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Vice President
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April 16, 2001

U.S. Nuclear Regulatory Commission
Document Control desk
Attn: Guy S. Vissing
Project Directorate I-1
Washington, D.C. 20555

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

Dear Mr. Vissing:

The subject report is hereby submitted as required by 10 CFR 50.59(d)(2). The enclosed report contains descriptions and summaries of the 10 CFR 50.59 evaluations conducted in support of proposed changes to the facility and procedures described in the UFSAR and special tests, from July 1999 through December 2000, performed under the provisions of 10 CFR 50.59. Also included in this report is a summary of commitment changes performed in accordance with NEI 99-04, Guidelines for Managing NRC Commitment Changes, as endorsed by NRC Regulatory Issue Summary 2000-17.

Very truly yours,


Robert C. Mecredy

Attachment

1000289

IE 47

xc: Mr. Guy S. Vissing (Mail Stop 8C2)
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2001 REPORT
OF
FACILITY CHANGES, TESTS, AND EXPERIMENTS
CONDUCTED WITHOUT PRIOR NRC APPROVAL
FOR JULY 1999 THROUGH DECEMBER 2000
UNDER THE PROVISIONS OF 10 CFR 50.59

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

DATED APRIL 16, 2001

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1119

Title of Change: Evaluation of Adjustable Travel Stop Set Position for HCV-624 and HCV-625

Implementation Document: PCR 98-068

UFSAR Affected Sections: 6.3.3.9

System: Residual Heat Removal System

Description of Change:

An adjustable valve travel stop was added to the actuators for RHR discharge control valves AOV-624 and AOV-625. The travel stop consists of a top mounted handwheel, mounted onto the existing actuator top cover. The handwheel has the capability to either manually close the valve or be used as a limit to upward travel of the actuator, thereby limiting the open position of the valve. A desired position of the valve could be set during a flow test during the refueling cavity filling during an outage. Following the setting of each valve actuator in position, the handwheel would be chain locked in place. Revision 1 to this safety evaluation covered changes which allowed for a second option of operating the RHR system with the AOV-624 and AOV-625 valves fully open, which is a previously approved configuration, with the handwheel on each valve actuator retracted to its maximum position. If needed, throttling could be achieved by utilizing the handwheel affixed to the top of the actuators prior to sump recirculation.

Evaluation Summary:

The functional impact of the modification involves the reduction in LHSI flow post-LOCA, when the valve open travel position is limited by the travel stop, as compared to the flow rate that would exist when the valve is full open. The reduction in flow is acceptable and has been shown to meet all LHSI delivery requirements post-LOCA.

Since the maximum valve position will be set by the travel stop, loss of instrument air will not cause an increase in RHR flow and, therefore, no operator action would be needed to further throttle RHR flow. If the Rev. 1 option is utilized, it will require operator entry to the auxiliary building during the injection phase following a design basis event, which has been previously evaluated as acceptable.

Based on the evaluations performed, it has been concluded that these change options do not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1121

Title of Change: Changes to ATT-2.1, ATTACHMENT MIN SW, to Address ACTION Report 98-1042 Concerns

Implementation Document: PCN to ATT-2.1, ATTACHMENT MIN SW

UFSAR Affected Sections: 9.2.1.1

System: Service Water System, Containment HVAC System, Component Cooling Water System, Diesel Generator Emergency Power System

Description of Change:

This evaluation was the result of a change to procedure ATT-2.1, "ATTACHMENT MIN SW". This attachment is used to align the service water system for the recirculation phase of a LOCA with one operable service water pump. ATT-2.1 had initially instructed the operators to fully open the service water globe valve on the discharge side of the component cooling water (CCW) heat exchanger to be aligned. During testing, it was determined that the service water flow rate to the applicable CCW heat exchanger would be higher than originally predicted, or desired, if the service water globe valve were opened completely with a single service water pump in service. Procedure changes were proposed to optimize the service water flow to the required components.

Evaluation Summary:

The changes to ATT-2.1 increase the back-pressure on the service water system by isolating service water to non-operating components and increasing the hydraulic resistance by throttling flow through the aligned CCW heat exchanger flow path. The increased system pressure will increase the flow rate through all parallel branches above what it would be if the system were aligned per the previous revision of the procedure attachment.

The increase in service water system flow to the emergency diesel generator coolers as a result of the proposed changes is beneficial with respect to emergency diesel generator operability. Isolating the inoperable service water loads in containment will increase the overall containment heat removal rate further and is therefore conservative with respect to EQ and containment hydrogen issues.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1126

Title of Change: Revise Restart/Stopping Criteria for Containment Spray Pump During the Sump Recirculation Phase

Implementation Document: PCN to ES-1.3, Transfer to Cold Leg Recirculation

UFSAR Affected Sections: 6.3.3.9

System: Containment Spray System

Description of Change:

The subject of this evaluation was to modify the restart and subsequent stopping criteria of a containment spray pump during the sump recirculation phase. The previous criteria, based on previous analysis provided for a restart at a minimum containment pressure of 37 psig (increasing), and subsequent stopping at 32 psig (decreasing). The proposed change modified this criteria to a restart at 28 psig (increasing) and subsequent stopping at 22 psig (decreasing).

