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SUBJECT: "1989 Rept of Facility Changes,Tests & Experiments Conducted w/o Prior Approval for Aug 1988 - Jul 1989." W/891219 ltr.

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December 19, 1989

U.S. Nuclear Regulatory Commission
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Washington, D.C. 20555

Subject: Annual Report of Facility Changes, Tests, and Experiments Conducted Without Prior Commission Approval
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Gentlemen:

The subject report is hereby submitted as required by 10 CFR 50.59(b). Enclosed are the original and one copy of the report containing descriptions and summaries of the safety evaluations conducted in support of changes to the facility and procedures described in the UFSAR and special tests, from August 1988 through July 1989.

Very truly yours,

Robert C. Mecredy
General Manager, Nuclear Production

RES/jdw
Enc.

xc: USNRC Region I Office
USNRC Resident Inspector

IE47

1989 REPORT

OF

FACILITY CHANGES, TESTS AND EXPERIMENTS

CONDUCTED WITHOUT PRIOR APPROVAL

FOR AUGUST 1988 THROUGH JULY 1989

SECTION A	COMPLETED ENGINEERING WORK REQUESTS (EWR)
SECTION B	COMPLETED STATION MODIFICATIONS (SM)
SECTION C	TEMPORARY BYPASS OF SAFETY FUNCTION, STRUCTURE FEATURES, SHIELDING, AND FLUID SYSTEM FEATURES
SECTION D	PROCEDURE CHANGES
SECTION E	COMPLETED SPECIAL TESTS (ST) AND EXPERIMENTS

R.E. GINNA NUCLEAR POWER PLANT
DOCKET NO. 50-244
ROCHESTER GAS AND ELECTRIC CORPORATION

DATED DECEMBER 19, 1989

SECTION A - COMPLETED ENGINEERING WORK REQUESTS (EWRs)

This section contains a description of modifications in the facility as described in the safety analysis report, and a summary of the safety evaluation for those changes, pursuant to the requirements of 10 CFR 50.59(b).

The basis for inclusion of an EWR in this section is closure of the completed modification package in the Document Control Department.

EWR-1660
RCS OVERPRESSURE PROTECTION

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION WHICH WILL PROVIDE AUTOMATIC PRESSURE RELIEF DURING LOW TEMPERATURE REACTOR COOLANT SYSTEM OPERATION. THE DESIGN PROVIDES REDUNDANT TRAINS OF PRESSURE SENSING INSTRUMENTATION AND RELIEVING CAPACITY.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE SMALL BREAK LOCA, AND RCS OVERPRESSURIZATION TRANSIENT.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPH 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-2602
PRESSURIZER SAFETY AND RELIEF VALVE PIPING

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE VERIFICATION OF THE FUNCTION ABILITY AND THE STRUCTURAL INTEGRITY OF THE PRESSURIZER RELIEF AND SAFETY VALVE PIPING. THIS WORK WILL INCLUDE DYNAMIC ANALYSIS OF THE PIPING INCLUDING EFFECTS DUE TO SEISMIC EVENTS AS WELL AS SYSTEM OPERATION. THE PIPE SUPPORTS WILL BE EVALUATED FOR THE RESULTING LOADS AND MODIFIED AS NECESSARY. THIS WORK ALSO INCLUDES THERMAL ANALYSIS, DESIGN AND INSTALLATION OF A REFLECTIVE INSULATION SYSTEM ON THE PRESSURIZER HEAD AND SAFETY VALVE LOOP SEALS. THIS VERIFICATION AND MODIFICATION IS NECESSARY TO COMPLY WITH NUREG 0737, SECTION II.D.1, "PERFORMANCE TESTING OF BWR AND PWR RELIEF AND SAFETY VALVES".

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE SEISMIC EVENT AND THE OCCURRENCE OF A SMALL LOCA.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPHS 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR 3059
CONTROL OF HEAVY LOADS MODIFICATIONS

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE UPGRADING OF SAFETY-RELATED OVERHEAD LOAD HANDLING SYSTEMS. THE MAJOR ADDITION IS THE INSTALLATION OF A MECHANISM BY WHICH THE PRESSURIZER HATCH BLOCKS WILL BE PHYSICALLY PROHIBITED FROM FALLING INTO THE PRESSURIZER CAVITY DURING REMOVAL AND REPLACEMENT. THIS WILL BE ACHIEVED THROUGH INSTALLATION OF STRONG BACKS ON THE HATCH COVER BLOCKS.

OTHER MODIFICATIONS, ORIGINALLY CONSIDERED IN REVISION 0 OF THE DESIGN CRITERIA/SAFETY ANALYSIS WERE INCLUDED TO FULLY COMPLY WITH THE ORIGINAL INTERPRETATION OF NUREG-0612. REVISION 1 TO THIS DESIGN CRITERIA AND SAFETY ANALYSIS DELETES THE MODIFICATION OF MONORAILS NOTED IN REVISION 0. BASED UPON FURTHER ENGINEERING REVIEW, THESE MONORAIL SYSTEMS WERE DETERMINED TO ALREADY BE IN COMPLIANCE WITH ANSI B30.11-1980.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR, AND THE VENTS REQUIRING ANALYSIS BY USNRC REG. GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE "CONTROL OF HEAVY LOADS" GUIDELINES (NUREG-0612) AND SEISMIC EVENTS.

THE DESIGN FOR UPGRADING OF THE PRESSURIZER HATCH BLOCKS WILL ENHANCE THE CAPABILITY OF THE PRESSURIZER CUBICLE TO WITHSTAND SEISMIC EVENTS. IT WILL ALSO ENSURE THAT DURING MOVEMENT OF THE HATCH BLOCKS, ACCIDENTAL DROPPING OF A BLOCK FROM THE JIB CRANE WILL NOT CAUSE DAMAGE TO THE PRESSURIZER, ITS INSTRUMENTATION AND ASSOCIATED VALVES LOCATED AT THE TOP OF THE PRESSURIZER.

THUS, THIS MODIFICATION NEITHER INCREASES THE CONSEQUENCES, NOR DOES IT REDUCE THE MARGINS OF SAFETY FOR, 1) EQUIPMENT REQUIRED TO FUNCTION DURING AND FOLLOWING A SEISMIC EVENT, 2) POSE A THREAT TO THE REACTOR COOLANT SYSTEM BOUNDARY.

BASED UPON A REVIEW OF THE UFSAR AND TECHNICAL SPECIFICATIONS, IT HAS BEEN CONCLUDED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN CONCLUDED THAT ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-3175
CONTROL ROD DROP TEST CABLE

THIS MODIFICATION INVOLVES THE INSTALLATION OF AN INSTRUMENTATION CABLE FROM THE CONTROL ROD DRIVE CABINETS IN THE INTERMEDIATE BUILDING TO THE ROD POSITION INDICATION RACKS IN THE RELAY ROOM. THESE NEW CABLES ARE REQUIRED TO TEST THE CONTROL ROD DROP RATE. PRESENTLY, I&C RUNS A TEMPORARY CABLE FOR THIS PURPOSE AND THEN REMOVES IT WHEN TESTING IS COMPLETED. TO CONSERVE TIME AND MANPOWER DURING SHUTDOWN PERIODS, IT IS PROPOSED THAT A PERMANENT CABLE AND A SPARE BE INSTALLED FOR CONTROL ROD DROP TESTING.

THIS MODIFICATION IS DESIGNATED NOT SEISMIC CATEGORY I, HOWEVER THE DESIGN SHALL MEET SECTION C.2 OF USNRC REG. GUIDE 1.29.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE (1) MAJOR AND MINOR FIRES (2) A SEISMIC EVENT.

THE MODIFICATION DOES NOT INCREASE THE POSSIBILITY OR IMPACT OF A FIRE.

ADDITIONAL WIRING AND CABLE WILL BE ADDED IN THIS MODIFICATION, WHICH COULD ADD TO THE FIRE LOADING OF THE PLANT. THEREFORE, THE DESIGN CRITERIA REQUIRES THAT ALL SUCH CABLE MEET THE IEEE 383-1974 FLAME TEST, REQUIREMENTS. BECAUSE OF THIS THERE WILL BE NO SIGNIFICANT INCREASE OF FIRE LOADING CAUSED BY THIS MODIFICATION.

THIS MODIFICATION IS DESIGNATED NOT SEISMIC CATEGORY I, HOWEVER, ANY NEW CABLE AND CONDUIT SHALL BE INSTALLED SUCH THAT IT WILL NOT IMPACT ANY SAFETY RELATED SYSTEMS DURING A SEISMIC EVENT.

THIS MODIFICATION HAS BEEN REVIEWED TO ENSURE THAT FAILURE OF THE ELECTRICAL CABLE INSTALLED WILL NOT RESULT IN DISABLING OF VITAL EQUIPMENT NEEDED TO SAFELY SHUTDOWN THE PLANT DURING POSTULATED FIRES OR A SEISMIC EVENT.

EWR-3258A
SERVICE WATER CONTAINMENT ISOLATION VALVES

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION WHICH WILL PROVIDE MECHANICAL MANUAL REMOTE OPERATORS TO CONTAINMENT ISOLATION VALVES 4629, 4630, 4643 AND 4644. THE FUNCTION OF THE REMOTE MANUAL OPERATORS IS TO FACILITATE OPERATING THE ASSOCIATED VALVES WHERE ACCESS BY PERSONNEL IS RESTRICTED DUE TO NEARBY PIPING AND EQUIPMENT. ALL NEW VALVES WERE INSTALLED UNDER THE PREVIOUS REVISION.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE:

A) PRIMARY SYSTEM PIPE RUPTURES
B) RUPTURE OF THE STEAM AND FEEDWATER PIPES INSIDE AND OUTSIDE CONTAINMENT
C) FIRE OR EARTHQUAKE

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPHS 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-3645
GROUNDWATER LEVEL

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE INSTALLATION OF THREE PERMANENT GROUNDWATER MONITORING WELLS.

THE DESIGN BASES FOR THE HIGHEST STILL GROUNDWATER LEVEL FOR THE R. E. GINNA NUCLEAR POWER PLANT ASSUMED FOR THE DESIGN OF THE PLANT STRUCTURES WAS 250.0 MSL. AS A RESULT OF SEP TOPIC II-3.5 "FLOODING POTENTIAL PROTECTION REQUIREMENTS", IT IS NECESSARY TO DETERMINE IF THE ORIGINAL DESIGN BASIS GROUNDWATER LEVEL (DBGWL) IS AN ACCEPTABLE UPPER LIMIT TO BE USED TO CALCULATE THE LOADING CAPABILITY OF THE PLANT STRUCTURES. TO ASCERTAIN THE CORRECT DBGWL, THREE GROUNDWATER MONITORING WELLS WILL BE INSTALLED ON THE R. E. GINNA PLANT SITE. THIS INSTALLATION WILL CONSIST OF THREE FULL-ENCASED BORINGS DRILLED INTO THE GROUNDWATER TABLE. A LIQUID LEVEL DETECTION AND INDICATION UNIT WILL BE INSTALLED ON ONE WELL TO CONSTANTLY MONITOR AND RECORD THE GROUNDWATER LEVEL. REFER TO RG&E DRAWING NUMBER 33013-1384 FOR THE LOCATION OF THE THREE BORINGS. IF MORE DATA TO ESTABLISH A DBGWL IS NEEDED, THE OTHER TWO WELLS WILL BE AVAILABLE TO MONITOR.

THIS INSTALLATION WILL INCLUDE THREE FULL-CASED BORINGS DRILLED INTO THE WATER TABLE, ONE FULLY ELECTRONIC LIQUID LEVEL SENSING MONITOR, THREE FLANGE CAPS FOR THE WELL HEADS, ONE ALL-WEATHER ENCLOSURE FOR THE TRANSMITTER AND A RUN OF ELECTRIC CABLE CONNECTED TO AN EXISTING CHART RECORDER INSIDE THE PLANT.

IN THE UNLIKELY EVENT OF FAILURE OF ANY COMPONENT OF THIS MODIFICATION, NONE OF THE CLASS IE EQUIPMENT IN THE PLANT WILL BE PREVENTED FROM PERFORMING ITS SAFETY FUNCTION.

THE ACCIDENT EVENTS ANALYZED BY THE FSAR HAVE BEEN REVIEWED AND NONE WILL BE AFFECTED BY THIS MODIFICATION.

EWR-3678
OVEREXCITATION RELAY

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION CONSISTING OF INSTALLATION OF AN OVEREXCITATION RELAY ON THE MAIN CONTROL BOARD. OVEREXCITATION OF THE GSU AND NO. 11 TRANSFORMERS CAN MOST COMMONLY OCCUR DURING PLANT STARTUP. AS THE TURBINE GENERATOR IS BEING BROUGHT UP TO RATED VOLTAGE AND SPEED, THE EXCITATION LEVEL (VOLTS/HERTZ) MUST NOT EXCEED THE TRANSFORMERS CAPABILITIES. IF THESE CAPABILITIES ARE EXCEEDED, THERMAL DAMAGE TO THE UNITS WILL OCCUR. DEPENDING UPON THE MAGNITUDE AND DURATION OF OVEREXCITATION, TRANSFORMER FAILURE WILL OCCUR EITHER IMMEDIATELY OR AFTER REPEATED LESS SEVERE EVENTS. THE EXISTING OVEREXCITATION RELAY AT GINNA, WHICH OPERATES THE CONTROL ROOM ANNUNCIATOR, IS AN ELECTROMECHANICAL DEVICE. ITS OPERATING CHARACTERISTIC DOES NOT ACCURATELY MATCH THE TRANSFORMER'S OVEREXCITATION CAPABILITIES. THE RELAY PROPOSED IN THE MODIFICATION, HOWEVER, CAN BE SET TO DUPLICATE THE TRANSFORMER'S CAPABILITIES FOR VERY ACCURATE ALARM AND TRIP OPERATION. THIS RELAY, WHICH INCORPORATES MICROPROCESSOR TECHNOLOGY, WILL INITIALLY BE INSTALLED WITH ITS OUTPUTS CONNECTED TO THE PLANT PROCESS COMPUTER FOR ALARMING AND DATA RETENTION.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE (1) MAJOR AND MINOR FIRES, (2) A SEISMIC EVENT, (3) A LOSS OF LOAD.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPHS 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE STATION HAVE NOT BEEN AFFECTED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED.

EWR-3728
WASTE EVAPORATOR LINE

THIS ENGINEERING WORK REQUEST (EWR) ADDRESSES THE MODIFICATION WHICH INVOLVES REPLACING AND REROUTING THE PIPING BETWEEN V1799E AND 1654A OUTSIDE THE HIGH RADIATION AREA.

A REVIEW HAS BEEN PERFORMED OF ALL EVENTS ANALYZED IN THE GINNA STATION UPDATED FINAL SAFETY ANALYSIS REPORT AND NRC IE CIRCULAR NO. 80-18. THE EVENTS RELATED TO THE MODIFICATION ARE:

A) RADIOACTIVE LIQUID WASTE SYSTEM LEAK OR FAILURE
B) FIRES
C) SEISMIC EVENTS

THE FOLLOWING ASSESSMENT IS MADE:

THE PROBABILITY OF RADIOACTIVE LIQUID WASTE SYSTEM LEAK OR FAILURE WILL NOT BE INCREASED SINCE THE MODIFICATION WILL MEET OR EXCEED PRESENTLY ESTABLISHED CRITERIA.

BASED ON THE REQUIREMENTS SPECIFIED IN SECTION 27.0 OF THE DESIGN CRITERIA, THE MODIFICATION WILL NOT INCREASE THE PROBABILITY OF OR THE EFFECTS OF A FIRE SINCE THE MATERIALS USED WILL MEET CRITERIA EQUAL TO OR GREATER THAN THOSE PRESENTLY INSTALLED.

THIS MODIFICATION IS NON-SAFETY RELATED BUT WILL BE SEISMICALLY SUPPORTED SO THAT IT DOES NOT AFFECT SAFETY RELATED EQUIPMENT. BASED ON NRC IE CIRCULAR NO. 80-18 AND NRC REG. GUIDE 1.143 THE NON-SEISMIC CLASSIFICATION IS ACCEPTABLE.

BASED UPON ALL THE ABOVE ANALYSES:

1) STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS ARE ADEQUATE.

2) MARGIN OF SAFETY DURING NORMAL OPERATING AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE STATION ARE NOT REDUCED.

BASED UPON A REVIEW OF THE UFSAR AND THE REQUIREMENTS OF GINNA STATION TECHNICAL SPECIFICATIONS, IT HAS BEEN CONCLUDED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN CONCLUDED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-3882
SIMULATOR BUILDING AND TRAINING CENTER ALARM PANEL

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION WHICH CONSISTS OF INSTALLING AN ALARM PANEL IN THE GUARDHOUSE, AND INSTALLING CONDUIT AND CABLE IN THE GUARDHOUSE AND THE SIMULATOR BUILDING. THE ALARM CIRCUITS WILL CONSIST OF EXISTING DIRECT BURIAL CABLE BETWEEN THE GUARDHOUSE AND TRAINING CENTER, NEW CABLE WILL BE INSTALLED BETWEEN THE TRAINING BUILDING SECURITY PANEL AND THE SIMULATOR BUILDING ALARM PANEL. POWER TO THE GUARDHOUSE ALARM PANEL WILL BE FROM THE EXISTING LIGHTING PANEL IN THE GUARDHOUSE WHICH IS FED FROM NON-CLASS 1E BUS 15. THE ADDITIONAL LOAD OF APPROXIMATELY 1-AMP WILL NOT DEGRADE BUS 15.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE: LOSS OF A.C. POWER, SEISMIC AND FIRE.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPHS 3.1 TO 4.5 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-3895
INSTALL STATES BLOCKS

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION WHICH WILL PROVIDE NEW SLIDING LINK TERMINAL BLOCKS TO SEVERAL "AGASTAT" TIME RELAYS. THE PURPOSE OF THESE NEW TERMINAL BLOCKS IS TO FACILITATE TESTING OF TIME RELAYS WITHOUT DISCONNECTING WIRES. THIS WILL ELIMINATE THE POSSIBILITY OF RECONNECTING WIRES INCORRECTLY AFTER RELAY TESTING.

DEVICES AFFECTED BY THIS MODIFICATION ARE:

1) EMERGENCY DIESEL GENERATOR 1A AND 1B
2) CIRCULATING WATER PUMP 1A AND 1B
3) FEEDWATER PUMP 1A AND 1B
4) 4160 VAC BUS 11A AND 11B
5) NO. 1 GENERATOR BACKUP RELAYS

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE INTERNAL AND EXTERNAL EVENTS, SPECIFICALLY FIRE AND EARTHQUAKE.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPH 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-3983
INSTRUMENTATION REROUTE FOR TORNADOES AND HELB

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE REROUTING OF REQUIRED INSTRUMENTATION CABLE WHICH MAY BE AFFECTED BY TORNADOES OR HIGH ENERGY LINE BREAKS.

IN THE NRC'S REVIEW OF PIPE BREAKS INSIDE CONTAINMENT IT WAS NOTED THAT SAFETY RELATED INSTRUMENTATION CABLE TRAYS AND CONDUIT PASSED WITHIN THE ZONE OF INFLUENCE OF BREAKS ON THE CVCS CHARGING AND LETDOWN LINES AND ACCUMULATOR "A" LEVEL TAP. IN THE EVENT OF A POSTULATED FAILURE OF THESE LINES, HOT OR COLD SAFE SHUTDOWN AND APPROPRIATE ACCIDENT MITIGATION INSTRUMENTATION SHOULD REMAIN AVAILABLE.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS REQUIRING ANALYSIS BY THE USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE 1) MAJOR AND MINOR FIRES, 2) A SEISMIC EVENT, 3) A HIGH ENERGY LINE BREAK (HELB), 4) A TORNADO, 5) A LOSS OF COOLANT ACCIDENT (LOCA).

BASED UPON THE ANALYSIS DESCRIBED UNDER PARAGRAPH 3.1 TO 4.4 OF THE SAFETY ANALYSIS IT HAS, THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE STATION HAVE NOT BEEN AFFECTED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES HAVE NOT BEEN AFFECTED.

EWR-3989
TURBINE BUILDING PRESSURIZATION

THE SCOPE OF EWR-3989 COVERS THE DETAILED ANALYSIS OF THE TURBINE BUILDING'S STRUCTURAL INTEGRITY AS WELL AS DESIGN AND INSTALLATION OF MODIFICATIONS THAT ARE REQUIRED AS A RESULT OF THIS ANALYSIS. TWO SPECIFIC DOUBLE ENDED PIPE RUPTURES WILL BE CONSIDERED IN THE ANALYSIS: A) A BREAK IN THE 20" FEEDWATER LINE DOWNSTREAM OF THE NUMBER 5 FEEDWATER HEATER, AND B) BREAK IN THE 12" MAIN STEAM DUMP LINE DOWNSTREAM OF THE 36" HEADER. THE ENERGY AND PRESSURE RELEASE AS A RESULT OF A PIPE RUPTURE IN ONE OR BOTH LOCATIONS LISTED ABOVE WILL EXCEED THE PRESENT STRUCTURAL INTEGRITY OF THE TURBINE BUILDING.

THE PROBLEM AND EFFECT OF HIGH ENERGY LINE BREAKS OUTSIDE OF THE CONTAINMENT BUILDING WERE ORIGINALLY REVIEWED IN 1973 UNDER EWR-1836. AT THAT TIME THE RESULTS OF THE ANALYSIS WERE 1) THE CONTROL BUILDING AND THE DIESEL GENERATOR BUILDING THAT COULD BE SEVERELY DAMAGED BY A PIPE RUPTURE AND INSTALLATION OF PRESSURE WALLS AT THE INTERFACES BETWEEN THESE BUILDINGS AND THE TURBINE BUILDING WOULD BE REQUIRED; 2) IT WAS RECOGNIZED THAT OTHER PORTIONS OF THE TURBINE BUILDING, SUCH AS AT THE WALL COMMON TO THE TURBINE AND INTERMEDIATE BUILDINGS COULD REQUIRE FURTHER ANALYSIS; AND 3) A MORE DETAILED ANALYSIS OF THE STRUCTURAL INTEGRITY OF THE TURBINE BUILDING, WITH REGARDS TO THE ENERGY LINE BREAKS WAS CALLED FOR, AS FAILURE OF THE TURBINE BUILDING COULD IMPACT THE INTER-CONNECTED SAFETY RELATED STRUCTURES.

INSTALLATION OF THE TWO PRESSURE WALLS WAS ACCOMPLISHED UNDER THE ORIGINAL EWR-1836. ANALYSIS AND MODIFICATION OF THE WALL COMMON TO THE INTERMEDIATE BUILDING AND TURBINE BUILDING IS BEING ACCOMPLISHED UNDER EWR-2846B.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE: PIPE BREAK IN THE TURBINE BUILDING, AND OPERATING BASIS AND SAFE SHUTDOWN EARTHQUAKES.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPHS 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-3992
VITAL AREA ANALYSIS SECURITY MODIFICATIONS

THE MODIFICATION CONSISTS OF INSTALLING A SECURITY ALARM SWITCH ON THE DOOR OF THE TURBINE BUILDING DC DISTRIBUTION PANEL LOCATED AT ELEVATION 253'.6" OF THE TURBINE BUILDING. THE REASON FOR THIS MODIFICATION IS TO COMPLY WITH AN RG&E COMMITMENT TO MODIFY THE PHYSICAL SECURITY PLAN PER THE LOS ALAMOS NATIONAL LABORATORY VITAL AREA ANALYSIS.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. EVENTS RELATED TO THIS MODIFICATION ARE SEISMIC.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPH 3.1 TO 4.5 OF THE SAFETY ANALYSIS, IT HAS BEEN DETERMINED THAT THIS MODIFICATION IS NOT REQUIRED TO B SEISMIC AND ITS FAILURE WILL NOT AFFECT SAFETY RELATED EQUIPMENT OR SAFETY RELATED STRUCTURES.

EWR 4040
DIESEL GENERATOR VAULT HUMIDITY

THE PURPOSE OF THIS MODIFICATION IS TO REDUCE THE EXISTING HUMIDITY LEVELS IN THE A AND B DIESEL GENERATOR VAULTS. THE STRUCTURAL/ELECTRICAL COMPONENTS WITHIN THE VAULT AREAS ARE DETERIORATING DUE TO HIGH HUMIDITY LEVELS. THIS MODIFICATION IS REQUIRED IN ORDER TO REDUCE THE ADVERSE EFFECTS OF THE EXISTING SPACE CONDITIONS. THIS MODIFICATION WILL HENCE IMPROVE EXISTING CONDITIONS.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS REQUIRING ANALYSIS BY NRC REGULATORY GUIDE 1.70. THE ONLY EVENTS RELATED TO THIS MODIFICATION ARE INTERNAL AND EXTERNAL EVENTS, SUCH AS FIRE, FLOODS, STORMS, AND EARTHQUAKES.

THE DESIGN CRITERIA REQUIRES THAT AN APPENDIX R CONFORMANCE VERIFICATION BE PERFORMED TO VERIFY THAT THIS MODIFICATION WILL NOT ADVERSELY AFFECT THE REQUIREMENTS OF APPENDIX R.

THIS MODIFICATION WILL NOT AFFECT ANY PREVIOUS ANALYSIS CONCERNING FLOODS OR STORMS. THIS IS A REQUIREMENT OF THE DESIGN CRITERIA.

THE DEHUMIDIFICATION SYSTEMS WHICH ARE REQUIRED TO BE INSTALLED UNDER THIS MODIFICATION ARE CLASSIFIED AS NON-SAFETY RELATED. THE EQUIPMENT IS NOT REQUIRED TO MAINTAIN FUNCTIONAL INTEGRITY FOLLOWING A SEISMIC EVENT. HOWEVER, THE EQUIPMENT WILL BE DESIGNED AND INSTALLED SUCH AS TO NOT ADVERSELY AFFECT ANY SAFETY-RELATED COMPONENTS OR STRUCTURES. THIS IS A REQUIREMENT OF THE DESIGN CRITERIA.

THEREFORE, THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND FOR THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED.

EWR-4057
FEEDWATER FLOW MEASUREMENT SYSTEM

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION CONSISTING OF THE INSTALLATION OF A FEEDWATER FLOW MEASUREMENT SYSTEM FOR MEASUREMENT OF ABSOLUTE FEEDWATER FLOW RATE. THE NEW FEEDWATER FLOW MEASUREMENT SYSTEM WILL MEASURE THE RATE OF FLOW THROUGH THE USE OF AN ULTRASONIC TECHNIQUE UTILIZING PULSES OF HIGH FREQUENCY SOUND ACROSS THE FLUID FROM ONE TRANSDUCER TO ANOTHER. THE PURPOSE OF THIS MODIFICATION WILL IMPROVE THE RELIABILITY OF THE FEEDWATER FLOW MEASUREMENT.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE:

A) LOSS OF NORMAL FEEDWATER
B) EXCESSIVE HEAT REMOVAL DUE TO FEEDWATER TEMPERATURE DECREASE
C) FEEDWATER PIPING BREAKER
D) SEISMIC AND FIRES

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPH 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-4072
ADDITION OF DYNAMIC DATA MANAGER TO RCP VIBRATION MONITORING SYSTEM

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION OF THE EXISTING RCP VIBRATION MONITOR. PRESENTLY THE EXISTING TCP VIBRATION MONITOR PROVIDES INDICATION OF ROTOR VIBRATION AMPLITUDE ONLY. IN ORDER TO TAKE ADVANCE OF ANALYTICAL METHODS FOR PREDICTING FAILURE AND DIAGNOSING DEGRADATION IN ROTATING MACHINERY. THE MONITOR MODULES WILL BE MODIFIED TO DIGITIZE, STORE, AND TRANSMIT DIAGNOSTIC VIRATION DATA TO THE HEWLETT-PACKARD 9816S COMPUTER. THIS DIAGNOSTIC DATA INCLUDES R5OTATIONAL SPEED AMPLITUDE AND PHASE ANGLE, MAXIMUM AND MINIMUM VALUES, AND DYNAMIC WAVE FORMS. THE EXISTING COMPUTER SHOFTWARE WILL PERMIT DYNAMIC AND STATIC VIBRATION DATA TO BE DISPLAYED IN THE FORM OF GRAPHIC PLOTS, ALARM LIGHTS, REPORTS, AND LOGS.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS RREQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE MAJOR AND MINOR FIRES.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPH 3.1 TO 4.4 OF THE SAFETY ANALYSIS. IT HAS, THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE STATION HAVE NOT BEEN AFFECTED.

