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ComEd

10CFR50.59(b)(2)

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December 22, 1999

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

Zion Nuclear Power Station, Units 1 and 2
Facility Operating License Nos. DPR-39 and DPR-48
NRC Docket Nos. 50-295 and 50-304

Subject: Submittal of Summary Report Required by 10CFR50.59(b)(2)

Pursuant to 10CFR50.59(b)(2), we are submitting the annual report of changes made at Zion Nuclear Power Station, Units 1 and 2 during the 1998 calendar year. These changes were made in accordance with the provisions of 10CFR50.59, "Changes, Tests and Experiments." Descriptions of these changes, including summaries of the applicable safety evaluations, are provided in Attachment A to this letter. Attachment B provides a listing of the commitments contained in this letter.

The 10CFR50.59 evaluations summarized in Attachment A did not identify any changes which involved a change to the facility Technical Specifications or an unreviewed safety question.

Should you have any questions concerning this letter, please contact Mr. T. Marini at (847) 746-2084 Extension 2390.

Respectfully,

for

R. S. Starkey
Decommissioning Plant Manager
Zion Nuclear Power Station

Attachments

cc: Regional Administrator - RIII

IE47

PDR ADOCK 05000295

Change Number and Title: 98-0001 Revision 3 to PT 40-09, "Valve Remote Position Indication Verification."

Description: Eliminate valves 1(2)MOV-SW00108, 1(2)MOV-SW00109, and 1(2)MOV-SW00110 from the Inservice Testing Program.

Summary: Activity was to delete motor operated valves; 1(2)MOV-SW00108, 1(2)MOV-SW00109, and 1(2)MOV-SW00110 from the Inservice Testing Program. These valves were determined to be passive components which did not have an active safety function. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0036 Revision to NSP-TQ-2001, Revision 0, "Training Roles and Responsibilities"

Description: Evaluation of new procedure which defines the policies governing the roles, responsibilities, expectations and relationships of individuals involved in the training and qualification of personnel.

Summary: Evaluation of new corporate procedure developed to define roles and responsibilities of individuals involved in the training and qualification of personnel. No impact on accidents or malfunction of equipment described in the safety analysis report. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0037 Revision of SOI-63R, "Unit 1 System Auxiliary Transformer Back feed'" Revision 6, and SOI-63S, "Unit 2 System Auxiliary Transformer Back feed," Revision 4

Description: Evaluation of procedural revisions to enhance guidance for 4KV back-feed procedures.

Summary: Procedural revisions performed to SOI-63R, and SOI-63S, to provide enhanced guidance for 4KV back-feed procedures to improve ease of back-feed operations. No new components being added, or existing equipment being modified by this change, that could create an accident or malfunction not previously evaluated in the safety analysis report. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0041 Revision 9 to station procedure ZAP-310-02, "Operating Log books."

Description: Evaluation of incorporation of Operations Department electronic logkeeping guidance into ZAP-310-02.

Summary: Changes to procedure required to implement an effort by Operations Department to implement a single station electronic log that will be accessed through the Station computer network. Evaluation described that the change was a plant records enhancement that has no effect on any SSC or its mode of operation. Permanent plant records will be created and maintained through the station record retention process. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0108 Revision to SOI-33, "Circulating Water and Off Gas Systems", SOI-33A, "Starting A Circulating Water Pump", SOI-33, "Appendix B-1, "Circulating Water System", SOI-33 Appendix B-2, Circulating Water system", SOI-33I, "Forebay Ice Removal", PT-2E"Spurious Valve Actuation Group, Containment Sump Pump, RCS Loop Isolation, SI Loop Isolation, CW Discharge Tunnel Isolation Valve and Reactor Cavity Sump Pump Breaker Verification"

Description: Evaluation of the de-energization of 1(2)AP024-B for 1(2)MOV-CW0006. De-energization will prevent spurious electrical operation of the motor operated valve and disable the Main Control Board light indication for each valve. The referenced operating procedures will be changed to reflect this condition.

Summary: The function of MOV-CW0006 is to isolate the CW discharge canal from the Lake Michigan and by throttling close, the back pressure created increases the water flow rate to the Forebay and Afterbay during Ice Melt Operation. Additionally, the MCC for the associated valve provides electrical power to the valve motor and motor control circuit. The motor control circuit provides red and green lights for the valve position.

When the MCCs are de-energized, valves 1(2)MOV-CW0006 can not be manipulated from the MCB control switch. Additionally. the valve indicating lights will not be illuminated. Although. the MCB valve position indicator will function by indicating valve position. Within the control circuit, no interlocks are present. Therefore, de-energizing the MCC will not prevent an automatic actuation of the valve, since none exist. For the 2 scenarios that require manipulation of MOV-CW0006, discharge canal isolation and ice melt operation, Operation's procedures will be changed to reflect the need to energize the motor control center before stroking.

De-energization of the MCC will not affect equipment failures. While the MCC is off the potential for 1(2)MOV-CW0006 to spuriously close due to a seismic event has been eliminated. Additionally, PT-2E will be changed to periodically check the breaker positions of 1(2)AP024-B2, for the associated valves 1(2)MOVCW0006. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0156 Revision to Special Operating Instruction 63D, "Transferring 4kv ESS Buses From Reserve Feed To Normal Feed"

Description: Evaluation of deleted procedural steps directing the manual transfer of power for the process computer due to installation of a new computer un-interruptible power supply.

Summary: The evaluation determined that an Un-interruptible Power Supply (UPS) for the process computer could be installed and that the procedural steps to delete the previous manual transfer action was appropriate. The new UPS provides power to the process computer. Automatic switching to alternate power sources is utilized for the new system. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0165 Revisions to PT-3A, "Accumulator Boron Samples", SOI-4A, "Placing The Safety Injection System In Service", SOI-4E "Decreasing Accumulator Level With Containment Entry", SOI-4F,"Decreasing Accumulator Level Without Containment Entry"

Description: Evaluation of procedure revisions needed to change the Safety injection Accumulator Tank levels for Unit 1 back to 75% to 94% from the previous value of 40-53%. Proposed change is to restore the Safety Injection (SI) accumulator tank level requirements to within that specified in earlier revisions of applicable procedures for unit 1.

Summary: This activity facilitates Operability Testing associated with Exempt Change E22-1/2-97-264 which requires that the low and high level setpoint alarms be verified for the SI Accumulators. This procedure will be performed in Modes 5, 6 or Defueled where SI is not required to be operable. Normally, SI is required to be incapable of injecting into RCS in these modes to prevent Low Temperature Over-pressurization (LTOP) transients. This procedure includes precautions to ensure that this requirement is adhered to. Proper Boron concentrations will be verified and maintained. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0173 Revision 4 to SOI-2I, "Auto Makeup."

Description: Evaluation of revision to establish new administrative limits for minimum BA and PW flow for Auto Makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111. New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA and PW flow established at greater than or equal to 5 gpm to ensure stable flow indications and reasonably accurate BA concentration readout. Administrative limit for minimum BA flow increased from 4.5 to 5.0 gpm and minimum PW flow increased from 4.5 to 5.0 gpm to provide additional operating margin. The new instrument components and features being added were evaluated and determined to have no adverse affect on the instrument loops or the operation of the VC system. The change will improve reactivity control. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0174 Revision 6 to SOI-2J,"Borate"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Corrected nomenclature for Pressurizer backup heaters and added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0175 Revision 6 to SOI-2K,"Dilute"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0176 Revision 6 to SOI-2L,"Alternate Dilute"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0177 Revision 9 to SOI-2M,"Manual Makeup"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0178 Revision 9 to SOI-2N,"Make-Up To RWST Or Transfer Boric Acid From BAT To HUT"

Description: Revision was to establish new administrative limits for minimum Boric Acid (BA) and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0179 Revision 8 to SOI-2X,"Borating The CVCS Mixed Bed Demineralizers"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0180 Revision 9 to SOI-2Y,"Reactor Coolant System Degassing"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0181 Revision 9 to SOI-3A,"Recircing Of An Isolated Boric Acid Tank""

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0182 Revision 10 to SOI-3B,"Placing Boric Acid Tanks In Operation/ Recirculation"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0183 Revision 6 to SOI-3C,"Transfer Of Boric Acid Between BATS, Batch Tank and HUTS"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0184 Revision 12 to SOI-3D,"Boric Acid Batching And Transfer"

Description: Revision was to establish new administrative limits for minimum BA and PW flow for Reactor makeup operations to eliminate affects of mechanical/hydraulic induced system noise which caused erratic indications on 2FI-110, 2FR-110 and 2FI-111 New limits established at greater than or equal to 5 gpm.

