

November 28, 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 November 21 and 22, 2000.

Docket Nos. 50-315; 50-316

Attachments: 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  
Docket Files

**Please make this document publically available in ADAMS.**

DOCUMENT NAME: G:\cook\dcc1121&112200.mtgsum.wpd

To receive a copy of this document, indicate in the box: "C" = Copy without enclosure "E"= Copy with enclosure "N"= No copy

OFFICE	RIII	E	RIII	N	RIII			
NAME	Vegel/trn		Bajwa		Grant			
DATE	11/22/00		11/24/00		11/28/00			

**OFFICIAL RECORD COPY**

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

DATE: November 21 and 22, 2000

TIME: November 21 - 2:30 p.m. (Central)  
November 22 - 12:00 p.m. (Central)

**ATTENDEES:**

S. Bajwa (November 21 only)  
B. Bartlett  
K. Coyne  
C. Craig  
G. Grant  
M. Holmberg

J. Lamb  
J. Maynen  
D. Passehl  
R. Pichumani (November 22 only)  
J. Stang  
K. Walton  
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 continues to make progress toward restart. Core reload is complete and the upper internals of the reactor vessel have been installed. The licensee is moving forward with preparations for Mode 5 (Cold Shutdown).

2. *Discuss Restart Action Matrix (RAM)*

The Panel reviewed and discussed the status of items listed on the Unit 1 RAM. For each RAM item, inspectors or NRR staff members presented to the panel their assessment of associated issues and made recommendations to the panel. The Panel approved closure of the following Unit 1 RAM Items:

- Item 2.1, Evaluate Modifications to the Unit 1 Recirculation Sump to Address Previous Deficiencies with Inadequate Inventory, Dead Ended Compartments and Sump Venting

Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/316/2000021 - Biennial Permanent Mods & Annual 50.59 Inspection.

- Item 2.2, Confirm Removal of Fibrous Material in the Unit 1 Containment That Could Clog the Recirculation Sump

Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/2000023 - Unit 1 Restart Readiness Team Inspection.

- Item 3.2, Evaluate Modifications Completed to Address Unit 1 Compressed Air System Operability

Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/316/2000021 - Biennial Permanent Mods & Annual 50.59 Inspection.

- Item 4.1, Evaluate Modifications Completed to Resolve Operability of the AFW System, Associated with Postulated High Energy Line Breaks

Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/316/2000021 - Biennial Permanent Mods & Annual 50.59 Inspection.

- Item 5.1, Evaluate Modifications Completed to Resolve the Unit 1 Electrical System Fuse and Breaker Coordination

Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/316/2000021 - Biennial Permanent Mods & Annual 50.59 Inspection.

- Item 6.1, Evaluate Setpoint Changes for the Unit 1 RWST Level to Account for Measurement Error and Instrument Uncertainties

Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/316/2000021 - Biennial Permanent Mods & Annual 50.59 Inspection.

- Item 7.1, Evaluate Licensing Basis Program Controls for Safety Reviews in Accordance with 10 CFR 50.59

Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/316/2000021 - Biennial Permanent Mods & Annual 50.59 Inspection.

- Item 8.2, Tornado Missile Licensing Bases Change - Use of approved PRA Techniques

Closure documentation for this RAM item is provided in License Amendment 247 (U1) and 228 (U2) dated November 17, 2000.

- Item 8.5, ILRT TS Change and Exemption

Closure documentation for this RAM item is provided in License Amendment 248 (U1) and 229 (U2) dated November 17, 2000.

- Item 8.7, USQ on Methodology Changes (Modeling of Operator Actions and Use of Actual Tube Flows) to Tube Rupture Analysis. (SG Overfill)

Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/2000023 - Unit 1 Restart Readiness Team Inspection.

- Item 8.8, USQ on HELB - Licensing Basis Change Request for 10D on Plume and SRP, MEB 3-1 Exclusion Areas  
  
Closure documentation for this RAM item is provided in License Amendment 249 (U1) and 230 (U2) dated November 21, 2000.
- Item C.5.e, Confirmatory Action Letter Conditions Have Been Satisfied  
  
Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/2000023 - Unit 1 Restart Readiness Team Inspection.
- Item C.5.f, Significant Enforcement Issues Have Been Resolved  
  
Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/2000023 - Unit 1 Restart Readiness Team Inspection.
- Item C.5.g, Allegations Have Been Appropriately Addressed  
  
Closure documentation for this RAM item will be provided in NRC Inspection Report 50-315/2000023 - Unit 1 Restart Readiness Team Inspection.

In addition, on November 21 and 22, the Panel discussed Item 2.3, Evaluate Licensee Corrective Actions for Containment Internal Structural Walls; and Item 8.1, Reconstitution of Assumptions and Methodology for Transient Mass Distribution (TMD) Sub-compartment Analysis and Containment Sub-compartment Structural Issues. These items will be further discussed during the next internal Panel meeting.

3. *Discuss Deferred Modification Regarding Emergency Diesel Generator Fuel Oil Lines*

The Panel discussed a licensee modification regarding replacement of emergency diesel generator fuel oil lines. The Panel determined that this was not an item to be added to the Unit 1 Restart Action Matrix. However, follow on inspections will be conducted to review the associated operability evaluations.

4. *Discuss Auxiliary Feedwater Valve Surveillance Testing*

The Panel discussed testing of the auxiliary feedwater discharge valves after entry into Mode 3. Additional discussions with licensee will be held to determine their basis for potential deferral of the testing.

