



ENTERGY

Entergy Operations, Inc.
P.O. Box 756
Port Gibson, MS 39150
Tel 801 437 6408

W. T. Cottle
Vice President
Operations
Grand Gulf Nuclear Station

May 28, 1992

U.S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D.C. 20555

Attention: Document Control Desk

Subject: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Emergency Response Data System Information Update

GNRO-92/00062

Gentlemen:

On January 14, 1992, the Grand Gulf Nuclear Station submitted its Emergency Response Data System (ERDS) Plant Attribute Library and the ERDS Data Point Library in accordance with the ERDS Implementation Plan.

During subsequent telephone conversations with Mr. John Jolicoeur of the Analysis & Evaluation of Operational Data/Incident Response Branch (AEOD/IRB), it was agreed that certain data points would be provided, if available, for those parameters omitted in our original submittal.

In response to Mr. Jolicoeur's request, the attached Data Point Library Reference Files are provided to reflect additional GGNS data points and other related information. We are also providing corrections and clarifications to several other data reference files discussed with Mr. Jolicoeur.

Please contact this office or Ms. Jewel Summers at extension 2149 should you have any questions or require additional information.

Yours truly,

W. T. Cottle

WTC/JS/mtc

- attachments: 1. ERDS Data Point Library Updates
 2. Clarifications/Corrections to Previously Submitted Reference Files
 (See Next Page)

010021

G9205152/SNLICFLR - 1
9206020009 920528
PDR ADOCK 05000416
F PDR

AD26

May 28, 1992

GNRO-92/00062

Page 2 of 3

cc:

Mr. D. C. Hintz (w/a)
Mr. J. L. Mathis (w/a)
Mr. R. B. McGehee (w/a)
Mr. N. S. Reynolds (w/a)
Mr. H. L. Thomas (w/o)

Mr. Stewart D. Elmeter (w/a)
Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 2900
Atlanta, Georgia 30323

Mr. P. W. O'Connor, Project Manager (w/2)
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop 13H3
Washington, D.C. 20555

Mr. John R. Jolicœur (w/a)
U.S. Nuclear Regulatory Commission
Mail Stop MNBB-3206
Washington, D.C. 20555

Mr. Tony P. LaRosa (w/a)
Halliburton NUS/Energy Group
P. O. Box 50736
Idaho Falls, ID 83405

DATA POINT LIBRARY

(DPL)

Computer Point to Parameter Cross Reference

The following table cross references the NRC Safety Function Parameters to GGNS computer points. Computer points are not available for all parameters. These are denoted with N/A in the GGNS computer point column.

* Denotes points which have been added to original list.

NRC Parameters

GGNS computer points

Reactivity Control

NI POWER RNG	C51J807A C51J807B C51J807C C51J807D C51J807E C51J807F C51J807G C51J807H
NI INTER RNG	C51J700 * C51J701 *
NI SOURC RNG	C51L609 * C51J705 *

Core Cooling

REAC VES LEV	C34N017
MAIN FD FLOW	C34N002A C34N002B
RCIC FLOW	E51L603

RCS Integrity

RCS PRESSURE	C34N005
HPCI FLOW	N/A (Control Room indicators are used to monitor flow)
LPCI FLOW	E21L605 *
CR SPRAY FL	P41N016C
DW FD SMP LV	P45N003

BWR DATA POINT LIBRARY REFERENCE FILE

DATE: 4 / 21 / 92

REACTOR UNIT: GG1

DATA FEEDER: N/A

NRC ERDS PARAMETER: NI SOURCE RNG

IDENT ID: C51L609

1 ANT SPEC POINT DESC.: SRM DOWNSCALE

GENERIC/COND DESC.: Source Range Monitor Downscale

ANALOG/DIGITAL: D

ENGR UNITS/DIG STATES: OFF ON
(RESET) (ALARM)

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: S

NUMBER OF SENSORS: 1

HOW PROCESSED: N/A

SENSOR LOCATION: Containment Bldg 93' el. Area 11

ALARM/TRIP SET POINTS: ALARM at .7 counts / sec

NI DETECTOR POWER
SUPPLY CUT-OFF POWER
LEVEL: Point is always active.