Evaluation Summary:

An analysis has been performed to determine the time to reach transfer to sump recirculation and the associated containment pressure during LOCA Containment Integrity. The impact of the proposed change was to modify the containment spray pump restart and subsequent stop criteria in emergency procedure ES-1.3, during evaluation of the need to initiate high-head sump recirculation within the procedure. There were no hardware changes being made. The containment pressure criteria being applied is a function of the transient. There are no known transients that could cause the containment pressure to rise to 28 psig during the sump recirculation phase. Loss of Coolant Accidents evaluated indicate a maximum containment pressure of about 9.3 psig (24 psia) at the time of switchover, based on the containment integrity analysis in the UFSAR. A value of containment pressure is included in the EOP procedure to cover a beyond design basis condition. Modifying the stop criteria to 22 psig, as containment pressure is decreasing with operation of a spray pump, has been shown by analysis to provide adequate NPSH margin for the RHR pump when operated in conjunction with a containment spray pump (and safety injection pump).

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1137

Title of Change: Safety Evaluation for Conversion of Part of the New Fuel Storage Area to a Contaminated Work Area, Thereby Reducing the Capacity of Storage Areas from 44 to 12

Implementation Document: PCR 98-064

UFSAR Affected Sections: 9.1.1

System: Auxiliary Building, Auxiliary/Intermediate Building HVAC, Instrument Air, Service Air, Water Treatment

Description of Change:

Approximately 75% of the New Fuel Building area has been converted to house a contaminated work area. This required removal of 32 existing new fuel storage racks and thereby decrease the capacity of the fuel storage area from 44 to 12 assemblies. A new wall and curbs has been constructed between the segregated areas. Also, a new floor drain has been installed in the new fuel area to ensure adequate drainage. The ventilation system has been configured to prevent the introduction of foreign materials into the fuel area from the maintenance area. Connections were provided to the Instrument/Service Air systems for use as appropriate.

Evaluation Summary:

The functional requirements of the SSCs remain the same, with the exception of the capacity of the new fuel storage area. The ability of the New Fuel Storage Area to provide a protective area for the storage/inspection of new reactor fuel has not been changed. Adequate space has been provided to perform the necessary function of receiving and inspecting new fuel because new fuel is typically moved to the Spent Fuel Pool after inspection for longer term storage, making room for the receipt of more fuel. Drainage and ventilation were added to provide for protection of the new fuel. A positive benefit of fewer new fuel storage racks in the area is that the maximum obtainable K_{eff} will be lower.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1138

Title of Change: Turbine Stop and Control Valve Test Frequency Change

Implementation Document: None

UFSAR Affected Sections: 10.2.3.4.4, 3.5.1.2

System: Turbine-Generator System

Description of Change:

The purpose of this SEV was to evaluate the safety consequences for changing the monthly Turbine Stop and Intercept valve stroke testing to an annual (12 month) test.

Evaluation Summary:

The change decreases the frequency at which turbine valves are tested, but does not change the kind, number, or type of overspeed protection components available. Changing the frequency of turbine valve testing maintains the failure rate within the allowable acceptance criteria with respect to turbine missiles. An analysis referenced in WCAP-11525 provides an evaluation of the probability of turbine missile ejection for the purpose of justifying a reduction in the frequency of turbine valve testing. In a letter to Westinghouse Electric Corporation the NRC established acceptable criteria for the probability of generating a turbine missile from an unfavorably oriented turbine. The evaluation in WCAP-11525 shows that the probability of a missile ejection incident for turbine valve test intervals of up to one year for plants similar to Ginna is significantly less than the established acceptance criteria. A plant specific analysis of the potential for missile ejection also shows that the NRC acceptance criteria is met assuming worst case conditions.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1139

Title of Change: Defeat of the High Flux at Shutdown Containment Audible Alarm

Implementation Document: PCNs to procedures AR-E-5, AR-E-29, O-1.2, O-2.1, O-6.7, S-32, PT-6.1, CPI-SR-N31, CPI-SR-N32

UFSAR Affected Sections: 7.5.1.1.3, 7.7.3.2.1, 15.4.4.2.1

System: Nuclear Instrumentation System

Description of Change:

The purpose of this evaluation was to address the defeating of the Nuclear Instrument System (NIS) Source Range High Flux at Shutdown audible alarm in containment during all modes of plant operation. The audible alarm in containment can be inhibited by placing the Manual High Flux Block switches on the NIS Source Range drawers to the 'Block' position. If a high flux condition were to occur, control room annunciator E29 would alarm and alert the operators of the condition. Operations could then take the appropriate actions that may be required, including sounding the containment evacuation alarm.