EWR-4135
TDAFP D.C. LUBE OIL PUMP LOCAL CONTROL

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION OF MANUAL START CIRCUITRY FOR THE TURBINE DRIVEN AUXILIARY FEEDWATER PUMP (TDAFP) DC LUBE OIL PUMP. THE PURPOSE OF THIS MODIFICATION IS TO PROVIDE MANUAL START/STOP CAPABILITY OF THE DC LUBE OIL PUMP SHOULD A FIRE OCCUR IN ANY AREA OF THE PLANT REQUIRING LOCAL CONTROL OF THE TDAFP. THIS MODIFICATION IS REQUIRED TO COMPLY TO THE FIRE PROTECTION REQUIREMENTS OF THE APPENDIX R ALTERNATIVE SHUTDOWN REPORT.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE: 1) MAJOR AND MINOR FIRES, AND 2) A SEISMIC EVENT.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPH 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE STATION HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND FOR THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED.

EWR-4136
'A' DIESEL GENERATOR EMERGENCY CONTROL PANEL

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE MODIFICATION WHICH PROVIDES ISOLATION OF CONTROL CIRCUITS IN THE 'A' DIESEL GENERATOR ROOM AND SECONDLY, TO PROVIDE SUFFICIENT CONTROL FEATURES SO AS TO ALLOW LOCAL CONTROL OF THE 'A' DIESEL GENERATOR WHICH WILL SATISFY THE REQUIREMENTS ESTABLISHED BY THE APPENDIX R ALTERNATIVE SAFE SHUTDOWN SYSTEM REPORT REVISION 2.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE:

1) LOSS OF AC POWER TO STATION AUXILIARY DURING NORMAL CONDITIONS INCLUDING THOSE CONDITIONS IN THE APPENDIX R ANALYSIS,

2) LOSS OF DC CONTROL POWER,

3) MAJOR AND MINOR FIRE, AND

4) EVENTS OF FLOOD, STORM, OR EARTHQUAKE.

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPH 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-4138
APPENDIX R CHARGING PUMP D.C. FEED

THIS EWR ADDRESSES THE MODIFICATION WHICH WILL PROVIDE A BACKUP D.C. FEED FOR THE CHARGING PUMP 1A AS PART OF RG&E COMPLIANCE WITH APPENDIX R OF 10-CFR-50 IT IS NECESSARY TO ADD AN ALTERNATIVE D.C. FEED TO THE CHARGING PUMP 1A. THE NEW BACKUP D.C. FEED WILL INSURE THAT CHARGING PUMP A1 IS AVAILABLE FOR SERVICE AFTER FIRE IN THE CONTROL COMPLEX. A NEW TRANSFER SWITCH WILL ALSO BE PROVIDED WHICH WILL ISOLATE THE NORMAL D.C. FEED TO THE CHARGING PUMP1A PRIOR TO APPLYING THE BACKUP FEED.

EWR-4139, 4139A
APPENDIX R SPRINKLER AND FIRE DAMPER MODS

THIS ENGINEERING WORK REQUEST ADDRESSES THE INSTALLATION OF CLOSED HEAD, CLOSE-SPACED SPRINKLERS AROUND THE PERIMETERS OF THE TWO STAIRWELLS AND THE EQUIPMENT HATCH AT THE CEILING LEVEL OF THE MEZZANINE FLOOR. IN ADDITION, DUCT PENETRATIONS OF FIRE BARRIERS NEED TO BE PROTECTED AND THREE HOUR RATED DAMPERS WILL BE INSTALLED IN THE DUCT AT THE BARRIER FOR EACH OF THESE PENETRATIONS BETWEEN FIRE ZONES AMO, ABM, ABBM, AND CHG. THE DAMPERS WILL CLOSE AUTOMATICALLY AT A FIXED TEMPERATURE, PROVIDED THAT SYSTEM DIFFERENTIAL PRESSURE DOES NOT PRECLUDE DAMPER FUNCTIONALITY.

THIS MODIFICATION IS NECESSARY IN ORDER TO COMPLY WITH THE REQUIREMENTS OF 10CFR50 APPENDIX R, SECTION IIIG.2, AND APPENDIX R ALTERNATIVE SHUTDOWN SYSTEM REPORT, REVISION 2, DATED JANUARY 1985.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UPDATE UFSAR AND THE EVENTS REQUIRING ANALYSIS BY NRC REGULATORY GUIDE 1.70. THE ONLY EVENTS RELATED TO THIS MODIFICATION ARE INTERNAL AND EXTERNAL EVENTS, SUCH AS FIRE, FLOODS, STORMS, AND EARTHQUAKES.

THE EFFECTS OF A MAJOR FIRE(S) ON THE MARGINS OF SAFETY ARE ADDRESSED IN THE USNRC FIRE PROTECTION SAFETY EVALUATION REPORT. THIS MODIFICATION WILL NOT DEGRADE ANY EXISTING FIRE BARRIERS NOR WILL IT DEGRADE ANY EXISTING FIRE PROTECTION SYSTEMS OR COMPONENTS. THE MODIFICATION CONFORMS TO COMMITMENTS MADE, AND ARE THOSE NECESSARY TO ACHIEVE COMPLIANCE WITH APPENDIX R AND THEREBY ASSURE SAFE SHUTDOWN FOLLOWING ALL POSTULATED FIRES.

THIS MODIFICATION WILL NOT AFFECT ANY PREVIOUS ANALYSES CONCERNING FLOODS OR STORMS. POTENTIAL FLOODING OF THE RHR PUMPS SHALL NOT BE GREATER THAN EXISTING AS SPECIFIED IN THE DESIGN CRITERIA.

THE FIRE SUPPRESSION SYSTEM IS CLASSIFIED AS NON-NUCLEAR SAFETY CLASS BUT THE PIPING TO BE INSTALLED WILL BE DESIGNED SO THAT THE FAILURE DURING A SEISMIC EVENT WILL NOT CAUSE DAMAGE TO ANY SAFETY RELATED EQUIPMENT. THIS MODIFICATION WILL NOT DEGRADE EXISTING SEISMIC SYSTEMS OR STRUCTURES.

THE VENTILATION SYSTEM IS CLASSIFIED AS A NON-NUCLEAR SAFETY CLASS BUT THE FIRE DAMPER INSTALLATION WILL BE DESIGNED SO THAT FAILURE DURING A SEISMIC EVENT WILL NOT CAUSE DAMAGE TO ANY SAFETY RELATED EQUIPMENT. THIS MODIFICATION WILL NOT DEGRADE EXISTING SEISMIC SYSTEMS OR STRUCTURES.

RELOCATED ELECTRICAL CIRCUITS SHALL BE REINSTALLED SEISMIC CATEGORY I, HENCE THIS MODIFICATION WILL NOT DEGRADE EXISTING SEISMIC SYSTEMS OR STRUCTURES.

THEREFORE, THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND FOR THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED.

THE PROBABILITY OF OCCURRENCE AND THE CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY PREVIOUSLY EVALUATED IN THE SAFETY ANALYSIS REPORT ARE NOT INCREASED.

THE POSSIBILITY OF AN ACCIDENT OR MALFUNCTION OF A TYPE DIFFERENT FROM ANY PREVIOUSLY EVALUATED IN THE SAFETY ANALYSIS REPORT HAS NOT BEEN CREATED.

THE MARGIN OF SAFETY AS DEFINED IN THE BASIS FOR ANY TECHNICAL SPECIFICATION IS NOT REDUCED.

THEREFORE, THE PROPOSED MODIFICATION DOES NOT INVOLVE AN UNREVIEWED SAFETY QUESTION. NO CHANGES TO THE TECHNICAL SPECIFICATIONS ARE REQUIRED AS THE RESULT OF THE MODIFICATION TO MAINTAIN THE PRESENT MARGINS OF SAFETY.

EWR-4276
FLUX MAPPING SEISMIC RESTRAINT

THIS EWR (ENGINEERING WORK REQUEST) ADDRESSES THE WORK INVOLVES SEISMICALLY ANALYZING GINNA'S RESTRAINT OF THE FLUX MAPPING SYSTEM, AND PERFORMING MODIFICATIONS WHERE NECESSARY TO UPGRADE THE EXISTING STRUCTURE. THIS RESTRAIN SUPPORTS THE 10PATH TRANSFER DEVICES AND ISOLATION VALVES WHICH IS LOCATED DIRECTLY ABOVE THE SEAL TABLE.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE:

A) DECREASE IN REACTOR COOLANT INVENTORY DUE TO A SMALL LOCA

B) FIRES

C) SEISMIC EVENTS

BASED UPON THE ANALYSES DESCRIBED UNDER PARAGRAPH 3.1 TO 4.4 OF THE SAFETY ANALYSIS, IT HAS THEREFORE, BEEN DETERMINED THAT THE MARGIN OF SAFETY DURING NORMAL OPERATION AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE STATION ARE NOT REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEM AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS ARE ADEQUATE.

EWR 4330
FEEDWATER PUMP RECIRCULATION SYSTEM

THE PURPOSE OF THIS MODIFICATION IS TO IDENTIFY AND RESOLVE THE CAUSE OF DEGRADATION IN THE FEEDWATER PUMP RECIRCULATION SYSTEM. DEGRADATION HAS BEEN IDENTIFIED IN THE RECIRCULATION VALVES 4253 (CV-19), 4262 (CV-18) AND IN THE PIPING DOWNSTREAM OF THESE VALVES. DEGRADATION HAS ALSO BEEN FOUND IN SUPPORTS ON THE MAIN FEEDWATER RECIRCULATION AND FEEDWATER CLEANUP LINES ENCORED IN CONCRETE. EXCESSIVE IMPELLER WEAR IN THE MAIN FEED PUMPS HAS OCCURRED CONSISTENTLY.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE: LOSS OF NORMAL FEEDWATER AND HIGH ENERGY LINE BREAKS OUTSIDE CONTAINMENT.

MODIFICATION REQUIRED BY DESIGN CRITERIA WILL NOT INCREASE THE PROBABILITY OF A LOSS OF NORMAL FEEDWATER AND HIGH ENERGY LINE BREAKS OUTSIDE OF CONTAINMENT.

THE DESIGN AND MATERIALS USED IN THIS MODIFICATION WILL MEET APPENDIX "R" REQUIREMENTS BASED UPON 10CFR50 APPENDIX R AND ENGINEERING PROCEDURE AND WILL NOT INCREASE THE PROBABILITY OF A FIRE.

MODIFICATION TO THE FEEDWATER SYSTEMS WILL NOT DEGRADE PERFORMANCE OR FUNCTION OF ANY PLANT EQUIPMENT OR SYSTEM.

BASED UPON THE ABOVE ANALYSIS:

1) STRUCTURES, SYSTEMS AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS ARE ADEQUATE.

2) MARGIN OF SAFETY DURING NORMAL OPERATING AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE STATION ARE NOT REDUCED.

BASED UPON A REVIEW OF THE UFSAR AND THE REQUIREMENTS OF GINNA STATION TECHNICAL SPECIFICATIONS, IT HAS BEEN CONCLUDED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN CONCLUDED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR-4346
WIDE RANGE PRT PRESSURE INSTRUMENTATION

THIS ENGINEERING WORK REQUEST (EWR) ADDRESSES THE MODIFICATION TO THE WIDE RANGE PRESSURIZER RELIEF TANK (PRT) PRESSURE INSTRUMENTATION AND TO THE RCS WIDE RANGE PRESSURE INSTRUMENTATION.

EWR-4346 WILL REPLACE THE EXISTING P440 PRESSURE TRANSMITTER, SIGNAL PROCESSING, AND MAIN CONTROL BOARD (MCB) INDICATORS WITH MODERN INSTRUMENTS THAT ARE CAPABLE OF MONITORING PRT PRESSURE UP TO THE RATING OF THE PRT RUPTURE DISC (100 PSIG). EWR-4346 WAS WRITTEN IN RESPONSE TO HUMAN ENGINEERING DISCREPANCIES (HED) #0056 AND #0407. THE HEDS REQUIRE THE INSTALLATION OF A NEW WIDE RANGE PRT PRESSURE INDICATOR ON THE MCB BY JUNE 1988.

THE EXISTING PRT PRESSURE TRANSMITTER, INDICATORS, POWER SUPPLY, AND BISTABLES WILL BE REPLACED AND SCALED TO ACHIEVE THE NEW REQUIRED RANGE. SINCE THE PRT RUPTURE DISC RATING IS 100 PSIG, THE NEW PRT PRESSURE INSTRUMENTATION RANGE WILL BE 0 TO 150 PSIG TO ENSURE THAT THE PRT RUPTURE DISC RATING PLUS ANY ASSOCIATED UNCERTAINTIES ARE COMPLETELY ENVELOPED. ONE OF THE INDICATORS WILL BE RE-SCALED TO THE NEW WIDE RANGE SPAN AND THE OTHER WILL REMAIN A NARROW RANGE INSTRUMENT FOR MONITORING PRT PRESSURE UNDER NORMAL OPERATING CONDITIONS. THIS MODIFICATION WILL REQUIRE THE INSTALLATION OF NEW SCALING MODULES INTO AN INSTRUMENT RACK IN THE RELAY ROOM. THE PI-440A DISABLE SWITCH SHALL BE DELETED FROM THE PRT PRESSURE INSTRUMENTATION.

ALSO INCLUDED IN THE SCOPE OF THIS EWR IS THE INSTALLATION OF TWO NEW VERTICAL SCALE INDICATORS TO DISPLAY RCS WIDE RANGE PRESSURE ON THE MCB. PRESENTLY, RCS WIDE RANGE PRESSURE IS DISPLAYED ON STRIP CHART RECORDERS PR-420 AND PR-429 ON THE MCB FRONT, AND A VERTICAL SCALE INDICATOR ON THE REAR OF THE MCB. READABILITY OF THE EXISTING CHART RECORDERS IS POOR, THEREFORE, VERTICAL SCALE INDICATORS FOR DISPLAY OF RCS WIDE RANGE PRESSURE WILL BE ADDED TO THE FRONT OF THE MCB. THE INDICATOR ON THE MCB REAR WAS INSTALLED UNDER EWR-3067 (MINOR MOD) FOR USE WITH THE OVERPRESSURIZATION SYSTEM AND THE REACTOR HEAD VENT VALVES, AND SHALL REMAIN TO PERFORM THAT FUNCTION.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND EVENTS REQUIRING ANALYSIS BY USNRC REG. GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE 1) MAJOR AND MINOR FIRES, 2) A SEISMIC EVENT, 3) PIPE BREAKS INSIDE THE CONTAINMENT BUILDING.

THE FIRST EVENT CONSIDERED IS "MAJOR AND MINOR FIRES".

NEW WIRING AND CABLE MAY BE REQUIRED FOR THIS MODIFICATION WHICH COULD ADD TO THE FIRE LOADING OF THE PLANT, THEREFORE, THE DESIGN CRITERIA REQUIRES THAT ALL SUCH CABLE MEET THE IEEE-383-1974 FLAME TEST REQUIREMENTS. BECAUSE OF THIS THERE WILL BE NO SIGNIFICANT INCREASE OF FIRE LOADING CAUSED BY THIS MODIFICATION.

THIS MODIFICATION HAS BEEN REVIEWED TO ENSURE THAT FAILURE OF ANY ELECTRICAL CABLE INSTALLED AS A PART OF THIS MODIFICATION WILL NOT RESULT IN THE DISABLING OF VITAL EQUIPMENT NEEDED TO SAFELY SHUT DOWN THE PLANT DURING POSTULATED FIRES.

THUS, THE MODIFICATION NEITHER INCREASES THE CONSEQUENCES, NOR DOES IT REDUCE THE MARGINS OF SAFETY FOR "MAJOR AND MINOR FIRES".

THE SECOND EVENT CONSIDERED IS "A SEISMIC EVENT".

THE PRESSURE BOUNDARY PORTIONS OF THE PRT PRESSURE INSTRUMENTATION ARE DESIGNATED NON-SEISMIC CATEGORY I, HOWEVER, ANY MODIFICATION TO THIS SYSTEM WHOSE FAILURE COULD CAUSE DAMAGE TO SAFETY RELATED EQUIPMENT WILL BE DESIGNED TO MEET THE REQUIREMENTS OF USNRC REGULATORY GUIDE 1.29, REVISION C.2.

THE RCS WIDE RANGE PRESSURE INSTRUMENTATION IS DESIGNATED SEISMIC CATEGORY I. THE DESIGN CRITERIA REQUIRES THAT ALL NEW RCS WIDE RANGE PRESSURE INSTRUMENTATION BE QUALIFIED AND INSTALLED PER IEEE-344-1975, THEREFORE, A SEISMIC EVENT WILL NOT IMPACT THE PROPER OPERATION OF THE RCS WIDE RANGE PRESSURE INSTRUMENTATION.

THUS, THE MODIFICATION NEITHER INCREASES THE CONSEQUENCES, NOR DOES IT REDUCE THE MARGINS OF SAFETY FOR "A SEISMIC EVENT".

THE THIRD EVENT CONSIDERED IS "PIPE BREAKS INSIDE THE CONTAINMENT BUILDING".

THE NEW PRESSURE TRANSMITTER WILL INTERFACE WITH THE EXISTING 3/8 INCH PRT PRESSURE SENSING LINE IN THE SAME MANNER AS DOES THE EXISTING PRESSURE TRANSMITTER. THEREFORE THIS MODIFICATION DOES NOT INTRODUCE ANY NEW FAILURE MODES CONCERNING PIPE BREAKS INSIDE THE CONTAINMENT BUILDING.

THUS, THIS MODIFICATION NEITHER INCREASES THE CONSEQUENCES, NOR DOES IT REDUCE THE MARGINS OF SAFETY FOR "PIPE BREAKS INSIDE THE CONTAINMENT BUILDING".

IT HAS BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN DETERMINED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR 4543
PT-32.2 TEST CABLE INSTALLATION

THIS PROPOSED MODIFICATION WILL PROVIDE AN ALTERNATE CONTROL CABLE TO BE DEDICATED TO PORV TESTING CONTROL CIRCUITS. THE DEDICATED CABLE WILL CONNECT RACK R2 IN THE CONTROL ROOM TO THE NEW TEST BOX LOCATED NEAR THE TOP OF THE PRESSURIZER CUBICLE. SPECIFICALLY, EXISTING SPARE CIRCUITS R881 AND R882 WILL BE USED TO ACCOMPLISH THE REQUIRED CONNECTIONS. A NEW TEST BOX WILL BE INSTALLED AND ONE NEW THREE CONDUCTOR CABLE WILL BE INSTALLED TO ACHIEVE THE DESIRED TEST BOX LOCATION NEAR TOP OF PRESSURIZER. THE ADDITION OF THE TEST BOX SERVES TWO PURPOSES, ONE TO PROVIDE A CONVENIENT RECEPTACLE FOR PT-32.2 TEST LEADS AND IT WILL REDUCE THE CABLE RUN WITHIN CONTAINMENT.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS REQUIRING ANALYSIS BY NRC REGULATORY GUIDE 1.70. THE EVENTS RELATING TO THIS MODIFICATION ARE FIRE, SEISMIC AND SMALL LOCA EVENTS.

THE FIRST EVENT ANALYZED IS THE EFFECT OF A SEISMIC EVENT. THE ONLY HARDWARE ASSOCIATED WITH THIS MODIFICATION IS THE ANCHORAGE OF CONDUIT AND A TEST BOX NEAR TOP OF THE PRESSURIZER. THE PROPOSED TEST BOX AND CONDUIT WILL BE MOUNTED CONSISTENT WITH THE C2 REQUIREMENTS OF REGULATORY GUIDE 1.29. THUS THE CONSEQUENCES OF A FAILURE DUE TO A SEISMIC EVENT ARE MITIGATED.

THE SECOND EVENT ANALYZED IS THE EFFECT OF A FIRE ON THE PLANT DUE TO THIS MODIFICATION. THE CONTROL WIRING FOR THE CONNECTION BETWEEN THE R2 RACK IN THE CONTROL ROOM AND THE TEST BOX LOCATED AT THE PRESSURIZER CUBICLE IS REQUIRED TO MEET REQUIREMENTS OF IEEE STD 383-1984 FLAME TEST. THUS THERE IS NO SIGNIFICANT INCREASE IN THE FIRE LOADING DUE TO THIS MODIFICATION.

THE THIRD EVENT ANALYZED IS THE EFFECT OF A SMALL LOCA ON THE PLANT CAUSED BY AN INADVERTENT PORV OPERATION DUE TO THIS PROPOSED MODIFICATION. THIS PROPOSED MODIFICATION WILL NOT CONNECT THE TEST BOX TO THE PORV'S; THE ONLY TIME THE TWO WILL BE CONNECTED IS DURING SHUTDOWN WHEN TESTING AND TIMING OF PORV'S IS PERFORMED. THEREFORE, THE CONSEQUENCES OF A SMALL LOCA DUE TO THIS MODIFICATION ARE MITIGATED.

THEREFORE, BASED UPON THE ABOVE ANALYSIS, IT HAS BEEN DETERMINED THAT:

A) THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE STATION ARE NOT REDUCED AND

B) THE STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS ARE ADEQUATE.

EWR-4640
HU-1 TRANSFORMER DIFFERENTIAL RELAY MODIFICATION

THIS ENGINEERING WORK REQUEST (EWR) ADDRESSES THE MODIFICATION WHICH MODIFIES THE HU-1 DIFFERENTIAL RELAYS FOR TRANSFORMERS NO. 1, 11 AND 12A.

THE HU-1 RELAY MODIFICATION WILL LOWER THE THRESHOLD OF RESTRAINT FOR THE HARMONIC RESTRAINT UNIT FROM 15% TO 7.5%. A RESISTOR WILL BE CONNECTED IN PARALLEL WITH THE HARMONIC RESTRAINT UNIT OPERATE COIL (TOP UNIT), REDUCING THE POTENTIAL FOR SPURIOUS OPERATION RESULTING FROM INRUSH HARMONICS DURING ENERGIZATION.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION FSAR AND THE EVENTS REQUIRING ANALYSIS BY NRC REGULATORY GUIDE 1.70. THE EVENTS RELATED TO THIS MODIFICATION ARE FIRE AND EARTHQUAKE, LOSS OF OFFSITE POWER AND LOSS OF ELECTRICAL LOAD.

THIS MODIFICATION CONSISTS OF WIRING AND COMPONENT REPLACEMENT INTERNAL TO THE HU-1 RELAY CASE. THERE IS NO INCREASE IN COMBUSTIBLE MATERIAL AND NO INCREASED POTENTIAL FOR FIRE.

THIS MODIFICATION IS CLASSIFIED NON-1E WHICH IS CONSISTENT WITH THE CLASSIFICATION OF THE TRANSFORMERS AND THE EMERGENCY OFFSITE POWER SYSTEM. THIS MODIFICATION DOES NOT DEGRADE THE ABILITY OF THE RELAY TO PROVIDE ITS PROTECTION FUNCTION. THEREFORE, THE ABILITY OF CLASS 1E SYSTEM TO OPERATE PROPERLY DURING A SEISMIC EVENT WILL NOT BE IMPAIRED.

UPON LOSS OF ELECTRICAL LOAD, AUXILIARY LOADS ARE AUTOMATICALLY TRANSFERRED FROM THE 11 TO THE 12A TRANSFORMER. THE PURPOSE OF THIS MODIFICATION IS TO DECREASE THE POTENTIAL FOR INAPPROPRIATE OPERATION OF THE DIFFERENTIAL RELAY WHILE MAINTAINING THE ORIGINAL TRANSFORMER PROTECTION FUNCTION OF THE RELAY. THE CONSEQUENCE OF A FAILURE OF THE PROPOSED RESISTOR ADDITION HAS ALSO BEEN EVALUATED AND HAS BEEN DETERMINED TO BE NEGLIGIBLE. SPECIFICALLY, IF THE RESISTOR SHOULD OPEN, THE HU-1 RELAY WILL REVERT BACK TO A 15% RESTRAINT WHICH IS THE WAY THE RELAY OPERATED PRIOR TO THE MODIFICATION. THE CONSEQUENCES ASSOCIATED WITH THE RESISTOR SHORTING HAVE ALSO BEEN EVALUATED. IT HAS BEEN DETERMINED THAT SHORT WOULD PRECLUDE THE RELAY FROM OPERATING SPURIOUSLY. THIS IS AN ACCEPTABLE FAILURE MODE EVEN IF A DIFFERENTIAL OPERATION IS REQUIRED BECAUSE THE SYSTEM CONSISTS OF THREE SEPARATE HU-1 RELAYS AND ANY ONE OF WHICH WILL INITIATE A TRIP. THE MARGIN OF SAFETY, IN TERMS OF PROBABILITY OF LOSS OF OFFSITE POWER FROM INAPPROPRIATE RELAY OPERATION, IS INCREASED AND THE DESIGN ADEQUACY AS DOCUMENTED IN THE UFSAR IS NOT AFFECTED.

IT HAS BEEN DETERMINED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT WILL NOT BE REDUCED. THE ADEQUACY OF STRUCTURES, SYSTEMS AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND FOR THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

EWR 4657
UPGRADE OF SERVICE BUILDING STRUCTURAL TO SUPPORT PCM SHIELDING

THIS ENGINEERING WORK REQUEST (EWR) ADDRESSES THE STRUCTURAL UPGRADE OF THE SERVICE BUILDING TO SUPPORT PERSONNEL CONTAMINATION MONITOR(S) (PCM) SHIELDING. THE PROPOSED MODIFICATION WILL UPGRADE THE SERVICE BUILDING FLOOR STRUCTURAL TO PROVIDE THE NECESSARY ADDED STRENGTH REQUIRED TO RESIST THE ADDITIONAL LOAD DUE TO THE INSTALLATION OF LEAD SHIELDING AROUND THE PCM'S IN THE MEN'S DECONTAMINATION AREA.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY THE USNRC REGULATORY GUIDE 1.70.

SEISMIC EVENTS NEED NOT BE CONSIDERED FOR THIS EWR BECAUSE THE SERVICE BUILDING IS CLASSIFIED AS NON-SEISMIC. IN ADDITION, THE MODIFICATION WILL NOT REQUIRE THE REPOSITIONING OF INSTRUMENTATION, CONTROLS, OR OTHER COMPONENTS ASSOCIATED WITH SAFETY RELATED SYSTEMS.

ALL EXISTING FIRE PROTECTION FEATURES REQUIRED TO ASSURE COMPLIANCE WITH 10CFR50, APPENDIX R, OR TO MAINTAIN EQUIVALENT LEVELS OF PROTECTION FROM FIRES WILL BE MAINTAINED DURING AND FOLLOWING THE STRUCTURAL UPGRADE MODIFICATIONS.

REVISION 1 TO THIS DESIGN CRITERIA AND SAFETY ANALYSIS INCORPORATE CHANGES TO REFERENCE "RG&E UFSAR REVISION 2, DECEMBER 1986".

BASED ON THE EVALUATIONS ABOVE, THERE WILL BE NO CHANGES TO MARGINS OF SAFETY AND ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS WILL NOT BE DIMINISHED.

THE PROBABILITY OF OCCURRENCE OR THE CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY, PREVIOUSLY EVALUATED IN THE SAFETY ANALYSIS REPORT, WILL NOT BE INCREASED BY THE PROPOSED ADDITION.

THE POSSIBILITY OF AN ACCIDENT OR MALFUNCTION OF A DIFFERENT TYPE OTHER THAN ANY EVALUATED PREVIOUSLY ON THE SAFETY ANALYSIS REPORT WILL NOT BE CREATED BY THESE PROPOSED MODIFICATIONS.

EWR-4674
S.I. PUMP/MOTOR GANTRY HOIST

THIS ENGINEERING WORK REQUEST (EWR) ADDRESSES THE DESIGN AND INSTALLATION OF A PORTABLE LIFTING GANTRY HOIST ASSEMBLY FOR USE IN REMOVAL OF S.I. PUMPS AND/OR MOTORS FOR MAINTENANCE.