Summary: Administrative limits for minimum BA flow increased from 4.5 gpm to 5.0 gpm and minimum PW flow increased from 4.0 gpm to 5.0 gpm to provide additional operating margin. Added commitment titles for procedural enhancement. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0199 Revision 1 to SOI-33,"Circulating Water And Off Gas Systems"

Description: Procedural revision to de-energize power supply to 1MOV-CW0006 and 2MOV-CW006.

Summary: The function of MOV-CW0006 is to isolate the CW discharge canal from the Lake Michigan and by throttling close, the back pressure created increases the water flow rate to the Forebay and Afterbay during Ice Melt Operation. Additionally, the MCC for the associated valve provides electrical power to the valve motor and motor control circuit. The motor control circuit provides red and green lights for the valve position. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0200 Revision 9 to SOI-33A, "Starting a Circulating Water Pump"

Description: Procedural revision to de-energize power supply to 1MOV-CW0006 and 2MOV-CW006 unless valve needs to be repositioned.

Summary: The function of MOV-CW0006 is two fold to isolate the CW discharge canal from the Lake Michigan and by throttling close, the back pressure created increases the water flow rate to the Forebay and Afterbay during Ice Melt Operation. Additionally, the MCC for the associated valve provides electrical power to the valve motor and motor control circuit. The motor control circuit provides red and green lights for the valve position. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0203 Revision 2 to SOI-33I, "Forebay Ice Removal"

Description: Procedural revision to de-energize power supply to 1MOV-CW0006 and 2MOV-CW006 unless valve needs to be repositioned. Added precaution, Note and reference to applicable footnote. Revised title of Shift Engineer to Shift Manager.

Summary: The function of MOV-CW0006 is to isolate the CW discharge canal from the Lake Michigan and by throttling close, the back pressure created increases the water flow rate to the Forebay and Afterbay during Ice Melt Operation. Additionally, the MCC for the associated valve provides electrical power to the valve motor and motor control circuit. The motor control circuit provides red and green lights for the valve position. Administrative changes made to ensure titles of station management reflect current organization. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0205 Revision 2 to SOI-33 Appendix B-1, "Circulating Water System"

Description: Procedural revision to de-energize power supply to 1MOV-CW0006 and 2MOV-CW006 unless valve needs to be repositioned. Added comment to allow energizing power supply if the valve needs to be repositioned.

Summary: The function of MOV-CW0006 is to isolate the CW discharge canal from the Lake Michigan and by throttling close, the back pressure created increases the water flow rate to the Forebay and Afterbay during Ice Melt Operation. Additionally, the MCC for the associated valve provides electrical power to the valve motor and motor control circuit. The motor control circuit provides red and green lights for the valve position. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0206 Revision 2 to SOI-33 Appendix B-2, "Circulating Water System"

Description: Procedural revision to de-energize power supply to 1MOV-CW0006 and 2MOV-CW006 unless valve needs to be repositioned. Added comment to allow energizing power supply if the valve needs to be repositioned.

Summary: The function of MOV-CW0006 is to isolate the CW discharge canal from the Lake Michigan and by throttling close, the back pressure created increases the water flow rate to the Forebay and Afterbay during Ice Melt Operation. Additionally, the MCC for the associated valve provides electrical power to the valve motor and motor control circuit. The motor control circuit provides red and green lights for the valve position. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0207 Revision 1 to PT-2E, "Spurious Valve Actuation Group, Containment Sump Pump, RCS Loop Isolation, SI Loop Isolation, CW Discharge Tunnel Isolation Valve And Reactor Cavity Sump Pump Breaker Verification"

Description: Procedural revision to verify power supply breakers to 1MOV-CW0006 and 2MOV-CW006 are open.

Summary: The function of MOV-CW0006 is to isolate the CW discharge canal from the Lake Michigan and by throttling close, the back pressure created increases the water flow rate to the Forebay and Afterbay during Ice Melt Operation. Additionally, the MCC for the associated valve provides electrical power to the valve motor and motor control circuit. The motor control circuit provides red and green lights for the valve position. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0270 Provide a Temporary Alteration of a enclosure plate of fire retardant (treated) plywood to cover the opening on top of the Unit 2 Vertical Pipe Chase at floor elevation 617.

Description: The proposed change provides a temporary enclosure plate of fire retardant (treated) plywood to cover the opening on top of the Unit 2 Vertical Pipe Chase at Floor elevation 617. The cover will act as a ventilation barrier such that no flow path from the Unit 2 containment or fuel Handling Building to the Unit 1 or 2 Pipe tunnel will exist.

Summary: The off-site dose as a result of a fuel handling accident either in Containment or the Fuel Handling Building is not increased because the exhaust air will be entirely routed through the Fuel Handling Building Exhaust system. The installation of the enclosure over the pipe tunnel will ensure that no unfiltered leakage paths will exist between the Fuel Handling Building/Containment and the pipe tunnel in accordance with the design basis analysis.

The change does not affect the ability of the Fuel Handling Exhaust System to perform its function during a Fuel Handling accident. The cover over the pipe tunnel is functioning as a ventilation barrier. The cover is a passive component acting as a ventilation boundary. It adds no active components. The consequences of a Fuel Handling building Exhaust system component malfunctioning is not increased.
No new accidents that have not been evaluated in the SAR are created by the installation of the enclosure plate on top of the pipe tunnel. The change does not adversely impact the already analyzed Fuel Handling Accident, and the system component required to function in that accident. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0453 Modification M22-1-98-001 to convert the Zion Unit I main generator into a synchronous condenser.

Description: The Zion Unit 1 main generator is being modified to convert it into a synchronous condenser. This modification will provide ComEd grid voltage stability in Northern Illinois. When operated as synchronous condensers the machine will be generating volt-amperes reactive to the ComEd electric grid instead of watts. The generators are placed in service as synchronous condensers by bringing the generator up to synchronous speed using a drive motor, applying excitation, and synchronizing the excited generator to the ComEd grid.

Summary: A synchronous condenser is a synchronous machine operating with no mechanical drive which will supply reactive power. The unit auxiliary transformer (UAT) will be disconnected. Disconnecting the UAT eliminates any potential voltage swings on 4160V and 480V buses and related equipment that could be fed from the UAT, and ensures that there will be no over-excitation concern for the UAT if left connected but not loaded. The following are required auxiliary systems to Support Synchronous Condenser Operation; 1) Hydrogen System, 2) Stator Cooling Water System, 3) Seal Oil System, 4) Turbine Lube Oil System, 5) Auxiliary Power System, and 6) Service Water System.

The auxiliary power system will be operated within its design requirements and new loads are added at designated balance of plant buses. For the service water interconnections, the potential for failure or new failure modes are not introduced since the system modifications are being made on the turbine building non-safety related portion of the system. For accident analysis purposes, the non-safety related system already has an assumed failure and therefore the probability of failure is not impacted. The design basis function of the auxiliary power system is not impacted by conversion of the unit(s) to synchronous condenser operation nor by disconnection of the UAT. No functional modifications are being made to the ESF buses.

The operation of one Zion unit as a synchronous condenser will not increase the probability of a trip of the second Zion unit, whether operating as a nuclear power generator or as a synchronous condenser. Since the operation of the units is not any different from a loss of offsite power (LOOP) perspective than for full power operations, the consequences of an accident (off-site dose) are not increased. Also, due to the defueled condition of the plant, the consequences of a LOOP are significantly lower than assumed in UFSAR Section 1 5.2.6.

