

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

August 16, 1993

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No. 93-493
EE/TJK-CGL R0
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
EMERGENCY RESPONSE DATA SYSTEM
DATA BASE UPDATES

Modifications were recently made to the instrument ranges for the containment sump level (narrow range and wide range) and hydrogen analyzer inputs for Surry Units 1 and 2. The lower instrument limits were modified slightly to expand the range in order to prevent spurious alarms. The changes, which were made to resolve recent Emergency Response Facility problem reports, are detailed in the Data Point Library (DPL) reference file sheets contained in Attachment 1 for Surry Units 1 and 2. Attachment 2 provides revision summaries (change reports) for the affected points for Surry Units 1 and 2. The updated data base files, documented in Attachments 1 and 2, are also provided in the dBase IV format on Attachment 3.

If you have questions regarding this information, please contact us.

Very truly yours,



M. L. Bowling, Manager
Nuclear Licensing & Programs

Attachments:

1. Updated Data Point Library Reference File Sheets for Surry Units 1 and 2
2. Revision Summaries for Surry Units 1 and 2
3. Updated DPL Data Base Files in dBase Format

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cc: U. S. Nuclear Regulatory Commission (Attachments 1 and 2)
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Mr. M. W. Branch (Attachments 1 and 2)
NRC Senior Resident Inspector
Surry Power Station

NUS Corporation / EI Division (Attachments 1, 2, and 3)
P. O. Box 59736
Idaho Falls, Idaho 83405
Attention: Mr. Tony LaRosa

ATTACHMENT 1

**UPDATED DATA POINT LIBRARY REFERENCE FILE SHEETS
FOR SURRY UNITS 1 AND 2**

STATION: Surry
UNIT: 1
PWR DATA POINT LIBRARY REFERENCE FILE

PRINTED
08/02/93

DATE: 08/02/93
REACTOR UNIT: SU1
DATA FEEDER: N/A
NRC ERDS PARAMETER: CTMNT SMP WR
POINT ID: L1DA001C
PLANT SPEC POINT DESC: CONTAINMENT WR SUMP LEVEL
GENERIC/COND DESC: CONTAINMENT SUMP WR LEVEL
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: FT
ENGR UNITS CONVERSION: 1 FT = 58343 GALLONS
MINIMUM INSTR RANGE: 0.173
MAXIMUM INSTR RANGE: 9.0
ZERO POINT REFERENCE: TNKBOT
REFERENCE POINT NOTES: N/A
PROC OR SENS: P
NUMBER OF SENSORS: 2
HOW PROCESSED: AVERAGE - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: RECIRC SPRAY SUMP-SEE SYSTEM DESCRIPTION
ALARM/TRIP SETPOINTS: VARIABLE
NI DETECTOR POWER SUPPLY
CUT-OFF POWER LEVEL: N/A
NI DETECTOR POWER SUPPLY
TURN-ON POWER LEVEL: N/A
INSTRUMENT FAILURE MODE: N/A
TEMPERATURE COMPENSATION
FOR DP TRANSMITTERS:
LEVEL REFERENCE LEG: N/A
UNIQUE SYSTEM DESC: The valid wide range signals are averaged (2 signals if all are valid). If neither signal is valid, this point is marked invalid.

STATION: Surry
UNIT: 1
PWR DATA POINT LIBRARY REFERENCE FILE

PRINTED
08/02/93

DATE: 08/02/93
REACTOR UNIT: SU1
DATA FEEDER: N/A
NRC ERDS PARAMETER: CTMNT SMP NR
POINT ID: L1DA002C
PLANT SPEC POINT DESC: CONTAINMENT NR SUMP LEVEL
GENERIC/COND DESC: CONTAINMENT SUMP NR LEVEL
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: INCH
ENGR UNITS CONVERSION: 1 IN = 2369 GALLONS
MINIMUM INSTR RANGE: 3.84
MAXIMUM INSTR RANGE: 26.5
ZERO POINT REFERENCE: TNKBOT
REFERENCE POINT NOTES: 280 GALLONS REMAIN AT ZERO POINT
PROC OR SENS: P
NUMBER OF SENSORS: 2
HOW PROCESSED: MAXIMUM - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: CONTAINMENT SUMP
ALARM/TRIP SETPOINTS: VARIABLE
NI DETECTOR POWER SUPPLY
CUT-OFF POWER LEVEL: N/A
NI DETECTOR POWER SUPPLY
TURN-ON POWER LEVEL: N/A
INSTRUMENT FAILURE MODE: N/A
TEMPERATURE COMPENSATION
FOR DP TRANSMITTERS:
LEVEL REFERENCE LEG: N/A
UNIQUE SYSTEM DESC: Senses reactor containment sump level and provides a high level alarm. The largest valid narrow range signal is used for this point. If all signals are valid, 2 signals are considered. If both signals are invalid, this point is marked invalid.