NI DETECTOR POWER
SUPPLY TURN-ON POWER
LEVEL: Point is always active.

INSTRUMENT FAILURE
MODE: Indeterminate

BWR DATA POINT LIBRARY REFERENCE FILE

DATE: 4 / 21 / 92

REACTOR UNIT: GG1

DATA FEEDER: N/A

NRC ERDS PARAMETER: NI INTER RNG

POINT ID. C51J700

PLANT SPEC POINT DESC.: IRM UPSCALE ALARM

GENERIC/COND DESC.: Intermediate Range Monitor Upscale Alarm

ANALOG/DIGITAL: D

ENGR UNITS/DIG STATES: ^{OFF} (NORMAL) ^{ON} (ALM)

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: S

NUMBER OF SENSORS: 1

HOW PROCESSED: N/A

SENSOR LOCATION: Containment Bldg 93' el. Area 11

ALARM/TRIP SET POINTS: Any IRM at greater than 108/125 of scale on any range

NI DETECTOR POWER
SUPPLY CUT-OFF POWER
LEVEL: Point is always active.

NI DETECTOR POWER
SUPPLY TURN-ON POWER
LEVEL: Point is always active.

INSTRUMENT FAILURE
MODE: Indeterminate

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

This point indicates that an IRM is out of range and warns
of operating conditions that could lead to fuel damage.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE: 4 / 21 / 92

REACTOR UNIT: GG1

DATA FEEDER: N/A

NRC ERDS PARAMETER: NI INTER RNG

POINT ID: C51J701

PLANT SPEC POINT DESC.: IRM DOWNSCALE ALARM

GENERIC/COND DESC.: Intermediate Range Monitor Downscale Alarm

ANALOG/DIGITAL: D

ENGR UNITS/DIG STATES: OFF ON
(NORMAL) (ALM)

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: S

NUMBER OF SENSORS: 1

HOW PROCESSED: N/A

SENSOR LOCATION: Containment Bldg 93' el. Area 11

ALARM/TRIP SET POINTS: Any IRM at less than 5/125 of scale on any range

NI DETECTOR POWER
SUPPLY CUT-OFF POWER
LEVEL: Point is always active.

NI DETECTOR POWER
SUPPLY TURN-ON POWER
LEVEL: Point is always active.

INSTRUMENT FAILURE
MODE: Indeterminate

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

This point indicates a possible channel malfunction or
power level that is below the range of indication of the IRMs.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE:	<u>4 / 21 / 92</u>
REACTOR UNIT:	<u>GG1</u>
DATA FEEDER:	<u>N/A</u>
NRC ERDS PARAMETER:	<u>NI SOURCE RNG</u>
POINT ID:	<u>C51J705</u>
PLANT SPEC POINT DESC.:	<u>SRM UPSCALE ALARM</u>
GENERIC/COND DESC.:	<u>Source Range Monitor Upscale Alarm</u>
ANALOG/DIGITAL:	<u>D</u>
ENGR UNITS/DIG STATES:	<u>OFF ON</u> <u>(NORM) (ALM)</u>
ENGR UNITS CONVERSION:	<u>N/A</u>
MINIMUM INSTR RANGE:	<u>N/A</u>
MAXIMUM INSTR RANGE:	<u>N/A</u>
ZERO POINT REFERENCE:	<u>N/A</u>
REFERENCE POINT NOTES:	<u>N/A</u>
PROC OR SENS:	<u>S</u>
NUMBER OF SENSORS:	<u>1</u>
HOW PROCESSED:	<u>N/A</u>
SENSOR LOCATION:	<u>Containment Bldg 93' el. Area 11</u>
ALARM/TRIP SET POINTS:	<u>ALM at 10⁵ counts / sec</u>
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	<u>Point is always active.</u>
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	<u>Point is always active.</u>
INSTRUMENT FAILURE MODE:	<u>Indeterminate</u>

