

GROUP: A

FOIA/PA NO.: 2014-0280

RECORDS BEING RELEASED IN THEIR ENTIRETY

10/1/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Issues for Resolution (IFR): One (1)

1) ISSUE FOR RESOLUTION (IFR)- LIMERICK 1 & 2 - ISOLATION VALVES COULD FAIL TO FULLY CLOSE

EN 48334 reported an issue where 12 MOVs per unit (24 valves total) would indicate closed if they are in a dead band zone when stroking closed at the time a loss of power to the valves occurs. In this situation the valves could still remain up to ~15% open while indicating closed. This IFR will be used to further evaluate this issue and determine if further agency action is required in response to this report. The following qualitative criteria from LIC 401 was satisfied for screening this issue in for further evaluation: (2.a) degradation of important safety equipment that could lead to a loss of safety function to shut down the reactor and maintain it in a safe condition, to remove residual heat, or to control the release of radioactive material.

IFR and screen-in document assigned to Dave Garmon.

OpE Forum Postings (COMMS): One (1)

1) (ISSUE FOR RESOLUTION) LIMERICK 1 & 2 - ISOLATION VALVES COULD FAIL TO FULLY CLOSE

Post OpE COMM on IFR item (see above). Post and OpE Comm communicating this issue to the following OpE Comm Groups: All Comms, Containment, Inspection Programs, ECCS, NRO, QA & Vendor, and Pump and Valve comm groups, assigned to Dave Garmon.

Follow-up/Other Tasks: Fifteen (15)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48350 - GE HITACHI NUCLEAR ENERGY - PART 21 INTERIM REPORT - ERROR IN MAIN STEAM LINE HIGH FLOW CALCULATIONAL METHODOLOGY

See Interim Part 21 report text. The licensee recently discovered that calculations of choked flow rate in the Main Steam Line (MSL) of GEH BWRs may not be conservative. Affected plants include the following: Nine Mile 1-2, Fermi 2, Columbia, Grand Gulf, River Bend, FitzPatrick, Pilgrim, Vermont Yankee, Clinton, Dresden 2-3, LaSalle 1-2, Limerick 1-2, Oyster Creek, Peach

Bottom 2-3, Quad Cities 1-2, Perry 1, Duane Arnold, Cooper, Susquehanna 1-2, Brunswick 1-2, Hope Creek, Hatch 1-2, Browns Ferry 1-3, and Monticello. Send to TRG Leads for Instrumentation and Controls (David Rahn), QA & Vendor Issues (Paul Prescott / Thomas Kendzia), NRO (Al Issa) and to the Regional OpE contacts. Assigned to Steve Pannier (Complete).

2) EN 48359 - FAIRBANKS MORSE - PART 21 - FAIRBANKS MORSE OPPOSED PISTON EDG FUEL OIL PUMP LEAK

See EN/Part 21 text. The vendor reported a defect related to a significant oil leak from the fuel oil pump shaft. This leakage will occur if the mechanical seal area within the pump is displaced by an impact to the pump shaft during shipment and handling. This is a vendor provided response that addresses what was already reported by Crystal River 3 in interim Part 21 number 2012-38-00. The vendor is not requesting the return of any fuel oil pumps. However, the following licensees received one or more of this part over the past 5 years: Millstone, Crystal River 3, Duane Arnold, Harris and Prairie Island. Send to TRG Leads for Electrical Power (Roy Mathew), EDG (Robert Wolfgang), QA & Vendor (Paul Prescott / Thomas Kendzia) and to the Regional OpE contacts. Assigned to Steve Pannier (Complete).

3) BRUNSWICK 1 - CONTROL ROD NOT WITHDRAWN PER PREPLANNED SEQUENCE

On 9/27 during startup, it was discovered that operators missed withdrawing a rod per preplanned sequence. Rod 30-47 was inadvertently signed off as being pulled from notch 12 to notch 48 (full out). This was discovered by the operators prior to moving to the next group of rods. Decision was made to position the rod to notch 48. Licensee removed the individuals involved from watchstanding duties, conducted a human performance review board (HURB) and resumed startup with new operators and a new reactivity manager. Forward to TRG Lead for Human Performance (Molly Keefe); assigned to Dave Garmon.

4) CRYSTAL RIVER 3 - INTERIM PART 21 REPORT - MECHANICAL SEAL FAILURE ON A NEW ENGINE-DRIVEN DIESEL FUEL PUMP

See Interim Part 21 Report text. The licensee reported a mechanical seal failure on a new Fairbanks Morse engine driven diesel fuel pump. On 9/21/2012 the vendor made a follow up Part 21 report (see EN 48359). Send to TRG Leads for Electrical Power (Roy Mathew), EDG (Robert Wolfgang), QA & Vendor (Paul Prescott / Thomas Kendzia) and to the Regional OpE contacts. Assigned to Steve Pannier (Complete).

5) EN 48361 - DRESDEN 2, 3- OFFSITE NOTIFICATION DUE TO FIRE IN THE MAINTENANCE BUILDING

(Additional information) Fire was located in the Protected Area; no EAL declared due to no SSCs impacted that would compromise the integrity of nuclear safety. Fire was believed to be electrically induced. Residents are following up. Forward to TRG Leads for Fire Protection (Metzger), EP (Schrader); assigned to Russ Haskell.

6) EN 48212 - DUANE ARNOLD - RWCU SYSTEM ISOLATION DIFFERENTIAL FLOW - HIGH FUNCTION INOPERABLE (RETRACTED)

Justification: An engineering analysis of the impact of the instrument as-found and as-left values on the overall instrument loop setting was performed. The analysis determined that the instrument in question was set at a value which would have isolated the RWCU Primary Containment Isolation Valves prior to reaching the Technical Specification (TS) allowable value and therefore the instrument loop remained capable at all times of performing its TS function. Forward retraction to TRG Lead for I&C (Rahn); assigned to Russ Haskell.

7) LER 3412012003R00 - FERMI 2: (LER) REACTOR SCRAM DUE TO DEGRADING CONDENSER VACUUM

See LER 3412012003R0 (ML12240A026) - (6/25/12) unit was operating at approximately 22% with Main Generator offline to make repairs to a oil pump on the Main Unit Transformer (MUT). Shortly following units synch to the grid and subsequent power ascension, the running (south) RFP began to indicate multiple vibration alarms in the Main Control room. Technicians responded to alarms; no abnormalities were identified at the pump. ~ 10 - 13 minutes later the (south) RFP tripped; Main Condenser vacuum started degrading and unit was MANUALLY scrammed. Licensee determined there was significant mechanical failure and physical damage to the (south) RFP turbine. Root cause being assessed. Fermi assumed power operations and continues to operate on a single (north) RFP at reduced power (68%). Forward to TRG Lead for Pump/Valve (Faman); assigned to Russ Haskell.

8) EN 48363 - FITZPATRICK - PART-21 REPORT - FAULTY MASTER TRIP UNITS, SLAVE UNITS, AND RESISTANCE TEMPERATURE DETECTORS

See Part 21 text. The licensee's evaluation of thirteen (13) reworked Master Trip Units, Resistance Temperature Detector Units, and Slave Units supplied by Rosemount Nuclear Instruments, Inc. determined that a non-compliant condition involving a basic component existed. Send to TRG Leads for Instrumentation and Controls (David Rahn), QA & Vendor Issues (Paul Prescott / Thomas Kendzia) and to the Regional OpE contacts. Assigned to Steve Pannier (Complete).

9) EN 48333 - GINNA - (RETRACTION) UNANALYZED CONDITION IDENTIFIED IN APPENDIX R FIRE SCENARIO

Forward to TRG Lead for Fire Protection (Brian Metzger) and ECCS (Sam Miranda); assigned to Dave Garmon.

10) HARRIS - "A" EDG DEGRADED DUE TO FAILED PRESSURE SWITCH

On 9/29, the licensee returned the "A" EDG to operable after a planned maintenance outage. During the PMT, the licensee identified that two pressure switches failed to position as expected during startup. One pressure switch enables the aux lube oil pump and the other enables the Loss of Both Generator Potential Circuits Trip. The licensee dispositioned this as a non-operability issue. Upon review, the residents determined the Loss of Both Generator Potential Circuits Trip is an emergency trip and challenged the licensee with why no operability determination was done. After further discussion, the licensee agreed and performed an operability evaluation determining that the "A" EDG is operable but degraded without this trip function. Forward to TRG Lead for EDG (Roy Mathew); assigned to Dave Garmon.

11) EN 48360 - HOPE CREEK - LOSS OF POWER SUPPLY FOR NUCLEAR EMERGENCY TELECOMMUNICATION SYSTEM

Forward to TRG Lead for EP (Eric Schrader); assigned to Dave Garmon.

12) LER 3052012005R00 - KEWAUNEE: (LER) BOTH SAFETY INJECTION TRAINS INOPERABLE DUE TO VENTING

See LER 3052012005R0 (ML12250A624). During routine monitoring of voids, licensee identified voiding in the Safety Injection system suction/bypass line common to both SI trains ('A' & 'B'). The piping was vented to reduce voiding to acceptable levels resulting in both SI trains being declared INOPERABLE (~14 minutes). The licensee believes voiding was caused by pressure drop across throttled butterfly valve RHR 1-01 (H/X Bypass FCV) during reactor cavity drain down, allowing dissolved gasses to come out of solution. Forward to TRG Leads for Pump/Valve (Faman), ECCS (Miranda), POCs for Voiding Issues (Gall, Lyon); assigned to Russ Haskell.

13) (ISSUE FOR RESOLUTION) LIMERICK 1 & 2 - ISOLATION VALVES COULD FAIL TO FULLY CLOSE

EN 48334 reported an issue where 12 MOVs per unit (24 total) would indicate closed if they are in a dead band zone when stroking closed at the time a loss of power to the valves occurs. In this situation the valves could still remain up to ~15% open while indicating closed. This IFR will be used to further evaluate this issue and determine if further agency action is required in response to this report.

COMM and IFR assigned for this issue. Forward to TRG Lead for ECCS (Sam Miranda) and Pump and Valve (Michael Faman); assigned to Dave Garmon.

14) LER 2822012004R00 - PRAIRIE ISLAND 1: EMERGENCY DIESEL GENERATORS (D1 & D2) DECLARED INOPERABLE DUE TO HIGH AMBIENT TEMPERATURES

LER 2822012004R0 (ML12258A147) - (EDG, EQ, I&C). (6/7/2011 event) Excessive outside temperatures (100.5 degrees F) caused licensee to declare both unit 1 EDGs (D1/D2) INOPERABLE (6 hrs 50 min). This temperature is the maximum analytical temperature for EDG operability due to the environmental qualifications (EQ) of three D1/D2 lube oil pressure switches. Licensee replaced lube oil switches following an analysis of the condition (July 2012). The final analysis performed on D1/D2 established that both EDGs are OPERABLE (non-conforming) up to a maximum temperature of 105 degree F (ambient). Laboratory component testing for the impacted lube oil pressure switches is ongoing. Supplement LER may be submitted. (Related to EN 46934). Forward to TRG Leads for EDGs (Wolfgang), EQ (Jacobson), I&C (Rahn); assigned to Russ Haskell.

15) EN 48357 - WATERFORD 3 - PART 21 - DEFECTIVE MASONEILAN TRANSDUCER MODEL 8005N

See EN/Part 21 text. The licensee identified that the subject transducer fails to calibrate at the high end of its span. No defective components are currently installed. Send to TRG Leads for Instrumentation and Controls (David Rahn), QA & Vendor Issues (Paul Prescott / Thomas Kendzia) and to the Regional OpE contacts. Assigned to Steve Pannier (complete).

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Joe Giantelli
Dave Garmon
Steve Pannier
Mark King – by phone
Russ Haskell
Larry Criscione - RES

10/2/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Two (2)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48283 - BEAVER VALLEY 1 - (RETRACTION) BOTH OFFSITE POWER SOURCES INOPERABLE (RESTORED)

Forward EN retraction to TRG Lead for Electrical (Roy Mathew); assigned to Dave Garmon.

2) PNO-IV-12-007 - GRAND GULF - SECURITY OFFICER LOCKOUT

See PNO text. Send to TRG Lead for Physical Security (Chris Lamb). Assigned to Steve Pannier.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Joe Glantelli
Dave Garmon -- by phone
Steve Pannier
Mark King
Russ Haskell
Richard Perkins (RES)- by phone

10/4/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Nine (9)

(Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.)

1) EN 48367 - CALVERT CLIFFS 1 - UNANALYZED CONDITION DUE TO HIGH ENERGY LINE BREAK BARRIER BEING PARTIALLY OPEN

Send to COM 111 POCs assigned to Mark King.

2) EN 48240 - FORT CALHOUN - SAFEGUARDS REPORT (RETRACTION)

See EN for text. Subsequent review by the licensee determined that there was not uncontrolled safeguards information. Send to TRG Lead for Physical Security (Christopher Lamb). Assigned to Steve Pannier.

3) LER 2852012016R00 - FORT CALHOUN - UNANALYZED CHARGING SYSTEM SOCKET WELDS TO THE REACTOR COOLANT SYSTEM (LER).

See LER text in ADAMS at ML12262A317. The licensee identified a deficiency as to whether some Class I pipe was potentially not qualified as Class 1. The affected socket welds will be replaced prior to plant heatup. Send to TRG Lead for Primary Materials/Vessels and Piping/Welding (Keith Hoffman). Assigned to Steve Pannier.

4) LER 4162012007R00 - GRAND GULF: STANDBY SERVICE WATER SYSTEM ADMINISTRATIVELY INOPERABLE FOR A PERIOD LONGER THAN ALLOWED BY TECHNICAL SPECIFICATIONS (LER).

See LER text in ADAMS at ML12261A125. The licensee performed a 10 CFR 50.59 safety evaluation for a change to the Grand Gulf Nuclear Station (GGNS) Final Safety Analysis Report (FSAR) to relax methodology for single passive failures of Standby Service Water (SSW) components. During a subsequent Component Design Basis Inspection (CDBI), the Nuclear Regulatory Commission (NRC) reviewed this FSAR change and determined that prior NRC approval of the change was required. SSW was administratively inoperable for a period longer than allowed by technical specifications due to relaxation of the passive failure methodology without prior NRC approval. Send to TRG Lead for Station Service Water / Ultimate Heat Sink (Gerard Purciarello) and to the STSB (Robert Elliott). Assigned to Steve Pannier.

5) EN 48370 - HATCH - RPS SUB-COMPONENT FAILURE CAUSED HALF SCRAM WITH GROUP 2 PCIV ACTUATION

Invalid actuation, - Info Only

6) KEWAUNEE – WATER INTRUSION IN CONDENSATE PUMP LEADS TO DOWNPOWER

A licensee operator conducting a walk-down of the condensate system identified a site glass to the 'A' condensate pump as being visibly cloudy; indication of water in the system. Upon further review, it was determined there was water intrusion in the upper/lower oil reservoirs of the pump. Licensee reduced power level to ~57% to inspect system and perform repairs which included a condensate pump motor replacement. Repairs to the 'A' condensate pump have been completed, pump returned to service. Licensee in progress of performing power ascension throughout the day today. The root cause of event is being assessed. Forward to TRG Lead for PUMP/VALVE (Faman); assigned to Russ Haskell.

7) EN 48372 - LIMERICK 2 - FIRE SAFE SHUTDOWN ANALYSIS FAILED TO IDENTIFY UNPROTECTED CABLE

Licensee has compensatory fire watch in place and is evaluating extent of condition for Unit 1 Forward to TRG Lead for Fire Protection (Brian Metzger); assigned to Dave Garmon.

8) EN 48371 - PEACH BOTTOM 2 - SAFEGUARDS REPORT - VULNERABILITY IN A SAFEGUARD SYSTEM

Forward to TRG Lead for Physical Security (Chris Lamb); assigned to Dave Garmon.

9) EN 48369 - SAINT LUCIE 2 - FAILURE OF STARTUP TRANSFORMER CAUSED UNDERVOLTAGE CONDITION ON ESSENTIAL BUS

Forward to TRG Lead for Electrical Power (Roy Mathew); assigned to Dave Garmon.

~~— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —~~

~~— **MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
— INFORMATION** —~~

~~— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
— PERMISSION FROM ORIGINATOR —~~

Attendees at Screening Meeting:

Joe Giantelli
Steve Pannier
Mark King
Russ Haskell
Rebecca Sigmon
Kenichi Watanabe, JNES

10/9/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Seventeen (17)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48382 - ENGINE SYSTEMS INC. - PART 21 REPORT - EMD / DETROIT DIESEL TEMPERATURE SWITCH POTENTIALLY SHIPPED WITHOUT SET SCREW (EN 48382)

See Part 21 text. The vendor reported a potential defect in EMD / Detroit Diesel temperature switches with four different part numbers. Potentially impacted licensees that were shipped defective parts that may be used in a safety-related application include Watts Bar and Clinton. LaSalle and Arkansas Nuclear One also received potentially defective parts, but the vendor noted that these model numbers may not be used in safety-related applications. Send to TRG Leads for EDG (Robert Wolfgang) Electrical Power (Roy Mathew), QA & Vendor Issues (Paul Prescott / Thomas Kendzie), and Regional OpE POCs. Assigned to Steve Pannier (complete).

2) BRUNSWICK 2: FEED WATER HEATER DRAIN VALVE FAILURE

Around midnight on 10/8, a feed/condensate transient occurred due to a 4B feedwater water heater (FWH) level transient. Operators initiated a manual runback of recirc pumps to 75% and entered AOP-23 (Feed and Condensate System Failures). The OCC was manned on 10/8 to facilitate troubleshooting and repairs. Power was reduced further to approximately 62% to further reduce FWH level transients and to support troubleshooting. The licensee determined the cause was a failed FWH 4B heater drain valve that will be repaired today with the level switch for 4B FW heater. Pass to the TRG Lead for Pump and Valve (Michael Faman). Assigned to Bob Bernardo.

3) EN 48387 - BEAVER VALLEY 2 - ONE OF SIXTY SIX REACTOR VESSEL PENETRATIONS DID NOT MEET ACCEPTANCE CRITERIA

Forward to TRG lead for Primary Materials/Vessels/Welding Issues (Keith Hoffman); assigned to Dave Garmon.

4) EN 48348 - CATAWBA 1 & 2 - TECHNICAL SPECIFICATION 3.0.3 ENTERED DUE TO SURVEILLANCE TESTING NOT BEING COMPLETED AS REQUIRED - RETRACTION

Surveillance testing was completed. The testing determined that both unit's respective train 'A' and 'B' pressurizer pressure low were operable and would have functioned as needed. Pass EN retraction to the TRG Lead for I&C (Dave Rahn); assigned to Bob Bernardo.

5) EN 48377 - CLINTON: INADVERTENT ACTIVATION OF ALL EMERGENCY SIRENS

Forward info to EP TRG (Eric Schrader); assigned to Steve Pannier.

6) EN 48338 - FERMI 2: EMERGENCY RESPONSE DATA SYSTEM PROCESS COMPUTER DATA SERVER FAILURE (UPDATE - SYSTEM RESTORED)

Forward update to TRG Lead for EP (Schrader); assigned to Steve Pannier.

7) EN 48386 - FITZPATRICK - RPS AND PCIV ACTUATION DUE TO LOSS OF OFFSITE POWER (WHILE IN MODE 5)

Forward to TRG Lead for Electrical (Roy Mathew) and EP (Eric Schrader); assigned to Dave Garmon.

8) EN 48373 - HARRIS: TECHNICAL SUPPORT CENTER VENTILATION SYSTEM REPAIRS

Pass to the TRG Leads for Emergency Preparedness (Eric Schrader) and HVAC (Nageswara Karipineni). Assigned to Bob Bernardo.

9) EN 48378 - MONTICELLO: PRIMARY AND BACKUP METEOROLOGICAL TOWERS OUT OF SERVICE (PRIMARY TOWER RESTORED) (EP)

Forward to TRG Lead for EP (Schrader); assigned to Russ Haskell (completed).

10) EN 48371 - PEACH BOTTOM 2 - (RETRACTION) SAFEGUARDS REPORT - VULNERABILITY IN A SAFEGUARD SYSTEM

Forward retraction to TRG Lead for Physical Security (Chris Lamb); assigned to Dave Garmon.

11) EN 48376 - PEACH BOTTOM 3 - BOTH TRAINS OF CONTROL ROOM EMERGENCY VENTILATION SYSTEM OUT OF SERVICE (RESTORED)

Forward to TRG lead for HVAC (Nageswara Karipineni); assigned to Dave Garmon.

12) EN 48379 - MITSUBISHI NUCLEAR ENERGY SYSTEMS - PART 21 REPORT- STEAM GENERATOR TUBE WEAR ADJACENT TO RETAINER BARS (SONGS 3) (EN 48379)

See Part 21 Report for complete text. Send to TRG Leads for Steam Generators (Ken Karwoski), QA & Vendor Issues (Paul Prescott / Thomas Kendzia), NRO (Phil O'Bryan / Al Issa), STSB (Gloria Kulesa / Emmett Murphy) and to the Region OpE Contacts. Assigned to Steve Pannier (complete).

13) EN 48380 - MITSUBISHI NUCLEAR ENERGY SYSTEMS - PART 21 REPORT - STEAM GENERATOR TUBE TO TUBE WEAR (SONGS 2) (EN 48380)

See Part 21 Report for complete text. Send to TRG Leads for Steam Generators (Ken Karwoski), QA & Vendor Issues (Paul Prescott / Thomas Kendzia), NRO (Phil O'Bryan / Al

Issa), STSB (Gloria Kulesa / Emmett Murphy) and to the Region OpE Contacts. Assigned to Steve Pannier (complete).

14) EN 48383 - SEQUOYAH: CONFIRMED POSITIVE FITNESS FOR DUTY TEST (RANDOM TEST FOR ALCOHOL OF NON-LICENSEED SUPV.)

Pass to FFD Points of Contact (John Munro, Mark Resner, Paul Harris, and Will Smith). Assigned to Bob Bernardo.

15) EN 48369 - SAINT LUCIE 2 - FAILURE OF STARTUP TRANSFORMER CAUSED UNDERVOLTAGE CONDITION ON ESSENTIAL BUS

Update from region: Over the weekend, the 2B SUT was returned to service. The licensee found that corrosion of the 6.9 kV bus ductwork inspection covers had made contact with some bus bars causing the fault on 10/3 (see picture) The licensee inspected the ductwork and found two areas where shorting (faulting) took place on the 6.9 kV side only. The bus bar conditions were evaluated, reinsulated, and tested. The bus bar conditions were accepted as is. An extent of condition will be performed. Pass to the TRG Lead for Electrical Power (Roy Mathew). Assigned to Bob Bernardo.

16) EN 48388 - ST. LUCIE 2: ESSENTIAL BUS DEENERGIZED WHILE DEFUELED

On Sunday 10/7/12, while racking in the 2B CCW Pump breaker, a differential current lock out relay actuated deenergizing the B 4kV vital bus and creating an ESF signal to the 2B EDG which was already running. The 2A EDG remained operable. Residents are following up with licensee. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew). Assigned to Bob Bernardo.

17) EN 48293 - SUSQUEHANNA 1 & 2 - (RETRACTION) BOTH UNITS ENTERED TECHNICAL SPECIFICATION 3.0.3 DUE TO INOPERABLE CONTROL STRUCTURE CHILLERS ('A' CHILLER RESTORED)

Forward EN retraction to HVAC TRG lead (Nageswara Karipineni); assigned to Dave Garmon.

— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —

— ***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY —

— INFORMATION*** —

— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING —

— PERMISSION FROM ORIGINATOR —

Attendees at Screening Meeting:

Steve Pannier
Bob Bernardo – by phone
Richard Perkins, RES – by phone
Al Issa, NRO
Dave Garmon
Mark King - by phone

10/11/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Seven (7)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48394 - CLINTON - SAFEGUARDS REPORT - DISCOVERY OF POTENTIALLY COMPROMISED SAFEGUARDS DOCUMENT

Send to TRG Lead for Physical Security (Christopher Lamb). Assigned to Steve Pannier.

2) EN 48391 - CRYSTAL RIVER: LOSS OF ASSESSMENT CAPABILITY AT THE EMERGENCY OPERATIONS FACILITY

RASCAL and facility cooling capability have been restored. Pass to the TRG Lead for Emergency Preparedness (Eric Schrader). Complete.

3) EN 48395 - DIABLO CANYON - UNANALYZED FIRE PROTECTION DEFICIENCIES

See EN text. Send to TRG Lead for Fire Protection (Brian Metzger). Assigned to Steve Pannier.

4) EN 48396 - HARRIS: POTENTIAL FITNESS FOR DUTY VIOLATION

A for-cause chemical test was administered to a non-licensed employee supervisor and the results are pending. The individual's access to the plant has been terminated. Pass to FFD Points of Contact (John Munro, Mark Reagier, Paul Harris, and Will Smith). Complete.

5) EN 48397 - KEWAUNEE - REDUCED RADIATION MONITORING CAPABILITY FOR AUXILIARY BUILDING AND CONTAINMENT VENT STACKS

See EN text. Send to TRG Leads for Emergency Preparedness (Eric Schrader), Instruments and Control (David Rahn) and Health Physics (Steven Garry). Assigned to Steve Pannier.

6) EN 48393 - PALO VERDE - DISCOVERY OF AFTER-THE-FACT EMERGENCY CONDITION - UNUSUAL EVENT

See EN Text. During post event reviews, the licensee determined that two small seismic events met the classification criteria for declaration of an Unusual Event for a seismic event as specified by the PVNGS Emergency Plan. Send to TRG Leads for EP (Eric Schrader). Assigned to Steve Pannier.

7) VOGTLE 1: SHEARED STEM ON 2 MAIN STEAM ISOLATION VALVES

During Unit 1 startup on Sunday night, 10/7/12, the operators noticed that the differential temperatures across the four loops were not balanced. Loops 2 and 3 showed zero differential temperature, while loops 1 and 4 showed a small but observable differential temperature. Senior plant management decided to return the reactor to Mode 3 by performing a controlled reactor shutdown and further investigate the delta T anomalies. The operators placed the plant in a stable condition in Mode 3, then continued to cooldown to Mode 4 for further troubleshooting.

Late in the evening on 10/9, troubleshooting indicated possible stem-to-disc separation or stem-to-actuator separation on both the SG 2 and 3 outboard Main Steam Isolation Valves (MSIVs). No major work was performed on these valves or any other MSIV during the outage. The valve vendor is going to the site. Root cause and incident response team was formed to look at extent-of-condition and to determine what caused the failures.

