

October 27, 1999

MEMORANDUM TO: Marc L. Dapas, Region III
Ronald N. Gardner, Region III
Thomas J. Kozak, Region III
Troy W. Pruett, Region IV
Stuart A. Richards, Office of Nuclear Reactor Regulation

FROM: Jon B. Hopkins, Senior Project Manager, Section 2
Project Directorate III Original Signed By
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: MINUTES OF INTERNAL MEETINGS OF THE CLINTON POWER
STATION MANUAL CHAPTER (MC) 0350 OVERSIGHT PANEL

The NRC Restart Action Plan for the Clinton Power Station (CPS) was revised on July 14, 1998. The revision was necessitated by several significant activities at CPS. The NRC MC 0350 oversight panel activities were revived at that time and the first internal panel meeting was held on September 2, 1998. The CPS MC 0350 oversight panel consisted of M. Dapas, R. Gardner, T. Kozak, T. Pruett, S. Richards, and J. Hopkins. During the internal panel meetings, plant status, significant technical and performance issues, NRC regulatory approach, inspection resources and priorities, and Restart Action Plan status were discussed. Attached for your information are the minutes from the internal meetings of September 2, October 2 and 15, and December 14, 1998, January 7, February 16, March 3 and 31, April 14 and 20, and August 19, 1999.

Docket No. 50-461

Attachment: Minutes of MC 0350 Oversight
Panel Meetings

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MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

AUGUST 19, 1999

ATTENDEES: M. Dapas T. Kozak K. Stodter L. Wert, Jr.
 C. Brown S. Richards J. Hopkins R. Gardner
 A. Mendiola

1. Improvement Plans

The panel discussed the Clinton Business Plan and the Strategic Plan that provides more details for the Business Plan's items. The 0350 panel agreed that Illinois Power has developed long-term plans to sustain performance improvement. The panel then agreed that criteria have been met to end the panel and a recommendation to the Region III Administrator would be made to that effect.

2. Site Issues

Operations performance and the corrective action program were discussed and it was agreed that these areas would be discussed at the next plant performance review conducted by the NRC.

ATTACHMENT

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

APRIL 20, 1999

ATTENDEES: M. Dapas T. Kozak T. Pruett K. Stoedter C. Brown
 S. Richards J. Hopkins E. Duncan S. DuPont R. Gardner
 T. Mendiola

1. Case-Specific checklist

The NRC 0350 panel confirmed that at the public 0350 panel meeting on April 16, 1999, at the site, the Case-Specific checklist (CSC) was reviewed and each item was verified closed. CSC item II.1 sub-item 5, work control/operations interface, was closed based on planned corrective actions by the licensee. An inspector follow-up item will be opened to assess the performance in a future inspection.

3. Manual Chapter 0350 summary

The panel went over the status of the Manual Chapter 0350 summary for the Clinton Power Station (CPS). Most items were complete. For the few remaining open items, the NRC organization responsible for the action was identified. The panel reached a consensus that Illinois Power's performance improvement initiatives have been sufficiently implemented to support restart of CPS.

Additionally, the panel reached a consensus that it should recommend to the Region III Administrator that a management meeting should be held with Illinois Power within the next few months to discuss near-term and long-term actions that the licensee plans to implement to sustain performance improvement. Also, the panel reached a consensus that at the next Plant Performance Review meeting, NRC management should consider the need to have an evaluation performed of the programs and processes in place within the Operations organization at CPS, similar to an Operational Safety Team Inspection.

Finally, the panel reached a consensus that it should be disbanded; however, the panel determined that enhanced NRC oversight of CPS activities is warranted following plant restart to ensure that Illinois Power is effectively implementing its performance improvement initiatives.

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

APRIL 14, 1999

ATTENDEES: M. Dapas T. Kozak T. Pruett K. Stuedter D. Hills
 C. Brown S. Richards J. Hopkins E. Duncan S. DuPont
 M. Bielby A. Mendiola

1. Plant status

The plant is in a Division 2 outage that is scheduled to be complete this evening. Then, the plant will transition into a Division 1 outage followed by a Division 3 outage. Each outage is expected to take 4 to 5 days. If the schedule is met, then the plant will be ready for mode 2 operation on April 25, 1999.