None of the modifications to the addressed turbine lube oil system, generator seal oil system, nor the installation of generator bearing lift pumps will impact equipment important to safety.

The turbine and auxiliary systems are not considered critical systems for nuclear related plant operations. None of the modifications to the turbine lube oil system, generator seal oil system, nor the installation of generator bearing lift pumps will impact equipment important to safety. The turbine and generator auxiliary systems will still perform their intended support function. No new failure modes are introduced. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0454 Modification M22-2-98-001 to convert the Zion Unit 2 main generator into a synchronous condenser.

Description: The Zion Unit 2 main generator is being modified to convert it into a synchronous condenser. This modification will provide ComEd grid voltage stability in Northern Illinois. When operated as synchronous condensers the machine will be generating volt-amperes reactive to the ComEd electric grid instead of watts. The generators are placed in service as synchronous condensers by bringing the generator up to synchronous speed using a drive motor, applying excitation, and synchronizing the excited generator to the ComEd grid.

Summary: A synchronous condenser is a synchronous machine operating with no mechanical drive which will supply reactive power. The unit auxiliary transformer (UAT) will be disconnected. Disconnecting the UAT eliminates any potential voltage swings on 4160V and 480V buses and related equipment that could be fed from the UAT, and ensures that there will be no over-excitation concern for the UAT if left connected but not loaded. The following are required auxiliary systems to Support Synchronous Condenser Operation; 1) Hydrogen System, 2) Stator Cooling Water System, 3) Seal Oil System, 4) Turbine Lube Oil System, 5) Auxiliary Power System, and 6) Service Water System.

The auxiliary power system will be operated within its design requirements and new loads are added at designated balance of plant buses. For the service water interconnections, the potential for failure or new failure modes are not introduced since the system modifications are being made on the turbine building non-safety related portion of the system. For accident analysis purposes, the non-safety related system already has an assumed failure and therefore the probability of failure is not impacted. The design basis function of the auxiliary power system is not impacted by conversion of the unit(s) to synchronous condenser operation nor by disconnection of the UAT. No functional modifications are being made to the ESF buses.

The operation of one Zion unit as a synchronous condenser will not increase the probability of a trip of the second Zion unit, whether operating as a nuclear power generator or as a synchronous condenser. Since the operation of the units is not any different from a loss of offsite power (LOOP) perspective than for full power operations, the consequences of an accident (off-site dose) are not increased. Also, due to the defueled condition of the plant, the consequences of a LOOP are significantly lower than assumed in UFSAR Section 1 5.2.6.

None of the modifications to the addressed turbine lube oil system, generator seal oil system, nor the installation of generator bearing lift pumps will impact equipment important to safety.

The turbine and auxiliary systems are not considered critical systems for nuclear related plant operations. None of the modifications to the turbine lube oil system, generator seal oil system, nor the installation of generator bearing lift pumps will impact equipment important to safety. The turbine and generator auxiliary systems will still perform their intended support function. No new failure modes are introduced. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0492 Revision to Offsite Dose Calculation Manual (ODCM) and Zion Radiological Procedure (ZRP) 5820-12, "Surveillance Requirements For Inoperable Radiation Monitors"

Description: Revision to Offsite Dose Calculation Manual to:

1. Correct various punctuation and capitalization errors in Chapters 10 and 12
2. Expand the abbreviation "vent" to the complete word "ventilation" in various parts of Chapters 10 and 12, where appropriate
3. Add definition for "continuous sampling frequency" to identify allowances for sampling interruptions of short duration
4. Add footnote and footnote notation clarifying the definition of "continuous sampling frequency" to the table defining the radioactive gaseous effluent sampling and analysis program
5. Correct the section referenced in Table 12 2 -1 Action I for independent sampling of Lake Discharge Tanks prior to release
6. Change the words "calculated" and "determined" back to "projected," where appropriate
6. Delete previously abandoned radiation monitor ORT-PR14 from Figure 10-1

Summary: Radiation monitor ORT-PR14 was abandoned on May 31, 1995 using 10CFR50.59 Safety Evaluation number 95-0074, but reference to ORT-PR14 was inadvertently not removed from ODCM Figure 10-1. Removals of reference to ORT-PR14 from ODCM Figure 10-1 will not affect plant operation or equipment failures and does not create any new failure modes. The Ventilation Stack SPINGs do not initiate any automatic plant actuation features and are not required to mitigate any accident conditions. The proposed ODCM changes will not affect the normal operation of any radiation monitor. Adding the definition of "continuous sampling frequency" to the ODCM documents allowances for standard industry practices to maintain process radiation monitors operable. The proposed ODCM changes have no impact on the probability of malfunction of equipment important to safety. The ODCM changes are not physical changes to plant equipment which would affect the equipment's ability to remain operable. The definition of "continuous sampling frequency" clarifies the term "continuous" and makes allowances for routine activities which are required to maintain monitor operability. Administrative changes enhance readability of the ODCM. The Safety Evaluation concluded that no unreviewed safety question existed

Change Number and Title: 98-0562 Revision to Fire Protection Report Volume 2, Zion Administrative Procedure 900-02, "System Impairments For Fire, Flood, Radiation, And Ventilation Barriers" and Administrative Technical Requirement 3.21.6,"Penetration Fire Barriers"

Description: Revision to Administrative Technical Requirement ATR 3.21.6, "Penetration Fire Barriers" to clarify compensation measures.

Summary: The functional integrity of the penetration fire barriers ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and suppression. There will be no effect on plant operation from the proposed change. The proposed activity is only a clarification to have the fire watch observe the area. No new components being added, or existing equipment being modified by this change, that could create an accident or malfunction not previously evaluated in the safety analysis report. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0603 Evaluation of Master Required Equipment Status (RES) Reference Document

Description: The Master RES Reference Document provides a clarification of the Zion Station license and design basis as it pertains to plant SSCs while in the interim defueled mode. The interim period shall be the time between the announcement of the intent to remain in a defueled mode and submittal of the Defueled Safety Analysis Report (DSAR) to the NRC and the approval of the Defueled Technical Specifications (DTS). The document provides the basis for the classification of those SSCs that must be considered OPERABLE\REOUIRED and those systems that can be considered FUNCTIONAL and NOT REQUIRED.

Summary: No sections of the Safety Analysis Report (SAR) are affected by the development of the Master RES Reference Document. The development of the document will not affect plant operation. It provides clarification regarding SSC requirements while the plant is in the interim defueled condition. The Master RES Reference Document does not alter the current license or design basis in any way. It provides guidance based on the current license and design basis documentation regarding SSC requirements for supporting the plant in an interim defueled condition. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0610 Revision of station procedure TSSP 98-002, "Test Of Synchronous Condenser Oil Systems" to include guidance for the testing of operation and actuation of various oil system components on the synchronous condenser.

Description: Evaluation of revision to station procedure TSSP 98-002, "Test Of Synchronous Condenser Oil Systems" to include additional guidance for testing of the synchronous condenser. Added guidance to test operation and actuation of various oil system components on the synchronous condenser.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for evaluation 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0618 Installation of above ground Fuel Storage Tank to store gasoline and diesel fuel.

Description: Evaluation of the installation of an above ground fuel storage tank to store gasoline and diesel fuel.

Summary: An above ground fuel storage tank will be installed on an existing concrete pad that previously held the spare main transformer. Location of the installation will be outside the protected area of the plant and a large distance away from any vital equipment. The tank provides a two hour fire protection, vehicle impact resistance and bullet resistance proven by tests carried out by Underwriters Laboratories. Tank is protected by bollards on the vehicle sides. It is not tied to any systems in the plant. Use of the storage tank will not cause an accident of malfunction in the plant. Failure of the tank will not affect any plant systems. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0634 Temporarily change to ORT-AR 13 dose-rate alarm setpoint.

