. Avg. of 1-LT-3-107 and -110.  
0-100% span on SG narrow range level transmitters  
corresponds to 75-100% on the SG wide range level instrumentation. Top of "U" tubes is approximately 71% on the wide range. Therefore, the entire narrow range span is above the "U" tubes. Input from Point ID's 1L0461A and 1L0460A.

ERDS Point Number: 12 SG PRESS 1/A 1UP1002 Steam Generator 1 Pressure

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG PRESS 1/A  
Point ID: 1UP1002  
Plant Specific Point Desc: SG #1 MS PRESSURE AVG  
Generic Cond Desc: Steam Generator 1 Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote Location in Penetration Room  
Alarm/Trip Set Points: Low at 700 PSIG, High at 1020 PSIG

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #1 Pressure. Average of 1-PT-1-2A and 1-PT-1-2B.  
Input from computer point ID's 1P0400A and 1P0401A.

ERDS Point Number: 13 SG PRESS 2/B 1UP1003 Steam Generator 2 Pressure

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG PRESS 2/B  
Point ID: 1UP1003  
Plant Specific Point Desc: SG #2 MS PRESSURE AVG  
Generic Cond Desc: Steam Generator 2 Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote location in East Valve Room  
Alarm/Trip Set Points: Low at 700 PSIG, High at 1020 PSIG

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #2 Pressure. Average of 1-PT-1-9A and 1-PT-1-9B.  
Input from computer point ID's 1P0420A and 1P0421A.



ERDS Point Number: 14 SG PRESS 3/C 1UP1004 Steam Generator 3 Pressure

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG PRESS 3/C  
Point ID: 1UP1004  
Plant Specific Point Desc: SG #3 MS PRESSURE AVG  
Generic Cond Desc: Steam Generator 3 Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote Location in East Valve Room  
Alarm/Trip Set Points: Low at 700 PSIG, High at 1020 PSIG

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #3 Pressure. Average of 1-PT-1-20A and 1-PT-1-20B.  
Input from computer point ID's 1P0440A and 1P0441A.

ERDS Point Number: 15 SG PRESS 4/D 1UP1005 Steam Generator 4 Pressure

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG PRESS 4/D  
Point ID: 1UP1005  
Plant Specific Point Desc: SG #4 MS PRESSURE AVG  
Generic Cond Desc: Steam Generator 4 Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote location in Penetration Room  
Alarm/Trip Set Points: Low at 700 PSIG, High at 1020 PSIG

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #4 Pressure. Average of 1-PT-1-27A and 1-PT-1-27B.  
Input from computer point ID's 1P0460A and 1P0461A.

ERDS Point Number: 16    MN FD FL 1/A    1U0410C    Stm Gen 1 Main Feedwater Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: MN FD FL 1/A  
Point ID: 1U0410C  
Plant Specific Point Desc: SG #1 CORR FW 1/2 AVG  
Generic Cond Desc: Stm Gen 1 Main Feedwater Flow

Analog/Digital: A  
Engr Units/Dig States: MLB/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 4.5  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: Stm Gen FW Line 1, Aux. Bldg  
Alarm/Trip Set Points: High at 3.9 MLB/HR, Hi-Hi at 4.0 MLB/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator 1 Main Feedwater Flow. Average of 1F0403A (1-FT-3-35A) and 1F0404A (1-FT-3-35B). Corrected for temperature 1T0418A (1-TE-3-36).

ERDS Point Number: 17 MN FD FL 2/B 1U0430C Stm Gen 2 Main Feedwater Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: MN FD FL 2/B  
Point ID: 1U0430C  
Plant Specific Point Desc: SG #2 CORR FW 1/2 AVG  
Generic Cond Desc: Stm Gen 2 Main Feedwater Flow

Analog/Digital: A  
Engr Units/Dig States: MLB/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 4.5  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: Stm Gen FW Line 2, Aux Bldg  
Alarm/Trip Set Points: High at 3.9 MLB/HR, Hi-Hi at 4.0 MLB/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET

Unique System Desc: Steam Generator 2 Main Feedwater Flow. Average of 1F0423A  
(1-FT-3-48A) and 1F0424A (1-FT-3-48B). Corrected for  
Temperature 1T0438A (1-TE-3-49).

ERDS Point Number: 18 MN FD FL 3/C 1U0450C Stm Gen 3 Main Feedwater Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: MN FD FL 3/C  
Point ID: 1U0450C  
Plant Specific Point Desc: SG #3 CORR FW 1/2 AVG  
Generic Cond Desc: Stm Gen 3 Main Feedwater Flow

Analog/Digital: A  
Engr Units/Dig States: MLB/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 4.5  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: Stm Gen FW Line 3, Aux. Bldg  
Alarm/Trip Set Points: High at 3.9 MLB/HR, Hi-Hi at 4.0 MLB/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator 3 Main Feedwater Flow. Average of 1F0443A  
(1-FT-3-90A) and 1F0444A (1-FT-3-90B). Corrected for  
Temperature 1T0458A (1-TE-3-91).

ERDS Point Number: 19 MN FD FL 4/D 1U0470C Stm Gen 4 Main Feedwater Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: MN FD FL 4/D  
Point ID: 1U0470C  
Plant Specific Point Desc: SG #4 CORR FW 1/2 AVG  
Generic Cond Desc: Stm Gen 4 Main Feedwater Flow

Analog/Digital: A  
Engr Units/Dig States: MLB/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 4.5  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: Stm Gen FW Line 4, Aux. Bldg  
Alarm/Trip Set Points: High at 3.9 MLB/HR, Hi-Hi at 4.0 MLB/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator 4 Main Feedwater Flow. Average of 1F0463A  
(1-FT-3-103A) and 1F0464A (1-FT-3-103B). Corrected for  
Temperature 1T0478A (1-TE-3-104).

ERDS Point Number: 20 AX FW FL 1/A 1U0066 Stm Gen 1 Auxiliary FW Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: AX F<sup>W</sup> FL 1/A  
Point ID: 1U0066  
Plant Specific Point Desc: SG #1 AUX FEEDWATER FLOW  
Generic Cond Desc: Stm Gen 1 Auxiliary FW Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 440  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROCESSED: S  
Number of Sensors: 1  
How Processed: Pseudo point caps flow at 440 GPM  
Sensor Locations: Downstream of MDAFW, TDAFW tie to S/G 1  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: There are two electric and one turbine-driven AFWPS. Each electric pump feeds two SG's and the turbine-driven pump feeds all four SG's. The electric and turbine-driven AFWPS share the same piping to each SG. The flow element is located in the shared piping, maximum rated flow for MDAFWPS and turbine-driven AFWP, is 440 and 880 gpm, respectively. Input from 1-FM-3-163C (computer point ID 1F1049A).

ERDS Point Number: 21    AX FW FL 2/B    1U0067    Stm Gen 2 Auxiliary FW Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: AX FW FL 2/B  
Point ID: 1U0067  
Plant Specific Point Desc: SG #2 AUX FEEDWATER FLOW  
Generic Cond Desc: Stm Gen 2 Auxiliary FW Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 440  
Zero Point Reference: N/A  
Reference Point Notes: N/A

P'XOC or SENS: S  
Number of Sensors: 1  
How Processed: Pseudo point caps flow at 440 GPM  
Sensor Locations: Downstream of MDAFW, TDAFW tie to S/G 2  
Alarm/Trip Set Points: No alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: There are two electric and one turbine-driven AFWPS. Each electric pump feeds two SG's and the turbine-driven pump feeds all four SG's. The electric and turbine-driven AFWPs share the same piping to each SG. The flow element is located in the shared piping, maximum rated flow for MDAFWPs and turbine-driven AFWP, is 440 and 880 gpm, respectively. Input from 1-FM-3-155C (computer point ID 1F1048A).



ERDS Point Number: 22    AX FW FL 3/C    1U0068    Stm Gen 3 Auxiliary FW Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: AX FW FL 3/C  
Point ID: 1U0068  
Plant Specific Point Desc: SG #3 AUX FEEDWATER FLOW  
Generic Cond Desc: Stm Gen 3 Auxiliary FW Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 440  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: Pseudo point caps flow at 440 GPM  
Sensor Locations: Downstream of MDAFW, TDAFW tie to S/G 3  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: There are two electric and one turbine-driven AFWPS. Each electric pump feeds two SG's and the turbine-driven pump feeds all four SG's. The electric and turbine-driven AFWPs share the same piping to each SG. The flow element is located in the shared piping, maximum rated flow for MDAFWPs and turbine-driven AFWP, is 440 and 880 gpm, respectively. Input from 1-FM-3-147C (computer point ID 1F1047A).

ERDS Point Number: 23    AX FW FL 4/D    1U0069    Stm Gen 4 Auxiliary FW Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: AX FW FL 4/D  
Point ID: 1U0069  
Plant Specific Point Desc: SG #4 AUX FEEDWATER FLOW  
Generic Cond Desc: Stm Gen 4 Auxiliary FW Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 440  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: Pseudo point caps flow at 440 GPM  
Sensor Locations: Downstream of MDAFW, TDAFW tie to S/G 4  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: There are two electric and one turbine-driven AFWPS. Each electric pump feeds two SG's and the turbine-driven pump feeds all four SG's. The electric and turbine-driven AFWPs share the same piping to each SG. The flow element is located in the shared piping, maximum rated flow for MDAFWPs and Turbine-driver, AFWP, is 440 and 880 gpm, respectively. Input from 1-FM-3-1/0C (computer point ID 1F1050A).

ERDS Point Number: 24 HL TEMP 1/A 1T0419A Stm Gen 1 Inlet Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: HL TEMP 1/A  
Point ID: 1T0419A  
Plant Specific Point Desc: LOOP 1 HOT LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 1 Inlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 1 RCS Hot Leg piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS hot leg temperature is used in event recovery to provide information for manual control of RCS temperature, control of the ECCS pumps and RCPs, and verifying natural circulation or increase blow down. The temperature indication is also used to control RCS pressure and temperature within required limits. Input from 1-TM-68-1B.

ERDS Point Number: 25    HL TEMP 2/B    1T0439A    Strm Gen 2 Inlet Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: HL TEMP 2/B  
Point ID: 1T0439A  
Plant Specific Point Desc: LOOP 2 HOT LEG WIDE RANGE TEMP  
Generic Cond Desc: Strm Gen 2 Inlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 2 RCS Hot Leg Piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS hot leg temperature is used in event recovery to provide information for manual control of RCS temperature, control of the ECCS pumps and RCPs, and verifying natural circulation or increase blow down. The temperature indication is also used to control RCS pressure and temperature within required limits. Input from 1-TM-68-24B.

ERDS Point Number: 26    HL TEMP 3/C    1T0459A    Stm Gen 3 Inlet Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: HL TEMP 3/C  
Point ID: 1T0459A  
Plant Specific Point Desc: LOOP 3 HOT LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 3 Inlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: C  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 3 RCS Hot Leg Piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS hot leg temperature is used in event recovery to provide information for manual control of RCS temperature, control of the ECCS pumps and RCPs, and verifying natural circulation or increase blow down. The temperature indication is also used to control RCS pressure and temperature within required limits. Input from 1-TM-68-43B.

ERDS Point Number: 27    HL TEMP 4/D    1T0479A    Stm Gen 4 Inlet Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: HL TEMP 4/D  
Point ID: 1T0479A  
Plant Specific Point Desc: LOOP 4 HOT LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 4 Inlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 4 RCS Hot Leg Piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS hot leg temperature is used in event recovery to provide information for manual control of RCS temperature, control of the ECCS pumps and RCPs, and verifying natural circulation or increase blow down. The temperature indication is also used to control RCS pressure and temperature within required limits. Input from 1-TM-68-65B.

ERDS Point Number: 28 CL TEMP 1/A 1T0406A Stm Gen 1 Outlet Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CL TEMP 1/A  
Point ID: 1T0406A  
Plant Specific Point Desc: LOOP 1 COLD LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 1 Outlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 1 RCS Cold Leg Piping  
Alarm/Trip Set Points: High at 650 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS cold leg temperature is used in event recovery to maintain proper relationship between RCS pressure and temperature while cooling down, and providing information to manually control RCS temperature by controlling AFW flow, steam generator pressure, and RHR. The temperature indication is also used in maintaining stable plant conditions and verifying natural circulation.  
Input from 1-TM-68-18B.

ERDS Point Number: 29 CL TEMP 2/B 1T0426A Stm Gen 2 Outlet Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CL TEMP 2/B  
Point ID: 1T0426A  
Plant Specific Point Desc: LOOP 2 COLD LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 2 Outlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 2 RCS Cold Leg Piping  
Alarm/Trip Set Points: High at 650 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS cold leg temperature is used in event recovery to maintain proper relationship between RCS pressure and temperature while cooling down, and providing information to manually control RCS temperature by controlling AFW flow, steam generator pressure, and RHR. The temperature indication is also used in maintaining stable plant conditions and verifying natural circulation.  
Input from 1-TM-68-41B.



ERDS Point Number: 30 CL TEMP 3/C 1T0446A Stm Gen 3 Outlet Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CL TEMP 3/C  
Point ID: 1T0446A  
Plant Specific Point Desc: LOOP 3 COLD LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 3 Outlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 3 RCS Cold Leg Piping  
Alarm/Trip Set Points: High at 650 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS cold leg temperature is used in event recovery to maintain proper relationship between RCS pressure and temperature while cooling down, and providing information to manually control RCS temperature by controlling AFW flow, steam generator pressure, and RHR. The temperature indication is also used in maintaining stable plant conditions and verifying natural circulation.  
Input from 1-TM-68-60B.

