

October 27, 2000

MEMORANDUM TO: Donald C. Cook Nuclear Plant Manual Chapter 0350 Panel  
FROM: Geoffrey E. Grant, Director, DRP **/RA/**  
SUBJECT: MINUTES OF INTERNAL MEETING OF THE DONALD C. COOK  
NUCLEAR PLANT MANUAL CHAPTER 0350 PANEL

The Donald C. Cook Nuclear Plant Manual Chapter 0350 Panel charter was announced on April 17, 1998, and most recently revised on October 4, 2000. These internal meetings are used to discuss significant technical and performance issues, NRC regulatory approach, and inspection resources and priorities. Attached for your information are the minutes from the internal meeting of the Inspection Manual Chapter 0350 Restart Panel held on October 24, 2000.

Docket Nos. 50-315; 50-316

Attachment: As stated

cc w/att: T. Bergman, NRR  
S. Singh Bajwa, NRR  
C. Craig, NRR  
J. Stang, NRR  
J. Thompson, NRR  
J. Grobe, RIII  
G. Grant, RIII  
A. Vogel, RIII  
M. Holmberg, RIII  
B. Bartlett, RIII  
D. Passehl, RIII  
K. Coyne, RIII  
J. Maynen, RIII  
R. Walton, RIII  
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OFFICE	RIII:DRP	HQ:NRR	RIII:DRP
NAME	AVogel/co	SBajwa	GGrant
DATE	10/26/00	10/26/00	10/26/00

**OFFICIAL RECORD COPY**

MEETING MINUTES: Internal MC 0350 Restart Panel Meeting  
on the D. C. Cook Nuclear Plant

DATE: October 24, 2000

TIME: 3:00 p.m. (Central)

**ATTENDEES:**

S. Bajwa

B. Bartlett

K. Coyne

C. Craig

G. Grant

J. Maynen

D. Passehl

J. Stang

A. Vogel

Discussion Topics:

1. *Plant Status and Inspector Insights*

The Senior Resident Inspector provided a summary of plant activities. Unit 2 continues to operate at full power with no significant equipment problems.

Unit 1 restart activities are continuing. Open Vessel Testing was in progress. The licensee experienced a delay in the testing due to a relief valve that lifted and failed to reseat. The licensee completed repairs to the relief valve and was preparing to continue testing. Ice condenser work was in progress with no significant problems identified.

The Senior Resident Inspector discussed a concern involving maintenance work in the Unit 1 East Motor Driven Auxiliary Feedwater Pump room and the Unit 2 Turbine Driven Auxiliary Feedwater Pump room. The licensee had designated these rooms as "guarded equipment" due to work in both Unit 1 Essential Service Water Trains. However, the inspectors identified ongoing work in these rooms, including tools, personnel protective gear, scaffolding, and other work items that could possibly interfere with the "guarded equipment." The Senior Resident Inspector discussed this concern with plant management.

2. *Discuss Recent Licensee Event Reports*

The Panel discussed the following Licensee Event Reports (LERs) to determine whether the reports should be added to the Unit 1 Restart Action Matrix (RAM):

- LER 316/2000-012-00, Failure to Perform Increased Frequency Surveillance on 2 East Containment Spray Pump
- LER 315/2000-006-00, Emergency Diesel Fuel Oil Technical Specification Not Met Verbatim
- LER 315/1999-003-01, Fuses Not Installed for Cable Passing Through Containment Penetration
- LER 315/1998-059-01, Single Failure in Containment Spray System Could Result in Containment Spray pH Outside Equipment Qualification Design

- LER 315/1998-058-01, Postulated High Energy Line Break Could Result in Condition Outside Design Bases for Auxiliary Feedwater
- LER 316/1998-007-01, High Energy Line Break Effects On Auxiliary Feedwater System
- LER 316/1998-005-01, Potential for High Energy Line Break to Degrade Component Cooling Water System
- LER 315/1998-001-03, Containment Air Recirculation System Flow Testing Results Indicate Condition Outside the Design Basis

Several of the LERs above had been previously reviewed prior to restart of Unit 2. The Panel reviewed the information provided in the supplemented LERs and in the new LERs and determined that none of the LERs above should be added to the Unit 1 Restart Action Matrix (RAM). However, LERs 315/1998-058-01, 316/1998-007-01, and 316/1998-005-01, associated with postulated high energy line break concerns, will be reviewed as part of the inspections planned to address RAM Item 4.1, "Evaluate Modifications Completed to Resolve Operability of the AFW System, Associated with Postulated High Energy Line Breaks."