Description: Evaluation of a temporarily change to ORT-AR 13 dose-rate alarm setpoint from 20 mrem/hr to 500 mrem/hr in order to allow the Fuel Handling Building (FB) overhead crane to be utilized for placement of approximately 1000-pound lids onto radioactive shipping casks after the casks have been filled with used filters. The filters were used for clean-up of the refueling cavity, spent fuel pool, and fuel transfer canal water. The dose-rate alarm setpoint will be returned to 20 mrem/hr once the lids have been placed on the casks.

Summary: Radiation monitor ORT-AR 13 is designed to monitor dose rates to the FB overhead crane operator. The monitor warns personnel of increasing radiation that might result in a radiological health hazard when a high-dose-rate object is raised near the surface of or from the spent fuel pool water. Upon detection of dose rates greater than the dose-rate alarm setpoint, ORT-AR13 also functions to prohibit raising objects from the spent fuel pool by preventing upward motion of the crane hoist. Radiation monitor ORT-AR13 has no impact on Fuel Building (FB) ventilation. The proposed increase in the dose-rate alarm setpoint of ORT-AR13 will allow higher-dose-rate objects to be removed from the spent fuel pool and removal of items from the spent fuel pool using the FB overhead crane will be administratively controlled. Raising the dose-rate alarm setpoint of ORT-AR 1 3 will not affect equipment failures and does not create any new failure modes.

The radiation monitor affected by this setpoint change is not an initiating event to any accident previously evaluated in the SAR. Radiation monitor ORT-AR13 does not initiate any automatic plant actuation features and is not required to prevent or mitigate any accident conditions. Radiation monitor ORT-AR03 monitors FB general-area dose rates and, upon reaching its dose-rate alarm setpoint, diverts FB Ventilation through particulate filters and iodine adsorber units.

The proposed ORT-AR13 dose-rate alarm setpoint change will not adversely impact systems or functions due to the preparation of additional radiological safety precautions. The possibility of an accident or malfunction of a type different from those evaluated in the SAR will not be created due to this setpoint change. The proposed ORT-AR13 dose-rate alarm setpoint change will not change the form or function of equipment. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0635 Revision of Technical Specification Interpretation 91-05, Service Water Pump Operability.

Description: Evaluation of deletion of Technical Specification Interpretation that was written to provide guidance for Service Water Pump Operability during all modes of operation.

Summary: Delete Technical Specification Interpretation that was written to provide guidance for Service Water Pump Operability during all modes of operation. This was needed when both units were available for power operation and many safety related loads of the Service Water (SW) system were in operation in modes not addressed by the Technical Specifications.

Technical Specifications do not require service water to be operable during modes 4, 5, 6 or defueled. In accordance with IOCFR50.82(a)(1)(i), on February 13,1998, ComEd submitted its written certification of permanent cessation of operations at Zion Station Unit 1 and 2. Defueling activities have been completed. ComEd has committed that those units will remain permanently defueled.

The removal of the SW operability requirements from the TSI does not alter the design or functional capability of the SW system. The removal of the CC operability requirements from the TSI changes the self-imposed requirement of operability to a functional state that will support the current licensing requirements for the SW system.

This will have no effect on SW system failures since the action to be in cold shutdown as described in Technical Specification 3.8.7.D will already exist with the unites permanently defuelled. No new failure modes are created since the current Technical Specifications are still in effect and no design change to the system has occurred. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0637 Revision of Technical Specification Interpretation 91-04, Rev 12; CC System Operability.

Description: Evaluation of deletion of Technical Specification Interpretation that was written to provide guidance for component Cooling (CC) system operation during all modes of operation.

Summary: Delete Technical Specification Interpretation that was written to provide additional guidance for component Cooling (CC) system operation during all modes of operation. This was needed when both units were available for power operation and many safety related loads of the CC system were in operation in modes not addressed by the Technical Specifications.

TSI 91-04 requires 2 CC pumps and their associated diesel generators to be operable when both units are defueled. The removal of the CC operability requirements from the TSI does not alter the design or functional capability of the CC system. The removal of the CC operability requirements from the TSI changes the self-imposed requirement of operability to a functional state that will support the current licensing requirements for the Component Cooling water system. The removal of the requirement of operability will allow the removal of specific functions that are not needed and are not part of the current license with both units defueled.

This will have no effect on CC system failures since the action to be in cold shutdown as described in TS 3.8-6.E will already exist with the unites permanently defuelled. No new failure modes are created since the current TS are still in effect and no design change to the system has occurred.

Removing the TS interpretation does not increase the probability of occurrence of a malfunction from what that probability of occurrence was previously. This is due to the fact that the Technical Specifications do not require the CC system to be operable in modes 5 or 6 or both units defueled.

Revising the TS interpretation only removes the requirement for CC pumps and heat exchangers to be operable in modes not required by the Technical Specifications. This does not remove the requirement to maintain the capability for SFP cooling and any other requirements of the current licensing basis. The current Technical Specification does not require any CC pumps or HX to be operable when the reactor is in cold shutdown. Based on a review of the systems and components that will require CC with both units defueled the spent fuel pool heat exchanger is the only heat load that is important to nuclear safety. The minimum CC system requirements will be maintained by Station approved procedures. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0639 Deletion of all requirements from Zion Operability Determination Manual (ZODM)-Service Water System pertaining to Technical Specification Interpretation 91-05.

Description: Station procedure Zion Operability Determination Manual (ZODM)-Service Water System included references to self imposed requirements of Technical Specification Interpretation 91-05. The ZODM requirements were deleted.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for safety evaluation number 98-0635. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0645 Revision of station procedure TSSP 98-002, "Test Of Synchronous Condenser Oil Systems" to include additional guidance for testing of the synchronous condenser.

Description: Evaluation of revision to station procedure TSSP 98-002, "Test Of Synchronous Condenser Oil Systems" to include additional guidance for testing of the synchronous condenser. New guidance to test the generator air side seal oil backup pump was added. Restoration guidance was provided to return the generator oil seal system to normal.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for evaluation 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0654 Clarification of basis for Administrative Technical Requirements 3.22.1 and 3.22.2.

Description: Evaluation of bases for Administrative Technical Requirements (ATRs) 3.22.1 and 3.22.2. These ATRs provide additional guidance for plant operation while in the defueled configuration not presently defined in the Technical Specifications.

Summary: Evaluation of bases for Administrative Technical Requirements (ATRs) 3.22.1 and 3.22.2. These ATRs provide additional guidance for plant operation while in the defueled configuration not presently defined in the Technical Specifications. This change has no impact on Zion Station's physical plant design.

The plant configuration of one train of non safety-related spent fuel pool cooling (and applicable support cooling systems) is a safe and acceptable design and mode of operation in the completely defueled condition and does not result in an Unreviewed Safety Question (USQ) or require a change to the plant's Technical Specifications. The plant configuration will not compromise safety, design, or licensing bases and does not result in any increase in the risk to the health and safety of the public.

No new components being added, or existing equipment being modified by this change, that could create an accident or malfunction not previously evaluated in the safety analysis report. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0655 Revision of station procedure TSSP 98-003, "Synchronous Condenser Systems Testing" to include additional guidance for testing of the synchronous condenser.

Description: Revision of station procedure TSSP 98-003, "Synchronous Condenser Systems Testing" to include additional guidance for verification of proper operation of various systems associated with the synchronous condenser.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for evaluation 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0656 Evaluation of design change to permanently install a portion of Temporary Alteration 97-020

Description: The Temporary Alteration documents installation of all piping, supports and structural members required to operate a rented package boiler. The boiler is to be returned to the owner. Some of the piping, support and structural members are removed so that the boiler can be taken off-site. piping. support and structural members are removed so that the boiler can be taken off-site.

The remaining components are made permanent through this exempt change design package so that reinstallation of a package boiler can be expedited if deemed necessary in the future. Drawings affected arc updated and any valves and equipment made permanent by this exempt change are give identification numbers and their associated System Operating Instructions procedures are updated.

