



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-8064

JUN - 7 2001

J. H. Swailes, Vice President of
Nuclear Energy
Nebraska Public Power District
P.O. Box 98
Brownville, Nebraska 68321

SUBJECT: SUMMARY OF END-OF-CYCLE ASSESSMENT MEETING FOR COOPER
NUCLEAR STATION

Dear Mr. Swailes:

This refers to the public meeting conducted in the Auburn, Nebraska, on June 4, 2001, between you, your staff, and the NRC. The participants discussed the results of the NRC's end-of-cycle assessment of Cooper performance for the period April 2, 2000, through March 31, 2001.

The presentation included a brief overview of the reactor oversight program by the NRC for the benefit of the public. In addition, the NRC presented the overall assessment results based on inspection findings and performance indicators reported by Cooper.

The attendance list and presentation are enclosed with this summary (Enclosures 1 and 2).

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Reading Room).

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles S. Marschall".

Charles S. Marschall
Project Branch C
Division of Reactor Projects

Docket No.: 50-298
License No.: DPR-46

Enclosures:

1. Attendance List
2. Licensee Presentation

cc w/enclosures:

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Section Chief, DRP/TSS **(PHH)**
RITS Coordinator **(NBH)**
Jim Isom, Pilot Plant Program **(JAI)**
Sampath Malur, Pilot Plant Program **(SKM)**

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RIV:C:DRP/C			
CSMarschall;df			
<i>CSM</i>			
6/7/01			

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ATTENDANCE SHEET END OF CYCLE ASSESSMENT MEETING

NAME	AFFILIATION
FADI DIYA	NPPD/CNS
Michael T. Boyce	NPPD/CNS
John MacKinnon	NPPD / IAG
Bill Leech	Mid American Energy
DAVE MEYERS	NPPD/CNS
R. D. STODDARD	LES
DAVID KUNSEHILLER	NPPD/CNS
Tim Chand	NPPD/CNS
JOHN MARTIN	NPPD / CNS
John McDONALD	NPPD/CNS
Kyle Kriesel	NPPD/CNS
Jennifer Peters	NPPD/CNS
Sony Grant	Public
Eddie R Grant	NPPD/CNS
William Gilbert	USN/NPPD CNS June 11 th
Guy P Horn	NPPD/General office
John Michael R Bartol	NPPD/CNS
Loras A Baumbever	Wenaha County Sheriff
Beth Clark	
ROMAN ESTRADA	NPPD / CNS
Brad Houston	NPPD/CNS
De J. NELSON	NPPD BOARD
C.R. Fidler	NPPD CNS Meet.
Pick Gardner	NPPD / CNS

**ATTENDANCE SHEET
END OF CYCLE ASSESSMENT MEETING**

NAME	AFFILIATION
Jerome A. Ranalli	



NRC Public Meeting

End of Cycle Assessment of Cooper Nuclear Station

Agenda

- Introduction and opening comments - Ken Brockman
- Introduction and opening comments- John Swailes
- Presentation of assessment - Charles Marschall
- Discussion of assessment - NRC and Cooper staff
- Closing remarks - John Swailes
- Closing remarks - Ken Brockman
- Adjourn



Reactor Oversight Process

[Nuclear Reactors](#) | [NRC Home Page](#) | [NRC Site Contents](#) | [Search](#)

Plant
Assessment
Results

NEW ROP
Program
Documents

NEW Initial
Implementation
Evaluation
Panel

ROP "Plain
Language"
Description

Meeting
Notices &
Summaries

Lessons Learned Public Workshop

March 26 - 28, 2001 in Gaithersburg, MD

[Agenda](#)

[Summary Slides from Closing Session](#)

NEW [Meeting Summary](#) NEW

[Federal Register Notice: Request for Public Comment on the First Year of Initial Implementation of the Reactor Oversight Process](#)

Role of the Reactor Oversight Process

The Nuclear Regulatory Commission's (NRC's) mission is to ensure adequate protection of the public health and safety and the environment, as it relates to the peaceful use of nuclear materials in the United States. The agency itself does not operate nuclear power plants. Rather, it regulates the operation of the nation's 103 nuclear power plants by establishing regulatory requirements for the design, construction and operation of such plants. The NRC issues licenses for the plants to operate, licenses the plant operators, and establishes plant specific technical specifications for plant operators to follow to ensure that the plants are operated safely within these requirements.