THIS DEVICE IS DESIGNED FOR EASY DISASSEMBLY WITH THE GANTRIES (SUPPORTING LEGS) BOLTED TO A MONORAIL AND TO THE CONCRETE FLOOR TO PROVIDE ANCHORAGE AND SUPPORT. IT WILL NORMALLY BY USED ONLY WHEN MAINTENANCE IS TO BE PERFORMED DURING A PLANT SHUTDOWN.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70.

SEISMIC EVENTS NEED NOT BE CONSIDERED FOR USE OF THIS GANTRY HOIST BECAUSE IT WILL NOT NORMALLY BE LEFT IN PLACE DURING POWER OPERATION. ADDITIONALLY IT IS DESIGNED AND FABRICATED TO BE ANCHORED TO THE FLOOR WHEN IN PLACE OVER ONE SAFETY INJECTION PUMP. THEREFORE, IT WILL NOT CREATE A HAZARD TO OTHER SAFETY- RELATED EQUIPMENT DURING ITS USE. BOTH THE GANTRIES AND THE MONORAIL THEY SUPPORT WILL BE REMOVED FOLLOWING MAINTENANCE ACTIVITIES.

USE OF THE HOIST WILL BE ADMINISTRATIVELY CONTROLLED UNDER MAINTENANCE WORK PROCEDURES OR UNDER THE TEMPORARY MODIFICATION CONTROL PROGRAM, A-1406.1, TO ENSURE 1) COMPLIANCE WITH TECHNICAL SPECIFICATION REQUIREMENTS AND 2) THAT ONLY ONE TRAIN OF EQUIPMENT IS AFFECTED BY ITS INSTALLATION.

BASED ON THE EVALUATIONS ABOVE, THERE WILL BE NO CHANGES TO MARGINS OF SAFETY AND ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS WILL NOT BE DIMINISHED.

THE PROBABILITY OF OCCURRENCE OR THE CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY, PREVIOUSLY EVALUATED IN THE SAFETY ANALYSIS REPORT, WILL NOT BE INCREASED BY THE PROPOSED USE OF THIS GANTRY HOIST.

THE POSSIBILITY OF AN ACCIDENT OR MALFUNCTION OF A DIFFERENT TYPE OTHER THAN ANY EVALUATED PREVIOUSLY ON THE SAFETY ANALYSIS REPORT WILL NOT BE CREATED BY THIS PROPOSED MODIFICATION.

TSR-88-08
FIRE PROTECTION YARD LOOP ISOLATION VALVES

THE TECHNICAL STAFF REQUEST (TSR) ADDRESSES THE MODIFICATION OF THE FIRE PROTECTION YARD LOOP TO INCLUDE NEW ISOLATION VALVES.

THE INSTALLATION OF SIX (6) ADDITIONAL SECTIONALIZING MANUAL GATE VALVES ON THE DOMESTIC WATER SYSTEM WILL PROVIDE SEGMENT ISOLATION WITHOUT TECHNICAL SPECIFICATION SYSTEM IMPAIRMENTS AND IMPROVE THE RELIABILITY OF THE DOMESTIC WATER SUPPLY SYSTEM.

A REVIEW HAS BEEN MADE OF ALL EVENTS ANALYZED IN THE GINNA STATION UFSAR AND THE EVENTS REQUIRING ANALYSIS BY USNRC REGULATORY GUIDE 1.70. THE PROPOSED MODIFICATION DOES NOT AFFECT THE PLANT TRANSIENTS AND ACCIDENTS DESCRIBED IN CHAPTER 15 OF THE UFSAR. THE MODIFICATION DOES RELATE TO THE PLANT DESIGN AS DESCRIBED IN CHAPTER 3 OF THE UFSAR. THE EVENTS RELATED TO THIS MODIFICATION ARE FIRES AND TORNADOS AND WIND LOADING.

THE FIRE PROTECTION YARD LOOP PROVIDES A BACKUP SOURCE OF COOLING WATER IN THE EVENT THAT SERVICE WATER IS LOST. IT PROVIDES A BACKUP AUXILIARY FEEDWATER SOURCE FOR THE CONDENSATE STORAGE TANKS FOR THE MOTOR DRIVEN AUXILIARY FEEDWATER OR TURBINE DRIVEN AUXILIARY FEEDWATER SYSTEM AND BACKUP FOR THE CONDENSATE SUPPLY TANK FOR THE STANDBY AUXILIARY FEEDWATER SYSTEM. IT CAN BE USED TO PROVIDE COOLING WATER TO THE EMERGENCY DIESEL GENERATORS IF ALL SERVICE WATER WERE TO BE LOST.

THE STANDBY AUXILIARY FEEDWATER SYSTEM PROVIDES DECAY HEAT REMOVAL FUNCTION IN THE EVENT OF A TORNADO STRIKE. OTHER METHODS ARE ASSUMED UNAVAILABLE. THE YARD LOOP CAN BE CONNECTED FOLLOWING DEPLETION OF THE 10,000 GALLON CONDENSATE SUPPLY TANK. IN THE EVENT THE SCREENHOUSE WERE LOST DUE TO TORNADO STRIKE, THE YARD LOOP CAN BE USED TO PROVIDE A BACKUP SOURCE OF AUXILIARY FEEDWATER FOR DECAY HEAT REMOVAL AND EMERGENCY DIESEL COOLING BY USE OF CONNECTIONS AVAILABLE IN THESE AREAS.

THE INSTALLATION OF THE ISOLATION VALVES WILL NOT AFFECT THE DESIGN OR OPERATION OF THE YARD LOOP FOR THE CASES DESCRIBED BECAUSE THE VALVES WILL BE USED FOR ISOLATION PURPOSED, ARE MANUAL VALVES, AND DO NOT AFFECT THE CONNECTIONS TO THE CONDENSATE SUPPLY TANK, CONDENSATE STORAGE TANKS, EMERGENCY DIESEL GENERATOR ROOM CONNECTIONS OR SERVICE BUILDING AUXILIARY FEEDWATER CONNECTION. OPERABILITY OF THE YARD SYSTEM WILL BE IMPROVED WITH THE INSTALLATION OF THE VALVES. THEREFORE, THE METHODS OF COMPLIANCE WITH THE APPENDIX R ALTERNATIVE SHUTDOWN SYSTEM IS NOT AFFECTED.

BECAUSE THE CONNECTIONS TO THE STANDBY AUXILIARY FEEDWATER CONDENSATE SUPPLY TANK, AUXILIARY FEEDWATER CONDENSATE STORAGE TANKS, AND EMERGENCY DIESEL GENERATOR PIPING IS NOT CHANGED, AND THE LOOP INTEGRITY WILL BE MAINTAINED THROUGH THE EXISTING TECHNICAL SPECIFICATION SURVEILLANCE AND OPERABILITY REQUIREMENTS, IT IS CONCLUDED THAT THE DESIGN OF STRUCTURES, SYSTEMS AND COMPONENTS PROVIDED FOR THE MARGIN OF SAFETY DURING NORMAL TRANSIENT CONDITIONS ANTICIPATED AND THE ADEQUACY OF THESE STRUCTURES, SYSTEMS AND COMPONENTS PROVIDED TO MITIGATE THE CONSEQUENCES OF ACCIDENTS IS NOT DECREASED.

THE PROBABILITY OF OCCURRENCE OF THE CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY, PREVIOUSLY EVALUATED IN THE SAFETY ANALYSIS REPORT, WILL NOT BE INCREASED BECAUSE THE CONNECTIONS PROVIDED FOR YARD LOOP TIE-INS ARE NOT AFFECTED AND, THEREFORE, PROCEDURAL REQUIREMENTS FOR THIS BACKUP SYSTEM WILL STILL BE MAINTAINED.

THE POSSIBILITY OF OCCURRENCE OF AN ACCIDENT OR MALFUNCTION OF A DIFFERENT TYPE THAN ANY TYPE PREVIOUSLY EVALUATED IN THE SAFETY ANALYSIS REPORT WILL NOT BE CREATED BECAUSE THE INTEGRITY OF THE YARD LOOP WILL BE MAINTAINED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION SURVEILLANCE AND OPERABILITY REQUIREMENTS.

THE MARGIN OF SAFETY AS DEFINED IN THE BASIS FOR ANY TECHNICAL SPECIFICATION WILL NOT BE REDUCED, BECAUSE THESE REQUIREMENTS ARE NOT BEING ALTERED BY THE MODIFICATION.

BASED UPON A REVIEW OF THE UFSAR AND THE REQUIREMENTS OF GINNA STATION TECHNICAL SPECIFICATIONS, IT HAS BEEN CONCLUDED THAT THE MARGINS OF SAFETY DURING NORMAL OPERATIONS AND TRANSIENT CONDITIONS ANTICIPATED DURING THE LIFE OF THE PLANT HAVE NOT BEEN REDUCED. IT HAS ALSO BEEN CONCLUDED THAT THE ADEQUACY OF STRUCTURES, SYSTEMS, AND COMPONENTS PROVIDED FOR THE PREVENTION OF ACCIDENTS AND THE MITIGATION OF THE CONSEQUENCES OF ACCIDENTS HAVE NOT BEEN AFFECTED BY THE IMPLEMENTATION OF THIS MODIFICATION.

SECTION B - COMPLETED STATION MODIFICATIONS (SMs)

This section contains a description of station modification procedures performed in the facility as described in the safety analysis report. Station modification procedures are written to complete a portion of an Engineering Work Request (EWR) identified by the same parent number. Station Modifications are reviewed by the Plant Operations Review Committee to ensure that no unreviewed safety questions or Technical Specification changes are involved with the procedure.

The basis for inclusion of an SM in this section is closure of the SM where portions of the parent EWR, in the form of other SMs or other documentation, remain to be completed.

SM-1594.5
REMOVAL OF REVERSE OSMOSIS (R.O.) TANK AND ASSOCIATED COMPONENTS FROM THE AUXILIARY BUILDING

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE REMOVAL OF THE REVERSE OSMOSIS TANK AND ASSOCIATED EQUIPMENT FROM THE AUXILIARY BUILDING.

SM-1594.10
SPENT FUEL POOL COOLING SYSTEM ELECTRICAL EQUIPMENT AND CONDUIT INSTALLATION

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF THE SPENT FUEL POOL COOLING SYSTEM ELECTRICAL EQUIPMENT, CONDUIT AND SUPPORTS.

SM-1594.12
FLUSH AND HYDROSTATIC TEST OF NEW SPENT FUEL POOL COOLING SYSTEM

THE PURPOSE OF THIS NEW PROCEDURE IS 1) TO CONTROL FLUSH AND HYDROSTATIC TESTING OF THE NEW SPENT FUEL POOL COOLING SYSTEM AND 2) PROVIDE INITIAL VALVE LINE-UP FOR EXISTING AND NEW SPENT FUEL POOL COOLING SYSTEMS.

SM-1594.13
SPENT FUEL POOL COOLING - SERVICE WATER SYSTEM FLUSH AND HYDROSTATIC TEST

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE FLUSH AND HYDROSTATIC TEST OF THE NEW SPENT FUEL POOL COOLING SYSTEM SERVICE WATER PIPING.

SM-2512.117
SEISMIC UPGRADE OF PIPE SUPPORTS - ANALYSIS LINE CS-150, CONTAINMENT SPRAY RISER SECTION IN CONTAINMENT

THE PURPOSE OF THIS NEW PROCEDURE IS TO DOCUMENT/DIRECT MODIFICATION OF CV SPRAY PIPING SUPPORTS IN CONTAINMENT.

SM-2512.119
STEAM GENERATOR LEVEL INSTRUMENTATION TUBING AND PIPING SUPPORTS

THE PURPOSE OF THIS PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF SUPPORTS FOR THE "A" STEAM GENERATOR LEVEL INSTRUMENTATION TUBING AND PIPING.

SM-2512.120
SERVICE WATER PIPING SUPPORT

THE PURPOSE OF THIS PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF A PIPING SUPPORT ON THE SERVICE WATER PUMP DISCHARGE PIPING.

SM-2512.121
SEISMIC UPGRADE OF PIPE SUPPORTS - ANALYSIS LINE SAFW,STANDBY AUXILIARY FEEDWATER BUILDING

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF THE STANDBY AUXILIARY FEEDWATER SUPPORTS A-TRAIN IN THE SAFW BUILDING.

SM-2512.122
SEISMIC UPGRADE OF PIPE SUPPORTS - ANALYSIS LINE SAFW-450-STANDBY AUXILIARY FEEDWATER BUILDING

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF STANDBY AUXILIARY FEEDWATER CROSSOVER PIPING SUPPORTS.

SM-2799.21
RVLMS RECALIBRATION TESTING

THE PURPOSE OF THIS PROCEDURE IS TO CONTROL THE TESTING OF RVLMS SYSTEM FOLLOWING RECALIBRATION.

SM-2831.1
BATTERY ROOM RACKS SEISMIC RESTRAINT MODIFICATION

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF BATTERY RACK 1A AND BATTERY RACK 1B SEISMIC RESTRAINT MODIFICATION.

SM-2846.1946
"A" MSIV SOLENOID PROTECTIVE STRUCTURE

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF THE "A" MSIV SOLENOID PROTECTIVE STRUCTURE.

SM-2846.1946A
"A" MSIV SOLENOID PROTECTIVE STRUCTURE DOOR AND SHIELD PLATES

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL INSTALLATION OF A DOOR AND SHIELD PLATES ON THE "A" MSIV PROTECTIVE STRUCTURE.

SM-3092.10
BORIC ACID PIPING UPGRADE PHASE 2 (BAPU) - MECHANICAL REMOVAL RECONSTRUCTION, AND RELOCATIONS

THE PURPOSE OF THIS NEW PROCEDURE IS TO DOCUMENT/DIRECT PIPING MODIFICATION BAPU - PHASE 2.

SM-3092.11
BORIC ACID PIPING UPGRADE - PHASE 2 PRE-OUTAGE ELECTRICAL

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF THE PRE-OUTAGE ELECTRICAL MODIFICATION FOR THE BORIC ACID PIPING UPGRADE - PHASE 2.

SM-3092.12
BORIC ACID PIPING UPGRADE PHASE II (BAPU) ELECTRICAL REMOVALS, RECONSTRUCTION, AND RELOCATIONS

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL 1) THE REMOVALS, RE-INSTALLATION, AND TURNOVER OF HEAT TRACE ZONES AND ASSOCIATED ELECTRICAL EQUIPMENT, 2) THE DETERMINATION, RETERMINATION, TESTING, AND TURNOVER OF SPECIFIC MOTOR-OPERATED VALVES (MOVs).

SM-3092.13
BORIC ACID PIPING UPGRADE (BAPU) PHASE II HEAT TRACT TESTING

THE PURPOSE OF THIS PROCEDURE IS TO CONTROL THE TESTING AND TURNOVER OF THE BORIC ACID PIPING UPGRADE (BAPU) PHASE II HEAT TRACE SYSTEM.

SM-3296.2046
INSTALLATION OF AUXILIARY BUILDING BACKDRAFT DAMPERS AND STATIONARY LOUVERS

THE PURPOSE OF THIS NEW PROCEDURE IS TO PROVIDE BACK DRAFT PROTECTION TO PREVENT DAMAGE TO THE AUXILIARY BUILDING OUTER SHELL DURING TORNADO WIND CONDITIONS.

SM-3319.57
MCC-1C/15M THERMAL OVERLOAD HEATER REPLACEMENT

THE PURPOSE OF THIS NEW PROCEDURE IS TO PROVIDE INSTRUCTIONS FOR THERMAL OVERLOAD HEATER REPLACEMENT AT MCC-1C/15M FOR MOV-1815A.

SM-3319A.1
PHASE ROTATION CHECK PRIOR TO BREAKER CHANGEOUT ON MCC-1B, 1C, 1D, 1E, 1F, AND 1K

THE PURPOSE OF THIS PROCEDURE IS TO PERFORM A DOCUMENTED SURVEY OF PHASE ROTATION ON BREAKERS TO BE REPLACED DURING THE 1988 OUTAGE. ALSO, THE PHASE ROTATION AT THE FIELD TERMINATIONS FOR THE BORIC ACID EVAPORATOR PACKAGE AND THE

AUXILIARY BUILDING LIGHTING TRANSFORMER 1B WILL BE DOCUMENTED.

SM-3319A.7
PHASE ROTATION CHECK PRIOR TO BREAKER CHANGEOUT AT MCC-1F

THE PURPOSE OF THIS NEW PROCEDURE IS TO DOCUMENT THE PHASE ROTATION AT BREAKERS, PRIOR TO REPLACEMENT AT MCC-1F.

SM-3755.2
P.O.R.V. BLOCK VALVE REPLACEMENT - MECHANICAL.

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE MECHANICAL INSTALLATION REQUIRED FOR THE NEW PORV BLOCK VALVES MOV-515 AND MOV-516.

SM-3768.4
CONTAINMENT PENETRATION COOLING SYSTEM - PIPING AND INSTRUMENT TUBING MODIFICATIONS

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION, TESTING, AND TURNOVER OF PIPING AND INSTRUMENT TUBING ASSOCIATED WITH THE PENETRATION COOLING SYSTEM UPGRADE.

SM-3797.7
MRPI SYSTEM TROUBLESHOOTING AND REPAIR

THE PURPOSE OF THIS PROCEDURE IS TO CONTROL THE TROUBLESHOOTING, INSTALLATION, TESTING, AND TURNOVER OF PROBLEMS FOUND DURING OPERATION OF THE MRPI SYSTEM. THIS INCLUDES CORRECTING THE 130 KHZ OSCILLATION, MODIFYING THE DATA CABINET CARDS, AND INSTALLING TIME DELAYS ON THE ROD DROP RELAYS.

SM-3881.3
BORIC ACID TANK OVERLFOW PIPING MODIFICATION

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF THE BORIC ACID TANK OVERFLOW PIPING MODIFICATION.

SM-3881.5
MOV-897 AND MOV-898 FUNCTIONAL TESTING

THE PURPOSE OF THIS NEW PROCEDURE IS TO PROVIDE INSTRUCTIONS TO PERFORM THE FUNCTIONAL TESTING OF NEW MOV-897 AND 898.

SM-3986.22
APPENDIX R FIRE WRAP - SUPPORT UPGRADE

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION OF FIRE WRAP ON CONDUIT SUPPORTS.

SM-3986.23
STRUCTURAL STEEL MODIFICATION FOR FIRE WRAP

THE PURPOSE OF THIS PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF THE MODIFICATION TO THE INTERMEDIATE BUILDING STRUCTURAL STEEL AND HANDRAIL, TO ALLOW FOR INSTALLATION OF APPENDIX R FIRE WRAP.

SM-4037.2
S.P.I.N.G. TO P.P.C.S. INTERFACE LINK

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION, TESTING, AND TURNOVER OF THE SPING/PPCS INTERFACE WIRING AND ASSOCIATED COMPONENTS.

SM-4068.7
R.M.S. PUMP ANNUNCIATOR

THE PURPOSE OF THIS PROCEDURE IS FOR THE R.M.S. ANNUNCIATOR HOOKUP INSTALLATION.

SM-4075.5
INSTALLATION OF ELECTRIC HEATING COILS IN THE T.S.C. HVAC SYSTEM

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION OF ELECTRICAL HEATING COILS, AND ASSOCIATED COMPONENTS IN THE T.S.C. HVAC SYSTEM.

SM-4282.1
CV RECIRCULATION FAN CONDENSATE COLLECTOR LEVEL ELECTRICAL MODIFICATION

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF CABLES, CONDUITS, AND INSTRUMENTATION FOR THE CV RECIRCULATION FAN CONDENSATE COLLECTOR LEVEL SYSTEM.

SM-4526.18
D/G FUEL OIL SYSTEM DAY TANK LEVEL INST. CONDUIT RUN LOCATION

THE PURPOSE OF THIS NEW PROCEDURE IS TO INVESTIGATE CONDUIT ROUTING FOR THE D/G FUEL OIL SYSTEM MODIFICATION EWR-4526.

SM-4526.19
D/G INSTRUMENT TUBING SUPPORTS

THE PURPOSE OF THIS NEW PROCEDURE IS TO INSTALL TEMPORARY SEISMIC SUPPORTS ON THE DIESEL GENERATOR INSTRUMENT TUBING.

SM-4554.2
4A AND 4B FEEDWATER HEATERS REPLACEMENT

THE PURPOSE OF THIS NEW PROCEDURE IS TO PERFORM 4A AND 4B LP FEEDWATER HEATERS REPLACEMENT.

SM-4618.2
PRE-OPERATIONAL TESTING OF THE MAIN FEEDWATER PUMP ROOM VENTILATION SYSTEM

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE TESTING AND TURNOVER OF THE MAIN FEEDWATER PUMP ROOM NEW VENTILATION SYSTEM.

SM-4638.1
GENERATOR SURGE CAPACITORS AND NEUTRAL TRANSFORMER REPLACEMENT

THE PURPOSE OF THIS PROCEDURE IS TO CONTROL THE INSTALLATION AND TURNOVER OF REPLACEMENT OF THE MAIN GENERATOR SURGE CAPACITORS AND NEUTRAL TRANSFORMER.

SM-4761.2
MOV 857A AND 857B POWER SUPPLY SWAPOVER FUNCTIONAL TEST

THE PURPOSE OF THIS NEW PROCEDURE IS TO CONTROL THE TESTING AND TURNOVER OF THE MOV 857A AND 857B POWER SUPPLY SWAPOVER MODIFICATION.

SECTION C - TEMPORARY BYPASS OF SAFETY FUNCTION, STRUCTURE FEATURES, SHIELDING, AND FLUID SYSTEM FEATURES

This section contains descriptions and summaries of safety evaluations of temporary changes pursuant to the requirements of 10 CFR 50.59(b).

CATEGORY 3.3.5

REVIEWED

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: [signature] DATE: 10-7-88 REQUEST #: 88-68

JUMPER WIRE ☒ LIFTED WIRE ☐ FUSES PULLED ☐ STATES BLOCK ☒ OTHER ☐

FUNCTION "B" Accumulator Level Temporary Recorder. Connecting test point to recorder.

PURPOSE Install Temporary wire from RCS-2/TP-935 to Recorder for Trending Purposes of Acc. Level

LOCATION: Relay Room RCS-2 ~~Terminal RCS-2 5-10, 11 20.~~ 935 TP.

SAFETY EVALUATION REQUIRED: ☒ YES ☐ NO SKETCH ATTACHED: ☐ YES ☐ NO

PORC DATE (IF REQUIRED): 10-7-88

TECHNICAL MANAGER: [signature] for J.A. WIDAY DATE: 10-7-88

SHIFT SUPERVISOR: [signature] DATE: 10/7/88

INSTALLATION

DATE & TIME 10-7-88 11:47

ENTERED IN OFFICIAL LOG: [signature]

NUMBER OF TAGS INSTALLED: 1

INSTALLED BY: [signature]

VERIFIED BY: Charles J. Kain

REMOVAL

DATE & TIME: 10/18/88

ENTERED IN OFFICIAL LOG: [signature]

NUMBER OF TAGS REMOVED: 1

REMOVED BY: D. Fisher

VERIFIED BY: [signature]

REVIEW (AS NECESSARY)

MAR 2 - 1989

CENTRAL RECORDS
QA
DISPOSITION - 5 YRS.

Attach additional page(s) as necessary

AND THE COMMITTEE HAS DETERMINED THAT NO TECHNICAL SPECIFICATION CHANGES OR VIOLATIONS WERE INVOLVED AND THERE ARE NO UNREVIEWED SAFETY QUESTIONS. THE FOLLOWING DOCUMENTATION IS PROVIDED AS JUSTIFICATION FOR COMPLIANCE WITH 10 CFR 50.59. REFERENCES: GINNA STATION QA MANUAL JUSTIFICATION: THE MDH ELECTROMETER SUPPLEMENTS OUR CURRENTLY APPROVED LEVEL II TEST EQUIPMENT FOR CALIBRATION OF SOURCES. THIS INSTRUMENT WAS PURCHASED IN COMPLIANCE WITH SECTION VII OF THE QA MANUAL AND IS USED IN COMPLIANCE WITH SECTION VIII OF THE MANUAL. THIS ITEM IS COMPLETE.

3.3.0-88-116-002 ST-88.2 88-4391

RCS LEAKAGE DETERMINATION OF 10/7/88
THE PROC. SPEC. PRESENTED THIS NEW PROCEDURE:
THE PURPOSE OF THIS NEW PROCEDURE IS TO MEET PORC APPROVED GUIDANCE FOR SUCH TESTS. THE COMMITTEE REVIEWED THE PROCEDURE STEP BY STEP AND RECOMMENDED APPROVAL OF THIS NEW PROCEDURE. THE ABOVE ITEM WAS REVIEWED BY THE COMMITTEE WITH RESPECT TO THE TECHNICAL SPECIFICATIONS AND THE COMMITTEE HAS DETERMINED THAT NO TECHNICAL SPECIFICATION CHANGES OR VIOLATIONS WERE INVOLVED AND THERE ARE NO UNREVIEWED SAFETY QUESTIONS. THE ST PROCEDURE INCLUDES SAFETY ANALYSIS TO COMPLY WITH 50.59- SEE RECORD CATEGORY 4.22. THIS ITEM IS COMPLETE.

9.0 OTHER DISCUSSION

9.1.0-88-116-001

THE REACTOR ENGINEER PRESENTED A SAFETY EVALUATION FOR BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL NUMBER 88-68. THE JUMPER CONTROL WILL CONNECT A RECORDER TO THE TEST POINTS OF THE ACCUMULATOR LEVEL TRANSMITTER LT-935. THIS TEMPORARY CONNECTION WILL NOT CREATE AN UNREVIEWED SAFETY QUESTION AS DEFINED IN 10CFR50.59. THIS ITEM IS COMPLETE.

ALL OF THE ABOVE ITEMS WERE REVIEWED BY THE COMMITTEE WITH RESPECT

TO THE TECHNICAL SPECIFICATIONS AND THE COMMITTEE HAS DETERMINED THAT NO TECHNICAL SPECIFICATION CHANGES OR VIOLATIONS WERE INVOLVED IN THE CHANGES AND THERE ARE NO UNREVIEWED SAFETY QUESTIONS.

THE CHAIRMAN ADJOURNED THE MEETING.

for Lori Van Hoozer
JOYCE WRIGHT
PORC SECRETARY

APPROVED BY: S. M. Spector
S. M. SPECTOR
SUPERINTENDENT

K. Nassauer
K. NASSAUER
QC ENGINEER

CATEGORY 3.3.5

REVIEWED ~~[illegible]~~

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: M. Meleca DATE: 10-13-88 REQUEST #: 88-70

JUMPER WIRE ☐ LIFTED WIRE ☒ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☐

FUNCTION PT # 19 (T-39) FOR "A" TRAIN INCORE T/C DISPLAY

PURPOSE LIFT WIRES ON TB-T2A TERMINALS #5 (T-39/D7-) AND #6 (T-39/D7+)

LOCATION: REAR OF INCORE T/C RACK

SAFETY EVALUATION REQUIRED: ☒ YES ☐ NO SKETCH ATTACHED: ☒ YES (T/C MAP) ☐ NO

PORC DATE (IF REQUIRED): 10-18-88

TECHNICAL MANAGER: [signature] for [signature] DATE: 10-18-88

SHIFT SUPERVISOR: [signature] DATE: 11-3-88

INSTALLATION		REMOVAL	
DATE & TIME	11-3-88 1044	DATE & TIME:	8/11/89 1402
ENTERED IN OFFICIAL LOG:	[signature]	ENTERED IN OFFICIAL LOG:	[signature]
NUMBER OF TAGS INSTALLED:	1	NUMBER OF TAGS REMOVED:	1
INSTALLED BY:	Charles J. Kirin	REMOVED BY:	[signature]
VERIFIED BY:	[signature]	VERIFIED BY:	[signature]

REVIEW (AS NECESSARY)

RECEIVED
AUG 11 1989
~~CENTRAL RECORDS~~
QA
DISPOSITION - 5 YRS.

