

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

December 14, 1989

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

Serial No. 89-743
NO/HWB:vlh
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
CONTROL ROOM DESIGN REVIEW
CORRECTIVE ACTION IMPLEMENTATION STATUS

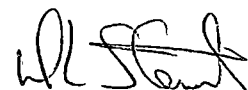
On March 31, 1986, Virginia Electric and Power submitted a Final Summary Report (Letter No. 86-171) which delineated the corrective actions to be implemented that would resolve the human engineering discrepancies identified at Surry during the NUREG-0700 Control Room Design Review Project. A proposed schedule was provided which identified completion of the corrective actions in three phases: I - Immediate (0 to two years for implementation), ST - Short Term (0 to four years for implementation), LT - Long Term (0 to eight years for implementation) and NP - Normal Program.

As requested by the NRC Project Manager for Surry, the status of the Immediate Corrective Actions, which were scheduled to be completed by the end of 1988, is provided in Attachment 1. The delay in issuing this report is due to the extension of the Surry 1988 refueling outages into 1989. In the case where a corrective action involved more than one schedule commitment (e.g. Corrective Action CA50N with both Immediate (I) and Normal Program (NP) actions), the status provided is for the Immediate action.

To summarize, thirty-three (33) of the thirty-four (34) Immediate Corrective Actions have been completed as scheduled. The remaining corrective action (CA80N) has been addressed as originally described, but was subsequently upgraded to replacing the main steam PORVs. The schedule for implementation of the upgraded action is 1990/1991 refueling outages.

Should you have any questions concerning this status please contact us.

Very truly yours,



W. L. Stewart
Senior Vice President - Power

Attachment

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cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Mr. W. E. Holland
NRC Senior Resident Inspector
Surry Power Station

IMMEDIATE CORRECTIVE ACTIONS STATUS REPORT
CONTROL ROOM DESIGN REVIEW
SURRY POWER STATION
OCTOBER, 1989

Corrective Action No.	Corrective Action	Commitment Date
CA3T <u>SURRY</u>	EMPHASIZE IN TRAINING THAT ALL CONTROLLERS INDICATE DEMAND NOT POSITION.	I
	STATUS: ORIGINALLY OPERATIONS RESPONSIBILITY. RO/SRO LICENSE CLASS LESSON PLAN ND-93.1-LP-2 AND NON-LICENSED OPERATOR ENGINEERING MECHANICSII PLAN ND-5-LP-4 REVISED 04/04/88.	12/31/88 Complete <input type="checkbox"/> Y
CA4E <u>SURRY</u>	PROVIDE RED/GREEN LIGHTS ON BENCHBOARD FOR REACTOR TRIP BREAKER STATUS.	I
	STATUS: DESIGN CHANGE DCP 84-06 WAS IMPLEMENTED 07/17/86. DESIGN CHANGE DCP 84-07 WAS IMPLEMENTED 02/20/86.	12/31/88 Complete <input type="checkbox"/> Y
CA5E <u>SURRY</u>	EXISTING CORE COOLING MONITORS TO BE REPLACED BY INTEGRATED CORE COOLING SYSTEM.	I
	STATUS: DESIGN CHANGE DCP 85-10 WAS ISSUED 04/24/86 AND IMPLEMENTED 07/15/88. DESIGN CHANGE DCP 85-11 WAS ISSUED 08/15/86 AND IMPLEMENTED 10/20/88.	12/31/88 Complete <input type="checkbox"/> Y
CA7T <u>SURRY</u>	TRAIN OPERATORS TO GO TO RADIATION MONITOR TREND RECORDERS FOR TREND INFORMATION AND TO RADIATION MONITOR METERS FOR CURRENT VALUES.	I
	STATUS: RO/SRO LICENSE CLASS JPM-29.01 REVISED 04/04/88.	12/31/88 Complete <input type="checkbox"/> Y
CA8T <u>SURRY</u>	SCALE TO PEN RELATIONSHIP HAS BEEN CODED ON MULTISCALE METERS. INITIATE JOB PERFORMANCE MEASURES (JPM) ON READING OF MULTISCALE METERS.	I
	STATUS: RO/SRO LICENSE CLASS JPM-29.01 REVISED 04/04/88.	12/31/88 Complete <input type="checkbox"/> Y
CA13N <u>SURRY</u>	PERIODIC TESTS WILL BE PERFORMED IN ACCORDANCE WITH PT-26.1 TO VERIFY OPERATION OF RADIATION SAMPLER FILTER LIGHT.	I
	STATUS: SYSTEM REPLACED. FILTER LIGHT FOR NEW SYSTEM IS NO LONGER PUSH TO TEST. VERIFICATION OF OPERABILITY WILL BE ACCOMPLISHED BY VISUAL INSPECTION OF RADIATION MONITOR DURING DAILY WALKDOWNS.	12/31/88 Complete <input type="checkbox"/> Y