Evaluation Summary:

This change does not affect the function of the source range instrumentation with regard to providing the required safety related and safety significant functions. The High Flux at Shutdown alarm in containment is not a required safety function and only provides an additional alarm inside containment. The current Technical Specifications and administrative controls provide assurance that an uncontrolled reactor startup is very unlikely. The response by control room personnel has not been affected by the change. The audible count rate in the control room and containment is not affected by this change. The alarm is not being removed as part of the proposed change, it is only being defeated through the use of installed switches.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1140

Title of Change: Fuel Transfer System Modification

Implementation Document: PCR 96-003

UFSAR Affected Sections: 9.1.4.3.4

System: Fuel Handling System

Description of Change:

The original design of the Stearns-Roger Fuel Transfer System included a mechanically actuated electrical interlock associated with the fuel transfer tube, manually operated, gate valve. The interlock function failed and in order to operate the fuel transfer car, a jumper had to be temporarily installed in the fuel transfer system control console. A modification was made which permanently installed a jumper wire to bypass the "gate valve open" interlock; remove procedure guidance for installation and removal for each refueling, and to enhance station procedures to ensure sufficient administrative guidance for the safe operation of the fuel transfer system.

Evaluation Summary:

The intent of the gate valve interlock is to prevent driving the fuel transfer system unless the valve is fully open. This intent, whether met by electrical interlock or procedural control, is limited in that the gate valve could be manually manipulated in the shut direction at any time, even with a fuel assembly directly beneath the valve disc. The difference would be that if the interlock were in place, the car would stop and if the interlock is jumpered, the car would continue to attempt moving the fuel assembly until the air motor stalls. The valve disc would still not contact the fuel assembly, even in this scenario since the fuel is inside the fuel transfer basket. While a failure of the sprocket or chain would render the transfer system inoperable, the fuel assembly would remain untouched. Removal of a fuel assembly from a damaged/inoperable fuel transfer system is accomplished utilizing the Emergency Cable Assembly feature installed in the fuel transfer system. Therefore, this change involves primarily commercial issues and not nuclear safety issues.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1141

Title of Change: Removal of Reactor Makeup Water Tank Diaflote Diaphragm (Bladder)

Implementation Document: PCR 99-070

UFSAR Affected Sections: 9.3.4.3.3.10

System: Reactor Makeup Water System

Description of Change:

The Reactor Makeup Water (RMW) tank had a torn bladder. The cost of bladder replacement is exceptionally high. Based on the experience of the bladder change out of the outside condensate storage tank, the bladder can fail soon after replacement. It was recommended that the bladder be removed and not replaced, and that the RMW tank internals be inspected and cleaned. In addition, an external filter media was placed over the tank top vent to filter any particles and dust from directly entering the tank.

Evaluation Summary:

The removal of the bladder or diaphragm will not functionally affect the ability of the reactor makeup water system to provide cooling or to dilute the reactor coolant system. The reactor makeup water tank is a carbon steel plastic lined tank, the inside of the tank is treated with a Plasite 7155 HHB coating up to the mounting bracket for the diaphragm. The height of the inside treated surface of the tank is greater than the operating fluid range of the tank. Therefore, removal of the membrane will not expose any untreated portions of the carbon steel tank to the reactor makeup water. The placement of a mechanical type filter over the tank vent will not affect tank operation, this filter will not restrict any significant air movement and will essentially allow the tank to freely vent.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1145

Title of Change: Evaluation of an Unusual Conditions Found During the IWL Inspection of the Containment Exterior Concrete Structure

Implementation Document: None

UFSAR Affected Sections: 3.8.1.1.1

System: Containment

Description of Change:

During ASME Code Section XI inspections some unusual conditions of the accessible exterior surface of the containment structure concrete were found. A 24" long x 14" high x 9" deep section of concrete was missing from the side wall cylindrical portion of the containment structure which appeared to be from the placement of instrumentation during initial containment pressure testing. In addition, a number of shallow core bored holes at various locations on the exterior of the concrete containment were found. There were total of eighteen holes which are surmised to have been used as an initial construction aide to support scaffolding or heavy rigging.

Evaluation Summary:

It has been determined that this condition was in existence during the 1969 and 1996 Structural Integrity Tests (SIT) and Integrated Leak Rate Tests of the containment structure. Both tests were successful and the SITs were conducted at a minimum pressure of 115% of the required design pressure. During each test, inspections of containment were performed. The concrete was excavated to a point exposing only the first layer of rebar and based on review of the original design bases documents, the function of the containment structure to withstand all postulated accidents and all environmental loading is not diminished by these conditions.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1146

Title of Change: Refurbishment of Ginna Station Intake Structure Heater Racks

Implementation Document: PCR 2000-0014

UFSAR Affected Sections: 10.6.2.1

System: Circulating Water System

Description of Change:

The intake structure heater racks were replaced to reduce the probability of water stoppage due to frazil ice. The intake structure is made up of racks containing vertical bars and heater elements. In addition, the vertical bars are spaced such to prevent large debris from entering the system. The replacement included a redesign of the racks and integral heaters to maximize the bar spacing thereby minimizing the surface area in which frazil ice can accumulate while still maintaining the ability to prevent large debris from entering the system.