Summary: The temporary auxiliary boiler provides a backup source of auxiliary steam due to problems with the permanent auxiliary boiler which make it unavailable. Connections with existing systems, potential equipment failures and the reduced capacity of the temp. boiler were evaluated and found to have no adverse affect on the safe operation of the plant. The temporary alteration is non-safety related and does not interface with any safety related system, structure or component. No new components being added, or existing equipment being modified by this change, that could create an accident or malfunction not previously evaluated in the safety analysis report. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0678 New station procedure TSSP-98-004, "Synchronous Condenser Startup Testing", revision 0.

Description: Evaluation of new station procedure TSSP-98-004, "Synchronous Condenser Startup Testing", which provides procedural guidance to verify the proper operation of various systems associated with the synchronous condenser installation. Testing guidance includes machine speed increase to 1800 rpm , excitation application and synchronization to the ComEd electrical grid.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0680 Revision to station procedure 1LP01, "Hydrogen Stator Cooling Local Panel."

Description: Evaluation of revision to station procedure 1LP01, "Hydrogen Stator Cooling Local Panel" to include Zion Decommissioning Organization nomenclature and additional guidance due to the synchronous condenser modification.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for evaluation 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0683 Revision Annunciator Response Manual, Unit 1, Panel 14

Description: Revision to Unit 1 Annunciator Response Manual Panel 14 to incorporate design changes from the Synchronous Condenser Modification.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0685 Revision to procedure TSSP-98-004, "Synchronous Condenser Startup Testing", revision 1.

Description: Revision to procedure TSSP-98-004, "Synchronous Condenser Startup Testing", to include operational startup testing requirements for the synchronous condenser modification.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0687 Revision to procedure TSSP-98-004, "Synchronous Condenser Startup Testing", revision 2.

Description: Revision to procedure TSSP-98-004, "Synchronous Condenser Startup Testing", to include operational startup testing requirements for the synchronous condenser modification.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0688 Revision to Annuciator Response Manual, Unit 1, Panel 11

Description: Revision to Unit 1 Annunciator Response Manual Panel 11 to incorporate design changes

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0691 Revision 11 to station procedure SOI-61 App. A-1, "Unit 1 Service Water Valve Lineup"

Description: Evaluation of revision to SOI-61 App. A-1, "Unit 1 Service Water Valve Lineup" which added new synchronous condenser motor starting skid valves. Changes required as a result of the Synchronous Condenser Modification.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0694 Revision to procedure TSSP-98-004, "Synchronous Condenser Startup Testing", revision 3.

Description: Evaluation of revision to procedure TSSP-98-004, "Synchronous Condenser Startup Testing", to move step 18.5 to step 18.3. Changes were required as a result of the Synchronous Condenser Modification.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0708 Revision to procedure TSSP-98-004, "Synchronous Condenser Startup Testing", revision 4.

Description: Evaluation of revision to procedure TSSP-98-004, "Synchronous Condenser Startup Testing", which added additional information pertaining to components on the synchronous condenser starting motor skid and additional testing enhancements. Changes were required as a result of the Synchronous Condenser Modification.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0718 Revision 3 to station procedure SOI-34 Appendix A-2, "Turbine Lube Oil System Electrical And Valve Lineup"

Description: Evaluation of revision to station procedure SOI-34 Appendix A-2, "Turbine Lube Oil System Electrical And Valve Lineup" which incorporated enhanced valve listing sequencing to reduce operator valve alignment time. Changes were required as a result of the Synchronous Condenser Modification.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0720 Revision 1 to station procedure GOP-5, "Generator Operations"

Description: Evaluation of revision to station procedure GOP-5, "Generator Operation" which provided guidance for main generator operation as a synchronous condenser.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0723 Revision 2 to station procedure SOI-34A, "Starting The Turbine Lube Oil System "

Description: Evaluation of revision to station procedure SOI-34A, "Starting The Turbine Lube Oil System " which incorporated startup and testing guidance of the new lube oil system for the synchronous condensers.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0724 Revision 4 to station procedure SOI-34E, "Testing Main Turbine Lube Oil System "

Description: Evaluation of revision to station procedure SOI-34E, "Testing Main Turbine Lube Oil System " which incorporated startup and testing guidance of the new lube oil system for the synchronous condensers.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0725 Revision 5 to station procedure SOI-34A, "Generator Seal Oil System Startup And Shutdown "

Description: Evaluation of revision 5 to station procedure SOI-34A, "Generator Seal Oil System Startup And Shutdown " which incorporated startup and testing guidance of the new seal oil system for the synchronous condensers.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0727 Revision to station procedure ARM-U1-Panel 13 to reflect changes corresponding to the new Synchronous condenser.

Description: Revision to station procedure ARM-U1-Panel 13 to reflect changes corresponding to the new Synchronous condenser.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Safety Evaluation Number 98-0453. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0748 Temporary Alteration 98-11

Description: Evaluation of Temporary Alteration 98-11 to remove valves 1(2)SW-1772 and 1(2)SW-1773 and install blank flanges.

Summary: Evaluation of Temporary Alteration 98-11 to remove valves 1(2)SW-1772 and 1(2)SW-1773 and install blank flanges. The Containment Spray room coolers are leaking and cannot be isolated. The service water lines which feed the coolers must be isolated to stop the leakage. Since valves 1(2)SW-1772 and 1(2)SW-1773 are susceptible to leakage they will be replaced with isolation plates. Removing these valves will not negatively affect service water flows to any other equipment since the six inch supply valve (SW0020, SW0021) are fully closed. The containment Spray system has been determined to not be required in the defueled condition. There are no effects on equipment operation important to the defueled condition. No new components being added, or existing equipment being modified by this change, that could create an accident or malfunction not previously evaluated in the safety analysis report. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0762 Revision to station procedure SOI -11D, "Paralleling Diesel Generator With The Edison System" .

Description: Evaluation of change to procedure SOI -11D, "Paralleling Diesel Generator With The Edison System" to delete Precaution 12 of Section 4.0, which allows only one operable Emergency Diesel Generator per unit to be aligned in parallel with the offsite grid at any given time.

Summary: Safety evaluation documents the acceptability of aligning any or all of the emergency diesel generators to the offsite grid without any adverse impact on the capability of the emergency diesel Generators to perform their intended Support functions(s) for the affected systems or on the OPERABILITY of any systems, structures, or components (SSCs) which may be required to be OPERABLE during this configuration.

Operation of the EDGs in parallel to the offsite grid can have no adverse effect on the consequences of an accident with respect to support of the Auxiliary Building/Spent Fuel Building Ventilation System. The EDGs will still be capable of providing the required support function of supplying emergency power to the charcoal booster fans in the event of a fuel handling accident coincident with a Loss Of offsite Power.

Operation of the EDGs paralleled to the offsite grid will have no impact on any malfunction of equipment important to safety. The EDGs will function as designed when required, regardless of whether or not they are paralleled to the offsite grid. Operation of the EDGs parallel to the offsite grid will not affect the normal or abnormal operation of the affected systems. In the event of a grid transient which isolates offsite power, the only effect of having the EDGs providing power to the grid is that the EDGs will already be running, and supplying power to the 4KV essential buses. Thus, the EDGs are able to provide the necessary support function(s) for any and all of the above affected systems required to be operable (specifically Auxiliary Building/Spent Fuel Building Ventilation), thus meeting the definition of operability in Technical Specifications for those systems. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0763 Revision of station procedure Zion Operability Determination Manual (ZODM), Component Cooling Water System, to reflect system requirements needed due to the permanently defueled condition.

Description: Evaluation of deletion of requirements from Zion Operability Determination Manual (ZODM), Component Cooling Water System, pertaining to Zion Technical Specification Interpretation 91-04. Added requirements to indicate the required number of Component cooling water pumps and heat exchangers needed for the permanently defueled condition.

