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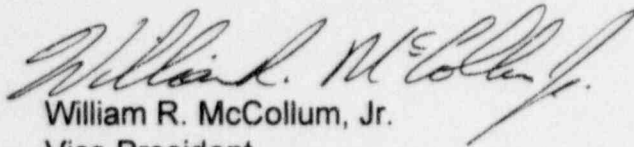
**DUKE POWER**

March 27, 1995

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555-0001

Subject: Catawba Nuclear Station  
Docket Nos. 50-413 and 50-414  
1995 10 CFR 50.59 Report

Pursuant to 10 CFR 50.59, find attached a summary of all changes, tests, and experiments which were completed under the provisions of 10 CFR 50.59 from October 1, 1994 to September 30, 1995.

  
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Attachment

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CATAWBA NUCLEAR STATION  
SUMMARY OF PROCEDURE-RELATED 10 CFR 50.59 EVALUATIONS

OP/O/A/6200/30 Change 0      Approved 10-18-94  
Operating Procedure for the Preparation and Transfer of  
Boric Acid

Description

This procedure describes the mixing and/or addition of boric acid to the Boric Acid Batching Tank and its transfer to a Boric Acid Tank.

Evaluation

This procedure was revised to change the position of 1NV-924 from normally closed to the OPEN position. The need to notify Operations Shift Supervisor when removing/replacing the fire plug for boric acid batching was eliminated by adding a note and a procedure signoff step in enclosure 4.1 and 4.2. These changes were made in accordance with S.L.C. 16.9-5 for Fire Protection systems.

OP/O/A/6400/06C Change 175      Approved 08-03-95  
Nuclear Service Water System

Description

This restricted procedure change enhances the existing procedure enclosure for SNSWP makeup by giving an upper limit for SNSWP top of pond evaluation while using enclosure, it allows the operators to start or stop additional RN pumps for makeup as required, and revises the format of some steps to make the enclosure easier to follow.

Evaluation

The responses to all seven questions were negative, therefore there are no unreviewed safety questions associated with restricted change number 175 to OP/O/A/6400/06C Enclosure 4.9. No FSAR or Tech Spec changes are required.

OP/O/B/6400/30 Change 2      Approved 06-06-95  
Operating Procedure for the Regeneration of YM  
Demineralizers

#### Description

Procedure is being changed to add steps needed when regenerating YM demineralizes. These steps were included to enhance procedure performance and adherence requirements.

#### Evaluation

To allow for proper regeneration sequence for regeneration of YM.

OP/OB/6400/17 Change 0                      Approved 06-29-95  
Operating Procedure for the Cooling Tower Make-up

#### Description

The purpose of this procedure is to describe the process and action used to provide supplemental make-up water to the cooling towers. Make-up water for the cooling towers is supplied from the RL (Low Pressure Service Water) System. Make-up water is provided to replace the water that is lost through the evaporative process and the blowing down of the cooling towers.

#### Evaluation

This procedure is used to add make-up water to the cooling towers of the RC system for Unit 1 and Unit 2. The cooling towers, associated valves and the piping system are not considered to be an Engineered Safety feature. Therefore, no credit is taken for their operation in analyzing the consequences of an accident. The affected piping and valves are not in any seismic boundary. This procedure nor the revision warrant inclusion in the FSAR or the Technical Specifications. The activity of the system does not directly adversely affect any system structure or component necessary to operate the plant in accordance with the SAR.

OP/1/A/6100/02                      Approved 02-09-95  
Controlling Procedure for Unit Shutdown

#### Description

Change to administrative limit.

#### Evaluation

To reflect an administrative cooldown limit of 75 deg/hr rather than 50 degF/hr. ASME Section III Code Class I Piping Transient Parameter Analysis, conducted at 100 degF/hr is not adversely affected. Catawba licensing basis is not degraded. Adequate margin exists to ensure that the service life limitations of NC pressure boundary are not adversely affected. No USQ, and no Tech Spec changes are associated with this change, however, an FSAR update will be required (Section 5.3.3.1).

OP/1/A/6200/11 Change 0      Approved 04-25-95  
Operating Procedure for the Primary Sampling System

#### Description

The purpose of this procedure is to describe the proper operation of the Primary Sampling System (NM). (The Primary Sampling System is also known as the Nuclear Sampling System).

#### Evaluation

Chemistry Operating Procedure for NM lab Sampling, was revised to remove any Human Performance Problems that could be identified and make it a more user friendly procedure.

OP/1/A/6200/27 Change 8      Approved 04-18-95  
Operating Procedure for Sampling Local Primary Sample Points

#### Description

The purpose of this procedure is to describe the sampling of Unit 1 primary related systems with sample points other than the Nuclear Sampling Lab (NW).

#### Evaluation

Operating Procedure for Sampling Local Primary Sample Points, was revised to remove any Human Performance Problems that could be identified and to make it more user friendly. Previously approved changes were also incorporated.

OP/1/A/6200/27 Change 8      Approved 02-22-95  
Operating Procedure for Sampling Local Primary Sample Points



#### Description

The purpose of this procedure is to describe the sampling of Unit 1 primary related systems with sample points.

#### Evaluation

This change is to allow the Canal to be sampled via the FWST sample point when in the proper alignment. A modification was made to the FWST sample point and a new sample sink was installed. This change gives the new valves and alignment for using the new sample sink. No changes to the Tech Spec or FSAR are needed because of this change.

OP/1/A/6400/25 Change 2 Approved 06-22-95  
Operating Procedure for the Addition of Chemicals to Safety  
Related Closed Cooling Water Systems

#### Description

The purpose of this change is to meet higher PH requirements as recommended by General Office Chemistry for Nitrite-Treated systems.

#### Evaluation

This procedure required a change to allow for alternate chemicals to provide pH control on the following closed cooling water systems; KD, KC, and YC systems. These changes increased the pH range from 8.7-9.2 to 9.5-10.5 to meet the recommended operating specifications for nitrite-treated systems. These changes are based on INPO recommendations to elevate pH because bacteria do not thrive at higher pHs. This control of bacteria is of concern due to the presence of nitrifying bacteria and sulfate-reducing bacteria in closed cooling water systems industry wide. The FSAR states that to assure proper system performance maintain the system in accordance with manufacturer's recommendations, Chemistry and General Office Chemistry feel that these changes supersede the manufacturer's recommendations.

OP/1/B/6200/33 Change 1 Approved 01-27-95  
Operating Procedure for the Determination of Hydrogen by In-Line Analyzer

#### Description

The purpose of this change was during OJT, new employees were not directed where to go if hydrogen concentrations were within the given valves.

#### Evaluation

The change to the orbisphere procedure was to add an instruction step to tell the user where to go in the procedure if the measured and entered hydrogen were within 2%. New employees were confused by lack of direction.

OP/2/A/6200/11 Change 0      Approved 04-25-95  
Operating Procedure for the Primary Sampling System (NM)

#### Description

The purpose of this procedure is to describe the proper operation of the Primary Sampling System (NM). The Primary Sampling System is also known as the Nuclear Sampling System.

#### Evaluation

Chemistry Operating Procedure for NM lab Sampling, was revised to remove any Human Performance Problems that could be identified and make it a more user friendly procedure.

OP/2/B/6200/33 Change 3      Approved 01-31-95  
Operating Procedure for the Determination of Hydrogen by In-Line Analyzer

#### Description

The purpose of this change was during OJT new employees were not directed where to go if hydrogen concentrations were within the given valves.

#### Evaluation

The change to the orbisphere procedure was to add an instruction step to tell the user where to go in the procedure if the measured and entered hydrogen were within 2%. New employees were confused by lack of direction.

OP/2/A/6200/27 Change 9      Approved 02-22-95  
Operating Procedure for Sampling Local Primary Sample Points

#### Description

The purpose of this change was modification and addition of sample sink to sample FWST.

#### Evaluation

This change is to allow the Canal to be sampled via the FWST sample point when in the proper alignment. A modification was made to the FWST sample point and a new sample sink was installed. This change gives the new valves and alignment for using the new sample sink. No changes to the Tech Spec or FSAR are needed because of this change.

OP/2/B/6500/53 Change 3      Approved 05-17-95  
Unit 2 Operating Procedure for Transfer and Dewatering  
Contaminated Secondary Resin

#### Description

The purpose of this was to correct valve numbers.

#### Evaluation

This procedure is being changed in order to correctly identify two valves that were incorrectly listed in the latest revision.

OP/2/A/6400/25 Change 2      Approved 06-22-95  
Operating Procedure for the Addition of Chemicals to Safety  
Related Closed Cooling Water Systems

#### Description

The purpose of this change was to meet higher pH requirements as recommended by General Office Chemistry for nitrite treated systems.

#### Evaluation

This procedure required a change to allow for alternated chemicals to provide pH control in the following closed cooling water system; KD, KC, and YC systems. These changes increased the pH range from 8.7-9.2 to 9.5-10.5 to meet the recommended operating specifications for nitrite-treated systems. These changes are based on INPO recommendations to elevate pH because bacteria do not thrive at higher Phs. This control of bacteria is of concern due to the presence

of nitrifying bacteria and sulfate-reducing bacteria on closed cooling water systems industry wide. The FSAR stated that to assure proper system performance maintain the system in accordance with manufacturer's recommendations, Chemistry and General Office Chemistry feel that these changes supersede the manufacturer's recommendations.

OP/2/A/6200/27 Change 0 Approved 04-25-95  
Operating Procedure for Sampling Local Primary Points

Description

The purpose of this procedure was to describe the sampling of Unit 2 primary related systems with sample points other than the Nuclear Sampling Lab (NM).

Evaluation

This procedure was revised to remove any Human Performance Problems that could be identified and to make it more user friendly. Previously approved changes were also incorporated.

CP/O/A/8100/16 Change 0 Approved 02-21-95  
Chemistry Procedure for the Determination of Boron

Description

This procedure describes the automatic method used for the determination of boron in aqueous boric acid solutions. The automatic method is performed by the Mettler DL25 Titrator and is based on potentiometric titration.

Evaluation

This revision is to incorporate previously approved changes. All changes have been 5059 reviewed prior to incorporating them into the procedure. The only reason for the revision is to incorporate five changes.

CP/O/B/8100/75 Change 0 Approved 07-13-95  
Chemistry Procedure for Determination of Specific Conductivity

Description

This procedure describes the manual method for determining the conductivity of aqueous solutions. There are two types of meters dual cell and single cell. This procedure is applicable for both.

#### Evaluation

This procedure was revised to put in enclosure form to make it a more user friendly procedure and to make it work for all groups in chemistry whether they have a one or two cell meter.

CP/O/B/8100/83 Change 0 Approved 09-22-95  
Chemistry Procedure for the Determination of Carbohydrazide

#### Description

This procedure describes the manual calorimetric method for the determination of Carbohydrazide in water.

#### Evaluation

This procedure to determine Carbohydrazide in secondary plant samples will not require a change to the Technical Specifications. As this revision applies to the FSAR, it will not affect structures, systems, or components that are addressed in the FSAR. Further, this revision will not involve procedures or tests and experiments not already addressed. And Finally, this revision will no be significant enough to require inclusion in the FSAR.

IP/1/B/3032/05 Change 2 Approved 03-16-95  
Heater Drain System (HW) HP Heater ICI

#### Description

The revised section of this procedure will affect sections to reflect setpoint changes done by CE-5051.

#### Evaluation

This procedure change was necessary due to the relocation of 1HWLT5480 & 5490. The relocation changed the Normal Liquid Level (NLL) which is the reference point for setpoints associated with 1HWPS5540, 5541, 5542, 5543. Also, this change brings setpoints and level of heater drain tank 1C1 in line with tank 1C2 and eliminates operator confusion due to level differences between the tanks.

IP/1/B/3034/01 Change 12 Approved 03-16-95  
Moisture Separator Reheater Bleed Steam (HMO System)

Description

The revised section of this procedure are to show 1HMPT5110 as a Rosemount 1151GP9E22 instead of an L&N 451.

Evaluation

Regarding this procedure, minor modification CE-5024 was written to replace an L&N transmitter with a Rosemount. The procedure is to have applicable sections revised to reflect this change. No changes to FSAR or Tech Specs result from this action.

IP/1/B/3681/01B Change 6 Approved 02-27-95  
D/G-1B Non-Emergency Trips

Description

During 1E0C6 per NSM CN-11149, the pneumatic non-emergency trip system for the Unit 1 Diesel Generators was replaced with an electronic system that is controlled by a Rosemount Alarm Monitor. When this device was originally installed into its control panel, the field wiring was terminated directly to the alarm monitor. During installation and calibrations following the modification, it was realized that due to the small size of the termination's on the monitor and the amount of conductors required, that future calibrations would be tedious due to the necessity of removing the input wiring to input test signals. This would increase the chances of damaging the wiring due to the tight configuration of the wiring scheme. When this modification was performed on Unit 2 per NSM CN-20528, the scope of the mod included the addition of sliding link terminal blocks and jumpers to connect the field wiring to the terminals on the rear of the alarm monitor. When cabinet coolers were added to the Unit 1 control panels per Minor Mod CE-60002, terminal blocks were added at that time in anticipation of wiring the unit panels like the Unit 2 panels. Therefore, the purpose of CE-4610 will be to install jumpers between the previously installed sliding link terminal blocks and the Rosemount Monitor, and terminate the field wiring directly to the terminal blocks. This will enable

calibrations to take place without lifting the wiring and risking damage. This procedure change will reflect changes made per the minor mod.

#### Evaluation

This procedure change will not degrade the effectiveness of the non-emergency trip system to perform its design function in any way. The wiring scheme is not changed by the minor mod. Only the addition of an isolation point between the field input devices is added. Therefore, neither the FSAR or Tech Specs are affected as a result of performing this mod since the design of the system is not changed in any way.

IP/2/B/3130/05 Change 1      Approved 05-02-95  
Calibration Procedure for Nuclear Sampling (NM) System  
Miscellaneous Instrumentation.

#### Description

The procedure change desired VDC from 2.0VDC to 1.8VDC. Also changed comments 2.0VDC to 1.8VDC and change allowable range from 1.972-2.028 to 1.772- 1.828.

#### Evaluation

Voltage given on data sheet 11.1.1, page 3 was a typo. Other data sheets in procedure gave correct value. Verified conversion of 6.77 INWD equal 1.8VDC. Equipment was calibrated per the 6.77 INWD. There are no tech spec or FSAR concerns about correcting simple math error/typo.

IP/2/B/3222/60 Change 5      Approved 03-15-95  
Delta T Deviation Alarms Loop 411, 421, 431, 441

#### Description

The purpose of this change was to establish Delta T deviation alarms at 7°F.

#### Evaluation

MP/O/A/7150/004A Change 0      Approved 02-09-95  
Component Cooling Pumps Rotating Element Assembly



### Description

The purpose of this procedure is to provide a method for disassembly and reassembly of the rotating element for Goulds Model 3405 size 10 X 12-17 Component Cooling Pumps.

### Evaluation

The safety related function of the Component Cooling Water (KC) Pumps is to provide the necessary flow for the entire KC System to serve as an intermediate nuclear safety-related heat sink for components of various systems essential in the mitigation of design basis events which require Emergency Core Cooling System (ECCS) operation and to support normal unit operation. Various aspects of the pumps associated with this procedure are described in the FSAR in the sections referenced. Maintenance of the KC Pumps can directly impact Technical Specification 3.7.3.

The reissue (#1) includes additional steps for measurement of inboard bearing housing bore diameter and bore depth. Acceptance criteria for these QA-inspected measurements is also provided, based on vendor proprietary drawings. The added emphasis on these measurements is intended to eliminate recurring cases of loose bearing housings.

MP/0/A/7150/020 Change 0 Approved 01-19-95  
Equipment Hatch Removal and Replacement

### Description

The purpose of this procedure is to provide a method for removal and replacement of the containment vessel equipment hatch.

### Evaluation

This procedure controls the activities associated with removal and replacement of the containment vessel equipment hatch during refueling outages. This evaluation is for changes made to the procedure to improve the technical and human factors aspects of the procedure. All the changes made to the procedure are enhancements for performing and do not adversely affect any activities associated with the containment vessel equipment hatch removal and replacement. This procedure will be used to maintain the containment vessel equipment hatch in its original design

specifications. The Catawba Nuclear Station FSAR and Technical Specifications have been reviewed and are not affected by this procedure revision.

MP/O/A/7150/022 Change 9 Approved 07-11-95  
Fuel Pool Cooling Pumps Corrective Maintenance and Replacement

#### Description

The changes remove and replace steps to prevent unnecessary maintenance and to arrange steps in a logical order.

#### Evaluation

Procedure was updated to incorporate changes and to arrange steps in a more logical order. These changes have been reviewed against the FSAR, Technical Specifications, and other SAR documents. By improvement to this procedure, these changes increase the assurance that the Fuel Pool Cooling Pumps will perform to its intended function to meet all normal operation and design base requirements.

MP/O/A/7150/060 Retype 6 Approved 12-05-94  
Pall Trinity Filter Removal and Replacement

#### Description

The purpose of this procedure is to provide a method for removal and replacement of Pall-Trinity filters.