3. *Discuss Open Allegations*

The Panel discussed the status of all open allegations focusing on those that could impact restart of Unit 1.

4. *Discussion of Licensing Plan - Discuss Licensing Issues/USQs That Need to Be Reviewed and Preliminary Scope and Schedule of Reviews*

The Panel approved the action plan for NRR technical staff's review of containment structural issues. The Technical Staff's review will include review of calculations for the containment structures, the operability evaluation regarding containment structural calculations and transient mass distribution loading, and the operability evaluation for containment subcompartment walls. In addition, the staff will review the licensee's long term corrective action plan.

The Panel also reviewed the status of licensing issues as listed on the Unit 1 RAM. The Panel approved closure of Unit 1 RAM Item 8.3, "Pressurizer Heater Surveillance Change TS 4.4.2" based on issuance of Amendments 246 and 227 for Units 1 and 2, respectively.

The Panel approved an addition to the Unit 1 RAM, "Technical Specification Change Request Valve Position for Automatic Valves in the Auxiliary Feedwater System." This is listed as RAM Item 8.9.

5. *Discuss Restart Action Matrix*

The Panel discussed the Unit 1 RAM. In addition to the items discussed above in Item 5, and approved changes to the estimated completion dates and documentation and references for some of the RAM items.

6. *Discuss/Update Milestones and Commitments.*

The Panel discussed important upcoming meetings and deadlines.

7. *Other.*

Enclosure 1 provides latest Restart Action Matrix.

Enclosure 1

**D. C. Cook Restart Action Matrix**  
**Unit 1**

October 24, 2000

Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
<b>Inspection Report References</b>							
<p>Notes:</p> <p>ECD Estimated Completion Date (Present to IMC 0350 Panel)            NRR NRC Office of Nuclear Reactor Regulation            RRATI Restart Readiness Assessment Team Inspection            SRI Senior Resident Inspector            UCS Union of Concerned Scientists</p> <p>IR 2000021 - Biennial Permanent Mods &amp; Annual 50.59 Insp 11/06/00 to 11/17/00            IR 2000022 - Resident Inspector Report 10/11/00 to 11/11/00            IR 2000023 - Unit 1 Restart Readiness Assessment Team Inspection 11/27/00 to 12/01/00</p>							
<b>Restart Issues</b>							
<b>1. Ice Condenser Operability</b>							
1.1	Unit 1 ice condenser restoration - Observe ice condenser ice load & surveillance testing	SRI	IP 71111.22 (Surveillance Testing)	LER 315/2000-001-00, Stress Loads for the Ice Condenser Basket Assembly Greater Than Allowed by Safety Analysis Report  IR 99026	IR 2000022 (10/11/00 to 11/11/00)	11/21/00	Open
<b>2. Containment Operability</b>							
2.1	Evaluate modifications to the Unit 1 recirculation sump to address previous deficiencies with inadequate Inventory, dead ended compartments and sump venting.	Biennial Permanent Mods & Annual 50.59 Insp	71111.17 (Permanent Plant Modifications)	IR 99029	IR 2000021 (11/06/00 to 11/17/00)	11/21/00	Open
2.2	Confirm removal of fibrous material in the Unit 1 Containment that could clog the recirculation sump.	SRI	71111.20 (Refueling and Outage Activities)	IR 2000016	IR 2000022 (10/11/00 to 11/11/00)	11/21/00	Open

