PETER E. KATZ
Plant General Manager
Calvert Cliffs Nuclear Power Plant

Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657
410 495-4101

A Member of the
Constellation Energy Group

BGE

February 14, 2000

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
Report of Changes, Tests, and Experiments - 10 CFR 50.59

In accordance with 10 CFR 50.59(b)(2), Baltimore Gas and Electric Company hereby submits a report containing brief descriptions of changes, tests, and experiments approved under the provisions of 10 CFR 50.59.

Attachment (1) of this report includes 50.59 evaluations recorded approved between December 1, 1998 and January 31, 2000. Items in the report are sorted by 50.59 identification number.

Should you have questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

Peter E. Katz

CHC/JMO/dlm

Attachment: (1) Calvert Cliffs Nuclear Power Plant Report of Changes, Tests, and Experiments [10 CFR 50.59(b)(2)]

cc: R. S. Fleishman, Esquire
J. E. Silberg, Esquire
Director, Project Directorate I-1, NRC
A. W. Dromerick, NRC
H. J. Miller, NRC
Resident Inspector, NRC
R. I. McLean, DNR
J. H. Walter, PSC

IE47

ATTACHMENT (1)

CALVERT CLIFFS NUCLEAR POWER PLANT

REPORT OF CHANGES, TESTS, AND EXPERIMENTS

[10 CFR 50.59(b)(2)]

Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant
February 14, 2000

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00250	50.59	64	0001	12/16/1998	12/14/1998	04/23/1999

Subject ALLOW THE TEMPORARY REMOVAL OF CONTROL ROOM HVAC SYSTEM DAMPERS.

Text

SUMMARY:

HVAC DAMPERS 0-PO-5344, 5348 AND 5349 ARE IN NEED OF REPAIR. THEY MUST BE REMOVED FROM THE DUCT SYSTEM TO BE REPAIRED. IT IS PART OF THE CONTROL ROOM/CABLE SPREADING ROOM COOLING AND VENTILATION SYSTEM AND SUPPORTS THE FIRE PROTECTION SYSTEM. FIRE WATCHES IN THE CABLE SPREADING ROOM WILL BE ESTABLISHED IN ACCORDANCE WITH THE TECHNICAL REQUIREMENTS ACTION STATEMENTS FOR EQUIPMENT OUT-OF-SERVICE. TO MAINTAIN THE INTEGRITY OF THE CONTROL ROOM/CABLE SPREADING ROOM VENTILATION SYSTEM, THE EQUIPMENT ROOM THAT HOUSES THE DAMPERS WILL BE SEALED TO ALLOW THE DUCT WORK TO BE OPENED TO REMOVE THE DAMPERS AND AGAIN TO REINSTALL THEM. WHILE MAINTEANNCE IS PERFORMED ON THE DAMPER A "MAKE-UP" PIECE WILL BE INSTALLED IN THE DUCT TO ESTABLISH THE INTEGRITY OF THE CONTROL ROOM/CABLE SPREADING ROOM VENTILATION SYSTEM. WITH THE SYSTEM INTEGRITY ASSURED, THE REQUIRED COOLING FOR THE ROOMS WILL BE AVAILABLE. THIS ACTIVITY DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
MD-1-100	NPIP	0600	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00258	50.59	64	0001	03/31/1999	01/21/1999	09/07/1999

Subject SAFETY EVALUATION TPSS MODIFICATION

Text

SUMMARY:

THE ACTIVITIES RELOCATE THE SAMPLE CONNECTION POINT FOR THE CONDENSATE HEADER UPSTREAM OF THE DEMINERALIZERS. THAT SAMPLE POINT WILL NOW TERMINATE IN THE CDSS VICE THE TPSS. FURTHER, THE DISSOLVED OXYGEN ANALYZERS 1 & 2-AE-6440-1 IN THE TURBINE PLANT SAMPLE SYSTEM (TPSS) 1(2)T21 WILL BE MOVED TO PANELS 1 & 2C57A IN THE CONDENSATE DEMINERALIZER SAMPLING SYSTEM (CDSS). THE NEW SAMPLE LINE ROUTING WILL BE SIGNIFICANTLY SHORTER THAN THE EXISTING SAMPLE LINE RESULTING IN A REDUCED SAMPLE TRANSIT TIME.

THIS ESP ALSO INSTALLS NEW HYDRAZINE ANALYZERS 1&2-AE-6417 IN PANELS 1&2T21. THE HYDRAZINE ANALYZERS WILL BE ADDED TO THE EXISTING STEAM GENERATOR FEED PUMP DISCHARGE HEADER SAMPLE LINES INSIDE PANEL 1&2T21 AND WILL BE USED TO MONITOR HYDRAZINE IN THE FEEDWATER.

ANOTHER ACTIVITY OF THE PROPOSED ESP WILL INSTALL A NEW MANIFOLD TO ALLOW HOTWELL SAMPLES TO BE ANALYZED FOR SODIUM BY CONNECTING THE CONDENSATE HOTWELL SAMPLE LINES (6 LINES PER UNIT) TO THE EXISTING SODIUM ANALYZERS IN PANELS 1&2T21A. THESE MONITORS WILL BE USED TO CHECK FOR SODIUM CONTENT IN THE CONDENSATE SYSTEM WHICH IS INDICATIVE OF CONDENSER TUBE FAILURE.

THIS ESP WILL INSTALL CROSS CONNECTS WITH ISOLATION VALVES BETWEEN THE 11 & 12 AND 21 & 22 MAIN STEAM HEADER SAMPLE LINES AND ADD ROOT VALVES TO EACH RESPECTIVE SAMPLE POINT. THIS WILL PROVIDE THE CAPABILITY TO SAMPLE THE 12 & 22 MAIN STEAM HEADERS WHILE MAINTAINING THE REDUCED HEAT LOAD ON THE ISOTHERMAL BATH SAMPLE COOLERS.

THE PROPOSED ESP ALSO CONNECTS THE HOTWELL SAMPLE LINES IN 1(2)T21 TO THE SODIUM ANALYZER SAMPLE LINE WHICH GOES TO 1(2)T21A. THE SAMPLE ISOLATION STOP VALVES IN 1(2)T21 ARE CLOSED AND THE CONDENSATE PUMP DISCHARGE HEADER PH ANALYZERS IN PANELS 1&2T21 ARE ABANDONED TO SUPPORT SODIUM SAMPLING OF THE HOTWELL SAMPLES.

NONE OF THE SSCS AFFECTED BY THE PROPOSED ESP PERFORM ANY SAFETY RELATED FUNCTIONS. ALL AFFECTED SSCS ARE CLASSIFIED AS NON-SAFETY RELATED BY THE CCNPP Q-LIST. THE NECESSARY CHANGES TO THE UFSAR ARE ATTACHED. AS DISCUSSED ABOVE, THE PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY PREVIOUSLY EVALUATED IN THE SAR IS NOT INCREASED. THE CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY EVALUATED PREVIOUSLY IN THE SAR ARE ALSO NOT INCREASED. THIS ACTIVITY DOES NOT INCREASE THE POSSIBILITY OF A MALFUNCTION OR AN ACCIDENT OF A DIFFERENT TYPE THAN PREVIOUSLY IN THE

SAR. THERE ARE NO OFFSITE DOSE CONSEQUENCES. THE MARGIN OF SAFETY, AS DEFINED IN THE TECHNICAL SPECIFICATIONS, IS NOT AFFECTED. THEREFORE, THERE ARE NO UNREVIEWED SAFETY QUESTIONS ASSOCIATED WITH THE ACTIVITIES DEFINED IN THIS SAFETY EVALUATION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199500952-000	ESP	0003	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00292	50.59	64	0000	12/01/1998	05/14/1998	02/17/1999

Subject MAIN STEAM SAFETY VALVE TESTING AT POWER

Text

SUMMARY:

THIS ACTIVITY INVOLVES A CHNAGE TO THE MSSV TEST PROCEDURE IN ORDER TO PROVIDE FOR PERFORMING THE TESTING OF THE VALVE LIFT SETTING WHILE IN MODE 1 RATHER THAN ONLY MODE 3.

THE CHANGE DOES NOT INVOLVE A USQ SINCE AN MSSV WILL NOT INADVERTENTLY OPEN WHILE IT IS BEING TESTED. ALSO, THE T / S ACTION STATEMENT WILL BE MET WHEN ANY VALVE BECOMES INOPERABLE BY LOWERING THE POWER AND THE VHPT UPPER LIMIT PRIOR TO THE TEST.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199800550-001	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00323	50.59	64		12/02/1998	09/23/1998	02/17/1999

Subject RETIRE-IN-PLACE OUTAGE AIR DRYER/FILTER

Text

SUMMARY:

THE PROPOSED ACTIVITY WILL ABANDON THE OUTAGE AIR DRYER / FILTER IN PLACE. THE OUTAGE AIR DRYER / FILTER SYSTEM WAS ONLY DESIGNED TO FACILITATE OUTAGE RELATED WORK. THE SYSTEM WAS NEVER COMPLETED PER ITS ORIGINAL DESIGN AND IS NOT USED DURING OUTAGES, TO NO SIGNIFICANT ADVERSE AFFECT. THIS ACTIVITY DOES NOT INCREASE THE PROBABILITY OF OCCURRENCE OR THE CONSEQUENCES OF ANY ACCIDENT OR MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY. THE UFSAR WILL BE REVISED TO DELETE REFERENCE TO THE OUTAGE AIR DRYER AND ASSOCIATED PIPING.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199700396-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00331	50.59	64	0000	12/15/1998	11/09/1998	04/25/1999

Subject MAIN PLANT VENT EFFLUENT SAMPLER REPLACEMENT 50.59

Text

SUMMARY:

THE EXISTING NSR EFFLUENT SAMPLERS FOR COLLECTION OF MAIN PLANT VENT PARTICULATE, IODINE, AND TRITIUM SAMPLES ARE TO BE REPLACED WITH REDUNDANT

TRAINS OF SAMPLERS THAT ALLOW FOR BETTER FLOW CONTROL, FLOW ALARMS, AND AUTOMATIC TRANSFER OF FUNCTION TO A REDUNDANT TRAIN UPON LOSS OF THE SELECTED TRAIN. CONTINUOUS SAMPLING OF MAIN PLANT VENT EFFLUENT IS ACCOMPLISHED TO COMPLY WITH THE ODCM REVISION 3 SECTIONS 3.3.3.9 AND 4. 11. 2. 1. THERE ARE NO REQUIREMENTS FOR THIS MONITORING FUNCTION IN THE TECH SPECS, NOR DOES THIS EQUIPMENT SATISFY ANY RG 1.97 OR SOER 93-01 REQUIREMENTS. THE REPLACEMENT OF THIS EQUIPMENT WILL HAVE NO EFFECT UPON THE TECH SPECS, AND THE SAR WILL BE CHANGED VIA UCR TO REFLECT THE NEW UNIT ID NUMBERS AND THE PRESENCE OF REDUNDANT TRAINS. IN CONCLUSION, THIS ACTIVITY IS NOT A USQ.

Associations

Document Id	Doc Type	Revision To	Assoc Status
91-0251-008	ESP	0000	C
91-0251-009	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00334	50.59	64		08/08/1999	11/17/1998	12/15/1999

Subject CR HVAC MODIFICATION

Text

SUMMARY:

THE AIR SUPPLY TO THE BATTER ROM VENTILATION SYSTEM IS NORMALLY FROM THE OUTSIDE IN THE SUMMER MODE OR FROM THE MAIN PLANT EXHAUST EQUIPMENT ROOM (MPEER) IN THE WINTER MODE. DURING WINTER MODE, THE BATTERY ROOM SUPPLY INTAKE IS FROM THE MAIN PLANT EXHAUST EQUIPMENT ROOM. ALTHOUGH THE WINTER TEMPERATURE IN MAIN PLANT EXHAUST EQUIPMENT ROOM IS HIGHER THAN OUTSIDE, IT CAN STILL BE LOW ENOUGH TO CAUSE A LOW TEMPERATURE ALARM. THEREFORE, THE BATTERY ROOM FAN SUPPLY DUCT IS REROUTED TO THE ACCESS CONTROL AREA AND THE SUPPLY DUCT FROM THE MPEER IS ISOLATED. DRAWING ON AIR FROM THE ACCESS CONTROL AREA WILL MAINTAIN A CONSTANT TEMPERATURE AIR SUPPLY FOR THE BATTERY ROOM YEAR ROUND AND REDUCE THE POTENTIAL FOR HIGH / LOW TEMPERATURE ALARMS AND MAINTAIN THE BATTERY ROOM ABOVE A MINIMUM TEMPERATURE TO ENSURE BATTERY DESIGN CAPACITY IS AVAILABLE. THE NEW ACCESS CONTROL AREA HVAC UNIT HAS BEEN DESIGNED WITH SUFFICIENT CAPACITY TO SUPPLY THE BATTERY ROOM VENTILATION SYSTEM AND DUCTING IS RUN TO THE ACCESS CONTROL AREA WHERE THE BATTERY ROOM VENTILATION SYSTEM SUPPLY FAN IS TAKING A SUCTION ON.

EXHAUST FLOW THROUGH THE MAIN PLANT VENT STACK, LOCATED IN THE MPEER, PASSES BY A RADIATION MONITOR, WHEREAS THE BATTERY ROOM EXHAUST FAN IS NOT EQUIPPED WITH A RADIATION MONITOR. SHOULD THERE BE ANY LEAKAGE INTO THE MAIN PLANT EXHAUST EQUIPMENT ROOM FROM THE VARIOUS DUCTS INSIDE THE ROOM AND SUBSEQUENTLY INTO THE BATTERY ROOM SUPPLY, A POTENTIAL EXISTS FOR UNMONITORED AIRBORNE CONTAMINATION TO BE RELEASED TO THE OUTSIDE ATMOSPHERE THROUGH THE BATTERY ROOM EXHAUST FAN WHICH DISCHARGES TO THE OUTSIDE WITHOUT BEING MONITORED. SEALING OF THE AIR SUPPLY DUCT FROM THE MPEER WILL PREVENT THE POSSIBLE INDUCTION OF AIRBORNE CONTAMINATION INTO THE BATTERY ROOM VENTILATION SYSTEM.

THE SAFETY RELATED DUCT CONNECTED TO THE MPEER ROOM WALL AND THE NON SAFETY RELATED DUCT LEADING TO THE ACCESS CONTROL AREA ARE CONNECTED BY A FLEXIBLE CONNECTION TO ENSURE THAT THE SEISMIC MOVEMENT OF THE ACCESS CONTROL AREA DOES NOT AFFECT THE STRUCTURAL INTEGRITY OF THE SAFETY RELATED BATTERY ROOM VENTILATION SYSTEM IN THE MPEER. STRUCTURAL INTEGRITY OF THE SAFETY RELATED BATTERY ROOM SUPPLY DUCT WILL BE MAINTAINED. NO AIR FROM THE MPEER WILL BE ABLE TO ENTER INTO THE BATTERY ROOM VENTILATION SYSTEM.

SINCE THE PROBABILITY AND CONSEQUENCES OF PREVIOUSLY EVALUATED MALFUNCTIONS AND ACCIDENTS ARE NOT INCREASED BY THIS ACTIVITY, THE PROBABILITY OF NEW MALFUNCTIONS AND ACCIDENTS ARE NOT CREATED BY THIS ACTIVITY, AND THE MARGINS OF SAFETY EXPRESSED IN THE TECHNICAL SPECIFICATIONS ARE NOT REDUCED BY THIS ACTIVITY, THRE IS NO UNREVIEWED SAFETY QUESTION ASSOCIATED WITH THIS ACTIVITY.

Associations

Document Id	Doc Type	Revision To	Assoc Status

ES199702144-004 ESP 0000 C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00337	50.59	64		12/07/1998	12/07/1998	10/22/1999

Subject CR HVAC MODIFICATION

Text

SUMMARY:

THE CURRENT CONTROL ROOM (CR) HABITABILITY ANALYSES FOR CCNPP ARE BASED ON THE ORIGINAL DESIGN BASIS UNFILTERED INLEAKAGE RATE OF 910 CFM INTO THE CR. HOWEVER, RECENT REST MEASUREMENTS INDICATE THAT THE ACTUAL INLEAKAGE RATE IS SIGNIFICANTLY HIGHER. DOSE CALCULATIONS PERFORMED FOR THE DESIGN BASIS ACCIDENTS UTILIZING THE MEASURED INLEAKAGE RATE DEMONSTRATE THAT LEAKAGE FROM THE AUXILIARY BUILDING ROOF INTO THE CONTROL ROOM HVAC SYSTEM (CRHVAC) IS A SIGNIFICANT CONTRIBUTOR TO THE CR OPERATOR DOSES. THESE CALCULATIONS ALSO INDICATE THAT IN ORDER TO LIMIT THE CONTROL ROOM DOSE TO WITHIN THE GDC 19 LIMITS, FOR THE APPLICABLE DESIGN BASIS ACCIDENTS, NONE OF THE LEAKAGE INTO THE CRHVAC SYSTEM SHOULD ORIGINATE FROM THE AUXILIARY BUILDING ROOF. A SUBSTANTIAL PORTION OF THE CRHVAC SYSTEM EQUIPMENT IS LOCATED IN ROOM 512. DIRECTLY ABOVE AND BELOW ROOM 512 ARE THE AUXILIARY BUILDING ROOF AT ELEV. 91'-6" AND THE CR AT ELEV. 45', RESPECTIVELY.