2. Next 0350 public meeting

The next 0350 public meeting is scheduled for April 16, 1999, 12:30 p.m. CDT, at the site. The proposed agenda for the meeting is as follows: 1) opening comments, 2) discussion of the recent Plant Performance Review conducted by the NRC, 3) results of the recent operations inspection, and 4) status of the Case-Specific checklist items.

3. Case-Specific checklist

Items that are complete and are recommended for closure are II.1 sub-items 1 thru 4, operator training; II.3, abnormal operation procedures; II.4 sub-item 2, risk assessment program; IV.1, main control room deficiencies; V.1, deferrals of preventive maintenance items; and V.2, reasonable assurance that qualified materials and parts are installed in plant systems. Items II.1 sub-item 5; IV.4 sub-item 1, degraded voltage; and VI.3 sub-item 3, Setpoint Program remain open, but should be able to be closed this week.

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

MARCH 31, 1999

ATTENDEES: M. Dapas T. Kozak T. Pruett K. Stoedter S. Reynolds
 C. Brown S. Richards J. Hopkins E. Duncan S. DuPont
 R. Gardner A. Mendiola G. Hausman

1. Plant status

Static VAR compensator (SVC) testing is in progress. There is only one test left for each SVC. Following the SVC testing, a Division 2 outage will be entered for approximately 12 days. The schedule is to then perform a reactor vessel pressure test taking 2 days, performing a Division 3 outage for 6 days, a Division 1 outage for 4 days, and then starting the circulating water system, pulling a vacuum and venting control rods for 4 days. Mode 2 operation would then be entered. The schedule date for Mode 2 is May 5, 1999, but the licensee is trying to attain the published date of April 27, 1999.

2. Operational readiness inspection

The inspection is ongoing with no major problems identified so far.

3. Manual Chapter 0350 summary

The NRC 0350 panel went over the status of the Manual Chapter 0350 summary for the Clinton Power Station (CPS) except for Section C, issues. J. Hopkins of the Office of Nuclear Reactor Regulation stated that the Advisory Committee on Reactor Safeguards (ACRS) had been contacted and the ACRS Deputy Executive Director (R. Savio) informed him that the ACRS declined the offer of a briefing prior to restart of CPS.

4. Case-Specific checklist

Items I.1, management expectations; II.5, requalification examination deficiencies; III.1, improve the corrective action program; IV.3, circuit breaker failures; IV.6, recirculation pump seal failures; IV.7, emergency diesel generator concerns; and VII.1, emergency preparedness program, were discussed and are closed. Items to be addressed in Inspection Report 1999006 were discussed, and it was agreed to address closure at a later time.

5. Next 0350 public meeting

A date for the next public meeting was discussed, and it was agreed to try for April 15 or 16, 1999, at the site.

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

MARCH 3, 1999

ATTENDEES: M. Dapas T. Kozak T. Pruett K. Stoedter J. Caldwell
 C. Brown J. Grobe J. Hopkins E. Duncan S. DuPont
 R. Gardner D. Butler G. Hausman M. Bailey D. Hills
 P. Simpson Z. Falevits

1. Plant status

Currently, the plant is in a Division 1 outage that is scheduled to end March 8, 1999. The plan is to then begin recirculation pump runs, and then begin static VAR compensator (SVC) integrated testing. The licensee is trying to complete bulk work by April 4, 1999. The licensee is talking about a hiatus between completion of bulk work and plant startup.

2. Engineering inspection status

A risk analysis of the maintenance backlog is to be performed next week. The NRC is following up on the difference in reject rates for different types of molded case circuit breakers. As noted by the Integrated Safety Assessment and the Special Evaluation Team, some engineering personnel did not exhibit an aggressive questioning attitude. The NRC staff has determined that the licensee's System Design and Functional Validation (SDFV) review was thorough and comprehensive. Additionally, the staff's independent review of the reactor core isolation cooling system validates the SDFV findings.