Evaluation Summary:

The modified intake structure screen racks have no functional impact on the required Circulating Water Systems function to provide a reliable supply of water to condense the steam exhausted from the low-pressure turbines, nor the required Service Water System function to provide a heat sink for the removal of process and operating heat from safety related components during a Design Basis Accident (DBA) or transient. The structural adequacy of the new intake structure screen racks to resist the impact of lake debris has been judged to be acceptable.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No:

SEV-1149

Title of Change:

Containment Tendon Grease Filler Pipe Leak Repair

Implementation Document:

TM 2000-0010

UFSAR Affected Sections:

None

System:

Containment

Description of Change:

The containment structure utilizes vertical tendons that are contained within grease-filled conduits. The grease was installed initially by pumping it in through 2" grease filler piping that connects to the tendon conduits, which was then isolated by closing a valve located on the containment's ring beam foundation. Portions of this piping have been exposed to water and have corroded from the outside. Thru wall leakage has been observed at three grease filler pipes and a fourth is suspect. This temporary modification removed excess grease and rust and installed an epoxy collar to eliminate any further grease leakage temporarily until permanent repairs can be made.

Evaluation Summary:

The loss of grease from the filler tube could result in some portions of the tendon wires becoming less protected from potentially corrosive atmospheric conditions (though no adverse conditions have been observed). This is considered a long-term degradation mechanism whose effect is periodically verified by containment tendon testing. The amount of grease leakage is estimated at less than a few quarts per tendon. Due to the volume of the fill pipe, conduit and end cans, this is considered insignificant and not a potential corrosion concern. The temporary modification will increase confidence that the tendon wires will remain grease covered and thus protected from corrosion by eliminating any further grease loss. The fill pipe serves as a barrier to hold the hydrostatic forces developed by the grease. Due to the extremely high viscosity of the grease, the hydrostatic forces are very low. Since the hydrostatic forces are low, it has been determined that the use of an epoxy collar will structurally contain the grease and will not reduce the functional capability of the fill pipe.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1151

Title of Change: Cycle 29 Reload

Implementation Document: None

UFSAR Affected Sections: 4.1.2, 4.2.3.1.2, 4.4.3.1

System: Fuel

Description of Change:

The reload for Cycle 29 consisted of 44 new fuel assemblies. The fuel assemblies loaded in the core for Cycle 29 are mechanically the same as the Cycle 28 fuel assemblies except for the following:

- A total of fifty seven (57) fuel assemblies in Cycle 29 have top nozzles with clamp screws made of bead-blasted Inconel 600. The remaining fuel assemblies may have fractured screws.
- The 44 fresh fuel assemblies have a Debris Filter Bottom Nozzle (DFBN) supplied with reinforcing skirts.
- Fuel assembly H69 has a stainless steel filler rod in location H-14. The fuel rod in that location was found to be leaking.

Evaluation Summary:

This change involved a new loading pattern with 44 new fuel assemblies, which were performed in accordance with the Westinghouse reload methodology. Replacing the top nozzles and the clamp screws with screws made of bead-blasted Inconel 600 is to conservatively address the potential of the existing screws to fracture due to primary water stress corrosion cracking. A detailed evaluation of using fuel assemblies that may have fractured screws has been performed. The reinforcing skirt provides additional structural capacity for fuel handling. The use of stainless-steel filler rods in reconstituted fuel assemblies is specifically allowed in the Technical Specifications.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1152

Title of Change: Removal of Control Rod Drive System Stationary and Moving Gripper Blocking Diodes

Implementation Document: PCR 2000-0031

UFSAR Affected Sections: 7.7.1.2.5.2

System: Control Rod Drive System

Description of Change:

A modification removed the Control Rod Drive system power cabinet stationary and moving gripper circuit blocking diodes and installed a mechanical jumper (binding posts) in their place. The purpose of this modification was to increase the reliability of the Control Rod Drive system. Previously, with the blocking diodes installed, the potential existed to drop a control rod or cause rod ratcheting if the diode failed open. This has previously occurred in the industry.

Evaluation Summary:

Removing the blocking diodes in the stationary and moving gripper circuits will improve system reliability and eliminate a component that causes a dropped rod or rod ratcheting when it fails open. There will be no impact on other system components such as regulation circuits or fuses. The gripper opening times will be increased by as much as 10 milliseconds due to decaying of the energy stored in the coils magnetic field, but this delay is an insignificant change in the available margin in channel response and rod drop time. Since the connection of an external power source to the Control Rod Drive System is not credible and the removal of the blocking diodes will have no affect on the operation of the Control Rod Drive system, there will be no effect on reactor safety.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1153

Title of Change: Modify the HVAC Pneumatic Controls to Provide Outside Air to the Control Room During Normal Operation.

Implementation Document: PCR 96-125

UFSAR Affected Sections: 6.4.2.2.1

System: Control Room HVAC Control System

Description of Change:

A modification was performed that allows a minimum of 350 cfm of fresh air into the Control Room during normal system operation. The outside air duct is routed inside the plant and has a very low velocity, the temperature of the air often increased above 60°F even on cold days and thus kept the fresh air intake damper closed, resulting in no fresh outside air for the Control Room.