Attach additional page(s) as necessary

49-142 Rev. 2/88

SAFETY EVALUATION SUMMARY FORM

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

~~PROCEDURE~~ # ~~#~~

~~PCN~~ # N/A

DATE 10-17-88

Exclusion from Screening Criteria - Items 1, 2, or 6

If "yes" is answered for items 1 or 2, provide the type of "inconsequential change" or the referenced 10CFR50.59 safety evaluation below:

If "no" is answered for Item 6, provide basis for exclusion below:

Basis for Exclusion: N/A

10CFR50.59 Safety Evaluation - Item 7

If "no" has been answered for each question in items 7a through 7g this change is not an Unreviewed Safety Question. Document the justification for these conclusions below. List material referenced in the space provided as appropriate.

Written Justification: The thermocouples are not required for safety per section 7.7.2.6.4.3 and 7.7.4 of the UFSAR, however, technical specification table 3.5-3 requires 4 thermocouples per quadrant. By jumpering thermocouple D7, more than four thermocouples are operable in all quadrants. No Unreviewed safety question exists as defined in section 10CFR50.59.

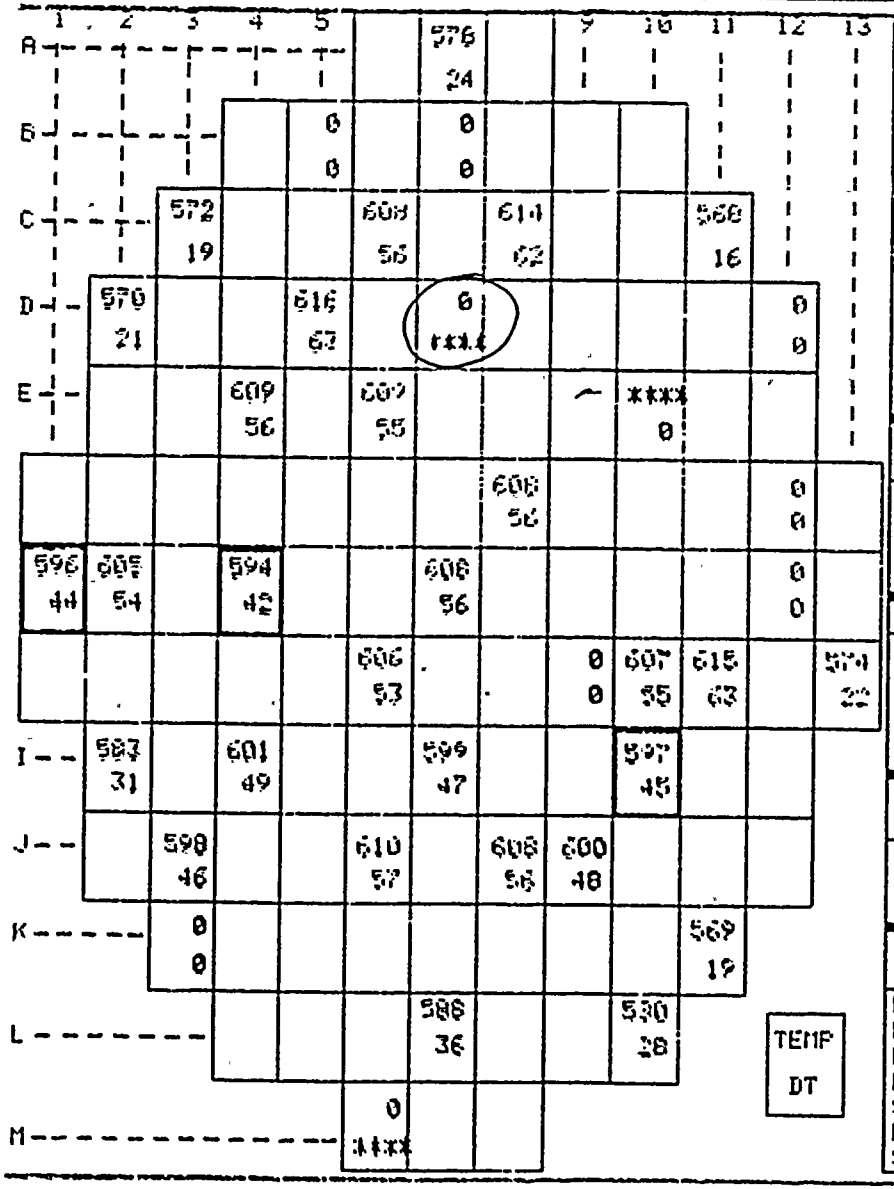
Referenced Material: Technical Specification table 3.5-3
UFSAR Section 7.7.4 & 7.7.2.6.4.3

If "yes", PORC shall review and approve this submittal, and this proposed change is an Unreviewed Safety Question (USQ) and requires submittal to the NRC for their review.

Submitted By: S. T. Adam

SELECT FUNC, KEY OR TURN-ON CODE TC : [redacted]

OCT 17,1988
08:58:23



SUBCOOLED MARGINS		INCORE TCs	AVG	MAX
HEAT	54 °F	HEAD	596	597
CORE	35 °F	CORE	596	616
THOTA	49 °F			
THOTB	53 °F	TSAT 651		

RCS WIDE RANGES	LOOP A	LOOP B	
FLOW	98.5	97.8	%
PRESS	2213	2217	PSIG
THOT	602.8	597.9	°F
TCOLD	554.3	549.6	°F
DTT-TC	48.5	48.3	°F
TAVG	578.5	573.9	°F

RCS NARROW RANGES	LOOPA	LOOPB	AVG	
DT	55.4	56.1	55.8	°F
TAVG	574.2	573.8	574.0	°F
TREF			573.3	°F
TAVG-TREF DEVI			1.0	°F

PRESSURIZER			REACTOR VESSEL LEVEL
LEVEL	48.8	%	
PRESS	2242	PSIG	
STM T	640	°F	
WTR T	650	°F	101.2% A
SURGE	649	°F	100.7% B

PRESSURIZER RELIEF TANK		
LEVEL	71.2	PORV431 CLOSED
PRESS	1.9	
TEMP	89.6	PORV430 CLOSED

STEAM GENERATOR	LOOP A	LOOP B	
LVLWIDE	278	270	INCH
LVLWIDE	53.8	52.0	%
LEVEL	51.8	52.2	%
PRESS	713	713	PSIG
SF	3229	3138	KLB/H
FF	3304	3248	KLB/H
SF-FF	-89	-114	KLB/H

F1=CLEAR F2= F3=[illegible] F4= F5= F6=
PREV CANC 1 4 CF =NORMAL MODE=ON LINE CPUA.

CATEGORY 3.3.5

REVIEWED _____

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: [signature] DATE: 11/14/88 REQUEST #: 88-71

JUMPER WIRE ☐ LIFTED WIRE ☑ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☐

FUNCTION PT #1 FOR "A" TRAIN INCORE T/C DISPLAY T/C #T2 LOC.#M6

PURPOSE LIFT WIRES ON TB-T2A TERMINALS #1 & #3 (T2/M6 + AND T2/M6 - RESPECTIVELY)

LOCATION: REAR OF INCORE T/C RACK

SAFETY EVALUATION REQUIRED: ☒ YES ☐ NO SKETCH ATTACHED: ☐ YES ☒ NO
TC MAP ATTACHED

PORC DATE (IF REQUIRED): 11/16/88

TECHNICAL MANAGER: [signature] DATE: 11/16/88

SHIFT SUPERVISOR: [signature] DATE: 11-18-88

INSTALLATION	REMOVAL
DATE & TIME 11/18/88 @ 1054	DATE & TIME:
ENTERED IN OFFICIAL LOG: [signature]	ENTERED IN OFFICIAL LOG;
NUMBER OF TAGS INSTALLED: 1	NUMBER OF TAGS REMOVED:
INSTALLED BY: D. Parker	REMOVED BY:
VERIFIED BY: [signature]	VERIFIED BY:

REVIEW (AS NECESSARY)

WIRES TO BE LIFTED IN ACCORDANCE WITH CP-14, PCN # 88T-1061

Attach additional page(s) as necessary

SAFETY EVALUATION SUMMARY FORM

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

~~PROCEDURE~~ # _____

PCN # N/A

DATE 11-15-88

Exclusion from Screening Criteria - Items 1, 2, or 6

If "yes" is answered for items 1 or 2, provide the type of "inconsequential change" or the referenced 10CFR50.59 safety evaluation below:

If "no" is answered for Item 6, provide basis for exclusion below:

Basis for Exclusion: N/A

10CFR50.59 Safety Evaluation - Item 7

If "no" has been answered for each question in items 7a through 7g this change is not an Unreviewed Safety Question. Document the justification for these conclusions below. List material referenced in the space provided as appropriate.

Written Justification: The thermocouples are not required for Safety per section 7.7.2.6.4.3 and 7.7.4 of the UFSAR, however, technical specification table 3.5-3 requires 4 thermocouples per quadrant. By jumpering thermocouple N16, more than four thermocouples are operable in all quadrants. No unreviewed safety question exists as defined in section 10CFR50.59.

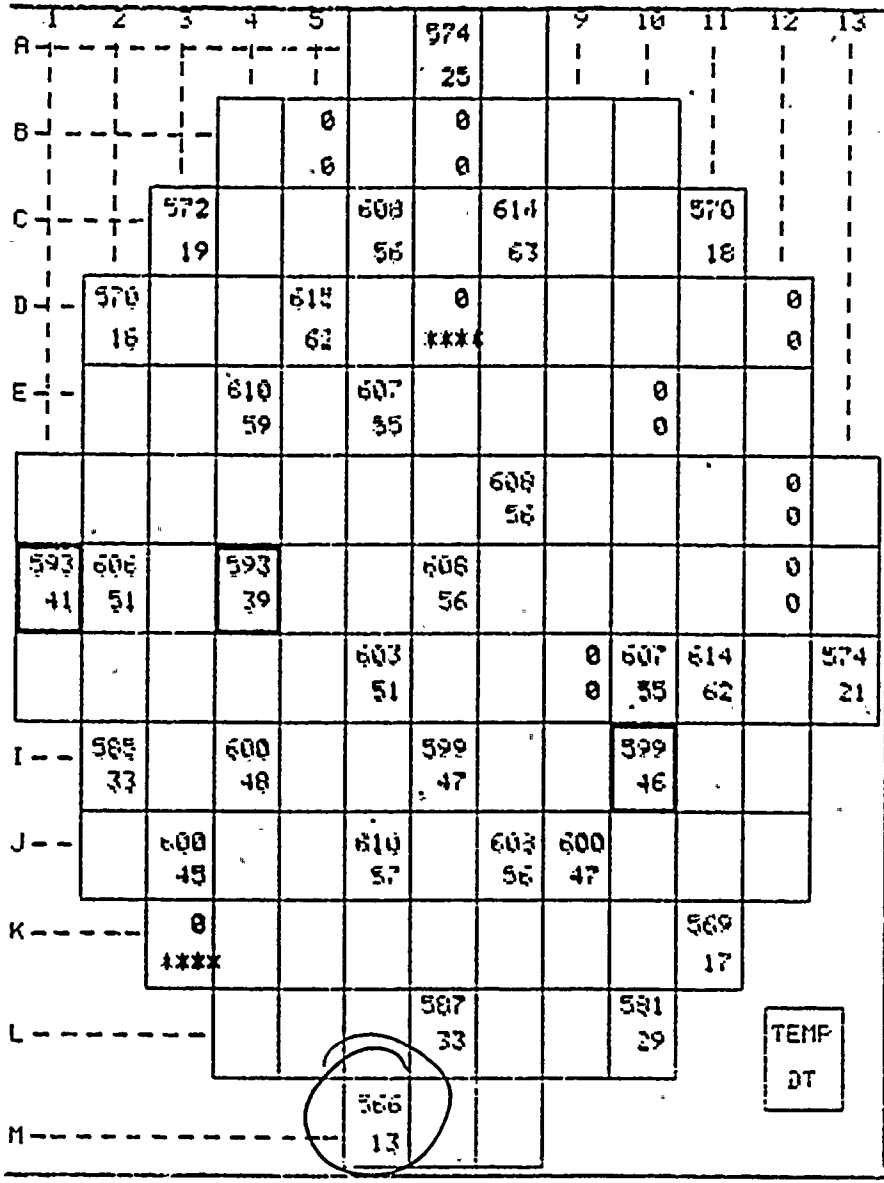
Referenced Material: Tech Spec. table 3.5-3, UFSAR Section 7.7.4 & 7.7.2.6.4.3

If "yes", PORC shall review and approve this submittal, and this proposed change is an Unreviewed Safety Question (USQ) and requires submittal to the NRC for their review.

Submitted By: [signature]

SELECT FUNC. KEY OR TURN-ON CODE TC : [redacted]

NOV 15,1988
09:06:31



SUBCOOLED MARGINS		INCORE TCs	AVG	MAX
HEAD	53 °F	HEAD	595	599
CORE	37 °F	CORE	595	615
THOTA	54 °F			
THOTB	53 °F	TSAT	651	

RCS WIDE RANGES	LOOP A	LOOP B	
FLOW	98.5	98.0	%
PRESS	2212	2218	PSIG
THOT	597.5	598.6	°F
TCOLD	555.6	549.6	°F
DTTH-TC	41.9	49.0	°F
TAVG	576.6	574.1	°F

RCS NARROW RANGES	LOOPA	LOOPB	AVG	
DT	55.1	55.4	55.2	°F
TAVG	574.2	573.8	574.0	°F
TREF			573.2	°F
TAVG-TREF DEVI			1.0	°F

PRESSURIZER			REACTOR VESSEL LEVEL
LEVEL	50.0	%	
PRESS	2240	PSIG	
STM T	640	°F	
WTR T	651	°F	100.8% A
SURGE	650	°F	100.4% B

PRESSURIZER RELIEF TANK		PORV431 CLOSED
LEVEL	72.5	
PRESS	2.8	PORV430 CLOSED
TEMP	85.2	

STEAM GENERATOR	LOOP A	LOOP B	
LVLWIDE	277	269	INCH
LVLWIDE	53.5	51.9	%
LEVEL	51.8	52.1	%
PRESS	718	716	PSIG
SF	3179	3118	KLB/H
FF	3291	3261	KLB/H
SF-FF	-113	-146	KLB/H

F1= F2= F3= F4= F5= F6=

CONSOLE=NORMAL MODE=ON LINE CPUA

CATEGORY 3.3.5

REVIEWED

REFERENCE PROCEDURE
A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: Richard M. Daly DATE: 12-28-88 REQUEST #: 88-73

JUMPER WIRE ☐ LIFTED WIRE ☒ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☐

FUNCTION ALARM FUNCTION J-31

PURPOSE LIFT WIRE TO ISOLATE ALARM FUNCTION ~~TB3-1~~ TB4-1 Point B
ONLY FOR A BATTERY. REFER TO PT 10.3 STEP 6.6.1

LOCATION: A BATTERY ROOM VITAL BATTERY MONITOR

SAFETY EVALUATION REQUIRED: ☒ YES ☐ NO per ATTACHED 10 CFR 50.59 SKETCH ATTACHED: ☐ YES ☒ NO

PORC DATE (IF REQUIRED):

TECHNICAL MANAGER: [signature] for STEVE ADAMS DATE: 12-28-88

SHIFT SUPERVISOR: [signature] DATE: 12-28-88

INSTALLATION	REMOVAL
DATE & TIME 12-28-88 1615	DATE & TIME:
ENTERED IN OFFICIAL LOG; [signature]	ENTERED IN OFFICIAL LOG;
NUMBER OF TAGS INSTALLED: 1 Tag	NUMBER OF TAGS REMOVED:
INSTALLED BY: R. Leubner	REMOVED BY:
VERIFIED BY: Richard M. Daly	VERIFIED BY:

REVIEW (AS NECESSARY)

Attach additional page(s) as necessary

SAFETY EVALUATION SUMMARY FORM

PROCEDURE # A-1402
PCN # N/A
DATE 12-28-88

Exclusion from Screening Criteria - Items 1, 2, or 6

If "yes" is answered for items 1 or 2, provide the type of "inconsequential change" or the referenced 10CFR50.59 safety evaluation below:

If "no" is answered for Item 6, provide basis for exclusion below:

Basis for Exclusion: WIRE BEING LIFTED AS PER A-1402 BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL HAS BEEN REVIEWED PREVIOUSLY FOR SAFETY CONCERNS IN PROCEDURE PT-10.3 (REFER TO STEP 6.6.1)

10CFR50.59 Safety Evaluation - Item 7

If "no" has been answered for each question in items 7a through 7g this change is not an Unreviewed Safety Question. Document the justification for these conclusions below. List material referenced in the space provided as appropriate.

Written Justification:

Referenced Material:

If "yes", PORC shall review and approve this submittal, and this proposed change is an Unreviewed Safety Question (USQ) and requires submittal to the NRC for their review...

Submitted By: [signature]

CATEGORY 3.3.5

REVIEWED

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: Jeff Jones DATE: 1-21-89 REQUEST #: 89-02

JUMPER WIRE ☐ LIFTED WIRE ☐ FUSES PULLED ☐ STATES BLOCK ☒ OTHER ☐

FUNCTION Stop Valve Test Solenoid

PURPOSE Prevent Stop valves from shuting due to signals caused by noise

LOCATION: Turbine (west end)(SVY#S9L)(SVY#S9R)

SAFETY EVALUATION REQUIRED: ☒ YES (see attached) ☐ NO SKETCH ATTACHED: ☐ YES ☒ NO

PORC DATE (IF REQUIRED): N/A (Repeat request)

TECHNICAL MANAGER: [signature] DATE: 1-21-89

SHIFT SUPERVISOR: [signature] DATE: 1-21-89

INSTALLATION	REMOVAL
DATE & TIME 1/21/89 1437	DATE & TIME:
ENTERED IN OFFICIAL LOG: [signature]	ENTERED IN OFFICIAL LOG:
NUMBER OF TAGS INSTALLED: 2	NUMBER OF TAGS REMOVED:
INSTALLED BY: [signature]	REMOVED BY:
VERIFIED BY: John Deane	VERIFIED BY:

REVIEW (AS NECESSARY) See attached review for jumper 88-72. This is a repeat request, there are no operating restrictions placed

[signature]

ONE VALVE AT A TIME JAD

Attach additional page(s) as necessary

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION:	DATE: 10-5-87	PAGE 1 OF 1
JOB: North Stop Valve Test Solenoid	MADE BY: J.G. Widay	

J.G. Widay 12-88

References: Westinghouse Instruction Book 1250-C660

Solenoid-operated valve

This valve is used for remote closing of the valve for periodic tests of valve stem freedom. When energized, it dumps the stop-throttle valve emergency trip fluid for that particular valve thereby causing the dump valves to function.

The attached request will determine the wiring from the existing solenoid on the North/South Stop Valves to prevent inadvertent operation. Since the provides no other operational or safety function, no safety significant results. Based on the above, the requested change will not:

1) Result in a change to the facility or its operation as described in the UFSAR
2) Provide a change to the Plant Technical Specifications
3) Involve an Unreviewed Safety Question

J. G. Widay

RECEIVED
REFERENCE PROCEDURE

49-142 Rev. 4/85

CATEGORY 3.3.5

REVIEWED

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: JEFF JONES DATE: 2/27/89 REQUEST #: 89-06

JUMPER WIRE ☒ LIFTED WIRE ☐ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☐

FUNCTION PLACE MOMENTARY JUMPER ACROSS TERMINAL BLOCK TSA TERM #4 AND TSC TERM #6 (LOCATED INSIDE MCB)

PURPOSE TO LIGHT ANNUNCIATOR L-12 (SEE PRINTS 10905-47) MCB RIGHT REAR SECTION

LOCATION: MCB

SAFETY EVALUATION REQUIRED: ☒ YES ☒ NO SKETCH ATTACHED: ☐ YES ☐ NO

PORC DATE (IF REQUIRED): N/A 2.28.89

TECHNICAL MANAGER: [signature] DATE: 2-28-89

SHIFT SUPERVISOR: [signature] DATE: 2-28-89

INSTALLATION	REMOVAL
DATE & TIME 2-28-89 1330	DATE & TIME: 2-28-89 1335
ENTERED IN OFFICIAL LOG: [signature]	ENTERED IN OFFICIAL LOG: [signature]
NUMBER OF TAGS INSTALLED: 0	NUMBER OF TAGS REMOVED: 0
INSTALLED BY: [signature]	REMOVED BY: [signature]
VERIFIED BY: [signature]	VERIFIED BY: [signature]

REVIEW (AS NECESSARY) Follow precaution & limits of procedure A-52 for installation of jumper. Test alarm with alarm test button following removal of jumper. JF

MAR 2 - 1989

CENTRAL RECORDS
QA
DISPOSITION - 5 YRS.

Attach additional page(s) as necessary

CATEGORY 3.3.5

REVIEWED _____

REFERENCE PROCEDURE
A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: JEFF JONES DATE: 3-13-89 REQUEST #: 89-07

JUMPER WIRE ☐ LIFTED WIRE ☐ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☒

FUNCTION TO PROVIDE RVLMS "B TRAIN" WITH CORE EXIT TC INPUT

PURPOSE TO PROVIDE TC "I7" AS AN INPUT TO RVLMS IN LIEU OF THE FAILED "J9" INPUT

LOCATION: MCB - TC RACK (TIB-9 TIB-10)

SAFETY EVALUATION REQUIRED: ☒ YES ☐ NO SKETCH ATTACHED: ☐ YES ☐ NO

PORC DATE (IF REQUIRED): 3-13-89

TECHNICAL MANAGER: Thomas T. Cobbs DATE: 3-13-89

SHIFT SUPERVISOR: [signature] DATE: 3-13-89

INSTALLATION	REMOVAL
DATE & TIME 3/13/89 1532	DATE & TIME:
ENTERED IN OFFICIAL LOG: [signature]	ENTERED IN OFFICIAL LOG:
NUMBER OF TAGS INSTALLED: 1	NUMBER OF TAGS REMOVED:
INSTALLED BY: [signature]	REMOVED BY:
VERIFIED BY: [signature]	VERIFIED BY:

REVIEW (AS NECESSARY)

Attach additional page(s) as necessary

10CFR50.59 Safety Evaluation for the Bypass of Safety Function and Jumper Control for the 'B' train RVLMS

The Reactor Vessel Level Monitoring System (RVLMS) is used to trend coolant inventory within the reactor vessel during all phases of plant operation, including postaccident conditions and during slowly developing transients. The RVLMS uses input signals of 6 core exit thermocouples (CETs), cold leg temperature, RCS wide range pressure, reactor coolant pump status, safety injection status, and RHR status. These inputs are necessary for an accurate reactor vessel inventory output.

Because of the failure of incore thermocouple J9, the B train of RVLMS is inoperable. To regain operability of the B train RVLMS, incore thermocouple I-7 will be jumpered to provide an input into the B train calculation. This thermocouple (I7) meets the original design basis for thermocouple J9 because:

1. This thermocouple is located on the 'B' train of the CET System
2. This thermocouple is located in the same quadrant as thermocouple J9.

By using thermocouple I7 as an input to RVLMS, 'B' train, the probability or the consequence of an accident previously identified in the UFSAR will not be increased. The function of thermocouple J9 and I7 are identical and will not adversely impact the 'B' train of RVLMS.

An accident of a different type other than the accidents evaluated in Chapter 15 of the UFSAR will not be created by altering the feed to RVLMS from thermocouple J9 to thermocouple I7. RVLMS will function the same with I7 as an input as when J9 were providing the incore thermocouple

The margin of safety as defined in any technical specification basis will not be reduced by changing the incore thermocouple feed from location J9 to I7. This change will allow the 'B' train of ~~RVLIS~~ RVLMS to remain operable.

References: UFSAR sections 7.3.2.3, 7.6.5, 15
Technical Specifications 3.5

CATEGORY 3.3.5

REVIEWED

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: J. JONES DATE: 3/14/89 REQUEST #: 89-08

JUMPER WIRE ☐ LIFTED WIRE ☒ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☐

FUNCTION PT #4 (T-10) FOR "B" TRAIN INCORE T/C DISPLAY

PURPOSE LIFT WIRES ON TB-T1B TERMINALS #7 (T-10/J9+) AND #8 (T-10/J9-), T/C SIDE

LOCATION: MAIN CONTROL ROOM - REAR OF INCORE T/C RACK

SAFETY EVALUATION REQUIRED: ☒ YES ☐ NO SKETCH ATTACHED: ☒ YES ☐ NO

PORC DATE (IF REQUIRED): March 14, 1989

TECHNICAL MANAGER: John C Cook for STEVE ADAMS DATE: 03/14/89

SHIFT SUPERVISOR: Richard Fitts FOR DATE: 3-14-89

INSTALLATION	REMOVAL
DATE & TIME 3/14/89 1452	DATE & TIME:
ENTERED IN OFFICIAL LOG: K Griffin	ENTERED IN OFFICIAL LOG;
NUMBER OF TAGS INSTALLED: 1	NUMBER OF TAGS REMOVED:
INSTALLED BY:	REMOVED BY:
VERIFIED BY: James T. Street	VERIFIED BY:

REVIEW (AS NECESSARY)

① Install wire jumper (lifted leads) on TB-T1B terminal
#7 (T-10/J-9+) JC
#8 T-10/J-9-) JC

② Verify reading on TC panel indicates zero (9999) JC

③ Notify Shift Supervisor that TC J-09 has been jumpered. JC

④ Using CP-14, reconnect thermocouple J-09 following corrective maintenance. JC

⑤ Notify Shift Supervisor TC J-09 has been returned to service.

Attach additional page(s) as necessary

FIGURE 2

SAFETY EVALUATION SUMMARY FORM Bypass of Safety Function and Jumper Control

PROCEDURE # _____

DATE _____

PCN # _____

Exclusion from Screening Criteria - Items 1, 2, or 6

If "yes" is answered for Items 1 or 2, provide the type of "inconsequential change" or the referenced 10CFR50.59 safety evaluation below:

Change Type: _____

If "no" was answered for Item 6, provide the basis for exclusion below:

Basis for Exclusion: _____

10CFR50.59 Safety Evaluation - Item 7

If "no" has been answered for each question in items 7a through 7g this change is not an Unreviewed Safety Question. Document the justification for these conclusions below. List any material referenced in the space provided.

Written Justification: The thermocouples are not required for safety per section 7.7.2.6.4.3 and 7.7.4 of the UFSAR. However Tech Spec Section 3.5-3 requires 4 thermocouples per quadrant. By jumpering thermocouple T-09 (or more than one) the thermocouples per quadrant are operable. No unreviewed safety question existed as defined in 10CFR 50.59

Referenced Material: Tech Specification Section 3.5 Table 3.5-3; UFSAR Section 7.7.4 and 7.7.2.6.4.3

If "yes" was answered for Item 3, check this box [ ]

If "yes", was answered for Item 7, PORC shall review and approve this submittal. This proposed change is an Unreviewed Safety Question (USQ) and requires submittal to the NRC for their review.

Submitted By: _____

CATEGORY 3.3.5
REVIEWED DHP

REFERENCE PROCEDURE
A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: DAVE MILLER DATE: 3/21/89 REQUEST #: 89-14

JUMPER WIRE ☒ LIFTED WIRE ☐ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☐

FUNCTION TEMPORARY FEED - D.C. VOLTAGE FROM SPARE FUSE BLOCK

PURPOSE TO SUPPLY D.C. CONTROL VOLTAGE FOR THE PURPOSE OF TESTING THE PRIDE OVEREXCITATION RELAY.

LOCATION: MCB RIGHT REAR - LABELED SPARE 125V/DC CONTROL.

SAFETY EVALUATION REQUIRED: ☒ YES ☐ NO SKETCH ATTACHED: ☐ YES ☐ NO

PORC DATE (IF REQUIRED): 3-22-89

TECHNICAL MANAGER: [signature] DATE: 3-22-89

SHIFT SUPERVISOR: [signature] DATE: 3-22-89

INSTALLATION	REMOVAL
DATE & TIME 3/22/89 1411	DATE & TIME: 3/22/89 5/26/89 1411
ENTERED IN OFFICIAL LOG: [signature]	ENTERED IN OFFICIAL LOG: [signature]
NUMBER OF TAGS INSTALLED: 1	NUMBER OF TAGS REMOVED: 1
INSTALLED BY: E. Weber	REMOVED BY: E. Weber
VERIFIED BY: [signature]	VERIFIED BY: [signature]

REVIEW (AS NECESSARY) 6 Amp fuse to be installed in spare fuse block

RECEIVED
AUG 11 1989
CENTRAL RECORDS
QA
DISPOSITION - 5 YRS

Attach additional page(s) as necessary

10CFR 50.59 EVALUATION FOR JUMPER TO DC CONTROL VOLTAGE

The purpose of this jumper is to supply DC voltage for relay testing. The dc feed will be provided from a labeled spare 125 V/dc control. This feed will be fused to provide worker protection in addition to protection against ~~backfeed~~ excessive current draw in case of a short circuit. The plant is currently at cold/refueling shutdown and this jumper will be removed prior to leaving cold shutdown conditions.