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

Normally this alarm will cause a rod block unless associated

IRM channels are on range 8 or above.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE:	<u>4 / 21 / 92</u>
REACTOR UNIT:	<u>GG1</u>
DATA FEEDER:	<u>N/A</u>
NRC ERDS PARAMETER:	<u>LPCI FLOW</u>
POINT ID:	<u>E21L605</u>
PLANT SPEC POINT DESC.:	<u>LPCS SYSTEM ACTIVATION</u>
GENERIC/COND DESC.:	<u>Low Pressure Core Spray Actuated</u>
ANALOG/DIGITAL:	<u>D</u>
ENGR UNITS/DIG STATES:	<u>OFF ON (OFF) (OPERATE)</u>
ENGR UNITS CONVERSION:	<u>N/A</u>
MINIMUM INSTR RANGE:	<u>N/A</u>
MAXIMUM INSTR RANGE:	<u>N/A</u>
ZERO POINT REFERENCE:	<u>N/A</u>
REFERENCE POINT NOTES:	<u>N/A</u>
PROC OR SENS:	<u>S</u>
NUMBER OF SENSORS:	<u>1</u>
HOW PROCESSED:	<u>N/A</u>
SENSOR LOCATION:	<u>Control Bldg 166' el. Room OC504</u>
ALARM/TRIP SET POINTS:	<u>OPERATE is alarm</u>
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	<u>N/A</u>
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	<u>N/A</u>
INSTRUMENT FAILURE MODE:	<u>Indeterminate</u>

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

Point indicates that the LPCS system is in operation. LPCS

is automatically initiated when reactor water level lowers to -150.3 inches or Drywell pressure

increases to +1.39 psig. Reactor pressure must be at 300 psi or below before LPCS can provide

core spray.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE:	<u>4 / 21 / 92</u>
REACTOR UNIT:	<u>CG1</u>
DATA FEEDER:	<u>N/A</u>
NRC ERDS PARAMETER:	<u>DW RAD</u>
POINT ID:	<u>D23K6011</u>
PLANT SPEC POINT DESC.:	<u>DRYWELL PARTICULATE RADN</u>
GENERIC/COND DESC.:	<u>Drywell Particulate Radiation Monitor</u>
ANALOG/DIGITAL:	<u>A</u>
ENGR UNITS/DIG STATES:	<u>CPM</u>
ENGR UNITS CONVERSION:	<u>Exponential (0-5V)</u>
MINIMUM INSTR RANGE:	<u>10</u>
MAXIMUM INSTR RANGE:	<u>1,000,000</u>
ZERO POINT REFERENCE:	<u>N/A</u>
REFERENCE POINT NOTES:	<u>N/A</u>
PROC OR SENS:	<u>S</u>
NUMBER OF SENSORS:	<u>1</u>
HOW PROCESSED:	<u>N/A</u>
SENSOR LOCATION:	<u>Drywell 166' el.</u>
ALARM/TRIP SET POINTS:	<u>100 (Low) 1000 (High)</u>
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	<u>N/A</u>
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	<u>N/A</u>
INSTRUMENT FAILURE MODE:	<u>LOW</u>

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

The system is located in the Auxiliary building but has tubing
which draws air from the drywell, monitors the air, and then returns the air to the drywell.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE:	<u>4 / 21 / 92</u>
REACTOR UNIT:	<u>GG1</u>
DATA FEEDER:	<u>N/A</u>
NRC ERDS PARAMETER:	<u>DW RAD</u>
POINT ID:	<u>D23K6021</u>
PLANT SPEC POINT DESC.:	<u>DRYWELL IODINE RADN</u>
GENERIC/COND DESC.:	<u>Drywell Iodine Radiation Monitor</u>
ANALOG/DIGITAL:	<u>A</u>
ENGR UNITS/DIG STATES:	<u>CPM</u>
ENGR UNITS CONVERSION:	<u>Exponential (0-5V)</u>
MINIMUM INSTR RANGE:	<u>10</u>
MAXIMUM INSTR RANGE:	<u>1,000,000</u>
ZERO POINT REFERENCE:	<u>N/A</u>
REFERENCE POINT NOTES:	<u>N/A</u>
PROC OR SENS:	<u>S</u>
NUMBER OF SENSORS:	<u>1</u>
HOW PROCESSED:	<u>N/A</u>
SENSOR LOCATION:	<u>Drywell 166' el.</u>
ALARM/TRIP SET POINTS:	<u>100 (Low) 1000 (High)</u>
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	<u>N/A</u>
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	<u>N/A</u>
INSTRUMENT FAILURE MODE:	<u>LOW</u>