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Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
2.3	Evaluate Licensee Corrective Actions for Containment Internal Structural Walls	SRI  NRR	71111.20 (Refueling and Outage Activities)	LER 316/2000-003-00, Containment Internal Concrete Structures Do Not Meet Design Load Margins  0350 Mtg. Minutes dtd. 06/12/00	Memo from NRR to IMC 0350 Panel	11/21/00 (SRI)  11/17/00 (NRR)	Open
<b>3. Valve Operability</b>							
3.1	Evaluate modifications completed to resolve operability of the Unit 1 MOVs	Biennial Permanent Mods & Annual 50.59 Insp	71111.17 (Permanent Plant Modifications)	LER 315/1999-031-00, Interim - Valves Required to Operate Post-Accident Could Fail to Open Due to Pressure Locking/Thermal Binding  IR 2000002	IR 2000021 (11/06/00 to 11/17/00)	11/21/00	Open
3.2	Evaluate Modifications Completed to Address Unit 1 Compressed Air System Operability	Biennial Permanent Mods & Annual 50.59 Insp	71111.17 (Permanent Plant Modifications)	IR 99029	IR 2000021 (11/06/00 to 11/17/00)	11/21/00	Open
<b>4.. Auxiliary Feedwater Operability</b>							
4.1	Evaluate modifications completed to resolve operability of the AFW system, associated with postulated high energy line breaks.	Biennial Permanent Mods & Annual 50.59 Insp)	71111.17 (Permanent Plant Modifications)	LER 315/1999-026-00, High Energy Line Break Programmatic Inadequacies Result in Unanalyzed Conditions  IR 2000007	IR 2000021 (11/06/00 to 11/17/00)	11/21/00	Open
<b>5. Electrical System Operability</b>							
5.1	Evaluate modifications completed to resolve the Unit 1 electrical system fuse and breaker coordination.	Biennial Permanent Mods & Annual 50.59 Insp	71111.17 (Permanent Plant Modifications)	IR 2000007	IR 2000021 (11/06/00 to 11/17/00)	11/21/00	Open
<b>6. Emergency Core Cooling System Operability</b>							
6.1	Evaluate setpoint changes for the Unit 1 RWST Level to account for measurement error and instrument uncertainties	Biennial Permanent Mods & Annual 50.59 Insp	71111.17 (Permanent Plant Modifications)	IR 2000007	IR 2000021 (11/06/00 to 11/17/00)	11/21/00	Open

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Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
<b>7. Licensing Basis Control Program</b>							
7.1	Evaluate licensing basis program controls for safety reviews in accordance with 10 CFR 50.59.	Biennial Permanent Mods & Annual 50.59 Insp	71111.02 (Evaluation of Changes, Tests, or Experiments)	IR 99023	IR 2000021 (11/06/00 to 11/17/00)	11/21/00	Open
<b>8. Licensing Issues, Amendments, Unreviewed Safety Questions</b>							
8.1	Reconstitution of Assumptions and Methodology for Transient Mass Distribution (TMD) Sub-compartment Analysis and Containment Sub-compartment Structural Issues	NRR	N/A		IR 2000025 (11/12/00 to 12/31/00)	11/17/00	Open
8.2	Tornado Missile Licensing Bases Change - Use of approved PRA Techniques	NRR	N/A	TAC no. MA 9176/77	License Amendment	11/17/00	Open
8.3	Pressurizer Heater Surveillance Change TS 4.4.2	NRR	N/A		License Amendment 246 (U1) 227 (U2)	10/20/00	Closed
8.4	NRC Review of Leak Before Break Methodology for the Pressurizer Surge Line	NRR	N/A		License Amendment	11/17/00	Open
8.5	ILRT TS Change and Exemption	NRR	N/A		License Amendment	11/17/00	Open
8.6	QAPD Cad-Weld Commitment	NRR	N/A		License Amendment	10/30/00	Open
8.7	USQ on Methodology Changes (modeling of operator actions and use of actual tube flows) to Tube Rupture Analysis. (SG Overfill)	NRR	N/A		Memo from NRR to IMC 0350 Panel	11/27/00	Open
8.8	USQ on HELB - Licensing Basis Change Request for 10D on Plume and SRP, MEB 3-1 exclusion areas. Tac no. MA 8893/94	NRR	N/A		License Amendment	11/17/00	Open
8.9	Technical Specification Change Request Valve Position for Automatic Valves in the Auxiliary Feedwater System	NRR	N/A		License Amendment	11/26/00	Open
<b>Guidelines for Restart Approval</b>							
C.3.3	Operator Issues						
C.3.3.d	Effectiveness of restart simulator/required training necessary to re-familiarize personnel with operating conditions.	SRI	71111.11 (Licensed Operator Requalification)		IR 2000025 (11/12/00 to 12/31/00)	11/28/00	Open