Station procedure Zion Operability Determination Manual (ZODM)-Component cooling Water System included references to self imposed requirements of Technical Specification Interpretation 91-04. The ZODM requirements were deleted.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for evaluation 98-0637. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0764 Evaluation of conversion of the Zion Nuclear Power Station Updated Safety Analysis Report (UFSAR) to a Defueled Safety Analysis Report (DSAR).

Description: Evaluation of the revision of the Zion UFSAR to a Defueled Safety Analysis Report (DSAR). This will be done by removing items from the UFSAR that are no longer applicable to the defueled condition of the plant, by establishing a new classification scheme for SSC's deemed Important to the Defueled Condition (ITDC), and adding the applicable UFSAR changes and reformatting the UFSAR to simplify and consolidate the remaining sections to accurately describe the new licensing basis.

Summary: On February 13, 1998, ComEd issued a certification of permanent cessation of operations to the NRC per 10CFR50.82. Conversion of the UFSAR, and the applicable pending UFSAR changes, to a DSAR will provides a concise licensing basis that focuses on SSC's, operational constraints and practices, and accident analyses concerned with the safe storage, monitoring, and handling of fuel. No SSC is physically being added or modified. All SSC's that are important to the defueled condition will function as they did when they were described in the UFSAR. Removing discussions of SSC's and operational practices and constraints not associated with the safe storage, handling, or monitoring of spent fuel from the SAR results in the elimination of accidents and malfunctions which no longer apply to the defueled condition. The accidents and malfunctions that are still credible in the defueled condition were credible when the plant was operating and remain unchanged.

All equipment that is important to the defueled condition will function the same as when described in the UFSAR. Failure modes for equipment defined as important to the defueled condition are also the same as before. The removal of discussions not applicable to the permanently defueled condition results in the elimination of most accidents since fuel is precluded from being loaded into the reactor. The accidents that remain are those applicable to the permanently defueled condition.

All SSC's that are important to the defueled condition will be operated the same as they were when the plant was operating and their functions remain unchanged. No physical changes are being made to these SSC's. The probability of malfunction of equipment important to the defueled condition, therefore, remains unchanged. Equipment that is no longer important to the defueled condition is not important to safety and, therefore, will not cause any adverse affect on equipment that is important to the defueled condition. The probability of a malfunction of equipment important to safety, therefore, will not increase as a result of removing discussions of SSC's and operational practices and constraints not associated with the safe storage, handling, or monitoring of spent fuel.

The malfunctions of equipment important to the defueled condition are non-mechanistic and the consequences do not credit any equipment to prevent or mitigate the accident. The consequences of a malfunction of equipment important to safety, therefore, will not increase as a result of removing discussions of SSC's and operational practices and constraints not associated with the safe storage, handling, or monitoring of spent fuel.

The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0772 Revision to station procedure PT-11 DG-1A,"Diesel Generator Loading Tests "

Description: Evaluation of change to station procedure PT-11 DG-1A, 1B, 2A and O, "Diesel Generator Loading Tests " which deleted precaution that limited operation of Diesel Generators to one per unit with the Diesel Generator tied to the grid. Analysis has shown that loss of both Diesel Generators is no longer a safety concern in a permanently defuelled plant.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Evaluation 98-0762. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0773 Revision to station procedure PT-11 DG-1B "Diesel Generator Loading Tests "

Description: Evaluation of change to station procedure PT-11 DG-1A, 1B, 2A and O, "Diesel Generator Loading Tests " which deleted precaution that limited operation of Diesel Generators to one per unit with the Diesel Generator tied to the grid. Analysis has shown that loss of both DGs is no longer a safety concern in a permanently defuelled plant.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Evaluation 98-0762. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0774 Revision to station procedure PT-11 DG- 2A,"Diesel Generator Loading Tests "

Description: Evaluation of change to station procedure PT-11 DG-1A, 1B, 2A and O, "Diesel Generator Loading Tests " which deleted precaution that limited operation of Diesel Generators to one per unit with the Diesel Generator tied to the grid. Analysis has shown that loss of both DGs is no longer a safety concern in a permanently defuelled plant.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Evaluation 98-0762. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0775 Revision to station procedure PT-11 DG- 2B, "Diesel Generator Loading Tests "

Description: Evaluation of change to station procedure PT-11 DG-1A, 1B, 2A and O, "Diesel Generator Loading Tests " which deleted precaution that limited operation of Diesel Generators to one per unit with the Diesel Generator tied to the grid. Analysis has shown that loss of both DGs is no longer a safety concern in a permanently defuelled plant.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for Evaluation 98-0762. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0832 Revision to vendor procedure STD-FP-1998-8196, Revision 2, "Fuel Assembly Partial Disassembly"

Description: Revision to vendor procedure STD-FP-1998-8196, Revision 2, "Fuel Assembly Partial Disassembly" to provide a detailed, safe, and effective guide to conduct removal of fuel rods from un-irradiated fuel assemblies in the new fuel storage area and placement of the rods into a shipping container for shipment offsite.

Summary: Selected assemblies in Zion Unit 2 are to have one or two fuel rods removed from each assembly using tooling and procedures provided by Westinghouse. Evaluation included Fuel handling disassembly considerations and individual fuel rod handling actions. Existing safety analyses are not impacted by the use of the procedure. Ventilation systems for the area including the new fuel vault and associated components are not challenged. No new failure modes have been defined for any system or component important to safety nor has any new limiting single failure been identified. Since the applicable fuel, equipment and system design criteria continue to be met, it is concluded that component and system performance will not be adversely affected. Equipment important to safety for the fuel handling accident in the new fuel vault are the ventilation and radiation monitoring systems. Since these systems are not affected the consequences evaluated in the safety analysis report for the fuel handling accident will not increase. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0835 Operating Special Procedure OSP-98-005, "Placement Of Fuel Rods Into General Electric Model No. RA-3 Shipping Container."

Description: Evaluation of Operating Special Procedure OSP-98-005, "Placement Of Fuel Rods Into General Electric Model No. RA-3 Shipping Container." Procedure provides procedural control steps to pack loose fuel rods into a GE Model No. RA-3 shipping container.

Summary: Evaluation included Fuel handling disassembly considerations and individual fuel rod handling actions. Existing safety analyses are not impacted by the use of the procedure. Ventilation systems for the area including the new fuel vault and associated components are not challenged. No new failure modes have been defined for any system or component important to safety nor has any new limiting single failure been identified. Since the applicable fuel, equipment and system design criteria continue to be met, it is concluded that component and system performance will not be adversely affected. Equipment important to safety for the fuel handling accident in the new fuel vault are the ventilation and radiation monitoring systems. Since these systems are not affected the consequences evaluated in the safety analysis report for the fuel handling accident will not increase. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0836 Revision to station procedure AOP-8.5,"Loss Of Off Site Power Or System Auxiliary Transformer"

Description: Provide the ability to cross-tie ESF busses by closing the emergency and reserve feed breakers at the same time thereby providing power from an ESF bus on the same unit that has power to one that did not have power. This, in conjunction with the existing appendices in AOP-8.5 will also allow an ESF bus to back-feed to a service bus and ultimately feed a bus used to power a spent fuel pump. Also deleted references to Tech Specs and actions for modes no longer applicable in the defueled condition. A step was added to verify the synchronous condenser is tripped which is not a part of Tech Specs or the FSAR.

Summary: Zion is now Permanent defueled, therefor references to tech specs that referenced other modes were deleted. Reference to equipment that is no longer required to be in service in the defueled condition were deleted. Actions for modes other than defueled were deleted.