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CA14E <u>SURRY</u>	REPLACE RESERVE STATION TRANSFER CONTROL SWITCH HANDLES TO MINIMIZE INADVERTENT OPERATION. STATUS: ENGINEERING WORK REQUEST EWR 87-244 WAS ISSUED 07/15/87 AND IMPLEMENTED 10/15/87.	I 12/31/88 Complete <input type="checkbox"/> Y
CA16T <u>SURRY</u>	INVESTIGATE DIFFICULT TO OPERATE CONTROLS FOR ANY MAINTENANCE PROBLEMS. EMPHASIZE USE OF MANUAL CONTROLS DURING TRAINING USING JOB PERFORMANCE MEASURES (JPM). STATUS: RO/SRO LICENSE CLASS LESSON PLAN ND-88.1-LP-5 REVISED 04/04/88. SIMULATOR LEARNING ACTIVITY ND-90.3-SLA-7.1 REVISED 04/05/88.	I 12/31/88 Complete <input type="checkbox"/> Y
CA20N <u>SURRY</u>	ENSURE ENFORCEMENT OF STANDING ORDER THAT CONTROLS USE AND PLACEMENT OF TEMPORARY LABELS (OPERATOR AIDS). STATUS: THE ORIGINAL STANDING ORDER GOVERNING PLACEMENT OF TEMPORARILY LABELS HAS BEEN REPLACED WITH STATION ADMINISTRATIVE PROCEDURE SUADM-0-08 WHICH PROVIDES DETAILED GUIDANCE.	I 12/31/88 Complete <input type="checkbox"/> Y
CA25E <u>SURRY</u>	PROVIDE DIRECT PRESSURIZER PORV POSITION INDICATION WITH RED/GREEN STATUS LIGHTS. STATUS: DESIGN CHANGE DCP 85-08 AND DESIGN CHANGE DCP 85-09 WERE IMPLEMENTED 12/86.	I 12/31/88 Complete <input type="checkbox"/> Y
CA26E <u>SURRY</u>	PROVIDE BETTER FUNCTIONAL ARRANGEMENT OF CONTAINMENT SUMP LEVEL INDICATORS. COORDINATE WITH CA48E. STATUS: DESIGN CHANGE DCP 87-24 WAS ISSUED 04/04/88 AND IMPLEMENTED 06/03/88. DESIGN CHANGE DCP 87-25 WAS ISSUED 06/15/88 AND IMPLEMENTED 10/20/88.	I 12/31/88 Complete <input type="checkbox"/> Y
CA28N <u>SURRY</u>	ENSURE THAT ANNUNCIATOR RESPONSE PROCEDURE INSTRUCTS OPERATORS TO RESET THE PRESSURIZER SAFETY VALVES ANNUNCIATOR. STATUS: RESET PUSHBUTTONS REMOVED BY DCP 85-08-1 AND DCP 85-09-2 WHICH REPLACED INDICATORS WITH OPEN/CLOSED STATUS LIGHTS. HED RESOLVED BY ALTERNATIVE CORRECTIVE ACTION.	I 12/31/88 Complete <input type="checkbox"/> Y

