UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

May 20, 2009

Mr. Charles G. Pardee
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO), Exelon Nuclear
4300 Winfield Road
Warrenville IL 60555

SUBJECT: CLINTON POWER STATION
NRC PROBLEM IDENTIFICATION AND RESOLUTION
INSPECTION REPORT 05000461/2009007

Dear Mr. Pardee:

On April 17, 2009, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Clinton Power Station. The enclosed inspection report documents the inspection results, which were discussed on April 17, 2009, with Mr. Kearney and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Bases on the results of this inspection, no findings of significance were identified. On the basis of the samples selected for review, the team concluded that, in general, problems were properly identified, evaluated, and corrected.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the

NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Mark A. Ring, Chief
Branch 1
Division of Reactor Projects

Docket No. 50-461
License No. NPF-62

Enclosure: Inspection Report 05000461/2009-007
w/Attachment: Supplemental Information

cc w/encl: Site Vice President - Clinton Power Station
Plant Manager - Clinton Power Station
Manager Regulatory Assurance - Clinton Power Station
Senior Vice President - Midwest Operations
Senior Vice President - Operations Support
Vice President - Licensing and Regulatory Affairs
Director - Licensing and Regulatory Affairs
Manager Licensing - Clinton, Dresden and Quad Cities
Associate General Counsel
Document Control Desk - Licensing
Assistant Attorney General
J. Klinger, State Liaison Officer,
Illinois Emergency Management Agency
Chairman, Illinois Commerce Commission

NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

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Associate General Counsel
Document Control Desk - Licensing
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J. Klinger, State Liaison Officer,
Illinois Emergency Management Agency
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Letter to C. Pardee from M. Ring dated May 20, 2009

SUBJECT: CLINTON POWER STATION
NRC PROBLEM IDENTIFICATION AND RESOLUTION
INSPECTION REPORT 05000461/2009007

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-461
License Nos:	NPF-62
Report No:	05000461/2009007
Licensee:	Exelon Nuclear
Facility:	Clinton Power Station
Location:	Clinton, IL
Dates:	March 30, 2009, through April 17, 2009
Team Leader:	J. Benjamin, Project Engineer
Inspectors:	G. Hausman, Senior Reactor Inspector D. Lords, Resident Inspector – Clinton D. Szwarc, Reactor Inspector S. Mischke, Illinois Emergency Management Agency
Approved by:	Mark A. Ring, Chief Branch 1 Division of Projects

Enclosure

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SUMMARY OF FINDINGS

IR 05000461/2009007; 03/30/2009 - 04/17/2009; Clinton Power Station; Identification and Resolution of Problems.

This inspection was conducted with region-based inspectors, the NRC Resident Inspector at the Clinton Power Station and the onsite Illinois Emergency Management Agency (IEMA) inspector. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Identification and Resolution of Problems

The inspectors concluded that the implementation of the corrective action program (CAP) at Clinton was generally good. The licensee had a low threshold for identifying station problems and entering them into the CAP. In addition, the station was effective at incorporating operating experience (OE) reports into the CAP. The inspectors determined that issues were generally effectively screened and prioritized in a timely manner using established criteria based on plant risk and uncertainty. Causal evaluations sampled were generally of sufficient depth, considered extent of condition, generic issues, and previous occurrences. CAP assignments were generally completed in a timely and accurate manner. The team noted that station effectiveness reviews, audits, and self-assessment were generally thorough and effective at identifying unrecognized weaknesses. The inspectors concluded that station employees appeared to be willing to express safety concerns through established processes and a healthy safety conscious work environment (SCWE) existed at the station.

A. NRC-Identified and Self-Revealed Findings

No violations of significance were identified.

B. Licensee-Identified Violations

No violations of significance were identified.

REPORT DETAILS

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution (71152B)

.1 Assessment of the Corrective Action Program (CAP) Effectiveness

a. Inspection Scope

The inspectors reviewed the procedures and processes that describe Exelon's CAP at Clinton Power Station to ensure, in part, that the station had an adequate program for meeting 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action", requirements. Exelon entered identified problems for evaluation and resolution into the CAP by initiating action requests (ARs) via a computer based system. The ARs were subsequently screened by the station for operability and reportability, categorized by significance, and assigned for further evaluation and/or corrective action. The issue priority was determined largely in part by the issue's specific risk significance and uncertainty. Action Requests were also tracked to identify adverse trends and repetitive issues. Plant staff and management were interviewed to determine their understanding of and involvement with the CAP. The inspectors observed and evaluated the effectiveness of CAP meetings such as the Station Oversight Committee (SOC) and Management Review Committee (MRC).

The inspectors reviewed selected ARs across the seven cornerstones of safety in the NRC's Reactor Oversight Process (ROP) to determine if site personnel properly identified, characterized, and entered problems into the CAP for evaluation and resolution. The inspectors selected items from functional areas that included emergency preparedness (EP), engineering, maintenance, operations, physical security, radiation safety, and oversight programs to ensure that Exelon appropriately addressed problems identified in these functional areas. The inspectors selected a risk-informed sample of ARs that had been issued since the last NRC biennial Problem Identification and Resolution (PI&R) inspection conducted in March 2007. The inspectors considered risk insights from the station's risk analyses to focus the sample selection and plant tours on risk-significant systems and components. Inspection samples focused on, but were not limited to, these systems. In addition, the inspectors conducted system walk downs and interviewed station personnel to ensure apparent and known issues were being entered into the CAP.

The inspectors selected a sample of causal evaluations for review based on issues identified within the CAP. This sample included the full range of Exelon causal evaluations (i.e., root cause evaluations (RCE), apparent cause evaluations (ACE), equipment apparent cause evaluations (EACE), and quick human performance investigations (QHPI).) In addition to these causal evaluations, the inspectors also reviewed a selected sample of common cause evaluations (CCEs) to evaluate the station's ability to identify and eliminate the most prevalent cause of a continuing problem.

The inspectors reviewed CAP assignments associated with selected ARs to determine whether the corrective actions addressed the identified causes of the problems. The inspectors reviewed selected ARs to verify that adverse trends and repetitive problems

were being effectively addressed in a broader sense. The inspectors assessed the station's timeliness in implementing corrective actions and effectiveness in precluding the reoccurrence for significant conditions adverse to quality (SCAQ). The inspectors also reviewed ARs associated with selected violations (VIOs), non-cited violations (NCVs), and findings (FINs) to determine whether the station properly evaluated and resolved the issues.

Items from processes other then the CAP were selected by the inspectors to verify that the issues were appropriately considered for entry into the CAP. Specifically, the inspectors reviewed a sample of engineering change requests (ECRs), operator workarounds, operability evaluations, work orders, work requests, and system health reports. The inspectors also reviewed completed work packages to determine if issues identified during the performance of corrective, elective, and preventative maintenance were appropriately entered into the CAP. In addition, the inspectors reviewed operator and security logs to determine whether problems described in the logs were entered into the CAP. The inspectors further reviewed the backlog of elective and corrective actions in maintenance, engineering, and operations to determine, individually and collectively, if there was an increased risk due to delays implementing the corrective actions. As part of the backlog review, the inspectors reviewed the station's process for removing work items that had been characterized as elective.