THEREFORE, IN ORDER TO LIMIT THE CONTROL ROOM DOSE TO WITHIN THE GDC 19 LIMITS, FOR THE APPLICABLE DESIGN BASIS ACCIDENTS, A CONTROL ROOM INLEAKAGE REDUCTION PLAN WAS GENERATED TO REDUCE INLEAKAGE TO THE CR. THE MAJOR COMPONENT OF THIS PLAN IS TO SEAL THE ROOM 512 ROOF OPENINGS. THIS ACTIVITY REMOVES THE NON SAFETY-RELATED ACCESS CONTROL AC UNIT NO. 14 AND H&V UNIT NO. 11 AND SEALS THE ROOF WITH A SAFETY-RELATED PRESSURE BOUNDARY. A SINGLE ROOF TOP MOUNTED HVAC UNIT REPLACES THE TWO EXISTING ACCESS CONTROL AREA VENTILATION UNITS.

THE NEW ACCESS CONTROL AREA HVAC UNIT WILL BE PLACED ON THE AUXILIARY BUILDING ROOF AT ELEVATION 91'-6", ABOVE CORRIDOR 591. HOISTING OF THE NEW HVAC UNIT ONTO THE ROOF WILL BE CONDUCTED BY THE UNIT 2 CONTAINMENT JIB CRANE. THE UNIT 2 CONTAINMENT JIB CRANE HAS BEEN ANALYZED TO ENSURE IT CAN HOIST THE LARGEST SEGMENT OF THE NEW HVAC UNIT WITHOUT COMPROMISING THE STRUCTURAL INTEGRITY OF THE CRANE.

THE NEW HVAC UNIT WILL TRAVEL ALONG THE ROOF, AND WILL TRAVERSE ABOVE THE UNIT 2 SPENT FUEL POOL. THE ROOF OVER THIS AREA HAS BEEN EVALUATED FOR A LOAD DROP ANALYSIS TO DETERMINE THE MAXIMUM HEIGHT THE LOAD COULD BE DROPPED BEFORE STRUCTURAL DAMAGE TO THE ROOF WERE TO OCCUR. GUIDELINES ARE GIVEN TO ENSURE NO DAMAGE OCCURS TO THIS ROOF WHILE TRANSPORTING THE UNIT. THEREFORE, MAINTAINING THE STRUCTURAL INTEGRITY OF THE ROOF ENSURES THERE IS NO CONSEQUENCE TO THE SPENT FUEL POOL. ONCE THE HVAC UNIT CLEARS THE SPENT FUEL POOL AREA, IT THEN TRAVELS ONTO A METAL DECKING ROOF, ABOVE THE ACCESS CONTROL AREA. THIS ROOF HAS BEEN ANALYZED TO ENSURE THE STRUCTURAL INTEGRITY IS MAINTAINED FOR THE ADDED WEIGHT OF THE NEW HVAC UNIT, ALONG WITH CRIBBING AND HOISTS THAT ARE REQUIRED TO SET THE HVAC UNIT ONTO ITS FOUNDATION.

THE CRHVAC SYSTEM DUCTS IN ROOM 512 ARE EITHER POSITIVE OR NEGATIVE PRESSURE, DEPENDING ON THEIR RELATIVE LOCATION (SUCTION OR DISCHARGE) WITH RESPECT TO THE FANS. THE POSITIVE PRESSURE DUCTS WILL LEAK AIR OUT TO THE ROOM AND THE NEGATIVE PRESSURE DUCTS WILL DRAW AIR FROM THE ROOM DUE TO THE DIFFERENTIAL PRESSURE INDUCED LEAKAGE THROUGH THE SEAMS, JOINTS, AND CONNECTIONS IN THE DUCTING. WITH THE REMOVAL OF ALL OTHER HVAC EQUIPMENT FROM ROOM 512 AND THE INSTALLATION OF SAFETY-RELATED PRESSURE BOUNDARY HATCHES, DAMPERS AND SEALED ROOF OPENINGS ON THE ROOM 512 ROOF, UNDER THIS AND OTHER SUPPLEMENTS TO THIS MODIFICATION, ROOM 512 IS NOW PART OF THE CRHVAC SYSTEM ENVELOPE. NO AIR FROM THE OUTSIDE, ABOVE ROOM 512, CAN ENTER INTO THE CRHVAC SYSTEM. THEREFORE, DOSES FROM THE DESIGN BASIS ACCIDENTS, WILL BE SIGNIFICANTLY LOWERED FOR THE CR OPERATOR.

SINCE THE PROBABILITY AND CONSEQUENCES OF PREVIOUSLY EVALUATED MALFUNCTIONS AND ACCIDENTS ARE NOT INCREASED BY THIS ACTIVITY, THE PROBABILITY OF NEW MALFUNCTIONS AND ACCIDENTS ARE NOT CREATED BY THIS ACTIVITY, AND THE MARGINS OF SAFETY EXPRESSED IN THE TECHNICAL SPECIFICATIONS ARE NOT REDUCED BY THIS ACTIVITY, THERE IS NO UNREVIEWED SAFETY QUESTION ASSOCIATED WITH THIS ACTIVITY.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199702144-003	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00338	50.59	64	0000	12/06/1998	12/07/1998	02/17/1999

Subject GAG OPEN CONDENSATE PRECOAT FILTER BYPASS VALVE ON UNIT 1.

Text

SUMMARY:

THIS ACTIVITY ALLOWS THE CONDENSATE PRECOAT FILTER BYPASS VALVE 1CV5818 TO BE GAGGED OPEN. THE CONNECTING LINKAGE BETWEEN THE VALVE VANE ARM AND THE ACTUATOR IS BROKEN AND GAGGING THE VALVE OPEN WILL ALLOW IT TO BE REPAIRED WHILE IT REMAINS IN SERVICE. GAGGING THE VALVE OPEN WILL ENSURE CONDENSATE FLOW IS UNINTERRUPTED BUT WILL BYPASS THE PRECOAT FILTERS. THE PRECOAT FILTERS ARE ONLY USED FOR LONG TERM PURITY OF THE CONDENSATE; THEREFORE, TEMPORARILY BYPASSING THEM WILL NOT INCREASE THE PROBABILITY OR CONSEQUENCES OF A MALFUNCTION OR ACCIDENT. SINCE THE GAG IS DESIGNED TO BE STRONGER THAN THE ACTUATOR FORCE, THERE WILL BE NO INCREASE IN THE PROBABILITY OF IT FAILING. THERE ARE NO SURVEILLANCE TEST PROCEDURES OR TECHNICAL SPECIFICATIONS TO EITHER THE CONDENSATE DEMINERALIZER OR PRECOAT FILTER SYSTEM.

Associations

Document Id	Doc Type	Revision To	Assoc Status
MD-1-100	NPIP	0600	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00339	50.59	64		03/01/1999	02/22/1999	07/26/1999

Subject FLOW DEPENDENT SELECTOR SWITCH REMOVAL

Text

SUMMARY:

DURING THE ORIGINAL DESIGN OF CALVERT CLIFFS, IT WAS ENVISIONED THAT POWER OPERATIONS WITH LESS THAN FOUR REACTOR COOLANT PUMPS WOULD BE ALLOWED. MANY OF THE CALVERT CLIFFS TECHNICAL SPECIFICATIONS CONTAINED REFERENCES TO "LESS THAN FOUR PUMP OPERATION". THIS DESIGN FEATURE WAS NEVER IMPLEMENTED, HOWEVER THE RPS LIMITS FOR CONFIGURATIONS OTHER THAN 4 PUMP OPERATION REMAINED IN THE TECHNICAL SPECIFICATIONS.

BG&E DOES NOT INTEND TO PURSUE POWER OPERATION WITH LESS THAN FOUR RCP'S OPERATING. BECAUSE OF THIS, THE FLOW DEPENDENT SELECTOR SWITCHES ALONG WITH THE ASSOCIATED WIRING IS UNNECESSARY AND WILL BE REMOVED FROM THE REACTOR PROTECTIVE SYSTEM CALIBRATION AND INDICATION PANELS (RPSCIP). BY REMOVING THESE UNNECESSARY COMPONENTS, LESS BROKEN WIRES, LOOSE CONNECTIONS, OR DEGRADED SWITCH CONTACTS SHALL BE PRESENT FOR POSSIBLE FAILURE IN THE RPSCIP. THEREFORE, THE INHERENT NATURE OF THE PROPOSED MODIFICATION IS TO LESSEN THE PROBABILITY OF OCCURRENCE, AND THE CONSEQUENCES OF MALFUNCTIONS OF THE FLOW DEPENDENT SELECTOR SWITCH.

THE FLOW DEPENDENT SELECTOR SWITCH WILL BE REMOVED FROM FIGURES 7-5, 7-6, 7-6A AND 7-21 OF THE UPDATED FINAL SAFETY ANALYSIS REPORT. ADDITIONALLY, AN EDITORIAL CORRECTION WILL BE MADE TO THE CALVERT CLIFFS TECHNICAL SPECIFICATION BASIS B 3.3.1 TO REMOVE A REFERENCE TO OTHER THAN FOUR PUMP OPERATIONS.

THE K3 RELAY, WHICH ORIGINALLY WAS INTENDED TO COMPARE THE NUMBER OF RCP'S RUNNING WITH THE FLOW DEPENDENT SELECTOR SWITCH POSITION, IS PRESENTLY ABANDONED IN PLACE WITH NO FILED INPUTS CONNECTED. THE UPDATED FINAL SAFETY ANALYSIS REPORT DOES NOT DISCUSS, EITHER EXPLICITLY OR IMPLICITLY, THE EXISTENCE OF THE K3 RELAY CIRCUIT INTHE RPSCIP. POWER TO THE K3 RELAY CIRCUIT WILL BE REMOVED IN ORDER TO PREVENT THE POTENTIAL FOR FAULTS IN THE RPSCIP CIRCUITRY.

BASED ON THE ABOVE DISCUSSIONS, THE PROPOSED MODIFICATION DOES NOT AFFECT THE ABILITY OF OPERATORS TO ASSESS OR CONTROL THE NUCLEAR SAFETY STATUS OF THE PLANT, NOT DOES THE PROPOSED MODIFICATION CHANGE THE NUCLEAR SAFETY

RESPONSE OF THE PLANT TO NORMAL EVOLUTIONS, ANTICIPATED OPERATIONAL OCCURRENCES, OR DESIGN BASIS ACCIDENTS. THE POTENTIAL FOR THE RELEASE OF RADIOACTIVE MATERIAL TO THE ENVIRONMENT IS NOT INCREASED BY THE PROPOSED MODIFICATION, NOR DOES THIS ACTIVITY INCREASE THE POTENTIAL FOR A PLANT TRIP.

THEREFORE, THE PROPOSED MODIFICATION DOES NOT CONSTITUTE AN UNREVIEWED S SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199700702-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00340	50.59	64	0000	02/22/1999	02/22/1999	07/26/1999

Subject UFSAR CHANGE FOR FLOOD HEIGHT DUE TO CIRC WATER EXPANSION JOINT RUPTURE

Text

SUMMARY:

TABLE 9-17A OF THE UFSAR DISCUSSES THE CONSEQUENCES OF A RUPTURE OF A CIRCULATING WATER EXPANSION JOINT IN THE TURBINE BUILDING CONDENSER PIT. IT STATES THAT THE TURBINE BUILDING COULD BE FLOODED TO AN ELEVATION OF 18 FEET WITH NO DAMAGE TO SAFETY RELATED EQUIPMENT. ALSO, TABLE 9-17A STATES THAT FLOOD HEIGHT WOULD REACH ELEVATION 18 FEET IN 28 MINUTES.

RESEARCH INTO THE DESIGN BASIS BEHIND THE TURBINE BUILDING FLOODING INDICATES THAT FLOODING OF THE TURBINE BUILDING WAS ORIGINALLY BASED SOLELY ON THE MAXIMUM METEOROLOGICAL EVENT AND NOT ON THE FLOODING FROM THE RUPTURE OF THE CIRCULATING WATER EXPANSION JOINT.

AN ISSUE REPORT WAS WRITTEN TO DOCUMENT A CONCERN REGARDING THE POTENTIAL FLOODING OF THE SERVICE WATER AND AUXILIARY FEEDWATER ROOMS AS A RESULT OF A BREAK IN THE CIRCULATING WATER PIPING AS DETAILED IN UFSAR TABLE 9-17A. THE CONCERN CENTERS AROUND TECHNICAL REQUIREMENTS MANUAL SECTION 15.7.4 "WATERTIGHT DOORS". THIS SECTION STATES, IN PART, THAT THE WATERTIGHT DOORS FOR THESE ROOMS ARE REQUIRED TO BE CLOSED WHEN THE UNIT IS IN MODES 1 THROUGH 4. THESE WATERTIGHT DOORS ARE LOCATED AT THE 12'-6" ELEVATION AND FLOOD LEVEL WOULD REACH THIS POINT MUCH SOONER THAN 28 MINUTES. UNDER SINGLE UNIT OUTAGE CONDITIONS, MAINTENANCE ACTIVITIES MAY REQUIRE THAT THE WATERTIGHT DOORS OF THE ROOM ASSOCIATED WITH THE OUTAGE UNIT BE LEFT OPEN. SINCE THE OTHER UNIT IS OPERATIONAL, ITS CIRCULATING WATER PUMPS ARE OPERATIONAL. IF THE SRW AND AFW ROOMS WERE TO FLOOD DURING THIS EVENT, IT IS POSSIBLE THAT THE AUXILIARY BUILDING COULD FLOOD THROUGH NON-WATERTIGHT DOORS THAT JOIN THESE ROOMS AND THE AUXILIARY BUILDING. THIS WOULD PLACE OTHER SAFETY-RELATED EQUIPMENT IN THE AUXILIARY BUILDING AT RISK. THEREFORE, THE OPERATING UNIT MAY BE IN JEOPARDY DUE TO THE POTENTIAL FLOODING EFFECTS FROM THE OUTAGE UNITS SRW OR AFW ROOM INTO THE COMMON AUXILIARY BUILDING THROUGH THE OPEN WATERTIGHT DOORS.

A NEW CALCULATION WAS COMPLETED TO ANALYZE A MORE REALISTIC MODEL OF THE CIRCULATING WATER SYSTEM AND THE RUPTURE OF THE EXPANSION JOINT. A PORTION OF THE FLOW WILL CONTINUE TO FLOW THROUGH THE CONDENSER AND OUT TO THE BAY WHILE THE REMAINING FLOW WILL FLOW OUT THE EXPANSION JOINT, LOCATED AT ELEVATION 2.33 FEET, ONTO THE FLOOR OF THE TURBINE BUILDING. AS THE FLOOD HEIGHT ABOVE THE RUPTURE INCREASES, PRESSURE WILL INCREASE AT THE RUPTURE AND MORE FLOW WILL BE DIVERTED THROUGH THE CONDENSER AND OUT TO THE BAY. THIS CALCULATION CONCLUDED THAT THE FLOOD HEIGHT FROM A BREAK IN THE EXPANSION JOINT LOCATED UPSTREAM OF THE MAIN CONDENSER COULD NOT REACH A HEIGHT OF 18' DUE TO THE HEAD CREATED BY THE FLOOD ELEVATION AND THE LOW HEAD OF THE CIRCULATING WATER PUMP. THE CALCULATION ALSO CONCLUDED THAT IT WOULD TAKE APPROXIMATELY 45 MINUTES TO REACH THE WATERTIGHT DOORS AT ELEVATION 12'6", ALLOWING SUFFICIENT TIME FOR THE OPERATORS, WHO REQUIRE 37 MINUTES, TO SECURE THE FLOODING.

UFSAR, TABLE 9-17A IS TO BE CLARIFIED TO INDICATE THAT THE FLOOD HEIGHT OF 18 FOOT IS ASSOCIATED WITH THE MAXIMUM METEOROLOGICAL EVENT AND THAT THE CIRCULATING WATER EXPANSION JOINT RUPTURE COULD NOT PRODUCE THIS HIGH A FLOOD ELEVATION. THE WORDING IN THE TECHNICAL REQUIREMENTS MANUAL THAT THE DOORS ARE REQUIRED TO BE CLOSED WITH THE UNIT IN MODES 1 - 4 IS CONSISTENT WITH THIS PHILOSOPHY. THIS REQUIREMENT ENSURES THAT THE OPERATING UNITS EQUIPMENT IS PROTECTED AT ALL TIMES. THE ONLY POTENTIAL

FOR FLOODING THE AUXILIARY BUILDING THROUGH THE SRW PUMP ROOMS IS THE MAXIMUM METEOROLOGICAL DESIGN BASIS FLOOD. IN THE EVENT OF THE THREAT OF A HURRICANE, THERE IS AMPLE TIME TO ENSURE THAT THE WATERTIGHT DOORS ARE CLOSED, EVEN DURING PERIODS OF HEAVY MAINTENANCE.