#### Evaluation

This revision describes the removing and replacing Pall Trinity filters. This procedure addressed the method required to open and close the filter housing in order to install a new filter cartridge. The revision to this procedure does not affect the opening and closing of the filter housing. The revision is to instruct craft that a BWNT filter cartridge may be used instead of the Pall cartridge. In this case the top of the filter provides the sealing medium and no O-Rings are used. The procedure was also reformatted to the current method for signing off required steps. The original intent and technical requirements of this procedure were not affected.

MP/0/A/7150/063 Retype 8      Approved 01-24-95  
Reactor Vessel Guide Stud Removal and Replacement

Description

The purpose of Removing and Replacing the Reactor Vessel Guide Studs. The procedure controls the activities associated with removal and replacement of the reactor vessel head guide studs during refueling outages.

Evaluation

This evaluation is for changes made to the procedure to improve the technical and human factors aspects of the procedure. All of the changes made to the procedure are enhancements for performing the procedure and do not adversely affect any activities associated with reactor vessel head guide stud removal and replacement. This procedure will be used to maintain the reactor vessel head in its original design specifications.

MP/0/A/7600/036 Retype 7      Approved 02-23-95  
Dresser Relief Valve Model 1970 and 1975

Description

The purpose of this procedure is to provide a method of disassembly and reassembly for a screwed bonnet dresser relief valve. The procedure was developed from Manufacturer's Instruction Manual CNM-1205.10-105 and recommendations. Instructions are provided for maintaining the valves within their original design specifications.

Evaluation

The changes to this procedure ensure proper valve reassembly as specified by the OE manufacturer and will maintain the valve within its original design specification; therefore, this change has no adverse affect on valve performance or any plant parameters.

MP/0/A/7650/054 Retype 3      Approved 10-20-94  
Personnel Air Lock Door Corrective Maintenance

Description

The purpose of this procedure is to provide a method of Corrective Maintenance of Bearings on Personnel Air Lock Doors.

#### Evaluation

The existing procedure for the Air Lock Door Seal replacement has been divided into two separate procedures for clarification for maintenance personnel. MP/0/A/7650/54 now provides information for corrective maintenance for the door excluding the door seals, and MP/0/A/7650/54A provides instruction for removal, replacement, and corrective maintenance for the door seals only. No significant technical information has been added to, nor deleted from either of these maintenance procedures.

MP/0/A/7600/103 Retype 6 Approved 01-19-95  
Fisher/Posi - Seal Butterfly Valve Disassembly and Reassembly

#### Description

This procedure provides a method for disassembly, inspection, reassembly, and corrective maintenance for Posi-Seal/Fisher Butterfly Valves.

#### Evaluation

This evaluation is to describe the changes made to MP/0/A/7600/103 and ensure that these changes do not require changes to Technical Specifications or create an unreviewed safety question. This procedure is to correct and improve the performance of Posi-Seal BF Valves within the original design requirements and specifications.

MP/0/A/7650/054A Change 0 Approved 10-20-95  
Personnel Air Lock Door Seal

#### Description

The purpose of this procedure is to provide a method of removing, replacing and corrective maintenance of Air Lock Doors Seals.

#### Evaluation

The technical information in this procedure was taken out of MP/0/A/7650/54. The existing procedure for the Air Lock

Door Seal replacement has been divided into two separate procedures for clarification and maintenance personnel. 7650/54 provides information for corrective maintenance for the door excluding the door seals, and 7650/54A provides instruction for removal, replacement, and corrective maintenance for the door seals only. No significant technical information has been added to this procedure.

MP/0/A/7650/091 Retype 3      Approved 10-14-94  
Containment Airlock Strongback Installation and Removal

Description

The purpose is to provide instructions for the installation and removal of the Containment Airlock Strongbacks

Evaluation

This evaluation is for the editorial changes made to the procedure discovered by maintenance crew during installation/removal of the strongbacks. These changes were made in accordance with the latest revision of the Site Directive for Containment Entry. Also, the procedure format was upgraded in accordance with the latest revision of the Site Directives. These changes do not affect the technical content of the procedure on a significant manner.

MP/0/A/7150/012 Change 0      Approved 01-12-95  
Refueling Canal Cleanliness

Description

This procedure deals with preventing and minimizing foreign objects and debris from entering the refueling canal. The most notable benefit of foreign material exclusion is the prevention of fuel failures from debris fretting on the fuel pins.

Evaluation

The new procedure is an enhancement for performing the Canal Monitor function associated with foreign material exclusion. This procedure does not adversely affect any activities associated with refueling.

MP/0/B/7300/021 Change 1      Approved 08-10-95

## New Fuel Elevator Preventive Maintenance

### Description

The purpose of this procedure is to describe the lubricant used in the New Fuel Elevator and what type of preventative maintenance process is used.

### Evaluation

This procedure change will substitute the lubricant used in the New Fuel Elevator Winch Hoist Gear Box. The procedure now specifies EXXON Cyclestic 460, which, according to the EXXON Product Summary, is a high quality steam cylinder and worm gear lubricant, compounded with acidless tallow and a tackiness agent to provide adhesion and lubrication under the wet conditions encountered with saturated steam. The New Fuel Elevator Winch Hoist is not subjected to a saturated steam environment and has no need for the compounds included in the Cyclestic 460. Exxon Spartan EP 460, a premium industrial gear oil, has the same viscosity, and similar characteristics to the Cyclestic 460, without the tallow and tackiness agent, and will adequately meet the needs of the New Fuel Elevator Winch Hoist gear box.

MP/2/A/7150/042 Retype 9      Approved 07-17-95  
Reactor Vessel Head Removal and Replacement

### Description

The purpose of this procedure is to provide a method of removal and replacement of the Unit 2 reactor vessel head.

### Evaluation

This procedure change incorporated information from the new Biach Stud Runner Tool manual, adding two new enclosures on how to set up the tool to remove and replace the Rx vessel head studs. The vendor manual for the tool was referenced in the "References" section. Also, a step was added to visually inspect Rx vessel upper internals for dislodged CRDM or CETNA funnels, after the Rx head is removed and placed in the storage stand.

RP/0/A/5000/06A Original      Approved 1-19-95  
Notification to States and Counties from the Control Room

Description

New procedure developed.

Evaluation

This response procedure is of an administrative nature and has no effect on facilities, procedures, tests, experiments, systems structures, or components described in the SAR.

RP/0/A/5000/06B Original      Approved 1-19-95  
Notifications to States and Counties from the Technical Support Center

Description

New procedure developed.

Evaluation

This response procedure is of an administrative nature and has no effect on facilities, procedures, tests, experiments, systems structures, or components described in the SAR.

RP/0/A/5000/06C Original      Approved 1-19-95  
Notifications to States and Counties from the Emergency Operations Facility

Description

New procedure developed.

Evaluation

This response procedure is of an administrative nature and has no effect on facilities, procedures, tests, experiments, systems structures, or components described in the SAR.

PT/0/A/4150/11A Retype 5      Approved 09-08-95  
Control Rod Worth Measurement By Boration/Dilution

Description

To alleviate dilution of the VCT while extensive NCS dilution is being performed for control rod worth measurement at Hot Zero Power, an alternate mini-flow path which returns flow to the suction of the Centrifugal Changing Pumps via the Seal Water Heat Exchanger, through valve NV221, is established. However, special actions are



required to prevent overheating of the NV Pump(s) during accident scenarios. These actions include instructing Operations to open valve NV219 and close valve NV221, to reestablish the original (normal) mini-Flow path for the NV Pumps.

#### Evaluation

Two Safety Related concerns are addressed as follows:

1. During a LOCA, the non-essential header of Component Cooling (KC System) is isolated. However, NV Pump mini-flow remains in service, discharging back to pump suction. With no cooling water to the Seal Water Heat Exchanger (KC flow being isolated) the temperature of the mini-flow water will increase, thereby increasing bearing and seal water temperatures of the NV Pump(s). Eventually the pump(s) will overheat and be rendered inoperable. To prevent overheating of the pump(s), this procedure directs Operations to reinstate the original mini-flow path within a 45 minute time frame. This action will ensure that the NV Pumps are not overheated and subsequently rendered inoperable.
2. Loss of KC Non-essential Header and operator response are bounded by the above scenario.

PT/0/A/4150/29

Approved 12-19-94

New Fuel and Core Component Inspection

#### Description

The change made to this procedure are due to the QA procedure changing. The QA procedure was changed from QCG-2 to NPP 312. This procedure change reflects the new QA procedure.

#### Evaluation

This procedure change in no way increases the probability or consequences of an accident. It does not affect the health and safety of the public.

PT/0/A/4150/31 Change 2

Approved 1-25-95

Ultrasonic Testing of Fuel Assemblies

#### Description

This procedure change is made to take an action statement out of a note and put it in the procedure. A note said that an enclosure must be verified once every 12 hours. This note was made a step in the procedure. Also a prerequisite system condition was added to ensure any fuel work vendor has had procedure and adherence training.

#### Evaluation

These changes have no effect on the health and safety of the public.

PT/0/A/4400/08H Retype 0 Approved 03-03-95  
RN Individual Component Flow Balance

#### Description

The purpose of this procedure will allow balancing of individual components upon the completion of maintenance activities which severely alter flow characteristics.

#### Evaluation

This procedure will allow any RN pump to be in service and will not separate trains, which will allow balancing without affecting operating system alignments. The RN pump in operation will provide cooling for the operational loads of both units. Essential header pressure will be reduced to the previous flow balance value by opening available flow paths. The component being balanced will have flow set between previous flow balance values and the minimum allowable while maintaining essential header pressure within +1.2 psig (error adjusted) of the previous flow balance value. Setting flow below previous values but above minimum will ensure operability of other components in the system as well as the component being balanced.

PT/0/A/4400/08I Retype 0 Approved 04-19-95  
RN Train A Discharge Flow Split Test

#### Description

This procedures measures the distribution of flow between the long and short legs of the RN discharge to the SNSWP. The purpose of the test is to verify distribution of flow in accordance with the design of the system. The RN A loop

will be aligned to simulate a simultaneous LOCA on the unit and shutdown of the other unit to establish design basis flow rates.

#### Evaluation

The procedure will separate the trains, both supply and discharge. It will fail open all essential components to accident alignment with both A Train pumps running to provide maximum flow to the SNSWP discharge. A second NS Hx will be open to simulate non-essential header flow on the shutdown unit which will be the only variation from true accident alignment. A and B Train supply will remain on the lake with all discharges aligned to the SNSWP. Cooling for critical loads will be provided by the B Train of RN during this test.

PT/O/A/4450/008E Change 23 Approved 4-12-95  
Control Room Area Chillers Performance Test

#### Description

This procedure change allows for a different ranged differential transmitter to be used during the test.

#### Evaluation

This is only a change to an existing procedure. A USQ evaluation is not applicable to this procedure change. No Technical Specification or FSAR changes are required.

PT/O/A/4450/04A Retype 2 Approved 7-24-95  
Auxiliary Building Ventilation System Performance Test

#### Description

This reissue will incorporate Changes 0 through 33. Justification for these changes is identified on 10CFR50.59 evaluations completed with these changes.

#### Evaluation

This procedural change to performance test will incorporate the following:

- Incorporate changes 0 - 33
- Adds procedural revisions to assure that all ECCS Pump Rooms are maintained at a negative pressure relative to

Elev 543.

- Lower the maximum air flow rate for one Auxiliary Building filter unit operating in a normal alignment and in parallel with opposite train filter unit, from 33,000 cfm to 32,000 cfm. This will assure that with a single failure of one filter, the air flow rate through the remaining filter unit does not increase to the point that it will exceed the ability of the filter unit to provide design basis filtration efficiency.

PT/O/A/4450/04A Change 31 Approved 1-7-95  
Auxiliary Building Filtered Exhaust System Performance Test

#### Description

This restricted change is being prepared to perform a retest for Work Order 95002410 01. This work order replaced an optical isolator which had failed. This defective optical prevented Auxiliary Building Unfiltered Exhaust Fan 1A and Auxiliary Building Supply Unit 1A from tripping off upon receipt of a simulated safety injection signal from Unit 2. Therefore all steps such as flow measurements and negative pressure verifications have been deleted because they are unnecessary to validate the correct repair of the Optical Isolator. Additionally, the simulated safety injection signal is being changed from Unit 1 to Unit 2 so that the test conditions will be identified to those when the failed optical isolator was detected. Enclosure 13.3 which specifies the lineup after the simulated safety injection signal has been received has been changed to include verifications that ABUXF 1A, 2A have tripped. Otherwise the procedure section will be done in the same manner as had been previously reviewed.

#### Evaluation

Restricted Procedure Change #31 to this procedure has been developed to perform a Post Maintenance Retest for Work Order 9500241001 which repaired a defective optical isolator which had prevented the tripping of Auxiliary Building Unfiltered Exhaust Fan 1A and Auxiliary Building Supply Unit 1A upon receipt of a safety required to demonstrate proper operation of the repaired optical isolator. Otherwise the procedure will be performed in a similar manner as before.

Therefore, this procedure change does not create an unreviewed safety questions.

PT/0/A/4200/23 Retype - Initial Approved 3-20-95  
PZR Continuous Spray Flow Valve Setup

#### Description

This test is described in FSAR 14.5.3.1. The test method and the acceptance criteria as described is the same with the exception of the number of NC pumps that need to be on. Per FSAR 14.5.3.1 all four NC pumps are required on but per this new procedure only A and B NCP are required on.

#### Evaluation

A procedure change, as compared to the initial startup procedure described in FSAR 14.5.3.1 has been made to allow the pressurize minimum continuous spray flow to be set with a minimum of NCP's A & B operating, rather than all 4 NCP's in operation. ASME Section III Code Class I Piping Transient Parameter Analysis is not adversely affected. Catawba licensing basis is not degraded. The procedure assures that at least the minimum continuous spray line exists to ensure that the service life limitations of NC pressure boundary are not adversely affected. No USQ, and no Tech Spec changes are associated with this change. Since this is a new procedure to be performed anytime the associated throttling valves are maintained, and is not a change to the original startup test described in the FSAR, no FSAR update will be required.

PT/0/A/4400/08I Retype 1 Approved 5-18-95  
RN Train A Discharge Flow Split Test

#### Description

This procedure measures the distribution of flow between the long and short legs of the RN discharge of the SNSWP. The purpose of the test is to verify distribution of flow in accordance with the design of the system. The RN A loop will be aligned to simulate a simultaneous LOCA on one unit and shutdown of the other unit to establish design basis flow rates.

#### Evaluation

The procedure will separate the trains, both supply and discharge. It will fail open all essential components to accident alignment with both A Train pumps running to provide maximum flow to the SNSWP discharge. A second NS Hx will be open to simulate non-essential header flow on the shutdown unit and to ensure flow meets or exceeds flow balance values. This second NS being full open will be the only variation from true accident alignment. A and B Train supply will remain on the lake with all discharges aligned to the SNSWP. Cooling for critical loads will be provided by the F Train of RN during this test.

PT/0/A/4400/08J Retype 0      Approved 4-12-95  
RN Train B Discharge Flow Split Test

#### Description

The purpose of this procedure is to measure the distribution of flow between the long and short legs of the RN discharge to the SNSWP. The purpose of the test is to verify distribution of flow in accordance with the design of the system. The RN B loop will be aligned to simulate a simultaneous LOCA on one unit and shutdown of the other unit to establish design basis flow rates.

#### Evaluation

The procedure will separate the trains, both supply and discharge. It will fail open all components to accident alignment with both B Train pumps running to provide maximum flow to the SNSWP discharge. A second NS Hx will be open to simulate non-essential header flow on the shutdown unit which would be the only variation from true accident alignment. A and B Train supply along with the A Train discharge will remain on the lake. Cooling for critical loads will be provided by the A Train of RN during this test.

PT/0/A/4400/08J Retype 1      Approved 5-30-95  
RN Train B Discharge Flow Split Test

#### Description

The purpose of this procedure is to measure the distribution of flow between the long and short legs of the RN discharge to the SNSWP. The purpose of the test is to verify



distribution of flow in accordance with the design of the system. The RN B loop will be aligned to simulate a simultaneous LOCA on one unit and shutdown of the other unit to establish design basis flow rates.

#### Evaluation

The procedure will separate the trains, both supply and discharge. B Train (the train under test) will have supply Aligned to the lake and discharge aligned to the SNSWP. All B Train essential components will be failed to accident alignment with both B Train pumps running to provide maximum flow to the SNSWP discharge. A second NS Hx will be open to simulate non-essential header flow on the shutdown unit and to ensure flow meets or exceeds flow balance values. This second NS being full open will be the only variation from true accident alignment. Cooling for critical loads will be provided by the A Train of RN during this test which will have supply and discharge remain aligned to the lake.

PT/0/A/4450/04A Change 25 Approved 10-27-94  
Auxiliary Building Filtered Exhaust System Performance Test

#### Description

Restricted procedure change #25 makes several changes to the VA System Performance Test in order to perform the post modification testing for the part of NSM's CN11288 and 20683 that revised B-Train VA on both units.

#### Evaluation

Steps will be added to the procedure to verify certain electrical devices that were potentially affected during implementation of the modification. A new Enclosure will also be added to balance some of the air flows in the VA System. This rebalancing may be necessary due to dampers 1(2)ABF-D17 being secured in the open position.

PT/0/A/4450/008E Change 26 Approved 9-6-95  
Control Room Area Chillers Performance Test

#### Description

Restricted procedure change #26 allows for the manual control valve on the YC Chiller condenser (valve IRN247) to be opened while the head pressure control valve is also



opened. Data will be taken in order to determine how much the flow through the condenser increases with the bypass line open.