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

The system is located in the Auxilary building but has tubing
that draws air from the drywell, monitors the air, and then returns the air to the drywell.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE:	<u>4 / 21 / 92</u>
REACTOR UNIT:	<u>GG1</u>
DATA FEEDER:	<u>N/A</u>
NRC ERDS PARAMETER:	<u>DW RAD</u>
POINT ID:	<u>D23K6631</u>
PLANT SPEC POINT DESC.:	<u>DRYWELL GASEOUS RADN</u>
GENERIC/COND DESC.:	<u>Drywell Gaseous Radiation Monitor</u>
ANALOG/DIGITAL:	<u>A</u>
ENGR UNITS/DIG STATES:	<u>CPM</u>
ENGR UNITS CONVERSION:	<u>Exponential (0-5V)</u>
MINIMUM INSTR RANGE:	<u>10</u>
MAXIMUM INSTR RANGE:	<u>1,000,000</u>
ZERO POINT REFERENCE:	<u>N/A</u>
REFERENCE POINT NOTES:	<u>N/A</u>
PROC OR SENS:	<u>S</u>
NUMBER OF SENSORS:	<u>1</u>
HOW PROCESSED:	<u>N/A</u>
SENSOR LOCATION:	<u>Drywell 166' el.</u>
ALARM/TRIP SET POINTS:	<u>100 (Low) 1000 (High)</u>
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	<u>N/A</u>
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	<u>N/A</u>
INSTRUMENT FAILURE MODE:	<u>LOW</u>

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

The system is located in the Auxilary building but has tubing
which draws air from the drywell, monitors the air, and then returns the air to the drywell.

CLARIFICATIONS/CORRECTIONS
TO
PREVIOUSLY SUBMITTED REFERENCE FILES

BWR DATA POINT LIBRARY REFERENCE FILE

DATE: 08 / 29 / 91
 REACTOR UNIT: GG1
 DATA FEEDER: N/A
 NRC ERDS PARAMETER: REAC VES LEV
 POINT ID: C34N017
 PLANT SPEC POINT DESC.: Rx WATER LEVEL (WIDE RANGE)
 GENERIC/COND DESC.: Reactor Water Level
 ANALOG/DIGITAL: A
 ENGR UNITS/DIG STATES: INH2O
 ENGR UNITS CONVERSION: Linear (32-160mv)
 MINIMUM INSTR RANGE: 0
 MAXIMUM INSTR RANGE: 180
 ZERO POINT REFERENCE: COMPLX
 REFERENCE POINT NOTES: INSTRUMENT 0 is 533" above Vessel 0
 PROC OR SENS: S
 NUMBER OF SENSORS: 1
 HOW PROCESSED: N/A
 SENSOR LOCATION: Inside Cntmt 135' el, Az 20, pnl 1H22P027
 ALARM/TRIP SET POINTS: (15 LOW) (120 HIGH)
 NI DETECTOR POWER
 SUPPLY CUT-OFF POWER
 LEVEL: N/A
 NI DETECTOR POWER
 SUPPLY TURN-ON POWER
 LEVEL: N/A
 INSTRUMENT FAILURE
 MODE: (Mech. HiGH) (Elect. LOW)

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

Y

LEVEL REFERENCE LEG:

WET

UNIQUE SYSTEM DESC.:

Instrument calibrated for saturated water and steam conditioner at
1025 psig in vessel and 135 degrees in drywell. Although, part of the feedwater control system provides
no logic functions but only as a vessel level recorder indicator on P680 panel.