SINCE THE PROBABILITY AND CONSEQUENCES OF PREVIOUSLY EVALUATED MALFUNCTIONS AND ACCIDENTS ARE NOT INCREASED BY THIS ACTIVITY, THE PROBABILITY OF NEW MALFUNCTIONS AND ACCIDENTS ARE NOT CREATED BY THIS ACTIVITY, AND THE MARGINS OF SAFETY EXPRESSED IN THE TECHNICAL SPECIFICATIONS ARE NOT REDUCED THIS THIS ACTIVITY, THERE IS NO UNREVIEWED SAFETY QUESTION ASSOCIATED WITH THIS ACTIVITY.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900253-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00341	50.59	64		03/11/1999	02/23/1999	07/26/1999

Subject SAFETY EVALUATION FOR SLUDGE LANCING

Text

SUMMARY:

CALVERT CLIFFS UNIT 2 MAY BE PERFORMING AN UPPER BUNDLE FLUSH AND SLUDGE LANCING OF THE STEAM GENERATORS DURING THE UPCOMING OUTAGE. THIS ACTIVITY INCLUDES THE FOLLOWING PROCESSES:

1. FLUSHING OF THE UPPER BUNDLE WITH DEMINERALIZED WATER TO WASH LOOSE MATERIAL TO THE TUBESHEET.

2. SLUDGE LANCING VIA WATER JET TO REMOVE MATERIAL WHICH HAS ACCUMULATED ON THE TUBESHEET.

THE FLUSHING AND LANCING PROCESSES ARE SIMILAR IN THAT THEY BOTH PUMP DEMINERALIZED WATER INTO THE STEAM GENERATOR TO REMOVE SLUDGE / DEBRIS. THE FLUSHING PROCESS IS A HIGH FLOW, LOW PRESSURE PROCESS WHICH FLUSHES DEBRIS FROM THE STEAM GENERATOR TUBESHEET TO THE BOTTOM OF THE STEAM GENERATOR. THE LANCING PROCESS IS A LOW FLOW, HIGH PRESSURE PROCESS WHICH REMOVES ADHERENT DEBRIS FROM THE STEAM GENERATOR TUBESHEET BY THE FORCE CREATED BY THE WATER PRESSURE.

BOTH PROCESSES PUMP WATER TO THE STEAM GENERATOR AND RETURN IT TO A "PROCESS TRAILER". THE TRAILER HOUSES THE BULK OF THE MECHANICAL EQUIPMENT AND CONTROLS REQUIED TO PERFORM BOTH THE FLUSHING AND LANCING OPERATIONS. A RECIRCULATION LOOP IS INSTALLED WITHIN CONTAINMENT TO ALLOW FOR A PARTIAL SIDE STREAM OF WATER TO BE DIRECTED TO THE PROCESS TRAILER. IN THE TRAILER, THE WATER IS PUMPED THROUGH FILTERS. ONCE IT IS FILTERED, IT IS PUMPED BACK INTO THE STEAM GENERATOR TO CONTINUE THE CLEANING PROCESS.

THESE PROCESSES AND PROCESS EQUIPMENT WERE REVIEWED TO DETERMINE IF THERE IS ANY ADVERSE IMPACT ON ANY PLANT EQUIPMENT AS A RESULT OF THIS ACTIVITY. IT HAS BEEN DETERMINED THAT THERE IS NO INCREASE IN THE PROBABILITY OF OCCURRENCE, OR THE CONSEQUENCES OF, A MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY AND AN ACCIDENT PREVIOUSLY EVALUATED IN THE SAR. THE POSSIBILITY OF AN ACCIDENT OR A MALFUNCTION OF EQUIPMENT OF A DIFFERENT TYPE THAN ANY PREVIOUSLY EVALUATED IN THE SAR IS NOT CREATED. IN ADDITION, THE MARGIN OF SAFETY AS DEFINED IN THE BASIS FOR ANY TECHNICAL SPECIFICATION IS NOT REDUCED.

THIS IS NOT A USQ.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199801660-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00341	50.59	64	0001	04/09/1999	06/04/1999	09/07/1999

Subject SAFETY EVALUATION FOR SLUDGE LANCING

Text

SUMMARY:

CALVERT CLIFFS UNIT 2 MAY BE PERFORMING AN UPPER BUNDLE FLUSH AND SLUDGE LANCING OF THE STEAM GENERATORS DURING THE UPCOMING OUTAGE. THIS ACTIVITY INCLUDES THE FOLLOWING PROCESSES:

1. FLUSHING OF THE UPPER BUNDLE WITH DEMINERALIZED WATER TO WASH LOOSE MATERIAL TO THE TUBESHEET.
2. SLUDGE LANCING VIA WATER JET TO REMOVE MATERIAL WHICH HAS ACCUMULATED ON THE TUBESHEET.

THE PURPOSE OF THIS ACTIVITY IS TO REMOVE UNWANTED SLUDGE DEPOSITS FROM THE STEAM GENERATOR.

THE FLUSHING AND LANCING PROCESSES ARE SIMILAR IN THAT THEY BOTH PUMP DEMINERALIZED WATER INTO THE STEAM GENERATOR TO REMOVE SLUDGE / DEBRIS. THE FLUSHING PROCESS IS A HIGH FLOW, LOW PRESSURE PROCESS WHICH FLUSHES DEBRIS FROM THE STEAM GENERATOR TUBESHEET TO THE BOTTOM OF THE STEAM GENERATOR. THE LANCING PROCESS IS A LOW FLOW, HIGH PRESSURE PROCESS WHICH REMOVES ADHERENT DEBRIS FROM THE STEAM GENERATOR TUBESHEET BY THE FORCE CREATED BY THE WATER PRESSURE.

BOTH PROCESSES PUMP WATER TO THE STEAM GENERATOR AND RETURN IT TO A "PROCESS TRAILER". THE TRAILER HOUSES THE BULK OF THE MECHANICAL EQUIPMENT AND CONTROLS REQUIRED TO PERFORM BOTH THE FLUSHING AND LANCING OPERATIONS. A RECIRCULATION LOOP IS INSTALLED WITHIN CONTAINMENT TO ALLOW FOR A PARTIAL SIDE STREAM OF WATER TO BE DIRECTED TO THE PROCESS TRAILER. IN THE TRAILER, THE WATER IS PUMPED THROUGH FILTERS. ONCE IT IS FILTERED, IT IS PUMPED BACK INTO THE STEAM GENERATOR TO CONTINUE THE CLEANING PROCESS.

THESE PROCESSES AND PROCESS EQUIPMENT WERE REVIEWED TO DETERMINE IF THERE IS ANY ADVERSE IMPACT ON ANY PLANT EQUIPMENT AS A RESULT OF THIS ACTIVITY. IT HAS BEEN DETERMINED THAT THERE IS NO INCREASE IN THE PROBABILITY OF OCCURRENCE, OR THE CONSEQUENCES OF, A MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY AND AN ACCIDENT PREVIOUSLY EVALUATED IN THE SAR. THE POSSIBILITY OF AN ACCIDENT OR A MALFUNCTION OF EQUIPMENT OF A DIFFERENT TYPE THAN ANY PREVIOUSLY EVALUATED IN THE SAR IS NOT CREATED. IN ADDITION, THE MARGIN OF SAFETY AS DEFINED IN THE BASIS FOR ANY TECHNICAL SPECIFICATION IS NOT REDUCED.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199801660-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00343	50.59	64		05/19/1999	02/25/1999	09/07/1999

Subject SAR CHANGE TO SECTION 9.8.2.3

Text

SUMMARY:

THE PURPOSE OF THIS ACTIVITY IS TO SUPPORT A CHANGE TO THE SAR TO CORRECT A STATEMENT IN SECTION 9.8.2.3 WHICH DESCRIBES THE VENTILATION SYSTEM OF THE FAIRBANKS MORSE DIESEL GENERATOR ROOMS. IN THIS SECTION, THE STATEMENT IS MADE THAT:

> "ALL PENETRATIONS ARE CLOSED OFF BY THE DAMPERS WHEN THE DIESEL IS NOT RUNNING. SUFFICIENT VENTILATION FOR THE AREA SHOULD BE MAINTAINED AS A RESULT OF INFILTRATION THROUGH CLOSED WALL AND CEILING DAMPERS."

THIS STATEMENT IS NOT ACCURATE AND SHOULD BE CHANGED. THERE ARE TIMES WHEN THE VENTILATION SYSTEM IS OPERATED AND THE DIESEL IS NOT RUNNING. AND WHENEVER THE VENTILATION SYSTEM IS OPERATED, THE DAMPERS ARE OPEN.

THE SECTION WILL BE REVISED TO DELETE THE SENTENCES STATED ABOVE. NO FURTHER STATEMENT NEEDS TO BE ADDED SINCE THE SECTION WILL CORRECTLY EXPLAIN THAT THE VENTILATION SYSTEM WILL MAINTAIN THE ROOM TEMPERATURE WITHIN THE DESIGN LIMITS OF 60 DEGREES F IN THE WINTER AND 120 DEGREES F IN THE SUMMER, WITH NO OPERATING RESTRICTIONS OF WHETHER THE DIESEL IS

RUNNING OR IDLE.

THIS ACTIVITY DOES NOT INCREASE THE PROBABILITY AND/OR CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION. NOR DOES THIS ACTIVITY CREATE A NEW MALFUNCTION OR ACCIDENT OF A DIFFERENT TYPE THAN ANY PREVIOUSLY EVALUATED IN THE SAR. THIS SAFETY EVALUATION DOES NOT REDUCE THE MARGIN OF SAFETY AS DESCRIBED IN THE TECHNICAL SPECIFICATIONS BASES. THEREFORE, IT MAY BE CONCLUDED THAT THIS ACTIVITY DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900261-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00345	50.59	64	0001	04/23/1999	04/13/1999	08/03/1999

Subject UNIT 2 CYCLE 13 RELOAD CORE DESIGN

Text

SUMMARY:

THIS SAFETY EVALUATION CONSIDERED THE OPERATION OF UNIT 2 CYCLE 13. MODIFICATIONS TO THE FUEL ASSEMBLY AND THE RELOAD CORE DESIGN WERE CONSIDERED. THE USE OF A THIRD FULL BATCH OF ERBIUM FOR UNIT 2 AS A BURNABLE ABSORBER WAS CONSIDERED. THE PRE-TRIP STEAM LINE BREAK EVENT, AND SEIZED ROTOR EVENT WERE EVALUATED USING NRC APPROVED DNB CONVOLUTION METHODOLOGY TO PREDICT THE PERCENTAGE OF FUEL FAILURES. THE EVALUATION ASSUMED FRT AND FXYT LIMITS EQUAL TO 1.65 AND RESULTED IN FUEL FAILURES LESS LIMITING THAN THAT PREVIOUSLY REPORTED. THE CHANGES ASSOCIATED WITH FRT AND FXYT LIMITS EQUAL TO 1.65 ARE IMPLEMENTED IN THE UNIT 2 CYCLE 13 COLR AND ARE VERIFIED TO BE APPLICABLE TO UNIT 2 CYCLE 13. THE LOSS OF LOAD EVENT WAS REANALYZED FOR A DECREASE IN THE RANGE OF TURBINE STOP VALVE CLOSURE TIMES. THE ANALYSIS CONCLUDED THAT THE PEAK RCS AND STEAM GENERATOR PRESSURES AND THE LINEAR HEAT RATE DO NOT EXCEED THE NRC ACCEPTANCE LIMITS. THE EXCESS HEAT REMOVAL EVENT WAS EVALUATED FOR AN INCREASE IN FEEDWATER FLOW AND A DECREASE IN FEEDWATER ENTHALPY. THIS EVALUATION CONCLUDED THAT THE PREVIOUSLY REPORTED RESULTS WERE MORE LIMITING. THE POST-TRIP STEAM LINE BREAK EVENT WAS RE-EVALUATED WITH REGARD TO COOLABILITY FOR AN INCREASE IN THE SAFETY INJECTION SWEEP OUT VOLUME. IT WAS DETERMINED THAT FUEL FAILURE DUE TO VIOLATION OF THE DNB SAFDL OR DUE TO EXCEEDING THE CENTER LINE MELT (CLM) LIMIT DID NOT OCCUR FOLLOWING THE RETURN TO POWER FOR THE FULL POWER CASES, THUS AVERTING THE NEED TO INVOKE THE CORE COOLABILITY LIMIT. THE RESULTS OF THIS EVALUATION WERE BOUNDED BY THE PREVIOUSLY REPORTED RESULTS FOR THE POST-TRIP STEAM LINE BREAK EVENT. A TOTAL OF 48 CEAS WERE CREDITED FOR REFUELING BORON CONCENTRATION. THE UNIT 2 CYCLE 13 SAFETY ANALYSES ACCOUNTED FOR ALL THE RELOAD CORE DIFFERENCES. REVISION 0001 OF THIS SAFETY EVALUATION CONSIDERED THE IMPACT OF NOT INSTALLING THREE INCORE INSTRUMENTS (ICIS). IT IS CONCLUDED THAT THE CORE MONITORING SYSTEM WAS NOT ADVERSELY EFFECTED BY NOT INSTALLING THESE ICIS. IT IS CONCLUDED THAT OPERATION OF UNIT 2 CYCLE 13 DOES NOT INVOLVE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199800350-000	ESP	0001	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00345	50.59	64	0000	03/31/1999	03/19/1999	07/26/1999

Subject UNIT 2 CYCLE 13 RELOAD CORE DESIGN

Text

SUMMARY:

THIS SAFETY EVALUATION CONSIDERED THE OPERATION OF UNIT 2 CYCLE 13. MODIFICATIONS TO THE FUEL ASSEMBLY AND THE RELOAD CORE DESIGN WERE CONSIDERED. THE USE OF A THIRD FULL BATCH OF ERBIUM FOR UNIT 2 AS A BURNABLE ABSORBER WAS CONSIDERED. THE PRE-TRIP STEAM LINE BREAK EVENT, AND SEIZED ROTOR EVENT WERE EVALUATED USING NRC APPROVED DNB CONVOLUTION

METHODOLOGY TO PREDICT THE PERCENTAGE OF FUEL FAILURES. THE EVALUATION ASSUMED FRT AND FXYT LIMITS EQUIAL TO 1.65 AND RESULTED IN FUEL FAILURES LESS LIMITING THAN THAT PREVIOUSLY REPORTED. THE CHANGES ASSOCIATED WITH FRT AND FXYT LIMITS EQUAL TO 1.65 ARE IMPLEMENTED IN THE UNIT 2 CYCLE 13 COLR AND ARE VERIFIED TO BE APPLICABLE TO UNIT 2 CYCLE 13. THE LOSS OF LOAD EVENT WAS REANALYZED FOR A DECREASE IN THE TURBINE STOP VALVE CLOSURE TIME. THE EVALUATION CONCLUDED THAT THE PREVIOUSLY REPORTED RESULTS FOR THIS EVENT WERE MORE LIMITING. THE EXCESS HEAT REMOVAL EVENT WAS EVALUATED FOR AN INCREASE IN FEEDWATER FLOW AND A DECREASE IN FEEDWATER ENTHALPY. THIS EVALUATION CONCLUDED THAT THE PREVIOUSLY REPORTED RESULTS WERE MORE LIMITING. THE POST-TRIP STEAM LINE BREAK EVENT WAS REEVALUATED WITH REGARD TO COOLABILITY FOR AN INCREASE IN THE SAFETY INJECTION SWEEP OUT VOLUME. IT WAS DETERMINED THAT FUEL FAILURE DUE TO VIOLATIONOF THE DNC SAFDL OR DUE TO EXCEEDING THE CENTER LINE MELT (CLM) LIMIT DID NOT OCCUR FOLLOWING THE RETURN TO POWER FOR THE FULL POWER CASES, THUS AVERTING THE NEED TO INVOKE THE CORE COOLABILITY LIMIT. THE RESULTS OF THIS EVALUATION WERE BOUNDED BY THE PREVIOUSLY REPORTED RESULTS FOR THE POST-TRIP STEAM LINE BREAK EVENT. A TOTAL OF 48 CEAS WERE CREDITED FOR REFUELING BORON CONCENTRATION. THE UNIT 2 CYCLE 13 SAFETY ANALYSES ACCOUNTED FOR ALL THE RELOAD CORE DIFFERENCES. THE RESULTS OF ALL ANALYSES OF RECORD CONSERVATIVELY APPLY TO UNIT 2 CYCLE 13. IT IS CONCLUDED THAT OPERATION OF UNIT 2 CYCLE 13 DOES NOT INVOLVE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199800350-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00346	50.59	64	0000	03/23/1999	03/23/1999	07/26/1999

Subject REFUEL MACHINE JUMPERS TO ALLOW DECOUPLING

Text

SUMMARY:

THE PROPOSED TEMPORARY ALTERATION ALLOWS FOR USE OF THE BRIDGE, TROLLEY AND AUXILIARY HOIST WITHOUT THE MAIN HOIST BOX INSTALLED IN THE MAIN HOIST ASSEMBLY.