Evaluation Summary:

The introduction of outside air into the CR HVAC System during normal operation is not a safety function. The isolation dampers have not been functionally affected from performing their isolation function as a result of the modification. The operation of the Control Room isolation dampers in the radiation or toxic gas mode is not changed by this modification because the means of damper closure, isolation of instrument air or loss of instrument air, is not changed by this modification. The closure times of the isolation dampers is not affected by this modification.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1154

Title of Change: Equivalency Evaluation - Westinghouse Model BF-66F
120 VAC Relays

Implementation Document: TE 2000-0037

UFSAR Affected Sections: None

System: Reactor Protection System, Engineered Safety Feature Actuation
System

Description of Change:

Interfacing logic/test relays for the ESFAS and RPS Systems as well as other non-safety relays associated with other plant systems could be replaced with like relays of the same model number (Westinghouse BF-66F). A design change was made by Westinghouse to the construction of the coil for these relays in 1979 which increased the holding current draw, subsequent power requirements and heat generation. This change was not documented in the Westinghouse specifications for these relays. An Equivalency Technical Evaluation was completed documenting the differences between the old and current version of the relay.

Evaluation Summary:

The relay replacements are like for like and no relay or system functions have been changed or degraded due to the replacements. A review showed that adequate current/load margins exist on the Instrument Buses if all approximately 550 normally energized and normally de-energized relays in the ESFAS and RPS systems were replaced. No conditions have been introduced that would prevent any Instrument Bus from performing its intended functions. Based on the projected rack temperatures and heat load increases due to the relay replacements, the Relay Room temperatures will not increase to a point that would exceed the normal ambient limiting environmental condition temperature.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1155

Title of Change: Temporary Power Source for "B" Instrument Bus

Implementation Document: PCN 2000-2499 to CME-44-02-MCCC, Westinghouse, Type W
Motor Control Center C Maintenance

UFSAR Affected Sections: None

System: Class 1E 480/V Electrical System, 120/VAC Instrument Power
System

Description of Change:

The purpose of this evaluation was to address the use of a temporary electrical feed to supply the "B" Instrument Bus during an outage of Motor Control Center C (MCCC), as the MCC outage was to occur during fuel movement and redundant source range detectors were required.

Evaluation Summary:

This change did not affect the function of the Class 1E 480/V Electrical System or the 120/VAC Instrument Power System with regard to providing the specified safety related and safety significant functions. The "B" Instrument Bus continued to be supplied by a 1E source that had an operable diesel generator available. The additional loading of the CVT associated with the "B" Instrument Bus on MCC D and the B Diesel Generator had been reviewed and was determined to be insignificant during plant Modes 5 and 6. The independence of required sources for the instrument buses was also maintained.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1156

Title of Change: Original Issue of New Procedure T-36.4, Temporary Cooling Water to Various Service Water Loads

Implementation Document: PCN 2000-3797 to T-36.4, Temporary Cooling Water to Various Service Water Loads

UFSAR Affected Sections: None

System: Service Water System

Description of Change:

The purpose of this procedure is to provide instructions during shutdown for the connection of temporary cooling water for the following loads while the Service Water system is isolated to allow maintenance activities to be performed:

- Instrument Air Compressors A, B, and C
- Administrative Computer AC Unit
- Relay Room AC Units A and B
- Battery Room AC Unit
- Motor Driven Auxiliary Feedwater Pumps Lube Oil and Bearing Coolers
- Circulating Water Pumps Seal Injection Water
- Control Room AC Water Chillers A and B

Evaluation Summary:

With City Water providing temporary cooling to these loads per this procedure, their overall performance and function remained the same as required to support Modes 5, 6, or Defueled operations. Since City Water operating pressure is slightly higher than the normal SW operating pressure, equal or greater temporary cooling flow to these loads was ensured.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1157

Title of Change: Revised Auxiliary Building Transient Heat-Up Results

Implementation Document: UCN 16/008

UFSAR Affected Sections: 3.11.2.2.1, 9.4.2.4.1

System: Auxiliary Building

Description of Change:

An NRC Inspection Report identified three non-conservative assumptions that were used in an Auxiliary Building heatup analysis. To address the concerns, the transient heat-up of the Auxiliary Building following a design basis LOCA was re-analyzed. The re-analysis evaluated the three concerns. It also evaluated the impact of isolating Spent Fuel Pool (SFP) cooling immediately following a design basis LOCA. In general, the revised analysis obtained higher peak temperatures than were calculated originally. Consequently, the revised transient temperature profiles were then reviewed for potential impact upon the existing Ginna Environmental Qualification (EQ) Program for safety related equipment located in the Auxiliary Building.

Evaluation Summary:

It was determined that the transient heat-up of the Auxiliary Building following a design basis LOCA has no adverse impact on any equipment used in the mitigation of the event. The evaluation determined that the revised Auxiliary Building transient temperature results were higher, but not at a level that would adversely impact the EQ program or the existing Environmental Qualification of safety related equipment located in the Auxiliary Building.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1158

Title of Change: Traveling Screen Mesh

Implementation Document: PCR 99-090

UFSAR Affected Sections: 10.6.2.3

System: Circulating Water System, Service Water System, and Fire Suppression System

Description of Change:

A modification was performed which changed the Circulating Water system "D" traveling screen basket 3/8" square woven mesh to 3/16" x 1" rectangular woven mesh. Only one of the screens was modified, coinciding with the screen preventive maintenance rebuild schedule to evaluate the new screen performance. The new mesh is constructed of stainless steel which will not rust and will not produce a rough surface. In addition, half of the new mesh baskets will be coated with a non-stick type material. The intent of each of the proposed changes is to increase the ability of the screens to capture and remove lake grass while still maintaining the required screen flow area.