This jumper will not increase the probability or the consequence of an accident previously evaluated in the UFSAR. The jumper will be fused to provide protection of existing equipment and will be removed prior to leaving the cold shutdown condition.

This jumper will not create an accident which is different than the accidents previously evaluated in the UFSAR. The jumper will be removed prior to leaving the cold shutdown condition.

The margin of safety as defined in any technical specification basis will not be decreased by the installation of the jumper. The jumper will be removed prior to leaving cold shutdown. The fuses will provide protection of existing equipment.

Since the spare fuse block will be replaced to it's original condition, and is not functional during plant operation, no additional post installation testing is required.

A. T. Cahill
3-22-89

CATEGORY 3.3.5

REVIEWED

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: Jeff Jones DATE: 4/3/89 REQUEST #: 89-23

JUMPER WIRE ☐ LIFTED WIRE ☐ FUSES PULLED ☒ STATES BLOCK ☐ OTHER ☐

FUNCTION Fuses Removed on bistable to prevent spurious Alarms

PURPOSE To Prevent spurious CCW Low ALARMS while CCW Flow is Throttled To Low Flow

LOCATION: SA Rack Bistable FC-619B

SAFETY EVALUATION REQUIRED: ☑ YES ☐ NO SKETCH ATTACHED: ☐ YES ☒ NO

PORC DATE (IF REQUIRED): 4-5-89

TECHNICAL MANAGER: [signature] DATE: 4-5-89

SHIFT SUPERVISOR: [signature] DATE: 4-5-89

INSTALLATION	REMOVAL
DATE & TIME 4/5/89 1250	DATE & TIME:
ENTERED IN OFFICIAL LOG: [signature]	ENTERED IN OFFICIAL LOG:
NUMBER OF TAGS INSTALLED: 1	NUMBER OF TAGS REMOVED:
INSTALLED BY: [signature]	REMOVED BY:
VERIFIED BY: [signature]	VERIFIED BY:

CP-619

REVIEW (AS NECESSARY) Fuses must be reinstalled prior to use of the RHR system for core cooling. When the fuses are reinstalled, the alarm must be reset per CP-619.

Attach additional page(s) as necessary

ROCHESTER GAS AND ELECTRIC CORPORATION

49-169

GINNA STATION:	DATE:	PAGE OF
JOB: 10 CFR 50.59 EVALUATION	MADE BY:	

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL
TO BYPASS THE LOW FLOW ALARM FOR CCW.

With the core off-loaded into the Spent Fuel Pit, the RHR System has been taken out of service for maintenance. Maintenance is also being performed on the RHR and CCW heat exchangers. The CCW system is only supplying small loads such as the Waste Evaporator package. This plant condition has set up a low flow and has created an alarm "chatter" of the CCW low flow alarm.

The purpose of the Low flow alarm is to alert the operator of a potential problem with cooling to the RHR heat exchangers. This alarm function is not needed for the current system configuration and will be required to be operable prior to reinstating the RHR system for core cooling.

By pulling the fuses to this alarm relay, the probability or consequences of occurrence of an accident previously evaluated in the UFSAR will not be increased. Since the fuel is removed from the core and the RHR heat exchangers are not needed for core cooling, accidents evaluated in the UFSAR will not be affected by the removal of the CCW alarm.

By pulling the fuses to this alarm, the possibility of an accident of a different type will not be increased. The CCW flow alarm only provides a function to alert the operators of problems with the CCW system when the RHR heat exchangers are in use or considered operable.

The margin of safety as defined in the basis for any technical specification will not be reduced by elimination of this alarm at the present plant condition. This alarm does not provide a function at the present plant condition of a complete fuel unload.

STEVEN T. ADAMS
TECHNICAL MANAGER

Ref: UFSAR Section 9.2.2.4
Tech Specs. 3.3.3

CATEGORY 3.3.5

REVIEWED

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: T. Jones DATE: 6-13-89 REQUEST #: 89-40

JUMPER WIRE ☐ LIFTED WIRE ☑ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☐

FUNCTION Lift wires From Bad Incore T/C's To Incore T/C cabinet Incore rack-4

PURPOSE To Remove BAD T/C's From SCAN T/C's # B05, D12, F12, G12, H09, J03, L10, and M06

LOCATION: Control Room, INCORE T/C PANEL, REAR

SAFETY EVALUATION REQUIRED: ☑ YES* ☐ NO SKETCH ATTACHED: ☑ YES ☐ NO

PORC DATE (IF REQUIRED):

TECHNICAL MANAGER: for STEVE ADAMS DATE: 6-13-89

SHIFT SUPERVISOR: DATE: 6-13-89

INSTALLATION	REMOVAL
DATE & TIME 6/13/89 1444	DATE & TIME:
ENTERED IN OFFICIAL LOG; RV	ENTERED IN OFFICIAL LOG;
NUMBER OF TAGS INSTALLED: 8	NUMBER OF TAGS REMOVED:
INSTALLED BY:	REMOVED BY:
VERIFIED BY:	VERIFIED BY:

REVIEW (AS NECESSARY)

REQUIRED 4 T/C's PER CORE QUADRANT WILL BE MAINTAINED. I/C WILL CONFIRM RVLIS NOT AFFECTED.

* See evaluations for previous forms 88-70 and 88-71.

Attach additional page(s) as necessary

CATEGORY 3.3.5

REVIEWED

REFERENCE PROCEDURE A-1402

ROCHESTER GAS AND ELECTRIC
GINNA STATION

BYPASS OF SAFETY FUNCTION AND JUMPER CONTROL

JOB FOREMAN: Jeff Jones DATE: 11/29/89 REQUEST #: 89-46

JUMPER WIRE ☐ LIFTED WIRE ☒ FUSES PULLED ☐ STATES BLOCK ☐ OTHER ☐

FUNCTION Lift wires for BAD T/C. (D7) to INCORE T/C READ out (T.39) ckt sol. R378T TB. T2A 5+6

PURPOSE To Remove BAD T/C from SCAN

LOCATION: Control Room, INCORE T/C PANEL REAR

SAFETY EVALUATION REQUIRED: ☒ YES ☒ NO SKETCH ATTACHED: ☒ YES ☒ NO

PORC DATE (IF REQUIRED): 12-6-89

TECHNICAL MANAGER: [signature] DATE: 11-30-89

SHIFT SUPERVISOR: [signature] DATE: 12-11-89

INSTALLATION	REMOVAL
DATE & TIME 12/11/89 1309	DATE & TIME:
ENTERED IN OFFICIAL LOG: N	ENTERED IN OFFICIAL LOG:
NUMBER OF TAGS INSTALLED: 1	NUMBER OF TAGS REMOVED:
INSTALLED BY: [signature]	REMOVED BY:
VERIFIED BY: [signature] [signature]	VERIFIED BY: [signature]

REVIEW (AS NECESSARY) Ensure 4 thermocouples per quadrant are maintained and ~~post this thermocouple is not an~~ input to RVLIS.

Attach additional page(s) as necessary

10CFR50.59 Safety Evaluation
for lifting wire for Thermocouple D07

The indications for TC D07 are inconsistent with the response of other related core parameters (i.e. incore flux map & nearby thermocouple indications). Thermocouples are used to sense core outlet temperature, determine relative fuel assembly power and compensate RVLIS. Since TC D07 is not consistent with either incore or other thermocouples it has been declared inoperable. It has been deleted from processing in PPCS. To remove it from the averaging circuit at the thermocouple panel requires lifting its lead. The panel will then sense an open TC and remove it from averaging.

With TC D07 inoperable the minimum requirement per Tech. Specs. of 4 thermocouples per quadrant is met. TC D07 is not used to compensate RVLIS. The functions of the thermocouple system as described in the UfSAR are fulfilled. Therefore, neither the probability nor the consequences of an accident or malfunction evaluated in the UFSAR is increased. The possibility of a new accident or malfunction is not created. The margin of safety defined in Tech. Specs. is not reduced.

References: Tech. Specs. 3.5.3, UFSAR Section 7.7.4

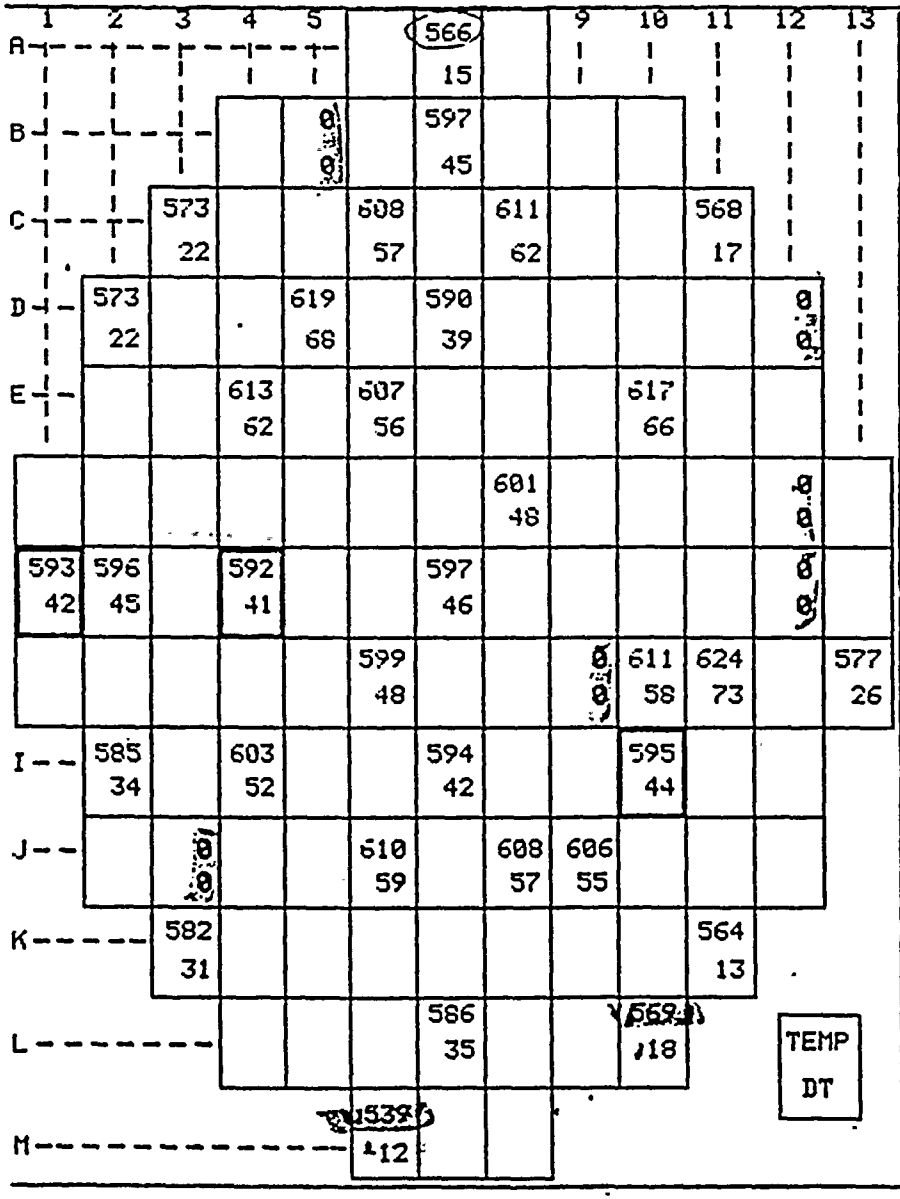
Jeffrey P. Wayland
11/30/89

PORC Approval: 12-6-89

Consistent

SELECT FUNC. KEY OR TURN-ON CODE

JUN 13,1989
08:36:26



SUBCOOLED MARGINS		INCORE TCs	AVG	MAX
HEAD	58 °F	HEAD	593	595
CORE	39 °F	CORE	594	624
THOTA	57 °F			
THOTB	56 °F	TSAT	653	

RCS WIDE RANGES	LOOP A	LOOP B	
FLOW	98.7	98.2	%
PRESS	2245	2230	PSIG
THOT	596.2	597.3	°F
TCOLD	553.0	549.0	°F
DTTH-TC	43.4	48.2	°F
TAVG	574.6	573.2	°F

RCS NARROW RANGES	LOOPA	LOOPB	AVG	
DT	55.4	55.4	55.4	°F
TAVG	573.0	573.7	573.3	°F
TREF			573.0	°F
TAVG-TREF DEVI			.5	°F

PRESSURIZER			REACTOR VESSEL LEVEL
LEVEL	49.0	%	
PRESS	2241	PSIG	
STM T	640	°F	
WTR T	647	°F	100.3% A
SURGE		°F	101.9% B

PRESSURIZER RELIEF TANK		PORV431 CLOSED
LEVEL		
PRESS	3.9	PORV430 CLOSED
TEMP	83.7	

STEAM GENERATOR	LOOP A	LOOP B	
LVLWIDE	279	269	INCH
LVLWIDE	53.9	51.9	%
LEVEL	51.0	50.6	%
PRESS	699	699	PSIG
SF	3172	3099	KLB/H
FF	3269	3180	KLB/H
SF-FF	-97	-81	KLB/H

F1= F2= F3= F4= F5= F6=

CONSOLE=NORMAL MODE=ON LINE CPUA

October 17, 1988

NEW SPENT FUEL HEAT EXCHANGER EWR 1594B
PIPING SCAFFOLD
88-110

After the new heat exchanger is set on the foundations planned immediately south of the A Component Cooling Heat Exchanger, piping installation efforts will require work platforms at the area over the west half of the SFP heat exchanger and at the area north of the east half. Each platform will rise 5 to 6 feet above the floor, and each will have some coverage over the A Component Cooling Heat Exchanger.

The durability of the CCWHXS is such as to preclude any damage that could be postulated from toppling pipe, knuckle and plank scaffold. Cooling capability of one of the two CCWHXS is sufficient to provide for the cooling loads for the plant. Clearance must be provided for access to valves and instruments associated with the Component Cooling Heat Exchangers and Boric Acid Evaporator Condensate Demineralizers. Care should be taken to prevent disturbing the smoke detector Z04DI.

With observance of the above, the work platforms will not 1) result in a change to the facility or its operation as described in the Safety Analysis Report, 2) provide a change to the Plant Technical Specifications, or 3) involve an unreviewed safety question.

October 20, 1988

SPENT FUEL COOLING PUMP PIPING
EWR-1594B SCAFFOLDS
88-111

In order to install piping for the planned Spent Fuel Cooling Pump, two scaffolds are planned above the presently existing pump, about 6 feet from the floor, per attached sketch. The SFP cooling system is non-seismic safety related (1) however, Seismic Category I items are within the immediate vicinity, given below.

- A and B Residual Heat Removal Pump Cooling Units (2)
- A Residual Heat Removal Pump Discharge Temperature TT-630 (3)

Other instruments in the area for which care should be taken to avoid disturbing are as follows:

- Component Cooling Return from Residual Heat Removal Pumps flow FI-651 and its associated tubing. (3)
- A Residual Heat removal Pump discharge pressure PIC-629 and PI-629A and their associated tubing. (3)

Because of the presence of the above items the two scaffolds shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons September 23, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer. The Liaison Engineer may so signify this in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to the Auxiliary Building sub-basement, all valves and instrumentation in the area.

With observance of the above requirements the scaffolds will not 1) result in a change to the assumptions for the Safety Analysis in the Safety Analysis Report, 2) provide a change to the Plant Technical Specifications, or 3) involve an unreviewed safety question.

NOTES:

1) Quality Assurance Manual Appendix A Quality and Safety Related Listing and Diagrams Section 2.2.4 Spent Fuel Pool Cooling outlined in RG&E Drawing 33013-1248 (portion attached).

2) UFSAR Section 9.4.9.1 Engineered Safety Features Equipment Ventilation and Cooling.

3) UFSAR Figure 5.4-7 Residual Heat Removal System (portion attached)

4) UFSAR Figure 9.2-4 Sheet 1 Component Cooling Water System (portion attached).

November 1, 1988

RELAY ROOM CEILING PENETRATION WORK BY
AUX RELAY RACK RA-2 SCAFFOLD
88-115

The penetration work planned will require a scaffold between the Aux. Relay Rack RA-2 and the MUX Room door. It is to rise about 15 feet from the floor. Other items within the vicinity are Containment Isolation Relay Racks A-1 and A-2, Safeguards Initiation Cabinets SI-A1 and SI-A2, Fox Racks 1 and 2, and Cable Tray 164.

The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M. B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

With observance of the above requirements the scaffold will not 1) result in a change to the assumptions for the Safety Analysis in the Safety Analysis Report, 2) provide a change to the Plant Technical Specifications, or 3) involve an unreviewed safety question.

November 30, 1988

FIRE WRAP UPGRADE EWR 3986 OVER MCC-1D
SCAFFOLD 88-118

A scaffold is planned to extend from the front of 480 Bus 16 eastward over MCC-1D to the wall behind MCC-1D. It is to rise about 9 feet. In order to prevent any interference with activities involving the alternate train Bus 14 and MCC-1C, it is planned to construct the scaffold as a seismic installation. The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer. In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing, and maintenance access to all electrical panels on the Bus 16 and MCC-1D, to include clearance to rack out breakers.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analyses given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Seismic Events

The installation does not involve a change to the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

November 9, 1988

FIRE WRAP UPGRADE EWR 3986 BY
B SAFETY INJECTION PUMP SCAFFOLD
88-120

In order to perform the necessary upgrade a scaffold approximately 9 feet high will be needed to follow the routing shown in the attached sketch. The route is adjacent to the B Safety Injection Pump and the B Containment Spray Pump.

The scaffold shall be constructed so as to maintain access for testing and emergency operation to all associated valves, instruments and heat trace connections and circuits.

The estimated duration of the project, 30 days, is such that seismic construction requirements are imposed. The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer. The Liaison Engineer may so signify this in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

With observance of the above requirements the scaffold will not 1) result in a change to the assumptions for the Safety Analysis in the Safety Analysis Report, 2) provide a change to the Plant Technical Specifications, or 3) involve an unreviewed safety question.

November 9, 1988

FIRE WRAP UPGRADE EWR 3986 OVER B CONTROL
ROD DRIVE MG SET SCAFFOLD
88-121

A scaffold is needed to perform the fire wrap upgrade, the work being located over the B MG set, and in the vicinity of the MG set control panels, the Reactor Trip Breaker Panels, the Reactor Trip Bypass Breaker Panels, and B Steam Generator Steam Line Pressure Transmitters. It is to rise 10 feet.

Because of the presence of the safety related features included in the above list, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer. The Liaison Engineer may so signify this in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

In addition to the above, several cautions are to be observed as follows:

Constrain all planking and provide toe boards to minimize the potential for dropped objects.

Special care should be taken during material movement for scaffold erection and removal to prevent striking the nearby instruments and breaker controls.

It has been determined that the scaffold installation, with observance of the above requirements will not 1) result in a change to the facility or its operation as described in the Safety Analysis Report, 2) provide a change to the Plant Technical Specifications, or 3) involve an unreviewed safety question.

November 10, 1988

SPENT FUEL COOLING EWR-1594B CONDUIT
INSTALLATION OVER SFPHX TO TRAY 136
SCAFFOLD 88-127

A scaffold is needed to install conduit supports and conduit to extend from near the Auxiliary Building intermediate floor northwest corner east over the G Aux. Bldg. Exhaust Fan suction duct to tray 136, over the east end of the Spent Fuel Pool Heat Exchanger. Standby Auxiliary Feedwater System Containment isolation MOVs are located on the north side of the SFPHX.

The space between the heat exchanger and containment is very congested with piping, pipe support structures, regulators, valves, instruments, and lead shielding for a process monitor in the service water piping from the heat exchanger. A major portion of the equipment here is associated with the waste gas system supporting the Reactor Coolant Drain Tank and the Pressurizer Relief Tank, both of which are in Containment. Immersed within this space is one of the Containment Mini-purge discharge isolation valves.

Concurrent with the above planned effort is a planned repair on Turbine Aux. Feedwater Pump discharge check valve 4003. The authorization for the scaffold for that job was based on maintaining operability of the SAFW system. Because of the location of the above discussed SAFW Containment isolation MOVs, the scaffold shall be constructed as seismic using the attached Seismic Scaffold Guidelines provided from Structural Engineering (M. B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer. The Liaison Engineer may so signify this in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

With observance of the above requirements the scaffold will not 1) result in a change to the assumptions for the Safety Analysis in the Safety Analysis Report, 2) provide a change to the Plant Technical Specifications, or 3) involve an unreviewed safety question.

November 23, 1988

SPENT FUEL COOLING EWR-1594B CONDUIT
SUPPORT AND CONDUIT INSTALLATION BETWEEN
SFP PUMP AREA AND A SAFETY INJECTION
PUMP SCAFFOLD 88-128

In order to install conduit supports and conduit for this project in the Auxiliary Building Basement a scaffold is needed for work near the ceiling from the SFP pump area, east along the corridor by the Residual Heat Removal Heat Exchanger outlet and bypass valves, the RHR piping to Safety Injection Pump Suction and its associated flow instrumentation, over the hose reel at column 8a-N^1 to the space above the A Safety Injection Pump and adjacent to A Containment Spray Pump.

As the portion by the SFP pump would essentially have the same potential effect as the scaffold of request #88-111, because of the proximity to the outlet controls of both trains of Residual Heat Removal Heat Exchanger, because of the presence of Train A and Train B cable trays just east of the SFP pump area, because of the proximity to the C Safety Injection Pump and the B Containment Spray Pump in addition to those alternate pumps mentioned above, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 6.0 shall be augmented with the requirement that the scaffold shall be complete and seismic to the extent installed by the end of each shift. The erection process shall be monitored by the Construction Engineer and the Liaison Engineer. During construction, the end-of-shift seismic status shall be documented on an attachment to the field copy of the authorization form by the Construction Engineer or the Liaison Engineer in his stead. In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to the Auxiliary Building sub-basement, all valves, instrumentation, panels, rotating equipment, fire fighting provisions, and adjoining rooms in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Accidental Release - Waste Gas
- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change to the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

December 6, 1988

PIPE ENTRY GROUTING IN AUXILIARY BUILDING
SUB-BASEMENT SCAFFOLD 88-133

A scaffold is needed with a work platform about 8 feet from the floor. The corner poles shall be extended to the ceiling and horizontal poles shall be extended to at least one wall and other anchorage points or bumper contact points on the opposite side to prevent movement.

Because both trains of Residual Heat Removal Pumps are within the immediate vicinity of the scaffold, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment), incorporating the features described above. All scaffold shall be in place prior to the end of shift worked on the day it is erected.

The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, and rotating equipment in the area.

The above construction and operational requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analyses given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Accidental Release - Waste Gas
- Decrease in Reactor Coolant Inventory
- Seismic Events

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

December 14, 1988

PIPE ENTRY GROUTING IN AUXILIARY BUILDING
SUB-BASEMENT NORTHWEST CORNER SCAFFOLD
88-134

A scaffold is needed with a work platform about 8 feet from the floor. The corner poles shall be extended to the ceiling and horizontal poles shall be extended to at least one wall and other anchorage points or bumper contact points on the opposite side to prevent movement.

Because both trains of Residual Heat Removal Pumps are within the immediate vicinity of the scaffold, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment), incorporating the features described above. Scaffold in the northeast corner shall be completely dismantled before beginning this construction. All scaffold shall be in place prior to the end of shift worked on the day it is erected.

The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, and rotating equipment in the area.

The above construction and operational requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analyses given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Accidental Release - Waste Gas
- Decrease in Reactor Coolant Inventory
- Seismic Events

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

December 20, 1988

SPENT FUEL COOLING PIPING EWR 1594B
CORE BORING AT AUXILIARY BUILDING
INTERMEDIATE FLOOR WEST STAIRWELL
SCAFFOLD 88-139

In order to perform core boring and pipe installation at the Spent Fuel Pool Filter north vault wall, a scaffold will be needed which will be using the Auxiliary Building basement floor as part of its foundation, and will also be partly based on the intermediate floor. Between the two floors it will interact with the scaffolds 88-111 for pump discharge piping (not started yet) and 88-128 for pump conduit (presently existing). The items of equipment within the vicinity of these scaffolds are described in the reviews for these installations, and their presence is the basis for requiring these to be constructed in accordance with seismic scaffold guidelines. On the intermediate floor another seismic scaffold (88-127) exists on the opposite side of the Spent Fuel Heat Exchanger, in the vicinity of the Standby Auxiliary Feedwater System Containment Isolation MOVs. To the immediate south of the stairwell, on the wall to be core bored, are Seismic Category I boundary valves in the SFP piping.

Because of the above factors the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 6.0 shall be augmented with the requirement that the scaffold shall be complete and seismic to the extent installed by the end of each shift. The erection process shall be monitored by the Construction Engineer and the Liaison Engineer. During construction, the end-of-shift seismic status shall be documented on an attachment to the field copy of the authorization form by the Construction Engineer or the Liaison Engineer in his stead. In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to the Auxiliary Building sub-basement, all valves, instrumentation, panels, rotating equipment, and fire fighting provisions in the area.

Locked area accesses to the Auxiliary Building sub-basement and the Spent Fuel Pool filter vault are controlled by locked gates. Ensure that the scaffold does not allow any easier access to these areas.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Steam Generator Tube Rupture
- Rupture of a Steam Pipe
- Primary System Pipe Rupture
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

January 10, 1989

FIRE WRAP UPGRADE EWR 3986 OVER B CONTROL
ROD DRIVE MG SET SCAFFOLD
89-2

A scaffold is needed to perform the fire wrap upgrade, the work being located over the east end B MG set, and in the vicinity of the MG set control panels, the Reactor Trip Breaker Panels, the Reactor Trip Bypass Breaker Panels, and B Steam Generator Steam Line Pressure Transmitters. It is to rise 10 feet.

Because of the presence of the safety related features included in the above list, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer. The Liaison Engineer may so signify this in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

In addition to the above, several cautions are to be observed as follows:

Constrain all planking and provide toe boards to minimize the potential for dropped objects.

Special care should be taken during material movement for scaffold erection and removal to prevent striking the nearby instruments and breaker controls.

Clearance shall be maintained for use of fire fighting provisions.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Rod Cluster Control Assembly (RCCA) Drop
- Rupture of a Steam Pipe
- Anticipated Transients Without Scram
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

January 23, 1989

FIRE WRAP UPGRADE EWR 3986
DECK OVER CABLE TRAY 192
ADDENDUM TO SCAFFOLD 89-2

In addition to the scaffold a small deck near the stairway is needed. This is to be secured to Tray 192 and a nearby 4" diameter conduit, adjacent to the work site. The tray is supported by a double unistrut cantilevered from structural steel to the east, as shown on the attached sketch. The limiting load is considered to be a point load at the free end of the support. The load is estimated to be roughly half of the calculated capability based on that load configuration. In order to provide a configuration with which the added load may be considered insignificant, vertical support shall be provided under the tray in the form of a jack stand or 4 X 4 wood with a provision to bear upward on both sides of the tray or the west side of the tray. There are numerous barriers in the surroundings which prevent any adverse effect on safety related equipment discussed in the scaffold review.

An access ladder, if used, shall be tied off.

The deck shall be at minimum of 1/2 in. plywood placed on top of the tray and shall rest on the outer tray barriers. No pressure shall be applied to cables within the trays. Cleats shall be applied to prevent displacement.

The Control Room Operators shall be notified prior to commencing deck installation.