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Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
C.3.3.e	Assessment of plant staff performance during restart. Sustained control room observations by NRC personnel	RRATI	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	12/01/00	Open
C.4	Assessment of Physical Readiness of the Plant						
C.4.a	Operability of Technical Specification systems, specifically those with identified operational, design, and maintenance issues.	SRI RRATI	71111.15 (Operability Evaluations)		IR 2000022 (10/11/00 to 11/11/00)  IR 2000023 (11/27/00 to 12/01/00)	12/01/00	Open
C.4.b	Operability of required secondary and support systems.	SRI RRATI	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	12/01/00	Open
C.4.c	Results of pre-startup testing.	SRI	IMC 0350		IR 2000025 (11/12/00 to 12/31/00)	12/01/00	Open
C.4.d	Adequacy of system lineups.	RRATI SRI	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	12/01/00	Open
C.4.e	Adequacy of surveillance tests/test program.	SRI	IP 71111.22 (Surveillance Testing)	LER 50-315/99003-00, Control Room pressurization Surveillance Test Does Not Test System In Normal Operating Condition	IR 2000025 (11/12/00 to 12/31/00)	12/01/00	Open
C.4.f	Significant hardware issues resolved (i.e., equipment with poor material condition, equipment aging, modifications).	SRI  Biennial Permanent Mods & Annual 50.59 Insp	71111.17 (Permanent Plant Modifications)	LER 50-315/99011-01, Air System for Emergency Diesel Generators May Not Support Long Term Operability Due to Original Design Error	IR 2000022 (10/11/00 to 11/11/00)	11/28/00	Open
C.4.g	Adequacy of the power ascension testing program.	SRI	IMC 0350		IR 2000025 (11/12/00 to 12/31/00)	11/28/00	Open

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Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
C.4.h	Effectiveness of the plant maintenance program.	SRI	71111.12 (Maintenance Rule Implementation)		IR 2000022 (10/11/00 to 11/11/00)	12/01/00	Open
C.4.i	Maintenance backlog managed and impact on operation assessed.	SRI SRA	IMC 0350		IR 2000025 (11/12/00 to 12/31/00)	11/28/00	Open
C.4.j	Adequacy of plant housekeeping and equipment storage.	SRI	IMC 0350		IR 2000025 (11/12/00 to 12/31/00)	11/21/00	Open
C.5	Assessment of Compliance with Regulatory Requirements						
C.5.a	Applicable licensee amendments have been issued.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	11/17/00	Open
C.5.b	Applicable exemptions have been granted.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	11/17/00	Open
C.5.c	Applicable reliefs have been granted.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	11/17/00	Open
C.5.d	Imposed orders have been modified or rescinded.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	11/17/00	Open
C.5.e	Confirmatory Action Letter conditions have been satisfied.	Veget	IMC 0350		Memo to IMC 0350 Panel	11/21/00	Open
C.5.f	Significant enforcement issues have been resolved.	Veget	IMC 0350		Memo to IMC 0350 Panel	11/21/00	Open
C.5.g	Allegations have been appropriately addressed.	Veget	IMC 0350		Memo to IMC 0350 Panel	11/21/00	Open
C.5.h	10 CFR 2.206 Petitions have been appropriately addressed.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	11/17/00	Open
C.6	Coordination with Interested Agencies and Parties						
C.6.e.1	Appropriate state and local officials -FEMA	RIII State Liaison Officer NRR	IMC 0350		Memo to IMC 0350 Panel		Open
C.6.e.2	Appropriate state and local officials -Congressional Affairs	NRR	IMC 0350		Memo to IMC 0350 Panel		Open

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Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
C.6.e.3	Appropriate state and local officials -Inform Stakeholders (UCS)	NRR	IMC 0350		Memo to IMC 0350 Panel		Open
C.6.f	Appropriate public interest groups.	Public Affairs	IMC 0350		N/A		Open
C.6.g	Local news media.	Public Affairs	IMC 0350		N/A		Open