Removed FCS Flooding Recovery Action Plan – 3.4
I&C Power Supply Service Life Assessment

FOCUS AREA:	Long Term Equipment Reliability
ACTION PLAN:	I&C Power Supply Service Life Assessment
ACTION PLAN NUMBER:	3.4

ISSUE DEFINITION:

A few power supplies in the FCS Reactor Protection System (RPS) have failed. Some failures are due to age related failure mechanisms, including some equipment that was installed beyond the vendor or other established recommended service life. This same issue applies to Safety Related (CQE) - includes FID 1 & 2-power supplies in other systems.

OBJECTIVE:

Ensure safety-related (CQE) power supplies do not fail while in service by implementation of an effective equipment reliability strategy. Replace CQE power supplies that are beyond their established service life. Develop a strong technical basis for all CQE power supplies that support the equipment reliability strategies for these power supplies.

3.4.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
1.	Replace Non-RPS CQE power supplies that will be beyond their recommended service life	Engineering Programs	Ravi Tella	Non-RPS CQE power supplies replaced that will beyond their recommended service life. Work Order report – showing the applicable WO in finished or complete status

Removed FCS Flooding Recovery Action Plan – 3.4
I&C Power Supply Service Life Assessment

3.4.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
1.	Establish High Impact Team with a Charter	Engineering Programs	Ravi Tella	Team established and briefed on the task, objectives and Charter - Completed
2.	Identify all CQE power supplies; priority will be on RPS CQE power supplies and then non-RPS CQE power supplies	Engineering Programs	Ravi Tella	Excel list of all power supplies, including identification of those power supplies that do not have a unique component identification number in Asset Suite - Completed
3.	Determine the installation date for FCS CQE power supplies; these dates will be used to define those CQE power supplies that are beyond their service life	Engineering Programs	Ravi Tella	Excel list with CQE power supplies and their installation dates
4.	Conduct an industry and FCS specific analysis of historical performance for CQE power supplies; determine the effectiveness of the current ER Strategies at the FCS component level	Engineering Programs	Ravi Tella	Word or Excel document with a summary of historical performance by manufacturer and model and FCS component identification number for CQE power supplies

Removed FCS Flooding Recovery Action Plan – 3.4
I&C Power Supply Service Life Assessment

3.4.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
5.	Conduct an analysis of the current FCS ER Strategy for power supplies; contact vendors, review industry documentation, benchmark other plants	Engineering Programs	Ravi Tella	Revised ER Strategy document for CQE power supplies

Removed FCS Flooding Recovery Action Plan – 3.4
I&C Power Supply Service Life Assessment

3.4.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
6.	Determine the recommended service life for CQE power supplies based on analyses performed earlier in this action plan These service lives will be based on: (1) manufacturer and model, (2) qualified life testing, (3) vendor recommendations and communication with vendors, (4) remnant life based on stress testing of removed power supplies, (5) industry and FCS specific historical performance and (6) actual duty cycle and service condition where these power supplies are installed	Engineering Programs	Ravi Tella	Excel list with manufacturer and model number and recommended service lives for each CQE power supply

Removed FCS Flooding Recovery Action Plan – 3.4
I&C Power Supply Service Life Assessment

3.4.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
7.	Conduct a failure modes and effects analysis on each power supply to ensure the impact of failures is understood	Engineering Programs	Ravi Tella	Excel or Word document with Failure modes and effects analysis of each power supply defining the system and plant impact of a failure of that power supply
8.	Document the time based replacement strategy and basis for CQE and RPS power supplies This strategy and basis will provide the tasks to be performed and the basis for the scope and frequency of those tasks. This action is being completed before start up to ensure each power supply has been analyzed and a recommended service life defined	Engineering Programs	Ravi Tella	Word and Excel documents defining the time based replacement strategy and basis

Removed FCS Flooding Recovery Action Plan – 3.4
I&C Power Supply Service Life Assessment

3.4.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
9.	Define those power supplies that are beyond their service life. This will include power supplies that will be beyond their service life before the next planned refueling outage	Engineering Programs	Ravi Tella	Excel list of power supplies beyond their service life, including those that will be beyond their service life before the next refueling outage; Operability Determination (NOD-QP-31) documenting the basis for power supplies that will not be replaced
10.	Replace RPS CQE power supplies beyond their service life	Engineering Programs	Ravi Tella	Work Order report – showing the applicable WO in finished or complete status
11.	Replace Non-RPS CQE power supplies that will be beyond their recommended service life	Engineering Programs	Ravi Tella	Work Order report – showing the applicable WO in finished or complete status.

Removed FCS Flooding Recovery Action Plan – 3.4
I&C Power Supply Service Life Assessment

3.4.3 Long-Term Actions				
#	Action	Lead Group	Owner	Deliverable
1.	Complete the development of the ER Strategy for CQE power supplies This action will include all tasks to be performed and basis for those tasks and PM Change Requests for any PM changes	Engineering Programs	Ravi Tella	Fully developed ER Strategy loaded into IQReview (software) PM Change Requests (FC-1065) for PM Changes **NOTE: This commitment has been removed from the Flooding Recovery Plan because it is not related to restoration. It is not reflected in the Restart Checklist Implementation Strategy because it is a post-restart commitment. It is therefore being tracked in the licensing commitment management system.**
2.	Implement PM Change Requests by changing PMs in Asset Suite Validate PM Changes in Asset Suite to be correct	Engineering Programs	Ravi Tella	PMs changed. PM Change Requests (FC-1065) verified to be closed accurately **NOTE: This commitment has been removed from the Flooding Recovery Plan because it is not related to restoration. It is not reflected in the Restart Checklist Implementation Strategy because it is a post-restart commitment. It is therefore being tracked in the licensing commitment management system.**
3.	Schedule new and revised PMs	Engineering Programs	Ravi Tella	PMs scheduled in Asset Suite **NOTE: This commitment has been removed from the Flooding Recovery Plan because it is not related to restoration. It is not reflected in the Restart Checklist Implementation Strategy because it is a post-restart commitment. It is therefore being tracked in the licensing commitment management system.**

Removed FCS Flooding Recovery Action Plan 4.4
External Flood Design Basis Review

FOCUS AREA:	Design and Licensing Basis
ACTION PLAN:	External Flood Design Basis Review
ACTION PLAN NUMBER:	4.4

ISSUE DEFINITION:
The station design basis needs to be reviewed with respect to the 2011 flood event to determine if changes to the design basis are appropriate based on lessons learned regarding flood character.

OBJECTIVE:
Determine if the station flood design basis is adequate to maintain nuclear safety and protect the health and safety of the public. Based on the conclusion of the assessment revise design basis, processes and procedures as appropriate.

4.4.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
1.	N/A			

4.4.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
1.	N/A			

Removed FCS Flooding Recovery Action Plan 4.4
External Flood Design Basis Review

4.4.3 Long-Term Actions				
#	Action	Lead Group	Owner	Deliverable
1.	Gather flood response lessons learned through CR reviews to determine if procedure or strategy changes should be implemented.	DEN	Hyde	Recommended process and strategy changes **NOTE: This commitment has been removed from the Flooding Recovery Plan because it is not related to restoration. It is not reflected in the Restart Checklist Implementation Strategy because it is a post-restart commitment. It is therefore being tracked in the licensing commitment management system.**
2.	Review Flood Design Basis and determine if the 2011 flood event provides additional information that should drive design basis changes	DEN	Hyde	The external flooding design basis document was prepared as a result of action assignments in CR 2010-2387. This DBD has been under examination throughout the 2011 flood event. Further review will be conducted to determine if design basis changes are warranted **NOTE: This commitment has been removed from the Flooding Recovery Plan because it is not related to restoration. It is not reflected in the Restart Checklist Implementation Strategy because it is a post-restart commitment. It is therefore being tracked in the licensing commitment management system.**
3.	Implement procedure and strategy changes as indicated by the lessons learned review conducted above.	DEN	Hyde	This is similar to action item 39 of level A CR 2010-2387 which requires implementation of enhanced external flooding procedures. This action item is due 12/09/2011 This action is being driven by responses to CRs from the flooding event. **NOTE: This commitment has been removed from the Flooding Recovery Plan because it is not related to restoration. It is not reflected in the Restart Checklist Implementation Strategy because it is a post-restart commitment. It is therefore being tracked in the licensing commitment management system.**

Removed FCS Flooding Recovery Action Plan 4.4
External Flood Design Basis Review

4.4.3 Long-Term Actions				
#	Action	Lead Group	Owner	Deliverable
4.	Gather all information from lessons learned during 2011 flood event	DEN	Hyde	Comprehensive collection of lessons learned assembled in a table
5.	Not Used			
6.	Site expert panel to review lessons learned information	DEN	Hyde	Confirmed assessment table and additional actions.
7.	Specify assumed flood duration in strategy portion of External Flood DBD	DEN	Hyde	Revised PLDBD-CS-56.
8.	Establish plan for periodic review of US Army Corps of Engineer Master Plan to ensure External Flood DBD strategy remains current.	DEN	Hyde	Administrative task established to drive periodic review of USACE Master Plan.
9.	Develop strategies for beyond design basis flooding	DEN	Hyde	Draft Strategy Guideline.

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

FOCUS AREA:	Design and Licensing Basis
ACTION PLAN:	High Energy Line Break Remediation
ACTION PLAN NUMBER:	4.5

ISSUE DEFINITION:

The reconstitution of the Electrical Equipment Qualification (EEQ) program involved a re-analysis of high energy lines to current industry standards. The High Energy Line Break (HELB) analyses have determined that there are some systems that require modification to prevent new harsh environments and some that result in new harsh environments.

OBJECTIVE:

This action plan addresses analysis and configuration change work to be performed to address the HELB concerns.

4.5.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
1.	90% SMART Review of EC 53202; FW-10 Steam Line HELB Modification	DEN	Swearngin	EC 53202 SMART review comments developed and provided to DEN Closed to final action 4.5.1.3 (PRC Review of EC 53202; FW-10 Steam Line HELB Modification). SMART reviews are an interim part of the approval process.
2.	Final SMART Review of EC 53202; FW-10 Steam Line HELB Modification	DEN	Swearngin	SMART approval of EC 53202 Closed to final action 4.5.1.3 (PRC Review of EC 53202; FW-10 Steam Line HELB Modification). SMART reviews are an interim part of the approval process.
3.	PRC Review of EC 53202; FW-10 Steam Line HELB Modification	DEN	Swearngin	PRC Approval of EC 53202

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.1 Short-Term Actions (Prior To RCS >210°F)				
#	Action	Lead Group	Owner	Deliverable
4.	Develop Construction Work Orders for EC 53202; FW-10 Steam Line HELB Modification	Construction	Allen	Approved Construction Work Orders Closed to final action 4.5.1.5 (Complete installation of EC 53202; FW-10 Steam Line HELB Modification). This is an interim step in installation of the EC.
5.	Complete installation of EC 53202; FW-10 Steam Line HELB Modification	Construction	Allen	OPSAC of EC 53202
6.	Prepare EC 52662; Add a new Pipe Support on the SGBD vertical line above FW-1020	DEN	Swearngin	EC 52662 issued to plant
7.	Install EC 52662; Add a new Pipe Support on the SGBD vertical line above FW-1020	Construction	Allen	OPSAC of EC 52662
8.	Complete EEQ Harsh Environment analysis for Room 13 crack in Steam Generator Blowdown system	Engineering Programs	Shudak	Analysis is complete
9.	Develop plan to address Room 13 EEQ harsh environment qualification of electrical equipment	DEN	Sterba	Completed Action Plan with timeline for resolution Close to actions 4.5.1.16 thru 4.5.1.36 that resolve the identified issues.

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.1 Short-Term Actions (Prior To RCS >210°F)				
#	Action	Lead Group	Owner	Deliverable
10	Initiate actions to resolve Room 13 EEQ harsh environment qualification of equipment which must be addressed prior to leaving cold shutdown	DEN	Sterba	Maintenance work orders written and ECs developed Close to actions 4.5.1.16 thru 4.5.1.36 that resolve the identified issues.
11	Resolve Room 13 EEQ harsh environment qualification of equipment which must be addressed prior to leaving cold shutdown	Maintenance	Uehling	Work orders complete and ECs implemented Close to actions 4.5.1.16 thru 4.5.1.36 that resolve the identified issues.
12	Perform analysis to address HCV-1385/1386 Main Steam Line Break/Feedwater isolation concern (CR 2011-6757)	DEN	Mathew	Completed analysis
13	Implement resolution of HCV-1385/1386 Main Steam Line Break/Feedwater isolation concern	DEN	Swearngin	Engineering Changes implemented

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
14	Perform HELB analysis of Auxiliary Steam piping in the auxiliary building	DEN	Mathew	Completed analysis Closed to 4.5.2.1 (Perform HELB analysis of Auxiliary Steam piping in the auxiliary building). Auxiliary Steam can be isolated to the Auxiliary Building prior to plant heatup and startup.
15	Implement resolution of Auxiliary Steam piping in the auxiliary building	DEN	Mathew	Engineering Changes implemented (OPSAC complete) Closed to 4.5.3.5 (Develop EC 53958 to prevent harsh areas resulting from Auxiliary Steam System) and 4.5.3.6 (Implement EC 53958 to prevent harsh areas resulting from the Auxiliary Steam system). Auxiliary Steam can be isolated to the Auxiliary Building prior to plant heatup and startup.
16	Implement EC's to address HCV-1105/1106 qualification for FW isolation	Construction	Dailey	Completed work order and OPSAC (if required)
17	Prepare EC to replace VA-63A-M and VA-63B-M	DEN	Smidt/Jorgensen	EC Issued
18	Implement EC to replace VA-63A-M and VA-63B-M	Construction	Dailey	Completed work order and OPSAC (if required)
19	Prepare EC 53866 for SGBD isolation based on A SGBD pipe break in Room 13	DEN	Sterba	Engineering Change package, EC53866.

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.1 Short-Term Actions (Prior To RCS >210°F)				
#	Action	Lead Group	Owner	Deliverable
20.	Implement EC 53866 to provide SGBD isolation based on pipe break in Room 13	Construction	Dailey	Completed work order and OPSAC (if required)
21.	Prepare EC 54243; FQ-236, FT-236 to be relocated to AI-100 (EC 54243)	DEN	Sterba	Engineering change package
22.	Implement EC 54243 to relocate FQ-236 and FT-236	Construction	Dailey	Completed work order and OPSAC (if required)
23.	Prepare EC; HCV-1041/1042 – Room 81, install additional isolation fuses	DEN	Sterba	Engineering change package
24.	Implement EC to install isolation fuses EEQ MEL concern	Construction	Dailey	Completed work order and OPSAC (if required)
25.	Prepare EC 54245 to install isolation fuses for PIC-242, 243, 244	DEN	Sterba	EC Issued
26.	Implement EC 54245 to install isolation fuses for PIC-242, 243, 244	Construction	Andersen	Completed work order and OPSAC (if required)
27.	Prepare EC 54246 to replace PCS-2937, 2947	DEN	Sterba	EC issued. (EC 54246).

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
28.	Implement EC to replace or qualify PCS-2937, 2947	Construction	Andersen	Completed work order to install EC. CWO 428164-6
29.	Prepare EC to replace TE-6683-2, 6683-3, 6684-2, 6684-3	DEN	Sterba	EC package issued.
30.	Implement EC to replace TE-6683-02, 6681-3, 6684-2, 6684-3	Construction	Dailey	Completed work order and OPSAC (if required)
31.	Prepare EC to replace/rewind VA-40A, 40B, 40C motors	DEN	Sterba	EC package prepared
32.	Implement EC 54554 to replace VA-40A, 40B, 40C motors	Construction	Dailey	Completed work order and OPSAC (if required)
33.	Prepare EC 54554 to replace HCV-1042C-O with class RH insulation motor	DEN	Sterba	EC 52116 Issued
34.	Implement EC to replace HCV-1042C-O	Construction	Dailey	Completed work order and OPSAC (if required)
35.	Prepare EC 54428 to replace diodes (CR 11-8772).	DEN	Sterba	EC package issued.
36.	Implement EC54428 to replace diodes	Construction	Dailey	Completed work order and OPSAC (if required)

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.1 Short-Term Actions (Prior To RCS >210°F)				
#	Action	Lead Group	Owner	Deliverable
37.	Perform Radiation Analysis to evaluate streaming affects and point-specific calculations	DEN	Swearngin	Complete Engineering Analysis
38.	Identify actions for startup issues for radiation – only areas as identified in CR 2011-7462.	Programs	Smidt/Jorgensen	Recommendations for additional actions
39.	Complete Engineering review of EA 08-11; EEQ Master Equipment List	DEN	Sterba	Preliminary Engineering Analysis and final disposition of EEQ Master Equipment List to support plant startup.
40.	Complete engineering review of EA 06-032; EEQ Environmental Parameters	DEN	Swearngin	Review and disposition engineering analysis to support plant startup
41.	Complete EA 11-037; HELB Analysis	DEN	Mathew	Completed Engineering Analysis
42.	Perform Owner Acceptance Review of EA 11-038; RG 1.97 Compliance	DEN	Sterba	Completed Engineering Analysis
43.	Perform Owner Acceptance Review of EA 11-041; Ambient Temperature Analysis	DEN	Swearngin	Completed Engineering Analysis, Rev 0

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.1 Short-Term Actions (Prior To RCS >210°F)				
#	Action	Lead Group	Owner	Deliverable
44	Evaluate Room 81 components due to MSLB analysis requiring survivability to 370 degrees F	Programs	Smidt/Jorgensen	Completed Engineering Analysis
45	Perform Engineering Analysis to demonstrate qualification of new components added to EEQ MEL. CR 2011-7463	Programs	Smidt/Jorgensen	Completed Engineering analysis EA 11-046.
46	Establish resolution of EEQ MEL components that require some form of remediation	Programs	Smidt/Jorgensen	Condition Reports documenting results of evaluations, initiation of Engineering Changes, new action plan items.
47	Identify components that would exceed qualified life per EA 11-041	Programs	Smidt	WRs placed in RFO scope to replace identified components.
48	Implement replacement of components per EA 11-041.	Maintenance	Uehling	Completed component replacement.
49	Revise EEQ Program documents to remove need for 4.5.1-17/18	Programs	Smidt/Jorgensen	Revised program documents

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
50.	Prepare EC 55210 to replace PS-1107B and PS-1108B.	DEN	Sterba	Completed Engineering Change Package.
51.	Implement EC 55210 to replace PS-1107B and PS-1108B.	Construction	TBD	Completed work order and OPSAC (if required).

4.5.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
1.	Perform HELB analysis of Auxiliary Steam piping in the auxiliary building.	DEN	Mathew	Completed analysis
2.	Not Used			
3.	Not Used			
4.	Update EEQ Harsh Files	Programs	Jorgense n/ Smidt	Updated Harsh Files

4.5.3 Long-Term Actions				
#	Action	Lead Group	Owner	Deliverable
1.	Complete EA 10-020 Owner Acceptance Review	DEN	Swearngin	Completed Engineering Analyses.
2.	Complete EA 06-032 Owner Acceptance Review.	DEN	Swearngin	Completed Engineering Analysis.
3.	Complete EA 08-011 Owner Acceptance Review	DEN	Sterba	Completed Engineering Analysis.