Based on the factors described above the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the facility or procedures as described in the Safety Analysis Report. Because of the adequacy of the support system as augmented and existing intervening barriers discussed above it will not have any adverse effect on the Seismic Category I or non-seismic safety related equipment in the vicinity. The design bases events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Rod Cluster Control Assembly (RCCA) Drop
- Rupture of a Steam Pipe
- Anticipated Transients Without Scram

The installation does not involve a change in the Plant Technical Specifications because the adequacy of the support system as augmented and the barriers which intervene with Seismic Category I or non-seismic safety-related equipment are such as to ensure there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation will not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the adequacy of the support system as augmented and the existing intervening barriers to Seismic Category I or non-seismic safety related equipment.

The installation will not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report because the adequacy of the support system as augmented and the barriers described ensure that there will be no adverse effect on Seismic Category I or non-seismic safety related equipment within the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification because of the adequacy of the support system as augmented and the intervening barriers which would prevent any adverse effect on any equipment or systems discussed in the bases of Technical Specifications.

January 25, 1989

SERVICE WATER PIPE SUPPORT UPGRADE - EWR 2512J
(SW-2200) WORK PLATFORMS
89-4

This pipe support upgrade effort will require four platforms, one on the Auxiliary Building top floor by MCC-1L and three on the intermediate floor in the vicinity of the G Auxiliary Building Charcoal Filter and the Heat Trace Panel 14 and distribution 14B Primary. Because of the proximity of both MCCs 1L and 1M to these platforms, they shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment).

The erection process shall be monitored by the Construction Engineer and the Liaison Engineer.

In the final stage of construction prior to use, the seismic capability of the scaffolds in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing, and maintenance access to all valves, instrumentation, panels, and fire fighting provisions in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Loss of Normal Feedwater
- Pipe Breaks Outside the Containment Building
- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

March 8, 1989

DIESEL GENERATOR FUEL OIL EWR 4526B
DISCHARGE PIPE SUPPORT UPGRADE
SCAFFOLDS 89-7

In order to perform pipe support upgrade in the Diesel Generator Rooms prior to the coming annual AI&O seismically constructed scaffolds are proposed to permit simultaneous existence in both rooms, as shown on the attached sketch. The scaffolds shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, rotating equipment, and fire fighting provisions.

The above construction and operational requirements are to be observed. Based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the facility or procedures as described in the Safety Analysis Report As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Loss of all A.C. power to the station auxiliaries
- Decrease in heat removal by the secondary system with coincident loss of on-site and external (off-site) A.C. power to the station
- Steam Generator tube rupture
- Rupture of a steam pipe
- Primary system pipe rupture
- Anticipated transients without SCRAM with a loss of A.C. power
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

February 14, 1989

RHR RECIRC TIE-IN EWR 4675A PIPE TRENCH
DECON SCAFFOLD FRAME ENCLOSURE
89-8

Work planned for RHR recirc tie-in in the pipe trench west of the RWST is to be supported by decontaminating the trench in the work area prior to the pipe work. An 8'x 8'x 8' scaffold frame enclosure is planned to control the area during decontamination. Because of the proximity of a variety of Seismic Category I features, the scaffold frame shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer. In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, rotating equipment, and fire fighting provisions.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

February 14, 1989

RHR HEAT EXCHANGER MONORAIL INSTALLATION AND
EDDY CURRENT INSPECTION WORK PLATFORMS
89-9

Plans to install monorails to lift each RHR Heat Exchanger and to perform eddy current testing will require work platforms at several levels at both heat exchangers concurrently. Because of this, they shall be constructed one at a time in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 6.0 shall be augmented with the requirement that the scaffolds shall be complete and seismic to the extent installed by the end of each shift. The erection process shall be monitored by the Construction Engineer and the Liaison Engineer. During construction, the end-of-shift seismic status shall be documented on an attachment to the field copy of the authorization form by the Construction Engineer or the Liaison Engineer in his stead. In the final stage of construction prior to beginning erection of the scaffold in the second heat exchanger cubicle, the seismic capability of the scaffold frame in the first cubicle in relation to the guidelines shall be confirmed and documented by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability. After such confirmation erection of the scaffold frame in the second cubicle may begin, accompanied by monitoring, confirmation, notification and documentation as with the first cubicle.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves and instrumentation in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Seismic Events

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

March 1, 1989

RHR HEAT EXCHANGER MONORAILS MWR 89-2022
89-10

In order to perform eddy current examination on the RHR Heat Exchanger tubes a lifting arrangement has been designed to be attached within each RHR HX cubicle. The sketches showing dimensions and requirements, indicating the design is Seismic Category II over I. As such, although this structural feature is not Seismic Category I, it is capable of withstanding a seismic event equal to that for which the Seismic Category I items are designed without providing any potential for damage to Seismic Category I items within the vicinity. The installation and inspection activities shall be controlled per WP-7204-1.

An additional construction requirement shall be that the monorails are to be installed in one Residual Heat Exchanger cubicle at a time. Upon completion of the first installation the Construction Engineer, or the Liaison Engineer in his stead, shall confirm and document the seismic capability in relation to the design and installation requirements Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of the confirmation prior to proceeding with installation in the second cubicle. Confirmation, documentation and notification shall follow for the second cubicle as with the first.

The construction Engineer or the Liaison Engineer shall verify that an orientation session has been conducted on the requirements provided prior to installation.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Seismic Events

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

March 9, 1989

NONREGENERATIVE HEAT EXCHANGER PREPARATIONS
FOR LIFT FOR EDDY CURRENT EXAMINATION
PLATFORM 89-11

In order to prepare to lift the Nonregenerative Heat Exchanger for eddy current examination a work platform is needed just below the component cooling water inlet flange. This heat exchanger is Seismic Category I. Because of the estimated duration of the platform installation, and the ease with which a seismic scaffold can be installed it was decided to construct it as such.

Accordingly, the platform utilize a frame constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer.

In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves and instrumentation in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

February 27, 1989

SAFETY INJECTION RECIRC EWR 3881 CORE
BORING SCAFFOLD 89-15

In order to perform core boring in the ceiling above the Auxiliary Building Basement a work platform is needed at the site, between the A Safety Injection Pump and the Refueling Water Tank. Also within the vicinity are cable trays for Trains A and B, and the Hose Reel at Column 8a-N. It is to be constructed taking advantage of interlocking with the building structure, and in particular to surround the above column.

Because of the proximity of the above safety related features the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer.

In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, rotating equipment, and fire fighting provisions in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Rupture of a Steam Pipe
- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

3/1/89

RHR PUMP RECIRC. EWR-4675
PIPE TIE-IN SCAFFOLD 89-17

The RHR recirc. tie-in effort will require a work platform in the Auxiliary Building basement as Column line 7a, which is between MOV-856 RWST outlet to RHR and RWST. Also within this vicinity are Seismic Category I instruments and controls for RHR Heat Exchanger outlet and bypass control. Because of these the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by the Construction Engineer and the Liaison Engineer. In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. This confirmation shall include review of attributes such as configuration of the scaffold frame and securing of the planks. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

During construction and teardown care should be taken to prevent bumping any sensitive equipment and tubing in the vicinity.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, rotating equipment, fire fighting provisions, and adjoining rooms in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

3/14/89

OFF-SITE ELECTRICAL RECONFIGURATION EWR-4525
CONDUIT INSTALLATION IN RELAY ROOM SCAFFOLD 89-25

Scaffolding is needed to support conduit installation in the Relay Room, which is estimated to take about 6 weeks, and will be over Auxiliary Relay Racks, Containment Isolation Relay Racks, Safeguards Initiation Cabinets and Relay Logic and Test Racks. The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 6.0 shall be augmented with the requirement that the scaffold shall be complete and seismic to the extent installed by the end of each shift. The Construction Engineer or Liaison Engineer shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by the Construction Engineer and the Liaison Engineer. During construction, the end-of-shift seismic status shall be documented on an attachment to the field copy of the authorization form by the Construction Engineer or the Liaison Engineer in his stead. In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. THis confirmation shall include review of attributes such as configuration of the scaffold frame and securing of the planks. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

During construction and teardown care should be taken to prevent bumping any sensitive equipment in the vicinity.

Clearance shall be maintained for operations, testing and maintenance access to all instrumentation, panels, fire fighting provisions, and adjoining rooms in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Rupture of Steam Pipe
- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

May 9, 1989

CONDENSATE MAKEUP/REJECT PIPE SUPPORT
TEMPORARY MODIFICATION 89-26
PRELIMINARY 10CFR50.59 EVALUATION

As a result of this modification the following conclusions may be drawn:

1) The probability of occurrence of an accident previously evaluated in the UFSAR will not be increased. This modification will return the condensate makeup/reject line to its design intent.

2) The consequences of an accident previously evaluated in the UFSAR will not be increased. This modification will not change any plant component that would change the consequences of any accident.

3) The probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR will not be increased. The affected line does not serve an accident mitigation function and the new support will not increase the probability of any malfunction.

4) The consequences of a malfunction of equipment important to safety will not be increased.

5) Since this modification returns the line to its original design condition, the possibility of an accident different from those evaluated in the UFSAR will not be created.

6) The possibility of a malfunction of equipment important to safety of a different type than any previously evaluated in the UFSAR will not be created for the same reason as #5 above.

7) The margin of safety as defined in the basis for the Technical Specifications will not be reduced since this modification will return the line to its design configuration.

3/18/89

A STEAM GENERATOR SNUBBER REPLACEMENT
EWR-1483 SCAFFOLDS AND RIGGING 89-38

The scaffolds for the efforts for snubber removal, bumper installation and hot clearance confirmation are designed and provided per Rochester Scaffold and Equipment Company drawings RS-116 and RS-117. The following letters are attached to indicate structural Engineering evaluation of loading of steel members for scaffold support and rigging, and seismic capability:

1. S.K. Ferguson January 4, 1988 letter to R.N. Murray, Subject: EWR 1483 Temporary Rigging for Snubbers and Struts.

2. S.K. Ferguson January 14, 1988 letter to M.J. Smith, Subject: S/G Snubber Replacement Scaffolding EWR 1483

3. S.K. Ferguson February 4, 1988 letter to R.N. Murray, Subject: Scaffold for Snubber Removal.

The installation will take place while the unit is in cold condition; however, the hot clearance phase will take advantage of the seismic design, allowing existence of such scaffolds by both Steam Generators simultaneously. Unless further evaluation is performed to permit simultaneous dismantling of the scaffolds, scaffold at one steam generator is to be completely removed prior to starting dismantling scaffolding at the other Steam Generator.

Based on the seismic capability of the scaffold design the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

3/18/89

B STEAM GENERATOR SNUBBER REPLACEMENT
EWR-1483 SCAFFOLDS AND RIGGING 89-39

The scaffolds for the efforts for snubber removal, bumper installation and hot clearance confirmation are designed and provided per Rochester Scaffold and Equipment Company drawings RS-116 and RS-117. The following letters are attached to indicate structural Engineering evaluation of loading of steel members for scaffold support and rigging, and seismic capability:

1. S.K. Ferguson January 4, 1988 letter to R.N. Murray, Subject: EWR 1483 Temporary Rigging for Snubbers and Struts.

2. S.K. Ferguson January 14, 1988 letter to M.J. Smith, Subject: S/G Snubber Replacement Scaffolding EWR 1483

3. S.K. Ferguson February 4, 1988 letter to R.N. Murray, Subject: Scaffold for Snubber Removal.

4. S.K. Ferguson March 6, 1989 letter to R.N. Murray, Subject: EWR-1483 Snubber Reduction Program Temporary Rigging - "B" Main Steam Line.

The installation will take place while the unit is in cold condition; however, the hot clearance phase will take advantage of the seismic design, allowing existence of such scaffolds by both Steam Generators simultaneously. Unless further evaluation is performed to permit simultaneous dismantling of the scaffolds, scaffold at one steam generator is to be completely removed prior to starting dismantling scaffolding at the other Steam Generator.

Based on the seismic capability of the scaffold design the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

May 23, 1989

RESIDUAL HEAT REMOVAL TO LOOP B VENT
VALVE 2779 FLANGE HOSE REMOVAL SCAFFOLD
89-148

A work platform is desired in order to remove the hose from a flange at the vent valve 2779. With the Reactor Coolant System at temperature greater than cold shutdown temperature the existence of more than one train of safeguards equipment which could be included within the area which could be affected by a scaffold must be considered. The area of the proposed scaffold includes equipment associated with two trains.

The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, rotating equipment, fire fighting provisions, and adjoining rooms in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Steam Generator Tube Rupture
- Rupture of a Steam Pipe
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

8/30/89

A DIESEL GENERATOR ROOM PAINTING
SCAFFOLD 89-160

Scaffolding is needed for work platforms for ceiling and wall painting. Because of the many obstacles to using easy-built scaffold, pole and knuckle scaffold must be used, which will add to the duration of scaffold existence; because of this and the potential effect on the MCC within the vicinity which contains the breaker for the B Diesel Generator Air Start Compressor, the scaffolding shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M.K. Fitzsimmons on Authorization Form 89-167 attached.) The guidelines statement 6.0 shall be augmented with the requirement that the scaffold shall be complete and seismic to the extent installed by the end of each shift. The job supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by the Liaison Engineer. During construction, the end-of-shift seismic status shall be documented on an attachment to the field copy of the authorization form by the Liaison Engineer. In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. This confirmation shall include review of attributes such as configuration of the scaffold frame and securing of the planks. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

During construction and teardown care should be taken to prevent bumping any sensitive equipment and tubing in the vicinity.

No non-seismic scaffold construction or teardown activity is to be undertaken in the alternate Diesel Generator Room unless interim or final seismic capability is established and is being maintained within the A Diesel Generator Room.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, rotating equipment, and fire fighting provisions.

The above construction and operational requirements are to be observed. Based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the facility or procedures as described in the Safety Analysis Report As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Loss of all A.C. power to the station auxiliaries
- Decrease in heat removal by the secondary system with coincident loss of on-site and external (off-site) A.C. power to the station
- Steam Generator tube rupture
- Rupture of a steam pipe
- Primary system pipe rupture
- Anticipated transients without SCRAM with a loss of A.C. power
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

8/30/89

A DIESEL GENERATOR ROOM PAINT SCAFFOLD END-OF-SHIFT STATUS

Since start of scaffold construction in the A Diesel Generator Room on July 10, 1989, the building crew has been alternating between this installation and an installation in the Screenhouse, with highest priority given to the Screenhouse work. Whenever work was done on the scaffold structure in the A Diesel Generator Room, I have been notified and performed an end-of-shift inspection. At the completion of each such work effort the structure was found to be complete and seismic to the extent installed. The scaffold is yet to be turned over for use by the paint crew.

Michael J. Smith
Liaison Engineer

June 20, 1989

SPENT FUEL POOL COVER 89-162

Work above the Spent Fuel Pool is planned, and as a measure to prevent debris from entering, the pool is to be covered with a protective structure as shown on the attached sketch.

Should any debris enter the pool notification to the Construction Engineer shall be made. Prior to fuel transfer system operation, a complete inspection shall be made in the fuel transfer slot.

The analysis for projectile impingement on the Spent Fuel Rack involves a mass equivalent to a utility pole. The platform assembly components represent less mass; the potential effect on the rack by the assembly would be more broadly distributed.

The above construction and operational requirements are to be observed. Based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the facility or procedures as described in the Safety Analysis Report. The design basis event analyzed in the Safety Analysis Report associated with this proposed installation is the fuel handling accident.

The installation does not involve a change in the Plant Technical Specifications because of the lack of any potential effect on the fuel due to the protection afforded by the rack as described above.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because the capability of the rack and the absence of safety related equipment in the area.

The installation does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report because of the rack capability described above, the lack of impact on reactor safety and the bounding analysis of the fuel handling accident.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification because of the capability of the rack.

The total weight of the temporary structure is estimated at 8,600 lbs. This weight will be supported by 32 feet of SFP bridge track which is a total surface area of 4.67 ft^2. The final load on the tracks is 1842 lb/ft^2 a value far less than that experienced when the SFP bridge is moving with a fuel assembly attached.

The structure will support personnel and small tools and equipment such as paint cans and brushes, however, the cover is not intended for use as a temporary storage area for non-related ancillary equipment.

During assembly of the structure double rigging will be used for all moves over the SFP area.

Sufficient space will be available for visual SFP water level verification.

June 20, 1989

MAIN STEAM LINE PRESSURE TRANSMITTER TUBING
REROUTE EWR 4933 WORK PLATFORMS
89-163

Work platforms are needed to perform the tubing rerouting to be located by the Intermediate Building North east stair, between the Containment wall and the north wall. Within this vicinity are the Control Rod MG Set Control Panels, the Reactor Trip Breaker Panels, the Reactor Trip Bypass Breaker Panels, the B Main Steam Line Pressure Transmitters, and numerous cable trays. The scaffold frame for these platforms is to rise approximately 20 ft.

Because of the presence of the safety related features listed above, the scaffold frame system for the work platforms shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 6.0 shall be augmented with the requirement that the scaffold shall be complete and seismic to the extent installed by the end of each shift. The Construction Engineer or Liaison Engineer shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by the Construction Engineer and the Liaison Engineer. During construction, the end-of-shift seismic status shall be documented on an attachment to the field copy of the authorization form by the Construction Engineer or the Liaison Engineer in his stead. In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Construction Engineer, or the Liaison Engineer in his stead. This confirmation shall include review of attributes such as configuration of the scaffold frame and securing of the planks. Such documentation shall be attached to the original copy of the Authorization Form. The Construction Engineer or the Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

During construction and teardown care should be taken to prevent bumping any sensitive equipment and tubing in the vicinity.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, rotating equipment, fire fighting provisions, and adjoining rooms in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Rod Cluster Control Assembly (RCCA) Drop
- Rupture of a Steam Pipe
- Anticipated Transients Without Scram
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

June 22, 1989

SAFETY INJECTION TO B LOOP FLOW
ORIFICE FE-924 SCAFFOLD
89-166

A work platform is needed about 4 ft. above the floor east of the Safety Injection to B Loop MOV's 878 A and B, north of the Excess Letdown Letdown Heat Exchanger, which is just behind a 7 ft. high chain link barrier, west of a building column intervening with the Regenerative Heat Exchanger, also within the chain link barrier, and southeast of CVCS air operated valves for normal charging to B Cold Leg, charging to B Hot Leg and Auxiliary Pressurizer Spray, in order of distance from the orifice. The distance to the first CVCS valve is about 6 ft. The unit is presently with RCS temperature less than 350°F, to be maintained as such until after removal of the scaffold.

An alternate path for charging to the A loop exists, which has a route away from the scaffold area. Auxiliary Pressurizer Spray is not normally used. The alternate path for charging to A Loop shall be maintained operable during the scaffold existence.

The above construction and operational requirements are to be observed. Based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the facility or procedures as described in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory

- Chemical and Volume Control System Malfunction

The installation does not involve a change in the Plant Technical Specifications because observing the requirements of maintaining less than 350°F and the alternate charging path operable will permit satisfying the assumptions and bases in the Technical Specifications dealing with Safety Injection and Chemical and Volume Control.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because observing the operational requirement of maintaining less than 350°F assures that there will be no need for the delivery capabilities of the Safety Injection System called for in the design bases. The alternate charging path will be available in the event of any adverse affect on the normal charging path.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a feature to be in place only during maintaining RCS temperature less than 350°F with the alternate charging path to A Loop available, there will be no effect on safety of operations.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a feature installed with imposition of RCS temperature limitation of 350°F and maintaining operability of the charging path to A Loop, it will have no effect on systems as discussed in the bases of Technical Specifications.

7/7/89

SCREENHOUSE WINDOW SECURITY BAR SM-89-03
BY A SERVICE WATER PUMP SCAFFOLD
89-167

Scaffolding is required in the Screenhouse for the installation of security bars for SM-89-03. This permit (89-167) is for a seismic scaffold adjacent to the east wall of the building near the south side of the house heating boiler (Ref. sketch attached to permit). This location is within 1 1/2 times its height of safety related service water pump 1A.

The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to the Screenhouse all valves, instrumentation, panels, rotating equipment, and fire fighting provisions.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

7/7/89

SCREENHOUSE WINDOW SECURITY BAR SM-89-03
BY BUS 17 SCAFFOLD
89-168

Scaffolding is required in the Screenhouse for the installation of security bars for SM-89-03. This permit (89-168) is for a seismic scaffold in the northeast corner of the building along column lines 7 and EE (Ref. sketch attached to permit). This location is within 1 1/2 times its height of safety related Busses 17 and 18.

The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to the Screenhouse all valves, instrumentation, panels, and fire fighting provisions.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

7/7/89

SCREENHOUSE WINDOW SECURITY BAR SM-89-03
BY BUS 18 SCAFFOLD
89-169

Scaffolding is required in the Screenhouse for the installation of security bars for SM-89-03. This permit (89-169) is for a seismic scaffold in the southeast corner of the building above the stairwell to the basement (Ref. sketch attached to permit). This location is within 1 1/2 times its height of safety related Bus 18.

The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to the Screenhouse all valves, instrumentation, panels, fire fighting provisions, and adjoining rooms in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

7/7/89

SCREENHOUSE WINDOW SECURITY BAR SM-89-03
BY DIESEL FIRE PUMP OIL TANK SCAFFOLD
89-170

Scaffolding is required in the Screenhouse for the installation of security bars for SM-89-03. This permit (89-170) is for a seismic scaffold on the south wall of the building near door S0 (Ref. sketch attached to permit). This location is within 1 1/2 times its height of safety related Bus 18.

The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to the Screenhouse all valves, instrumentation, panels, fire fighting provisions, and adjoining rooms in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

7/7/89

SCREENHOUSE WINDOW SECURITY BAR SM-89-03
BETWEEN FIRE PUMPS SCAFFOLD
89-171

Scaffolding is required in the Screenhouse for the installation of security bars for SM-89-03. This permit (89-171) is for a seismic scaffold on the south wall of the building near door S2 (Ref. sketch attached to permit). This location is within 1 1/2 times its height of safety related service water pump 1D.

The scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to the Screenhouse all valves, instrumentation, panels, rotating equipment, and fire fighting provisions.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

August 1, 1989

SAFETY EVALUATION FOR TEMPORARY STRUCTURE FEATURE
AUTHORIZATION FORM 89-180

This temporary structure will be placed under the reference leg piping to support the condensate pot and associated tubing. The reference leg piping will be lifted by hand while measuring and recording the maximum lift force. The lift will not create any substantial deflection of the root valve and will therefore not create an unexceptable stress on the welds in the reference leg. The reference leg will not be lifted past the condensates pot's original design elevation. Therefore, this temporary structure will not endanger the integrity of the reference leg piping. This temporary structure will be removed prior to leaving the hot shutdown condition.

This temporary structure will not increase the probability of an accident or the consequences of an accident previously evaluated in the UFSAR. This temporary structure will not effect the pressure transmitter PT-429 and therefore will not effect the response of safety injection to an accident. This structure will not effect the integrity of the reference leg and will only be used to support the static load of the piping will remain intact.

This temporary structure will not create an accident of a different type then those specified in the UFSAR. The Safety Injection System will react as designed to any accident addressed in the UFSAR.

This temporary structure will not reduce the margin of safety as defined in any technical specification basis. This structure does not render any plant system inoperable, nor will it degrade any operating system.

8/11/89

SCREENHOUSE NORTH OF MCC-1G PLANT
BETTERMENT PAINT SCAFFOLD
89-183

Scaffolding is needed for ceiling and wall painting in the area north of MCC-1G not covered by previously approved scaffolds 89-167 and 89-168. Because of the proximity of the service Water Pumps in both trains and MCC-1G the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M.K. Fitzsimmons on Authorization Form 89-167).

The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, and fire fighting provisions.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

8/11/89

SCREENHOUSE SOUTH WALL OVER DIESEL FIRE PUMP
PLANT BETTERMENT PAINT SCAFFOLD
89-184

Scaffolding is needed for ceiling and wall painting in the area over the Diesel Fire Pump between the areas covered by previously approved scaffolds 89-170 and 89-171. Because of the proximity of the service Water Pumps and Fire Service Water Pumps in both trains the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M.K. Fitzsimmons on Authorization Form 89-167).

The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, and fire fighting provisions.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

8/28/89

REFUELING WATER TANK OPERATING FLOOR
PAINT SCAFFOLD 89-189

In order to minimize contamination at the Aux. Bldg. top floor it will be necessary to decon the RWST from top to the floor, and, to facilitate future decon efforts, it is desirable to follow up with painting. Because of the nearness of 480V Bus 14 and the relatively lengthy projected duration of the scaffold existence, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment).

The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M.K. Fitzsimmons on Authorization Form 89-167).

The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall accept the installation.

Clearance shall be maintained for operations, testing and maintenance access all valves, instrumentation, panels, rotating equipment, fire fighting provisions, and adjoining rooms in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Rupture of a Steam Pipe
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

September 6, 1989

A MAIN STEAM ARV-3411 REPAIR
WORK PLATFORM 89-190

Repair work on ARV-3411 will necessitate a work platform, constructed of pole scaffold and planks such as to surround the A Main Steam lead and the relief valve inlet piping, somewhat below the ARV inlet flange. The small tubing for the ARV air operator will be disconnected during the valve repair preparations. As such the platform will have no potential effect on the ARVs, and the structures will be restricted from movement in the direction of any other safety related equipment. The Main Steam leads and the relief piping are sufficiently sturdy to preclude any damage from the relatively light scaffold materials; however, piping of smaller diameter than the scaffold pole material is incorporated as the isolation valve 3507 bypass. The duration of scaffold existence is projected to be 2 weeks.

Because of the above factors, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M. B. Fitzsimmons on Authorization Form 89-167). The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, and fire fighting provisions in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Steam Generator tube rupture
- Rupture of a steam pipe
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

September 7, 1989

LAUNDRY EXHAUST FAN VIBRATION/EXPANSION
RING REPLACEMENT WORK PLATFORM 89-191

Repair is required on ductwork at the Laundry Exhaust Fan, located in the vicinity of the A Feedwater Line. The entries from the Motor and Turbine Auxiliary Feedwater Pump discharges are nearby, and there is a high density of snubbers for this piping in area (5 mechanical and 1 hydraulic). A temperature sensor (TE-2096) is located at the top of the feedwater line downstream of check valve 3003.

Because of the existence of the above features within the vicinity of the proposed scaffold, scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M.B. Fitzsimmons on Authorization Form 89-167). The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, and fire fighting provisions in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Loss of Normal Feedwater
- Loss of all A.C. power to the station auxiliaries
- Steam Generator tube rupture
- Rupture of a steam pipe
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

September 12, 1989

SI RECIRC FLOW ORIFICE FE-916
LEAK REPAIR WORK PLATFORM 89-192

A work platform is required to correct a leak condition at SI recirc flow orifice FE-916, located between the Refueling Water Tank and 480v Bus 16. Also within the vicinity are Temperature Indicator TI-917, and SI recirc MOVs 897 and 898. The MOVs are within the ASME Seismic Class 2 boundary as indicated on P&ID 33013-1261 Containment Spray (SI). The platform is to be about 4 ft. high, estimated to be in existence 2 days.

Because of factors given above the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment). The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M.B. Fitzsimmons on Authorization Form 89-167). The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. The erection process shall be monitored by an assigned Liaison Engineer, and its seismic capability in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or is observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

Clearance shall be maintained for operations, testing and maintenance access to all valves, instrumentation, panels, and fire fighting provisions in the area.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

9/26/89

AUXILIARY BUILDING TOP NORTH WALL (CNMT)
PLANT BETTERMENT PAINT SCAFFOLD
89-193

A scaffold is planned for painting the north wall at the Auxiliary Building top level, to extend from the Spent Fuel Pool to the area north of 480V Bus 14, and tie into a planned scaffold around the RWST, controlled by Authorization Form 89-189. Because of the large area to be covered, including the area surrounding 480V Bus 14, and the relatively lengthy projected duration of the scaffold existence, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment).

The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M.B. Fitzsimmons on Authorization Form 89-167).

The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. In addition, part of the orientation shall stress the importance of taking care not to bump any live smoke detectors. The erection process shall be monitored by an assigned Liaison Engineer. In addition, the Job Supervisor shall notify the Fire Protection group during installation to allow for consultation on any potential interferences with fire detection/sprinkler provisions encountered.

During construction, the end-of-shift seismic status shall be documented on an attachment to the field copy of the authorization form by the Liaison Engineer.

In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. This confirmation shall include review of attributes such as configuration of the scaffold frame and securing of the planks. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

During construction and teardown care should be taken to prevent bumping any sensitive equipment and tubing in the vicinity.

