GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2

NRC DOCKET NOS. 50-424 AND 50-425

FACILITY OPERATING LICENSE NOS. NPF-68 AND NPF-81

1992 ANNUAL REPORT - PART 2

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INTRODUCTION

The Vogtle Electric Generating Plant Units 1 and 2 are powered by pressurized water reactors, each rated at 3411 megawatts thermal. It is located on the Savannah River in Burke County Georgia, 34 miles southeast of Augusta. The Unit 1 operating license was received on January 16, 1987 and commercial operation started on May 31, 1987. Unit 1 is in a refueling outage, preparing for its fifth fuel cycle. Unit 2 received its operating license on February 9, 1989, began commercial operation on May 20, 1989. Unit 2 is operating in its third fuel cycle.

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VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2

NRC DOCKET NOS. 50-424 AND 50-425

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PLANT MODIFICATIONS AND TEST OR EXPERIMENTS

INTERIM REPORT

10 CFR 50.59(b)

January 1, 1992 thru May 31, 1992

PLANT MODIFICATIONS

SUBJECT:	DCP: 87-V1E0098, REVISION 0, SEQUENCE 3
DESCRIPTION:	INSTALL A ACCURATE CRUD TANK LEVEL INDICATION METHOD
SAFETY EVALUATION:	THE AFFECTED LEVEL INDICATOR DOES NOT PROVIDE ANY ALARMS OR CONTROL FUNCTIONS ASSOCIATED WITH ANY FSAR FAILURE ANALYSIS NOR DOES IT CREATE THE POSSIBILITY OF AN ACCIDENT OCCURRING,CREATE AN UNANALYZED ACCIDENT,OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 87-V1E0234, REVISION 0, SEQUENCE 2
DESCRIPTION:	UPGRADE NON Q COATING SYSTEM IN VARIOUS ROOMS IN THE AUX BLDG TO INCLUDE AN EPOXY TOPCOAT.
SAFETY EVALUATION:	THE CHANGE HAS NO IMPACT ON PLANT SYSTEM OPERATION AND THESE COATINGS ARE NOT ADDRESSED IN THE FSAR. THE CHANGE DOES NOT CREATE THE POSSIBILITY OF AN ACCIDENT OCCURRING,CREATE AN UNANALYZED ACCIDENT,OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 87-V1E0234, REVISION 0, SEQUENCE 3
DESCRIPTION:	PROVIDE FINISH COATING TO FACILITATE DECONTAMINATION ACTIVITIES
SAFETY EVALUATION:	THE CHANGE HAS NO IMPACT ON PLANT SYSTEM OPERATION AND THESE COATINGS ARE NOT ADDRESSED IN THE FSAR. THE CHANGE DOES NOT CREATE THE POSSIBILITY OF AN ACCIDENT OCCURRING,CREATE AN UNANALYZED

	ACCIDENT,OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 87-V1E0234, REVISION 0, SEQUENCE 4
DESCRIPTION:	THIS CHANGE ADDS GENERAL NOTES TO THE FINISH SCHEDULES OF THOSE PLANT BUILDING OUTSIDE THE CONTAINMENT,NOT COVERED UNDER SEQUENCE 3 OF THIS DCP.
SAFETY EVALUATION:	THE CHANGE HAS NO IMPACT ON PLANT SYSTEM OPERATION AND THESE COATINGS ARE NOT ADDRESSED IN THE FSAR. THE CHANGE DOES NOT CREATE THE POSSIBILITY OF AN ACCIDENT OCCURRING,CREATE AN UNANALYZED ACCIDENT,OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 87-V1E0293, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP ADDED REACH RODS OF THE BACKFLUSHABLE FILTER NITROGEN SUPPLY VALVES FOR ALARA CONCERNS.
SAFETY EVALUATION:	FSAR FIGURE 11.4.2-3 (P&ID) WILL CHANGE AS A RESULT OF THE VALVE REACH ROD ADDITION TO VALVE 1-1224-U4-151. THIS SYSTEM IS NOT ASSUMED TO FUNCTION OR MITIGATE THE CONSEQUENCES OF ANY ACCIDENTS ANALYZED IN FSAR CHAPTERS 11 AND 15. THE CHANGE DOES NOT CREATE THE POSSIBILITY OF AN ACCIDENT OCCURRING,CREATE AN UNANALYZED ACCIDENT, OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR.

SUBJECT:	DCP: 87-V1N0418, REVISION 0, SEQUENCE 1,2,&3
DESCRIPTION:	MAIN STEAM SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.
SAFETY EVALUATION:	THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT,OR COMPONENT FUNCTION OR OPERATION AND BASED ON A REVIEW OF SECTIONS 15.1 ND 15.2,OF THE FSAR,WOULD NOT CREATE THE PROBABILITY OF AN UNANALYZED ACCIDENT OR EQUIPMENT / COMPONENT MALFUNCTION IN THE MAIN STEAM SYSTEM.
SUBJECT:	DCP: 87-V1N0419, REVISION 0, SEQUENCE 1
DESCRIPTION:	MAIN STEAM SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION:	THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT,OR COMPONENT FUNCTION OR OPERATION AND BASED ON A REVIEW OF SECTIONS 15.1 ND 15.2,OF THE FSAR,WOULD NOT CREATE THE PROBABILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT / COMPONENT MALFUNCTION IN THE MAIN STEAM SYSTEM.
SUBJECT:	DCP: 87-V1N0421, REVISION 0, SEQUENCE 1
DESCRIPTION:	MAIN STEAM SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.
SAFETY EVALUATION:	THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT,OR COMPONENT FUNCTION OR OPERATION AND BASED ON A REVIEW OF SECTIONS 15.1 ND 15.2,OF THE FSAR,WOULD NOT CREATE THE PROBABILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT / COMPONENT MALFUNCTION IN THE MAIN STEAM SYSTEM.
SUBJECT:	DCP: 87-V1N0424, REVISION 0, SEQUENCE 1
DESCRIPTION:	CONTAINMENT SPRAY SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF

SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT ANY SYSTEM OR COMPONENT FUNCTION OR OPERATION AND BASED ON A REVIEW OF SECTIONS 6.2.2.2 AND 15.6.5,OF THE FSAR,WOULD NOT CREATE THE PROBABILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT / COMPONENT MALFUNCTION IN THE MAIN STEAM SYSTEM.

SUBJECT: DCP: 87-V1N0425, REVISION 0, SEQUENCE 1

DESCRIPTION: CONTAINMENT SPRAY SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT,OR COMPONENT FUNCTION OR OPERATION AND BASED ON A REVIEW OF SECTIONS 6.2.2.2,6.5,3.6,AND 15,OF THE FSAR,WOULD NOT CREATE THE

PROBABILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT / COMPONENT MALFUNCTION IN THE MAIN STEAM SYSTEM.

SUBJECT: DCP: 87-V1N0428, REVISION 0, SEQUENCE 1

DESCRIPTION: AUXILIARY FEED WATER SYSTEM SNUBBER REDUCTION PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT ANY SYSTEM OR COMPONENT FUNCTION OR OPERATION AND BASED ON A REVIEW OF SECTIONS 15.2,OF THE FSAR,WOULD NOT CREATE THE PROBABILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT / COMPONENT MALFUNCTION IN THE MAIN STEAM SYSTEM.

SUBJECT: DCP: 87-V1N0429, REVISION 0, SEQUENCE 1

DESCRIPTION: AUXILIARY FEED WATER SYSTEM SNUBBER REDUCTION PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN

ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT,OR COMPONENT FUNCTION OR OPERATION AND BASED ON A REVIEW OF SECTIONS 15,OF THE FSAR,WOULD NOT CREATE THE PROBABILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT / COMPONENT MALFUNCTION IN THE MAIN STEAM SYSTEM.

SUBJECT: DCP: 88-V1N0114, REVISION 0, SEQUENCE 1

DESCRIPTION: RESIDUAL HEAT REMOVAL SYSTEM SNUBBER REDUCTION PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT SYSTEM FUNCTION OR OPERATION AND THEREFORE DOES NOT AFFECT THE ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OR CONSEQUENCES OF AN ACCIDENT DESCRIBED IN SECTION 15 OF THE FSAR. THE SUPPORT MODIFICATIONS ARE TO THE MODERATE ENERGY PORTION OF THE RHR SYSTEM ONLY,THEREFORE PIPE WHIP AND

JET IMPINGEMENT DO NOT APPLY. THE FLOODING AND SPRAY WETTING ANALYSIS FOR MODERATE ENERGY SYSTEM WILL NOT CHANGE.

SUBJECT: DCP: 89-VCE0112, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP UPGRADES THE TEMPORARY FLUSHING WATER STORAGE TANK AND PUMP TO PERMANENT PLANT EQUIPMENT,PROVIDE PERMANENT PIPING TIE-IN WITH WELL PUMP #2,PROVIDE PERMANENT PIPING TIE-IN TO THE FIRE PROTECTION SYSTEM YARD LOOP AT EXISTING VALVE C-2301-U4-U41,PROVIDE ELECTRIC POWER FOR THE EXISTING PUMP MOTOR FROM THE PERMANENT POWER SYSTEM,PROVIDE HOUSING ENCLOSURE FOR THE PUMP/MOTOR,AND PROVIDE PIPE SUPPORTS FOR ALL ABOVE GROUND PIPING.

SAFETY EVALUATION: THIS IS A CHANGE TO THE FACILITY AND WILL BE UPDATED IN FSAR TABLE 9.5.1-10,SECTION 2.3 PER LDCR # FS-89-004 TO CLARIFY THE GENERAL REQUIREMENTS FOR A BACKUP FIRE SUPPRESSION SYSTEM. IT DOES NOT AFFECT ANY ACCIDENT ANALYSIS, PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR. IT DOES NOT RESULT IN AN UNPOSTULATED ACCIDENT.

SUBJECT: DCP: 89-VCN0118, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS CHANGE REPLACES THE EXISTING DISTRIBUTION NON-CLASS 1E SURGE ARRESTORS WITH INTERMEDIATE CLASS SURGE ARRESTORS FOR THE FOLLOWING TRANSFORMERS:1NB02X,1NB08X,1NB11X,1NB 19X,1NB25X. SURGE ARRESTORS PROVIDE ELECTRICAL INSULATOR PROTECTION DUE

	TO SWITCHING IMPULSES GENERATED IN THE OPERATION OF THE ELECTRICAL SYSTEM. THE LOWER SWITCHING SURGE RATING OF THE REPLACEMENT SURGE ARRESTORS WILL PROVIDE AN INCREASED MARGIN OF PROTECTION AGAINST SWITCHING SURGES AND CONSEQUENTLY INCREASE THE RELIABILITY OF THE TRANSFORMER.
SAFETY EVALUATION:	THIS CHANGE DOES NOT INCREASE THE PROBABILITY OF OCCURRENCE OR CONSEQUENCES OF THE MALFUNCTION OF ANY EQUIPMENT OR COMPONENT ASSUMED TO FUNCTION IN ACCIDENTS ANALYZED IN THE FSAR. THE PROPOSED CHANGE WILL INVOLVE ONLY NON-1E TRANSFORMERS. THE TRANSFORMERS AND THE LOADS SUPPLIED FROM THESE TRANSFORMERS ARE NOT REQUIRED TO FUNCTION FOR ACCIDENT MITIGATION OR FOR SAFE SHUTDOWN. THE CONSEQUENCES OF FAILURE OF THESE TRANSFORMERS ARE BOUNDED BY THE LOSS OF NON-EMERGENCY AC POWER TO THE PLANT AUXILIARIES ANALYSIS. THIS INCLUDES A REVIEW OF FSAR SECTIONS 8.3.1 AND 15.0 SPECIFICALLY SECTIONS 15.2.6 AND 15.0.8.
SUBJECT:	DCP: 89-V1N0039, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS CHANGE REDUCES THE NUMBER OF SNUBBERS IN THE CONTAINMENT SPRAY SYSTEM OUTSIDE CONTAINMENT AND IS LIMITED TO PIPE SUPPORTS ONLY. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN

	INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.
SAFETY EVALUATION:	THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT OR COMPONENT'S OPERATION AND BASED ON A REVIEW OF FSAR SECTIONS 3,6,9,AND 15 WOULD NOT CREATE THE POSSIBILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT/COMPONENT MALFUNCTION. NO NEW PIPE BREAK LOCATIONS ARE CREATED AND THE APPLICABLE PIPE STRESSES WILL NOT BE EXCEEDED DUE TO THE REMOVAL OF THESE SNUBBERS.
SUBJECT:	DCP: 89-V1N0040, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS CHANGE REDUCES THE NUMBER OF SNUBBERS IN THE COMPONENT COOLING WATER SYSTEM INSIDE THE AUXILIARY BUILDING AND IS LIMITED TO PIPE SUPPORTS ONLY. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.
SAFETY EVALUATION:	THE CONSEQUENCES OF ACCIDENTS DESCRIBED IN THE FSAR ARE NOT AFFECTED BY THIS DCP SINCE THE PIPE SUPPORT MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE DESIGN CRITERIA IDENTIFIED IN THE DESIGN INPUT RECORD

AND THE MODIFICATIONS DO NOT AFFECT THE SYSTEM FUNCTION OR OPERATION. SYSTEMS REQUIRED TO MITIGATE A DESIGN BASIS ACCIDENT ARE NOT ADVERSELY AFFECTED BY THIS DESIGN MODIFICATION.

SUBJECT: DCP: 89-V1N0042, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS CHANGE REDUCES THE NUMBER OF SNUBBERS IN THE AUXILIARY COMPONENT COOLING WATER SYSTEM INSIDE THE AUXILIARY BUILDING AND IS LIMITED TO PIPE SUPPORTS ONLY. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THE MODIFICATIONS REQUIRED BY THIS DCP ARE BASED ON PIPING ANALYSIS AND PIPE SUPPORT CALCULATIONS AND DESIGN THAT HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DESIGN CRITERIA IDENTIFIED IN THE DESIGN INPUT RECORD. THESE MODIFICATIONS HAVE BEEN REVIEWED FOR ANY EFFECT ON INTERCONNECTING EQUIPMENT OR COMPONENTS INCLUDING EXISTING PIPE SUPPORTS WITHIN THE AUXILIARY COMPONENT COOLING WATER PIPING SYSTEM. THE ACCEPTABILITY OF THIS REVIEW HAS BEEN DOCUMENTED IN THE CALCULATIONS IDENTIFIED IN THE CALCULATION RECORD. THEREFORE,THIS CHANGE DOES NOT CREATE THE POSSIBILITY OF AN ACCIDENT OR

EQUIPMENT/COMPONENT MALFUNCTION NOT DESCRIBED AND ANALYZED IN THE FSAR.

SUBJECT: DCP: 89-V1N0046, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS CHANGE REDUCES THE NUMBER OF SNUBBERS IN THE WASTE EVAPORATOR STEAM SUPPLY SYSTEM INSIDE THE AUXILIARY BUILDING AND IS LIMITED TO PIPE SUPPORTS ONLY. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT OR COMPONENT'S OPERATION AND BASED ON A REVIEW OF FSAR SECTIONS 3,6,9,AND 15 WOULD NOT CREATE THE POSSIBILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT/COMPONENT MALFUNCTION. NO NEW PIPE BREAK LOCATIONS ARE CREATED AND THE APPLICABLE PIPE STRESSES WILL NOT BE EXCEEDED DUE TO THE REMOVAL OF THESE SNUBBERS.

SUBJECT: DCP: 89-V1N0048, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS CHANGE REDUCES THE NUMBER OF SNUBBERS IN THE STEAM GENERATOR BLOWDOWN SYSTEM OUTSIDE CONTAINMENT AND IS LIMITED TO PIPE

SUPPORTS ONLY. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT OR COMPONENT'S OPERATION AND BASED ON A REVIEW OF FSAR SECTIONS 3,6,9,AND 15 WOULD NOT CREATE THE POSSIBILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT/COMPONENT MALFUNCTION. NO NEW PIPE BREAK LOCATIONS ARE CREATED AND THE APPLICABLE PIPE STRESSES WILL NOT BE EXCEEDED DUE TO THE REMOVAL OF THESE SNUBBERS.

SUBJECT: DCP: 89-V1N0049, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS CHANGE REDUCES THE NUMBER OF SNUBBERS IN THE CVCS SYSTEM OUTSIDE CONTAINMENT AND IS LIMITED TO PIPE SUPPORTS ONLY. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL

RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT ANY SYSTEM,EQUIPMENT OR COMPONENT'S OPERATION AND BASED ON A REVIEW OF FSAR SECTIONS 3,6,9,AND 15 WOULD NOT CREATE THE POSSIBILITY OF AN UNANALYZED OR UNDESCRIBED ACCIDENT OR EQUIPMENT/COMPONENT MALFUNCTION. NO NEW PIPE BREAK LOCATIONS ARE CREATED AND THE APPLICABLE PIPE STRESSES WILL NOT BE EXCEEDED DUE TO THE REMOVAL OF THESE SNUBBERS.

SUBJECT: DCP: 89-V1N0054, REVISION 0, SEQUENCE 1

DESCRIPTION: REDUCE THE VIBRATION OF THE EHC SYSTEM BY PROVIDING REINFORCING SLEEVE ON 1 1/2" DISCHARGE PIPES OF THE EHC PUMPS 1-1625-S4-501-P01 AND 1-1625-S4-501-P02. THE EHC PUMPS AND TUBING ARE LOCATED ON LEVEL 1 OF THE TURBINE BUILDING . THE TUBING IS OF PROJECT CLASS 424,SEISMIC CATEGORY 2. ADDITION OF SLEEVE WILL INCREASE THE STIFFNESS OF THE SYSTEM,THUS RESULTING IN A SHIFT OF THE FUNDAMENTAL FREQUENCY OF THE TUBING AWAY FROM PUMP ROTATING FREQUENCY. THIS WILL REDUCE THE VIBRATORY RESPONSE OF THE DISCHARGE TUBING.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT SYSTEM FUNCTION OR OPERATION,THEREFORE,THEY DO NOT AFFECT THE ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OR CONSEQUENCES OF ACCIDENTS DESCRIBED IN THE FSAR INCLUDING SECTION 3 OR 15. THE MODIFICATION DOES NOT ALTER THE FAILURE MODE OF THE SYSTEM,I.E.,NO NEW FAILURE MODES ARE CREATED.

SUBJECT:	DCP: 89-V1N0061, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP DELETES THREE OF THE FIVE HYDRAULIC SNUBBERS IN EACH OF THE FOUR LOOPS LOCATED AT THE STEAM GENERATOR UPPER LATERAL SUPPORT SYSTEM. THE PLANT WILL BENEFIT BY ENHANCING THE RELIABILITY OF THE SUPPORT SYSTEM THROUGH THE REDUCTION OF THE NUMBER OF HYDRAULIC SNUBBERS BY ALLOWING GREATER ACCESSIBILITY FOR IN SERVICE INSPECTION AND TESTING AND BY REDUCING THE PROBABILITY OF HAVING INOPERABLE HYDRAULIC SUPPORT SNUBBERS ; PERSONNEL RADIATION EXPOSURE WILL BE REDUCED OVER THE LIFE OF THE PLANT DUE TO A REDUCTION IN THE NUMBER OF SNUBBERS REQUIRING TESTING AND MAINTENANCE.
SAFETY EVALUATION:	THE MODIFICATION OF THE UPPER LATERAL SUPPORTS HAS NO IMPACT ON THE PROBABILITY OF OCCURRENCE OF AN ACCIDENT AS ANY HYPOTHETICAL FAILURE OR DEGRADATION OF A SNUBBER WOULD NOT RESULT IN AN ACCIDENT CONDITION. THE CONSEQUENCES OF ACCIDENTS PREVIOUSLY EVALUATED IN THE FSAR SECTION 15 ARE NOT INCREASED,BECAUSE OF THE ELIMINATION OF LOADING CONDITIONS DUE TO POSTULATED BREAKS IN THE PRIMARY COOLANT LOOP AND ATTACHED BRANCH LINES (LARGER THAN EIGHT INCHES IN DIAMETER) DO NOT AFFECT THE OTHER LOADING CONDITIONS ANALYZED.
SUBJECT:	DCP: 89-V1N0101, REVISION 0, SEQUENCE 1

DESCRIPTION:	THIS CHANGE MODIFIES THE SUPPORTS ON THE PRESSURIZER SURGE LINE AND IS LIMITED TO MODIFICATION OF THE PIPE SUPPORTS ONLY AND DOES NOT CHANGE SYSTEM FUNCTION,PIPE ROUTING,EQUIPMENT OR COMPONENTS.
SAFETY EVALUATION:	THIS MODIFICATION DOES INVOLVE A CHANGE TO THE FACILITY AS DESCRIBED IN THE FSAR. THE NEW ANALYSIS ON THE PRESSURIZER SURGE LINE WHICH INCORPORATES LEAK-BEFORE-BREAK (LBB) TECHNOLOGY HAS DEMONSTRATED ASME CODE COMPLIANCE. THE NEW ANALYSIS IS CONSISTENT WITH THE EXISTING UNIT 2 ANALYSIS,BUT IS DIFFERENT FROM UNIT 1 PRESSURIZER SURGE LINE ANALYSIS. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF NA ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.FOR ADDITIONAL INFORMATION SEE LDCR FS 90-005.
SUBJECT:	DCP: 89-V1N0210, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP UPGRADES THE STEAM GENERATOR HYDRAULIC SNUBBERS BY ADDING "TRUE TEST-IN-PLACE" FEATURE. THIS WILL PERMIT IN-SERVICE TESTING OF THE HYDRAULIC SNUBBERS WITHOUT THE RISK,COST,AND SCHEDULE DURATION OF CLEVIS PIN REMOVAL OR SNUBBER HANDLING.
SAFETY EVALUATION:	THE MODIFICATION OF THE UPPER LATERAL SUPPORTS HAS NO IMPACT ON THE PROBABILITY OF OCCURRENCE OF AN

ACCIDENT AS ANY HYPOTHETICAL FAILURE OR DEGRADATION OF A SNUBBER WOULD NOT RESULT IN AN ACCIDENT CONDITION. THE CONSEQUENCES OF ACCIDENTS PREVIOUSLY EVALUATED IN THE FSAR SECTION 15 ARE NOT INCREASED,BECAUSE OF THE ELIMINATION OF LOADING CONDITIONS DUE TO POSTULATED BREAKS IN THE PRIMARY COOLANT LOOP AND ATTACHED BRANCH LINES (LARGER THAN EIGHT INCHES IN DIAMETER) DO NOT AFFECT THE OTHER LOADING CONDITIONS ANALYZED.

SUBJECT: DCP: 89-V1N0311, REVISION 0, SEQUENCE 1

DESCRIPTION: RELIEF VALVES 1-PSV-41324 AND 1-PSV-41328 FOR SEAL WATER INJECTION BACKFLUSHABLE FILTERS 1-1208-F4-004 AND 005 RESPECTIVELY,WILL BE REMOVED TO REDUCE POTENTIAL RCS LEAKAGE PATHS AND REDUCE PERSONNEL RADIATION EXPOSURE. CALCULATIONS AND EXPERIMENTS HAVE BEEN DONE TO ENSURE THAT THE RELATED VESSELS DO NOT EXCEED THERE DESIGN PRESSURES

SAFETY EVALUATION: THIS MODIFICATION DOES INVOLVE A CHANGE TO THE FACILITY AS DESCRIBED IN THE FSAR. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR. FSAR FIGURE 11.4.2-3 REQUIRED A CHANGE

SUBJECT: DCP: 89-V2E0114, REVISION 0, SEQUENCE 1

DESCRIPTION:	THIS CHANGE ADDED 25 NEW AND UNIQUE LOG-ON PASSWORDS FOR THE UNIT 2 PERMS MONITORS. PREVIOUSLY THE PASSWORDS WERE THE SAME FOR BOTH UNITS 1 & 2. THIS CHANGE WILL REQUIRE NEW EPROM'S TO BE INSTALLED ON THE EPROM BOARD OF THE COMMUNICATION CONSOLE . ALTHOUGH THE COMMUNICATIONS CONSOLE IS NOT SAFETY RELATED IT DOES ACCESS SAFETY RELATED MONITORS. THIS CHANGE HAS NO EFFECT ON THESE MONITORS BECAUSE OF THE ISOLATION OF THE SAFETY RELATED MONITORS FROM THE NON-SAFETY RELATED MONITORS.
SAFETY EVALUATION:	THE COMMUNICATIONS CONSOLE IS NOT SAFETY RELATED AND DOES NOT INCREASE THE PROBABILITY OR CONSEQUENCES OF AN ACCIDENT SINCE THE PERMS SYSTEM IS NOT TAKEN CREDIT FOR IN FSAR SECTION 15.
SUBJECT:	DCP: 89-V1N0312, REVISION 0, SEQUENCE 1
DESCRIPTION:	RELIEF VALVES 2-PSV-41324 AND 2-PSV-41328 FOR SEAL WATER INJECTION BACKFLUSHABLE FILTERS 2-1208-F4-004 AND 005 RESPECTIVELY,WILL BE REMOVED TO REDUCE POTENTIAL RCS LEAKAGE PATHS AND REDUCE PERSONNEL RADIATION EXPOSURE. CALCULATIONS AND EXPERIMENTS HAVE BEEN DONE TO ENSURE THAT THE RELATED VESSELS DO NOT EXCEED THERE DESIGN PRESSURES
SAFETY EVALUATION:	THIS MODIFICATION DOES INVOLVE A CHANGE TO THE FACILITY AS DESCRIBED IN THE FSAR. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF

AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR. FSAR FIGURE 11.4.2-3 REQUIRED A CHANGE.

SUBJECT: DCP: 90-VCN0176, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP MODIFIES THE SECURITY COMPUTER PROGRAMMERS CONSOLES. THIS DCP CONTAINS SAFEGUARDS INFORMATION AND THE INFORMATION GIVEN IN THIS BRIEF IS DECONTROLLED.

SAFETY EVALUATION: THE CHANGE DOES NOT AFFECT ANY SAFETY SYSTEMS OR SAFETY LIMIT SETTINGS. THEREFORE THE CHANGE DOES NOT INCREASE THE PROBABILITY OF OCCURRENCE OR CONSEQUENCES OF AN ACCIDENT DESCRIBED IN THE FSAR INCLUDING CHAPTER 15. THE CHANGE DOES NOT DECREASE THE MARGIN OF SAFETY DEFINED BY THE BASES OF THE TECHNICAL SPECIFICATIONS AND DOES NOT INVOLVE ANY UNREVIEWED SAFETY QUESTIONS BASED UPON A REVIEW OF TECHNICAL SPECIFICATIONS.

SUBJECT: DCP: 90-VCN0190, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP MODIFIED THE SECURITY CCTV MONITORS. THIS DCP CONTAINS SAFEGUARDS INFORMATION AND THE INFORMATION GIVEN IN THIS BRIEF IS DECONTROLLED.

SAFETY EVALUATION: THIS DCP DOES NOT AFFECT ANY EQUIPMENT IMPORTANT TO SAFETY. THE SECURITY SYSTEM IS REFERENCED IN FSAR SECTION 13.6 AND THE VOGTLE SECURITY PLAN. THE SECURITY SYSTEM IS NOT

MENTIONED IN TECHNICAL SPECIFICATIONS AND DOES NOT AFFECT ANY SYSTEMS REFERENCED IN THE TECHNICAL SPECIFICATIONS.

SUBJECT: DCP: 90-V1N0040, REVISION 0, SEQUENCE 2

DESCRIPTION: THIS DCP INSTALLED HEATERS IN THE DIESEL GENERATOR AIR COMPRESSOR CRANKCASES TO ELIMINATE MOISTURE INTRUSION INTO THE COMPRESSOR OIL THEREBY EXTENDING THE COMPRESSOR LIFE .

SAFETY EVALUATION: THIS CHANGE INVOLVED A MODIFICATION OF THE DIESEL GENERATOR STARTING AIR COMPRESSOR WHICH IS NON-SAFETY RELATED. THIS DESIGN CHANGE MAKES THE COMPRESSOR MORE RELIABLE AND DOES NOT AFFECT THE SAFETY RELATED PORTION OF THE DIESEL GENERATOR AIR START SYSTEM. THEREFORE IT DOES NOT HAVE ANY AFFECT ON THE FSAR SAFETY EVALUATIONS. THIS CHANGE DOES NOT AFFECT TECHNICAL SPECIFICATIONS BASED ON A REVIEW OF TECH SPECS.

SUBJECT: DCP: 90-V1N0086, REVISION 0, SEQUENCE 1

DESCRIPTION: ADD A VENT VALVE TO PREVENT HAVING TO LOWER THE SPENT FUEL POOL LEVEL BELOW THE ANTI-SIPHON HOLES TO ALLOW WORK ON "A" TRAIN SPENT FUEL POOL HEAT EXCHANGER . INSTALLED ON LINE 1-1213-005-10

SAFETY EVALUATION: THIS DCP DOES RESULT IN A CHANGE TO THE FACILITY PER FSAR FIGURE 9.1.3-1. THE VENT VALVE WILL NOT PERFORM ANY SAFETY FUNCTION AND IT WILL HAVE NO IMPACT ON THE SAFETY FUNCTION OF THE SPENT FUEL POOL COOLING SYSTEM. THE

VENT IS QUALIFIED TO SEISMIC CATEGORY 1 CRITERIA. THIS DESIGN WAS IMPLEMENTED WITH NO FUEL IN THE UNIT 1 SPENT FUEL POOL THEREFORE THIS DESIGN DOES NOT DECREASE THE MARGIN OF SAFETY DEFINED BY THE BASES OF THE TECHNICAL SPECIFICATIONS. SECTIONS 3/4.9.11 AND 5.6.2 WERE REVIEWED FOR IMPACT. THIS CHANGE DOES NOT PRESENT AN UNREVIEWED SAFETY QUESTION.

