



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37384-2000

July 10, 2003

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

Gentlemen:

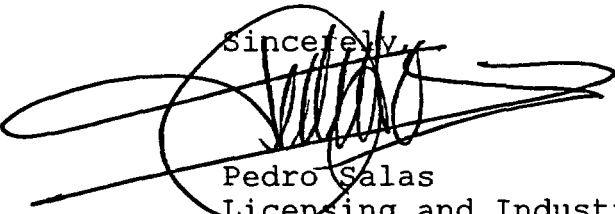
In the Matter of	)	Docket Nos. 50-327
Tennessee Valley Authority	)	50-328

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

In accordance with 10 CFR 50 Appendix E VI.3.a, TVA is providing an updated Data Point Library for SQN Units 1 and 2. The enclosure contains a copy of the revised listing.

This letter is being sent in accordance with NRC RIS 2001-05. If you have any questions concerning this matter, please call me at (423) 843-7170 or J. D. Smith at (423) 843-6672.

Sincerely,



Pedro Salas  
Licensing and Industry Affairs Manager

Enclosure

A026

**ENCLOSURE**

**TENNESSEE VALLEY AUTHORITY  
SEQUOYAH NUCLEAR PLANT (SQN)**

**EMERGENCY RESPONSE DATA SYSTEM (ERDS) DATA POINT  
LIBRARY UPDATE**

## 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: 05/14/1997**

**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/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      1UN2000      Reactor Power - Power Range**

**Date:** 07/01/2003  
**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:** 0-5V = 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:** 07/01/2003  
**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:** 0-5.2V = 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:** 07/01/2003  
**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:** 0-5V = 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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**Reactor Unit:** SE1  
**Data Feeder:** N/A  
**NRC ERDS Parameter:** SG LEVEL 4/D  
**Point ID:** 1UL1004  
**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 instru-  
mentation. 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 an 1L0460A.



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

**Date:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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: 05/14/1997**

**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997

**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 Auxilliary FW Flow**

**Date:** 07/01/2003  
**Reactor Unit:** SE1  
**Data Feeder:** N/A  
**NRC ERDS Parameter:** AX FW FL 1/A  
**Point ID:** 1U0066  
**Plant Specific Point Desc:** SG #1 AUX FEEDWATER FLOW  
**Generic Cond Desc:** Stm Gen 1 Auxilliary 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:** P  
**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:** 07/01/2003  
**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

**PROC or SENS:** P  
**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:** 07/01/2003  
**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:** P  
**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 Auxilliary FW Flow**

**Date:** 07/01/2003  
**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:** P  
**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 1-FM-3-170C (computer point ID 1F1050A).

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

**Date:** 05/14/1997

**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    Stm Gen 2 Inlet Temperature**

**Date:** 05/14/1997  
**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:** 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 1-TM-68-24B.

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

**Date:** 05/14/1997  
**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:** 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 1-TM-68-43B.

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

**Date:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997

**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:** 05/14/1997  
**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:** 05/14/1997  
**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 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 1-TM-68-83B.

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

**Date: 05/14/1997**

**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 07/01/2003  
**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:** 9000  
**Zero Point Reference:** N/A  
**Reference Point Notes:** N/A

**PROC or SENS:** P  
**Number of Sensors:** 4  
**How Processed:** Sum  
**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 flow from cold legs 2 and 3 with the 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 are 1-FT-63-91B and 1-FT-63-92B. Input from computer point ID's 1F1061A and 1F1064A.

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

**Date:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 07/01/2003  
**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 with 1-RM-90-119 or 1-RM-90-99 to compute dose rates. These two monitors cover the same range, one of which may be valved out. This point utilizes the monitor with the highest radiation level.  
Input from computer point ID's 1F2700A with 1R0001A or 1R0014A.

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

**Date:** 07/01/2003  
**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-90-255 to compute dose rates. Input from computer point ID's 1F2700A and 1R0022A.

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

**Date:** 07/01/2003  
**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-90-256 to compute dose rates. Input from computer point ID's 1F2700A and 1R9023A.