Clearance shall be maintained for operations, testing, and maintenance access to all valves, instrumentation, panels, rotating equipment, and fire fighting provisions in the area.

The scaffold shall be constructed so as not to interfere with Auxiliary Building Crane use during fuel transfer mechanism work planned. During scaffold use, G. Joss shall be contacted on prevention of painting ILRT inspection areas on the containment wall.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Rupture of a Steam Pipe
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

9/26/89

AUXILIARY BUILDING TOP SOUTH WALL WEST
FROM COLUMN LINE 8a PLANT BETTERMENT
PAINT SCAFFOLD 89-194

A scaffold is planned for painting the south wall at the Auxiliary Building top level, to extend from the Decon Pit to the Monitor Tanks. Because of the large area to be covered, including the area immediately adjacent to both Component Cooling Heat Exchangers, and the relatively lengthy projected duration of the scaffold existence, the scaffold shall be constructed in accordance with the attached Seismic Scaffold Guidelines provided from Structural Engineering (M.B. Fitzsimmons October 31, 1988 memo attachment).

The guidelines statement 4.0 requirement to wire all plank decking in place may be replaced with the alternative requirement to use scaffold poles as hold down bars in conjunction with wooden cleats. (Acceptable as noted per M.B. Fitzsimmons on Authorization Form 89-167).

The Job Supervisor shall verify that an orientation session has been conducted on the guidelines provided. In addition, part of the orientation shall stress the importance of taking care not to bump any live smoke detectors. The erection process shall be monitored by an assigned Liaison Engineer. In addition, the Job Supervisor shall notify the Fire Protection group during installation to allow for consultation on any potential interferences with fire detection/sprinkler provisions encountered.

During construction, the end-of-shift seismic status shall be documented on an attachment to the field copy of the authorization form by the Liaison Engineer.

In the final stage of construction prior to use, the seismic capability of the scaffold in relation to the guidelines shall be confirmed and documented prior to scaffold use by the Liaison Engineer. This confirmation shall include review of attributes such as configuration of the scaffold frame and securing of the planks. Such documentation shall be attached to the original copy of the Authorization Form. The Liaison Engineer shall notify the Shift Supervisor of confirmation of seismic capability.

If it is foreseen in the scaffold planning stage, or observed during erection, that a deviation from the guidelines will be necessary, verbal guidance from a member of Structural Engineering shall be obtained. In this instance the Structural Engineer shall review the installation, and, upon being satisfied with its seismic capability, the Structural Engineer shall document acceptance of the installation in the same manner as described above.

During construction and teardown care should be taken to prevent bumping any sensitive equipment and tubing in the vicinity.

Clearance shall be maintained for operations, testing, and maintenance access to all valves, instrumentation, panels, rotating equipment, and fire fighting provisions in the area.

The scaffold shall be constructed so as not to interfere with Auxiliary Building Crane use during fuel transfer mechanism work planned.

The above construction requirements are to be observed; based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analysis given in the Safety Analysis Report. As a seismically constructed feature with no interferences with accesses described above it will not have any adverse effect on any existing plant provisions in the immediate vicinity in their functions in normal operation or in their functions as described in the analyses given in the Safety Analysis Report. The design basis events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory
- Rupture of a Steam Pipe
- Seismic Events

There will be no adverse effect on fire fighting capability because there will be no interference with access provided to fire fighting provisions.

The installation does not involve a change in the Plant Technical Specifications because as a seismic feature there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because of the seismic capability and access provisions incorporated.

The installation does not create the possibility for an accident or malfunction of a different type other than previously evaluated in the Safety Analysis Report, because as a seismic feature, it will remain independent of, and will have no interface with any existing equipment or systems in the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification, because as a seismic feature, it will be independent of, and will have no interface with any equipment or systems discussed in the bases of Technical Specifications.

Temporary Installation and Operation of Standby S.F.P. Cooling System

As part of EWR-1594; "Spent Fuel Pool Cooling", the Standby S.F.P. Cooling System will be utilized in a different configuration then originally analyzed. The recirculation pump, heat exchanger, and associated Spent Fuel Pool pipe, valves, fitting, hoses, and instrumentation will be provided and installed as shown on attached sketch(s) and per SM-1594.8A. The standby system will remain in service until the new system is installed, tested, and placed in operation per EWR-1594.

Temporary Fluid Provisions:

Hoses are connected from the S.W. system to the skid mounted S.F.P. Heat Exchanger. These two hoses which pass within 5' of each C.C.W. pump will be secured to existing plant structural members. The hose design pressure is 200 psig which exceeds the S.W. system design operating pressure. A system relief valve located on the heat exchanger shell will prevent the system pressure from exceeding 150 psig. Isolation valves are provided to isolate service water from the skid mounted heat exchanger. The C.C.W. system requires only one pump to meet the required design. In the event of a failure which causes a complete failure of the C.C.W. system, residual heat removal would be accomplished with auxiliary feed and steam generators. This event has been analyzed in the UFSAR and does not involve an unreviewed safety question.

EWR-1594 addresses a postulated break in the six inch supply and return lines. Since there are two trains of service water, the assumption is, if one train is lost, the other train will provide the required cooling for the plant. Failure of the six inch return line would not affect the cooling of components in the service water system. A redundant service water return line is provided. In both cases stated above isolation valves are provided to isolate service water from the skid mounted heat exchanger and associated hoses.

The installation and tie-in to the S.W. system of hoses to and from the skid S.F.P. heat exchanger and their locations in reference to C.C.W. pumps and associated components will not 1) result in a change to the facility or it's operation as described in the Safety Analysis Report, 2) provide a change to the Plant Technical Specifications, or 3) involve an unreviewed safety question.

S.F.P. Recirculation Hoses, Pipe, and Fittings

The skid pump discharge piping hose and fitting which connects to the bottom of the skid mounted S.F.P. heat exchanger will not be located near any safety related equipment or any other plant piping. The hose will be routed along the floor.

The skid mounted heat exchanger discharges into the existing pool discharge pipe. The hose route is from the S.F.P. Hx Discharge along the south wall of the Auxiliary Building and ties into the existing S.F.P. discharge piping. Except for hose, valves, and fittings located over the spent fuel pool, the hose is not located next to any safety related equipment. The hose will be secured to structural members. The hose will run within approximately two feet of radiation monitor R-18. A hose break in this area which could cause R-18 to become inoperable could increase the possibility of an unmonitored release.

During liquid releases R-18 and associated systems are monitored; thus, a failure and the release of any unmonitored release would be minimized. Plant procedures dictate that prior to any liquid release the limits for activity are below those required by 10CFR20.

The discharge hose, valves, and fittings located over the southwest corner of the Spent Fuel Pit will be tied into the existing pool discharge pipe. The existing discharge pipe is provided with a vacuum breaker to prevent the siphon effect and eventual drain down of the spent fuel pool. The hose will be secured to structural members. The combined weight of the above stated components is less than that of a 1490 lb. wooden pole or fuel handling tool with attached assembly. The impact of the above upon the fuel racks is analyzed in the UFSAR. Therefore, this installation bounded by the above will not change any assumption as described in UFSAR.

The suction pipe will protrude below the normal spent fuel pool level to an elevation no lower than 275' 0" (elevation of upper suction pipe). The pipe and attached fittings will be located in the southeast corner of the Spent Fuel Pool. Spent fuel is not located in this area. The pipe will be located at or above the elevation of the upper pool suction tap which has been analyzed and designed to prevent pool drain down as stated in UFSAR. A break or rupture of the suction hose outside the pool and at an elevation below the pool water level would only drain the pool water level down to that of the upper suction tap which has been analyzed in the UFSAR. A vent valve and isolation valve located above the pool water level and in the temporary suction line could be operated to stop the siphoning of water from the pool. Therefore, this installation does not change the assumptions as stated in UFSAR. The weight of the hose and fittings is less than that of a wooden pole or fuel handling tool with attached assembly. Therefore, this installation bounded by the above will not change any assumptions as described in UFSAR.

S.F.P. Heat Exchanger

The spent fuel standby heat exchanger will be located less than 1.5 times the height away from safety related equipment and the flooded weight of the heat exchangers is greater than 7200 lbs. The heat exchanger will be seismically mounted to prevent contact with the 1A CCW pump during a seismic event. Service water return from the S.F.P. back-up heat exchanger will be sampled and analyzed to detect any tube leakage.

S.F.P. Recirculation Pump

The S.F.P. recirculation pump is located further than 1.5 times its height from any safety related equipment. The pump base will be secured to the floor to prevent movement. The 3 phase power supply to the pump motor will be from a non-safety related source and the cable will not be located next to any safety related components.

Back-up Spent Fuel Pool System

Based on all the above the standby spent fuel pool cooling system will not 1) result in a change to the assumptions as described in the Safety Analysis Report, 2) provide a change to the Plant Technical Specifications, or 3) involve an unreviewed safety question.

Prepared By: Mike Smith Date: 11-16-88

Approved By: [signature] Date: 11-16-88

PORC Review Date: 11/16/88

As modified 3/15/89 WJF
D.F.S.

TEMPORARY INSTALLATION AND OPERATION OF STANDBY S.F.P. COOLING SYSTEM

AS PART OF EWR-1594; "SPENT FUEL POOL COOLING", THE STANDBY S.F.P. COOLING SYSTEM WILL BE UTILIZED IN A DIFFERENT CONFIGURATION THEN ORIGINALLY ANALYZED. THE RECIRCULATION PUMP, HEAT EXCHANGER, AND ASSOCIATED SPENT FUEL POOL PIPE, VALVES, FITTING, HOSES, AND INSTRUMENTATION WILL BE PROVIDED AND INSTALLED AS SHOWN ON ATTACHED SKETCH(S) AND PER SM-1594.8A. THE STANDBY SYSTEM WILL REMAIN IN SERVICE UNTIL THE NEW SYSTEM IS INSTALLED, TESTED, AND PLACED IN OPERATION PER EWR-1594.

TEMPORARY FLUID PROVISIONS:

HOSES ARE CONNECTED FROM THE S.W. SYSTEM TO THE SKID MOUNTED S.F.P. HEAT EXCHANGER. THESE TWO HOSES WHICH PASS WITHIN 5' OF EACH C.C.W. PUMP WILL BE SECURED TO EXISTING PLANT STRUCTURAL MEMBERS. THE HOSE DESIGN PRESSURE IS 200 PSIG WHICH EXCEEDS THE S.W. SYSTEM DESIGN OPERATING PRESSURE. A SYSTEM RELIEF VALVE LOCATED ON THE HEAT EXCHANGER SHELL WILL PREVENT THE SYSTEM PRESSURE FROM EXCEEDING 150 PSIG. ISOLATION VALVES ARE PROVIDED TO ISOLATE SERVICE WATER FROM THE SKID MOUNTED HEAT EXCHANGER. THE C.C.W. SYSTEM REQUIRES ONLY ONE PUMP TO MEET THE REQUIRED DESIGN. IN THE EVENT OF A FAILURE WHICH CAUSES A COMPLETE FAILURE OF THE C.C.W. SYSTEM, RESIDUAL HEAT REMOVAL WOULD BE ACCOMPLISHED WITH

AUXILIARY FEED AND STEAM GENERATORS. THIS EVENT HAS BEEN ANALYZED IN THE UFSAR AND DOES NOT INVOLVE AN UNREVIEWED SAFETY QUESTION.

EWR-1594 ADDRESSES A POSTULATED BREAK IN THE SIX INCH SUPPLY AND RETURN LINES. SINCE THERE ARE TWO TRAINS OF SERVICE WATER, THE ASSUMPTION IS, IF ONE TRAIN IS LOST, THE OTHER TRAIN WILL PROVIDE THE REQUIRED COOLING FOR THE PLANT. FAILURE OF THE SIX INCH RETURN LINE WOULD NOT AFFECT THE COOLING OF COMPONENTS IN THE SERVICE WATER SYSTEM. A REDUNDANT SERVICE WATER RETURN LINE IS PROVIDED. IN BOTH CASES STATED ABOVE ISOLATION VALVES ARE PROVIDED TO ISOLATE SERVICE WATER FROM THE SKID MOUNTED HEAT EXCHANGER AND ASSOCIATED HOSES.

THE INSTALLATION AND TIE-IN TO THE S.W. SYSTEM OF HOSES TO AND FROM THE SKID S.F.P. HEAT EXCHANGER AND THEIR LOCATIONS IN REFERENCE TO C.C.W. PUMPS AND ASSOCIATED COMPONENTS WILL NOT 1) RESULT IN A CHANGE TO THE FACILITY OR IT'S OPERATION AS DESCRIBED IN THE SAFETY ANALYSIS REPORT, 2) PROVIDE A CHANGE TO THE PLANT TECHNICAL SPECIFICATIONS, OR 3) INVOLVE AN UNREVIEWED SAFETY QUESTION.

S.F.P. RECIRCULATION HOSES, PIPE, AND FITTINGS

THE SKID PUMP DISCHARGE PIPING HOSE AND FITTING WHICH CONNECTS TO THE BOTTOM OF THE SKID MOUNTED S.F.P. HEAT EXCHANGER WILL NOT BE LOCATED NEAR ANY SAFETY RELATED EQUIPMENT OR ANY OTHER PLANT PIPING. THE HOSE WILL BE ROUTED ALONG THE FLOOR.

THE SKID MOUNTED HEAT EXCHANGER DISCHARGES INTO THE EXISTING POOL DISCHARGE PIPE. THE HOSE ROUTE IS FROM THE S.F.P. HX DISCHARGE ALONG THE SOUTH WALL OF THE AUXILIARY BUILDING, AND TIES INTO THE EXISTING S.F.P. DISCHARGE PIPING. EXCEPT FOR HOSE, VALVES, AND FITTINGS LOCATED OVER THE SPENT FUEL POOL, THE HOSE IS NOT LOCATED NEXT TO ANY SAFETY RELATED EQUIPMENT. ~~THE HOSE~~ WILL BE SECURED TO STRUCTURAL MEMBERS. ~~THE HOSE WILL RUN WITHIN APPROXIMATELY TWO FEET OF RADIATION MONITOR R-18. A HOSE BREAK IN THIS AREA WHICH COULD CAUSE R-18 TO BECOME INOPERABLE COULD INCREASE THE POSSIBILITY OF AN UNMONITORED RELEASE~~.

~~DURING LIQUID RELEASES R-18 AND ASSOCIATED SYSTEMS ARE MONITORED; THUS, A FAILURE AND THE RELEASE OF ANY UNMONITORED RELEASE WOULD BE MINIMIZED. PLANT PROCEDURES DICTATE THAT PRIOR TO ANY LIQUID RELEASE THE LIMITS FOR ACTIVITY ARE BELOW THOSE REQUIRED BY 10CFR20~~.

~~THE DISCHARGE HOSE, VALVES, AND FITTINGS LOCATED OVER THE SOUTHWEST CORNER OF THE SPENT FUEL PIT WILL BE TIED INTO THE EXISTING POOL DISCHARGE PIPE~~. THE EXISTING DISCHARGE PIPE IS PROVIDED WITH A VACUUM BREAKER TO

PREVENT THE SIPHON EFFECT AND EVENTUAL DRAIN DOWN OF THE SPENT FUEL POOL. THE HOSE WILL BE SECURED TO STRUCTURAL MEMBERS. ~~THE COMBINED WEIGHT OF THE ABOVE STATED COMPONENTS IS LESS THAN THAT OF A 1490 LB. WOODEN POLE OR FUEL HANDLING TOOL WITH ATTACHED ASSEMBLY. THE IMPACT OF THE ABOVE UPON THE FUEL RACKS IS ANALYZED IN THE UFSAR~~. THEREFORE, THIS INSTALLATION BOUNDED BY THE ABOVE WILL NOT CHANGE ANY ASSUMPTION AS DESCRIBED IN UFSAR.

THE SUCTION PIPE WILL PROTRUDE BELOW THE NORMAL SPENT FUEL POOL LEVEL TO AN ELEVATION NO LOWER THAN 275' 0" (ELEVATION OF UPPER SUCTION PIPE). THE PIPE AND ATTACHED FITTINGS WILL BE LOCATED IN THE SOUTHEAST CORNER OF THE SPENT FUEL POOL. SPENT FUEL IS NOT LOCATED IN THIS AREA. THE PIPE WILL BE LOCATED AT OR ABOVE THE ELEVATION OF THE UPPER POOL SUCTION TAP WHICH HAS BEEN ANALYZED AND DESIGNED TO PREVENT POOL DRAIN DOWN AS STATED IN UFSAR. A BREAK OR RUPTURE OF THE SUCTION HOSE OUTSIDE THE POOL AND AT AN ELEVATION BELOW THE POOL WATER LEVEL WOULD ONLY DRAIN THE POOL WATER LEVEL DOWN TO THAT OF THE UPPER SUCTION TAP WHICH HAS BEEN ANALYZED IN THE UFSAR. A VENT VALVE AND ISOLATION VALVE LOCATED ABOVE THE POOL WATER LEVEL AND IN THE TEMPORARY SUCTION LINE COULD BE OPERATED TO STOP THE SIPHONING OF WATER FROM THE POOL. THEREFORE, THIS INSTALLATION DOES NOT CHANGE THE ASSUMPTIONS AS STATED IN UFSAR. THE WEIGHT OF THE HOSE AND FITTINGS IS LESS THAN THAT OF A WOODEN POLE OR FUEL HANDLING TOOL WITH ATTACHED ASSEMBLY. THEREFORE, THIS INSTALLATION BOUNDED BY THE ABOVE WILL NOT CHANGE ANY ASSUMPTIONS AS DESCRIBED IN UFSAR.

S.F.P. HEAT EXCHANGER

THE SPENT FUEL STANDBY HEAT EXCHANGER WILL BE LOCATED LESS THAN 1.5 TIMES THE HEIGHT AWAY FROM SAFETY RELATED EQUIPMENT AND THE FLOODED WEIGHT OF THE HEAT EXCHANGERS IS GREATER THAN 7200 LBS. THE HEAT EXCHANGER WILL BE SEISMICALLY MOUNTED TO PREVENT CONTACT WITH THE 1A CCW PUMP DURING A SEISMIC EVENT. SERVICE WATER RETURN FROM THE S.F.P. BACK-UP HEAT EXCHANGER WILL BE SAMPLED AND ANALYZED TO DETECT ANY TUBE LEAKAGE.

STANDBY S.F.P. RECIRCULATION PUMP

THE S.F.P. RECIRCULATION PUMP IS LOCATED FURTHER THAN 1.5 TIMES ITS HEIGHT FROM ANY SAFETY RELATED EQUIPMENT. THE PUMP BASE WILL BE SECURED TO THE AUXILIARY BUILDING OPERATING FLOOR TO PREVENT MOVEMENT. THE 3 PHASE TEMPORARY POWER SUPPLY TO THE STANDBY S.F.P. PUMP MOTOR WILL BE FROM MCC-1C POS. 1H WHICH PRESENTLY IS A SPARE BREAKER. THE TEMPORARY CABLE WILL BE ROUTED FROM MCC-1C POS. 1H POSITION ALONG THE EXISTING CONDUIT SUPPORTS

AND BUILDING STRUCTURES TO THE STANDBY S.F.P. PUMP. THE PUMP TEMPORARY POWER SUPPLY HAS BEEN EVALUATED AND APPROVED BY ELECTRICAL ENGINEERING (SEE LETTER #13N1-RR-L2131 FROM JOHN H. SMITH). THE CABLE TO BE USED IS Q.A. APPROVED AND MEETS IEEE 38[illegible] SPECIFICATIONS ~~FOR FIRE PROTECTION~~. qualified to 3

TEMPORARY HOSE BETWEEN "A" CVCS HOLD UP TANK AND S.F.P. COOLING SYSTEM

A DRAIN HOSE AND PORTABLE PUMP WILL BE INSTALLED BETWEEN THE DISCHARGE OF S.F.P. COOLING PUMP AND THE "A" H.U.T. THIS PROCEDURE SM-15948A WILL CONTROL THE INSTALLATION AND DRAIN DOWN OF THE S.F.P. COOLING SYSTEM PIPING TO "A" H.U.T. THERE IS ADEQUATE CAPACITY IN H.U.T.'S TO DRAIN APPROXIMATELY 1500 GALLONS OF BORATED WATER FROM S.F.P. PIPING. PROCEDURAL CONTROLS AND CONTINUOUS MONITORING OF THE DRAIN DOWN PROCESS WILL NEGATE ANY POSSIBILITY OF DRAINING OF SPENT FUEL POOL WATER TO CVCS HOLD-UP-TANKS.

BACK-UP SPENT FUEL POOL SYSTEM

BASED ON ALL THE ABOVE THE STANDBY SPENT FUEL POOL COOLING SYSTEM WILL NOT 1) RESULT IN A CHANGE TO THE ASSUMPTIONS AS DESCRIBED IN THE SAFETY ANALYSIS REPORT, 2) PROVIDE A CHANGE TO THE PLANT TECHNICAL SPECIFICATIONS, OR 3) INVOLVE AN UNREVIEWED SAFETY QUESTION.

THE ABOVE ITEM WAS REVIEWED BY THE COMMITTEE WITH RESPECT TO THE TECHNICAL SPECIFICATIONS AND THE COMMITTEE HAS DETERMINED THAT NO TECHNICAL SPECIFICATION CHANGES OR VIOLATIONS WERE INVOLVED AND THERE ARE NO UNREVIEWED SAFETY QUESTIONS. THIS ITEM IS NOT COMPLETE, PENDING REVIEW OF MODIFICATION INSTALLATION.

^E

Turn this in tomorrow

[illegible]

STANDBY S.F.P. HEATEXCHANGER TUBE LEAK

IN THE EVENT of A TUBE LEAK IN The STANDBY S.F.P. HEAT EXCHANGER. The EXISTING S.F.P HEAT EXCHANGER COULD BE UTILIZED. SERVICE WATER FLOW IS being maintained THROUGH The HEATEXCHANGER AND The RADIATION MONITOR OPERATING. THE EXISTING HEATEXCHANGER WOULD BE PLACED IN SERVICE By DISCONNECTING EXISTING S.F.P. WATER PIPING from The TUBE SIDE of THE HEATEXCHANGER, INSTALL HOSE CONNECTIONS AND ROUTE HOSES TO & FROM EXISTING HEATEXCHANGER

THE ABOVE PROCESS & SUBSEQUENT POOL COOLING WOULD TAKE LESS THAN 24 HOURS TO ACCOMPLISH. BASED UPON The S.F.P. present HEATUP RATE of APPROXIMATELY 0.7 °F/HR SUBSTANTIAL TIME IS AVAILABLE TO RESTORE POOL COOLING PRIOR TO S.F.P. EXCEEDING ADMINISTRATIVE LIMIT of 135°F.

STANDBY S.F.P. PUMP FAILURE

IN THE EVENT OF S.F.P. PUMP FAILURE, IN MOST CASES THE PUMP COULD BE REPAIRED OR REPLACED & RESTORED TO SERVICE WITHIN 24 HOURS.

THE WORST CASE SENARIO BEING UNABLE TO OBTAIN A REPLACEMENT PUMP. IN THIS CASE THE EXISTING S.F.P. PUMP COULD BE UTILIZED. THE PUMP WOULD HAVE TO BE PHYSICALLY RELOCATED TO THE AUX. BLD. OPERATING LEVEL & HOSE CONNECTIONS ATTACHED TO PUMP. THIS TASK WOULD TAKE APPROXIMATELY 48 HOURS TO ACCOMPLISH.

BASED UPON THE S.F.P. PRESENT HEAT-UP RATE OF APPROXIMATELY 0.7 °F/HR SUBSTANTIAL TIME IS AVAILABLE TO RESTORE POOL COOLING PRIOR TO S.F.P. EXCEEDING ADMINISTRATIVE LIMIT of 125°F.

March 16, 1989

LOSS OF DECAY HEAT REMOVAL EXPEDITIOUS ACTION -
INTERIM "A" HOT LEG LEVEL TRANSMITTER
89-9

Generic letter 88-17 recommended expeditious actions including installing two independent RCS water level indications with the capability to provide water level information to Control Room operators. One such provision, a pressure transmitter (PT-432A) with indication at the Main Control Board has been in permanent existence; however, a similar provision is to be installed prior to entering the next reduced reactor coolant inventory operation. This will be installed at a test connection downstream of the Loop A Hot Leg Sample tap manual root valve 504, using tubing of identical material to the permanent installation for PT-432A in the B Loop Sample tap except that 3/8" tubing may be used in place of 1/4". A transmitter, similar to PT-432A, is to be installed, designated DPT-432B at the test point discussed above, to be mounted securely to the adjacent wall or on a stand which will be fabricated and installed such as to insure against toppling by use of struts, bumpers or tie-downs.

The signal cable will be installed under the controls of procedure A-1405 installation and removal of temporary cables.

The existing procedure O-2.3.1, Draining the Reactor Coolant System, is to be revised to address the indications to be monitored, including the subject provision. Regarding level indication difference between measurement points, the difference calculated from Westinghouse ESBU/WOG-88-173 dated October 14, 1988 will be provided to operators for guidance.

The above construction and operational requirements are to be observed. Based on these, the determinations called for in 10CFR50.59 are given below.

The installation does not result in a change to the assumptions of the analyses given in the Safety Analysis Report because of the substantial tubing installation and the adequate support system to provided as discussed above, it will not have any adverse effect on the safety-related equipment in the vicinity, or result in a decrease in reactor coolant inventory. The design bases events analyzed in the Safety Analysis Report which are associated with this proposed installation are the following:

- Decrease in Reactor Coolant Inventory

The installation does not involve a change in the Plant Technical Specifications because the substantial tubing installation and the adequacy of the support system is such as to ensure there will be no effect on assumptions provided in the Plant Technical Specification bases.

The installation does not increase the probability of an occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because the substantial tubing installation and the adequacy of the support system to be utilized ensures there will be no adverse effect on safety-related equipment.

The installation does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report because the substantial tubing installation and the support system adequacy, as described above, ensures there will be no adverse effect on safety related equipment within the vicinity.

The installation does not reduce the margin of safety as defined in the basis for any Plant Technical Specification because of the substantial tubing installation and the adequacy of the support system which ensures against any adverse effect on equipment or systems discussed in the bases of Technical Specifications.

10CFR50.59 SAFETY EVALUATION

TEMPORARY MODIFICATION 89-21A
TEMPORARY CONNECTION OF LT-426
REFERENCE LEG TO LT-427

INTRODUCTION

This temporary modification will connect the reference leg of LT-426 with the existing reference leg of LT-427. The plant is currently at Hot Shutdown and will remain at hot or cold shutdown while this temporary connection is in place. The purpose of this temporary connection is to determine the operability of LT-426 while connected to the reference leg of LT-427 due to a possible obstruction in the reference leg of LT-426.

The reference leg of LT-426 also has pressure transmitter PT-429. This pressure transmitter provides input to OT/ΔT, low pressurizer pressure, and hi pressurizer pressure trip along with low pressurizer pressure safety injection and pressure interlock input to PORV 430. The reference leg for LT-427 has pressure transmitter PT-430. This pressure transmitter provides input to OT/ΔT, low pressurizer pressure, and hi pressurizer pressure trips, low pressurizer pressure safety injection along with the pressure input to PORV 430, and the low pressure alarm at 2185 psig.

The temporary connection will be constructed of 3/8 stainless steel tubing and will be connected from the low side of LT-426 on the reference leg side of V12231L and the reference leg with PT-429 (LT-426S reference leg) will be capped. The other end of the temporary connection will be connected to the drain point of the reference leg of LT-427, at the transmitter side of the low side isolation valve.

The process of valving in this temporary tubing will allow operability of the 2/3 low pressure safety injection circuitry. Initially, LT-426 and PT-429 will be inoperable, isolated and the associated bistables will be in the trip condition. All remaining pressurizer pressure and level transmitters will be operable. After the reference leg of LT-426 is capped, pressure transmitter PT-429 will be declared operable and its bistables reinstalled. At this point, LT-427 will be declared inoperable and its bistables tripped. This will generate a reactor trip signal from 2/3 hi pressurizer level (reactor trip breakers will be open prior to trip of bistables). The connection will then take place between the low side of LT-426 and the reference leg of LT-427.