US NRC Reactor Oversight Process - Plant Assessment Results - Microsoft Internet Explorer

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Address <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html> Go Links

US NRC Reactor Oversight Process

Plant Assessment Results

[PI Summary](#)
[Inspection Findings Summary](#)
[Action Matrix Summary](#)
[Inspection Reports List](#)
[Cornerstones & PI](#)
[Home](#)

- Alphabetical listing of plants
 A B C D F G H I K L M N O
 P Q R S T V W
- Region 1 plants
- Region 2 plants
- Region 3 plants
- Region 4 plants

Alphabetical listing of plants:

- ▲ **A**
 - Arkansas 1
 - Arkansas 2
- ▲ **B**
 - Beaver Valley 1
 - Beaver Valley 2
 - Braidwood 1
 - Braidwood 2
 - Browns Ferry 2
 - Browns Ferry 3
 - Brunswick 1
 - Brunswick 2
 - Byron 1
 - Byron 2
- ▲ **C**
 - Callaway
 - Calvert Cliffs 1
 - Calvert Cliffs 2
 - Catawba 1
 - Catawba 2
 - Clinton
 - Columbia Generating Station
 - Comanche Peak 1
 - Comanche Peak 2
 - Cooper (Pilot Plant)
 - Crystal River 3
- ▲ **D**
 - D.C. Cook 1

New This Quarter

- New format of Action Matrix Summary
- Action Matrix Designation on plant performance summaries

Individual Plant Performance Summaries - Performance information is summarized for each plant and sorted by the seven cornerstones of safety. This information can be viewed by selecting the plant name from the left column (organized alphabetically as well as by the region where the plants are located). For each plant, the current Action Matrix designation is displayed along with the performance indicators (PIs) and a summary of NRC inspection findings. Links are also provided to NRC assessment letters, inspection plans, and inspection reports.

Comprehensive Performance Summary Matrices - The most recent quarterly performance indicator color designations for all plants are summarized in a PI Summary matrix. The most significant inspection finding color designations over the previous 4 quarters for all plants is summarized in an Inspection Findings Summary matrix. Based on the latest applicable performance indicators and inspection findings, the current Action Matrix designation for each plant is available in the Action Matrix Summary. The Action Matrix Summary provides a matrix of the five columns with the plants listed within their applicable column. You can drill down into more detailed information from any of these three summaries.

Background - Both PIs and inspection findings are evaluated and given a color designation based on their safety significance. Green inspection findings or PIs indicate a very low risk significance and therefore have little or no impact on safety. White, yellow, or red inspection findings or PIs each, respectively, represent a greater degree of safety significance.

Cooper Operating Summary

- Refueling/Environmental Qualification Outage
- Automatic trip from full power
 - Main transformer differential current
- Midcycle outage
 - Replace leaking fuel assembly

Cooper Mid-cycle Assessment

October 2000

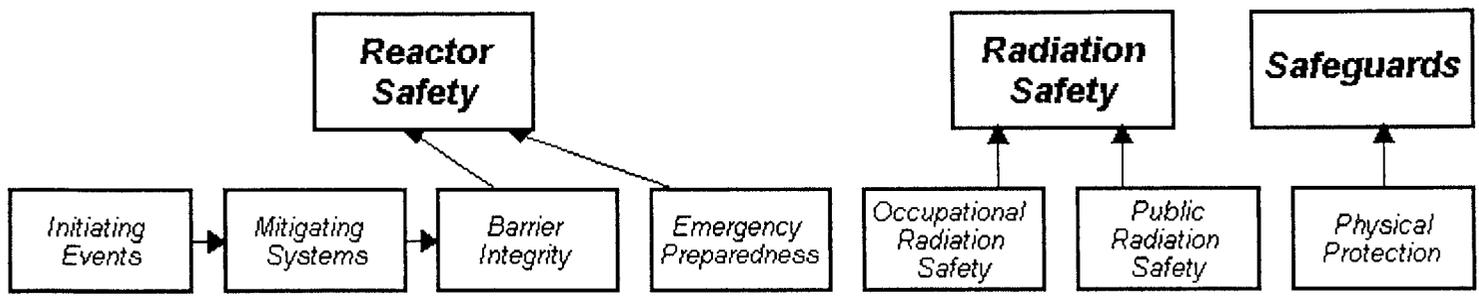
- Licensee Response Column
- Potential Problems in:
 - ▶ Environmental Qualification
 - ▶ Problem Identification and Resolution