SUBJECT: DCP: 90-V1N0146, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP PROVIDES A METHOD FOR SAMPLING THE CIRCULATING WATER FOR CHEMISTRY CONTROL BY ADDING A SAMPLE LINE TO THE TURBINE PLANT COOLING TOWER BYPASS LINE. THE ADDITIONAL VALVES AND PIPING ARE NON-SAFETY RELATED,PROJECT CLASS 626,AND ARE NOT LOCATED IN A SEISMIC CATEGORY 2/1 AREA.

SAFETY EVALUATION: THE PROPOSED CHANGE WILL NOT AFFECT THE DESCRIPTION OF THE CIRCULATING WATER SYSTEM AS DESCRIBED IN THE FSAR,HOWEVER FIGURE 10.4.5-1,SHEET 2 WILL BE AFFECTED NO OTHER FSAR CHANGES ARE REQUIRED. THE CIRC WATER SYSTEM SERVES NO SAFETY RELATED FUNCTION AND HAS NO SAFETY DESIGN BASIS. THEREFORE,THIS CHANGE WILL NOT INCREASE THE PROBABILITY OF OCCURRENCE OR CONSEQUENCES OF AN ACCIDENT OR INCREASE THE PROBABILITY OF SAFETY RELATED EQUIPMENT MALFUNCTION DESCRIBED IN THE FSAR. THE CIRCULATING WATER SYSTEM IS NOT DISCUSSED IN TECHNICAL SPECIFICATIONS THIS CHANGE DOES NOT PRODUCE ANY UNREVIEWED SAFETY QUESTIONS.

SUBJECT: DCP: 90-V2E0114, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP PROVIDES AN ALTERNATE SOURCE OF COOLING WATER TO THE CIRCULATING WATER PUMPS AND MOTORS IN THE EVENT UTILITY WATER IS NOT AVAILABLE FROM THE TPCW PUMPS DISCHARGE THROUGH A FILTERING SYSTEM

SAFETY EVALUATION: THIS IS A CHANGE TO THE FACILITY AS DESCRIBED IN THE FSAR AND AFFECTS FSAR FIGURES 10.4.5-1,SHEET 2 OF 2 AND 9.2.11-1,SHEET 1 OF 3. THE PHYSICAL CHANGES COVERED DO NOT AFFECT THE CURRENT FUNCTION OF UTILITY WATER AS THE ONLY SUPPLY OF SEAL AND COOLING WATER TO UNIT 2 CIRCULATING WATER PUMPS AND MOTORS. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 90-V2N0043, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS CHANGE IMPROVED ACCESS AND HEALTH PHYSICS CONTROL BY ADDING A DOOR BETWEEN THE MAIN STEAM VALVE AREA AND LEVEL 'A' OF THE AUXILIARY BUILDING (ROOMS RA98 AND RA99)

SAFETY EVALUATION: THIS DID INVOLVE A CHANGE TO THE FACILITY AS DESCRIBED IN THE FSAR. FSAR APPENDIX 9A,SECTIONS 9A.2.7 AND 9A.2.22 AND APPENDIX 9B,SECTION C.5.A.5 REQUIRED REVISION TO DOCUMENT AND JUSTIFY THE INSTALLATION OF THE UNRATED WATERTIGHT DOOR IN A RATED FIRE BOUNDARY. ALSO FSAR FIGURES 1.2.2-

7,3F-3 (SHEET 1 OF 5),12.3.1-1 (SHEET 8 OF 40),12.3.1-2 (SHEET 8 OF 23) AND 12.3.1-3 (SHEET 8 OF 33) REQUIRED REVISION. FSAR FIGURE 9A-11 NEEDED TO BE REVISED. THIS CHANGE INVOLVED SPLICING CABLES FOR THE HEAT TRACING SYSTEM FOR FREEZE PROTECTION AS DESCRIBED IN THE FSAR SECTION 8.3.1.1.9. NO CHANGE TO THE SYSTEM DESCRIPTION WILL OCCUR DUE TO THIS MODIFICATION. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 90-V2N0060, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP PROVIDED A FLOW SENSING INSTRUMENT FOR 2FE/FT12442 (PLANT VENT FLOW TRANSMITTER) WHICH PRODUCES INDICATION OF THE AIRFLOW THROUGH THE STACK BY USING THE KURZ MODEL 455 FLOW INSTRUMENT WITH A MULTI-POINT SENSING SYSTEM (9 X 9 ARRAY) WHICH IS LESS SUSCEPTIBLE TO TURBULENCE-INDUCED ERROR.

SAFETY EVALUATION: THIS DCP IS A CHANGE TO THE PLANT AS DESCRIBED IN THE FSAR . TABLES 7.5.2-1 AND 11.5.2-5 HAD TO BE CHANGED TO REFLECT THE NEW SCALE FOR 2FT-12442. THIS CHANGE DOES NOT ADVERSELY AFFECT SYSTEM OPERATION OR PERFORMANCE. ALSO FSAR FIGURE 9.4.9-2 WAS CHANGED TO REFLECT THE INCORPORATED CHANGE BY MODIFICATION OF DRAWING S1-M-90-V1N0060-100 AND P&ID 2X4DB203. THIS DCP DOES NOT CREATE A

CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 90-V2N0062, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP REPLACED THE DOORS V22108L1166 (DOOR 166) AND V22108L1223 (DOOR 223) LOCATED IN THE AUXILIARY BUILDING ON LEVELS 1 AND 2 RESPECTIVELY WITH DOORS WITH A 3-HOUR FIRE RATING AND WITH A 4.1 PSI PRESSURE RATING (THE SAME CRITERIA USED FOR SIMILAR PRESSURE DOORS IN THE AUXILIARY BUILDING).; THE DOORS ARE AIR-TIGHT.

SAFETY EVALUATION: THE REPLACEMENT DOORS INSTALLED PER THIS DCP ARE NOT A FACTOR IN THE PROBABILITY OF ANY ACCIDENTS DESCRIBED IN SECTION 15 OF THE FSAR OR IN ANY OTHER SECTION OF THE FSAR. HOWEVER THE DESIGN AND FUNCTION OF THE DOORS AS PRESSURE AND FIRE BARRIERS WILL MITIGATE ANY INCIDENT AT THE DOOR OPENINGS IN REGARD TO THE COMMUNICATION OF STEAM,HEAT,OR RADIATION FROM A POSTULATED PIPE BREAK OR FIRE. FURTHERMORE,THE DOORS WILL ENSURE THAT THE DOOR OPENINGS CONFORM TO THE DESIGN BASES DESCRIBED IN THE FSAR SECTIONS 3.6,3.11,AND 9.5.1.

SUBJECT: DCP: 90-V2N0065, REVISION 0, SEQUENCE 1

DESCRIPTION:	BECAUSE OF REOCCURRING MAINTENANCE PROBLEMS WITH THE 6A AND 6B (2-1305-E4-021 AND 2-1305-E4-022) FEED WATER HEATER PRESSURE SAFETY VALVES 2-PSV-5002 AND 2-PSV-5003, THIS DCP INSTALLED GATE VALVES UPSTREAM OF THESE RELIEF VALVES TO BE CLOSED ONLY DURING MAINTENANCE AND INSPECTION. THESE VALVES ARE LOCKED IN THE OPEN POSITION AND COMPLY WITH ASME SECTION VIII,DIVISION I,APPENDIX M,UA-354(A). THESE VALVES DO NOT AFFECT SYSTEM OPERATION.
SAFETY EVALUATION:	SINCE FAILURE OF THE 6A AND 6B FEED WATER HEATERS DOES NOT AFFECT THE HEALTH AND SAFETY OF THE PUBLIC AND THEY ARE NON SAFETY RELATED COMPONENTS. THIS DCP DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 90-V2N0065, REVISION 0, SEQUENCE 2
DESCRIPTION:	BECAUSE OF REOCCURRING MAINTENANCE PROBLEMS WITH THE 6A AND 6B (2-1305-E4-021 AND 2-1305-E4-022) FEED WATER HEATER PRESSURE SAFETY VALVES 2-PSV-5002 AND 2-PSV-5003, THIS DCP REPLACED THESE RELIEF VALVES WITH MORE RELIABLE PILOT OPERATED RELIEF VALVES (DRESSER INDUSTRIES MODEL 3916 HMN). PIPE SUPPORT HANGERS 2J1-1310-035-01-N01 AND 2J1-1310-041-01-N01 WERE CHANGED TO 3-WAY RESTRAINTS INSTEAD OF 2-WAY RESTRAINTS. THE RELIEF VALVES ARE NON-SAFETY RELATED ALONG WITH THE FEED WATER HEATERS (PROJECT CLASS 424).

THESE VALVES DO NOT AFFECT SYSTEM OPERATION.

SAFETY EVALUATION: SINCE FAILURE OF THE 6A AND 6B FEED WATER HEATERS DOES NOT AFFECT THE HEALTH AND SAFETY OF THE PUBLIC AND THEY ARE NON SAFETY RELATED COMPONENTS. THIS DCP DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 90-V2N0121, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP REPLACED EXISTING CLAMP ASSEMBLIES ON A PORTION OF THE INSTRUMENTATION PORT COLUMN ASSEMBLY,ON TOP OF THE REACTOR VESSEL HEAD,WITH AN UPGRADED PORT COLUMN ASSEMBLY. THE REPLACEMENT ASSEMBLY UTILIZES AN UPPER AND LOWER ARTICULATED CLAMP/POSITIONER DESIGN. THIS NEW DESIGN FACILITATES QUICK ASSEMBLY AND DISASSEMBLY OF THE INSTRUMENTATION PORT COLUMN,THEREBY REDUCING PERSONNEL RADIATION EXPOSURE ASSOCIATED WITH MAINTENANCE AND REFUELING.

SAFETY EVALUATION: THE INTEGRITY OF THE INSTRUMENTATION PORT COLUMN ASSEMBLY REMAINS EQUIVALENT TO THAT PRIOR TO THE MODIFICATION AND THEREFORE THE ASSUMPTIONS IN THE RADIOLOGICAL CONSEQUENCES REMAIN BOUNDED. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS

DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 90-V1N0160, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP PROVIDES A METHOD FOR SAMPLING THE CIRCULATING WATER FOR CHEMISTRY CONTROL BY ADDING A SAMPLE LINE TO THE TURBINE PLANT COOLING TOWER BYPASS LINE

SAFETY EVALUATION: THE CIRC WATER SYSTEM SERVES NO SAFETY RELATED FUNCTION AND HAS NO SAFETY DESIGN BASIS. THEREFORE THIS MODIFICATION DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 90-V2N0163, REVISION 0, SEQUENCE 2

DESCRIPTION: THIS DCP ADDED GATE AND GLOBE VALVES INSIDE THE CONTAINMENT AND AUXILIARY BUILDINGS TO FACILITATE LOCAL LEAK RATE TESTING (LLRT) OF CONTAINMENT ISOLATION VALVES FOR CONTAINMENT PENETRATION NUMBERS 50,12A/69A,11A/69B,AND PEN 63. THIS WILL REDUCE THE TIME TO PERFORM THE LLRT THUS REDUCING PERSONNEL RADIATION EXPOSURE.

SAFETY EVALUATION: THIS IS A CHANGE TO THE FACILITY AS DESCRIBED IN THE FSAR SECTIONS 5.0,6.2.4,6.2.6,9.2.3,9.3.2,10.3.2,AND 10.4.10 ARE AFFECTED. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED

IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR

SUBJECT: DCP: 90-V2N0184, REVISION 0, SEQUENCE 1

DESCRIPTION: DUE TO THE PREVIOUS FLOW SWITCHES,FOR MAIN GENERATOR STATOR COOLING HIGH VOLTAGE BUSHING FLOW AND EXCITER RECTIFIER FLOW,NO LONGER BEING MANUFACTURED AND A SINGLE FAILURE 1 OUT OF 1 LOGIC TO TRIP CONFIGURATION; THIS DCP INSTALLED DIFFERENTIAL FLOW ORIFICES AND DIFFERENTIAL INDICATING SWITCHES UTILIZING A 2 OUT OF 3 TRIPPING LOGIC .

SAFETY EVALUATION: THIS IS A CHANGE TO THE PLANT AS DESCRIBED IN THE FSAR AND FIGURES 10.2.2-1 (SHEET 8 OF 9) (2X4DB193) AND 10.2.2-3 (2X5DN203-1) HAD TO BE REVISED. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR

SUBJECT: DCP: 90-V2N0192, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DESIGN CHANGE INSTALLS COOLING FANS IN THE REFUELING MACHINE CONSOLE TO IMPROVE COOLING AIR FLOW . THE

REFUELING MACHINE POSITIONING SYSTEM WAS IMPROVED BY REPLACING THE EXISTING ENCODER CHIP WITH A FUNCTIONALLY IDENTICAL CHIP WITH IMPROVED NOISE IMMUNITY AND REPLACEMENT OF CABLE AND CONNECTORS FOR THE HOIST POSITION ENCODER CIRCUITS. THE CABLE WAS REROUTED FOR BETTER NOISE PERFORMANCE. THIS CHANGE ALSO PROVIDED PERMANENT SOUND POWERED TELEPHONE COMMUNICATIONS AND POWER RECEPTACLES FOR TEMPORARY LIGHTING ON THE REFUELING MACHINE. THE REFUELING MACHINE IS SEISMIC CATEGORY 2 EQUIPMENT WHICH WAS DESIGNED TO SATISFY SEISMIC 2/1 REQUIREMENTS. WESTINGHOUSE HAS EVALUATED THE ADDITIONAL WEIGHT FROM THE COMMUNICATIONS AND POWER CIRCUIT AND DETERMINED THERE IS NO ADVERSE EFFECT ON THE STRUCTURAL ADEQUACY OF THE REFUELING MACHINE.

SAFETY EVALUATION:

THIS DCP IS A CHANGE TO THE PLANT AS DESCRIBED IN FSAR SECTION 9A.2.76-15 AND WAS REVISED TO REFLECT THE CHANGE IN THE FIXED COMBUSTIBLE LOADING DUE TO CABLE INSULATION IN FIRE AREA 2-CTB FOR THE EXPOSED SOUND POWERED PHONE CABLES. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR

SUBJECT:

DCP: 90-V2N0193, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP ABANDONED IN PLACE ONE PIPE SUPPORT ON THE CONTAINMENT SPRAY SYSTEM (V2-1206-008-H003) WHICH IS ATTACHED TO THE CONTAINMENT DOME AND IS INACCESSIBLE FOR INSPECTION .

SAFETY EVALUATION: DESIGN STRESS CALCULATIONS HAVE BEEN PERFORMED TO WHICH SHOW THAT THE STRESSES ASSOCIATED WITH THE CONTAINMENT SPRAY SYSTEM ARE STILL WITHIN THE STRESS ALLOWABLE CODE LIMITS AND ARE CONSISTENT WITH THE ORIGINAL DESIGN BASES FOR THE SYSTEM. THIS CHANGE DOES NOT INVOLVE A CHANGE TO THE FACILITY OR A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 90-V2N0196, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP ADDED SUPPORTS TO THE TERMINATION ENDS OF CABLES 2DD101LA,LB,AND LC ON BATTERY BANK 2DD1B TO PREVENT POST DAMAGE FROM THE LARGE SIZE AND RELATIVELY STIFF CABLES CAUSING STRESS ON THE BATTERY POST.

SAFETY EVALUATION: THIS IS A CHANGE TO THE PLANT AS DESCRIBED IN THE FSAR SECTIONS 3.1.2,5.4.11.3,14.2.8.1.74,8.1.2,8.1.4.2,7.3.8.1.1.H,7.3.12.1.1.J,7.3.13.1.1,7.3.14.1.1.J,10.4.9.2.2.3,10.4.9.2.2.4,10.4.9.3,8.3.2.1,8.3.2.1.1,8.3.2.1.5,8.3.2.2,8.3.1.1.2,8.3.1.1.5,8.3.1.1.13,AND FSAR TABLES 3.2.2-1,1.3.2-1,1.7.1-1,8.3.2-5. ALSO FSAR SECTION 9A.2 WAS CHANGED TO REFLECT

	COMBUSTION LOADING CHANGES. THIS CHANGE DOES NOT INVOLVE A CHANGE TO THE FACILITY OR A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-VAN0134, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP REPLACED THE DURESS SYSTEM WHICH IS OBSOLETE. THIS DCP CONTAINS SAFEGUARDS INFORMATION AND THE INFORMATION GIVEN IN THIS BRIEF IS DECONTROLLED.
SAFETY EVALUATION:	THIS DCP DOES NOT AFFECT ANY EQUIPMENT IMPORTANT TO SAFETY. THE SECURITY SYSTEM IS REFERENCED IN FSAR SECTION 13.6,AND THE VOGTLE SECURITY PLAN. THE SECURITY SYSTEM IS NOT MENTIONED IN TECHNICAL SPECIFICATIONS AND DOES NOT AFFECT ANY SYSTEMS REFERENCED IN THE TECHNICAL SPECIFICATIONS.
SUBJECT:	DCP: 91-VAN0181, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP UPGRADED THE SECURITY SYSTEM CCTV SWITCHER TO INCORPORATE MULTIPLE CAMERA CALL-UP ALARM (SALVO SWITCHING). THIS DCP CONTAINS SAFEGUARDS INFORMATION AND THE INFORMATION GIVEN IN THIS BRIEF IS FROM DECONTROLLED DOCUMENTS.

SAFETY EVALUATION:	THIS ACTIVIT ; INVOLVES CHANGES TO THE SECURITY CCTV SYSTEM ONLY. THIS SYSTEM IS NOT SAFETY RELATED AND DOES NOT AFFECT ANY SAFETY RELATED EQUIPMENT. THE SECURITY SYSTEM IS REFERENCED IN FSAR SECTION 13.6,AND THE VOGTLE SECURITY PLAN. THE SECURITY SYSTEM IS NOT MENTIONED IN TECHNICAL SPECIFICATIONS AND DOES NOT AFFECT ANY SYSTEMS REFERENCED IN THE TECHNICAL SPECIFICATIONS.
SUBJECT:	DCP: 91-VCN0171, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP PROVIDED A TYPICAL DETAIL FOR STRUCTURAL PAD-EYES TO BE INSTALLED IN VARIOUS LOCATIONS IN THE PLANT FOR LIFTING AND RIGGING OF PLANT EQUIPMENT DURING MAINTENANCE AND INSPECTION. MANY PLANT AREAS DO NOT HAVE SUFFICIENT LOCAL LIFTING SUPPORTS TO FACILITATE REMOVAL OR REPLACEMENT OF EQUIPMENT DURING MAINTENANCE ACTIVITIES.
SAFETY EVALUATION:	THIS MODIFICATION DOES NOT INVOLVE A CHANGE TO THE FACILITY AS DESCRIBED IN THE FSAR. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V1N0009, REVISION 0, SEQUENCE 1 & 2

DESCRIPTION: THIS DCP REMOVED THE UNIT 1 RTD BYPASS SYSTEM AND REPLACED IT WITH FAST ACTING,NARROW RANGE,DUAL-ELEMENT THERMOWELL-MOUNTED RTDS INSTALLED DIRECTLY INTO THE EXISTING REACTOR COOLANT PIPING PENETRATIONS (THREE MOUNTED IN THE OLD HOT LEG SCOOP PENETRATION AND ONE MOUNTED IN THE OLD COLD LEG NOZZLE PENETRATION WITH THE CROSSOVER LINE HOLE BEING CAPPED OFF).

SAFETY EVALUATION: REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY IS MAINTAINED. REACTOR COOLANT LOOP TEMPERATURE INPUTS FOR CONTROL AND PROTECTION FUNCTIONS CONTINUE TO BE SUPPLIED. ALSO OTHER EQUIPMENT IMPORTANT TO SAFETY ARE UNAFFECTED AND CONTINUE TO FUNCTION AS DESIGNED. THE ARRANGEMENT OF THE RTD MEASUREMENT SYSTEM DOES NOT AFFECT THE FUNCTION OF EQUIPMENT USED IN THE MITIGATION OF THE RADIOLOGICAL CONSEQUENCES OF ANY ACCIDENT. THEREFORE,THIS CHANGE DOES NOT CREATE THE POSSIBILITY OF A MALFUNCTION OF EQUIPMENT OR AN UNREVIEWED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V1N0091, REVISION 0, SEQUENCE 1

DESCRIPTION: NUCLEAR SERVICE COOLING WATER SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM INSIDE CONTAINMENT WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND

MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THE PIPE STRESS ANALYSIS PERFORMED FOR THIS DESIGN CHANGE VERIFIES THAT APPLICABLE PIPE STRESS ALLOWABLE IS NOT EXCEEDED DUE TO THE REMOVAL OF THESE SNUBBERS. THE REDUCTION IN THE NUMBER OF SNUBBERS DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V1N0092, REVISION 0, SEQUENCE 1

DESCRIPTION: SAFETY INJECTION SYSTEM SNUBBER REDUCTION PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM INSIDE CONTAINMENT WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE:A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS DCP DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT:	DCP: 91-V1N0094, REVISION 0, SEQUENCE 1
DESCRIPTION:	REACTOR COOLANT SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM INSIDE CONTAINMENT WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.
SAFETY EVALUATION:	THIS DESIGN CHANGE ONLY MODIFIED THE PIPE SUPPORTS ASSOCIATED WITH THE REACTOR COOLANT PIPING SYSTEM INSIDE THE CONTAINMENT BUILDING. BASED ON A REVIEW OF FSAR SECTIONS 3,6,9,AND 15 THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR. THIS CHANGE DOES NOT CREATE AN UNPOSTULATED ACCIDENT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V1N0095, REVISION 0, SEQUENCE 1
DESCRIPTION:	CVCS SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM INSIDE CONTAINMENT WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS.

THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS DESIGN CHANGE ONLY MODIFIES THE PIPE SUPPORTS ASSOCIATED WITH THE CVCS PIPING SYSTEM INSIDE THE CONTAINMENT BUILDING. BASED ON A REVIEW OF FSAR SECTIONS 3,6,9,AND 15 THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION ACCIDENT ANALYSIS PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR. THIS CHANGE DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V1N0096, REVISION 0, SEQUENCE 1

DESCRIPTION: MAIN STEAM SYSTEM SNUBBER REDUCTION PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEM INSIDE CONTAINMENT WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THIS DESIGN CHANGE ONLY MODIFIED THE PIPE SUPPORTS ASSOCIATED WITH THE MAIN STEAM PIPING SYSTEM INSIDE THE CONTAINMENT BUILDING. BASED ON A REVIEW OF FSAR SECTIONS 3,6,9,AND 15 THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT

ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V1N0097, REVISION 0, SEQUENCE 1

DESCRIPTION: CONTAINMENT MINI PURGE SYSTEM,THE CONTAINMENT NORMAL PREACCESS PURGE EXHAUST SYSTEMS,THE CONTAINMENT FIRE PROTECTION- SEISMIC CATEGORY I WATER SYSTEM,THE POST-ACCIDENT SAMPLING SYSTEM,AND THE NSS LIQUID SAMPLING SYSTEM SNUBBER REDUCTION. PIPING SYSTEM RE-ANALYSIS,WITH THE INTENT TO OPTIMIZE THE DESIGN AND REDUCE THE QUANTITY OF SNUBBERS,HAS RESULTED IN THE ELIMINATION OF SNUBBERS FROM THIS PORTION OF THE SYSTEMS INSIDE CONTAINMENT WHILE MAINTAINING STRESS CODES WITHIN ALLOWABLE CODE LIMITS. THE LONG TERM EFFECT WILL BE A SIGNIFICANT SAVINGS IN INSPECTION AND MAINTENANCE COSTS IN ADDITION TO A REDUCTION IN PERSONNEL RADIATION EXPOSURE OVER THE LIFE OF THE PLANT.

SAFETY EVALUATION: THE PIPE SUPPORT MODIFICATIONS HAVE BEEN DESIGNED WITHIN THE ALLOWABLE CODE LIMITS AND THE ORIGINAL DESIGN BASES FOR THE SYSTEMS AS DEMONSTRATED BY THE CALCULATIONS IDENTIFIED IN THE CALCULATION RECORD IN THE DCP. THE MODIFICATIONS DO NOT AFFECT THE SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT:	DCP: 91-V1N0164, REVISION 0, SEQUENCE 1
DESCRIPTION:	BEGIN IMPLEMENTATION OF THE UPGRADE OF THE UNIT 1 FUEL TO VANTAGE 5 LOPAR FUEL ASSEMBLIES. IT ALSO INCORPORATES THE CHANGES TO THE FOLLOWING: 1) REACTOR CORE SAFETY LIMITS AND DNB PARAMETERS. 2) INCREASE IN SHUTDOWN AND CONTROL ROD DROP TIME 3) AXIAL FLUX DIFFERENCE AND PEAKING FACTOR SURVEILLANCE 4) WIDENED ACCUMULATOR WATER LEVEL RANGE 5) MINIMUM RWST SOLUTION TEMPERATURE . THE LAST TWO OF THESE CHANGES ARE NOT DIRECTLY RELATED TO THE VANTAGE 5 SAFETY ANALYSES.
SAFETY EVALUATION:	THIS DCP REQUIRES CHANGES TO THE FOLLOWING FSAR SECTIONS : 4.1,4.2.1,4.2.2,4.2.3,4.2.4,4.3.1,4.3.2,4.3.3,4.4.1,4.4.2,4.4.3,4.4.4,CHAPTER 4 REFERENCES,5.3,6.2.1,9.1.1,15.0.3,15.0.4,15.0.5,15.0.6,15.0.9,15.0.11,15.1,15.1.1,15.1.2,15.1.3,15.2,15.2.2,15.2.3,15.2.4,15.3,15.3.1,15.3.2,15.3.3,15.3.4,15.4,15.4.1,15.4.2,15.4.3,15.4.4,15.4.6,15.4.8,15.4.9,15.5,15.5.1,15.6.1,15.6.3,15.6.5,15.7.4,15A.1,15A.2,15A.3,15A.4,CHAPTER 15 REFERENCES AND FSAR FIGURES 4.2-1 THROUGH 4.2-11,4.2-14,4.2-15,4.3-1,4.3-3 THROUGH 4.3-17,4.3-21,4.3-22,4.3-23,4.3-27 THROUGH 4.3-35,4.3-38,4.3-39,4.4-1,4.4-8,4.4-9,6.2.1-35 THROUGH 6.2.1-37,15.0.3-1,15.0.3-2,15.0.4-1,15.0.4-2,15.0.5-1 THROUGH 15.0.5-3,15.0.6-1,15.1.2-1,15.1.2 2,15.1.3-1 THROUGH 15.1.3-8,15.2.3-1 THROUGH 15.2.3-8,15.3.1-1 THROUGH 15.3.1-4,15.3.2-1 THROUGH 15.3.2-4,15.3.3-1 THROUGH 15.3.3-4B,15.4.1-1 THROUGH 15.4.1-3,15.4.2-1 THROUGH 15.4.2-9,15.4.3-2,15.4.3-3,15.4.4-1 THROUGH 15.4.4-5,15.4.8-1 THROUGH 15.4.8-4,15.4.9-1 THROUGH 15.4.9-3,15.5.1-1,15.5.1-2,15.5.1-3,15.6.1-1,15.6.1-2,15.6.3-1 THROUGH 15.6.3-11,15.6.3-13 THROUGH 15.6.3-15,15.6.5-2

	THROUGH 15.6.5-48. AND ASSOCIATED TABLES. THIS CHANGE DOES NOT RESULT IN A CHANGE TO THE ENVIRONMENTAL PROTECTION PLAN. THIS DCP DOES NOT CREATE A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V1N0192, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP INSTALLED OPEN/CLOSED INDICATION LOCALLY ON THE TRANSFER TUBE GATE VALVE 1-1213-U6-086 TO ENSURE THE VALVE OPERATOR IS NOT OVERTORQUED DURING OPERATION TO PREVENT DAMAGING THE VALVE OPERATOR. THIS DOES NOT CHANGE SYSTEM OPERATION.
SAFETY EVALUATION:	THIS CHANGE DOES NOT AFFECT ANY SAFETY SYSTEM. THEREFORE,THIS CHANGE DOES NOT INVOLVE A CHANGE TO THE FACILITY OR A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V1N0218, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP REMOVED AND CAPPED THE BIT BYPASS LINE DUE TO REOCCURRING LEAKS

THROUGH ISOLATION VALVE 1-1204-U4-007 WHICH ALSO SERVED AS A OUTBOARD CONTAINMENT ISOLATION VALVE . WITH THE ELIMINATION OF THE USE OF THE BIT, THIS LINE IS NO LONGER NECESSARY AND SERVES NO SAFETY FUNCTION OTHER THAN MAINTAINING THE PRESSURE INTEGRITY OF THE SAFETY INJECTION SYSTEM.

SAFETY EVALUATION: THIS MODIFICATION DOES CREATE A CHANGE TO THE PLANT AS DESCRIBED IN THE FSAR PER TABLE 6.2.4-1 (SHEET 3 OF 10),FIGURE 6.2.4-1 (SHEET 6 OF 12),FIGURE 6.3.2-1 (SHEET 1 OF 4) AND TABLE 16.3-4 (SHEET 10 OF 15) WERE CHANGED ACCORDINGLY. IT DOES NOT CHANGE ANY PROCEDURES DESCRIBED OR IMPLIED IN THE FSAR AND DOES NOT REQUIRE ANY TEST OR EXPERIMENTS. IT HAS NO EFFECT ON TECH SPECS .IT DOES NOT INCREASE THE PROBABILITY,INCREASE THE CONSEQUENCES,OR INCREASE THE PROBABILITY OF AN ACCIDENT. IT DOES NOT INCREASE THE CONSEQUENCES OF AN EQUIPMENT MALFUNCTION IMPORTANT TO SAFETY. IT DOES NOT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V1N0225, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP RAISED THE OTDT ROD STOP AND AUTO TURBINE RUNBACK SETPOINT TO 1 PERCENT BELOW THE OTDT REACTOR TRIP SETPOINT. AN EVALUATION WAS CONDUCTED AFTER THE PLANT CHANGED TO VANTAGE 5 FUEL,ATTEMPTED TO REACH FULL POWER AND RECEIVED SEVERAL OTDT ROD STOP AND RUNBACK ALARMS.