On 10/10, the licensee verified that the stem on the S/G #2 outboard MSIV is sheared (approximately 2 inches from where it connects to the disc). The mechanics are currently disassembling the outboard MSIV for S/G #3. Initial Ultrasonic Testing (UT) testing shows that its stem is also sheared at same location. The licensee is currently making plans to verify that the shafts on the remaining 6 MSIVs are intact. Westinghouse has directed the licensee's attention to Information Notice 1992-60, which is applicable to the MSIVs at Vogtle and discusses that this series of valves is susceptible to embrittlement.

An MD 8.3 evaluation was performed, at this time the conclusion is a reactive inspection is not warranted based on assessment of risk significance. A regional Inspector has been sent to the site to assist the residents. Pass to the TRG Lead for Pump and Valve (Michael Farnan). Complete.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRG INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Bob Bernardo
Joe Giantelli
Steve Pannier
Rebecca Sigmon
Al Issa (NRO)
Richard Perkins (RES)

10/15/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Sixteen (16)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) IRS 8250 TOKAI 2 (JAPAN) - FAILURE OF SEA WATER PUMP MOTOR FOR EMERGENCY DIESEL GENERATOR (FOLLOWING THE TOHOKU-PACIFIC OCEAN EARTHQUAKE)

Tokai 2 is a BWR that commenced operations in November 1978. This report summarizes events as they occurred at Tokai as a result of the March 11, 2011 earthquake that resulted in a reactor accident at Fukushima Daiichi. Tokai lost offsite power as a result of the earthquake, however electrical power was provided through emergency diesel generators. One of the EDGs was eventually affected by the tsunami because its seawater cooling pump was inundated through unprotected penetrations in its pit. Tokai was in the process of completing modifications to the pump pit structure when the earthquake occurred. Forward to TRG Lead for EDG (Roy Mathew); Flooding/Leaks (Ed Smith), Station Service Water and Ultimate Heat Sink (Gerald Purciarello) and Chris Cook POC for Flooding Walkdowns; assigned to Dave Garmon.

2) IRS 8249 CHASNUPP 2 (PAKISTAN) - REACTOR TRIP ON TURBINE TRIP DUE TO CONDENSER VACUUM LOW-LOW

Chasnupp 2 is a PWR that commenced operation in May 2011. In May of 2011, the auxiliary steam pressure control valve failed resulting in a loss of vacuum, turbine trip and reactor trip. The cause of the failure was attributed to separation between the stem and disc of the valve that resulted from threads on the stem becoming worn. Forward to TRG Lead for Pump and Valve (Michael Faman); assigned to Dave Garmon.

3) IRS 8248 LAGUNA VERDE 2 (MEXICO) - EXCITATION SYSTEM DIODE FAILURE DURING MAIN GENERATOR BREAKER CLOSURE

Laguna Verde 2 is a BWR that commenced operations in April 1995. In July 2011, the plant experienced a fault in main generator excitation that resulted in the plant having to perform a controlled shutdown. Two Alstom diodes were found to have failed because of over-current or over-voltage (not specified) conditions. Poor dielectric insulation in the two diodes may have contributed to their failure as well. The plant installed a more modern design of diode as a corrective action. Forward to TRG Lead for Electrical (Roy Mathew) and Vendor Issues (Paul Prescott); assigned to Dave Garmon.

4) IRS 8247 HEYSHAM-A1 (UNITED KINGDOM) - INCORRECT EMERGENCY MESSAGE SENT DURING EXERCISE

Heysham-A1 is a gas cooled reactor that commenced operations in April 1989. In November 2011, the plant inadvertently sent an actual emergency message vice the required exercise message resulting in multiple stakeholders taking actions as if a reactor accident were occurring (to include sheltering in place and taking K-I). The plant determined that the user interface for the notification system was confusing and could lead to wrong messages being selected. Forward to TRG Lead for EP (Eric Schrader) and Human Performance (Molly Keefe); assigned to Dave Garmon.

5) LER 2592012007R01 - BROWNS FERRY 1, 2, & 3 - CABLE ROUTING ERRORS FOUND IN THE APPENDIX R SEPARATION ANALYSIS

This LER is available in internal ADAMS at ML12254A381. During National Fire Protection Association 805 transition review, it was discovered that a cable routing error would result in failure of direct current (DC) control power to credited 4kV Shutdown Board 3EA during an Appendix R fire in Fire Area (FA) 23. This revision identifies that, during a subsequent review, it was discovered that an Appendix R cable was routed in Fire Zone 03-02. However, the Appendix R computerized separation analysis does not recognize the Appendix R cable as being routed in Fire Zone 03-02. The root cause was determined to be the lack of an effective program for technical human performance tools during the performance of the Appendix R separation analysis. Pass to the TRG Lead for Fire Protection (Brian Metzger) and Human Performance/Safety Culture (Molly Keefe). Assigned to Bob Bernardo.

6) LER 2602012003R00 - BROWNS FERRY 2 - 480V REACTOR MOTOR OPERATED VALVE BOARD 2E FAILED TO MANUALLY TRANSFER TO ALTERNATE POWER

On July 10, 2012, when the alternate feeder breaker for RMOV board 2E was racked in after performance of PM activities, the manual trip pushbutton remained in the depressed position. This was discovered on July 19, 2012, during additional PM activities. The causal analysis for this event is ongoing. Upon completion of the causal analysis, TVA will submit a supplement to this Licensee Event Report. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew); Assigned to Bob Bernardo. This LER is available in ADAMS at ML12263A430.

7) LER 3172012002R00 - CALVERT CLIFFS 1 - (LER) REACTOR COOLANT PRESSURE BOUNDARY LEAKAGE DUE TO TUBING HIGH CYCLE FATIGUE

LER reports high cycle fatigue failure of a differential pressure detector instrument line, near the pipe connection adapter, that resulted in pressure boundary leakage. The licensee shutdown to repair the leak and conducted extent-of-condition inspections on other similar instrumentation lines. The licensee attributed the cyclic fatigue to a vertical tubing support that was not connected. Forward to TRG lead for Primary Materials (Keith Hoffman); assigned to Dave Garmon.

8) EN 48405 - COOPER - PORTIONS OF ONSITE TELEPHONE SYSTEMS NOT RESPONDING NORMALLY (SYSTEM RESTORED)

See EN Text. The normal method of contacting state and local agencies during an emergency has been restored. Send to TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Steve Pannier.

9) EN 48400 - DIABLO CANYON 2 - UNIT 2 EXPERIENCED AN AUTOMATIC REACTOR TRIP ON A 500KV LINE DIFFERENTIAL RELAY ACTUATION

See EN text. The Diablo Canyon Power Plant Unit 2 500kV line differential relay actuated, resulting in a unit trip. It appears that the differential relay initiated due to a flashover to ground across the phase 'A' main bank transformer capacitive coupled voltage transformer. All plant equipment initially responded as designed. The turbine driven auxiliary feedwater pump was secured by plant operators manually closing the steam supply valve to the pump turbine. This action was performed in accordance with plant operating procedures after the operators had verified that the indicated steam generator levels were greater than the procedural requirement of 16%. However, because the steam generator low level bistables associated with the auxiliary feedwater actuation circuits had not yet cleared, the emergency safeguards actuation signal drove the steam supply valve back open, restarting the turbine driven auxiliary feedwater pump. Send to TRG Leads for Electrical Power Systems (Roy Mathew), Instrumentation and Control (David Rahn), Auxiliary Feedwater (Stanley Gardocki), ECCS (Samuel Miranda) and to the IOLB (Jack McHale). Assigned to Steve Pannier (Complete).

10) EN 48403 - DUANE ARNOLD - OFFSITE NOTIFICATION DUE TO LEAK FROM CONDENSATE STORAGE TANK CONTAINMENT PIT SUMP

See EN text. The source of the leak was a failed seal on an air line into the sump. The total amount leaked was estimated to be less than 100 gallons. Send to TRG Lead for Health Physics (Steven Garry and Ron LaVera) and to the Health Physics and Human Performance Branch (AHPB) (Richard Conatser). Assigned to Steve Pannier.

11) LER 3482012005R00 - FARLEY 1: UNIT SHUTDOWN REQUIRED BY TECHNICAL SPECIFICATION 3.8.1

This LER is available in ADAMS at ML12269A168. On 7/18/12, the 1B EDG was removed from service for 24 month preventative maintenance, with an allowed outage time of 10 days. The maintenance was completed and PMT commenced on 7/20. However, during PMT, the engine unexpectedly shutdown. The initial investigation included an examination of all cylinders which led to the discovery of a damaged piston and cylinder liner on the #12 cylinder. Subsequent repairs and testing could not be completed within the AOT, and the licensee shutdown as required by T/S 3.8.1. Subsequent investigation determined the immediate cause of the EDG 1 B shutdown was a high crankcase pressure trip; the underlying cause of the engine shutdown was the malfunction of the engine's intercooler thermostatic bypass valve due to the failure of one of three thermal actuating devices. Pass to the TRG Lead for Electrical Power Systems and EDG (Roy Mathew and Bob Wolfgang). Assigned to Bob Bernardo.

12) LER 3522012004R00 - LIMERICK 1 - (LER) COMMON-CAUSE INOPERABILITY OF INDEPENDENT CHANNELS DUE TO PIPE LEAK

This LER reports that a 3/4 inch instrument pipe failed at the half-coupling connection to the main steam line resulting in loss of the turbine stop valve closure and turbine control valve fast closure trip functions. Circumferential fatigue cracks were observed along the weld toe most likely due to reverse bending. The failure by fatigue indicates the line was subject to vibration. A modification will be installed to address vibration induced fatigue on the affected instrument piping. Info Only

13) EN 48402 - POINT BEACH 2 - REACTOR POWER EXCEEDED FSAR ANALYZED VALUE

See EN text. The Unit 2 Steam Generator B Atmospheric Steam Dump Valve (ADV) spuriously opened while in automatic control. This resulted in indicated reactor power exceeding the FSAR analyzed value of 1810.8 MWt. The power increased to approximately 102%. Prompt operator action was taken and reactor power was restored to within limits in approximately four minutes. Send to TRG Leads for Instrumentation and Controls (David Rahn) and Pump and Valve Performance (Michael Farnan). Assigned to Steve Pannier.

14) EN 48401 - PRAIRIE ISLAND - OFFSITE NOTIFICATION DUE TO ONSITE SIRENS ALARMING DURING A DRILL

See EN text. Send to TRG Leads for Emergency Preparedness (Eric Schrader) and Physical Security (Christopher Lamb). Assigned to Steve Pannier. (Complete)

15) LER 3352012003R01 - ST. LUCIE 1 - MANUAL TRIP DURING STEAM BYPASS CONTROL SYSTEM POST-MODIFICATION TESTING

This LER is available in ADAMS at ML12263A425. On March 31, 2012 at 0022 EDT, St. Lucie Unit 1 was in mode 1 at 10% reactor power and performing preoperational testing of the steam bypass control system (SBCS) when the reactor was manually scrammed after a steam bypass control valve opened unexpectedly. This supplement provides the root cause and corrective actions. The root cause for failure of the control valve was less than adequate analyses supporting a recently implemented design change and less than adequate post modification testing that failed to provide appropriate contingency actions to mitigate potentially unfavorable SBCS test responses. Corrective actions include isolating the malfunctioning SBCS valve until it can be redesigned and replaced. SBCS capability is provided by the remaining four SBCS valves. Pass to the TRG Leads for Pump and Valve (Mike Farnan), QA/Vendor Issues (Paul Prescott and Tom Kendzia), Human Performance (Molly Keefe) and Power Upgrades (Nicholas DiFrancesco). Assigned to Bob Bernardo.

16) VOGTLE 1- SHEARED STEM ON 2 MAIN STEAM ISOLATION VALVES

The licensee has completed UT testing of the other MSIVs. The UTs show that the remaining 6 MSIV stems are intact. Stem replacement for the SG 2 and 3 outboard MSIVs is complete, and metallurgy results from the sheared stems is being provided to Region II DRS. Apparent cause is that the licensee failed to follow industry Operating Experience related to embrittlement, specifically concerning the outboard MSIVs. Licensee does not plan to replace the other outboard MSIV stems at this time, since the valve fails in its safety position. Pass to the TRG Lead for Pump and Valve (Mike Farnan). Assigned to Bob Bernardo.

— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —

— ***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION*** —

— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR —

Attendees at Screening Meeting:

Robert Bernardo – by phone

Jay Patel (NRO)

Rebecca Sigmon

David Garmon

Steve Pannier

Richard Perkins (RES) - by phone

10/16/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Six (6)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) LER 3612012001R00 - ARKANSAS NUCLEAR ONE UNIT 2 - DEGRADED CONDENSER VACUUM DUE TO THE FAILURE OF CONDENSER VACUUM PUMP SOLENOID VALVES RESULTS IN A MAIN TURBINE TRIP AND SUBSEQUENT AUTOMATIC REACTOR TRIP (LER)

See LER text. Send to TRG Leads for Instrumentation and Controls (David Rahn) and for Environmental Qualification (Jeffrey Jacobson). Assigned to Steve Pannier.

2) LER 2592012008R00 - BROWNS FERRY 1, 2, & 3: STANDBY GAS TREATMENT SYSTEM TRAIN C INOPERABLE LONGER THAN ALLOWED BY TECHNICAL SPECIFICATIONS

This LER can be found in ADAMS at ML12279A043. One train of Standby Gas Treatment (SGT) was inoperable from 9/12/11 until 8/3/12 when it was identified that only the top retaining device, out of the two required retaining devices, used to secure the relative humidity heater breaker bucket in the cubicle, was installed in the MCC. The causal analysis for this event is ongoing. Upon completion of the causal analysis, TVA will submit a supplement to this LER. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew). Assigned to Bob Bernardo.

3) LER 2852012017R00 - FORT CALHOUN - CONTAINMENT VALVE ACTUATORS DESIGN TEMPERATURE RATINGS BELOW THOSE REQUIRED FOR DESIGN BASIS ACCIDENTS (LER)

See LER text. The licensee identified three air operated valves within containment which have nitrile based elastomers for their air filter regulator and actuator, and these components may not be able to withstand Containment Main Steam Line Break (MSLB) and Loss of Coolant Accident (LOCA) temperatures. Send to TRG Lead for Pump and Valve performance (Michael Farnan). Assigned to Steve Pannier.

4) LER 2852012018R00 - FORT CALHOUN - CONTAINMENT AIR COOLING UNITS OPERATED OUTSIDE OF TECHNICAL SPECIFICATIONS DURING CYCLE 26 (LER)

See LER text. Send to TRG Leads for HVAC (Nageswara Karipineni), Containment (Brian Lee) and Human Performance (Molly Keefe). Assigned to Steve Pannier.

5) EN 48407 - OCONEE; AREA RADIATION MONITOR USED FOR EMERGENCY ASSESSMENT FAILED

Pass to the TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Bob Bernardo.

6) LER 3612012002R01 - SAN ONOFRE 2 & 3 - EMERGENCY DIESEL GENERATOR VIBRATION TRIP NOT BYPASSED FOR NON-ACCIDENT CONDITION (SUPPLEMENT - NOW A VOLUNTARY LER)

See LER text. This supplemental report documents the previously unanalyzed condition did not degrade plant safety and changes the reporting criteria to voluntary. The licensee's independent expert developed analytical models based on manufacturer's data, direct measurements, circuit analysis, and shake table testing to further evaluate the response of the circuit. The results confirmed a Design Basis Event would not have caused a spurious high vibration trip of the EDGs. Send to TRG Leads for EDG (Robert Wolfgang) and Electrical Power Systems (Roy Mathew). Assigned to Steve Pannier.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Bob Bernardo
Steve Pannier
Mark King
Dave Garmon - by phone
Jay Patel (NRO)
Richard Perkins (RES) - by phone

10/18/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Seven (7)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) BRUNSWICK: IMPROPER INSTALLATION OF OVERSPEED START EMERGENCY BOOSTER CYLINDER

On Sunday (10/14) during monthly load testing on EDG #3, the EDG did not come up to speed as expected and was declared inoperable. The residents, with help from BR4 and NRR, determined that the licensee's common cause evaluation on the remaining operable EDGs was inadequate. Following engagement with the licensee, the other 3 EDGs were ran satisfactory per SR 3.8.1.2. The licensee has determined that the most likely cause of EDG 3 failure appears to be the improper installation of the overspeed start emergency booster cylinder. The air line was connected to the oil side of the cylinder and the oil line was connected to the air side of the cylinder. This reduces the effectiveness of the booster cylinder to provide the pressure surge (boost) to the oil to ensure the pneumatic control system operates when the auxiliary oil pump is not available (i.e., during a LOOP event). This booster cylinder was replaced back in 2009 and it is possible this has been installed incorrectly for at least that long. The licensee is still investigating. The other EDG's were walked down by the residents/licensee to confirm the proper installation of the booster cylinders.

Residents observed the PMT run of EDG3 following replacement of the booster cylinder and some associated oil check valves. EDG3 came up to speed and voltage within 9 seconds, and it appears to be a satisfactory run.

See the linked picture of a booster cylinder. It is the long green cylinder in the picture (at the top is the oil tubing and a brass check valve, at the bottom is the air tubing). The air line should be installed on the connection that is closest to the weep hole. Pass to the TRG Lead for EDGs (Bob Wolfgang). Assigned to Bob Bernardo.

2) EN 48410 - FITZPATRICK - SHUTDOWN COOLING ISOLATION CAPABILITY LOST

Forward to TRG Lead for ECCS (Sam Miranda) and Shutdown Risk POCs (Jeff Mitman and Marie Pohida); assigned to Dave Garmon.

3) EN 48416 - HARRIS: OFFSITE NOTIFICATION OF WASTE WATER PIPE LEAK CONTAINING TRITIUM

Pass to NRR Staff Following Tritium Issues (Steve Garry and Richard Conatser). Complete.

4) INTERIM PART 21 REPORT 2012-45-00 - SHAW AREVA MOX SERVICES - HVAC DUCT SPOOL MINIMUM WALL THICKNESS

See Interim Part 21 Report 2012-45-00. Send to TRG Leads for QA & Vendor (Paul Prescott / Thomas Kendzia), HVAC (Nageswara Karipineni), NRO (Al Issa), NMSS (Sabrina Atack) and to the Regional OpE Contacts. Assigned to Steve Pannier (Complete).

5) EN 48413 - SEABROOK 1 - UNUSUAL EVENT DECLARED DUE TO EARTHQUAKE FELT ON-SITE (EXITED)

Forward to TRG Lead for Structural (Farhad Farzam and Manas Chakravorty); Assigned to Dave Garmon.

6) VOGTLE 1: SHEARED STEM ON TWO MAIN STEAM ISOLATION VALVES

UPDATE 10/18/12: All Unit 1 MSIVs were opened yesterday (10/17) morning with no significant issues. Unit 1 is at 28% power on the steam dumps. All low-power testing of the new digital feedwater system has been completed -SAT. The licensee plans on rolling the main turbine and synching to the grid around 0900 this morning. Pass to the TRG Lead for Pump and Valve (Mike Faman). - Completed.

7) EN 48414 - WATTS BAR: ALL FOUR EMERGENCY DIESEL GENERATORS AUTO-START ON VALID UNDERVOLTAGE SIGNAL

A manual transfer of the shutdown board from the Normal power supply to the Alternate was in progress to support maintenance when a momentary (less than 2 seconds) loss of power caused load shed and Diesel Generator auto start to occur. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew). Assigned to Bob Bernardo.

**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Bob Bernardo
Steve Pannier
Mark King
Jay Patel (NRO) – by phone
Richard Perkins (RES) – by phone

10/22/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Eight (8)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48419 - BROWNS FERRY - CONFIRMED POSITIVE FITNESS FOR DUTY TEST

Forward to Fitness for Duty POCs (John Munro, Mark Resner, Paul Harris, and Will Smith). Complete.

2) EN 48421 - BROWNS FERRY 2 & 3 - FIRE PROTECTION REVIEW IDENTIFIES A POTENTIAL UNANALYZED CONDITION

Forward to TRG Lead for Fire Protection (Brian Metzger). Complete.

3) EN 48429 - COOPER - POTENTIAL CONDITION COULD BYPASS FLOODING BARRIERS AND AFFECT RESIDUAL HEAT REMOVAL EQUIPMENT

See EN text. During a walkdown evaluating potential for adverse consequences of site flooding, per 10CFR50.54(f) request, a condition was identified which had the potential to adversely impact the ability to address external flooding conditions. Forward to TRG Lead for Flooding / Missiles (Edward Smith), ECCS (Samuel Miranda), and IRIB (Tim Kobetz). Assigned to Steve Pannier.

4) EN 48427 - DIABLO CANYON - UNUSUAL EVENT DECLARED DUE TO SEISMIC EVENT

See EN text. The licensee declared a Notification of Unusual Event based on an earthquake that was felt onsite. The 5.3 magnitude earthquake was centered 90 miles north of the plant. The licensee terminated from the Unusual Event based on review of completed plant walkdowns. No damage was identified. Both Units are stable and in normal plant operations. Forward to TRG Leads for Emergency Preparedness (Eric Schrader) and Structural (Farhad Farzam, NRR / Manas Chakravorty, NRO). Assigned to Steve Pannier.

5) EN 47892 - FORT CALHOUN - POTENTIAL UNANALYZED CONDITION WITH CONTAINMENT PRESSURE INSTRUMENTS (RETRACTED)

See EN Text. The licensee's evaluation of actual data concluded that the safety analysis limit was not exceeded and therefore not reportable under 10 CFR50.72(b)(3)(ii)(B). Forward to TRG Lead for I&C (David Rahn). Assigned to Steve Pannier.

6) EN 48428 - SAN ONOFRE 2 - OFFSITE NOTIFICATION DUE TO HYDROGEN LEAKAGE

Info Only. See EN text.

7) LER 3822012005R01 (ML12276A111) - WATERFORD 3 - VALVE DEGRADATION CAUSES INOPERABILITY OF SAFETY RELATED SYSTEM (LER SUPPLEMENT AND PART 21 REPORT)

See LER Supplement / Part 21 report text. The failure of Masoneilan I/P transducers is being conservatively reported pursuant to 10 CFR 21 requirements. While the symptoms experienced and the on-site analysis performed suggests a possible manufacturing deficiency, the vendor did not confirm that a manufacturing deficiency did exist. Most of the defective Masoneilan transducers were procured by the licensee from Callaway. Forward to TRG Leads for QA & Vendor (Paul Prescott / Thomas Kendzia), Pump and Valve Performance (Michael Faman), Human Performance (Molly Keefe), Resident Inspectors at Callaway, and Regional OpE Contacts. Assigned to Steve Pannier (Complete).

8) LER 3972012003R00 (ML12277A386) - COLUMBIA GENERATING STATION - SECONDARY CONTAINMENT PRESSURE EXCEEDED DURING PLANT MAINTENANCE

See LER text. Secondary containment pressure exceeded technical specification allowable limits for a period of approximately four and a half minutes because of an inadvertent trip of reactor building fans. The fan trips occurred during ongoing maintenance on the Standby Gas Treatment (SGT) system. The cause of the fans tripping was that work control does not have guidance on swapping to redundant lineups when taking these systems out of service. Forward to TRG Leads for HVAC (Nageswara Karipineri), Human Performance (Molly Keefe) and Containment (Brian Lee). Assigned to Steve Pannier.

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY

***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY

INFORMATION***

DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR

Attendees at Screening Meeting:

Russ Haskell
Bob Bernardo (phone)
Steve Pannier
Doug Copeland - NRO
Richard Perkins - RES

Russell S. Haskell II
United States Nuclear Regulatory Commission (NRC)
Reactor Systems Engineer (NRR/DIRS/OEB)
Russell.Haskell@Nrc.Gov | 301.415.1129 | O-7h23

10/23/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR~~

OpE Forum Postings (COMMS): One (1)

1) SALEM - GE 4KV TYPE AM MAGNE-BLAST BREAKER ISSUE

Post an Operating Experience Forum Posting (OpE Comm) on information provided by Salem Resident Inspector (Philip McKenna) for the 21 Auxiliary Feed Water (AFW) pump breaker found mechanically bound. On March 25, 2012 Salem's 21 Auxiliary Feed Water (AFW) pump breaker was found to be mechanically bound in a partially open status. This was discovered after the stop light failed to illuminate on the bezel indication when stopping the 21 AFW pump. The 21 AFW pump was maintaining steam generator water level after a Unit 2 reactor trip on March 23rd. After de-energizing the respective vital bus and manually racking out the breaker, the arc chute cover was removed and the support pins on the center phase booster cylinder (or "puffer") were found detached from the assembly. This caused the booster cylinder and piston to shift out of position, hit the breaker frame and jam the breaker in mid-position. This OpE Comm is assigned to Joe Giantelli and will be posted to the following OpE Comm groups: All Comms, Auxiliary Feedwater, Electrical Power Systems, Inspection Program, Materials/Aging, New Reactors, Quality Assurance and Vendor Issues.

Follow-up/Other Tasks: Four (4)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48429 - COOPER - POTENTIAL CONDITION COULD BYPASS FLOODING BARRIERS AND AFFECT RESIDUAL HEAT REMOVAL EQUIPMENT (UPDATE)

See EN text. The licensee had identified another condition which has the potential to adversely impact the ability to address external flooding conditions. Send to TRG Lead for Flooding / Missiles (Edward Smith), ECCS (Samuel Miranda) and IRIB (Tim Kobetz). Assigned to Steve Pannier.

2) EN 48430 - COOPER - PARTIAL LOSS OF EMERGENCY ASSESSMENT CAPABILITY

See EN text. A power supply failure resulted in the loss of ability to remotely measure and quantify radiation levels in multiple areas in the reactor building, turbine building and control room. Send to TRG Leads for Emergency Preparedness (Eric Schrader) and Instrumentation and Controls (David Rahn). Assigned to Steve Pannier.

3) EN 48431 - KEWAUNEE - OFFSITE NOTIFICATION DUE TO PLANNED DECOMMISSIONING

(10/22/12; 0745 CDT) Dominion announced its plan to permanently shutdown and decommission the Kewaunee Power Station. A local press release was made at 1100 [CDT] on 10/22/2012. At 1139 [CDT], security reported that members of the local media were gathering on company property at the plants training facility which is located outside the Owner Controlled Area. At this time security reports no security issues and no other press releases are planned at this time. This event is being conservatively reported under 10 CFR 50.72(b)(2)(xi) for offsite notifications based on the press release and the notification to Midwest Independent System Operator (MISO) of the planned shutdown of the Kewaunee Power Station. The licensee notified the NRC Resident Inspector. Note: Lots of media interest in this story since it is the first nuclear unit to announce a shutdown since 1998, see NRC daily news items. - Info Only.

