

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

November 2, 1993

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

Serial No. 93-675
NL&P/CGL R0
Docket Nos. 50-280
50-281
50-338
50-339
License Nos. DPR-32
DPR-37
NFP-4
NFP-7

Gentlemen:

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

Modifications were recently made to the instrument range for the Reactor Vessel Level Instrumentation System (RVLIS) dynamic head points. The upper instrument limits were modified slightly to expand the range in order to prevent spurious alarms. The changes were made to resolve a recent North Anna Emergency Response Facility problem report. Since the potential for this problem also exists at Surry, the changes were made at both stations and are detailed in the Data Point Library (DPL) revision summaries (change reports) contained in Attachments 1 and 2 for Surry Units 1 and 2 and North Anna Units 1 and 2, respectively. Attachments 3 and 4 provide revision summaries (change reports) for the affected points for Surry Units 1 and 2 and North Anna Units 1 and 2, respectively. The updated data base files are also provided in the dBase IV format on Attachment 5.

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

Very truly yours,



M. L. Bowling, Manager
Nuclear Licensing & Programs

Attachments:

1. Updated DPL Forms for Surry Units 1 and 2
2. Updated DPL Forms for North Anna Units 1 and 2
3. DPL Revision Summaries for Surry Units 1 and 2
4. DPL Revision Summaries for North Anna Units 1 and 2
5. Updated DPL Data Base Files for Surry and North Anna in dBase IV Format

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cc: U. S. Nuclear Regulatory Commission - Attachments 1 - 4
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Mr. M. W. Branch - Attachments 1 - 4
NRC Senior Resident Inspector
Surry Power Station

Mr. R. D. McWhorter - Attachments 1 - 4
NRC Senior Resident Inspector
North Anna Power Station

NUS Corporation / EI Division - Attachments 1 - 5
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Attention: Mr. Tony LaRosa

ATTACHMENT 1

UPDATED DPL FORMS FOR SURRY UNITS 1 AND 2

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

PRINTED
10/20/93

DATE: 10/20/93
REACTOR UNIT: SU1
DATA FEEDER: N/A
NRC ERDS PARAMETER: REAC VES LEV
POINT ID: L1RC003C
PLANT SPEC POINT DESC: RVLIS DYNAMIC HEAD LEVEL
GENERIC/COND DESC: REACTOR VESSEL WATER LEVEL
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: PCT
ENGR UNITS CONVERSION: N/A
MINIMUM INSTR RANGE: 0.0
MAXIMUM INSTR RANGE: 122.0
ZERO POINT REFERENCE: TNKBOT
REFERENCE POINT NOTES: N/A
PROC OR SENS: P
NUMBER OF SENSORS: 5
HOW PROCESSED: AVERAGE - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: HEAD VENT (TOP) & BOTTOM OF VESSEL
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: WET
UNIQUE SYSTEM DESC:

The 2 reactor dynamic head level signals are used in conjunction with the reactor coolant pump motor currents to calculate this value. The dynamic head readings are invalid if no RCP's are running; therefore, this process value will be set invalid if no RCP motor current is greater than 5% of it's full load value. If none of the RCP's are running, the average of the valid dynamic head level signals is used to calculate this point.

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

PRINTED
10/20/93

DATE: 10/20/93
REACTOR UNIT: SU2
DATA FEEDER: N/A
NRC ERDS PARAMETER: REAC VES LEV
POINT ID: L2RC003C
PLANT SPEC POINT DESC: RVLIS DYNAMIC HEAD LEVEL
GENERIC/COND DESC: REACTOR VESSEL WATER LEVEL
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: PCT
ENGR UNITS CONVERSION: N/A
MINIMUM INSTR RANGE: 0.0
MAXIMUM INSTR RANGE: 122.0
ZERO POINT REFERENCE: TNKBOT
REFERENCE POINT NOTES: N/A
PROC OR SENS: P
NUMBER OF SENSORS: 5
HOW PROCESSED: AVERAGE - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: HEAD VENT (TOP) & BOTTOM OF VESSEL
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: WET
UNIQUE SYSTEM DESC: The 2 reactor dynamic head level signals are used in conjunction with the reactor coolant pump motor currents to calculate this value. The dynamic head readings are invalid if no RCP's are running; therefore, this process value will be set invalid if no RCP motor current is greater than 5% of it's full load value. If none of the RCP's are running, the average of the valid dynamic head level signals is used to calculate this point.