SAFETY EVALUATION: THE FUNCTION OF THE TURBINE RUNBACK ON OTDT IS TO IMPROVE PLANT AVAILABILITY BY ASSISTING THE

OPERATORS IN MITIGATING TRANSIENTS WHICH CAUSE UNNECESSARY REACTOR TRIPS. SETPOINT VALUES OR CHANGES TO THE SETPOINT DO NOT INCREASE THE PROBABILITY OF AN ACCIDENT PREVIOUSLY EVALUATED IN THE FSAR. THEREFORE THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V1N0225, REVISION 0, SEQUENCE 2

DESCRIPTION: THIS DCP RAISED THE OPDT ROD STOP AND AUTO TURBINE RUNBACK SETPOINT TO 1 PERCENT BELOW THE OPDT REACTOR TRIP SETPOINT. AN EVALUATION WAS CONDUCTED AFTER THE PLANT CHANGED TO VANTAGE 5 FUEL AND ATTEMPTED TO REACH FULL POWER AND RECEIVED SEVERAL OPDT ROD STOP AND RUNBACK ALARMS.

SAFETY EVALUATION: THE FUNCTION OF THE TURBINE RUNBACK ON OPDT IS TO IMPROVE PLANT AVABILITY BY ASSISTING THE OPERATORS IN MITIGATING TRANSIENTS WHICH CAUSE UNNECESSARY REACTOR TRIPS. SETPOINT VALUES OR CHANGES TO THE SETPOINT DO NOT INCREASE THE PROBABILITY OF AN ACCIDENT PREVIOUSLY EVALUATED IN THE FSAR. THEREFORE THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT:	DCP: 91-V2N0061, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP REPLACED THE EXISTING SOLENOID OPERATED GLOBE VALVE 2HV-8220 WITH A SOLENOID OPERATED GATE VALVE WHICH HAS IMPROVED DESIGN FEATURES. THE NEW GATE VALVE MINIMIZES IN-LINE LEAKAGE AND PROVIDES MORE RELIABLE POSITION INDICATION.
SAFETY EVALUATION:	PASS DOES NOT PERFORM ANY DIRECT SAFETY FUNCTION . HOWEVER,WHEN POST-ACCIDENT SAMPLING IS NOT REQUIRED,CONTAINMENT ISOLATION INTEGRITY IS MAINTAINED BY THE INNER (2HV-3548) AND OUTER (2HV-8220) CONTAINMENT ISOLATION VALVES. THESE VALVES ARE REACTOR COOLANT SYSTEM BOUNDARY VALVES SUBJECT TO THE DESIGN REQUIREMENTS OF GDC 54 AND 55 (10CFR50,APPENDIX A). REPLACING THE EXISTING SOLENOID OPERATED GLOBE VALVE WITH A SOLENOID OPERATED GATE VALVE MEETING THE ORIGINAL DESIGN,MATERIAL AND CONSTRUCTION STANDARDS,WILL NOT ADVERSELY AFFECT THE OPERATION OF THE PASS OR THE CAPABILITY TO ISOLATE CONTAINMENT. THEREFORE THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V2N0089, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP DELETED THE NEGATIVE FLUX RATE REACTOR TRIP (NFRT) THUS

IMPROVING THE PLANTS RELIABILITY AND AVAILABILITY BY ELIMINATING INADVERTENT REACTOR TRIPS CAUSED BY HIGH NEGATIVE FLUX RATES.

SAFETY EVALUATION: THIS DCP DOES CREATE A CHANGE TO THE PLANT AS DESCRIBED IN THE FSAR PER SECTIONS 7.2,15.0,15.4,AND 16.3 AND TABLES 7.2.1-1,7.2.1-3,7.2.2-1,15.0.1-10,15.0.6-1,15.0.8-1,AND 16.3-1 WHICH HAVE BEEN CHANGED ACCORDINGLY. THE EVALUATION FOR THE EFFECTS OF ELIMINATING THE NFRT FUNCTION ON THE LOCA AND THE NON-LOCA TRANSIENTS HAS TAKEN INTO ACCOUNT THE APPLICABLE TECHNICAL SPECIFICATIONS AND HAS BOUNDED THE CONDITIONS UNDER WHICH THE SPECIFICATIONS PERMIT SAFE OPERATION. THESE EVALUATIONS DETERMINED THAT THE APPLICABLE TECHNICAL SPECIFICATION DNB DESIGN BASES WITH THE NFRT REMOVAL WERE MAINTAINED WITHIN THE MARGIN OF SAFETY AS DEFINED IN TECH. SPECS.

SUBJECT: DCP: 91-V2N0101, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP INSTALLED 3 WIRE MESH DOORS AND ONE REMOVABLE WIRE MESH PARTITION IN THE ACCESS PASSAGEWAYS INTO THE BIOSHIELD AREA TO ALLOW HEALTH PHYSICS TO CONTROL ACCESS INTO THIS AREA.

SAFETY EVALUATION: SINCE THE WIRE MESH DOORS ARE SEISMIC CATEGORY 2 STRUCTURES WHICH ARE DESIGNED TO SATISFY SEISMIC 2 OVER 1 CRITERIA AND THE FAILURE MODE OF THE INORGANIC COATING IS POWDERING,WHICH MINIMIZES ACCUMULATION IN THE CONTAINMENT EMERGENCY SUMPS,THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT

ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR. THE QUANTITY OF HYDROGEN PRODUCING ELEMENT WHICH WILL BE ADDED INSIDE THE UNIT 2 CONTAINMENT BUILDING AS A RESULT OF THIS ACTIVITY IS MUCH LESS THAN THE MARGIN THAT EXIST FOR SUCH ELEMENTS,THEREFORE IT WILL HAVE NO EFFECT ON THE TECHNICAL SPECIFICATION SAFETY MARGINS.

SUBJECT: DCP: 91-V2N0103, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP PROVIDED A MORE RELIABLE METHOD OF NSCW TOWER LEVEL INDICATION AND LEVEL CONTROL BY REPLACING A PORTION OF THE EXISTING 3/8" STAINLESS STEEL TUBING WITH 3/4" TUBING FOR LEVEL TRANSMITTERS 2LT-1600,1601,1606,AND 1607.THE PREVIOUS TUBING WAS CLOGGING DUE TO ALGAE. THE LARGER INNER DIAMETER MINIMIZES CLOGGING AND FACILITATES CLEANING IF REQUIRED. THIS DCP ALSO INSTALLS A LOCAL SCALE IN THE NSCW TOWER BASIN TO ALLOW DETERMINATION OF THE NSCW BASIN LEVEL LOCALLY.

SAFETY EVALUATION: THE BUBBLER SYSTEMS WHICH MEASURE THE NSCW TOWER BASIN LEVEL ARE SEISMICALLY MOUNTED AND ARE NON-SAFETY RELATED. THEY ARE NOT REQUIRED TO MITIGATE THE CONSEQUENCES OF AN ACCIDENT AND THE LAMACOID PHENOLIC MATERIAL OR LEXAN IS COMPATIBLE WITH THE NSCW WATER CHEMISTRY. THEREFORE THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF

AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V2N0112, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP PROVIDED THE DOCUMENTATION NECESSARY TO MAKE THE TEMP MOD (TM-2-90-018),WHICH FIXED THE WIRING PROBLEM OF SEPARATION,OF THE POWER FAILURE ALARM FROM THE STEAM GENERATOR LEVEL CONTROL/INDICATION SIGNAL,INTO A PERMANENT PLANT DESIGN.

SAFETY EVALUATION: THIS CHANGE DOES NOT AFFECT THE OPERATION OR CHANGE THE FUNCTION OF THE STEAM GENERATOR LEVEL CIRCUIT. THE CHANGE CORRECTS THE WIRING PROBLEM SO THAT THE POWER FAILURE ALARM CIRCUIT AND THE STEAM GENERATOR LEVEL CIRCUIT WILL FUNCTION PER THEIR DESIGN INTENT. THEREFORE THIS CHANGE DOES NOT AFFECT THE ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V2N0116, REVISION 1, SEQUENCE 1

DESCRIPTION: THIS DCP REPLACED SHUTTLE VALVE 12 ON BOARD 1A-6952 OF THE EMERGENCY DIESEL GENERATOR PNEUMATIC CONTROL CIRCUITRY WITH A MORE RELIABLE "OR" ELEMENT. THE NEW ELEMENTS DIAPHRAGM SCHEME OF OPERATION IS NOT AS SENSITIVE TO FLOW VARIATIONS AS THE BALL SCHEME OF OPERATION. THIS

CIRCUITRY OPERATES THE FUEL RACK SHUTDOWN CYLINDER OF THE ENGINE AND THE AIR FLOW TO THE ENGINE TRIP ALARM.

SAFETY EVALUATION: THIS DESIGN CHANGE DECREASED THE POSSIBILITY OF A D/G MALFUNCTION IN THAT THE "OR" ELEMENT IN PLACE OF THE STICKING SHUTTLE VALVE WILL INCREASE THE START-UP RELIABILITY,AND THE ELIMINATION OF THE SPURIOUS ANNUCIATIONS WILL INCREASE THE ANNUCIATOR CREDIBILITY. THEREFORE THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V2N0129, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP REPLACED THE MAIN FEED WATER ISOLATION VALVE HYDRAULIC FLUID RESERVOIR FILLER/BREATHER CAPS WITH DESICCANT FILTER/BREATHERS. THIS CHANGE WILL NOT AFFECT THE OPERATION OR RESPONSE OF THE SYSTEM BUT WILL PREVENT MOISTURE INTRUSION WHICH HAS BEEN ATTRIBUTED TO SEVERAL INDUSTRY EVENT FAILURES.

SAFETY EVALUATION: SINCE THIS CHANGE IMPROVES THE ABILITY TO MAINTAIN CLEAN MOISTURE FREE HYDRAULIC FLUID THIS CHANGE IMPROVES THE RELIABILITY OF THE VALVES TO FUNCTION WHEN REQUIRED AND DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT

	CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V2N0142, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP PROVIDED SEPARATE POWER SUPPLIES TO THE AUXILIARY RELAYS IN 2-HV-8804A AND 2-HV-8804B CONTROL CIRCUITRY. THESE SEPARATE POWER SOURCES FROM 2AYB1 (FOR 2-HV-8804A) AND 2BYB1 (FOR 2-HV-8804B) PROVIDE POWER THROUGH THE 2-HV-8804A AND 2-HV-8804B LIMIT SWITCH CONTACTS (#14) TO THE AUX RELAY MAINTAINING THE 2-HV-8804A AND 2-HV-8804B VALVE CLOSED PERMISSIVE INTERLOCK. THIS ENABLES THE OPERATION OF 2-HV-8702B,2-HV-8812A,AND 2-HV-8812B FROM THE MAIN CONTROL BOARD WHEN MCC COMPARTMENT CIRCUIT BREAKERS 2ABB05 AND 2BBB05 ARE OPENED DURING MODE 4,5,AND 6. POWER IS PROVIDED TO THESE CIRCUITS BY NEW WIRING FROM DISTRIBUTION PANEL 2BYB1 TO 2BBB05. THE OPERATION OF THESE VALVES DURING MODES 4,5,AND 6 PREVIOUSLY REQUIRED USE OF THE SHUTDOWN PANELS WHICH BYPASS ALL ASSOCIATED SAFETY INTERLOCKS.
SAFETY EVALUATION:	THIS CHANGE DOES NOT ADD ANY CAPABILITIES OR OPERATIONAL CHARACTERISTICS THAT DIFFER FROM THE ORIGINAL DESIGN. ALL SAFETY INTERLOCKS ASSOCIATED WITH THE RHR SYSTEM WILL REMAIN THE SAME AND NO NEW PERFORMANCE REQUIREMENTS ARE IMPOSED ON THE SYSTEM. THEREFORE THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT

CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V2N0175, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP REPLACED THE FLOW METER SYSTEM FOR 2FT-0018,WHICH WAS NO LONGER SERVICEABLE.WITH A NEWER MODEL OF THE SAME DESIGN AND MANUFACTURER.

SAFETY EVALUATION: THIS DCP DID RESULT IN A CHANGE TO THE PLANT AS DESCRIBED IN THE FSAR PER TABLE 11.5.2-5 (SHEET 1 OF 2). THE INSTRUMENT RANGE COLUMN CHANGED TO 0-225 GAL/MIN. (REF LDCR FS-91-019.)THIS CHANGE DOES NOT INVOLVE A CHANGE TO THE FACILITY OR A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 91-V2N0177, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DESIGN CHANGE ADDED A VARIABLE SPRING SUPPORT ON THE 10 INCH STEAM PACKING EXHAUSTER BLOWER DISCHARGE PIPING IN THE TURBINE BUILDING. THIS CHANGE WILL REDUCE THE WEAR ON AND PREVENT SLIPPING OF THE ISOMODE PADS TO ENSURE THAT THE INTEGRITY OF THE PIPING IS MAINTAINED.

SAFETY EVALUATION: THE ADDITION OF THE VARIABLE SPRING SUPPORT TO THE MAIN STEAM SYSTEM 1301 IN THE TURBINE BUILDING IS NOT SAFETY

	RELATED,IMPORTANT TO SAFETY,OR REQUIRED TO FUNCTION IN SUPPORT OF ANY SAFETY RELATED COMPONENTS AND DOES NOT AFFECT THE OPERATION,FUNCTION,OR THE SETPOINTS OF THE SYSTEM. THEREFORE THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V2N0184, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP REPLACED THE OBSOLETE RCP UNDER FREQUENCY RELAYS WITH A NEW ABB MODEL 422B1275 RELAY WITH MINOR WIRING CHANGES INTERNAL TO THE SWITCHGEAR.
SAFETY EVALUATION:	SINCE THE NEW RELAYS DO NOT CHANGE THE SYSTEM OPERATION THIS CHANGE DOES NOT AFFECT THE ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V2N0193, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP INSTALLED OPEN/CLOSED INDICATION LOCALLY ON TRANSFER TUBE GATE VALVE 2-1213-U6-086 TO PREVENT DAMAGING THE VALVE OPERATOR. THIS DOES NOT CHANGE SYSTEM OPERATION.

SAFETY EVALUATION:	THE CHANGE DOES NOT AFFECT THE OPERATION OF THE VALVE. THE VALVE OPERATOR SERVES NO SAFETY RELATED FUNCTION,NOR DOES THE CHANGE AFFECT ANY SAFETY RELATED EQUIPMENT. THIS CHANGE DOES NOT AFFECT THE ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 91-V2N0229, REVISION 1, SEQUENCE 1
DESCRIPTION:	THIS DCP INSTALLED SEALS,TO PREVENT MOISTURE INTRUSION FROM STEAM,ON ASCO SOLENOIDS 2-HY-8888,2-HY-8964,2-FY-510A.,2FY-520A,2FY-530A,2FY-540A,2LY-5242A,2LY-5243A,2LY-5244A,2LY-5245A,2HY-15196A,2-HY-15197A,2HY-15198A,2HY-15199A,AND 2HY-8145. THESE VALVE SOLENOIDS WERE DISCOVERED TO BE SUSCEPTIBLE TO MOISTURE INTRUSION WHICH COULD ELECTRICALLY SHORT OUT THE CONTROL POWER TO THESE VALVES AS FOUND IN THE "MOISTURE INTRUSION BROADNESS REVIEW PER REA VG-680
SAFETY EVALUATION:	THE PROBABILITY OF AN ACCIDENT IS NOT CHANGED BY THE ADDITION OF THE SEALS TO THE SOLENOIDS. THIS IMPROVES THE RELIABILITY OF THE PAMS INDICATION DUE TO THE INCREASE IN THE ENVIRONMENTAL INTEGRITY. THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT:	DCP: 92-V2N0009, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP REPLACED THE ACCW LOW FLOW DIFFERENTIAL PRESSURE SWITCHES WHICH WERE GIVING FALSE ALARMS WHEN THE POWER SUPPLY WAS INTERRUPTED. A CONTAINMENT ENTRY WAS REQUIRED TO RESET THE OLD SWITCHES EACH TIME THEY TRIPPED INTO ALARM CONDITION. THIS CHANGE DID NOT AFFECT SYSTEM OPERATION OR SYSTEM SENSOR RESPONSE.
SAFETY EVALUATION:	THE EQUIPMENT STILL FUNCTIONS IN THE INTENDED DESIGN AND THE MODIFIED PORTION DOES NOT SERVE ANY SAFETY RELATED FUNCTION AND IS NOT RELIED UPON TO MITIGATE ANY ACCIDENTS. THE ISOLATIONS OF THE THERMAL BARRIERS ARE NOT AFFECTED. THEREFORE,THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.
SUBJECT:	DCP: 92-V2N0028, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP REPLACED THE MAIN FEED WATER ISOLATION VALVE SOLENOID VALVES WITH LOWER WATTAGE SOLENOID VALVES WHICH HAVE A LOWER FAILURE RATE. THIS WILL REDUCE THE PROBABILITY OF UNPLANNED REACTOR TRIPS FROM INADVERTENT MFIV CLOSURES.
SAFETY EVALUATION:	THE REPLACEMENT SOLENOID VALVES ARE FULLY QUALIFIED AND DO NOT REPRESENT A PHYSICAL OR FUNCTIONAL CHANGE TO THE MFIV ACTUATORS. THE DESIGN CHANGE

TO THE SOLENOIDS VALVES IS AN UPGRADE INTENDED ONLY TO REDUCE POWER DISSIPATION WITHIN THE SOLENOID COIL. IT IS THEREFORE AN ENHANCEMENT WHICH IS EXPECTED TO REDUCE THE RISK OF MFIV MALFUNCTION AND DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 92-V2N0052, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP CHANGED THE OPDT AND OTDT SETPOINT CALCULATION CONSTANTS TO REFLECT THE CHANGE IN CORE PERFORMANCE PARAMETERS AS PART OF THE UPGRADE TO VANTAGE 5 LOPAR FUEL. NO HARDWARE CHANGES WERE REQUIRED,HOWEVER,ADJUSTMENTS TO THE ELECTRONICS OF THE 7300 PROTECTION SYSTEM CABINETS HAD TO BE MADE TO IMPLEMENT THIS CHANGE.

SAFETY EVALUATION: THIS IS A CHANGE TO THE FACILITY AS DESCRIBED IN FSAR SECTION 7.2. THE MATHEMATICAL EXPRESSION USED TO CALCULATE THE OPDT AND OTDT SETPOINTS WILL BE REVISED AND A CHANGE TO TECH SPECS TABLE 2.2-1 WAS REQUIRED. THIS CHANGE IS BOUNDED BY THE SAFETY ANALYSIS FOR THE VANTAGE 5 FUEL UPGRADE WHICH CONCLUDED THAT THERE IS NO ADVERSE INCREASE IN THE CONSEQUENCES OF AN ACCIDENT,AND NO ADVERSE AFFECT ON THE FUNCTION OF THE REACTOR PROTECTION SYSTEM OR ANY OTHER SYSTEM IMPORTANT TO SAFETY EVALUATED IN THE FSAR PREVIOUSLY. IT DOES NOT DECREASE THE MARGIN OF

SAFETY AS DEFINED IN TECHNICAL SPECIFICATIONS AND DOES NOT RESULT IN ANY UNREVIEWED SAFETY QUESTIONS.

SUBJECT: DCP: 92-V2N0053, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP CHANGED THE PRESSURIZER PRESSURE SI BLOCK PERMISSIVE SETPOINT TO ALLOW A WIDER BAND IN WHICH SI MAY BE BLOCKED BY RAISING THE BLOCK PERMISSIVE SETPOINT FROM 1970 PSIG TO 2000 PSIG. NO HARDWARE CHANGES WERE REQUIRED,HOWEVER,ADJUSTMENTS TO THE ELECTRONICS OF THE 7300 PROTECTION SYSTEM CABINETS HAD TO BE MADE TO IMPLEMENT THIS CHANGE.

SAFETY EVALUATION: THE CHANGE DOES NOT AFFECT THE DESIGN OR OPERABILITY OF THE SI SYSTEM OR ANY OTHER EQUIPMENT IMPORTANT TO SAFETY. THE SETPOINT FOR THE SI SIGNAL REMAINS UNAFFECTED. THE SI SIGNAL IS BLOCKED DURING PLANNED COOLDOWN/DE-PRESSURIZATION TO PREVENT AN INADVERTENT SI ACTUATION. THE P-11 SETPOINT DEFEATS THE SI BLOCK WHEN THE PRESSURIZER PRESSURE IS ABOVE THE P-11 SETPOINT. THE P-11 SETPOINT REMAINS WELL BELOW THE INITIAL OPERATING PRESSURE ASSUMPTIONS FOR THE SAFETY ANALYSIS. THERE IS NO ADVERSE INCREASE IN THE CONSEQUENCES OF AN ACCIDENT,AND NO ADVERSE AFFECT ON THE FUNCTION OF THE REACTOR PROTECTION SYSTEM OR ANY OTHER SYSTEM IMPORTANT TO SAFETY EVALUATED IN THE FSAR PREVIOUSLY. IT DOES NOT DECREASE THE MARGIN OF SAFETY AS DEFINED IN TECHNICAL SPECIFICATIONS. AND DOES NOT RESULT IN ANY UNREVIEWED SAFETY QUESTIONS.

SUBJECT:	DCP: 92-V2N0086, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP REROUTES THE LOWER SENSING LINES FOR STEAM GENERATOR NARROW RANGE LEVEL TRANSMITTERS 2LT-517,518,519,528,529,537,538,539,547,548,549,551,552,553,AND 554 TO PROVIDE ADEQUATE CONTINUOUS DOWNWARD SLOPE ON THE SENSING LINE. THIS CHANGE PREVENTS THE POSSIBLE BUILDUP OF NON-CONDENSABLE GASES AND ENSURE A WATER SOLID SENSING LINE TO THE TRANSMITTER.
SAFETY EVALUATION:	THIS CHANGE DOES NOT INCREASE THE PROBABILITY OF OCCURRENCE OF AN ACCIDENT DESCRIBED IN THE FSAR OR DECREASE THE MARGIN OF SAFETY AS DEFINED IN TECHNICAL SPECIFICATIONS. THE RELOCATION OF THE LEVEL TRANSMITTERS AND THE ASSOCIATED CORE DRILLS DOES NOT ADVERSELY AFFECT THE OPERATION OF THE STEAM GENERATOR LEVEL INSTRUMENTS NOR DOES IT ADVERSELY AFFECT THE OPERATION OR FUNCTION OF ANY SAFETY SYSTEM. IT DOES NOT DEGRADE THE FUNCTIONAL CAPABILITY OF THE STEAM GENERATOR NARROW RANGE LEVEL SYSTEM. THIS DESIGN IS AN ENHANCEMENT OVER THE PREVIOUS DESIGN DUE TO THE ELIMINATION OF GAS TRAPS IN THE INSTRUMENT TUBING.
SUBJECT:	DCP: 92-V2N0139, REVISION 0, SEQUENCE 1
DESCRIPTION:	THIS DCP DETERMINES AND ISSUES THE NEW MINIMUM REQUIRED AND MAXIMUM ALLOWABLE THRUST VALUES FOR VALVES 2HV-8701A & B,2HV-8702A & B,2FV-0610,AND 2FV-0611 TO ASSIST IN THE SETUP OF THESE VALVES WITH THE MOVATS DIAGNOSTIC TESTING EQUIPMENT. THERE IS NO CHANGE IN SYSTEM OPERATION OR RESPONSE AS A

RESULT OF THE IMPLEMENTATION OF THIS DCP..

SAFETY EVALUATION: THIS CHANGE DOES NOT MODIFY THE FUNCTION OF THE VALVES, ONLY THE REQUIRED ALLOWABLE THRUST VALUES. THE NEW VALUES ARE ADEQUATE TO ENSURE THE VALVES WILL OPERATE AS REQUIRED THIS CHANGE DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT: DCP: 92-V2N0145, REVISION 0, SEQUENCE 1

DESCRIPTION: THIS DCP LOWERS THE TOTAL KVA RATING OF THREE SOLA FERRO RESONANT TRANSFORMER BANKS 2NBS18X,2NBS21X,AND 2NBR21X BY DECREASING THE NUMBER OF TRANSFORMERS IN EACH BANK. THIS INCREASES THE LOAD ON EACH TRANSFORMER WHICH ATTRIBUTES TO A MORE STABLE OPERATION AND INCREASES THE RELIABILITY OF THE TRANSFORMER BANK.

SAFETY EVALUATION: THIS DCP DOES RESULT IN A CHANGE TO THE FACILITY PER FSAR FIGURE 8.3.1-2 BUT DOES NOT RESULT IN A CHANGE TO ANY PROCEDURE AS DESCRIBED IN THE FSAR. IT DOES NOT AFFECT SYSTEM OPERATION,ACCIDENT ANALYSIS,PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR INCREASE THE CONSEQUENCES OF AN ACCIDENT AS DESCRIBED IN THE FSAR NOR DOES IT CREATE AN UNPOSTULATED ACCIDENT NOT DESCRIBED IN THE FSAR.

SUBJECT:	MDD 90-V2M118,REVISION 0,SEQUENCE 1
DESCRIPTION:	LIFT SETPOINTS FOR CLOSED COOLING WATER (CCW) PRESSURE SAFETY VALVES LOCATED IN THE CCW PUMP DISCHARGE AT THE RHR AND SPENT FUEL POOL HEAT EXCHANGERS WERE RAISED FROM 135 PSIG TO 145 PSIG. THIS WAS NECESSARY TO PREVENT INADVERTENT OPENING OF THE PSV'S UPON CCW PUMP STARTS WHICH PRODUCES A SYSTEM SURGE RESULTING IN A PEAK PRESSURE OF ABOUT 140 PSIG.
SAFETY EVALUATION:	FSAR SECTION'S 5.4.7,"RHR",9.1.3,"SPENT FUEL POOL COOLING AND PURIFICATION" AND 9.2.2,"CCW" DISCUSS OPERATION OF THESE SYSTEMS. SECTION 9.2.2 ADDRESSES THE FUNCTION OF THE THERMAL RELIEF VALVES BUT DOES NOT SPECIFICALLY ADDRESS A DESIGN SETPOINT. THE NEW PSV SETPOINT WILL STILL FUNCTION TO PREVENT THE PROTECTED COMPONENTS FROM EXCEEDING THEIR DESIGN PRESSURE OF 150 PSIG. TECHNICAL SPECIFICATIONS 3/4.5.2, 3/4.7.3, 3/4.9.8 AND 3/4.9.11 ADDRESSING THE AFFECTED SYSTEMS DOES NOT DISCUSS THERMAL PROTECTION RELIEF VALVE SETPOINTS.
SUBJECT:	MDD 90-V2M119,REVISION 0,SEQUENCE 1
DESCRIPTION:	LIFT SETPOINTS FOR CLOSED COOLING WATER (CCW) PRESSURE SAFETY VALVES LOCATED IN THE CCW PUMP DISCHARGE AT THE RHR AND SPENT FUEL POOL HEAT EXCHANGERS WERE RAISED FROM 135 PSIG TO 145 PSIG. THIS WAS NECESSARY TO PREVENT INADVERTENT OPENING OF THE PSV'S UPON CCW PUMP STARTS WHICH PRODUCES A SYSTEM SURGE RESULTING IN A PEAK PRESSURE OF

ABOUT 140 PSIG.

SAFETY EVALUATION: FSAR SECTION'S 5.4.7,"RHR',9.3.1,"SPENT FUEL POOL COOLING AND PURIFICATION" AND 9.2.2,"CCW" DISCUSS OPERATION OF THESE SYSTEMS. SECTION 9.2.2 ADDRESSES THE FUNCTION OF THE THERMAL RELIEF VALVES BUT DOES NOT SPECIFICALLY ADDRESS A DESIGN SETPOINT. THE NEW PSV SETPOINT WILL STILL FUNCTION TO PREVENT THE PROTECTED COMPONENTS FROM EXCEEDING THEIR DESIGN PRESSURE OF 150 PSIG. TECHNICAL SPECIFICATIONS 3/4.5.2, 3/4.7.3, 3/4.9.8 AND 3/4.9.11 ADDRESSING THE AFFECTED SYSTEMS DOES NOT DISCUSS THERMAL PROTECTION RELIEF VALVE SETPOINTS.

SUBJECT: MDD 91-V2M008,REVISION 0,SEQUENCE 1

DESCRIPTION: THE TIME DELAY ASSOCIATED WITH THE AUTOMATIC START OF THE STANDBY CONDENSATE PUMP ON LOW STEAM GENERATOR FEED PUMP SUCTION PRESSURE WAS CHANGED FROM 10 SECONDS TO 2 SECONDS TO ALLOW THE STANDBY PUMP ADEQUATE TIME TO RESTORE SYSTEM PRESSURE BEFORE REACHING THE STEAM GENERATOR FEED PUMP LOW SUCTION PRESSURE TRIP.