ERDS Point Number: 31 CL TEMP 4/D 1T0466A Stm Gen 4 Outlet Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CL TEMP 4/D  
Point ID: 1T0466A  
Plant Specific Point Desc: LOOP 4 COLD LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 4 Outlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SEN: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 4 RCS Cold Leg Piping  
Alarm/Trip Set Points: High at 650 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS cold leg temperature is used in event recovery to maintain proper relationship between RCS pressure and temperature while cooling down, and providing information to manually control RCS temperature by controlling AFW flow, steam generator pressure, and RHR. The temperature indication is also used in maintaining stable plant conditions and verifying natural circulation.  
Input from 1-TM-68-83B.

ERDS Point Number: 32    RCS PRESSURE    1UP1000    Reactor Coolant System Pressure

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: RCS PRESSURE  
Point ID: 1UP1000  
Plant Specific Point Desc: RCS WIDE RANGE PRESSURE AVERAGE  
Generic Cond Desc: Reactor Coolant System Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 3000  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: RCS Hot Legs 1, 3, 4  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS pressure determined by this point is the average of 3 signals, which measure wide range hot leg pressures (1-PT-68-62, -66, and -69). RCS pressure indication is utilized by the operators to identify events for SI actuation and termination, starting and stopping RHR pumps, and controlling cooldown to prevent PTS.  
Input from computer point ID's 1P2000A, 1P0129A, and 1P2001A.

ERDS Point Number: 33 PRZR LEVEL 1UL1005 Primary System Pressurizer Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: PRZR LEVEL  
Point ID: 1UL1005  
Plant Specific Point Desc: PZR LEVEL AVERAGE  
Generic Cond Desc: Primary System Pressurizer Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Top of HTR = 14%

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: TAPs from Pressurizer  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: WET

Unique System Desc: The pressurizer level is an averaged signal from 3 level transmitters (1-LT-68-320, -335, -339). Zero reference is bottom of cylindrical shell. Approximately 63 cu ft of water remains in the pressurizer below zero reference at 652 deg F and 2235 psia. Top of heater represents approximately 14% level. Heaters shutdown and letdown isolated at approximately 17% level. Input from computer point ID's 1L0482A, 1L0481A, and 1L0480A.

ERDS Point Number: 34 RCS CHG/MU 1UF1016 Primary System Charging / Makeup

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: RCS CHG/MU  
Point ID: 1UF1016  
Plant Specific Point Desc: NET CHG FLO  
Generic Cond Desc: Primary System Charging / Makeup

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: -200  
Maximum Instr Range: 176  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 6  
How Processed: Subtraction  
Sensor Locations: CCP Pmp, RCP Seal/Leakoff, RCS Letdown  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Multiple due to number of sensors  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The net charging flow is calculated by subtracting RCP seal return, and CVCS letdown flow from the discharge flow of the charging pump. The design charging flow is between 55 and 100 GPM during normal operation. Input from Point ID's 1F0128A, 1F0134A, 1F1018A, 1F1020A, 1F1022A, and 1F1024A.

ERDS Point Number: 35    HP SI FLOW    1UF1010    High Pressure Safety Inj. Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: HP SI FLOW  
Point ID: 1UF1010  
Plant Specific Point Desc: SI FLOW TOTAL  
Generic Cond Desc: High Pressure Safety Inj. Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1600  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Sum  
Sensor Locations: Discharge of Safety Injection Pumps  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The total flow is measured by adding the discharge flow rates from two Safety Injection Pumps. The total accident flow rates for cold leg injection or recirculation and hot leg recirculation can be monitored by this point. Safety Injection Pumps on miniflow will not show flow since miniflow path is upstream of flow element. The design flow rate is 425 GPM @ 2500 ft of head for each SI Pump. (Sum of 1-FT-63-20 and -151). Input from Point ID's 1F1059A and 1F1066A.

ERDS Point Number: 36 LP SI FLOW 1UF1011 Low Pressure Safety Inj. Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: LP SI FLOW  
Point ID: 1UF1011  
Plant Specific Point Desc: RHR COLD LEG TOTAL FLOW  
Generic Cond Desc: Low Pressure Safety Inj. Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 11000  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Average  
Sensor Locations: RHR Cold Legs 2, 3 and 1, 4 Piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The RHR Cold Leg Flow Rate value is calculated by summing the average flow from cold legs 2 and 3 with the average flow from cold legs 1 and 4. The design flow rate for a RHR pump is 3000 GPM at 375 feet of head. Flow sensors include 1-FT-63-91A and -91B, 1-FT-63-92A and -92B. Input from computer point ID's 1F1060A, 1F1061A, 1F1063A, and 1F1064A.

ERDS Point Number: 37    CNTMT SMP WR    1UL1011    Containment Sump Wide Rng Lvl

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CNTMT SMP WR  
Point ID: 1UL1011  
Plant Specific Point Desc: CONTAINMENT SUMP LEV AVG  
Generic Cond Desc: Containment Sump Wide Rng Lvl  
  
Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: CNTFLR  
Reference Point Notes: The containment floor is elevation: 680

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Average, Redundant Sensor Algorithm  
Sensor Locations: Containment Sump  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The containment average sump level is calculated by a redundant sensor algorithm using four sump level transmitters. LT-63-176, -177, -178, and -179. The transfer from RWST to containment sump setpoint is 11%, which is approximately 2.5 feet above containment floor elevation. Gallons/% level varies with level in a nearly linear relationship. (78,000 gallons)  
Input from computer point ID's 1L1052A, 1L1053A, 1L1054A, and 1L1055A.



ERDS Point Number: 38    EFF GAS RAD    1R9102A    Release Rt of Radioactive Gases

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: EFF GAS RAD  
Point ID: 1R9102A  
Plant Specific Point Desc: UNIT 1 SHIELD BLDG RELEASE RATE  
Generic Cond Desc: Release Rt of Radioactive Gases

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E-2  
Maximum Instr Range: 1.0 E10  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: Sampled Totalized times flow rate  
Sensor Locations: Auxiliary Bldg  
Alarm/Trip Set Points: 220,000 uCi/sec

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Unit 1 Shield Bldg Exhaust. To obtain true release rate,  
Unit 2 monitor must also be checked.  
Input from 1-RM-90-400.

ERDS Point Number: 39    EFF GAS RAD    1R9102XA    Release Rt. of Radioactive Gases

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: EFF GAS RAD  
Point ID: 1R9102XA  
Plant Specific Point Desc: UNIT 2 SHIELD BLDG RELEASE RATE  
Generic Cond Desc: Release Rt. of Radioactive Gases

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E-2  
Maximum Instr Range: 1.0 E10  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: Sampled Totalized times flow rate  
Sensor Locations: Auxiliary Bldg  
Alarm/Trip Set Points: 220,000 uCi/sec

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Unit 2 Shield Bldg Exhaust. To obtain true release rate,  
Unit 1 monitor must also be checked.  
Input from 2-RM-90-400.

ERDS Point Number: 40    EFF LIQ RAD    0R1022A    Radioactivity of Released Liquid

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: EFF LIQ RAD  
Point ID: 0R1022A  
Plant Specific Point Desc: WDS LIQUID EFFLUENT RADIATION  
Generic Cond Desc: Radioactivity of Released Liquid  
  
Analog/Digital: A  
Engr Units/Dig States: CPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E1  
Maximum Instr Range: 1.0 E7  
Zero Point Reference: N/A  
Reference Point Notes: N/A  
  
PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: Auxiliary Bldg  
Alarm/Trip Set Points: Variable  
  
NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Waste Disposal System Liquid Effluent  
This computer point is in counts per minute.  
Input from 0-RE-90-122.

ERDS Point Number: 41 COND A/E RAD 1UR1006 Cond Air Ejector Radioactivity

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: COND A/E RAD  
Point ID: 1UR1006  
Plant Specific Point Desc: COND VAC EXH LOW RNG RELEASE RATE  
Generic Cond Desc: Cond Air Ejector Radioactivity

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Cond Flow \* Dose  
Sensor Locations: Turbine Bldg  
Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Condenser Air Ejector Noble Gas Monitor.

This is one of three computer points needed to cover full range. This point uses inputs from 1-FT-2-256 and 1-RM-90-119 to compute dose rates.  
Input from computer point ID's 1F2700A and 1R0001A.

ERDS Point Number: 42    COND A/E RAD    1UR1007    Cond Air Ejector Radioactivity

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: COND A/E RAD  
Point ID: 1UR1007  
Plant Specific Point Desc: COND VAC EXH MID RNG RELEASE RATE  
Generic Cond Desc: Cond Air Ejector Radioactivity

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Cond Flow \* Dose  
Sensor Locations: Turbine Bldg.  
Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Condenser Air Ejector Noble Gas Monitor

This is one of three computer points needed to cover full range. This point uses inputs from 1-FT-2-256 & 1-RM-90-99 to compute dose rates. Input from computer point ID's 1F2700A and 1R0014A.

ERDS Point Number: 43 COND A/E RAD 1UR1008 Cond Air Ejector Radioactivity

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: COND A/E RAD  
Point ID: 1UR1008  
Plant Specific Point Desc: COND VAC EXH HI RNG RELEASE RATE  
Generic Cond Desc: Cond Air Ejector Radioactivity

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Cond Flow \* Dose  
Sensor Locations: Turbine Bldg  
Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Condenser Air Ejector Noble Gas Monitor.

This is one of three computer points needed to cover full range. This point uses inputs from 1-FT-2-256 & 1-RM-90-405 to compute dose rates. Input from computer point ID's 1F2700A and 1R9101A.

ERDS Point Number: 44    CNTMNT RAD    1UR6021    Upper Containment Radiation Lvl

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CNTMNT RAD  
Point ID: 1UR6021  
Plant Specific Point Desc: UPPER CNTMT RADIATION  
Generic Cond Desc: Upper Containment Radiation Lvl

Analog/Digital: A  
Engr Units/Dig States: R/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Upper Containment  
Alarm/Trip Set Points: 100 R/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Upper Containment High Range Area Monitors.  
Inputs are 1-RM-90-271 & 1-RM-90-272.  
Input from computer point ID's 1R9018A and 1R9019A.

ERDS Point Number: 45 CNTMNT RAD

1UR6022

Lower Containment Radiation Lvl

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CNTMNT RAD  
Point ID: 1UR6022  
Plant Specific Point Desc: LOWER CNTMT RADIATION  
Generic Cond Desc: Lower Containment Radiation Lvl

Analog/Digital: A  
Engr Units/Dig States: R/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Lower Containment  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Lower Containment High Range Area Monitor.  
Inputs are 1-RM-90-273 & 1-RM-90-274 (computer point  
ID's 1R9020A and 1R9021A).



ERDS Point Number: 46    MAIN SL 1/A    1UR1001    Stm Gen 1 Steam Line Rad Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: MAIN SL 1/A  
Point ID: 1UR1001  
Plant Specific Point Desc: SG #1 RELEASE RATE  
Generic Cond Desc: Stm Gen 1 Steam Line Rad Level

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Sampled Totalized  
Sensor Locations: Main Steam Line prior to ATM reliefs  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Value calculated as product of SG #1 release rate, radioactivity, specific volume, and a conversion constant. 1-PCV-1-5 position is monitored & if PORV is 'NOT CLOSED', valve is assumed to contribute 890,000 lb/hr flow to the atmosphere. 5 code safety valves for each S/G. MS line header pressure (1-PT-1-2A & 2B) is monitored to determine condition of valves. Each open valve is assumed to contribute 890,000 lb/hr to the flow rate. If code safeties lift, 1 is assumed stuck open until pressure < 50 psig. Input from rad monitor 1-RM-90-421 (computer point 1R9027A).

ERDS Point Number: 47    MAIN SL 2/B    1UR1002    Stm Gen 2 Steam Line Rad Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: MAIN SL 2/B  
Point ID: 1UR1002  
Plant Specific Point Desc: SG #2 RELEASE RATE  
Generic Cond Desc: Stm Gen 2 Steam Line Rad Level

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Sampled Totalized  
Sensor Locations: Main Steam Line prior to ATM reliefs  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Value calculated as product of SG #2 release rate, radioactivity, specific volume, and a conversion constant. 1-PCV-1-12 position is monitored & if PORV is 'NOT CLOSED', valve is assumed to contribute 890,000 lb/hr flow to the atmosphere. 5 code safety valves for each S/G. MS line header pressure (1-PT-1-9A & 9B) is monitored to determine condition of valves. Each open valve is assumed to contribute 890,000 lb/hr to the flow rate. If code safeties lift, 1 is assumed stuck open until pressure < 50 psig. Input from rad monitor 1-RM-90-422 (computer point 1R9028A).