3. 40500 inspection status

Inspectors have found that the corrective action program root cause evaluations were uneven and somewhat narrowly focused. Interviews of licensee quality assurance auditors, including contract personnel began on March 2, 1999.

4. Control room observations

In general, control room conduct was satisfactory and NRC staff observations were positive. There were some work control process problems; prejob briefs were not completely consistent, and the NRC staff could not get a comprehensive list of control room deficiencies.

5. Case-Specific checklist

Case-Specific checklist (CSC) item IV.4, sub-item 1, on degraded voltage modifications should remain open until SVC testing is complete and the license amendment for the undervoltage relay setpoints is issued. CSC items discussed and recommended for closure were IV.2, sub-item 1, safety-related deficiencies; IV.4, sub-items 2 and 3; IV.5, fire protection safe shutdown concerns; VI.1, assure safety function performance; and VI.2, validate calculations adequacy and controls.

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

FEBRUARY 16, 1999

ATTENDEES: M. Dapas T. Kozak T. Pruett K. Stoedter M. Bailey
 C. Brown S. Richards J. Hopkins E. Duncan S. Dupont
 J. Dyer R. Gardner J. Grobe D. Hills G. Hausman
 Z. Falevits

1. Plant status

The plant is in a Division 1 outage for operational modes 1, 2, and 3 that will be completed in approximately 10 days. Therefore, it is estimated that it will be February 26, 1999, before more static VAR compensator testing is performed.

2. Preliminary 40500 inspection results

The NRC inspectors are looking at the corrective action program and program implementation in the areas of operations, maintenance, radiation protection, and chemistry. A weakness found in the program is that first-line supervisors can sign that condition reports do not need to go to the control room. Additionally, there are approximately 45 different tracking systems. There have been a large amount of changes made to the corrective action program in the last year. A corrective action review (CARE) program was started in May 1998, and to-date, 15 of approximately 175 CARE items have been completed. The inspection team has not yet found any big problems.

3. Preliminary engineering inspection results

The engineering inspection is on schedule to be completed by the end of next week. One item requiring followup is a potential unreviewed safety question (USQ). The potential USQ concerns a feedwater line break outside containment that could render reactor core isolation cooling (RCIC) inoperable. The licensee changed the design basis to high pressure core spray (HPCS) and automatic depressurization system from HPCS and RCIC to be the plant systems that handle the event.

4. Conduct of operations

The Clinton quality assurance (QA) organization performed an audit of the conduct of operations. The audit results were fairly negative. Five of eight attributes that were looked at were found to be weak. Operator knowledge of plant component status was particularly weak. QA concluded that operations was not ready for the NRC inspection scheduled to begin on March 1, 1998, but with aggressive management attention, the operations department could be ready for the NRC inspection. Illinois Power (IP) plans to put a PECO Energy Company senior reactor operator and a management representative on each shift to improve operations performance. QA will reassess the conduct of operations during the week of February 22, 1998.

5. Case-Specific checklist

Item V.1, review deferrals of preventive maintenance items, will remain open. IP has written a Level 2 Condition Report concerning the deferrals based on the NRC Senior Resident Inspector review of this issue. Item II.3, abnormal operations procedures, is remaining open while IP reviews all procedures in their backlog. Item V.3, maintenance rule program, was discussed and is now closed.

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

JANUARY 7, 1999

ATTENDEES: M. Dapas T. Kozak T. Pruett R. Gardner M. Bailey
 C. Brown S. Richards J. Hopkins E. Duncan S. Dupont

1. Plant status

The emergency reserve auxiliary transformer (ERAT) and the reserve auxiliary transformer (RAT) have been returned to service. Incorrect fuses were found associated with the ERAT. The plant intends to go back into a RAT outage and tie in the static VAR compensator modification. Jack McElwain is now the Senior Vice-President and Chief Nuclear Officer for Illinois Power (IP) replacing Walt MacFarland. Mr. McElwain is part of the PECO Energy management services contract, as was Mr. MacFarland. IP thinks that the critical path item is the degraded voltage modification. IP intends to submit a license amendment concerning a change to the undervoltage relay setpoints. IP intends to reduce the number of surveillances it has to do for startup by planning a mid-cycle outage tentatively scheduled for April 2000. IP's current restart schedule is mid-March 1999 for pulling control rods.