4) EN 48433 - NINE MILE POINT 1 - NOTIFICATION OF UNUSUAL EVENT DUE TO A FIRE GREATER THAN 15 MINUTES

Fire effect was limited to a heater/lighting panel in the screen house. NOUE was terminated after about 31minutes. There was no effect on Unit 1 (or Unit 2) operation. Forward to TRG Leads for Fire Protection (Brian Metzger) and EP (Eric Schrader); assigned to Dave Garmon.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Russ Haskell
Bob Bernardo
Dave Garmon (phone)
Joe Giantelli
Steve Pannier
Mark King
Doug Copeland - NRO
Richard Perkins - RES (phone)

10/25/2012

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR

Follow-up/Other Tasks: Twelve (12)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) IRS 8251 - QINSHAN 2-1 (CHINA) - INADVERTENT START UP OF THE FIRE PROTECTION SYSTEM OF A MAIN TRANSFORMER

QINSHAN 2-1 is a PWR that commenced operations in April 2002. In January and February 2012, a single point failure of fire protection equipment resulted in unnecessary actuation of a fire spray system. The plant operator modified the fire protection logic to include additional detectors and a more robust actuation logic.

Forward to TRG Leads for Fire Protection (Brian Metzger) and NRC (Doug Copeland); assigned to Dave Garmon

2) IRS 8029 OLKILUOTO-1 (FINLAND) - COMMON-CAUSE FAILURE IN MAIN STEAM LINE OUTER ISOLATION VALVE ACTUATOR

Olkiluoto 1 is a BWR that commenced operation in October 1979. In May 2009, two failures of reduction gears within outboard main steam isolation valves (MSIVs) were noted. The failures in these motor operated valves (MOVs) were attributed to cyclic fatigue. These gear sets connect the MOV actuator to the motor and were generally considered to be part of the motor for maintenance purposes. This issue could not be resolved by replacing the affect valves' actuator.

Forward to TRG Lead for NRC (Doug Copeland) and Pump and Valve (Michael Farnan); assigned to Dave Garmon.

3) IRS 8252 TOKAI 2 (JAPAN) - RELEASE OF A VERY SMALL QUANTITY OF RADIOACTIVE MATERIALS OUTSIDE THE RADIATION CONTROLLED AREA DUE TO FLOODING AT 125 V BATTERY ROOM (FOLLOWING THE TOHOKU-PACIFIC OCEAN EARTHQUAKE)

Tokai 2 is a BWR that commenced operations in November 1978. Following the March 11, 2011 earthquake, water flowed from a sump that services a laboratory in a radiologically controlled area to a battery room. In order to protect vital equipment in the battery room the water in the room was pumped outside. At the time of pumping the water was evaluated for contamination; however, none was found. Once offsite power was restored and more reliable means of survey were available the water was determined to be contaminated to a level of 1/3000 of the applicable concentration limit. Forward to TRG lead for Health Physics (Steven Garry and Ron LaVera) and NRC JLD; assigned to Dave Garmon.

4) IRS 8253 ONAGAWA 1 (JAPAN) - COLLAPSE OF HEAVY-OIL STORAGE TANK FOR AUXILIARY BOILER (FOLLOWING THE TOHOKU-PACIFIC OCEAN EARTHQUAKE)

Onagawa 1 is a BWR that commenced operation in June 1984. Following the March 2011 earthquake, the plant operator discovered that an outdoor heavy oil storage tank for an auxiliary boiler collapsed and heavy oil leaked out on the intake side (ocean side) of Unit 1 because of the tsunami. It is estimated that about 159,000 gallons of oil were spilled. Send to NRC JLD, assigned to Dave Garmon

5) IRS 8254 ONAGAWA 2 (JAPAN) - LOSS OF FUNCTION IN REACTOR COMPONENT COOLING WATER PUMP (FOLLOWING THE TOHOKU-PACIFIC OCEAN EARTHQUAKE)

Onagawa 2 is BWR that commenced operations in July 1995. Following the earthquake of March 11, 2011 the B emergency diesel generator and the high pressure core spray diesel generator ceased to function; leaving the A emergency diesel generator as the sole source of AC power. The B and D reactor component cooling water pumps and the high pressure core spray component cooling water pumps were inundated with water from the tsunami that followed the earthquake. Water entered the pump pit through a water level gauge penetration. The plant operator has relocated the water level gauge and sealed the old penetration. Sent to TRG Lead for Flooding and Missiles (Ed Smith) and NRC JLD; assigned to Dave Garmon.

6) IRS 8255 OLKILUOTO 2 (FINLAND) - MATERIALS AGEING IN BWR PRIMARY CIRCUIT SAFETY RELIEF VALVES

Olkiluoto is a BWR that commenced operations in July 1982. During an outage in from May - June 2011, the plant operator discovered multiple flaws on the internals to several pressure relief valves. Cracks were noted on the valve pistons and on stem guide bushings. The valves were subject to an ISI program; however, the plant operator and the regulator determined this program was ineffective. The plant operator developed a plan to replaced the valves during a mid-cycle shutdown. Forward to TRG Leads for Primary Materials (Keith Hoffman) and Pump and Valve (Mike Farnan) ; assigned to Dave Garmon

7) LER 3312012004R00 - DUANE ARNOLD: (LER) HIGH PRESSURE COOLANT INJECTION DECLARED INOPERABLE

LER 3312012004R0 (ML122630454). Maintenance related activities resulted in the isolation of the HPCI system when the HPCI Steam Supply Valve and Outboard Torus Suction Valve tripped. The trip was due to a broken wire to the HPCI Steam Leak Detection system. The licensee concluded that work performed earlier in the day on a Control Room recorder resulted in a break of a system thermocouple extension wire. The recorders terminal cover was left unsupported, placing excessive stress on the wire bundle. The licensee positioned placards adjacent to recorder cover plates warning technicians of the potential that thermal couple wires may be fragile when working on circuitry. Forward to TRG Leads for I&C (Rahn), Human Performance (Keefe); assigned to Russ Haskell.

8) EN 48440 - HARRIS: TECHNICAL SUPPORT CENTER VENTILATION SUPPORT SYSTEM NON-FUNCTIONAL

The licensee discovered that the TSC pressure controller was not working. This pressure controller makes the TSC nonfunctional due to the ventilation system not being capable of maintaining a positive pressure. Procedural guidance exists for the Radiation Protection staff to perform continuous air monitoring of the TSC atmosphere to determine habitability conditions, and the alternate TSC is available if needed. Pass to the TRG Leads for Emergency Preparedness (Eric Schrader) and HVAC (Nageswara Karipineni). Assigned to Bob Bernardo.

9) PNO-III-12-013 - PNO-III-12-013: KEWAUNEE - PLANNED SHUTDOWN AND DECOMMISSIONING OF KEWAUNEE POWER STATION

PNO-III-12-013 (ML12297A396). Info Only.

10) EN 48436 - NORTH ANNA 2: AUTOMATIC REACTOR TRIP ON LOW STEAM GENERATOR WATER LEVEL AND DISCOVERY OF AFTER-THE-FACT UNUSUAL EVENT CONDITION

Unit 2 tripped automatically at 0147 on 10/24/12 due to 'C' S/G lo-lo level. No complications were observed. Grid was stable at time of trip. The Licensee determined that a full closed signal was being sent from a speed amplifier error card to all four governor valves leading to the 100% loss of load. Testing determined that the errant signal was due to the failure of an electrolytic capacitor on the card. A replacement card was obtained and tested sat. Licensee is planning an extensive capacitor replacement project during the next outage. Unit start up is in progress. On 10/24 at 1346, the licensee updated their report to retract the portion related to the after-the-fact entry into EAL SU6. Pass to the TRG Leads for Emergency Preparedness (Eric Schrader) and I&C (David Rahn). Assigned to Bob Bernardo.

11) LER 4402012002R00 - PERRY 1: (LER) INOPERABLE HIGH PRESSURE CORE SPRAY SYSTEM RESULTS IN LOSS OF SAFETY FUNCTION

LER 4402012002R0 (ML12228A288). A fault associated with the NORMAL Battery Charger High Voltage Shutdown (HVSD) board resulted in reduced Division 3 DC bus voltage (Forward to TRG Leads for Electrical (Mathew), I&C (Rahn), QA/Vendor (Prescott, Kendzia), OpE POCs; assigned to Russ Haskell.

12) EN 48435 - V.C. SUMMER: DEGRADED CONDITION DUE TO REACTOR HEAD VESSEL PENETRATION INDICATIONS

The indications are not through wall as indicated by volumetric and bare metal visual inspections. 2 head penetrations (#19 and #52) are affected, inspections are about 50% complete (as of morning on 10/24). Two Region II DRS inspectors are on site this week for refueling outage ISI and TI-188 independent walkdowns and will be reviewing the reactor vessel head penetration cracks. Pass to the TRG Lead for Primary Materials (Keith Hoffman) and NRO POCs (David Harmon / David Terao). Assigned to Bob Bernardo.

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY

MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION

DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR

Attendees at Screening Meeting:

Russ Haskell

Bob Bernardo

Steve Pannier

Mark King

Doug Copeland – NRO (phone)

Richard Perkins – RES (phone)

10/29/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

NRC Headquarters and Region-1 have been closed (for non-emergency personnel) in anticipation of the impacts from Hurricane Sandy.

Severe Weather Impacts: Hurricane Sandy has strengthened and is expected to bring life threatening storm surge, coastal hurricane winds and heavy Appalachian snows and potential for flooding. Current maximum winds are 85 mph. Hurricane force winds extend outward up to 175 miles, and Tropical storm force winds extend outwards up to 485 miles. Sandy is expected to make landfall in the mid-Atlantic states sometime this evening (10/29). Sandy is expected to transition into a frontal or wintertime low pressure system prior to landfall. However, this transition will not be accompanied by a weakening of the system, and a little strengthening is possible. The storm should then begin to weaken once it is over land. Due to the potential impacts to Region 1 facilities, the NRC entered **Monitoring Mode** at 1020 hrs. EDT Monday, 10/29/2012, with Region 1 in the lead. There will be a Commissioners Assistants Briefing given by NRC Region 1 at 1430 EDT, 10/29/2012 today concerning Hurricane Sandy. Contact the HOO should you need to be on this call and desire to be placed on the bridge call.

Follow-up/Other Tasks: Six (6)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48446 - CALVERT CLIFFS: CONFIRMED POSITIVE FITNESS FOR DUTY

Pass to FFD POCs (John Munro, Paul Harris, Mark Resner, Will Smith, Assigned to Bob Bernardo. Complete.

2) EN 48269 - CLINTON -- TRANSFER OF EMERGENCY RESERVE AUXILIARY TRANSFORMER (ERAT) ISOLATING FUEL POOL COOLING AND CLEANUP SYSTEM, AND FUEL BUILDING VENTILATION SYSTEM (RESTORED)

See retraction info / EN text. Upper Containment Pool level dropped below the normal pool level of 827 feet-3 inches when the Fuel Pool Cooling and Cleanup system pump 'A' tripped, and was initially reported as dropping below the minimum level (825 feet-6 inches) required by Technical Specification (TS) 3.6.2.4. However, subsequent reports from the field confirmed that the lowest level reached was 827 feet 0 inches, which is greater than the minimum required TS level. Therefore, no loss of safety function occurred for the Upper Containment Pool level as a result of this event, and the event is not reportable under 50.72 (b)(3)(v)(B). The NRC Resident [Inspector] has been notified. Forward to TRG Leads for ELECTRICAL (Mathew), HVAC (Karipineni), Containment (Bettie); assigned to Mark King - completed.

3) EN 48353 - FITZPATRICK - PART-21 REPORT - FAULTY MASTER TRIP UNITS, SLAVE UNITS, AND RESISTANCE TEMPERATURE DETECTORS (RETRACTION)

See Part 21 / EN Retraction text. A study completed by Rosemount Instruments concluded that there is sufficient design margin to ensure that certain resistors installed without being secured by epoxy per licensee's specification will remain rigid during qualified seismic conditions. Send to TRG Leads for Instrumentation and Controls (David Rahn), QA & Vendor Issues (Paul Prescott / Thomas Kendzia) and to the Regional OpE contacts. Assigned to Steve Pannier (Complete).

4) EN 48449 - PERRY UNIT 1 - EQUIPMENT FAILURE AFFECTING SPDS AND ERDS - (CONNECTION WAS RESTORED)

Send to EP TRG (Eric Schrader) assigned to Mark King. - Completed.

5) EN 48448 - SOUTH TEXAS - LOSS OF OFFSITE COMMUNICATIONS (RESTORED)

See EN text. The Emergency Notification System has been returned to service. The cause of the loss of communications was a cut fiber optic line. Send to TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Steve Pannier.

6) EN 48435 - V.C.SUMMER: DEGRADED CONDITION DUE TO REACTOR HEAD VESSEL PENETRATION INDICATIONS - UPDATED

EN was updated to report the RPV head inspections are complete and a total of 4 indications were found. Pass to the TRG Lead for Primary Materials (Keith Hoffman) and NRO POCs (David Harmon / David Terao). Assigned to Bob Bernardo. Complete.

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY

***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***

DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR

Attendees at Screening Meeting:

Mark King (by phone); Bob Bernardo (by phone); Steve Pannier (by phone) and Phil O'Bryan, NRO (by phone)

10/31/2012 (Note: No Clearinghouse Meeting today because of Hurricane Sandy. NRC HQ offices closed)

NO CLEARINGHOUSE MEETING TODAY... the recent event notices (ENs) are pasted below. They will be screened at Thursdays normally scheduled IOEB Clearinghouse Meeting.

FYI – most of these events are related to issues with Hurricane Sandy/east coast storm related impacts. NOTE: Oyster Creek declare an Unusual Event that was upgraded to an ALERT declaration... that has since been terminated.

Several NRC News releases were issued relate to Hurricane /storm impacts. FYI

Date	Document Number	Description
10/30/2012	<u>I-12-044</u>	NRC Starting to Return to Normal Inspection Coverage Following Sandy; Alert Remains in Effect at Oyster Creek Nuclear Power Plant
10/30/2012	<u>I-12-043</u>	NRC Maintains Heightened Watch Over Nuclear Plants Impacted by Sandy; Three Reactors Experienced Shutdowns During Storm; Oyster Creek Plant Remains In Alert
10/29/2012	<u>I-12-042</u>	NRC Continues to Monitor Hurricane Sandy; Alert Declared at Oyster Creek Plant; No Plants Shut Down Due to the Storm
10/29/2012	<u>I-12-041</u>	NRC Continues to Monitor Hurricane Sandy; No Plants Shut Down as a Result of the Storm
10/29/2012	<u>I-12-040</u>	NRC Prepared for Approach of Hurricane Sandy, Stations Inspectors at Nuclear Plants Expected to be Most Impacted

And there were numerous news media reports regarding the impact of the hurricane/storm:
Three Nuclear Units Shut Down Due To Hurricane, Fourth Declares Alert

Here are the recent Event Notices (ENs per 10 CFR

50.72)

Power Reactor	Event Number: 48452
Facility: OYSTER CREEK	Notification Date: 10/29/2012
Region: 1 State: NJ	Notification Time: 19:18 [ET]
Unit: [1] [] []	Event Date: 10/29/2012
RX Type: [1] GE-2	Event Time: 18:55 [EDT]
NRC Notified By: STEVE SERPE	Last Update Date: 10/31/2012
HQ OPS Officer: RYAN ALEXANDER	
Emergency Class: ALERT	Person (Organization):
10 CFR Section:	JOHN CARUSO (R1DO)
50.72(a) (1) (i) - EMERGENCY DECLARED	WILLIAM DEAN (R1 R)

50.72(b)(3)(iv)(A) - VALID SPECIF SYS ACTUATION	ERIC LEEDS (NRR)
50.72(b)(3)(v)(B) - POT RHR INOP	MICHELE EVANS (NRR)
	JANE MARSHALL (IRD)
	VICTOR MCCREE (R2 R)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	N	0	Refueling	0	Refueling

Event Text

NOTICE OF UNUSUAL EVENT DECLARED DUE TO HIGH INTAKE STRUCTURE WATER LEVEL

At 1855 EDT on 10/29/2012, the licensee declared a Notice of Unusual Event (NOUE) per criteria HU4 for high water level in the station intake structure of greater than 4.5 feet. At the time of the notification, water level in the intake structure was approximate 4.8 feet and slowly rising. The cause of the increased water level was due to storm surge associated with Hurricane Sandy. No other station impacts were reported at the time. The licensee continues to monitor the intake levels and ocean tides.

The licensee has notified the NRC Resident Inspector and the State of New Jersey.

*** ALERT UPDATE ON 10/29/2012 AT 2141 EDT FROM STEVE SERPE TO RYAN ALEXANDER ***

At 2044 EDT on 10/29/2012, the licensee escalated its emergency declaration to an Alert per criteria HA4 for high water level in the station intake structure of greater than 6.0 feet. At the time of the notification, water level in the intake structure was approximately 6.6 feet. The site also experienced a loss of offsite power event concurrent with the additional water level increase. Both emergency diesel generators started and are supplying power to the emergency electrical busses. Shutdown cooling and spent fuel pool cooling have been restored. Reactor pressure vessel level is steady at 584.7 inches. Intake levels continues to rise slowly and the licensee is monitoring.

The licensee has notified the NRC Resident Inspector and the State of New Jersey.

Notified DHS SWO, FEMA Ops Center, USDA Ops Center, HHS Ops Center, DOE Ops Center, DHS NICC Watch Officer, EPA EOC, and NuclearSSA via e-mail.

*** UPDATE on 10/30/12 at 0414 EDT FROM GILBERT DEVRIES TO RYAN ALEXANDER *
**

The licensee updated this report with an 8-hour non-emergency notification of emergency diesel generator auto-actuation due to the actual loss of off-site power event [which occurred at 2018 EDT on 10/29/2012]. This event caused a valid RPS actuation with automatic containment isolations that resulted in a temporary loss of shut-down cooling to the reactor. Shutdown cooling was subsequently restored with power provided by the emergency diesel generators.

The licensee has notified the NRC Resident Inspector. Notified R1DO (Caruso).

*** UPDATE AT 0357 EDT ON 10/31/12 FROM GILBERT A. DeVRIES TO S. SANDIN ***

Termination of Alert.

The Oyster Creek Station has terminated the Alert that was declared at 2044 [EDT] on 10/29/12 due to Intake Structure high water level greater than 6.0 ft. MSL (EAL HA4).

Intake water level has returned to normal and is now below the Unusual Event EAL threshold (4.5 ft. MSL) and continues to lower."

The licensee informed state and local agencies and the NRC Resident Inspector. Notified Region I IRC (Clifford), NRR (Evans), and IRD (Marshall).

Notified DHS SWO, FEMA Ops Center, USDA Ops Center, HHS Ops Center, DOE Ops Center, DHS NICC Watch Officer, EPA EOC, and NuclearSSA via e-mail.

Power Reactor	Event Number: 48450
Facility: OYSTER CREEK Region: 1 State: NJ Unit: [1] [] [] RX Type: [1] GE-2 NRC Notified By: JOHN CLARK HQ OPS Officer: DAN LIVERMORE	Notification Date: 10/29/2012 Notification Time: 16:15 (ET) Event Date: 10/29/2012 Event Time: 15:00 (EDT) Last Update Date: 10/30/2012
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(xiii) - LOSS COMM/ASMT/RESPONSE	Person (Organization): JOHN CARUSO (R1DO) JANE MARSHALL (IRD)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	N	0	Refueling	0	Refueling

Event Text

LOSS OF 21 EMERGENCY NOTIFICATION SIRENS

On October 29, 2012, at approximately 1500 EDT, ANS, the licensee's provider of siren maintenance, reported a loss of 12 out of 43 sirens in the Oyster Creek Emergency Planning Zone, which exceeded the licensee's reporting threshold of 25 percent or more sirens out of service.

At 1600 EDT, ANS, updated that the number of sirens out of service was 21 out of 43 sirens. ANS and the licensee continues to work to rectify the issue.

The NRC Resident Inspector will be notified.

*** UPDATE ON 10/30/12 AT 0428 EDT FROM JOHN CLARK TO RYAN ALEXANDER ***

As of 0320 EDT on 10/30/12, it was determined that 36 of the 43 Emergency Planning Zone sirens were out of service, and the licensee continues work to rectify the issue.

The NRC Resident Inspector will be notified. Notified R1DO (Caruso) and IRD (Marshall).

Power Reactor	Event Number: 48454
Facility: INDIAN POINT Region: 1 State: NY Unit: [] [3] [] RX Type: [2] W-4-LP [3] W-4-LP NRC Notified By: CHUCK GUALDONI HQ OPS Officer: ERIC SIMPSON	Notification Date: 10/30/2012 Notification Time: 00:30 [ET] Event Date: 10/29/2012 Event Time: 22:41 [EDT] Last Update Date: 10/30/2012
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(iv)(B) - RPS ACTUATION - CRITICAL 50.72(b)(3)(iv)(A) - VALID SPECIF SYS ACTUATION	Person (Organization): JOHN CARUSO (R1DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
3	A/R	Y	100	Power Operation	0	Hot Standby

Event Text

AUTOMATIC RPS ACTUATION ON GENERATOR TRIP

On October 29, 2012, at 2241EDT, the Reactor Protection System automatically actuated at 100% reactor power due to a direct electrical trip to the Unit 3 Main Turbine Generator. The generator trip resulted in a turbine/reactor trip. All control rods fully inserted on the reactor trip. All plant equipment responded normally to the unit trip. This is reportable under 10 CFR 50.72(b)(2)(iv)(B). The plant is stable in Mode 3 at this time.

The Auxiliary Feedwater System actuated following the automatic trip as expected. This is reportable under 10 CFR 50.72(b)(3)(iv)(A). The Emergency Diesel Generators did not start as offsite power remained available and stable. The unit remains on offsite power and all electrical loads are stable. No primary or secondary relief valves lifted. The plant is in Hot Standby at normal operating temperature and pressure with decay heat removal using auxiliary feedwater to the steam generators and normal heat removal through the condenser via condenser steam dumps. There was no radiation released.

Indian Point Unit 2 was not affected by this event and remains at 100% power.

A post trip investigation is in progress.

The licensee notified the NRC Resident Inspector.

Power Reactor	Event Number: 48455
Facility: PEACH BOTTOM Region: 1 State: PA Unit: [2] [3] [] RX Type: [2] GE-4,[3] GE-4 NRC Notified By: JAMES BROWN HQ OPS Officer: ERIC SIMPSON	Notification Date: 10/30/2012 Notification Time: 03:20 [ET] Event Date: 10/30/2012 Event Time: 00:30 [EDT] Last Update Date: 10/31/2012
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(xiii) - LOSS COMM/ASMT/RESPONSE	Person (Organization): JOHN CARUSO (R1DO) JANE MARSHALL (IRD)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
2	N	Y	100	Power Operation	100	Power Operation
3	N	Y	100	Power Operation	100	Power Operation

Event Text

LOSS OF EMERGENCY SIRENS DUE TO IMPACTS FROM HURRICANE SANDY

Peach Bottom Atomic Power Station Control Room was notified of a loss of greater than 25% of sirens after severe storms in the area associated with Hurricane Sandy. Thirty-one (31) of 97 Emergency Planning Zone (EPZ) sirens are currently unavailable in Lancaster, York, Cecil and Harford Counties. Actions are currently being taken to restore unavailable sirens."

The licensee notified the NRC Resident Inspector.

*** UPDATE AT 0515 EDT ON 10/31/12 FROM SCOTT RUCKER TO S. SANDIN ***

Currently 12 of 97 sirens remain inoperable."

The licensee will inform state and local agencies and the NRC Resident Inspector. Notified R1DO (Caruso).

Power Reactor	Event Number: 48456
Facility: NINE MILE POINT Region: 1 State: NY Unit: [] [2] [] RX Type: [1] GE-2, [2] GE-5 NRC Notified By: MARK GREER HQ OPS Officer: ERIC SIMPSON	Notification Date: 10/30/2012 Notification Time: 03:35 [ET] Event Date: 10/29/2012 Event Time: 21:00 [EDT] Last Update Date: 10/30/2012
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(iv)(A) - VALID SPECIF SYS ACTUATION	Person (Organization): JOHN CARUSO (R1DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
2	N	Y	100	Power Operation	100	Power Operation

Event Text**AUTOMATIC INITIATION OF EMERGENCY DIESEL GENERATOR DUE TO LOSS OF ONE OFF-SITE POWER SOURCE**

On October 29, 2012 at 2100 EDT, Nine Mile Point Unit 2 experienced an automatic initiation of the Division 1 Emergency Diesel Generator due to a loss of line 5. Line 5 is one of the 115KV offsite power sources. Line 5 was lost due to a lightening arrester falling onto electrical components in the Scriba switchyard during high winds.

During the electrical transient, Nine Mile Point Unit 2 also experienced a feedwater level control lockup, requiring manual control. No Emergency Core Cooling Systems actuated and feedwater level control was returned to automatic. Nine Mile Point Unit 2 remained at 100% power during the loss of line 5.

The off-site power source, line 5, was restored on October 30, 2012 at 0326 EDT.

The licensee notified the NRC Resident Inspector.

Power Reactor	Event Number: 48457
Facility: SALEM Region: 1 State: NJ Unit: [1][] RX Type: [1] W-4-LP, [2] W-4-LP NRC Notified By: JOHN BRENNAN HQ OPS Officer: ERIC SIMPSON	Notification Date: 10/30/2012 Notification Time: 04:10 [ET] Event Date: 10/30/2012 Event Time: 01:09 [EDT] Last Update Date: 10/30/2012
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(iv)(B) - RPS ACTUATION - CRITICAL 50.72(b)(3)(iv)(A) - VALID SPECIF SYS ACTUATION	Person (Organization): JOHN CARUSO (R1DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	M/R	Y	100	Power Operation	0	Hot Standby

Event Text

MANUAL REACTOR TRIP FROM 100% POWER

"This report is being made under the requirements of 10 CFR 50.72(b)(2)(iv)(B), Actuation of the Reactor Protection System While Critical, except preplanned, and under the requirements of 10 CFR 50.72(b)(3)(iv)(A), Valid Actuation of Listed System, except preplanned.

"Salem Unit 1 was operating at 100% reactor power when a loss of 4 condenser circulators required a manual reactor trip in accordance with station procedures. The cause of the 4 circulators being removed from service was due to a combination of high river level and detritus from Hurricane Sandy's transit.

"All control rods inserted. A subsequent loss of the 2 remaining circulators required transition

of decay heat removal from condenser steam dumps to the 11-14 MS10s (atmospheric steam dump). Decay heat removal is from the 11/12 Aux Feed Pumps to all 4 steam generators via the 11-14 MS10s. 11/12/13 AFW pumps started due to low level on all steam generators due to shrink from full power operation (this is a normal response). All safety related equipment functioned as expected. No one has been injured. As an additional note, Hurricane Sandy had recently moved past artificial island. Salem Unit 1 is currently in Mode 3. Salem Unit 2 reactor is currently in its 2R19 refueling outage and is shutdown and defueled with no fuel movement in progress."

The licensee has notified the NRC Resident Inspector.