SAFETY EVALUATION: THE AUTO START FEATURE OF THE STANDBY CONDENSATE PUMP ON LOW FEED PUMP SUCTION PRESSURE IS NOT ADDRESSED IN THE FSAR. SECTIONS 7.7,"CONTROL SYSTEMS NOT REQUIRED FOR PLANT SAFETY",10.4.7,"FEEDWATER AND CONDENSATE SYSTEM" AND 15.2.7,"LOSS OF NORMAL FEEDWATER FLOW" WERE REVIEWED. THE CONDENSATE SYSTEM IS NOT THE SUBJECT OF ANY PLANT TECHNICAL

SPECIFICATION.

SUBJECT: MDD 91-V2M026,REVISION 0,SEQUENCE 1

DESCRIPTION: THE AIR REGULATOR PRESSURE SETPOINT FOR 2LV-4331 AND 2LV-4332 (HEATER DRAIN PUMP DISCHARGE VALVES) WAS INCREASED FROM 35 PSIG TO 40 PSIG. THE ORIFICE SIZE IN 2LY-4331 AND 2LY-4332 WAS INCREASED FROM 3/32" TO 1/8" BY CHANGING THE SOLENOID VALVE TO A DIFFERENT MODEL. THESE CHANGES WILL ALLOW THE HEATER DRAIN PUMP DISCHARGE VALVES TO OPERATE PROPERLY.

SAFETY EVALUATION: THE HEATER DRAIN SYSTEM FUNCTION AND OPERATION ARE GENERALLY DISCUSSED IN FSAR SECTION 10.4. THE AIR SET PRESSURE, SOLENOID VALVE MODEL NUMBER AND ORIFICE SIZE ARE NOT ADDRESSED IN THIS DISCUSSION. THE CHANGE DOES NOT EFFECT THE FUNCTION OF THE VALVES. THE HEATER DRAIN SYSTEM IS NOT THE SUBJECT OF ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 91-VCM030,REVISION 0,SEQUENCE 1

DESCRIPTION: THE PLATFORM AROUND THE BORIC ACID BATCH TANK WAS MODIFIED TO PROVIDE A BETTER WORK SPACE FOR PERSONNEL INVOLVED IN BATCHING OPERATIONS WITHOUT STANDING ON THE BATCHING TANK HEAD. THE NEW PLATFORM ENABLES PERSONNEL TO BETTER CONTROL BORIC ACID DRUMS BEING ADDED TO THE BATCH TANK.

SAFETY EVALUATION: THE BORIC ACID BATCH TANK IS DESCRIBED IN FSAR SECTION 9.3.4. THE DESCRIPTION INVOLVES TANK FUNCTION

AND COMPONENTS AND DOES NOT ADDRESS TANK PLATFORMS. THE MODIFICATION OF THE PLATFORM HAS NO IMPACT ON TANK OPERATION. TECHNICAL SPECIFICATIONS ARE NOT AFFECTED BY THIS CHANGE.

SUBJECT: MDD 91-V2M031,REVISION 0,SEQUENCE 1

DESCRIPTION: AN INTERNAL WIRING MODIFICATION WAS IMPLEMENTED IN PROTECTIVE RELAY PANEL 2-1816-U3-008 TO DELETE AN UNNECESSARY AND REDUNDANT TRIP OF THE MAIN TURBINE FROM THE 386M LOCKOUT RELAY. SINCE THE MAIN TURBINE MUST ALREADY BE TRIPPED FOR A LEGITIMATE ACTUATION OF THE 386M RELAY TO OCCUR, THE EXISTING LOGIC WAS NOT REQUIRED AND REPRESENTED AN UNDUE RISK OF A SPURIOUS TURBINE/REACTOR TRIP.

SAFETY EVALUATION: THE SUBJECT TRIP FUNCTION WAS NOT SHOWN ON THE TURBINE TRIP LOGIC DIAGRAM ILLUSTRATED IN FSAR SECTION 10.2 AND WAS NOT INCLUDED IN THE LIST OF TURBINE TRIPS DESCRIBED IN SECTION 10.2. THE FUNCTIONS OF THE 386M RELAY ASSOCIATED WITH THE GENERATOR TRIP 30 SECOND DELAY WERE NOT ALTERED. AN ANNUNCIATOR RESPONSE PROCEDURE WAS REVISED TO REFLECT THIS CHANGE. THE TURBINE TRIP FUNCTION ASSOCIATED WITH THE 386M RELAY WAS NOT THE SUBJECT OF ANY TECHNICAL SPECIFICATION.

SUBJECT: MDD 91-V1M032,REVISION 0,SEQUENCE 1

DESCRIPTION: 1UQ-14503 SUPPLIES POWER IN THE MISCELLANEOUS SYSTEMS EQUIPMENT PANEL USED FOR POWER TO VARIOUS

ROSEMOUNT PRESSURE AND DIFFERENTIAL PRESSURE TRANSMITTERS IN THE TURBINE BUILDING AND OUTSIDE AREAS. THE POWER SUPPLY WAS CHANGED FROM A 24 VDC SUPPLY TO A 36 VDC SUPPLY. THIS CHANGE PREVENTS EXCEEDING THE MAXIMUM ALLOWABLE LOOP RESISTANCE DURING CALIBRATION WHICH AFFECTS TRANSMITTER PERFORMANCE.

SAFETY EVALUATION: THE SUBJECT TRANSMITTERS ARE CONTAINED WITHIN SYSTEMS GENERALLY DESCRIBED IN FSAR SECTIONS 9.5, 10.2 AND 10.4. THE FSAR DOES NOT PROVIDE SPECIFICS AS TO POWER SUPPLY VOLTAGE OR MODEL NUMBER. THE POWER SUPPLY OR TRANSMITTERS FED FROM THE NEW SUPPLY ARE NOT THE SUBJECT OF ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 91-V2M043,REVISION 0,SEQUENCE 1

DESCRIPTION: THE MAIN GENERATOR FIELD GROUND DETECTOR ALARM LOCK OUT SWITCH WAS RELOCATED TO THE FRONT OF THE EXCITER PANEL. THE LOCKOUT SWITCH WAS PREVIOUSLY LOCATED INSIDE THE MAIN GENERATOR FIELD GROUND DETECTION PANEL. THIS NECESSITATED OPENING THE PANEL EACH TIME THE GROUND DETECTION RELAY WAS PLACED IN RESET/TEST (WEEKLY INSPECTIONS) CREATING UNNECESSARY RISK OF TRIPPING DUE TO RFI RELAY/WIRE JARRING.

SAFETY EVALUATION: FSAR SECTION 10.2 DISCUSSES THE TURBINE GENERATOR SYSTEM AND FUNCTION. THE FIELD GROUND DETECTOR IS NOT INCLUDED AS PART OF THIS DISCUSSION. THE OPERATION OF

THE GROUND DETECTION SYSTEM IS NOT AFFECTED BY THE RELOCATION OF THE LOCKOUT SWITCH. THE TURBINE GENERATOR IS NOT THE SUBJECT OF ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 91-VCM059,REVISI0N 0,SEQUENCE 1

DESCRIPTION: A RAILROAD CAR BUMPER STOP LOCATED INSIDE THE AUXILIARY BUILDING AT THE FUEL BAY WAS REMOVED AND THE RAILS GROUTED. THE STOP WAS NOT UTILIZED ANYMORE AND REPRESENTED A RESTRICTION DURING FUEL MOVEMENT ACTIVITIES AND CREATED A PERSONNEL HAZARD (TRIPPING).

SAFETY EVALUATION: THE REMOVAL OF THE BUMPER STOP DOES NOT IMPACT ANY PORTION OF THE FSAR. THIS FOLLOWED A REVIEWED OF FSAR SECTIONS 3.2, 3.8, 4.2 AND 9.1 WHICH DESCRIBE THE CLASSIFICATIONS OF STRUCTURES, DESIGN OF CATEGORY 1 STRUCTURES, FUEL SYSTEM DESIGN AND FUEL STORAGE AND HANDLING RESPECTIVELY. THE MODIFICATION DID NOT IMPACT ANY PLANT TECHNICAL SPECIFICATION FOLLOWING A REVIEW OF SECTION 5.6.

SUBJECT: MDD 91-V2M060,REVISION 0,SEQUENCE 1

DESCRIPTION: DURING NORMAL OPERATIONS,WHEN SWITCHING FROM ONE ACCW PUMP TO THE STANDBY PUMP, BOTH PUMPS ARE RUNNING SIMULTANEOUS FOR A SHORT PERIOD OF TIME. DURING THIS TIME THE FLOW RATE REACHES 247 GPM, CAUSING VALVE HV-2041 TO CLOSE ISOLATING ACCW COOLING WATER FROM THE RCP THERMAL BARRIER HEAT EXCHANGERS. TO ELIMINATE THIS UNNECESSARY

ISOLATION, THE SETPOINT WAS RAISED FROM 240 GPM TO 253 GPM.

SAFETY EVALUATION: THE VALVES AND THEIR FUNCTION ARE DESCRIBED IN FSAR SECTIONS 7.6.6, 9.2.8 AND THE ACTIVE VALVE TABLE 3.9.B.3-9. THE VALVES ARE DESIGNED TO CLOSE ON HIGH FLOW OR HIGH PRESSURE, HOWEVER THE SPECIFIC TRANSMITTER SETPOINT IS NOT REFERENCED IN THESE SECTIONS. ISOLATION OF ACCW IN THE EVENT OF A THERMAL BARRIER LEAK IS NOT SPECIFICALLY REFERENCED IN THE RCS PIPE BREAK DISCUSSION IN FSAR SECTION 3.6. SECTIONS 15.6.2 AND 15.6.5 DISCUSS THE LOSS OF COOLANT INVENTORY AND SMALL BREAK LOCA'S, HOWEVER NO REFERENCE TO THERMAL BARRIER FLOW IS MADE. TECHNICAL SPECIFICATION 3/4.7.12 REFERENCES ACCW ISOLATION IN THE EVENT OF A THERMAL BARRIER LEAK. THE ISOLATION IS DESIGNED TO PREVENT LOSING RCS INVENTORY IN THE EVENT OF A BREAK IN THE ACCW PIPING DOWNSTREAM OF THE ISOLATION VALVE. IN THE EVENT OF AN RCS LEAK, THE RESULTING FLOW RATE WOULD BE SIGNIFICANTLY HIGHER THAN NORMAL ACCW FLOW AND VALVE ISOLATION WOULD OCCUR. THE VALUE OF FLOW ASSOCIATED WITH THE ISOLATION FUNCTION IS NOT ADDRESSED IN THE TECHNICAL SPECIFICATIONS.

SUBJECT: MDD 91-V1M079,REVISION 0,SEQUENCE 1

DESCRIPTION: VALVES 1-1305-U4-592 & 579,"STEAM GENERATOR FEED PUMP (A & B) PUMP CASING WARMUP ISOLATION VALVES WERE RELOCATED TO DOWNSTREAM OF THEIR OF THEIR ORIGINALLY INSTALLED LOCATION. THE ORIGINAL LOCATION POSED AN INTERFERENCE PROBLEM

DURING PUMP MAINTENANCE ACTIVITIES. THE RELOCATION ENHANCES FUTURE MAINTENANCE ACTIVITIES INVOLVING DISASSEMBLY/REASSEMBLY OF THE PUMPS.

SAFETY EVALUATION: SECTION 10.4.7 "CONDENSATE AND FEEDWATER" DOES NOT DISCUSS THE FEED PUMP CASING WARMUPS. THE CHANGE DOES NOT IMPACT SYSTEM OPERATION. RELOCATION OF THE VALVES DOES NOT IMPACT THEIR ORIGINAL DESIGN FUNCTION NOR WILL IT CHANGE THE WAY THE SYSTEM IS OPERATED. THE FEEDWATER PUMPS ARE NOT THE SUBJECT OF ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 91-V1M091,REVISION 0,SEQUENCE 1

DESCRIPTION: BASED ON AN INSPECTION OF THE BOTTOM MOUNTED INSTRUMENTATION FLUX THIMBLES IT WAS DETERMINED THAT FLUX THIMBLE F-14 SHOULD BE REMOVED FROM SERVICE. THIMBLE F-14 INDICATED AN 80 % LOSS OF WALL THICKNESS. THE FLUX THIMBLE WAS REMOVED FROM SERVICE THROUGH THE INSTALLATION OF A "SWAGELOCK" CAP ONTO THE END OF THE THIMBLE TUBE AT THE SEAL TABLE.

SAFETY EVALUATION: FIGURE 4.4-10 ILLUSTRATES 58 THIMBLE TUBES IN VARIOUS LOCATIONS IN THE CORE. LICENSING DOCUMENT CHANGE REQUEST FS-91-041 WAS GENERATED TO DOCUMENT REMOVAL OF THIMBLE TUBE F-14 FROM SERVICE. THE CHANGE DID NOT IMPACT ANY PROCEDURE DESCRIBED IN THE FSAR. PLANT PROCEDURES HAVE BEEN REVISED TO REFLECT THIS CHANGE. CAPPING OF THE THIMBLE TUBE DID NOT REDUCE THE MARGIN OF SAFETY AS

DEFINED IN PLANT TECHNICAL SPECIFICATION 3.3.3.2. THE CHANGE DID NOT AFFECT THE DRIVES, DETECTORS OR READOUT EQUIPMENT ASSOCIATED WITH THE FLUX MONITORING SYSTEMS.

SUBJECT: MDD 91-V2M100,REVISION 0,SEQUENCE 1

DESCRIPTION: THE 0 TO 60 PSI GAUGE LOCATED DOWNSTREAM OF THE PRESSURE REGULATOR ON THE BYPASS FEEDWATER ISOLATION VALVES (BFIV) WAS REPLACED WITH A 0 TO 100 PSI GAUGE. THE GAUGE PROVIDES LOCAL INDICATION OF SUPPLY AIR PRESSURE TO THE AIR PUMP WHICH POSITIONS THE BFIV. THE AIR REGULATOR MAINTAINS SUPPLY AIR PRESSURE AT 80 PSIG CAUSING GAUGES TO BE OVERPRESSURIZED.

SAFETY EVALUATION: FSAR SECTION 10.4.7,"CONDENSATE AND FEEDWATER SYSTEM" DISCUSSES THE FUNCTION AND OPERATION OF THE BYPASS FEEDWATER ISOLATION VALVES. THE DESCRIPTION DOES NOT MAKE REFERENCE TO PRESSURE GAUGE RANGE REQUIREMENTS. BFIV OPERATION IS NOT IMPACTED BY THE CHANGE. THE REPLACEMENT OF THE PRESSURE GAUGE DOE NOT AFFECT REQUIREMENTS SET FORTH IN PLANT TECHNICAL SPECIFICATIONS 3/4.3.2 CONCERNING FEEDWATER ISOLATION.

SUBJECT: MDD 91-V2M102,REVISION 0,SEQUENCE 1

DESCRIPTION: THE ORIGINALLY INSTALLED DC-DC CONVERTER (NMX-514-2) FOR THE MAIN GENERATOR UNDER FREQUENCY RELAY HAD EXPERIENCED FAILURES ATTRIBUTED TO OVER HEATING AND WAS

REPLACED WITH A NEW MODEL CONVERTER WHICH IS LESS SUSCEPTIBLE TO OVER HEATING. THE REPLACEMENT CONVERTER MEETS ALL THE REQUIREMENTS OF THE ORIGINAL AND DOES NOT AFFECT UNDER FREQUENCY RELAY ACTUATION.

SAFETY EVALUATION: FSAR SECTIONS 8.2, 8.3 AND 10.2 ADDRESS THE OFFSITE AND ONSITE POWER DISTRIBUTION SYSTEMS AND THE TURBINE-GENERATOR RESPECTIVELY. THE UNDER FREQUENCY RELAY MODEL IS NOT SPECIFIED IN THESE SECTIONS. THE TURBINE-GENERATOR SYSTEM IS NOT THE TOPIC OF ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 91-V1M103,REVISION 0,SEQUENCE 1

DESCRIPTION: THE CAPACITANCE OF CAPACITOR "C14" ON CONTROL BOARD "A" IN 125 VDC VITAL BATTERY CHARGER (1AD1CB) WAS INCREASED BY PARALLELING A CAPACITOR OF SIMILAR RATING WITH "C14". THIS WAS NECESSARY DUE TO OSCILLATIONS THAT HAD BEEN OCCURRING IN THE BATTERY OUTPUT WHEN ATTEMPTING TO RECHARGE A DISCHARGED BATTERY.

SAFETY EVALUATION: THE MODIFICATION TO THE CIRCUIT BOARD DOES NOT IMPACT SYSTEM OPERATION OF FUNCTION AS DESCRIBED IN FSAR SECTION 8.3.2. THE CHARGERS CAPABILITY TO FULFILL ITS DESIGN FUNCTION HAVE NOT BEEN ALTERED BY THIS ADDITION OF THE PARALLEL CAPACITOR. THE ADDITION DOES NOT IMPACT PLANT TECHNICAL SPECIFICATION 3/4.8.2 SINCE THE CHARGER WILL CONTINUE TO FUNCTION AS ORIGINALLY DESIGNED.

SUBJECT:	MDD 91-V2M107,REVISION 0,SEQUENCE 1
DESCRIPTION:	FLOOR DRAINS IN THE RWST VALVE ROOM AND DIKE AREA WERE ORIGINALLY INTERCONNECTED AND DESIGNED SUCH THAT WATER FROM BOTH DRAINS WOULD FLOW TOWARDS THE REACTOR MAKEUP STORAGE TANK VALVE PIT. THE RWST VALVE ROOM DRAIN WAS PLUGGED AND SEALED TO PREVENT RAIN WATER ENTERING THE RWST DIKE AREA FROM FLOWING BACK INTO THE VALVE ROOM CAUSING FLOODING IN THE VALVE ROOM. THE VALVE ROOM TO NCCW TUNNEL PIPE CHASE WAS ALSO DIKED TO PREVENT CONTAMINATION TO THE NSCW TUNNEL BY RWST LEAKAGE.
SAFETY EVALUATION:	FSAR SECTION 9.3.3 "EQUIPMENT AND FLOOR DRAINAGE SYSTEMS" DOES NOT SPECIFICALLY ADDRESS THIS FLOW PATH. FSAR FIGURE 9.3.3-3 (SHEET 10 OF 11) DEPICTS THE FLOOR DRAINS IN THE RWST VALVE ROOM AND DIKE AREA. THE FIGURE WILL BE REVISED VIA LICENSING DOCUMENT CHANGE REQUEST FS-91-053 WHICH WILL ILLUSTRATE THE PLUGGING OF THE RWST VALVE ROOM FLOOR DRAIN. PLANT TECHNICAL SPECIFICATIONS DO NOT SPECIFICALLY ADDRESS THE FLOOR DRAINS ASSOCIATED WITH THE RWST AREA.
SUBJECT:	MDD 91-V1M113,REVISION 0,SEQUENCE 1
DESCRIPTION:	THE REACTOR WATER MAKEUP PUMP MOTORS HAVE BEEN RETROFITTED WITH ADDITIONAL VIBRATION DAMPENING SUPPORTS (BRACES) TO PROVIDE ADEQUATE VIBRATION DAMPENING CAPABILITY THEREBY PROTECTING THE

PUMP FROM VIBRATION RELATED DAMAGE.

SAFETY EVALUATION: THE DESCRIPTION CONTAINED IN FSAR SECTION 9.2.7 DOES NOT PROVIDE FOR THE MOUNTING CONFIGURATION FOR THE MAKEUP PUMP/MOTOR SET. THE CHANGE DOES NOT AFFECT SYSTEM OPERATION OR THE CAPABILITY OF THE SYSTEM TO MEETS ITS ORIGINAL DESIGN. THE TOPIC OF THIS CHANGE IS NOT THE SUBJECT OF ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 91-V2M118,REVISION 0,SEQUENCE 1

DESCRIPTION: THE CHANGE REPLACED THE ORIGINALLY INSTALLED EHC FULLERS EARTH FILTER CANISTER WITH A NEW MODEL CANISTER (HILLARD CORP) HAVING A DIFFERENT HEAD DESIGN WHICH REDUCES A SOURCE OF EHC FLUID LEAKS. FILTER PIPING CONNECTIONS WERE RE-ROUTED, SUPPORT BOLTING MODIFIED AND FILTER ENCLOSURE MODIFICATIONS WERE MADE TO SUPPORT INSTALLATION OF THE NEW CANISTER. ALL DESIGN AND OPERATIONAL DESIGN CRITERIA ARE UNCHANGED.

SAFETY EVALUATION: THERE IS NO CHANGE TO THE FSAR AS DESCRIBED OR IMPLIED BY THIS CHANGE. THE FULLERS EARTH FILTERS ARE NOT SPECIFICALLY ADDRESSED IN FSAR SECTION 10.2.2 "ELECTROHYDRAULIC CONTROL SYSTEM". FSAR FIGURE 10.2.2-5 DEPICTS THE EHC SYSTEM BUT DOES NOT PROVIDE FILTER HOUSING COMPONENT REQUIREMENTS. PLANT TECHNICAL SPECIFICATION 3/4.7 DISCUSSES PLANT SYSTEMS. THE EHC SYSTEM IS NOT ADDRESSED IN THIS SECTION.

SUBJECT:	MDD 91-V2M120,REVISION 0,SEQUENCE 1
DESCRIPTION:	THE INSTRUMENT ROOT VALVES (2-1301-X4-976 & 987) FOR THE MAIN TURBINE THROTTLE PRESSURE TRANSMITTERS WERE FROM ANSI CLASS 666# VALVES TO ANSI CLASS 1500# TO REDUCE THE PROBABILITY OF RECURRING STEAM LEAKS FROM THE BODY TO BONNET JOINT WHICH PLAGUED THE ORIGINALLY INSTALLED VALVES.
SAFETY EVALUATION:	THE MAIN TURBINE IS DISCUSSED IN FSAR SECTION 10.2. THE ANSI PRESSURE AND TEMPERATURE DESIGN REQUIREMENTS ARE NOT SPECIFIED FOR THE PRESSURE TRANSMITTER ISOLATION VALVES. THE VALVE UPGRADE DOES NOT IMPACT TRANSMITTER PERFORMANCE. THE MAIN TURBINE THROTTLE PRESSURE TRANSMITTERS ARE NOT HE SUBJECT OF ANY PLANT TECHNICAL SPECIFICATION.
SUBJECT:	MDD 91-V2M123,REVISION 0,SEQUENCE 1
DESCRIPTION:	MLB (MONITOR LIGHT BOX) FOR VALVE 2HV7603D WOULD NOT ILLUMINATE UNTIL VALVE 2HV7603B WAS CLOSED. THE WIRING CONFIGURATION WAS DETERMINED TO BE INCORRECT AND WAS MODIFIED TO THE PROPER WIRING CONFIGURATION DETAILED ON WIRING DIAGRAM 2X3D-BE-HO6C. THE CHANGE PERMITS THE PROPER "CLOSED" MLB ILLUMINATION FOR VALVE 2HV7603D INDEPENDENT OF VALVE 2HV7603B.
SAFETY EVALUATION:	THE ACTIVITY MODIFIED THE WIRING CONFIGURATION TO ALLOW FOR THE PROPER ILLUMINATION OF THE MLB FOR 2HV7603D. THE CHANGE DOES NOT AFFECT THE FUNCTION OR OPERATION OF THE VALVE. THE WIRING CHANGE

INVOLVES INDICATION ONLY. THIS FOLLOWS A REVIEW OF FSAR SECTIONS 10.3, 10.4.8 AND TABLE 6.2.4.1. THIS ACTIVITY DOES NOT IMPACT THE ABILITY OF 2HV7603D TO AUTO CLOSE ON AN AUXILIARY FEEDWATER INITIATION NOR DOES IT AFFECT ANY SYSTEM FUNCTION OTHER THAN POSITION INDICATION. THE PROPER WIRING CONFIGURATION IS BOUNDED BY PLANT TECHNICAL SPECIFICATIONS.

SUBJECT: MDD 91-V2M124,REVISION 0,SEQUENCE 1

DESCRIPTION: THE EXISTING PRESSURE SWITCHES FOR STEAM GENERATOR FEED PUMP DISCHARGE PRESSURE ARE NO LONGER AVAILABLE THROUGH THE SWITCH MANUFACTURER. DESIGN DRAWINGS HAVE BEEN UPDATED TO PERMIT THE USE OF AN EQUIVALENT PRESSURE SWITCH MODEL IN THIS APPLICATION. MOUNTING DETAILS ASSOCIATED WITH THE NEW SWITCH HAVE ALSO BEEN INCLUDED ON PLANT DESIGN DRAWINGS.

SAFETY EVALUATION: THE NEW PRESSURE SWITCH IS A DIRECT REPLACEMENT FOR THE EXISTING PRESSURE SWITCH IN FUNCTION AND OPERATION. THE REPLACEMENT DOES NOT AFFECT ANY OF THE DISCUSSIONS PRESENTED IN FSAR SECTIONS 7.7.1-7 "CONTROL SYSTEMS NOT REQUIRED FOR SAFETY" AND 10.4.7 "CONDENSATE AND FEEDWATER". THE PRESSURE SWITCHES ADDRESSED BY THIS CHANGE ARE NOT INCLUDED IN THE PLANT TECHNICAL SPECIFICATIONS.

SUBJECT: MDD 92-V2M009,REVISION 0,SEQUENCE 1

DESCRIPTION: FIVE BATTERY-BACKED 8-HOUR RATED

EMERGENCY LIGHT UNITS WERE ADDED TO AUXILIARY BUILDING ROOMS R-129 AND R-142 SO THAT PERSONNEL COULD SAFELY EXIT THESE ROOMS ON A LOSS OF AC POWER.

SAFETY EVALUATION: FSAR SECTIONS 8.3 "ONSITE POWER SYSTEMS", 9.5.3 "LIGHTING SYSTEMS" AND 9A "FIRE PROTECTION" WERE REVIEWED TO DETERMINE IMPACT OF THIS CHANGE. THE CHANGE DOES NOT AFFECT THE DESCRIPTION PROVIDED IN THESE SECTIONS. THE EMERGENCY LIGHTING FIXTURES ARE SEISMICALLY MOUNTED. CONTRIBUTION TO THE COMBUSTIBLE FIRE LOADING FOR EITHER OF THE AREAS IS NOT SIGNIFICANT. THE NEW LIGHTING UNITS WILL BE TESTED IN ACCORDANCE WITH EXISTING PLANT PROCEDURES. THE ADDITION OF THE LIGHTING UNITS DOES NOT AFFECT ANY REQUIREMENTS SPECIFIED IN PLANT TECHNICAL SPECIFICATION 3/4.8 "ELECTRICAL DISTRIBUTION SYSTEMS".

SUBJECT: MDD 92-V2M014,REVISION 0,SEQUENCE 1

DESCRIPTION: THE CONTROL LOGIC FOR THE MAIN TURBINE ABOVE SEAT DRAIN VALVES (2HV-6022, 6023, 6029 AND 6031) HAS BEEN CHANGED TO DELETE THE AUTOMATIC OPENING OF THESE VALVES WHEN A MAIN TURBINE TRIP OCCURS. THIS LOGIC SERVED NO USEFUL PURPOSE SINCE THE OPERATORS HAVE TO RECLOSE THE VALVES TO AVOID THE NEED TO ISOLATE THE MAIN STEAM LINES BEFORE EXCESSIVE RCS COOLDOWN OCCURS.

SAFETY EVALUATION: THE MAIN STEAM SYSTEM IS DESCRIBED IN FSAR SECTION 10.3. THE MAIN TURBINE IS DESCRIBED IN FSAR SECTION 10.2. NEITHER OF THESE SECTIONS ADDRESS

THE MAIN TURBINE ABOVE SEAT DRAIN VALVES OR THEIR CONTROL LOGIC. THE DESIGN CHANGE DOES NOT INVOLVE THE TURBINE TRIPPING OR OVERSPEED PROTECTION FUNCTIONS REQUIRED BY THE TECHNICAL SPECIFICATIONS.

SUBJECT: MDD 92-V1M022,REVISION 0,SEQUENCE 1

DESCRIPTION: THE MAIN GENERATOR DOES NOT HAVE ANY EXTERNAL COMPUTER CONTROLS, THEREFORE THE AUTOMATION PANEL IS NOT USED. THE PANEL CAN BE INADVERTENTLY ACTIVATED BY THE COMPUTER/OPERATOR SELECTOR SWITCH LOCATED AT THE GENEREX PANEL. ACTIVATION OF THE SWITCH WILL CAUSE A UNIT TRIP. TO PREVENT THIS FORM HAPPENING, THE COMPUTER/OPERATOR SWITCH WAS DEFEATED BY REMOVAL OF A JUMPER THAT ACTUATES THE TRANSFER RELAY.

SAFETY EVALUATION: FSAR SECTION 8.2, 8.3 AND 10.2 DISCUSS THE OPERATION AND FUNCTION ASSOCIATED WITH OFFSITE POWER SYSTEMS, ONSITE POWER SYSTEMS AND THE TURBINE GENERATOR. THE GENERATOR EXCITATION CONTROLS ARE NOT ADDRESSED IN THESE DISCUSSIONS. THE GENEREX CONTROL SYSTEM IS NOT THE SUBJECT OF ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 92-V2M023,REVISION 0,SEQUENCE 1

DESCRIPTION: THE MAIN GENERATOR DOES NOT HAVE ANY EXTERNAL COMPUTER CONTROLS, THEREFORE THE AUTOMATION PANEL IS NOT USED. THE PANEL CAN BE INADVERTENTLY ACTIVATED BY THE COMPUTER/OPERATOR SELECTOR SWITCH

LOCATED AT THE GENEREX PANEL. ACTIVATION OF THE SWITCH WILL CAUSE A UNIT TRIP. TO PREVENT THIS FORM HAPPENING, THE COMPUTER/OPERATOR SWITCH WAS DEFEATED BY REMOVAL OF A JUMPER THAT ACTUATES THE TRANSFER RELAY.