2. Operator training inspection

Operating crew evaluations are starting this week and will not be complete until February 12, 1999. NRC inspectors will observe the evaluations during the week of January 11, 1999. Emergency Operating Procedures usage is being conducted now. Considering the one week of training conducted after the requalification examinations, the total amount of training is 8 days. The operational readiness review inspection will be used, in part, to close the restart item concerning licensed operator training.

3. Draft agenda for upcoming public 0350 panel meeting

The following items were discussed as being draft agenda items for the upcoming public 0350 panel meeting on January 14, 1999:

- a. Degraded voltage modifications
- b. Fire protection issues
- c. IP readiness for the 40500 inspection
- d. IP readiness for the safety system engineering inspection
- e. Emergency preparedness drill results
- f. Restart closure list
- g. Plant status including the backlog of maintenance items
- h. Operator licensing training inspection

The panel agreed that the inspection plan should be updated following the public meeting.

4. Case-Specific checklist

Item V.3, establish maintenance rule program, has been inspected and is going to be closed soon. Item II.4 sub-item 2, training provided to operations and work management personnel involved in risk assessment, will be followed up by the NRC resident inspection staff.

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

DECEMBER 14, 1998

ATTENDEES: M. Dapas T. Kozak T. Pruett R. Gardner K. Stuedter
 C. Brown S. Richards J. Hopkins J. Creed M. Leach
 J. Foster E. Duncan S. Dupont Z. Falevits

1. Plant status

The Division 2 outage is continuing and is scheduled for completion on December 20, 1998. Illinois Power (IP) is clearing constraints for mode 4 operation. Each safety division will need at least one more outage to prepare for mode 2 operation. The degraded voltage modification is the critical path hardware item for restart. Mode 2 operation is scheduled for early April 1999.

2. Inspections

The planned NRC inspections have been resource loaded. However, the members for the 40500 Inspection may change, and the Operational Readiness Inspection needs a new member. Eric Duncan will be the team leader for the Safety System Engineering Inspection. The inspection plan is being finalized for the engineering inspection. A revised inspection schedule needs to be issued.

3. Draft agenda for public 0350 panel meeting on December 17, 1998

The draft agenda for the upcoming public 0350 panel meeting was discussed. Items on the draft agenda were plant status, emergency response organization corrective actions, corrective action program, electrical breakers including the final response to the confirmatory action letter (CAL), and the maintenance backlogs. It was agreed by the 0350 panel that the status of operator licensing should be added to the agenda.

4. Electrical breakers

The final response to the CAL was submitted on December 11, 1998, and the IP closure package has been submitted to the NRC. The 4160 volt (4 kv) breaker failure mechanism was approximately 80 percent due to the friction force on the main and arcing contacts, and 20 percent due to a contributing factor of the lower part of the breaker. The corrective action for the 4 kv breakers involved lubricating the contacts and performing extended preventive maintenance on the lower part of the breaker. Additionally, the Division 1, 4 kv breakers are to be refurbished or replaced by startup, and the Division 2 breakers are to be refurbished or replaced by December 31, 1999.

5. Operator licensing

Four operating crews have gone through the current training cycle with no failures. The training is concentrating on severe accidents and emergency operating procedures. IP has retired licenses for two employees who failed operator training in September 1998. NRC staff is inspecting the training this week and will be going back in January 1999 to witness examinations.

6. Case-Specific checklist

It was observed that many Case-Specific checklist (CSC) items are to be reviewed by the NRC from mid-February to the end of March 1999.

The close-out packages provided to the NRC for CSC items II.4, establish and implement an effective risk assessment program, and V.3, establish maintenance rule program, will be looked at this week.