* * * UPDATE ON 10/30/12 AT 0835 EDT FROM JOHN OSBORNE TO DAN LIVERMORE * *

"At 0513, following [a] Unit 1 manual [reactor] trip due to loss of condenser cooling, a manual steam line isolation was initiated due to a high condenser back pressure. All main steamline isolation valves responded as expected. The high condenser back pressure resulted in the #11 low pressure turbine rupture disc relieving. Unit 1 remains in mode 3 with Reactor Coolant System temperature at 549 [degrees] and stable. Reactor Coolant System pressure is 2235 psig and in automatic control. Pressurizer level is on program at 26 percent level and in automatic control. Core cooling is via aux feed water and the steam generator levels are on program. There were no [personnel] injuries."

The licensee has notified the NRC Resident Inspector. Notified R1DO (Caruso).

Power Reactor	Event Number: 48460
Facility: OYSTER CREEK Region: 1 State: NJ Unit: [1] [] [] RX Type: [1] GE-2 NRC Notified By: GILBERT A. DeVRIES HQ OPS Officer: STEVE SANDIN	Notification Date: 10/31/2012 Notification Time: 00:07 [ET] Event Date: 10/30/2012 Event Time: 23:40 [EDT] Last Update Date: 10/31/2012
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(xi) - OFFSITE NOTIFICATION	Person (Organization): IRC (R1)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	N	0	Refueling	0	Refueling

Event Text

OFFSITE NOTIFICATION TO THE NATIONAL MARINE FISHERIES SERVICE

"[The licensee] notified National Marine Fisheries Service per OC-08 that Oyster Creek has been unable to use the dilution and intake trash rake for greater than 24 hours due to safety concerns and loss of power. Daily manual raking of intake and dilution is in progress."

The licensee informed the NRC Resident Inspector.

Power Reactor	Event Number: 47775
Facility: HARRIS Region: 2 State: NC Unit: [1][1][1] RX Type: [1] W-3-LP NRC Notified By: CURTIS BULLOCK HQ OPS Officer: DONALD NORWOOD	Notification Date: 03/27/2012 Notification Time: 17:54 [ET] Event Date: 03/27/2012 Event Time: [EDT] Last Update Date: 10/30/2012
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(xiii) - LOSS COMM/ASMT/RESPONSE	Person (Organization): MARK LESSER (R2DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	Y	100	Power Operation	100	Power Operation

Event Text

HISTORICAL UNAVAILABILITY OF EMERGENCY OPERATIONS FACILITY VENTILATION DUE TO MAINTENANCE

"During a review of past maintenance that was performed on the Emergency Operations Facility (EOF) ventilation system, it was identified that there were three periods of time when the maintenance would have impacted the functionality of the facility and the ventilation system would not be able to be restored promptly. Site reporting guidance has been revised to assure accurate reporting.

The periods of time where maintenance impacted the functionality of the EOF are as follows:

1. April 30 to May 1, 2009 for approximately 36 hours due to condenser and air handler replacement.
2. January 14 to 18, 2010 for approximately 96 hours due to damper and ductwork

replacement.

3. November 17 to 19, 2010 for approximately 72 hours due to a compressor failure.

"This event is reportable per 10CFR50.72(b)(3)(xiii) as described in NUREG-1022, Rev. 2 since the work activities affected an emergency response facility for the duration of the maintenance.

"The Senior Resident Inspector has been informed."

*** UPDATE ON 10/30/2012 AT 0940 FROM JOHN CAVES TO DAN LIVERMORE ***

"On several occasions between August 4, 2009, and November 9, 2011, the Emergency Operations Facility (EOF) ventilation systems were in a degraded state and/or removed from service, for extended periods of time. There were no actual emergencies that occurred during those periods that required activation of the EOF.

"A calculation indicated that with the degraded air conditioning system during summer conditions, the temperature in the EOF could reach 87 degrees F. While there is no specific temperature limit for EOF habitability, an elevated temperature is of concern when emergency response organization members are under potential stress, as in emergency response situations.

"On January 25, 2010, Harris staff found a damper in the ventilation system stuck in the nearly closed condition. The damper was reopened on the day it was discovered. A calculation indicated that with the ventilation system in the normal mode and the damper stuck, the carbon dioxide concentration in the EOF could have exceeded 0.5%.

"The elevated carbon dioxide concentration due to the stuck damper, combined with the stress associated with an actual emergency in a facility and temperatures of 87 degrees, had the potential to impair a key responder's ability to perform an assigned emergency response function."

The licensee has informed the NRC Senior Resident Inspector. Notified R2DO (Musser).

11/1/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Issues for Resolution (IFR): One (1)

1) IFR: REVIEW HURRICANE SANDY (2012) RESPONSE BY THE AGENCY AND THE VARIOUS SITES IMPACTED

Hurricane Sandy (2012) storm response will be reviewed regarding what went right, where we saw any areas for improvement and any lessons learned from Hurricane Sandy response/actions...both internally for the agency and from various affected licensee perspectives, as well. See various ENs and the PNO followup item 16 below in clearinghouse summary for 11/1/2012. Issue screened in under LIC-401 criteria: (2.j) potential new or novel failure mode, system interaction, material condition or degradation, or other phenomena that may have instructive value for the NRC or the industry. Will review industry and NRC response to the impacts from Hurricane Sandy 2012 and related storm issues- consolidate various lessons learned for both NRC agency internal responses and external for the nuclear industry]. IFR screen-in document and IFR assigned to Steve Pannier.

OpE Forum Postings (COMMS): One (1)

1) IFR: REVIEW HURRICANE SANDY (2012) RESPONSE BY THE AGENCY AND VARIOUS SITES IMPACTED

Post OpE COMM on IFR (Hurricane Sandy Response) assignment, see item 1 above. Post COMM to: ALL COMMS, EDG, ELECTRICAL PWR, EP, FIRE PROTECTION, FLOODING/MISSILES, HUMAN PERF, INSP PROGRAMS, NAT. PHENOMENA, NRO, PHYS SECURITY, SERVICE WATER/UHS, SHUTDOWN RISK, and WORKER FATIGUE. - Assigned to Steve Pannier.

Follow-up/Other Tasks: Sixteen (16)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48467 - BROWNS FERRY: POTENTIALLY UNABLE TO PROVIDE POWER TO SAFE SHUTDOWN EQUIPMENT DURING APPENDIX R FIRE

Pass to the TRG Lead for Fire Protection (Brian Metzger). Assigned to Bob Bernardo.

2) EN 48463 - COMANCHE PEAK 1 - SEQUENCER FAULT RESULTING IN SYSTEM ACTUATIONS

See EN text. The Train 'B' Safety Injection/Blackout Sequencer faulted resulting in a start of the Turbine Driven Auxiliary Feed Water (TDAFW) Pump and Train 'B' Emergency Diesel Generator (EDG). Reactor power was manually reduced to 97% rated thermal power (RTP) by an immediate load reduction of 50 MWe due to the resulting cooler Auxiliary Feed Water being injected into the Steam Generators; so reactor power did not exceed 100% RTP. Train 'A' equipment was not affected by the event. Send to TRG Leads for Electrical Power (Roy Mathew), EDG (Robert Wolfgang), AFW (Stanley Gardocki), Instrumentation and Controls (David Rahn) and to IRIB (Aron Lewin). Assigned to Steve Pannier.

3) EN 48395 - DIABLO CANYON - UNANALYZED FIRE PROTECTION DEFICIENCIES (UPDATE)

See EN Update text. Send to TRG Lead for Fire Protection (Brian Metzger). Assigned to Steve Pannier.

4) EN 48451 - FERM1 2 - ERDS LOST DUE TO PROCESS COMPUTER SYSTEM DATA SERVER FAILURE

Forward to TRG Lead for EP (Schrader); assigned to Russ Haskell.

5) EN 47775 - HARRIS: HISTORICAL UNAVAILABILITY OF EMERGENCY OPERATIONS FACILITY VENTILATION DUE TO MAINTENANCE - UPDATED

In March, 2012, it was identified that there were three periods of time when the maintenance would have impacted the functionality of the facility and the ventilation system would not be able to be restored promptly. The EN has been updated to additionally identify that the EOF ventilation systems were in a degraded state for an extended period of time on several occasions. Pass to the TRG Leads for Emergency Preparedness (Eric Schrader) and HVAC (Nageswara Karipineni). Assigned to Bob Bernardo.

6) EN 48454 - INDIAN POINT 3 - AUTOMATIC RPS ACTUATION ON GENERATOR TRIP

Forward to Electrical TRG Lead (Roy Mathew); assigned to Dave Garmon.

7) EN 48462 - MCGUIRE: HISTORICAL UNAVAILABILITY OF TECHNICAL SUPPORT CENTER VENTILATION DUE TO MAINTENANCE

Pass to the TRG Leads for Emergency Preparedness (Eric Schrader) and HVAC (Nageswara Karipineni). Assigned to Bob Bernardo.

8) EN 48453 - NINE MILE POINT 1 - RPS ACTUATION WHILE CRITICAL DUE TO GENERATOR LOAD REJECT

Forward to TRG Lead for Electrical (Roy Mathew); assigned to Dave Garmon.

9) EN 48456 - NINE MILE POINT 2 - AUTOMATIC INITIATION OF EMERGENCY DIESEL GENERATOR DUE TO LOSS OF ONE OFF-SITE POWER SOURCE (RESTORED)

Forward to TRG Lead for Electrical Power (Roy Mathew); assigne to Dave Garmon.

10) EN 48450 - OYSTER CREEK - LOSS OF 21 EMERGENCY NOTIFICATION SIRENS

Forward to TRG Lead for EP (Eric Schrader); assigned to Dave Garmon.

11) EN 48452 - OYSTER CREEK - NOTICE OF UNUSUAL EVENT [UPGRADED TO ALERT] DECLARED DUE TO HIGH INTAKE STRUCTURE WATER LEVEL [ALERT EXITED ON 10/31]

Oyster Creek (in refueling outage) declared an NOUE and upgraded it to an Alert because of high water level in the station intake structure that is attributed to hurricane/superstorm Sandy. The site also experienced a LOOP and a valid RPS actuation with automatic containment isolations that resulted in a temporary loss of shut-down cooling to the reactor. Shutdown cooling and spent fuel pool cooling was when both emergency diesel generators started to supply power to the emergency electrical busses. Alert was exited on 10/31/2012. Forward to TRG Leads for EDG (Bob Wolfgang); Electrical (Roy Mathew); EP (Eric Schrader); Flooding (Ed Smith) and Service Water/UHS (Gerrald Purciarello); assigned to Dave Garmon.

12) EN 48455 - PEACH BOTTOM 2 & 3 - LOSS OF EMERGENCY SIRENS DUE TO IMPACTS FROM HURRICANE SANDY - (UPDATE)

Update from regional call: as of 11/1/2012 there are 6 of 97 sirens are out of service Forward to TRG Lead for EP (Eric Schrader); assigned to Dave Garmon.

13) EN 48466 - PILGRIM 1 - BOTH TRAINS OF STANDBY GAS TREATMENT SYSTEM INOPERABLE

Forward to TRG lead for HVAC (Nageswara Karipineni) and Electrical (Roy Mathew); assigned to Dave Garmon.

14) EN 48464 - PRAIRIE ISLAND 1 & 2 - NOTICE OF UNUSUAL EVENT DUE TO SECURITY CONDITION (NOUE TERMINATED)

Forward to TRG Lead for EP (Schrader), Physical Security (Lamb).

15) EN 48457 - SALEM 1 - MANUAL REACTOR TRIP FROM 100% POWER (LOSS OF CONDENSER CIRCULATORS)

Forward to TRG Lead for Electrical (Roy Mathew) and Service Water/UHS (Gerald Purciarello); assigned to Dave Garmon.

16.) PNO-I-12-007 - HURRICANE SANDY CAUSES OYSTER CREEK ALERT AND SHUTDOWNS OF REACTORS AT NINE MILE POINT UNIT 1, INDIAN POINT UNIT 3, AND SALEM UNIT 1

(SEE ML12305A460) – INFO ONLY.

**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an Issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Mark King, Russ Haskell, Bob Bernardo, Steve Pannier, Dave Garmon (by phone), Richard Perkins, NRO (by phone) and Phil O'Bryan, NRO (by phone)

11/6/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Eleven (11)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) LER 4832012002R00 - CALLAWAY - FAILURE OF 120-V VITAL INSTRUMENT SYSTEM POWER INVERTER NN14

See LER text. A failure of the NN14 inverter occurred. This inverter provides power to the NNO4 instrument bus which is one of the four vital 120-volt, alternating current (AC), instrument buses at Callaway Plant. The NNO4 bus remained energized throughout the event. The cause was failure of the output constant-voltage transformer (CVT) within the inverter. Specifically, internal windings in the transformer shorted to ground as a result of less robust varnish used by the manufacturer (prior to 1998) for insulation and controlling vibration. Send to TRG Leads for Electrical Power Systems (Roy Mathew), Instrumentation and Controls (David Rahn), QA & Vendor Issues (Paul Prescott / Thomas Kendzia). Assigned to Steve Pannier.

2) EN 48475 - COMANCHE PEAK 1 - MANUAL REACTOR TRIP DUE TO HIGH REACTOR COOLANT PUMP MOTOR BEARING TEMPERATURE

See EN text. Comanche Peak Nuclear Power Plant Unit 1 was manually tripped due to high temperature indications on the 1-04 reactor coolant pump motor radial bearing concurrent with a high / low oil reservoir level alarm. The trip was uncomplicated. Send to TRG Lead for Pump and Valve Performance (Michael Farnan). Assigned to Steve Pannier.

3) EN 48476 - CRYSTAL RIVER: FITNESS FOR DUTY - CONTRACT SUPERVISOR CONFIRMED POSITIVE - UPDATED

Pass to FFD Points of Contact (John Munro, Mark Resner, Paul Harris, and Will Smith). Complete.

4) LER 2752012006R00 - DIABLO CANYON - VIOLATION OF TECHNICAL SPECIFICATIONS DUE TO INCORRECT BASES

See LER for more information. The licensee identified that the intent of their Auxiliary Building Ventilation System (ABVS) Technical Specifications had been changed via a revision to the TS Bases. This change eliminated the ABVS function to cool ECCS components and eliminated the ABVS supply fans from the definition of an operable ABVS train. Both trains of supply fans were occasionally removed from service at the same time for maintenance, and single supply fans

were removed from service longer than would have been permitted by TS. The licensee determined that their procedure for performing 10 CFR 50.59 evaluations was insufficient because it did not provide guidance regarding TS bases changes that change the intent of the TS requirements, and that those changes may require a license amendment. Send to TRG Lead for HVAC (Nageswara Karipineni) and to the STSB (Robert Elliott). Assigned to Steve Pannier.

5) LER 3232012001R00 - DIABLO CANYON 2 - FAILURE TO MEET EMERGENCY DIESEL GENERATOR TECHNICAL SPECIFICATIONS

See LER text. The licensee discovered that the belt connecting Emergency Diesel Generator (EDG) 2-3 to its fuel oil booster pump (FOBP) was broken. Based upon the inspection results and vendor discussions, the licensee's cause analysis concluded that the FOBP drive belt failed because the FOBP seized. The FOBP seized because the excessive drive belt tension caused uneven side loading, bushing wear, and shaft skewing. This prevented pump sheave rotation that resulted in the belt snapping during coast-down following EDG 2-3's satisfactory performance of a surveillance test. Send to TRG Leads for EDG (Robert Wolfgang) and Electrical Power (Roy Mathew). Assigned to Steve Pannier.

6) EN 48479 - FITZPATRICK - AUTOMATIC REACTOR SCRAM FROM FULL POWER FOLLOWING TURBINE TRIP

Turbine tripped because of a high level in one-of-two moisture separator re-heaters Info Only.

7) EN 48477 - NINE MILE POINT 1 - AUTOMATIC SCRAM ON LOW REACTOR WATER LEVEL

Forward to TRG Lead for I&C (Dave Rahn); assigned to Dave Garmon.

8) EN 48481 - NINE MILE POINT 1 - HIGH PRESSURE COOLANT INJECTION ACTUATION SIGNAL

Event occurred in cold shutdown, see EN. Forward to TRG Lead for I&C (Dave Rahn); assigned to Dave Garmon.

9) EN 48478 - PALISADES - TECHNICAL SPECIFICATION REQUIRED SHUTDOWN DUE TO SECONDARY SIDE STEAM LEAK

(Additional Information). A thru-wall leak on secondary side was identified on a 1-inch line to a steam trap (valve) associated with the 'B' steam generator, 'B' Steam generator and associated primary coolant loop were declared INOPERABLE and a TS shutdown initiated. Piping section will be replaced; repairs anticipated to take a couple days. Region III will evaluate event for risk via MD 8.3. Forward to Pump/Valve (Faman); assigned to Russ Haskell.

10) PNO-III-12-015 - PNO-III-12-015: PALISADES - SHUTDOWN DUE TO LEAKAGE FROM THE MAIN STEAM SYSTEM

See PNO (ML12310A505). Forward to Pump/Valve (Faman); assigned to Russ Haskell.

11) SUSQUEHANNA 1 AND 2 – LP TURBINE BLADE UPDATE

Unit 1- is recovering from an outage to inspect and repair blades in the 'A' LP turbine. Seven blades were identified as requiring inspection prior to the maintenance outage using a new method of evaluating data from the blade vibration monitor (BVM). However, the licensee made the decision to replace all blades in the L0 row during the outage. The BVM measures changes in blade natural frequency and correlates the data to indicate blade cracking. Subsequent Unit 1 inspection using ultrasonic phased array (UT-PA) techniques identified another 18 blades with crack indications, which were below the detectability limits of the BVM. Destructive evaluation of removed blades is ongoing to further validate BVM system data. The number of Unit 1 LP turbine blade crack indications in 2012 is consistent with those seen in 2011.

Unit 2 - will enter a maintenance outage after Unit 1 resumes full power operations (expected later this week) to inspect susceptible turbine blades. - Info Only

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Mark King, Russ Haskell, Bob Bernardo; Steve Pannier, Dave Garmon (by phone), Richard Perkins, NRO (by phone) and Phil O'Bryan, NRO (by phone)

11/8/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

OpE Forum Postings (COMMS): One (1)

1) VOGTLE 3 VESSEL NOZZLE WELDING ISSUES AT DOOSAN'S

Following inlet nozzle welding on the Vogtle 3 reactor vessel at Doosan's in South Korea, Ultrasonic examination (UT) was performed and several recordable indications were detected in the inlet nozzle-to-safe end welds. The welds are performed using Inconel 52M filler material. The welds were repaired from the inside diameter (I.D.) of the nozzle, which introduces residual tensile stresses on the I.D. surface of the nozzle. However, due primarily to the low susceptibility of alloy 52M to PWSCC, the licensee has determined that the repairs are acceptable with no additional mitigation actions. The cause of the indications was a loss of weld shield gas due to weld operator actions. Contrary to procedures, the operators moved an exhaust fan to a location that stripped the weld site of the shield gas because they wanted increased air flow in the area that they were working in. Post COMM to: All Communications, Human Performance, Inspection Programs, Materials/Aging, New Reactors, QA/Vendor, Reactor Vessel/Pressurizer, Welding/Non-Destructive Examination assigned to Phil O'Bryan.

Follow-up/Other Tasks: Fourteen (14)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) LER 2602012004R00 - BROWNS FERRY 2: HIGH PRESSURE COOLANT INJECTION SYSTEM RENDERED INOPERABLE DUE TO AN INADVERTENT ACTUATION OF PRIMARY CONTAINMENT ISOLATION SYSTEM

ML122910958 - The root cause of the event was determined to be the use of incorrect wire bending practices to assemble steam line space high temperature switches. The wire insulation of the Fenwal switch (Fenwal model number of 17023-6) is not capable of withstanding the stress from bending over time and is susceptible to fraying when in contact with the switch housing. It was determined that the wire insulation degraded slowly over multiple years until it exposed the wire and slight vibration and/or slight thermal expansion caused spurious actuation of the HPCI steam line space high temperature channel B2. Fenwal no longer supplies temperature switches to the nuclear industry. Fenwal does manufacture switches for EGS, but those switches are manufactured to EGS design specifications, which require a more robust Rockbestos wire. Pass to the TRG Leads for I&C (Dave Rahn) and QA/Vendor Issues (Paul Prescott/Tom Kendzia). Assigned to Bob Bernardo.

2) EN 48485 - FORT CALHOUN - PLANNED OUTAGE OF EMERGENCY SIRENS (RESTORED)

See EN text. Send to TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Steve Pannier.

3) EN 48487 - FERMI 2 - MANUAL REACTOR SHUTDOWN DUE TO HYDROGEN IN-LEAKAGE TO STATOR WATER COOLING SYSTEM

(Additional Information) Prior to the shutdown, the licensee had been tracking elevated H2 in-leakage to the main generator at the rate of approximately 2 to 3 standard cubic-feet/day (scfd). The H2 in-leakage spiked at a rate of 96 scfd which exceeded a licensee (ODMI) action level prompting operators to manually trip reactor. RGN III indicated the unit may be shutdown for several weeks to make repairs.- Info Only.

4) EN 48491 - OYSTER CREEK - LIQUID PENETRANT SURFACE INDICATIONS FOUND ON CONTROL ROD DRIVE RETURN NOZZLE SAFE END TO PIPE WELD

Forward to TRG Lead for Primary Materials (Keith Hoffman); assigned to Dave Garmon.

5) PRAIRIE ISLAND 1 - TWO WORKERS CLOSED INSIDE MAIN CONDENSER FOR 35 MINUTES

Unit 1 is currently shutdown in a refueling outage (RFO). Two licensee workers entered the unit's main condenser (restricted workspace). During the period of time they were in the condenser, approximately 35 minutes, the access ladder was removed and the access hole covered. The two workers were able to successfully exit; there were no personnel injuries. It took several hours before licensee management and the Resident Inspectors were notified of the situation. The licensee is evaluating specific details surrounding event. Resident Inspectors tracking licensee's actions. Forward to TRG Lead for Human Performance (Keefe); assigned to Russ Haskell.

6) LER 3282012001R00 - SEQUOYAH 2: AUTOMATIC REACTOR TRIP ON LOSS OF FLOW DUE TO A REACTOR COOLANT PUMP TRIP

ML122910959 - A metal oxide varistor in the GR-5 relay, designated as device 50G on breaker locations that feed motors and transformers, failed, causing a standing trip signal for the 2-4 RCP. The root cause was determined to be the Preventative Maintenance (PM) instructions and implementation frequency is inadequate on GR-5-relays in critical systems. The service life of the component was reached and there is no guidance to replace the relay in the PM. A contributing factor was that the Preventative Maintenance Optimization template for solid state protective relays recommends replacement every 8 to 10 years. A weakness in the preventative maintenance program was found and is being addressed to implement a program for lifecycle management practices for relays.

Pass to the TRG Leads for Electrical Power System (Roy Mathew) and I&C (David Rahn). Assigned to Bob Bernardo.

7) LER 4242012003R00 - VOGTLE 1: FAILURE TO COMPLY WITH TECHNICAL SPECIFICATION LCOS 3.7.14 AND 3.0.3 [ESF CHILLER]

ML122910935 - The underlying cause of the failure to comply with Technical Specification LCOs 3.7.14 and 3.0.3 event was a weakness in sensitivity to out of specification parameters (ESF Chiller Condenser Vacuum) by the shift supervisor, along with the associated failure to initiate a condition report documenting the out of specification parameter, as required by procedure. As a result of this error, the Operability Determination process was not conducted upon discovery of the condition, and the applicability of LCOs 3.7.14 and 3.0.3 was not recognized. Pass to the TRG Leads for HVAC (Nageswara Karipineni) and Human Performance/Safety Culture (Molly Keefe). Assigned to Bob Bernardo.

8) LER 3902010003R00 - WATTS BAR 1: ENTRY INTO MODE 4 WITHOUT MEETING LCO 3.4.12, "COLD OVERPRESSURE MITIGATION SYSTEM (COMS)"

ML12284A030 - Prior to WBN TS Amendment 55, TS 3.4.12 allowed up to four hours to secure both SI pumps and one CCP after entering Mode 4. Amendment 55 removed the four hour allowance. During the implementation of WBN TS Amendment 55, the impact on the Operations procedure was not identified, and as a result, LCO 3.4.12 was not met and the applicable Required Actions were not taken within their associated Completion Times on September 21, 2009, and April 4, 2011, when transitioning from Mode 3 to Mode 4 for scheduled RFOs. Pass to the TRG Lead for Human Performance/Safety Culture (Molly Keefe) and STSB Branch Chief (Rob Elliott). Assigned to Bob Bernardo.

9) SC&G V.C SUMMER NUCLEAR STATION UNITS 2 AND 3 - NRC INTEGRATED INSPECTION REPORTS 05200027/2012-003, 05200028/2012-003 AND NOTICE OF VIOLATION

The NRC identified one finding, associated with one violation (05200027/2012-003-02, 05200028/2012-003-02) that was evaluated under the construction significance determination process as having very low safety significance (Green). The licensee failed to adequately ensure that quality assurance records converted into electronic format were sufficient to furnish evidence of activities affecting quality. Specifically, procedure QSI-17.1, Quality Assurance Records Processing, Revision C, did not provide sufficient measures to ensure that all pages contained in document packages were exactly in accordance with the source document. - INFO ONLY

10) FINLAND - OLKILUOTO 3 (EPR): NON-CONFORMITIES ON VALVE BODY SURFACE

Non-Conformities on valve body surface were identified upon receiving inspection at OL3 site. These inspections showed that the valve bodies made of cast austenitic stainless steel showed a number of surface indications. Due to this finding, installation of similar valves already accepted for installation was stopped. The valves installed and delivered from the manufacturer were inspected visually.

All valves with surface defects were transported back to manufacturer for corrective actions. The manufacturing process and related inspections were updated so that an extra PT examination (100%) is done after pickling and a non-conformance report and root cause analysis was submitted to STUK. Forward to NRO Primary Materials/Vessels and Piping/Welding (David Terao), Pump and Valve Performance (Tom Scarbrough), and Quality Assurance & Vendor Issues (Paul Prescott) assigned to Jay Patel.

11) FRANCE - FLAMANVILLE 3 (EPR): NON-CONFORMITY CONCERNING THE SURFACE FINISH OF PIPES

On March 2011, a non-conformity concerning the surface finish of pipes from the EPR safety injection system was detected by AREVA during an on-site inspection of those pipes, just before welding. The surface finish presented small particles (no longer than 1.5mm) stuck inside the straight section of the pipes. The tubes used for manufacturing the pipes came from a different supplier: PRODUCTOS TUBULARES, SMTS. The subcontractor in charge of the pipes manufacturing was Nordon Ponticelli.