ERDS Point Number: 48    MAIN SL 3/C    1UR1003    Stm Gen 3 Steam Line Rad Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: MAIN SL 3/C  
Point ID: 1UR1003  
Plant Specific Point Desc: SG #3 RELEASE RATE  
Generic Cond Desc: Stm Gen 3 Steam Line Rad Level

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Sampled Totalized  
Sensor Locations: Main Steam Line prior to ATM reliefs  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Value calculated as product of SG #3 release rate, radioactivity, specific volume, and a conversion constant. 1-PCV-1-23 position is monitored & if PORV is 'NOT CLOSED', valve is assumed to contribute 890,000 lb/hr flow to the atmosphere. 5 code safety valves for each S/G MS line header pressure (1-PT-1-20A & 20B) is monitored to determine condition of valves. Each open valve is assumed to contribute 890,000 lb/hr to the flow rate. If code safeties lift, 1 is assumed stuck open until pressure < 50 psig. input from rad monitor 1-RM-90-423 (computer point 1R9029A).

ERDS Point Number: 49    MAIN SL 4/D    1UR1004    Stm Gen 4 Steam Line Rad Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: MAIN SL 4/D  
Point ID: 1UR1004  
Plant Specific Point Desc: SG #4 RELEASE RATE  
Generic Cond Desc: Stm Gen 4 Steam Line Rad Level

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Sampled Totalized  
Sensor Locations: Main Steam Line prior to ATM reliefs  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Value calculated as product of SG #4 release rate, radioactivity, specific volume, and a conversion constant. 1-PCV-1-30 position is monitored & if PORV is 'NOT CLOSED', valve is assumed to contribute 890,000 lb/hr flow to the atmosphere. 5 code safety valves for each S/G. MS line header pressure (1-PT-1-27A & 27B) is monitored to determine condition of valves. Each open valve is assumed to contribute 890,000 lb/hr to the flow rate. If code safeties lift, 1 is assumed stuck open until pressure < 50 psig. Input from rad monitor 1-RM-90-424 (computer point 1R9030A).

ERDS Point Number: 50 SG BD RAD 1A 1R1020A Stm Gen Header Blowdown Rad Lvl

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG BD RAD 1A  
Point ID: 1R1020A  
Plant Specific Point Desc: SG BLOWDOWN RADIATION  
Generic Cond Desc: Stm Gen Header Blowdown Rad Lvl

Analog/Digital: A  
Engr Units/Dig States: CPM  
Engl Units Conversion: N/A  
Minimum Instr Range: 1.0 E1  
Maximum Instr Range: 1.0 E7  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: Turbine Bldg  
Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Steam Generator Blowdown Header Liquid Monitor.

This is one of two monitors, one of which is valved out.  
The monitor is for the header and not individual loops.  
Input from 1-RM-90-120A.

ERDS Point Number: 51 SG BD RAD 1B 1R1021A Stm Gen Header Blowdown Rad Lev

Date:	5/14/97
Reactor Unit:	SE1
Data Feeder:	N/A
NRC ERDS Parameter:	SG BD RAD 1B
Point ID:	1R1021A
Plant Specific Point Desc:	SG BLOWDOWN RADIATION
Generic Cond Desc:	Stm Gen Header Blowdown Rad Lev
Analog/Digital:	A
Engr Units/Dig States:	CPM
Engr Units Conversion:	N/A
Minimum Instr Range:	1.0 E1
Maximum Instr Range:	1.0 E7
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Locations:	Turbine Bldg
Alarm/Trip Set Points:	Variable
NID Power Cutoff Level:	N/A
NID Power Cut-On Level:	N/A
Instrument Failure Mode:	Low on Loss of Power
Temperature Compensation:	N
Level Reference Leg:	N/A
Unique System Desc:	Steam Generator Blowdown Header Liquid Monitor
	This is one of two monitors, one of which is valved out.
	The monitor is for the header and not individual loops.
	Input from 1-RM-90-121A.

ERDS Point Number: 52 CTMNT PRESS 1UP6000 Containment Pressure

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CTMNT PRESS  
Point ID: 1UP6000  
Plant Specific Point Desc: CNTMT PRESSURE AVERAGE  
Generic Cond Desc: Containment Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: -1  
Maximum Instr Range: 15  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Annulus  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Containment Pressure. This is actually a differential between containment and the annulus. Average of 1-PDT-30-44 and -45 (computer points 1P1002A and 1P1003A).

ERDS Point Number: 53 CTMNT TEMP 1QV0020 Containment Temperature

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CTMNT TEMP  
Point ID: 1QV0020  
Plant Specific Point Desc: CALCULATED LOWER CTMT TEMP - LCTTEMP  
Generic Cond Desc: Containment Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 19  
How Processed: Weighted Average  
Sensor Locations: Lower Containment  
Alarm/Trip Set Points: Low at 105 DEGF, High at 120 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Fail Low  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Weighted Average of 19 Lower Containment Temp. Elements.



ERDS Point Number: 54 H2 CONC 1UY1005 Containment H2 Concentration

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: H2 CONC  
Point ID: 1UY1005  
Plant Specific Point Desc: H2 CONC AVG  
Generic Cond Desc: Containment H2 Concentration  
  
Analog/Digital: A  
Engr Units/Dig States: % H2V  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 10  
Zero Point Reference: N/A  
Reference Point Notes: N/A  
  
PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Sample line from both uppr & lowr cntmnt  
Alarm/Trip Set Points: High at 10 %  
  
NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Downscale on loss of power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Samples H2 gas concentration in containment. Average of  
1-H2AN-43-200 and 1-H2AN-43-210 (computer points 1C1000A  
and 1C1001A). Analyzers are normally valved out.

ERDS Point Number: 55 RWST LEVEL 1UL1000 Refueling Water Storage Tank Lev

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: RWST LEVEL  
Point ID: 1UL1000  
Plant Specific Point Desc: RWST LEV AVG  
Generic Cond Desc: Refueling Water Storage Tank Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: 27.6"  
Reference Point Notes: 25,000 gal below zero reference

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average, Redundant Sensor Algorithm  
Sensor Locations: RWST taps 25,000 Gals in tnk at 0% Level  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The RWST average level is calculated by a redundant sensor algorithm from the 2 RWST level transmitters.  
The RWST tank capacity is 380,000 gallons.  
0% = 25,000 gallons, 100% = 380,000 gallons.  
Input from 1-LT-63-50 and -51 (computer points 1L2201A and 1L1041A).

ERDS Point Number: 56 WIND SPEED MET001 Wind Speed - Upper Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: WIND SPEED  
Point ID: MET001  
Plant Specific Point Desc: 91M VECTOR WIND SPEED (15 MIN AVG)  
Generic Cond Desc: Wind Speed - Upper Level

Analog/Digital: A  
Engr Units/Dig States: m/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 44.6  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 91 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:

ERDS Point Number: 57 WIND SPEED MET002 Wind Speed - Intermediate Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: WIND SPEED  
Point ID: MET002  
Plant Specific Point Desc: 46M VECTOR WIND SPEED (15 MIN AVG)  
Generic Cond Desc: Wind Speed - Intermediate Level

Analog/Digital: A  
Engr Units/Dig States: m/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 44.6  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 46 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:

ERDS Point Number: 58 WIND SPEED MET003 Wind Speed - Lower Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: WIND SPEED  
Point ID: MET003  
Plant Specific Point Desc: 10M VECTOR WIND SPEED (15 MIN AVG)  
Generic Cond Desc: Wind Speed - Lower Level

Analog/Digital: A  
Engr Units/Dig States: m/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 44.6  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 10 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Level: N/A  
Unique System Desc:

ERDS Point Number: 59    WIND DIR    MET004    Wind Direction - Upper Level

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: WIND DIR  
Point ID: MET004  
Plant Specific Point Desc: 91M VECTOR WIND DIR (15 MIN AVG)  
Generic Corid Desc: Wind Direction - Upper Level

Analog/Digital: A  
Engr Units/Dig States: DEG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 360  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 91 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Lng: N/A  
Unique System Desc:

ERDS Point Number: 60 WIND DIR MET005 Wind Direction - Intermed. Level

Date:	5/14/97
Reactor Unit:	SE1
Data Feeder:	N/A
NRC ERDS Parameter:	WIND DIR
Point ID:	MET005
Plant Specific Point Desc:	46M VECTOR WIND DIR (15 MIN AVG)
Generic Cond Desc:	Wind Direction - Intermed. Level
Analog/Digital:	A
Engr Units/Dig States:	DEG
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	360
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Locations:	At the 46 Meter Level of the Met Tower
Alarm/Trip Set Points:	No Alarms
NID Power Cutoff Level:	N/A
NID Power Cut-On Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation :	N
Level Reference Leg:	N/A
Unique System Desc:	

ERDS Point Number: 61 WIND DIR MET006 Wind Direction - Lower Level

Date:	5/14/97
Reactor Unit:	SE1
Data Feeder:	N/A
NRC ERDS Parameter:	WIND DIR
Point ID:	MET006
Plant Specific Point Desc:	10M VECTOR WIND DIR (15 MIN AVG)
Generic Cond Desc:	Wind Direction - Lower Level
Analog/Digital:	A
Engr Units/Dig States:	DEG
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	360
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	N/A
Sensor Locations:	At the 10 Meter Level of the Met Tower
Alarm/Trip Set Points:	No Alarms
NID Power Cutoff Level:	N/A
NID Power Cut-On Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation:	N
Level Reference Leg:	N/A
Unique System Desc:	



ERDS Point Number: 62    STAB CLASS    MET007    Air Stability - Upper

Date: 5/14/97  
 Reactor Unit: SE1  
 Data Feeder: N/A  
 NRC ERDS Parameter: STAB CLASS  
 Point ID: MET007  
 Plant Specific Point Desc: Stability Class Upper  
 Generic Cond Desc: Air Stability - Upper

Analog/Digital: A  
 Engr Units/Dig S.ates: STABA  
 Engr Units Conversion: See Below  
 Minimum Instr Range: See Below  
 Maximum Instr Range: See Below  
 Zero Point Reference: N/A  
 Reference Point Notes: N/A

PROC or SENS: P  
 Number of Sensors: 2  
 How Processed: See Below  
 Sensor Locations: Met Tower  
 Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
 NID Power Cut-On Level: N/A  
 Instrument Failure Mode: LOW  
 Temperature Compensation: N  
 Level Reference Leg: N/A

Unique System Desc: Differential Temperature Upper-Lower (deg C)

Difference		Stability Class	Point Value
>	<=		
	-1.9	A	1
-1.9	-1.7	B	2
-1.7	-1.5	C	3
-1.5	-0.5	D	4
-0.5	1.5	E	5
1.5	4.0	F	6
4.0		G	7

ERDS Point Number: 63    STAB CLASS    MET008    Air Stability - Intermediate

Date: 5/14/97  
 Reactor Unit: SE1  
 Data Feeder: N/A  
 NRC ERDS Parameter: STAB CLASS  
 Point ID: MET008  
 Plant Specific Point Desc: Stability Class Intermediate  
 Generic Cond Desc: Air Stability - Intermediate

Analog/Digital: A  
 Engr Units/Dig States: STABA  
 Engr Units Conversion: See Below  
 Minimum Instr Range: See Below  
 Maximum Instr Range: See Below  
 Zero Point Reference: N/A  
 Reference Point Notes: N/A

PROC or SENS: P  
 Number of Sensors: 2  
 How Processed: See Below  
 Sensor Locations: Met Tower  
 Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
 NID Power Cut-On Level: N/A  
 Instrument Failure Mode: LOW  
 Temperature Compensation: N  
 Level Reference Leg: N/A

Unique System Desc: Differential Temperature Upper-Intermediate (deg C)

Difference		Stability Class	Point Value
>	<=		
	-1.9	A	1
-1.9	-1.7	B	2
-1.7	-1.5	C	3
-1.5	-0.5	D	4
-0.5	1.5	E	5
1.5	4.0	F	6
4.0		G	7

ERDS Point Number: 64 STAB CLASS MET009 Air Stability - Lower

Date: 5/14/97  
 Reactor Unit: SE1  
 Data Feeder: N/A  
 NRC ERDS Parameter: STAB CLASS  
 Point ID: MET009  
 Plant Specific Point Desc: Stability Class Lower  
 Generic Cond Desc: Air Stability - Lower

Analog/Digital: A  
 Engr Units/Dig States: STABA  
 Engr Units Conversion: See Below  
 Minimum Instr Range: See Below  
 Maximum Instr Range: See Below  
 Zero Point Reference: N/A  
 Reference Point Notes: N/A

PROC or SENS: P  
 Number of Sensors: 2  
 How Processed: See Below  
 Sensor Locations: Met Tower  
 Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
 NID Power Cut-On Level: N/A  
 Instrument Failure Mode: LOW  
 Temperature Compensation: N  
 Level Reference Leg: N/A  
 Unique System Desc: Differential Temperature Intermediate-Lower (deg C)

Difference		Stability Class	Point Value
>	<=		
	-1.9	A	1
-1.9	-1.7	B	2
-1.7	-1.5	C	3
-1.5	-0.5	D	4
-0.5	1.5	E	5
1.5	4.0	F	6
4.0		G	7

ERDS Point Number: 65 SG LEVEL 1/A 1L0403A Steam Gen 1 Wide Range Water Lev

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 1/A  
Point ID: 1L0403A  
Plant Specific Point Desc: SG #1 WIDE RANGE LEVEL  
Generic Cond Desc: Steam Gen 1 Wide Range Water Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: 1% = 5.7"  
Minimum Instr Range: 0.0  
Maximum Instr Range: 100.0  
Zero Point Reference: LOWTAP  
Reference Point Notes: See Below

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: See Below  
Alarm/Trip Set Points: Low at 60%, High at 80%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Sensor Out Low  
Temperature Compensation: N  
Level Reference Leg: WET

Unique System Desc: LT is calibrated for design operating conditions. 0% corresponds to lower tap on SG located just above tube plate. 100% corresponds to the upper tap which is 170" above the top of "U" tubes. Top of "U" tubes is approximately 70% level.  
Input from: 1-LT-3-43.