STATION: Surry
UNIT: 1
PWR DATA POINT LIBRARY REFERENCE FILE

PRINTED
08/03/93

DATE: 08/03/93
REACTOR UNIT: SU1
DATA FEEDER: N/A
NRC ERDS PARAMETER: H2 CONC
POINT ID: A1GW001C
PLANT SPEC POINT DESC: CNTMT H2 CONCENTRATION
GENERIC/COND DESC: CONTAINMENT HYDROGEN CONC
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: PCT
ENGR UNITS CONVERSION: N/A
MINIMUM INSTR RANGE: -0.3
MAXIMUM INSTR RANGE: 10.0
ZERO POINT REFERENCE: N/A
REFERENCE POINT NOTES: N/A
PROC OR SENS: P
NUMBER OF SENSORS: 2
HOW PROCESSED: AVERAGE - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: AUX BLDG 13' LVL
ALARM/TRIP SETPOINTS: VARIABLE
NI DETECTOR POWER SUPPLY
CUT-OFF POWER LEVEL: N/A
NI DETECTOR POWER SUPPLY
TURN-ON POWER LEVEL: N/A
INSTRUMENT FAILURE MODE: N/A
TEMPERATURE COMPENSATION
FOR DP TRANSMITTERS:
LEVEL REFERENCE LEG: N/A
UNIQUE SYSTEM DESC: Takes a sample of containment atmosphere and measures the
hydrogen concentration in the sample. The valid signals are
averaged (2 signals if all are valid). If none of the
signals is valid, this point is marked invalid.

STATION: Surry
UNIT: 2
PWR DATA POINT LIBRARY REFERENCE FILE

PRINTED
08/02/93

DATE: 08/02/93
REACTOR UNIT: SU2
DATA FEEDER: N/A
NRC ERDS PARAMETER: CTMNT SMP WR
POINT ID: L2DA001C
PLANT SPEC POINT DESC: CONTAINMENT WR SUMP LEVEL
GENERIC/COND DESC: CONTAINMENT SUMP WR LEVEL
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: FT
ENGR UNITS CONVERSION: 1 FT = 58343 GALLONS
MINIMUM INSTR RANGE: 0.173
MAXIMUM INSTR RANGE: 9.0
ZERO POINT REFERENCE: TNKBOT
REFERENCE POINT NOTES: N/A
PROC OR SENS: P
NUMBER OF SENSORS: 2
HOW PROCESSED: AVERAGE - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: RECIRC SPRAY SUMP-SEE SYSTEM DESCRIPTION
ALARM/TRIP SETPOINTS: VARIABLE
NI DETECTOR POWER SUPPLY
CUT-OFF POWER LEVEL: N/A
NI DETECTOR POWER SUPPLY
TURN-ON POWER LEVEL: N/A
INSTRUMENT FAILURE MODE: N/A
TEMPERATURE COMPENSATION
FOR DP TRANSMITTERS:
LEVEL REFERENCE LEG: N/A
UNIQUE SYSTEM DESC: The valid wide range signals are averaged (2 signals if all are valid). If neither signal is valid, this point is marked invalid.

STATION: Surry
UNIT: 2
PWR DATA POINT LIBRARY REFERENCE FILE

PRINTED
08/02/93

DATE: 08/02/93
REACTOR UNIT: SU2
DATA FEEDER: N/A
NRC ERDS PARAMETER: CTMNT SMP NR
POINT ID: L2DA002C
PLANT SPEC POINT DESC: CONTAINMENT NR SUMP LEVEL
GENERIC/COND DESC: CONTAINMENT SUMP NR LEVEL
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: INCH
ENGR UNITS CONVERSION: 1 IN = 2369 GALLONS
MINIMUM INSTR RANGE: 3.84
MAXIMUM INSTR RANGE: 26.5
ZERO POINT REFERENCE: TNKBOT
REFERENCE POINT NOTES: 280 GALLONS REMAIN AT ZERO POINT
PROC OR SENS: P
NUMBER OF SENSORS: 2
HOW PROCESSED: MAXIMUM - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: CONTAINMENT SUMP
ALARM/TRIP SETPOINTS: VARIABLE
NI DETECTOR POWER SUPPLY
CUT-OFF POWER LEVEL: N/A
NI DETECTOR POWER SUPPLY
TURN-ON POWER LEVEL: N/A
INSTRUMENT FAILURE MODE: N/A
TEMPERATURE COMPENSATION
FOR DP TRANSMITTERS:
LEVEL REFERENCE LEG: N/A
UNIQUE SYSTEM DESC: Senses reactor containment sump level and provides a high level alarm. The largest valid narrow range signal is used for this point. If all signals are valid, 2 signals are considered. If both signals are invalid, this point is marked invalid.