CSC item IV.7, sub-items 2, 3, and 4, which resolve emergency diesel generator (EDG) concerns, are open, and they will be closed following issuance of the three outstanding EDG license amendments. Item IV.6 regarding recirculation pump seal failures is still open pending the training of the operators scheduled for February 1999. The work-off rate of main control room deficiencies is being watched by the NRC and item IV.1 concerning this issue is scheduled for closure in January 1999. Item VII.1 concerning the emergency preparedness program will be open until the additional drill scheduled for the first quarter of 1999 is conducted.

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

OCTOBER 15, 1998

ATTENDEES: M. Dapas T. Kozak T. Pruett R. Gardner M. Bailey
 K. Stuedter C. Brown S. Richards J. Hopkins

1. Plant status

The licensee completed a Division 1 outage and Division 1 was declared operable for Mode 4 operation. The licensee plans to next perform normal maintenance outages for the reactor water cleanup and control rod drive systems.

2. Generic training issues

There are a number of issues involving training. The panel agreed to bring the issue of training to the licensee's attention and obtain the licensee's response.

3. Maintenance backlog versus risk assessment

The panel agreed that it should explore whether an NRC probabilistic risk analysis specialist could be obtained to do a review of the maintenance backlog and assess the backlog from a risk perspective.

4. Status of licensing actions

a. Two license amendments related to degraded grid voltage have been issued.

b. An American Society of Mechanical Engineers Section XI relief request has been granted to allow deferral of leak rate tests for 21 valves.

c. Three license amendments are undergoing review. They are related to the Division 3 emergency diesel generator (EDG) mechanical governor, EDG loading limits, and a 10 CFR Part 50, Appendix J, local leak rate test extension.

d. The licensee plans to submit two more license amendments. They are related to the feedwater check valve keep fill system, and a potential unreviewed safety question concerning the hazard of tornado missiles.

5. Condition Reports

The panel agreed that the licensee's corrective actions for recently issued Level 1 and 2 Condition Reports related to maintenance should be followed by the NRC staff.

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

OCTOBER 2, 1998

ATTENDEES: M. Dapas T. Kozak T. Pruett J. Caldwell C. Brown
 S. Richards J. Hopkins

1. Plant status

Clinton is in a Division 1 outage. The plant's schedule is to next conduct a reactor water cleanup system outage, then a Division 2 outage followed by another Division 1 outage. Work items were being closed at a rate of approximately 500 items per week. 700 items per week would be necessary to meet the plant's goal for restart.

2. 0350 Checklist items

a. The panel agreed to add an item to the checklist to conduct a followup review of corrective actions to address operator requalification examination failures.

b. The panel reviewed draft inspection report inputs for item II.2, establish and implement an effective equipment clearance program, and item III.2, establish and implement performance measures to assess performance. Based on the inspector's conclusions, the panel agreed to close these items.

3. Allegations

The status of allegations was reviewed by the panel. At this time, allegations are not an impediment to startup operations.

4. Public 0350 panel meetings

The next two scheduled public 0350 panel meetings are:

a. October 23, 1998, 8:30 am, at the site

b. November 10, 1998, 10:00 am, at the site

MINUTES OF INTERNAL MANUAL CHAPTER 0350 MEETING - CLINTON

SEPTEMBER 2, 1998

ATTENDEES: M. Dapas T. Kozak T. Pruett J. Grobe R. Gardner
 Z. Falevits J. Hopkins

1. Plant status

Clinton is in a Division 1 outage scheduled for completion on September 13, 1998. Then a Division 2 outage will be conducted with completion scheduled for October 14, 1998. Degraded grid voltage modifications are scheduled for completion on October 31, 1998. Mode 2 operation is scheduled for December 3, 1998. Currently, the work-off rate is 70 - 75 percent of scheduled items. The goal is 90 percent.

2. Inspection activities

The panel agreed that the NRC focus would be on engineering, the corrective actions program, maintenance activities, and operations especially Technical Specification and procedure compliance. Along with engineering, a fire protection inspection is planned. Region III will call the NRR branch chief to obtain NRR support for the fire protection inspection.

3. Public 0350 panel meetings

There is a public 0350 panel meeting on September 17, 1998 in Rockville, MD. The next public 0350 panel meeting will be at the site in October 1998. The majority of the public meetings will be at the site.