SAFETY EVALUATION

The probability of occurrence or the consequences of an accident previously evaluated in the UFSAR will not be increased. Since the stainless steel tubing run from LT-426 to LT-427 will be rated for system pressure and temperature, the probability of a LOCA from the temporary tubing will not be increased from the LOCA accident addressed in the UFSAR Chapter 15. Since the temporary tubing and both connection points are 3/8" in diameter, a leak from the temporary tubing will be equal to, or less than the capabilities of the charging system. Since the plant is maintained at the hot shutdown condition, the Reactor Trips from both the pressurizer pressure channels (OTΔT low pressure and hi pressure) and the level channels (hi level) are not required to be operable per Technical Specification 3.5 table 3.5-1. Letdown isolation signal will not be operable during this evolution. The consequences of an accident will not be increased because the letdown isolation signal is not assumed in the accident analysis of Chapter 15 of the UFSAR. Since, the pressurizer low pressure safety injection signal will be in the trip condition or operable, safety injection will remain fully operable during this temporary modification.

The possibility of an accident of a different type than any previously evaluated in the UFSAR will not be created by this temporary modification. The safety injection system will remain fully operable during this temporary modification and will respond to the accident as addressed in Chapter 15 of the UFSAR.

The margin of safety as defined in the basis of any Technical Specification will not be reduced by this temporary modification. Section 3.5 of Technical Specifications will be satisfied during this temporary modification. A simulated signal will be installed into the defeated LT-427 channel to allow operation of the pressurizer heaters and to keep 100kw of heaters operable. In Chapter 15 accident analysis, letdown isolation is to take place through CV isolation signal of AOV-371 and not via letdown isolation.

CONCLUSION

Temporarily connecting the reference leg of LT-427 to LT-426 does not involve an unreviewed safety question providing the connection is performed as specified above.

SECTION D - PROCEDURE CHANGES

This section contains a description of the changes to procedures as described in the UFSAR and a summary of the safety evaluation pursuant to the requirements of 10 CFR 50.59(b).

FIGURE 2

SAFETY EVALUATION SUMMARY FORM

PROCEDURE # PT-32A
DATE 4/29/89
PCN # 88-211-34

Exclusion from Screening Criteria - Items 1, 2, or 6

If "yes" is answered for Items 1 or 2, provide the type of "inconsequential change" or the referenced 10CFR50.59 safety evaluation below:

Change Type: _____

If "no" was answered for Item 6, provide the basis for exclusion below:

Basis for Exclusion: _____

10CFR50.59 Safety Evaluation - Item 7

If "no" has been answered for each question in items 7a through 7g this change is not an Unreviewed Safety Question. Document the justification for these conclusions below. List any material referenced in the space provided.

Written Justification: See attached evaluation

Referenced Material: _____

If "yes" was answered for Item 3, check this box [ ]

If "yes", was answered for Item 7, PORC shall review and approve this submittal. This proposed change is an Unreviewed Safety Question (USQ) and requires submittal to the NRC for their review.

Submitted By: DE Jon

50.59 for PT-32A

Amendment 34 to the Ginna Technical Specifications, mandates logic train testing for the reactor trip and bypass breakers, on an alternate month basis. This monthly logic testing will verify the operability of all sets of reactor trip logic actuating contacts, on the train undergoing testing. During this testing, operation of one set of contacts will result in a reactor trip breaker trip, the operation of all other sets of contacts will be verified by the use of indication circuitry. The testing shall be performed monthly unless the reactor trip breakers are open or shall be performed prior to startup if testing has not been performed within the last 30 days. The monthly testing of the bypass breaker, will verify manual trip of the bypass breaker using the shunt trip coil, actuated from the test switches in the reactor protection rack.

The reactor trip logic was designed to have the capability of testing any of the various logic combinations while at power, with the use of the bypass breaker as the allowing factor. During such logic testing, there is no reduction in plant safety due to the tripping scheme, whereby the train <u>not</u> undergoing testing generates the trip signal for its respective reactor trip breaker and the bypass breaker which is in service, bypassing the opposite trains reactor trip breaker. Therefore, if an actual trip signal were to be generated, both the bypass breaker and the reactor trip breaker on the active train would open, resulting in a reactor trip.

The probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR will be increased, due to the nature of the increased testing of the logic actuating relays and associated contacts. This is an obvious point in that the history of these relays and contacts were the determining factor in the NRC's decision to test them bi-monthly, in lieu of yearly, as had been done in the past. Therefore, by virtue of the NRC's review of this issue and their decision to increase the testing frequency, no unreviewed safety questions exist. Additionally, even if the malfunction rate increases substantially, the fact that we are testing in an established safety conscious test alignment, will not compromise plant safety or cause any unreviewed safety questions to be generated.

Gregg E. Joss
4/29/89

FIGURE 2

SAFETY EVALUATION SUMMARY FORM

PROCEDURE # PT-32B
DATE 4/29/89
PCN # 88-7240

Exclusion from Screening Criteria - Items 1, 2, or 6

If "yes" is answered for Items 1 or 2, provide the type of "inconsequential change" or the referenced 10CFR50.59 safety evaluation below:

Change Type: _____

If "no" was answered for Item 6, provide the basis for exclusion below:

Basis for Exclusion: _____

10CFR50.59 Safety Evaluation - Item 7

If "no" has been answered for each question in items 7a through 7g this change is not an Unreviewed Safety Question. Document the justification for these conclusions below. List any material referenced in the space provided.

Written Justification: See attached evaluation

Referenced Material: _____

If "yes" was answered for Item 3, check this box ☐

If "yes", was answered for Item 7, PORC shall review and approve this submittal. This proposed change is an Unreviewed Safety Question (USQ) and requires submittal to the NRC for their review.

Submitted By: DE Jon

Amendment 34 to the Ginna Technical Specifications, mandates logic train testing for the reactor trip and bypass breakers, on an alternate month basis. This monthly logic testing will verify the operability of all sets of reactor trip logic actuating contacts, on the train undergoing testing. During this testing, operation of one set of contacts will result in a reactor trip breaker trip, the operation of all other sets of contacts will be verified by the use of indication circuitry. The testing shall be performed monthly unless the reactor trip breakers are open or shall be performed prior to startup if testing has not been performed within the last 30 days. The monthly testing of the bypass breaker, will verify manual trip of the bypass breaker using the shunt trip coil, actuated from the test switches in the reactor protection rack.

The reactor trip logic was designed to have the capability of testing any of the various logic combinations while at power, with the use of the bypass breaker as the allowing factor. During such logic testing, there is no reduction in plant safety due to the tripping scheme, whereby the train <u>not</u> undergoing testing generates the trip signal for its respective reactor trip breaker and the bypass breaker which is in service, bypassing the opposite trains reactor trip breaker. Therefore, if an actual trip signal were to be generated, both the bypass breaker and the reactor trip breaker on the active train would open, resulting in a reactor trip.

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Gregg E. Joss
4/29/89

FIGURE 2

SAFETY EVALUATION SUMMARY FORM

PROCEDURE # RF-12.2
DATE 03/06/89
PCN # _____

Exclusion from Screening Criteria - Items 1, 2, or 6

If "yes" is answered for Items 1 or 2, provide the type of "inconsequential change" or the referenced 10CFR50.59 safety evaluation below:

Change Type: _____

If "no" was answered for Item 6, provide the basis for exclusion below:

Basis for Exclusion: _____

10CFR50.59 Safety Evaluation - Item 7

If "no" has been answered for each question in items 7a through 7g this change is not an Unreviewed Safety Question. Document the justification for these conclusions below. List any material referenced in the space provided.

Written Justification: See attached documents

Referenced Material: Section 15.7, 9.1

If "yes" was answered for Item 3, check this box [X]
Use of NEW FUEL ELEVATOR

If "yes", was answered for Item 7, PORC shall review and approve this submittal. This proposed change is an Unreviewed Safety Question (USQ) and requires submittal to the NRC for their review.

Submitted By: John Cook

The attached procedure RF 42.2 controls the examination of fuel assemblies XT03 and XT04. Both fuel assemblies will be examined in the spent fuel pool during the outage period that the core is completely unloaded. Fuel assembly XT04 will be examined visually only. Fuel assembly XT03 will be examined visually, but will also have individual rods removed for specific measurements. To remove the rods the fuel assembly will be placed in the new fuel elevator and raised to a depth of no less than 8 ft below the pool surface. At this level the upper tie plate will be removed and individual rods grappled. Each rod will be removed and reinserted 20 inches by hand to insure their are no interferences at the grids. The rod will be completely removed by lowering the new fuel elevator. After the measurements are completed the rod will be reinserted by hand 20 inches, and then fully inserted by raising the elevator. Additionally peripheral rods will be reinserted using a special fixture to minimize the potential for hookout at grid locations.

Transfer of fuel assemblies within the spent fuel pool will be in accordance with existing procedure RF 8.4. No loads in excess of a fuel assembly and its handling tool (1500 lbs) will be suspended over racks containing spent fuel. Therefore the radiological release from a potential fuel handling accident remains bounded by that analyzed in section 15.7.3 of the UFSAR.

Placement of a spent fuel assembly in the new fuel elevator is not addressed in Section 9.1.4.3.2 in the UFSAR which specifically states that the elevator will be used for new fuel only. The safety concern is the potential for the elevator to be raised to the pool surface with a spent fuel assembly creating a severe radiological hazard. However the potential for this to occur is minimized through two independent measures. First, elevator operation is normally controlled by a push button that must be continuously depressed for operation. The elevator cable will be suitibly marked to provide the operator with indication when minimum depth is approached. Second, the up limit switch on the elevator will be adjusted to maintain the minimum 8ft depth.

Transfer of single fuel rods will be by hand tools. These tools will be marked to indicate the minimum required depth of 6ft. The fuel rod elevator will also be equiped with limit switches to maintain the minimum depth at 6 ft.

Initial of the fuel rods from the fuel assembly will be performed manually to prevent the potential for overloading the rod during lowerin of the elevator. Initial insertion of the rod will also be performed manually.

The attached procedure RF 42.2 controls the examination of fuel assemblies XT03 and XT04. Both fuel assemblies will be examined in the spent fuel pool during the outage period that the core is completely unloaded. Fuel assembly XT04 will be examined visually only. Fuel assembly XT03 will be examined visually, but will also have individual rods removed for specific measurements. To remove the rods the fuel assembly will be placed in the new fuel elevator and raised to a depth of no less than 8 ft below the pool surface. At this level the upper tie plate will be removed and individual rods grappled. Each rod will be removed and reinserted 20 inches by hand to insure their are no interferences at the grids. The rod will be completely removed by lowering the new fuel elevator. After the measurements are completed the rod will be reinserted by hand 20 inches, and then fully inserted by raising the elevator. Additionally peripheral rods will be reinserted using a special fixture to minimize the potential for hookout at grid locations.

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Placement of a spent fuel assembly in the new fuel elevator is not addressed in Section 9.1.4.3.2 in the UFSAR which specifically states that the elevator will be used for new fuel only. The safety concern is the potential for the elevator to be raised to the pool surface with a spent fuel assembly creating a severe radiological hazard. However the potential for this to occur is minimized through two independent measures. First, elevator operation is normally controlled by a push button that must be continuously depressed for operation. The elevator cable will be suitibly marked to provide the operator with indication when minimum depth is approached. Second, the up limit switch on the elevator will be adjusted to maintain the minimum 8ft depth.

Transfer of single fuel rods will be by hand tools. These tools will be marked to indicate the minimum required depth of 6ft. The fuel rod elevator will also be equiped with limit switches to maintain the minimum depth at 6 ft.

The initial pullof the fuel rods from the fuel assembly will be performed manually to prevent the potential for overloading the rod during lowering of the elevator. Initial insertion of the rod will also be performed manually.

Therefore this process does not present an unreviewed safety question for the following reasons:

1. The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased.

The fuel handling accident is addressed in chapter 15 of the UFSAR. At no time is more than one fuel assembly being transported by a

handling tool or installed in the new fuel elevator for examination. At no time does the opportunity occur for more than one assembly to be damaged by a handling accident. The required building ventilation alignment and the radiological source term is bounded by the UFSAR assumptions.

2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis is not created.

Severe radiological consequences would result if a spent fuel assembly was raised to the surface of the pool in the new fuel elevator. However, this would require the failure of two independent means of restricting the assembly height to the maximum specified.

3. The margin of safety as defined in the basis for any technical specification is not reduced.

The required systems to mitigate the effects of fuel handling accidents are required for this fuel examination. The required depth for the examined fuel assembly in the new fuel elevator will provide sufficient radiological shielding, or adjustments will be made based upon review by health physics personnel. The double failure required for raising the fuel assembly makes evaluation of this event unnecessary.

SECTION E - COMPLETED SPECIAL TESTS (ST) AND EXPERIMENTS

This section is to contain a description of special tests and experiments performed in the facility, pursuant to the requirements of 10 CFR 50.59(b). Within the time frame of this report, there were two conducted.

TECHNICAL [illegible]

OCT 2 6 1988

Category 4.36

Reviewed J.A. Widay

CENTRAL RECORDS
QA LIFETIME

FIGURE 4

A-301.1:11

Refer to A-301.1 for Instructions

RG&E

SAFETY EVALUATION SUMMARY REPORT

For ST-88.02 JW No. _____

DESCRIPTION OF MODIFICATION, SPECIAL TEST OF EXPERIMENT:

Special Test "RCS Leakage Determination of 10-7-88"

PREPARED BY: J.A. Widay / A. Morris DATE: 10-7-88

1. DOCUMENTS REVIEWED: Section 15.1 Pages 15.1.1 thru 15.1.15

A. UFSAR - SECTION ~~3~~ JW 6.1 PAGES 6.1 thru 6.19

SECTION 6.3 PAGES 6.3.1 thru 6.3.40

B. TECHNICAL SPECIFICATIONS Section 15.6 Pages 15.6.1 thru 15.6.24

SECTION 3.3 PAGES 3.3-1 thru 3-4

SECTION 3.3 (Basis) PAGES 3.3-8 thru 3.3-A

2. EVALUATION RESULTS:

	YES	NO
A. AN UNREVIEWED SAFETY QUESTION INVOLVED (IF YES, CHECK APPLICABLE REASON BELOW)	[ ]	[X]

- INCREASED PROBABILITY OF OCCURRENCE OF CONSEQUENCES OF AN ACCIDENT OR A MALFUNCTION: _____

- POSSIBILITY CREATED FOR ACCIDENT OR MALFUNCTION NOT CONSIDERED BEFORE: _____

- MARGIN OF SAFETY DEFINED IN BASIS FOR TECHNICAL SPECIFICATIONS IS REDUCED: _____

	YES	NO
B. A CHANGE IN TECHNICAL SPECIFICATIONS REQUIRED IF YES, BRIEF DESCRIPTION:	[ ]	[X]

APPROVED [signature] TITLE Superintendent, Ginna DATE 10-7-88

PORC DATE: 10-7-88 ITEM NUMBER _____

NSARB DATE: _____

USNRC APPROVAL (IF REQUIRED): _____

- SAFETY ANALYSIS ATTACHED -

QA - LIFETIME

SAFETY EVALUATION
Special Test "RCS Leakage Determination of 10/7/88
ST-88.2

1.0 SCOPE OF ANALYSIS:

1.1 The purpose of this test is to determine the cause(s) of "B" SI Accumulator ("A" Loop Accumulator) in leakage and determine the cause of an observed elevated pressure and temperature on 1A High Head SI Line ("B" Loop SI Line) and correct if possible.

1.2 The scope of this analysis is to assure that the conduct of this test during reactor power operation does not:

a. increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety, previously evaluated in the FSAR, or

b. create the possibility of an accident or malfunction of a different type than any evaluated previously, or

c. reduce the margin of safety as defined in the basis of any Technical Specification.

2.0 REFERENCES:

2.1 Ginna Updated Facility Safety Analysis Report Section 6 and Section 15.

2.2 Ginna Technical Specifications Section 3.3.

2.3 RG&E Dwg. 33013-1262.

3.0 SAFETY ANALYSIS:

3.1 10 CFR 50.59 Review

The proposed procedure to determine RCS leakage of 10/7/88 has been reviewed to determine if sections 50.59 (a)(2)(i), (a)(2)(ii) and (a)(2)(iii) apply

(a)(2)(i) The closure of MOV 878 "B" or "D" constitutes the entering of a limiting condition for operation (LCO) (Section 3.3 Ginna Technical Specifications). The LCO constitutes an analyzed condition within the Safety Analysis Report. Therefore, the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety is not increased beyond that assumed in the Technical Specification LCO.

However, given that the 878 B/D flow paths are essential in delivering water to each cold leg of the RCS during an accident condition with no functional replacement, similar to the accumulator outlet valves, it is recommended that the 878 B/D valve, 1) remain active while closed and 2) should be closed no more than (1) one hour similar to the accumulator outlet valve specification.

(a)(2)(ii) No different type accident or malfunction other than the SAR evaluated accidents or malfunctions as defined by the Technical Specification LCO is created.

(a)(2)(iii) No reduction in the margin to safety as defined in the basis of Technical Specifications is intimated by this test [see discussion in (a)(2)(i) above]

4.0 PRELIMINARY SAFETY EVALUATION:

Based on the above it is determined that:

a. the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety, previously evaluated in the safety analysis will not be increased, and

b. the possibility of an accident or malfunction of a different type than that evaluated previously in the safety analysis will not be created, and

c. the margin of safety as defined in the basis for any Technical Specification is not reduced.

PREPARED BY: _____ DATE: 10/7/88
Responsible ~~Staff~~ Engineer

REVIEWED BY: _____ DATE: 10-7-88
Reactor Engineer

APPROVED BY: _____ DATE: 10-7-88
Technical Manager

FIGURE 4 Refer to A-301.1 for Instructions

RG&E SAFETY EVALUATION SUMMARY REPORT

For PROCEDURE No. ST-89.1

DESCRIPTION OF MODIFICATION, SPECIAL TEST OF EXPERIMENT:
TEMPERATURE STRATIFICATION MONITORING OF PRESSURIZER SURGE LINE AND AUXILIARY PRIMARY SYSTEM PIPING VIA TEMPORARY INSTALLATION OF THERMOCOUPLES
SAFETY ANALYSIS DATED - 4/27/89

PREPARED BY: ROBERT F. BRYAN DATE: 5/3/89

1. DOCUMENTS REVIEWED:

A. UFSAR - SECTION 5.1.X, 9.3 PAGES 5.1-11, 5.4-33 thru 5.4-35

SECTION 5.4 PAGES 5.4-15 and 5.4-16; Pages 9.3-52

B. TECHNICAL SPECIFICATIONS

SECTION _____ PAGES _____

SECTION _____ PAGES _____

2. EVALUATION RESULTS:

	YES	NO
A. AN UNREVIEWED SAFETY QUESTION INVOLVED (IF YES, CHECK APPLICABLE REASON BELOW)	☐	☒
- INCREASED PROBABILITY OF OCCURRENCE OF CONSEQUENCES OF AN ACCIDENT OR A MALFUNCTION: _____		
- POSSIBILITY CREATED FOR ACCIDENT OR MALFUNCTION NOT CONSIDERED BEFORE: _____		
- MARGIN OF SAFETY DEFINED IN BASIS FOR TECHNICAL SPECIFICATIONS IS REDUCED: _____		
B. A CHANGE IN TECHNICAL SPECIFICATIONS REQUIRED IF YES, BRIEF DESCRIPTION:	☐	☒

APPROVED J. A. Widay TITLE Dept. Nuc. Prod. DATE 5-3-89

PORC DATE: 5-3-89 ITEM NUMBER 4.1.0-89-081-001

NSARB DATE: _____

USNRC APPROVAL (IF REQUIRED): _____

- SAFETY ANALYSIS ATTACHED -

QA - LIFETIME

SAFETY ANALYSIS

GINNA STATION

TEMPERATURE STRATIFICATION MONITORING

TEMPORARY MODIFICATION

REVISION 0

APRIL 27, 1989

PREPARED BY: _____ 4-28-89
Electrical Engineer — Date

REVIEWED BY: _____ 5/1/89
Reactor Engineer — Date

APPROVED BY: _____ 4-29-89
Manager, Technical Engineering — Date

PORC APPROVAL

DATE: MAY 3 1989

Revision Status Sheet

Page	Latest Rev.	Page	Latest Rev.	Page	Latest Rev.
i	0				
ii	0				
1	0				
2	0				
3	0				
4	0				
5	0				

SAFETY ANALYSIS

1.0 SCOPE OF ANALYSIS:

1.1 NRC Bulletin No. 88-11, "Pressurizer Surge Line Thermal Stratification", requests all addressees to establish and implement a program to confirm pressurizer surge line integrity in view of the occurrence of thermal stratification, and requires them to inform the staff of the actions taken to resolve this issue. Pursuant to satisfying the requirement and schedule of Bulletin 88-11, Rochester Gas and Electric Corporation is participating in a program for partial resolution of this issue through the Westinghouse Owner's Group (WOG).

The WOG program is designed to benefit from the experience gained in the performance of several plant-specific analyses on Westinghouse PWR surge lines. These detailed analyses included definition of revised thermal transients (including stratification). The overall analytical approach used in all of these analyses has been reviewed by the NRC staff. A significant amount of pressurizer surge line thermal monitoring data has been obtained in support of these plant-specific analyses. Additional pressurizer surge line thermal monitoring and plant system data continues to be made available within the WOG, resulting in a steadily increasing database.

Pressurizer surge line temperature stratification data will be collected at Ginna for inclusion in the WOG database.

1.2 Thermal stratification and cycling phenomena were also discovered in auxiliary piping connected to the Reactor Coolant System (RCS). These phenomena may cause pipe cracks in the unisolable sections of auxiliary piping systems. USNRC issued Bulletin 88-08 and subsequent supplements to address this phenomena. As a result, electric utilities are required to provide response to the NRC regarding the review and identification of auxiliary pipe sections connected to the RCS that may be subjected to thermal stratification not considered in the design of the plant.

Westinghouse has identified three piping sections that may be subjected to thermal stratification. These are:

a) charging line to Loop B hot leg between check valve 393 and the RCS nozzle

b) alternate charging line to Loop A cold leg between check valve 383A and the RCS nozzle

c) auxiliary spray line between check valve 297 and the main pressurizer spray line

1.3 This analysis addresses the consequences of installing temporary thermocouples on the pressurizer surge line, Loop B charging line, Loop A alternate charging line, and auxiliary spray line. Thermocouple extension wire shall be temporarily routed to a data acquisition controller. The controller shall provide a digital output to a remote personal computer. The data output line shall utilize temporary cable and existing spare circuits to exit containment.

1.4 In addition to the thermocouples, four temporary displacement transducers are to be installed on the pressurizer surge line. The transducers will monitor line movement during heat-up, cool-down, and during temperature stratification conditions.

2.0 REFERENCE DOCUMENTS:

2.1 Ginna Station Procedure, A-303, "Preparation, Review, and Approval of Safety Analysis for Minor Modifications or Special Tests".

2.2 Ginna Station Procedure, A-1405, "Installation and Removal of Temporary Cables".

2.3 Ginna Station Procedure, "A-1406, "Control of Temporary Modifications".

2.4 R.E. Ginna Nuclear Power Plant Updated Safety Analysis Report.

2.5 USNRC Regulatory Guide 1.70, Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants, LWR Edition, Revision 3, November 1978.

2.6 Appendix R Alternative Shutdown System, "Ginna Nuclear Power Plant, Revision 4, January 1987.

2.7 GAI, "Fire Protection Evaluation" Report No. 1936, March 1977.

3.0 SAFETY ANALYSIS:

3.1 A review has been made of all events analyzed in the Ginna FSAR and the events requiring analysis by the USNRC Regulatory Guide 1.70. The events related to this modification are:

1) seismic event
2) major and minor fires

3.1.1 All temporary instrument cable installed shall be routed to follow the respective line to be monitored and then drop vertically to containment floor elevation 235'. The temporary cable will then be routed along the floor, following the shield wall to the free standing data acquisition controller. No seismic impact is anticipated since instrument cable weight is negligible compared to pipe/insulation weight. Instrument cable routed on the floor and the free standing controller (approx. 10"Hx 12"W x 24"D) will not affect seismic structures in the immediate vicinity. The data acquisition controller will be placed outside of the shield wall near the lower end of the pressurizer.

3.1.2 Temporary cable used for the data link shall follow the shield wall at elevation 235', rise to elevation 253' via south-east stairs, and follow the shield wall to Incore Reference Junction Box 1B. No seismic impact is anticipated since this cable will follow a floor/stair routing.

3.1.3 Cable separation in Incore Reference Junction Box 1B shall be maintained. The temporary data link cable shall be spliced to spare circuit A780. Cable and conductor insulation shall be restored using Raychem WCSF sleeves. The spliced cables shall be dressed in Incore Box 1B so that distance between A780 and Incore Thermocouple cables is maximized.

3.1.4 This temporary modification will not propagate a major or minor fire. Cables used for thermocouples and thermocouple extensions are individually sheathed in Inconel Overbraid (thermocouples) or Tinned Copper Overbraid (extensions). No additional fire loading is anticipated by the overbraided cable. Temporary cable used for the data link is rated and qualified to IEEE-383 flame requirements as a minimum. Total estimated containment fire loading for this temporary data link cable is 200000 BTUs.

3.1.5 Temporary cable used for the data link will be spliced to existing spare cable A779 in the Air Handling Room. Routing is through a floor penetration to the Mux. Room. Total fire loading for the temporary cable in the Air Handling Room is negligible. Total fire loading for the temporary cable in the Mux. Room is estimated at 2000 BTUs.

3.1.6 Fire barrier penetrations will be repaired and replaced in accordance with existing plant procedures. Therefore existing seals will not be degraded.

3.1.7 This modification does not affect the safe shutdown analysis in the Appendix R submittal since there is no effect on separation of existing circuits, associated circuits, or fire area boundaries as analyzed in the Appendix R submittal.

3.1.8 This modification will not effect the capabilities of the Alternative Shutdown System. Furthermore, none of the existing procedures for obtaining an Alternative Safe Shutdown will be effected. This modification, therefore, complies with 10CFR50, Appendix R.

3.2 This modification does not degrade the capability of any Safety System to perform its function. The assumptions and conclusions of existing analyses are unchanged. No new types of events are postulated.

3.2.1 Therefore, it has been determined that the margins of safety during normal operations and transient conditions anticipated during the life of the station have not been affected. It has also been determined that the adequacy of structures, systems, and components provided for the consequences of accidents have not been affected.

4.0 PRELIMINARY SAFETY EVALUATION:

4.1 The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety will not be increased by the proposed modification.

4.2 The possibility of an accident or a malfunction of a different type other than any evaluated previously will not be created by the proposed modification.

4.3 The margin of safety as defined in the basis for any Technical Specification will not be reduced by the proposed modification.

4.4 The proposed modification does not involve an unreviewed safety question or require a Technical Specification change.

All of the above were reviewed by the PORC committee with respect to the Technical Specifications and the committee has determined that no Technical Specification changes or violations were involved.

Additionally, these changes were reviewed in committee to determine if they presented an Unreviewed Safety Question and the general summations of these reviews are as follows:

1. These changes do not increase the probability of occurrence, or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR, because:

   These changes were made to ensure continued operability/availability of plant equipment and will not result in any equipment being operated outside of its normal operating range. This results in continued operability/availability of equipment important to safety. These changes additionally will not result in a change of operating characteristics of equipment used in transient/accident mitigation which precludes an increase in the probability of occurrence of an accident. Because these changes ensure continued availability of plant equipment, the limits shown in the Technical Specifications, and the assumptions of the safety analyses of the Updated Final Safety Analysis Report continue to be met. As a result there is no increase in the consequences of any presently postulated accident.

2. These changes do not create the possibility for a new or different kind of accident, or a malfunction of a different type from any accident previously evaluated in the UFSAR because:

   These changes do not present new failure mechanisms outside of those presently anticipated, and are bounded by the events contained in the Updated Final Safety Analysis Report.

3. These changes do not reduce the margin of safety because:

   Present margins as contained in the Technical Specifications are valid, and these procedure changes are made within those limits. These procedure changes will not result in violating the baseline assumptions made for equipment availability in the Technical Specifications, and the Updated Final Safety Analysis Report.