Evaluation Summary:

The function of the intake structure will not be adversely affected by the change in mesh material on one of the traveling screens because the slight decrease in flow area is 3% for one screen and is less than 1% of the total available flow area for all screens. There is adequate margin in the original design to offset this slight change on flow area. In addition, even if the entire "D" screen were plugged, the remaining three screens would still provide the design flow rate. The mesh is oriented such that the long dimension of the opening is in the vertical direction. Therefore, it is exposed to the spray wash water for a longer period of time than the current square opening, thus increasing the spray's ability to remove debris. Also, the smoother surface results in less lake grass sticking to the screens.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1159

Title of Change: New CREATS TRM Requirements

Implementation Document: TRM/020

UFSAR Affected Sections: None

System: Control Room Emergency Air Treatment System

Description of Change:

This evaluation addressed the addition of new requirements for the Control Room Emergency Air Treatment System (CREATS) to the Technical Requirements Manual (TRM). As the result of Improved Technical Specification (ITS) Amendment No. 78, the requirements for CREATS in Modes 5 and 6 were removed from the ITS.

Evaluation Summary:

There is no functional impact of the new TRM requirements which were previously located in the Technical Specifications, since the capability of the affected systems is not changed. Instead, the systems are now allowed to be in previously accepted configurations for longer periods of time, or compensatory measures are now required for performing the functions of certain system or structural components. These compensatory measures do not affect any SSC functionality since they are only in response to plant conditions and are temporary in nature.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1160

Title of Change: Scupper Addition to Control Building Roof

Implementation Document: PCR 99-054

UFSAR Affected Sections: 3.4.3

System: Control Building

Description of Change:

This change installed a new scupper/roof drain combination on the control building. The change is designed to alleviate the localized roof ponding that has been observed during freeze/thaw cycles. The change also provides sufficient de-watering capability to remove the potential water deposit listed in the revised "Probable Maximum Rainfall" calculations.

Evaluation Summary:

The new roof scupper will ensure the design rain loading is removed from the roof in the event the normal roof drain becomes plugged. The additional scupper is an enhancement to the existing roof drainage system. The modification effectively addressed the external hazard of roof ponding due to intense rainfall. The Control Building will remain capable of performing as intended under all design loads.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1161

Title of Change: Mimic Panel Removal and Reconfiguration

Implementation Document: PCR 99-034

UFSAR Affected Sections: 7.5.1.1.3

System: Offsite Power System

Description of Change:

Replacement parts were no longer available for the electrical distribution mimic panel which was located in the control room. The mimic panel was removed from the auxiliary benchboard and breaker/switchgear indication that was previously available on the mimic panel was made available on the Plant Process Computer System (PPCS).

Evaluation Summary:

The function of Safety related or Safety Significant components were not altered by this modification. Unused PPCS positions which were used in this modification are isolated from the others and therefore a failure on one point will not adversely impact other points. The change to the auxiliary benchboard does not alter the function of mounting and separation of equipment within the benchboard. Although attached to the auxiliary benchboard, the mimic panel did not have a structural, mechanical or electrical interface with the fire protection or control room ventilation equipment housed in the benchboard.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1162

Title of Change: Pressurizer Heater Inspection and Repair

Implementation Document: PCR 98-103

UFSAR Affected Sections: 5.4.7.1

System: Reactor Coolant System

Description of Change:

During the 2000 RFO, both the backup and proportional pressurizer heaters were inspected and repaired. Approximately 35 heaters had maintenance performed on them. Four of the heaters were left electrically disconnected, two from the backup group and two from the proportional group.

Evaluation Summary:

The removal of approximately 40KW pressurizer heater heat availability has minimal functional impact on the required function of the pressurizer heaters to pressurize the Reactor Coolant System by keeping the water and steam in the pressurizer at saturation temperature. The design KW availability of the pressurizer heaters is 800KW, 400KW on the backups and 400KW proportional. The requirements for both the Technical Specification minimum 100 KW of heat available from the proportional/backup heater groups and the approximately 250 KW of heat from the proportional heaters for normal operation are satisfied. The removal of approximately 40KW pressurizer heat availability has virtually no impact on the time required to draw a bubble in the pressurizer and subsequently the time required for plant startup.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1163

Title of Change: Control Room Toxic Gas Monitor Upgrade

Implementation Document: PCR 99-001

UFSAR Affected Sections: 6.4.5

System: Control Room HVAC Toxic Gas Detection System

Description of Change:

This change replaced the existing Control Room Toxic Gas Monitoring System, and added features that enhanced the operability and reliability of the system. The new system has two separate "trains" of toxic gas monitoring and indicating instrumentation. This provides an additional level of redundancy, so that either train can sense toxic gas levels and initiate a Control Room isolation if high levels are reached.