Zion has entered the permanently defueled condition. Therefor the only accidents that could apply are loss of all AC and the fuel handling accident. This procedure is a recovery procedure entered upon a loss of all AC and is used to attempt to restore power to busses that could feed a Spent Fuel Pump (NON-ESF) as well as security equipment from the Diesel Generators. This procedure doesn't increase the probability of a fuel handling accident because it is only entered upon a loss of all AC or the SAT. Once entered it directs any fuel movements in progress to be stopped. For Zion Station, in the defueled condition, a loss of offsite power results in a loss of SFP cooling. This procedure provides actions to restore power when the normal paths for power to a bus have failed. This allows for restoration of SFP cooling, Aux. Building ventilation and plant security. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0850 Revision to station procedure AOP 6.4

Description: 1) Added Figures I through 4 to determine time to boiling in the SFP.
2) Changed Step 2 of the procedure to check if the Auxiliary Building ventilation is in service and provided actions to open various doors based upon whether ventilation system is running or not.
3) Deleted all operator titles throughout the procedure.
4) Changed Appendix B such that on a loss of CC to the SFP, feed and bleed is not performed. Makeup to the SFP is the only action required.

1)□and 2): Engineering Calculation 22S-0-1 I OM-0061 provided new time to boil curves based on initial SFP temperature and whether the Auxiliary Building ventilation system is operating or not. 3) All operators now have the same title. No need to differentiate who will perform the step.
4) . Both units are permanently defueled and decay heat load in the SFP no longer requires bleeding the SFP cooling, system to the HUTs in order to maintain SFP temperature below saturation as long as makeup is provided.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for safety evaluation 98-0654. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0866 Revision to station procedures ZAP 510-03, "Plant Lay-up Program" and OSP 98-006, "Placement Of The Condensate System In The SAFSTOR Condition."

Description: Evaluation of revisions to station procedures ZAP 510-03, "Plant Lay-up Program" and OSP 98-006, "Placement Of The Condensate System In The SAFSTOR Condition."

This safety evaluation is for draining and de-energizing the condensate system for safe storage. The activities of placing a system in safe storage include: draining to normal sumps and/or tanks, leaving valves open that normally would be closed, installing blocks on valves for open/closed positions; de-energizing equipment and instruments, cutting and capping lines, attaching hoses to piping for routing water, inserting blanks between flanges, removing equipment and determinating wires.

Summary: The systems are to be drained and deenergized and do not provide any safety functions in the defueled condition. There will be no effect on equipment failures. All malfunctions associated with operating equipment are no longer applicable since the equipment will be de-energized and out-of-service. All alterations to the system configuration will result in the remainder of the system in compliance with the existing standard or code so as any structural failures will not be affected.

This system has been evaluated as 'Not Required' and does not: (1) perform any specified safety function, (2) have any operability requirements per the Technical Specifications or licensing commitments, and (3) prevent or mitigate the consequences of any design accidents or malfunctions in the current plant condition. The activities of placing a system in SAFSTOR do not result in an unreviewed safety question for the not required system. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0878 Revision to station procedures ZAP 510-03, "Plant Lay-up Program" and OSP-98-007, "Heater Drain System Draining And De-Energization Procedure"

Description: Evaluation of revisions to station procedures ZAP 510-03, "Plant Lay-up Program" and OSP 98-006, "Placement Of The Condensate System In The SAFSTOR Condition."

This safety evaluation is for draining and de-energizing the Heater Drain system for safe storage. The activities of placing a system in safe storage include: draining to normal sumps and/or tanks, leaving valves open that normally would be closed and de-energizing equipment and instruments.

Summary: The systems are to be drained and deenergized and do not provide any safety functions in the defueled condition. There will be no effect on equipment failures. All malfunctions associated with operating equipment are no longer applicable since the equipment will be de-energized and out-of-service. All alterations to the system configuration will result in the remainder of the system in compliance with the existing standard or code so as any structural failures will not be affected.

This system has been evaluated as 'Not Required' and does not: (1) perform any specified safety function, (2) have any operability requirements per the Technical Specifications or licensing commitments, and (3) prevent or mitigate the consequences of any design accidents or malfunctions in the current plant condition. The activities of placing a system in SAFSTOR do not result in an unreviewed safety question for the not required system. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0885 Revision to Administrative Technical specification 3.21.8, "Halon Systems"

Description: Evaluation of revision to Administrative Technical specification 3.21.8, "Halon Systems" to change compensatory fire watch for halon systems from continuous to hourly fire watch.

Summary: Activity determined to be enveloped by previous safety evaluation. See citation for evaluation 98-764. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0909 ZAP 510-03, " Plant Lay-up program" and associated OSP-98-012 for de-energizing the Control Rod System.

Description: This safety evaluation is for de-energizing the Control Rod system for safe storage. The activities of placing the system in safe storage include: de-energizing equipment and instruments, removing equipment and determinating wires.

Summary: The system is to be deenergized and does not provide any safety function for the fuel in the defueled condition. There will be no effect on equipment malfunctions. All malfunctions associated with operating equipment are no longer applicable since the equipment will be de-energized and out-of-service. All alterations to the system configuration will result in the remainder of the system in compliance with the existing standard or code so as any structural failures will not be affected. Therefore, there will be no increase in the consequences of any malfunctions.

This system has been evaluated as 'Not Required' and does not: (1) perform any specified safety function, (2) have any operability requirements per the Technical Specifications or licensing commitments, and (3) prevent or mitigate the consequences of any design accidents or malfunctions in the current plant condition. The activities of placing a system in SAFSTOR do not result in an unreviewed safety question for the not required system. It has been determined, that this system performs no safety function and/or is not needed for safe operation of the facility in the current and/or future state of the facility. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0913 Revision to station procedures SOI-61, "Service Water" and SOI-61 App.A-0, "Common Service Water Valve Lineup"

Description: Delete the requirement to maintain Component Cooling Water heat Exchanger Service water outlet valves in a throttled position enough to ensure 8000 gpm during previously applicable design basis accidents. Add a requirement to maintain service water flow greater than or equal to 4000 gpm to a component cooling water heat exchanger when aligned for service.

Summary: The proposed change deletes the requirement to maintain the Component Cooling Heat Exchangers Service Water outlet valves in a throttled position enough to ensure 8000 gpm during design basis accident conditions as specified in UFSAR Table 9.2-1. Plant operation will not be affected, since the design basis accidents specified in UFSAR Table 9.2-1 no longer apply with the plant in the defueled condition. A minimum of 4000 gpm to an aligned Component cooling heat exchanger will provide enough flow for Spent Fuel Pool cooling. The minimum of 4,000 gpm will also be enough to minimize the potential for fouling of the Component Cooling Heat exchangers.

There will be no affect on SW system or equipment failures. Since Zion has permanently ceased operations, the affected design basis accidents specified in UFSAR Table 9.2-1 no longer apply. During normal operation, a minimum of 4000 gpm to an Component Cooling Heat Exchangers will provide enough flow for Spent Fuel Pool cooling and enough to minimize the potential for fouling of the Component Cooling Heat Exchangers.

The consequences of the affected accident will not be increased, since the affected accident is not applicable with the plant in a defueled condition. Deleting the requirement to maintain at least 8000 gpm SW flow to each aligned Component Cooling Heat Exchangers will not increase the probability of a malfunction of equipment important to safety because: 1) The design basis accidents for which the 8000 gpm flow was required are no longer applicable with the plant in the defueled condition, and 2) enough flow will be maintained to provide for Spent Fuel Pool cooling and to minimize the potential for fouling of the Component Cooling Heat Exchangers. The capability to provide SFP cooling will be maintained. As such, the change will have no impact on equipment important to safety and there can be no increase in the consequences of a malfunction. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0923 Revision to station procedure AOP-4.1, "Loss Of Component Cooling."

Description: Evaluation of revision to station procedure AOP-4.1, "Loss Of Component Cooling" to reflect conditions for a permanently defuelled plant. Procedure deletes provisions for equipment which is no longer required due to permanently defuelled condition.

Summary: Since Zion has permanently ceased operations the design basis accidents that required ESF equipment no longer apply. During normal operations the cooling for spent fuel stored in the Spent fuel Pool is still required and is addressed in the procedure. The evaluation identified that the change will have no impact on equipment important to safety. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0924 Revision to station procedure AOP-4.2, "Loss Of Service Water."