Removed FCS Flooding Recovery Action Plan 4.5
High Energy Line Break Remediation

4.5.3 Long-Term Actions				
#	Action	Lead Group	Owner	Deliverable
4.	Develop enhanced design bases document and/or Program Bases Document for EEQ program	Programs	Smidt/Jorgensen	Comprehensive description of the FCS EEQ program
5.	Develop EC 53958 to prevent harsh areas resulting from Auxiliary Steam System	DEN	Swearngin	Engineering Changes approved. (EC 53958)
6.	Implement EC 53958 to prevent harsh areas resulting from the Auxiliary Steam system	Construction	Dailey	Completed work order and OPSAC (if required)

Removed FCS Flooding Recovery Action Plan 4.6
Design Resolution Items

FOCUS AREA:	Design and Licensing Basis
ACTION PLAN:	Design Resolution Items
ACTION PLAN NUMBER:	4.6

ISSUE DEFINITION:
Significant Design Issues which require resolution prior to plant startup and are not covered in other Recovery Plan are identified in this Action Plan. Items are considered to be significant issues if they require a large amount of resource to resolve or could pose a challenge to the timely completion of the Recovery.

OBJECTIVE:
This action plan tracks the resolution of significant design issues.

4.6.1 Short-Term Actions (Prior To RCS >210°F)				
#	Action	Lead Group	Owner	Deliverable
1.	Address concerns identified with the Reactor Coolant Pump oil collection system	DEN	Swearngin	Complete CR 2011-6631 corrective actions to address RCP oil collection system Closed to specific action 4.6.1.8 (Reactor Coolant pump oil collection system brazed joint rework. CR 2011-6631)
2.	Address non-conservative 161 kV minimum voltage to support operation of a main feedwater pump in an SIAS-only scenario (CR 2011-6725)	DEN	Sterba	EA-FC-92-081; OPLS setpoint analysis update and recommendations for setpoint changes
3.	Provide analysis of Steam Generator accident ring (CR 2011-6825)	DEN	Swearngin	Engineering Analysis provided by Westinghouse and recommendation for additional supports

Removed FCS Flooding Recovery Action Plan 4.6
Design Resolution Items

4.6.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
4.	Provide analysis to address LTOP PORV concern (CR 2011-7164)	Den	Swearngin	Engineering analysis to evaluate adequacy of PORV supports during water-solid conditions.
5.	1B3A tripping during 1B4A bus fire (CR 2011-6621)	DEN	Sterba	Root Cause Analysis approved by Station CARB.
6.	Not Used			
7.	CCW thermal analysis by Stevenson & Associates identified the need for support modification for several CCW system supports in containment **(Cr 2011-7938).**	DEN	Swearngin	A new reportability is assigned to address this issue
8.	Reactor Coolant pump oil collection system brazed joint rework. CR 2011-6631	Maintenance	Uehling	Completed work order packages WO 425667.
9.	Not Used			
10.	Main steam piping analysis; seismic anchor movement and break anchor movements to be included in analysis (CR 2011-7939)	DEN	Swearngin	Reportability Evaluation.

Removed FCS Flooding Recovery Action Plan 4.6
Design Resolution Items

4.6.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
11	Develop EC scope to allow removal of interconnecting 480 volt buswork when RCS above 300F (address 1B3A tripping CR 2011-6621)	DEN	Sterba	EC scope statement.
12	Develop EC 54429 to address interconnecting 480 volt buswork (address 1B3A tripping CR 2011-6621)	DEN	Sterba	EC in ACTIVE status.
13	Identify solution to address load shed of Spent Fuel Pool Cooling pumps during accident conditions (CR 2011-4725)	DEN	Sterba	EC scope statement or procedure change.
14	Perform inspection inside pressurizer to address pressurizer heater sheath integrity concern (CR 2011-6523)	System Engineering	Kevin Naser	Completed inspection of heater sheath on failed heaters

Removed FCS Flooding Recovery Action Plan 4.6
Design Resolution Items

4.6.1 Short-Term Actions (Prior To RCS >210° F)				
#	Action	Lead Group	Owner	Deliverable
15.	Complete analysis of pressurizer heater sheath (CR 2011-6523)	DEN	Swearngin	Reportability evaluation completed
16.	Perform analysis of CVCS and RCS drain line piping supports down stream of isolation valve cclass break (CR 2011-8063)	Nuclear Projects	Jeff Spilker	Analysis completed
17.	Developed EC 54437 to address CVCS and RCS drain line piping supports (CR 2011-8063)	Nuclear Projects	Jeff Spilker	Engineering Change package issued
18.	Implement EC 54437 to address CVCS and RCS drain line piping supports (CR 2011-8063)	Construction	Andersen	Completed work Orders
19.	Developed EC 54435 to address supports for PORVs (CR 2011-7164)	Nuclear Projects	Jeff Spilker	Engineering Change package prepared to ensure piping is adequately supported for all scenarios
20.	Implement EC 54435 to address supports for PORV's (CR 2011-7164)	Construction	Andersen	Completed work Order

Removed FCS Flooding Recovery Action Plan 4.6
Design Resolution Items

4.6.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
1.	Run FW-541 to validate engineering analysis for suction void	DEN	Swearngin	Validation of Fauske analysis.
2.	Analyze main steam piping in containment for Turbine Stop Valve Transient (CR 2011-7840)	DEN	Swearngin	Complete analysis for MSVT.
3.	Not Used			
4.	Develop EC 46038 solution for turbine stop valve transient	Projects	Spilker	Engineering change package issued
5.	Implement EC 46038 solution for turbine stop valve transient	Construction	Dailey	Completed work order
6.	Implement EC procedure change to address load shed of Spent Fuel Pool Cooling pumps during accident conditions (CR 2011-4725)	Operations	Smith	Procedure changes issued

Removed FCS Flooding Recovery Action Plan 4.6
Design Resolution Items

4.6.2 Short-Term Actions (Prior To Reactor Critical)				
#	Action	Lead Group	Owner	Deliverable
7.	Develop EC 54436 solution to address containment CCW piping thermal analysis (CR 2011-7938)	Nuc Projects	Spilker	Engineering change package issued.
8.	Implement EC 54436 solution to address containment CCW piping thermal analysis (CR 2011-7938)	Constructio n	Dailey	Completed work order.

4.6.3 Long-Term Actions				
#	Action	Lead Group	Owner	Deliverable
1.	N/A			

APPENDIX C: RESTART CHECKLIST IMPLEMENTATION STRATEGY

Fort Calhoun Station Restart Checklist Implementation Strategy

Restart Checklist Scope and Purpose

The Restart Checklist includes a list of items that require resolution prior to restart. The purpose of the Restart Checklist is to identify and resolve those issues that have resulted in the prolonged performance decline at Fort Calhoun Station (FCS). The Restart Checklist is focused on those items related to the basis expressed in the December 13, 2011, letter placing FCS under NRC Inspection Manual Chapter 0350, "Oversight of Reactor Facilities in a Shutdown Condition due to Significant Performance and/or Operational Concerns," (MC0350), the 2011 flood, and the performance categorization within the Multiple/Repetitive Degraded Cornerstone column of the Reactor Oversight Process Action Matrix prior to being placed under MC0350. The Restart Checklist also includes the third party evaluation of the FCS safety culture. In addition, the Restart Checklist includes certain risk significant issues that were identified during Fort Calhoun Station Discovery activities and warrant inclusion on the Restart Checklist. Resolution of all performance deficiencies that have been characterized as white, yellow, or red significance will be completed before restart of FCS.

This implementation strategy for the Restart Checklist provides clarification of the scope and breadth of the actions Omaha Public Power District (OPPD) will take to address each of the Restart Checklist items.

The outcome of completing implementation of the Restart Checklist strategy will be thorough assessment of the causes of the protracted performance decline at FCS and identification and implementation of necessary corrective actions, actions to prevent recurrence, and/or compensatory measures to assure the plant, people and processes are sufficiently robust to provide reasonable assurance of safe and efficient restart and continued safe operation of FCS. The items in the Restart Checklist are the critical subset of activities in the Integrated Performance Improvement Plan that the NRC has identified that must be adequately addressed before restart. Addressing the Checklist items includes the performance of extensive discovery activities. Consequently, the Checklist will be a living document incorporating any additional deficiencies that are identified through the discovery process that are of sufficient safety significance that NRC confidence in adequate closure before restart is important.

This implementation strategy will describe the purpose of the actions within each Restart Checklist section. For each item in the section, the strategy will list the Reactor Oversight Process cornerstones addressed by that item and further describe the scope of the discovery actions that will be accomplished to address that item, and the scope expansion criteria.

Restart Checklist Closure Criteria

Success criteria for completion of each Restart Checklist item will differ depending on the section of the Checklist and the nature of the action.

1. Under Section 1, the root cause and other assessments will be completed using procedures and processes that consider best industry practices for those assessments. Each item in Section 1 will be considered complete when the assessment is completed and identified deficiencies, corrective actions and actions to prevent recurrence from these assessments are incorporated into the Corrective Action Program (CAP) for resolution.

2. Section 2 addresses the readiness of the structures, systems and components for safe restart of FCS. Checklist item 2.a addresses the flood related restoration activities contained in the Flooding Recovery Plan, Revision 3 included in Appendix B to this IPIP. This item will be considered complete when the restoration activities are addressed under the procedures in the CAP. Checklist item 2.b includes actions to assure important systems are ready for restart. The items will be complete when the reviews are completed using procedures that consider industry standards and best practices for those activities and identified deficiencies, corrective actions and actions to prevent recurrence from these reviews are incorporated into the CAP for resolution.

3. For the programmatic areas addressed in Section 3, the Checklist item will be considered completed when the discovery is completed without further scope expansion, identified deficiencies, corrective actions and actions to prevent recurrence are incorporated into the CAP for resolution, the program has been evaluated and enhanced where necessary considering industry best practices, and performance metrics are established and monitored to assure continued successful program implementation.

4. Section 4 of the Restart Checklist involves the NRC evaluation of the FCS Integrated Performance Improvement Plan. No specific completion activities are necessary for OPPD.

5. Section 5 of the Restart Checklist involves the NRC evaluation of the NRC Inspection Procedure 95003 key attributes at FCS. No specific completion activities are necessary for OPPD.

6. Any licensing actions necessary for restart in Checklist item 6.a will be complete when NRC has approved the licensing actions or amendments. Checklist item 6.b addresses licensing commitments, including the activities contained in Flooding Recovery Plan (FRP), Revision 1 reflected in the September 2011 Confirmatory Action Letter that are not associated with flood restoration. These are the items that are in FRP, Revision 1 that not captured in FRP, Revision 3. These commitments will be considered complete when they are addressed under the procedures in the CAP.

7. Checklist items 7.a and 7.b will be considered complete when the operations organization, including necessary support from other plant organizations, has demonstrated capability to safely restart, operate at power, and control the plant, and all necessary systems have been returned to operability and mode restraint checklists have been completed.

   It is anticipated that a large number of Condition Reports (CRs) will be written within the CAP documenting problems identified during performance of the discovery activities to address the Restart Checklist items. OPPD has developed safety-based criteria for differentiating those corrective actions and actions to prevent recurrence that are necessary to complete before restart, and those actions that will be incorporated into the post-restart IPIP plan for sustained improvement. Successful completion under the procedures in the CAP of those actions determined to be restart constraints will be the final step in closure of the actions under Checklist item 7.c.

   The corrective actions and corrective actions to prevent recurrence taken in the areas of the CAP, and safety culture, safety conscious work environment and organizational effectiveness will be evaluated for effectiveness prior to restart.

8. Section 8 of the Restart Checklist addresses closure of the restart Confirmatory Action Letter. The items in this section will be compete when all the conditions in the Restart Confirmatory Action Letter are confirmed as completed under the procedures in the CAP,

OPPD submits its Readiness for Restart Report and the NRC and OPPD conduct a Category 1 public meeting to discuss completion of the actions necessary for restart.

9. Section 9 of the Restart Checklist addresses the NRC actions necessary to approve restart of FCS. No specific completion activities are necessary for OPPD.

Fort Calhoun Station Restart Checklist

The NRC issued a restart Confirmatory Action Letter with an enclosed Restart Checklist on June 11, 2012. That Restart Checklist is captured in the shaded rows in this strategy. The additional rows include details regarding specific actions that OPPD will take to address the specific the Restart Checklist items.

Item Number	Description	
1	**Causes of Significant Performance Deficiencies and Assessment of Organizational Effectiveness**	
1.a	Flooding Issue – Yellow Finding	
1.b	Reactor Protection System Contactor Failure – White Finding	
1.c	Electrical Bus Modification and Maintenance – Red Finding	
1.d	Security – Greater than Green Findings	
1.e	Third Party Safety Culture Assessment	
1.f	Integrated Organizational Effectiveness Assessment	
2	**Flood Restoration and Adequacy of Structures, Systems, and Components**	
2.a	Flooding Recovery Plan Actions Associated with Facility and System Restoration	
2.b	System Readiness for Restart following Extended Plant Shutdown	
2.b.1	System Health Reviews	
2.b.2	Reactor Safety Strategic Performance Area Review	
2.b.3	Impact of Sub-Surface Water on Structures	

2.b.4	Containment Penetration Design	
2.b.5	Containment Internal Structure Design	
3	**Adequacy of Significant Programs and Processes**	
3.a	Corrective Action Program	
3.b	Equipment Design Qualifications	
3.b.1	Safety Related Parts Program	
3.b.2	Equipment Qualification Program including High Energy Line Break Considerations	
3.c	Design Changes and Modifications	
3.c.1	Vendor Modification Control	
3.c.2	10 CFR 50.59 Screening and Safety Evaluation Programs	
3.d	Maintenance Programs	
3.d.1	Vendor Manuals and Vendor Information Control Programs	
3.d.2	Equipment Service Life Program	
3.e	Operability Process	
3.e.1	Operability Determination Program	
3.e.2	Degraded and Non-Conforming Condition Program	
3.f	Quality Assurance	

4	**Review of Integrated Performance Improvement Plan**	
5	**Assessment of NRC Inspection Procedure 95003 Key Attributes**	
5.a	Design	
5.b	Human Performance	
5.c	Procedure Quality	
5.d	Equipment Performance	
5.e	Configuration Control	
5.f	Emergency Response	
5.g	Occupational Radiation Safety	
5.h	Public Radiation Safety	
5.i	Security	
6	**Licensing Issue Resolution**	
6.a	Review of Necessary Licensing Amendments or Actions	
6.b	Review of Licensing Commitments Necessary for Restart	
7	**Readiness for Restart**	

7.a	Operations Organization Ready for Restart	
7.b	Systems Ready for Restart and Mode Restraints Properly Addressed	
7.c	Final Review of Corrective Action Program for Restart Items	
8	**Confirmatory Action Letter Resolution**	
8.a	Verification that All Restart-Related Confirmatory Action Letter Items are Appropriately Resolved	
8.b	Conduct Public Meeting Regarding Plant Readiness for Restart	
9	**Final Recommendation for Restart**	
9.a	Manual Chapter 0350 Panel recommends restart to the Region IV Administrator. The Region IV Administrator obtains concurrence for Post-Restart Confirmatory Action Letter from the Deputy Executive Director for Reactor and Preparedness Programs and the Director of the Office of Nuclear Reactor Regulation.	

Restart Checklist Implementation Strategy

For each section of the NRC issued Restart Checklist and the additional sections that contain other specific OPPD actions to address an NRC Checklist section, described below are implementation strategies that include the scope of actions that will be taken to address that section, scope expansion criteria where appropriate, and closure criteria for completion of the actions in that section.

1 **IE, MS, BI, EP, PRS, ORS and SEC** **Cornerstones**	**Root Causes of Significant Performance Deficiencies and Assessment of Organizational Effectiveness**	

Section 1 of the Restart Checklist contains those items necessary to develop a comprehensive understanding of the root causes of the performance deficiencies identified at FCS that have been determined under the Significance Determination Process to have a risk significance of White, Yellow or Red. In addition, Section 1 includes an independent safety culture assessment and an integrated organizational effectiveness assessment. The integrated organizational effectiveness assessment will identify the fundamental aspects of organizational performance in the areas of organizational structure and engagement, values, standards, culture, behaviors and leadership that have resulted in the protracted performance decline and are critical for sustained performance improvement.

The outcome of the assessments described in Section 1 will be issues incorporated into the CAP, including corrective actions, actions to prevent recurrence and/or compensatory measures addressing organizational effectiveness and human performance, the physical plant, and the station procedures and processes revealed through those assessments. Specific findings arising from these assessments related to other Checklist items will be incorporated into the action plans for those items. As additional critical areas for improvement are identified through the completion of the root cause and other assessments that have not yet been addressed through the Restart Checklist items, it may be necessary to supplement the Restart Checklist to reflect those new areas.

1.a MS Cornerstone	Flooding Issue – Yellow finding	
1.b MS Cornerstone	Reactor Protection System Contact Failure – White Finding	
1.cIE Cornerstone	Electrical Bus Modification and Maintenance – Red Finding	
1.d SEC Cornerstone	Security – Greater than Green Findings	

Root cause assessments will be completed for all findings determined to be classified at White, Yellow or Red under the Significance Determination Process. Those Root Cause Assessments will be performed

utilizing station procedures that consider standard industry best practices and procedures under the leadership of qualified root cause assessors.

Corrective actions, actions to prevent recurrence, and/or compensatory measures from these root cause assessments will be entered into the CAP.

1.e IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Independent Safety Culture Assessment	

An assessment of the safety culture at FCS will be performed consistent with the guidance in Inspection Procedure (IP) 95003, Sections 02.07 and 03.07. The assessment will be performed by an organization independent of OPPD that is nationally recognized for successful performance of behavior-anchored nuclear safety culture assessments. The findings of this assessment will be appropriately considered in the Integrated Organizational Effectiveness Assessment.

1.f IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Integrated Organizational Effectiveness Assessment	

OPPD will perform an integrated organizational effectiveness assessment utilizing a methodology that considers industry best practices for identifying organizational concerns and areas for improvement. This assessment will appropriately consider the results of the assessments performed under Restart Checklist Items 1.a through 1.e, including the independent safety culture assessment. This assessment will identify those fundamental aspects of organizational performance in the areas of organizational structure and engagement, values, standards, culture behaviors and leadership that have resulted in the protracted performance decline and are critical for sustained performance improvement. This assessment will be performed by qualified individuals from OPPD, supplemented by outside experts.

2 **IE, MS, BI, EP, PRS, ORS and SEC Cornerstones**	**Flood Restoration and Adequacy of Structures, Systems, and Components**	

Section 2 of the Restart Checklist contains those items necessary to assure that important structures, systems and components affected by the flood and safety significant structures, systems and components at FCS are in appropriate condition to support safe restart and continued safe plant operation.