Evaluation Summary:

The isolation functions of the CR HVAC system remain functionally the same. The new detectors and system configuration ensure that the functionality of the CR HVAC system is not degraded. All contacts and relays are configured to change to the "isolation initiation" position upon loss of power, such that failure of any component will result in a CR isolation signal being initiated, which is consistent with the previous design. The new CR wall penetration results in a new penetration that does not impact the integrity of the previous wall to provide the appropriate barriers and isolations required of it.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1165

Title of Change: Evaluation of AOV 4561 Automatic Control

Implementation Document: TSR 93-129

UFSAR Affected Sections: 6.2.2.1.2.3

System: Service Water System

Description of Change:

The purpose of this evaluation was to review the modification which changed the Instrument Air signal piping supply to Service Water valve 4561 in order to allow manual or automatic operation of this AOV from a location accessible during power operations.

Evaluation Summary:

The original configuration controlled containment air temperature automatically by sensing the containment temperature and modulating AOV 4561 to vary the rate of coolant discharge from the containment recirculating fan coolers (CRFCs) during normal operation. The non-safety function of the controller and AOV are to maintain containment temperature at approximately 100 degrees F. The change allows for manual operator control of the valve position to control containment temperature, within the constraints of the Technical Specifications. In the event of a Safety Injection (SI) signal, AOV 4561 fails to the open position. An independent, parallel, full-flow valve (AOV 4562) also opens automatically in the event of an SI signal to bypass the control valve. This automatic action for protection of safety limits was not changed or impacted.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1166

Title of Change: Evaluation of TE 94-0586, Material Change for Service Water Pump (SWP) Impellers and Wear Rings

Implementation Document: TE 94-0586

UFSAR Affected Sections: Table 8.3-2

System: Service Water System

Description of Change:

Originally, the Service Water Pump (SWP) impellers were bronze UNS Alloy 836 and the wear rings were UNS Alloy 937. A technical evaluation approved the material change to CF8M stainless steel impellers and stainless steel Nitronic 60 wear rings. The original evaluation assumed like-for-like pump performance between the original bronze impellers and the new stainless steel impellers. However, subsequent to the installation of the first SWP assembly utilizing stainless steel impellers, post installation testing demonstrated that the stainless steel pump assembly had slightly higher pump operating characteristics with a correspondingly higher horsepower demand.

Evaluation Summary:

The functions of the Service Water System are: 1) provide heat removal to safety related and non-safety related loads during normal and accident conditions, 2) provide emergency heat removal from RCS using secondary heat removal capability. The ability and method of the SWPs and motors to fulfill these functions remains unaffected by this change; even though, the performance of the SWPs is affected. The increase in SWP performance and increase in Busses 17/18 KW load, associated with the enhanced stainless steel impeller pump assemblies, was evaluated and it was concluded that this change is within the design basis of the service water system and the load limits for EDGs.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1167

Title of Change: Modification to Reduce Potential for Pressure Locking of RHR Valves 852A and 852B

Implementation Document: PCR 96-086

UFSAR Affected Sections: 5.4.9.3

System: Residual Heat Removal System

Description of Change:

Residual Heat Removal Pump Discharge to Reactor Vessel Deluge Motor-Operated Valves 852A and 852B were determined to have the potential for pressure locking of the valve bonnets under some postulated conditions. The remedy was to provide a vent path to relieve the pressure that could be trapped in the valve bonnet by drilling a 6 mm (approx. ¼ inch) diameter vent hole in the downstream side (RCS side) of the flexible wedge above the stellite hardfaced surface area. The vent hole is large enough to allow valve bonnet depressurization under design basis conditions. Hole sizing and location were provided by the valve manufacturer.

Evaluation Summary:

The function of Motor-Operated Valves 852A and 852B remains unchanged. The purpose of the vent hole in the flexible wedges of valves 852A and 852B is to relieve any pressure trapped in the valve bonnets to the downstream side (towards the RCS) when the valves are closed and adjacent piping becomes suddenly depressurized. The vent will ensure that no excessive differential pressure exists between the valve body and the valve bonnet and that the available thrust will be sufficient to open the valve to allow flow without damage. Pressure boundary and isolation capability will be maintained through seating of the unmodified upstream portion of the flexible wedge. Valve performance will continue to be monitored per applicable periodic testing requirements.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1168

Title of Change: Motor-Operated Valves 857A, 857B & 857C Valve Disc Modification

Implementation Document: PCR 96-107

UFSAR Affected Sections: 5.4.9.3

System: Residual Heat Removal System

Description of Change:

Residual Heat Removal Pump Motor-Operated Discharge to Safety Injection Pump Suction Valves 857A, 857B and 857C were determined to have the potential for pressure locking of the valve bonnets under some postulated conditions. The remedy was to provide a vent path to relieve the pressure that could be trapped in the valve bonnet by drilling a 1/8 inch diameter vent hole in the upstream side (RHR side) of the valve disc approximately 1/2 inch inside the stellite hardfaced surface area. The vent hole is large enough to allow valve bonnet depressurization under design basis conditions. Hole sizing and location were provided by the valve manufacturer.