ERDS Point Number: 66 SG LEVEL 2/B 1L0423A Steam Gen 2 Wide Range Water Lev

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 2/B  
Point ID: 1L0423A  
Plant Specific Point Desc: SG #2 WIDE RANGE LEVEL  
Generic Cond Desc: Steam Gen 2 Wide Range Water Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: 1% = 5.7"  
Minimum Instr Range: 0.0  
Maximum Instr Range: 100.0  
Zero Point Reference: LOWTAP  
Reference Point Notes: See Below

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: See Below  
Alarm/Trip Set Points: Low at 60%, High at 80%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Sensor Out Low  
Temperature Compensation: N  
Level Reference Leg: WET

Unique System Desc: LT is calibrated for design operating conditions. 0% corresponds to lower tap on SG located just above tube plate. 100% corresponds to the upper tap which is 170" above the top of "U" tubes. Top of "U" tubes is approximately 70% level.  
Input from 1-LT-3-56.

ERDS Point Number: 67 SG LEVEL 3/C 1L0443A Steam Gen: 3 Wide Range Water Lev

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 3/C  
Point ID: 1L0443A  
Plant Specific Point Desc: SG #3 WIDE RANGE LEVEL  
Generic Cond Desc: Steam Gen 3 Wide Range Water Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: 1% = 5.7"  
Minimum Instr Range: 0.0  
Maximum Instr Range: 100.0  
Zero Point Reference: LOWTAP  
Reference Point Notes: See Below

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: See Below  
Alarm/Trip Set Points: Low at 60%, High at 80%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Sensor Out Low  
Temperature Compensation: N

Level Reference Leg: WET

Unique System Desc: LT is calibrated for design operating conditions. 0% corresponds to lower tap on SG located just above tube plate. 100% corresponds to the upper tap which is 170" above the top of "U" tubes. Top of "U" tubes is approximately 70% level.  
Input from 1-LT-3-98.

ERDS Point Number: 68 SG LEVEL 4/D 1L0463A Steam Gen 4 Wide Range Water Lev

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 4/D  
Point ID: 1L0463A  
Plant Specific Point Desc: SG #4 WIDE RANGE LEVEL  
Generic Cond Desc: Steam Gen 4 Wide Range Water Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: 1% = 5.7"  
Minimum Instr Range: 0.0  
Maximum Instr Range: 100.0  
Zero Point Reference: LOWTAP  
Reference Point Notes: See Below

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: See Below  
Alarm/Trip Set Points: Low at 60%, High at 80%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Sensor Out Low  
Temperature Compensation: N  
Level Reference Leg: WET  
Unique System Desc: LT is calibrated for design operating conditions. 0% corresponds to lower tap on SG located just above tube plate. 100% corresponds to the upper tap which is 170" above the top of "U" tubes. Top of "U" tubes is approximately 70% level.  
Input from 1-LT-3-111.

ERDS Point Number: 69    CORE FLOW    1PA003    Total RCS Flow

Date: 5/14/97  
Reactor Unit: SE1  
Data Feeder: N/A  
NRC ERDS Parameter: CORE FLOW  
Point ID: 1PA003  
Plant Specific Point Desc: TOTAL REACTOR COOLANT FLOW  
Generic Cond Desc: Total RCS Flow

Analog/Digital: A  
Engr Units/Dig States: % FLOW  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0  
Maximum Instr Range: 110.0  
Zero Point Reference: N/A  
Reference Point Notes: See Below

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Average  
Sensor Locations: RCS Flow loops 1-4  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: This point is generated from an Average of 1-FT-68-6A, -29A, -48A, -71A. Input from Point ID's 1F0400A, 1F0420A, 1F0440A, and 1F0460A. Design Flow = 138 MLB/HR per Loop.



## SEQUOYAH UNIT 2 - ERDS DATA POINT LIBRARY

1	NL	SIMULATION	INDICATES REAL OR SIMULATED DATA
2	NI POWER RNG	2UN2000	POWER RANGE AVERAGE
3	NI INTER RNG	2UN1015	INTERMEDIATE RANGE FLUX
4	NI SOURC RNG	2UN1014	SOURCE RANGE FLUX
5	REAC VES LEV	2UL6000	RVLIS LOWER RANGE AVERAGE
6	TEMP CORE EX	2UT1003	CORE EXIT TEMP MAX
7	SUB MARGIN	2UT1005	MIN SUBCOOL
8	SG LEVEL 1/A	2UL1001	SG #1 NR LEVEL AVG
9	SG LEVEL 2/B	2UL1002	SG #2 NR LEVEL AVG
10	SG LEVEL 3/C	2UL1003	SG #3 NR LEVEL AVG
11	SG LEVEL 4/D	2UL1004	SG #4 NR LEVEL AVG
12	SG PRESS 1/A	2UP1002	SG #1 MS PRESSURE AVG
13	SG PRESS 2/B	2UP1003	SG #2 MS PRESSURE AVG
14	SG PRESS 3/C	2UP1004	SG #3 MS PRESSURE AVG
15	SG PRESS 4/D	2UP1005	SG #4 MS PRESSURE AVG
16	MN FD FL 1/A	2U0410C	SG #1 CORR FW 1/2 AVG
17	MN FD FL 2/B	2U0430C	SG #2 CORR FW 1/2 AVG
18	MN FD FL 3/C	2U0450C	SG #3 CORR FW 1/2 AVG
19	MN FD FL 4/D	2U0470C	SG #4 CORR FW 1/2 AVG
20	AX FW FL 1/A	2U0066	SG #1 AUX FEEDWATER FLOW
21	AX FW FL 2/B	2U0067	SG #2 AUX FEEDWATER FLOW
22	AX FW FL 3/C	2U0068	SG #3 AUX FEEDWATER FLOW
23	AX FW FL 4/D	2U0069	SG #4 AUX FEEDWATER FLOW
24	HL TEMP 1/A	2T0419A	LOOP 1 HOT LEG WIDE RANGE TEMP
25	HL TEMP 2/B	2T0439A	LOOP 2 HOT LEG WIDE RANGE TEMP
26	HL TEMP 3/C	2T0459A	LOOP 3 HOT LEG WIDE RANGE TEMP
27	HL TEMP 4/D	2T0479A	LOOP 4 HOT LEG WIDE RANGE TEMP
28	CL TEMP 1/A	2T0406A	LOOP 1 COLD LEG WIDE RANGE TEMP
29	CL TEMP 2/B	2T0426A	LOOP 2 COLD LEG WIDE RANGE TEMP
30	CL TEMP 3/C	2T0446A	LOOP 3 COLD LEG WIDE RANGE TEMP
31	CL TEMP 4/D	2T0466A	LOOP 4 COLD LEG WIDE RANGE TEMP
32	RCS PRESSURE	2UP1000	RCS WIDE RANGE PRESSURE AVERAGE

33	PRZR LEVEL	2UL1005	PZR LEVEL AVERAGE
34	RCS CHG/MU	2UF1016	NET CHG FLO
35	HP SI FLOW	2UF1010	SI FLOW TOTAL
36	LP SI FLOW	2UF1011	RHR COLD LEG TOTAL FLOW
37	CNTMT SMP WR	2UL1011	CONTAINMENT SUMP LEV AVG
38	EFF GAS RAD	2R9102XA	UNIT 1 SHIELD BLDG RELEASE RATE
39	EFF GAS RAD	2R9102A	SHIELD BUILDING VENT RADIATION
40	EFF LIQ RAD	0R1022A	WDS LIQUID EFFLUENT RADIATION
41	COND A/E RAD	2UR1006	COND VAC EXH LOW RNG RELEASE RATE
42	COND A/E RAD	2UR1007	COND VAC EXH MID RNG RELEASE RATE
43	COND A/E RAD	2UR1008	COND VAC EXH HI RNG RELEASE RATE
44	CNTMNT RAD	2UR6021	UPPER CNTMT RADIATION
45	CNTMNT RAD	2UR6022	LOWER CNTMT RADIATION
46	MAIN SL 1/A	2UR1001	SG #1 RELEASE RATE
47	MAIN SL 2/B	2UR1002	SG #2 RELEASE RATE
48	MAIN SL 3/C	2UR1003	SG #3 RELEASE RATE
49	MAIN SL 4/D	2UR1004	SG #4 RELEASE RATE
50	SG BD RAD 1A	2R1020A	SG BLOWDOWN RADIATION
51	SG BD RAD 1B	2R1021A	SG BLOWDOWN RADIATION
52	CTMNT PRESS	2UP6000	CNTMT PRESSURE AVERAGE
53	CTMNT TEMP	2QV0020	CALCULATED LOWER CTMT TEMP - LCTTEMP
54	H2 CONC	2UY1005	H2 CONC AVG
55	RWST LEVEL	2UL1000	RWST LEV AVG
56	WIND SPEED	MET001	91M VECTOR WIND SPEED (15 MIN AVG)
57	WIND SPEED	MET002	46M VECTOR WIND SPEED (15 MIN AVG)
58	WIND SPEED	MET003	10M VECTOR WIND SPEED (15 MIN AVG)
59	WIND DIR	MET004	91M VECTOR WIND DIR (15 MIN AVG)
60	WIND DIR	MET005	46M VECTOR WIND DIR (15 MIN AVG)
61	WIND DIR	MET006	10M VECTOR WIND DIR (15 MIN AVG)
62	STAB CLASS	MET007	Stability Class Upper
63	STAB CLASS	MET008	Stability Class Intermediate
64	STAB CLASS	MET009	Stability Class Lower
65	SG LEVEL 1/A	2L0403A	SG #1 WIDE RANGE LEVEL
66	SG LEVEL 2/B	2L0423A	SG #2 WIDE RANGE LEVEL

67	SG LEVEL 3/C	2L0443A	SG #3 WIDE RANGE LEVEL
68	SG LEVEL 4/D	2L0463A	SG #4 WIDE RANGE LEVEL
69	CORE FLOW	2PA003	TOTAL REACTOR COOLANT FLOW

ERDS Point Number: 1 NL

SIMULATION Real/Simulated Data

Date: 5/14/97

Reactor Unit: SE2

Data Feeder: N/A

NRC ERDS Parameter: NL

Point ID: SIMULATION

Plant Specific Point Desc: INDICATES REAL OR SIMULATED DATA

Generic Cond Desc: Real/Simulated Data

Analog/Digital: D

Engr Units/Dig States: REAL/SIMUL

Engr Units Conversion: N/A

Minimum Instr Range: N/A

Maximum Instr Range: N/A

Zero Point Reference: N/A

Reference Point Notes: N/A

PROC or SENS: P

Number of Sensors: 0

How Processed: 0 If Real, 1 if Simulated

Sensor Locations: N/A

Alarm/Trip Set Points: N/A

NID Power Cutoff Level: N/A

NID Power Cut-On Level: N/A

Instrument Failure Mode: N/A

Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: This Point is used to indicate whether the data is coming from the Unit or from the Simulator.

ERDS Point Number:	2	NI POWER RNG	2UN2000	Reactor Power - Power Range
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Date:	5/14/97
Reactor Unit:	SE2
Data Feeder:	N/A
NRC ERDS Parameter:	NI POWER RNG
Point ID:	2UN2000
Plant Specific Point Desc:	POWER RANGE AVERAGE
Generic Cond Desc:	Reactor Power - Power Range

  

Analog/Digital:	A
Engr Units/Dig States:	%
Engr Units Conversion:	0-10V = 0-120% Power (Linear)
Minimum Instr Range:	0
Maximum Instr Range:	120
Zero Point Reference:	N/A
Reference Point Notes:	N/A

  

PROC or SENS:	P
Number of Sensors:	8
How Processed:	Average
Sensor Locations:	Upper & Lower excore detectors
Alarm/Trip Set Points:	No Alarms

  

NID Power Cutoff Level:	N/A
NID Power Cut-On Level:	N/A
Instrument Failure Mode:	Probable Downscale (No forcing function)
Temperature Compensation:	N
Level Reference Leg:	N/A
Unique System Desc:	Upper & Lower detection inputs for 2-NE-92-41, -42, -43, -44 Average of 2-XM-92-5005E (N-41), -5006E (N-42), -5007E (N-43), -5008E (N-44). Input from Point ID's 2N0049A, 2N0050A, 2N0051A, 2N0052A.

ERDS Point Number: 3      NI INTER RNG      2UN1015      Reactor Power - Intermediate Rng

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: NI INTER RNG  
Point ID: 2UN1015  
Plant Specific Point Desc: INTERMEDIATE RANGE FLUX  
Generic Cond Desc: Reactor Power - Intermediate Rng

Analog/Digital: A  
Engr Units/Dig States: %  
Engr Units Conversion: 0 - 10.3V = 10E-8 - 200  
Minimum Instr Range: 10E-8  
Maximum Instr Range: 200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: AZ 0 deg & 180 deg Excore  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Probable Downscale (no forcing function)  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Average of XX-92-5003 (channel N35) and -5004 (channel N36).  
Input from Point ID's 2N0035A and 2N0036A.  
Engineering Units Conversion is logarithmic.