ONLY THE MAIN HOIST INTERLOCKS ASSOCIATED WITH PROTECTING THE FUEL WILL BE BYPASSED BY THIS TEMPORARY ALTERATION. SINCE THE MAIN HOIST WILL BE REMOVED, THE DESIGN INTENT OF THE SE INTERLOCKS TO PROTECT THE FUEL IS MET. ALL OTHER REFUELING MACHINE INTERLOCKS WILL REMAIN FUNCTIONAL.

BASED ON THE ABOVE DISCUSSIONS, THE PROPOSED TEMPORARY ALTERATION DOES NOT AFFECT THE ABILITY OF OPERATORS TO ASSESS OR CONTROL THE NUCLEAR SAFETY STATUS OF THE PLANT, NOR DOES THE PROPOSED TEMPORARY ALTERATION CHANGE THE NUCLEAR SAFETY RESPONSE OF THE PLANT TO NORMAL EVALUATIONS, ANTICIPATED OPERATIONAL OCCURRENCES, OR DESIGN BASIS ACCIDENTS. THE POTENTIAL FOR THE RELEASE OF RADIOACTIVE MATERIAL TO THE ENVIRONMENT IS NOT INCREASED BY THE PROPOSED TEMPORARY MODIFICATION, NOR DOES THIS ACTIVITY IN CREASE THE POTENTIAL FOR A PLANT TRIP.

BASED ON THE ABOVE DISCUSSIONS, THE PROPOSED TEMPORARY ALTERATION DOES
DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
12154-066	VTM	0009	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00348	50.59	64	0000	03/31/1999	03/31/1999	07/26/1999

Subject ALLOW FOR INSTALLATION OF A BYPASS SWITCH ON THE SPENT FUEL POOL UPENDER VERTICAL / HOME PROXIMITY SWITCH (2 - Z S - B V H).

Text

SUMMARY:

THIS ACTIVITY CONSISTS OF A TEMPORARY ALTERATION WHICH WILL PROVIDE A CONTINGENCY FOR FAILED PROXIMITY SWITCH 2-LS-BVH. A MANUAL TOGGLE SWITCH WILL BE USED TO PERFORM THE FUNCTION OF PROXIMITY SWITCH 2-LS-BVH ON THE SPENT FUEL POOL UPENDER. IN THIS MANNER, THE ASSOCIATED INTERLOCK WILL BE IN PLACE UNTIL THE OPERATOR CONSCIOUSLY OVERRIDES IT WITH THE MANUAL TOGGLE SWITCH. THE MANUAL TOGGLE SWITCH WILL MAINTAIN THE POSITION THE OPERATOR PLACES IT IN. THE OPERATION OF THE MANUAL TOGGLE SWITCH WILL BE CONTROLLED BY THE SYSTEM OPERATING INSTRUCTION. THE OPERATING INSTRUCTION WILL BE CHANGED TO ENSURE THAT THE MANUAL TOGGLE SWITCH IS OPERATED ONLY AFTER TWO INDEPENDENT METHODS DETERMINE THE EQUIPMENT IS IN THE PROPER POSITON. ONE METHOD IS TO VISUALLY VERIFY THE EQUIPMENT IS IN THE PROPER POSITON. THE SECOND METHOD REQUIRES THE OPERATOR TO VERIFY THT HYDRAULIC PRESSURE CHANGES ARE CONSISTENT WITH FULL VERTICAL POSITION. SINCE THE OPERATOR WILL ENSURE THAT THE INTERLOCK IS SATISFIED, THE PROBABILITY OF A FUEL HANDLING ACCIDENT IS NOT AFFECTED. THEREFORE, THIS ACTIVITY DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
12154C-0048	BGEDRWG	0012	C
12154C-0074	BGEDRWG	0000D	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00349	50.59	64	0000	04/03/1999	04/03/1999	07/26/1999

Subject ALLOW VALVE 2-CV-5460 TO BE GAGGED OPEN WHILE DEFUELED.

Text

SUMMARY:

DE MATERIALIZED WATER IS USED IN CONTAINMENT DURING THE DEFUELED PERIOD. THE SWAC AIR THAT CONTROLS VALVE 2-CV-5460 WILL BE OUT OF SERVICE FOR MAINTENANCE. TO PREVENT VALVE 2-CV-5460 FROM "FAILING CLOSED" DURING THE AIR OUTAGE, THE CONTROL VALVE WILL BE GAGGED IN THE OPEN POSITION. DURING THE DEFUELED PERIOD, GAGGING OPEN OF THIS CONTAINMENT ISOLATION VALVE DOES NOT AFFECT NUCLEAR SAFETY. THIS ACTIVITY IS NOT A USQ.

Associations

Document Id	Doc Type	Revision To	Assoc Status
MD-1-100	NPIP	0600	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00350	50.59	64	0000	04/04/1999	04/05/1999	07/26/1999

Subject REVISE FSAR SECTION 9.7.2.7 TO ALLOW THE NEW FUEL ELEVATOR TO RAISE NEW FUEL

Text

SUMMARY:

THE PURPOSE OF THIS ACTIVITY IS TO REVISE THE UFSAR SECTION 9.7.2.7 DESCRIPTION OF THE NEW FUEL ELEVATOR (NFE). THIS WILL ALLOW THE NFE TO RAISE OR LOWER THE NEW FUEL ASSEMBLY FROM THE BOTTOM TO THE TOP OF THE SPENT FUEL POOL (SPF). THIS CHANGE DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
FH-340	FH	0601	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00352	50.59	64		04/09/1999	04/09/1999	09/07/1999

Subject LEAVE EDDY CURRENT PROBE IN SG 21 TUBE

Text

SUMMARY:

A LIGHTWEIGHT (2.2 OZ.) EDDY CURRENT PROBE BROKE OFF FROM THE DRIVE CABLE DURING AN INSPECTION AND LEFT A 2' SECTION STUCK AT THE APEX OF TUBE ROW 2, LINE NUMBER 32 IN STEAM GENERATOR 22. THE PROBE IS MADE OF STAINLESS STEEL, SOME OTHER MINOR METALLIC, NYLON AND OTHER SMALL PLASTICS. THE CHEMICAL COMPONENTS HAVE BEEN EVALUATED TO HAVE LOW PROBABILITY OF CAUSING CORROSION AND ALSO THE RATE OF CORROSION IF IT WERE TO OCCUR IS VERY LOW IN AN ALLOY 600 TUBE. IT HAS BEEN EVALUATED AS SAFE TO LEAVE THE PROBE IN PLACE AND PLUG THE TUBE USING CURRENTLY APPROVED ALLOY 690 TUBE PLUGS AND APPROVED PROCEDURES. REMOVING THE TUBE FROM SERVICE ISOLATES ANY POTENTIAL MALFUNCTIONS OR ACCIDENTS. LOSS OF THIS SINGLE TUBE HAS INSIGNIFICANT IMPACT ON THE HEAT TRANSFER CAPABILITY OF THE STEAM GENERATOR. THE PLANT IS QUITE FAR FROMT HE APPROVED PLUGGING LIMIT OF 2500 TUBES PER STEAM GENERATOR.

THEREFORE, THIS ACTION DOES NOT CREATE A SAFETY CONCERN, DECREASE THE MARGIN OF SAFETY AS DEFINED IN THE TECH SPECS, NOR DOES IT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900427-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00355	50.59	64	0000	05/20/1999	05/03/1999	09/07/1999

Subject SAFETY EVALUATION FOR RETIRING CAC SUPPLY VALVE CONTROLS

Text

SUMMARY:

EACH CONTAINMENT AIR COOLER (CAC) INLET CONTROL VALVE (CV) IS AN 8" BUTTERFLY TYPE WITH AN AIR OPERATOR. THE CV IS NORMALLY OPEN WITH THE OPERATOR VENTED TO ATMOSPHERE VIA A THREE-WAY SOLENOID VALVE. UPON RECEIPT OF A SIAS THE SOLENOID VALVE REDIRECTS THE FLOW INDICATING CONTROLLER OUTPUT TO THE CV OPERATOR WHICH SHUTS THE VALVE TO A THROTTLE POSITON CONTROLLED BY EACH VALVE'S FLOW CONTROLLER SETPOINT.

THIS ACTIVITY REPOSITIONS THE VALVE TRAVEL LIMITER SO THAT DURING SIAS ACTUATION, THE VALVE IS CLOSED AGAINST A TRAVEL LIMITER (MECHANICAL STOP) AND HELD THERE BY A QUALIFIED SOURCE OF COMPRESSED AIR. A CONTROLLER, I/P TRANSDUCER AND POSITIONER THAT WERE PREVIOUSLY IN THE VALVE CONTROL LOOP WILL BE BYPASSED, DISCONNECTED AND RETIRED. R.G. 1.97 INDICATION OF SERVICE WATER SUPPLY FLOW TO THE CACS, A CATEGORY 2 VARIABLE, WILL BE MAINTAINED. THE THROTTLE POSITION HAS BEEN DETERMINED BY PERFORMING AN ENGINEERING TEST PROCEDURE. THE THROTTLE POSITION WILL ENSURE THAT THE MINIMUM REQUIRED FLOW TO THE CACS DURING SIAS ACTUATION IS MAINTAINED.

THIS EVALUATION DETERMINES THAT THIS ACTIVITY DOES NOT INVOLVE A USQ.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900364-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00356	50.59	64	0000	05/07/1999	05/05/1999	09/07/1999

Subject ALLOW 2-CV-2059 TO BE GAGGED IN THE OPEN POSITION

Text

SUMMARY:

THIS ACTIVITY WILL GAG A VALVE IN THE PLANT AIR SYSTEM OPEN, WHILE THE RELIEF VALVE FOR THE PIPING SYSTEM IS REMOVED FOR TESTING. THE GAG WILL ALLOW THE PLANT AIR HEADER IN THE UNIT 2 TO REMAIN IN SERVICE TO ALLOW ROUTINE ACTIVITIES THAT SUPPORT OPERATIONS TO CONTINUE. THIS ACTIVITY DOES NOT AFFECT EQUIPMENT IMPORTANT TO SAFETY. THIS ACTIVITY DOES NOT CONSTITUTE A USQ.

Associations

Document Id	Doc Type	Revision To	Assoc Status
AOP-07D	AOP	0900	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00357	50.59	64	000	05/11/1999	05/11/1999	12/15/1999

Subject SINGLE ASSEMBLY RECONSTITUTION

Text

SUMMARY:

THIS ACTIVITY SUPPORTS REVISIONS TO THE UFSAR AND THE FUEL HANDLING PROCEDURES TO ALLOW A SINGLE FUEL ASSEMBLY TO BE PLACED ON A SPENT FUEL POOL RACK SPACER AND TO HAVE ITS UPPER END FITTING REMOVED FOR THE PURPOSE OF RECONSTITUTION OR INSPECTION. PLACING A FUEL ASSEMBLY ON A RACK SPACER CAUSES IT TO PROTRUDE ABOVE THE TOPS OF THE SPENT FUEL RACKS IN THE SPENT FUEL POOL. THE REVISIONS INCLUDE MODIFICATION OF USAR CHAPTER 14.18 (FUEL HANDLING INCIDENT) AND THE ADDITION OF ADMINISTRATION CONTROLS TO THE FUEL HANDLING PROCEDURES TO MAINTAIN DOSE AND CRITICALITY LIMITS. THE ADMINISTRATIVE CONTROLS INCLUDE A LIMITATION ON THE NUMBER OF ASSEMBLIES WHICH MAY BE PLACED ON RACK SPACERS AT ANY ONE TIME (ONE), RESTRICTIONS ON MOVEMENT OF LOADS OR OTHER ASSEMBLIES IN THE VICINITY OF THE RAISED ASSEMBLY, RESTRICTIONS ON DECAY TIME BEFORE UPPER END FITTING REMOVAL, AND RESTRICTIONS ON PERMANENT STORAGE OF ALUMINUM SPACES IN THE SPENT FUEL POOL. ONLY THE SINGLE-FAILURE-PROOF CRANE OR SINGLE-FAILURE-PROOF RIGGING

WILL BE USED OVER THE RECONSTITUTION AREA IN THE SFP FOR LOADS OTHER THAN TOOLS. A KNOWLEDGEABLE AND BRIEFED PERSON WILL BE PRESENT FOR THE ENTIRE TIME THAT THE UPPER END FITTING OR TEMPLATE IS REMOVED FROM AN ASSEMBLY TO RESTRICT MOVEMENT OF LOADS OTHER THAN TOOLS OVER THE RECONSTITUTION AREA IN THE SFP. THESE CHANGES ARE SHOWN TO BE TECHNICALLY JUSTIFIABLE BY ANALYSIS. THE ANALYSIS EVALUATED THE RESULTS OF AN FHI IN THE SPENT FUEL POOL AREA WITH AN ASSEMBLY PLACED ON A RACK SPACER. THE CALCULATION WAS PERFORMED IN ACCORDANCE WITH NRC REVIEWED AND APPROVED METHODOLOGY. THIS SAFETY EVALUATION DOCUMENTS THAT AN FHI IN THE SPENT FUEL POOL AREA WITH AN ASSEMBLY ON A RACK SPACER IS BOUNDED BY PREVIOUSLY ACCEPTED RESULTS FOR A DESIGN BASIS FHI IN THE CONTAINMENT AND IN THE SPENT FUEL POOLS.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900504-000	ESP	000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00358	50.59	64	0000	06/03/1999	05/18/1999	09/07/1999

Subject 50 59 FOR ES 1 998 013 14 000

Text

SUMMARY:

THIS ACTIVITY CHANGES THE LOGIC FROM ONE OUT OF ONE TO TWO OUT OF TWO FOR THE THURST BEARING WEAR DETECTOR (TBWD) TRIP LOGIC. THE MODIFICATION OF THE UNIT 1 (TBWD) WILL REVISE TURBINE TRIP ALTERS THE LIST OF TURBINE TRIPS PROVIDED IN THE UFSAR SECTION 7 4 7 1D 4 6 ON PAGE 7 4-20 AND AND FIGURE 8-7 SHEET 2. THIS TRIP DOES NOT AFFECT EQUIPMENT IMPORTANT TO SAFETY NOR IS IT CREDITED IN ANY ACCIDENT OR EVENT SCENARIOS.

THIS ACTIVITY DOES NOT CREATE AN UNREVIEWED SAFETY QUESTION AS DEFINED IN 10CFR50.59.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199801314-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00359	50.59	64	0000	06/02/1999	05/18/1999	09/07/1999

Subject INSTALL PLATINUM DETECTOR TEST ICIS IN UNIT 1 CYCLE 15

Text

SUMMARY:

THE PROPOSED ACTIVITY REPLACES EIGHT OF THE FORTY-FIVE UNIT 1 INCORE INSTRUMENTATION (ICI) ASSEMBLIES WITH ASSEMBLIES THAT CONTAIN ONE PLATINUM DETECTOR AND THREE RHODIUM DETECTORS, AND MODIFIES THE ASSOCIATED INSTRUMENT LOOP INPUT RESISTORS TO THE DATA ACQUISITION SYSTEM (DAS). INCORE INSTRUMENTATION CONSISTS OF INCORE NEUTRON DETECTORS AND CORE EXIT THERMOCOUPLES (CET).

THIS ACTIVITY DOES NOT AFFECT THE ICI SYSTEM OPERABILITY REQUIREMENTS SPECIFIED IN THE UFSAR. PROCEDURES ARE IN PLACE THAT ACCOUNT FOR THE PLATINUM MATERIAL DURING THE CORE RELOAD DESIGN AND TO ENSURE UFSAR REQUIREMENTS ARE MET DURING THE FUEL CYCLE. THUS, ASSUMPTIONS USED IN THE SAFETY ANALYSIS REMAIN VALID. THE PROPOSED ACTIVITY DOES NOT AFFECT THE DESIGN, FUNCTION, OR OPERABILITY OF THE CETS OR THE DAS.

THE PROPOSED ACTIVITY WILL NOT REQUIRE A CHANGE TO THE TECHNICAL SPECIFICATIONS. THE PROPOSED ACTIVITY DOES NOT INCREASE THE PROBABILITY OF OCCURRENCE OR CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION, NOR DOES IT CREATE THE POSSIBILITY OF A NEW ACCIDENT OR MALFUNCTION, NOR DOES IT REDUCE THE DEFINED MARGIN OF SAFETY. THEREFORE, THE PROPOSED ACTIVITY IS NOT AN UNREVIEWED SAFETY QUESTION (USQ).

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199801407-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00360	50.59	64	0000	05/31/1999	05/31/1999	09/07/1999

Subject EVALUATE FLUSH OF SDC PIPING WHILE IN MODES 1, 2 OR 3.