Description: Evaluation of revision to station procedure AOP-4.2, "Loss Of Service Water" to reflect conditions for a permanently defuelled plant. Procedure deletes provisions for equipment which is no longer required due to permanently defuelled condition.

Summary: Since Zion has permanently ceased operations the design basis accidents that required ESF equipment no longer apply. During normal operations the cooling for spent fuel stored in the Spent fuel Pool is still required and is addressed in the procedure. The evaluation identified that the change will have no impact on equipment important to safety. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0958 ZAP 510-03, " Plant Lay-up program" and associated OSP-98-018 for draining and de-energizing the spray additive tank lines from the spray additive tank to the eductors.

Description: This safety evaluation is for draining and de-energizing systems for safe storage. The activities of placing a system in safe storage include: draining to normal sumps and/or tanks, leaving valves open that normally would be closed, installing blocks on valves for open/closed positions; de-energizing equipment and instruments, cutting and capping lines, attaching hoses to piping for routing water, inserting blanks between flanges, removing equipment and determinating wires.

Summary: The systems are to be drained and deenergized and do not provide any safety functions for the fuel in the defueled condition. There will be no effect on equipment malfunctions. All malfunctions associated with operating equipment are no longer applicable since the equipment will be de-energized and out-of-service. All alterations to the system configuration will result in the remainder of the system in compliance with the existing standard or code so as any structural failures will not be affected. Therefore, there will be no increase in the consequences of any malfunctions.

This system has been evaluated as 'Not Required' and does not: (1) perform any specified safety function, (2) have any operability requirements per the Technical Specifications or licensing commitments, and (3) prevent or mitigate the consequences of any design accidents or malfunctions in the current plant condition. The activities of placing a system in SAFSTOR do not result in an unreviewed safety question for the not required system. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0964 ZAP 510-03, " Plant Lay-up program" and associated OSP-98-008, Placement of Main Steam In The SAFSTOR Condition.

Description: This safety evaluation is for draining and de-energizing the Main Steam system for safe storage. The activities of placing a Main Steam in safe storage include: draining to normal sumps and/or tanks, leaving valves open that normally would be closed, installing blocks on valves for open/closed positions: de-energizing equipment and instruments, cutting and capping lines, attaching hoses to piping for routing water, inserting blanks between flanges, removing equipment and determinating wires as necessary.

The activity is necessary to place the Main Steam in a safe stable condition until it is subsequently decontaminated and dismantled to levels that permit license termination.

Summary: The systems are to be drained and de-energized and do not provide any safety functions for the facility in the defueled condition. There will be no effect on equipment malfunctions. All malfunctions associated with operating equipment are no longer applicable since the equipment will be deenergized and out-of-service. All alterations to the system configuration will result in the remainder of the system in compliance with the existing standard or code so as any structural failures will not be affected. Therefore, there will be no increase in the consequences of any malfunctions.

This system has been evaluated as 'Not Required' and does not: (1) perform any specified safety function, (2) have any operability requirements per the Technical Specifications or licensing commitments, and (3) prevent or mitigate the consequences of any design accidents or malfunctions in the current plant condition. The activities of placing a system in SAFSTOR do not result in an unreviewed safety question for the not required system. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0965 ZAP 510-03, " Plant Lay-up program" and associated OSP-98-014 for draining and de-energizing the Isolation Valve Seal Water

Description: This safety evaluation is for draining and de-energizing systems for safe storage. The activities of placing a system in safe storage include: draining to normal sumps and/or tanks, leaving valves open that normally would be closed, installing blocks on valves for open/closed positions; de-energizing equipment and instruments, cutting and capping lines, attaching hoses to piping for routing water, inserting blanks between flanges, removing equipment and determinating wires.

Summary: The systems are to be drained and deenergized and do not provide any safety functions for the f in the defueled condition. There will be no effect on equipment malfunctions. All malfunctions associated with operating equipment are no longer applicable since the equipment will be de-energized and out-of-service. All alterations to the system configuration will result in the remainder of the system in compliance with the existing standard or code so as any structural failures will not be affected. Therefore, there will be no increase in the consequences of any malfunctions.

This system has been evaluated as 'Not Required' and does not: (1) perform any specified safety function, (2) have any operability requirements per the Technical Specifications or licensing commitments, and (3) prevent or mitigate the consequences of any design accidents or malfunctions in the current plant condition. The activities of placing a system in SAFSTOR do not result in an unreviewed safety question for the not required system. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0968 Revision to station procedure ZAP 510-03, "Plant Lay-up program" and associated procedures for draining and/or de-energizing Feedwater Systems.

Description: This safety evaluation is for draining and de-energizing systems for safe storage. The activities of placing a system in safe storage include: draining to normal sumps and/or tanks, leaving valves open that normally would be closed, installing blocks on valves for open/closed positions; de-energizing equipment and instruments, cutting and capping lines, attaching hoses to piping for routing water, inserting blanks between flanges, removing equipment and determinating wires.

Summary: The Main FW and Auxiliary FW systems are to be drained and deenergized and do not provide any safety functions for the facility in the defueled condition. There will be no effect on equipment malfunctions. All malfunctions associated with operating equipment are no longer applicable since the equipment will be deenergized and out-of-service. All alterations to the FW system configuration will result in the remainder of the system in compliance with the existing standard or code so as any structural failures will not be affected. Therefore, there will be no increase in the consequences of any malfunctions.

This system has been evaluated as 'Not Required' and does not: (1) perform any specified safety function, (2) have any operability requirements per the Technical Specifications or licensing commitments, and (3) prevent or mitigate the consequences of any design accidents or malfunctions in the current plant condition. The activities of placing a system in SAFSTOR do not result in an unreviewed safety question for the not required system. The Safety Evaluation concluded that no unreviewed safety question existed.

Change Number and Title: 98-0970 Revision of the Defueled Safety Analysis Report to describe how Zion station has chosen to comply with the criticality accident requirements of 10 CFR 50.68 rather than those of 10 CFR 70.24.

Description: Evaluation of Defueled Safety Analysis Report revision prepared to meet the safety analysis report documentation requirement of 10 CFR 50.68.

Summary: Defueled Safety Analysis Report revision prepared to meet the safety analysis report documentation requirement of 10 CFR 50.68. The only equipment having an attribute affected by this change is the Spent Fuel Pool area radiation monitor(s). The change eliminates certain sensitivity, alarm and location requirements for the monitor(s). Elimination of these requirements does not affect the probability of that the monitors will malfunction. Under 10 CFR 70.24, radiation monitor alarms and personnel drills were used to mitigate the consequences of a criticality accident resulting from any cause, including a malfunction of equipment important to safety. The change to 10 CFR 50.68 establishes new requirements which ensure that a criticality accident is not credible even if malfunctions occur, such as introduction of pure water into the fuel storage area. Since the change ensures that a malfunction of equipment will not cause a criticality accident, the consequences of such a malfunction are not increased.

The change in compliance from 10 CFR 70.24 to 10 CFR 50.68 constitutes a change in the manner that protection is provided from a criticality accident in the stored fuel. The principle behind 10 CFR 70.24 is to require radiation detectors that will alert personnel to a criticality accident and to require measures to ensure that personnel respond properly when alerted. The principle behind 10 CFR 50.68 is to require measures which ensure a criticality accident will not occur. The accident of concern is still the criticality accident. The only change in a system or function is that the SFP area radiation monitors no longer need to function as criticality monitors. This change in function is related solely to criticality accidents and does not involve any other type of accident or malfunction. The proposed transition from 10 CFR 70.24 to 10 CFR 50.68 affects neither the individual margins of safety nor the overall margin of safety. The Safety Evaluation concluded that no unreviewed safety question existed.

Attachment B

List of Commitments Identified in ZRA99024

The following table identifies those actions committed to by ComEd in this document. Any other actions discussed in this submittal represent intended or planned actions by ComEd. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify Mr. T. Marini, Zion Station Regulatory Assurance Manager, of any questions regarding this document or any associated regulatory commitments.

Commitment	Tracking Number
None	