ERDS Point Number: 4 NI SOURC RNG 2UN1014 Reactor Power - Source Range

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: NI SOURC RNG  
Point ID: 2UN1014  
Plant Specific Point Desc: SOURCE RANGE FLUX  
Generic Cond Desc: Reactor Power - Source Range

Analog/Digital: A  
Engr Units/Dig States: CPS  
Engr Units Conversion: 0 - 10V = 1 - 1E6  
Minimum Instr Range: 1.0 E0  
Maximum Instr Range: 1.0 E6  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Average  
Sensor Locations: AZ 0 deg. & 180 deg. Excore  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Probable Downscale (No forcing function)  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Average of XX-92-5001(channel N31) & -5002 (channel N32)  
(2 chambers/detector).  
Input from Point ID's 2N003 1A and 2N0032A.  
Engineering Units Conversion is logarithmic.

ERDS Point Number: 5 REAC VES LEV 2UL6000 Reactor Vessel Water Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: REAC VES LEV  
Point ID: 2UL6000  
Plant Specific Point Desc: RVLIS LOWER RANGE AVERAGE  
Generic Cond Desc: Reactor Vessel Water Level

Analog/Digital: A  
Engr Units/Dig States: %  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 70  
Zero Point Reference: RV BOT  
Reference Point Notes: TAF = 62%

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote location in the Penetration Rooms  
Alarm/Trip Set Points: High at 50%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET

Unique System Desc: This is the lower range portion of the Rx Vessel level indication. The lower range provides indication of the reactor vessel level from the bottom of the vessel to the hot leg during natural circulation conditions. Average of 2-LM-68-368E and -371E. Top of core = 62.3%.  
Input from computer point ID's 2L2307A and 2L2308A.



ERDS Point Number: 6 TEMP CORE EX 2UT1003 Highest Core Exit Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: TEMP CORE EX  
Point ID: 2UT1003  
Plant Specific Point Desc: CORE EXIT TEMP MAX  
Generic Cond Desc: Highest Core Exit Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: TYPE K TC Table  
Minimum Instr Range: 200  
Maximum Instr Range: 2300  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 65  
How Processed: Highest  
Sensor Locations: Throughout core  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Eliminates open TC's  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: INCORE Thermocouples processed through "Exosensor" System.  
The system is divisionalized into 2 divisions. Total of  
65 elements. The numeric is the higher of  
2T1081A (2-XM-94-101-69) and 2T1087A (2-XM-94-102-75).  
200 DEGF is lower calibrated range but will read lower than  
this.

ERDS Point Number: 7 SUB MARGIN 2UT1005 Saturation Temp. - Highest CET

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SUB MARGIN  
Point ID: 2UT1005  
Plant Specific Point Desc: MIN SUBCOOL  
Generic Cond Desc: Saturation Temp. - Highest CET

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: TYPE K TC Table  
Minimum Instr Range: -35  
Maximum Instr Range: 200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 67  
How Processed: Lowest Subcooling  
Sensor Locations: CETs throughout core/Remote Pentr Rm PT  
Alarm/Trip Set Points: Low at 15 DEGF, High at 130 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Eliminates open TC's  
Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: INCORE Thermocouples processed through "Exosensor" System.  
The system is divisionalized into 2 divisions. Total of 65 thermocouples and 2 pressure transmitters. Uses highest CET with lowest RCS pressure (2-PT-68-66-78 and 2-PT-68-69-79).  
Input from 2T1074A (2-XM-94-101-66) and 2T1077A (2-XM-94-102-72).

ERDS Point Number: 8      SG LEVEL 1/A      2UL1001      Steam Generator 1 Water Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 1/A  
Point ID: 2UL1001  
Plant Specific Point Desc: SG #1 NR LEVEL AVG  
Generic Cond Desc: Steam Generator 1 Water Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Above "U" tubes

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Located outside of Polar Crane Wall  
Alarm/Trip Set Points: Low at 25 %, High at 70 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET

Unique System Desc: Steam Generator #1 Water Level. Avg. of 2-LT-3-39 and -42.  
0-100% span on SG narrow range level transmitters corresponds to 75-100% span on the SG wide range level instrumentation. Top of "U" tubes is approximately 71% on the wide range. Therefore, the entire narrow range span is above the "U" tubes. Input from Point ID's 2L0401A and 2L0400A.

ERDS Point Number: 9 SG LEVEL 2/B 2UL1002 Steam Generator 2 Water Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 2/B  
Point ID: 2UL1002  
Plant Specific Point Desc: SG #2 NR LEVEL AVG  
Generic Cond Desc: Steam Generator 2 Water Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Above "U" tubes

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Located outside of Polar Crane Wall  
Alarm/Trip Set Points: Low at 25 %, High at 70 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET

Unique System Desc: Steam Generator #2 Water Level. Avg. of 2-LT-3-52 and -55.  
0-100% span on SG narrow range level transmitters corresponds to 75-100% span on the SG wide range level instrumentation. Top of "U" tubes is approximately 71% on the wide range. Therefore, the entire narrow range span is above the "U" tubes. Input from Point ID's 2L0421A and 2L0420A.

ERDS Point Number: 10 SG LEVEL 3/C 2UL1003 Steam Generator 3 Water Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 3/C  
Point ID: 2UL1003  
Plant Specific Point Desc: SG #3 NR LEVEL AVG  
Generic Cond Desc: Steam Generator 3 Water Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Above "U" tubes

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Located outside of Polar Crane Wall  
Alarm/Trip Set Points: Low at 25 %, High at 70 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y

Level Reference Leg: WET

Unique System Desc: Steam Generator #3 Water Level Avg. of 2-LT-3-94 and -97.  
0-100% span on SG narrow range level transmitters corresponds to 75-100% span on the SG wide range level instrumentation. Top of "U" tubes is approximately 71% on the wide range. Therefore, the entire narrow range span is above the "U" tubes. Input from Point ID's 2L0441A and 2L0440A.

ERDS Point Number: 11 SG LEVEL 4/D 2UL1004 Steam Generator 4 Water Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 4/D  
Point ID: 2UL1004  
Plant Specific Point Desc: SG #4 NR LEVEL AVG  
Generic Cond Desc: Steam Generator 4 Water Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Above "U" tubes

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Located outside of Polar Crane Wall  
Alarm/Trip Set Points: Low at 25 %, High at 70 %

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #4 Water Level. Avg. of 2-LT-3-107 and -110.  
0-100% span on SG narrow range level transmitters  
corresponds to 75-100% on the SG wide range level instrumentation. Top of "U" tubes is approximately 71% on the wide range. Therefore, the entire narrow range span is above the "U" tubes. Input from Point ID's 2L0461A and 2L0460A.

ERDS Point Number: 12 SG PRESS 1/A 2UP1002 Steam Generator 1 Pressure

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG PRESS 1/A  
Point ID: 2UP1002  
Plant Specific Point Desc: SG #1 MS PRESSURE AVG  
Generic Cond Desc: Steam Generator 1 Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote Location in Penetration Room  
Alarm/Trip Set Points: Low at 700 PSIG, High at 1020 PSIG

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #1 Pressure. Average of 2-PT-1-2A and 2-PT-1-2B.  
Input from computer point ID's 2P0400A and 2P0401A.

ERDS Point Number: 13 SG PRESS 2/B 2UP1003 Steam Generator 2 Pressure

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG PRESS 2/B  
Point ID: 2UP1003  
Plant Specific Point Desc: SG #2 MS PRESSURE AVG  
Generic Cond Desc: Steam Generator 2 Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote location in East Valve Room  
Alarm/Trip Set Points: Low at 700 PSIG, High at 1020 PSIG

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #2 Pressure. Average of 2-PT-1-9A and 2-PT-1-9B.  
Input from computer point ID's 2P0420A and 2P0421A.



ERDS Point Number: 14 SG PRESS 3/C 2UP1004 Steam Generator 3 Pressure

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG PRESS 3/C  
Point ID: 2UP1004  
Plant Specific Point Desc: SG #3 MS PRESSURE AVG  
Generic Cond Desc: Steam Generator 3 Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote Location in East Valve Room  
Alarm/Trip Set Points: Low at 700 PSIG, High at 1020 PSIG

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference: eg: WET  
Unique System Desc: Steam Generator #3 Pressure. Average of 2-PT-1-20A and 2-PT-1-20B.  
Input from computer point ID's 2P0440A and 2P0441A.

ERDS Point Number: 15 SG PRESS 4/D 2UP1005 Steam Generator 4 Pressure

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG PRESS 4/D  
Point ID: 2UP1005  
Plant Specific Point Desc: SG #4 MS PRESSURE AVG  
Generic Cond Desc: Steam Generator 4 Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Remote location in Penetration Room  
Alarm/Trip Set Points: Low at 700 PSIG, High at 1020 PSIG

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: WET  
Unique System Desc: Steam Generator #4 Pressure. Average of 2-PT-1-27A and 2-PT-1-27B.  
Input from computer point ID's 2P0460A and 2P0461A.

ERDS Point Number: 16    MN FD FL 1/A    2U0410C    Stm Gen 1 Main Feedwater Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: MN FD FL 1/A  
Point ID: 2U0410C  
Plant Specific Point Desc: SG #1 CORR FW 1/2 AVG  
Generic Cond Desc: Stm Gen 1 Main Feedwater Flow

Analog/Digital: A  
Engr Units/Dig States: MLB/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 4.5  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: Stm Gen FW Line 1, Aux Bldg  
Alarm/Trip Set Points: High at 3.9 MLB/HR, Hi-Hi at 4.0 MLB/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator 1 Main Feedwater Flow. Average of 2F0403A  
(2-FT-3-35A) and 2F0404A (2-FT-3-35B). Corrected for  
temperature 2T0418A (2-TE-3-36).

ERDS Point Number: 17 MN FD FL 2/B 2U0430C Stm Gen 2 Main Feedwater Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: MN FD FL 2/B  
Point ID: 2U0430C  
Plant Specific Point Desc: SG #2 CORR FW 1/2 AVG  
Generic Cond Desc: Stm Gen 2 Main Feedwater Flow

Analog/Digital: A  
Engr Units/Dig States: MLB/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 4.5  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: Stm Gen FW Line 2, Aux. Bldg  
Alarm/Trip Set Points: High at 3.9 MLB/HR, Hi-Hi at 4.0 MLB/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator 2 Main Feedwater Flow. Average of 2F0423A  
(2-FT-3-48A) and 2F0424A (2-FT-3-48B). Corrected for  
Temperature 2T0438A (2-TE-3-49).

ERDS Point Number: 18 MN FD FL 3/C 2U0450C Stm Gen 3 Main Feedwater Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: MN FD FL 3/C  
Point ID: 2U0450C  
Plant Specific Point Desc: SG #3 CORR FW 1/2 AVG  
Generic Cond Desc: Stm Gen 3 Main Feedwater Flow

Analog/Digital: A  
Engr Units/Dig States: MLB/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 4.5  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: Stm Gen FW Line 3, Aux. Bldg  
Alarm/Trip Set Points: High at 3.9 MLB/HR, Hi-Hi at 4.0 MLB/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator 3 Main Feedwater Flow. Average of 2F0443A  
(2-FT-3-90A) and 2F0444A (2-FT-3-90B). Corrected for  
Temperature 2T0458A (2-TE-3-91).

ERDS Point Number: 19 MN FD FL 4/D 2U0470C Stm Gen 4 Main Feedwater Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: MN FD FL 4/D  
Point ID: 2U0470C  
Plant Specific Point Desc: SG #4 CORR FW 1/2 AVG  
Generic Cond Desc: Stm Gen 4 Main Feedwater Flow

Analog/Digital: A  
Engr Units/Dig States: MLB/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 4.5  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: Stm Gen FW Line 4, Aux Bldg  
Alarm/Trip Set Points: High at 3.9 MLB/HR, Hi-Hi at 4.0 MLB/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: Y  
Level Reference Leg: WET  
Unique System Desc: Steam Generator 4 Main Feedwater Flow. Average of 2F0463A  
(2-FT-3-103A) and 2F0464A (2-FT-3-103B). Corrected for  
Temperature 2T0478A (2-TE-3-104).

ERDS Point Number: 20 AX FW FL 1/A 2U0066 Stm Gen 1 Auxiliary FW Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: AX FW FL 1/A  
Point ID: 2U0066  
Plant Specific Point Desc: SG #1 AUX FEEDWATER FLOW  
Generic Cond Desc: Stm Gen 1 Auxiliary FW Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 440  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: Pseudo point caps flow at 440 GPM  
Sensor Locations: Downstream of MDAFW, TDAFW tie to S/G 1  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: There are two electric and one turbine-driven AFWPS. Each electric pump feeds two SG's and the turbine-driven pump feeds all four SG's. The electric and turbine-driven AFWPS share the same piping to each SG. The flow element is located in the shared piping, maximum rated flow for MDAFWPS and turbine-driven AFWP, is 440 and 880 gpm, respectively. Input from 2-FM-3-163C (computer point ID 2F1049A).