The inspectors also conducted an expanded five year review of selected ARs associated with the service water and high pressure core spray (HPCS) systems. These systems were selected, in part, due to their relatively high individual risk achievement worth and potential aging related vulnerabilities (i.e., erosion of piping, degradation of safety-related raw water systems, aging of electronic components, etc.). In addition to this AR review, the inspectors conducted system walk downs and interviewed key station personnel to determine if problems were being entered into the CAP and were being properly addressed.

The inspectors conducted a targeted review to evaluate the completion and effectiveness of the station's corrective actions taken to address weaknesses identified during the 2007 NRC 95001 supplemental inspection involving a White violation related to a HPCS vortexing issue (CLINTON POWER STATION NRC SUPPLEMENTAL INSPECTION REPORT NO. 05000461/2007009, ML072710132). The inspection was conducted to provide assurance that the root causes and contributing causes of the events resulting in the White finding were understood, to independently assess the extent of condition, and to provide assurance that the corrective actions for risk significant performance issues were sufficient to address the root causes and contributing causes, and to prevent recurrence.

The ARs and other documents reviewed, as well as key personnel contacted, are listed in the Attachment to this report.

b. Assessment

(1) Identification of Issues

The inspectors concluded that, in general, the station continued to identify issues at a low threshold by entering them into the CAP. The inspectors determined that the station was appropriately screening both NRC and industry OE at an appropriate level and

entering identified issues into the CAP when applicable to the station. The inspectors determined that although a number of security related ARs had been written by security officers, a number of security officers did not have training or did not have adequate training to utilize the station's computer based CAP process. The inspectors determined that although no related regulatory requirement existed, the station could strengthen this area of the CAP by ensuring all station personnel had an adequate working knowledge of entering issues into the CAP. The inspectors determined that this observation was not a significant concern since the security officers interviewed stated that they would be willing to voice issues to their management and/or ask another employee to write the AR for them.

The inspectors determined that the MRC CAP meeting was generally thorough and maintained a high standard for approving action. The inspectors noted that it was not uncommon for the MRC to change an AR priority, add or modify AR assignments, require that the SOC provide additional information to operability and reportability comments, and ask for issue clarification from the SOC. The inspectors determined that these examples represented MRC strengths and areas that could be improved upon by the SOC.

The inspectors determined that the station was generally effective at trending low level issues to prevent larger issues from developing. The licensee also used the CAP to document instances were previous corrective actions were ineffective or were inappropriately closed. The inspectors noted one exception, in that, nine ARs had been written over the past two years related to issues identified with protected equipment postings. Of these ARs, two ARs were level 5 improvements, four ARs were posting errors, and three ARs were posting inconsistencies. The inspectors determined that these issues had not been reviewed collectively to determine if an adverse trend existed. The licensee entered this observation into the CAP for further evaluation (AR 00908324).

The inspectors determined that the station was generally effective at identifying the cause(s) of abnormal station parameters, however, did note one exception. As of the end of this inspection (April 17, 2009), the station had not identified the cause(s) of an unexplained minor temperature rise in the auxiliary building steam tunnel. This temperature rise was initially discovered on January 8, 2009. The inspectors determined that the station had placed a high priority and applied significance resources on identifying the cause(s). The inspectors determined that although the cause(s) had not been determined, the station had implemented and maintained an interim compensatory measure to periodically monitor the steam tunnel temperature. This compensatory action was implemented to identify a worsening trend to provide ample time for the station to take action prior to the condition significantly worsening.

The inspectors determined that the weaknesses identified in NRC supplemental inspection report IR 05000461/2007009 had been properly addressed through the station's CAP.

(2) <u>Prioritization and Evaluation of Issues</u>

The inspectors concluded that the station was generally effective at prioritizing and evaluating issues commensurate with the safety significance of the identified problem. However, the inspectors noted two issues that had been inappropriately assigned a low

"5/D" enhancement significance level. In accordance with station procedures, these issues should have been assigned a higher significance level since the individual issues required the station to address regulatory requirements or challenges in meeting regulatory requirements. The station's "5/D" enhancement significance level is reserved for station improvements and therefore generally has a lower priority for corrective actions and a lower threshold for deleting the issue(s) from the CAP. The team determined that these issues were minor, in part, because they had been corrected in a reasonable time frame despite their assigned significance and priority level. In addition, these performance deficiencies were not reflective of current performance since they occurred in the 2005 timeframe. The licensee entered this issue into the CAP, (AR 00920113).

- AR 00267337 identified that a controlled drawing was inaccurate since it had mislabeled a safety-related current transformer associated with the HPCS system. 10 CFR 50 Appendix B, Criterion III, "Design Control," requires, in part, that this type of quality document accurately reflect the design.

- AR 00351291 identified that the scale of an installed pressure gauge was inadequate to ensure that an in-service test (IST) differential pressure range could accurately be read by an operator to ensure that the safety-related service water pumps had adequate performance.

The team determined that the station was generally effective at evaluating equipment functionality requirements after a degraded or non-conforming issue was identified with one exception. The team determined that the station had not evaluated how a previously identified degraded "B" reactor recirculation pump seal would perform during transient events (i.e., loss of seal cooling, reactor scram, station black out, etc.) The inspectors concluded that the station had been effective at evaluating and monitoring the seal's condition under steady state conditions and had appropriately set a seal pressure limit in which an orderly down power or shutdown would commence. The inspectors determined that this evaluation, alone, was not adequate since the station could not readily ensure the inspectors that an unexpected seal failure and resultant loss of coolant accident (LOCA) would occur from the spectrum of license based transient events. Ultimately, the inspectors determined that the failure to perform this type of functionality evaluation was a minor issue since the station was able to provide the inspector's confidence that the redundant seal would operate adequately until an orderly shutdown and cool down would be completed in the case the degraded seal unexpectedly failed during a transient event.

The team determined that causal analyses generally considered extent of condition, generic issues, and previous occurrences with one exception. Specifically, a CCE related to six separate on-site badging issues and fifty eight issues corporate wide did not identify any common causes. Based on the team's review, the inspectors determined that this common cause lacked rigor in evaluating higher level common causes such as personnel responsibility, training, and awareness.

(3) Effectiveness of Corrective Action

The team concluded that corrective actions for identified deficiencies were typically timely and adequately implemented. The team concluded that sampled corrective actions assignments for selected NRC documented violations were timely but not

effective in one instance. Specifically, over the course of the past two years, the NRC had identified three NCVs associated with transient combustible free-zones and related issues. These issues were categorized as conditions adverse to quality (CAQ) within the station's CAP. Corrective actions such as, painting these areas consistently throughout the plant to avoid potential confusion and system walk downs to ensure legacy issues had been identified, did not prevent additional related NRC-identified NCVs.

The team concluded that, in general, administrative controls had been effective at ensuring that corrective actions were completed as scheduled and reviews were performed to ensure that actions were implemented as intended.

For SCAQs, the inspectors determined that the station's corrective actions designed to prevent a reoccurrence (i.e., CAPRs) were generally comprehensive, thorough, and successful.