RESPONSIBILITY CODE:

E - ENGINEERING, N - OPERATIONS, T - TRAINING

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CA30 E <u>SURRY</u>	LABEL RCS PRESSURIZER PRESSURE RECORDER READINGS.	I 12/31/88
	STATUS: ORIGINALLY OPERATIONS RESPONSIBILITY. TRANSFERRED TO POWER ENGINEERING SERVICES ON 07/07/88. EWR 88-472 TO PROVIDE LABELING WAS PREPARED AND IMPLEMENTED DURING 1988/1989 OUTAGES.	Complete <input type="checkbox"/> Y
CA31 E <u>SURRY</u>	PROVIDE REACTOR COOLANT SYSTEM (RCS) TH & TC ON SPDS COMPUTER.	I 12/31/88
	STATUS: NUREG-0696 MODIFICATIONS WERE COMPLETED 12/86.	Complete <input type="checkbox"/> Y
CA33 T <u>SURRY</u>	INITIATE JOB PERFORMANCE MEASURE FOR OPERATORS ON SETTING OF HAGAN PROCESS CONTROLLERS.	I 12/31/88
	STATUS: ORIGINALLY OPERATIONS RESPONSIBILITY. RO/SRO LICENSE CLASS LESSON PLAN ND-93.1-LP-2 WAS REVISED 04/04/88.	Complete <input type="checkbox"/> Y
CA34 E <u>SURRY</u>	TRAIN OPERATORS IN CORRELATION OF RECORDER OUTPUT TO DISPLAY OUTPUT.	I 12/31/88
	STATUS: ORIGINALLY TRAINING RESPONSIBILITY. TRANSFERRED TO POWER ENGINEERING SERVICES ON 06/88. EWR 88-472 TO SUPPLY TRAINING AIDES WAS PREPARED AND IMPLEMENTED DURING 1988/1989 OUTAGES.	Complete <input type="checkbox"/> Y
CA35 T <u>SURRY</u>	EMPHASIZE LOG SCALE READING IN TRAINING.	I 12/31/88
	STATUS: RO/SRO LICENSE CLASS JPM-29.01 REVISED 04/04/88.	Complete <input type="checkbox"/> Y
CA40 N <u>SURRY</u>	CHANGE RED LIGHT ON UNIT 2 EDG TO YELLOW LIGHT FOR "EMERG GEN #2 TRIP AUX RESET BUTTON."	I 12/31/88
	STATUS: LENSE REPLACED IN 1986.	Complete <input type="checkbox"/> Y