Text

SUMMARY:

THIS ACTIVITY IS A PROCEDURE CHANGE, APPLICABLE TO BOTH UNIT 1 AND UNIT 2, WHICH WOULD ALLOW A FLUSH OF THE COMMON LPSI DISCHARGE AND SUCTION PIPING WHILE IN MODES 1, 2 OR 3. THE FLOW PATH USED IS SIMILAR TO THAT USED IN THE PAST WHILE THE UNITS ARE SHUTDOWN. THE FLUSH IS NEEDED TO REMOVE PARTICULATE ACTIVITY IN THE SI SYSTEM PIPING IN ORDER TO REDUCE PERSONNEL DOSE IN CERTAIN AUXILIARY BUILDING ROOMS. DURING THE FLUSH THE POSITION OF CERTAIN SAFETY INJECTION VALVES WILL BE CHANGED FROM THEIR NORMAL ACCIDENT POSITION. THESE VALVE POSITIONS WILL DEGRADE LPSI INJECTION. HOWEVER, RECIRCULATION FLOW LIMITS WILL BE IMPLEMENTED BY THE PROCEDURE TO ENSURE ADEQUATE LPSI INJECTION TO THE RCS IMMEDIATELY UPON SIAS, WITHOUT REPOSITIONING ANY OF THE VALVES THAT ARE OUT OF THEIR NORMAL POSITIONS. IN ADDITION, DEDICATED OPERATORS WILL BE STATIONED TO RESTORE THE VALVES THAT ARE REQUIRED FOR RWT ISOLATION PRIOR TO RAS AND FOR LPSI CORE FLUSH PRIOR TO BORIC ACID PRECIPITATION. AMPLE TIME IS AVAILABLE FOR THESE OPERATORS TO TAKE THE REQUIRED ACTION. THEREFORE, THE LPSI SYSTEM SAFETY FUNCTIONS WILL BE ABLE TO BE PERFORMED BY EITHER ECCS TRAIN.

THIS ACTIVITY WILL DISABLE ONE OF TWO CONTAINMENT SPRAY TRAINS. THE APPROPRIATE TS ACTION STATEMENT WILL BE ENTERED WHILE THE AFFECTED SPRAY TRAIN IS OUT OF SERVICE. THE REMAINING SPRAY TRAIN WILL BE OPERABLE AND WILL BE CAPABLE OF PERFORMING ALL CONTAINMENT SPRAY SAFETY FUNCTIONS.

THE FLUSHING FLOW PATH WILL REMAIN ISOLATED FROM THE RCS AND THE FLUSH WILL NOT AFFECT RWT LEVEL OR BORON CONCENTRATION.

THEREFORE, THIS ACTIVITY DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
CA01854	DCALC	0000	C
M-94-044	DCALC	0000	C
ES199900631-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00361	50.59	64	0000	07/08/1999	06/01/1999	10/22/1999

Subject REVISE FIGURE 10-1 TO REMOVE VIBRATION RECORDER FROM SGFPT

Text

SUMMARY:

THE PROPOSED ACTIVITY REPLACES THE VIBRATION MONITORING EQUIPMENT ON 11 AND 12 STEAM GENERATOR FEED PUMPS AND TURBINES. UFSAR FIGURE 10.1 IS BEING REVISED TO REMOVE VIBRATION RECORDER 1 VR 3962 FROM IT. THE RECORDER WILL BE REMOVED AS PART OF THE MODIFICATION. LOCAL INDICATION AND A DATA LOGGER WILL REPLACE THE FUNCTION OF THE RECORDER FOR TRENDING.

THE PROPOSED ACTIVITY WILL NOT REQUIRE A CHANGE TO THE TECHNICAL SPECIFICATION. THE PROPOSED ACTIVITY DOES NOT INCREASE THE PROBABILITY OF OCCURRENCE OF AN ACCIDENT OR MALFUNCTION, NOR DOES IT CREATE THE POSSIBILITY OF A NEW ACCIDENT OR MALFUNCTION, NOR DOES IT REDUCE THE DEFINED MARGIN OF SAFETY. THEREFORE, THE PROPOSED ACTIVITY IS NOT AN UNREVIEWED SAFETY QUESTION (USQ).

Associations

Document Id	Doc Type	Revision To	Assoc Status

64300	BGEDRWG	0002	C
ES199800433-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00362	50.59	64	0000	06/11/1999	06/08/1999	10/22/1999

Subject ADD AIR ACCUMULATOR UPSTREAM OF AFW AIR AMPLIFIER

Text

SUMMARY:

THIS ACTIVITY WILL CHANGE THE TYPE OF CHECK VALVE INSTALL IN THREE (3) LOCATIONS FROM Y PATTERN LIFT CHECKS TO AN AXIAL FLOW CHECK VALVE. THIS ACTIVITY WILL INSTALL AN AIR ACCUMULATOR IN THE PIPING SYSTEM UPSTREAM OF THE AIR AMPLIFIER FOR THE AUXILIARY FEEDWATER AIR SYSTEM. THE AXIAL FLOW CHECK VALVE IS A BETTER VALVE FOR USE IN AN AIR SYSTEM. THE ACCUMULATOR TANK WILL MINIMIZE THE PRESSURE TRANSIENT IN THE AIR SUPPLY SYSTEM CREATED BY THE CYCLING OF THE AIR AMPLIFIER. THIS TRANSIENT LEADS TO COMPONENT DEGRADATION OVER LONG PERIODS OF TIME. THIS ACTIVITY IS NOT AN USQ.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199801324-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00364	50.59	64	0000	06/11/1999	06/11/1999	12/15/1999

Subject ENDF/B-VI CROSS SECTION

Text

SUMMARY:

UFSAR SECTION 3.4.9., ENTITLED "ANALYTICAL METHODS", DESCRIBES THE TECHNIQUES CALVERT CLIFFS USES FOR NUCLEAR DESIGN. IT STATES THAT CALVERT CLIFFS USES THE "ENDF/B-IV" NEUTRON CROSS SECTION DATABASE WITH MODIFICATIONS. IT DESCRIBES THE CROSS SECTION AS AN "85 ENERGY GROUP STRUCTURE" AND HAS "AN ALTERNATE 41 ENERGY GROUP STRUCTURE" AVAILABLE. THE PROPOSED CHANGES WILL MODIFY THIS UFSAR SECTION TO:

- ELIMINATE THE REVISION NUMBER (IV) OF ENDF/B AND REFERENCE TO THE ENDF/B-IV MODIFICATONS
- CHANGE THE REFERENCE FROM "85 ENERGY GROUPS" TO "MULTI-ENERGY GROUPS"
- ELIMINATE THE REFERENCE TO THE "41 ENERGY GROUP"

THE PROPOSED CHANGES ALLOW THE USE OF THE UPDATED ENDF/B-VI CROSS SECTIONS WITH 89 ENERGY GROUPS IN THE CALVERT CLIFFS NUCLEAR DESIGN. IT ALSO ALLOWS THE REFLECTOR REGION TO BE CALCULATED EXPLICITLY FOR ALL TIME POINTS IN THE FUEL CYCLE. THE FUEL TEMPERATURE CORRELATION IS A FUNCTION OF COOLANT TEMPERATURE, FUEL DEPLETION AND LOCAL POWER. THE TOPICAL REPORT SHOWS THE CORRELATION AS A SIMPLE 7TH ORDER POLYNOMIAL. THE PROPOSED CHANGES ALLOW A 12TH ORDER POLYNOMIAL TO BETTER REPRESENT THE TRUE TEMPERATURE CORRELATION. THE PROPOSED CHNAGES DO NOT REQUIRE A CHANGE TO THE TECHNICAL SPECIFICATIONS. THE PROPOSED CHANGES DO NOT INVOLVE AN UNREVIEWED SAFETY QUESTION BECAUSE IT DOES NOT INCREASE THE PROBABILITY OF OCCURRENCE OR CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION, NOR DOES IT CREATE THE POSSIBILITY OF A NEW ACCIDENT OR MALFUNCTION, NOR DOES IT REDUCE THE DEFINED MARGIN OF SAFETY.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900164-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00365	50.59	64	0000	06/14/1999	06/14/1999	12/15/1999

Subject MULTIPLE ASSEMBLY RECONSTITUTION

Text

SUMMARY:

FUEL RECONSTITUTION OR INSPECTION ACTIVITIES WOULD REQUIRE PLACING A SINGLE ASSEMBLY OR MULTIPLE ASSEMBLIES ON RACK SPACERS IN THE SPENT FUEL POOL AND REMOVING THEIR UPPER END FITTINGS, WHILE ALLOWING FUEL MOVEMENT TO CONTINUE IN THE SPENT FUEL POOL. PLACING FUEL ASSEMBLIES ON RACK SPACERS CAUSES THEM TO PROTRUDE ABOVE THE TOPS OF THE SPENT FUEL RACKS IN THE SPENT FUEL POOL. THIS IS INCONSISTENT WITH THE CURRENT DESCRIPTION OF A FUEL HANDLING INCIDENT IN THE UFSAR. ADDITIONALLY, THE TECHNICAL SPECIFICATION 3. 7. 13 (PERTAINING TO MINIMUM WATER LEVEL IN THE SPENT FUEL POOL) WOULD BE VIOLATED BY THIS ACTIVITY. THUS THE MARGIN OF SAFETY AS DEFINED IN THE BASIS FOR ANY TECHNICAL SPECIFICATION IS REDUCED FOR ASSEMBLIES SEATED ON SPACERS WITH THEIR UPPER END FITTINGS REMOVED; HOWEVER, THERE ARE NO SIGNIFICANT HAZARDS ASSOCIATED WITH THIS REDUCED MARGIN OF SAFETY BASED ON THE ADMINISTRATIVE CONTROLS PLACED ON THE RECONSTITUTION AND INSPECTION ACTIVITIES. THE ADMINISTRATIVE CONTROLS INCLUDE RESTRICTIONS ON PLACEMENT OF THE AFFECTED ASSEMBLIES, RESTRICTIONS ON MOVEMENT OF HEAVY LOADS OR OTHER ASSEMBLIES IN THE VICINITY OF AFFECTED ASSEMBLIES, RESTRICTIONS ON DECAY TIME BEFORE UPPER END FITTING REMOVAL, RESTRICTIONS ON SPACER HEIGHT, AND RESTRICTIONS ON PERMANENT STORAGE OF ALUMINUM SPACERS IN THE SPENT FUEL POOL. THIS ACTIVITY SUPPORTS REVISIONS TO THE UFSAR, THE TECHNICAL SPECIFICATIONS, THE TECHNICAL SPECIFICATION BASES, AND THE FUEL HANDLING PROCEDURES TO ALLOW PLACEMENT OF MORE THAN ONE FUEL ASSEMBLY ON SFP RACK SPACERS AND REMOVAL OF THEIR UPPER END FITTINGS. THE PROPOSED ACTIVITY, THEREFORE, MAKES THE REQUISITE MODIFICATIONS TO CHAPTER 14.18 OF THE UFSAR, TO TECHNICAL SPECIFICATION 3. 7. 13, AND TO THE BASIS FOR TECHNICAL SPECIFICATION 3. 7. 13 SUCH THAT THE DESCRIPTIONS THEREIN ARE CONSISTENT WITH RECONSTITUTION OR INSPECTION OF MULTIPLE FUEL ASSEMBLIES. THESE CHANGES ARE SHOWN TO BE TECHNICALLY JUSTIFIABLE BY ANALYSIS. THE ANALYSIS PERFORMED EVALUATED THE RESULTS OF AN FHI IN THE SPENT FUEL POOL AREA WITH ONE OR MORE ASSEMBLIES PLACED ON RACK SPACERS. THE CALCULATION WAS PERFORMED IN ACCORDANCE WITH NRC REVIEWED AND APPROVED METHODOLOGY. THIS SAFETY EVALUATION DOCUMENTS THAT THE RESULTS OF THIS CALCULATION SHOW THAT AN FHI IN THE SPENT FUEL POOL AREA WITH MULTIPLE ASSEMBLIES ON RACK SPACERS ARE BOUNDED BY PREVIOUSLY ACCEPTED RESULTS FOR A DESIGN BASIS FHI IN THE CONTAINMENT AND IN THE SPENT FUEL POOLS.

THIS WORK ALSO CLARIFIES THE SURVEILLANCE REQUIREMENT OF TECHNICAL SPECIFICATION BASES 3. 7. 3 ON SPENT FUEL POOL LEVEL BEING AT EQUILIBRIUM WITH THAT OF THE REFUELING CANAL DURING REFUELING OPERATIONS. THE REVISED SURVEILLANCE REQUIREMENT READS: "DURING REFUELING OPERATIONS, THE LEVEL IN THE SPENT FUEL POOL IS NORMALLY AT EQUILIBRIUM WITH THAT OF THE REFUELING POOL".

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900695-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00366	50.59	64		07/06/1999	07/06/1999	10/22/1999

Subject OPERABILITY CRITERIA FOR CET'S

Text

SUMMARY:

THIS ACTIVITY WILL REVISE THE OPERABILITY CRITERIA FOR CORE EXIT THERMOCOUPLES (CETS) FOR BOTH UNITS. CURRENTLY, UFSAR SECTION 7. 5. 9. 3. AND TECHNICAL SPECIFICATION BASES 3.3.10 STATE THAT ALL CET TEMPERATURES MUST BE WITHIN 45 DEGREES F OF THE RCS HOT LEG RTD TEMPERATURE INDICATIONS TO BE CONSIDERED OPERABLE. STP O 063 FURTHER LIMITS THIS CRITERIA TO THE FOLLOWING:

INTERIOR CETS	PERIPHERAL CETS
+35 DEG F OR	+20 DEG F OR
-40 DEG F OF THE HOT LEG RTDS	-45 DEG F OF THE HOT LEG RTDS

THE PROPOSED CHANGE WILL REVISE THE STP O 063 CRITERIA TO THE FOLLOWING:

INTERIOR CETS	PERIPHERAL CETS(1)	CORE SHROUD PERIPHERAL CETS(2)
+35 DEG F OR	+35 DEG F OR	+20 DEG F OR
- 45 DEG F HOT LEG	- 45 DEG F HOT LEG	- 55 DEG F HOT LEG

RTDS RTDS RTDS

(1) UNIT 1 HAS 7 CETS DEFINED AS PERIPHERAL: XD 20, 22, 25, 30,32, 36 AND 43.
UNIT 2 HAS 11 CETS DEFINED AS PERIPHERAL: THOSE LISTED IN UNIT 1 PLUS XD 15, 19, 26 AND 29.
(2) THE 13 CORE SHROUD PERIPHERAL CETS FOR BOTH UNITS WILL BE XD 21, 31, 33, 34, 35, 37, 38, 39, 40, 41, 42, 44 AND 45.

THE UFSAR AND TECH SPEC BASES WILL ALSO BE UPDATED TO REMOVE THE 45 DEG F CRITERIA.

THIS CHANGE IS REQUIRED DUE TO THE IMPLEMENTATION OF A LOW LEAKAGE FUEL MANAGEMENT SCHEME. THE NEW OPERABILITY CRITERIA WILL MORE ACCURATELY REFLECT THE CET PERFORMANCE AND DIFFERENT CORE LOCATIONS. THE PROPOSED CHANGE WILL NOT IMPACT ANY SYSTEM OPERATION OR ACCIDENT RESPONSE.

THE PROPOSED CHANGE WILL NOT AFFECT THE ABILITY OF THE CETS TO PERFORM THEIR REQUIRED SAFETY FUNCTIONS. THEY WILL MAINTAIN THE SAME ACCURACY AND RELIABILITY AS BEFORE.

THEREFORE, THIS ACTIVITY DOES NOT INVOLVE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900772-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00368	50.59	64	0000	07/16/1999	07/16/1999	10/22/1999

Subject ADD NEEDLE VALVE TO CAR PUMP SEPERATOR TANK INLET

Text

SUMMARY:

THIS ACTIVITY WILL INSTALL A NEEDLE VALVE IN THE NORMAL MAKE-UP LINE TO THE CONDENSER AIR REMOVAL PUMP SEPARATOR TANK. THE NEEDLE VALVE WILL BE SET TO LIMIT THE MAKE-UP SUPPLY TO THE CAPACITY OF THE GRAVITY DRAIN FOR THE TANK. THIS WILL PREVENT THE TANK FROM FLOODING AND TRIPPING THE PUMP. THIS ACTIVITY DOES NOT AFFECT EQUIPMENT IMPORTANT TO SAFETY. THIS ACTIVITY DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
64306	BGEDRWG	0002	C
ES199801229-000	ESP	0001	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00369	50.59	62	0000	07/26/1999	07/26/1999	01/03/2000

Subject CHANGES IN SW SYSTEM OPERATION

Text

This modification will change the normal operating configuration of the SW system. The SW system will normally be operated with the SW bypass control valves [1(2)-CV-5154, 5157] shut and the PHE SW outlet valves [1(2)-CV-5209, 5210, 5211, and 5212] full open. Automatic control of the bypass valves or PHE SW outlet valves may be used to support specific operational configurations. The ESFAS will be removed from the CC heat exchanger SW valves as automatic system reconfiguration on a SIAS is not required to perform the system design functions. PHE SW system instrumentation and strainer controls are modified to support normal operation at a higher SW flow rate. This activity also installs permanent SW flow indication in the control room to facilitate monitoring system performance during normal operations.