The team concluded that corrective actions to address all weaknesses identified in the September 2007 NRC 95001 supplemental inspection to address a White violation associated with a HPCS vortexing issue were adequate (CLINTON POWER STATION NRC SUPPLEMENTAL INSPECTION REPORT NO. 05000/2007009, ML072710132).

The team concluded that the station had been effective at maintaining the corrective maintenance system backlog at a relatively low number (i.e., nine). The team determined that the station's elective maintenance backlog had been relatively constant over the past five years (i.e., 2000-3000 items). The station noted and questioned the binning of a degraded "B" reactor recirculation pump seal given its degraded characterization, heightened station awareness, and declining trend. The inspectors verified that the station had current plans to replace this seal during their next refueling outage.

Findings

No findings of significance were identified.

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the facility's OE program. Specifically, the inspectors reviewed implementing OE program procedures, attended CA program meetings to observe the use of OE information, completed evaluations of OE issues and events, and selected monthly assessments of the OE composite performance indicators. The inspectors' review was to determine whether the licensee was effectively integrating OE experience into the performance of daily activities, whether evaluations of issues were proper and conducted by qualified personnel, whether the licensee's program was sufficient to prevent future occurrences of previous industry events, and whether the licensee effectively used the information in developing departmental assessments and facility audits. The inspectors also assessed if corrective actions, as a result of OE experience, were effective and timely implemented. A list of the documents reviewed is included in the Attachment to this report.

b. Assessment

The inspectors concluded that the station appropriately considered industry and NRC OE information for applicability, and used the information for corrective and preventative actions to identify and prevent similar issues. The inspectors assessed that OE was appropriately applied and lessons learned were communicated and incorporated into plant operations.

Findings

No findings of significance were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed selected focused area self-assessments (FASA), check-in self assessments, root cause effectiveness reviews, and Nuclear Oversight (NOS) audits. The inspectors evaluated whether these audits and self-assessments were being effectively managed, were adequately covering the subject areas, and were properly capturing identified issues in the CAP. In addition, the inspectors also interviewed licensee staff regarding the implementation of the audit and self-assessment programs. A list of the documents reviewed is included in the Attachment to this report.

b. Assessment

The inspectors concluded that self-assessments, NOS audits, and other assessments were typically critical, thorough, and effective at identifying issues. The inspectors concluded that these audits and self-assessments were generally completed in a methodical manner by personnel knowledgeable in the subject area. Corrective actions associated with the identified issues were implemented commensurate with their safety significance.

The inspectors concluded that, in general, effectiveness reviews were conducted in-depth to ensure that corrective actions were effective for significant issues. One exception was noted and is described below. In addition, the inspectors identified one process weakness in conducting effectiveness reviews. Specifically, the inspectors identified that the station's effectiveness review process did not require an effectiveness review to be performed on interim corrective actions. Rather, the scope of the effectiveness review is limited to the effectiveness of assigned and completed final corrective actions. Therefore, the timeframe between an issue (e.g., an SCAQ) and the completion of the final corrective actions is not reviewed to evaluate the effectiveness of any interim corrective actions. This timeframe could be up to several months depending on the time taken to conduct the appropriate causal evaluation, and approve and implement the final corrective action(s). The inspectors noted a vulnerability to this process is that this review would therefore not identify inadequate interim corrective actions that could be utilized from a lessons-learned perspective or used to identify existing weaknesses in the finalized corrective actions.

- The inspectors identified that the station did not conduct an adequate collective effectiveness review related to an SCAQ described in NCV 2008-02-07,

"Failure to Barricade and Lock a Locked High Radiation Area" and AR 00726499. The inspectors identified three specific issues:

- The station determined that the root cause related to this NCV was a "failure to enforce fleet and industry posting requirements by radiation protection (RP) management". The station determined that this root cause had resulted in inadequate posting standards and a lack of sensitivity to radiological controls. According to station procedure LS-AA-125-1004, Revision 4, "Effectiveness Review Manual", the purpose of a collective effectiveness review is to determine whether the associated CAs or CAPRs eliminated the cause or reduced the recurrence rate to an acceptable level. The collective effectiveness review focused narrowly on recurrence rate since the completion date of the CAPRs and not on elimination of the root cause.

- Additionally, step 4.1.2 of this procedure states that "these reviews should analyze and document satisfactory implementation of CAP and Exelon Nuclear Event Report (NER) fleet-wide actions and their affect on the overall fleet intent of the original action." This was not performed for (NER) LS-08-006, "LaSalle County Station Secured High Radiation Area Found not Posted/Controlled."

- Lastly, step 4.2.4 of this procedure states that the effectiveness review should, "evaluate each action individually, and then evaluate the broader scope of the CAPRs to determine whether the actions were collectively effective in correcting the issue. . ." The broader scope evaluation was not performed.

Based on these issues, the inspectors determined that this effectiveness review did not follow the station's effectiveness review procedural requirements. Therefore, the inspector's concluded that this effectiveness review was incomplete, and therefore inadequate. The inspectors determined that these discrepancies were individually and collectively a minor issue because of the overall effectiveness of the corrective actions following their implementation and improvements made by RP management with enforcing the fleet and industry posting requirements. The station entered this issue into the CAP, (AR 00909560).

Findings

No findings of significance were identified.

.4 Assessment of Safety Conscious Work Environment (SCWE)

a. Inspection Scope

The inspectors interviewed selected members of the Clinton station staff to determine if there were any impediments of a SCWE. In addition, the inspectors discussed the implementation of the Employee Concerns Program (ECP) with the ECP coordinators, and reviewed ECP 2007 - 2009 activities to identify any emergent issues or potential trends. Licensee programs to publicize the CAP and ECP programs were also reviewed. In addition, the inspectors assessed the licensee's SCWE through the

reviews of the facility's ECP implementing procedures, discussions with coordinators of the ECP, interviews with personnel from various departments, and reviews of ARs. The inspectors also reviewed the results from the August 2007 station safety culture survey.

b. Assessment

The inspectors determined that the conditions at the Clinton station were conducive to identifying issues. The staff was aware of and generally familiar with the CAP and other station processes, including the ECP, through which concerns could be raised. Staff interviews identified that issues could be freely communicated to supervision, and that several of the individuals interviewed had previously initiated ARs. In addition, a review of the types of issues in the ECP indicated that site personnel were appropriately using the CAP and ECP to identify issues. The inspectors interviewed the ECP coordinators and concluded that the individuals were focused on ensuring all site individuals were aware of the program, comprehensive in their review of individual concerns, and used the CAP and ECP to appropriately resolve issues. The team noted that the ECP coordinators proactively sought out employee concerns by randomly conducting approximately 100 interviews a year with station employees.

The inspectors noted that the station does not have an anomalous AR process (i.e., paper process) and relies on the ECP to fulfill that function. That is, if an employee wanted to identify an issue to the station directly but did not want her/his identity known, then the employee would have to call the Exelon ECP hotline. The inspectors determined that this phone call could result in an employee leaving a message on an answering machine if a person was not available to answer the call. Using a process outside of the nominal CAP and leaving a safety concern on an answering machine could both be viewed as additional barriers an employee would have to overcome to ensure an issue is known if the employee did not want their identity revealed.