Section 2 includes the items in the Flooding Recovery Plan, Revision 3 (FRP). Those items focus on returning the plant to pre-flood condition. Also, to assure that structures, systems, and components are in satisfactory working order, System Health Readiness Reviews (SHRRs) will be performed on safety significant and Maintenance Rule systems utilizing updated procedures that consider industry best practices.

In addition, Section 2 includes the performance of the Reactor Safety Strategic Performance Area review (RSSPA) consistent with the guidance in IP 95003, Sections 02.03 and 03.03 to evaluate and verify the

capability of selected systems to fulfill their intended safety functions, identify broad-based safety, organizational and performance issues, and evaluate the readiness of the Emergency Response Organization. The RSSPA will include detailed vertical slice reviews of the safety related electrical distribution system, the high pressure safety injection system, the emergency diesel generators and the reactor protection system.

Also, there are three specific plant issues addressed in Section 2: (1) the effect on soils and structures from sub-surface water; (2) resolution of the containment penetration design issue; and (3) resolution of the containment internal structural design issue. .

In Section 2, the FRP, Revision 3 flood restoration actions will be addressed under the procedures in the CAP, and the systems reviews will be conducted using procedures that consider industry standards and best practices for those activities. Findings and identified actions from these systems reviews will be incorporated into the CAP for resolution

It is expected that a number of repairs and enhancements will be identified and captured in the CAP during the process of assuring flood restoration and adequacy of structures, systems, and components. OPPD has developed safety-based criteria for differentiating those corrective actions, repairs, and enhancements that are necessary to complete before restart and those actions that will be incorporated into the IPIP plan for sustained improvement.

2.a MS, EP, ORS, PRS, and SEC Cornerstones	Flooding Recovery Plan Actions Associated with Facility and System Restoration	

The FRP, Revision 3 actions are related to restoration from flood-related impacts and are keyed to major plant milestones. The following actions in the FCS FRP will be addressed under this Restart Checklist item. Each action has been entered into the CAP. This item will be considered complete when the restoration activities are adequately addressed under the procedures in the CAP.

FRP Item Number	**Action Item (Restoration-Related)**
Prior to Exceeding 210 Degrees Fahrenheit in the Reactor Coolant System	
1.1.1.01	Remove AOP-1 floodgates and store
1.1.1.02	Remove temporary diesel, fuel tankers/tanks and transformer from Protected Area
1.1.1.03	Remove the Aqua Dams from the Protected Area
1.1.1.04	Remove flood protection around Security Building
1.1.1.05	Remove pumps and hoses from Security Building
1.1.1.06	Remove sandbags from turbine building
1.2.1.01	Determine if equipment in the intake structure and cells has been damaged
1.2.1.02	Determine if intake cell cleaning is required
1.2.1.03	Repair any structural damage identified in the intake structure
1.2.1.04	Return B.5.b materials to proper location
1.2.1.05	Correct any structural damage that is identified in Turbine Building
1.4.1.01	Remove sandbags for access to padmount T&D switch SW1062
1.4.1.04	Inspect manholes MH1 through MH4 associated with circuit 231 between T&D switch SW1062 to T&D transformer 13TN43G (T1B-3C-1)
1.4.1.07	test cable from switchyard breaker 122 to T&D switch SW1062
1.4.1.08	Replace T&D Switch SW1062
1.4.1.09	Replace Transformer T1B-3C-1 (T&D ID 13TN43G)
1.4.1.10	T&D test new installation as required
1.4.1.11	Perform Tan/Delta and AC Hypot test on new 1/0 cable from Transmission and Distribution switch SW1062 to the line side of transformer T1B-3C-1 (T&D ID 13TN43G)

FRP Item Number	Action Item (Restoration-Related)
1.4.1.12	Perform EM-ST-ESF-0002 Emergency Power Periodic Test
2.1.1.01	Ensure underground FP piping is intact and no unacceptable voids are present near FP piping
2.1.1.02	Repair any damaged or non-functional fire hydrants located inside the protected area or connected to the main fire protection header ring
2.1.1.03	Flush fire protection system piping connected to the fire protection header ring which flowed river water during flood mitigation actions
2.1.1.04	Inspect all SO-G-103 fire barriers in plant buildings affected by flood waters. Include Pyrocrete barriers in Intake Structure.
2.1.1.05	Verify soil compaction and moisture content in areas of underground fire protection main header ring and attached piping is per NFPA requirements
2.1.1.06	Restore the exterior fire hose houses impacted by flooding to functional condition
2.1.1.07	Verify proper functioning of flood affected fire hose houses
2.1.1.08	Complete FP System PMs and STs on flood impacted equipment which was not accessible for inspection and testing
2.1.1.09	Complete full flow testing of fire pumps
2.1.1.10	Remove the plugs that were installed in the transformer pits for drainage from the rocks
2.1.1.11	Complete monitoring and assessment of system leakage for FP piping.
2.1.1.12	Restore HALON systems in New Warehouse Security Areas
2.2.1.01	Assess the effects of the flood on the Auxiliary Cooling System (ACS) and identify actions to restore the system.
2.2.1.02	Assess the effects of the flood on the Auxiliary Feedwater System (AFW) and identify actions to restore the system.
2.2.1.03	Assess the effects of the flood on the Auxiliary Instrumentation System (AIS) and identify actions to restore the system.
2.2.1.04	Assess the effects of the flood on the Control Rod Drive System (CRD) and identify actions to restore the system.
2.2.1.05	Assess the effects of the flood on the Chemical and Volume Control System (CVC) and identify actions to restore the system.
2.2.1.06	Assess the effects of the flood on the Circulating Water System (CWS) and identify actions to restore the system.
2.2.1.07	Assess the effects of the flood on the Emergency Core Cooling System (ECC) and identify actions to restore the system.
2.2.1.08	Assess the effects of the flood on the Emergency Diesel Generator System (EDG) and identify actions to restore the system.
2.2.1.09	Assess the effects of the flood on the Electrical Distribution System (EDS) and identify actions to restore the system.
2.2.1.10	Assess the effects of the flood on the Engineered Safety Features System (ESF) and identify actions to restore the system.
2.2.1.11	Assess the effects of the flood on the Fuel Handling System (FHS) and identify actions to restore the system
2.2.1.12	Assess the effects of the flood on the Fire Protection System (FPS) and identify actions to restore the system.
2.2.1.13	Assess the effects of the flood on the Hoisting Equipment System (HES) and identify actions to restore the system.
2.2.1.14	Assess the effects of the flood on the Instrument Air System (IAS) and identify actions to restore the system
2.2.1.15	Assess the effects of the flood on the Main Feedwater System (MFW) and identify actions to restore the system
2.2.1.16	Assess the effects of the flood on the Reactor Coolant System (RCS) and identify actions to restore the system.
2.2.1.17	Assess the effects of the flood on the Radiation Monitoring System (RMS) and identify actions to restore the system
2.2.1.18	Assess the effects of the flood on the Reactor Protection System (RPS) and identify actions to restore the system.
2.2.1.19	Assess the effects of the flood on the Spent Fuel Pool System (SFP) and identify actions to restore the system.
2.2.1.20	Assess the effects of the flood on the Steam Generator System (SGS) and identify actions to restore

FRP Item Number	Action Item (Restoration-Related)
	the system.
2.2.1.21	Assess the effects of the flood on the Sampling System (SLS) and identify actions to restore the system.
2.2.1.22	Assess the effects of the flood on the Structures System (STR) and identify actions to restore the system
2.2.1.23	Assess the effects of the flood on the Turbine Generator System (TGS) and identify actions to restore the system.
2.2.1.24	Assess the effects of the flood on the Turbine Plant Cooling System (TPC) and identify actions to restore the system.
2.2.1.25	Assess the effects of the flood on the Ventilating Air Conditioning System (VAC) and identify actions to restore the system
2.2.1.26	Assess the effects of the flood on the Waste Disposal System (WDS) and identify actions to restore the system.
2.2.1.27	Assess the effects of the flood on the Demineralized Water / Potable Water System (DW/PW) and identify actions to restore the system
2.2.1.28	Assess the effects of the flood on the Vents and Drains System (VDS) and identify actions to restore the system. This will include Sanitary and Storm Drains.
2.2.1.29	Assess the effects of the flood on the Auxiliary Steam System (AUS) and identify actions to restore the system. This will include the Auxiliary Boiler
2.2.1.30	Assess the effects of the flood on the Meteorological Monitoring System (MMS) and identify actions to restore the system.
2.2.1.31	Assess the effects of the flood on the Plant Security Systems (SEC) and identify actions to restore the system.
2.2.1.32	Assess the effects of the flood on the Communications Systems (COM) and identify actions to restore the system.
2.3.1.01	Assess whether motor is to be tested for possible use, refurbished or replaced Motors that were wetted for a short timeframe will be "Tested for Possible Use." Motors that were wetted for an extended period of time will be "Refurbished" or "Replaced."
2.3.1.02	Take oil sample from bearing housings. [CW-1A-M, CW-1B-M, CW-1C-M]
2.3.1.03	Evaluate if water has gotten in contact with bearings. [CW-1A-M, CW-1B-M, CW-1C-M]
2.3.1.04	Refurbish motor if water contamination is present in oil. Replace motor in whole is an additional option. [CW-1A-M (PO167480) CW-1C-M (PO166728)]
2.3.1.05	Perform visual and boroscope inspection of motor internals (to included termination box) looking for slit, pools of water, corrosion, etc. [CW-1A-M, CW-1B-M, CW-1C-M]
2.3.1.06	Evaluate visual inspection results for possible actions (removal of moisture, cleaning, refurbishment of motor) [CW-1A-M, CW-1B-M,CW-1C-M]
2.3.1.07	If bearings are in good condition and motor is visibly in good condition, Static Test Motor (resistive balance, megger, PI). [CW-1A-M, CW-1B-M, CW-1C-M]
2.3.1.08	If Static Test results are SAT, motor can be started. Maintenance oversight of initial run. Vibration data to be taken during initial run [CW-1A-M, CW-1B-M, CW-1C-M]
2.3.1.09	Remove motor and prepare for shipment to vendor.
2.3.1.10	Refurbish motor
2.3.1.11	Install refurbished motor
2.3.1.12	Post Maintenance Testing of motor
2.3.1.13	Ensure spare motor and pump assembly is available DW-69-M (PO166406) DW-70-M (PO166406)
2.3.1.14	Remove degraded motor [DW-69-M, DW-70-M]
2.3.1.15	Install new motor pump assembly DW-69-M DW-70-M
2.3.1.16	Post Maintenance Testing of motor pump assembly. DW-69-M

FRP Item Number	Action Item (Restoration-Related)
	DW-70-M
3.1.1.01	Document review of all Engineering Programs
3.1.1.02	Document justification of no flood recovery plan for each program that screened out as not needing one
3.2.1.01	Test Maintenance Rule Medium Voltage Power Cables subjected to wetting/submergence
3.2.1.02	Test Maintenance Rule Low Voltage Power Cables subjected to wetting / submergence
3.2.1.03	Test representative sample of Maintenance Rule Low Voltage Control and Instrumentation Cables subjected to wetting/submergence
3.2.1.04	Test or Replace 13.8KV Medium Voltage Cable for Emergency Power Feed and Met Tower Feed
3.3.1.01	Inspect underground Raw Water, EDG Fuel Oil and Fire Protection piping and tanks using GPR (Ground Penetrating Radar)
3.3.1.02	Assess results of GPR
4.1.1.03	Assemble OPPD and HDR project management and assessment teams
4.1.1.04	Badging staff for plant access
4.1.1.07	Priority 1 proposal
4.1.1.08	Prepare draft report document plan and outline
4.1.1.09	Acquire historical geotechnical and structural data
4.1.1.10	Create shareable database
4.1.1.11	Review data for each structure and identify data gaps
4.1.1.12	Review structure design features to assess potential for damage due to flooding
4.1.1.16	Create report of findings
4.1.1.17	Review findings and recommendations with OPPD and document results
4.1.1.18	Review data for each structure and identify data gaps
4.1.1.19	Review structure design features to assess potential for damage due to flooding
4.1.1.23	Create report of findings
4.1.1.24	Review findings and recommendations with OPPD and document results
4.1.1.25	Post-Flood River Channel Evaluation
4.1.1.26	Develop follow-on geotechnical inspection and testing plan based on summary report results
4.1.1.27	Perform follow on field testing
4.1.1.28	Resolve remaining 'Low Confidence' issues as necessary based on follow on testing report.
4.1.1.29	Update the Geotechnical / Structural Assessment Summary Report
4.1.1.30	Verify no geotechnical or structural impact to Priority 1 Structures as a result of the 2011 flood
4.1.1.31	EC-55000 to allow follow on geotechnical testing that will involve core drilling in the Auxiliary Building floor slab.
4.1.1.32	Remediation of the Turbine Building and Class 1 Structure void.
4.2.1.01	Review / observe all external flood barrier configurations and verify that they have not been altered during flood response or outage activities
4.2.1.02	Issue SO-G-124, Flood Barrier Impairment program
4.2.1.03	Document external flood barrier impairments as applicable in accordance with SO-G-124
4.2.1.04	Perform walkdown of all flood mitigation devices (i.e., berms, sandbags, HESCO barriers) to determine if each device is to be removed or is to remain
4.2.1.05	Initiate actions to remove flood mitigation devices which have been determined to not be permanent fixtures.
4.2.1.06	Identify flood barriers which will not have adequate qualification basis before leaving Cold Shutdown.
4.3.1.01	Finalize identification of all configuration changes for restoration
4.3.1.02	Finalize identification of configuration changes to be made permanent
4.3.1.03	Establish Priority/Schedule for restoration
4.3.1.04	Initiate actions to remove non-permanent configuration changes
5.2.1.01	Develop a field monitoring and environmental sampling plan
5.2.1.02	Distribute Plan
Prior to Reactor Criticality	
2.3.2.01	Refurbish motor if water contamination is present in oil
2.3.2.02	If bearings are in good condition and motor is visibly in good condition, Static Test Motor (resistive balance, megger, PI).
2.3.2.03	If Static Test results are SAT, motor can be started. Maintenance oversight of initial run. Vibration

FRP Item Number	Action Item (Restoration-Related)
	data to be taken during initial run
2.3.2.04	If Action 2.3.2.03 is SAT, change lower bearing oil.
3.2.2.02	Inspect Manholes and Vaults for structural integrity.
3.2.2.06	Inspect Manholes and remove mud/debris
3.3.2.01	Update the Geotechnical/Structural Assessment Summary Report
4.1.2.01	Update the Geotechnical/Structural Assessment Summary Report
4.1.2.02	Verify no geotechnical or structural impact to site structures (except TB and Class 1) and equipment as a result of the 2011 flood.
4.2.2.01	Identify degraded flood barriers
4.2.2.02	Repair flood barriers as required
4.2.2.03	Establish Program Owner for Flood Barrier impairment process
4.2.2.04	Prepare SO-G-124, documentation for all flood barriers which do not have adequate qualification
4.2.2.05	Review restoration plans for each impaired flood barrier per SO-G-124 form FC-1411
4.2.2.06	Review impaired flood barriers as identified in accordance with SO-G-124 form FC-1411
4.2.2.08	Prepare engineering changes as required to address degraded or unqualified flood penetrations
4.2.2.09	Identify design solution to MH-31 degraded conduit seals (CR 2011-6999)
4.2.2.10	Repair MH-31 conduits
4.3.2.01	Completion of all ECs/restoration required for plant start-up
4.3.2.02	Perform CR 2011-8566 walkdown to verify restoration of non-permanent configuration changes.
5.1.2.02	Perform fly over of flood affected siren to determine status and potential condition of the equipment
5.1.2.03	Based on siren inspection procure replacement siren heads, poles, electronic, and power supplies
5.1.2.04	If siren damage and or infrastructure is such that timely repair of sirens is not possible, work with FEMA, state and local governments for potential exemptions or long term plan
5.1.2.08	Conduct a full siren test after sirens have been restore to functional status
5.2.2.01	Conduct a Protective Measure table top with the states of Nebraska and Iowa
5.2.2.02	Discuss the use of fly-over sampling of flood affects area of the EPZ with the Directors of Radiological Health at the State of Nebraska and Iowa
5.3.2.01	Perform ERDS testing
5.3.2.02	Perform normal communications testing
5.3.2.06	Perform normal facility inventories and assessments
5.3.2.07	Conduct Meeting with FEMA, NRC, local Emergency Manager, and State Emergency Managers
5.3.2.08	Submit exemption to postpone 2011 annual exercise
5.3.2.09	Conduct pager test per EPT-34, Perform Augmentation or Notification Drills
5.3.2.19	Obtain statement of reasonable assurance from FEMA
5.4.2.01	MET tower restoration
5.4.2.02	MET tower building restoration
5.4.2.03	Secondary Evacuation Route restoration
5.4.2.04	Critique Flooding event
6.1.2.01	See IPIP Appendix B2
6.1.2.02	See IPIP Appendix B2
6.1.2.03	See IPIP Appendix B2
6.1.2.04	See IPIP Appendix B2
6.1.2.05	See IPIP Appendix B2
6.1.2.06	See IPIP Appendix B2
6.1.2.07	See IPIP Appendix B2
6.1.2.08	See IPIP Appendix B2
6.1.2.09	See IPIP Appendix B2
6.1.2.10	See IPIP Appendix B2
6.1.2.11	See IPIP Appendix B2
6.1.2.12	See IPIP Appendix B2
6.1.2.13	See IPIP Appendix B2
6.1.2.15	See IPIP Appendix B2
6.1.2.16	See IPIP Appendix B2
6.1.2.20	See IPIP Appendix B2
6.1.2.21	See IPIP Appendix B2
6.1.2.22	See IPIP Appendix B2

FRP Item Number	Action Item (Restoration-Related)
6.1.2.27	See IPIP Appendix B2
6.1.2.28	See IPIP Appendix B2
6.1.2.29	See IPIP Appendix B2
6.1.2.30	See IPIP Appendix B2
6.1.2.31	See IPIP Appendix B2
6.1.2.32	See IPIP Appendix B2
6.1.2.33	See IPIP Appendix B2
6.1.2.34	See IPIP Appendix B2
6.1.2.35	See IPIP Appendix B2
6.1.2.36	See IPIP Appendix B2
6.1.2.38	See IPIP Appendix B2
6.1.2.39	See IPIP Appendix B2

2.b IE, MS, BI and EP Cornerstones	System Readiness for Restart following Extended Plant Shutdown	

To assure that important structures, systems, and components are in satisfactory working order, Section 2.b.1 addresses SHRRs. SHRRs will be performed on safety-significant and Maintenance Rule systems utilizing updated procedures that consider industry best practices.