ATTACHMENT 2

UPDATED DPL FORMS FOR NORTH ANNA UNITS 1 AND 2

STATION: North Anna
UNIT: 1
PWR DATA POINT LIBRARY REFERENCE FILE

PRINTED
10/20/93

DATE: 10/20/93
REACTOR UNIT: NA1
DATA FEEDER: N/A
NRC ERDS PARAMETER: REAC VES LEV
POINT ID: L1RC003C
PLANT SPEC POINT DESC: RVLIS DYNAMIC HEAD LEVEL
GENERIC/COND DESC: REACTOR VESSEL WATER LEVEL
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: PCT
ENGR UNITS CONVERSION: N/A
MINIMUM INSTR RANGE: 0.0
MAXIMUM INSTR RANGE: 122.0
ZERO POINT REFERENCE: TNKBOT
REFERENCE POINT NOTES: N/A
PROC OR SENS: P
NUMBER OF SENSORS: 5
HOW PROCESSED: AVERAGE - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: HEAD VENT (TOP) & BOTTOM OF VESSEL
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: WET
UNIQUE SYSTEM DESC: The 2 DYNAMIC HEAD level signals are used in conjunction with the reactor coolant pump (RCP) breaker statuses to calculate this value. The dynamic head readings are invalid if no RCP's are running; therefore, this point will be set invalid if no RCP breakers are closed. If any of the RCP breakers are closed, the average of the valid dynamic head level signals is used to calculate this point.

STATION: North Anna
UNIT: 2
PWR DATA POINT LIBRARY REFERENCE FILE

PRINTED
10/20/93

DATE: 10/20/93
REACTOR UNIT: NA2
DATA FEEDER: N/A
NRC ERDS PARAMETER: REAC VES LEV
POINT ID: L2RC003C
PLANT SPEC POINT DESC: RVLIS DYNAMIC HEAD LEVEL
GENERIC/COND DESC: REACTOR VESSEL WATER LEVEL
ANALOG/DIGITAL: A
ENGR UNITS/DIG STATES: PCT
ENGR UNITS CONVERSION: N/A
MINIMUM INSTR RANGE: 0.0
MAXIMUM INSTR RANGE: 122.0
ZERO POINT REFERENCE: TNKBOT
REFERENCE POINT NOTES: N/A
PROC OR SENS: P
NUMBER OF SENSORS: 5
HOW PROCESSED: AVERAGE - SEE SYSTEM DESCRIPTION
SENSOR LOCATIONS: HEAD VENT (TOP) & BOTTOM OF VESSEL
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: WET
UNIQUE SYSTEM DESC: The 2 DYNAMIC HEAD level signals are used in conjunction with the reactor coolant pump (RCP) breaker statuses to calculate this value. The dynamic head readings are invalid if no RCP's are running; therefore, this point will be set invalid if no RCP breakers are closed. If any of the RCP breakers are closed, the average of the valid dynamic head level signals is used to calculate this point.

ATTACHMENT 3

DPL REVISION SUMMARIES FOR SURRY UNITS 1 AND 2

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

PRINTED
10/20/93

CHANGED POINT L1RC003C AT 08:21 ON 10/20/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 05/20/91
IS: 10/20/93

MAXIMUM INSTR RANGE: WAS: 120.0
IS: 122.0

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

PRINTED
10/20/93

CHANGED POINT L2RC003C AT 08:22 ON 10/20/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 05/20/91
IS: 10/20/93

MAXIMUM INSTR RANGE: WAS: 120.0
IS: 122.0

ATTACHMENT 4

DPL REVISION SUMMARIES FOR NORTH ANNA UNITS 1 AND 2

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

PRINTED
10/20/93

CHANGED POINT L1RC003C AT 08:20 ON 10/20/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 03/21/91
IS: 10/20/93

MAXIMUM INSTR RANGE: WAS: 120.0
IS: 122.0

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

PRINTED
10/20/93

CHANGED POINT L2RC003C AT 08:21 ON 10/20/93. CHANGES WERE AS FOLLOWS:

DATE: WAS: 03/21/91
IS: 10/20/93

MAXIMUM INSTR RANGE: WAS: 120.0
IS: 122.0

ATTACHMENT 5

**UPDATED DPL DATA BASE FILES FOR SURRY AND NORTH ANNA
IN dBASE IV FORMAT
(Diskette to NUS Corporation / EI Division)**