Findings

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting Summary

On April 17, 2009, the inspectors presented the inspection results to Mr. Kearney, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

F. Armetta, Engineering Corrective Action Program Coordinator
D. Brendley, Training Manager
M. Byrd, System Engineer
R. Chickering, Corrective Action Program Administrator
S. Clary, Engineering Programs Manager
T. Conner, Operations Director
C. Culp, Generic Letter 89-13 Program Engineer
T. Danley, In-Service Testing (IST) Program Engineer
A. Darelius, Emergency Planning Manager
J. Domitrovich, Maintenance Director
J. Ellis, Work Management Director
R. Frantz, Regulatory Assurance
G. Halverson, System Manager
N. Hightower, Radiation Operations Manager
M. Honzell, Simulator Coordinator
D. Hupp, Maintenance Planning
T. Husted, System Manager
C. Kelley, Maintenance Programs
M. Knapp, On-Line Work Control
D. McMillan, System Engineer
S. Lakebrink, Senior Staff Engineer
K. Leffel, Operations Support Manager
M. Otten, Operations Training Manager
M. Kanavos, Plant Manager
F. Kearney, Site Vice President
J. Peterson, Regulatory Assurance
M. Reandeau, Shift Operations Superintendent
D. Shelton , Shift Manager
M. Stickney, Corrective Maintenance Optimization
J. Stovall, Radiation Protection Manager
J. Ufert, Fire Marshall
C. VanDenburgh, Nuclear Oversight Manager
M. Vandermyde, Reactor Engineering Supervisor
R. Weber, Engineering Director
C. Williamson, Security Manager
J. Wemlinger, Operations Corrective Action Program Coordinator

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened
None

Closed
None

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather, that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

Action Request

AR 145406, Safety Issue-Battery Explosion OE at Davis Besse
AR 267338, Print E02-1HP99-110 is Incorrect
AR 351291, Gage Scale is not Appropriate for Desired Band
AR 356316, Enhancement for SX Pump Operability 9069.01
AR 401275, LTR U-603130 / GL 89-13
AR 425536, Discrepancy on 1E22-F035 Nameplate Information
AR 429583, NRC SSD&PC RCIC [Water Storage] Tank Vortex Issue
AR 435174, Need to Recover RCIC and HPCS Vortex Margin
AR 483205, RR Pump A Seal Cavity Temp>5 Deg/Day Rise, >27 Deg>#1
AR 522228, 9051.01 Procedure Change to Prevent Equipment Damage
AR 551037, 1DG11AA Div 1 DG Heat Exchanger Metal Inspection MIC Results
AR 570074, Div 1 SX System Spool Piece Replacement [Belzona]
AR 570082, Div 3 SX Piping Replacement
AR 589228, 1RI01T: Notice of Violation (White Finding) Related to HPCS
AR 610943, MRG for RV 1e12-F036 Specifies Incorrect Resting and Frequency
AR 617043, 1sx62a-1.5 Piping is Showing Signs of Degradation
AR 623199, RAT SVC Tripped Resulting in Unplanned Entry into 72 hr SD LCO
AR 625683, 0wo333 PMID 0015879-01 Needs to be 8 Year Frequency
AR 629610, CDBI-FASA Check Valve Inspection does not have a Due Date
AR 630588, Evaluate Need and Methodology for Dg Fuel Oil XFR Pump Test
AR 633873, UT of 1sx23ab-4 Finds Loss Below 87.5% Criteria (1 Reading)
AR 636256, Enhancement to RP Radiological Survey Maps
AR 636560, 1WF08D: Unit One Floor Drain Evaporator Vapor Body Leaking
AR 636898, Pm Failure for WO 469480 Trend In Eqr2 per Ma-Aa-716-017
AR 637398, Received Unexpected Alarm 5067-8l SRV Monitoring System TRBL
AR 637439, 1sx083a RHR HX 1a Flush Check Valve Mc Supply not Seating
AR 637656, Work Order Improperly Taken to Finished
AR 637804, Repeat Problem on 0we067b Open Indication
AR 638242, 1n66n012a; Unexpected Alarm 5130-6e OG Analyzer A Trouble
AR 640109, 3215.01 Procedure Problems
AR 640158, STC Security Badges not Issued/Activated in a Timely Manner
AR 641058, Enhancement to RCIS Operating Procedure 3304.01c001
AR 641169, PMT Failure of 2WF09D Sight Glass Repairs
AR 641375, 4001.01 Reactor Coolant Leakage
AR 642255, Enhancement to Cps 9060.01
AR 642505, Loss of Sirens (Greater than 25 Percent)

AR 642514, Apparent Cause Evaluation: Wrong EHC, ETS and FAS Hoses Installed in C1R10
AR 642929, LP Feedwater Heater 1b Isolated During Plant Startup
AR 642974, Enhancement to Allow Performance of Risk Activities in Mode
AR 645652, Too Many Owner-Controlled & Protected Area Locks Installed
AR 645765, Possible Unnecessary Work Changing 1SX204 Relief Valve
AR 646118, There is No Good Safe Access to the New TSC Generator
AR 646119, The New TSC Generator Needs a Permanent Gallery for Operator
AR 647055, Security Door # 160 Left Unsecured
AR 649339, Lessons Learned from 7/7/07 RAT SVC Failure
AR 649521, Enhancements Identified in Control Room ERO Performance
AR 650054, HEPA Unit Left Outside Since C1r10
AR 650845, 1dc07e: Loss of AC Feed to D2 Dc Battery Charge
AR 651094, 9080.21/22/23 9.1 Acceptance Criteria Affected By PPC Mod
AR 653122, 1LL78EB: Breaker for Circuit 30 Trips Repeatedly
AR 653784, Its 3.4.6 Is Not Included in the Mode 2 Checklist
AR 657163, Leakby of 0we079b Causes Entry into Spill off Normal
AR 660306, Week 0734 Mechanical Maintenance Resources Overloaded
AR 660415, Unexpected Alarm 5042-7c
AR 662669, 0XW011: Cannot Meet Spare RR Motor Maintenance Criteria
AR 664071, 0PL72JA: Use of Jumpers
AR 665132, Cps 4009.01 (Stuck Open SRV) Off Normal Needs Enhancement
AR 666222, Non-Consequential Error in Calculation 01HP08
AR 666266, Enhancements in Exercise Management and Scenario Control
AR 667633, Through Body Leak 1SX019B
AR 668414, Calc Sample Review per IR 589228-31 Missed Error in 01HP08
AR 669441, 1DR1-38: Security Door Left Unsecured
AR 669787, Potential Issue with Routing Temp Power for Maintenance
AR 676161, Supp Pool Cleaning Frequency in ATI Needs Revision
AR 676964, Monitor Battery Charger/Power Supply Damaged During Testing
AR 678718, NRC Triennial Phase 2 FOF Preparations
AR 678725, 0pifc030 Replaced, Still Indicates on High Stop
AR 680495, Screen house Diesel Pit Berm needs Repaired
AR 682200, EP Exercise Mgmt Control Enhancements in Annual Exercise
AR 682513, Security Perimeter Zone 26 Failed to Alarm
AR 682552, EP Exercise Facilities and Equipment Enhancements
AR 682573, EP Exercise Enhancement from the Simulator
AR 684036, NOS ID Poor Housekeeping Standards in Security Ready Room
AR 685199, Lessons Learned from Fermi Emergency Plan Activation
AR 685579, 1DG010F: Spring in Check Valve Broken
AR 687677, Security Door 629 Left Unsecured
AR 688142, Response to Buried Piping Inspection Results
AR 688664, 1E51N501 Pat not Like for Like
AR 688697, Security: NRC Inspection Recommended Follow-up
AR 688719, Enhancement ID'd in EP Inventory Checklist
AR 688866, RT Letdown Line to Condenser Causing Elevated Dose Rates
AR 691780, Outage Maintenance Being Performed on Abandoned Equipment
AR 692390, Procedure Improvement Identified - 9431.12, & 9431.12 D001, 2
AR 693430, NOS ID-Enhancement for Protected Pathway Postings
AR 693525, 1B33D003B: Proposed Changes to C1R11 RR 'B' HPU Maintenance