SAFETY EVALUATION: FSAR SECTION 8.2, 8.3 AND 10.2 DISCUSS THE OPERATION AND FUNCTION ASSOCIATED WITH OFFSITE POWER SYSTEMS, ONSITE POWER SYSTEMS AND THE TURBINE GENERATOR. THE GENERATOR EXCITATION CONTROLS ARE NOT ADDRESSED IN THESE DISCUSSIONS. THE GENEREX CONTROL SYSTEM IS NOT THE SUBJECT OF ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 92-V2M040,REVISION 0,SEQUENCE 1

DESCRIPTION: MSR POCKET DRAIN ORIFICE/STRAINER WAS RELOCATED TO THE VERTICAL SECTION OF PIPE DIRECTLY BENEATH THE MSR OUTLET CONNECTION, DOWNSTREAM OF THE CONNECTION TO THE BYPASS VALVE. THE TEE LOCATED DOWNSTREAM OF THE NEW ORIFICE/STRAINER WAS INCREASED IN SIZE AND A BLIND FLANGE USED ON THE END TO SERVE AS A STEAM AND CONDENSATE IMPINGEMENT PLATE. THIS WAS PERFORMED TO ENHANCE THE EROSION/CORROSION PROGRAM BY ELIMINATING FLASHING IN THE DRAIN PIPING.

SAFETY EVALUATION: THE RELOCATION OF THE ORIFICE/STRAINER WILL NOT IMPACT ANY OF THE DESCRIPTION PROVIDED IN FSAR SECTIONS 10.2 'TURBINE-GENERATOR', 10.4.1 "MAIN CONDENSER" OR 10.4.7 "CONDENSATE AND FEEDWATER

SYSTEM". THE ORIFICE/STRAINER WILL CONTINUE TO PERFORM ALL FUNCTIONS ASSOCIATED WITH ITS ORIGINAL DESIGN. THE TURBINE DRAIN SYSTEM IS NOT COVERED IN THE PLANT TECHNICAL SPECIFICATIONS.

SUBJECT: MDD 92-V2M041,REVISION 0,SEQUENCE 1

DESCRIPTION: PIPE SUPPORT V2-1301-616-H001 COULD NOT BE INSTALLED AS ORIGINALLY DESIGNED WHICH REQUIRED ATTACHMENT ON ONE END TO MISC STRUCTURAL STEEL BY FOUR 7/8"BOLTS. THIS COULD NOT BE DONE DUE TO THE EXISTENCE F AN EMBEDDED BEAM BENEATH THE FRAME. THIS CHANGE PROVIDED PROPER WELD DETAILS TO SECURE THE FRAME AT HIS END.

SAFETY EVALUATION: THE PIPE SUPPORT INVOLVED IN THIS CHANGE CARRIES REHEATED STEAM FROM A MAIN TURBINE MSR TO A COMBINED INTERMEDIATE VALVE. DETAILS FOR ATTACHMENT OF SUPPORTS ARE NOT PROVIDED IN FSAR SECTION 10.2 WHICH DISCUSSES THE TURBINE-GENERATOR. THE CHANGE WILL NOT IMPACT ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 92-V1M049,REVISION 0,SEQUENCE 1

DESCRIPTION: IN ORDER TO SUPPORT RETRIEVAL OF LOOSE PARTS FROM STEAM GENERATOR FEED PUMP 1B DISCHARGE CHECK VALVE THAT HAD BECOME WEDGED IN A PIPE ELBOW DOWNSTREAM OF THE CHECK VALVE, IT WAS NECESSARY TO REMOVE A 1" VENT VALVE ASSEMBLY (1-1305-X4-821 & 822) AND IN ITS PLACE DRILL A 5 3/4" HOLE TO RETRIEVE THE PARTS.

WHEN PARTS RETRIEVAL WAS COMPLETE, AN 6" WELDOLET AND CAP WERE ADDED AT THE OPENING AND THE VENT ASSEMBLY RECONNECTED TO THE CAP.

SAFETY EVALUATION: THE ADDITION OF THE WELDOLET DOES NOT AFFECT ANY P&ID CONTAINED IN THE FSAR. FSAR SECTIONS 10.4.7 "CONDENSATE AND FEEDWATER SYSTEM", 10.3 "MAIN STEAM SUPPLY" AND SECTION 10.1 "SUMMARY DESCRIPTION OF STEAM AND POWER CONVERSION" WERE REVIEWED AND DETERMINED NOT TO BE IMPACTED BY THE ADDITION OF THE WELDOLET. THE VENT ASSEMBLY REMAINS FUNCTIONAL IN ACCORDANCE WITH ORIGINAL INSTALLATION. PLANT TECHNICAL SPECIFICATIONS (3/4.7, PLANT SYSTEMS) DO NOT ADDRESS THE FEEDWATER SYSTEM COMPONENTS AFFECTED BY THIS CHANGE.

SUBJECT: MDD 92-V2M058,REVISION 0,SEQUENCE 1

DESCRIPTION: THE FIELD INPUT FOR COMPUTER POINT Q2832 "MAIN GEN VARS" WAS MOVED FROM I/O CABINET 05A TO I/O CABINET 03B AND THE ORIGINAL BRIDGE NETWORK WAS REPLACED THROUGH THE USE OF A PRECISION 10K OHM RESISTOR ACROSS THE TRANSDUCER INPUT LEADS. THIS CHANGE ENABLES THE COMPUTER THE ABILITY TO PROPERLY INDICATE GENERATOR VARS.

SAFETY EVALUATION: THE CHANGE AFFECTS THE COMPUTER INDICATION CIRCUIT ASSOCIATED WITH GENERATOR VAR'S. IT DOES NOT AFFECT THE FSAR DESCRIPTIONS RELATED TO THE FUNCTIONS PERFORMED BY THE COMPUTER SYSTEM IN SECTIONS 7.5.3.6, 7.7.1.3.1, 7.7.1.3.4, 7.7.1.9 AND 7.7.2. THE

CHANGE ALLOWS COMPUTER POINT Q2832 TO BE CALIBRATED CORRECTLY, RESULTING IN PROPER INDICATION ON THE COMPUTER SYSTEM. THE CHANGE DID NOT INVOLVE COMPUTER SYSTEM FUNCTIONS USED TO MEET THE REQUIREMENTS SPECIFIED IN PLANT TECHNICAL SPECIFICATIONS 3/4/1/3, 3/4.2.1, 3/4.3.3.2 AND TABLE 4.3-1.

SUBJECT: MDD 92-V2M080,REVISION 0, SEQUENCE 1

DESCRIPTION: THE ORIGINALLY INSTALLED WHITEY V SERIES TFE PACKED VALVES IN THE UNIT 2 PASS PANEL (VALVES HV-3709, 3710, 3711, 3712, 3714, 3717 AND 3726) WERE REPLACED WITH IDENTICAL VALVES WITH A UHWPE (ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE) TYPE PACKING WHICH IS BETTER SUITED TO THE TYPE OF ENVIRONMENT SEEN IN THE PASS SYSTEM.

SAFETY EVALUATION: CHANGING THE TYPE OF PACKING UTILIZED IN THE PASS SYSTEM VALVES DOES NOT REQUIRE A CHANGE TO THE PLANT AS DESCRIBED IN THE FSAR OR A REVISION TO ANY PORTION OF THE FSAR. THE POST ACCIDENT SAMPLING SYSTEM IS DESCRIBED IN FSAR SECTION 9.3.2. THE SECTION DOES NOT MAKE REFERENCE TO NOR DOES IT SPECIFY PACKING REQUIREMENTS FOR THE VALVES. THE PASS SYSTEM IS DISCUSSED IN TECHNICAL SPECIFICATION SECTION 6.0 HOWEVER NOT TO THE DETAIL DEFINED BY THIS CHANGE.

SUBJECT: MDD 92-V1M096,REVISION 0,SEQUENCE 1

DESCRIPTION: NORMAL LIGHTING AND 120 VAC RECEPTACLES HAVE BEEN ADDED TO THE

BACKFLUSHABLE FILTER PIT AREA ON LEVEL B OF THE AUXILIARY BUILDING. FIXTURES WERE MOUNTED IN ACCORDANCE WITH LIGHTING AND COMMUNICATION DETAIL DRAWINGS AND PER CATEGORY I STRUCTURE REQUIREMENTS.

SAFETY EVALUATION: THE ADDITION OF TEN NORMAL LIGHTS AND FOUR 120 VAC RECEPTACLES TO THE BACKFLUSHABLE FILTER PIT AREA DOES NOT IMPACT THE PLANT AS DESCRIBED IN FSAR SECTIONS 8.3 "ONSITE POWER SYSTEMS" AND 9.5.3 "LIGHTING SYSTEMS". ADDITION OF THE LIGHTING AND RECEPTACLES DOES NOT AFFECT ANY OF THE REQUIREMENTS SPECIFIED IN TECHNICAL SPECIFICATION 3/4.8 WHICH ADDRESSES ELECTRICAL POWER SYSTEMS.

SUBJECT: MDD 92-V2M097,REVISION 0,SEQUENCE 1

DESCRIPTION: NORMAL LIGHTING AND 120 VAC RECEPTACLES HAVE BEEN ADDED TO THE BACKFLUSHABLE FILTER PIT AREA ON LEVEL B OF THE AUXILIARY BUILDING. FIXTURES WERE MOUNTED IN ACCORDANCE WITH LIGHTING AND COMMUNICATION DETAIL DRAWINGS AND PER CATEGORY I STRUCTURE REQUIREMENTS.

SAFETY EVALUATION: THE ADDITION OF TEN NORMAL LIGHTS AND FOUR RECEPTACLES TO THE BACKFLUSHABLE FILTER PIT AREA DOES NOT IMPACT THE PLANT AS DESCRIBED IN FSAR SECTIONS 8.3 "ONSITE POWER SYSTEMS" AND 9.5.3 "LIGHTING SYSTEMS". ADDITION OF THE LIGHTING AND RECEPTACLES DOES NOT AFFECT ANY OF THE REQUIREMENTS SPECIFIED IN TECHNICAL SPECIFICATION 3/4.8 WHICH

ADDRESSES ELECTRICAL POWER SYSTEMS.

SUBJECT: MDD 92-V2M100,REVISION 0,SEQUENCE 1

DESCRIPTION: MATERIAL CLASSIFICATION FOR THE DISCHARGE PIPING FROM THE NORTH AND SOUTH TURBINE BUILDING SUMPS WAS CHANGED FROM PROJECT CLASS LLO (150# CARBON STEEL) TO LL3 (150# STAINLESS STEEL) IN ACCORDANCE WITH THE VOGTLE PROJECT PIPING MATERIALS CLASSIFICATION. MATERIAL CLASS WAS CHANGED TO PREVENT INTERNAL SURFACE CORROSION WHICH HAS CAUSED THE PUMP SUCTION LINE TO CLOG. IN ADDITION, SUCTION LINES WERE INSTALLED WITH FLANGED CONNECTIONS INSTEAD OF WELDED CONNECTIONS TO ASSIST FUTURE MAINTENANCE ACTIVITIES.

SAFETY EVALUATION: FSAR SECTION 11.5 "PROCESS AND EFFLUENT RADIOLOGICAL MONITORING AND SAMPLING SYSTEM" DOES NOT PROVIDE THE LEVEL OF DETAIL (MATERIAL CLASS) AFFECTED BY THIS CHANGE. THE SYSTEM WILL STILL FUNCTION AS DESCRIBED IN THE FSAR SECTION. CHANGING THE SUCTION PIPING MATERIAL CLASS WILL NOT IMPACT ANY PLANT TECHNICAL SPECIFICATION.

SUBJECT: MDD 92-V2M113,REVISION 0,SEQUENCE 1

DESCRIPTION: AN ADDITIONAL 1.5 INCHES OF FIBERGLASS INSULATION WAS INSTALLED OVER THE EXISTING INSULATION ON THE STEAM GENERATOR BLOWDOWN HEAT EXCHANGER INLET PIPING AND CONDENSATE OUTLET PIPING TO ASSIST IN REDUCING ROOM TEMPERATURES.

ELEVATED TEMPERATURES COULD CAUSE PREMATURE ACTUATION OF THE HIGH ENERGY LINE BREAK PROTECTION OR HAVE ADVERSE AFFECTS ON ELECTRICAL COMPONENTS CONTAINED WITHIN THE LOCAL BLOWDOWN CONTROL PANEL.

SAFETY EVALUATION: THE STEAM GENERATOR BLOWDOWN SYSTEM IS DESCRIBED IN FSAR SECTION 10.4.8. THE TYPE AND QUANTITY OF INSULATION IS NOT SET FORTH IN THIS DESCRIPTION. THE OPERATION OF THE BLOWNDOWN SYSTEM IS NOT AFFECTED BY THE ADDITION OF INSULATION. THE OPERABILITY OF THE HIGH ENERGY LINE BREAK PROTECTION CIRCUITS IN ROOM R-C02, REQUIRED BY TECHNICAL SPECIFICATION 3.3.3.11 ARE NOT AFFECTED BY THIS CHANGE.

SUBJECT: MDD 92-V1M118,REVISION 0,SEQUENCE 1

DESCRIPTION: THE TURBINE BUILDING COOLING WATER PUMPS (TPCW) USE A SPLIT MECHANICAL SEAL WITH UTILITY WATER INJECTING INTO THE SEAL. SEAL WATER FLOW TO THE SEALS WAS INADEQUATE. FLOW WAS BEING DIVERTED (NO RESTRICTION) THROUGH THE BUSHING BLEED OFF LINE ON THE STANDBY PUMP INSTEAD OF FLOWING TO THE RUNNING PUMP. TO RESTRICT THE FLOW OF UTILITY WATER TO THE SEAL HOUSING OF THE STANDBY TPCW PUMP TO PERMIT SEAL INJECTION PRESSURE FOR THE OPERATING PUMP TO EXCEED TPCW PUMP DISCHARGE PRESSURE AND FLOW INTO THE SEAL, THE THROTTLE BUSHING BLEED OFF LINE WAS REMOVED AND PLUGGED ON BOTH PUMPS.

SAFETY EVALUATION: THE TURBINE PLANT COOLING WATER PUMPS ARE DESCRIBED IN FSAR SECTION

9.2.11 HOWEVER THE DISCUSSION DOES NOT PROVIDE THE LEVEL OF DETAIL ASSOCIATED WITH THIS CHANGE. PUMP OPERATION REMAINS THE SAME. THE TURBINE PLANT COOLING WATER SYSTEM IS NOT ADDRESSED IN THE PLANT TECHNICAL SPECIFICATIONS.

SUBJECT: MDD 92-VAM133,REVISION 0,SEQUENCE 1

DESCRIPTION: THE ORIFICE BORE DIAMETER ASSOCIATED WITH THE MINI-FLOW RECIRCULATION LINES OF EACH LARGE WASTE MONITOR TANK PUMP WERE INCREASED TO THE FULL DIAMETER OF THE SCHEDULE 40S PIPE (1.049"; THEREBY ELIMINATING THE EFFECTS OF THE ORIFICE. THIS WAS NECESSARY TO PREVENT EVENTUAL PUMP DAMAGE DUE TO THE INADEQUATE SIZING OF THE ORIGINALLY INSTALLED ORIFICE.

SAFETY EVALUATION: FSAR SECTION 11.2 DISCUSSES THE PLANT'S LIQUID WASTE MANAGEMENT SYSTEMS. THE DISCUSSION DOES NOT SPECIFY ORIFICE SIZING REQUIREMENTS. THE SYSTEM WILL CONTINUE TO OPERATE AND BE OPERATED AS BEFORE. THE LARGER ORIFICE ENHANCES PUMP PERFORMANCE. THE PUMPS ARE NOT INCLUDED IN THE PLANT TECHNICAL SPECIFICATIONS.

SUBJECT: MDD 92-V1M136,REVISION 0,SEQUENCE 1

DESCRIPTION: SEVERAL MINOR WIRING DISCREPANCIES WERE DISCOVERED IN MOTOR CONTROL CENTER 1ABC. SEVERAL JUMPER CONNECTIONS ON THE BOTTOM SIDE TERMINAL BLOCKS WERE FOUND TO BE DUPLICATED ON THE TOP TERMINAL BLOCK AND WERE REMOVED. THE

SECOND CHANGE INVOLVED THE REMOVAL OF INTERNAL WIRING FOR THE SPACE HEATER ASSOCIATED WITH CUBICLE 1ABC30 WHICH HAD NOT PREVIOUSLY BEEN REMOVED WHEN THE LOAD WAS TRANSFERRED TO ANOTHER SUPPLY.

SAFETY EVALUATION: ONSITE POWER SYSTEMS ARE DISCUSSED IN FSAR SECTION 8.3. THESE CHANGES CORRECT MINOR WIRING ERRORS AND DO NOT AFFECT THE DESCRIPTION OR OPERATION OF THE ONSITE DISTRIBUTION SYSTEM AS DESCRIBED IN THIS FSAR SECTION. SYSTEM OPERATION IS NOT IMPACTED. TECHNICAL SPECIFICATION 3/4.8 ADDRESSES OPERABILITY REQUIREMENTS FOR ELECTRICAL DISTRIBUTION SYSTEMS. THESE REQUIREMENTS ARE NOT AFFECTED BY THE WIRING CHANGES.

SUBJECT: MDD 92-V2M146,REVISION 0,SEQUENCE 1

DESCRIPTION: THE TURBINE PLANT COOLING WATER PUMPS (TPCW) USE A SPLIT MECHANICAL SEAL WITH UTILITY WATER INJECTING INTO THE SEAL. SEAL WATER FLOW TO THE SEALS WAS INADEQUATE. FLOW WAS BEING DIVERTED (NO RESTRICTION) THROUGH THE BUSHING BLEED OFF LINE ON THE STANDBY PUMP INSTEAD OF THE RUNNING PUMP. TO RESTRICT THE FLOW OF UTILITY WATER TO THE SEAL HOUSING OF THE STANDBY TPCW PUMP TO PERMIT SEAL INJECTION PRESSURE FOR THE OPERATING PUMP TO EXCEED TPCW PUMP DISCHARGE PRESSURE AND FLOW INTO THE SEAL, THE THROTTLE BLEED OFF LINE WAS REMOVED AND PLUGGED.

SAFETY EVALUATION: THE TURBINE PLANT COOLING WATER

PUMPS ARE DESCRIBED IN FSAR SECTION 9.2.11 HOWEVER THE DISCUSSION DOES NOT PROVIDE THE LEVEL OF DETAIL ADDRESSED BY THIS CHANGE. PUMP OPERATION REMAINS THE SAME. THE TURBINE PLANT COOLING WATER SYSTEM IS NOT ADDRESSED IN THE PLANT TECHNICAL SPECIFICATIONS.

INTERIM REPORT

10 CFR 50.59(b)

January 1, 1992 thru May 31, 1993

TESTS OR EXPERIMENTS

SUBJECT:	T-ENG-92-01
DESCRIPTION:	THE PROCEDURE OPERATES THE 2B DIESEL GENERATOR WHILE VARYING THE VAR LOADING AND WAS WRITTEN TO SIMULATE AS CLOSE AS POSSIBLE, THE CONDITIONS PRESENT DURING THE 2/5/92 DIESEL GENERATOR FAILURE. DURING THE TEST, THE DIESEL GENERATOR IS PARALLELED PER THE NORMAL OPERATING PROCEDURE. AT THIS TIME KVARS WERE LOWERED UNTIL THE LOW EXCITATION ALARM OR A NEGATIVE 4500 KVARS WAS REACHED. THE GENERATOR WAS MAINTAINED WITHIN THE REACTIVE CAPABILITY CURVE DESIGN LIMITS THROUGHOUT THE TEST.
SAFETY EVALUATION:	THE TEST DID NOT REPRESENT A CHANGE TO THE DIESEL GENERATOR SYSTEM AS DESCRIBED IN FSAR SECTION 8.3 "ONSITE POWER SYSTEMS" AND SECTIONS 9.5.4 THROUGH 9.5 8 "DIESEL GENERATOR AND AUXILIARIES". NEGATIVE KVAR LOADING WAS MAINTAINED WITHIN THE CAPABILITY CURVE PROVIDED BY THE VENDOR. THE TEST DID NOT PROVIDE FOR DIESEL GENERATOR OPERATION OUTSIDE OF ITS DESIGN SPECIFICATIONS. PERFORMANCE OF THE TEST DID NOT IMPACT THE REQUIREMENTS SET FORTH IN PLANT TECHNICAL SPECIFICATION 3/4.8.1.
SUBJECT:	T-ENG-92-02
DESCRIPTION:	THE SPECIAL TEST WAS CONDUCTED TO COLLECT ACTUAL ELECTRICAL DATA UNDER KNOWN CONDITIONS TO VALIDATE THE ACCURACY OF THE ELECTRICAL MODEL OF THE DIESEL GENERATORS (DGs) AND CONNECTED ELECTRICAL DISTRIBUTION COMPONENTS.

THE TEST CONSISTED OF PERFORMANCE SEVERAL OPERATING CONDITIONS ASSOCIATED WITH TRAIN A DG OPERATION INCLUDING STARTUP OF TWO LARGE LOADS WHILE THE DG WAS TIED TO THE BUS, THE TWO TECHNICAL SPECIFICATION REQUIRED LOAD REJECTIONS OF THE DG AND LASTLY STARTER CURRENT TRACES FOR THE THIRD CCW AND NSCW PUMPS WHILE BEING SUPPLIED FROM THE RAT.

SAFETY EVALUATION: THE PROCEDURE INSTALLS NON-INTRUSIVE TEST INSTRUMENTS TO RECORD THE DESIRED PARAMETERS. ALL SYSTEM MANIPULATIONS WERE CONDUCTED IA ACCORDANCE WITH APPROVED PLANT PROCEDURES. THE TEST DID NOT INTRODUCE ANY SYSTEM OPERATION OUTSIDE OF DESIGN PARAMETERS. EQUIPMENT OPERATION WAS CONSISTENT WITH DESCRIPTIONS CONTAINED IN FSAR SECTIONS 8.2 "OFFSITE POWER SYSTEMS", 8.3 "ONSITE POWER SYSTEMS" AND SECTIONS 9.5.4 THROUGH 9.5.8 "DIESEL GENERATOR AND AUXILIARIES".TECHNICALSPECIFICATION 3/4.8.1 WAS NOT AFFECTED BY THE PERFORMANCE OF THIS TEST.

SUBJECT: T-ENG-92-03

DESCRIPTION: THE SPECIAL TEST WAS CONDUCTED TO COLLECT ACTUAL ELECTRICAL DATA UNDER KNOWN CONDITIONS TO VALIDATE THE ACCURACY OF THE ELECTRICAL MODEL OF THE DIESEL GENERATORS (DGs) AND CONNECTED ELECTRICAL DISTRIBUTION COMPONENTS. THE TEST CONSISTED OF PERFORMANCE SEVERAL OPERATING CONDITIONS ASSOCIATED WITH TRAIN B DG OPERATION INCLUDING STARTUP OF TWO

LARGE LOADS WHILE THE DG WAS TIED TO THE BUS, THE TWO TECHNICAL SPECIFICATION REQUIRED LOAD REJECTIONS OF THE DG AND LASTLY STARTER CURRENT TRACES FOR THE THIRD CCW AND NSCW PUMPS WHILE BEING SUPPLIED FROM THE RAT.

SAFETY EVALUATION: THE PROCEDURE INSTALLS NON-INTRUSIVE TEST INSTRUMENTS TO RECORD THE DESIRED PARAMETERS. ALL SYSTEM MANIPULATIONS WERE CONDUCTED IA ACCORDANCE WITH APPROVED PLANT PROCEDURES. THE TEST DID NOT INTRODUCE ANY SYSTEM OPERATION OUTSIDE OF DESIGN PARAMETERS. EQUIPMENT OPERATION WAS CONSISTENT WITH DESCRIPTIONS CONTAINED IN FSAR SECTIONS 8.2 "OFFSITE POWER SYSTEMS", 8.3 "ONSITE POWER SYSTEMS" AND SECTIONS 9.5.4 THROUGH 9.5.8 "DIESEL GENERATOR AND AUXILIARIES".TECHNICALSPECIFICATION 3/4.8.1 WAS NOT AFFECTED BY THE PERFORMANCE OF THIS TEST.

SUBJECT: T-ENG-92-04

DESCRIPTION: DESIGN CHANGE PACKAGE 91-V2N0200 PROVIDED THE NECESSARY DESIGN TO PLACE THE UNIT 2 POWER STABILIZER (PSS) IN SERVICE. THE PSS IS A PORTION OF THE MAIN GENERATOR EXCITATION SYSTEM. TESTING OF THE PSS IS TO CONFIRM THE LEAD/LAG TIME CONSTANTS PROVIDED IN THE DESIGN PACKAGE AND TO DETERMINE THE OPTIMUM GAIN SETTING. TESTING WAS DIVIDED INTO FIVE PARTS: 1) VERIFY TUNING/OPERATIONAL STATUS OF THE PSS, 2) TUNING AND OPERATIONAL STATUS OF THE AC VOLTAGE REGULATOR, 3) MEASUREMENT OF

TRANSFER CHARACTERISTICS OF AC VOLTAGE REGULATOR, EXCITER AND THE MAIN GENERATOR, 4) DETERMINE OF MAXIMUM USEABLE GAIN PROVIDED BY THE PSS AND 5) PSS PERFORMANCE VERIFICATION.

SAFETY EVALUATION: THE PSS WAS ORIGINALLY FURNISHED WITH THE EXCITER BUT WAS NOT PREVIOUSLY PLACED IN SERVICE. ALL TEST CONNECTIONS OR TEMPORARY ADJUSTMENTS WILL BE MADE WITH THE EXCITATION SYSTEM IN DC CONTROL, SINCE THE CONNECTIONS AFFECT THE AC REGULATOR CIRCUITRY. SYSTEM OPERATION WILL BE CONDUCTED IN ACCORDANCE WITH THE DESCRIPTION CONTAINED WITHIN FSAR SECTION 10.2, TURBINE-GENERATOR. TURBINE-GENERATOR PROTECTION FEATURES ARE REMAIN FUNCTIONAL THROUGHOUT PERFORMANCE OF THE TEST.

SUBJECT: T-ENG-92-05

DESCRIPTION: THE TEST CONSISTED OF CLOSING THE 2B DIESEL GENERATOR OUTPUT BREAKER AT APPROXIMATELY 50 VOLTS BELOW SYSTEM (GRID) VOLTAGE AND VARYING THE VAR LOADING. THE TEST PROVIDES FOR DATA COLLECTION AS A RESULT OF THE 2/5/92 DG FAILURE. THE TEST CONNECTS THE DIESEL GENERATOR 50 VOLTS BELOW BUS VOLTAGE. THE DG IS THEN LOADED TO 1000 KW UNDEREXCITED UNTIL THE LOW EXCITATION ALARM IS RECEIVED.

SAFETY EVALUATION: PERFORMANCE OF THIS TEST DID NOT REPRESENT A CHANGE TO THE DIESEL GENERATOR SYSTEM AS DESCRIBED IN FSAR SECTION 8.3 "ONSITE POWER SYSTEMS" AND SECTIONS 9.5.4 THROUGH

9.5.8 'DIESEL GENERATOR AND AUXILIARIES". NEGATIVE KVAR LOADING WAS MAINTAINED WITHIN THE REACTIVE CAPABILITY CURVE PROVIDED BY THE VENDOR. THE TEST DID NOT PROVIDE FOE DIESEL GENERATOR OPERATION OUTSIDE OF ITS DESIGN SPECIFICATIONS. PERFORMANCE OF THE TEST DID NOT IMPACT THE REQUIREMENTS SET FORTH IN PLANT TECHNICAL SPECIFICATION 3/4.8.1.

SUBJECT; T-ENG-92-06

DESCRIPTION: DURING THE PERFORMANCE OF THE SI PORTION OF THE UNIT 2 TRAIN B ESFAS, THE SAFETY FEATURES SEQUENCER INCLUDED AN EXTRA 14.3 SECOND TIME DELAY BETWEEN STEP 4 AND STEP 6 DURING THE LOAD SEQUENCING OPERATION. THIS PROCEDURE WAS PERFORMED TO TROUBLESHOOT THIS ABNORMALITY. THE TEST REQUIRED COMPLETION OF THE TRAIN B SEQUENCER LOAD BLOCK TIMER TEST ON SAFETY INJECTION SIGNAL TEN TIMES. SEVERAL TESTS FAILED UNTIL THE ATI (AUTOMATIC TEST INSERTION CIRCUIT) WAS REMOVED VIA A TEMPORARY MODIFICATION AT WHICH TIME THE TEST WAS SUCCESSFULLY PERFORMED.

SAFETY EVALUATION: THE PERFORMANCE OF THE TEST DOES NOT START ANY PLANT EQUIPMENT OTHER THAN THE SEQUENCER BEING TESTED. OTHER COMPONENTS BY DESIGN WOULD NOT BE AFFECTED UNLESS A SIGNAL WAS GENERATED CONCURRENTLY FROM THE SEQUENCER AND SSPS. THE INSTALLATION OF A TEST SWITCH TO INITIATE AN SI SIGNAL IS NOT ADDRESSED IN THE FSAR HOWEVER INSTALLATION AND REMOVAL OF THE

SWITCH WILL BE ADDRESSED THROUGH ADMINISTRATIVE CONTROLS. THE SWITCH AND TEST EQUIPMENT ARE NON-INTRUSIVE AND THEREFORE WILL NOT IMPACT SYSTEM OPERATION AS DESCRIBED IN THE FSAR. THIS FOLLOWS A REVIEW OF TECHNICAL SPECIFICATIONS 6.3, 7.3, 8.3 AND 15.0. WITH THE EXCEPTION OF THE SIMULATED SIGNAL, ALL EQUIPMENT IS OPERATED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES. SYSTEM FUNCTIONS REQUIRED BY TECHNICAL SPECIFICATIONS REMAIN CAPABLE OF PERFORMING THEIR RESPECTIVE FUNCTIONS.