#### Evaluation

Having the manual control valve opened will not affect the YC system because the testing is performed on the YC train that is out of service. This procedure change will not adversely affect the RN system either because there is adequate margin in the RN flow balance to account for the small increase in flow through the YC condenser. There is also guidance in the procedure that instructs test personnel to close the manual control valve on the event of a reactor trip/safety injection on either unit. This will restore the RN system to its flow balanced condition.

PT/O/B/4600/04 Retype 9      Approved 1-11-95  
Periodic Verification of Emergency Supplies

#### Description

The purpose of this procedure is to ensure sufficient supplies are on hand (in the TSC, OSC, and EOF) to effectively manage an emergency situation.

#### Evaluation

This response procedure is of an administrative nature and has no effect on facilities, procedures, tests, experiments, systems structures, or components described in the SAR. This activity does not require inclusion in the SAR.

PT/O/B/4600/05 Retype 17      Approved 10-12-94  
Coordination of Communications

#### Description

The purpose of this procedure is to ensure that communications capability exists between Catawba Nuclear Station, the Catawba Emergency Operations Facility (EOF) and various emergency organizations at all times.

#### Evaluation

The Response Procedure is of an administrative nature and has no effect on facilities, procedures, tests, experiments,

systems structures, or components described in the SAR.  
This activity does not require inclusion on the SAR.

PT/0/B/4600/27A Retype 4      Approved 10-17-94  
Emergency Response Data System Check

Description

The purpose of this procedure is to perform a quarterly check of the Emergency Response Data System (ERDS) to verify that it properly transmits data to NRC.

Evaluation

This Response Procedure is of an administrative nature and has no effect on facilities, procedures, tests, experiments, systems structures, or components described in the SAR. This activity does not require inclusion in the SAR>

PT/0/B/4700/16 Change 1      Approved 8-16-95  
Performance Test for Secondary Chemistry Valve Alignment

Description

The purpose of this procedure is to provide assurance of valve alignments for systems under Secondary Chemistry's operational control are periodically (annually) checked and verified to be in the correct position. The correct position is defined as a valve being in the operating procedure initial valve alignment checklist position, operational alignment, or a R&R.

Evaluation

This procedure is being changed to correct a procedure number reference.

PT/1/A/4200/07F Change 0      Approved 3-7-95  
Standby Makeup Pump Flow Verification

Description

This procedure was developed to verify that the Standby Makeup Pump is capable of delivering flow to each of the Reactor Coolant Pump seal injection lines.

Evaluation

During this test, the Standby Makeup pump will be aligned to the Spent Fuel pool and discharging into each individual Reactor Coolant Pump seal injection line. This is the design function and purpose of the Standby Makeup pump and these flow paths. Thus, it nor any other subsystems will be render inoperable as a result of this test. The chapter 15 Accident Safety Analysis were reviewed and are not affected since this test is performed within the parameters of the system's design function. Since this test does not impact accident initiation mechanisms, the probability or consequences of an accident previously evaluated in the FSAR are not increased. This test does not involve any hardware modifications or operation outside normal limits, and the possibility of an accident which is different than already evaluated in the FSAR is not created. This test does not adversely affect any equipment important to safety.

PT/1/A/4200/73 Change 0      Approved 6-7-95  
SV PORV Checkvalve Leakrate Test (5Y)

#### Description

The purpose of this test is to verify that check valves 1SVCK0010, 11, 70, 71, 130, 131, 190, and 191 sufficiently seal to prevent excessive loss of Nitrogen. The S/G PORV's are provided with safety related Nitrogen supplies which ensure that certain Design and Licensing Basis Events would be adequately mitigated. The check valves serve as a Nitrogen pressure boundary in the event the VI line is severed; allowing continued remote manual control of the affected PORV. This procedure has been developed to provide a method of leakrate testing of these instrument check valves.

#### Evaluation

This procedure has been designed to allow testing of the S/G PORV's during normal operations. The only function affected by this procedure is the auto cycling the valve undergoes to mitigate mild transients to help prevent the lifting of the Safety Valve. Per Reference 1, this function is non-safety and is not relied upon to mitigate the affects of any Design Basis Event. This test essentially simulates, for the PORV under test, the conditions of loss if air as well as loss of power to the two non-safety solenoids, which provide the non-safety auto-stroking function described above. The

PORV's ability to respond either to any event which generates a Main Steam Isolation Signal or a SGTR is not affected. As such, the valves are considered fully operable during the test, provided the test results are satisfactory. If the test results are not satisfactory, the appropriate Tech Spec entry will be made.

PT/1/A/4200/13H Change 13  
NI and NV Check Valve Test

#### Description

The purpose for the procedure is to comply with Catawba IWV testing program requirements for operability for those valves listed in the procedure. During performance of this test, Safety Injection pumps A and B and Chemical and Volume Control centrifugal charging pumps A and B are operated in Hot Leg and Cold Leg Injection with suction provided by Residual Heat Removal pumps A and B. The reactor vessel is open with no fuel inside of the core during performance of this test. NI and NV pumps discharge into the reactor vessel and water is allowed to overflow into the reactor vessel cavity.

#### Evaluation

10CFR50.59 allows the conduct of procedures which affect structures described in the FSAR in a significant manner without prior NRC approval unless the test involves a Technical Specifications change or an Unreviewed Safety Question.

PT/1/A/4200/13H Change 14 Approved 3-2-95  
NI/NV Check Valve Movement Test

#### Description

This procedure allows NV Pumps 1A and NI Pump 1A to be backed into miniflow and stopped during the portion of the test in which venting of other train flow transmitters is required. This action will minimize the amount of water pumped into the refueling cavity. This action has no effect on the safety of the system.

#### Evaluation

This change deletes the need close the NI pump manual isolation valves before starting the NI pumps. As the system is already balanced, these steps are unnecessary.

PT/1/A/4200/13H Change 15      Approved 3-3-95  
NI/NV Check Valve Test

Description

The purpose of this procedure is to prevent pressuring the NV pump miniflow line with ND Pump discharge pressure.

Evaluation

This change closes the NV Pump miniflow valves prior to aligning ND boost to the NV suction piping. This act will prevent lifting relief valves on the NV pump miniflow line.

PT/1/A/4400/01 Change 30      Approved 3-1-96  
ECCS Flow Balance

Description

The purpose of this procedure is to provide emergency cooling to the reactor core on the event of a Loss of Coolant Accident (LOCA) or steam line break.

Evaluation

Performance of this procedure ensures that Technical Specification Surveillance Requirement 4.5.2.h pump runout, total flow, and flow split requirements are satisfied and that the ECCS flow resistance and pressure drop characteristics are adequate for the system to perform its intended safety function.

PT/1/A/4400/07A Retype 4      Approved 8-11-95  
Control Room Area Chilled Water Pump A Performance Test

Description

The purpose of this procedure is to verify the operational readiness of Control Room Area Chilled Water Pump A.

Evaluation

This retype incorporates the following:

- Editorial changes to reflect name changes for station groups as a result of reorganization as well as miscellaneous changes to ensure agreement between this procedure and the procedure for the opposite train.
- New reference and step to incorporate corrective action to PIP C93-0696, ensuring that process instrumentation is returned to service following testing.
- Added steps to ensure opposite train is operable during performance of this test and steps to ensure the affected train is declared inoperable due to testing.
- Suction pressure limit was increased to > 15 psig to take static head and compression tank overpressure into account.
- As a result of error analysis, required flow valve was increased to 1097 gpm to ensure design flow valves are met. In addition, Required Action Range valves were also added for flow parameter.

PT/1/A/4400/07B Retype 4 Approved 8-11-95  
Control Room Area Chilled Water Pump B Performance Test

#### Description

The purpose of this procedure is to verify operational readiness of Control Room Area Chilled Water Pump B.

#### Evaluation

This retype incorporates the following:

- Editorial changes to reflect name changes for station groups as a result of reorganization as well as miscellaneous changes to ensure agreement between this procedure and the procedure for the opposite train.
- New reference and step to incorporate corrective action to PIP C93-0696, ensuring that process instrumentation is returned to service following testing.
- Added steps to ensure opposite train is operable during performance of this test and steps to ensure the affected train is declared inoperable due to testing.
- Suction pressure limit was increased to > 15 psig to take static head and compression tank overpressure into account.

As a result of error analysis, required flow valve was increased to 1097 gpm to ensure design flow valves are met.



In addition, Required Action Range valves were also added for flow parameter.

PT/1/A/4450/05A Retype 8      Approved 3-13-95  
Containment Air Return Fan 1A and Hydrogen Skimmer Fan 1A  
Performance Test

#### Description

The purpose of this procedure is to satisfy the requirements of the CNS Technical Specifications, Surveillance Requirements, Sections 4.6.5.6.1 a-g and 4.6.5.6.2.2 a-b with regards to the Hydrogen Skimmer Fan and Containment Air Return Fan starts, run time, damper verification, valve operation, fan motor current, CPCC Permissives, and RPM. Following maintenance or repair on any part of the system covered by this procedure that could affect Hydrogen Skimmer Fans or Containment Air Return Fans operability, that part of the system shall be retested to reverify operability as necessary.

#### Evaluation

The possibility of malfunctions of equipment important to safety different than any already evaluated on the SAR will not be created because performance of all VX System equipment will be verified operable prior to Mode 4. These changes do not affect the test method on a significant manner, impact any Safety Analysis or represent any change to a safety related system or component. They are just representing the as built condition of the plant. The margin of safety in associated Tech Spec Bases is not reduced in any way.

PT/1/A/4450/05A Change 24      Approved 3-13-95  
Containment Air Return Fan 1A and Hydrogen Skimmer Fan 1A  
Performance Test

#### Description

The purpose of this change is Post Modification Testing of NSM CN-11321.

#### Evaluation

This change will allow testing of Containment Air Return Fan 1A upon completion of installation of modification CN-11321.



The modification tied the fan start and stop permissives to ARF-D-2 permissives to meet single failure criteria. Verification that the fan will start with both channel permissives available will be proven along with stopping of the fan when one permissive is removed and the restarting of the fan when the permissive is restored. This will be performed to verify both channels. Motor start duties have been considered and warnings are present in the procedure to prevent exceeding them. Also verified will be fan and compute indication.

PT/1/A/4450/07A Change 8 Approved 4-19-95  
Containment Air Release and Addition Filter Train  
Performance Test

#### Description

The purpose of this procedure is to change carbon penetration acceptance criteria to provide a more realistic margin for carbon absorber change outs.

#### Evaluation

The change is necessary to provide a more realistic margin for carbon adsorber changeouts and is consistent with respect to the assumed carbon efficiency of 90% utilized in the Catawba Offsite Dose Calculation Manual (ODCM), as well as recommended by Regulatory 1.140, Revision 1. The subject change will not increase the probability or consequences of an accident which has previously been evaluated in the SAR. No physical changes will be made to the plant, therefore, there is no increased probability of an accident.

PT/1/A/4450/05B Retype 8 Approved 3-13-95  
Containment Air Return Fan 1B and Hydrogen Skimmer Fan 1B  
Performance Test.

#### Description

The retype of this procedure involved existing changes as well as revising the procedure format to enclosure type.

#### Evaluation

The possibility of malfunctions of equipment important to safety than any already evaluated in the SAR will not be created because performance of all VX System equipment will

be verified operable prior to Mode 4. These changes do not affect the test method in a significant manner, impact any Safety Analysis or represent any change to a safety related system or component.

PT/1/A/4450/05B Change 50 Approved 3-13-95  
Containment Air Return Fan 1B and Hydrogen Skimmer Fan 1B  
Performance Test

Description

The purpose of this change is Post Modification Testing of NSM CN-11321.

Evaluation

This restricted change will allow testing of Containment Air Return Fan 1B upon completion of installation of modification CN-11321. This modification tied the fan start and stop permissives to ARF-D-4 permissives to meet single failure criteria. Verification that the fan will start with both channel permissives available will be proven along with stopping of the fan when one premissive is removed and the restarting of the fan when the premissive is restored. This will be performed to verify both channels. Motor start duties have been considered and warnings are present in the procedure to prevent exceeding them. Also verified will be fan and computer indications.

PT/2/A/4200/10A Change 26 Approved 3-1-95  
Residual Heat Removal Pump 2A Performance Test

Description

To allow ND pump 2A 1WP testing to be performed in Mode 4 with NC pressure less than 650 psig.

Evaluation

All 7 questions of the 10CFR50.59 Evaluation have been answered no. There is no Unreviewed Safety Question.

PT/2/A/4200/31A Change 4 Approved 7-7-94  
S/G PORV and Block Valve D/P Stroke Test

Description

To ensure pre-regs for section 13.1 and 13.5 are the same with respect to plant conditions.

#### Evaluation

This change instructs the operators to fully open 2SV1 against full DP in a Section (12.1) that currently strokes the valve to only 30% open. This procedure already contains sections which fully stroke the S/G PORV's at power which all have been evaluated in accordance to 10CFR50.59. This change ensures that the same conditions that have been evaluated for in the "full Stroke" sections also exists in Enclosure 13.1. With the implementation of this change, the primary difference between the 30% section and any of the full blow sections is that the 30% section will open the valve with nitrogen (vs air) and will manually close the PORV from the Control Room verses providing an auto close signal.

PT/2/A/4200/31A Change 6      Approved 8-4-95  
S/G PORV and Block Valve D/P Stroke Test

#### Description

To ensure pre-regs for section 13.3 and 13.7 are the same with respect to plant conditions.

#### Evaluation

This change instructs the operators to fully open 2SV13 against full DP in a Section (12.3) that currently strokes the valve to only 30% open. This procedure already contains sections which fully stroke the S/G PORV's at power which all have been evaluated in accordance to 10CFR50.59. This change ensures that the same conditions that have been evaluated for in the "full Stroke" sections also exists in Enclosure 13.3. With the implementation of this change, the primary difference between the 30% section and any of the full blow sections is that the 30% section will open the valve with nitrogen (vs air) and will manually close the PORV from the Control Room verses providing an auto close signal.

PT/2/A/4200/73 Change 0      Approved 6-7-95  
SV PORV Checkvalve Leakrate Test (5Y)

#### Description

The purpose of this test is to verify that check valves 2SVCK0010, 11, 70, 71, 130, 131, 190, and 191 sufficiently seal to prevent excessive loss of Nitrogen. The S/G PORV's are provided with safety related Nitrogen supplies which ensure that certain Design and Licensing Basis Events would be adequately mitigated. The check valves serve as a Nitrogen pressure boundary in the event the VI line is severed; allowing continued remote manual control of the affected PORV. This procedure has been developed to provide a method of leakrate testing of these instrument check valves.

#### Evaluation

This procedure has been designed to allow testing of the S/G PORVs during normal operations. The only function affected by this procedure is the auto cycling the valve undergoes to mitigate mild transients to help prevent the lifting of the Safety Valves.

PT/2/A/4450/07A Change 9      Approved 4-19-95  
Containment Air Release and Addition Filter Train  
Performance Test

#### Description

This procedure will change carbon penetration acceptance criteria to provide a more realistic margin for carbon adsorber changeouts.

#### Evaluation

The change is necessary to provide a more realistic margin for carbon adsorber changeouts and is consistent with respect to the assumed carbon efficiency of 90% utilized in the Catawba Offsite Dose Calculation Manual, as well as recommended by Regulatory 1.140, rev 1. The VQ System is designed for normal operation purging of the reactor containment building.

TN/0/8/1007/CE/0/1A Original      Approved 7/20/95  
Procedure for Implementation of Minor Mod CE-61007

#### Description

This procedure controls the work which will be done during the Unit 1 innage prior to the replacement outage. This work will include installing sky climber lugs, life-line

attachments, and adding transverse stiffeners to the polar crane. Scaffolding will be constructed on top of the pressurizer cavity enclosure on order to access the polar crane girders and perform some of the installation of the stiffeners. A movable scaffold will also be constructed from the polar crane girders to allow access for installation of the stiffeners.

#### Evaluation

This work involves no system alignments and does not cause the degradation of any structure, system, or component important to safety. No Technical Specification or FSAR are needed because of this procedure.

TN/0/B/1007/CE/01A Change 1 Approved 7-27-95  
Procedure for Implementation of Minor Modifications

#### Description

This change modifies the safe load path and isolates flow to the Upper Containment Ventilation Units in order to allow installation of the sky climber lugs.

#### Evaluation

No unreviewed safety questions are created as a result of this change.

TN/1/A/1331/00/02A Change 1 Approved 2-22-95  
Procedure for Implementation of NSM CN-11331, Rev 0, Work Unit 02

#### Description

Change 1 adds a caution statement and a step on sections 8.8 & 8.9 to ensure that ND suction valves have power removed, prior to deenergizing Westinghouse relays. When power is removed from these relays, contacts on the relays change state, sending a signal that NC system pressure will not exist. Removing power from IND001B and IND002A will ensure that valves IND001B and 2A will not reposition while relay contacts are being converted for valves IND36B and IND37A.