AR 693609, RCIC Tank Vortex Issue
AR 695253, Problems Incurred during Breaker Timing Tests
AR 695968, NRC Resident Questions Div 3 Postings on Protected Systems
AR 696265, Missed Opportunity to Perform Maintenance
AR 696884, Enhancement to Cps 3412.01e001 Essential SWRG Ht RMVL ELEC
AR 672715, 1c11n602b: RC&LS INOP Alarms and STS Failure
AR 700411, 1lichd109 1a LP Heater HD Controller Reading Trending Upward
AR 701458, Enhancement to 9080.03, DG 1c Operability
AR 703029, Procedure 3222.13 Efficiency Enhancement
AR 703940, Need Clarification on Megger Requirements for Unit Subs
AR 704502, Equipment Reliability Enhancement: 0lswm180b & 0lswm180c
AR 710108, Security 511 Form not Submitted as Required
AR 711449, 3406.01 Enhancement
AR 711592, NOS ID Seals with No Documented Evidence of Inspection
AR 712119, 0VA01F High D/P – Replace Filters
AR 713617, 1SX20AA: Div 1 SX System Piping Replacement Required
AR 714850, N2 Bottle Changeout Procedure Enhancement and Safety Issue
AR 718457, 1pl90ja: New Rat "A" & "C" Relay Discrepancies
AR 720918, Root Cause Investigation: New Reserve Auxiliary Transformer Installation Deleted from C1R11 Scope Due to Out of Specification Parameters on Oil Samples
AR 721120, Potential Green NCV for Fire Protection Program Violations
AR 722101, CPS Security – SY-AA-101-112 Interpretation
AR 722199, C1R11LL Permanent Station Employee Turned Away from Parking Lot
AR 722733, C1R11LL Door Impairments and Repairs
AR 723408, Low Dose Areas not being Fully Utilized
AR 723748, Sys Eng Identified Damaged Gauge for HPCS Valve 1E22-F304
AR 723919, C1R11LL 1E22F339: Flexible Conduit Broken at Valve & Conduit
AR 725079, 1SX014A, Div 1 SX System Isolation Valve, Leaks by Seat
AR 725080, Pump Couplings Damaged, without Correct Amount of Grease
AR 726499, NRC Identified Locked High Radiation Area Violation
AR 726584, Refuel Floor RWP's Exceed Estimated Dose Limits
AR 727257, C1r11ll on Turbine Valve Work, 1tgciv1
AR 728133, 1b21-F065a Breaker Trip when Attempting to Open Valve
AR 729248, 1h13-P680: RR Pump a Fail to Start
AR 731403, Un-posted High Radiation Area Identified-U1 RB 694 B RHR Room
AR 730772, Enhancement to Cps 3515.01c001
AR 731403, Un-posted High Radiation Area Identified-U1 RB 694 B RHR Room
AR 732087, Exciter Replacement Collector Bus not Restored to Design
AR 732538, Exciter Terminal Block Not Wired per Design
AR 734993, NOS ID Elevation of Transient Combustible Control at CPS
AR 735489, NRC NCV 2007005-01, Fire Protection Program Violations
AR 735492, NRC NCV 2007005-02, SX System Post Modification Testing
AR 735659, C1r11ll EM Need for Better Clearance Coordination for Craft

AR 736280, NOS ID: Some Security Drill/Exercise Records Not Retained
AR 739198, 1sx156a: Relief Valve Failed to Lift During Bench Test
AR 740400, 1eidc054: Dc MCC D Volt Meter Indicates Low
AR 742602, C1R11LL Need for Security Keys/Cores S/B Communicated Better
AR 742610, C1R11LL Security RCA Ready Room Becomes RP Checkpoint
AR 743169, ECCS Pump Rooms Inaccessible Oil Level Indications
AR 748938, Improvements Needed in Simulator Realism
AR 752128, Radiological Access Enhancements for B.5.B
AR 754289, M&TE Is Past Due for Cal - Cannot Be Located – is Lost
AR 755161, Un-posted High Radiation Area Identified
AR 755615, Emergency Response Personnel Lists Not Updated Recently
AR 756443, 1cw001b: CW Pump B Discharge Valve Intermediate Indication
AR 765328, Evaluate if SX System is Inop when 1sx013d/E Is Closed
AR 765401, Security Badge Issue Associated with CPS EO
AR 766188, 1SX29BB-3 Piping Degradation Due to Cavitation
AR 766453, Footprints Indicate Potential Improper Access to Clean Area
AR 766945, Review Summer Plant OE on Offsite Siren Performance
AR 766849, 0ap95e: ERAT Circuit Switcher Fail to Close
AR 768235, Unexpected MCR Annunciator Gen/Exciter Field Trouble
AR 769309, Unable to Sample B (Protected) Due to Maintenance on System A
AR 772425, IEMA ID'D HP Protected System Postings not Hung
AR 772520, Operator Lack of Sensitivity to Radiation Postings
AR 773618, Enhancement Protected Equipment Signs
AR 776156, IEMA Identified Missed Postings and Pipe Hanger Rub
AR 776573, 1pidg045: Div 2 Dg Fuel Inlet Pressure Higher than Normal
AR 776772, 1cw001c Discharge Valve Drifting Shut
AR 777844, C1r11 Chem Cleaning of Main EHC System was Effective
AR 778127, NRC URI 2008002-04, Leakage through Valve 1SX014A
AR 778685, Enhancement to 9031.02 APRM Channel Functional (On-Line)
AR 778835, EP Exercise Evaluation for Objective J.6
AR 778844, EP Exercise Evaluation for Objective K.4
AR 781530, Unexpected Entry into Off Normal 4004.01
AR 782251, Screen house SX Pit Potential Flooding Problems
AR 782292, NOS Id Finding - Failure to Perform Independent Tech Reviews
AR 782712, 1JB05-STI-1: No Preventive Maintenance Scheduled
AR 783226, 0rixpr003 Flow not Within Band per CPS 6948.02
AR 787987, Found Transfer Pumps Tripped & Sump Pump Switch in Off
AR 788733, NOS ID Lack of Thread Engagement 1f15e003
AR 788989, 3513.01 Procedure Enhancement
AR 789769, Cyber Security Safeguards Information
AR 791440, 1rix-Pr035 Channel 1 has become a Nuisance
AR 792635, Div 1 RHR Pump Room Cooler near Air Flow Upper Limit
AR 795239, 1mp01k: Excessive Brush Wear on Main Generator
AR 796446, Water Found Under Insulation around 1sx03ma
AR 796575-18, Root Cause Investigation: Security Safeguards Information (Control) Event
AR 796718, NRC Identified RR Pump Trip on 2/10/08 as Maint Rule Failure
AR 798450-02, Common Cause: Potential Trend in Maintenance Planning
AR 798485, Re-Occurring Fire Protection Trouble
AR 802353, WS/CC Temperature Transient Impact on RR B Seal