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CA47E <u>SURRY</u>	ON BORIC ACID STORAGE TANK LEVEL INDICATION MARK SCALE FACE WITH TECH. SPEC. LIMIT AND ALARM SETPOINT.	I 12/31/88
STATUS: ORIGINALLY ASSIGNED TO OPERATIONS. EWR 89-237 TO INSTALL NEW INDICATOR SCALES AND LEGEND PLATES WAS PREPARED AND IMPLEMENTED DURING 1988/1989 OUTAGES.		Complete <input type="checkbox"/> Y
CA48E <u>SURRY</u>	RESCALE RECIRC SPRAY SUMP LEVEL INDICATION (2 INCH INCREMENTS) AND PUT MARKINGS ON SCALE AS NECESSARY. COORDINATE WITH CA26E.	I 12/31/88
STATUS: DESIGN CHANGE DCP 87-24 WAS ISSUED 04/04/88 AND IMPLEMENTED 06/03/88. DESIGN CHANGE DCP 87-25 WAS ISSUED 06/15/88 AND IMPLEMENTED 10/20/88.		Complete <input type="checkbox"/> Y
CA49E <u>SURRY</u>	RESCALE CONTAINMENT SUMP LEVEL INDICATION (0 TO 25 INCHES WITH 5" MAJOR INCREMENTS AND 1" MINORS).	I 12/31/88
STATUS: ORIGINALLY OPERATIONS RESPONSIBILITY. DESIGN CHANGE DCP 87-24 WAS ISSUED 04/04/88 AND IMPLEMENTED 07/15/88. DESIGN CHANGE DCP 87-25 WAS ISSUED 06/15/88 AND IMPLEMENTED 10/20/88.		Complete <input type="checkbox"/> Y
CA50N <u>SURRY</u>	REPLACE SCRATCHED GLASS AND REMOVE LEGENDS FROM TREND RECORDER WINDOWS. COORDINATE WITH CA51N.	I,NP 12/31/88
STATUS: CONTROL ROOM RECORDERS WERE INSPECTED FOR SUBJECT PROBLEMS. SCRATCHED GLASS WAS REPLACED AS NECESSARY. CURRENT LEGENDS ON RECORDERS DO NOT INTERFERE WITH READING OF DATA BY OPERATORS.		Complete <input type="checkbox"/> Y
CA52N <u>SURRY</u>	IMPLEMENT PREVENTIVE MAINTENANCE PROGRAM FOR TREND RECORDERS. COORDINATE WITH CA49N.	I 12/31/88
STATUS: A PREVENTIVE MAINTENANCE PROGRAM HAS BEEN IMPLEMENTED FOR THE TREND RECORDERS. ALSO, PERIODIC TEST PT-2.29 CHECKS THE OPERABILITY OF THE TREND RECORDERS ON A QUARTERLY BASIS.		Complete <input type="checkbox"/> Y
CA57E <u>SURRY</u>	PROVIDE SWITCH GUARDS FOR CONDENSER CIRCULATION WATER INLET VALVES WITH CLEAR FLIP-UP COVERS.	I 12/31/88
STATUS: ENGINEERING WORK REQUESTS EWR-87-317 AND EWR-87-318 WERE ISSUED 02/26/88. THE TWO SWITCH COVER DESIGNS WERE TESTED ON THE SIMULATOR AND FOUND TO BE UNSUITABLE. SUITABLE SWITCH COVERS HAVE NOT BEEN FOUND. TECH REPORT PE-0007 ISSUED RECOMMENDING THE RETENTION OF THE EXISTING COVERS.		Complete <input type="checkbox"/> Y

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Corrective Action No.	Corrective Action	Commitment Date
CA58 E <u>SURRY</u>	PROVIDE SWITCH GUARDS FOR MAIN STEAM TRIP VALVES WITH CLEAR FLIP-UP COVERS.	I 12/31/88
	STATUS: ENGINEERING WORK REQUESTS EWR-87-317 AND EWR-87-318 WERE ISSUED 02/26/88. THE TWO SWITCH COVER DESIGNS WERE TESTED ON THE SIMULATOR AND FOUND TO BE UNSUITABLE. SUITABLE SWITCH COVERS HAVE NOT BEEN FOUND. TECH REPORT PE-0007 ISSUED RECOMMENDING THE RETENTION OF THE EXISTING COVERS.	Complete <input type="checkbox"/> Y
CA62 N <u>SURRY</u>	REWRITE LIST OF ABBREVIATIONS/ACRONYMS TO INCLUDE ALL ABBREVIATIONS/ACRONYMS USED ON LABELS, ANNUNCIATORS, LEGENDS.	I 12/31/88
	STATUS: A STANDARDIZED LIST OF ACRONYMS AND ABBREVIATIONS HAS BEEN INCORPORATED INTO STATION ADMINISTRATIVE PROCEDURE SUADM-MM-09.	Complete <input type="checkbox"/> Y
CA63 E <u>SURRY</u>	ADD ZONE MARKINGS TO LEVEL INDICATION FOR ACCUMULATOR TANKS.	I 12/31/88
	STATUS: ORIGINALLY OPERATIONS RESPONSIBILITY. IMPLEMENTATION OF THIS CORRECTIVE ACTION WAS TRANSFERRED TO POWER ENGINEERING SERVICES ON 07/07/88. EWR 88-472 TO PROVIDE LABELING WAS PREPARED AND IMPLEMENTED DURING 1988/1989 OUTAGES.	Complete <input type="checkbox"/> Y
CA64 E <u>SURRY</u>	ADD AN INTERMEDIATE GRADUATIONS (HEAVIER LINE) FOR EACH VALUE OF 10 ON PRESSURE INDICATION FOR THE CONTAINMENT LEAKAGE MONITORING SYSTEM.	I 12/31/88
	STATUS: ORIGINALLY OPERATIONS RESPONSIBILITY. IMPLEMENTATION OF THIS CORRECTIVE ACTION WAS TRANSFERRED TO POWER ENGINEERING SERVICES ON 07/07/88. EWR 88-472 TO PROVIDE LABELING WAS PREPARED AND IMPLEMENTED DURING 1988/1989 OUTAGES.	Complete <input type="checkbox"/> Y
CA67 N <u>SURRY</u>	PROVIDE A STEP STOOL FOR CHEMICAL ADDITION TANK (CAT) INDICATION.	I 12/31/88
	STATUS: A STEP STOOL HAS BEEN MADE AVAILABLE IN THE CONTROL ROOM FOR READING OF CHEMICAL ADDITION TANK (CAT) INDICATION.	Complete <input type="checkbox"/> Y
CA68 N <u>SURRY</u>	PROVIDE STEP STOOL READING FOR VARIOUS INDICATORS ABOVE 70 INCHES ON VERTICAL BOARD.	I 12/31/88
	STATUS: STEP STOOLS HAVE BEEN MADE AVAILABLE IN THE CONTROL ROOM FOR READING OF VARIOUS INDICATORS ABOVE 70 INCHES ON VERTICAL BOARD.	Complete <input type="checkbox"/> Y