ERDS Point Number: 21 AX FW FL 2/B 2U0067 Stm Gen 2 Auxiliary FW Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: AX FW FL 2/B  
Point ID: 2U0067  
Plant Specific Point Desc: SG #2 AUX FEEDWATER FLOW  
Generic Cond Desc: Stm Gen 2 Auxiliary FW Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 440  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: Pseudo point caps flow at 440 GPM  
Sensor Locations: Downstream of MDAFW, TDAFW tie to S/G 2  
Alarm/Trip Set Points: No alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: There are two electric and one turbine-driven AFWPS. Each electric pump feeds two SG's and the turbine-driven pump feeds all four SG's. The electric and turbine-driven AFWPs share the same piping to each SG. The flow element is located in the shared piping, maximum rated flow for MDAFWPs and turbine-driven AFWP, is 440 and 880 gpm, respectively. Input from 2-FM-3-155C (computer point ID 2F1048A).



ERDS Point Number: 22    AX FW FL 3/C    2U0068    Stm Gen 3 Auxiliary FW Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: AX FW FL 3/C  
Point ID: 2U0068  
Plant Specific Point Desc: SG #3 AUX FEEDWATER FLOW  
Generic Cond Desc: Stm Gen 3 Auxiliary FW Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 440  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: Pseudo point caps flow at 440 GPM  
Sensor Locations: Downstream of MDAFW, TDAFW tie to S/G 3  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: There are two electric and one turbine-driven AFWPS. Each electric pump feeds two SG's and the turbine-driven pump feeds all four SG's. The electric and turbine-driven AFWPs share the same piping to each SG. The flow element is located in the shared piping, maximum rated flow for MDAFWPs and turbine-driven AFWP, is 440 and 880 gpm, respectively. Input from 2-FM-3-147C (computer point ID 2F1047A).

ERDS Point Number: 23    AX FW FL 4/D    2U0069    Stm Gen 4 Auxiliary FW Flow

Date:	5/14/97
Reactor Unit:	SE2
Data Feeder:	N/A
NRC ERDS Parameter:	AX FW FL 4/D
Point ID:	2U0069
Plant Specific Point Desc:	SG #4 AUX FEEDWATER FLOW
Generic Cond Desc:	Stm Gen 4 Auxiliary FW Flow
Analog/Digital:	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	440
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	Pseudo point caps flow at 440 GPM
Sensor Locations:	Downstream of MDAFW, TDAFW tie to S/G 4
Alarm/Trip Set Points:	No Alarms
NID Power Cutoff Level:	N/A
NID Power Cut-On Level:	N/A
Instrument Failure Mode:	Low
Temperature Compensation :	N
Level Reference Leg:	N/A
Unique System Desc:	There are two electric and one turbine-driven AFWPS. Each electric pump feeds two SG's and the turbine-driven pump feeds all four SG's. The electric and turbine-driven AFWPs share the same piping to each SG. The flow element is located in the shared piping, maximum rated flow for MDAFWPs and Turbine-driven AFWP, is 440 and 880 gpm, respectively. Input from 2-FM-3-170C (computer point ID 2F1050A).

ERDS Point Number: 24 HL TEMP 1/A 2T0419A Stm Gen 1 Inlet Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: HL TEMP 1/A  
Point ID: 2T0419A  
Plant Specific Point Desc: LOOP 1 HOT LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 1 Inlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 1 RCS Hot Leg piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS hot leg temperature is used in event recovery to provide information for manual control of RCS temperature, control of the ECCS pumps and RCPs, and verifying natural circulation or increase blow down. The temperature indication is also used to control RCS pressure and temperature within required limits.  
Input from 2-TM-68-1B.

ERDS Point Number: 25    HL TEMP 2/B    2T0439A    Stm Gen 2 Inlet Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: HL TEMP 2/B  
Point ID: 2T0439A  
Plant Specific Point Desc: LOOP 2 HOT LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 2 Inlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 2 RCS Hot Leg Piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS hot leg temperature is used in event recovery to provide information for manual control of RCS temperature, control of the ECCS pumps and RCPs, and verifying natural circulation or increase blow down. The temperature indication is also used to control RCS pressure and temperature within required limits.  
Input from 2-TM-68-24B.

ERDS Point Number: 26    HL TEMP 3/C    2T0459A    Stm Gen 3 Inlet Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: HL TEMP 3/C  
Point ID: 2T0459A  
Plant Specific Point Desc: LOOP 3 HOT LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 3 Inlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 3 RCS Hot Leg Piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS hot leg temperature is used in event recovery to provide information for manual control of RCS temperature, control of the ECCS pumps and RCPs, and verifying natural circulation or increase blow down. The temperature indication is also used to control RCS pressure and temperature within required limits.  
Input from 2-TM-68-43B

ERDS Point Number: 27 HL TEMP 4/D 2T0479A Stm Gen 4 Inlet Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: HL TEMP 4/D  
Point ID: 2T0479A  
Plant Specific Point Desc: LOOP 4 HOT LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 4 Inlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 4 RCS Hot Leg Piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS hot leg temperature is used in event recovery to provide information for manual control of RCS temperature, control of the ECCS pumps and RCPs, and verifying natural circulation or increase blow down. The temperature indication is also used to control RCS pressure and temperature within required limits.  
Input from 2-TM-68-65B.

ERDS Point Number: 28 CL TEMP 1/A 2T0406A Stm Gen 1 Outlet Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CL TEMP 1/A  
Point ID: 2T0406A  
Plant Specific Point Desc: LOOP 1 COLD LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 1 Outlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 1 RCS Cold Leg Piping  
Alarm/Trip Set Points: High at 650 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS cold leg temperature is used in event recovery to maintain proper relationship between RCS pressure and temperature while cooling down, and providing information to manually control RCS temperature by controlling AFW flow, steam generator pressure, and RHR. The temperature indication is also used in maintaining stable plant conditions and verifying natural circulation.  
Input from 2-TM-68-18B.

ERDS Point Number: 29 CL TEMP 2/B 2T0426A Stm Gen 2 Cutlet Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CL TEMP 2/B  
Point ID: 2T0426A  
Plant Specific Point Desc: LOOP 2 COLD LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 2 Outlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 2 RCS Cold Leg Piping  
Alarm/Trip Set Points: High at 650 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS cold leg temperature is used in event recovery to maintain proper relationship between RCS pressure and temperature while cooling down, and providing information to manually control RCS temperature by controlling AFW flow, steam generator pressure, and RHR. The temperature indication is also used in maintaining stable plant conditions and verifying natural circulation.  
Input from 2-TM-68-41B.



ERDS Point Number: 30 CL TEMP 3/C 2T0446A Stm Gen 3 Outlet Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CL TEMP 3/C  
Point ID: 2T0446A  
Plant Specific Point Desc: LOOP 3 COLD LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 3 Outlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 3 RCS Cold Leg Piping  
Alarm/Trip Set Points: High at 650 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS cold leg temperature is used in event recovery to maintain proper relationship between RCS pressure and temperature while cooling down, and providing information to manually control RCS temperature by controlling AFW flow, steam generator pressure, and RHR. The temperature indication is also used in maintaining stable plant conditions and verifying natural circulation.  
Input from 2-TM-68-60B

ERDS Point Number: 31 CL TEMP 4/D 2T0466A Stm Gen 4 Outlet Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CL TEMP 4/D  
Point ID: 2T0466A  
Plant Specific Point Desc: LOOP 4 COLD LEG WIDE RANGE TEMP  
Generic Cond Desc: Stm Gen 4 Outlet Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 700  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: On Loop 4 RCS Cold Leg Piping  
Alarm/Trip Set Points: High at 650 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS cold leg temperature is used in event recovery to maintain proper relationship between RCS pressure and temperature while cooling down, and providing information to manually control RCS temperature by controlling AFW flow, steam generator pressure, and RHR. The temperature indication is also used in maintaining stable plant conditions and verifying natural circulation.  
Input from 2-TM-68-83B

ERDS Point Number: 32    RCS PRESSURE    2UP1000    Reactor Coolant System Pressure

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: RCS PRESSURE  
Point ID: 2UP1000  
Plant Specific Point Desc: RCS WIDE RANGE PRESSURE AVERAGE  
Generic Cond Desc: Reactor Coolant System Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 3000  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: RCS Hot Legs 1, 3, 4  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: RCS pressure determined by this point is the average of 3 signals, which measure wide range hot leg pressures. (2-PT-68-62, -66, and -69) RCS pressure indication is utilized by the operators to identify events for SI actuation and termination, starting and stopping RHR pumps, and controlling cooldown to prevent PTS.  
Input from computer point ID's 2P2000A, 2P0129A and 2P2001A.

ERDS Point Number: 33 PRZR LEVEL 2UL1005 Primary System Pressurizer Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: PRZR LEVEL  
Point ID: 2UL1005  
Plant Specific Point Desc: PZR LEVEL AVERAGE  
Generic Cond Desc: Primary System Pressurizer Level

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: Notes  
Reference Point Notes: Top of HTR = 14%

PROC or SENS: P  
Number of Sensors: 3  
How Processed: Average  
Sensor Locations: TA/Ps from Pressurizer  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: WET

Unique System Desc: The pressurizer level is an averaged signal from 3 level transmitters (2-LT-68-320, -335, -339). Zero reference is bottom of cylindrical shell. Approximately 63 cu ft of water remains in the pressurizer below zero reference at 652 deg F and 2235 psia. Top of heater represents approximately 14% level. Heaters shutdown and letdown isolated at approximately 17% level. Input from computer point ID's 2L0482A, 2L0481A, and 2L0480A.

ERDS Point Number: 34    RCS CHG/MU    2UF1016    Primary System Charging / Makeup

Date: 5/14/97

Reactor Unit: SE2

Data Feeder: N/A

NRC ERDS Parameter: RCS CHG/MU

Point ID: 2UF1016

Plant Specific Point Desc: NET CHG FLO

Generic Cond Desc: Primary System Charging / Makeup

Analog/Digital: A

Engr Units/Dig States: GPM

Engr Units Conversion: N/A

Minimum Instr Range: -200

Maximum Instr Range: 176

Zero Point Reference: N/A

Reference Point Notes: N/A

PROC or SENS: P

Number of Sensors: 6

How Processed: Subtraction

Sensor Locations: CCP Pmp, RCP Seal/Leakoff, RCS Letdown

Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A

NID Power Cut-On Level: N/A

Instrument Failure Mode: Multiple due to number of sensors

Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: The net charging flow is calculated by subtracting RCP seal return, and CVCS letdown flow from the discharge flow of the charging pump. The design charging flow is between 55 and 100 GPM during normal operation. Input from Point ID's 2F0128A, 2F0134A, 2F1018A, 2F1020A, 2F1022A, and 2F1024A.

ERDS Point Number: 35    HP SI FLOW    2UF1010    High Pressure Safety Inj. Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: HP SI FLOW  
Point ID: 2UF1010  
Plant Specific Point Desc: SI FLOW TOTAL  
Generic Cond Desc: High Pressure Safety Inj. Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 1600  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Sum  
Sensor Locations: Discharge of Safety Injection Pumps  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The total flow is measured by adding the discharge flow rates from two Safety Injection Pumps. The total accident flow rates for cold leg injection or recirculation and hot leg recirculation can be monitored by this point. Safety Injection Pumps on miniflow will not show flow since miniflow path is upstream of flow element. The design flow rate is 425 GPM @ 2500 ft of head for each SI Pump. (Sum of 2-FT-63-20 and -151). Input from Point ID's 2F1059A and 2F1066A.

ERDS Point Number: 36 LP SI FLOW 2UF1011 Low Pressure Safety Inj. Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: LP SI FLOW  
Point ID: 2UF1011  
Plant Specific Point Desc: RHR COLD LEG TOTAL FLOW  
Generic Cond Desc: Low Pressure Safety Inj. Flow

Analog/Digital: A  
Engr Units/Dig States: GPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 11000  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Average  
Sensor Locations: RHR Cold Legs 2, 3 and 1, 4 Piping  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The RHR Cold Leg Flow Rate value is calculated by summing the average flow from cold legs 2 and 3 with the average flow from cold legs 1 and 4. The design flow rate for a RHR pump is 3000 GPM at 375 feet of head. Flow sensors include 2-FT-63-91A and -91B, 2-FT-63-92A and -92B. Input from computer point ID's 2F1060A, 2F1061A, 2F1063A, and 2F1064A.

ERDS Point Number: 37    CNTMT SMP WR    2UL1011    Containment Sump Wide Rng Lvl

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CNTMT SMP WR  
Point ID: 2UL1011  
Plant Specific Point Desc: CONTAINMENT SUMP LEV AVG  
Generic Cond Desc: Containment Sump Wide Rng Lvl  
  
Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: CNTFLR  
Reference Point Notes: The containment floor is elevation 680

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Average, Redundant Sensor Algorithm  
Sensor Locations: Containment Sump  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The containment average sump level is calculated by a redundant sensor algorithm using four sump level transmitters. LT-63-176, -177, -178, and -179. The transfer from RWST to containment sump setpoint is 11%, which is approximately 2.5 feet above containment floor elevation. Gallons/% level varies with level in a nearly linear relationship. (78,000 gallons)  
Input from computer point ID's 2L1052A, 2L1053A, 2L1054A, and 2L1055A.