SUBJECT: T-ENG-92-07

DESCRIPTION: DURING THE PERFORMANCE OF AN ESFAS TEST (UNDERVOLTAGE AND SAFETY INJECTION), THE SEQUENCER EXPERIENCED A FAILURE OF ITS INTERNAL LOGIC WHICH NECESSITATED THE REPLACEMENT OF ITS CONTROLLER A MODULE. IT WAS DETERMINED THAT ONLY THE CONTROLLER SHOULD BE RETESTED.THIS TEST WAS PERFORMED TO TEST THOSE FUNCTIONS AFFECTED BY CONTROLLER A REPLACEMENT, WITH OVERLAP AT THE BOUNDARIES OF THE AFFECTED CIRCUITRY. THE TEST WILL NOT OPERATE ANY EQUIPMENT EXCEPT FOR THE SEQUENCER.

SAFETY EVALUATION: THE PERFORMANCE OF THE TEST ON THE SI PORTION DOES NOT START ANY PLANT EQUIPMENT OTHER THAN THE SEQUENCER BEING TESTED. OTHER COMPONENTS BY DESIGN WOULD NOT BE AFFECTED UNLESS A SIGNAL WAS GENERATED CONCURRENTLY FROM THE SEQUENCER AND SSPS. THE CONCURRENT

SIMULATION OF AN SI/UV FROM THE MANUAL TEST PANEL WILL NOT START ANY EQUIPMENT AS THIS MODE (SEQ TEST MODE) BLOCKS ACTUATIONS. THE INSTALLATION OF A TEST SWITCH TO INITIATE AN SI AND A UV SIGNAL IS NOT ADDRESSED IN THE FSAR HOWEVER INSTALLATION AND REMOVAL OF THE SWITCH CONNECTIONS WILL BE ADDRESSED THROUGH ADMINISTRATIVE CONTROLS. THE SWITCHES AND TEST EQUIPMENT ARE NON-INTRUSIVE AND THEREFORE WILL NOT IMPACT SYSTEM OPERATION AS DESCRIBED IN THE FSAR. THIS FOLLOWS A REVIEW OF TECHNICAL SPECIFICATIONS 6.3, 7.3, 8.3 AND 15.0. WITH THE EXCEPTION OF THE SIMULATED SIGNAL SIGNALS, ALL EQUIPMENT IS OPERATED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES. SYSTEM FUNCTIONS REQUIRED BY TECHNICAL SPECIFICATIONS REMAIN CAPABLE OF PERFORMING THEIR RESPECTIVE FUNCTIONS.

SUBJECT: T-ENG-92-08

DESCRIPTION: THE PROCEDURE WAS PERFORMED TO VERIFY THE SENSOR CALIBRATION FOR THE REACTOR COOLANT SYSTEM NARROW RANGE AND WIDE RANGE RTD'S TO SATISFY TECHNICAL SPECIFICATION SURVEILLANCE REQUIREMENTS 4.3.1.1 (F/U 7 AND 8 OF TABLE 4.3-1) AND 4.3.3.6.b (F/U 2 AND 3 OF TABLE 3.3-8).

SAFETY EVALUATION: THE RTD'S ARE ADDRESSED IN FSAR SECTIONS 7.2.1.1.4 "COOLANT TEMPERATURE SENSOR ARRANGEMENT, 7.2.2.3.2 "COOLANT TEMPERATURE AND 7.4 "SYSTEMS REQUIRED FOR SAFE SHUTDOWN". ALL NON-INTRUSIVE TEST EQUIPMENT INSTALLED TO PERFORM THE

TEST WILL BE REMOVED AND INDEPENDENTLY VERIFIED REMOVED, THEREFORE NOT IMPACTING THE DISCUSSIONS OF THESE SECTIONS. THE TEST IS BEING USED TO VERIFY TECHNICAL SPECIFICATION REQUIREMENTS IN THEIR ENTIRETY.

SUBJECT:	T-OPER-92-002
DESCRIPTION:	THIS PROCEDURE IS SIMPLY PROCEDURE 14721-2, "ECCS SUBSYSTEM FLOW BALANCE AND CHECK VALVE REFUELING INSERVICE TEST", WITH ADDITIONAL STEPS FOR THE SUCTION BOOST TEST. IT WAS USED TO PERFORM THE REQUIRED ECCS FLOW BALANCE AND CHECK VALVE TESTS AS SPECIFIED BY TECHNICAL SPECIFICATIONS 4.5.2g, 4.5.2h AND 4.0.5. IN ADDITION, THE CCP SUCTION BOOST PORTION WAS PERFORMED TO DETERMINE IF ADEQUATE SUCTION PRESSURE IS PROVIDED DURING A LOCA. THE SUCTION PRESSURES WERE EVALUATED BY WESTINGHOUSE TO DETERMINE EFFECTS OF CCP RUNOUT DURING A LOCA. THE BOOST PORTION OF THE TEST WAS SEPARATE FROM THE ECCS FLOW BALANCE PORTIONS OF THIS TEST AND WAS RECOMMENDED BY WESTINGHOUSE.
SAFETY EVALUATION:	THIS TEST DOES NOT DEVIATE OR CREATE AN ACCIDENT OR MALFUNCTION DIFFERENT FROM FSAR ANALYSIS. DURING THE TEST, SHUTDOWN COOLING WAS MAINTAINED BY THE RHR TRAIN NOT BEING TESTED. IN ADDITION, STEPS WERE INCLUDED TO PREVENT OVERPRESSURIZATION OF THE ECCS RING HEADER DURING THE SUCTION BOOST SECTION. TECHNICAL SPECIFICATION 4.5.2g AND 4.5.2h WERE MET AS REQUIRED AND THEREFORE DO NOT DEVIATE FROM THE MARGIN OF SAFETY. THE SUCTION BOOST PORTION OF THE TEST WAS PERFORMED WHEN IN MODE 6, WITH THE REACTOR HEAD OFF, WHEN ECCS SYSTEMS ARE NOT REQUIRED FOR ECCS INJECTION MODE. WITH THESE CRITERIA MET AND ONE BORATION FLOWPATH AVAILABLE, THE LIMITATIONS OF TECHNICAL SPECIFICATIONS ARE SATISFIED.

III

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2

NRC DOCKET NOS. 50-424 AND 50-425

FACILITY OPERATING LICENSE NOS. NPF-68 AND NPF-81

ANNUAL RADIOLOGICAL ENVIRONMENTAL SURVEILLANCE REPORT
CALENDAR YEAR 1992

VOGTLE ELECTRIC GENERATING PLANT
RADIOLOGICAL ENVIRONMENTAL SURVEILLANCE REPORT

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ACRONYMS

CL	Confidence Level
EPA	Environmental Protection Agency
GPC	Georgia Power Company
LLD	Lower Limit of Detection
MDA	Minimum Detectable Activity
MDD	Minimum Detectable Difference
NA	Not Applicable
NDM	No Detectable Measurement(s)
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
REMP	Radiological Environmental Monitoring Program
RL	Reporting Level
RM	River Mile
SRS	Savannah River Site
TLD	Thermoluminescent Dosimeter
VEGP	Alvin W. Vogtle Electric Generating Plant

VOGTLE ELECTRIC GENERATING PLANT
RADIOLOGICAL ENVIRONMENTAL SURVEILLANCE REPORT

1.0 INTRODUCTION

This is the sixth Annual Radiological Environmental Surveillance Report for the Alvin W. Vogtle Electric Generating Plant (VEGP). It covers activities of the Radiological Environmental Monitoring Program (REMP) for calendar year 1992. All dates in this report are for 1992 unless otherwise indicated. The specifications for the REMP are provided by Technical Specifications Section 3/4.12.

The objectives of the REMP are to ascertain the levels of radiation and the concentrations of radioactivity in the VEGP environs and to assess any radiological impact upon the environment due to plant operations. A comparison between the results obtained during the preoperational and operational phases provides some basis for such an assessment. A comparison between the results obtained at control stations (locations where radiological levels are not expected to be significantly affected by plant operations) and at indicator stations (locations where it is anticipated that radiological levels are more likely to be affected by plant operations) provides a further basis for this assessment.

The preoperational stage of the REMP started in August of 1981 when the initial collections of the radiological environmental samples were made. There was a phase-in period of a few years before the preoperational program was fully implemented. The transition from the preoperational stage to the operational stage occurred upon initial criticality for Unit 1, March 9, 1987.

A summary description of the REMP is provided in Section 2. Included are maps showing the sampling locations which are keyed to a table indicating the distance and direction of each sampling location from a point midway between the VEGP's reactors. An annual summary of the laboratory analysis results obtained from the samples utilized for environmental monitoring is presented in Section 3. A discussion of the results including assessments of any radiological impacts upon the environment is provided in Section 4. The results of the Interlaboratory Comparison Program are presented in Section 5. Conclusions are stated in Section 6.

2.0 SUMMARY DESCRIPTION

A summary description of the REMP is provided in Table 2-1. Table 2-1 is essentially a copy of Table 3.12-1 of the Technical Specifications which delineates the program's requirements. Sampling locations specified by Table 2-1 are described in Table 2-2 and are shown on maps in Figures 2-1 through 2-4. This description of the sample locations closely follows that found in the table and figures in Section 3.0 of the Offsite Dose Calculation Manual (ODCM).

In Footnote (1) of Technical Specifications Table 3.12-1, deviations are permitted from the required sampling schedule if specimens are unobtainable due to circumstances such as hazardous conditions, seasonal unavailability, and malfunction of equipment. Any deviations are accounted for in the discussions for each particular sample type in Section 4.

For 1992, all the laboratory analyses were performed by Georgia Power Company's Environmental Laboratory in Smyrna, Georgia. In previous years, the reading of the thermoluminescent dosimeters (TLDs) were provided by Teledyne Isotopes Midwest Laboratory (or its predecessor, Hazleton Environmental Sciences, Inc.) in Northbrook, Illinois.

TABLE 2-1 (SHEET 1 OF 5)

SUMMARY DESCRIPTION OF RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Representative Samples and Sample Locations	Sampling and Collection Frequency	Type and Frequency of Analysis
1. Direct Radiation	Thirty-nine routine monitoring stations with two or more dosimeters placed as follows: An inner ring of stations, one in each meteorological sector in the general area of the site boundary; An outer ring of stations, one in each meteorological sector in the 6 mile range from the site; and Special interest areas such as population centers, nearby recreation areas, schools and control stations.	Quarterly	Gamma dose quarterly

TABLE 2-1 (SHEET 2 OF 5)

SUMMARY DESCRIPTION OF RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Representative Samples and Sample Locations	Sampling and Collection Frequency	Type and Frequency of Analysis
2. Airborne			
Radioiodine and Particulates	Samples from seven locations: Five locations close to the site boundary in different sectors; A community having the highest calculated annual average ground-level D/Q; and A control location in the vicinity of a population center at a distance of about 14 miles.	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading	Radioiodine cannister: I-131 analysis weekly Particulate sampler: Gross beta analysis(1) following filter change and gamma isotopic analysis(2) of composite (by location) quarterly

TABLE 2-1 (SHEET 3 OF 5)

SUMMARY DESCRIPTION OF RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Representative Samples and Sample Locations	Sampling and Collection Frequency	Type and Frequency of Analysis
3. Waterborne			
a. Surface(3)	One sample upriver Two samples downriver	Composite sample over 1-month period(4)	Gamma isotopic analysis(2) monthly. Composite for tritium analysis quarterly
b. Drinking	Two samples at each of the two nearest water treatment plants that could be affected by plant discharges Two samples at a control location	Composite sample of river water near the intake at each water treatment plant over 2-week period(4) when I-131 analysis is required to be performed on each sample; monthly composite otherwise; and grab sample of finished water at each water treatment plant every 2 weeks or monthly, as appropriate.	I-131 analysis on each sample when the dose calculated for the consumption of the water is greater than 1 mrem per year(5). Composite for gross beta and gamma isotopic analyses(2) on raw water monthly. Gross beta, gamma isotopic and I-131 analyses on grab sample of finished water monthly. Composite for tritium analysis on raw and finished water quarterly.
c. Sediment from Shoreline	One sample from downriver area with existing or potential recreational value One sample from upriver area with existing or potential recreational value	Semiannually	Gamma isotopic analysis(2) semiannually

TABLE 2-1 (SHEET 4 OF 5)

SUMMARY DESCRIPTION OF RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Representative Samples and Sample Locations	Sampling and Collection Frequency	Type and Frequency of Analysis
4. Ingestion			
a. Milk	Two samples from milking animals(6) at control locations at a distance of about 10 miles or more	Biweekly	Gamma isotopic analysis(2,7) biweekly
b. Fish	At least one sample of any commercially or recreationally important species in vicinity of plant discharge area	Semiannually	Gamma isotopic analysis(2) on edible portions semiannually
	At least one sample of any commercially or recreationally important species in an area not influenced by plant discharge		
	At least one sample of any anadromous species in vicinity of plant discharge	During spring spawning season	Gamma isotopic analysis(2) on edible portions annually
c. Grass or Leafy Vegetation	One sample from two onsite locations near the site boundary in different sectors	Monthly during growing season	Gamma isotopic analysis(2,7) monthly
	One sample from a control location at about 17 miles distance		

TABLE 2-1 (SHEET 5 of 5)

SUMMARY DESCRIPTION OF
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

TABLE NOTATIONS

(1) Airborne particulate sample filters shall be analyzed for gross beta radioactivity 24 hours or more after sampling to allow for radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than 10 times the yearly mean of control samples, gamma isotopic analysis shall be performed on the individual samples.

(2) Gamma isotopic analysis means the identification and quantification of gamma-emitting radionuclides that may be attributable to the effluents from the facility.

(3) The upriver sample is taken at a distance beyond significant influence of the discharge. The downriver samples are taken in areas beyond and near the mixing zone.

(4) Composite sample aliquots shall be collected at time intervals that are very short (e.g., hourly) relative to the compositing period (e.g., monthly) to assure obtaining a representative sample.

(5) The dose shall be calculated for the maximum organ and age group, using the methodology and parameters in the ODCM.

(6) A milking animal is a cow or goat producing milk for human consumption.

(7) If gamma isotopic analysis is not sensitive enough to meet the Lower Limit of Detection (LLD) for I-131, a separate analysis for I-131 will be performed.

TABLE 2-2 (SHEET 1 OF 3)

RADIOLOGICAL ENVIRONMENTAL SAMPLING LOCATIONS

Station Number	Station Type (1)	Descriptive Location	Direction (2)	Distance (2) (miles)	Sample Type (3)
1	I	Hancock Landing Road	N	1.1	D
2	I	River Bank	NNE	0.8	D
3	I	Discharge Area	NE	0.6	A
3	I	River Bank	NE	0.7	D
4	I	River Bank	ENE	0.8	D
5	I	River Bank	E	1.0	D
6	I	Plant Wilson	ESE	1.1	D
7	I	Simulator Building	SE	1.7	DVA
8	I	River Road	SSE	1.1	D
9	I	River Road	S	1.1	D
10	I	Met Tower	SSW	0.9	A
10	I	River Road	SSW	1.1	D
11	I	River Road	SW	1.2	D
12	I	River Road	WSW	1.2	DA
13	I	River Road	W	1.3	D
14	I	River Road	WNW	1.8	D
15	I	Hancock Landing Road	NW	1.5	DV
16	I	Hancock Landing Road	NNW	1.4	DA
17	O	Savannah River Site (SRS) River Road	N	5.4	D
18	O	SRS D Area	NNE	5.0	D
19	O	SRS Road A.13	NE	4.6	D
20	O	SRS Road A.13.1	ENE	4.8	D
21	O	SRS Road A.17	E	5.3	D
22	O	River Bank Downstream of Buxton Landing	ESE	5.2	D
23	O	River Road	SE	4.6	D
24	O	Chance Road	SSE	4.9	D
25	O	Chance Road near Highway 23	S	5.2	D
26	O	Highway 23, and Ebenezer Church Road	SSW	4.6	D
27	O	Highway 23, opposite Boll Weevil Road	SW	4.7	D
28	O	Thomas Road	WSW	5.0	D
29	O	Claxton-Lively Road	W	5.1	D
30	O	Nathaniel Howard Road	WNW	5.0	D
31	O	River Road at Allen's Chapel Fork	NW	5.0	D
32	O	River Bank	NNW	4.7	D
33	O	Hunting Cabin	SE	3.3	D
35	O	Girard	SSE	6.6	DA

TABLE 2-2 (SHEET 2 OF 3)

RADIOLOGICAL ENVIRONMENTAL SAMPLING LOCATIONS

Station Number	Station Type (1)	Descriptive Location	Direction (2)	Distance (2) (miles)	Sample Type (3)
36	C	GPC Waynesboro Op. Hqtrs	WSW	13.9	DA
37	C	Substation (Waynesboro)	WSW	16.7	DV
43	O	Employees Recreation Area	SW	2.2	D
47	C	Oak Grove Church	SE	10.4	D
48	C	McBean Cemetery	NW	10.2	D
80	C	Augusta Water Treatment Plant	NNW	29.0	W(4)
81	C	Savannah River	N	2.5	F (5)S(6)
82	C	Savannah River (RM 151.2)	NNE	0.8	R
83	I	Savannah River (RM 150.4)	ENE	0.8	RS(6)
84	O	Savannah River (RM 149.5)	ESE	1.6	R
85	I	Savannah River	ESE	4.3	F(5)
87	I	Beaufort-Jasper County Water Treatment Plant; Beaufort, SC	SE	66	W(7)
88	I	Cherokee Hill Water Treatment Plant; Port Wentworth, GA	SSE	72	W(8)
98	C	W. C. Dixon Dairy	SE	9.8	M
99	C	Boyceland Dairy	W	20.9	M

TABLE NOTATION:

(1) Station Types
C - Control
I - Indicator
O - Other

(2) Direction and distance are reckoned from a point midway between the two reactors.

(3) Sample Types
A - Airborne Radioactivity
D - Direct Radiation
F - Fish
M - Milk
R - River Water
S - River Shoreline Sediment
W - Drinking Water
V - Vegetation

TABLE 2-2 (SHEET 3 OF 3)

RADIOLOGICAL ENVIRONMENTAL MONITORING LOCATIONS

TABLE NOTATIONS (Continued)

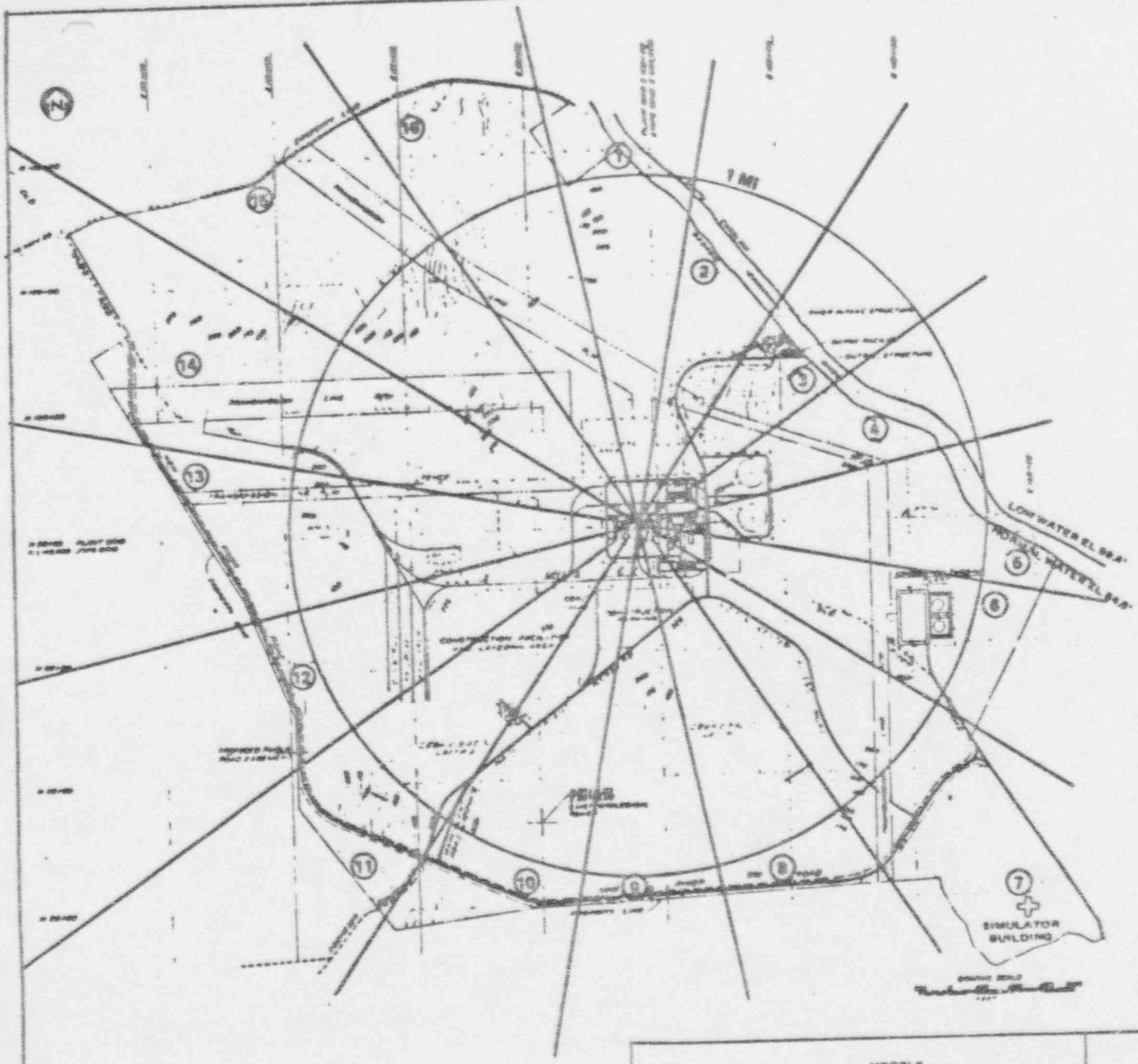
(4) The intake for the Augusta Water Treatment Plant is located on the Augusta Canal. The entrance to this canal is at River Mile (RM) 207 on the Savannah River. The canal effectively parallels the river. The intake to the pumping station is about 4 miles into the canal and only a tenth of a mile from the river (across land).

(5) A 5 mile stretch of the river was generally needed to obtain adequate fish samples. Samples were normally gathered between RM 153 and 158 for upriver collections and between RM 144 and 149.4 for downriver collections.

(6) Sediment was collected at locations with existing or potential recreational value. Because high water, shifting of the river bottom, or other reasons could cause a suitable location for sediment collection to become unavailable or unsuitable, a stretch of the river between RM 148.5 and 150.5 was designated for downriver collections while a stretch between RM 153 and 154 was designated for upriver collections. In practice, collections were normally made at RM 150.2 for downriver collections and RM 153.3 for upriver collections.

(7) The intake for the Beaufort-Jasper County Water Treatment Plant is located at the end of a canal which begins at RM 39.3 on the Savannah River. This intake is about 16 miles by line of sight down the canal from its beginning on the Savannah River.

(8) The intake for the Cherokee Hill Water Treatment Plant is located on Abercorn Creek which is about one and a quarter creek miles from its mouth on the Savannah River at RM 29.