Top of active fuel is 167 inches below instrument 0. Instrument 0 is 533 inches above vessel 0.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE: 08 / 29 / 91
 REACTOR UNIT: GG1
 DATA FEEDER: N/A
 NRC ERDS PARAMETER: MAIN FD FLOW
 POINT ID: C34N002B
 PLANT SPEC POINT DESC.: RTR FW LOOP B FLOW
 GENERIC/COND DESC.: Loop B Feedwater Flow
 ANALOG/DIGITAL: A
 ENGR UNITS/DIG STATES: MLB/HR
 ENGR UNITS CONVERSION: Square Root (32-160mv)
 MINIMUM INSTR RANGE: 0
 MAXIMUM INSTR RANGE: 10
 ZERO POINT REFERENCE: N/A
 REFERENCE POINT NOTES: N/A
 PROC OR SENS: S
 NUMBER OF SENSORS: 1
 HOW PROCESSED: N/A
 SENSOR LOCATION: Turbine Bldg. 113' el, pnl 1H22P043 in Rm 1T226
 ALARM/TRIP SET POINTS: N/A
 NI DETECTOR POWER
 SUPPLY CUT-OFF POWER
 LEVEL: N/A
 NI DETECTOR POWER
 SUPPLY TURN-ON POWER
 LEVEL: N/A
 INSTRUMENT FAILURE
 MODE: LOW

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

Part of feedwater control system but only function is to display
loop flow and in conjunction with 'A' loop flow instrumentation displays total FW flow on P680 panel.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE: 08 / 29 / 91

REACTOR UNIT: GG1

DATA FEEDER: N/A

NRC ERDS PARAMETER: WIND DIR

POINT ID: C84J006

PLANT SPEC POINT DESC.: WIND DIRECTION EL 162

GENERIC/COND DESC.: Wind Direction @ Elevation 162'

ANALOG/DIGITAL: A

ENGR UNITS/DIG STATES: DEG

ENGR UNITS CONVERSION: Linear (0-5y)

MINIMUM INSTR RANGE: 0

MAXIMUM INSTR RANGE: 540

ZERO POINT REFERENCE: N/A

REFERENCE POINT NOTES: N/A

PROC OR SENS: S

NUMBER OF SENSORS: 1

HOW PROCESSED: N/A

SENSOR LOCATION: Met Tower 162' el .5 miles north of plant

ALARM/TRIP SET POINTS: N/A

NI DETECTOR POWER
SUPPLY CUT-OFF POWER
LEVEL: N/A

NI DETECTOR POWER
SUPPLY TURN-ON POWER
LEVEL: N/A

INSTRUMENT FAILURE
MODE: LOW

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

N/A

UNIQUE SYSTEM DESC.:

The degree reading of this parameter indicates the direction from
which the wind is coming from.

BWR DATA POINT LIBRARY REFERENCE FILE

DATE: 08 / 29 / 91
 REACTOR UNIT: GG1
 DATA FEEDER: N/A
 NRC ERDS PARAMETER: CST LEVEL
 POINT ID: PIIN003
 PLANT SPEC POINT DESC.: CNDS STORAGE TK LEVEL
 GENERIC/COND DESC.: Condensate Storage Tank Level
 ANALOG/DIGITAL: A
 ENGR UNITS/DIG STATES: FT
 ENGR UNITS CONVERSION: Linear (1-5v)
 MINIMUM INSTR RANGE: 0
 MAXIMUM INSTR RANGE: 40
 ZERO POINT REFERENCE: COMPLX
 REFERENCE POINT NOTES: 8" Above Tank Bottom
 PROC OR SENS: S
 NUMBER OF SENSORS: 1
 HOW PROCESSED: N/A
 SENSOR LOCATION: Yard 122' el
 ALARM/TRIP SET POINTS: (22.8 LOW) (25.5 HIGH)
 NI DETECTOR POWER
 SUPPLY CUT-OFF POWER
 LEVEL: N/A
 NI DETECTOR POWER
 SUPPLY TURN-ON POWER
 LEVEL: N/A
 INSTRUMENT FAILURE
 MODE: LOW

TEMPERATURE COMPENSATION
FOR DP TRANSMITTER:

N/A

LEVEL REFERENCE LEG:

DRY

UNIQUE SYSTEM DESC.:

Normal level is 25 feet but varies significantly depending

on current water usage. One foot of level is equivalent to 9677 gallons of water.