The SRW heat exchangers were replaced with plate heat exchangers (PHE) during the 1998 and 1999 outages. The modification intended that the PHE SW outlet valves would normally operate in automatic to control flow at 4550 gpm, although provision was made to allow operation with the PHE SW outlet valves in full open. A SW bypass line was provided with a pressure control valve to maintain SW pump minimum flow requirements during system realignments. During their first two years of operation, a higher than expected increase in flow resistance has been experienced in the PHEs due to fouling. To compensate for this condition and to ensure the PHE minimum SW flow requirements are satisfied, the PHE SW outlet valves have been fully opened and the SW bypass valves have been shut. Shutting the bypass valve results in an increased system pressure and provides for greater flow through the heat exchangers. While in this configuration, SW pump minimum flow requirements are verified through use of SW header pressure indications and/or installed SW component flow indications. This modification will make this configuration the normal mode for system operation.

Instrumentation and controls installed during SRW heat exchanger replacement were designed assuming the normal PHE SW flow would be 4550 gpm. When the PHE SW

outlet valves are placed in full open, the PHE high dP alarm and the strainer high dP flush and alarm are cutout to avoid spurious alarms or strainer flushes. In addition, the differential pressures at the higher flows exceed the indicating range of some of the installed instruments. To support normal system operation in the new configuration, the instrumentation will be re-ranged and the controls and setpoints will be modified. In addition, SW flow indication will be provided in the control room.

In addition, this modification will permanently eliminate the ESFAS to the CC heat exchanger SW valves. The original SW system required isolation of flow to the CC heat exchanger and full opening of the SRW heat exchanger SW valves to ensure removal of the accident SRW heat load prior to a RAS. After RAS, the CC heat exchanger would be returned to service and the SW flow to the SRW heat exchanger would be reduced. Since heat exchanger replacement, the minimum required SW flow to the PHEs is the same in all modes of operation, i.e., normal operations, LOCA pre-RAS, and LOCA post RAS. Therefore, if the minimum flow requirements to the PHE are satisfied before a LOCA, they will be satisfied after a SIAS without any automatic system reconfiguration. As part of the heat exchanger replacement during the 1998 and 1999 outages, the ESFAS was removed from the SRW heat exchanger SW control valves but was left on the CC heat exchanger SW valves. Removal of the ESFAS from the CC heat exchanger SW valves will eliminate the automatic system reconfiguration and ensure that the total SW flow does not decrease at the start of the accident.

Since the SW temperature and flow requirements are not being changed by this activity, the ability of the SRW and CC heat exchangers to perform their design functions is unaffected. Minor modifications to the pressure boundary will be done in accordance with the original codes and standards. Reduced dependence on automatic control functions may decrease the probability of a malfunction. The design provided under this activity ensures that the safety functions provided by the SW, CC, and SRW are maintained, and may be enhanced. The availability of equipment required to mitigate the radiological consequences of an accident described in the SAR is enhanced by the flexibility provided for SW system operation. The redundant cooling capacity of the SW, CC, and SRW systems has not been altered. No new common mode failures are introduced by this activity. Furthermore, the proposed activity will not change, degrade or prevent actions described or assumed in any accident described in the SAR. The SW, SRW, and CC systems are accident mitigators. Their ability to perform their safety related functions is not changed by this modification. Therefore, it is concluded that this activity does not involve an unreviewed safety question.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900653-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00374	50.59	64	0000	08/19/1999	08/19/1999	12/15/1999

Subject REMOVAL OF ESFAS FROM CC HEAT EXCHANGER SW VALVES

Text

THE PROPOSED ACTIVITY WILL REMOVE THE ESFAS SIGNALS FROM THE CC HX SW VALVES. CURRENTLY, 1(2)-CV-5206, 5208, 5160, 5162, AND 5163 SHUT ON A SIAS AND RETURN TO THEIR PRE ACCIDENT POSITION ON A RAS. THIS WILL ALLOW USE OF EXISTING FLOW INSTRUMENTATION ON THE CC HEAT EXCHANGER AND THE SRW PHES TO VERIFY SW PUMP MINIMUM FLOW REQUIREMENTS ARE SATISFIED DURING NORMAL OPERATIONS.
THE ORIGINAL SW SYSTEM REQUIRED ISOLATION OF SW FLOW TO THE CC HEAT EXCHANGER TO PROVIDE ADEQUATE FLOW TO THE SRW HEAT EXCHANGER TO REMOVE THE ACCIDENT SRW HEAT LOAD PRIOR TO A RAS. AFTER RAS, THE CC HEAT EXCHANGER WAS RETURNED TO SERVICE AND THE SW FLOW TO THE SRW HEAT EXCHANGER WAS REDUCED. DURING THE 1998 AND 1999 REFUELING OUTAGES, THE SRW HEAT EXCHANGERS WERE REPLACED WITH PLATE HEAT EXCHANGERS. THE MINIMUM REQUIRED SW FLOW TO THE PHES IS THE SAME IN ALL MODES OF OPERATION, I.E., NORMAL OPERATIONS, LOCA PRE-RAS, AND LOCA POST RAS. THEREFORE, IF THE MINIMUM FLOW REQUIREMENTS TO THE PHE ARE SATISFIED BEFORE A LOCA, THEY WILL BE SATISFIED AFTER A SIAS WITHOUT ANY AUTOMATIC SYSTEM RECONFIGURATION. REMOVAL OF THE SIAS FROM THE CC HEAT EXCHANGER SW VALVES WILL ELIMINATE THE AUTOMATIC SYSTEM RECONFIGURATION AND ENSURE THAT THE TOTAL SW FLOW DOES NOT DECREASE AT THE START OF THE ACCIDENT.

SINCE THE SW TEMPERATURE AND FLOW REQUIREMENTS ARE NOT BEING CHANGED BY THIS ACTIVITY, THE ABILITY OF THE SRW AND CC HEAT EXCHANGERS TO PERFORM THEIR DESIGN FUNCTIONS IS UNAFFECTED. IN ADDITION, THE SW PIPING TO THE CC HEAT EXCHANGER IS SAFETY RELATED PRESSURE BOUNDARY. IT IS CREDITED IN THE EXISTIN SAR SINCE IT IS UNISOLATED AFTER A RAS. THEREFORE, ELIMINATING THE AUTOMATIC ISOLATION OF THIS PORTION OF THE SW SYSTEM WILL NOT INTRODUCE NEW POTENTIAL FAILURES. THE SW, SRW, AND CC SYSTEMS ARE ACCIDENT MITIGATORS. THEIR ABILITY TO PERFORM THEIR SAFETY RELATED FUNCTIONS IS NOT CHANGED BY THIS MODIFICATION. THEREFORE, IT IS CONCLUDED THAT THIS ACTIVITY DOES NOT INVOLVE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
MD-1-100	NPIP	0600	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00375	50.59	64		10/13/1999	08/20/1999	01/28/2000

Subject MODIFY TRIP LOGIC (FROM 1/3 TO 2/3) FOR U-1 LOW STATOR COOLING INLET PRESSURE RUNBACK CIRCUIT

Text

SUMMARY:

THIS ACTIVITY REDUCES THE PROBABILITY OF INADVERTENT TURBINE TRIP BY UPGRADING THE TURBINE RUNBACK CIRCUIT TRIP LOGIC FROM ONE-OUT-OF-ONE TO TWO-OUT-OF-THREE. BASED ON THE ABOVE EVLUATION, THIS ACTIVITY DOES NOT INCREASE THE PROBABILITY OR CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION PREVIOUSLY EVALUATED IN THE UFSAR, NOR DOES IT CREATE A N EW TYPE OF ACCIDENT OR MALFUNCTION NOT PREVIOUSLY EVALUATED IN THE UFSAR. THIS ACTIVITY DOES NOT RESULT IN A REDUCTION OF THE MARGIN OF SAFETY IN THE TECHNICAL SPECIFICATIONS. THIS ACTIVITY DOES NOT CREATE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900677-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00376	50.59	64	0000	08/26/1999	08/26/1999	12/15/1999

Subject ALLOW USE OF SW BYPASS VALVE IN MANUAL

Text

THE PROPOSED ACTIVITY IS TO ALLOW THE SW BYPASS VALVES [1(2) CV 5154 AND 5157] TO BE PLACED IN MANUAL AND SHUT WHEN NECESSARY TO ENSURE ADEQUATE FLOW TO SYSTEM HEAT EXCHANGERS. SHUTTING THE SW BYPASS LINE REQUIRES USE OF ALTERNATE MEANS TO MONITOR SW PUMP MINIMUM FLOW, E.G., SW HEADER PRESSURE, SW PUMP DISCHARGE PRESSURE, OR FLOW INDICATIONS.
THE SRW HEAT EXCHANGERS WERE REPLACED WITH PLATE HEAT EXCHANGERS DURING THE 1998 AND 1999 OUTAGES. TO ENSURE THAT SW PUMP MINIMUM FLOW REQUIREMENTS COULD BE SATISFIED WHILE PROVIDING FLEXIBILITY IN SYSTEM OPERATION, A SW BYPASS LINE WAS INSTALLED AROUND THE PHES AS AN AUXILIARY SW FLOW PATH. THE MODIFICATION INTENDED THAT THE PHE SW OUTLET VALVES WOULD NORMALLY OPERATE IN AUTOMATIC TO CONTROL FLOW AT 4550 GPM. WITH THE PHE SW OUTLET VALVES IN AUTOMATIC, THE TOTAL SW FLOW THROUGH THE TWO PHES WOULD BE LESS THAN THE MINIMUM REQUIRED SW PUMP FLOW OF 10000 GPM. TO ENSURE THAT SW PUMP MINIMUM FLOW REQUIREMENTS WOULD BE SATISFIED POST-SIAS, A PRESSURE CONTROL VALVE [1(2) CV 5154 AND 5157] WAS PLACED IN THE BYPASS LINE TO MAINTAIN A CONSTANT SW HEADER PRESSURE. THUS, IF FLOW WAS ESTABLISHED THROUGH THE CC HEAT EXCHANGER DURING NORMAL OPERATIONS AND THE HEAT EXCHANGER ISOLATED ON A SIAS, THE BYPASS CONTROL VALVE WOULD OPEN TO COMPENSATE FOR THE FLOW REDUCTION. TO COMPENSATE FOR MACRO FOULING AND ENSURE THE PHE MINIMUM SW FLOW REQUIREMENTS ARE SATISFIED, THE PHE SW OUTLET VALVES HAVE BEEN FULLY OPENED AND THE SW BYPASS VALVES HAVE BEEN SHUT. SHUTTING THE BYPASS VALVE RESULTS IN AN INCREASED SYSTEM PRESSURE AND PROVIDES FOR GREATER FLOW THROUGH THE HEAT EXCHANGERS. WHILE IN THIS CONFIGURATION, SW PUMP MINIMUM FLOW REQUIREMENTS ARE VERIFIED THROUGH USE OF SW HEADER PRESSURE INDICATIONS AND/OR INSTALLED SW COMPONENT FLOW INDICATIONS.
DURING NORMAL OPERATIONS, SW PUMP MINIMUM FLOW REQUIREMENTS CAN BE ESTABLISHED THROUGH SW COMPONENTS THAT DO NOT AUTOMATICALLY ISOLATE ON AN ESFAS, E.G., THE PHES AND THE CC HEAT EXCHANGER (WITH THE ESFAS TO THE SW CONTROL VALVES REMOVED.) FLOW CAN BE VERIFIED BY MEANS OF INSTALLED INSTRUMENTATION INCLUDING COMPONENT SW FLOW INSTRUMENTS, SW SUBSYSTEM HEADER PRESSURE, AND PUMP DISCHARGE PRESSURE. THIS ESTABLISHED FLOW WILL ALSO BE THE MINIMUM SW FLOW AFTER A SIAS SINCE THE CONTROL VALVES FOR THE SELECTED COMPONENTS DO NOT AUTOMATICALLY REPOSITION. AFTER A RAS, THE OPERATOR CONTROLS THE THROTTLE POSITION OF THE CC HEAT EXCHANGER SW VALVES, AND CAN MONITOR FLOW CHANGES WITH SW HEADER PRESSURE.
OPERATION WITH THE SW BYPASS IN MANUAL AND SHUT WILL RESULT IN THE SAME OR INCREASED FLOW TO ALL SW HEAT EXCHANGERS, ENSURING THE SYSTEM DESIGN ACCIDENT HEAT LOAD CAN BE REMOVED, SRW AND CC TEMPERATURES CAN BE MAINTAINED, AND THE ECCS PUMP ROOM AIR TEMPERATURE CAN BE CONTROLLED. THE SW VALVES FOR THE PHES AND CC HEAT EXCHANGERS ARE DESIGNED TO FAIL TO THE OPEN POSITION, RESULTING IN THE SAME OR INCREASED SW FLOW TO THESE COMPONENTS AND ENSURING THE SAME OR INCREASED SW PUMP FLOW IN THE EVENT OF THEIR MALFUNCTION. THEREFORE, ALLOWING OPERATION WITH THE SW BYPASS SHUT, PROVIDED SW PUMP MINIMUM FLOW IS VERIFIED THROUGH COMPONENTS THAT DO NOT AUTOMATICALLY ISOLATE ON AN ESFAS, WILL NOT INCREASE THE PROBABILITY OR CONSEQUENCES OF AN ANALYZED MALFUNCTION OR INTRODUCE NEW POTENTIAL FAILURES. THE SW SYSTEM IS AN ACCIDENT MITIGATOR. ITS ABILITY TO PERFORM ITS SAFETY RELATED FUNCTIONS IS NOT CHANGED BY THIS ACTIVITY. THEREFORE, IT IS CONCLUDED THAT THIS ACTIVITY DOES NOT INVOLVE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900985-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00377	50.59	64	0000	10/29/1999	09/01/1999	01/28/2000

Subject REFUELING MACHINE REPLACEMENT

Text

SUMMARY:

The Unit 1 and Unit 2 Refueling Machines (RFMs) are being replaced by machines with a higher load capacity, higher full speed capability, and a Programmable Logic Controller (PLC) based control system. The bulk of the control system will be contained in a removable control console which will be shared between the units and stored outside of containment.

Replacing the electromechanical relay based control system with a PLC based system will allow for enhanced functions, control and interlock features, and ease of testing. All modern refueling machines are based on computer controlled robotics. Programmed and Remote (PaR) Systems Incorporated, the designer of the existing and new machines, has delivered many new and retrofit control systems to nuclear utilities. Many of the automatic functions associated with the new RFMs are very similar to the existing Spent Fuel Handling Machine.

Administrative controls, qualified operators, and prescribed procedures combined with machine mechanical and electrical interlocks ensure that the likelihood or consequences of a fuel handling incident are not increased. Therefore, this modification is not an Unreviewed Safety Question.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199502088-003	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00378	50.59	62	0000	12/08/1999	09/14/1999	12/14/1999

Subject REVISE UFSAR FIGURE 8-5 61030

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900805-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00380	50.59	64		10/06/1999	09/30/1999	01/28/2000

Subject REVISE TECH SPEC BASIS 3.3.10 TO MATCH CALVERT CLIFFS 12 CST LEVEL INDICATOR

Text

SUMMARY:

The proposed activity is to change the technical specification basis description of the level indication for Condensate Storage Tank Number 12 to indicate that it covers the useable water level in the tank.

The range of the indicator provided in TS 3.3.10 (0 to 144 inches) is less than the actual range (0 to 38 feet). Number 12 CST is used to contain the water required by Technical Specification 3.7.4. That Technical Specification requires the tank to contain 150,000 gallons per unit, or 300,000 gallons. Emergency Operating Procedure Attachment 9 states that the CST volume is 9,636.78 gallons per foot. Using this number, 144 inches would be only 115,641.36 gallons - obviously not enough water to satisfy Technical Specification 3.7.4.

The technical specification reqirement of 300,000 gallons is 32.5 feet above the reference line in the CST. The reference line is the 0 point on the level indication, therefore, 38 feet level indication includes the level that satisfies the technical specification requirement.

The 144 inches is written into the ITS CE standard (NUREG-1432) and was not bracketed to indicate this is a plant-specific number. It was not changed on the LAR mark-up submitted to the NRC for adopting ITS.

As stated in Technical Specification B3.7.4, the technical specification tank is 12CST. Therefore, the wording in B 3.3.10 is being changed to "12 CST" vice "each tank" to show that this level indicator is on 12 CST.