Section 2.b.2 includes the performance of the RSSPA to evaluate and verify the capability of selected systems to fulfill their intended safety functions; identify broad-based safety, organizational and performance issues; and evaluate the readiness of the Emergency Response Organization. The RSSPA will include detailed vertical slice reviews that will be performed on: (1) the safety related 4160V breakers, 480V breakers, batteries and battery chargers (the safety related electrical distribution system); (2) the high pressure safety injection system (part of the emergency core cooling system); (3) the reactor protection system; and (4) the emergency diesel generator system, including selected risk significant components in these systems. This work is structured consistent with IP 95003 Sections 02.03 and 03.03 and is accomplished by review in six key attributes or areas. The six key attributes are design, configuration control, equipment performance, human performance, procedure quality and emergency preparedness. Also, Section 2.b.2 addresses improvement in the reliability of the reactor protection system and diesel generator system due to historic reliability issues with these systems.

Finally, Sections 2.b.3, 2.b.4 and 2.b.5 address specific plant issues identified by OPPD

2.b.1 MS Cornerstone	System Health Reviews	

To assure that safety significant and Maintenance Rule related structures, systems, and components are in satisfactory working order, OPPD will perform SHRRs on safety-significant and Maintenance Rule systems utilizing updated procedures that consider industry best practices.

These reviews will be conducted under a FCS procedure that addresses a comprehensive system walkdown and review of key information regarding system health, including, for example, commitments, open and closed CRs, open and closed work orders, preventative maintenance activities, modifications, operating experience, violations, open change-initiating documents and open operational concerns. The reviews will also include interviews with operations, maintenance and engineering staff. The system

engineer will lead the review of each system and the output will be reviewed by the Plant Health Committee.

The SHRRs will be complete when the review procedures are implemented and identified deficiencies, corrective actions and actions to prevent recurrence from these reviews are incorporated into the CAP for resolution.

2.b.2 IE, MS, BI and EP Cornerstones	Reactor Safety Strategic Performance Area Review	

OPPD will perform a RSSPA to evaluate and verify the capability of selected systems to fulfill their intended safety functions, identify broad-based safety, organizational and performance issues, and evaluate the readiness of the Emergency Response Organization. The RSSPA review will be performed consistent with the procedures and guidance in IP 95003, Sections 02.03 and 03.03.

The RSSPA will include a vertical slice review of: (1) the safety related 4160V breakers, 480V breakers, batteries and battery chargers (the safety related electrical distribution system); (2) the high pressure safety injection system (part of the emergency core cooling system); (3) the reactor protection system; and (4) the emergency diesel generator system, including selected risk significant components in these systems.

Procedures and checklists will be used to complete a detailed review of these systems, equipment and components. The electrical distribution and high pressure safety injection systems were selected based on their high risk reduction worth and input from system health reports, the mitigating systems performance indicator, CRs, and licensee event reports. In addition to these considerations, the selection of the emergency diesel generators and reactor protection system included consideration of system reliability and Plant Health Committee priorities. The review will cover the period from January 1, 2006 through December 31, 2011. The basis for this review period is that it predates the 2007 emergency diesel generator failures and also includes several other significant events at the Station.

The RSSPA will be performed in accordance with approved FCS procedures by teams of OPPD and external experts. The findings and corrective actions identified during the RSSPA reviews will be incorporated into the CAP.

The RSSPA will be complete when the review procedures are implemented and identified deficiencies, corrective actions and actions to prevent recurrence from these reviews are incorporated into the CAP for resolution.

2.b.3 MS Cornerstone	Impact of Sub-Surface Water on Structures	

The extent and duration of the 2011 flood generated a question regarding the condition of the soil and structure foundation for safety related structures. In addition, a CR has been generated regarding the condition of turbine building drains buried piping. Consequently, an item was identified to evaluate the impact of sub-surface water on the soils and foundation of safety related structures. OPPD will evaluate the following:

- Did flooding negatively affect the functionality of existing site safety-related structures?
- Did cracks in a turbine building drains buried pipes impact the soil under the Turbine Building affecting the Turbine Building structure?
- What is the cause and consequences of settling of a support column in the Maintenance Building?

Appropriate outside experts will be utilized to supplement OPPD staff on these activities and an independent outside expert group will be utilized to provided independent assessment to assure quality work. CRs have been generated concerning these issues.

This item will be considered complete when corrective actions for any deficiencies identified during discovery activities are incorporated into the CAP for resolution.

2.b.4 BI Cornerstone	Containment Penetration Design	

During the course of discovery activities under Restart Checklist item 3.b.2 regarding the equipment qualification program, FCS staff identified that certain containment electrical penetrations contain materials that could degrade under the FCS post-accident radiation profile inside containment. This issue was entered into the Corrective Action Program.

Testing will be performed on as found and new design penetrations to understand the as-found qualification and assure the certification of the new qualification design.

This item will be considered complete when corrective actions for any non-qualified penetrations are incorporated into the CAP for resolution.

2.b.5 MS Cornerstone	Containment Internal Structure Design	

During the course of design work for system modifications associated with the extended power uprate, FCS staff identified that certain containment internal structural members may not meet their design margins described in the licensing basis. This issue was entered into the Corrective Action Program. Additional evaluation of the issue was pursued and the original design calculations were not sufficiently clear to resolve the issue.

Consequently, the structural design of the containment internal structures is being reconstituted facilitating the identification of where corrective actions may be necessary. A smart sample of structural elements inside the auxiliary building will be thoroughly evaluated. Should structural design margin concerns be identified in the auxiliary building, the sample of structural elements evaluated will be expanded.

This item will be considered complete when corrective actions for any structural design deficiencies are incorporated into the CAP for resolution.

3 **IE, MS, BI, EP, PRS, ORS and SEC Cornerstones**	**Adequacy of Significant Programs and Processes**	

Section 3 of the Restart Checklist contains those actions necessary to develop a comprehensive understanding of the adequacy of key safety significant programs that were contributors to the greater than green findings and the significant performance decline at OPPD. The outcome of the evaluations described in Section 3 will be corrective actions and actions to prevent recurrence for safety significant performance deficiencies captured in the CAP.

OPPD will evaluate the adequacy of key safety significant programs that were contributors to the greater than green findings and the significant performance decline, including:

- Corrective action program
- Equipment design qualifications programs
- Design changes and modifications programs
- Maintenance programs
- Operability determination processes
- Quality assurance program

These evaluations will be performed by OPPD and outside experts.

The programmatic evaluations in Section 3 will be considered complete when the discovery is completed without further scope expansion, all hardware and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation. Specifically with respect to the improvements in the CAP, in addition to monitoring performance metrics, an effectiveness review will be conducted by OPPD staff and outside experts prior to restart to assure the adequacy of program implementation for safe and effective restart.

It is expected that a number of hardware repairs and programmatic enhancements will be identified during these program evaluations and implementation reviews. OPPD has developed safety-based criteria for differentiating those corrective actions, repairs, and enhancements that are necessary to complete before restart and those actions that will be incorporated into the IPIP plan for sustained improvement.

3.a IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Corrective Action Program	

Effectiveness in problem identification and resolution (PI&R) will be evaluated. OPPD will re-establish the necessary leadership and organizational engagement and ownership for finding and fixing problems. This will include instilling requisite values, standards, culture, and behaviors.

To establish organizational ownership and accountability for PI&R, OPPD will improve the CAP by performing the following:

- Review and improve the CAP
- Establish organizational ownership and accountability for CAP
- Implement Daily Plant Manager led Condition Review Group and Station Corrective Action Review Board meetings
- Implement CAP coordinators in key areas
- Review past CAP actions for latent issues
- Establish and monitor performance metrics

In addition to these actions to improve the CAP, OPPD will implement a review of the stations control systems for Identifying, Assessing and Correcting Performance Deficiencies (IACPD) consistent with the expectations described in IP95003 Sections 02.02 and 03.02. This review will provide greater granularity on performance shortfalls in the IACPD area.

The following areas will be assessed:

- Sufficiency of significant performance deficiency evaluations and corrective actions to correct the deficiencies and prevent recurrence.
- Effectiveness of audits and assessments performed by the nuclear oversight group, line organizations, and external organizations.
- Adequacy of the process for allocating resources providing appropriate consideration of safety and compliance, and whether appropriate consideration is given to the management of maintenance backlogs and correction of work-arounds.
- Assess performance goals to ensure they are congruent with those corrective actions needed to address the documented performance issues.
- Evaluate the employee concerns program and the results of surveys or other workplace environment evaluations providing information regarding employees' willingness to raise safety concerns and those safety significant concerns brought to the employee concerns program are entered into the CAP and receive an appropriate level of attention.
- Determine whether a mechanism exists to suggest improvements and explain disagreements with technical resolutions of identified deficiencies, including a "Differing Professional Opinion" process. Also, whether there is a feedback mechanism in which the evaluation of deficiencies and follow-up corrective actions are reported back to the identifying workers.
- Effectiveness of the organization in using industry information for previously documented performance issues.

In addition to those items detailed above, the station will also assess the Observation, Benchmarking, and Trending programs.

The evaluation of CAP will be considered complete when the discovery is completed without further scope expansion, all hardware and programmatic deficiencies are entered into the CAP, the CAP has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, an effectiveness review is conducted by OPPD staff and outside experts to assure the adequacy of program implementation for safe and effective restart and supplementary oversight is provided where necessary.

3.b MS Cornerstone	Equipment Design Qualification	

3.b.1 MS Cornerstone	Safety Related Parts Program	

A number of instances have been identified where non-safety related parts have been installed into safety related applications. OPPD has determined it will perform thorough reviews to identify conditions where a non-safety related component/sub-component was improperly used in a safety related application. This effort will evaluate 100 percent of the work orders over the past five years (approximately 30,000 work orders). The following criteria for scope expansion will be used:

A single occurrence where equipment is determined to be inoperable

- A single occurrence where a system would not perform its intended design functions
- Two occurrences in one year where a component would not be able to perform its design function not resulting in the system losing its ability to perform its design function
- More than three occurrences in one year where non-safety related parts were used in a safety related component, but no adverse component or system impact occurred
- More than three occurrences in one year where use of non-qualified material were identified as documentation issues

Components/parts with inconsistent quality classification levels (i.e., part/sub-component of lesser quality classification than component) will be identified in a CR in the CAP for evaluation of the operability of the component and/or rework, as determined to be necessary to correct the noted discrepancy.

In addition to any specific hardware issues associated with use of non-safety related parts in safety related applications, the program for control of parts will be reviewed considering industry best practices. Programmatic deficiencies will be entered into the CAP and corrective actions taken, including actions to prevent recurrence.

The evaluation of the safety related parts program will be considered complete when the discovery is completed without further scope expansion, all hardware and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

3.b.2 MS Cornerstone	Equipment Qualification Program including High Energy Line Break Considerations	

An Electrical Equipment Qualification (EEQ) design bases reconstitution effort has been underway since 2007. The reconstitution of the EEQ program involved a re-analysis of high energy lines to current industry standards. The High Energy Line Break (HELB) analyses have determined that there are some systems that require modification to prevent new harsh environments and some that result in new harsh environments. This project addresses gaps in documentation and analyses supporting the EEQ program, associated principally with harsh environments due to HELB and radiation.

It is anticipated that there will be documentation/analyses and equipment issues identified during these discovery activities that must be completed prior to startup. These activities will resolve both the HELB and radiation dose issues identified during the EEQ Program Reconstitution and resolve the resulting equipment issues.

The evaluation of the EEQ program will be considered complete when the discovery is completed, all hardware, analysis and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

3.c MS Cornerstone	Design Changes and Modifications	

3.c.1 MS Cornerstone	Vendor Modification Control Program	

Review by station personnel revealed that certain vendor modification packages lack the technical rigor necessary to ensure critical characteristics are identified and properly addressed. To address this issue, OPPD will sample engineering change packages that were performed by vendors. The sampling will be performed such that 20 percent of the control work projects packages dating back to 2007 will be sampled with an appropriate mix of Modifications, Facility Changes, Substitute Replacement Items, and Minor Configuration Changes included. The sample population will be expanded if conservative criteria are exceeded:

- The assessment finds one instance where it questions the viability of the design change in that it is found to have a fundamental flaw.
- Two instances where the assessment determines that critical characteristics were not properly evaluated, but the design changes were acceptable as designed.
- Two instances in any one modification package where the assessment determines that there is a need to perform more engineering work to validate that the change, as designed, was appropriate and would function as intended
- Four instances in any one modification package where the assessment determines that there is a need to update additional design documents or add additional design information/features to documents.
- 12 instances in any one modification package where the assessment determines that there are weaknesses in the package documentation, but the overall change was acceptable and only clarification was required.

Once sampling is complete, the chosen packages will be evaluated to determine if adequate controls were in place to assure that the vendor performed the task of interest in an appropriate manner. Any deficiencies in the modifications will be identified in a CR and placed into the CAP for evaluation of the operability and/or rework, as determined to be necessary to correct the noted discrepancy.

In addition to any specific hardware or design issues associated with the vendor work, the program for control of vendor modifications will be reviewed considering industry best practices. Programmatic deficiencies will be entered into the CAP and corrective actions taken, including actions to prevent recurrence.

The evaluation of vendor modifications will be considered complete when the discovery is completed without further scope expansion, all hardware and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

3.c.2 IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	10CFR50.59 Screening and Safety Evaluations Program	

The quality of certain 10 CFR 50.59 evaluations has come into question, and therefore the 10 CFR 50.59 program has been included in the Restart Checklist. For the 10 CFR 50.59 program, OPPD will review plant activities over the last five years to determine if modifications to the plant and to procedures were appropriately identified as needing a 10 CFR 50.59 review and whether the review, if required, was appropriately performed. This assessment will involve checking 20 percent of the Applicability

Determinations, 20 percent of the Screenings, and 100 percent of the 10 CFR 50.59 evaluations, which constitutes approximately 3,100 documents.

The scope of the sample population will be expanded if any of the following criteria are exceeded:

- The assessment identifies a single occurrence where there is a need to update or revise the conclusion of a 10 CFR 50.59 evaluation or the 10 CFR 50.59 documentation.
- The assessment determines there was a single occurrence where there was a failure to identify the need for additional required evaluations (e.g., Security or Emergency Planning), or there was a need to escalate an Applicability Determination to a Screen, escalate a Screen to an Evaluation, or escalate an Evaluation to a License Amendment Request.
- The assessment identifies multiple weaknesses (two occurrences for an Applicability Check, four occurrences for a Screen, eight occurrences for an Evaluation) in the 10 CFR 50.59 documentation.

Any deficiencies in the screenings or safety evaluations will be identified in a CR and placed into the CAP for evaluation of the need for a licensing action or other corrective actions.

In addition to any specific licensing basis issues associated with the screening or safety evaluation, the program for performing 10 CFR 50.59 reviews will be reviewed considering industry best practices. Programmatic deficiencies will be entered into the CAP and corrective actions taken.

The evaluation of the screening and safety evaluation program will be considered complete when the discovery is completed without further scope expansion, all licensing basis, hardware and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

3.d MS Cornerstone	Maintenance	

3.d.1 MS Cornerstone	Vendor Manuals and Vendor Information Control Program	

Vendor manuals and vendor information have not been adequately maintained. OPPD classifies FCS safety related equipment and Critical Quality Elements (CQE). OPPD will perform a thorough review to identify and incorporate vendor manual technical documentation updates for CQE or determined to have high functional importance (i.e., FID 1 and FID 2). This population of vendor information chosen for review focuses the activity on the equipment and components that have functional significance to the plant in terms of nuclear safety and operation. As such, completing the review for CQE-related vendor information will be given priority.

There are two parts to this review. The first is to identify and evaluate all vendor changes to the existing vendor manuals of interest. The vendor changes will be evaluated and any gaps will be identified in a CR within the CAP. A gap analysis will be performed and documented within the CR to evaluate the effect that the new information has on scheduled work and work completed since the last vendor manual update was made. Resolution of the CR will include whether a potentially deficient condition exists and ensure that appropriate evaluations are performed and corrective actions taken.

The second part to this review will ensure that vendor recommendations contained in the updates have been properly incorporated into appropriate plant documentation. This scope of this section depends on successful implementation of the "Project 1991" vendor manual reconstitution initiative. The focus of the current review is to identify whether the most recently available vendor information associated with vendor manuals of interest has been adequately captured since the Project 1991 effort. CRs will be generated where vendor requirements were missed or not incorporated into plant documents, where plant documents are found to deviate from vendor manual information without a basis for the deviation or where service life discrepancies are identified.

In addition to any specific vendor manual and vendor information control issues, the program for controlling vendor information will be reviewed considering industry best practices. Programmatic deficiencies will be entered into the CAP and corrective actions taken.

The evaluation of the vendor manual and vendor information control program will be considered complete when the discovery is completed, all hardware, procedure and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

3.d.2 MS Cornerstone	Equipment Service Life Program	

Some equipment at FCS has been allowed to operate beyond its vendor recommended service life or standard industry guideline for service life, and in some cases this has resulted in age-related failures. OPPD will conduct the following actions before restart associated with CQE classified as FID-1 N/P/O and FID 2 N equipment that has high safety significance to address this issue. The pre-restart effort includes approximately 8,400 components:

- Identify component types and equipment that require immediate replacement based on service life considerations.
- Identify components where "first performance" preventative maintenance activities have not been performed. Review specific components and recommend replacements based on service life considerations. Consider other programs, e.g., EQ program, power supply review project, etc., where service life and preventative maintenance would have already been addressed.
- Review past equipment failures for causes attributable to components or subcomponents being left in a system beyond their intended service life.
- Conduct a programmatic self-assessment of the Preventative Maintenance Program consistent with NRC inspection guidance contained in "Operating Experience Smart Sample FY-2010-01, Recent Inspection Experience for Components Installed Beyond Vendor Recommended Service Life". This will ensure that the station has procedures for establishing, implementing, and maintaining preventative maintenance requirements that are consistent with industry best practices.

All hardware or programmatic deficiencies will be documented in the CAP.

After restart, the remaining CQE for less safety significant equipment will be evaluated utilizing the same approach. This will involve approximately 7,100 components.

The evaluation of the service life/preventative maintenance program will be considered complete when the discovery is completed, all hardware and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

3.e MS Cornerstone	Operability Determination Process Including Degraded and Non-Conforming Conditions	

3.e.1 MS Cornerstone	Operability Determination Process	

The station has not consistently conducted sufficiently rigorous Operability Evaluations to ensure that the impact of degraded conditions on plant operations is fully understood or appropriately acted on. OPPD will:

- Develop and incorporate refined guidance for Operability Evaluations into station procedures to use as criteria for performing reviewing Operability Evaluations to identify weaknesses from the FID 1 and FID 2 CR reviews. Training will be given to personnel conducting the reviews to ensure a consistent review is given.
- Provide thorough review of all open and the last two operating cycles of closed Operability Evaluations as documented in CRs to validate the documented evaluation as compared to industry best Operability Evaluation practices. The basis for selecting all open and past two operating cycles of closed operability evaluations initially is to determine the extent of the problem. Expansion of the sample beyond two operating cycles will be determined based on the results of the degraded and non-conforming condition review under Checklist Item 3.e.2.