#### Evaluation

Change No. 1 to this procedure will permit activities required for NSM CN-11331 to be completed. The 10CFR50.59 Evaluation for this procedure is not affected by this

change. Accordingly, Change No. 1 will not increase the probability or consequences of an accident previously evaluated, or different than any already evaluated on the FSAR. Also, this change will not increase the probability or consequences of an equipment malfunction previously evaluated, or different than any already evaluated in the FSAR. The margin of safety defined in the bases of the Tech Spec is unaffected and further evaluation is not required.

TN/1/A/3620/MM/01A Original Approved 12-22-94  
Procedure for the Testing of Minor Mod CE-3620, Work Unit 01

#### Description

This procedure provides instruction for the testing of the Train A portion of Minor Modification CE-3620, which added jumpers in 11C2 to allow control board switches VX1 and VX5 to work in the "ON" position.

#### Evaluation

This procedure will involve placing switches VX1 and VX5 in the "ON" position and verifying that voltage is present to the proper circuits for manual operation. The equipment that would normally be energized by placing the switches in the manual "ON" position will be isolated so that the system cannot be inadvertently operated by performing this test. The Train A portion of the VX system will be out of service during this test; however, the Train B portion will be operable while the test is being performed and the test will be completed within the 72 hour LCO required by Technical Specification 3.6.5.6

TN/1/A/3620/MM/02A Original Approved 12/22/94  
Procedure for the testing of Minor Mod CE-3620, Work Unit 02

#### Description

This procedure provides instruction for the testing of the Train A portion of Minor Modification CE-3620, which added jumpers in 11C12 to allow control board switches VX36 and VX40 to work in the "ON" position.

#### Evaluation

This procedure will involve placing switches VX36 and VX40 in the "ON" position and verifying that voltage is present to the proper circuits for manual operation. The equipment that would normally be energized by placing the switches in



the manual "ON" position will be isolated so that the system cannot be inadvertently operated by performing this test. The Train B portion of the VX system will be out of service during this test; however, the Train A portion will be operable while the test is being performed and the test will be completed within the 72 hour LCO required by Technical Specification 3.6.5.6.

TN/2/A/0671/00/02A Original    Approved 11-3-94  
Implementation Procedure for NSM CN-20671, Rev 0 Work Unit 2

#### Description

The purpose of this evaluation is to determine if the implementation of this procedure for NSM CN-20671/00 involves any unreviewed safety questions.

#### Evaluation

The implementation of this procedure will not affect the bases for any of the systems as stated in the Tech Spec. As a result, no Tech Spec change will occur from the implementation of this procedure. All components affected by electrical isolations for this procedure have been evaluated and determined to have no affect on the safe operation of Unit 2. Containment Isolation Valve 2NM26B will be deactivated and secured in its isolation (closed) position during the performance of this procedure to prevent violating Tech Spec 3/4/6/3/. As a result, the probability and/or consequence of an accident previously evaluated in the FSAR will not be created nor will any accident different than that evaluated in the FSAR be not be increased.

TN/2/A/1346/00/01A Original    Approved 4-12-95  
Procedure for the Implementation of NSM CN-21346 Rev 0 Work Unit 01

#### Description

This procedure provides instruction for the implementation of the Train A portion of NSM CN-21346 Rev 0 which revises the 2/3 logic for D/G LO-LO Lube Oil Pressure by replacing LD pressure transmitters 2LDPT5142 and 2LDPT5143 with pressure switches 2LDPS5143 and 2LPPS5144. A seal-in will also be added to the LO-LO Lube Oil Pressure trip logic to seal in the trip signal until the diesel emergency start signal from the load sequence is reset.

### Evaluation

The implementation of this procedure will involve the electrical and mechanical isolation of the LD pressure transmitters. These isolations will cause the loss of the non-emergency LO Lube Oil Pressure trip and the loss of the non-emergency and emergency LO-Lo Lube Oil Pressure Trip.

TN/2/A/1346/00/01A Change 1    Approved 5-15-95  
Procedure for the Implementation of NSM CN-21346 Rev 0 Work Unit 01

### Description

Revise steps 8.7.2, 8.7.4 and the warning note prior to step 8.7.2 to change terminal J-2L to J-2R. This being done to correct the TN so that it will agree with drawing CN-2777-01.08-01, rev 2A.

### Evaluation

The changes being made are to correct a mistake on the original TN that showed J-2L where it should have shown J-2R. This is basically an editorial change. Therefore the changes are not significant and will not affect the original 10CFR50.59 evaluation for this procedure. No additional scope will be added to the procedure per this change. As a result, there will be no significant affect on any systems, components or structures as addressed in the FSAR.

TN/2/A/1346/00/01A Change 2    Approved 6-13-95  
Procedure for Implementation of NSM CN-21346 Rev 0, Work Unit 01

### Description

Revise Step 8.8.4 to change terminal J-1L to J-1R. This is being done to correct the TN so that it will agree with drawing CN-2777-01.08-01. Rev 2-A.

### Evaluation

The change being made is to correct a mistake on the original TN that showed J-1L where it should have shown J-1R. This change does not affect the original design of the system but is basically an editorial change to the TN.

TN/2/A/1346/00/02A Original    Approved 4-12-95  
Procedure for the Implementation of NSM CN-21346 Rev 0 Work Unit 02

#### Description

This procedure provides instruction for the implementation of the Train B portion of NSM CN-21346 Rev 0 which revises the 2/3 logic for D/G LO-LO Lube Oil Pressure by replacing LD pressure transmitters 2LDPT5172 and 2LDPT5173 with pressure switches 2LDPS5173 and 2LDPS5174. A seal-in will also be added to the LO-LO Lube Oil Pressure trip logic to seal in the trip signal until the diesel emergency start from the load sequence is reset.

#### Evaluation

The implementation of this procedure will involve the electrical and mechanical isolation of the LD pressure transmitters. These isolations will cause the loss of the non-emergency LO Lube Oil Pressure trip and the loss of the non-emergency and emergency LO-LO Lube Oil Pressure trip.

TN/2/A/1346/00/02A Change 2    Approved 6-16-95

Procedure for the Implementation of NSM CN-21346 Rev 0, Work Unit 02

#### Description

Revise steps 8.8.4 to change terminal J-1L to J-1R. This is being done to correct the TN, so it will agree with drawing CN-2777-01,90-01 Rev 2A. Add note to inform WCC SRO that the completion of step 8.8.4 will make Diesel Engine 2B inoperable until testing is completed.

#### Evaluation

The change being made to step 8.8.4 is to correct a mistake on the original TN that shows terminal J-1L instead of J-1R. This change does not affect the original design of the system, but is basically an editorial change to the TN.

TN/2/A/3574/MM/02A Original    Approved 12-22-94

Procedure for the Testing of Minor Mod CE-3574, Work Unit 02

#### Description

This procedure provides instruction for the testing of the Train B portion of Minor Modification CE-3574, which added jumpers in 2Ic12 to allow control board switches VX36 and VX40 to work in the "ON" position.

### Evaluation

This procedure will involve placing switches VX36 and VX40 in the "ON" position and verifying that voltage is present to the proper circuits for manual operation. The equipment that would normally be energized by placing the switches in the manual "ON" position will be isolated so that the system cannot be inadvertently operated by performing this test. Train B portion of the VX system will be out of service during this test; however, the Train A portion will be operable while the test is being performed and the test will be completed within 72 hour LCO required by Technical Specification 3.6.5.6.

TT/1/A/9200/78 Original                      Approved 2-21-95  
Flow Verification for 1KCFE5530 (Annubar)

### Description

This procedure is designed to obtain flow data to calibrate the flow annubar at KCFE5530. To accomplish this, the Component Cooling (KC) System A-train pumps will be run in an alignment such that flow will only pass through ND HX A and KC Pump A1 and A2 motor coolers. All other A-train essential loads will be isolated (by valving them out) in addition to the miniflow line. To ensure that the essential loads do not require cooling during this test, the affected systems pump breakers will be "racked out". The A-train will also be isolated from the non-essential headers by closing the non-essential header supply cross-connect valves (KC50A and KC230A).

### Evaluation

This procedure will not adversely affect unit operation or degrade any affected equipment. The probability or consequences of an accident or safety related equipment malfunction already evaluated in the FSAR will not be increased as a result of performing this test. B Train of the KC system will be operable during this test to properly respond to an ESF signal by automatically entering the appropriate emergency alignment. Therefore, the possibility of an accident or safety related equipment malfunction different than that previously evaluated in the FSAR will not be created and entrance into a Tech Spec Limiting Condition for Operation will not occur. Since the equipment and systems affected by this procedure are being operated

within their design bases, the margin of safety will not be reduced.

TT/1/A/9200/79 Original                      Approved 2-12-95  
Flow Verification for 1KCFE5540 (Annubar)

#### Description

This procedure is designed to obtain flow data to calibrate the flow annubar at KCFE5540. To accomplish this, the Component Cooling (KC) System B-train pumps will be run in an alignment such that flow will only pass through ND HX B and KC Pump B1 and B2 motor coolers. All other B-train essential loads will be isolated (by valving them out) in addition to the miniflow line. To ensure that the essential loads do not require cooling during this test, the affected systems pump breakers will be "racked out". The B-Train will also be isolated from the non-essential headers by closing the non-essential header supply cross-connect valves.

#### Evaluation

In order to obtain data to evaluate the accuracy of the KC system annubar due to questions raised in PIP 0-C92-0144, a one time test is being performed per this procedure. This TT will align the KC system such that flow is only sent through the ND Hx and KC pump motor coolers on the train that's being tested. The train being tested will be isolated from the Aux. Building and Reactor Building non essential loads. A Train of KC will be in service during the test supplying all essential and non essential loads. All equipment on the train being tested will be taken out of service prior to the test in a manner to ensure that equipment damage is prevented. In addition, proper system alignments will be performed to ensure all equipment used for the test is adequately protected.

TT/1/A/9200/080 Change 0                      Approved 3-17-95  
Post Modification Testing of NV Letdown Orifices

#### Description

The purpose of this procedure is to setup and maintain Chemical and Volume Control System (NV) operation for sufficient duration to ensure satisfactory vibration monitoring of the Unit 1 Letdown Orifices.

### Evaluation

During this test, the Chemical and Volume Control (NV) system is aligned for normal Letdown flow via the 75 gpm orifice per OP/1/A/6200/01. Vibration data is abstained with the 75 gpm orifice in service. Next, valve 1NV11A is opened to provide flow through the 45 gpm orifice. Letdown flow is now being provided through both, the 45 gpm orifice and the 75gpm orifice. Once letdown flow is established through the 45 gpm orifice, flow through the 75 gpm is secured. Vibration data is obtained with the 45 gpm orifice in service. Next valve 1NV10A is opened. Valve 1NV849 is then throttled "Full" open slowly to provide flow through the variable orifice. Letdown flow is now being provided through both, the variable orifice and the 45 gpm orifice. Once letdown flow is established through the variable orifice, flow through the 45 gpm orifice is secured. Vibration data is obtained with the variable orifice in service. Finally, the 75 gpm is returned to service. During this test, the maximum letdown flow as specified in Chapter 15 will not be exceed, thus this procedure is bounded by the analysis for letdown line break. This is the design function and purpose if these paths thus, it nor any other subsystems will be render inoperable as a result of this test.

TT/1/A/9200/84 Original                      3/20/95  
KC System One Pump Flow Verification

### Description

The purpose of this procedure is to verify whether or not one KC pump can supply enough flow to all of the normal loads which receive KC flow. The procedure is designed to obtain flow data through all of the components which are typically in service during normal power operations.

### Evaluation

In order to obtain flow data to evaluate whether or not on KC pump can supply the necessary flows to all the normal operational loads, a one time test performed per TT/1/A/9200/84. This TT will have the KC system in its' normal operational alignment. Only one KC pump will be running during the test while flow rates through all affected components are verified and adjusted as necessary. Should valve adjustments be necessary, sufficient precautions are addressed in the procedure to preclude



degrading any system or component. The normal operation of the KC system, or any system which interfaces with KC, will not be affected by the performance of this test.

TT/2/A/9200/086 Change 0      Approved 6-29-95  
ND Heat Exchanger 2B Gravity Flush

#### Description

The purpose of this procedure is to allow the FWST to flush ND piping through an idle ND pump, through ND Heat Exchanger 2B and to the WEFT by opening drain valves 2ND-54 and 2ND-56. While performing this procedure, ND train 2B and NS train 2B will be declared inoperable.

#### Evaluation

Procedural guidance will be provided to close the open drain valves prior to Cold Leg Recirculation in the event of an ND pump start. The ECCS pressure boundary would then remain intact and all dose annualizations would remain valid.

TSM940000401      Approved 12-1-94

#### Description

The enclosure for 1RCTT6350 needs to be replaced in order to place 1RCTT6350 back in service. Beneath the enclosure are two conduits with two cables going between them. In order to have the needed space to mount the required box, the conduits may need to be modified. Field will modify the conduits as required to mount the box over the conduits. If modifying the conduits still does not provide the needed space, then the enclosure will be modified by cutting into the bottom panel as needed to fit over the conduits. Any opening created by cutting into the bottom panel will be sealed appropriately. Since the cutout will occur at the bottom and any opening will be properly sealed, the NEMA 4 integrity of this enclosure is still maintained. This will only be a temporary solution. Minor Mod Ce-3766 will permanently replace the enclosure with a more suitable one for the corrosive environment.

#### Evaluation

A USQ evaluation is not applicable to this activity. No technical specification or FSAR changes are required.

TSM94049053      Approved 12-7-94

#### Description

This temporary modification will allow for the addition of dispersant to the Unit II cooling towers while CNOYTFE 5130 is removed from the system. CNOYTFE 5130 is leaking profusely and must be replaced. The instrument will be removed from the piping system and replaced with a piece of stainless steel pipe. OP/O/B/6400/13 requires that during the addition operation, that the dispersant flow is monitored at the instrument. Flow will not be monitored during this addition operation at the instrument, but will be monitored at the cooling tower. Also, the concentration of dispersant in the RC system will be confirmed by chemical analysis. The actual operation of the equipment has not changed although the instructions in the procedure may have changed somewhat.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94051109

Approved 12-15-94

#### Description

The function of 1KC-228 to close on low-low KC surge tank 1B level will be transferred to 1KC-338 as per TMS WR 94051109. The affect on the operability status of the Component Cooling (KC) System is addressed separately in the operability evaluation for PIP 1-C94-1777. The functions of 1KC338 are not adversely affected. The qualification and reliability of the affected controls (1BSSPS) are not degraded. NO USQ's are associated with this TSM. As this is a temporary modification, no changes to the FSAR are required. No changes to the Technical Specifications are required.

#### Evaluation

This modification involves no unreviewed safety questions or safety concerns.

TSM94066204

Approved 4-11-95

#### Description

This modification will install temporary backwash piping for the 2A RN Strainer. The temporary piping will allow the 2A RN pump to be kept in service while the permanent strainer

backwash piping is being replaced under NSM CN-50443. The temporary backwash piping does not include any valves, only a flow restricting orifice. With the temporary piping in place, the strainer will be in continuous backwash when exposed to system pressure.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM 94066205

Approved 12-5-94

Description

This Temporary Modification will install backwash piping for the 2B RN Strainer. The temporary piping will allow the 2B RN Pump to be kept in service while the permanent strainer backwash piping does not include any valves, only a flow restricting orifice. With the temporary piping in place, the strainer will be in continuous backwash when exposed to system pressure.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94066206

Approved 4-11-95

Description

This modification will install temporary backwash piping for the 1A RN Strainer. The temporary piping will allow the 1A RN Pump to be kept in service while the permanent strainer backwash piping is being replaced under NSM CN-50443. The temporary backwash piping does not include any valves, only a flow restricting orifice. With the temporary piping in place, the strainer will be in continuous backwash when exposed to system pressure.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94066207

Approved 12/2/94

#### Description

The purpose of this evaluation is to determine if ureviewed safety questions are involved with TSM09066207. The criteria will be applied to make this determination per the requirements of NSD-209(ref9)

#### Evaluation

Temporary Modification 94066207 will install temporary backwash piping for the 1B RN Strainer. The temporary piping will allow the 1B RN Pump to be kept in service while the permanent strainer backwash piping is being replaced under NSM CN50443. The temporary backwash piping does not include any valves, only a flow restricting orifice. With the temporary piping in place, the strainer will be in continuous backwash when exposed to system pressure.

TSM94066697

Approved 12/12/94

#### Description

Install thermocouples on SA piping to monitor piping and heat trace temperatures.

#### Evaluation

This modification does not involves an unreviewed safety question or safety concern.

TSM94074005

Approved 11/30/94

#### Description

This TSM will gag 1CA015A open with a split collar attached to the stem and resting against the packing gland preventing the stem from closing while the actuator is replaced.

#### Evaluation

This modification does not involve and unreviewed safety question or safety concern.

TSM94066697

#### Description

This TSM is adding thermocouples approximately every 5 feet, to the outside of the SA piping, located in the Unit 1 CA pump Room, the Unit 1 Mechanical Penetration Room, and the Unit 1 Interior Doghouse. These thermocouples will monitor

the combined temperatures of the piping and the electrical heat tracing.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94074142

Approved 11/17/94

Description

This TSM will gag 1CA085B open with a split collar attached to the stem and resting against the packing gland preventing the stem from closing while the actuator is replaced.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94067850-01

Approved 10/5/94

Description

The purpose of this modification is to install a jumper to disable the Emergency Lo Level signal for the RN "B" Pit. This TSM will allow draining of the RN "B" Pit without automatically closing valves 1&2RN47A or automatically starting the RN pumps due to a "B" pit signal. The pit is being drained to support replacement of valves located in the B pit and various other maintenance activities and inspections. This evaluation will only cover the installation of the jumper to defeat the automatic swap for the RN B Pit. Operations procedure OP/O/A/6400/06C covers the proper RN alignment and the RN Unwatering Procedure OP/O/A/6400/06M covers the draining of the Pit and includes a step for installation and removal of this TSM.