As a corrective action, AREVA proposed complementary manufacturing operations to get an acceptable surface finish inside the pipes in non conformance (by polishing) and decrease the required roughness to ensure the result. Forward to Human Performance, NRO Primary Materials/Vessels and Piping/Welding (David Terao), and Quality Assurance & Vendor Issues (Paul Prescott) - assigned to Jay Patel.

12) FRANCE - FLAMANVILLE 3 (EPR): DEFECTS IN PRESTRESSING DUCTS

Several non-compliances on prestressing ducts occurred between November 2009 and June 2011. Prestressing system of inner wall of reactor building was affected by each non compliance. For ASN, the main cause of those non-compliances is a lack of preparedness and training by the operator and its subcontractors concerning the possible interactions between steelwork (and anchor plates) and prestressing ducts. ASN noted also a lack of efficiency of the technical control realized by sub-contractors and the lack of efficiency of the supervision performed by EDF on the prestressing activities.

All the causes and the repetition of similar non compliances (wrong position according ETC-C criteria) reveal a lack of safety culture. Non-compliances in the implementation of pre-stressed ducts may cause mechanical efforts on steelwork and can endanger the mechanical behavior of the containment wall. Forward to Human Performance/Safety Culture, NRO Primary Materials/Vessels and Piping/Welding (David Terao), and Quality Assurance & Vendor Issues (Paul Prescott/ Thomas Kendzie) assigned to Jay Patel.

13) FRANCE - FLAMANVILLE 3 (EPR): POURING ACTIVITIES OF POOLS OR TANKS - HIGH REBAR DENSITY AREAS AND HIGH POURING LIFT ISSUES

Licensee observed a non compliance with the flatness tolerances when pouring the concrete walls for the emergency feedwater system tank. The technical code used for civil work activities (ETC-C) specifies some flatness tolerances for the wall of the pools. The flatness of walls is important to reduce the mechanical loading of the pool liner in case of water temperature increase due to an accident. After pouring the walls for the spent fuel pool and the reactor building pool, when the formworks were removed, numerous areas of the walls were found full of stones and/or without cement. Moreover, due to the height of the lift, it was not possible to perform adequate joint treatments between 2 lifts. Some areas were poured without joint treatment in-between.

To pour the concrete for the pool walls and tanks, the main contractor decided to: use high pouring lifts (up to 6 meters per lift); fix the steel framework to the reinforcement steel and/or to the formwork and pour directly the concrete. This was a new method in comparison with the previous constructions of NPP in France (previously the height of the lift was smaller, the walls

were poured with two vertical layers: the walls were first poured, the steel framework was set on the wall and a second layer of concrete was spread on the wall between the steels of the framework). Forward to NRO Structural (Manas Chakravorty) and DCI Region II assigned to Jay Patel.

14) VOGTLE 3 VESSEL NOZZLE WELDING ISSUES AT DOOSAN'S

Following inlet nozzle welding on the Vogtle 3 reactor vessel at Doosan's in South Korea, Ultrasonic examination (UT) was performed and several recordable indications were detected in the inlet nozzle-to-safe end welds. The welds are performed using Inconel 52M filler material. The welds were repaired from the inside diameter (I.D.) of the nozzle, which introduces residual tensile stresses on the I.D. surface of the nozzle. However, due primarily to the low susceptibility of alloy 52M to PWSCC, the licensee has determined that the repairs are acceptable with no additional mitigation actions. The cause of the indications was a loss of weld shield gas due to weld operator actions. Contrary to procedures, the operators moved an exhaust fan to a location that stripped the weld site of the shield gas because they wanted increased air flow in the area that they were working in. Forward to NRO Primary Materials/Vessels and Piping/Welding (David Terao).

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY

***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY

INFORMATION***

DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR

Attendees at Screening Meeting:

Mark King, Russ Haskell, Bob Bernardo; Steve Pannier, Dave Garmon (by phone), Richard Perkins, NRO (by phone), Jay Patel, NRO (by phone) and Dave Harmon (R-II/DCI/CIB3)

11/13/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Thirteen (13)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48492 - FISHER CONTROLS INTERNATIONAL, LLC - PART 21 REPORT-COMMERCIAL GRADE DEDICATION NOT PROPERLY APPLIED TO BUTTERFLY VALVES

See EN / Part 21 Report text. Potentially impacted sites include D.C. Cook; Millstone; Surry; McGuire; San Onofre; Indian Point; Palisades; Clinton; Peach Bottom; Beaver Valley; Cooper; Palo Verde; Brunswick; Hope Creek/Salem and Watts Bar 2. It is noted that numerous foreign facilities are also affected. Send to TRG Leads for QA & Vendor Issues (Paul Prescott / Thomas Kendzia), Pump and Valve Performance (Michael Faman) and Regional OpE Contacts. Assigned to Steve Pannier (Complete).

2) EN 48494 - SCIENTECH - PART 21 - POTENTIAL GROUNDING PATHWAY BETWEEN HEAT SINK AND CHASSIS OF CONTROL MODULES

See EN / Part 21 Report text. Potentially impacted sites are Turkey Point and Robinson. Send to TRG Leads for QA & Vendor Issues (Paul Prescott / Thomas Kendzia), Instrumentation and Controls (David Rahn) and to the Regional OpE Contacts. Assigned to Steve Pannier (Complete).

3) EN 48493 - ABB INC. (MEDIUM VOLTAGE SERVICE) - PART 21 - AN OPERATING MECHANISM FRONT COVER FAILED DURING LICENSEE RECEIPT INSPECTION

See EN / Part 21 Report text. Send to TRG Leads for QA & Vendor Issues (Paul Prescott / Thomas Kendzia), Electrical Power Systems (Roy Mathew) and to the Regional OpE Contacts. Assigned to Steve Pannier (Complete).

4) EN 48502 - CATAWBA: TECHNICAL SUPPORT CENTER INOPERABLE NUMEROUS TIMES OVER PREVIOUS THREE YEARS WITHOUT PROPER REPORTING

Pass to the TRG Leads for Emergency Preparedness (Eric Schrader) and HVAC (Nageswara Karipineni). Assigned to Bob Bernardo.

5) EN 48429 - COOPER - POTENTIAL CONDITION COULD BYPASS FLOODING BARRIERS AND AFFECT RESIDUAL HEAT REMOVAL EQUIPMENT (RETRACTION)

See EN Retraction text. Send to TRG Lead for Flooding / Missiles (Edward Smith), ECCS (Samuel Miranda) and IRIB (Tim Kobetz). Assigned to Steve Pannier.

6) EN 48499 - FARLEY: SAFEGUARDS REPORT - MISSING SAFEGUARDS INFORMATION (OUO)

OFFICIAL USE ONLY - Security Related Information. Region is performing an MD 8.3 evaluation. Pass to the TRG Lead for Physical Security (Chris Lamb). Assigned to Bob Bernardo.

7) EN 48451 - FERMI 2 - ERDS LOST DUE TO PROCESS COMPUTER SYSTEM DATA SERVER FAILURE (UPDATE)

Forward to TRG Lead for EP (Schrader); assigned to Russ Haskell. Completed.

8) EN 48501 - FITZPATRICK: REACTOR SCRAM DUE TO TURBINE TRIP FOLLOWED BY UNUSUAL EVENT DECLARED DUE TO MAIN TRANSFORMER AND BUS DUCT FIRE

Fire has been extinguished and NOUE terminated. Cooldown is in progress to cold conditions. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew) and Fire Protection (Brian Metzger). Assigned to Bob Bernardo.

9) EN 48503 - MONTICELLO - REACTOR BUILDING ISOLATION WITH STANDBY GAS TREATMENT SYSTEM ACTUATION DURING RADIOACTIVE MATERIAL MOVE

Send to HP TRG Steve Garry. assigned to Mark King.

10) EN 48495 - OYSTER CREEK: LOSS OF EMERGENCY PLANNING ZONE SIRENS

Pass to the TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Bob Bernardo.

11) PNO-III-12-150 - PALISADES - (PNO) SHUTDOWN DUE TO LEAKAGE FROM THE MAIN STEAM SYSTEM (UPDATE)

Info Only. PNO-III-12-15A (ML12314A271)

12) EN 48496 - SUSQUEHANNA 2: UNIT 2 MANUAL SCRAM DUE TO LOSS OF THE INTEGRATED CONTROL SYSTEM

Pass to the TRG Lead for I&C (David Rahn). Assigned to Bob Bernardo.

13) EN 48500 - SUSQUEHANNA 2: RPS ACTUATION RESULTING FROM LOW REACTOR WATER LEVEL

Reports an RPS actuation (Low RV Level Trip) which occurred recovery/stabilization from a previous scram 3 hours earlier (EN 48496). Pass to the TRG Lead for I&C (David Rahn). Assigned to Bob Bernardo.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Mark King, Bob Bernardo; Steve Pannier, Eric Thomas,
Richard Perkins, RES, Jay Patel, NRO

11/15/2012

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR

Follow-up/Other Tasks: Seventeen (17)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) LESSONS LEARNED FROM "LESSONS LEARNED": THE EVOLUTION OF NUCLEAR POWER SAFETY AFTER ACCIDENTS AND NEAR-ACCIDENTS - A REPORT FROM AMERICAN ACADEMY OF ARTS & SCIENCES

This copyrighted 38-page report published © 2012 by the American Academy of Arts and Sciences can be downloaded from:
<http://www.amacad.org/projects/globalnuclearbooks.aspx> or directly at:
<http://amacad.org/pdfs/lessonsLearned.pdf>. The statements made and views expressed in this publication are solely the responsibility of the authors and are not necessarily those of the Officers and Fellows of the American Academy of Arts and Sciences or the foundations supporting the Global Nuclear Future Initiative. This report has been shared with the Japan Lessons-Learned Directorate (JLD) team -completed.- Info Only.

2) EN 48505 - BROWNS FERRY 3: 60-DAY OPTIONAL TELEPHONIC NOTIFICATION OF INVALID ACTUATION OF CONTAINMENT ISOLATION SIGNALS

This condition was the result of newly installed Metal Oxide Varistors in the governor circuits operating due to induced current in their associated ground cables. This resulted in grounds which tripped the DC control power breaker. To address this condition, the varistors were permanently removed. Pass to the TRG Lead for EDGs (Bob Wolfgang). Assigned to Bob Bernardo.

3) EN 48506 - BROWNS FERRY 1: 60-DAY OPTIONAL TELEPHONIC NOTIFICATION OF INVALID ACTUATION OF CONTAINMENT ISOLATION SIGNALS

This condition was the result of improper test setup during a surveillance test. A jumper installed during the test to prevent an invalid actuation was not installed correctly. Pass to the TRG Lead for Human Performance (Molly Keefe). Assigned to Bob Bernardo.

4) BRUNSWICK: DG3 ENGINE DRIVEN JACKET WATER PUMP FAILURE

During the DG3 outage inspection, licensee discovered the engine-driven jacket water pump had failed. The preliminary direct cause of failure is galling of the impeller wear rings that caused the impeller to seize and shear the impeller screw where the impeller is mounted to the

shaft. The top half of the impeller screw and washer were found in the pump suction valve located immediately adjacent to the pump. Licensee is extending their outage to complete repairs to the engine-driven jacket water pump by installing a new (rebuilt pump) and increasing the wear ring tolerances. The licensee replaced this pump in Aug 2012 due to excessive seal leakage and machined the wear rings on site at that time. Expect return to service on Friday. The motor driven water pump is 100% redundant to the engine driven pump. Pass to the TRG Lead for EDG (Bob Wolfgang). Assigned to Bob Bernardo.

5) LER 3462012002R00 - DAVIS-BESSE - (LER) REGARDING LEAK FROM REACTOR COOLANT PUMP SEAL PIPING SOCKET WELD DUE TO HIGH CYCLE FATIGUE

LER 3462012002R0 (ML12220A354). A scheduled walkdown identified a leak (0.1 gpm) from Reactor Coolant Pump (RCP) 1-2 first stage seal vent cavity line. The leak was from a socket weld of the small bore ASME Section III Class 2 piping between the RCP seal and the first isolation valve. (See LER for details). Forward to TRG Lead For Prim. Piping/Material/Welding (Hoffman), Pump/Valve (Farnan); Assigned To Russ Haskell.

6) PNO-III-12-016 - FERMII 2 - (PNO) UNPLANNED SHUTDOWN GREATER THAN 72 HOURS DUE TO HYDROGEN IN-LEAKAGE TO THE STATOR WATER COOLING SYSTEM

PNO-III-12-016 – (ML12318A384). Info Only.

7) EN 48507 - HARRIS: LOSS OF ASSESSMENT CAPABILITY - GROSS FAILED FUEL DETECTOR

Pass to the TRG Lead for Emergency Preparedness (Eric Schrader) and Health Physics (Steve Garry). Assigned to Bob Bernardo.

8) LER 3522012002R01 - LIMERICK 1 (LER) - VALID MANUAL ACTUATION OF THE REACTOR PROTECTION SYSTEM DUE TO REACTOR RECIRCULATION PUMPS TRIPPING

This LER updates the cause of this event by removing environmental factors as a contributing cause. The final evaluation determined that the transformer failure was caused by partial current discharge (corona effect). The partial current discharge was caused by a manufacturing defect resulting in improper insulation of the high voltage line rod where it passes through the polyester support board. The faulted transformer was replaced. Forward to TRG Lead for Electrical (Roy Mathew) and QA/Vendor Issues (Paul Prescott); assigned to Dave Garmon.

9) LER 3522012006R00 - LIMERICK 1 (LER) - VALID MANUAL ACTUATION OF THE REACTOR PROTECTION SYSTEM DUE TO A PERSONNEL ERROR AND SURVEILLANCE TEST WEAKNESS

This LER reports a manual scram actuation. During an outage, the mode switch was taken from "Shutdown" to "Refuel" as part of control rod exercising; however, the required nuclear instrument surveillances were not current. The surveillance test supervisor incorrectly indicated the NI surveillances were completed. Forward to Human Performance TRG Lead (Molly Keefe); assigned to Dave Garmon

10) OCONEE 1: CRACKED JACKSCREW ON RV VENT VALVE

A cracked jackscrew on a RV Vent Valve found during an ISI inspection. The licensee has contacted AREVA and AREVA has indicated that the vent valve should be replaced. The AREVA conclusion was that the vent valve was not installed per design requirements and specifications. The tooling/process is currently being developed to replace the vent valve.

RV Vent Valves are included in the B&W design to provide a direct path to the break for steam venting after a LOCA resulting from a cold leg rupture. Without this venting of steam, a pressure differential could exist between the core region and the RV internal inlet annulus region where coolant is injected which would inhibit flow to the core. A [linked pdf](#) is provided with a diagram and pictures of the vent valve. The cracked jackscrew could become an FME issue, but would not be expected to preclude the vent valve from operating. Pass to the TRG Lead for Pump and Valve (Mike Faman) and to resident inspector staff for other B&W Plants (ANO1, CR3, DB, and TMI). Assigned to Bob Bernardo.

11) LER 2552012001R00 - PALISADES: (LER) DEGRADED CONDITION DUE TO CONTROL ROD DRIVE MECHANISM HOUSING ASSEMBLY CRACK

LER 2552012001R0 (ML12285A320) – Pressure boundary leakage was identified in the control rod drive mechanism (CRDM) 24 upper housing assembly. Liquid penetrant testing identified a 1/8" x 1/16" L-shaped crack indication on the outside surface of the type 316L stainless steel pipe section of (CRD 24) upper housing assembly. Follow-on non-destructive and destructive examinations (Lynchburg) revealed a total of nine axially oriented crack indications in proximity of an inside surface weld over lay. One of the nine crack indications was a through-wall crack at the leak point approximately 3" in length. (see [OpE COMM](#)). Info Only.

12) LER 2662012002R00 - POINT BEACH 1 - (LER) CONDITION PROHIBITED BY TECHNICAL SPECIFICATION 3.7.5, AUXILIARY FEEDWATER

LER 2662012002R0 – (ML12230A227). Testing of the # 1 TDAFW pump (1P-29) revealed a degraded coupling condition. Licensee's concluded misalignment between TDAFW pump/turbine led to the degraded coupling. Following a technical assessment, the licensee determined that total exposure time for the pumps INOPERABILITY (~ 80 days) exceeded T.S. requirements (72 hrs) to have TDAFW able to perform design and licensing basis functions. This report will be revised, via supplemental LER, to include root cause. Forward to TRG Lead for AFW (Gardocki), ECCS (Miranda); assigned To Russ Haskell.

13) LER 2662012002R01 - POINT BEACH 1 - (REVISED LER) - CONDITION PROHIBITED BY TECHNICAL SPECIFICATION 3.7.5, AUXILIARY FEEDWATER

LER 2662012002R1 – (ML12265A081). (See LER 2662012002R0). The root cause of the degraded TDAFW pump coupling was determined to be exhaust system piping flange misalignment with turbine flange due to piping cold spring. This caused excessive stresses on pump turbine causing coupling to degrade. The cold spring was resolved from the 1P-29 Turbine Exhaust Steam Piping by installing a tapered wedge in the exhaust flange connection. Forward to TRG Lead for AFW (Gardocki), ECCS (Miranda); assigned To Russ Haskell.

**14) LER 2822012001R00 - PRAIRIE ISLAND 1 - (LER) NON-CONSERVATIVE
CALCULATION OF DIESEL FUEL STORAGE REQUIREMENTS**

LER 2822012001R0 (ML12107A032). Due to licensee calculation errors associated with diesel fuel oil storage calculations, on- site diesel fuel capacity did not meet minimum volumetric requirements to operate the units D1 or D2 plus a diesel-driven cooling water pump for 14 days in the event of a postulated maximum probable flood. Forward to TRG Lead for EDG (Wolfgang); assigned to Russ Haskell.

15) EN 48508 - ROBINSON: RADIATION MONITOR OUT OF SERVICE

Pass to the TRG Lead for Emergency Preparedness (Eric Schrader) and Health Physics (Steve Garry). Assigned to Bob Bernardo.

**16) PART 21 - THE SHAW GROUP - STATUS UPDATE FOR INTERIM REPORT
REGARDING EMBEDMENTS FOR AP1000 PROJECT VOGTLE UNIT 3 AND UNIT 4**

See Part 21 text. The licensee's evaluation determined that the initially reported noncompliances and deficiencies were not reportable defects. Send to TRG Leads for Structural (Farhad Farzam / Manas Chakravorty), NRO (Doug Copeland / David Harmon), (QA and Vendor Issues (Paul Prescott / Thomas Kendzia) and to the Regional OpE contacts. Assigned to Steve Pannier (Complete).

**17) LER 2712012001R01 - VERMONT YANKEE (LER) - POTENTIAL TO FLOOD
SWITCHGEAR ROOMS DUE TO MISSING CONDUIT FLOOD SEAL**

This LER update reports the cause of the missing flood seal. "The causal analysis determined that the flood seal used in this spare conduit did not provide an adequate seal to prevent the flood seal from becoming dislodged. When the flood seal is fully expanded by tightening a compression screw, the outside diameter measurement of the seal expands to 4.25", leaving a relatively small surface area on the inside of the conduit to make the seal (approximately 0.25"). The end of this spare conduit where the seal was installed was measured in the field at 4.125". The condition was corrected by installing a new flood seal of a different design, thus removing the potential flood path." Forward to TRG leads for Electrical Power (Roy Mathew) and Flood Protection & Missiles (Edward Smith) ; assigned to Dave Garmon.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Mark King, Bob Bernardo; Steve Pannier, Eric Thomas, Richard Perkins, RES; Phil O'Bryan, NRO (by phone).

11/18/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Fourteen (14)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48514 - COMANCHE PEAK 2 - AUTOMATIC REACTOR TRIP ON LOW STEAM GENERATOR WATER LEVEL

See EN text. The initiating event appears to be a sheared instrument air tubing line that feeds the common heater drain pump discharge valve. The drain pump discharge valve failed closed, resulting in a loss of all heater drain return flow to the feedwater system. Send to TRG Leads for Instrumentation and Controls (David Rahn) and Pump and Valve Performance (Michael Farnan). Assigned to Steve Pannier.

2) EN 48499 - FARLEY: SAFEGUARDS REPORT - MISSING SAFEGUARDS INFORMATION (OUO) - RETRACTED

Pass to the TRG Lead for Physical Security (Chris Lamb). Complete.

3) LER 2852012019R00 - FORT CALHOUN - TRAVELING SCREEN SLUICE GATES FOUND WITH DUAL INDICATION (LER)

See LER text. The licensee identified that a traveling screen sluice-gate motor was stopping on high torque and provided indication that the gate was approximately 8 inches open. During a flooding event, these sluice gates are credited to fully close allowing control of the intake structure cell level with the raw water pumps. Without closure of the sluice gates, the raw water pump bay could become flooded causing a loss of raw water to the component cooling water heat exchangers. The loss of component cooling water will result in the loss of cooling to the shutdown cooling heat exchangers, the high/low pressure SI pumps, the containment spray pumps, and the control room air conditioners. The apparent cause of the failure of the sluice gates to fully close was debris under the gates. Send to TRG Leads for Flooding and Missiles (Edward Smith), ECCS (Samuel Miranda) and for Service Water / Ultimate Heat Sink (Gerard Purciarello). Assigned to Steve Pannier.

4) LER 2852012004R02 - FORT CALHOUN - INADEQUATE ANALYSIS OF DRIFT AFFECTS SAFETY RELATED EQUIPMENT (LER SUPPLEMENT 2)

See LER Supplement text. The licensee initially identified pressure switches that provide signals for high containment pressure to the reactor protection system and engineered safeguards

actuation circuitry may be subject to set point drift. The impact of the potential drift was evaluated and it was initially determined that neither reactor protection system nor the engineered safeguard circuitry may actuate at the required containment pressure of 5 psig. A subsequent evaluation of actual data concluded that safety analysis limits were not exceeded. However, two Technical Specification limits were not protected by the calibration procedure nominal trip setpoint when applying the additional uncertainty. The Apparent Cause was determined to be poor vendor documentation which led to Engineering personnel to improperly interpret and apply the information contained in the vendor manual. Send to TRG Leads for Instrument and Controls (David Rahn) and QA and Vendor Issues (Paul Prescott / Thomas Kendzia). Assigned to Steve Pannier.

5) LER 2852012007R01 - FORT CALHOUN - FAILURE OF PRESSURIZER HEATER SHEATH. (LER SUPPLEMENT)

See LER Supplement text. The LER Supplement reported that during the fabrication of the heater sheath, the manufacturing process induced high tensile residual stresses on the outer surface of the sheaths. The impacted heater sheath has been removed and replaced. The other heater sheaths have been inspected and none of them had indications of cracking. Send to TRG Leads for Primary Materials/Vessels and Piping/Welding (Keith Hoffman), Electrical Power Systems (Roy Mathew), and Instrumentation and Controls (David Rahn) and QA/Vendor TRG (Paul Prescott and Tom Kendzia) and NRO component integrity branch (David Terao) Assigned to Steve Pannier.

6) PNO-I-12-007A - HURRICANE SANDY - UPDATE - HURRICANE SANDY CAUSES OYSTER CREEK ALERT AND SHUTDOWNS OF REACTORS AT NINE MILE POINT UNIT 1, INDIAN POINT UNIT 3, AND SALEM UNIT 1

See PNO (ML12320A020) and recently issued OpE COMM. This issue has been screened in as an Issue For Resolution (IFR) by NRR IOEB, and the point of contact is Steve Pannier for anyone involved wishing to provide input on this issue. - Info Only.

7) LER 5302012001R01 - PALO VERDE 3 - UNIT 3 MANUAL REACTOR TRIP DURING LOW POWER PHYSICS TESTING (LER SUPPLEMENT)

See Supplemental LER text. The licensee reported that the root cause of the manual reactor trip was the Low Pressure Physics Testing procedure did not provide contingency direction to insert other CEA groups to compensate for the RCS dilution. Send to TRG Lead for Human Performance (Molly Keefe) and Instrumentation and Controls (David Rahn). Assigned to Steve Pannier.

8) LER 2662012004R00 - POINT BEACH 1 - (LER) UNIT 1 MANUAL REACTOR TRIP

LER 2662012004R0 (ML12277A325) – (8/14/12) Unit 1 was manually tripped due to indications of a loss of load to the main turbine. Control room alarms indicated reduced main turbine first stage pressure and generator megawatts, indicative of a reduction in turbine load. Control rods were responding as designed by inserting into the reactor to reduce reactor power. The Shift Manager directed the reactor to be shut down by manually. The licensee determined the loss of turbine load was due to a failure of the main speed channel card in the electro-hydraulic (EH) system. Forward to TRG Lead for I&C (Rahn); assigned to Russ Haskell.

9) LER 2822012003R00 - PRAIRIE ISLAND 1 - COMPENSATORY MEASURES WERE DELAYED (SECURITY RELATED INFORMATION)

Forward LER to NSIR POC for Physical Protection (Lamb); assigned to Russ Haskell (completed).

10) LER 2822012005R00 - PRAIRIE ISLAND 1 - (LER) UNIT 1 DIESEL GENERATORS INOPERABLE DUE TO EXHAUST FIRE

LER 2822012005R0 (ML12286A326) - (8/13/12) During a monthly surveillance run of the D1 EDG a flame was observed coming from the D1 turbo-charger exhaust extension (control-side). D1 was declared INOPERABLE and per T.S. 3.8.1. entered a 14 day LCO. The next day, the D2 EDG was run to check for common cause failure. D2 was also declared INOPERABLE due to a flame coming from the same exhaust location as D1. Both EDGs had a similar exhaust leak. Licensee decided to replace exhaust manifolds and exhaust extension gaskets on both sides of both EDGs. As expected, due to plant electrical conditions, the Auxiliary Feedwater System auto started when main generator was taken offline to support the shutdown. Root cause of EDG exhaust leaks to be reported via supplemental report. Forward to TRG Lead for EDGs (Wolfgang); assigned to Russ Haskell.

11) EN 48508 - ROBINSON: RADIATION MONITOR OUT OF SERVICE - UPDATE (RESTORED)

Pass to the TRG Lead for Emergency Preparedness (Eric Schrader) and Health Physics (Steve Garry). Complete.

12) LER 4432012001R00 - SEABROOK (LER) - INADEQUATE TESTING OF CERTAIN EMERGENCY FEEDWATER ACTUATION SYSTEM RELAYS

This LER reports that the licensee has not tested the SG Lo-Lo actuation logic for the motor driven emergency feedwater pump since commencement of operation. The licensee determined that the MDEFW pump would have passed surveillances based on recent testing and an actuation that occurred during in a trip in 2011 Forward to TRG Leads for AFW (Stan Gardocki) and I&C (Dave Rahn); assigned to Dave Garmon.