ERDS Point Number: 38    EFF GAS RAD    2R9102XA    Release Rt of Radioactive Gases

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: EFF GAS RAD  
Point ID: 2R9102XA  
Plant Specific Point Desc: UNIT 1 SHIELD BLDG RELEASE RATE  
Generic Cond Desc: Release Rt of Radioactive Gases

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E-2  
Maximum Instr Range: 1.0 E10  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: Sampled Totalized times flow rate  
Sensor Locations: Auxiliary Bldg  
Alarm/Trip Set Points: 220,000 uCi/sec

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Unit 1 Shield Bldg Exhaust. To obtain true release rate,  
Unit 2 monitor must also be checked.  
Input from 1-RM-90-400.

ERDS Point Number: 39    EFF GAS RAD    2R9102A    Release Rt. of Radioactive Gases

Date: 5/14/97

Reactor Unit: SE2

Data Feeder: N/A

NRC ERDS Parameter: EFF GAS RAD

Point ID: 2R9102A

Plant Specific Point Desc: SHIELD BUILDING VENT RADIATION

Generic Cond Desc: Release Rt. of Radioactive Gases

  

Analog/Digital: A

Engr Units/Dig States: uCi/sec

Engr Units Conversion: N/A

Minimum Instr Range: 1.0 E-2

Maximum Instr Range: 1.0 E10

Zero Point Reference: N/A

Reference Point Notes: N/A

  

PROC or SENS: S

Number of Sensors: 1

How Processed: Sampled Totalized times flow rate

Sensor Locations: Auxiliary Bldg

Alarm/Trip Set Points: 220,000 uCi/sec

  

NID Power Cutoff Level: N/A

NID Power Cut-On Level: N/A

Instrument Failure Mode: Low on Loss of Power

Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: Unit 2 Shield Bldg Exhaust. To obtain true release rate,  
Unit 1 monitor must also be checked.  
Input from 2-RM-90-400.

ERDS Point Number: 40    EFF LIQ RAD    0R1022A    Radioactivity of Released Liquid

Date: 5/14/97

Reactor Unit: SE2

Data Feeder: N/A

NRC ERDS Parameter: EFF LIQ RAD

Point ID: 0R1022A

Plant Specific Point Desc: WDS LIQUID EFFLUENT RADIATION

Generic Cond Desc: Radioactivity of Released Liquid

  

Analog/Digital: A

Engr Units/Dig States: CPM

Engr Units Conversion: N/A

Minimum Instr Range: 1.0 E1

Maximum Instr Range: 1.0 E7

Zero Point Reference: N/A

Reference Point Notes: N/A

  

PROC or SENS: S

Number of Sensors: 1

How Processed: N/A

Sensor Locations: Auxiliary Bldg

Alarm/Trip Set Points: Variable

  

NID Power Cutoff Level: N/A

NID Power Cut-On Level: N/A

Instrument Failure Mode: Low on Loss of Power

Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: Waste Disposal System Liquid Effluent.

This computer point is in counts per minute.

Input from 0-RE-90-122.

ERDS Point Number: 41    COND A/E RAD    2UR1006    Cond Air Ejector Radioactivity

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: COND A/E RAD  
Point ID: 2UR1006  
Plant Specific Point Desc: COND VAC EXH LOW RNG RELEASE RATE  
Generic Cond Desc: Cond Air Ejector Radioactivity

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Cond Flow \* Dose  
Sensor Locations: Turbine Bldg  
Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Condenser Air Ejector Noble Gas Monitor.

This is one of three computer points needed to cover full range. This point uses inputs from 2-FT-2-256 and 2-RM-90-119 to compute dose rates. Input from computer point ID's 2F2700A and 2R0001A.

ERDS Point Number: 42    COND A/E RAD    2UR1007    Cond Air Ejector Radioactivity

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: COND A/E RAD  
Point ID: 2UR1007  
Plant Specific Point Desc: COND VAC EXH MID RNG RELEASE RATE  
Generic Cond Desc: Cond Air Ejector Radioactivity

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Cond Flow \* Dose  
Sensor Locations: Turbine Bldg  
Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Condenser Air Ejector Noble Gas Monitor.  
This is one of three computer points needed to cover full range. This point uses inputs from 2-FT-2-256 & 2-RM-90-99 to compute dose rates. Input from computer point ID's 2F2700A and 2R0014A.

ERDS Point Number: 43    COND A/E RAD    2UR1008    Cond Air Ejector Radioactivity

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: COND A/E RAD  
Point ID: 2UR1008  
Plant Specific Point Desc: COND VAC EXH HI RNG RELEASE RATE  
Generic Cond Desc: Cond Air Ejector Radioactivity

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Cond Flow \* Dose  
Sensor Locations: Turbine Bldg  
Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Condenser Air Ejector Noble Gas Monitor

This is one of three computer points needed to cover full range. This point uses inputs from 2-FT-2-256 & 2-RM-90-405 to compute dose rates. Input from computer point ID's 2F2700A and 2R9101A.

ERDS Point Number: 44    CNTMNT RAD    2UR6021    Upper Containment Radiation Lvl

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CNTMNT RAD  
Point ID: 2UR6021  
Plant Specific Point Desc: UPPER CNTMT RADIATION  
Generic Cond Desc: Upper Containment Radiation Lvl

Analog/Digital: A  
Engr Units/Dig States: R/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Upper Containment  
Alarm/Trip Set Points: 100 R/HR

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Upper Containment High Range Area Monitors  
Inputs are 2-RM-90-271 & 2-RM-90-272.  
Input from computer point ID's 2R9018A and 2R9019A.

ERDS Point Number: 45    CNTMNT RAD    2UR6022    Lower Containment Radiation Lvl

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CNTMNT RAD  
Point ID: 2UR6022  
Plant Specific Point Desc: LOWER CNTMT RADIATION  
Generic Cond Desc: Lower Containment Radiation Lvl

Analog/Digital: A  
Engr Units/Dig States: R/HR  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Lower Containment  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Lower Containment High Range Area Monitor  
Inputs are 2-RM-90-273 & 2-RM-90-274 (computer point  
ID's 2R9020A and 2R9021A).



ERDS Point Number: 46    MAIN SL 1/A    2UR1001    Stm Gen 1 Steam Line Rad Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: MAIN SL 1/A  
Point ID: 2UR1001  
Plant Specific Point Desc: SG #1 RELEASE RATE  
Generic Cond Desc: Stm Gen 1 Steam Line Rad Level

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Sampled Totalized  
Sensor Locations: Main Steam Line prior to ATM reliefs  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Value calculated as product of SG #1 release rate, radioactivity, specific volume, and a conversion constant. 2-PCV-1-5 position is monitored & if PORV is 'NOT CLOSED', valve is assumed to contribute 890,000 lb/hr flow to the atmosphere. 5 code safety valves for each S/G. MS line header pressure (2-PT-1-2A & 2B) is monitored to determine condition of valves. Each open valve is assumed to contribute 890,000 lb/hr to the flow rate. If code safeties lift, 1 is assumed stuck open until pressure < 50 psig. Input from rad monitor 2-RM-90-421 (computer point 2R9027A).

ERDS Point Number: 47    MAIN SL 2/B    2UR1002    Stm Gen 2 Steam Line Rad Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: MAIN SL 2/B  
Point ID: 2UR1002  
Plant Specific Point Desc: SG #2 RELEASE RATE  
Generic Cond Desc: Stm Gen 2 Steam Line Rad Level

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Sampled Totalized  
Sensor Locations: Main Steam Line prior to ATM reliefs  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:

Value calculated as product of SG #2 release rate, radioactivity, specific volume, and a conversion constant. 2-PCV-1-12 position is monitored & if PORV is 'NOT CLOSED', valve is assumed to contribute 890,000 lb/hr flow to the atmosphere. 5 code safety valves for each S/G. MS line header pressure (2-PT-1-9A & 9B) is monitored to determine condition of valves. Each open valve is assumed to contribute 890,000 lb/hr to the flow rate. If code safeties lift, 1 is assumed stuck open until pressure < 50 psig. Input from rad monitor 2-RM-90-422 (computer point 2R9028A).

ERDS Point Number: 48    MAIN SL 3/C    2UR1003    Stm Gen 3 Steam Line Rad Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: MAIN SL 3/C  
Point ID: 2UR1003  
Plant Specific Point Desc: SG #3 RELEASE RATE  
Generic Cond Desc: Stm Gen 3 Steam Line Rad Level

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Sampled Totalized  
Sensor Locations: Main Steam Line prior to ATM reliefs  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Value calculated as product of SG #3 release rate, radioactivity, specific volume, and a conversion constant. 2-PCV-1-23 position is monitored & if PORV is 'NOT CLOSED', valve is assumed to contribute 890,000 lb/hr flow to the atmosphere. 5 code safety valves for each S/G MS line header pressure (2-PT-1-20A & 20B) is monitored to determine condition of valves. Each open valve is assumed to contribute 890,000 lb/hr to the flow rate. If code safeties lift, 1 is assumed stuck open until pressure < 50 psig. Input from rad monitor 2-RM-90-423 (computer point 2R9029A).

ERDS Point Number: 49    MAIN SL 4/D    2UR1004    Stm Gen 4 Steam Line Rad Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: MAIN SL 4/D  
Point ID: 2UR1004  
Plant Specific Point Desc: SG #4 RELEASE RATE  
Generic Cond Desc: Stm Gen 4 Steam Line Rad Level

Analog/Digital: A  
Engr Units/Dig States: uCi/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0 E0  
Maximum Instr Range: 1.0 E8  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Sampled Totalized  
Sensor Locations: Main Steam Line prior to ATM reliefs  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: Value calculated as product of SG #4 release rate, radioactivity, specific volume, and a conversion constant. 2-PCV-1-30 position is monitored & if PORV is 'NOT CLOSED', valve is assumed to contribute 890,000 lb/hr flow to the atmosphere. 5 code safety valves for each S/G. MS line header pressure (2-PT-1-27A & 27B) is monitored to determine condition of valves. Each open valve is assumed to contribute 890,000 lb/hr to the flow rate. If code safeties lift, 1 is assumed stuck open until pressure < 50 psig. Input from rad monitor 2-RM-90-424 (computer point 2R9030A).

ERDS Point Number: 50 SG BD RAD 1A 2R1020A Stm Gen Header Blowdown Rad Lev

Date: 5/14/97

Reactor Unit: SE2

Data Feeder: N/A

NRC ERDS Parameter: SG BD RAD 1A

Point ID: 2R1020A

Plant Specific Point Desc: SG BLOWDOWN RADIATION

Generic Cond Desc: Stm Gen Header Blowdown Rad Lev

Analog/Digital: A

Engr Units/Dig States: CPM

Engr Units Conversion: N/A

Minimum Instr Range: 1.0 E1

Maximum Instr Range: 1.0 E7

Zero Point Reference: N/A

Reference Point Notes: N/A

PROC or SENS: S

Number of Sensors: 1

How Processed: N/A

Sensor Locations: Turbine Bldg

Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A

NID Power Cut-On Level: N/A

Instrument Failure Mode: Low on Loss of Power

Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: Steam Generator Blowdown Header Liquid Monitor.  
This is one of two monitors, one of which is valved out.  
The monitor is for the header and not individual loops.  
Input from 2-RM-90-120A.

ERDS Point Number: 51 SG BD RAD 1B 2R1021A Stm Gen Header Blowdown Rad Lev

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG BD RAD 1B  
Point ID: 2R1021A  
Plant Specific Point Desc: SG BLOWDOWN RADIATION  
Generic Cond Desc: Stm Gen Header Blowdown Rad Lev

Analog/Digital: A  
Engr Units/Dig States: CPM  
Engr Units Conversion: N/A  
Minimum Instr Range: 1.0 E1  
Maximum Instr Range: 1.0 E7  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: Turbine Bldg  
Alarm/Trip Set Points: Variable

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low on Loss of Power  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Steam Generator Blowdown Header Liquid Monitor.  
This is one of two monitors, one of which is valved out.  
The monitor is for the header and not individual loops.  
Input from 2-RM-90-121A.

ERDS Point Number: 52 CTMNT PRESS 2UP6000 Containment Pressure

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CTMNT PRESS  
Point ID: 2UP6000  
Plant Specific Point Desc: CNTMT PRESSURE AVERAGE  
Generic Cond Desc: Containment Pressure

Analog/Digital: A  
Engr Units/Dig States: PSIG  
Engr Units Conversion: N/A  
Minimum Instr Range: -1  
Maximum Instr Range: 15  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average  
Sensor Locations: Annulus  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: Containment Pressure. This is actually a differential  
between containment and the annulus. Average of 2-PDT-30-44  
and -45 (computer points 2P1002A and 2P1003A).

ERDS Point Number: 53 CTMNT TEMP 2QV0020 Containment Temperature

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CTMNT TEMP  
Point ID: 2QV0020  
Plant Specific Point Desc: CALCULATED LOWER CTMT TEMP - LCTTEMP  
Generic Cond Desc: Containment Temperature

Analog/Digital: A  
Engr Units/Dig States: DEGF  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 200  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: P  
Number of Sensors: 19  
How Processed: Weighted Average  
Sensor Locations: Lower Containment  
Alarm/Trip Set Points: Low at 105 DEGF, High at 120 DEGF

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Fail Low  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc: Weighted Average of 19 Lower Containment Temp. Elements



ERDS Point Number: 54 H2 CONC 2UY1005 Containment H2 Concentration

Date: 5/14/97

Reactor Unit: SE2

Data Feeder: N/A

NRC ERDS Parameter: H2 CONC

Point ID: 2UY1005

Plant Specific Point Desc: H2 CONC AVG

Generic Cond Desc: Containment H2 Concentration

Analog/Digital: A

Engr Units/Dig States: % H2V

Engr Units Conversion: N/A

Minimum Instr Range: 0

Maximum Instr Range: 10

Zero Point Reference: N/A

Reference Point Notes: N/A

PROC or SENS: P

Number of Sensors: 2

How Processed: Average

Sensor Locations: Sample line from both uppr & lower cntmnt

Alarm/Trip Set Points: High at 10 %

NID Power Cutoff Level: N/A

NID Power Cut-On Level: N/A

Instrument Failure Mode: Downscale on loss of power

Temperature Compensation: N

Level Reference Leg: N/A

Unique System Desc: Samples H2 gas concentration in containment. Average of  
2-H2AN-43-200 and 2-H2AN-43-210 (computer points 2C1000A  
and 2C1001A). Analyzers are normally valved out.