Evaluation

This TSM is defeating the Train B instrumentation to automatically swap RN to the Standby Nuclear Service Water Pond. RN will be aligned to the SNSWP prior to installation of the TSM to satisfy Tech Spec Table 3.3-3, 14G, Action 29 and maintain operability of both trains of RN. This TSM does not create an Unreviewed Safety Question nor does it impact the Tech Specs or the FSAR.

TSM94067851-01

Approved 10/5/94

#### Description

The purpose of this modification is to install a jumper to disable the Emergency Lo Level signal for the RN "A" Pit. This TSM will allow draining of the RN "A" Pit without automatically closing valves 1&2RN48B or automatically starting the RN pumps due to a "A" pit signal. The pit is being drained to support replacement of valves located on the A pit and various other maintenance activities and inspections. This evaluation will only cover the installation of the jumper to degate the automatic swap for the RN A Pit. Operations procedures covers the proper RN alignment and the RN Unwatering Procedure covers the draining of the Pit and includes a step for installation and removal of this TSM.

#### Evaluation

This TSM is defeating the Train A instrumentation to automatically swap RN to the Standby Nuclear Service Water Pond. RN will be aligned to the SNSWP prior to installation of the TSM to satisfy Tech Spec Table 3.3-3, 14G, Action 29 and maintain operability of both trains of RN. This TSM does not create an Unreviewed Safety Question nor does it impact the Tech Specs or the FSAR.

TSM9407414411

Approved 12/15/94

#### Description

The purpose of this evaluation is to determine if this TSM involves any unreviewed safety questions.

#### Evaluation

This TSM will gag open with a split collar attached to the stem and resting against the packing gland preventing the stem from closing while the actuator is replaced.

TSM9407498310

Approved 11/20/94

#### Description

This TSM will gag 2KC056A open with the Limitorque H1BC gearbox while the actuator is removed from the valve. The ratio of this Limitorque H1BC gearbox is self-locking, therefore it is acceptable to use this gearbox as a gag. The gearbox is designed to keep the valve in position. The gearbox can handle the load of keeping the valve in the open



position for this TSM. OPS will also need to ensure 2KC230A and 2KC050A are closed prior to opening 2KC056A.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94075034

Approved 11/14/94

Description

This TSM will gag 2KC081B open with the Limitorque H1BC gearbox while the actuator is removed from the valve. The ratio of this Limitorque H1BC gearbox is self-locking, therefore it is acceptable to use this gearbox as a gag. OPS will also need to ensure 2KC228B and 2KC053B are closed prior to opening 2KC081B.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94083616

Approved 12/15/94

Description

This TSM will gag 2CA116A open with a split collar attached to the stem and resting against the packing gland preventing the stem from closing while the actuator is replaced.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94085191-01

Approved 11/9/94

Description

Install a 3/8" thread pipe plug in RL ventline connection to GH Cooler waterbox. Ventline pipe connection to Hydrogen Cooler 2A broke.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM94094545-01

Approved 12/15/94

Description

Change setpoints for 2RAP65010 from 10 and 20 inch increasing to 20 and 25 inch increasing, respectively.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM9500273201

Approved 1/9/95

Description

This TSM makes connections into the generator #1 watthour metering circuit to allow the monitoring of the units voltage and currents on all three phases and neutral. The units output is being monitored and recorded during negative sequence events on the system. The recording equipment is trigger set to record automatically. The voltage and current connections are being made in the watthour meter circuit as all needed inputs are available from the watthour meters. Also there should be no relay tripping possibilities in making the connections at the watthour meter. The unit main metering system, components, cabinets, and purpose serves no safety function and is not seismic.

Evaluation

IN the installation and removal of the TSM no station equipment will be adversely affected and while installed all site equipment will function normally. There are no Technical Specifications associated with this equipment. The FSAR is unaffected by this TSM and its implementation will have no affect on procedures, methods of operation, or tests or experiments as described in the SAR. This TSM is screenable for an unreviewed safety question and no further evaluation is required.

TSM95003055-01

Approved 2/8/95

Description

The referenced temporary modification will install a jumper across the Train A Containment Purge Ventilation (VP) System Humidistat output contacts. This is necessary during the No-Mode period for the Unit 1EOC8 Refueling Outage. During this time, the power source for Train A humidistat will be down for maintenance which would normally cause the

humidistat output to fail to the high relative humidity position.

Evaluation

This temporary modification does not involve any Unreviewed Safety Questions.

TSM95005060-17

Approved 1/23/95

Description

This valve is an 8" Borg-Warner carbon steel gate that is normally in the open position. A gag needs to be installed to keep the valve open while the motor operator is removed and tested. The gag will be removed prior to the repair of 1KC-228B during the upcoming UIEOC8 refueling outage.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM95005060-27

Approved 2/14/95

Description

The valve is an 8" Borg-Warner carbon steel gate valve that is normally in the open position. The valve was disassembled 2/14/95 and found to have damage to body guide rails. Valve replacement was determined to be the most feasible repair and will be pursued during the next available work window in the outage. the valve will be reassembled in it's safe position and secured in that position by either the electric motor operator or a gag. This TSM will be removed prior to the repair of 1KC-228b and entering mode 4 in 1EC08.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM95021927

Approved 6/8/95

Description

This modification will rewire relay JF/1ATC15 so that annunciator 1AD07.01.02 illuminates on normal and high level. Presently, a normally open contact (shelf state) on JF/1ATC15 will close, causing the annunciator to illuminate

on low standpipe level. By rewiring to a spare, normally closed (shelf state) contact on JF/1ATC15, the annunciator will extinguish on low standpipe level. This modification will be removed during 1EOC9.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM95024662

Approved 6/12/95

Description

This TSM will disable contr room annum, "Leak Rate Inst Lower Airlock Trouble" because the Volumetric Leak Rate Monitor is disabled and will not be repaired. This TSM will remain in place until an elective MM installs a Manual Leak Rate monitor or some other option at which time this annun's function will change or will be done away with. In the interim, TOG will perform the leak rate test every other day.

Evaluation

The margin of safety defined in the bases of the Technical Specifications for Catawba is not reduced.

TSM95025025

Approved 6/5/95

Description

This valve is an 10" Walworth carbon steel gate valve that is normally in the open position. A gag needs to be installed to keep the valve open while the yoke is removed and the yoke nut is replaced.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM95035851-01

Approved 9/25/95

Description

To provide Temporary Control Power for chiller YR CH-0001 during installation/checkout of two new chillers per NSM CN-50456/00.

#### Evaluation

A USQ evaluation is not applicable to this modification. No technical specification or FSAR changes are required.

TSM95039459

Approved 7/24/95

#### Description

The referenced temporary modification will install a jumper across the Train B Containment Purge Ventilation (VP) System Humidistat output contacts. This is necessary during the No-Mode period for the unit 2EOC7 Refueling Outage. During this time, the power source for Train B Humidistat will be down for maintenance, which would normally cause the humidistat output to fail to the high relative humidity position.

#### Evaluation

This temporary modification does not involve an Unreviewed Safety Question. No changes to the FSAR or the Technical Specifications are required.

TSM95039460

Approved 9/7/95

#### Description

This TSM will install jumpers to allow Containment Floor and Equipment Sump Pumps 2A1, 2A2, 2B1, 2B2 and the Incore Instrumentation Sump Pumps to operate with power isolated to valves 2WL825A and 2WL827B. The isolation of power to the valves are not a function of this TSM. This TSM will be installed after entering NO Mode and removed prior to exiting No Mode. The installation of these jumpers will bypass the interlock between the valve control circuit and the pump control circuit that is designed to prevent the pumps from pumping against a closed discharge valve. Discharge valves 2WL825A and 2WL825B will be tagged in the open position also by this TSM. This TSM modifies the sump pumps and their control circuits by installing jumpers across the contacts of the non-safety related side of the optical isolators associated with containment isolation valves 2WL825A and 2WL827B.

#### Evaluation

A USQ evaluation is not applicable to this activity. No technical specification or FSAR changes are required.

TSM95004041

Approved 1/12/95

Description

This TSM will enlarge the bore on orifice 2RNFE9230 installed in the temporary backwash piping for the 2B RN Strainer under TSM94066205. The temporary piping allows the 2B RN Pump to be kept inservice while the permanent strainer backwash piping is being replaced under NSM CN-50443. The temporary backwash piping does not include any valves, only a flow restricting orifice. With the temporary piping in place, the strainer will be in continuous backwash when exposed to system pressure.

Evaluation

The responses to all seven questions were negative, therefore there are no unreviewed safety questions associated with this TSM.

TSM95044818-01

Approved 6/7/95

Description

This TSM will change the valve at which Reactor Power Limit becomes active. At present RPL becomes active when reactor power EQUALS the value entered by the operator. The TSM will change the value, at which RPL becomes active, to 1% greater than the value entered by the operator. The reason for this TSM is to prevent nuisance actuation of the reactor power limit circuit. The actuations are being caused by power peaks, due to the analyzed flow anomalies.

Evaluation

This change does not change the facility, or methods of operation, as described in the SAR. This change does not perform a test or experiment. This change will not adversely affect any system, structure, or component necessary to operate the plant in accordance with the SAR.

TSM95045093-01

Approved 6/8/95

Description

The purpose of this TSM is to install a Nyad dew point monitor in series with the already-installed Panametrics



probe located inside the control cabinet of the Generator Hydrogen System. The Nyad will be used to give comparison readings of the Panametrics over the course of time. The hydrogen gas will be returned to the generator, as before. This TSM will have no effect on the operation of the GH system or the generator, as before. This TSM will have no effect on the operation of the GH system or the generator itself.

#### Evaluation

The Generator Hydrogen System and its dew monitoring line serve no safety function and are not QA Condition 1. This Mod does not change the facility as described in the FSAR. It does not adversely affect any system, structure, or component necessary to operate the plant.

TSM95045322-01

Approved 6/7/95

#### Description

This TSM makes connections into the generator #2 watthour metering circuit to allow the monitoring of the units voltage and currents on all three phases and neutral. The units output is being monitored and recorded during negative sequence events on the system. The recording equipment is trigger set to record automatically. The voltage and current connections are being made in the watthour meter circuit as all needed inputs are available from the watthouse meter. Also there should be no relay tripping possibilities in making the connections at the watthour meter. The unit main metering system, components, cabinets, and purpose serves no safety function and is not seismic.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM95045472-01

Approved 6/8/95

#### Description

This TSM was written to raise the setpoints of the high  $\Delta P$  and extra-high  $\Delta P$  alarms for 2RAPG5000, which measures the pressure drop across the Condenser Tube Cleaning System strainer screens in the A-side CCW Line. Currently the high  $\Delta P$  alarm is given at 10 psi and the extra high alarm is given at 20 psi. At 10 psi the sponge rubber balls are

captured in the collectors, then the screens are flipped to the backwash positions. At 20 psi, the screens flip automatically whether the balls have been captured or not. If they have not been captured, they escape from the CTCS boundary and must be replaced. 2RAPG-5000 has recently been surging upward and setting off the alarms. This has been such a problem lately that the 2A train of the CTCS has been taken out of service.

#### Evaluation

The affected equipment is located in the basement of the turbine Building. No safety related equipment is involved with this TSM. The TSM will not change the facility as described in the FSAR. It will not change any methods of operation or any procedures or tests that are described in the FSAR. The effects of the TSM do not need to be included in the FSAR. This TSM will not adversely affect any system, structure, or component necessary to operate the plant.

TSM95046111-01

Approved 6/14/95

#### Description

This subject TSM is designed to install temporary flex duct in the Steam Generator B and C upper cavities. The temporary flex duct will be used to redirect airflow from the Lower Containment Ventilation Units for these generator cavities to a leaking Steam Generator B manway for personnel habitability and safety. Two steam leaks on one manway were identified during an inspection on 6/7/95. Since an attempt to repair the leaks will be performed during normal plant operation, temporary ventilation needs to be established to allow for adequate stay times for the repair effort.

#### Evaluation

The TSM was evaluated for its impact upon Unit operation and ability to mitigate the consequences of a MSLLB or LOCA. No significant concerns were identified which would adversely impact station operation.

TSM95046470-01

Approved 9/26/95

#### Description

The purpose of this TSM is to allow the Vital I&C system to provide control power of the D/G control circuits for

calibration work during the outage. This TSM will be in effect during the D/G B window in 2E0C7.

#### Evaluation

The installation of this TSM will not change the facility as described in the SAR, and will not change procedures or operation methods as described in the SAR. It is not significant as to require inclusion in the SAR, and does not affect any SSC necessary to operate the plant in the modes in which it will be installed. The EPQ system will be inoperable during this work, and the EPL B Train will be maintained as available. A-Train will be operable for the duration of this TSM, therefore no further analysis is required.

TSM95046471-01

Approved 9/26/95

#### Description

The TSM will move wires internal to diode assembly 2VADA to allow power to "backfeed" from Vital I&C channel EDA to the D/G control panels.

#### Evaluation

The installation of this TSM will not change the facility as described in the SAR, and will not change procedures or operation methods as described in the SAR. It is not significant as to require inclusion in the SAR, and does not affect any SSC necessary to operate the plant in the modes in which it will be installed. The EPQ system will be inoperable during this work, and the EPL A Training will be maintained as available. B Train will be operable for this TSM, therefore no further analysis is required.

TSM9505121-01

Approved 7/7/95

#### Description

This TSM will remove Diesel Building normal ventilation sampler actuator and tie this damper in the open position. The damper is being tied open due to a mechanical failure of the damper actuator and unavailability of a replacement actuator. This TSM will free operations resources, which are currently used in manual operation of the emergency ventilation fans.

#### Evaluation

This modification does not involve any unreviewed safety questions or concerns.

TSM95061427-01

Approved 8/13/95

Description

This modification will increase the NC pump 2B #1 seal leakoff set point from 5.0 gpm to 5.5 gpm. NC pump 2B #1 seal leakoff flow has been trending upward since July 1995. Presently NC pump 2B leakoff flow is above the 5.0 gpm set point. Therefore, a new set point will be established to alert operators to increasing #1 seal leakoff flow. This modification will revise the NC pump 2B #1 seal leakoff set point to 5.5 gpm.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM95071968-01

Approved 9/18/95

Description

Set alarm bitable for annunciator 2A007.03.01 "NC Pump 2B #1 seal leakoff - Hc flows to 6.0 gpm.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

TSM95072446-01

Approved 9/17/95

Description

This TSM installs a jumper across the output contacts of optical isolator JI43 in 1EATC2 to maintain relay KD in/EATC4 energized. The jumpers allow the CF isolation valve hydraulic motors to continue to operate when required to maintain the CF isolation valves in the open position. The Hydraulic motors for each CF isolation valve will continue to be prevented from operating if a CF Isolation signal is present by individual train related optical isolator contacts that open on signals from the SSPS generated CF isolation signals and the Manual CF Isolation, Doghouse Isolation and ASP transfer switches. This TSM affects the non Safety related hydraulic pump and test circuit portion of the CF isolation valves and does not

affect the Safety related pneumatic and hydraulic solenoid valves that actuate to close the CF isolation valves.

Evaluation

This TSM does not affect the Safety related components required to close the CF isolation valves. Since the hydraulic motor still operates as designed, the closure function and closure times will not be affected, therefore the function of the CF isolation valves are not affected. This activity does not involve a test or experiment. Since the function of the CF isolation valves are not affected by this TSM, no further evaluation of unreviewed safety questions is required.

TSM95073502-01

Approved 9/26/95

Description

This TSM will allow the tagout of existing sump pumps in the Unit 2 CAPT sump and C Floor Drain Sumps to support implementation of CE-60277. This TSM will allow the CAPT to be maintained available and protect against overflow of C Floor Drain Sump.

Evaluation

This TSM does not involve an unreviewed safety question of safety concern. No Technical Specification or FSAR changes are required.

TSM95074923-01

Approved 9/27/95

Description

A gated "Y" to be installed on the downstream side of Fire Hose valve 2RF057 in order to promote a temporary water supply to the sprinkler system in the temporary outage office in the Unit 2 Turbine Building Operating floor.

Evaluation

A USQ evaluation is not applicable to this TSM. No Technical Specification or FSAR changes are required.

TSM95075386-01

Approved 9/28/96

Description

A blank flange is required to be installed in the southern most side of valves in order to provide a temporary

isolation boundary to allow the replacement of valves 1RY019 and 1RY007 per Minor Modification CE-7323.

Evaluation

A USQ does not exist for this TSM. No technical specification or FSAR changes are required.