Cooper Performance for the Inspection Cycle

Performance Indicators for the most recent quarter

- All in the licensee response band

Cooper 1Q/2001 Performance Summary



Performance Indicators

Unplanned Scrams (G)	Emergency AC Power System Availability (G)	Reactor Coolant System Activity (G)	Onsite Radioactive Performance (G)	Occupational Exposure Control Effectiveness (G)	RETS/EDPM Radiological Effluent (G)	Protected Area Equipment (G)
Scrams with Loss of Normal Heat Removal (G)	High Pressure Injection System Availability (G)	Reactor Coolant System Leakage (G)	Event Audit Participation (G)			Personnel Screening Program (G)
Unplanned Power Changes (G)	Systemic Safety System Availability (G)		Alarm and Notification System (G)			RPD/Personnel Reliability Program (G)
	Residual Heat Removal System Availability (G)					
	Search System Functional (G)					

Cooper Performance for the Inspection Cycle (cont'd)

NRC Inspections findings for the last four quarters

- One white finding in Emergency Preparedness
- Green findings in:
 - ▶ Initiating Events
 - ▶ Mitigating Systems
 - ▶ Barrier Integrity
 - ▶ Occupational Exposure
 - ▶ Safeguards

	Initiating Events	Mitigating Systems	Barrier Integrity	Emergency Preparedness	Occupational Radiation Safety	Public Radiation Safety	Physical Protection
Most Significant Inspection Findings							
1Q/2001	G	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	G
4Q/2000	No findings this quarter	G	No findings this quarter	W (1)	No findings this quarter	No findings this quarter	No findings this quarter
3Q/2000	No findings this quarter	G	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
2Q/2000	G	G	No findings this quarter	No findings this quarter	G	No findings this quarter	No findings this quarter

Miscellaneous findings

Additional Inspection & Assessment Information

☒ Assessment Letters/Inspection Plans:

- 1Q/2001
- 4Q/2000
- 3Q/2000
- 2Q/2000

☒ Inspection Reports

Cooper Performance for the Inspection Cycle (cont'd)

Regulatory Response Column

- Results from White Finding
 - ▶ Performance problem during observed drill
 - ▶ Occurred in fourth quarter 2000
 - ▶ Licensee corrective actions complete
 - ▶ Supplemental inspection complete
- Other inspection findings in Cooper corrective action system
 - ▶ Very low risk significance

1Q/2001 Inspection Findings - Cooper - Microsoft Internet Explorer

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Address http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/CNS/cns_pim.html#EP2nd Go Links >>

Emergency Preparedness

Significance: W Oct 11, 2000
Identified By: NRC
Item Type: AV Apparent Violation

Failure of exercise critique process to identify a risk-significant planning standard problem
IR 05000298-00-16, on 8/28-31/2000, Nebraska Public Power District, Cooper Nuclear Station. Exercise Evaluation. The inspection was conducted by regional inspectors and resident inspectors. This inspection identified one finding. Cornerstone: Emergency Preparedness The formal exercise critique process failed to identify a dose assessment performance problem which caused the issuance of incorrect protective action recommendations for offsite populations. There were three opportunities for protective action recommendations, and only one was performed correctly. During its initial critique, the licensee assessed that three protective action recommendation opportunities had been successfully completed. The issue was preliminarily determined to have low to moderate safety significance because the issue involved a failure of the licensee's critique process to identify a risk-significant emergency preparedness planning standard problem.