Associations

Document Id	Doc Type	Revision To	Assoc Status
TSPEC-BASES	TS	0500	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00382	50.59	62	0000	12/17/1999	10/28/1999	02/08/2000

Subject MODIFICATION TO INSTALL CAB MOUNTED CONTROLS ON POLAR CRANES

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199800889-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00403	50.59	64		11/29/1999	11/16/1999	01/28/2000

Subject REVISE TRM TO REFLECT REED SWITCH CEA POSITION DISPLAY ACCURACY TO 3.0 INCHES

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199801203-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00404	50.59	64	0000	12/01/1999	11/22/1999	01/28/2000

Subject MODIFICATION ES199800827-001 ADDITION OF DISC 189-1705

Text

SUMMARY:

THE ACTIVITY BEING ADDRESSED IS THE UPGRADE OF CABLE AND INSTALLATION OF 2 PAD MOUNT SWITCHGEAR IN THE POWER DISTRIBUTION SYSTEM PROVIDING OFF-SITE power TO THE 07 SBO DG BUS. POWER ENTERS THE 07 BUS AT BREAKER 152-0704, THE SOURCE UPSTREAM OF THE BREAKER IS TRANSFORMER 0X01. THIS ACTIVITY IS PLACING A PAD MOUNT SWITCHGEAR (PROVIDING 2 DISCONNECT SWITCHES IN SERIES) BETWEEN THE TRANSFORMER AND THE BUS FOR FUTURE FLEXIBILITY. AT THIS TIME THE SWITCHES WILL BE MAINTAINED IN THE CLOSED POSITION. UPSTREAM OF THE TRANSFORMER ON THE 13.2kV SMECO SYSTEM THE FEEDER CABLE IS BEING UPGRADED FROM 2/0 TO 500MCM AND AN ADDITIONAL PAD MOUNT SWITCHGEAR WILL BE INSTALLED FOR FUTURE GROWTH OF THE SYSTEM. THE 13.2kV SMECO SYSTEM IS NOT PART OF THE PLANT SYSTEMS AND IS NOT DESCRIBED IN THE SAR BEYOND A SOURCE OF POWER. TO THE 07 BUS THIS ACTIVITY WILL HAVE NO IMPACT AT THIS TIME, THERE WILL BE NO MEANS TO CHANGE THE POSITION OF THE DISCONNECT SWITCHES BETWEEN THE TRANSFORMER AND 07 BUS AT THIS TIME. IN THE FUTURE, THIS CAPABILITY WILL BE DEVELOPED, A NEW 50.59 WILL PREPARED AT THAT TIME TO DISCUSS THE IMPACT OF THIS ACTIVITY. THEREFORE, THIS CHANGE DOES NOT RESULT IN AN UNRESOLVED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199800827-001	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00405	50.59	64	0000	11/26/1999	11/25/1999	01/28/2000

Subject INSTALL TEMP ALT FOR JUMPERING OUT 1TE112HA AT 1TT112HA

Text

SUMMARY:

THIS ACTIVITY EVALUATES DISABLING A PRIMARY SYSTEM RTD INPUT TO RPS. THE SYSTEM AVERAGES THE TEMPERATURE OF THE 11 AND 12 HOT LEG RTDS FOR FOUR DIFFERENT CHANNELS. THIS ACTIVITY REMOVES AN RTD INPUT FROM ONE OF THE CHANNELS SO THAT THREE OF THE CHANNELS WILL STILL HAVE A T-HOT AVERAGE (TWO INPUTS) AND ONE CHANNEL WILL HAVE A SINGLE T-HOT INPUT. TO ACCOMPLISH THIS, THE OUTPUT OF THE TEMPERATURE TRANSMITTER INTO RPS WILL BE DISABLED. THIS ACTIVITY WILL MAINTAIN FOUR OPERABLE RPS CHANNELS AND TWO SUB-COOLED MARGIN MONITORS.

THE FUNCTION OF THE RPS WILL BE UNAFFECTED BECAUSE THE TWO HOT LEGS ARE AT APPROXIMATELY THE SAME TEMPERATURE, THEREFORE SYMETRICAL EVENTS WILL BE DETECTED BY THE SINGLE RTD. THERE ARE NO ASYMETRICAL EVENTS THAT RELY ON T-HOT INPUTS TO TRIP THE REACTOR.

BASED ON THE ABOVE DISCUSSION, THIS ACTIVITY DOES NOT INCREASE THE PROBABILITY OR CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION PREVIOUSLY EVALUATED IN THE SAR, NOR DOES IT CREATE A NEW TYPE OF ACCIDENT OR MALFUNCTION NOT PREVIOUSLY EVALUATED IN THE SAR. THIS ACTIVITY DOES NOT RESULT IN A REDUCTION OF THE MARGIN OF SAFETY IN THE TECHNICAL SPECIFICATIONS, THEREFORE THIS ACTIVITY IS NOT AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
60907SH0001	BGEDRWG	0013	C
60907SH0001A	BGEDRWG	0005	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00406	50.59	62		12/09/1999	11/29/1999	02/09/2000

Subject BORONOMETER RETIREMENT

Text

SUMMARY:

THE BORONOMETERS FOR UNIT ONE AND TWO WILL BE RETIRED BY THIS ACTIVITY. THE BORONOMETERS PROVIDE LIMITED VALUE BASED ON THEIR SLOW RESPONSE TIME AND ARE COSTLY TO MAINTAIN DUE TO OBSOLESCENCE ISSUES. THE BORONOMETERS DO NOT FUNCTION TO PREVENT OR MITIGATE ANY MALFUNCTIONS OF EQUIPMENT IMPORTANT TO SAFETY OR ACCIDENTS ANALYZED IN CHAPTER 14 OF THE UFSAR. CONTINUOUS INDICATION OF RCS BORON CONCENTRATION IN THE CONTROL ROOM IS NOT REQUIRED TO SATISFY THE INTENT OF EITHER REG. GUIDE 1.97 OR NUREG-0696 WITH REGARD TO THE SAFETY PARAMETER DISPLAY SYSTEM (SPDS). THEREFORE, THE ACTIVITY PROPOSED BY THIS 50.59 DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900807-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00408	50.59	62	0001	01/31/2000	01/26/2000	02/09/2000

Subject CONSTRUCTION OF SMECO TIE TO BUS 17

Text

REVISION TO CLARIFY SCOPE AND APPLICABILITY.

THE PROPOSED ACTIVITY IS ADDING A NEW CIRCUIT INTERCONNECTION IN THE PLANT POWER DISTRIBUTION SYSTEM. PLANT 4KV BUS 17, VIA CIRCUIT BREAKER 152-1705 (FORMERLY SPARE) WILL NOW BE CAPABLE OF ALIGNMENT/CONNECTION TO THE 4KV WINDINGS OF TRANSFORMER 0X01. CIRCUIT BREAKER 152-1705 WILL BE CONNECTED TO 1MBT189-1705 AT SWITCH POSITION 1 (NEW CONNECTION), AND FROM SWITCH POSITION 3 ON TO THE 4KV WINDING OF TRANSFORMER 0X01 (AN EXISTING CONNECTION). THE CIRCUIT BREAKER 152-1705 WILL PROVIDE THE REQUIRED ISOLATION/INDEPENDENCE BETWEEN SAFETY RELATED 17 BUS AND THE NSR EQUIPMENT DOWNSTREAM. BREAKER 152-1705 WILL RECEIVE A TRIP SIGNAL ON U/V AND SIAS AS REQUIRED TO SUPPORT CIRCUIT INDEPENDENCE, IF THE BREAKER IS MANUALLY CLOSED AFTER THE GENERATION OF ONE OF THESE SIGNALS THE CONDITION WILL BE NOTED BY ANNUNCIATION.

OPERATION OF BREAKER 152-1705 IS LOCAL WITH NO AUTOMATIC OR REMOTE CLOSE SIGNALS. THIS BREAKER WILL COORDINATE WITH OTHER PROTECTIVE FEATURES ON BUS 17 TO ENSURE PROPER INDEPENDENCE PER IEEE 384-1981. A TRIP SIGNAL WILL BE RECEIVED ON A U/V OR SIAS ACTUATION TO SHED THIS LOAD AS REQUIRED FOR CIRCUIT INDEPENDENCE. A KEY LOCKED SWITCH IS PROVIDED TO BLOCK THIS SIGNAL, PLACING THIS SWITCH IN THE BLOCK POSITION WILL ANNUNCIATE AT 1C188 FOR AN ABNORMAL CONDITION AND WILL BE REPEATED IN THE CONTROL ROOM. PLACING THIS SWITCH IN THE BLOCK POSITION WILL RESULT IN THE 1 ALPHA DIESEL GENERATOR BEING OUT OF SERVICE IN MODES REQUIRING SIAS PROTECTION.

THIS ACTIVITY DOES NOT CREATE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199800827-002	ESP	0001	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00408	50.59	62	0000	01/04/2000	12/13/1999	02/09/2000

Subject CONNECTION OF 189-1705 TO 17 4KV BUS VIA 152-1705

Text

SUMMARY:

THE PROPOSED ACTIVITY IS ADDING A NEW CIRCUIT INTERCONNECTION IN THE PLANT POWER DISTRIBUTION SYSTEM. PLANT 4KV BUS 17, VIA CIRCUIT BREAKER 152-1705 (FORMERLY SPARE) WILL NOW BE CAPABLE OF ALIGNMENT/CONNECTION TO THE 4KV WINDINGS OF TRANSFORMER 0X01. CIRCUIT BREAKER 152-1705 WILL BE CONNECTED TO 1MBT189-1705 AT SWITCH POSITION 1 (NEW CONNECTION), AND FROM SWITCH POSITION 3 ON TO THE 4KV WINDING OF TRANSFORMER 0X01 (AN EXISTING CONNECTION). THE CIRCUIT BREAKER 152-1705 WILL PROVIDE THE REQUIRED ISOLATION/INDEPENDENCE BETWEEN SAFETY RELATED 17 BUS AND THE NSR EQUIPMENT DOWNSTREAM. BREAKER 152-1705 WILL RECEIVE A TRIP SIGNAL ON U/V AND SIAS AS REQUIRED TO SUPPORT CIRCUIT INDEPENDENCE, IF THE BREAKER IS MANUALLY CLOSED AFTER THE GENERATION OF ONE OF THESE SIGNALS THE CONDITION WILL BE NOTED BY ANNUNCIATION.

OPERATION OF BREAKER 152-1705 IS LOCAL WITH NO AUTOMATIC OR REMOTE CLOSE SIGNALS. THIS BREAKER WILL COORDINATE WITH OTHER PROTECTIVE FEATURES ON BUS 17 TO ENSURE PROPER INDEPENDENCE PER IEEE 384-1981. A TRIP SIGNAL WILL BE RECEIVED ON A U/V OR SIAS ACTUATION TO SHED THIS LOAD AS REQUIRED FOR CIRCUIT INDEPENDENCE. A KEY LOCKED SWITCH IS PROVIDED TO BLOCK THIS SIGNAL, PLACING THIS SWITCH IN THE BLOCK POSITION WILL ANNUNCIATE AT 1C188 FOR AN ABNORMAL CONDITION AND WILL BE REPEATED IN THE CONTROL ROOM. PLACING THIS SWITCH IN THE BLOCK POSITION WILL RESULT IN THE 1 ALPHA DIESEL GENERATOR BEING OUT OF SERVICE IN MODES REQUIRING SIAS PROTECTION.

THIS ACTIVITY DOES NOT CREATE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199800827-002	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00409	50.59	62	0000	12/15/1999	12/15/1999	02/09/2000

Subject INTEGRATED WORK MANAGEMENT ORGANIZATION CHANGE

Text SUMMARY:

THE PROPOSED ACTIVITY ESTABLISHES AN INTEGRATED WORK MANAGEMENT ORGANIZATION UNDER THE PLANT GENERAL MANAGER. THE NEW ORGANIZATION WILL IMPROVE RISK MANAGEMENT ACTIVITIES BY INSTITUTIONALIZING THE WAY WE ASSESS AND MANAGE RISK IN THE FOLLOWING AREAS: 1) NUCLEAR SAFETY; 2) INDUSTRIAL SAFETY; 3) RADIATION SAFETY; 4) ENVIRONMENTAL SAFETY; AND 5) CORPORATE RISK.

Associations

Document Id	Doc Type	Revision To	Assoc Status
EN-1-100	NPIP	1200	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00410	50.59	62	0000	12/16/1999	12/16/1999	02/09/2000

Subject VALUE ADDED PELLET CRITICALITY ANALYSES

Text SUMMARY:

THIS ACTIVITY ALLOWS THE USE OF VALUE ADDED PELLET (VAP) FUEL IN THE NEW FUEL STORAGE RACKS, IN THE SPENT FUEL POOL, IN THE FUEL TRANSFER CARRIAGE AND UPENDER, IN THE NEW FUEL ELEVATOR, IN THE ICI RACKS, IN THE NEW FUEL INSPECTION PLATFORM, AND IN THE SPENT FUEL CASK HANDLING CRANE. IN ADDITION, THIS ACTIVITY DETERMINES THE CONDITIONS FOR STORAGE OF ENCAPSULATED FUEL IN ASSEMBLIES AND IN EMPTY GRID CAGES. VAP FUEL IS CHARACTERIZED BY A HIGHER STACK HEIGHT DENSITY OF ~94% THEORETICAL DENSITY, A LARGER FUEL PELLET DIAMETER OF 0.381", AND A THINNER CLAD THICKNESS OF 0.026".

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199602403-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00411	50.59	62	0000	01/17/2000	01/12/2000	02/09/2000

Subject REMOVE RELIEF VALVES 1/2-RV-105

Text SUMMARY:

THIS ACTIVITY WILL REMOVE RELIEF VALVES 1/2-RV-105. THE REMOVAL OF PRESSURE CONTROL VALVES 1/2-PCV-502 AND 1/2-PCV-503 REMOVED THE CODE REQUIREMENT THAT NECESSITATED THESE VALVES. THESE PCV WERE REMOVED UNDER FCR 86-0116. THE PCV WERE TROUBLESOME AND LEAKED HYDROGEN AND RAD-GASES. FLOW ORIFICES ARE INSTALLED TO LIMIT GAS FLOW, AND EXISTING RELIEF VALVES PROTECT THE VOLUME CONTROL TANKS. THIS ACTIVITY DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES200000040-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00144	72.48	64	0000	01/13/1999	01/13/1999	07/26/1999

Subject APPROVE CHANGE TO ISFSI USAR VOL I, APP A, ENVIRONMENTAL REPORT RESPONSE TO NRC QUESTION ER-11 ITEM A

Text SUMMARY:

CHANGE WORDING IN ISFSI USAR VOLUME I, APPENDIX A ENVIRONMENTAL REPORT, RESPONSE TO NRC QUESTION ER-11 ITEM. A. CHANGE THE WORD "MONTHLY' TO "AT LEAST QUARTERLY" IN THE FOLLOWING SENTENCE: TLDS WILL BE READ MONTHLY. THIS CHANGE RESOLVES A CONFLICT BETWEEN THE ISFSI USAR AND ISFSI RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM REQUIREMENTS IN THE CALVERT CLIFFS OFFSITE DOSE CALCULATION MANUAL (ODCM). THIS ACTIVITY DOES NOT INVOLVE AN UNREVIEWED SAFETY QUESTION, NOR A SIGNIFICANT INCREASE IN OCCUPATIONAL DOSE, NOR A SIGNIFICANT UNREVIEWED ENVIRONMENTAL IMPACT.

Associations

Document Id	Doc Type	Revision To	Assoc Status

ES199801725-000 ESP 0000 C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00145	72.48	64		03/31/1999	03/16/1999	07/26/1999

Subject 72.48 ADDRESSES CHANGES TO ECN 98 - 0516

Text

SUMMARY:

THIS SAFETY EVALUATION ADDRESSES MODIFICATIONS TO THE CALVERT CLIFFS NUHOMS-24P DRY SHIELDED CANISTER (DSC). THE MODIFICATIONS GENERALLY AFFECT THE FUNCTIONAL DESIGN OF THE DSC INTERNAL BASKET ASSEMBLY, AND AFFECT FABRICATION DETAILS ASSOCIATED WITH DSC CONFINEMENT BOUNDARY AND SHIELD PLUG COMPONENTS. THE DESIGN CHANGES TO THE DSC INTERNAL BASKET ASSEMBLY INCLUDE REMOVAL OF GUIDE SLEEVE CLIP ANGLE WELDED ATTACHMENTS TO THE BOTTOM SPACER DISK, ADDITION OF GUIDE SLEEVE EXTRACTION STOPS AND ADDITION OF NOTCHED OPENINGS TO THE BOTTOM ENDS OF THE GUIDE SLEEVES. THERE ARE NUMEROUS OTHER CHANGES BEING MADE TO THE DSC FABRICATION DETAILS, INCLUDING CHANGES TO THE CONFINEMENT BOUNDARY WELDING DETAILS, CHANGES TO VARIOUS DSC COMPONENT DIMENSIONS AND TOLERANCES, DESIGNATION OF CONSUMABLE MATERIALS TO BE USED DURING DSC FABRICATION, CHANGES TO THE SHIELD PLUG LIFTING POST DETAIL, AND IDENTIFICATION OF CERTAIN LEAK TESTING REQUIREMENTS. THE DSC DESIGN DOCUMENTS ARE ALSO BEING UPDATED TO IDENTIFY TRANSNUCLEAR WEST INC. AS THE NEW PATENT HOLDER OF THE NUHOMS-24P SYSTEM DESIGN, AND TO CLARIFY CERTAIN DSC COMPONENT NAMES. THE DSC MODIFICATIONS AND DOCUMENT CHANGES ARE TO BE IMPLEMENTED BEGINNING WITH CALVERT CLIFFS DSC NO. R 025.