SUMMARY OF NUCLEAR STATION MODIFICATIONS-RELATED  
10 CFR 50.59 EVALUATIONS

CN-10951 Rev 0

Description

The Loose Parts Monitoring System (LPMS) is an electronic system that monitors the Reactor Coolant System for metal-to-metal impacts in the primary coolant loop. Accelerometer sensors are mounted at various collection regions on the exterior surface of the upper reactor vessel, reactor coolant pumps, and steam generators. The signal information from these sensors are amplified via charge converters and then routed out of containment of the LPMS cabinet mounted in the control room. Functionally the LPMS involved both the detection and analysis of metal-to-metal impacts in the Reactor Coolant System. Once a loose part is detected, analysis is performed to estimate the mass and location of the part. With this mass and location information damage estimates can be evaluated to determine the correct course of action that will minimize damage while maximizing plant efficiency.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-11064 Rev 1

Description

The purpose of the modification to be evaluated is to replace several Borg-Warner air operated solid wedge gate valves with Anchor Darling air operated double disc gate valves.

Evaluation

There is no unreviewed safety question associated with either NSM CN-11064/00 or NSM CN-11064/06.

CN-11248 Rev 0

Description

The purpose of this modification is to provide a flush connection near valve IRNA83 to allow this portion of piping to be flushed periodically.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-11255/03 Rev 3

#### Description

This modification will perform extensive work on Main Control Board MC5 to delete 7 receiver gauges and on MC10 to select 21 devices. Also, there will be some wiring changes in the following cabinets: IIC21, IIC30, IARR3, IATC13, ISTTR0008, IPCC6, IMC5, IMC10, ICADC1, and 1STTR0007. There will be no mechanical involvement. In general this NSM will clean up the Control Board space that is currently being taken up by unused NR System-related devices. The first two revisions to this NSM deleted all of the mechanical equipment that is intended to be eliminated or abandoned in place. Revision 3 to CN-11255 will perform the rest of the electrical work required to render the NR System disabled.

#### Evaluation

No unreviewed safety question is associated with this modification.

CN-11275 Rev 0

#### Description

Drain valves 1NC4, 1NC5, 1NC13, 1NC19, 1NC20, 1NC94, 1NC95, and 1NC106 will be replaced with valves from a different manufacturer. It is anticipated the new valves will be less likely to stick in the closed position. Furthermore, the new valves will have a higher disc lift. Crud and debris will be more likely to pass through the valve seats rather than collect on them. There should be fewer instance of leakage past these valve seats.

#### Evaluation

There is no unreviewed safety questions associated with NSM CN-11275.

Description

Monitors 1(2)EMF48 will be replaced with "adjacent-to-line" monitors. Each monitor will be placed next to its NM sample line to measure exposure dose rates from the sample line activity. The replacement monitors use Geiger-Mueller gamma counters to continuously measure dose rates.

Evaluation

No unreviewed safety question is associated with either NSM CN-11278/00 or NSM CN 20671/00. No changes to the technical specifications are required. Changes to the FSAR (Section 11.5.1.2; Table 11-19; Figures 9-49, 9-78, and 9-80) are required. Table 11-22 is to be added to the FSAR.

Description

The purpose of this evaluation is to determine whether there is any unreviewed safety question (USQ) associated with either Nuclear Station Modification (NSM) CN-11280/00 or NSM CN-20674/00. The criteria of 10 CFR 50.59 a (2) is used to make this determination. Since the presence or absence of a USQ is to be determined, this evaluation is classified QA condition 1.

Evaluation

There is no unreviewed safety question associated with either NSM CN-11280 or NSM-20674. No changes to the FSAR or the technical specifications are required as a result of these modifications.

Description

The purpose of this evaluation is to determine if there is any unreviewed safety question associated with either Nuclear Station Modification CN-11288/00 or CN 20683/00. The criteria will be used to make this determination. Since the absence or presence of any USQ is to be determined, this evaluation is classified QA Condition 1.

Evaluation

No unreviewed safety question is associated with either NSM CN-11288/00 or NSM CN-20683/00. No changes to the FSAR or the Technical Specifications are required.

CN-11303 Rev 0

Description

The purpose of this modification is to replace the Annulus Ventilation System (VE) electro-hydraulic operated dampers 1AVS-D-5 and 1AVS-D-10 with backdraft dampers.

Evaluation

No unreviewed Safety Questions are created by these NSMs. No Tech Spec changes are required.

CN-11310 Rev 0

Description

The purpose of this modification is to eliminate erroneous temperature alarms and inaccurate heater control. These problems are the result of instrumentation that has a history of setpoint drift and extreme sensitivity to their environment. Dual setpoints for low KD and LD temperature are provided to eliminate alarms that are expected as "routine" during a normal engine startup.

Evaluation

No unreviewed safety questions are created by these NSMs.

CN-11312 Rev 0

Description

Per PCO 1473, this NSM deletes the Train A bypass solenoid valves reset function found on device SM48. Device SM48 is modified to close/open MSIV SM-1.

Evaluation

No unreviewed safety questions are created as a result of this NSM. No FSAR or Tech Spec changes are required. DBD changes are required and have been performed as part of the design process.

CN-11314 Rev 0

Description

The purpose of this NSM is to improve the reliability and failure tolerance of the Main Feedwater Control Valves. As stated in the NSM request, these valves have had a history of failures which have led to Unit load reductions and reactor trips. Numerous control components have contributed to these failures. The NSM request focused on the pneumatic control components, the E/Ps, the positioners, and the volume boosters. Several NSM Team meetings were held to discuss the Scope of the NSM. The meetings are well documented in Intrastation Letters by John Aycok and only the results will be summarized here. It was decided that the reliability of the components listed above has been adequately addressed by an aggressive PM program and by minor mods to change various part manufacturer/model. However, the true "root purpose" of the NSM request, to improve the reliability of the FCV's could be addressed by adding redundant Svs.

#### Evaluation

No unreviewed safety question is associated with NSM CN-11314/00 or CN-21314/00. No change to either the FSAR or the Technical Specifications is required as a result of these modifications.

CN-11321 Rev 0

#### Description

This NSM will add an additional interlock to the Containment Air Return Fans (CARF) from the Containment Pressure Control System. This interlock will be derived from the CPCS channels which currently provide the interlocks for the CARF dampers and will be in addition to the presently installed CPCS interlocks for the CARFs. Addition of this second interlock will provide the CARFs with two independent, physically and electricity separate, CPCS interlocks, thereby complying with the CPCS single failure criteria as set forth in FSAR Section 7.6.4.3.2. This NSM will also remove certain indicating lights from the CPCS cabinets which are no longer used. Additionally, certain time-delay relays on the actuation logic for the Containment Air Return Fans, Hydrogen Skimmer Fans, and valves will be replaced. The new relays will have improved accuracy to allow present setpoint tolerances to be met.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-11324 Rev 0

#### Description

The purpose of this evaluation is to determine the presence or absence of any Unreviewed Safety Questions resulting from NSMs. The criteria will be applied to make this determination. This evaluation is QA-1.

#### Evaluation

These NSMs do not create any unreviewed safety questions. No Tech Spec changes are required. However, a change to the Selected License Commitments manual is needed. The change is required to Table 16.9.2. The changes are attached to each Final Scope Document for NSMs CN-11324/0 and CN-21324/0. No other FSAR changes are required.

CN-11331 Rev 0

#### Description

This NSM will delete the Residual Heat Removal (RHR) Autoclosure Interlock program from the RHR Pump suction valves. The open permissive interlock will remain. The ACI program will be replaced with a control room alarm that will actuate whenever any RHR suction valve is open concurrent with a high Reactor Coolant System pressure.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-11343 Rev 0

#### Description

This mod replaces Unit 1's Reactor Coolant Systems letdown orifices with a low vibration design to prevent socket-weld failures. Along with the orifices, downstream piping and fittings that were subjected to high vibration will be replaced with 5D and 3D pipe bends and butt-welded fittings. In addition, relief valve will be moved approximately 24 inches from a vertical to a horizontal run of pipe to prevent sporadic lifting.



Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-19010 Rev 0

Description

This NSM involves the modification of existing platforms and cable trays located in the Steam Generator cavities. This modification of these platforms, cable tray and cable tray supports is necessary to support the replacement of the steam generators during a subsequent refueling outage. All necessary requirements have been met following the installation of this modification and the hydrogen evaluation and heat sink calculations re unaffected.

Evaluation

NOUSQ's are created as a result of this modifications.

CN-19040 Rev 0

Description

The purpose of this evaluation is to determine if this NSM involves an unreviewed safety question using criteria 10 CFR 50.59. This evaluation is performed per the guidance in NSD-209.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-19410 Rev 0

Description

This modification will remove potential interferences for the new route of CF pipe. This includes but is not limited to existing piping, electrical cable trays, hvac duct work, area lighting, support restraints and instrumentation tubing.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-20448 Rev 0

Description

This NSM will replace valves with a more reliable valve. They are presently air operated solid wedge gate valves and air operated double disc gate valve will replace them.

Evaluation

No unreviewed safety question are created by these NSMs.

CN-20672 Rev 0

Description

The purpose of this NSM is to remove major sources of Noble Gases and Radon leaking into the Unit 2 Auxiliary Building.

Evaluation

No unreviewed safety questions are introduced due to this NSM.

CN-21303 Rev 0

Description

The purpose of this modification is to replace the Annulus Ventilation System electro-hydraulic operated dampers with backdraft dampers.

Evaluation

No unreviewed safety questions are created by these NSMs.

CN-21311 Rev 0

Description

The NSM will be providing new gauges to monitor the differential pressure across the RN side of the KC Heat Exchangers. In addition, the existing transmitters that measure the RN flow existing the KC Heat Exchangers will be changed out for indicating transmitters. No other changes to the loops will be made. The new differential pressure gauges were located as close as possible to their corresponding flow transmitter.

Evaluation

No unreviewed safety questions are created by these NSMs.

CN-21324 Rev 0

Description

The purpose of this mod is to enhance the manual fire fighting capability in the CA Pump Room.

Evaluation

These NSMs do not create any unreviewed safety questions. No Tech Spec changes are required. However, a change to the SLC manual is needed. The change is required to Table 16.9.2. The changes are attached to each Final Scope Document for this NSM.

CN-21346 Rev 0

Description

The purpose of this mod is to revise 2/3 logic for D/G Lo-Lo Lube Oil Pressure by replacing LD pressure transmitters with pressure switches and adding a seal-in to the L0-Lo Lube Oil Pressure trip logic to seal in the trip signal until the diesel emergency start signal from the load sequence is reset.

Evaluation

This modification does not required an unreviewed safety question or safety concern.

CN-50399 Rev 0

Description

This NSM replaces the present OAC time of day clock with a true time clock driven from and synchronized to the go based master satellite receiver linked to the station via phone line/microwave.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-50403 Rev 0

Description

The purpose of this NSM is to provide a method of paging from the emergency coordinators desk in the TSC to the TSC, OSC, control room, simulator and plant.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-50308 Rev 0

Description

The purpose of the NSM is to install indicated barriers to the drainage and catch-basin system. Install 5/8" or greater steel rods vertical to existing horizontal rods and horizontal to existing vertical rods in the HVAC systems. Review all Reactor Building penetrations and install barriers as needed.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-50428 Rev 0

Description

The purpose of this evaluation is to determine if a USQ Evaluation is applicable to this NSM including PCA 1416, using the criteria of NSD-209.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-50441 Rev 0

Description

The purpose of this modification is to remove from service the ITT Electro-hydraulic actuators on YC Systems valves.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

CN-50442 Rev 0

Description

The purpose of this modification is to remove the Control Room smoke purge fans, isolation dampers, valves used as

isolation dampers, and associated controls. The duct connections from the System VC ductwork to the suction side of the smoke purge fans and from the discharge side of the smoke purge fans to the Unit Vent will be blanked off.

Evaluation

NO USQs are created by this NSM. No Tech Spec changes are required.

CN-50454 Rev 0

Description

The purpose of this evaluation is to determine if a USQ Evaluation is applicable to this NSM. The criteria of Nuclear System Directive NSD-209 Procedure for this evaluation of NSMs will be used to make the determination.

Evaluation

A USQ Evaluation is not applicable to this modification. Revision of the Technical Specification or FSAR is not required.

SUMMARY OF NUCLEAR EXEMPT CHANGES RELATED TO  
10 CFR 50.59 EVALUATIONS

Exempt Change CE-2684

Description

The change replaces the selector stations for valves 1RC 31 and 1RC 32. Valves 1RC 31 and 1RC 32 regulate makeup to the Condenser Circulating System Cooling Towers. There have been several failures of the valve control circuits due to the existing selector stations. The Moore 350s Single Loop Controllers now used in the valve control circuits will be replaced with Moore Products 252B Single Loop Digital Controllers. The new controllers will perform the same function as the existing selector stations.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-2685

Description

The change replaces the selector stations for valves 1RC 31 and 1RC 32. Valves 1RC 31 and 1RC 32 regulate makeup to the Condenser Circulating System Cooling Towers. There have been several failures of the valve control circuits due to the existing selector stations. The Moore 350s Single Loop Controllers now used in the valve control circuits will be replaced with Moore Products 252B Single Loop Digital Controllers. The new controllers will perform the same function as the existing selector stations.

Evaluation

There will be no unreviewed safety questions created by this modification and it will not require any changes to the Technical Specifications or FSAR for implementation.

Exempt Change CE-3100

Description

In order to comply with the ASME Code Section XI inservice inspection requirements, weld 2SM12-1 requires a radiographic inspection. This weld is located between S/G



2B and the 32" diameter main steam (SM) system piping. In order to perform the radiographic inspection efficiently, a hole is needed on the SM system piping to allow access inside the piping. After the inspection has completed, the hole will be plugged. This exempt change was originated to provide the access hole that is needed for the radiographic inspection of weld 2SM12-1.

#### Evaluation

The function or operability of the SM system will not be affected by providing the access hole at the location specified by Exempt Change CE-3100. The access hole plug is designed to function at the temperature and pressure conditions experienced on this portion of the SM system. The access hole plug will maintain the integrity of the SM system and serve as a pressure boundary. In order to prevent leakage, a seal weld will be made around the plug. To satisfy seismic concerns, a minimum clearance of 0.75" will be maintained between the top of the plug and the inside wall of the guard pipe. The location of the access hole has been reviewed by Design Engineering and there are no piping stress concerns. The plug will be removed and reinstalled as required for future radiographic inspections. Providing this access inside the piping results in more efficient radiographic inspections. Therefore, this exempt change does not increase the probability or consequences of an equipment malfunction already evaluated in the FSAR. Also, per this evaluation, this exempt change does not reduce the margin of safety as defined in any technical specifications.

Exempt Change CE-3122

#### Description

Per Tech Spec 3.4.6.2, reactor coolant leakage is limited to one GPM unidentified and ten GPM identified leakage. In the past, Catawba has experienced significant volumes of unidentified leakage. One of the sources of this leakage is primary valve stem leakoffs. Identification and measurement of reactor coolant valve stem leakage involves work methods that are unsafe, time consuming and not ALARA. When leakage is suspected at a specific valve, instrument fittings must be disconnected to verify and quantify the leakage. Exempt change 3122 was originated to provide three-way valves in

each individual primary valve's leakoff line to allow more efficient identification and measurement of leakage.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-3912

Description

Turbine Oil Transfer Tank Room supply fan motors for ITB-SF-2 and 2TB-SF-2 have failed, rendering the fans inoperable. The replacement is a slightly larger rating, 3/4 HP to a 1 HP. The originally supplied motor is no longer available. Replace ITB-SF-2 and 2TB-SF-2 motors with the reliance electric replacement. Change the overloads from a 2421 size to a 2424 size.

Evaluation

No unreviewed safety questions have been identified as a result of this modification.

Exempt Change CE-4086

Description

Minor modification 4086 will revise the part and setpoint information referenced on the 4 associated documentation for the Control Room (YC) System Chiller Compressor Motor High Temperature Modules. The Train A and Train B modules will be replaced with modules which references the new part numbers. The modules are supplied with fixed setpoints. Variation Notice No. CP-1063 will revise the setpoints further to allow modules with a wider range of setpoints to be used. It will also eliminate the reset values.

Evaluation

An Unreviewed Safety Question Evaluation is not applicable to this modification. No changes to the FSAR if any technical specifications are required.

Exempt Change CE-4159

Description

This modification replaces level transmitters with a transmitter with filled capillaries and bellows assemblies.

Exempt Changes

This transmitter is used to control level in the fire protection pressurizer tank. Nitrogen has gotten in to the fire protection piping due to ORFLT5010 being out of calibration. This has been due to the nitrogen blanket in the tank being absorbed by the water in the high pressure leg. This has caused a transmitter to be out of calibration and allowed the actual level of water in the tank to get below the piping tap and thus allow nitrogen from the nitrogen blanket to get into the fore protection piping. By installing the filled capillary no nitrogen can get into the high pressure leg will remain constant and help keep the transmitter in calibration. The will allow ORFLT5010 to control tank water level and perform as designed.

#### Evaluation

No unreviewed safety question is crated as a result of this modification.