AR 802470, Device 22-21 Locked in Following Corrective Maintenance
AR 802634, Hour Fire Watch Patrols not performed for B Fire Pump Room
AR 802909, Lessons Learned from RT Trip on August 01, 2008
AR 807927, Hotwell Level Dropped Approx. 2.2" For Unknown Reason
AR 814578, Aro16 Alarmed While Loading Cask with Radioactive Material
AR 816638, 0fp01pa: Batteries Requires Extensive Maintenance
AR 820646, NOS ID Security Yellow Rating from CPA
AR 822449, Evaluation of OGH HVAC to Ensure No Security Vulnerability
AR 823779, 12 of 44 Emergency Sirens OOS
AR 824278, Apparent Cause Evaluation: Valve Actuator 1SX063A was removed with a Clearance Tag on the Actuator
AR 827328, Emergency Planning Performance Indicators in Variance
AR 827641, Inability to Accurately Measure 30” SX Piping Thickness
AR 827770, NOS ID Missed Posting for Protected Equipment
AR 828190, Corrective Action to Prevent Recur CHNGD without MRC Approval
AR 830351, Summer 08 Safety Culture Workshop Summary
AR 830882, 3rd Qtr Cap Trending Ids Potential Trend in Cap Process Code
AR 836598, Improvement Needed-Identification of Protected Systems
AR 842556, Div 1 Ads Bottle Lose 100 Psig Pressure in 24 Hours
AR 845197, 1fh02j Seal Discovered Damaged
AR 847646, NRC NCV 2008004-03: Inadequate PM of 1SX014A
AR 849475, Adverse Trend for Ps-Ia085 Calibration
AR 849910, NOS ID’D Gaps in Operation’s Supervisory Oversight
AR 853676, Enhancement to PM for RAT SVC Panel Filter Changeout
AR 856929, Potential Trend Identified on Issues Coded as Operations
AR 857694, Div 2 Dg Cooling Flow Discrepancy Post Bellows Mod
AR 857715, Third Time in a Row B2 Subloop Decay Press Out of Band
AR 857824, Potential Trend in Work Execution Failures
AR 858054, Ineffective Risk Recognition and Assumption Validation – AFI
AR 858994, RR B Seal Pressure Had 20 Psi Pressure Change
AR 859606, NOS ID HU Errors Associated with Emergent Work
AR 861457-02, Complex Troubleshooting Plan for AR 861457
AR 861456, Unexplained Transient on B SJAE/RECOMB Train
AR 862428, Unidentified Leak in Turb Bldg Results in Tritium Detection
AR 865109, 1 Drop per 10 Seconds Leak From MSIV-LCS Room to RCIC Room
AR 868375, 1b33c001b: RR B Seal Pressure Change
AR 868434, Plant Risk Level Determination and Protected Equipment
AR 868532, CPS Dose outside Dose Performance Criteria
AR 875719, NRC ID’d Cables Coiled Up and Left under Cable Tray
AR 876841, Diesel Fire Pumps Charger Regulator Circuit Boards Degraded
AR 877325, CAP Process Still not Working - Related to Radiation Monitors/Instruments
AR 878270, Diesel Fire Pumps Charger Regulator Circuit Boards Degraded
AR 878283, Diesel Fire Pumps Charger Regulator Circuit Boards Degraded
AR 882343, Decreasing Trend in 1ia044b Regulated Pressure
AR 883075, Generate WO to Perform 2009 G-Wave Inspections
AR 886604, Dose Expended at CPS for Multiple Entries into AB 750' ABST

AR 893209, Improperly Stored Combustible Materials
AR 893215, Ineffective ACIT Actions - IR 825384
AR 894155, Deficiencies with Protected Equipment Postings
AR 894345, Tech Spec Change Required To Implement Work Hr Rules
AR 895734, Combustible Material Stored Directly Below Cable Trays
AR 898656, No Guidance in 4100.01 Reactor Scram to Verify AVR Trip
AR 899199, 1dr1-506 Door Knob is Broken Off
* AR 900652, NRC PI&R: RR Seal Issues Need Evaluated as Operator Burdens
*AR 908324, IEMA Resident Inspector IDD Potential Trend in Posting IRS
*AR 909560, NRC ID'd Potential Gap in EFR Process
*AR 920113, 2009 PI&R NRC ID'D 2 CRs Need Severity Levels Changed

Apparent Cause Evaluations

AR 648022, RAT SVC Tripped Resulting in UNPNLD Entry into 72 Hr SD LCO
AR 689094, CW Pump a Tripped Shortly after Start
AR 724971, 1c85fv70 Foreign Material Found in EHC Fluid during Draining
AR 728133, 1b21-F065a Breaker Trip when Attempting to Open Valve
AR 731403, Un-posted High Radiation Area Identified-U1 RB 694 B RHR Room
AR 731981, Fast Acting Solenoids Improperly Configured
AR 733950, Rec'd Unexpected Alarm 5002-4f, LO RX FD Pump Suction Header AR 742114, 1lic-Hd004: 4005.01, Loss of FW Heating Off-Normal, Entered
AR 766213, Apparent Cause Evaluation: Missed ORM Surveillance in C1R11
AR 771648, Scheduling Of VC Surveillance, Entry into 7 Day Shutdown LCO

Audit, Assessment and Self-Assessments

ASSA 699080, Radiation Monitoring Instrumentation and Protective Equipment
AR 642769-04, Self-Assessment in Preparation for NRC Supplemental Inspection on WHITE Finding for the High Pressure Core Spray (HPCS) Pump Suction Line to Preclude Vortex Formation and Subsequent Air Entrainment in the Pump's Suction
AR 699084, Check-In (WC): Summer Readiness Compliance
AR 699694-03, Preparation for NRC Problem Identification and Resolution (PI&R) Inspection
AR 754341, Check-In (Ops) SOER 07-1, Recommendation 6
Check-In 811548-02, August 15, 2008, Safeguards Control
FASA Self-Assessment 696824, February 19, 2008, NRC EP Baseline Program Inspection Readiness
FASA Self-Assessment 699120, October 15, 2008, Control of Contractors
FASA Self-Assessment 699694-03, June 23, 2008, Preparation for NRC Problem Identification and Resolution (PI&R) Inspection
FASA Report 563211; dated September 21, 2007; Licensed Operator Requalification Training Pre-NRC 71111.11
NOS Fleet Wide Assessment, Management follow through of CAP Corrective Action Assignments Conducted April 2008