13) EN 48517 - TURKEY POINT: AUTO-INITIATION FEATURE OF TECHNICAL SUPPORT CENTER VENTILATION IMPROPERLY INHIBITED

As a result of a deficient procedure, an automatic initiation feature to the Technical Support Center (TSC) ventilation system was inhibited from 11/16/12 at 2325 to 11/17/12 at 1419. Pass to the TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Bob Bernardo.

14) LER 3822012006R00 - WATERFORD 3 - SUSPENSION OF SPECIFIC SECURITY MEASURES DURING SEVERE WEATHER CONDITIONS

See LER at ML12305A382. Send to TRG Group Lead for Physical Security (Chris Lamb). Assigned to Steve Pannier.

— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Mark King, Bob Bernardo (by phone); Steve Pannier, Dave Garmon, Russ Haskell, Richard Perkins, RES (by phone); Doug Copeland, NRO.

11/20/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Twelve (12)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) LER 3252012005R00 - BRUNSWICK 1 & 2: LOCAL CONTROL CAPABILITY OF EMERGENCY DIESEL GENERATOR NO. 2 NOT AVAILABLE

ML12312A068 -During planned maintenance on EDG2, a wire jumper was found that was incorrectly installed. The erroneous wiring in the field was not reflected on the control wiring diagrams or interconnection wiring diagrams. With the incorrect jumper installed, in the event of a fire, an induced fault could potentially affect the ability to locally control EDG 2. Local control of EDG 2 is credited in the safe shutdown analysis. This condition did not affect the Technical Specification operability of EDG 2 and it remained fully capable of performing its intended safety function. Pass to the TRG Lead for Fire Protection (Brian Metzger). Assigned to Bob Bernardo.

2) EN 48511 - BYRON 1 - 60-DAY OPTIONAL TELEPHONIC NOTIFICATION OF INVALID SYSTEM ACTUATION

Forward to TRG Lead for I&C (Rahn), Human Performance (Keefe); assigned to Russ Haskell.

3) EN 48367 - CALVERT CLIFFS 1 - (RETRACTION) UNANALYZED CONDITION DUE TO HIGH ENERGY LINE BREAK BARRIER BEING PARTIALLY OPEN

Send to COM 111 POCs assigned to Mark King- completed.

4) LER 2982013003R00 - COOPER - REACTOR BUILDING DOORS OPENED SIMULTANEOUSLY CAUSES LOSS OF SAFETY FUNCTION (LER)

See LER text. The licensee determined that previous reportability practices minimized the significance of having both airlock doors open which caused CNS to defer installing equipment that would have precluded this event. A review of licensee records reveal five different occurrences of the Reactor Building airlock doors being open simultaneously that meet the reporting criteria of 10 CFR 50.72 and 10 CFR 50.73; however, none of these events were reported. Specifically, these events occurred on: May 31, 2002; July 19, 2002; February 14, 2003; February 17, 2005; April 2, 2009. Send to TRG Leads for Containment (Brian Lee) and Human Performance (Molly Keefe). Assigned to Steve Pannier.

5) LER 3642012001R00 - FARLEY 2: TDAFW PUMP ORIFICE PLATE THICKNESS RESULTS IN CONDITION PROHIBITED BY TECHNICAL SPECIFICATIONS

ML12312A425 - Licensee Identified Violation (LIV 364/2011010-005) was documented during the 2011 Component Design Basis Inspection (CDBI) for the actual bore size of the Unit 1 Motor Driven Auxiliary Feed Water (MDAFW) system discharge flow orifice deviating from the nominal bore size specified in the design drawing. During planning inspections to replace the unit 2 orifices, the licensee determined the thickness of the orifices was 1/8" vice the required 1/2". A temporary modification was implemented to limit TDAFW flow to reduce the pressure drop to an acceptable level. Pass to the TRG Lead for AFW (Stanley Gardocki). Assigned to Bob Bernardo.

6) LER 3542012005R00 - HOPE CREEK (LER) - RCIC BEARING LOW OIL PRESSURE INDICATION ON REMOTE SHUTDOWN PANEL INOPERABLE.

This LER reports an event where the RCIC remote indication for bearing oil pressure was found inoperable because of a failed relay. Additionally, the licensee discovered that the indication was incorrectly marked as being operable during a previous surveillance because of a work control issue. Forward to TRG Lead for ECCS (Sam Miranda) and Human Performance (Molly Keefe); assigned to Dave Garmon.

7) LER 3522012005R00 - LIMERICK 1 (LER) - VALID ACTUATION OF THE REACTOR PROTECTION SYSTEM WITH THE REACTOR CRITICAL AND UNUSUAL EVENT DECLARED.

A valid manual actuation of the reactor protection system was initiated due to an automatic trip of both reactor recirculation pumps. The reactor recirculation pumps tripped due to a loss of stator cooling water following a failure of a connection in a 13 kV/480 VAC non-safeguard load center air termination cabinet. An Unusual Event was declared due to flash-over damage on the failed transformer air termination cabinet which was classified as an explosion within the protected area boundary. The cause of the failed transformer was a high voltage connection clamp that was larger than the 13 kV cable size and the cable was not installed properly. The cable in use was a solid conductor and the clamp used was designed for stranded cable. This resulted in overheating and subsequent failure of the connection which damaged the cable and the load center transformer. The investigation determined that this connection is not disturbed during routine maintenance. Therefore, this is believed to be a manufacturing issue. The 124A load center transformer supply cable was upgraded to a stranded cable with a crimped lug connection. The faulted 124A load center transformer was replaced and returned to service. Similar load center transformers will be upgraded to stranded cable with crimped lug connections. Forward to TRG Lead for Electrical (Roy Mathew), NRO (Doug Copeland) and QA/Vendor Issues (Paul Prescott); assigned to Dave Garmon.

8) LER 4102012004R00 - NINE MILE POINT 2 (LER) - MANUAL REACTOR SCRAM DUE TO A LOSS OF MAIN TURBINE GLAND SEALING STEAM RESULTING IN LOWERING CONDENSER VACUUM

This LER reports a manual scram that was inserted as a result of lowering condenser vacuum. To support extended uprate operations the licensee gagged a relief valve downstream of a gland seal steam reboiler; however, the gag was installed incorrectly. This allowed leak-by from the reboiler causing water level to decrease until the reboiler tripped. The backup source of

gland sealing steam was incorrectly set (too low) to maintain adequate system pressure so main condenser vacuum decreased until a manual scram was inserted. Forward to TRG Leads for Human Performance (Molly Keefe) and Uprates POC (Nicholas DiFrancesco); assigned to Dave Garmon.

9) LER 5282012004R00 - PALO VERDE 1 - ESSENTIAL SPRAY POND PUMP ACTUATION DUE TO A CONTROL ROOM ESSENTIAL FILTRATION ACTUATION SIGNAL (LER)

See LER text. The Unit 1 control room received a fuel building ventilation exhaust radiation monitor high radioactivity alarm. This resulted in actuation of the train A and B fuel building essential ventilation actuation signals (FBEVAS) and control room essential filtration actuation signals. The licensee determined that the high radioactivity alarm was caused by a random failure of a power supply zener diode and resultant loss of the 24 VDC low voltage power supply. Send to TRG Lead for Instrumentation and Controls (David Rahn). Assigned to Steve Pannier.

10) LER 3352012008R00 - ST. LUCIE 1 & 2: CONTROL ROOM AC SINGLE FAILURE VULNERABILITY

ML12310A084 - FPL discovered an original design error (legacy issue) with both unit's swing CRACS unit control circuitry. The condition would have prevented these units from automatically starting after a loss of offsite power (LOOP) event. This condition affects the system's single failure criteria such that the design bases accident General Design Criteria (GDC) 19 control room dose may be affected. Pass to the TRG Lead for HVAC and Dose Assessment (Nageswara Karipineni and Mark Blumberg) and NRO POC (Doug Copeland). Assigned to Bob Bernardo.

11) LER 2502012003R00 - TURKEY POINT 3: CONDITION PROHIBITED BY TECHNICAL SPECIFICATIONS DUE TO INSTRUMENT VALVE MISPOSITIONING

ML12313A004 - Newly installed root valves for the High Pressure Turbine inlet pressure transmitters were discovered shut while performing main turbine alignment in Mode 2. The new root valves were not listed in the valve alignment procedure. The root cause identified a weakness in the Change Request Notice (CRN) process with respect to the Operations Department "impact of change determination" and review requirements. Pass to the TRG Lead for Human Performance (Molly Keefe). Assigned to Bob Bernardo.

12) LER 3972012004R00 - COLUMBIA GENERATING STATION - FAILURE TO MEET TECHNICAL SPECIFICATIONS COMPLETION TIME FOR OFFSITE POWER (LER)

See LER text. The licensee discovered that during maintenance on a circuit breaker a required Technical Specification Condition was not entered. The subject breaker provides power to an essential bus from one of the credited offsite power sources. The licensee identified three similar breaker maintenance events where the applicable TS Completion time was exceeded within the past three years. Send to TRG Leads for Electrical Power Systems (Roy Mathew), Human Performance (Molly Keefe) and to the STSB (Rob Elliott). Assigned to Steve Pannier.

— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —

— ***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION*** —

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting:

Mark King, Bob Bernardo; Steve Pannier, Dave Garmon (by phone), Russ Haskell, Richard Perkins, RES (by phone); Doug Copeland, NRO, Jesse Robles, Joe Giantelli.

✓

11/26/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Twelve (12)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48533 - CLINTON - INADVERTENT LOSS OF INSTRUMENT AIR

See EN text. (Additional Information) At time of event, the licensee was in the process of swapping control room chillers. When the 'B' Chiller breaker started cycling the unit motor control center was manually tripped leading to the subsequent loss of equipment. Forward to TRG Leads for HVAC (Karipineni), Electrical (Mathew), I&C (Rahn), Containment (Lee), ECCS (Miranda); assigned to Russ Haskell.

2) LER 3152012002R00 - COOK 1 - (LER) EXCEEDED TECHNICAL SPECIFICATION TIME LIMIT TO SHUTDOWN / (NOED GRANTED - DOWNPOWER WAS HALTED AT 50% POWER)

LER 3152012002R0 (ML12272A280) – Control room operators received annunciator alarms on loss of control power to two (2) 'B' Steam Generator Stop Valve dump valves, rendering steam line isolation function for train 'B' INOPERABLE. T.S. LCO 3.3.2 Condition I was entered, requiring the plant to be in Mode 3 (6 hrs.). Licensee commenced a plant shutdown to meet the T.S. action statement. Approximately 1 hour into the shutdown, the NRC granted a Notice of Enforcement Discretion (NOED) extending the Action Statement to 24 hrs. Power reduction was halted at 50% power. Licensee completed repairs approx. 1 hour into the NOED. Repairs included replacement of fuses, dump valve solenoid, and cabling. (EN 48120). Forward to TRG Leads for Pump/Valve (Faman), Electrical Power Systems (Mathew), I & C (Rahn). Assigned to Russ Haskell.

3) LER 3332012002R00 - FITZPATRICK - (LER) HIGH PRESSURE COOLANT INJECTION PRESSURE CONTROL VALVE FAILURE

This LER reports the failure of a HPCI recirculation pressure control valve. The valve sensing line contained particulates that were introduced when the HPCI system was filled using torus water following maintenance in June 2012. The valve failure resulted in a SSFF of the HPCI system. This event was attributed to an incomplete procedure because the procedure did not take into account the need to fill the HPCI instrument line with water that did not contain suspended particulate matter. Forward to TRG Lead for Human Performance (Molly Keefe), ECCS (Sam Miranda) and Pump and Valve (Michael Faman); assigned to Dave Garmon

4) LER 3332012003R00 - FITZPATRICK - (LER) HIGH PRESSURE COOLANT INJECTION SYSTEM INOPERABLE DUE TO AIR IN FLOW ELEMENT SENSING LINE

ML12307A075 -The licensee discovered that a HPCI instrument line was incorrectly sloped resulting in the instrument becoming bound with air and falsely indicating flow. The licensee adjusted their procedures to perform a pressurized backflush of the instrument line pending development of a long term solution for the deficiency. Forward to TRG Lead for ECCS (Sam Miranda); assigned to Dave Garmon.

5) EN 48524 - HARRIS: LOSS OF ASSESSMENT CAPABILITY - RADIATION MONITOR DECLARED INOPERABLE

Pass to the TRG Leads for Emergency Preparedness (Eric Schrader) and Health Physics (Steve Garry). Complete.

6) LER 2202012001R00 - NINE MILE POINT 1 - (LER) AUTOMATIC REACTOR SCRAM DUE TO ELECTRONIC PRESSURE REGULATOR FAILURE

Forward to TRG Lead for Human Performance (Molly Keefe); assigned to Dave Garmon.

7) LER 2772012001R00 - PEACH BOTTOM 2 - (LER) LABORATORY ANALYSIS IDENTIFIES SAFETY RELIEF VALVES AND SAFETY VALVE SET POINT DEFICIENCIES

On 9/25/12, the licensee determined that safety relief valve (SRV) and safety valve (SV) setpoint deficiencies existed with six SRVs and one SV that were in place during the 19th Unit 2 operating cycle. This was based on information received from a laboratory performing SRV and SV as-found testing. Six SRVs and one SV were determined to have their as-found setpoints outside of the Technical Specification (TS) allowable $\pm 1\%$ tolerance. All six SRVs were within the ASME Code allowable $\pm 3\%$ tolerance. The one SV outside of its TS allowable setpoint range also exceeded the ASME Code allowable $\pm 3\%$ tolerance. Forward to TRG Lead for Pump and Valve (Michael Farnan); assigned to Dave Garmon.

8) EN 48527 - QUAD CITIES 1 - DRYWELL RADIATION MONITOR INOPERABLE

Info Only.

9) LER 2542012003R00 - QUAD CITIES 1 & 2 - (LER) DEGRADED FLOOD PROTECTION BARRIER

LER 2542012003R0 (ML12290A023)- (8/5/2012) During routine leak tests on Reactor Building Floor Drain Sump Ball Valves, two (2) of eight (8) sump ball valves exhibited minor leakage. Since the drain sump ball valves are associated with Emergency Core Cooling System (ECCS) components, the associated ECCS equipment was declared INOPERABLE. Valve leakage from the 1B and 2B Core Spray Room Floor Drain Ball Valves was determined to be due to wear related degradation at the valve-to-actuator coupling. This impacted the valves ability to fully seat (closed) despite the actuator indicating full travel closed. Forward to TRG Lead or Pump/Valve Performance (Farnan), Flood/Missile Protection (Smith)and ECCS (Miranda); assigned to Russ Haskell.

**10) EN 48534 - SALEM 2 - AUTOMATIC REACTOR TRIP DUE TO STEAM GENERATOR
FEEDWATER REGULATOR VALVE NOT RESPONDING TO DEMAND SIGNAL**

The licensee determined that the 24 SG feedwater regulating valve pneumatic positioner contained fine particulate matter that would obstruct normal valve operation. The licensee also found similar particulate matter in the 22 SG bypass feedwater valve positioner. The licensee intends to clean and overhaul both positioners today. The residents responded to the site following the trip and are following up on the licensee's extent-of-condition activities Forward to TRG Lead for Pump and Valve (Michael Farman); assigned to Dave Garmon.

**11) EN 48525 - SUSQUEHANNA 2 - CONDITION THAT COULD HAVE PREVENTED
AUTOMATIC ISOLATION OF REACTOR WATER CLEANUP SYSTEM**

Forward to TRG Lead for I&C (Dave Rahn); complete 11/21/2012.

**12) EN 48526 - TURKEY POINT: NON-LICENSED CONTRACTOR SUPERVISOR TESTS
POSITIVE FOR ALCOHOL**

Pass to FFD Points of Contact (John Munro, Mark Resner, Paul Harris, and Will Smith).
Complete.

~~— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —~~
~~— ***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY —~~
~~— INFORMATION —~~
~~— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING —~~
~~— PERMISSION FROM ORIGINATOR —~~

Attendees at Screening Meeting: Mark King (by phone), Bob Bernardo (by phone); Dave Garmon, Russ Haskell, Arthur Cunanan, RES; Al Issa, NRO,

11/27/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Four (4)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) PNO-IV-12-007A - PNO-IV-12-007A: GRAND GULF NUCLEAR STATION - (PNO) SECURITY OFFICER LOCKOUT

See PNO-IV-12-007A - Info Only.

2) MCGUIRE 2: STEM TO DISC SEPARATION ON FWRV INLET ISOLATION VALVE

Unit 2 is returning to power from an RFO. During troubleshooting of unexpected low main feedwater flow to the "A" steam generator, while transitioning from the feedwater bypass valves to the main feedwater regulating valves, the licensee identified that the valve disc to 2CF-31 was separated from its stem (with the disc failed in its seat preventing main feedwater flow). 2CF-31 is the inlet MOV isolation to the "A" SG feedwater regulating valve. 2CF-31 is not safety related, does not receive an automatic Feedwater Isolation signal and its normal operating and accident configuration is to be open. The licensee plans to repair/investigate the valve failure by returning to Mode 3 and isolating the main feedwater header while supplying steam generator cooling water via auxiliary feedwater. Unit shutdown to Mode 3 in progress. Pass to the TRG Lead for Pump and Valve (Mike Farnan). Assigned to Bob Bernardo.

3) EN 48537 - OYSTER CREEK - DEGRADED CONDITION DUE TO PINHOLE LEAK IN REACTOR HEAD SPRAY LINE

Forward to TRG Lead for Primary Materials (Keith Hoffman); assigned to Dave Garmon.

4) LER 3352012009R00 - ST. LUCIE 1 & 2: SECURITY EVENT - CONTRABAND INTRODUCED INTO PROTECTED AREA

See ML12321A052 for this Security Related LER. Pass to the TRG Lead for Physical Security (Chris Lamb). Assigned to Bob Bernardo.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Mark King, Bob Bernardo; Steve Pannier, Dave Garmon (by phone), Russ Haskell, Richard Perkins, RES (by phone); Al Issa, NRO.

11/29/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Eight (8)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48541 - DIABLO CANYON - CONTROL ROOM VENTILATION SYSTEM WILL NOT AUTOMATICALLY START IN PRESSURIZATION MODE

See EN text. The licensee identified that none of the Control Room Ventilation System (CRVS) four pressurization fans would operate continuously if they started in response to a safety injection or control room radiation atmosphere intake actuation signal. All of the pressurization fans remain capable of continuous operation via manual actuation. Send to TRG Leads for HVAC (Nageswara Karipineni) and Instrumentation and Controls (David Rahn). Assigned to Steve Pannier.

2) EN 48538 - HARRIS: LOSS OF ASSESSMENT CAPABILITY- RADIATION MONITOR INOPERABLE DUE TO DATABASE ERROR

The database error was corrected and the monitor returned to service. Pass to the TRG Leads for Emergency Preparedness (Eric Schrader) and Health Physics (Steve Garry). Complete.

3) EN 48542 - PERRY 1 - NOTIFICATION OF UNUSUAL EVENT DUE TO TOXIC GAS IN RADWASTE CONTROL ROOM (NOUE TERMINATED)

See EN text. Forward to TRG Lead for EP (Schrader); assigned to Russ Haskell.

4) EN 48544 - PERRY 1 - DISCOVERY OF AFTER-THE-FACT EMERGENCY CONDITION (UNUSUAL EVENT)

See EN text. Forward to TRG Lead for EP (Schrader), NUREG -1022 POC (Lewin); assigned to Russ Haskell.

5) EN 48539 - SAN ONOFRE 3 - SECURITY EVENT

Note: Event Text Not for Public Distribution. See EN text for more information. Send to TRG Lead for Physical Security (Christopher Lamb). Assigned to Steve Pannier.

6) EN 48540 - SUSQUEHANNA 1& 2 - OFFSITE NOTIFICATION DUE TO A FATALITY

Info Only.

7) EN 48543 - WATERFORD 3 - SAFEGUARDS REPORT - VULNERABILITY IN A SAFEGUARD SYSTEM

See EN text. The licensee discovered vulnerability in a safeguard system that could allow access to a controlled access area for which compensatory measures have not been employed. Send to TRG Lead for Physical Security (Christopher Lamb). Assigned to Steve Pannier.

8) LER 3972012005R00 - COLUMBIA GENERATING STATION - VIOLATION OF TECHNICAL SPECIFICATIONS DUE TO THE FAILURE TO ENTER THE APPROPRIATE TECHNICAL SPECIFICATION (LER)

See LER text. The NRC questioned Columbia Generating Station's (Columbia) practice of applying the Service Water (SW) Technical Specification (TS) 3.7.1, as called out in plant procedures and work instructions, when taking safety related room coolers or fans out of service. The licensee eventually determined that this practice was inappropriate. Specifically, Columbia did not enter the appropriate TS for an inoperable system, subsystem, train or component when the necessary attendant non-technical specification support equipment was not capable of performing its support function. Columbia entered the TS Limiting Condition for Operation (LCO) Action for one SW subsystem inoperable rather than entering the appropriate TS Action for the equipment supported by the room coolers. Send to TRG Leads for Electrical Power Systems (Roy Mathew), Human Performance (Molly Keefe), Service Water (Gerard Purciarello), IRIB (Aron Lewin) and to the STSB (Robert Elliott). Assigned to Steve Pannier.

— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —

— ***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY —

— INFORMATION*** —

— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING —

— PERMISSION FROM ORIGINATOR —

Attendees at Screening Meeting: Mark King, Bob Bernardo; Steve Pannier, Russ Haskell, Richard Perkins, RES (by phone); Al Issa, NRO, Dan Pasquale (NRO/CQVB)

12/3/2012

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR

Follow-up/Other Tasks: Nine (9)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

**1) EN 48395 - DIABLO CANYON - UNANALYZED FIRE PROTECTION DEFICIENCIES
(SECOND UPDATE AND PARTIAL RETRACTION)**

See EN Update text. This second EN Update retracts the initially reported unanalyzed condition but not the Alternate Compensatory Measures issue identified in the first update to this EN. The licensee will submit a 50.73 Licensee Event Report on of about 12/7/2012. Send to TRG Lead for Fire Protection (Brian Metzger). Assigned to Steve Pannier.

2) DUANE ARNOLD - UNIT SHUTDOWN DUE TO MAIN GENERATOR GROUND

Last week the licensee exited from a refueling outage (11/26). Shortly thereafter, a ground was detected on the main generator (11/29). The licensee was unable to detect/isolate source of ground during online testing. The main generator was taken offline for tests during this past weekend. On Sunday, the licensee determined the extent of troubleshooting the main generator warranted a unit shutdown. Further tests revealed the ground was discovered on the rotor field windings. The licensee suspects the cause of ground was one (or more) Collector Terminal studs (exciter end) as being faulty. These studs were reworked during the recent refueling outage. Work activities include a partial disassembly of the main generator exciter assembly; work anticipated to be completed by late this week.

INFO ONLY.

**3) EN 48551 - FORT CALHOUN - INADEQUATE RAW WATER PUMP ANCHOR
EMBEDMENT**

See EN text. Raw water pumps (AC-10A/B/C/D) base plate support anchors were discovered by Fort Calhoun Station personnel to have inadequate embedment to support existing analysis. Plant drawing specify a j-bolt type of anchor with a required 16 inch embedment. Actual plant configuration was found to be a j-bolt type anchor with a 9 inch embedment. Plant design analysis requirements are not being met for the existing configuration. Send to TRG Leads for Service Water / Ultimate Heat Sink (Gerard Purciarello) and Pump and Valve Performance (Michael Farnan) and NRO (Phil O'Bryan). Assigned to Steve Pannier.

**4) LER 3332012004R00 - FITZPATRICK - (LER) CONTROL RODS INOPERABLE WHILE
ENTERING PLANT OUTAGE**

See LER Text.. a detailed review of issues involved and that relate to BWR concerns with requirements in accordance with the General Electric Part 21 notification, SC11-05 Revision 1, for Seismic Input in Channel-Control Blade Interference. Forward to Rod Control POC (Tony Mendiola); assigned to Dave Garmon.

5) EN 48548 - INDIAN POINT 2 & 3 - TSC VENTILATION NOT ABLE TO DIRECT AIRFLOW TO THE CHARCOAL FILTER

Issue was attributed to a blown fuse. Info Only.

6) LER 3522012008R00 - LIMERICK 1 - (LER) CONDITION PROHIBITED BY TECHNICAL SPECIFICATIONS DUE TO INOPERABLE ISOLATION INSTRUMENTATION

Forward to TRG Lead for I&C (Dave Rahn) - completed; assigned to Dave Garmon.

7) EN 48549 - MCGUIRE 2: AMSAC ACTUATED AT LOWER THAN EXPECTED TURBINE INLET PRESSURE

On 12/1 at 2317, an Anticipated Transient Without Scram Mitigation Actuation Circuitry (AMSAC) actuation occurred during power ascension (at 31% power) causing an automatic turbine trip and auxiliary feedwater actuation. A reactor trip did not occur since power was below the P8 setpoint (49%). The unit was stabilized at 15% power with no abnormal equipment operation. The residents responded to the site to review the transient and licensee investigation/recovery actions. The inadvertent AMSAC actuation occurred due to the licensee's failure to change the AMSAC turbine inlet pressure setpoints for the new turbine replacement modification that was implemented during the refueling outage. With the old (lower) turbine inlet pressure setpoints installed, AMSAC actuated earlier than expected for the given turbine load and main feedwater regulating valve position that makes up the AMSAC actuation logic. As part of the licensee's extent of condition for the event, all setpoint changes for the main turbine/governor/exciter replacement modifications were reviewed to ensure no other changes were not implemented properly. Pass to the TRG Lead for Human Performance (Molly Keefe). Assigned to Bob Bernardo.

8) EN 48550 - MCGUIRE 2: AUXILIARY FEEDWATER AND NUCLEAR SERVICE WATER PUMP ACTUATION

On 12/2 at 1142, while technicians were changing the AMSAC turbine inlet pressure setpoints to the correct values (from 290# to 360# - see related event notice 48549), another AMSAC actuation occurred with the reactor at 15% power and the turbine already tripped. At the time of the event, the residents were in the control room and monitored operator response actions. Auxiliary feedwater automatically actuated as designed and no other complications were encountered during recovery from the actuation. The actuation occurred as a result of an inadequate calibration procedure that was revised early morning to allow the setpoint change while the turbine was tripped. The procedure is normally conducted in Modes 5/6 versus Mode 1, and it was not recognized that the procedure still allowed both AMSAC turbine inlet pressure switches that makeup the actuation logic to be calibrated (setpoint changed) at the same time. The procedure was subsequently revised to change one pressure setpoint at a time. Pass to the TRG Lead for Human Performance (Molly Keefe). Assigned to Bob Bernardo.