CRs will be generated when discrepancies are identified during the assessment. Upon completion of this review a collective significance evaluation will consider the number and importance of the findings. Station procedures will be updated considering industry best practices in operability evaluations.

The assessment of the operability evaluation program will be considered complete when the discovery is completed without the need for further scope expansion, all hardware, procedure and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

3.e.2 MS Cornerstone	Degraded and non-conforming conditions	

Equipment identified as "operable but degraded" has sometimes remained degraded until subsequent failure and/or inoperability occurs. Station processes have not adequately identified degraded equipment or restored the equipment from a degraded condition in a timely manner.

To address this issue, OPPD will:

- Refined guidance and definition for Degraded/Nonconforming condition evaluations will be developed and incorporated into station procedures to use as criteria for performing an assessment of all potential and existing Degraded/Nonconforming condition concerns identified from FID 1 and FID 2 CRs. Training will be given to the people conducting the reviews to ensure a consistent review.
- Thoroughly review of all open and two operating cycles of closed CRs written on components with high functional importance (FID 1 and 2) for potential Degraded/Nonconforming conditions.

The basis for selecting all open and two operating cycles of closed CRs initially is to determine the extent of the problem. If a degraded condition is identified in the plant that has not been documented in a CR within the CAP, then the scope will be expanded utilizing a smart sampling approach based on the findings in the original review scope.

CRs within the CAP will be written when discrepancies are identified during the assessment. Upon completion of this review a collective significance evaluation will consider the number and importance of the findings. Station procedures will be updated considering industry best practices in dealing with degraded and non-conforming equipment conditions.

The assessment of the degraded and non-conforming conditions program will be considered complete when the discovery is completed without the need for further scope expansion, all hardware, procedure and programmatic deficiencies are entered into the CAP, the subject program has been evaluated and enhanced where necessary considering industry best practices, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

3.f IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Quality assurance	

Nuclear Oversight (NOS) should provide an independent assessment of safety-related work activities to identify problems and trends before they become significant plant problems. The NOS organization was not effective in identifying and driving improvement in a broad range of problematic performance areas that led to protracted performance decline at FCS. In addition, NOS has been the subject of multiple critical third party assessments, including the Nuclear Industry Evaluation Program assessment in 2010 and the INPO evaluation in March 2011 that resulted in an area for improvement in independent monitoring and assessment.

A thorough apparent cause assessment has been completed regarding NOS effectiveness identifying the following areas for attention:

- There was insufficient guidance on how to assess behavior attributes related to the performance of specific plant activities,
- The assessment activities that did not utilize sufficient behavioral observation data as part of their assessment process,
- Behavioral standards were not well defined complicating NOSs ability to provide adequate independent assessment of behavioral compliance issues,
- Independent trend analysis of organizational processes and behaviors was not defined or performed,
- The escalation process was not effective to drive station improvements, and
- Management oversight of the conduct of assessments was not sufficient to identify weaknesses in NOS.

Corrective actions were developed, including consideration of benchmarking results from other NOS organizations, and are being implemented to address these issues. Critical to these actions is a focus on clarity of roles and responsibilities, ownership and accountability, focus on behaviors and other precursors to more significant performance problems, trending performance observations for early identification of problems, and effective management oversight and escalation of issues to assure effective organizational response to NOS findings.

These actions will result in a NOS organization with the following focus areas:

- Verify that activities are being correctly performed in accordance with procedural and regulatory requirements,
- Assess station performance against management expectations,
- Identify problems and issues before they become events,
- Verify the effectiveness of corrective actions,
- Progressively escalate issues for resolution through the organization, and
- Exercise stop work authority when a violation of the company NOS program, procedures, specifications or drawings is identified.

The area will be considered complete when the implementation of the corrective actions addressing programmatic deficiencies has resulted in improved performance, performance metrics are established and monitored, and supplementary oversight is provided where necessary as indicated by performance metrics to assure continued successful program implementation.

4 **IE, MS, BI, EP, PRS, ORS and SEC Cornerstones**	**Review of Integrated Performance Improvement Plan**	

This section of the checklist includes NRC review and evaluation of the FCS IPIP.

OPPD has no activities under this Restart Checklist section.

5 **IE, MS, BI, EP, PRS, ORS and SEC Cornerstones**	**Assessment of NRC Inspection Procedure 95003 Key Attributes**	

The NRC MC0350 Oversight Panel will designate appropriate inspection activities to be accomplished to evaluate FCS performance. Below are listed the sections of NRC Inspection Procedure (IP) 95003 included in the Reactor Safety Strategic Performance Area (Sections 5.a through 5.f), the Occupational Radiation Safety Strategic Performance Area (Section 5.g), the Public Radiation Safety Strategic Performance Area (Section 5.h), and the Security Strategic Performance Area (Section 5.i). The NRC will assure that the critical aspects of these areas are adequately addressed during inspections at FCS.

OPPD has no required actions under this Restart Checklist section.

5.a	Design	
5.b	Human Performance	
5.c	Procedure Quality	
5.d	Equipment Performance	

5.e	Configuration Control	
5.f	Emergency Response	
5.g	Occupational Radiation Safety	
5.h	Public Radiation Safety	
5.i	Security	

6 **IE, MS, BI, EP, PRS, ORS and SEC Cornerstones**	**Licensing Issue Resolution**	

6.a IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Review of Licensing Amendments and Actions Necessary for Restart	

This section of the checklist will include any licensing actions that are identified through the discovery process and are necessary to support safe restart of the FCS. There are currently no licensing actions necessary for restart.

6.b IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Review of Licensing Commitments Necessary for Restart	

This section of the checklist includes a review of all open regulatory commitments; identifying and tracking to closure those necessary for safe restart of the FCS.

In addition, several of the Flooding Recovery Plan, Revision 1 actions that were addressed in the September 2011 Confirmatory Action Letter were not related to flood restoration and, while not included in the FRP, Revision 3, are captured here as licensing commitments.

The following actions from the FCS Flooding Recovery Plan, Revision 1 will be addressed under this Restart Checklist item. Each action has been entered into the CAP. This item will be considered complete when the restoration activities are adequately addressed under the procedures in the CAP.

FRP Item Number	Action Item (Non-Restoration-Related)
Prior to Exceeding 210 Degrees Fahrenheit in the Reactor Coolant System	
1.3.1.01	Rebuild the 1B4A load center
1.3.1.02	Provide documentation for the dedication of the rebuilt load center in accordance with Contract 163495
1.3.1.03	Complete EC 53257 and obtain PRC approval to authorize the use of the rebuild load center, 1B4A
1.3.1.04	Test all cables that terminate in 1B4A load center
1.3.1.05	Repair or replace defective cables terminating in 1B4A load center
1.3.1.06	Perform testing on the insulation of the cables that were potentially impacted by the fire located in the cable tray above 1B4A load center using EPRI technology.
1.3.1.07	Complete Engineering Change (53517) that details the repair to the cable jackets for cables located in the cable tray above the 1B4A load center.
1.3.1.08	Repair or replace the cables located in the cable tray above load center 1B4A that have had jacket damage
1.3.1.09	Witness Factory Acceptance Testing (FAT) of the new Square D circuit breakers that will be used in the 1B4A load center to replace the existing AK-25 breakers and the two Square D input and bus tie breakers
1.3.1.10	Calibration of the internal relays and protection equipment for bus 1B4A
1.3.1.11	Install new 4160 to 480 volt transformer T1B4A
1.3.1.12	Calibrate new Square D circuit breakers
1.3.1.13	Determine the method and extent of cleaning required in the switchgear room to return the equipment to pre-fire conditions and acceptable for power operation.
1.3.1.14	Clean equipment in the switchgear room that has been coated with by-products from the fire
1.3.1.15	Provide any required Engineering Change for the non-segregated bus between 1B4A and 1B3A-4A
1.3.1.16	Repair 1B4A to 1B3A-4A non-segregated bus section
1.3.1.17	Perform testing of all circuits associated with 1B4A load center
1.3.1.18	Perform testing of all circuits associated with cabling not associated with the 1B4A load center (i.e. cables located in the cable tray above the load center)
1.3.1.19	Submit, track, and seek approval of procedures that are changed as the result of EC 53257 and are required to be issued before the System Acceptance Process.
1.3.1.20	Prepare Acceptance forms
1.3.1.21	Declare bus 1B4A Operable
1.3.1.22	Temporary Modification restoration
1.3.1.23	Extent of Condition repair requirements. At this time, the extent of condition is not fully known. Provide repair requirements for extent of condition.
1.3.1.25	Track to completion work orders: 419854, 421870, 421871, 421873, 421880, 421875, 421876, 421878, 421879, and 421874 which are written to de-energize each of the five unaffected load centers and thoroughly clean (removing any hardened grease from the bus stabs for the supply and bus tie breakers). Ensure within work document that a step is added for independent verification of bus stab cleanliness by System Engineer. [CARB Corrective Action #1; CR Action Item # 2011-5414-15]
1.3.1.26	Re-align NLI breaker cradles so finger to bus stab engagement is in the silver plated contact surface, obtain acceptable as left DLRO readings under WOs listed in AI 25 above. [CARB Corrective Action #2; CR Action item # 2001-5414-16]
1.3.1.27	Implement EC 53347 providing ease of access to the load center bus side cubicles. [CARB Action Item #4; CR Action Item # 2011-5414-18]
3.4.1.01	Replace Non-RPS CQE power supplies that will be beyond their recommended service life
4.5.1.03	PRC Review of EC 53202; FW-10 Steam Line HELB Modification
4.5.1.05	Complete installation of EC 53202; FW-10 Steam Line HELB Modification
4.5.1.06	Prepare EC 52662; Add a new Pipe Support on the SGBD vertical line above FW-1020
4.5.1.07	Install EC 52662; Add a new Pipe Support on the SGBD vertical line above FW-1020
4.5.1.08	Complete EEQ Harsh Environment analysis for Room 13 crack in Steam Generator system
4.5.1.10	Initiate actions to resolve Room 13 EEQ harsh environment qualification of equipment which must be addressed prior to leaving cold shutdown
4.5.1.11	Resolve Room 13 EEQ harsh environment qualification of equipment which must be addressed prior to leaving cold shutdown
4.5.1.12	Perform analysis to address HCV-1385/1386 Main Steam Line Break/Feedwater isolation concern

FRP Item Number	Action Item (Non-Restoration-Related)
	(CR 2011-6757)
4.5.1.13	Develop resolution of HCV-1105/1106 Main Steam Line Break/Feedwater isolation concern
4.5.1.14	Perform HELB analysis of Auxiliary Steam piping in the auxiliary building
4.5.1.15	Implement resolution of Auxiliary Steam piping in the auxiliary building
4.5.1.16	Implement EC's to address HCV-1105/1106 qualification for FW isolation
4.5.1.17	Prepare EC to replace VA-63A-M and VA-63B-M
4.5.1.18	Implement EC to replace VA-63A-M and VA-63B-M
4.5.1.19	Prepare EC 53866 for SGBD isolation based on A SGBD pipe break in Room 13
4.5.1.20	Implement EC 53866 to provide SGBD isolation based on pipe break in Room 13
4.5.1.21	Prepare EC 54243; FQ-236, FT-236 to be relocated to AI-100 (EC 54243)
4.5.1.22	Implement EC 54243 to relocate FQ-236 and FT-236
4.5.1.23	Prepare EC; HCV-1041/1042 – Room 81, install additional isolation fuses
4.5.1.24	Implement EC to install isolation fuses EEQ MEL concern
4.5.1.25	Prepare EC 54245 to install isolation fuses for PIC-242, 243, 244
4.5.1.26	Implement EC 54245 to install isolation fuses for PIC-242, 243, 244
4.5.1.27	Prepare EC 54246 to replace PCS-2937, 2947
4.5.1.28	Implement EC to replace or qualify PCS-2937, 2947
4.5.1.29	Prepare EC to replace TE-6683-2, 6683-3, 6684-2, 6684-3
4.5.1.30	Implement EC to replace TE-6683-02, 6681-3, 6684-2, 6684-3
4.5.1.31	Prepare EC to replace/rewind VA-40A, 40B, 40C motors
4.5.1.32	Implement EC 54554 to replace VA-40A, 40B, 40C motors
4.5.1.33	Prepare EC 54554 to replace HCV-1042C-O with class RH insulation motor
4.5.1.34	Implement EC to replace HCV-1042C-O
4.5.1.35	Prepare EC 54428 to replace diodes (CR 11-8772).
4.5.1.36	Implement EC54428 to replace diodes
4.5.1.37	Perform Radiation Analysis to evaluate streaming affects and point-specific calculations
4.5.1.38	Identify actions for startup issues for radiation – only areas as identified in CR 2011-7462.
4.5.1.39	Complete Engineering review of EA 08-11; EEQ Master Equipment List
4.5.1.40	Complete engineering review of EA 06-032; EEQ Environmental Parameters
4.5.1.41	Complete EA 11-037; HELB Analysis
4.5.1.42	Perform Owner Acceptance Review of EA 11-038; RG 1.97 Compliance
4.5.1.43	Perform Owner Acceptance Review of EA 11-041; Ambient Temperature Analysis
4.5.1.44	Evaluate Room 81 components due to MSLB analysis requiring survivability to 370 degrees F
4.5.1.45	Perform Engineering Analysis to demonstrate qualification of new components added to EEQ MEL. CR 2011-7463
4.5.1.46	Establish resolution of EEQ MEL components that require some form of remediation
4.5.1.47	Identify components that would exceed qualified life per EA 11-041
4.5.1.48	Implement replacement of components per EA 11-041.
4.5.1.49	Revise EEQ Program documents to remove need for 4.5.1-17/18
4.5.1.50	Prepare EC 55210 to replace PS-1107B and PS-1108B.
4.5.1.51	Implement EC 55210 to replace PS-1107B and PS-1108B.
4.6.1.01	Address concerns identified with the Reactor Coolant Pump oil collection system
4.6.1.02	Address non-conservative 161 kV minimum voltage to support operation of a main feedwater pump in an SIAS-only scenario (CR 2011-6725)
4.6.1.03	Provide analysis of Steam Generator accident ring (CR 2001-6825)
4.6.1.04	Provide analysis to address LTOP PORV concern (CR 2011-7164)
4.6.1.05	1B3A tripping during 1B4A bus fire (CR 2011-6621)
4.6.1.07	CCW thermal analysis by Stevenson & Associates identified the need for support modification for several CCW system supports in containment (Cr 2011-7938).
4.6.1.08	Reactor Coolant pump oil collection system brazed joint rework. CR 2011-6631
4.6.1.10	Main steam piping analysis; seismic anchor movement and break anchor movements to be included in analysis (CR 2011-7939)
4.6.1.11	Develop EC scope to allow removal of interconnecting 480 volt buswork when RCS above 300F (address 1B3A tripping CR 2011-6621)
4.6.1.12	Develop EC 54429 to address interconnecting 480 volt buswork (address 1B3A tripping CR 2011-6621)

FRP Item Number	Action Item (Non-Restoration-Related)
4.6.1.13	Identify solution to address load shed of Spent Fuel Pool Cooling pumps during accident conditions (CR 2011-4725)
4.6.1.14	Perform inspection inside pressurizer to address pressurizer heater sheath integrity concern (CR 2011-6523
4.6.1.15	Complete analysis of pressurizer heater sheath (CR 2011-6523)
4.6.1.16	Perform analysis of CVCS and RCS drain line piping supports downstream of isolation valve class break (CR 2011-8063)
4.6.1.17	Develop EC 54437 to address CVCS and RCS drain line piping supports (CR 2011-8063)
4.6.1.18	Implement EC 54437 to address CVCS and RCS drain line piping supports (CR 2011-8063)
4.6.1.19	Developed EC 54435 to address supports for PORVs (CR 2011-7164)
4.6.1.20	Implement EC 54435 to address supports for PORV's (CR 2011-7164)
Prior to Reactor Criticality	
3.4.2.01	Establish High Impact Team with a Charter
3.4.2.02	Identify all CQE power supplies; priority will be on RPS CQE power supplies and then non-RPS CQE power supplies
3.4.2.03	Determine the installation date for FCS CQE power supplies; these dates will be used to define those CQE power supplies that are beyond their service life
3.4.2.04	Conduct an industry and FCS specific analysis of historical performance for CQE power supplies; determine the effectiveness of the current ER Strategies at the FCS component level
3.4.2.05	Conduct an analysis of the current FCS ER Strategy for power supplies; contact vendors, review industry documentation, benchmark other plants
3.4.2.06	Determine the recommended service life for CQE power supplies based on analyses performed earlier in this action plan These service lives will be based on: (1) manufacturer and model, (2) qualified life testing, (3) vendor recommendations and communication with vendors, (4) remnant life based on stress testing of removed power supplies, (5) industry and FCS specific historical performance and (6) actual duty cycle and service condition where these power supplies are installed
3.4.2.07	Conduct a failure modes and effects analysis on each power supply to ensure the impact of failures is understood
3.4.2.08	Document the time based replacement strategy and basis for CQE and RPS power supplies. This strategy and basis will provide the tasks to be performed and the basis for the scope and frequency of those tasks. This action is being completed before start up to ensure each power supply has been analyzed and a recommended service life defined.
3.4.2.09	Define those power supplies that are beyond their service life. This will include power supplies that will be beyond their service life before the next planned refueling outage
3.4.2.10	Replace RPS CQE power supplies beyond their service life
3.4.2.11	Replace Non-RPS CQE power supplies that will be beyond their recommended service life
4.5.2.01	Perform HELB analysis of Auxiliary Steam piping in the auxiliary building.
4.5.2.04	Update EEQ Harsh Files
4.6.2.01	Run FW-541 to validate engineering analysis for suction void
4.6.2.02	Analyze main steam piping in containment for Turbine Stop Valve Transient (CR 2011-7840)
4.6.2.04	Develop EC 46038 solution for turbine stop valve transient
4.6.2.05	Implement EC 46038 solution for turbine stop valve transient
4.6.2.06	Implement EC procedure change to address load shed of Spent Fuel Pool Cooling pumps during accident conditions (CR 2011-4725)
4.6.2.07	Develop EC 54436 solution to address containment CCW piping thermal analysis (CR 2011-7938)
4.6.2.08	Implement EC 54436 solution to address containment CCW piping thermal analysis (CR 2011-7938)

7 **IE, MS, BI, EP, PRS, ORS and SEC**	**Readiness for Restart**	

Cornerstones		

7.a IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Operations Organization Ready for Restart	

This item in the Checklist includes a final readiness assessment of the operations organization and all support organizations for safe and reliable restart of the FCS. This assessment will involve thorough review of the organization and operating crew performance and will be completed by a team of OPPD and industry experts.

This will also include confirmation by directors and managers that critical programs and their work groups are ready to support safe and efficient restart.

7.b IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Systems Ready for Restart and Mode Restraints Properly Addressed	

This item in the Checklist includes operations organization confirmation of completion of all the mode change constraints for systems required for restart. The systems will be operational as required by the Operating License and Technical Specifications, and all required actions and tests will be completed.