Exempt Change CE-4175

#### Description

This modification replaces the FNA type fuses in 1ELCC0007 with FLQ type fuses and update the vendor drawing to list these type fuses. Panel 1ELECC007 is a vendor supplied panel and currently has FNA type fuses, which are now on the Prohibited Items list, installed in it.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4290

#### Description

This variation notice will revise this modification to include the orifice coupling and two new valves, tag numbers INI-485 and INI-486, downstream of valve INI-423. New valve INI-485 is a check valve, and INI-486 is an isolation globe valve. All affected drawings will be revised to reflect these changes.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4296

Description

This modification will correct the MMIS number for 1.2" conduit plug. This MMIS number should be 0341400801C.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4297

Description

This modification will correct MMIS number for 1.25" conduit plug. The MMIS number should be 0341400801C. This Minor Mod must be cleared concurrent with CE-4296 to all drawings. These two minor mods affect the same CNM drawings, and to clear the two independently would create configuration management problems.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4415

Description

Missed some controls during development of original modification CE-4415. Room T-10 controls provides backup controls to MP relay MPR-3 to control dampers.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4441

Description

This modification will install a data acquisition system for Secondary Chemistry in the Conventional Sampling (CT) lab. The data acquisition system will process a 4-20 ma signal from existing instruments to provide the capability to view chemistry parameters on various computer terminals. This will be a monitoring system only and no control functions

are associated with this system. The data will be processed using a computer products device mounted in 1CTP2B. The processed data will then be transferred to the SCADA node via RS232 serial interface. Data can then be transferred to various View terminals via the LAN. This system will give Secondary Chemistry the capability to monitor data from remote locations. CE-4442 will provide the connections for the input signal and power connections for the data acquisition system as well as the location of the data acquisition processing racks.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4446

#### Description

This modification replaces Nuclear Service Water System (RN) butterfly valves 1RN001A and 1RN002B. The replacement butterfly valves are fabricated from stainless steel and thus will provide better long-term corrosion resistance. The seat rings of the replacement butterfly valves are made from EPR, which is better suited for these particular applications. These valves form a double isolation between Lake Wylie and the "A" RN pump pit. The two valves both close to perform the isolation function when an isolation signal is received. The actuator for each valve is not being replaced but the closing direction control logic of valves 1A and 2B will be changed to "close the Torque" from position seated by limit switch actuation. The replacement butterfly valves have been specifically designed to handle this change in close-direction control logic. The "close the torque" control logic will help improve the isolation performance of the replacement butterfly valves by consistently placing the disc of each replacement valve in the optimum disc-seat interference position for flow isolation. All required design conditions of the RN system and valves 1A and 2B are being preserved. Minor modification 4446 does not change the way in which the RN System functions.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Changes

Exempt Change CE-4447

Description

As part of the long-term Catawba Nuclear Service Water (RN) System program to upgrade certain carbon steel valve applications to stainless steel as priorities dictate, the carbon steel butterfly valves installed at 1RN005A and 1RN006B will be replaced with stainless steel butterfly valves under minor modification CE-4447. This material upgrade from carbon steel to stainless steel will provide increased corrosion resistance at these two tag locations, consequently resulting in improved isolation performance.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4453

Description

This modification will replace expansion joints 2HD-1, 2HD-3, 2HE-1, 2HE-2, 2HE-3, 2-HE-4, 2HE-5, and 2HE-6 because they have failed and are leaking. These expansion joints are part of the Heater Bleed HD and HE system. The HD and HE Systems take the eighth (HD) and ninth (HE) stage Low Pressure Turbine exhaust and routes it to the shell it heats condensate from the discharge of the Condensate Booster pump. Following condensation of the D and E bleed steam, the water drains to the shell side of the E and F heaters, respectfully.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4508

Description

This modification will remove the E30KT3 plastic boots from all of the E30 devices located on safety enclosures for Unit 1 and shared within the plant shown on the Minor Mod document listing. The boots are to be cutoff, collected, and returned to GD Rankin. It will not be necessary to take



the E30 devices apart to remove the boots as is presently done when one replaces light bulbs.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4509

Description

This modification will remove the E30KT3 plastic boots from all of the E30 devices located on safety enclosures for Unit 2 and shared within the plant shown on the Minor Mod document listing. The boots are to be cutoff, collected, and returned to GD Rankin. It will not be necessary to take the E30 devices apart to remove the boots as is presently done when one replaces light bulbs.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4518

Description

This minor modification will update CMN 1358.03-0010 and CMN 1358.03-0011 with new part numbers for inverter circuit boards, relays, and capacitors. The addition of these part numbers is required because SCI has changed its part numbering system, and because relay numbers were not specified in the original manual.

Evaluation

This change will add revised part numbers for various relays, boards, and capacitors to both CNM 1358.03.0010 and CNM 1358.03-0011. It is required because of revisions to SCIs numbering system, and because relay part numbers were not included in the original manuals. These part numbers are identical on form, fit, and function to the original part numbers. and no physical modifications are required in order for them to be used. This modification is required because of a vendor part number change only, the new parts are identical in size and electrical characteristics to the originals. This modification does not involve an unreviewed safety question or safety concern.

Exempt Changes

Exempt Change CE-4566

Description

This modification replaces Nuclear Service Water System (RN) butterfly valve 1RN003A. The replacement butterfly valve is fabricated from stainless steel and thus will provide better long-term corrosion resistance. The seat ring of the replacement butterfly valve is made from EPR, which is better suited for this particular application.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4567

Description

This modification replaces Nuclear Service Water System (RN) butterfly valve 1RN004A. The replacement butterfly valve is fabricated from stainless steel and thus will provide better long-term corrosion resistance. The seat ring of the replacement butterfly valve is made from EPR, which is better suited for this particular application.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4612

Description

Valve 25V26B currently has a bonnet leak at the pressure seal area. As a repair option, a modified bonnet pull up cap screw will be made. These will be used in lieu of the existing bonnet pull up cup screws. The modified cap screws will allow the injection of sealant into the void area between the bonnet and bonnet retainer. Reference detailed instructions on CNM1205.00-1200 003. Issue new drawings to allow this option.

Evaluation

This evaluation was performed to determine if any USQ's would be created by leak sealing the body to bonnet joint on

Valve 2SV26B per Minor Mod CE-4612. This valve had developed a severe steam leak coming out of the U2EO0C6 refueling outage. Valve 2SV26B is to close and isolate steam flow in the event 2SV7 sticks open. Engineering reviewed the proposed changes and determined that the function of the block valve would not be affected by the leak seal to verify that there were no adverse interactions. In summary, it was determined that valve 2SV26B could be leak sealed per Minor Mod CE-4612 without creating any USQ's.

Exempt Change CE-4674

#### Description

This modification will add vent valves to the ND Heat Exchanger and ND Pump vent lines. This will be a total of 4 valves. 1" globe valves with reducing inserts will be used on the Stainless Steel 3/4" lines. These valves will help with isolation of these components and with venting the system. All affected drawings will be revised to reflect the new information.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4704

#### Description

This modification changes the scale for points 17 through 24 on the Diesel Generator Chart Recorders 1EQCR5160 (D/G1A) and 1EQCR5170 (D/G 1B). The present scale for these points is 50 to 250 F. Points 21 and 23 monitor D/G Left Bank and Right Bank Aftercooler Air Inlet Temperature, respectively. Shortly after the D/G is started, these 2 points peg high on the chart recorder scale. The new Westronics DDR10 chart recorders were added per CE-60022. At that time a programming chart was included which instructed to set these two points along with several other points on the 50 to 250 F scale. This was an error. During full load runs, Aftercooler Air Inlet temperatures reach 265 F. By performance of this mod, the points designed as Scale B will be reprogrammed to the more appropriate 50 to 300 F scale. This will allow proper on-scale trending of points 21 and 23

which is required in the future under the new D/G maintenance program.

#### Evaluation

Based on the above discussions, the reprogramming of points 17 through 24 will not effect the ability of the D/G Chart Recorders to perform their intended design function. On the contrary, points 21 and 23 now will have useful trend data. Therefore, no Unreviewed Safety Questions are raised as a result of this modification. These recorders are non-safety related and are only used for trending purposes to evaluate diesel engine performance.. This mod effects no component considered to be significant to plant operation.

Exempt Change CE-4705

#### Description

This modification changes the scale for points 17 through 24 on the Diesel Generator Chart Recorders 2EQCR5160 (D/G1A) and 2EQCR5170 (D/G 1B). The present scale for these points is 50 to 250 F. Points 21 and 23 monitor D/G Left Bank and Right Bank Aftercooler Air Inlet Temperature, respectively. Shortly after the D/G is started, these 2 points peg high on the chart recorder scale. The new Westronics DDR10 chart recorders were added per CE-60023. At that time a programming chart was included which instructed to set these two points along with several other points on the 50 to 250 F scale. This was an error. During full load runs, Aftercooler Air Inlet temperatures reach 265 F. By performance of this mod, the points designed as Scale B will be reprogrammed to the more appropriate 50 to 300 F scale. This will allow proper on-scale trending of points 21 and 23 which is required in the future under the new D/G maintenance program.

#### Evaluation

Based on the above discussions, the reprogramming of points 17 through 24 will not effect the ability of the D/G Chart Recorders to perform their intended design function. On the contrary, points 21 and 23 now will have useful trend data. Therefore, no Unreviewed Safety Questions are raised as a result of this modification. These recorders are non-safety related and are only used for trending purposes to evaluate diesel engine performance.. This mod effects no component considered to be significant to plant operation.

Exempt Changes

Exempt Change CE-4740

Description

This modification will replace valves IND70, 76, 77, INS009, 26, INV805 and 1WG135, with new Item Number DMV-1021. Presently these valves are 3/4 and 1/2 inch T-type globe valves with remote operators. Remote operator issue has resulted in sheared stems on these valves. They will be replaced with 1 inch Y-type bellows sealed globe valves with remote operator attachments. These new valves will be more durable and resist breakage. The remote operators will be modified as required in order to fit up to the new valves. All affected drawings will be revised to reflect this new information.

Evaluation

The margin of safety as defined in the bases to the Technical Specifications will not be reduced by the replacement of these valves. All answers to the USQ's are no, therefore the new valve will continue to provide all requirements necessary for plant operation and safety.

Exempt Change CE-4741

Description

This modification is changing gate and globe valves to metal seated Plug valves. The gate and globe valves are used in isolation service. The valves being changed have a repeated history of packing leaks and body to bonnet leaks.

Evaluation

These valves changes made by this modification are considered changes of an equivalent valve type for another valve type. The replacement valves meet all the Flow Diagram Design requirements necessary for plant safety and system performance. An evaluation of the valves determined that no USQ's apply to these changes. All answers to the USQ's are no.

Exempt Change CE-4751

Description

This modification will add two, 2 Watt, 82 ohm, +/- 5% resistors to the control circuit of YW Chiller #3

Exempt Changes

Compressor #2 to replace two failed motor sensors. The addition of these resistors enables the chiller to run. One good sensor remains to protect the compressor motor. The alternative to adding the resistors is to have the compressors motors rewound which is expensive. The resistors will get us by until the last sensor fails, then we will have to replace this motor. The failed sensors are S1 and S2.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4819

#### Description

This modification will install oil addition tubing to the Reactor Coolant Pump (NCP) upper and lower oil reservoir. For the upper oil reservoir, the addition will replace a pipe plug for adding and sampling oil. This connection is under the flywheel cover (top hat) assembly which cannot be accessed with the NCP in operation. The added tubing will extend through the access cover and plugged to allow oil additions while the pump/motor is operating. For the lower oil reservoir, the addition will connect to the oil level alarm assembly. This connection will be above normal oil level and will extend through the inspection cover in the motor lower bracket and plugged.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4835

#### Description

This modification is an editorial modification which will allow the installation of swivel brackets to the baskets in the ice condenser. No physical work will be performed under this modification. FSAR changes will be included as part of this mod and copies forwarded to Compliance for inclusion into the next revision. Specifications CNS 1201.17-00-0004 has been written to ensure swivel brackets are fabricated to meet our requirements, Drawing CMN 1201.17-30 sheet 21 documents the Westinghouse qualification of the swivel



brackets for use at CNS. Drawing CNM 1201.17 30 sheet 20 describes the swivel brackets. All installation of swivel brackets will be documented on the basket configuration control drawings, CNM 1201.17-30 sheet 18 (Unit 1) and sheet 19 (Unit 2).

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4918

Description

Reconnecting the conductors as described will allow the sump pump to be placed back in operation. In its present condition, the pump cannot be started. However, switch 1FWLS5310 is configured to give a control room alarm and is independent of circuitry previously described.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4950

Description

This modification will replace valves 1CF065 and 1CF080 with new item number CMV-653. Presently these valves are 1" Y-Type Globe valves used in a vent application. The replacement valve is a 1" bellows sealed gate valve. All affected drawings will be revised to reflect this new information.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4971

Description

This modification will add an additional stop to the Reactor Coolant Pump No. 2 seal housing. The present design with two stops permits unacceptable tilt of the No. 2 seal ring which results in disengagement of the seal anti-rotation pin. This tilt and pin disengagement can occur during the

seal maintenance process. If the seal is properly assembled, the concern is eliminated by increase pin engagement. By increasing the number of stops to three, the unacceptable tilt in the No. 2 seal ring is eliminated. The new stops recommended by Westinghouse, will provide additional engagement between the pin and the housing. Use of the new stops was approved by minor modification CE-4752.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4976

#### Description

This modification will replace valve INC037 with new item number DMV-1021. Presently this valve is a 3/4" Y-Type Globe valve. INC037 will be replaced with a 1 inch Y-Type Bellows Sealed Globe valve. All affected drawings will be revised to reflect this new information.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-4992

#### Description

This modification provides document revisions to provide replacement of sliding line terminal blocks in heat trace panel 1CTCCSA. Existing terminal blocks have become degraded over time. In addition, thermography testing results have identified areas of overheating on the terminals. Panel 1CTCCSA contains the equipment used to control the electric heat tracing used to maintain adequate piping design temperatures on the SA piping for Unit 1.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-5002

#### Description

This modification will replace valve 1CF66 with new item number CMV-653. Presently this valve is a 1" Y-Type Globe valve used in a vent/train application. The replacement valve is a 1" bellows sealed gate valve. All affected drawings will be revised to reflect this new information.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-5012

Description

This modification will replace valve 1CF127 with new item number CMV-653. Presently this valve is a 1" Y-Type Globe valve used in a vent/drain application. The replacement valve is a 1" bellows sealed gate valve. All affected drawings will be revised to reflect this new information.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-5055

Description

This modification provides document revisions to provide replacement of electric heater cables for sections 1(P)SA-10 and 1 (B) SA-10 with shorter lengths. Excessive adder length has been identified by IAE craft. The close proximity of the valves and hangers to on another, on this section of SA piping, necessitate the use of shorter lengths of heater cables.

Evaluation

NO USQ's are crated by this Minor Modification. No Technical Specifications or FSAR changes are required.

Exempt Change CE-5136

Description

This modification provides document revisions to allow the usage of additional memory back-up battery part numbers for the SMU Electrical Heat Trace Monitoring Panels. Current

battery part has been discontinued by the manufacturer based on the hazardous chemical content of mercury.

Evaluation

No USQs are created by this Minor Modification. No Technical Specifications or FSAR changes are required.

Exempt Change CE-60057

Description

This modification will add a 15 second time delay to the 1EMF34 Loss of S/G Sample Flow alarm generated in the control room by 1NMFS5330 Clogging of the flow valves for 1EMF34 causes spurious actuation of the alarm. Addition of the 15 second time delay will aid in removing nuisance alarms, while still alerting personnel to more permanent loss of flow conditions. The local Flow Alarm light in 1EMF34 would not be affected. This minor modification to safety will be altered.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60058

Description

This modification will add a 15 second time delay to the 2EMF34 Loss of S/G Sample Flow alarm generated in the control room by 2NMFS5330 Clogging of the flow valves for 2EMF34 causes spurious actuation of the alarm. Addition of the 15 second time delay will aid in removing nuisance alarms, while still alerting personnel to more permanent loss of flow conditions. The local Flow Alarm light in 1EMF34 would not be affected. This minor modification will have no effect on the safe shutdown of the plant because no circuitry important to safety will be altered.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60061

Description

This modification will rewire the inputs from 1EMF45B, 1EMF44, 1EMF48, 1EMF53A, and 1EMF53B to the "Cabinet 3-4 Trouble" annunciator on 1PRADMON Bay 4. The wiring does not currently match the drawings, and would not fulfill the design intent of it did. The wiring does provide all the necessary inputs to the annunciator, but makes isolations very difficult. Rewiring the circuit and updating the drawing per CE-60061 will retain all the necessary inputs, while reducing the probability of personnel error. The operator failure contact from each radiation monitor will be wired to a signal terminal board and the signal terminal boards will be connected on series with each other and the annunciator. The radiation monitors themselves will not be affected by this modification. This mod will have no affect on the safe shutdown of the plant because no circuitry, logic or components important to safety will be altered in a significant way.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60090

#### Description

This modification alters the damper controls for the VD (Diesel Building Ventilation) Emergency fan inlet dampers. The outside air and return air damper motors associated with the 1A1, 1A2, 1B1, & 1B2 fans are affected. these damper motors are ITT Hydromotors they require excessive maintenance because they operate continuously. The MM changes the controls for these damper motors such that each damper motor will operate only when its respective fan operates.

#### Evaluation

Technical Specifications are unaffected. System functionality remains the same. The margin of safety as defined in the basis for technical specifications is not reduced. Based on the above, an unreviewed safety question does not exist.