9) EN 48056 - WATTS BAR: UNANALYZED CONDITION DUE TO INCREASE IN PROBABLE MAXIMUM FLOOD LEVEL - UPDATE

An updated Probable Maximum Flood (PMF) calculation resulted in an increase from 734.9 feet to 739.2 feet. The licensee previously identified that the Thermal Barrier Booster Pumps and Essential Raw Water Cooling Pumps were affected. Based upon continuing engineering reviews, the chilled water circulating pump motors for the Train A and B Main Control Room and 8.9kV Shutdown Board Room, including various sub-components, would be partially submerged during a Probable Maximum Flood (PMF) event. These components were not previously considered as affected by the PMF.

CAL No. NRR-12-001(ML12165A527) was issued on 6/25/12 for commitments to address external flooding concerns. Pass to the TRG Lead for Flood Protection (Edward Smith) and R-II Core (Dave Harmon). Assigned to Bob Bernardo.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Mark King (by phone), Bob Bernardo (by phone); Steve Pannier, Russ Haskell, Dave Garmon, Richard Perkins, RES; Phil O'Bryan, NRO (by phone).

12/4/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Two (2)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48552 - FITZPATRICK - INVALID ACTUATION SIGNAL OF THE PRIMARY CONTAINMENT ISOLATION LEVEL TRANSMITTER

See EN text. Forward to TRG Lead for Human Performance (Molly Keefe); assigned to Dave Garmon.

2) LER 2542012004R00 - QUAD CITIES 1 & 2: BREECH IN SECONDARY CONTAINMENT

LER 2542012004R0 (ML12321A020) – A worker passing thru secondary containment interlock doors discovered both inner/outer doors were opened (simultaneously). The duration both doors were opened was approximately 6 seconds. This was characterized as a breach of secondary containment. The licensee suspects the (outer) doors crash bar, in use as part of the doors interlocking system, may have impeded the mechanisms latching fingers causing the door not to latch properly.

Forward to TRG Lead for Containment (Lee); assigned to Russ Haskell.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Mark King (by phone), Bob Bernardo (by phone); Steve Pannier (by phone), Russ Haskell (by phone), Dave Garmon (by phone), Richard Perkins, RES (by phone), Phil O'Bryan, NRO (by phone).

12/6/2012

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR

Follow-up/Other Tasks: Nine (9)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48556 - CRYSTAL RIVER 3: TEMPORARY EMERGENCY OPERATING FACILITY ESTABLISHED FOR PLANNED OUTAGE

Pass to the TRG Lead for Emergency Preparedness (Eric Schrader). Complete.

2) PNO-III-12-018 - DUANE ARNOLD - (PNO) UNPLANNED SHUTDOWN EXPECTED TO LAST GREATER THAN 72 HOURS DUE TO ELECTRICAL GROUND DETECTED ON THE MAIN GENERATOR FIELD

See PNO-III-12-018 text.- INFO ONLY.

3) LER 3412012005R00 - FERMI 2: (LER) REACTOR SCRAM DUE TO LOSS OF 120 KV POWER

LER 3412012005R0 (ML12311A368) - An animal intrusion (bird) caused a phase to ground fault on a 120KV switchyard transformer resulting in the unit trip. Emergency safety feature (ESF) busses were isolated on the fault and subsequently restored via emergency diesel generators. The licensee concluded the fault location was at the wildlife protective cover for the surge arrester. (EN 48309).

Forward to TRG Lead for Electrical Systems (Mathew); assigned to Russ Haskell.

4) LER 3542012006R00 - HOPE CREEK - (LER) HIGH PRESSURE COOLANT INJECTION SYSTEM INOPERABLE.

This LER reports an period of inoperability of the HPCI system because the steam admission valve failed to stroke during a surveillance test of the system. The failure was attributed to a dirty contact in the MOV's operator .

Forward to TRG Lead for ECCS (Sam Miranda) and Pump and Valve (Mike Farnan); assigned to Dave Garmon.

5) LER 3742012001R00 - LASALLE 2: (LER) 2B DIESEL GENERATOR DECLARED

INOPERABLE DUE TO EXCESSIVE AIR START RECEIVER BLOWDOWN CAUSED BY A DEGRADED DRAIN VALVE

See LER 3742012001R0 (ML12318A187) - Because the 2B DG provides emergency power to HPCS, which is a single train system, this occurrence is reportable under 10 CFR 50.73(a)(2)(v)(D) as an event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident. During preventative maintenance activities to blowdown the 2B DG train 'A' starting air receiver, receiver pressure decreased below minimum T.S. requirements (165 psig) and was declared INOPERABLE. This impacted the operability of the High Pressure Core Spray System (HPCS). The licensee concluded the cause of the event was a degraded drain valve on the train 'A' starting air receiver. The drain valve was replaced and DG 2B was returned to service in 45 minutes. (EN 48263). Forward to TRG Leads for ECCS (Miranda), EDG (Wolfgang), PUMP/VALVE (Farnan); assigned to Russ Haskell.

6) EN 48402 - POINT BEACH 2 - REACTOR POWER EXCEEDED FSAR ANALYZED VALUE (RETRACTED)

See EN text. Send retraction to TRG Leads for Instrumentation and Controls (Rahn), Pump and Valve Performance (Farnan) and Power Excursion POC (Jim Isom). Assigned to Russ Haskell.

7) EN 48555 - RIVER BEND - LICENSEE NO LONGER HAS CONTROL OF EMERGENCY SIRENS

See EN text. The licensee reported that the site no longer has the ability to control offsite sirens. This was apparently caused by lightning strike in the area prohibiting the ability of the siren control computers to communicate with the sirens. Contingency actions are in place until the sirens are restored. Send to TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Steve Pannier.

8) LER 4432012002R00 - SEABROOK - (LER) INADEQUATE TESTING OF RESPONSE TIME FOR REACTOR TRIP BREAKERS.

During review of a design change for installation of new circuit boards in the solid state protection system, station personnel discovered that the surveillance procedure that performs response time testing of the reactor trip breaker does not measure the response time of the STA relay in the shunt trip circuit (one of two relays in the circuit). Further review concluded that the response time of the shunt trip circuit had never been adequately tested. However, surveillance procedures adequately test the response time of the undervoltage trip circuit and perform appropriate functional tests of the undervoltage and shunt trip circuits.

Forward to Tech Spec Branch (STSB) Branch Chief (Robert Elliot); assigned to Dave Garmon.

9) LER 4432012003R00 - SEABROOK - (LER) REACTOR TRIP DUE TO CIRCUIT BOARD FAILURE THAT CLOSES FEED REGULATING VALVE

On September 14, 2012 at 8:25 pm while operating at approximately 85% power, Seabrook Station experienced an automatic reactor trip on low steam generator water level. The failure of a printed circuit board in the 7300 process control system caused the feedwater regulating valve for SG-C to close. The corrective actions included replacing the failed circuit card and three

additional cards in the same instrument loop. Forward to TRG Lead for I&C (Dave Rahn):
assigned to Dave Garmon.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Mark King, Bob Bernardo, Steve Pannier, Russ Haskell, Dave Garmon, Richard Perkins, RES (by phone), Phil O'Bryan, NRO (by phone).

12/10/2012

Attendee all via telephone: Mark King, Dave Garmon, Bob Bernardo, Russ Haskell, John Thompson, Al Issa (NRO)..... NOTE: no research attendee due to their holiday party .

From: King, Mark

Sent: Monday, December 10, 2012 2:10 PM

Subject: IOEB Clearinghouse Screening Summary for Monday, December 10, 2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Twelve (12)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) LER 2592011008R02 - BROWNS FERRY 1: HIGH VIBRATIONS ON HIGH PRESSURE COOLANT INJECTION BOOSTER PUMP THRUST BEARINGS (REVISION 2)

LER ML12325A057 - TVA submitted a Licensee Event Report (Rev 00) and a Supplemental Licensee Event Report (Rev 01) containing details of an unexpected increase in vibrations on the Browns Ferry Nuclear Plant, Unit 1, High Pressure Coolant Injection Booster Pump thrust bearings. Additional analysis was performed and TVA has revised the causal analysis. Pass to TRG Lead for ECCS (Samuel Miranda), Human Performance (Molly Keefe), and Pump and Valve (Michael Farnan). Assigned to Bob Bernardo.

2) EN 48568 - BROWNS FERRY 2: 60-DAY TELEPHONIC NOTIFICATION OF AN INVALID SYSTEM ACTUATION

Half scram and resulting group 2 PCIS isolation caused by 2A RPS Motor Generator Set Voltage Regulator Failure. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew). Assigned to Bob Bernardo.

3) LER 4542012004R00 - BYRON 1: (LER) REACTOR PRESSURE VESSEL HEAD CONTROL ROD DRIVE MECHANISM PENETRATION NOZZLE WELD REPAIR SURFACE INDICATIONS

LER 4542012004R0 - Examinations of weld overlay repairs during the recent fall 2012 refueling outage revealed multiple rounded indications on the weld material of VHP 31 and 43. One indication on each penetration exceeded acceptance criteria. The indications are the result of surface irregularities on the weld material from previous repairs (spring 2011). The indications were reduced to acceptable size by mechanical means. No additional welding was necessary.

The weld overlays for Penetrations 31 and 43 are scheduled to be re-examined during the next Unit 1 refueling outage (Spring 2014). (EN 48311). Forward to TRG Lead for Primary Materials/Vessels/Welding (Hoffman); assigned to Russ Haskell.

4) EN 48564 - ENGINE SYSTEMS INC. - PART 21 REPORT - ESI REFURBISHED EMERGENCY DIESEL GENERATOR CYLINDER HEAD WITH FOREIGN MATERIAL IN INTAKE PORT

See Part 21 / EN text. The vendor identified that the only impacted unit is Cooper Nuclear Station. Send to TRG Leads for QA/Vendor (Paul Prescott / Thomas Kendzia), Emergency Diesel Generators (Robert Wolfgang) and to Site Residents and Regional OpE Contacts. Assigned to Steve Pannier (Complete).

5) EN 48565 - HATCH 2: 60-DAY OPTIONAL TELEPHONIC NOTIFICATION OF INVALID SYSTEM ACTUATION

Half scram and resulting PCIS was caused by a loose lug mounting screw. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew). Assigned to Bob Bernardo.

6) LER 2632012003R00 - MONTICELLO: (LER) AUTOMATIC REACTOR SCRAM DURING MAINTENANCE ON 4160V 12-BUS AMMETER

LER 2632012003R0 (ML12325A170) - (9/25/12) During maintenance activities on a 4160V ammeter switch the (#12) electrical bus locked out resulting in loss of the (#12) Reactor Feed Pump & (#12) Recirculation Pump. The subsequent reactor water level transient caused a HI HI trip (+48 inches). By design, the Main Turbine & (#11) Reactor Feed Pump tripped resulting in a reactor scram. Licensee concluded event was the result of poorly drafted guidance when using test equipment. (EN 48341) Forward to TRG Lead for I&C (Rahn), Human Perf. (Keefe); assigned to Russ Haskell.

7) EN 48570 - NINE MILE POINT 2 - TEMPERATURE SWITCH FAILURE CAUSES DIVISION ISOLATION SIGNAL (60 DAY NOTIFICATION OF INVALID ACTUATION)

- Info Only.

8) EN 48569 - EMERSON PROCESS MANAGEMENT (FISHER DIVISION) - PART 21 - PROXIMITY SWITCH BRACKETS INSTALLED UPSIDE DOWN.

See EN text. This Part 21 Report applies to Fisher Controls equipment provided to Arizona Public Service Company - Palo Verde Nuclear Generating Station. Send to TRG Leads for QA / Vendor Issues (Paul Prescott / Thomas Kendzia), EDG (Robert Wolfgang), Instrumentation and Controls (David Rahn), Pump and Valve Performance (Michael Farnan) and to Regional OpE Contacts and Palo Verde Site Residents. Assigned to Steve Pannier (Complete).

9) EN 48555 - RIVER BEND - LICENSEE NO LONGER HAS CONTROL OF EMERGENCY SIRENS (UPDATE)

See EN text. The licensee restored control to offsite sirens. Silent testing was performed to ensure all necessary controls were regained for all 93 sirens. This testing was performed

satisfactorily. Send to TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Steve Pannier.

10) SURRY: EDG VOLTAGE REGULATOR FEEDBACK LEAD NOT CONNECTED

On 12/6, during the monthly surveillance test for EDG #3, the EDG field excitation voltage pegged high after the field was flashed from the control room. Attempts were made to adjust the voltage down with no change. The EDG was then shutdown by the operator from the control room. A report of light smoke and an acrid odor from the relay cabinet in the EDG room was received shortly after the shutdown sequence was initiated. Upon inspection of the relay cabinet a lead was found un-landed, no other abnormalities were noted by a visual inspection. The lead is associated with the voltage regulator feedback circuit and with it disconnected the voltage regulator would remain in the boost (raise) mode. This is consistent with the observed response of the EDG. Several electrical checks were performed in the cabinet to ensure that no components were damaged by the over-voltage condition, no discrepancies were noted. The lead was then re-landed and the surveillance test was completed. The EDG was returned to service at 0420, 12/10.

The other two EDGs were evaluated (EDG #1, successful OPT on 12/03) or inspected (EDG #2 relay cabinet has not anomalies based on visual inspection) for common cause failure concerns and no issues were identified. The licensee has concluded that the condition of the un-landed lead would not be due to vibration or age. The last time work was performed in the subject cabinet was when EDG #3 was run for logic testing at the beginning of the outage (11/03). It is considered likely that the lead was inadvertently disconnected when removing monitoring equipment that had been installed for the logic testing. The Resident Inspector staff will follow-up. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew) and Human Performance (Molly Keefe). Assigned to Bob Bernardo.

11) LER 3882012001R01 - SUSQUEHANNA 2 - (LER REV 1) TWO CONTROL ROOM FLOOR COOLING SYSTEMS INOPERABLE

When operators were hanging a clearance to troubleshoot the failed 'A' train of control room cooling the 'B' train tripped and the 'A' train equipment started-up unexpectedly. This resulted in a temporary loss of control room floor cooling that was immediately recognized and corrected by operators. The event was attributed to a faulty alarm response procedure, poor control switch design and incomplete procedure for hanging clearances. Forward to TRG Lead for HVAC (Nageswara Karipineni); Electrical (Roy Mathew) and Human Performance (Molly Keefe); assigned to Dave Garmon.

12) LER 2892012006R00 - THREE MILE ISLAND 1 - (LER) REACTOR TRIP DUE TO RC-P-1C TRIP

Reactor coolant pump trip was attributed to age-related failure of a differential relay. The licensee has plans in place to replace similar relays in the other RCPs. Since troubleshooting was not definitive the licensee performed an operational decision making process (ODM) and determined that continued operation without a definitive cause was acceptable. Forward to TRG Lead for Electrical (Roy Mathew); assigned to Dave Garmon.

— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR~~

12/11/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY
INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING
PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Eleven (11)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) NRC NEWS RELEASE NO. I-12-049 - NRC CREATES WEB PAGE CONTAINING INFORMATION REGARDING CONCRETE DEGRADATION ISSUES AT SEABROOK NUCLEAR PLANT

The Nuclear Regulatory Commission has established a page on the agency's website to consolidate information on concrete degradation at the Seabrook nuclear power plant. Seabrook is a single pressurized-water reactor located in Seabrook, N.H., and operated by NextEra Energy Seabrook, LLC. Among the items on the web page are correspondence to and from the NRC regarding the issue, slides from a 2012 public meeting on the topic and graphics illustrating the condition. Information on the issue will be added to the page as it becomes available. The NRC public web page's address is: <http://www.nrc.gov/info-finder/reactor/seabrook/concrete-degradation.html>

The concrete degradation at Seabrook is caused by alkali silica reaction (ASR). This is a chemical combining of reactive silica from the concrete aggregate with the alkali from the cement paste in the presence of moisture. (Aggregates are inert granular materials, such as sand, gravel or crushed stone that, along with water and cement paste, are an essential ingredient in concrete.) The result of the reaction is a gel, which can expand and may cause micro-cracks in the concrete.

Note: IOEB/ NRO have been following up on this issue and have previously posted an OpE COMM and opened Issue For Resolutions related to this ASR topic. - INFO ONLY.

2) INVESTIGATION OF STRATEGIES FOR MITIGATING RADIOLOGICAL RELEASES IN SEVERE ACCIDENTS: BWR MARK I AND MARK II STUDIES - (EPRI PRODUCT ID 1026539)

See full report for details (2.16 MB download, 196-page report, click the link above, then click the "download" button). This publicly available EPRI report has been issued regarding strategies for mitigating radiological releases in severe accidents for BWR Mark I and Mark II plants. This EPRI report product number ID 1026539 is available from www.epri.com.

Key insights from this analysis include the following:

- No single strategy is effective;

- Active core debris cooling is required;
- Existing severe accident management guidelines (SAMGs) strategies provide substantial benefit;
- Spraying the containment atmosphere is beneficial;
- Venting prevents uncontrolled release and manages hydrogen;
- Control of the vent provides significant benefit;
- Low-efficiency filters can further reduce radionuclide releases.

Send report information to the NRC JLD task force team - completed. - Info Only.

3) LER 2592011002R01 - BROWNS FERRY 1, 2, & 3: LOSS OF SAFETY FUNCTION (SDC) RESULTING FROM LOSS OF POWER FROM UNIT 1/2 C EDG DUE TO OIL LEAK (LER REVISION AND PART 21 REPORT)

LER ML12083A194 - This revised LER was submitted to provide the results of the licensee's completed investigation and evaluation of past operability. The licensee determined the root cause to be less than adequate vendor design of the Unit 1 and 2 common 'C' EDG governor hydraulic oil tubing to compensate for vibration loading. As documented in the revised LER, the licensee concluded that the 'C' EDG would not have fulfilled its 7-day mission time from April 1 - 30, 2011. This LER also includes a Part 21 Report update. Pass to TRG Lead for EDG (Bob Wolfgang) and Quality and Vendor (Paul Prescott / Thomas Kendzia). Assigned to Bob Bernardo.

4) LER 2592012001R00 - BROWNS FERRY 1, 2, & 3: UNANALYZED CONDITIONS DISCOVERED DURING NFPA 805 TRANSITION REVIEW

This LER is profiled as Non-Public in ADAMS ML12100A148 - A National Fire Protection Association 805 transition review discovered several unanalyzed conditions associated with multiple spurious operation (MSO) of equipment during Appendix R fires. The cause of these conditions was the historical design basis which did not consider MSOs credible in a fire scenario. Pass to the TRG Lead for Fire Protection (Brian Metzger). Assigned to Bob Bernardo.

5) LER 2592012002R00 - BROWNS FERRY 1, 2, & 3: FAULT PROPAGATION DURING A POSTULATED APPENDIX R EVENT COULD RESULT IN AN INABILITY TO CLOSE MOTOR OPERATED VALVES

This LER is profiled as Non-Public in ADAMS ML12100A146 - During NFPA 805 reviews, it was discovered that the current Browns Ferry Nuclear Plant (BFN) Appendix R-analysis does not adequately evaluate fire induced circuit damage. Fire damage to the control circuits of a motor operated valve (MOV) has the potential to bypass the open/close limit switch and/or torque switch causing the valve actuator motor to stall and subject the valve train to forces which exceed design. Compensatory actions in the form of fire watches have been established in accordance with the BFN Fire Protection Report to mitigate this condition. The cause was the failure to review and resolve issues related to industry and NRC guidance on fire induced circuit damage as a result of process deficiencies. Pass to the TRG Lead for Fire Protection (Brian Metzger). Assigned to Bob Bernardo.

6) LER 2592012003R00 - BROWNS FERRY 1, 2, & 3: REACTOR PROTECTION SYSTEM CIRCUIT COULD POTENTIALLY REMAIN ENERGIZED DURING AN APPENDIX R FIRE

This LER is profiled as Non-Public in ADAMS ML12102A145 - As a result of the National Fire Protection Association 805 transition reviews, it was discovered that a lack of physical separation between RPS 120V utility circuit feed to RPS and 120 V Alternating Current (AC) lighting circuitry, the RPS circuit could remain energized due to a postulated hot short during a fire which could prevent the control rods from inserting into the reactor. Compensatory actions in the form of fire watches to mitigate this condition are in place in accordance with the BFN Fire Protection Report. The cause of this issue is engineers' lack of technical rigor during the initial review to verify conformance with 10 CFR 50 Appendix R Section III.G.2. Pass to the TRG Lead for Fire Protection (Brian Metzger). Assigned to Bob Bernardo.

7) LER 2852012003R01 - FORT CALHOUN - NON-CONSERVATIVE ERROR IN CALCULATION FOR ALTERNATE HOT LEG INJECTION RESULTS IN UNANALYZED CONDITION (LER SUPPLEMENT)

See LER Supplement text. The apparent cause of the non-conservative error in the input calculation for post-LOCA cooling flow was identified to be inadequate use of vendor oversight when design information was transmitted to the vendor. The analysis also identified a contributing cause of inadequate review of the calculation provided by the vendor during the owner acceptance process. Send to TRG Leads for ECCS (Samuel Miranda), NRO POC (Doug Copeland), Pump and Valve Performance (Michael Faman) and Human Performance (Molly Keefe). Assigned to Steve Pannier.

8) LER 2852012501R01 - FORT CALHOUN - SAFEGUARDS INFORMATION (SGI) DRAWINGS STORED IN AN UNCONTROLLED PLOTTER HARD DRIVE- (LER SUPPLEMENT)

LER Supplement (non-public available at ML12326A474). Send to TRG Lead for Physical Security (Christopher Lamb). Assigned to Steve Pannier.

9) EN 48575 - LIMERICK 1 - 60-DAY OPTIONAL TELEPHONIC NOTIFICATION OF INVALID MULTIPLE SYSTEM ACTUATIONS

See EN text. Forward to NUREG-1022 POC (Aron Lewin); assigned to Dave Garmon.

11) LER 3972012006R00 - COLUMBIA GENERATING STATION - BOTH DIVISIONS OF SDC ISOLATION VALVES MADE INOPERABLE (LER)

See LER text. The licensee identified that both divisions of Residual Heat Removal (RHR) Shutdown Cooling (SDC) Reactor Vessel Isolation valves were inappropriately made inoperable at the same time on multiple occasions in support of maintenance and surveillance testing during the 2011 refueling outage. Send to TRG Leads for ECCS (Samuel Miranda) and Human Performance (Molly Keefe). Assigned to Steve Pannier.

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY

MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION

DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR

Attendees at Screening Meeting: Mark King (by phone), Bob Bernardo (by phone); Steve Pannier(by phone), Russ Haskell(by phone), Dave Garmon(by phone), Richard Perkins, RES (by phone), Jay Patel, NRO (by phone).

12/14/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Ten (10)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48585 - PART 21 REPORT - 60-DAY INTERIM REPORT INVOLVING AN EVALUATION OF A DESIGN CHANGE TO MAGNE-BLAST CIRCUIT BREAKERS

Pass to TRG Leads for Electrical (Roy Mathew), QA/Vendor (Paul Prescott/Tom Kendzia) and Regional OpE POCs. Complete

2) EN 48587 - BROWNS FERRY 3: 60-DAY TELEPHONE NOTIFICATION OF AN INVALID SYSTEM ACTUATION

Pass to the TRG Lead for Electrical Power (Roy Mathew). Assigned to Bob Bernardo.

3) EN 48579 - BRAIDWOOD 2 - 60-DAY OPTIONAL TELEPHONIC NOTIFICATION OF INVALID SPECIFIED SYSTEM ACTUATION

See EN text. Forward to TRG Leads for Electrical (Mathew), I&C (Rahn); assigned to Russ Haskell

4) EN 48583 - CATAWBA: TECHNICAL SUPPORT CENTER UNAVAILABLE FOR EMERGENCY ASSESSMENT

Pass to the TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Bob Bernardo.

5) EN 48580 - FORT CALHOUN - UNACCOUNTED FOR FIREARM AT FORT CALHOUN

See EN text. The licensee has since located the missing weapon. Send to TRG Lead for Physical Security (Christopher Lamb). Assigned to Steve Pannier (Complete).

6) EN 48581 - FITZPATRICK - 60 DAY REPORT- INVALID SPECIFIED SYSTEM ACTUATION

Forward to TRG Lead for Human Performance (Molly Keefe); assigned to Dave Garmon.

7) EN 48550 - MCGUIRE 2: 60-DAY REPORT - INVALID AUXILIARY FEEDWATER AND NUCLEAR SERVICE WATER PUMP ACTUATION - RETRACTION/UPDATE

Licensee retracted the report under 50.72, and is now reporting this as an invalid actuation under 50.73. Pass to the TRG Lead for Human Performance (Molly Keefe). Assigned to Bob Bernardo (Complete).

8) EN 48590 - NINE MILE POINT 1 - TECHNICAL SPECIFICATION REQUIRED SHUTDOWN DUE TO PRIMARY CONTAINMENT SYSTEM DECLARED INOPERABLE

Forward to Pump and Valve TRG Lead (Michael Farnan); assigned to Dave Garmon.

9) EN 48574 - PILGRIM - LOSS OF EMERGENCY RESPONSE CAPABILITY - TSC/OSC UNAVAILABLE (UPDATE - RESTORED)

Forward to HVAC (Nageswara Karipineni); assigned to Dave Garmon.

10) EN 48584 - SEQUOYAH: RISK OF POSSIBLE FLOODING TO ERCW BUILDING DURING DESIGN BASIS FLOOD

TVA identified during Fukushima walkdowns that they had drawings indicating several possible water stops for ERCW cables going into an area in the ERCW building that is presumed dry during a flooding event. However, the licensee was uncertain of the configuration. NRC recently questioned why they had assurance of current operability if they were not certain of the configurations. TVA developed a work order to align the system, pull large concrete manways and inspect the penetrations.

For compensatory measures, the licensee has staged a 1700 gpm pump in the 2 A ERCW bay and are working on another in a separate bay. Safety-related electrical connections are planned to be completed Saturday evening. Licensee stated one of these pump sized to take care of any in leakage through the inadequate water stops to keep one train of ERCW available in the event of a flood. Residents are reviewing installation of these comp measures and the functional evaluation.

Region is questioning TVA regarding Watts Bar and Browns Ferry for applicability. Pass to the TRG Lead for Flooding/Missiles (Ed Smith). Assigned to Bob Bernardo.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Bob Bernardo, Dave Garmon, Joe Giantelli, Steve Pannier, Al Issa (NRO), Richard Perkins (RES)

12/17/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Eight (8)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) LER 2962011003R01 - BROWNS FERRY 3: AUTOMATIC REACTOR SCRAM DUE TO A MAIN TURBINE GENERATOR LOAD REJECT

ML12333A010 LER Revision 1 updated the causal analysis to identify that preventive maintenance instructions did not contain adequate inspection criteria for a generation risk sensitive component (debris screen). Pass to the TRG Lead for Electrical Power (Roy Mathew). Assigned to Bob Bernardo.