Common Cause Evaluation

AR 561398, Trng: CCA on Missed Training Due to Vacations
AR 562259, Common Cause: Human Performance Events Caused by Maintenance Department since the End of C1R10
AR 574651, Potential Trend in Main Control Room Distractions
AR 623463, CCA Needed on Cps Configuration Control Performance
AR 637606, Trng-Conduct Missed Training CCA
AR 646562, Perform CCA on FME Incidents on Fuel Floor
AR 691861, R/PR Common Cause Analysis
AR 695382, Common Cause Security Events from Exelon Refuel Outages
AR 730455, CCA on Excessive Wood and Cardboard into the RCA
AR 731981, Fast Acting Solenoids Improperly Configured
AR 789781, M&TE is Past Due for Cal - Cannot be Located – is Lost
AR 807546, CCA - Drywell Closeout Inspections
AR 827116, Reactivity Management Performance - Required CCA
AR 828827, Common Cause: Clearance and Tagging Issue Reports at CPS

Drawings

E05-1800-17-EI, Sheet 1 of 2; Revision M; Cathodic Protection Plans & Details Clinton Power Station Unit 1 & 2
M02-1027, Revision AD; Outdoor Piping Clinton Power Station Unit 1 & 2
M02-1028, Revision AC; Outdoor Piping Clinton Power Station Unit 1 & 2
M02-1033, Revision U; Outdoor Piping Clinton Power Station Unit 1 & 2
M05-1052, Sheet 1; Revision AU; P&ID Shutdown Service Water (SX) Clinton Power Station [CPS], Unit 1
Data Sheet No. FEO08; Revision A; Flow Elements Clinton Power Station Units 1 & 2

Engineering Change Request

ECR 352014, Revision 0; Remove Discrepancies on Various Design Documents Identified under Various Issue Reports and Engineering Change Request
ECR 355053, Revision 0, Upgrade the Existing Seals in the RR-B pump to Provide an Incremental Seal Performance Improvement.
ECR 366632, Revision 001, Security FOF Upgrade for Clinton Power Station Work Planning Instructions (WPI)
ECR 367348, Revision 0; Print E02-1HP99-110 Is Incorrect See EC 352014 for Resolution
ECR 370357, Revision 0, “AECL Update vendor manual with addendum vendor Document number GNP-33122-ASD-003”
ECR 371261, dated July 28, 2005; Enhancement for SX Pump Operability 9069.01

Equipment Apparent Cause Evaluations

AR 740318, HPCS INOP due to Div 4 Battery Voltage at 128 Vdc
AR 757421, 1c51-K601c (IRM C) Failed to Calibrate Per 9431.14
AR 776235, 1dg01kb not responding to Governor Controls from MCR
AR 826923, Enter Loss of Vacuum off Normal Due to Failure of PRM Pr035

AR 838240, 0vg01ya Failed to Modulate during Surveillance Test
AR 859077, Entry into 4004.02, Loss of Vacuum Off-Normal

Licensee Event Reports (LERs)

LER 2007-001-00, dated April 6, 2007; Inadequate Consideration of Vortexing in Design Calculations
LER 2007-001-01, dated August 16, 2007; Inadequate Consideration of Vortexing in Design Calculations, Supplement 1

Miscellaneous

2007 Clinton Safety Culture Survey
ASME OMa-1988, Part 6, In-service Testing of Pumps in Light-Water Reactor Power Plants
CP-2008-004, Exelon Memorandum to Roger Weber, Clinton Power Station dated September 10, 2008; Technical Position on use of Qualitative Pipe Inspection Techniques for Surveying ASME Class 3 Service Water Piping
CPS Simulator 2008 ANSI Photo Inspection List
CPS Simulator Deviations: Instructor List
CPS Simulator Model Deviations List
CPS Simulator Work Request (SWR) Report
CPS Simulator Known Deltas between Simulator and Plant (Student List of Deviations) Table
Letter dated Wednesday April 25, 2007, from Bob Hovey – Vice President Nuclear Oversight, to Exelon Nuclear Supervisors, “Raising Issues and Use of Employee Concerns Program
OTDM 809408-03, RR B Seal Pressure Long Term Increasing Trend
PO543481, Vendor Manual 92E2; Revision 1992; ITT Barton Model 227A Differential Pressure Indicator Installation and Operation Manual
RS-09-001, Exelon Letter to NRC dated January 12, 2009; Clinton Update Licensing Basis Documents
U-601574, Illinois Power Company Letter to NRC dated January 29, 1990; Clinton Power Station Response to Service Water System Problems Affecting Safety-Related Equipment (Generic Letter 89-13)
U-601576, Illinois Power Letter to NRC dated December 31, 1990; Clinton Power Station (CPS) Revised Response to Generic Letter 89-13 Service Water System Problems Affecting Safety-Related Equipment
U-601817, Illinois Power Letter to NRC dated April 4, 1991; Clinton Power Station (CPS) Status Update to Generic Letter (GL) 89-13, Service Water System Problems Affecting Safety-Related Equipment
U-601980, Illinois Power Letter to NRC dated May 18, 1992; Clinton Power Station (CPS) Status Update of Generic Letter (GL) 89-13, Service Water System Problems Affecting Safety-Related Equipment
U-602504, Illinois Power Letter to NRC dated October 24, 1995; Illinois Power’s (IP’s) Submittal of a Revised Response to Generic Letter 89-13, Service Water System Problems Affecting Safety-Related Equipment
U-602926, Illinois Power Letter to NRC dated February 20, 1998; Illinois Power’s (IP’s) Submittal of a Revised Response to Generic Letter 89-13, Service Water System Problems Affecting Safety-Related Equipment

U-603130, Illinois Power Letter to NRC dated February 4, 1999; Update to Illinois Power's (IP's) Response to Generic Letter 89-13, Service Water System Problems Affecting Safety-Related Equipment