7.c IE, MS, BI, EP, PRS, ORS and SEC Cornerstones	Final Review of Actions for Restart and Actions Designated as Post-Restart	

This item in the Checklist includes final confirmation that all restart designated actions have been adequately completed. In addition, this item includes confirmation that post-restart designated items have been tied to mode change checklists as appropriate and confirmation that:

- Degraded but operable equipment could remain at start-up provided it meets the following criteria:
  - Robust engineering justification,
  - Approval of the Plant Review Committee, and
  - Approval of the Site Vice President.
- A post-restart action can be readily worked on line, does not affect safe and reliable operation, does not represent a significant challenge to Maintenance Rule goals or required allowed outage time, and does not impair operations necessary to perform surveillance or monitoring.

8	**Confirmatory Action Letter Resolution**	

8.a	Verification that All Restart-Related Confirmatory Action Letter Items are Appropriately Resolved	
8.b	Conduct Public Meeting Regarding Plant Readiness for Restart	

OPPD will prepare a Restart Readiness Report that will describe the results of the implementation of the activities described in the Integrated Performance Improvement Plan, and provide verification that all activities necessary to address the restart-related Confirmatory Action Letter have been completed. This report will be submitted on the docket to the NRC requesting authorization for restart of FCS. In addition, OPPD will present the results of its recovery activities at a public meeting with the NRC.

9	**Final Recommendation for Restart**	
9.a	Manual Chapter 0350 Panel recommends restart to the Region IV Administrator. The Region IV Administrator obtains concurrence for restart from the Deputy Executive Director for Reactor and Preparedness Programs and the Director of the Office of Nuclear Reactor Regulation.	

This Checklist item addresses NRCs final decision making process for approval of the post-restart Confirmatory Action Letter for FCS.

OPPD has no activities under this Restart Checklist section.

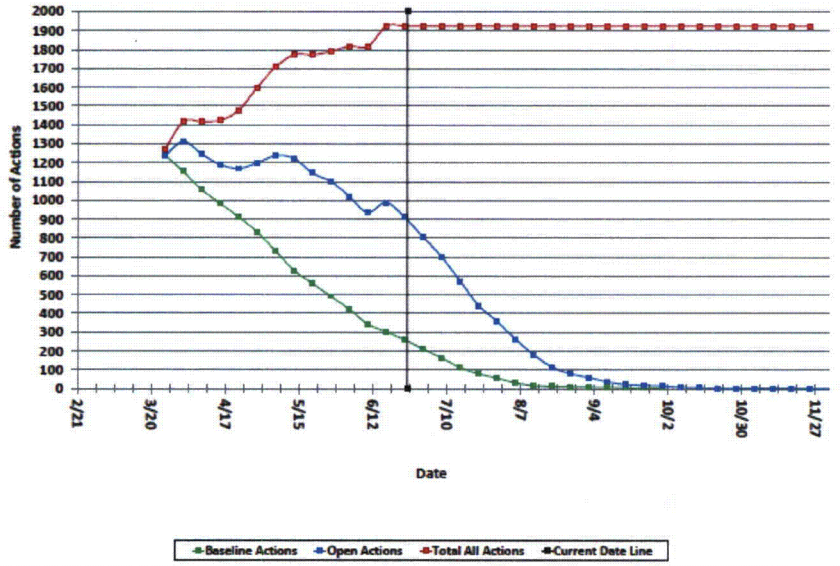
Workdown Curve

FCS Recovery

Action Plan Title:	FCS Recovery Action Rollup
Strategy:	Safe, effective, high quality station recovery as planned
Objective Measure:	Schedule Adherence
Indicator Description:	Total number of FCS Recovery Activities for FCS
Plan Owner:	Lou Cortopassi
Indicator Range:	Full Term

Status

On Track



Date	Baseline Actions	Actual Actions	Actions Added	Open
3/25	27	34		1235
4/1	89	69	146	1312
4/8	96	67	1	1246
4/15	73	63	7	1190
4/22	72	74	53	1169
4/29	79	93	122	1198
5/6	98	72	111	1237
5/13	104	79	65	1223
5/20	70	78		1145
5/27	68	62	17	1100
6/3	69	107	28	1021
6/10	80	86		935
6/17	41	51	105	989
6/24	43	80		909
7/1	48	103		806
7/8	48	105		701
7/15	50	127		574
7/22	34	130		444
7/29	23	85		359
8/5	25	94		265
8/12	15	84		181
8/19	4	65		116
8/26	1	36		80
9/2	2	20		60
9/9	1	23		37
9/16	2	14		23
9/23	1	4		19
9/30		4		15
10/7	3	6		9
10/14		4		5
10/21	1	1		4
10/28	1	2		2
11/4				2
11/11				2
11/18				2
11/25		1		1
12/30		1		

Notes

Sample Annunciator

INPO/WANO Performance	**INPO - 9** HPSI System Performance	**INPO - 12** Collective Radiation Exposure	**INPO - 13** Total Industrial Safety Accident Rate	INPO - 14 Loss of Shutdown Cooling Events		
NRC-Regulatory Performance	NRC - 4 MPSI Emergency AC Power System	NRC -5 MSPI High Pressure Safety Injection System	**NRC - 6** MSPI Auxiliary Feedwater System	NRC - 7 MSPI Residual Heat Removal System	NRC - 8 MPSI Cooling Water System	NRC - 9 MSPI Safety System Functional Failures
	NRC - 12 Emergency Plan Drill Exercise Event Performance	NRC - 13 ERO Exercise - Drill - Event Participation	NRC - 14 Alert Notification System Reliability	NRC - 15 Occupational Exposure Control Effectiveness	NRC - 16 RETS/ODCM Radiological Effluent Occurrences	**NRC - 17** Protected Area Security Equipment Indicator
	WHLV - 1 Work Hour Limitation Violations	WHLV - 2 Schedule variance by Department				
Production / Cost / Staffing	COST -1 Level 1 O&M Cost Management	**COST - 3** Capital Cost Management	COST - 5 O&M Overtime	COST - 6 Staffing Levels (Full time Employees)		
Operations	**POP -1** Operator Challenge Aggregate Impact Factor	POP - 2 Reactivity Management	POP - 3 Reactivity Management Event List	**POP - 7** Mispositioned Plant Components	**POP - 9** Tagging Errors	POP - 11 Procedural Compliance
Industrial Safety and Human Performance	**CHU -1** Station Human Performance Event Clock Resets	IS - 1 Industrial Safety Performance	IS - 3 Industrial Safety Work Order Inventory and Average Age	IS - 4 OSHA Recordable Injuries per 200,000 person hours	RP - 3 Outage Personnel Contaminations	
Maintenance	AIWM - 3 Corrective Maintenance Backlog	AIWM - 4 Deficient Maintenance Backlog	**AIWM - 5** Timely Completion of PMs	**AIWM - 6** PM Task Deferral	**AIWM - 7** Overdue PM Task	**AIWM - 8** Schedule Adherence (Indicator Moved to Historical Status)
	AIWM - 9 Outage Activity Backlog	AIWM - 12 Timely Completion of First Time Performance PMs	AIWM - 13 First Time PM Task Deferrals	AIWM - 14 Readiness of First Time Performance Preventative Maintenance Activities	**AMP - 1** Engineering Change (EC) Implementation Backlog	AMTC - 2 Maintenance Rework
	CCA - 20 CRs with Open Non-Outage RIS 2005-20 (GL91-18) Action items	CCA - 20 - 1 CRs with Open Outage Required RIS 2005-20 (GL91-18) Action items				
Engineering	**CCA - 35** CRs for Calculation Errors (no report available this month)	BACC - 1 Boric Acid Corrosion Control Program	**EDEN - 2** Engineering Change Scheduled by DCIT - Schedule Adherence (no report available this month)	**EDEN - 4** Engineering Document Change Requests (DCRs) Inventory	**EDEN - 7** Field Design Change Requests (FDCRs)	EDEN - 8 Engineering Change Closure Timeliness
	EPRG - 4 Equipment Reliability Clock Resets	EPRG - 5 ASME XI IST Components in Alert Range	EPRG - 7 Maintenance Rule Functional Failures (MRFF)	EPRG -10 AP 913 High Critical Component Failure	EPRG - 11 Components in Degraded PM as-found Condition	EPRG - 12 PM Feedback for Equipment as-found Condition
	EPRG - 13 Components in "Failed as-found" Condition	ESYS - 2 Temporary Modifications Installed	ESYS - 3 Fire Protection Impairment Permits			
Corrective Action and Performance Improvement	CCA-1 CR Inventory and Average Age (Type C)	**CCA - 7** CAPR Inventory and Avg. Age (CAs to Prevent Recurrence of Level A, B CRs)	CCA - 11 Overdue Corrective Actions	CCA - 12 Condition Reports Action Item Due Date Extensions	CCA - 16 Failed Condition Report Effectiveness Reviews	CCA -18 CR Self-Identification Ratio
	CCA - 23 Apparent Cause Analysis Effectiveness	**CCA - 24** Root Cause Analysis Effectiveness	**CCA - 36** Operating Experience Effectiveness	CPI - 1 Self Assessment Effectiveness	CPI - 2 Benchmark Effectiveness	**CQA - 3** Line Responsiveness to Oversight Identified Issues
Training	TRNG - 1 Accredited Training Programs - Qualification Aggregate Index	TRNG - 2 Site Qualification Aggregate Index	TRNG - 3 Line Management Observations of Training - Accredited Training Programs	TRNG - 5 Simulator Change Requests		

APPENDIX E: COMMUNICATIONS PLAN

FORT CALHOUN STATION
STRATEGIC COMMUNICATIONS PLAN
2012

Revision 1

October 2012

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2012 Strategic Communications Plan

Objective:

- Achieve and sustain communication excellence at Fort Calhoun Station.
- Support the institutionalization of the Integrated Performance Improvement Plan and the station's vision, mission and values.

  - Communications personnel have direct and ongoing interactions with the senior corporate and plant management teams and are involved in developing strategic communications for management decisions.
  - A station/utility communications strategy exists and supports the organization's mission and change initiatives by identifying key objectives and tactics for communicating with key stakeholders. The strategy includes methods to monitor communication effectiveness.
  - Corporate and station executives, managers, and supervisors are key sources of information in the communication strategy. They are trained and coached on effective communication skills.
  - A process is in place to encourage, monitor, and address employee feedback on business initiatives and organizational culture.

Section 1.0 Background

The overarching communication goals at Omaha Public Power District's Fort Calhoun Station are:

- Foster a strong nuclear safety culture
- Ensure all employees understand and feel a sense of urgency and the need for change in how we conduct business
- Clearly communicate new standards and expectations to ensure buy-in to new ways of operating

Strong internal communications at Omaha Public Power District's Fort Calhoun Nuclear Station are absolutely essential:

- Because of the volume of work that the site's workforce has to accomplish,
- Because of the changes that the site's workforce needs to make,
- Because of the loss of skilled and knowledgeable workforce to retirement,
- Because of the need for Fort Calhoun Station to stay abreast of industry standards and operating experience, and
- To ensure that a proper safety culture is formulated and maintained.

The communications strategy at Fort Calhoun Station is designed to drive organizational change by aligning and engaging employees. Communications theory indicates this is best accomplished by establishing and reinforcing key messages through multiple channels of communication. To ensure information flow throughout the organization, the strategy includes opportunities for effective vertical (up and down), horizontal and diagonal information flow. The elements of the communications strategy include effectiveness measures to facilitate continuous improvement.

This strategy is consistent with the performance objective for communications developed by the Institute of Nuclear Power Operations (INPO) for corporate evaluations, which states the following:

Nuclear communications inform and engage corporate and nuclear station employees so they can contribute to the strategic priorities of the organization.

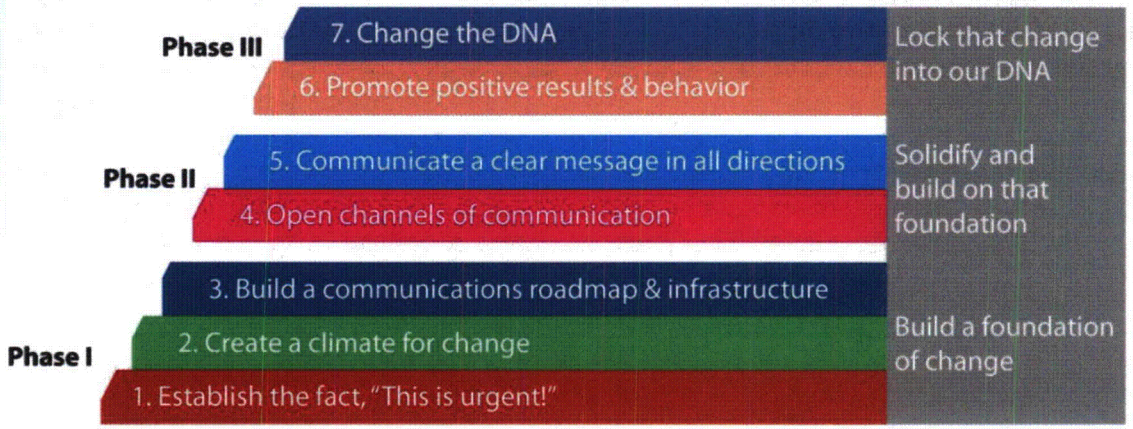
Four of the five criteria related to this INPO performance objective apply to this communication strategy. These include:

- having communications personnel directly interact with senior management to develop communication for management decisions
- a formal communication strategy with effectiveness measures
- the use of executives, managers and supervisors in key communication roles
- a process to seek employee feedback.

The Fort Calhoun Station internal communications strategy is comprised of eight elements:

- Evaluate and Enhance Current and Past Communications Tools
- Implement New Communication Tools
- Create Department-Level Communications Guidelines/Plans
- Foster Face-to-Face Communications
- Visually Reinforce Messaging
- Develop and Initiate a Formal Outage Communications Process
- Develop, Monitor and/or Enhance Feedback Mechanisms
- Measure Overall Communications Effectiveness

In building the internal communications strategy, a key primary consideration has been given to supporting numerous changes that are necessary at Fort Calhoun Station. These changes incorporate seven steps, generally divided into three phases: build a foundation of change, solidify and build on that foundation, and lock that change into our "DNA" so as to make the change sustainable.



"Saturation and repetitive messaging," in regards to communications at Fort Calhoun Station, is intended to provide a message to as large a segment of the work force or target audience as practical, and provide that message in as many ways possible to ensure the messages are received properly. Depending on the circumstances, saturation may be communicating a given message to 100 percent of the target audience.

In most cases, saturation is achieved by taking reasonable steps to communicate a given message to as large a portion of the target population as practical within a reasonable time frame. In any case, some discretion must be applied to determine when and how an appropriate level of saturation is achieved.

The more significant the issue, the more channels and repetition should be used to ensure proper communication.

Repetitive messaging should use as many formats of communicating as practical, including written, face-to-face, electronic/online, visual reminders (posters, signs, etc.), video, photos, etc.

Section 2.0 – Internal Communications

The objectives of internal communications are:

- Achieve and maintain high levels of awareness of site personnel regarding:
  - The FCS Vision, Mission and Strategic Goals
  - FCS performance compared to industry best:
    - Picture of Excellence
    - Picture of Current Performance
    - Gaps to Excellence/What we are doing to close them
    - Progress we are making
    - The role of individual contributors and supervisors in achieving success (strategic goals/vision/foundations)
  - Organizational successes especially those that involve:
    - Teamwork among several departments and divisions
    - Employee engagement
- Engage workers, obtain their input on department and station challenges, and respond to their concerns.
- Keep personnel aware of key upcoming activities.
  - Activities and changes affecting the plant (major projects or modifications)
  - Activities affecting the organization (organization or leadership changes, major evolutions such as INPO evaluations, major NRC inspections, VIP visits.)
  - Activities affecting OPPD in particular and the electric utility industry in general
  - Activities and changes involving processes (significant changes in station processes)
- Individual recognition for work that demonstrates our foundations
- Reinforce station/management expectations

2.1 Evaluate and Enhance Current and Past Communications Tools

2.1.1 Comprehensive Review

A communications audit shall be conducted to assess the effectiveness of current communications tools and how employees wish to receive their communications.

2.1.2 Advisory Council

The site will convene a communications advisory council, comprised of representatives from key departments and management levels to discuss results of the communications audit and look for best methods of fulfilling the desires of the employees.

The communications advisory council will have access to examples from high-performing sites of different communication techniques and tools to evaluate which examples would help FCS achieve a "sustained excellence" level of communication.

2.1.2 Development of Standards

After review and approval of various communication techniques and tools, standards will be established to identify appropriate content, processes and visual enhancement practices. Examples of these standards might include:

- Standardization of PowerPoint content, such as
  - amount of text per slide
  - restrictions on slide designs (background)
  - guidelines for inclusion of copyrighted or registered input, etc.
- Standardization of Safety Messages and other site-wide messages
- Development of a review and approval process for use of symbols, logos, shirt emblems, art work, etc.
- Development of a review and approval process for use of posters, signage and other visual communication tools, to ensure a consistent and appropriate process is followed. This would include posters desired by contractors.
- Other communication-related guidelines and policies.

2.1.3. Schedule

The following communications schedule lists the activities required to distribute the right information to the right stakeholders at the right time.

A number of events, such as Nuclear Regulatory (NRC) public meetings, will occur that remain to be scheduled. Other events, such as new regulations or requirements, will dictate changes in the schedule and flexibility on the part of the communications team.

Throughout the implementation of nuclear communications under this Plan, we will keep stakeholders informed of progress in the areas that concern them most.

Communications Activities				
Activity ID	**Information** *(What is to be communicated)*	**Stakeholders** *(To whom)*	**Timeframes** *(When)*	**Methods** *(How)*
1.0	Communications audit: ▪ How communication takes place ▪ What employees would like communication to look like ▪ Areas for improvement	OPPD employees at FCS	Fielded. Analysis under review. Completed Oct 26, 2012	**Computer, face-to-face in focus groups**
1.1	Three top goals: ▪ The top three priorities for employee focus ▪ The reason for these selected priorities	OPPD employees at FCS, FCS leaders, OPPD Senior Managers	by Nov 10, 2012	**To be determined (TBD) by communica-tions audit** Fact Sheets
1.2	Progress toward restart: ▪ Various milestones completed	All OPPD employees, OPPD Board, News Media, General Public	As they happen	Publications, FCS website, OPPD website, public presentations
1.3	Nuclear Safety: ▪ Defense-in-depth philosophy in action	General public, students, teachers, environmental activists	As possible	**Public presentations** School presentations, teachers' forums

Communications Activities				
Activity ID	**Information** *(What is to be communicated)*	**Stakeholders** *(To whom)*	**Timeframes** *(When)*	**Methods** *(How)*
1.4	Environmental Benefits: ▪ Nuclear power is carbon-free generation	OPPD employees @ FCS, OPPD employees elsewhere, general public, environmental activists	Throughout	Presentations to local groups, OPPD.com, Possibility of advertising, social media, public meetings)
1.5	Plan of the day: ▪ Priorities of day	FCS leaders, OPPD employees @ FCS, contractors	Daily	**TBD** (possibilities include email, message boards, intranet site)
1.6	Impact of regulatory changes (new seismic rule, new design basis rules, post-Fukushima rules, etc.): ▪ Financial impact ▪ Operational impact ▪ Future-of-the-plant impact	All OPPD employees, OPPD Board, General public	As they are received	Internet, news releases, board meetings speakers bureau

2.1.4 Assumptions

During the creation of this Communications Plan, we have made the following assumptions:

- OPPD employees, especially at FCS, will be kept regularly informed of the plant priorities and projects.
- A Communication Audit will be undertaken to find best ways to communicate up, down, sideways and diagonally at the plant.
- This plan will be a living document, serving as a blueprint and template as the regulatory environment changes.