STATION: Surry
UNIT: 2
PWR DATA POINT LIBRARY REFERENCE FILE

PRINTED
08/03/93

DATE: 08/03/93
REACTOR UNIT: SU2
DATA FEEDER: N/A
NRC ERDS PARAMETER: H2 CONC
POINT ID: A2GW001C
PLANT SPEC POINT DESC: CNTMT H2 CONCENTRATION
GENERIC/COND DESC: CONTAINMENT HYDROGEN CONC
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: PCT
ENGR UNITS CONVERSION: N/A
MINIMUM INSTR RANGE: -0.3
MAXIMUM INSTR RANGE: 10.0
ZERO POINT REFERENCE: N/A
REFERENCE POINT NOTES: N/A
PROC OR SENS: P
NUMBER OF SENSORS: 2
HOW PROCESSED: AVERAGE - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: AUX BLDG 13' LVL
ALARM/TRIP SETPOINTS: VARIABLE
NI DETECTOR POWER SUPPLY
CUT-OFF POWER LEVEL: N/A
NI DETECTOR POWER SUPPLY
TURN-ON POWER LEVEL: N/A
INSTRUMENT FAILURE MODE: N/A
TEMPERATURE COMPENSATION
FOR DP TRANSMITTERS:
LEVEL REFERENCE LEG: N/A
UNIQUE SYSTEM DESC: Takes a sample of containment atmosphere and measures the
hydrogen concentration in the sample. The valid signals are
averaged (2 signals if all are valid). If none of the
signals is valid, this point is marked invalid.

ATTACHMENT 2

REVISION SUMMARIES FOR SURRY UNITS 1 AND 2

STATION: Surry
UNIT: 1
PWR DATA POINT LIBRARY REFERENCE FILE
CHANGE REPORT

PRINTED
08/02/93

CHANGED POINT L1DA001C AT 13:11 ON 08/02/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 05/20/91
IS: 08/02/93

MINIMUM INSTR RANGE: WAS: 0.43
IS: 0.173

STATION: Surry
UNIT: 1
PWR DATA POINT LIBRARY REFERENCE FILE
CHANGE REPORT

PRINTED
08/02/93

CHANGED POINT L1DA002C AT 13:12 ON 08/02/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 05/20/91
IS: 08/02/93

MINIMUM INSTR RANGE: WAS: 4.5
IS: 3.84

STATION: Surry
UNIT: 1
PWR DATA POINT LIBRARY REFERENCE FILE
CHANGE REPORT

PRINTED
08/03/93

CHANGED POINT A1GW001C AT 07:58 ON 08/03/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 05/20/91
IS: 08/03/93

MINIMUM INSTR RANGE: WAS: 0.0
IS: -0.3

STATION: Surry
UNIT: 2
PWR DATA POINT LIBRARY REFERENCE FILE
CHANGE REPORT

PRINTED
08/02/93

CHANGED POINT L2DA001C AT 13:14 ON 08/02/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 05/20/91
IS: 08/02/93

MINIMUM INSTR RANGE: WAS: 0.43
IS: 0.173

STATION: Surry
UNIT: 2
PWR DATA POINT LIBRARY REFERENCE FILE
CHANGE REPORT

PRINTED
08/02/93

CHANGED POINT L2DA002C AT 13:15 ON 08/02/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 05/20/91
IS: 08/02/93

MINIMUM INSTR RANGE: WAS: 4.5
IS: 3.84

STATION: Surry
UNIT: 2
PWR DATA POINT LIBRARY REFERENCE FILE
CHANGE REPORT

PRINTED
08/03/93

CHANGED POINT A2GW001C AT 07:59 ON 08/03/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 05/20/91
IS: 08/03/93

MINIMUM INSTR RANGE: WAS: 0.0
IS: -0.3

ATTACHMENT 3

**UPDATED DPL DATA BASE FILES IN dBASE IV FORMAT
(Diskette to NUS Corporation / EI Division)**