PROPOSED CHANGES TO THE CALVERT CLIFFS ISFSI USAR INCLUDE THE FOLLOWING:

- ADDITION OF A DESCRIPTION OF THE MODIFIED DSC INTERNAL BASKET ASSEMBLY DESIGN. THE USAR CHANGE WILL SPECIFICALLY DESCRIBE THE ELIMINATION OF OF THE GUIDE SLEEVE CLIP ANGLE TO BOTTOM SPACER DISK WELDED ATTACHMENTS, ADDITION OF THE GUIDE SLEEVE EXTRACTION STOPS, AND ADDITION OF NOTCHED OPENINGS TO THE BOTTOM ENDS OF THE GUIDE SLEEVE.

- THE LICENSING BASIS ALLOWABLE STRESS CRITERIA FOR THE DESIGN OF THE DSC WILL BE ADDED TO THE USAR FOR COMPLETENESS. THE LICENSING BASIS ALLOWABLE STRESSES ARE BASED ON ASME SECTION III DIVISION I PERMISSIBLE STRESSES USING THE WORST THERMAL CONDITIONS REPORTED IN THE TOPICAL REPORT.

- CLARIFY THAT THE EXISTING DCS COMPONENT STRESS TABLES ARE NOT APPLICABLE FOR MODIFIED DSCS BEGINNING WITH R 025, THE TABULATED STRESSES ARE FOR INFORMATION ONLY, AND THAT ANY CALCULATED DSC STRESSES MUST REMAIN WITHIN THE LICENSING BASIS ALLOWABLE STRESS CRITERIA.

- REFERENCE TO THE MODIFIED DSC SUPPORTING ANALYSES WILL BE ADDED.

- TRANSNUCLEAR WEST INC. WILL BE IDENTIFIED AS THE NEW OWNER OF THE NUHOMS-24P PATENT.

- CONSISTENT TERMINOLOGY FOR THE DSC SIPHON AND VENT PORT COMPONENTS WILL BE PROVIDED.

- THE CALVERT CLIFFS NUHOMS-24P DSC DESIGN DRAWINGS WILL BE REVISED TO REFLECT THE MODIFIED DSC DESIGN.

AN INDEPENDENT ASSESSMENT OF THE NUHOMS-24P SYSTEM DESIGN DETERMINED THAT THE DSC INTERNAL BASKET ASSEMBLY MAY NOT PERFORM AS INTENDED DURING A DESIGN BASIS CASK DROP ACCIDENT. SPECIFICALLY, THE CLIP ANGLE ATTACHMENTS BETWEEN THE GUIDE SLEEVES AND THE BOTTOM SPACER DISK COULD FAIL IN BENDING AND PUSH AGAINST THE WALL OF THE GUIDE SLEEVES. IN SOME CASES THE RESULTING GUIDE SLEEVE DEFORMATION COULD ELIMINATE THE CLEARANCE BETWEEN THE GUIDE SLEEVE AND THE SPENT NUCLEAR FUEL ASSEMBLY. THIS INTERFERENCE WOULD NECESSITATE THE USE OF ADDITIONAL FORCE TO EXTRACT THE FUEL ASSEMBLY DURING POST ACCIDENT RECOVERY OPERATIONS. THIS CONDITION, ALTHOUGH TOLERABLE, IS UNDESIRABLE. THE MODIFIED DSC INTERNAL BASKET ASSEMBLY ELIMINATES USE OF THE GUIDE SLEEVE CLIP ANGLE ATTACHMENTS IN ORDER TO ALLEVIATE THIS TYPE OF LOCAL GUIDE SLEEVE DEFORMATION. GUIDE SLEEVE EXTRACTION STOPS ARE TO BE ADDED SO THAT IN THE UNLIKELY EVENT THAT A FUEL ASSEMBLY DOES BECOME STUCK, THE GUIDE SLEEVE WILL NOT BE WITHDRAWN TOGETHER WITH THE FUEL ASSEMBLY. THE REMOVAL OF THE GUIDE SLEEVE CLIP ANGLES WILL ALLOW THE GUIDE SLEEVES TO REST FLUSH ON THE DSC BOTTOM INNER COVER PLATE. THEREFORE, THE BOTTOMS OF THE GUIDE SLEEVES WILL BE NOTCHED OUT IN ORDER TO FACILITATE DSC DRAINING AND DRYING OPERATIONS.

OTHER DSC DESIGN CHANGES ARE DEEMED TO BE IMPROVEMENTS BASED ON TRANSNUCLEAR WEST INC. DESIGN REVIEW ISSUES AND LESSONS LEARNED. THE CHANGES TO THE DSC CONFINEMENT BOUNDARY WELDS ARE INTENDED TO MINIMIZE BASE METAL DISTORTION, EASE FABRICATION, AND IMPROVE ALARA EXPOSURE DURING FIELD WELDING OPERATIONS. DSC DIMENSION AND TOLERANCE CHANGES ARE BEING IMPLEMENTED TO REFLECT TRANSNUCLEAR WEST INC. TOLERANCE STANDARDS, TO ENSURE CONSISTENCY WITH THE TOPICAL REPORT DESIGN, TO ENSURE THAT MINIMUM DESIGN SHIELDING REQUIREMENTS WILL BE MAINTAINED, AND TO FULFILL STRUCTURAL ENGINEERING EVALUATION RECOMMENDATIONS. THE TOP SHIELD PLUG LIFTING POST DETAIL IS BEING REVISED TO IMPROVE FABRICATION. INCORPORATION OF MATERIAL AND TESTING INFORMATION IN THE DSC FABRICATION DRAWINGS IS FOR CLARIFICATION OF FABRICATION REQIREMENTS.

THE MODIFICATIONS TO THE CALVERT CLIFFS NUHOMS-24P DSC INTERNAL BASKET ASSEMBLY THAT ARE INTENDED TO ALLEVIATE LOCAL GUIDE SLEEVE DEFORMATION DURING A DESIGN BASIS CASK DROP ACCIDENT, AND THE VARIOUS OTHER DSC DESIGN AND FABRICATION DETAIL IMPROVEMENTS, IMPLEMENTED UNDER THIS ACTIVITY, DO NOT RESULT IN AN UNREVIEWED SAFETY QUESTION (USQ). THE PROBABILITY OF OCCURRENCE OF A MALFUNCTION OF EQUIMENT IMPORTANT TO SAFETY WILL NOT BE INCREASED BY THIS ACTIVITY BECAUSE THE DSC MODIFICATIONS HAVE BEEN FULLY ANALYZED IN A MANNER CONSISTENT WITH USAR DESIGN CRITERIA, AND THE RESULTS OF THE ANALYSES WERE DETERMINED TO COMPLY WITH THE APPLICABLE USAR STRUCTURAL SPECIFICATIONS AND SER ACCEPTANCE CONDITIONS. THE DSC MODIFICATIONS WILL NOT INCREASE THE PROBABILITY OF OCCURRENCE OF ANY ANALYZED ACCIDENT. THE CONSEQUENCES OF AN ACCIDENT WILL NOT BE INCREASED BECAUSE RADIOLOGICAL SHIELDING IS NOT ADVERSELY AFFECTED BY THIS MODIFICATION, CRITICALITY CONTROL IS ASSURED, FUEL ROD INTEGRITY IS ASSURED, AND THE RETRIEVAL CAPABILITY OF AN INTACT FUEL ASSEMBLY IS ASSURED. THE NEW GUIDE SLEEVE EXTRACTION STOPS AND THE CHANGE IN THE BEHAVIOR OF EXISTING DSC COMPONENTS HAVE BEEN EVALUATED, AND IT HAS BEEN DETERMINED THAT THE CHANGES ARE CLEARLY BENEFICIAL, THE CRITICAL FUNCTIONS OF THE DSC WILL NOT BE ADVERSELY IMPACTED, AND THAT AN ACCIDENT OR MALFUNCTION OF A DIFFERENT TYPE THAN ANY EVALUATED PREVIOUSLY IN THE SAR IS NOT CREATED BY THE CHNGES. THE DSC MODIFICATIONS DO NOT REDUCE THE MARGIN OF SAFTY AS DEFINED IN THE BASIS FOR ANY ISFSI TECHNICAL SPECIFICATION. THE DSC MODIFICATIONS DO NOT INVOLVE A CHANGE IN DSC LOADING OPERATIONS, AND DO NOT ADVERSELY IMPACT DSC CONFINEMENT INTEGRITY, SHIELDING FEATURES, CRITICALITY CONTROL, OR FUEL RETRIEVABILITY, AND THEREFORE, WILL NOT RESULT IN ANY INCREASE IN OCCUPATIONAL DOSE. FINALLY, THIS ACTIVITY DOES NOT INVOLVE AN UNREVIEWED ENVIRONMENTAL IMPACT.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199900153-001	ESP	0000	C
ES199900720-000	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00150	72.48	64		10/25/1999	10/13/1999	01/28/2000

Subject CHANGES TO PERIMITER FENCE ON ISFSI

Text

SUMMARY:

THIS SAFETY SCREEN EVALUATES THE FOLLOWING CHANGES TO THE USAR OF THE INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) LOCATED AT CALVERT CLIFFS NUCLEAR POWER PLANT:

1) THE ACCEPTABILITY TO INSTALL A NEW PERMANENT PERSONNEL GATE (LOCKED) IN THE WEST SIDE OF THE NUISANCE PERIMETER FENCE (THE OUTER FENCE) SURROUNDING THE ISFSI.

2) THE ACCEPTABILITY TO INSTALL A TEMPORARY SECURITY FENCE (WITH A LOCKED VEHICLE GATE), NUISANCE BARRIER, AND REMOTE INFRARED SECURITY SYSTEM. THIS TEMPORARY FENCE SYSTEM WILL BE ORIENTED IN THE EAST/WEST DIRECTION LOCATED APPROXIMATELY 27 FT., 47 FT. AND 37 FT. RESPECTIVELY, SOUTH OF EXISTING HORIZONTAL STORAGE MODULE (HSM) 2A AND 2B.

3) CORRECTION TO THE NUMBER SCHEME OF THE HSMS (ADMINISTRATIVE IN NATURE).

4) CORRECTION TO THE PHYSICAL LOCATION OF THE EXISTING VEHICLE GATE IN THE EAST SIDE OF THE PERIMETER FENCE (ADMINISTRATIVE IN NATURE).

REASON:
CALVERT CLIFFS IS ADDING HSMS 3A AND 3B TO THE ISFSI (REFERENCE ENGINEERING PACKAGE ES199801283-000). CONSTRUCTION OF 3A AND 3B WILL REQUIRE THE DAILY ADMITTANCE OF CONSTRUCTION PERSONNEL INSIDE THE FENCED ISFSI PROTECTED AREA. DOING SO ALLOWS SUCH INDIVIDUALS ACCESS TO EXISTING AND FUEL LOADED HSM 1A, 1B, 2A AND 2B, WHICH IN TURN REQUIRES INCREASED SECURITY PERSONNEL TO MANAGE THESE INDIVIDUALS' ACTIVITIES. TO MANAGE THIS SITUATION, A TEMPORARY FENCE, NUISANCE BARRIER, AND REMOTE SENSING SYSTEM WILL BE INSTALLED JUST SOUTH OF HSM 2A AND 2B SO THE ISFSI PROTECTED AREA BOUNDARY CAN ROUTINELY BE COLLAPSED DURING CONSTRUCTION TO AN AREA MORE IMMEDIATELY SURROUNDING HSM 1A, 1B, 2A AND 2B. THIS WILL EASE THE NUMBER OF SECURITY PERSONNEL REQUIRED TO MONITOR CONSTRUCTION PERSONNEL ACTIVITIES AND WILL ALLOW

MORE FREEDOM OF MOVEMENT FOR THE CONSTRUCTION PERSONNEL THEMSELVES. THE PERMANENT PERSONNEL GATE IN THE WEST SIDE OF THE NUISANCE PERIMETER FENCE SURROUNDING THE ISFSI IS BEING ADDED AT NUCLEAR SECURITY'S REQUEST IN ORDER TO ALLOW THEM ACCESS FLEXIBILITY. CURRENTLY ACCESS TO THE AREA BETWEEN THE PERIMETER NUISANCE FENCE (THE OUTER FENCE) AND THE SECURITY FENCE (THE INNER FENCE) WHERE THE REMOTE SENSING DEVICES ARE LOCATED IS THROUGH ONE LOCATION ONLY; THE VEHICLE-SIZED GATE LOCATED ON THE EAST SIDE. ACCESS TO THE OVERALL ISFSI PROTECTED AREA WILL STILL BE VIA ONE LOCATION ONLY, THE EXISTING EAST SIDE VEHICLE SIZE ACCESS GATE.

THE ABOVE ACTIVITIES DEVIATE FROM INFORMATION CURRENTLY REFLECTED IN THE ISFSI USAR FIGURES 1.2-1, 4.1-2 AND 2.4-1 AND THEREFORE REQUIRE A SAFETY EVALUATION.

THESE CHANGES DO NOT REPRESENT AN UNREVIEWED SAFETY QUESTION (USQ), A SIGNIFICANT INCREASE IN OCCUPATIONAL DOSE, OR AN UNREVIEWED ENVIRONMENTAL IMPACT.

THE PERIMETER FENCING SYSTEM IS A PASSIVE SYSTEM SURROUNDING THE HSMS WHOSE MAIN FUNCTION IS SECURITY (I.E., TO PREVENT UNAUTHORIZED PERSONNEL FROM ACCESSING THE HSMS). EXCEPT FOR "BLOCKAGE OF AIR INLETS AND OUTLETS" THE FENCE IS NOT CREDITED IN ANY ISFSI USAR CHAPTER 8 ACCIDENT ANALYSIS, PREVENTION ASSUMPTIONS, OR MITIGATIONS. IN THE CASE OF "BLOCKAGE OF AIR INLETS AND OUTLETS" THE PERIMETER FENCE ALONG WITH THE HSM AIR INLET AND OUTLET PHYSICAL SEPARATION AS CREDITED AS A CONTRIBUTOR TO "REDUCING THE POTENTIAL" THAT THE VENTS WILL BECOME BLOCKED BY ANY DEBRIS STIRRED UP BY A TORNADO. NO CALCULATIONS, ASSUMPTIONS, OR CREDI WAS TAKEN FOR THE FENCE STOPPING ANY PARTICULAR SIZE OR AMOUNT OF DEBRIS TRAVELING AT ANY PARTICULAR SPEED. IT IS JUST REFERENCED AS BEING PRESENT.

NO USQ RESULTS FROM:
- INSTALLATION OF THE PERMANENT PERSONNEL GATE BECAUSE IT WILL BE CONSTRUCTED OF EQUIVALENT MATERIAL, SIZE AND LOCATION AS THE EXISTING FENCE.
- THE TEMPORARY FENCE SYSTEM BECAUSE THE ORIGINAL PERIMETER FENCE WILL REMAIN IN PLACE TO REDUCE THE POTENTIAL OF DEBRIS FROM ENTERING THE ISFSI. ANY DEBRIS BOUNDED INSIDE THE ISFSI BUT SOUTH OF THE TEMPORARY FENCE (I.E., THE CONSTRUCTION AREA OF HSM 3A AND 3B) WILL BE REDUCED FROM REACHING THE EXISTING HSMS BY THE EQUIVALENT TEMPORARY FENCE.
- CHANGES TO THE HSM NUMBER SYSTEM OR FIGURE CHANGE TO SHOW THE ACTUAL LOCATION OF THE EXISTING SECURITY GATE (EAST SIDE) AS THESE ARE ADMINISTRATIVE IN NATURE AND DO NOT CAUSE ANY MAJOR DEVIATIONS FROM THE ISFSI USAR.

A SIGNIFICANT INCREASE IN OCCUPATIONAL DOSE TO ISFSI USAR TABLE 7.4-1 DOES NOT OCCUR BECAUSE THE FENCE CHANGES DO NOT AFFECT THE ACTIVITIES LISTED IN TABLE 7.4-1.

A SIGNIFICANT UNREVIEWED ENVIRONMENTAL IMPACT DOES NOT RESULT FROM THESE CHANGES BECAUSE THE FOOTPRINT TO THE ISFSI IS NOT BEING ALTERED AND THE ENVIRONMENTAL IMPACT STATEMENT REQUIRES NO CHANGES.

Associations

Document Id	Doc Type	Revision To	Assoc Status
ES199801283-001	ESP	0000	C

Document Id	Doc Type	Rev Status	Revision	Date Issued	Create Date	Modified Date
SE00151	72.48	62		12/15/1999	12/15/1999	02/09/2000

Subject INTEGRATED WORK MANAGEMENT ORGANIZATION CHANGE

Text SUMMARY:

THE PROPOSED ACTIVITY ESTABLISHES AN INTEGRATED WORK MANAGEMENT ORGANIZATION UNDER THE PLANT GENERAL MANAGER. THE NEW ORGANIZATION WILL IMPROVE RISK MANAGEMENT ACTIVITIES BY INSTITUTIONALIZING THE WAY WE ASSESS AND MANAGE RISK IN THE FOLLOWING AREAS: 1) NUCLEAR SAFETY; 2) INDUSTRIAL SAFETY; 3) RADIATION SAFETY; 4) ENVIRONMENTAL SAFETY; AND 5) CORPORATE RISK.

Associations

Document Id	Doc Type	Revision To	Assoc Status
EN-1-100	NPIP	1200	C