- A Communications Advisory Council will be formed to assist in further identifying needed information and stakeholders.

2.1.5. Constraints

During the creation of this Communications Plan, we identified the following constraints:

- As these communications must be started as soon as possible, various aspects will be created during the plans.

- Much of the Corporate Marketing & Communications Division will be called upon to carry out this plan. Even with that, additional personnel support at the plant site may be necessary as the plant transitions to more normal operations following startup.

2.1.6 Communications Process

The following sections clarify the activities, roles and documents involved with the formal release of communications for this project:

2.1.6.1 Activities

The following steps will be undertaken for each communications event:

- Identify the content, audience, timing and format of each message to be distributed
- Identify the channels best suited to distribute the message
- Create the communications message to be distributed
- Forward all communications messages to the proper manager for approval
- Distribute the communications messages via the approved methods
- Measure effectiveness of communication methods

2.1.6.2 Roles

The following project roles will be responsible for undertaking formal communications within the project:

The **Communications Team**, currently at four members from Corporate Marketing & Communications, working with onsite personnel, will be responsible for completing the activities listed in this Communications Plan by:

- Coordinating with FCS leaders to plan and organize the communications activity
- Identifying the detailed content, audience, timing and format of each communications message
- Creating a draft of the communications message to be distributed
- Forwarding the communications message to the various managers for approval

2.1.7 Current face-to-face meetings

The following is a listing of the most widespread of planned face-to-face meetings on-site.

- **0700 Plan of the Day Meeting** (Daily): (not normally used for strategic communications) to provide a consistent focus on the Plan of the Day and current support needs of the plant. Attended primarily by department supervisors and craft leads or their representatives.

- **Supervisory Safety Meetings**: Typically once per month
- **Alignment meetings** (weekly) – leaders moved these meetings from Wednesday to Monday mornings to make certain alignment on the most important priorities takes place at the beginning of the week.
- **Management Review Meetings** (Monthly-except for outage months or holiday impacts).
- **Work Group Communications Meetings** (Weekly): Established department level meetings to engage employees in a dialogue on "predefined" Weekly Discussion Points, such as; monthly Foundation reviews, materials discussed in all leader meetings, feedback from Management Review Meetings, department initiatives of interest to others, Current Strategic Goals and Plans, organizational changes, etc.
- Small Group **2C's** meetings with CNO: Two meetings are held between employees and the CNO to cover their concerns and compliments.
- All Hands Meetings: These now happen approximately every six weeks for the CNO and other senior leaders to communicate face-to-face with employees. Fort Calhoun Station does not have the physical resources to conduct these meetings at any one company facility (need to accommodate 600+ attendees), several meetings are being held in order to touch as many employees as possible. One nearby location (the former Dana College facilities in Blair) has been identified as a potential "single-meeting-capable" site.

2.1.8 Current media in use

The following is a listing of some of the communications media available at the site.

- Weekly Discussion Points: Communicated during face-to-face meetings throughout the organization, starting at the Daily Operations Management Focus Meeting on the first business day of each week (See Attachment 5).
- FCS News – The written weekly newsletter that was distributed electronically has transitioned to an online, daily presence. The daily "posts" are compiled into one document and made available to all nuclear employees at brochure racks and online each Friday
- Safety messages distributed at discretion of safety representatives electronically and in kiosks. From April to October 16, 2012, nineteen of these messages have been distributed, covering 21 different issues.
- CNO messages distributed, as necessary, electronically and in kiosks. A number of these messages were distributed in the weekly Update. Seven special CNO messages have been crafted and disseminated outside of that vehicle.
- Monthly OPPD Employee Engagement Communication Toolkit published by the Corporate Marketing & Communications Division.
- Video: Videos produced onsite or by corporate communications to relay company/plant news, highlight specific issues or projects and address rumors or concerns. Used whenever face-to-face is not a possibility due to the size of the desired audience. Video has been used in a training scenario.
- Bulletin Boards

- **Posters** These include Vision/Mission/Values, ECP, Progress toward restart.
- **Site/Corporate Communication Systems** The intranet site has been upgraded to daily stories. Improvements are underway to communications tools in the plant and Administration Building cafeterias.
- **Corporate intranet, FCS website and various associated web pages.**

2.2 Implement New Communication Tools

New communication tools could be identified in the communications audit. Other tools could include:

2.2.1 **Daily Plant Status Communications** ensure all employees are kept informed of the daily plant status and priorities. This helps ensure that the entire site is focusing on the right jobs. This process now utilizes a daily story of an event or issue taking place onsite. Future communications could include an email summary of the discussions from the daily morning operational focus meeting, the outage shift briefing (when in an outage mode), a video link to the daily operational meetings, and other ideas.

2.2.2 **Video Messages** will continue to be an alternate communications method to reach a large population in an efficient manner possible. Even though it is "one-way," it is close to face-to-face communications as it utilizes the visual and aural aspects vital to effective communications. Video messages can come from the chief nuclear officer and other members of the senior management team, as well as other managers. Video also can serve as a method of recognition of jobs well done and a visual reinforcement of vital messages, such as safety messages. We are developing this area at this time.

2.2.3 **Digital Signage.** This is a tool that FCS used at one time. It is found by other plants to be a most effective way of communicating to those workers with less access to computer screens. This may not be as effective as first thought, according to further research. It is not utilized at all Exelon plants.

2.2.3 **FCS Site and Department Websites** have seen changes to increase effectiveness. A more complete review may happen post startup. Possible outcomes of this review may include the redesign of websites, the elimination or production of websites and reduction of duplication of information from one website to another. Even though websites are not necessarily considered a direct communication tool, they serve an important process in delivering various communication products and, in usage at FCS, serve as a ready resource. The difficulty is making them user-friendly.

2.3 Develop and Initiate a formal Outage Communications Process

2.3.1 Develop and implement a standard for outage related communication tools and processes, based on review of industry best practices. After review of benchmarking inputs and review of INPO recommendations, the site will select a development committee to design and produce guidelines for daily, weekly, or special event related outage communications.

2.4 Create Department Level Communications Guidelines/Plans

2.4.1 A review and evaluation of the need for any department level communication plans will be conducted. Using industry benchmarking or best practices, a decision will be made whether department level communication plans are necessary. If any are deemed appropriate to implement, the department level plans will mimic the site's communication plans, but focus only on the department's specific needs and processes.

2.5 Foster Face-to-Face Communications

2.5.1 A thorough investigation of Exelon's practices in this area is helping determine how to develop and implement a meeting strategy to help ensure alignment throughout the organization and frontline exposure to senior management to include a hierarchy of current meetings, attendees, agendas, and how the meetings contribute to overall information flow. The development of this hierarchy will include such meetings as; mandatory industrial safety briefings, special event briefings, safety culture and behavior discussions, alignment meetings for department leaders and above, crew leader and supervisor alignment meetings, all-hands meetings and processes, small-group meetings, etc.

Eventually, a chart to illustrate the fundamental approach to the site's meeting strategy, which is to enhance face-to-face communications and ensure both horizontal and vertical information flow, will be developed to be used by all site employees.

2.6 Develop, Monitor and/or Enhance Feedback Mechanisms

2.6.1 Monitoring the pulse of the workforce is essential. This is accomplished through a variety of tools including a mix of formal and informal surveys and intentional upward communication feedback opportunities, such as individual, group, department, divisional and site wide meetings; leadership focused meetings; site priority alignment focused meetings, and others. A communications audit has been conducted.

2.6.2 Significant insight is routinely provided through mechanisms, such as; the site's Safety Conscience Work Environment (SCWE) surveys, overall organizational culture surveys and benchmarking, individual and group feedback sessions focusing on effectiveness of communications, etc. Pulse surveys have begun.

2.6.3 Care must always be taken to ensure that the site doesn't become complacent due to "too many" surveys. The site's communication team, working with OPPD's IT Division, takes responsibility to monitor the feedback processes being used and ensure that actions are developed to improve the communications tools and techniques.

2.7 Visually Reinforcing the Desired Safety Culture

2.7.1 The development of standards for content and arrangement of all visual messaging at FCS has been completed. The goal of this activity is to align all visual elements (photography, signage, video, posters, desktop guides, etc.) to reinforce site-wide messages and build a consistent, cohesive family of communications products.

2.7.2 Logo standards and templates will also be developed on the use and application of the Fort Calhoun Station and OPPD logos. Numerous examples of non-standard logos have been developed and used by numerous departments, divisions and groups at FCS over the years. A

process will be developed to survey and identify non-standard logos and eliminate them, including any necessary coaching of individuals who have used the official logos inappropriately. A logo standards manual is being developed in conjunction with the corporate standards to clearly outline the proper font, colors and application of the logo(s). If a department desires to build their own logo, the process for the development, review and approval of those logos will be described. The communications team at FCS will have full control and responsibility for maintenance of any approved logos.

2.8 Measurement

- Formal surveys of employee perceptions of communications effectiveness and methods. These surveys should be designed to provide statistically valid information and to enable benchmarking against the industry.
- Communications feedback or input from communications advisory council members will be documented and trended, as applicable.
- Informal pulse surveys providing qualitative data.
- Other measurement tools will be deployed as applicable.

2.9 Roles/Responsibilities regarding the Strategic Communications Plan

2.9.1 Chief Nuclear Officer (CNO)/Site Vice President (SVP)

- Review and approve Strategic Communication Plan revisions.
- Be personally involved in providing meeting summaries; contributing newsletters articles and suggestions; helping identify picture or video opportunities, etc.
- Provide communications interface to outside agencies and organizations.

2.9.2 Division Managers (DM's)

- Sponsor recurring topics and areas of interest.
- Help develop content of news releases, articles and policy reviews.
- Be personally involved in providing meeting summaries; newsletter articles and suggestions; assign department managers to provide communication articles and information; help identify picture or video opportunities, etc.
- Ensure applicable communications are provided to their department managers and leaders.
- Provide communication interface to outside agencies and organizations.
- Serve or delegate "tour guide" responsibility for plant tours.
- Serve or delegate speaking roles in speakers bureau.

2.9.3 Department Managers

- Sponsor recurring topic areas and areas of interest.
- Help develop content of news articles and informational stories.
- Ensure that guaranteed communications are discussed face to face to the individual contributor level.

2.9.4 Communications Specialist

- Contribute to the station's Strategic Communication Plan.
- Propose and implement site-wide communication themes, topics, and methods.
- Prepare communications using various media.
- Ensure the strategic communications plan is executed to the extent possible under existing plant conditions and activities.
- Prepare, review and recommend changes to the Strategic Communication Plan.
- Provide or coordinate photo and video support.
- Assist the site senior managers in other special projects or additional duties related to site communications.
- Oversee a communications survey routinely to determine message, tool, and overall communications effectiveness.
- Document and trend feedback provided concerning site communications.
- Provide tours
- Support speakers bureau with facts, presentations

References

1. INPO 09-009, Rev 0, August 2009; "Guidelines for the Conduct of Internal Communication at Nuclear Power Stations"

2. INPO 10-004, Preliminary, July 2010; "Principles for a Strong Plant Operational Focus"

3. INPO 10-005, Preliminary, July 2010; "Principles for Maintaining an Effective Technical Conscience"

4. NOD-QP-47, Rev 2, July 2010; "Training Accreditation Renewal Project Plan"

5. FCSG-58, Rev 0, September, 2010; "FCS INPO/WANO Plant Evaluation Preparation Plan"

6. FCSG-14, Rev 5, June 2012; "Communications Guideline"

7. NPM-1.06, July 2012; "Internal Communications"

Attachment 1: Recurring Communication Themes

Themes/Topics/ Messages	Frequency	Sponsor
Safety	At least Weekly via Discussion Points (or as needed due to events)	CNO/Site VP
FCS Performance	Weekly, various plant operational issues discussed at Daily Operations Management Briefing, via Weekly Discussion Points or Special Mass-Emails	CNO/Site VP
Principles of a Strong Nuclear Safety Culture	Weekly, a specific Nuclear Safety Culture Principle/Attribute in the Plan of the Day (POD). Also instituted in the Alignment meetings and other meetings.	CNO/Site VP (via the Employee Concerns Program (ECP)
Industrial Safety	Monthly Safety Meetings and Daily during Outages	APM
Vision	Quarterly, via FCS News, Discussion Points or Video This, now, is reinforced weekly during the leadership alignment meetings.	CNO/Site VP
Emergency Preparedness	Quarterly – FCS News, Discussion Points or Video	Manager, EP/HP
Organizational Successes	Monthly, as a minimum, otherwise as needed	DMs
Nuclear Safety Policy (NPM 100)	Semi-Annually, through FCS News, Discussion Points or Video	CNO/Site VP
Employee Concerns Program	Annually, through training, posters, FCS News or Discussion Points	DM, Quality and PI
Safety Conscious Work Environment (SCWE)	Annually, after any SCWE Survey, with Industry Operating Experience Presentations	DM, Quality and PI

Attachment 1

Themes/Topics/ Messages	Frequency	Sponsor
Refueling Outage Readiness/Execution	Graded approach; monthly starting one year prior to outage start and weekly starting 6 weeks prior to outage start. During outage; updates are provided daily via various Outage Team Meetings (See Attachment 2)	DM
Major NRC inspections	One month prior, and summarize results within two weeks of the exit meeting	Responsible DM
INPO Evaluations	Graded approach with various messages 6 months prior, 3 months prior, 1 month prior, two weeks prior, first Monday after on-site evaluation completed, and following the formal exit meeting (See Reference 5)	CNO/Site VP
Significant Organizational or Process Changes	As needed	DM (sponsor of change)

Attachment 2: Refueling Outage Communications

Communication Points (Note: RFO-0 refers to time prior to the start of the refueling outage; RFO+0 refers to time after the end of the refueling outage)

RFO-52 weeks
- Begin communication of outage preparation status and progress at:
  - ORR meetings with station managers
  - OTF meetings with work group representatives
  - Senior Team meetings with outage manager

RFO-40 weeks
- Begin publication of monthly outage newsletter
- Publish preliminary outage goals
- Publish Level 1 outage schedule
- Identify and communicate outage theme and logo
- Issue outage communications plan
- Publish outage frozen scope

RFO-24 weeks
- Begin publication of bimonthly outage newsletter
- Distribute banners and posters with outage theme and logo
- Publish Level 2 outage schedule
- Reinforce expectations for the outage readiness challenge review process
- Reinforce expectations for the horizontal schedule review process

RFO-12 weeks
- Begin publication of weekly outage newsletter
- Begin work group briefings on outage scope and expectations
- Publish Level 3 outage schedule
- Reinforce expectations for the vertical schedule review process

RFO-8 weeks
- Begin outage execution team briefings
- Conduct site-wide outage meeting

RFO-4 weeks
- Publish final outage goals
- Begin outage Topic of the Day briefings

RFO-2 weeks
- Distribute outage handbook
- Publish final outage schedule
- Begin OCC familiarization and training

During RFO

- Shift Outage Manager Report (beginning of every shift)
- Outage Newsletter (daily, 5, 6 or 7 days a week, depending on available communications staffing)
- Outage Organization Shift Briefing (beginning of every shift)
- Work Group Turnover Briefing (beginning of every shift)
- Daily Management Status Briefing (Monday - Saturday)

RFO+4 weeks

- Complete Outage Critiques

RFO+12 weeks

- Complete Outage Report

Communication Points (Note: RFO-0 refers to day 1 of the outage)

Attachment 3: FCS Performance Communications

The following Performance Metrics will be communicated at the indicated frequency:

Metric	Periodicity
INPO Performance Indicator Index (INPO-1 and INPO-2)	Quarterly
Unit Capability Factor (INPO-3)	Quarterly
Forced Loss Rate (INPO-4)	Quarterly
Chemistry Effectiveness Indicator (INPO-7)	Quarterly
Collective Radiation Exposure (INPO-12)	Quarterly
Total Industrial Safety Accident Rate (INPO-13)	Quarterly
Unplanned Power Changes Per 7000 Critical Hours (NRC-3)	Quarterly
MSPI Emergency AC Power System (NRC-4)	Quarterly
MSPI High Pressure SI System (NRC-5)	Quarterly
MSPI Auxiliary Feedwater System (NRC-6)	Quarterly
MSPI Cooling Water Systems (NRC-8)	Quarterly
MSPI Safety System Functional Failures (NRC-9)	Quarterly
E-Plan Drill-Exercise-Event Performance (NRC-12)	Quarterly
Power History Curve (PRO-1)	Quarterly
Site Recordable Injury Rate (IS-4)	Quarterly
Human Performance Error Rate (CHU-3)	Quarterly
CM and EM Backlogs (AIWM-1 and AIWM-2)	Quarterly
EC Implementation Backlog (AMP-1)	Quarterly
Equipment Reliability Index (EPRG-1)	Quarterly
Condition Report Inventory And Average Age (CCA-1)	Quarterly

Attachment 4: Weekly Discussion Points

Weekly Discussion Points are now being combined with the weekly leadership alignment meeting PowerPoint slides.

The new Alignment Meeting Discussion Points provide supervisors and managers an opportunity to communicate important topics on a weekly basis in a consistent way, encouraging a face-to-face forum that allows questions and answers, and better engagement than a site-wide video provides.

Process
Following the leadership alignment meeting on Mondays, Corporate Marketing & Communications (CMC) adds other items (such as the weekly industrial safety report and Yellow Communications on department clock resets) to the alignment meeting PowerPoint.

By 2 p.m. each Monday, CMC posts a PowerPoint and PDF version of these slides on the OPPD intranet.

FCS leaders (and anyone else interested) can then access these from the FCS home page by clicking on Alignment Meeting Discussion Points under Quick Links.

Attachment 5: Station Communications Guidelines

Responsibilities of Communications Plan Monthly Sponsors:

- Ensure the monthly Foundation and Strategic Goal are appropriately emphasized and reinforced (work with Strategic Goal Sponsors for input on Strategic Goal Communications).
- Monthly All-Leader meeting: Responsible for agenda and quality of the meeting (work with Communications Specialist)
- Video announcements or presentations will be done as needed. The monthly sponsor should discuss any options with the Communications Specialist.
- Other leadership meetings: Responsible for arranging the topic/presenter (work with Communications Specialist).