ERDS Point Number: 55    RWST LEVEL    2UL1000    Refueling Water Storage Tank Lev

Date: 5/14/9,  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: RWST LEVEL  
Point ID: 2UL1000  
Plant Specific Point Desc: RWST LEV AVG  
Generic Cond Desc: Refueling Water Storage Tank Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 100  
Zero Point Reference: 27.6"  
Reference Point Notes: 25,000 gal below zero reference

PROC or SENS: P  
Number of Sensors: 2  
How Processed: Average, Redundant Sensor Algorithm  
Sensor Locations: RWST taps 25,000 Gals in tnk at 0% Level  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Low  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: The RWST average level is calculated by a redundant sensor algorithm from the 2 RWST level transmitters.  
The RWST tank capacity is 380,000 gallons.  
0% = 25,000 gallons, 100% = 380,000 gallons.  
Input from 2-LT-63-50 and -51 (computer points 2L2201A and 2L1041A)

ERDS Point Number: 56 WIND SPEED MET001 Wind Speed - Upper Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: WIND SPEED  
Point ID: MET001  
Plant Specific Point Desc: 91M VECTOR WIND SPEED (15 MIN AVG)  
Generic Cond Desc: Wind Speed - Upper Level

Analog/Digital: A  
Engr Units/Dig States: m/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 44.6  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 91 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:

ERDS Point Number: 57 WIND SPEED MET002 Wind Speed - intermediate Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: WIND SPEED  
Point ID: MET002  
Plant Specific Point Desc: 46M VECTOR WIND SPEED (15 MIN AVG)  
Generic Cond Desc: Wind Speed - Intermediate Level

Analog/Digital: A  
Engr Units/Dig States: m/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 44.6  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 46 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:

ERDS Point Number: 58 WIND SPEED MET003 Wind Speed - Lower Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: WIND SPEED  
Point ID: MET003  
Plant Specific Point Desc: 10M VECTOR WIND SPEED (15 MIN AVG)  
Generic Cond Desc: Wind Speed - Lower Level

Analog/Digital: A  
Engr Units/Dig States: m/sec  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 44.6  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 10 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:

ERDS Point Number: 59    WIND DIR    MET004    Wind Direction - Upper Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: WIND DIR  
Point ID: MET004  
Plant Specific Point Desc: 91M VECTOR WIND DIR (15 MIN AVG)  
Generic Cond Desc: Wind Direction - Upper Level

Analog/Digital: A  
Engr Units/Dig States: DEG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 360  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 91 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:

ERDS Point Number: 60    WIND DIR    MET005    Wind Direction - Intermed. Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: WIND DIR  
Point ID: MET005  
Plant Specific Point Desc: 46M VECTOR WIND DIR (15 MIN AVG)  
Generic Cond Desc: Wind Direction - Intermed. Level

Analog/Digital: A  
Engr Units/Dig States: DEG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 360  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 46 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:

ERDS Point Number: 61    WIND DIR    MET006    Wind Direction - Lower Level

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: WIND DIR  
Point ID: MET006  
Plant Specific Point Desc: 10M VECTOR WIND DIR (15 MIN AVG)  
Generic Cond Desc: Wind Direction - Lower Level

Analog/Digital: A  
Engr Units/Dig States: DEG  
Engr Units Conversion: N/A  
Minimum Instr Range: 0  
Maximum Instr Range: 360  
Zero Point Reference: N/A  
Reference Point Notes: N/A

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: At the 10 Meter Level of the Met Tower  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: LOW  
Temperature Compensation: N  
Level Reference Leg: N/A  
Unique System Desc:



ERDS Point Number: 62 STAB CLASS MET007 Air Stability - Upper

Date: 5/14/97  
 Reactor Unit: SE2  
 Data Feeder: N/A  
 NRC ERDS Parameter: STAB CLASS  
 Point ID: MET007  
 Plant Specific Point Desc: Stability Class Upper  
 Generic Cond Desc: Air Stability - Upper

Analog/Digital: A  
 Engr Units/Dig States: STABA  
 Engr Units Conversion: See Below  
 Minimum Instr Range: See Below  
 Maximum Instr Range: See Below  
 Zero Point Reference: N/A  
 Reference Point Notes: N/A

PROC or SENS: P  
 Number of Sensors: 2  
 How Processed: See Below  
 Sensor Locations: Met Tower  
 Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
 NID Power Cut-On Level: N/A  
 Instrument Failure Mode: LOW  
 Temperature Compensation: N  
 Level Reference Leg: N/A

Unique System Desc: Differential Temperature Upper-Lower (deg C)

Difference		Stability Class	Point Value
>	<=		
	-1.9	A	1
-1.9	-1.7	B	2
-1.7	-1.5	C	3
-1.5	-0.5	D	4
-0.5	1.5	E	5
1.5	4.0	F	6
4.0		G	7

ERDS Point Number: 63      STAB CLASS      MET008      Air Stability - Intermediate

Date: 5/14/97  
 Reactor Unit: SE2  
 Data Feeder: N/A  
 NRC ERDS Parameter: STAB CLASS  
 Point ID: MET008  
 Plant Specific Point Desc: Stability Class Intermediate  
 Generic Cond Desc: Air Stability - Intermediate

Analog/Digital: A  
 Engr Units/Dig States: STABA  
 Engr Units Conversion: See Below  
 Minimum Instr Range: See Below  
 Maximum Instr Range: See Below  
 Zero Point Reference: N/A  
 Reference Point Notes: N/A

PROC or SENS: P  
 Number of Sensors: 2  
 How Processed: See Below  
 Sensor Locations: Met Tower  
 Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
 NID Power Cut-On Level: N/A  
 Instrument Failure Mode: LOW  
 Temperature Compensation: N  
 Level Reference Leg: N/A

Unique System Desc: Differential Temperature Upper-Intermediate (deg C)

Difference		Stability Class	Point Value
>	<=		
	-1.9	A	1
-1.9	-1.7	B	2
-1.7	-1.5	C	3
-1.5	-0.5	D	4
-0.5	1.5	E	5
1.5	4.0	F	6
4.0		G	7

ERDS Point Number: 64    STAB CLASS    MET009    Air Stability - Lower

Date: 5/14/97  
 Reactor Unit: SE2  
 Data Feeder: N/A  
 NRC ERDS Parameter: STAB CLASS  
 Point ID: MET009  
 Plant Specific Point Desc: Stability Class Lower  
 Generic Cond Desc: Air Stability - Lower

Analog/Digital: A  
 Engr Units/Dig States: STABA  
 Engr Units Conversion: See Below  
 Minimum Instr Range: See Below  
 Maximum Instr Range: See Below  
 Zero Point Reference: N/A  
 Reference Point Notes: N/A

PROC or SENS: P  
 Number of Sensors: 2  
 How Processed: See Below  
 Sensor Locations: Met Tower  
 Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
 NID Power Cut-On Level: N/A  
 Instrument Failure Mode: LOW  
 Temperature Compensation: N  
 Level Reference Leg: N/A  
 Unique System Desc: Differential Temperature Intermediate-Lower (deg C)

Difference		Stability Class	Point Value
>	<=		
	-1.9	A	1
-1.9	-1.7	B	2
-1.7	-1.5	C	3
-1.5	-0.5	D	4
-0.5	1.5	E	5
1.5	4.0	F	6
4.0		G	7

ERDS Point Number: 65 SG LEVEL 1/A 2L0403A Steam Gen 1 Wide Range Water Lev

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 1/A  
Point ID: 2L0403A  
Plant Specific Point Desc: SG #1 WIDE RANGE LEVEL  
Generic Cond Desc: Steam Gen 1 Wide Range Water Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: 1% = 5.7"  
Minimum Instr Range: 0.0  
Maximum Instr Range: 100.0  
Zero Point Reference: LOWTAP  
Reference Point Notes: See Below

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: See Below  
Alarm/Trip Set Points: Low at 60%, High at 80%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Sensor Out Low  
Temperature Compensation: N

Level Reference Leg: WET  
Unique System Desc: LT is calibrated for design operating conditions. 0% corresponds to lower tap on SG located just above tube plate. 100% corresponds to the upper tap which is 170" above the top of "U" tubes. Top of "U" tubes is approximately 70% level.  
Input from 2-LT-3-43.

ERDS Point Number. 66 SG LEVEL 2/B 2L0423A Steam Gen 2 Wide Range Water Lev

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 2/B  
Point ID: 2L0423A  
Plant Specific Point Desc: SG #2 WIDE RANGE LEVEL  
Generic Cond Desc: Steam Gen 2 Wide Range Water Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: 1% = 5.7"  
Minimum Instr Range: 0.0  
Maximum Instr Range: 100.0  
Zero Point Reference: LOWTAP  
Reference Point Notes: See Below

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: See Below  
Alarm/Trip Set Points: Low at 60%, High at 80%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Sensor Out Low  
Temperature Compensation: N

Level Reference Leg: WET

Unique System Desc: LT is calibrated for design operating conditions. 0% corresponds to lower tap on SG located just above tube plate. 100% corresponds to the upper tap which is 170" above the top of "U" tubes. Top of "U" tubes is approximately 70% level.  
Input from 2-LT-3-56.

ERDS Point Number: 67 SG LEVEL 3/C 2L0443A Steam Gen 3 Wide Range Water Lev

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 3/C  
Point ID: 2L0443A  
Plant Specific Point Desc: SG #3 WIDE RANGE LEVEL  
Generic Cond Desc: Steam Gen 3 Wide Range Water Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: 1% = 5.7"  
Minimum Instr Range: 0.0  
Maximum Instr Range: 100.0  
Zero Point Reference: LOWTAP  
Reference Point Notes: See Below

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: See Below  
Alarm/Trip Set Points: Low at 60%, High at 80%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Sensor Out Low

Temperature Compensation: N

Level Reference Leg: WET

Unique System Desc: LT is calibrated for design operating conditions. 0% corresponds to lower tap on SG located just above tube plate. 100% corresponds to the upper tap which is 170" above the top of "U" tubes. Top of "U" tubes is approximately 70% level.  
Input from 2-LT-3-98.

ERDS Point Number: 68    SG LEVEL 4/D    2L0463A    Steam Gen 4 Wide Range Water Lev

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: SG LEVEL 4/D  
Point ID: 2L0463A  
Plant Specific Point Desc: SG #4 WIDE RANGE LEVEL  
Generic Cond Desc: Steam Gen 4 Wide Range Water Lev

Analog/Digital: A  
Engr Units/Dig States: % LEVEL  
Engr Units Conversion: 1% = 5.7"  
Minimum Instr Range: 0.0  
Maximum Instr Range: 100.0  
Zero Point Reference: LOWTAP  
Reference Point Notes: See Below

PROC or SENS: S  
Number of Sensors: 1  
How Processed: N/A  
Sensor Locations: See Below  
Alarm/Trip Set Points: Low at 60%, High at 80%

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Sensor Out Low  
Temperature Compensation: N

Level Reference Leg: WET

Unique System Desc: LT is calibrated for design operating conditions. 0% corresponds to lower tap on SG located just above tube plate. 100% corresponds to the upper tap which is 170" above the top of "U" tubes. Top of "U" tubes is approximately 70% level.  
Input from 2-LT-3-111.

ERDS Point Number: 69    CORE FLOW    2PA003    Total RCS Flow

Date: 5/14/97  
Reactor Unit: SE2  
Data Feeder: N/A  
NRC ERDS Parameter: CORE FLOW  
Point ID: 2PA003  
Plant Specific Point Desc: TOTAL REACTOR COOLANT FLOW  
Generic Cond Desc: Total RCS Flow

Analog/Digital: A  
Engr Units/Dig States: % FLOW  
Engr Units Conversion: N/A  
Minimum Instr Range: 0.0  
Maximum Instr Range: 110.0  
Zero Point Reference: N/A  
Reference Point Notes: See Below

PROC or SENS: P  
Number of Sensors: 4  
How Processed: Average  
Sensor Locations: RCS Flow loops 1-4  
Alarm/Trip Set Points: No Alarms

NID Power Cutoff Level: N/A  
NID Power Cut-On Level: N/A  
Instrument Failure Mode: Out of Range  
Temperature Compensation: N  
Level Reference Leg: N/A

Unique System Desc: This point is generated from an Average of 2-FT-68-6A, -29A, -48A, -71A. Input from Point ID's 2F0400A, 2F0420A, 2F0440A, and 2F0460A. Design Flow = 138 MLB/HR per Loop.