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CA76N <u>SURRY</u>	REVIEW PROCEDURES FOR USE OF SHARED EQUIPMENT TO ENSURE THEIR ADEQUACY.	I 12/31/88
	STATUS: PROCEDURES HAVE BEEN REVIEWED AND ARE ADEQUATE FOR OPERATION OF SHARED EQUIPMENT (EG CIRCULATING WATER, FIRE PROTECTION & VENTILATION).	Complete <input type="checkbox"/> Y
CA77T <u>SURRY</u>	PROVIDE SIMULATOR TRAINING FOR OPERATORS IN DOUBLING THEORY, I/M PLOTTING CLOSENESS TO CRITICALITY VS. ROD INSERTION LIMITS.	I 12/31/88
	STATUS: RO/SRO LICENSE CLASS LESSON PLAN ND-86-2-LP-7 REVISED 04/04/88.	Complete <input type="checkbox"/> Y
CA79E <u>SURRY</u>	ENSURE COOLDOWN RATES AVAILABLE ON SPDS COMPUTER AS BACKUP TO PLANT PROCESS COMPUTER. HEATUP/COOLDOWN RATE CURVES VIA GRAPHICS PROGRAM.	I 12/31/88
	STATUS: ORIGINALLY OPERATIONS RESPONSIBILITY. IMPLEMENTATION OF THIS CORRECTIVE ACTION WAS TRANSFERRED TO POWER ENGINEERING SERVICES ON 07/07/88. EWR 88-472 TO COOLDOWN RATE ON SPDS COMPUTER VIA GRAPHICS PROGRAM WAS PREPARED AND IMPLEMENTED DURING 1988/1989 OUTAGES.	Complete <input type="checkbox"/> Y
CA80N <u>SURRY</u>	IMPROVE OPERABILITY OF MAIN STEAM PORVS AND PROVIDE STATUS ON SHIFT TURNOVER SHEET.	I 12/31/88
	STATUS: OPERATIONS TURNOVER CHECKLIST OC-8 HAS BEEN REVISED TO PROVIDE STATUS OF THE MS PORVS. THE MS PORVS WILL BE REPLACED DURING THE UPCOMING 1990 AND 1991 REFUELING OUTAGES.	Complete <input type="checkbox"/> N

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