Guidelines for using Site Wide Videos:

- About 1 minute is optimum, 3 minutes maximum.
- If appropriate, include emphasis on the current Foundation and the Strategic Goal that will be valid at time of presentation.
- Consider including key upcoming events such as refueling outage, INPO evaluation, important NRC inspections (see the communication calendar for other options).
- Where possible, review key station achievements/accomplishments that have occurred, focusing on foundation behaviors that led to positive results.
- Work with the Communications Specialist to determine when to distribute the video and to what audience.

Guidelines for All-Leader Meetings

- In advance of the meeting, prepare a 1-page summary of the key points from the meeting that we expect all leaders to discuss with their work groups following the meeting, and have them available to hand out at the end.
- Open the meeting with a safety culture attribute ... ask the audience to comment on how we embody that attribute, or an example that suggests we need to improve.
- Include a "Picture of Performance" in each All Leader Meeting: (This is a comparison of one or more aspects of FCS performance to industry excellence, and should include graphs and numbers where possible).
- Engage the audience. Our best All Leader Meetings occur when we get dialogue exchange between the audience and presenters.
- Include a 10-15 minute break in the middle for refreshments and discussion (all FCS senior management personnel should take this opportunity to mix with people, especially outside of their own divisions).
- Arrange the agenda to provide at least 10 minutes for Questions, Answers and Comments before closing the meeting.

Attachment 5

Guidelines for Large Group PowerPoint Presentations

When using a projector for displaying a PowerPoint in large group sessions, the following guidelines should be followed to ensure that the presentation is "crisp, to the point, and simple to understand."

NOTE: All projectors are different, including the differences in the room or area that the projector is being used in. Don't anticipate that all colors will appear on a projected image the same as they might on your computer screen when building the presentation. A dry run or 'testing' of the presentation is highly recommended prior to the event to ensure that the colors are appropriate.

If using a projector, stick with basic backgrounds (solid colors always work the best) with high contract between the background and font colors, such as BLACK FONT on WHITE BACKGROUND or WHITE FONT on BLACK BACKGROUND.

WHITE FONT	BLACK FONT

Title Slide:

- Presentation Title (six words or less) in 44 Point Bold Header (use of Arial (Headings) Font is recommended).
- Name and Title of Presenter in 28 Point Bold Body (use of Arial (Body) Font is recommended).

Topic Slides:

- If needed, each slide can have a 44 Point Bold (Header) Title.
- Less than or equal to a total of 10 slides with less than or equal to 6 bullets per slide.
- 32 Point Arial (Body) Font for text.
- Pictures are OK – visuals help the audience understand.
- SIMPLE phases, not full sentences (if you want the audience to have full sentences of information, use a handout instead).
- PowerPoint should enhance your presentation, but not be the presentation.
- Practice ahead of time and talk to the audience. **DO NOT READ** the slides!

Additional Hints:

- Don't get overenthusiastic with FONT colors. As mentioned previously, some projectors do not project colors the same as on your computer screen.
- Depending on the subject (and audience), a little humor keeps the audience awake.
- Again, keep slide designs (background) basic – don't get overly complicated backgrounds, especially if you will be transferring this presentation from one computer to another. Not all designs (background) transfer cleanly from one computer to another and may shift spacing and positioning of the text.

Attachment 6: Significant Station Upcoming Events/Activities

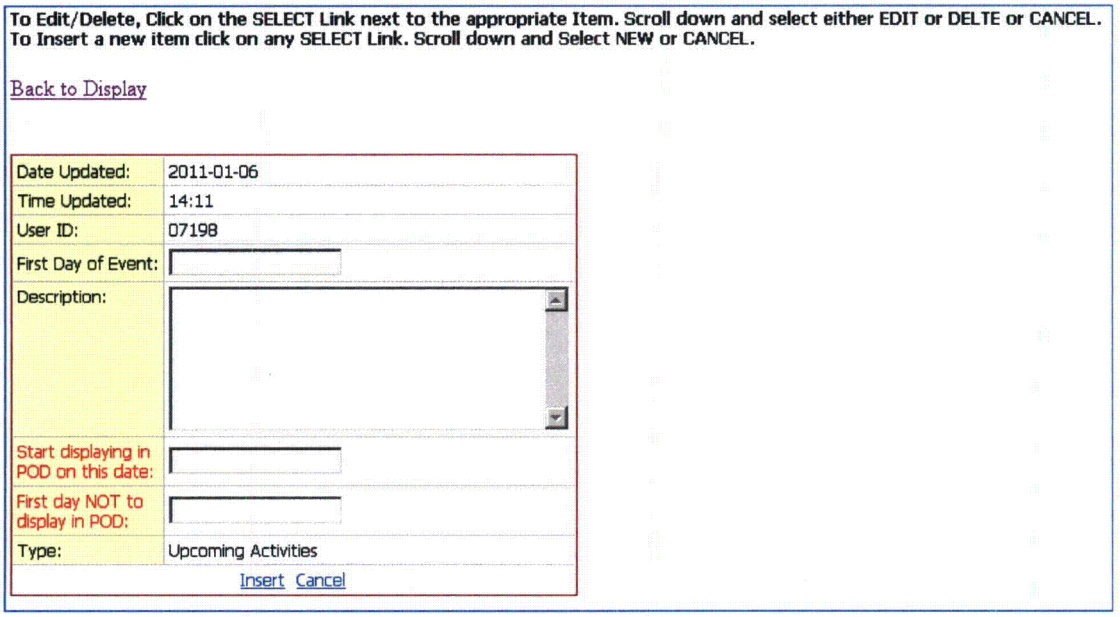
To prevent duplication or confusion, the master list of significant upcoming events, inspections, audits and visitors is maintained on the Fort Calhoun Station Plan of the Day.

The list appears in a two-column format, where the first column will show the first day of the event and provide a quick search option to personnel looking for what is going to occur on any specific date or range of dates.

Day 1 of Event	Event Description
• Jan. 10, 2011	January 10-14, 2011 - Self Assessment - System and Component Performance Monitoring. Lead - Jay Cate.
• Jan. 24, 2011	January 24 - February 4, 2011 QA Audit #6, Site Security Plan and Implementing Procedures (Safeguard Contingency Plan) Lead Auditor, J. Vanderbilt.
• Jan. 24, 2011	January 24 - February 4, 2011 QA Audit #13, Procurement and Material Control, Lead Auditor, J. McBride.
• Jan. 26, 2011	January 26-28, 2011 - Safety Audit and Review Committee (SARC) Meeting
• Jan. 31, 2011	January 31-February 4, 2011 - Self Assessment - System Health Reports and Action Plans. Lead - Steve Clayton.
• Feb. 08, 2011	February 8, 2011 - ERO Drill White Team
• Apr. 04, 2011	April 4-29, 2011 - NRC INSPECTION - Inservice Inspection. The inspectors will be using IP 71111.08P. Four inspectors are scheduled.
• Apr. 05, 2011	April 5, 2011 - Outage Fair (1000 to 1500)
• Apr. 10, 2011	April 10, 2011 - Scheduled start date for 2011 RFO.
• Apr. 11, 2011	April 11-22, 2011 - NRC INSPECTION - RADIATION SAFETY. NRC Inspector, Don Stearns, will be using IPs 71124.01 Radiological Hazard Assssment and Exposure Controls, 71124.02 Occupational ALARA Planning and Controls, 71124.03 In-Plant Airborne Radioactivity Control and Mitigation, IP 71151-OR01 Occupational Exposure Control Effectiveness, and IP 71151-PR01 RETS/ODCM Radiological Effluent.
• Apr. 18, 2011	April 18-22, 2011 - NRC INSPECTION - SECURITY. The inspectors will be using IPs 71130.02 (Access Control) and 71130.05 (Protective Strategy Evaluation). Three inspectors are scheduled.
• May. 27, 2011	May 27, 2011 - All-Manager Meeting (Offsite)
• Jul. 15, 2011	July 15, 2011, First Line Supervisors Forum, Shadow Ridge Country Club, 0730-1600.
• Oct. 28, 2011	October 28, 2011 - All-Manager Meeting (Offsite)

Update Page

The Communication Specialist will assist in routinely reviewing and editing the list on the POD, however; everyone has access to enter applicable information on this listing. The following guidelines are provided to enter or edit entries on the POD. To enter a new event, click on the "Select" link of any existing entry, then click on the "New" at the bottom of the edit box. The following entry box should appear with your User ID entered along with the current date and time.:



NOTE: The calendar entries will be done via a drop-down calendar selection tool. The date entered in the form will be in a YEAR-MONTH-DAY format to allow the POD to properly sort and place items chronologically.

First Day of Event: click on the entry line and a calendar should appear and allow you to select the first day of the event.

Description: FORMAT: Start Date-End Date, YEAR – Event Type – Verbal Description and Support Information. Should be short, sweet and contain information valuable to all readers. If the event is a NRC, QA, INPO (and other organizations) related, start with CAPITAL LETTERS to highlight the organization and KEY AREA of impact (if applicable).

Examples: October 17-21, 2011 – NRC INSPECTION – EMERGENCY PREPAREDNESS. Inspectors will use IP 71114.01……..

December 6-10, 2010 – QA AUDIT No. 63, RADIOACTIVE WASTE MANAGEMENT……

April 8, 2011 – INPO Plant Evaluation Exit Meeting.

January 31-February 4, 2011 – Self Assessment – System Health Reports and Action Plans. Lead – Steve Clayton

Start displaying in POD on this date: Click on the entry line and a calendar should appear and allow you to select the date that you desire the entry to start showing on the POD. Use the following guidelines, if not sure when to start displaying the entry:

- Annual or Fuel Cycle Events: 12 to 18 months in advance, which allows personnel to plan accordingly. Examples include ERO Evaluated Exercises and Dress Rehearsals.

- Special Events which require many personnel to block dates on their calendars: 6 to 12 months in advance. Examples include All-Hands Meetings, Site Picnics, ERO Drills and specialized training, Security FOF Exercises, etc.

- Quarterly Events: 3 to 6 months in advance.

- Monthly Events: 4 to 8 weeks in advance.

- Weekly Events: 2 to 4 weeks in advance.

- NRC Inspections: As soon as notified, not to exceed 12 months in advance.

- INPO Activities: As soon as notified, not to exceed 12 months in advance.

- QA Audits: As soon as scheduled, not to exceed 12 months in advance.

- Outage Milestones: Same as a Fuel Cycle Event – 12 to 18 months in advance.

First day NOT to display in POD: This should be the day following the last day of the event.

EXAMPLE: An event is planned for April 11-15. This entry should be April 16 (at midnight on the sixteenth, this entry will no longer display in the POD).

After entries are made, hit "Insert" on the bottom of the box.

The Communications Specialist will ensure appropriate items are updated on the Strategic Communications Calendar and appropriately linked to the SVP Website.

Attachment 7: Strategic Goal Communications

Strategic Goals are designed to help keep the station focused on one or more areas of improvement to achieve excellence in the industry. These strategic goals are selected by senior management and sponsored by management representatives.

Typically, a strategic goal will involve a preliminary assessment to determine what performance or functional gaps exist between Fort Calhoun Station and the generally accepted practice of "high achieving" or "excellent operational" plants. These gaps are then analyzed to determine what actions are necessary to help move Fort Calhoun Station towards a level of excellence. These actions are then approved in an overall action plan for the strategic goal. The open action plan is then made available to all FCS employees by link on the Site Vice President and/or FCS websites. Action item assignees and/or the strategic goal sponsor are responsible for maintaining the action plan current and providing any updates to the Communications Specialist for posting on the website(s).

Any strategic change, especially one that includes a "culture change" will require constant communications to keep the information and actions in front of everyone. Effective communications can include any combination of face-to-face, meetings, presentations, newsletters, posters, video and handouts. To ensure that appropriate behavior changes are recognized; celebrations should be considered as another method to communicate positive successes.

Strategic goal communication references are made throughout this Strategic Communication Plan. Sponsors of a strategic goal need to work with the Communication Specialist to provide routine and educational information to all FCS employees and contractors.

Here are some of the avenues to keep strategic goals in front of everyone at FCS:

- Routine updates or reviews of action plan items in the Weekly Discussion Points.
- Routine instructions to employees on how to locate the strategic plans on the website(s).
- Routine update presentations at the All Leader Meetings.
- Special face-to-face meetings at the department level to review/update strategic goal information.
- FCS News articles or Special FCS News editions focusing at strategic goals.
- Announcements of site wide clock resets or special focus clock resets (such as the Equipment Reliability Clock).
- Video messages.
- Individual mailings of information.
- Site posters.
- Celebrations.

Attachment 7

Senior Management and Strategic Goal Sponsors need to routinely provide information to the Communication Specialist to distribute to the employees using the appropriate media.

Attachment 8: Fort Calhoun Station Poster Guidelines

UNDER DEVELOPMENT – Coming Soon.

Attachment 9: Stakeholder List

A stakeholder is defined here as *any person or group who requires regular information about this project*. Based on this definition, the following stakeholders must be kept informed of the progress of this project:

Stakeholder Group	Stakeholder Description
OPPD Senior Managers	Vice Presidents
OPPD Board of Directors	Decide on overall policy of company, select senior managers
Fort Calhoun Leaders	Division Managers, Department Managers, Supervisors
Employees @ FCS	Will do the work necessary to bring FCS to Column 1
OPPD employees elsewhere	OPPD employees who do not work regularly @ FCS
Political leaders	Local, regional, state and national elected representatives
NRC staff	Resident inspectors, regional administrators, 0350 Panel
NRC communicators	Region IV Public Affairs Officers
Emergency officials	Federal Emergency Management Agency, Nebraska Emergency Management Agency, Iowa Homeland Security & Emergency Management, Region 5/6 emergency management, county & city emergency managers
News Media	Local, regional & national news media
Neighbors	Residents within the 10-mile Emergency Planning Zone
Environmental & activist groups	Concerned citizens with misgivings about nuclear power
General Public	All members of the public at large in OPPD's service territory and within 25 miles of the plant in Iowa

Attachment 10: Stakeholder Requirements

Stakeholder Requirements

Each of these Stakeholder Groups will require different types of information regarding the project. The following table lists the information required by each stakeholder, to enable us to create a plan for meeting their requirements.

Stakeholder Group	Stakeholder Role	Stakeholder Organization	Information Requirement This stakeholder needs an understanding of the...
OPPD Senior Managers	Overseers of overall budgets	OPPD	▪ Budget information ▪ High-level progress reports ▪ Restart estimations ▪ Information on complications
OPPD Board of Directors	Set policy of OPPD, select senior management	OPPD	▪ Summarized Status, talking points ▪ Deliverables produced since last briefing ▪ High-level risks, issues and changes ▪ Political currents ▪ Public Opinion ▪ Regulatory Status
Fort Calhoun Leaders	Direct the staff at the site. Will be integral part of plan	OPPD	▪ Purpose of the communication ▪ Deliverables produced to date ▪ Benefits to be received from project delivery ▪ Questions likely to be asked by FCS employees ▪ Issues likely to be raised by members of the public

Attachment 10

Stakeholder Group	Stakeholder Role	Stakeholder Organization	Information Requirement This stakeholder needs an understanding of the...
Employees @ FCS	Will be affected by the delivery of the plan	OPPD	▪ Purpose of the project ▪ Impact that delivery of the project will have on their rates ▪ Benefits to be received from delivery of the project ▪ Proposed new rates for Commercial Property Owners ▪ Other changes specific to Commercial Property Owners ▪ Current status of the project
OPPD employees elsewhere	Will be affected by the delivery of the plan	OPPD	▪ Status of plant and projects ▪ Role of FCS in OPPD plans ▪ Benefits of FCS to OPPD
Political leaders	Can affect future of plant through legislation, regulation	Federal, state, regional, county & city elected and appointed leaders	▪ Status of plant and projects ▪ Benefits of FCS to local communities, region, environment ▪
NRC staff	Oversee regulation of plant	U.S. Nuclear Regulatory Commission	▪ Status of plant and projects ▪ Communications taking place inside plant
NRC communicators	Communicate with media, others on regulation events	U.S. Nuclear Regulatory Commission	▪ Media interest in plant ▪ Communications taking place to media
Emergency officials	Affected by operations & successes at plant	FEMA, NEMA, Iowa Homeland Security	▪ Changes in emergency plan affecting them ▪ Changes in plant conditions, operations affecting safety

Attachment 10

Stakeholder Group	Stakeholder Role	Stakeholder Organization	Information Requirement This stakeholder needs an understanding of the...
News Media	Impart information on plant to general public	Various	▪ Progress toward resolution of issues ▪ Effects of new developments, regulations
Neighbors	Affected by happenings at plant. Can influence political and regulatory impacts on plant	Individuals	▪ Benefits of FCS to local communities, region, environment ▪ Environmental benefits of carbon-free generation ▪ Safety systems in place, backed up ▪ Education on nuclear power
Environmental & activist groups	Can influence public perception of plant, and influence political and regulatory impacts on plant	Individuals,	▪ Environmental benefits of carbon-free generation ▪ Defence-in-depth philosophy in practice
General Public	Can influence political and regulatory impacts on plant.	Individuals	▪ Safety of FCS, defense-in-depth philosophy in action ▪ Impact that FCS (or replacing it) will have on their rates ▪ Benefits of carbon-free generation to environment ▪ Status of plant and progress

Attachment 11: Assumptions

Assumptions

During the creation of this Communications Plan, we have made the following assumptions:

- OPPD employees, especially at FCS, will be kept regularly informed of the plant priorities and projects.
- A Communication Audit will be undertaken to find best ways to communicate up, down, sideways and diagonally at the plant.
- This plan will be a living document, serving as a blueprint and template as the regulatory environment is sure to change.
- A Communications Advisory Council will be formed to assist in further identifying needed information and stakeholders.

REVISION HISTORY

Revision	Date	Change Summary	Approver
0.0	3/6/2012	Initial Draft	Dave Bannister / Bob Hovey/ Lou Cortopassi
1.0	3/16/2012	Appendix A updated to include link instead of Level I and II summary	Dave Bannister / Bob Hovey/ Lou Cortopassi
2.0	4/24/2012	Updated pages 4 and 5 to describe the tie-in between scoping and CAP. Enhanced text on page 11 describing return to normal operations. Updated org charts.	Dave Bannister / Bob Hovey/ Lou Cortopassi
3.0	7/9/2012	Revised text on pages 4 – 8. Added Flooding Recovery Plan as Appendix B, Restart Checklist Implementation Strategy as Appendix C and performance Monitoring as Appendix D. Moved Communications Plan to Appendix E.	Dave Bannister / Bob Hovey/ Lou Cortopassi
4.0	10/25/2012	Added text related to 95003 work. Added text to Transition to Plant Operations and transition to Sustained Excellence sections. Corrected Class 1 structure list in FRP Appendix. Corrected numbering and FRP action item tables in Restart Checklist Strategy Document Appendix. Updated Communications Plan with current document.	Bob Hovey/ Lou Cortopassi