Operating Experience

AR 593531, IN 2007-05 Vertical Deep Draft Pump Shaft/Coupling Failures
AR 640721, IN 2007-20 Use of Blank Ammunition
AR 648675, 1mp01k: Salem OPEX Oe#25099 Applicable To Cps
AR 661844, dated August 17, 2007; OPEX: OE25299 – Transformer Feed Breaker Trip
AR 662666, OPEX Review Sen268 and Oe25124 - North Anna Zener Failure
AR 672634, OPEX Review: Seabrook Station Negligent Discharge Event
AR 696988, Eliminate BRE Pinch Points as Per NER NC-07-035
AR 705551, Opex Review - Perry Scram Event - RCIC Started and Tripped
AR 721305, Enhancement - Procedure RC&IS OPEX
AR 758115, Green NER #Ls08-006 Learning Opportunity
AR 760445, IN 2008-04 Counterfeit Parts Supplied to Nuclear Power Plant
AR 766945, Review Summer Plant OE on Offsite Siren Performance
AR 810875, Ideal Electric Generator OPEX – Potential CPS EDG Impact
AR 829386, 0SS11E: OE27252 OPEX for SCI Inverters
AR 862668, OE 19039 Learnings Were not Fully Understood or Incorporated
CHECK-IN 699085, Satellite RCAs and Contaminated Equipment Storage areas
CHECK-IN 821703, Configuration Control
ECR 0000383092, Eliminate BRE Pinch Points as Per NER NC-07-035
GL 2008-01, Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal and Containment Spray Systems
Nuclear Network Operating Experience (NNOE) OE# 24522, dated February 7, 2007; Inadequate High Pressure Core Spray (HPCS) Vortex Calculation Results in Potential for Vortex Formation and Subsequent Air Entrainment into the HPCS Pump
Nuclear Event Report (NER) LS-08-006 Green, LaSalle County Station, Secured High Radiation Area found not Posted/Controlled
RIS 2007-01, Clarification of NRC Guidance for Maintaining a Standard Action Level Scheme
RIS 2008-03, Return/Re-use of Previously Discharged Radioactive Effluents
WR 280364, Ideal Generator OPEX – Potential CPS EDG Impact

Plant Procedures

CC-AA-101, Revision 3; Engineering Change Requests
CPS 3005.01, Revision 34b, Unit Power Changes
CPS 3302.01, Revision 30, Reactor Recirculation
CPS 9069.01, Revision 46d; Shutdown Service Water Operability Test
CPS 9069.01D001, Revision 43C; SX System Operability Data Sheet
CPS 9069.01D001, Revision 41d; SX System Operability Data Sheet
ER-AA-340, Revision 5; GL 89-13 Program Implementing Procedure
ER-AA-340-1001, Revision 6; GL 89-13 Program Implementation Instructional Guide
ER-AA-5400, Revision 1; Buried Piping and Raw Water Corrosion Program (BPRWCP) Guide
ER-AA-5400-1002, Revision 1; Buried Piping Examination Guide

ER-AA-5400-1003, Revision 1; Buried Pipe and Raw Water Corrosion Program (BPRWCP) Performance Indicators
LS-AA-1, Revision 0, Licensing and Regulatory Operating Experience
LS-AA-115, Revision 13, Operating Experience Procedure
LS-AA-120, Revision 8, Issue Identification and Screening Process
LS-AA-125-1001, Revision 6, Root Cause Analysis Manual
LS-AA-125-1002, Revision 5, Common Cause Analysis Manual
LS-AA-125-1003, Revision 8, Apparent Cause Evaluation Manual
LS-AA-125-1004, Revision 4, Effectiveness Review Manual
LS-AA-125-1005, Revision 5, Coding and Analysis Manual
LS-AA-125, Revision 12, Corrective Action Program (CAP) Procedure
LS-AA-126-1001, Revision 5, Focused Area Self-Assessments
LS-AA-126-1002, Revision 1, Management Observation of Activities
LS-AA-126-1005, Revision 4, Check-In Self-Assessments
LS-AA-126-1006, Revision 2, Benchmarking Program
LS-AA-127, Revision 9, Passport Action Tracking Management Procedure
MA-MW-716-010-1000, Revision 10, Passport Work Planning Manual
WC-AA-106, Revision 9, Work Screening Process
WC-AA-101, Revision 15, On-Line Work Control Process
NO-AA-10, Revision 82, Quality Assurance Topical Report (QATR)
EP-AA-120, Revision 9, Emergency Planning Administration
EP-AA-120-1001, Revision 5, 10 CFR 50.54(q) Change Evaluation
TQ-AA-306, Revision 0; Simulator Management

Quick Human Performance Investigations

AR 692580, Received 5009-3h, PMS Alarm Display Due To Hi OG Flow

Root Cause Evaluations

RCE 345115, dated August 15, 2005; High Initial License Training Exam Failure Rate for ILT Class 04-1 Root Cause Investigation
RCE 589228, dated March 2, 2007; Inadequate High Pressure Core Spray (HPCS) Vortex Calculation Root Cause Investigation
RCE 603347, dated May 24, 2007; Post August 2006 Organization Weakness Not Addressed Root Cause Investigation
RCE 638917, 1c71s001c: Unexpected Alarms Div 3 NSPS Inverter
RCE 666492, dated October 12, 2007; 666492 Lower NRC Exam Results than Expected Root Cause Investigation
RCE 736499, NRC Identified Locked High Radiation Area Violation
RCE 755161, Un-posted High Radiation Area Identified

Surveillance Request

SR 00058209, Revise the Frequency of SA Dryer Ball Valve Rebuilds
SR 00053454, Perform NDE Inspection on Main Generator Seal Oil Segments

Work Request/Work Orders

WO 1001215, Design and Install New Aux Hoist for F15 Bridge
WO 1036633, 1h13p653: Received Annunciator 5006-3g, RCIS Inop
WO 1130776, Tasks 02 thru 12, Perform AVR Monitoring of Parameter 1029/Otdm Action
WO 1139298, Unexpected Entry into Off Normal 4004.01
WO 1199553, Unexplained Transient on B SJAE/RECOMB. Train (Off Service)
WO 856544, Single Input Calibration Sheet for 1FISX230, Sheet 1
WR 273544, Unexpected Entry into Off Normal 4004.01
WR 2911196, Unexplained Transient on B SJAE/RECOMB. Train (Off Service)

LIST OF ACRONYMS

ACE	apparent cause evaluation
ADAMS	Agencywide Documents Access and Management System
AR	action request
CA	corrective action
CAP	Corrective Action Program
CAPR	corrective action to prevent reoccurrence
CAQ	condition adverse to quality
CCE	common cause evaluation
CFR	Code of Federal Regulations
CNO	Chief Nuclear Officer
CPS	Clinton Power Station
CR	condition report
DRP	Division Reactor Projects
DRS	Division Reactor Safety
EACE	equipment apparent cause evaluation
EDG	emergency diesel generator
ECP	Employee Concerns Program
ECR	engineering change request
EP	Emergency Preparedness
FASA	focused area self-assessment
FIN	finding
GL	Generic Letter
HPCS	high pressure core spray
IEMA	Illinois Emergency Management Agency
IMC	Inspection Manual Chapter
IST	in-service test
MRC	Management Review Committee
NER	Nuclear Event Report
NCV	non-cited violation
NRC	Nuclear Regulatory Commission
NNOE	Nuclear Network Operating Experience
NOS	Nuclear Oversight
OE	operating experience
OPEX	operating experience
OPS	Operations
PARS	Publicly Available Records System
PI&R	Problem Identification and Resolution
QATR	Quality Assurance Topical Report
QHPI	quick human performance investigation
RCE	root cause evaluation
ROP	Reactor Oversight Process
SBO	station blackout
SCAQ	significant condition adverse to quality
SCWE	safety conscious work environment
SDP	Significance Determination Process
SOC	Station Oversight Committee
SR	surveillance request
SWR	simulator work request
TS	Technical Specifications

UFSAR	Updated Final Safety Analysis Report
VIO	violation
WR	work request
WO	work order