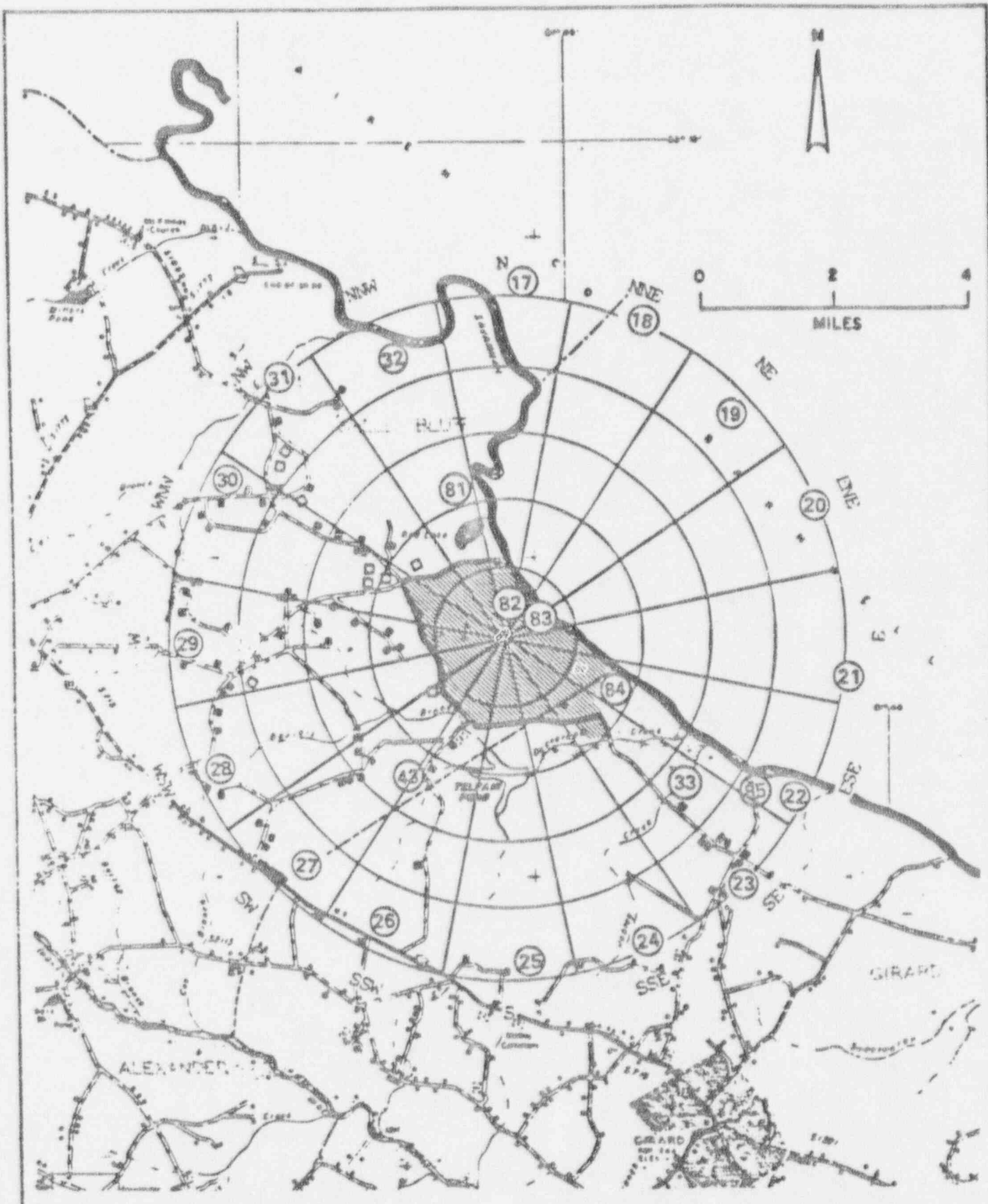


Georgia Power

VOGTLE
ELECTRIC GENERATING PLANT
UNIT 1 AND UNIT 2

TERRESTRIAL STATIONS NEAR SITE BOUNDARY

FIGURE 2-1



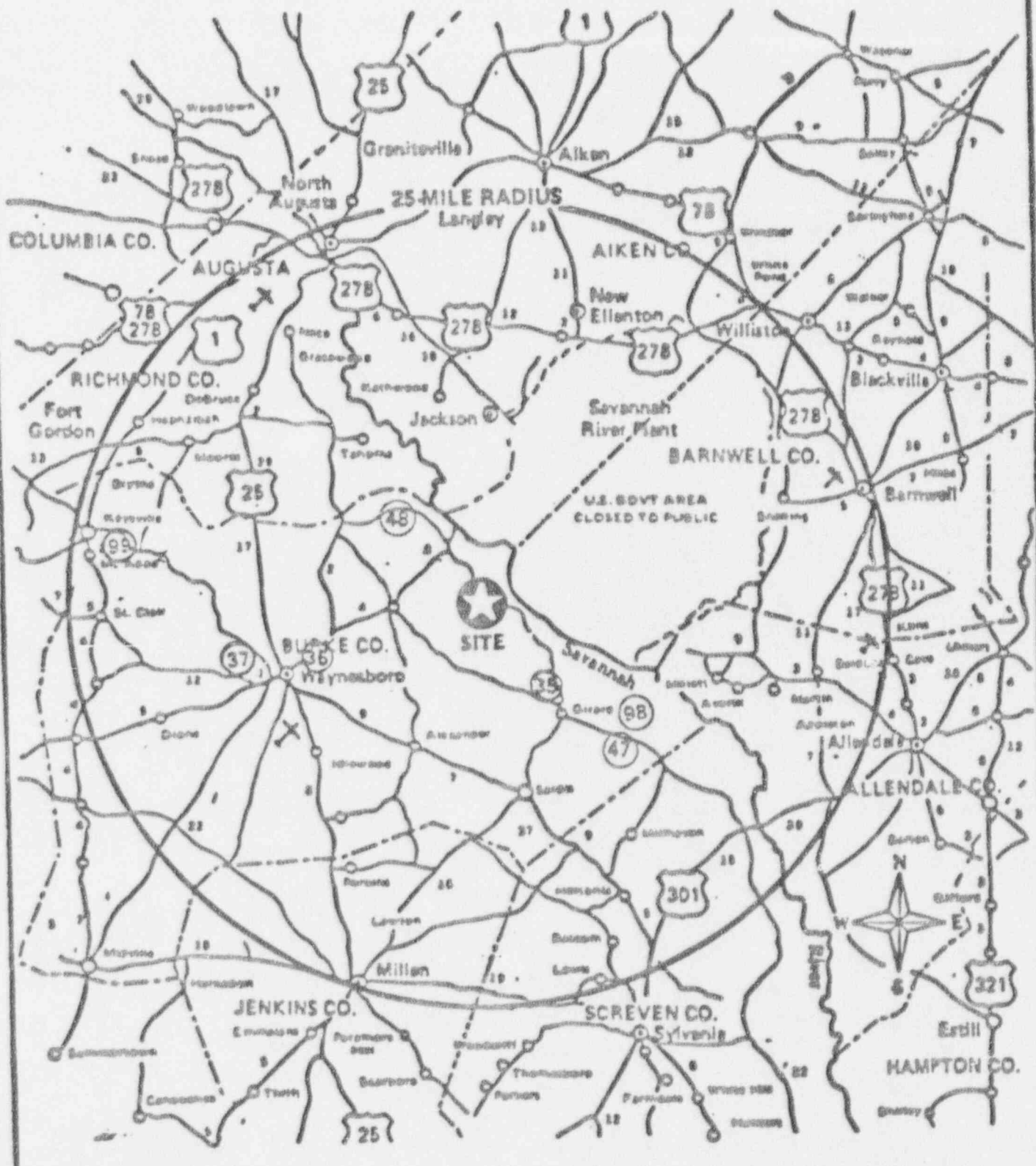
Georgia Power

VOGTLE
ELECTRIC GENERATING PLANT
UNIT 1 AND UNIT 2

TERRESTRIAL STATIONS BEYOND SITE BOUNDARY OUT TO APPROXIMATELY SIX MILES AND AQUATIC STATIONS

FIGURE 2-2

433-9

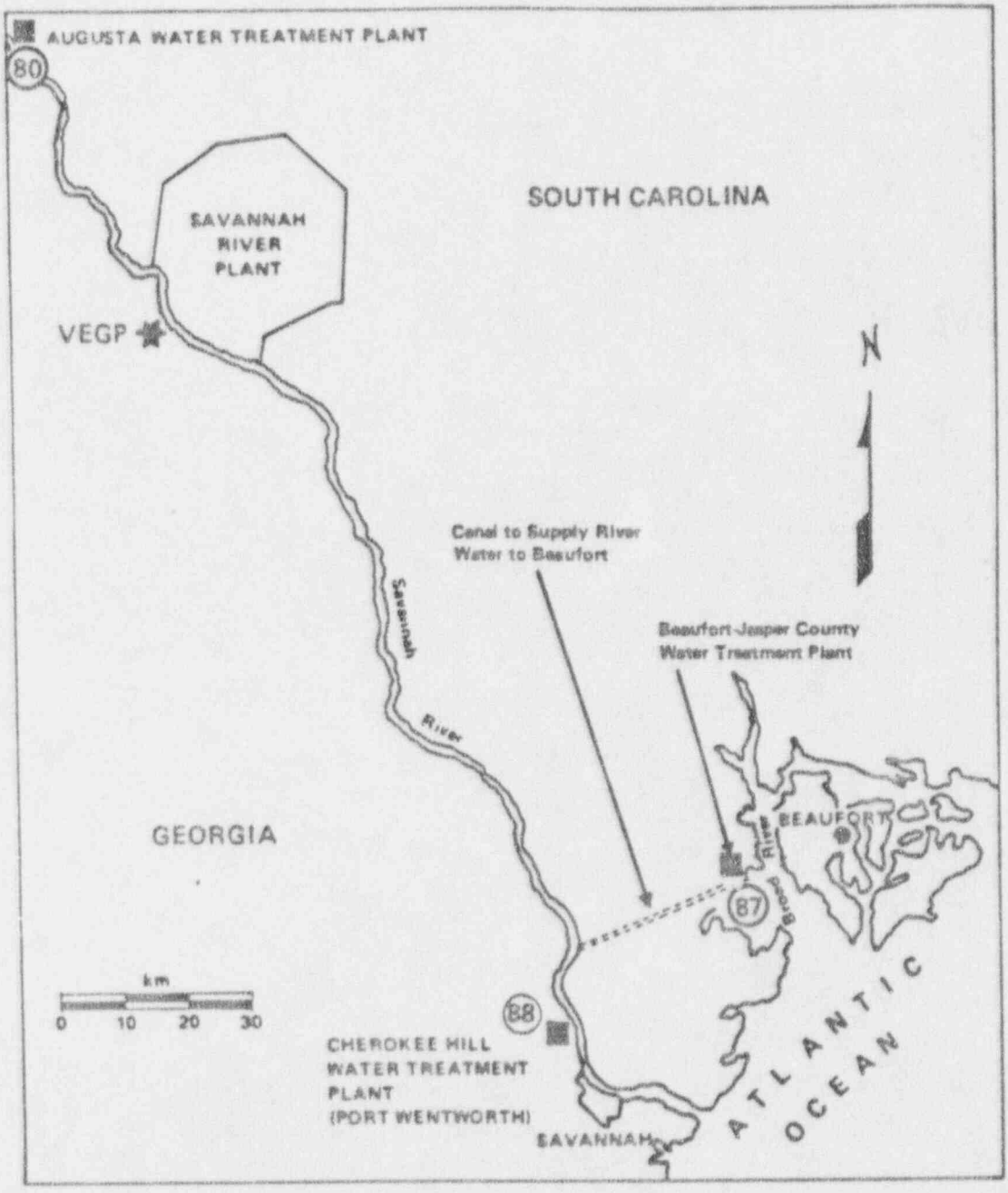


Georgia Power

VOGTLE
ELECTRIC GENERATING PLANT
UNIT 1 AND UNIT 2

TERRESTRIAL STATIONS
BEYOND 6 MILES

FIGURE 2-3



Georgia Power

VOGTLE
ELECTRIC GENERATING PLANT
UNIT 1 AND UNIT 2

DRINKING WATER STATIONS

FIGURE 2-4

433-9

3.0 RESULTS SUMMARY

In accordance with Technical Specifications Section 6.9.1.3, summarized and tabulated results for all of the regular radiological environmental samples and radiation measurements taken during the year at the designated indicator and control stations are presented in Table 3-1. Results for samples collected at locations other than indicator or control stations or in addition to those stipulated by Table 2-1 are included in Section 4, the discussion of results section, for the type sample.

Naturally occurring radionuclides which were not present in the plant's effluent releases are not required to be reported. Be-7 which occurs abundantly in nature is also produced in the reactors. Miniscule quantities were present in the liquid releases. No other naturally occurring radionuclides were known to be present in the plant's effluent releases. Hence, the radionuclides of interest for the radiological environmental samples monitoring liquid releases (river water, drinking water, fish, and sediment) are man-made radionuclides plus Be-7, while only man-made radionuclides are of interest for the other radiological environmental samples.

TABLE 3-1 (SHEET 1 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
Airborne Particulates (fCi/m^3)	Gross Beta 310	10	18.7 8-45 (258/258)	No. 12 River Road 1.2 miles WSW	19.4 10-45 (51/51)	19.3 78-46 (52/52)	0
	Gamma Isotopic 28						
	Cs-134	50	NDM (c)		NDM	NDM	0
	Cs-137	60	NDM		NDM	NDM	0
Airborne Radioiodine (fCi/m^3)	I-131 310	70	NDM		NDM	NDM	0
Direct Radiation (mR/91 days)	Gamma Dose 80	NA (d)	12.3 10-16 (64/64)	No. 1 Han Lan Rd 1.1 miles N	14.8 12-16 (4/4)	12.5 11-16 (16/16)	0

TABLE 3-1 (SHEET 2 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Location with Highest Annual Mean Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
Milk (pCi/l)	Gamma Isotopic 54						
	Cs-134	15	NA		NDM	NDM	0
	Cs-137	18	NA		NDM	NDM	0
	Ba-140	60	NA		NDM	NDM	0
	La-140	15	NA		NDM	NDM	0
	I-131	1	NA		NDM	NDM	0
	54						
Grass (pCi/kg wet)	Gamma Isotopic 36						
	I-131	60	NDM		NDM	NDM	0
	Cs-134	60	NDM		NDM	NDM	0

TABLE 3-1 (SHEET 3 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Location with Highest Annual Mean Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
	Cs-137	80	38.1 29-46 (6/24)	No. 37 Substation 16.7 miles WSW	144.0 144-144 (1/12)	144.0 144-144 (1/12)	0
River Water (pCi/l)	Gamma Isotopic 24						
	Be-7	80 (e)	NDM		NDM	NDM	0
	Mn-54	15	NDM		NDM	NDM	0
	Fe-59	30	NDM		NDM	NDM	0
	Co-58	15	NDM		NDM	NDM	0
	Co-60	15	NDM		NDM	NDM	0
	Zn-65	30	NDM		NDM	NDM	0
	Zr-95	30	NDM		NDM	NDM	0
	Nb-95	15	NDM		NDM	NDM	0

TABLE 3-1 (SHEET 4 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Location with Highest Annual Mean Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
	I-131	15	NDM		NDM	NDM	0
	Cs-134	15	NDM		NDM	NDM	0
	Cs-137	18	NDM		NDM	NDM	0
	Ba-140	60	NDM		NDM	NDM	0
	La-140	15	NDM		NDM	NDM	0
	Tritium 8	3000 (f)	1064 775-1350 (4/4)	No. 83 Downriver 0.4 miles	1064 775-1530 (4/4)	371 195-507 (3/4)	0
Water Near Intakes to Water Treatment Plants (pCi/l)	Gross Beta 36	4	2.73 1.1-6.0 (24/24)	No. 87 Beaufort Downriver 112 miles	2.76 1.1-6.0 (12/12)	2.70 1.1-4.4 (11/12)	0

TABLE 3-1 (SHEET 5 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Location with Highest Annual Mean Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
	Gamma Isotopic 36						
	Be-7	80 (e)	NDM		NDM	NDM	0
	Mn-54	15	NDM		NDM	NDM	0
	Fe-59	30	NDM		NDM	NDM	0
	Co-58	15	NDM		NDM	NDM	0
	Co-60	15	NDM		NDM	NDM	0
	Zn-65	30	NDM		NDM	NDM	0
	Zr-95	30	NDM		NDM	NDM	0
	Nb-95	15	NDM		NDM	NDM	0
	I-131 (f)	15	NDM		NDM	NDM	0
	Cs-134	15	NDM		NDM	NDM	0

TABLE 3-1 (SHEET 6 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Location with Highest Annual Mean Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
	Cs-137	18	NDM		NDM	NDM	0
	Ba-140	60	NDM		NDM	NDM	0
	La-140	15	NDM		NDM	NDM	0
	Tritium 12	3000	1373 837-2170 (8/8)	No. 88 Port Went Downriver 122 miles	1467 837-2170 (4/4)	179 155-200 (3/4)	0
Finished Water at Water Treatment Plants (pCi/l)	Gross Beta 36	4	2.09 1.1-3.0 (24/24)	No. 88 Port Went Downriver 122 miles	2.18 1.1-3.0 (12/12)	1.67 1.1-3.4 (12/12)	0
	Gamma Isotopic 36						
	Be-7	80 (e)	NDM		NDM	NDM	0
	Mn-54	15	NDM		NDM	NDM	0

TABLE 3-1 (SHEET 7 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean		Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
				Name Distance & Direction	Mean (b) Range (Fraction)		
	Fe-59	30	NDM		NDM	NDM	0
	Co-58	15	NDM		NDM	NDM	0
	Co-60	15	NDM		NDM	NDM	0
	Zn-65	30	NDM		NDM	NDM	0
	Zr-95	30	NDM		NDM	NDM	0
	Nb-95	15	NDM		NDM	NDM	0
	Cs-134	15	NDM		NDM	NDM	0
	Cs-137	18	NDM		NDM	NDM	0
	Ba-140	60	NDM		NDM	NDM	0
	La-140	15	NDM		NDM	NDM	0
	I-131 36	1	NDM		NDM	NDM	0

TABLE 3-1 (SHEET 8 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
	Tritium 12	2000	1195 670-1480 (8/8)	No. 88 Port Went Downriver 122 miles	1215 1080-1360 (4/4)	211 139-318 (4/4)	0
Anadromous Fish (pCi/kg wet)	Gamma Isotopic 1						
	Be-7	100 (e)	NDM		NDM	NA	0
	Mn-54	130	NDM		NDM	NA	0
	Fe-59	260	NDM		NDM	NA	0
	Co-58	130	NDM		NDM	NA	0
	Co-60	130	NDM		NDM	NA	0
	Zn-65	260	NDM		NDM	NA	0
	Cs-134	130	NDM		NDM	NA	0
	Cs-137	150	NDM		NDM	NA	0

TABLE 3-1 (SHEET 9 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
Fish (pCi/kg wet)	Gamma Isotopic 10						
	Be-7	100 (e)	NDM		NDM	NDM	0
	Mn-54	130	NDM		NDM	NDM	0
	Fe-59	260	NDM		NDM	NDM	0
	Co-58	130	NDM		NDM	NDM	0
	Co-60	130	NDM		NDM	NDM	0
	Zn-65	260	NDM		NDM	NDM	0
	Cs-134	130	NDM		NDM	NDM	0
	Cs-137	150	177.8 27-330 (6/6)	No. 85 Upriver 4.1 miles	177.8 26-890 (6/6)	80.4 42-119 (4/4)	0

TABLE 3-1 (SHEET 10 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 and 50-425
Burke County, Georgia, Calendar Year 1992

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (a) (LLD)	All Indicator Locations Mean (b) Range (Fraction)	Location with Highest Annual Mean Name Distance & Direction	Location with Highest Annual Mean Mean (b) Range (Fraction)	Control Locations Mean (b) Range (Fraction)	Number of Reportable Occurrences
Sediment (pCi/kg dry)	Gamma Isotopic 4						
	Be-7	300 (e)	2038 926-3150 (2/2)	No. 83 Downriver 0.6 miles	2038 926-3150 (2/2)	380 210-549 (2/2)	0
	Co-58	25 (e)	124 124-124 (1/2)	No. 83 Downriver 0.6 miles	124 124-124 (1/2)	NDM	0
	Co-60	40 (e)	59.5 40-79 (2/2)	No. 83 Downriver 0.6 miles	59.5 40-79 (2/2)	NDM	0
	I-131	30 (e)	194 194-194 (1/2)	No. 83 Downriver 0.6 miles	194 194-194 (1/2)	19.8 20-20 (1/2)	0
	Cs-134	150	NDM		NDM	NDM	0
	Cs-137	180	259 252-266 (2/2)	No. 83 Downriver 0.6 miles	259 252-166 (2/2)	111 76-146 (2/2)	0

TABLE 3-1 (SHEET 11 OF 11)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANNUAL SUMMARY
Vogtle Electric Generating Plant, Docket Nos. 50-424 & 50-425
Burke County, Georgia, Calendar Year 1992

TABLE NOTATIONS

a. The LLD is defined in table Notation 3 of Technical Specifications Table 4.12-1. Except as noted otherwise, the values listed in the column were the detection capabilities required by that table. In practice, the LLDs attained were generally much lower than the values listed. Any attained LLDs greater than the values listed are discussed in Section 4.

b. Mean and range of readings were based upon detectable measurements only. The fraction of all measurements at specified locations which were detectable is indicated in parentheses.

c. No detectable measurement(s).

d. Not applicable.

e. The Georgia Power Company Environmental Laboratory determined that this value may be routinely attained under normal conditions. No value is provided in Technical Specifications Table 4.12-1. Sample size, background count rate, or chemical yield may have made the Minimum Detectable Activity (MDA), "a posteriori", greater than the LLD.

f. Item 3b of Technical Specifications Table 3.12-1 implies that an I-131 analysis is not required to be performed on these samples when the dose calculated from the consumption of water is less than 1 mrem per year.

4.0 DISCUSSION OF RESULTS

An interpretation and evaluation, as appropriate, of the laboratory results for each type sample are included in this section. Relevant comparisons were made between the difference in average values for indicator and control stations and the calculated Minimum Detectable Difference (MDD) between these two groups at the 99 percent Confidence Level (CL). The MDD was determined using the standard Student's t-test. A difference in the average values which was less than the MDD was considered to be statistically indiscernible. Pertinent results were also compared with past results including those obtained during the period of preoperation. The results were examined to perceive any trends. To provide perspective, a result may have also been compared with its Lower Limit of Detection (LLD) and/or Reporting Level (RL) which are nominally provided by Technical Specifications Tables 4.12-1 and 3.12-2. Attempts were made to explain any RLs or other high radiological levels found in the samples. There were no failures in the laboratory analyses of each of the samples in attaining the LLDs required by Technical Specifications Table 4.12-1 for this report period.

Unless otherwise indicated, any reference made in this section to the results of a previous period are the results which have been purged of any obvious extraneous short term impacts. During preoperation, these included the nuclear weapons tests in the fall of 1980, abnormal releases from the Savannah River Site (SRS), and the Chernobyl incident in the spring of 1986. After operation commenced, short term impacts included abnormal releases from SRS during 1987 and 1991. Unless otherwise indicated, any references to 1987 will be to the operations portion of 1987. The SRS was previously called the Savannah River Plant.

The annual land use census required by Technical Specifications Section 3/4.12.2 was conducted on April 28, 1992. The locations of the nearest milk animal, residence, and garden of greater than 500 square feet producing broad leaf vegetation in each of the 16 meteorological sectors within a distance of 5 miles are tabulated in Table 4-1. Land within SRS was excluded from the census. Any consequences of the results of the land use census upon sample collections are discussed in Sections 4.3 and 4.4. The results of the annual survey conducted downstream of the plant to determine whether water from the Savannah River is being used for drinking or irrigation purposes are presented in Section 4.5.

All results were tested for conformance to Chauvenet's Criterion[1] to flag values which might differ from the others in its set by a relatively large amount. Identified outliers were investigated to determine reasons for deviating from the norm. If an equipment malfunction or other valid physical reason was found, the anomalous result was deemed non-representative and excluded from the data set. No datum was excluded for failing Chauvenet's Criterion only.

[1] G. D. Chase and J. L. Rabinowitz, Principles of Radioisotope Methodology (Burgess Publishing Company, 1962) 87-90

TABLE 4-1

LAND USE CENSUS RESULTS

Distance in Miles to Nearest Locations in Each Sector

SECTOR	MILK ANIMAL	RESIDENCE	LEAFY GARDEN
N	*	1.6	*
NNE	*	*	*
NE	*	*	*
ENE	*	*	*
E	*	*	*
ESE	*	*	*
SE	*	4.3	*
SSE	4.7	4.0	*
S	*	4.4	*
SSW	*	4.7	*
SW	*	2.9	*
WSW	*	1.2	*
W	*	2.3	*
WNW	*	2.0	*
NW	*	1.6	*
NNW	*	*	*

* None within 5 miles and outside of SRS.

4.1 Airborne

As indicated by Tables 2-1 and 2-2, airborne particulates and airborne radioiodine were collected at 5 indicator stations (Nos. 3, 7, 10, 12, and 16) which encircle the site boundary, at a nearby community (No. 35) and at a control station (No. 36). At these locations, air was continuously drawn through a particulate filter and a charcoal canister in sequence to retain airborne particulates and to adsorb airborne radioiodine, respectively. The filters and canisters were collected weekly. Each of the air particulate filters was counted for gross beta activity. A gamma isotopic analysis was performed quarterly on a composite of the air particulate filters for each station. Each charcoal canister was analyzed for I-131 by gamma spectroscopy.

The failures to obtain acceptable air particulate and airborne radioiodine samples during the calendar years of operations were as follows:

Period	Air Particulates	Airborne Radioiodine
1992	3	3
1991	2	2
1990	3	2
1989	6	4
1988	0	0
1987	0	0

When personnel arrived at Station 7 on January 7, 1992 and again on February 4, 1992 to collect samples, the air pump was not running. The fuse had blown after operating 42.9 and 101.8 hours, respectively. The air particulate samples were tested for conformance with Chauvenet's Criterion. Both the air particulate and the airborne radioiodine samples collected on January 7, 1992 were excluded due to failure to pass the test. Station 7 was on the same circuit as an adjacent air cabinet operated by the State of Georgia. Each time, the states air pump had failed. This caused the fuse to blow and thereby interrupted power to both cabinets. About 2 weeks after the second failure, the air cabinets at this and other affected stations were placed on separate circuits to preclude a failure of this kind in the future.

On July 16, 1992, the power was found to be off at Station 12. The pump had run for 28.9 hours. The samples were excluded because of failure to conform with Chauvenet's Criterion. The power failure was traced to the transformer which was repaired.
No samples were collected at Station 35 on July 21, 1992. Power to the station had inadvertently not been restored after collecting samples from this station the previous week. Involved personnel were instructed to check power restoration after each sample collection.

As seen in Table 3-1, the average weekly gross beta activity during the year for the indicator stations was 0.6 fCi/m^3 less than that for the control station. However, there was no discernible difference between these stations since the difference was less than the calculated MDD of 2.3 fCi/m^3. The average readings at the indicator stations have been greater that those at the control station for the previous 4 years.

The average weekly gross beta activity in units of fCi/m^3 for the indicator, control, and community stations during 1992 are compared below with those attained during previous years.

Period	Indicator	Control	Community
1992	18.7	19.3	18.7
1991	19.3	19.2	18.6
1990	19.6	19.4	18.8
1989	19.1	18.2	18.8
1988	24.7	23.7	22.8
1987	23.0	23.5	22.3
Preop Overall	22.9	22.1	21.9
Preop Range	18.1-28.1	18.3-26.5	18.3-26.5

The average weekly readings for 1992 show little change from those of the past few years but are about 80 percent of the averages found during preoperation and the first two years of operation. No trends were recognized in these data.

No positive results for man-made radionuclides were found during 1992 from the gamma isotopic analyses of the quarterly composites of the air particulate filters. During 1987, Cs-137 was found in one indicator composite at a level of 1.7 fCi/m^3. During preoperation, Cs-137 was found in approximately 13 percent of the indicator composites and approximately 14 percent of the control composites with average levels of 1.7 and 1.0 fCi/m^3, respectively; the required LLD is 60 fCi/m^3. Also, during preoperation Cs-134 was found in

about 8 percent of the indicator composites at an average level of 1.2 fCi/m^3. The required LLD for Cs-134 is 50 fCi/m^3.

I-131 was not detected in any of the charcoal canisters during the year. There were no positive results during the previous years of operation. During preoperation, positive results were obtained only after the Chernobyl incident when levels as high as 182 fCi/m^3 were obtained. The maximum allowed LLD is 70 fCi/m^3, however, the LLD usually attained is about 20 percent of this value. The RL for I-131 is 900 fCi/m^3.

4.2 Direct Radiation

Direct (external) radiation was measured by TLDs. Two TLD badges were placed at each station. Two TLD stations were established in each of the 16 meteorological sectors about the plant. The inner ring of stations (Nos. 1 through 16) is located near the site boundary, while the outer ring (Nos. 17 through 32) is located at a distance of about 5 miles. The 16 stations forming the inner ring are designated as the indicator stations. Each of the 4 control stations (Nos. 36, 37, 47, and 48) is over 10 miles from the plant. Special interest areas consist of a hunting cabin (No. 33), the town of Girard (No. 35), and the employees' recreational area (No. 43).

From August, 1981 (which was the start of preoperation for TLDs) through 1985, badges with lithium fluoride phosphors were used. Beginning with the first quarter of 1986 TLDs which use calcium sulfate phosphors replaced those using lithium fluoride phosphors. At the beginning of 1992, the Panasonic UD-814 TLD replaced the Teledyne TLD and also the Georgia Power Company Environmental Laboratory replaced Teledyne Midwest Laboratory as the processor of the TLDs.

This replacement followed a comparative study between the performance of the two types of TLDs. A Teledyne badge was placed side-by-side with two Panasonic badges at all stations from the third quarter of 1990 through the fourth quarter of 1991. The Teledyne badges were processed by Teledyne while the Panasonic badges were processed by the Georgia Power Company Environmental Laboratory.

A comparison of the makeup between the two badge types shows several differences. The phosphor for the Teledyne badge is a calcium sulfate (with dysprosium impurity) impregnated teflon card whereas the phosphor for the Panasonic badge consists of calcium sulfate (with thulium impurity) crystals on a polyimide substrate. The Teledyne badge has four read areas while the Panasonic has three. Each type badge is equipped with a filter on each side of the phosphor to attenuate low energy photons in order to compensate for the overresponse of the calcium sulfate in this portion of the energy spectrum. The

filters for the Teledyne badges consist of 500 mg/cm^2 of copper plus 150 mg/cm^2 of plastic whereas the filters for the Panasonic badges consist of 700 mg/cm^2 of lead plus 150 mg/cm^2 of plastic. As will be shown below, the readings for the Panasonic badges were lower due to greater attenuation being provided by the badge's heavier filters.

The average readings in mR for the Panasonic and the Teledyne TLDS for exposures during 1991 at the indicator (inner ring), outer ring and control stations along with a ratio of these readings were as follows:

Station Group	Panasonic	Teledyne	P/T
Indicator		13.48	16.880.799
Outer Ring		13.13	16.720.785
Control		13.15	17.120.768

This comparison shows that overall the Panasonic readings were about 21 percent less than the Teledyne readings.

The NRC places TLDs around commercial nuclear power plants to independently monitor the external radiation levels; they use Panasonic UD-801 TLDs. Perhaps the main difference between the UD-801 and the UD-814 (used by VEGP) is that the UD-801 has two read areas while the UD-814 has three. There are also procedural differences in the manner the badges was handled and there are differences in the dates defining each exposure period. Nevertheless, a comparison of results shows good agreement.

Listed below are VEGP's average readings for 1991 in mR as measured with Panasonic UD-814 TLDs along with those for the NRC who used Panasonic UD-801 TLDs and the ratio of these readings. Averages are presented for the indicator, outer ring and control station groups. The indicator group for the NRC was the stations located within 2 miles of the point midway between the center of the two reactors; the outer ring was those from 2 to 5 miles; and the control group was those at distances greater than 5 miles.

Station Group	UD-814	UD-801	814/801
Indicator	13.48	15.15	0.890
Outer Ring	13.13	14.35	0.915
Control	13.15	15.55	0.846

This comparison shows the UD-814 results processed by the Georgia Power Company Environmental Laboratory to be about 11 percent less than those measured by the NRC using UD-801 badges. This is considered good agreement considering badge and procedural differences and that the badges in each station were not side-by-side but only in the general vicinity of each other and the periods of exposure were not identical.

Having TLDs processed in-house permits more direct control over the operation, gives the opportunity for an abbreviated reporting time, and allows for the reduction in transient exposures because the period of time off-station can be reduced.

The actual results for the field exposures for the 1992 using the Panasonic UD-814 TLDs processed by the Georgia Power Company Environmental Laboratory are discussed in the subsequent paragraphs of this section.

Not infrequently, TLDs were lost due to theft or vandalism. Near the middle of each quarter, the vast majority (85 percent) of the stations (those readily accessible) were checked for missing or damaged badges. Replacement badges were provided as needed. If both badges were missing and/or damaged at the end of the quarter, the exposure for the quarter at that location could not be assessed.

When checking badges during the third quarter, those at Station 37 were missing. The replacement badges were exposed for 56 days. These readings passed Chauvenet's Criterion and, therefore, were not excluded. At the end of the fourth quarter, the badges at Station 22 were missing. This was the only failure during 1992 to obtain a quarterly exposure for a station. There were a few failures to obtain acceptable readings for both badges simultaneously.

During the second quarter, holes were discovered in the plastic packs for the badges at Stations 3 and 29 and water had entered the packs. Badge 3A was soaked and could not be read. Badge 29A was excluded due to its high standard deviation of 2.5. The Georgia Power Company Environmental Laboratory has set a criterion to exclude readings for the Panasonic UD-814 TLDs which have a standard deviation greater than 1.4 mR. Badges 3B and 29B provided the second quarter exposures for these stations for which their readings conformed with Chavenent's Criterion. The reading for Badge 21A for the fourth quarter was excluded due to a high standard deviation of 4.5 mR.

As may be seen from Table 3-1, the average quarterly exposure of 12.3 mR acquired at the indicator stations was 0.2 mR less than that acquired at the control stations; this difference was not discernible since it was less than the calculated MDD of 0.9 mR. The quarterly exposures acquired at the outer ring stations ranged from 9.9 to 17.7 mR with an average of 12.1 mR which is 0.2 mR less than that found for the inner ring. This difference is not discernible since it is less than the calculated MDD of 0.6 mR.

Listed below for the indicator, control and outer ring stations, are the average levels in units of mR/91 days obtained during each year of operation, the entire period of preoperation and the range of annual averages obtained during the calendar years of preoperation.

Period	Indicator	Control	Outer Ring
1992	12.3	12.5	12.1
1991	16.9	17.1	16.7
1990	16.9	16.6	16.3
1989	17.9	18.4	17.2
1988	16.8	16.1	16.0
1987	17.6	17.9	16.7
Preop Overall	15.3	16.5	14.7
Preop Range	15.1-16.9	14.1-18.2	12.5-16.2

The average levels in units of mR/91 days for the special interest areas obtained during each year of operation and the entire period of preoperation along with the range of annual averages obtained during the calendar years of preoperation are listed below.