2) LER 2962012003R01 - BROWNS FERRY 3: BROWNS FERRY NUCLEAR PLANT, UNITS 3, AUTOMATIC REACTOR SCRAM DUE TO DE-ENERGIZATION OF REACTOR PROTECTION SYSTEM FROM ACTUATION OF 3A UNIT STATION SERVICE TRANSFORMER DIFFERENTIAL RELAY

ML12333A007 LER Revision 01 updates the causal analysis. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew). Assigned to Bob Bernardo.

3) LER 2962012004R01 - BROWNS FERRY 3: MANUAL REACTOR SCRAM DURING STARTUP DUE TO MULTIPLE CONTROL ROD INSERTION

ML12333A009 LER Revision 01 changed the root cause to be high impedance of the BFN, Unit 3, Main Control Room (MCR) common ground to station ground that exposed the 3A IRM to noise feedback which resulted in a half scram. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew). Assigned to Bob Bernardo.

4) EN 48597 - HARRIS: TECHNICAL SUPPORT CENTER COOLING FAN INOPERABLE

The belt has been fixed and the TSC was restored to functional. Pass to the TRG Lead for Emergency Preparedness (Eric Schrader). Assigned to Bob Bernardo.

5) EN 48591 - SHAW AREVA MOX SERVICES, LLC - PART 21 REPORT INVOLVING NONCONFORMING WELDS ON A PELLET HANDLING TRANSFER GLOVE BOX

See EN / Part 21 text. Send to TRG Leads for QA and Vendor Issues (Paul Prescott / Thomas Kendzia), to the Region II OpE Contact (Ryan Taylor) and to the NMSS Part 21 contact (Sabrina Atack) and R-II ConE POC (Dave Harmon). Assigned to Steve Pannier (Complete).

6) EN 48590 - NINE MILE POINT 1 - (UPDATE) TECHNICAL SPECIFICATION REQUIRED SHUTDOWN DUE TO PRIMARY CONTAINMENT SYSTEM DECLARED INOPERABLE

Info Only.

7) EN 48595 - SUSQUEHANNA 1 & 2 - TECHNICAL SPECIFICATION REQUIRED SHUTDOWN - CONTROL STRUCTURE CHILLERS INOPERABLE

Forward to TRG Lead for HVAC: (Nageswara Karipineni); assigned to Dave Garmon.

8) EN 48598 - SUSQUEHANNA 2 - REACTOR SCRAM FROM 98% POWER DURING TURBINE CONTROL VALVE TESTING

Forward to ECCS TRG Lead (Sam Miranda) and I&C TRG Lead (Dave Rahn); assigned to Dave Garmon.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~

~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION***~~

~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Mark King (by phone), Bob Bernardo (by phone); Steve Pannier (by phone), Joe Giantelli, Dave Garmon, Richard Perkins, RES (by phone), Doug Copeland, NRO (by phone).

12/18/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Six (6) Total – Two (2) operating reactor items and four (4) NRO items below.

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48600 - DIABLO CANYON UNIT 1 - PLANT VENT CONTINUOUS RADIATION MONITORS INOPERABLE

See EN text. Send to EP TRG (Eric Schrader), assigned to Mark King.

2) EN 48481 - NINE MILE POINT 1 - HIGH PRESSURE COOLANT INJECTION ACTUATION SIGNAL - (Retraction)

This event has been retracted. Forward to TRG Lead for ECCS (Sam Miranda); assigned to Bob Bernardo.

New Reactors Items: Four (4)

1) FLAMANVILLE 3 (EPR): ABSENCE OF JOINT TREATMENT BETWEEN TWO CONCRETING LIFTS IN THE GUSSET AREA

In Summer 2008, subcontractors mocked up the concrete pouring activities of the gusset area. The mock-up was performed with 4 concreting lifts. The aim of this mock-up was to ensure; 1) adequate filling with concrete of the area, 2) adequate vibration of the concrete, 3) no deformation of the liner due to the pressure of the concrete, and 4) no gap between liner and concrete.

Reports were sent to EDF after the inspections, and EDF was asked to inform ASN about the feedback of the mock-up.

On October 31, 2008, EDF sent the procedure for concrete pouring of the gusset area. EDF forecasted 2 concreting lifts without joint treatment. All the steel reinforcement of the gusset area was in place, which prevents joint treatment. The absence of joint treatment was a non-compliance with the construction code ETC-C. Moreover, EDF used the mock-up results to ensure the good mechanical characteristics without joint treatment between the concreting lifts, which was not the aim of the mock-up.

In December 2008, ASN put forward the following issues; 1) The way to proceed is not in

accordance with the mock-up, 2) Concrete procedure failed to comply with construction code (ETC-C) and common civil works rules.

The main cause of this non-compliance with the construction code was a lack of preparedness and anticipation of the operator and its contractors. It also reveals a lack of knowledge or appropriation of the ETC-C and hence a lack of safety culture.

For more details see International event from CONEX. Refer to PDF file:
http://nrr10.nrc.gov/forum/oenote/2011-Construction_Joints.pdf

Forward to NRO Structural (Manas Chakravorty), R-II DCI Civil (Kathleen O'Donohue) and Human Performance/Safety Culture (Molly Keefe).

2) FLAMANVILLE 3 (EPR): DAMAGE OF THE 400 KV POWER CABLE OF FLAMANVILLE 2 DURING FLAMANVILLE 3 CONSTRUCTION

On June 2010, digging activities were carried out at the Flamanville 3 site to realize a gutter near the frontier between the construction EPR site and the adjacent operating reactor Flamanville 2 (1300 MWe PWR). Next to this working zone was a concrete electrical block containing three 400 kV cables. The cables provide power to the auxiliary voltage transformer of the adjacent operating reactor.

On the 8th of June 2010, prior to pouring concrete in the preformed gutter, a civil work contractor had to fix a form panel against the concrete electrical block, maintained by a prop. While using a drilling machine to make a hole in the block in order to fix the prop, the contractor damaged one of the 400 kV power cables. As soon as detected by an operator's supervisor, the activity was immediately stopped. The concrete was supposed to be covered, but due to the gutter activities in progress, it was exceptionally uncovered.

For more details see International Event from CONEX. Refer to PDF file:

<http://nrr10.nrc.gov/forum/oenote/2010%20-%20400%20kV%20Power%20cable.pdf>

Forward to Human Performance (Molly Keefe) and Electrical Power Systems (Roy Mathew) and to "NRO impacts on Operating Reactors" POCs (Paul Prescott/Jim Isom).

3) FLAMANVILLE 3 (EPR): APPEARANCE OF CRACKS IN CONCRETE BASEMAT OF REACTOR BUILDING

On January 2008, the operator at Flamanville informed ASN of the appearance of cracks in the recently poured concrete basemat of the reactor building. The transverse cracks ran the full depth of the first layer for the reactor building basemat (1.75m -4200 m3). The biggest cracks are 3.5 mm wide, but with time, the operator observed that the cracks width was decreasing. The pouring activities of the second layer of the basemat were deferred by the operator to wait for the conclusions of the assessment performed by ASN and IRSN (ASN's TSO) on this non-conformity.

On February 8, 2008, ASN carried out an inspection which included consideration of the treatment of cracks (epoxy resin injected under pressure).

On March 17, 2008, ASN wrote to the operator that as a result of the assessment, ASN required the operator to demonstrate how the safety requirements relevant to the function of the basemat (mechanical resistance and leak tightness) will be satisfied after treatment. The operator has to provide ASN with a report on this topic before the end of the year and additionally to detail how these safety functions will be confirmed by monitoring through the life of the facility.

For more details see International Event from CONEX database. Refer to PDF file: http://nrr10.nrc.gov/forum/oenote/08-01_fissuresBR1A.pdf

Forward to NRO Structural (Manas Chakravorty) and R-II DCI Civil (Kathleen O'Donohue) assigned to Jay Patel.

**4) WATTS BAR NUCLEAR PLANT UNIT 2 CONSTRUCTION - NRC
INTEGRATED INSPECTION REPORT 05000391/2012608 (NOV 04, 2012)**

See inspection report link above for more details. On September 30, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of construction activities at the Watts Bar Unit 2 reactor facility. Two NRC-identified findings were determined to involve violations of NRC requirements, however, because the findings were Severity Level IV violations and were entered into the corrective action program, the NRC treated these as non-cited violations (NCVs) consistent with Section 2.3.2 of the NRC Enforcement Policy

1) The NRC Identified a Severity Level (SL) IV Non-Cited Violation (NCV) of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to perform work on a safety-related system with an approved work instruction. (Section OA.1.2)

2) The NRC Identified a Severity Level SL IV NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly correct a condition adverse to quality associated with actions related to NCV 05000391/2011604-02 and NRC Bulletin (BL) 89-02.

NRO will forward to appropriate R-II contacts working on an INFO NOTICE related to work instruction issues in new construction activities.

INFO ONLY.

————— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —————
————— ***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY —————
————— INFORMATION*** —————
————— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING —————
————— PERMISSION FROM ORIGINATOR —————

Attendees at Screening Meeting: Mark King (by phone), Bob Bernardo (by phone); Joe Giantelli, (by phone); Dave Garmon (by phone);, Richard Perkins, RES (by phone), Doug Copeland, NRO (by phone). Al Issa, NRO (by phone), Jay Patel, NRO (by phone).

12/20/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Eight (8)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48603 - CALVERT CLIFFS 1 & 2- PARTIAL LOSS OF EMERGENCY ASSESSMENT DURING PLANNED MODIFICATIONS

Forward to EP TRG Lead (Eric Schrader); assigned to Dave Garmon.

3) EN 48608 - HATCH: GROUNDWATER SAMPLES INDICATE ELEVATED TRITIUM LEVELS

During routine well sampling, the licensee discovered high (5E6 pCi/l) tritium concentrations in wells T11 and T12 (south of U1 CST). The licensee is establishing an IRT to locate and repair the source of tritium leakage. The location of T11 and T12 is within the French drain perimeter so any migration would result in a monitored discharge. Pass to the NRR Staff following Tritium Issues (Steve Garry and Richard Conatser). Assigned to Bob Bernardo.

4) EN 48605 - KEWAUNEE - PLANNED MAINTENANCE AFFECTING THE ABILITY TO ASSESS AN EMERGENCY CLASSIFICATION

Info Only

5) LER 3052012008R00 - KEWAUNEE: (LER) RESIDUAL HEAT REMOVAL SYSTEM INTERLOCK SURVEILLANCE NOT MET DUE TO IMPROPER SETPOINT

LER 3052012008R0 (ML12333A233) – The licensee's calibration procedure to perform surveillance requirements on the RHR valve interlocks utilized setpoints not bounded by Improved Standard Technical Specification (ISTS) Surveillance Requirement 3.4.14.2. (Kewaunee Implemented ISTS in February 2011). A review of the calibration procedure for the RHR interlock bistables revealed improper setpoints of 450 psig (+/- 15 psig) decreasing pressure; and a reset of 480 psig (+/- 15 psig) increasing pressure. Newly implemented ISTS SR 3.4.14.2 requires verification that RHR interlocks will prevent pressure isolation valves from opening when RCS pressure is (\geq) 450 psig. The basis of this setpoint is to prevent over pressurization of the RHR system from the RCS. In the original licensing basis (1973 – 2011) the surveillance requirement did not stipulate a specific interlock setpoint. Upon discovery the ISTS surveillance requirement was not reflected in the licensee's RHR calibration procedure, the RHR interlock functionality was declared INOPERABLE. Licensee entered into action LCO 3.4.14 (C). The licensee concluded the cause of the INOPERABILITY was due to the calibration procedure not being synchronized with the implementation of the ISTS SR 3.4.14.2. Forward to

TRG Lead for I&C (Rahn), T.S. POC (Elliot), Human Performance (Keefe): assigned to Russ Haskell.

6) LER 2662012005R00 - POINT BEACH 1: (LER) POTENTIAL OPERATION PROHIBITED BY TECHNICAL SPECIFICATIONS

LER 2662012005R0 (ML12342A349) – Operators declared the Unit 1 Containment INOPERABLE due to a Service Water (SW) leak into Containment (Technical Specification action LCO 3.6.1). The T.S. requires restoring Containment to OPERABLE status within one hour; MODE 3 in six hours; MODE 5 in 36 hours. The leak was identified in a degraded piping run associated with the 'B' Train Reactor Cavity cooler. The leak was isolated and stopped. Containment was declared OPERABLE, and T.S. action exited (unit remained at power). The degraded pipe was repaired and returned to service. The licensee is evaluating if the actions performed to stop the leak were sufficient since the isolation valves were not leak tested (LLRT) prior to exiting LCO. A supplemental report (LER) is anticipated to address this review ensuring applicable regulatory guidance and industry best-practices were met. Forward to TRG Lead for Containment (Lee), HVAC (Karipineni), Service Water (Purciarello), T.S. POC (Elliot): assigned to Russ Haskell.

7) LER 2652012004R00 - QUAD CITIES 2: (LER) DRYWELL RADIATION MONITOR FAILED DOWNSCALE

LER 2652012004R0 (ML12334A405) – Failure of the 2B Drywell Radiation Monitor resulted in one of two divisions of primary containment isolation logic (Group 2) to be placed in a tripped condition. Technical Specifications (T.S. 3.3.6.1 (A)(B) and T.S. 3.3.3.1 (A) were applicable for this event. Monitor failure was determined to be due to dust/dirt accumulation inside the module, causing subcomponents to malfunction (led to a downscale indication). Inadequate periodic maintenance, in combination with the chassis ventilation design contributed to the failure. Corrective actions included immediate replacement of the 2B Drywell radiation monitor to return it to an OPERABLE condition. The safety significance of this event was minimal. Forward to TRG Lead for Containment (Lee), I&C (Rahn), Human Performance (Keefe): assigned to Russ Haskell.

8) EN 48607 - SUSQUEHANNA 2 - AUTOMATIC REACTOR SCRAM DUE TO LOW REACTOR PRESSURE VESSEL LEVEL

Forward to Pump and Valve TRG Lead (Mike Farnan): assigned to Dave Garmon.

———— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY ————
—— MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY ————
—— INFORMATION ————
—— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING ————
—— PERMISSION FROM ORIGINATOR ————

Attendees at Screening Meeting: Mark King, Russ Haskell, Bob Bernardo, Joe Giantelli, Richard Perkins, RES (by phone), Doug Copeland, NRO (by phone).

12/27/2012

~~— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —~~
~~— ***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY —~~
~~— INFORMATION*** —~~
~~— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING —~~
~~— PERMISSION FROM ORIGINATOR —~~

Follow-up/Other Tasks: Thirteen (13)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48621 - ABB INC. - PART 21 REPORT - DEFECT DISCOVERED IN COM-5 AND SSC-T PROTECTIVE RELAYS DISTRIBUTED BY ABB, INC.

See EN/Part 21 text. ABB Coral Springs received notice from ABB Inc. in Florence, South Carolina of a return request by NextEra Energy (Point Beach Nuclear Plant) for one of their COM-5 relays. The customer complaint was identified as 'A pin on the telephone relay fell out'. A failure of the Telephone Relay to operate on either the COM-5 or SSC-T relay can result in a breaker not tripping during an overload condition. ABB has identified COM-5 and SSC-T relays which shipped that may have a telephone relay of the same vintage as that of the subject telephone relay. There were eleven orders shipped, totaling twenty-five units to three customers; ABB Inc. Florence, S.C., Exelon Business Services and WESCO Distribution, Inc. Send to TRG Leads for QA and Vendor Issues (Paul Prescott / Thomas Kendzia), Electrical Power Systems (Roy Mathew), and to the Regional OpE Contacts. Assigned to Steve Pannier (Complete).

2) EN 48622 - TVA - PART 21 REPORT - BELDEN WIRE USED ON ENVIRONMENTALLY QUALIFIED FORM-WOUND MOTORS NOT FULLY QUALIFIED

See EN text. Thirteen (13) motors are affected. Ten (10) Browns Ferry motors, one (1) Watts Bar Unit 2 motor, one (1) Progress Energy [Crystal River] and one (1) Florida Power & Light (FPL) [St. Lucie Plant]. Region II confirmed that all the customers have been notified of this Part 21 condition and are taking action. Send to the TRG Leads for Pump and Valve (Mike Farnan), Electrical Power Systems (Roy Mathew), QA/Vendor (Paul Prescott, Tom Kendzia), NRO (Doug Copeland / Al Issa), to the Regional OpE Contacts and to RII (Dave Harmon). Assigned to Steve Pannier (Complete).

3) EN 48623 - BROWNS FERRY 2 - AUTOMATIC REACTOR SCRAM DUE TO LOSS OF POWER TO THE REACTOR PROTECTION SYSTEM

See EN text. On 12/22/2012 at 1152 CST, the Unit 2 reactor automatically scrambled due to loss of power to both trains of RPS. The loss of RPS power was the result of a malfunction in the paralleling circuit of the 3D and D Emergency Diesel Generators (EDGs) and a human performance error. Send to the TRG Leads for Electrical Power Systems (Roy Mathew) and Human Performance (Molly Keefe). Complete.

4) EN 48603 - CALVERT CLIFFS 1 & 2- PARTIAL LOSS OF EMERGENCY ASSESSMENT DURING PLANNED MODIFICATIONS (RESTORED)

See EN text. System is restored. Send to EP TRG Lead (Eric Schrader); Complete.

6) EN 48463 - COMANCHE PEAK 1 - SEQUENCER FAULT RESULTING IN SYSTEM ACTUATIONS (UPDATE)

See EN Update text for invalid actuation justification. This event was initially reported as a valid actuation. However, further evaluation of this event has confirmed that the cause was isolated to a failed 15VDC power supply and the ESF bus voltage sensed by the Blackout Sequencer did not dip. Therefore, a valid blackout condition did not occur and the starts of the Unit 1 Turbine Driven Auxiliary Feed Water Pump (TDAFWP) and the Unit 1 Train B Emergency Diesel Generator (EDG) were both determined to be invalid. Send to TRG Leads for Electrical Power (Roy Mathew), EDG (Robert Wolfgang), AFW (Stanley Gardock), Instrumentation and Controls (David Rahn) and to IRIB (Arin Lewin). Assigned to Steve Pannier.

7) LER 2852012008R01 - FORT CALHOUN - TECHNICAL SPECIFICATION VIOLATION FOR FUEL MOVEMENT (LER SUPPLEMENT)

See LER Supplement text. The licensee determined that fuel had been moved during a time where the spent fuel pool area charcoal filter was INOPERABLE because it failed to pass an elemental iodine removal test. A cause analysis determined that a lack of management oversight and the failure of Engineering to take a proactive approach in the prevention of future test failures lead to this event. Send to TRG Leads for HVAC (Nageswara Karipineni), Spent Fuel Handling (Steve Jones), Human Performance (Molly Keefe) and to the STSB (Robert Elliott). Assigned to Steve Pannier.

8) EN 48616 - MONTICELLO - UNANALYZED CONDITION DUE TO AN IDENTIFIED DEGRADED FIRE BARRIER

See EN text. Send to TRG Lead for Fire Protection (Brian Metzger); assigned to Russ Haskell.

9) EN 48618 - MONTICELLO - LOSS OF EMERGENCY RESPONSE DATA SYSTEM (ERDS) (RESTORED)

See EN text. Send to TRG Lead for EP (Eric Schrader); assigned to Russ Haskell.

10) EN 48615 - PALO VERDE 2 - 60-DAY OPTIONAL TELEPHONIC NOTIFICATION FOR AN INVALID ACTUATION OF THE ESSENTIAL SPRAY POND SYSTEM

See EN text. The licensee experienced an invalid actuation of the train B essential spray pond system during testing of the train B engineered safeguards features actuation system (ESFAS). A procedure required a check of contact status on a relay contact which provides input to the train B Load Sequencer. The procedure guidance required the use of a digital multi-meter to perform the contact status check. When the digital multi-meter test leads were landed and removed from the circuit, the train B Load Sequencer changed output modes which resulted in automatic starting of the train B essential chilled water system, essential cooling water system, essential fuel building air filtration unit and essential spray pond system. Send to TRG Leads

for Service Water / UHS (Gerard Purciarello) and Human Performance (Molly Keefe). Assigned to Steve Pannier.

11) EN 48619 - PRAIRIE ISLAND 2 - BOTH UNIT TWO AUXILIARY FEEDWATER PUMPS DECLARED INOPERABLE (RESTORED)

See EN text. Send to TRG Leads for AFW (Stanley Gardocki), ECCS (Sam Miranda); assigned to Russ Haskell.

12) EN 48620 - PRAIRIE ISLAND 1, 2 - LOSS OF EMERGENCY RESPONSE DATA SYSTEM (ERDS) (RESTORED)

See EN text. Send to TRG Lead for EP (Eric Schrader); assigned to Russ Haskell.

13) EN 48617 - SALEM 1 - UNIT 1 AUTOMATIC REACTOR TRIP ON TURBINE TRIP

See EN text. Send to TRG Lead for Electrical (Roy Mathew); assigned to Dave Garmon (complete 12/26/12).

————— NOTE: THIS SUMMARY IS OFFICIAL USE ONLY —————
——— ***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRG INTERNAL USE ONLY ———
————— INFORMATION*** —————
——— DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING ———
————— PERMISSION FROM ORIGINATOR —————

Attendees at Screening Meeting: Joe Giantelli; Russ Haskell; Steve Pannier; Nilda Rivera-Feliciano, NRO (by phone).

Russell S. Haskell II
United States Nuclear Regulatory Commission (NRC)
Reactor Systems Engineer (NRR/DIRS/IOEB)
Russell.Haskell@Nrc.Gov | 301.415.1129 | O-7h23

12/31/2012

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Follow-up/Other Tasks: Ten (10)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) EN 48627 - MIT 6000KW TANK RESEARCH REACTOR -- SAFEGUARDS SYSTEM DEGRADATION (OUO)

Pass to the TRG Lead for Physical Security (Chris Lamb) and PROB PMs (Al Adams/Xiaosong Yin. Assigned to Bob Bernardo.

2) LER 2752012007R00 - DIABLO CANYON - INADEQUATELY COMPENSATED NON-CONFORMANCES IN THE FIRE PROTECTION PROGRAM (LER)

See LER at ML12342A414. The licensee identified fire areas that did not conform to Appendix R requirements and did not have established, proceduralized, or practiced compensatory measures in place. The licensee identified these concerns in the course of responding to requests for information and questions from NRC inspectors conducting a triennial fire protection inspection. The licensee will provide the cause and corrective actions in a supplemental report. Send to TRG Lead for Fire Protection (Brian Metzger). Assigned to Steve Pannier.

3) EN 48635 - DRESDEN - FITNESS FOR DUTY - ACCESS DENIED

Forward to FFD POC (John Munro, Mark Resner, Paul Harris, and Will Smith). Assigned to Jesse Robles.

4) EN 48637 - GRAND GULF - AUTOMATIC REACTOR SCRAM DUE TO A TURBINE/GENERATOR TRIP

See EN text. The cause of the scram appears to be that the Phase A Unit Differential relay tripped causing main generator lockouts to trip resulting in a turbine trip and Reactor Scram. The licensee did not initially report that one of the Automatic Depressurization System (ADS) Safety Relief Valves (SRV's) that lifted in response to the transient did not close as expected. This lowered reactor pressure vessel pressure to about 875 psig. The licensee entered a procedure to shut the valve. Operators took the ADS SRV control switch to close and the valve closed. The licensee also removed the fuses for this valve. ADS SRV has been replaced and tested. Send to TRG Leads for Electrical Power Systems (Roy Mathew), Instrumentation and

Controls (David Rahn) and Pump and Valve Performance (Michael Farnan). Assigned to Steve Pannier.

5) EN 48608 - HATCH: GROUNDWATER SAMPLES INDICATE ELEVATED TRITIUM LEVELS - UPDATE

Pressure testing has identified the Unit 1 CST to RHR line as the Tritium source. Isolation of affected piping is complete and restoration of piping which passed pressure testing has also been completed. Excavation of affected piping is in progress. Pass to the NRR Staff following Tritium Issues (Steve Garry and Richard Conatser). Assigned to Bob Bernardo.

6) EN 48629 - LIMERICK 1 & 2 - LOSS OF COMMUNICATIONS WITH ALL EMERGENCY PLANNING ZONE SIRENS

Communications with all EPZ sirens have been restored. Forward to EP TRG Lead (Eric Schrader); assigned to Dave Garmon.

7) LER 4582012001R01 - RIVER BEND - OPERATIONS PROHIBITED BY TECHNICAL SPECIFICATIONS DUE TO INOPERABILITY OF DIVISION 3 DIESEL GENERATOR (LER SUPPLEMENT)

The licensee originally determined that the lubricating oil in the Division 3 diesel generator (DG) was contaminated with fuel at a level that required its replacement. The licensee has since determined that, in the as-found condition, the DG remained capable of fulfilling the mission time assumed by the station's probabilistic risk analysis. Enhanced work instructions for fuel jumper installation have been added to the vendor manual and to model work orders. Send to TRG Leads for EDG (Robert Wolfgang), ECCS (Samuel Miranda), Human Performance (Molly Keefe) and to the STSB (Robert Elliott). Assigned to Steve Pannier.

8) EN 48638 - SURRY 2: EMERGENCY DIESEL GENERATOR AUTO-START AND LOAD UPON TRIP OF RESERVE STATION TRANSFORMER

The supply breaker to 'B' Reserve Station Transformer (RSST), 0-EP-BKR-252 tripped on an instantaneous over current of the B-C phases due to a Pelican contacting the lines. Pass to the TRG Lead for Electrical Power Systems (Roy Mathew). Assigned to Bob Bernardo.

9) EN 48636 - SUSQUEHANNA 1 & 2 - COMPUTER PROGRAM ERROR IDENTIFIED IN THE FITNESS FOR DUTY PROGRAM

Forward to FFD POC (John Munro, Mark Resner, Paul Harris, and Will Smith). Assigned to Dave Garmon.

10) EN 48639 - COLUMBIA GENERATING STATION - SECONDARY CONTAINMENT MOMENTARILY INOPERABLE

A security officer proceeded through the Reactor Building outer security door and opened the inner door prior to the outer security door completely closing. This resulted in both the Reactor Building inner and outer access doors being simultaneously open for a short duration. Normally, the doors are interlocked in which the inner door would not be able to be opened prior to the

outer security door being closed. Send to TRG Leads for Containment (Brian Lee) and Human Performance (Molly Keefe). Assigned to Steve Pannier.

~~NOTE: THIS SUMMARY IS OFFICIAL USE ONLY~~
~~***MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY~~
~~INFORMATION***~~
~~DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING~~
~~PERMISSION FROM ORIGINATOR~~

Attendees at Screening Meeting: Bob Bernardo; Dave Gammon; Steve Pannier; Jesse Robles; Rebecca Sigmon; Phil O'Bryan