Evaluation Summary:

The function of Motor-Operated Valves 857A, 857B and 857C remains unchanged. The purpose of the proposed vent hole in the upstream disc of valves 857A, 857B and 857C is to relieve any pressure trapped in the valve bonnets to the upstream side (towards RHR) when the valves are closed and adjacent piping becomes suddenly depressurized. The vent will ensure that no excessive differential pressure exists between the valve body and the valve bonnet and that the available thrust will be sufficient to open the valve to allow flow without damage. Pressure boundary and isolation capability will be maintained through seating of the unmodified downstream valve disc. Valve performance will continue to be monitored per applicable periodic testing requirements.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No: SEV-1169

Title of Change: Service Water Valve 4619 Replacement and Service Water Valve 4620 Replacement

Implementation Document: PCR 98-101, PCR 99-020

UFSAR Affected Sections: 9.2.1.4

System: Service Water System, Component Cooling Water System

Description of Change:

Service Water (SW) valves 4619 and 4620 are located in the SW System downstream of the Component Cooling Water (CCW) heat exchangers. They act as isolation valves for the heat exchangers. They are also used as throttle valves to adjust SW flow to CCW heat exchangers during normal plant operation when there is a reduced heat load. Severe cavitation damage was discovered in the valve bodies which was believed to be the result of the large amount of throttling required of the 14" globe valves during normal plant operation in combination with the sub-atmospheric pressure that exists in the SW piping downstream of the valve due to the valve location. Due to these conditions, the 14" globe valves were replaced with smaller (10") butterfly valves.

Evaluation Summary:

Since the replacement 10" butterfly valves are rated as 150# ANSI valves, they satisfy the SW System design pressure and temperature limits. Therefore, the pressure boundary function of valves 4619 and 4620 is unaffected by the butterfly valve replacements. An evaluation has concluded that the lighter 10" butterfly valve has a minimal impact on overall SW piping stresses; and, the results are bounded by the analyzed stresses associated with the heavier 14" globe valves. Therefore, there is no adverse impact on the structural design of the SW System and its supports due to replacing the 14" globe valves with the 10" butterfly valves. The replacement butterfly valves are capable of performing an isolation function similar to that performed by the 14" globe valves and they provide improved throttling capability when compared to the larger 14" globe valves.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

50.59 EVALUATION SUMMARY REPORT

50.59 Evaluation No:

SEV-1171

Title of Change:

Closure of Fire Damper AH-44 if Needed to Prevent Low Temperatures in the Control Building Air Handling Room

Implementation Document:

PCN to A-54.4.1, Cold Weather Walkdown Procedure

UFSAR Affected Sections:

None

System:

Control Building HVAC System

Description of Change:

Fresh air is supplied to the Control Building Air handling room through a 36" duct that is located in the north wall of that room, west of the doors, behind fire damper AH-44. The duct allows fresh outside air into the room from the roof of the TSC. During winter months the fresh outside air passing through the Control Building Air Handling Room lowers the room temperature and creates a freezing concern. A procedure change was processed to permit fire damper AH-44 to be closed as needed to prevent low temperatures in the Control Building Air Handling Room.

Evaluation Summary:

The closing of fire damper AH-44 puts the damper in it's fail-safe position, because the closed damper performs it's intended function of isolation and pressure boundary. Calculations have been performed which show that 20 CFM is adequate makeup air to prevent the accumulation of hydrogen within the battery rooms which are supplied from the Control Building Air Handling Room and, by inspection, this amount of fresh air would be provided even when AH-44 is in the closed position.

Based on the evaluation performed, it has been concluded that this change does not involve an unreviewed safety question.

2001 REPORT
OF
COMMITMENT CHANGES
FOR JULY 1999 THROUGH DECEMBER 2000
PERFORMED IN ACCORDANCE WITH NEI 99-04

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

DATED APRIL 16, 2001

COMMITMENT CHANGE EVALUATION SUMMARY REPORT

Commitment Change Evaluation No: 2000-003

Source Document: NRC SER for Technical Specification Amendment 72, dated July 30, 1998

Original Commitment: A surveillance program for the monitoring of degradation of the boraflex material in the spent fuel pool is required.

Revised Commitment: There will be no planned surveillance program for the monitoring of degradation of the boraflex material.

Justification Summary: Boraflex is no longer credited within the spent fuel pool criticality analyses which has been submitted to the NRC. The temporary and permanent Technical Specification amendments both credit the use of 2300 ppm borated water.

COMMITMENT CHANGE EVALUATION SUMMARY REPORT

Commitment Change Evaluation No: 2000-004

Source Document: NRC SER for Technical Specification Amendment 72, dated July 30, 1998

Original Commitment: Region 1 of the Spent Fuel Pool contains freshly off-loaded assemblies with a minimum of 100 hours of decay interspaced with older fuel assemblies from Region 2.

Revised Commitment: The control of freshly off-loaded assemblies in Region 1 of the Spent Fuel Pool in a checkerboard pattern may also be accomplished by interspacing with new assemblies or empty water cells.

Justification Summary: The requirement for pre-loading Region 2 assemblies into Region 1 was an administrative aid to control off-loaded assembly placement. The requirement is excessive and could lead to more fuel moves than are necessary. Interspacing with new assemblies or empty water cells is conservative with regards to the dose analysis for a tornado missile event. The Technical Requirement Manual provides the controls for the placement of freshly off-loaded fuel within Region 1.