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

**Date:** 05/14/1997  
**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:** 05/14/1997  
**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:** 07/01/2003  
**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 (1PD1002) 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.  
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:** 07/01/2003  
**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 (1PD1003) 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.  
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:** 07/01/2003  
**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 (1PD1004) 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.  
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: 07/01/2003  
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 (1PD1005) 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. 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 Lev**

**Date:** 07/01/2003  
**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 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 may be 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:** 07/01/2003  
**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 may be 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:** 05/14/1997  
**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:** 07/01/2003  
**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 60 DEGF, High at 130 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:** 05/14/1997

**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:** 07/01/2003  
**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:** 0-387 IN = 0-100%  
**Minimum Instr Range:** 0  
**Maximum Instr Range:** 100  
**Zero Point Reference:** 27.6"  
**Reference Point Notes:** 20,000 gal below zero reference

**PROC or SENS:** P  
**Number of Sensors:** 2  
**How Processed:** Average  
**Sensor Locations:** RWST taps 20,000 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% = 20,000 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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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 Leg:** N/A  
**Unique System Desc:**

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

**Date:** 05/14/1997  
**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 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:** 05/14/1997  
**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:** 05/14/1997  
**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: 05/14/1997  
 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 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: 05/14/1997  
 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: 05/14/1997  
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:** 07/01/2003  
**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% = 5.5"  
**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 12" above tube plate. 100% corresponds to the upper tap which is 194" 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:** 07/01/2003  
**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% = 5.5"  
**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 12" above tube plate. 100% corresponds to the upper tap which is 194" 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:** 07/01/2003  
**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% = 5.5"  
**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 12" above tube plate. 100% corresponds to the upper tap which is 194" 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:** 07/01/2003  
**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% = 5.5"  
**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 12" above tube plate. 100% corresponds to the upper tap which is 194" 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:** 07/01/2003

**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:** 120.0

**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:** 05/14/1997

**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**

**Date:** 07/01/2003  
**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:** 0-5V = 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:** 07/01/2003  
**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 - 5.2V = 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:** 07/01/2003  
**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 - 5V = 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 2N0031A and 2N0032A.  
Engineering Units Conversion is logarithmic.

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

**Date:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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 instru-  
mentation. 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 an 2L0460A.



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

**Date:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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 Leg:** 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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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 Auxillary FW Flow**

**Date:** 07/01/2003  
**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:** P  
**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 Auxilliary FW Flow**

**Date:** 07/01/2003  
**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:** P  
**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:** 07/01/2003  
**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:** P  
**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 Auxilliary FW Flow**

**Date:** 07/01/2003  
**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:** P  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997

**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 Outlet Temperature**

**Date: 05/14/1997**

**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: 05/14/1997**

**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 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 (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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 07/01/2003  
**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:** 9000  
**Zero Point Reference:** N/A  
**Reference Point Notes:** N/A

**PROC or SENS:** P  
**Number of Sensors:** 4  
**How Processed:** Sum  
**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 flow from cold legs 2 and 3 with the 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 are 2-FT-63-91B and 2-FT-63-92B. Input from computer point ID's 2F1061A and 2F1064A.

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

**Date:** 05/14/1997

**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:** 05/14/1997  
**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:** 05/14/1997

**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:** 05/14/1997  
**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:** 07/01/2003  
**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 with 2-RM-90-119 or 2-RM-90-99 to compute dose rates. These two monitors cover the same range, one of which may be valved out. This point utilizes the monitor with the highest radiation level.  
Input from computer point ID's 2F2700A with 2R0001A. or 2R0014A.

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

**Date:** 07/01/2003  
**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-90-255 to compute dose rates. Input from computer point ID's 2F2700A and 2R9022A.

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

**Date:** 07/01/2003  
**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-90-256 to compute dose rates. Input from computer point ID's 2F2700A and 2R9023A.



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

**Date:** 05/14/1997  
**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:** 07/01/2003  
**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: 07/01/2003  
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 (2PD1002) 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.  
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: 07/01/2003  
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 (2PD1003) 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.  
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:** 07/01/2003  
**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 (2PD1004) 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.  
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:** 07/01/2003  
**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 (2PD1005) 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.  
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:** 07/01/2003  
**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 may be 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:** 07/01/2003  
**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 may be 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:** 05/14/1997  
**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:** 07/01/2003  
**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 60 DEGF, High at 130 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: 05/14/1997**

**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 & 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  
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:** 07/01/2003  
**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:** 0 - 387 IN = 0 - 100%  
**Minimum Instr Range:** 0  
**Maximum Instr Range:** 387  
**Zero Point Reference:** 27.6"  
**Reference Point Notes:** 20,000 gal below zero reference

**PROC or SENS:** P  
**Number of Sensors:** 2  
**How Processed:** Average  
**Sensor Locations:** RWST taps 20,000 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% = 20,000 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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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:** 05/14/1997  
**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: 05/14/1997  
 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: 05/14/1997  
 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: 05/14/1997  
 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:** 07/01/2003  
**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% = 5.5"  
**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:** 07/01/2003  
**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% = 5.5"  
**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:** 07/01/2003  
**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% = 5.5"  
**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:** 07/01/2003  
**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% = 5.5"  
**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:** 05/14/1997  
**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:** 120.0  
**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.