Inspection Report# : 2000016(pdf)

Cooper Overall Performance

- Preserved public health and safety
- Met all cornerstone objectives

Reactor Oversight Process

Inspection Findings Summary

Plants	Initiating Events	Mitigating Systems	Barrier Integrity	Emergency Preparedness	Occupational Radiation Safety	Public Radiation Safety	Physical Protection
Comanche Peak 1	Green	Green	No Findings	No Findings	No Findings	Green	No Findings
Comanche Peak 2	Green	Green	No Findings	No Findings	No Findings	Green	No Findings
Cooper	Green	Green	Green	White (1)	Green	No Findings	Green
Crystal River 3	No Findings	Green	No Colors	No Findings	Green	No Findings	Green
D.C. Cook 1	No Findings	Green	No Findings	Green	Green	Green	Green
D.C. Cook 2	No Findings	Green	Green	Green	Green	Green	Green
Davis-Besse	Green	Green	No Findings	No Findings	No Findings	No Findings	No Findings
Diablo Canyon 1	Green	Green	No Findings	Green	Green	Green	Green
Diablo Canyon 2	Green	Green	No Findings	Green	Green	Green	Green
Dresden 2	Green	Green	Green	No Findings	Green	No Findings	Green
Dresden 3	Green	Green	Green	No Findings	Green	No Findings	Green
Duane Arnold	Green	Green	No Findings	No Findings	No Findings	No Findings	Green
Farley 1	Green	Green	No Findings	Green	No Findings	No Findings	No Findings
Farley 2	Green	Green	No Findings	No Findings	No Findings	No Findings	No Findings
Fermi 2	No Findings	Green	No Findings	No Findings	No Findings	No Findings	No Findings
FitzPatrick	Green	Green	Green	Green	Green	No Findings	Green
Fort Calhoun	Green	Green	No Findings	No Colors	Green	No Findings	No Findings
Ginna	No Findings	Green	Green	No Colors	No Findings	Green	No Findings
Grand Gulf 1	Green	Green	No Findings	No Findings	Green	No Findings	No Findings
Harris 1	Green	White (1)	Green	No Findings	No Findings	No Findings	No Findings
Hatch 1	Green	Green	Green	No Findings	No Findings	No Findings	Green
Hatch 2	Green	Green	No Findings	No Findings	No Findings	No Findings	No Findings
Hope Creek 1	No Findings	Green	Green	No Findings	Green	No Findings	No Findings

The assessment program collects information from inspections and performance indicators (PIs) in order to enable the agency to arrive at objective conclusions about the licensee's safety performance. Based on this assessment information, the NRC determines the appropriate level of agency response, including supplemental inspection and pertinent regulatory actions ranging from management meetings up to and including orders for plant shutdown. The Action Matrix Summary listed below reflects overall plant performance and is updated regularly to reflect inputs from the most recent performance indicators and inspection findings. Notes have been added to some plants to explain the reasons that these plants have changed Action Matrix columns from the previous quarter. Plant oversight for D.C. Cook 1 and D.C. Cook 2 is being conducted in accordance with IMC 0350 "Oversight of Operating Reactor Facilities in Shutdown Condition with Performance Problems" and is not listed below. This page will be updated as necessary to reflect changes in licensee performance.

Licensee Response Column	Regulatory Response Column	Degraded Cornerstone Column	Multiple/Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
Arkansas Nuclear 1	Calvert Cliffs 1	Callaway	Indian Point 2	
Arkansas Nuclear 2	Cooper	Kewaunee		
Beaver Valley 1	Fermi 2 ¹	Millstone 2		
Beaver Valley 2	FitzPatrick			
Braidwood 1	Harris 1 ²			
Braidwood 2	North Anna 2 ³			
Browns Ferry 2	Oconee 1			
Browns Ferry 3	Point Beach 1			
Brunswick 1	Prairie Island 1 ⁴			
Brunswick 2	Prairie Island 2 ⁵			
Byron 1	Quad Cities 1 ⁶			
Byron 2	Quad Cities 2 ⁷			
Calvert Cliffs 2	Summer ⁸			
Catawba 1	Susquehanna 1 ⁹			
Catawba 2	Susquehanna 2 ¹⁰			
Clinton				

Cooper Overall Performance (cont'd)

Potential Safety Significant Inspection Finding

- Numerous degraded environmental qualification treatments
 - ▶ Initially identified as a potential YELLOW finding
 - ▶ Regulatory conference held
 - ▶ Final disposition pending

Cooper Performance Assessment

Potential Adverse Trends

- Weak Problem Identification
- Human Performance Problems