Exempt Change CE-60091

#### Description

Modify controls to Diesel Building Ventilation Emergency Fan Damper Motors. These damper motors are ITT Hydromotors. They currently run continuously and fail often. This MM will change controls such that damper motors will run only when respective fan runs. This will significantly reduce the maintenance required on the damper motors.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60141

#### Description

The refueling water storage tank provides a source of borated water for use during refueling and a loss-of-coolant accident. The usable tank capacity of 350,000 gallons is based on the requirement for filling the reactor cavity and fuel transfer canal for refueling. The only portion of the Refueling Water System (FW) that is safety related Seismic Category 1, is the RWST, missile-proof wall, and associated NRC Quality Class B piping that connects to the ECCS. This modification will fabricate and install a FW sample sink, associated piping, and valves. A tie in location (piping and valve) for NSMs CN-11335 and CN-21335 will also be provided. The scope of this evaluation is limited to the piping and valve only for the tie in. The sink discharge will be to the Liquid Radwaste System (WL).

#### Evaluation

No unreviewed safety questions are involved with this modification. FSAR figures 9-62 and 11-2 will be revised per this modification. No other changes to the FSAR or the Technical Specifications is required.

Exempt Change CE-60142

#### Description

The refueling water storage tank provides a source of borated water for use during refueling and a loss-of-coolant accident. The usable tank capacity of 350,000 gallons is based on the requirement for filling the reactor cavity and fuel transfer canal for refueling. The only portion of the Refueling Water System (FW) that is safety related seismic Category 1, is the RWST, missile-proof wall, and associated



NRC Quality Class B piping that connects to the ECCS. This modification will fabricate and install a FW sample sink, associated piping, and valves. A tie in location (piping and valve) for NSMs CN-11335 and CN-21335 will also be provided. The scope of this evaluation is limited to the piping and valves only for the tie in. The sink discharge will be to the Liquid Radwaste System (WL).

#### Evaluation

No unreviewed safety questions are involved with this modification. FSAR figures 9-62 and 11-2 will be revised per this modification. No other changes to the FSAR or the Technical Specifications is required.

Exempt Change CE-60149

#### Description

This modification replaces the Westinghouse type VX252 gages used for INDP 5180 and INDP 5190 and 1MC11 with Weschler type BG252 gages. INDP 5180 and INDP 5190 indicate flow from the ND System to the NC cold legs. The existing gages use a non linear scale which has a range of 0 to 4500 GPM, normal operating flow for the ND System is approximately 3000 GPM. Technical Specifications Sections 3/4.9.8.1 and 3/4.9.8.2 state that the minimum ND flow during refueling is 1000 GPM. Due to the non linear scale, it is difficult for the operators to determine the flow rate near the Tech Spec valve. The Weschler gage will be equipped with a square root extractor so that a linear scale can be utilized. The Weschler gage has both digital indication and a LHD bargraph. The digital indication and bargraph will provide accurate indication at both the normal and low flow rates for ND.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60151

#### Description

This modification will add a sightglass to the Hotwell, instrument number 1CMKG5450, as described in reference 3. The purpose of the sightglass is to enable Operation's



personnel to monitor the level in the Hotwell as it serves as a suction source for the Auxiliary Feedwater (CA) System during certain Design Basis Event scenarios. This would control resetting the CA System. In this case, provided a valid CA auto start signal does not occur again, the available hotwell volume can be utilized after defeating the auto pump trip on 2/3 low suction pressure. This option would only be used in a case where it appears fast recovery is probable and ultimate use of RN is not warranted. Should a valid CA auto-start signal occur subsequent to resetting CA, the auto swap to RN will occur provided the low pressure switches have been satisfied.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60157

#### Description

The Auxiliary Steam System provides steam to various plant equipment as required during all modes of plant operation. The water that remains in the 6" AS piping up stream of valves ISA089 (unit 1) and 2SA089 (unit 2) causes water hammer where the AS and SA systems connect. In order to keep water hammer from taking place, these Minor Mods will add 1" drain on AS piping upstream of valves 1SA089 and 1SA089. These drain valves will be used to remove water prior to connecting SA to SA system. These Minor Mods will attempt to stop the water hammer from taking place which will prevent pipe support damage and possible damage to AS and SA piping and components.

#### Evaluation

These modifications are an enhancement to the current design and do not involve an unreviewed safety question. No changes to the FSAR or Technical specification is required to implement this minor modification.

Exempt Change CE-60160

#### Description

This modification modifies the YN System to add 3" isolation valves in the piping serving the NM Sample Coolers. This will permit the isolation of the sample coolers for

maintenance while permitting the continued operation of other equipment served by the YN system. Currently, operation of the YN System must be stopped when this maintenance is performed on the sample coolers. This impacts the operation of other equipment served by the system.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60161

#### Description

This modification will reclassify the design pressure of the NI pump discharge header from 1750 psig at 200 deg F to 1900 psig at the same design temperature. This modification will not add any new components or piping to the NI System. Nor will there be any change to the operating, testing or emergency procedures. Rather, in order to increase the operating margin between the set point of relief valves 151 and 161 and that headers pressure normally experienced during testing, this minor modification will consist of increasing the set point on NI pump discharge header relief valves 151, and 161 from 1750 psig to 1900 psig and replacing NI flow transmitters 1&2NIFT5450 and NIFT5120 with a model capable of withstanding the higher design pressure.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60165

#### Description

The purpose of this modification is to improve the reliability of the Unit 1 vent stack monitors. This will be done by lowering the heat rejected to the area around the monitors and by improving the cooling of the monitors. Two mercury vapor lamps in the area will be replaced with fluorescent lamps which will provide adequate illumination of the affected area at a lower power. In addition, a rotary switch will be added to automatically turn off the lights after a preset time interval. These changes re made

to reduce the heat rejected to the Unit 1 vent stack monitor area.

Evaluation

No unreviewed safety question is associated with this mod. No changes to either the FSAR or the Technical Specification are required of this modification.

Exempt Change CE-60175

Description

This modification rewires the Hotwell Pump Motor space heaters. The purpose of this modification is to eliminate the effects of one heater out on the remaining heaters. The way that the heaters are currently wired, if one heater burns out, then there is an increase in the power dissipated by the remaining heater that is in parallel with the defective heater.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60192

Description

This modification will revise the Low Voltage Breaker List and issues revised CNLT's to reflect the as-built conditions of the plant. These changes involve document changes only and no physical changes to the plant will result as a part of this Modification.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60188

Description

This modification will relocate flow gages 1BWPG5000, 5010, 5020, and 5030 to elevate 599+00 in order to facilitate taking readings.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60217

Description

This modification will show the as-built field condition of an existing rack located in the tag out room. Equipment and connections to this rack will be added per the attached sheets. Drawing CN-1815-47 and associated bill of material CNBM 1815-47 will be released when this mod is implemented to show this rack.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60235

Description

This modification will remove the sink, faucet, and water heater and cap off or abandon in place the appropriate Drinking Water (YD) and Waste Treatment (WT) piping in the Service Building. The power supply for the water heater shall be disconnected and removed.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60237

Description

The Nuclear Sampling System (NM) provides a means of obtaining the more frequently taken samples during normal plant operation from the station's nuclear safety related systems. The system also provides a means of sampling the reactor coolant and containment atmosphere following a LOCA to monitor the reactor and determine the degree of core damage.

Evaluation

This modification will not create any unreviewed safety questions evaluated in the FSAR. It will not affect any procedures addressed in the FSAR or Tech Specs. It will

require a revision to CNS operating procedure OP/1/A/6200/11 to delete steps for internal purge for sample from Seal Water Injection Filter Outlet.

Exempt Change CE-60239

#### Description

The Nuclear Sampling System (NM) provides a means of obtaining the more frequently taken samples during normal plant operation from the station's nuclear safety related systems. The system also provides a means of sampling the reactor coolant and containment atmosphere following a LOCA to monitor the reactor and determine the degree of core damage. Currently there is the potential for cross-contamination of samples due to unreliable isolation and check valves. These sample lines are the VCT Outlet, Boric Acid Blender Outlet, RMWST Outlet, Spent Fuel Pool, Fuel Pool Cooling Post Filter, and the RWST. Cross-contamination would produce suspect results. The purpose of this modification is to remove the existing check valve/isolation valve combinations for the above mentioned sample lines and replace with more reliable valves.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60245

#### Description

This modification will remove the existing test circuit for the AMSAC panel. New indicating lights will be installed on the front of the panel provide a means to determine the status of pressure switches which indicate the status of the feedwater pump turbine stop valves. These light will be pressed to test to allow detection of a failed light bulb. Also, a control room annunciator will be added to indicate loss of power to the AMSAC circuitry. Some internal wiring changes to facilitate isolations will also be performed.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60247

#### Description

This modification will add a Fisher 2625 volume booster to the top cylinder actuator for 1CM83. Additionally, a type V63 regulator will be added and the setpoint for 1CMPR0830 will be changed from 100 psig to 150 psig. This is all to improve valve response time.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60258

#### Description

This modification rewires voltmeters and control switches on the Water Chemistry Building Control Panel. These switches control valves 1RL169 and 1RL167. This change will place the controls in association with their respective Units. The switches will remain in their same location, only the wiring and nameplates will change.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60270

#### Description

Halon 1301 has been determined to be an ozone depletion agent and production was discontinued after January 1, 1994. The QA File Room, Document Control Room and the DDP Computer Room are provided with automatic Halon fixed fire suppression systems. This minor mod will disconnect the Halon systems in the QA File Room, Document Control Room and DDP area had both Halon and a fixed sprinkler system. The fixed sprinkler system will remain in this area and fire protection for the QA File Room and the Document Control Room will be by manual means. The Chemtron control panels will still be used for fire detection and equipment shutdown for these areas.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Changes



Exempt Change CE-60275

Description

This modification will add a Delayed Egress lock and Panic Bar hardware on exit door A103/PAPE. This door comprises part of the PA Boundary and as such must be alarmed for unauthorized entry/exit. This door is marked as an emergency exit. Prior to installation of this modification emergency was allowed by security staff unlocking a mechanical lock. To allow free during an emergency and still maintain positive control of the PA boundary during normal operation a decayed egress lock will be installed. This lock will have it's own battery backed power and will remained locked on a loss of power unless someone activates the emergency exit. At this time a local alarm will sound at the door and a remote alarm will sound in the Badge Issue Area. The alarm will sound for a preset time before the door unlocks, thus allowing security staff in the badging area time to respond. After the door opens an alarm will sound in the CAS and SAS. This modification will not affect the required alarm points being monitored by the security computer. There are no Technical Specifications affected by this modification.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60284

Description

This modification will install telephone jacks on the input one reactor building. The new telephone jacks will be extensions of the telephone jacks that already exists I the reactor building. This addition will add the new jacks and its associated wiring. The existing jacks will be relocated.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60293

Description

Exempt Changes



This modification provides sample connections to the Final Feedwater header and to the Condensate System for the Electrochemical Potential monitor which is to be installed by NSM CN-11344. A 1 inch tap into the 36 inch CF line will serve as the sample supply point for the ECP monitor. At this point a short pipe, a root valve, and a short length of capped tubing will be installed. The monitor sample will be returned to an existing condensate line downstream of LP Heaters 1C1 and 1C2. A short pipe, root valve and short length of capped tubing will be installed in the 2 inch CM drain line.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60296

#### Description

Presently, the main step-up transformer cooler breakers are not uniquely identified between units or trains. In order for Operations to optimize the redtag system, each cooler breaker will be re-labeled with a unique identifier.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60297

#### Description

Presently, the main step-up transformer cooler breakers are not uniquely identified between units or trains. In order for Operations to optimize the redtag system, each cooler breaker will be re-labeled with a unique identifier.

#### Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60298

#### Description

This modification will add a note to the Low Voltage Breaker List for Panelboard LPCWC to contact security prior to de-energizing. There will be no field work as a results of this minor mod.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60300

Description

This modification will revise 250VDC one line and distribution center compartment nameplates to agree as built conditions.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60304

Description

This modification replaces the horn type speakers for the Public Address System in the OSC area at Elevation 574 with corridor type speakers which have individual volume control.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60308

Description

The Auxiliary Building Ventilation System controls are being modified to prevent the shutdown of Auxiliary Building Filtered Exhaust Fans and align the VA System to the filtered mode of operation on receipt of a high radiation alarm from the Unit 1 vent stack radiation monitors. This modification will also remove "emf Interlock Defeat" switches located on the main control board IMC3. This modification will address concerns identified by PIR0-92-0887. This PIP identified a concern with the operation of the VA System in that the VA Filtered Exhaust Fans can be shut down after a reset of the load sequencer following a

LOCA. After the load sequencer is reset an alarm or failure of the Unit Vent Stack radiation monitors will shut down the VA System Filtered Exhaust Fans.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60366

Description

The proposed resolution to PIP 0-C94-0866 is to raise the normal operating level of the Standby Nuclear Service Water Pond from 571 ft to 572 ft. The range of the existing level instrumentation of 566 ft. to 572 ft. Therefore raising the normal operating level would cause the existing instrumentation to consistently be overranged.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-60371

Description

This modification adds piping and valves in the Recirculated Cooling Water (KR) System to allow for connection to equipment that will monitor the corrosion levels in the KR system. This modification affects Class G piping and equipment located in the Service Building basement. The TSM added three valves and the associated piping connections to the KR system. This minor modification will extend the piping connections to eliminate a portion of the rubber hose that is currently used and update the appropriate documents to reflect the piping and valves installed per the TSM.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7035

Description

This modification will revise the flow diagram to show correct continuation drawing numbers per the attached sketches.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7078

Description

Material ID "B" on weld ISO CN-2CA-113 shows pipe size of 4". This should be 6" instead.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7095

Description

This modification revises the cable destination for cables 1EOA 885 and 2 EOA 885 to CNWT1711-08 and CNWT-2711-08 respectfully.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7145

Description

The modification revise MI I&C list to correct manufacturers outline number for IMISV5230, IMISV5232 and IMISV5233. The correct drawing is CNM 1205.08-0031 001. This action will clear PIP 1-C95-0814.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7156

Description

Exempt Changes

PIP 1-C95-1001 identified the need to show the correct location of a 2 amp fuse on CNEE0166-01.59 Rev 0. This fuse should have been identified with an 1 indicating this fuse is located in 1CMTS0035. In addition to the problem identified on PIP 1-C95-1001, there is a coil on CNEE0166-01.59 that does not show the correct location. This coil on CNEE0166-01.59 should also be identified with a 1 indicating this coil is located in 1CMTS0035.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7163

Description

The purpose of this modification is to document plant issues in order to allow for replacement of the Boric Acid Filter with smaller micron and micron rated filter. This evaluation will document no changes to the limits and precautions of the Boric Acid Filter for this replacement.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7177

Description

This modification will change valve 1YHF08 to 1YHF03 on the listed document.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7185

Description

The purpose of this evaluation is to document plant issues in order to allow for replacement of the Recycle Evaporation Condensate Feed Filter with smaller micron rated filters. This evaluation will document no changes to the limits and precautions of the Recycle Evaporation Condensate Feed Filter for this replacement.

Exempt Changes

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7187

Description

This modification will revise the coils on relays RWH1 and RWH2 on CN-1762-002.08 from AC to DC.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7189

Description

Currently, the Precautions, Limitations and Setpoints document list the control for the Letdown Heat Exchanger Outlet for 115 Deg F. This will be modified to provide a range at which the controller may be set.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7190

Description

This modification will update drawings to correct errors found while updating CC-3577.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7196

Description

Revise CN-1499-RL.12.00 to show various isolation valves, test tees, and test gauges. Revise RL I&C List to show entries for ORLPR1020/1040/1050/1060 and OPLPR103/1041/1051/1061 and add entries for square root extractor and Hi-Limit relay.

Exempt Changes



Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7216

Description

When minor mod CE-4625 was as-built, the setpoint shown in the miscellaneous information section of the I&C list for device CN2FDPS5001 was incorrectly shown as .89 instead of .86 as shown on the minor mod.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7249

Description

This modification will add number 15 note on flow diagram CN-1594-2.0.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7250

Description

This modification will show correct line takeoff point on flow diagram CN-2613 - 1.0.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7268

Description

This modification will revise the H2 Analyzer Instruction Manual to allow some tolerance in the drop-out valve of the Thermoelectric Cooler current sensing relay (K6). This MM will clear TSM WO#94083770-01.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7286

Description

This modification will show correct line takeoff point per the attached flow diagram sketch and change swing check valve symbol to stop check valve symbol on diagram. The ISO layout configuration to be revised per attached sketch to correctly show as-built configuration.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7292

Description

This modification will add the specific I&C list tag numbers on CN-1499-01.9-02 for the Sq. Rt. Extractors and Hi Select Relays. This is a result of adding the tag numbers to the devices per Editorial Minor Mod CE-7196.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7300

Description

This modification will add revision 10 of drawing CN-1760-01-03 is missing open torque switch bypass modifications which were added per NSM CN-11272/00 Rev 7. Reinstate changes per NSM CN-11272/00 for IRN144A, IRN148A, IRN225B, IRN287A, and IRN347B to bring drawing CN-1760-01.03 back to as-built condition.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7307

Description

This modification will blank out the following fields for Events Recorder Points 1ER714 thru 717 in CNLT-1765-05.01 as shown on attached sketches engraving, device name, device type, device panel, device drawing numbers.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.

Exempt Change CE-7322

Description

This modification will delete drawings CNEE-0131-02.01, CNEE-0131-04.01, and CNEE-0131-04.02.

Evaluation

This modification does not involve an unreviewed safety question or safety concern.