Period	Station 33	Station 35	Station 43
1992	12.7	13.5	12.0
1991	17.3	19.6	17.0
1990	16.8	18.9	16.2
1989	21.2	18.7	17.4
1988	19.7	18.1	14.8
1987	21.3	18.5	15.2
Preop Overall	16.6	15.1	15.3
Preop Range	13.6-19.9	12.6-17.6	13.9-25.0

The exposures acquired at the special interest areas were somewhat typical and within the range of those acquired at the other stations.

Overall, the readings during 1992 using the Panasonic TLDs were about 27 percent less than those during 1991 when Teledyne TLDs were used. A reduction of this order was anticipated from the above comparative study. It might also be noted that the absolute value of the differences between the station groups was consistent.

4.3 Milk

As indicated by Tables 2-1 and 2-2, milk is collected biweekly from two control stations, Dixon Dairy (No. 98) and the Boyceland Dairy (No. 99). Gamma isotopic and I-131 analyses were performed on each sample.

Milk has not been available from an indicator station (a location within 5 miles of the plant) since April 1986 when the cow from which milk was being obtained went dry and was subsequently removed from the area. The availability of milk within 5 miles of the plant was meager throughout preoperation and an adequate sample is yet to be obtained during operation. A milk animal is a cow or goat producing milk for human consumption.

As indicated by Table 4-1 for the land use census on April 28, 1992, milk producing goats were identified at 4.7 miles in the SSE sector. The owner drinks about 4 fluid ounces (118 ml) of the goat's milk per day. On July 7, 1992 a 165 ml milk sample was collected which was all that the owner could obtain. The Georgia Power Company Environmental Laboratory needs approximately 500 ml to properly perform the required analyses. For the I-131 analysis, an MDA of 6.87 pCi/l was obtained. The required LLD is 1 pCi/l. The gamma isotopic analysis found Cs-137 at a level of 38 pCi/l. Because an insufficient sample could be collected, efforts to collect additional samples at this location were suspended. On January 4, 1993 another attempt to collect milk was unsuccessful because the owner no longer milks the goat.

A container problem occured with the regular milk sample collected on April 28, 1992 resulting in ice diluting the sample. A replacement sample was collected on May 5, 1992. No man-made radionuclides were detected in either sample. The required LLDs were satisfied for the analyses on each of the samples.

No man-made radionuclides were found from the gamma isotopic analysis of the regular milk samples during 1992. During each past year of operation as well as during preoperation, Cs-137 was found in 2 to 4 percent of the samples at levels ranging from 5 to 27 pCi/l. The LLD and RL for Cs-137 in milk, as required by the Technical Specifications, are 18 and 70 pCi/l, respectively. During preoperation, Cs-134 was detected in a sample from an indicator station and during 1987, Zn-65 was detected in a sample from Boyceland Dairy.

I-131 was not detected in any of the milk samples during 1992. In 1990, I-131 was reported in two samples but its presence was questionable due to large counting uncertainties. I-131 was not detected during other years of

operation. During preoperation, positive I-131 results were found only during the Chernobyl incident. The levels ranged from 0.53 to 5.07 pCi/l. The LLD and RL required by the Technical Specifications are 1 and 3 pCi/l, respectively.

4.4 Vegetation

The Technical Specifications call for the gamma isotopic analysis of grass or leafy vegetation collected monthly from two indicator stations which are located onsite near the site boundary in different meteorological sectors (Stations 7 and 15) and one control station at about 15 or more miles from the plant (Station 37). Grass is collected at each of these locations. Gamma isotopic analysis is performed on each sample.

No gardens were found in the land use census where the calculated dose commitment would be 20 percent greater than that of either of the indicator stations at which vegetation is being sampled.
As indicated in Table 3-1, Cs-137 was the only man-made radionuclide detected. The average level at the control station was 105.9 pCi/kg wet greater than that at the indicator stations. A standard MDD calculation to compare results from the indicator stations with those from the control station was not possible since only one positive observation was made at the control location. A modified t-test that compared a single observation with the mean of a sample showed that there was a statistical difference between the indicator and control stations since the modified MDD was determined to be 12.6 pCi/kg wet.

The average level of Cs-137 found in vegetation samples in units of PCi/kg wet along with the fraction of detectable measurements at the indicator and control stations is shown below for each year of operation and the period of preoperation.

	Indicator Stations		Control Stations	
Period	Average	Fraction	Average	Fraction
1992	38.1	0.250	144.0	0.083
1991	35.3	0.208	62.4	0.083
1990	30.0	0.083	102.0	0.166
1989	9.7	0.042	0.0	0.000
1988	38.7	0.280	0.0	0.000
1987	24.4	0.318	61.5	0.250
Preop	54.6	0.573	43.7	0.193

Cs-137 is detected a few times more often at the indicator stations but the level is a few times greater at the control station. No trend is recognized in these data. The LLD and RL are, respectively, 60 and 2000 pCi/kg wet.

Except for a short period following the Chernobyl incident, Cs-137 has been the only man-made radionuclide detected in vegetation samples by gamma isotopic analysis during both the preoperation and operation periods. As a consequence of the Chernobyl incident, I-131 was found in nearly all the samples collected over a period of several weeks, some at elevated levels. Cs-137 was also found in nearly all of the samples and Co-60 was found in one of the samples.

4.5 River Water

Surface water was composited from the Savannah River at three locations using ISCO automatic samplers. Small quantities of river water were collected at intervals not exceeding a few hours. River water collected by these machines was picked up monthly; quarterly composites were made from the monthly collections. The collection points consist of a control station (No. 82) which is located about 0.4 miles upriver of the plant intake structure, an indicator station (No. 83) which is located about 0.4 miles downriver of the plant discharge structure, and a special station (No. 84) which is located about 1.3 miles downriver.

A gamma isotopic analysis was made on each monthly collection. As in all previous years of operation, there were no radionuclides of interest detected in the river water samples during 1992.

A tritium analysis was performed on each quarterly composite. As indicated in Table 3-1, the average level of 1064 pCi/l found at the indicator station was 693 pCi/l greater than that at the control station; this difference is not discernible since it is less than the calculated MDD of 714 pCi/l. There was a discernible difference in the tritium levels between these two stations in 1988 and 1989. At the special station (No. 84), the result ranged from 631 to 1130 pCi/l with an average of 929 pCi/l. The required LLD is 3000 pCi/l and the RL is 10 times greater.

Listed below for each year of operation are the average tritium levels found at the control, indicator, and special stations, the difference between the average values at the indicator and control stations (L_i - L_c), the MDD between these two stations, and the annual liquid releases of tritium from the plant. All of these values are in units of pCi/l except for the releases, which are in units of pCi.

Item	1992	1991	1990	1989	1988	1987
Control Station	371	828	392	538	427	524
Indicator Station	1064	1300	1142	1293	843	680
Special Station	929	1298	1081	1268	1430	1411
L_i - L_c	693	472	750	755	416	156
MDD	714	626	766	518	271	416
Releases	1481	1094	1172	916	390	321

These data show a generally upward trend for tritium levels in plant releases as would be expected for a recently operational plant building tritium to equilibrium levels. The releases are sufficient to account for the increased levels of tritium at the indicator station. The annual organ dose that the maximum exposed individual (a child) would receive from drinking water with an average tritium concentration of 693 pCi/l was conservatively calculated to be 0.072 mrem or 2.4 percent of the Technical Specifications limit.

On September 22, 1992 the annual survey of the Savannah River was conducted downstream of the plant for approximately 122 river miles to identify any users of river water for purposes of drinking or irrigation. The only users found to be withdrawing river water for drinking purposes were the two downriver water treatment plants (Stations 87 and 88) from which samples were collected monthly. As in all previous surveys, no intakes for irrigation use were observed. The survey results were corroborated by contacting the Environmental Protection Division of the Georgia Department of Natural Resources and the South Carolina Department of Health and Environmental Control. No new surface or drinking water withdrawal permits had been issued in 1992 for the Savannah River downstream of the plant.

4.6 Drinking Water

Samples were collected at a control station (No. 80), the Augusta Water Treatment Plant in Augusta, Georgia, which is located about 52 miles upriver and at two indicator stations (Nos. 87 and 88), the Beaufort-Jasper County Water Treatment Plant near Beaufort, South Carolina, and the Cherokee Hill Water Treatment Plant near Port Wentworth, Georgia, which are respectively located about 112 and 122 miles downriver. These upriver and downriver distances in river miles are the distances from VEGP to the point in the river where water is diverted to the intake for each of these water treatment plants.

Monthly, at each of the water treatment plants, collections were made of river water which was composited near the plant's intake (raw drinking water) and grab samples were obtained of finished drinking water. Quarterly composites are made up from the monthly collections. Gross beta and gamma isotopic analyses were performed on each of the samples collected monthly. Tritium analyses were performed on the quarterly composites. Although an I-131 analysis is not required to be performed on these samples when the dose calculated from the consumption of water is less than 1 mrem per year (see Item 3b of Table 3.12-1 of the Technical Specifications), an I-131 analysis was performed on each of the grab samples of finished water collected monthly since a drinking water pathway exists.

As indicated by Table 3-1, the average gross beta activity for raw drinking water was 0.03 pCi/l greater for the indicator stations than for the control stations. However, this difference was not discernible since it was less than the calculated MDD of 0.96 pCi/l. For finished drinking water, the average gross beta activity was 0.42 pCi/l greater for the indicator stations than for the control station. This difference was not discernible since it was less than the calculated MDD of 0.44 pCi/l.

Listed below for each year of operation are the average gross beta levels for raw and finished drinking water in units of pCi/l at the indicator and control stations, and the difference between the average levels at these stations ($L_i - L_c$).

Period	Indicator	Control	$(L_i - L_c)$
		RAW	
1992	2.73	2.70	0.03
1991	2.83	3.08	-0.25
1990	2.53	2.55	-0.02
1989	2.93	3.05	-0.12
1988	2.67	3.04	-0.37
1987	2.20	5.50	-3.30
		FINISHED	
1992	2.09	1.67	0.42
1991	1.90	1.53	0.37
1990	2.08	1.92	0.16
1989	2.36	2.38	-0.02
1988	2.28	2.35	-0.07
1987	2.10	1.80	0.30

The overall average gross beta reading for all years of operation was 39 percent greater for the raw drinking water than for the finished drinking water. This may be expected since the finished water has been filtered. There has not been a discernible difference between the average gross beta values at the indicator and control stations during any of the years of operation.

As indicated in Table 3-1, there were no positive results for the radionuclides of interest from the gamma isotopic analyses of the monthly collections. Only one positive result has been found since operations began; Be-7 at a level of 68.2 pCi/l was found in the sample collected for September, 1987 at Station 87. The LLD assigned for Be-7 in water is 80 pCi/l.

Following, for each year of operation, are the average tritium levels found in the quarterly composites of raw and finished drinking water in units of pCi/l collected at the indicator and control stations, the difference between the average levels at these stations (L_i - L_c), and the MDD.

Period	Indicator	Control	(L_i - L_c)	MDD
		RAW		
1992	1373	179	1194	532
1991	1626	165	1461	1537
1990	1320	266	1054	572
1989	2508	259	2249	1000
1988	2630	240	2390	580
1987	2229	316	1913	793
		FINISHED		
1992	1195	211	984	383
1991	1471	225	1246	1082
1990	1299	404	895	1131
1989	2236	259	1977	627
1988	2900	270	2630	830
1987	2406	305	2101	1007

The above tabulations show a discernable difference between the indicator and control stations for both raw and finished drinking water as the absolute value of (L_i-L_c) exceeds the MDD. The values for the indicator stations for both 1991 and 1992 are higher than they would have been due to the release at SRS of 7500 pCi of tritium to the Savannah River about 10 miles downriver from VEGP between December 22 and 25, 1991. If the December, 1991 sample were excluded from the composite for the fourth quarter, the average readings for the indicator stations for 1991 would become 1471 and 1240 pCi/l for raw and finished samples, respectively. If the yearly averages for 1992 were based on the last three quarters of the year, the average readings for the indicator

stations would become 1131 and 1162 pCi/l for the raw and finished samples, respectively. It might also be noted from the above tabulations that after 1989, there was a notable decrease in the tritium levels at the indicator stations.

As indicated in Table 3-1, there were no positive results from the I-131 analysis of the finished drinking water samples; each result was below its MDA which ranged from 0.18 to 0.63 pCi/l. Similar results were obtained in previous years of operation. The Technical Specifications require a LLD and a RL of 1 and 2 pCi/l, respectively.

4.7 Fish

The Technical Specifications call for the collection of at least one sample of any anadromous species of fish in the vicinity of the plant discharge during the spring spawning season. The Technical Specifications also call for semiannual collections of any commercially or recreationally important species in the vicinity of the plant discharge area and in areas not influenced by plant discharges. Further, the Technical Specifications call for a gamma isotopic analysis on the edible portions of each sample collected.

About a 5 mile stretch of the river is generally needed to obtain adequate fish samples. For the semiannual collections, the control station (No. 81) extends from approximately 2 to 7 miles upriver of the plant intake structure and the indicator station (No. 85) extends from about 1.4 to 7 miles downriver of the plant discharge structure. For the anadromous species, all collection points can be considered as indicator stations.

On March 31, 1992 American shad, an anadromous species, were collected. As in 1988, 1989, 1990 and 1992, no positive results for the radionuclides of interest were obtained from the gamma isotopic analysis. In 1987 and 1990, Cs-137 was found at a miniscule detectable levels of 10 and 12 pCi/kg wet, respectively. The LLD for Cs-137 in fish as specified by the Technical Specifications is 150 pCi/kg wet.

On April 20-21, 1992 and October 29, 1992 the composition of the catches at the indicator and control stations were as follows:

Date	Indicator	Control
April 20-21, 1992	Channel Catfish Bullhead Catfish Redbreast Sunfish Redear Sunfish	Largemouth Bass Redear Sunfish

Date	Indicator	Control
October 21, 1992	Largemouth Bass Channel Catfish	Channel Catfish Redear Sunfish

As indicated in Table 3-1, Cs-137 was the only radionuclide of interest found in the semiannual collections of commercially or recreationally important species. Since operation began, the only other radionuclide of interest detected was I-131 which was detected at the indicator station in 1989 and 1990 at levels of 18 and 13 pCi/kg wet, respectively and at the control station also in 1990 at a level of 12 pCi/kg wet.

In Table 3-1, the average level of 178 pCi/kg wet for Cs-137 at the indicator station is 98 pCi/kg wet greater than that at the control station. This difference is not discernible, however, since it is less than the calculated MDD of 131 pCi/kg wet. Since operations began, positive values for Cs-137 have been found in all but one of the 57 samples collected.

Listed below for each year of operation are the average levels of Cs-137 in units of pCi/kg wet found in fish samples at the indicator and control stations.

Period	Indicator	Control
1992	178	80
1991	105	211
1990	103	249
1989	117	125
1988	66	116
1987	337	119

It might be noted that 1992 is the first year since 1987 where the level at the indicator station exceeded that at the control station.
No trend is recognized in this data.

4.8 Sediment

Sediment was collected along the shoreline of the Savannah River on April 6, 1992 and November 3, 1992 at Stations 81 and 83. Station 81 is a control station located about 2.5 miles upriver of the plant intake structure at RM 153.3 while Station 83 is an indicator station located about 0.6 miles downriver of the plant discharge structure at RM 150.2. A gamma isotopic analysis was performed on each sample.

Listed below for each year of operation are the average levels of radionuclides of interest in units of pCi/kg dry found in the regular samples collected at the indicator and/or control stations along with the fraction of detectable measurements and the LLDs. Each of these radionuclides is included in the plant's liquid releases.

Period	Indicator	Fraction	Control	Fraction
		Be-7, LLD=300		
1992	2038	1.0	380	1.0
1991	826	1.0	427	1.0
1990	465	1.0	545	1.0
1989	1300	1.0	415	1.0
1988	970	1.0	810	1.0
1987	987	1.0	543	1.0
		Mn-54, LLD=50		
1989	18	0.5		
1988	22	0.5		
		Co-58, LLD=25		
1992	124	0.5		
1990	140	0.5		
1989	135	1.0		
1988	190	1.0		

Period	Indicator	Fraction	Control	Fraction
		Co-60, LLD=40		
1992	60	1.0		
1991	113	0.5		
1990	46	0.5		
1989	46	1.0		
1988	62	0.5		
		I-131, LLD=30		
1992	194	0.5	20	0.5
		Cs-137, LLD=180		
1992	259	1.0	111	1.0
1991	246	1.0	100	1.0
1990	155	1.0	140	1.0
1989	230	1.0	125	1.0
1988	175	1.0	175	1.0
1987	209	1.0	111	1.0

As in all previous years of operation, positive readings in 1992 for Be-7 and Cs-137 were found in each sample. For Be-7, the average reading of 2038 pCi/kg dry for the indicator station is 1658 pCi/kg dry greater than that for the control station; however, this difference is not discernible since it is less than the calculated MDD of 7834 pCi/kg dry. For the sample collected on April 6, 1992, the Be-7 reading was 3150 pCi/kg dry, a new maximum for an individual sample. The previous maximum of 1700 pCi/kg dry was in the sample collected at the indictor station in October, 1988. For Cs-137, the average reading of 259 pCi/kg dry for the indicator station is 148 pCi/kg dry greater than that for the control station; this difference is not discernible, however, since it is less than the calculated MDD of 250 pCi/kg dry. There has been no discernible difference between the levels at the indicator and control stations for either Be-7 or Cs-137 during any year of operation, including 1992.

In the sample collected on April 6, 1992, I-131 was found. Special samples were collected on June 2, 1992 for confirmation, in which no I-131 was detected. The levels in pCi/kg dry of other radionuclides of interest were as follows.

Radionuclide	Indicator	Control
Be-7	539.0	
Mn-54	14.8	
Co-58	39.2	
Co-60	58.1	
Cs-137	115.0	113

The frequent presence of Mn-54, Co-58 and Co-60 over the past few years at indicator stations (only) is indicative that their presence is due to plant releases. The whole body dose by direct radiation from sediment with concentrations on the order of those found in the above tabulations was calculated to be a few to several microrem per year which is a few tenths of a percent of the Technical Specifications limit (3 mrem per year). This extremely low dose, although calculable, poses no measurable environmental or public health impact.

5.0 INTERLABORATORY COMPARISON PROGRAM

Technical Specifications Section 3.16.3 requires analyses to be performed on radioactive materials supplied as part of an Interlaboratory Comparison Program approved by the Nuclear Regulatory Commission (NRC). The Environmental Protection Agency's (EPA's) Environmental Radioactivity Laboratory Intercomparison Studies (Crosscheck) Program conducted by the Environmental Monitoring and Support Laboratory in Las Vegas, Nevada, provides such a program. Reported herein, as required by Technical Specifications Section 4.16.3 are the results of the Georgia Power Company Environmental Laboratory's participation in the EPA Crosscheck Program.

The Crosscheck Program was designed for laboratories involved with REMPs. It includes environmental media and a variety of radionuclides with activities at or near environmental levels. Participation in the program ensures that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed. REMP results can thereby be demonstrated to be reasonably valid.

Simulated environmental samples are distributed regularly to the participants who analyze the samples and return the results to the EPA for statistical analysis and comparisons with known values and results obtained from other participating laboratories. The Crosscheck Program provides each participant with documentation of its performance which can be helpful in identifying any instrument or procedural problems.

The Georgia Power Company Environmental Laboratory's participation in the program consists of the analyses on the radioactive materials supplied by the program that correspond with those required by Table 2-1. Analyses were performed in a normal manner. Each sample was analyzed in triplicate as required by the program. Results obtained from the gross beta and gamma isotopic analyses of air filters, the gamma isotopic and I-131 analyses of milk samples, and the gross beta, I-131, tritium and gamma isotopic analyses of water samples are summarized in Table 5-1.

Delineated in Table 5-1 for each of the environmental media are the type analysis performed, EPA's collection date, the known value and expected precision (one standard deviation) provided by the EPA, the average result obtained by the Georgia Power Company Environmental Laboratory, the standard deviation of the Georgia Power Company Environmental Laboratory's result, the normalized deviation (from the known result), and the normalized range. The normalized deviation and normalized range were also provided by the EPA.

The normalized deviation from the known value provides a measure of the central tendency of the data (accuracy). The normalized range is a measure of the dispersion of the data (precision). An absolute value of three standard deviations for the normalized deviation and the normalized range was established by the EPA as the control limit. An absolute value of two standard deviations was established as the warning limit. The Georgia Power Company Environmental Laboratory considers any value greater than the control limit as unacceptable. Investigations are undertaken whenever any value exceeds the warning limit or whenever a plot of the values indicates a trend.

The following may be noted from Table 5-1 in regard to the normalized deviation: the control limit was exceeded for the gross beta analysis of water on September 18, 1992 and for low level I-131 analysis in water on February 7, 1992; the warning limit was exceeded for the gross beta analysis of water on January 31, 1992 and for the gamma analyses of Co-60 in water on October 9, 1992 and of Ru-106 in water on June 5, 1992. Positive biases were shown from the gamma analyses of Co-60, Ru-106 and Cs-137 in water, and of Cs-137 in air filters. Negative bias was shown from the gross beta analyses in water.

An extensive investigation of the low level I-131 sample which was outside the control limit did not reveal any definitive cause. Areas investigated included the effects of instrument parameters, efficiency curves, chemical yield, reagents chemical processing, procedures and demonstrated skill of analysts. All radiochemical personnel processed a series of quality control spikes and duplicates; all results were within the warning limits. It was noted that without careful processing, a potential existed for the loss of
I-131 at several steps in the procedure; these were pointed out to radiochemistry personnel.

The deficiencies delineated above regarding the gross beta analyses of water are attributed to the use of a Sr-90 (experimental) gross beta self-absorption curve rather than a Cs-137 curve as used by the EPA. A Cs-137 experimental self-absorption curve was made and analyses were performed on the two EPA samples outside of the limits. Results were brought within the warning limits for both samples, however, a duplicate reanalysis of one of the samples was outside the warning limit. This again indicates the possibility of all the solid from the sample not being recovered. Another Cs-137 self-absorption curve is being prepared.

An investigation regarding the deficiencies from the gamma analyses in water and air filters concluded that the deficiencies were due to changes in the background count rate. Computer software to revise peak background correction values has been developed but not fully implemented.

TABLE 5-1 (SHEET 1 OF 2)

CROSSCHECK PROGRAM RESULTS

Analysis	Date Collected	Known Value	Expected Precision	Reported Average	Standard Deviation	Normalized Deviation	Normalized Range
			Air Filters (pCi/filter)				
Gross Beta	03/27/92	41.0	5.0	44.67	1.15	1.27	0.24
	08/28/92	69.0	10.0	65.33	2.08	-0.64	0.24
Cs-137	03/27/92	10.0	5.0	14.00	0.00	1.39	0.00
	08/28/92	18.0	5.0	22.33	1.53	1.50	0.35
			Milk (pCi/l)				
I-131	04/24/92	78.0	8.0	80.33	4.04	0.51	0.59
	09/25/92	100.0	10.0	105.70	5.51	0.99	0.65
Cs-137	04/24/92	39.0	5.0	41.00	2.65	0.69	0.59
	09/25/92	15.0	5.0	18.00	2.00	1.04	0.47
			Water (pCi/l)				
Gross Beta	01/31/92	30.0	5.0	23.67	1.15	-2.19	0.24
	04/14/92	140.0	21.0	118.67	1.53	-1.76	0.08
	05/15/93	44.0	5.0	39.00	1.00	-1.73	0.24
	09/18/92	50.0	5.0	34.33	2.08	-5.43	0.47
	10/20/92	53.0	10.0	47.00	1.16	-1.04	0.18
H-3	02/21/92	7904.0	790.0	8380.00	115.34	1.04	0.16
	06/19/92	2125.0	347.0	1913.33	30.55	-1.06	0.10
	10/23/92	5962.0	596.0	5650.00	30.03	-0.91	0.06

TABLE 5-1 (SHEET 2 OF 2)

CROSSCHECK PROGRAM RESULTS

Analysis	Date Collected	Known Value	Expected Precision	Reported Average	Standard Deviation	Normalized Deviation	Normalized Range
Co-60	02/14/92	49.0	5.0	52.67	0.58	1.27	0.12
	04/14/92	22.0	5.0	26.33	2.08	1.50	0.47
	06/05/92	15.0	5.0	16.67	0.58	0.58	0.12
	10/09/92	8.0	5.0	11.67	1.53	1.27	0.35
	10/20/92	8.0	5.0	10.00	2.65	0.69	0.59
Zn-65	02/14/92	148.0	15.0	145.67	1.53	-0.27	0.12
	06/05/92	99.0	10.0	99.67	1.53	0.12	0.18
	10/09/92	148.0	15.0	156.00	2.00	0.92	0.16
Ru-106	02/14/92	203.0	20.0	199.0	7.00	-0.35	0.38
	06/05/92	141.0	14.0	157.67	1.53	2.06	0.13
	10/09/92	175.0	18.0	191.33	10.07	1.57	0.66
I-131	02/07/92	59.0	6.0	33.67	1.53	-7.31	0.30
Cs-134	02/14/92	31.0	5.0	30.00	0.00	-0.35	0.00
	04/14/92	24.0	5.0	26.33	0.58	0.81	0.12
	06/05/92	15.0	5.0	14.00	1.73	-0.35	0.35
	10/09/92	8.0	5.0	9.67	0.58	0.58	0.12
	10/20/92	5.0	5.0	6.33	1.53	0.46	0.35
Cs-137	02/14/92	49.0	5.0	52.67	0.58	1.27	0.12
	04/14/92	22.0	5.0	26.33	2.08	1.50	0.47
	06/05/92	15.0	5.0	16.67	0.58	0.58	0.12
	10/09/92	8.0	5.0	11.67	1.53	1.27	0.35
	10/20/92	8.0	5.0	10.00	2.65	0.69	0.59
Ba-133	02/14/92	76.0	8.0	79.00	1.00	0.65	0.15
	06/05/92	98.0	10.0	98.67	1.53	0.12	0.18
	10/09/92	74.0	7.0	76.33	4.04	0.58	0.59

6.0 CONCLUSIONS

This report confirms the licensee's conformance with Section 3/4.12 of the Technical Specifications during the year. It shows that all data were carefully examined. A summary and a discussion of the results of the laboratory analyses for each type sample collected were presented.

The presence of tritium in river water and of Mn-54, Co-58, and Co-60 in shoreline sediment at a short distance from the discharge point may possibly be related to plant releases. The potential doses from their presence (calculated to be on the order of tenths of a percent of the Technical Specification limits) pose no measurable radiological impact upon the environment or the public.

No Technical Specifications reportable limits were exceeded. No measureable radiological impact upon the environment or public as a consequence of plant operation was established.

IV

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2

NRC DOCKET NOS. 50-424 AND 50-425

FACILITY OPERATING LICENSE NOS. NPF-68 AND NPF-81

ANNUAL ENVIRONMENTAL OPERATING REPORT FOR 1992 (NONRADIOLOGICAL)

VOGTLE ELECTRIC GENERATING PLANT - UNIT 1 AND UNIT 2
ANNUAL ENVIRONMENTAL OPERATING REPORT (NONRADIOLOGICAL)
1992

SPECIFICATION

In accordance with Section 5.4.1 of the Vogtle Electric Generating Plant (VEGP) Environmental Protection Plan (Nonradiological), Appendix B to Facility Operating License Nos. NPF-68 and NPF-81, this report is submitted describing implementation of the Environmental Protection Plan for the calendar year 1992.

REPORTING REQUIREMENTS

A. Summaries and Analyses of Results of the Environmental Monitoring Activities for the Reporting Period

1. Aquatic Monitoring - Liquid effluent monitoring ws performed in accordance with National Pollutant Discharge Elimination System (NPDES) Permit GA0026786; there was no additional requirements for aquatic monitoring during 1992. Five minor NPDES Permit noncompliance events were reported to the State of Georgia during 1992.

2. Terrestrial Monitoring - Terrestrial monitoring is not required.

3. Maintenance of Transmission Line Corridors

   a. Corridor re-clearing was conducted on the Scherer-Wadley portion of the VEGP-Scherer 500 KV line during 1992. Work was performed with rotary mowers equipped with low ground pressure tires. In cultural resource areas, clearing was conducting by hand utilizing chain saws and brush axes.

      Herbicide usage associated with transmission corridor maintenance consisted of application of EPA approved herbicides by licensed applicators in strict compliance with the herbicide label requirements.

      There were no other transmission corridor maintenance activities conducted on VEGP-related transmission lines during 1992.

   b. There were no clearing or maintenance activities conducted within the Ebenezer Creek or Francis Plantation areas during 1992.

   c. Routine maintenance activities within the designated cultural properties along transmission line corridors were conducted in accordance with the Final Cultural Resources Management Plan.

4. Noise Monitoring - There were no complaints received by Georgia Power Company during 1992 regarding noise along the VEGP-related high voltage transmission lines.

B. Comparison of the 1992 Monitoring Activities with Preoperational Studies, Operational Controls, and Previous Monitoring Reports

These programs were not required because no nonradiological monitoring programs were conducted during the reporting period beyond those performed in accordance with NPDES Permit No. GA0026786 referenced in Section A above.

C. An Assessment of Observed Impacts of Plant Operation on the Environment

There was no significant environmental adverse environmental impact associated with plant operation in 1992.

D. Environmental Protection Plan (EPP) Noncompliances and Corrective Actions

There were no EPP noncompliances during 1992.

E. Changes in Station Design or Operation, Tests, or Experiments Made in Accordance with EPP Subsection 3.1 which Involved a Potentially Significant Unreviewed Environmental Question

There were no changes in station design or operation, tests, or experiments during 1992 which involved a potentially significant unreviewed environmental question.

F. Nonroutine Reports Submitted in Accordance with EPP Subsection 5.4.2

There were no nonroutine reports submitted in 1992.