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

The Panel reviewed the status of licensing issues. All open issues appeared close to being resolved on schedule.

6. *Discuss Issuance of Memo to All Inspectors Involved with Unit 1 Restart to Ensure Any Restart Issues Have Been Sufficiently Resolved*

Messrs. Vogel and Bajwa took action to issue an E-mail to NRC personnel involved with D.C. Cook Unit 1 to ensure that any restart issues have been properly resolved.

7. *Discuss NRC Inspection Manual Chapter 0350 Closure Memo, Time Line, and Protocol for Review and Concurrence*

The Panel discussed plans to issue restart documents for D.C. Cook in accordance with NRC Inspection Manual Chapter 0350.

8. *Discuss/Update Milestones and Commitments.*

The Panel discussed important upcoming meetings and deadlines.

9. *Other.*

Enclosure 1 provides latest Restart Action Matrix.

Enclosure 1

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

November 22, 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            SER Safety Evaluation Report            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            IR 2000025 - Resident Inspector Report 11/12/00 to 12/31/00</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		11/06/00	Closed  IR 2000022 (Pending)
<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	Closed  IR 2000021 (Pending)
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 2000023 (11/27/00 to 12/01/00)	11/21/00	Closed  IR 2000023 (Pending)

Enclosure 1

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	IR 2000023 (11/27/00 to 12/01/00)  Panel Internal Meeting Minutes	11/21/00 (SRI)  11/28/00 (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)	11/28/00	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	Closed  IR 2000021 (Pending)
<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	Closed  IR 2000021 (Pending)
<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	Closed  IR 2000021 (Pending)
<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	Closed  IR 2000021 (Pending)

Enclosure 1

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	Closed IR 2000021 (Pending)
<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 (11/27/00 to 12/31/00)	11/28/00	Open
8.2	Tornado Missile Licensing Bases Change - Use of approved PRA Techniques	NRR	N/A		License Amendment 247 (U1) 228 (U2)	11/21/00	Closed 0350 Mtg. 11/21/00
8.3	Pressurizer Heater Surveillance Change TS 4.4.2	NRR	N/A		License Amendment 246 (U1) 227 (U2)	10/20/00	Closed 0350 Mtg. 10/24/00
8.4	NRC Review of Leak Before Break Methodology for the Pressurizer Surge Line	NRR	N/A		11/08/00 SER Issued	11/14/00	Closed 0350 Mtg. 11/14/00
8.5	ILRT TS Change and Exemption	NRR	N/A		License Amendment 248 (U1) 229 (U2)	11/21/00	Closed 0350 Mtg. 11/21/00
8.6	QAPD Cad-Weld Commitment	NRR	N/A		11/07/00 SER Issued	11/14/00	Closed 0350 Mtg. 11/14/00
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		IR 2000023 (11/27/00 to 12/01/00)	11/21/00	Closed IR 2000023 (Pending)
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 249 (U1) 230 (U2)	11/21/00	Closed 0350 Mtg. 11/21/00
8.9	Technical Specification Change Request Valve Position for Automatic Valves in the Auxiliary Feedwater System	NRR	N/A		License Amendment	11/29/00	Open

Enclosure 1

Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
<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 2000023 (11/27/00 to 12/01/00)	11/28/00	Open
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 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 2000023 (11/27/00 to 12/01/00)	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 2000023 (11/27/00 to 12/01/00)	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 2000023 (11/27/00 to 12/01/00)	11/28/00	Open

Enclosure 1

Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
C.4.g	Adequacy of the power ascension testing program.	SRI	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	11/28/00	Open
C.4.h	Effectiveness of the plant maintenance program.	SRI	71111.12 (Maintenance Rule Implementation)		IR 2000023 (11/27/00 to 12/01/00)	12/01/00	Open
C.4.i	Maintenance backlog managed and impact on operation assessed.	SRI SRA	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	11/28/00	Open
C.4.j	Adequacy of plant housekeeping and equipment storage.	SRI	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	11/28/00	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	11/28/00	Open
C.5.b	Applicable exemptions have been granted.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	12/01/00	Open
C.5.c	Applicable reliefs have been granted.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	12/01/00	Open
C.5.d	Imposed orders have been modified or rescinded.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	12/01/00	Open
C.5.e	Confirmatory Action Letter conditions have been satisfied.	Vegel	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	11/21/00	Closed IR 2000023 (Pending)
C.5.f	Significant enforcement issues have been resolved.	Vegel	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	11/21/00	Closed IR 2000023 (Pending)
C.5.g	Allegations have been appropriately addressed.	Vegel	IMC 0350		IR 2000023 (11/27/00 to 12/01/00)	11/21/00	Closed IR 2000023 (Pending)
C.5.h	10 CFR 2.206 Petitions have been appropriately addressed.	NRR	IMC 0350		Memo from NRR to IMC 0350 Panel	12/01/00	Open

## Enclosure 1

Item No.	Description	NRC Lead	Inspection Procedure	References	Documentation	ECD	Status
C.6	Coordination with Interested Agencies and Parties						
C.6.e.1	Appropriate state and local officials -FEMA	RIII State Liaison Officer	IMC 0350		Memo to IMC 0350 Panel		Open
C.6.e.2	Appropriate state and local officials -Congressional Affairs	NRR RIII PAO	IMC 0350		RIII PAO to provide press release to OCA		Open
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