



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

April 22, 2003

Clay C. Warren, Vice President of
Nuclear Energy
Nebraska Public Power District
P.O. Box 98
Brownville, Nebraska 68321

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

Dear Mr. Warren:

This refers to the end-of-cycle performance assessment meeting conducted at the Brownville Concert Hall, Brownville, Nebraska, on April 8, 2003. The purpose of this meeting between the Nuclear Regulatory Commission (NRC) and Nebraska Public Power District (NPPD) was to present and discuss the NRC's assessment of performance at Cooper Nuclear Station for the period of January 1 through December 31, 2002. In addition, the meeting included a presentation on the NRC's oversight process.

The meeting attendance list and a copy of the slides presented during the meeting are included as Enclosures 1 through 3.

Following the meeting, your staff informed us that there was an error in the NPPD slide presentation and provided a corrected slide. The original NPPD slide presentation, and the corrected slide, are included in Enclosure 3. In addition, an error was identified in the NRC slide titled "Human Performance." This slide stated that human performance errors resulted in the unplanned intake of radioactive material by three workers. However, although three workers were not informed of the contamination levels, airborne radiological conditions, and the potential for creating an airborne area prior to the start of their task; only one of these individuals received an unplanned intake of radioactive material (NRC Inspection Report 50-298/01-08, dated May 3, 2002).

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be available electronically for public inspection in the NRC's 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/reading-rm/adams/index.html> (the Public Electronic Reading Room).

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

Sincerely,



Kriss M. Kennedy, Chief
Project Branch F
Division of Reactor Projects

Docket: 50-298
License: DPR-46

Enclosures:

1. Attendance List
2. NRC Presentation Slides
3. NPPD Presentation Slides

cc w/enclosures:

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Site Vice President
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Nebraska Public Power District
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Lincoln, Nebraska 68509-8922

Chairman
Nemaha County Board of Commissioners
Nemaha County Courthouse
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Auburn, Nebraska 68305

Sue Semerena, Section Administrator
Nebraska Health and Human Services System
Division of Public Health Assurance
Consumer Services Section
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Lincoln, Nebraska 68509-5007

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Department of Natural Resources
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Jefferson City, Missouri 65101

Jerry Uhlmann, Director
State Emergency Management Agency
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Jefferson City, Missouri 65101

Vick L. Cooper, Chief
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Kansas Department of Health
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Des Moines, Iowa 50309

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and Chief Executive Officer
Nebraska Public Power District
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Columbus, Nebraska 68601

Marlin Logan
Presiding Commissioner
Atchison County
P.O. Box 280
Rock Port, Missouri 64482

Nebraska Public Power District

-4-

Dennis Martin, Sheriff
Atchison County Sheriff's Office
511 West Clay
Rock Port, Missouri 64482

Loras Baumhover, Sheriff
1805 N Street
Auburn, Nebraska 68305

Dick Hainje, Regional Director
Federal Emergency Management Agency
Region VII
2323 Grand Blvd., Suite 900
Kansas City, Missouri 64108-2670

Gary McNutt, Director,
Radiation Control Program
Section for Environmental Public Health
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Jefferson City, Missouri 65102-0570

Robert Leopold, State Liaison Officer
Nebraska Health and Human Services
Department of Regulation and
Licensure Assurance
301 Centennial Mall, South
P.O. Box 95007
Lincoln, Nebraska 68509-5007

ENCLOSURE 1
ATTENDANCE LIST

MEETING ATTENDANCE

| | |
|----------------------------|---|
| LICENSEE/FACILITY | Nebraska Public Power District Cooper Nuclear Station |
| DATE/TIME | April 8, 2003; 7:00 p.m. |
| LOCATION | Brownville Concert Hall Atlantic Ave and Second St Brownville, Nebraska 68321 |
| NAME (PLEASE PRINT) | ORGANIZATION |
| Marcia Cady | NPPD |
| Julia Schmidt | NE HHS R+L |
| Jon Schwank | NE EMERG. VIC-MT AGENCY |
| Dennis Colsden | " " |
| John Nixon | KLZA Radio Falls Co. MO |
| DAVID KUNSEMIILLER | NPPD - CNS |
| PIERRE F. INGOLD | CONSULTANT |
| LISA EDWARDS | NPPD |
| JEFF EDWARDS | NPPD |
| JOE MOORE | NPPD |
| ROMAN ESTRADA | NPPD |
| M. KLEIN | PUBLIC |
| JIM SUMPTER | NPPD |

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| NAME (PLEASE PRINT) | ORGANIZATION |
| GARY KLINE | NPPD |
| DAVID MONTGOMERY | NPPD |
| Dorlene Weed | NPPD |
| Ken H. Neuman | Auburn Newspapers |
| JOHN CHANEY | AUBURN STATE BANK |
| DAVID PIPPERT | Auburn Development Comm. |
| Dr. J.C. Hausman | Auburn Citizens |
| Kim Liebig | NPPD |
| Tom Pillew | NPPD |
| Marg Coulter | NPPD. |
| BJ Shubert | CNS |
| R COOPER | NPPD |
| Tom Penderexter | Winston & Strawn for NPPD |

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| NAME (PLEASE PRINT) | ORGANIZATION |
| JIM HUTTON | NPPD |
| Trent Nelson | Nebraska City News Press |
| M.T. COYLE | CNS |
| TJ PALMSANT | CNS |
| V.R. ROPPEL | CNS |
| DAVE MEYERS | NPPD |
| AL PASSEWATER | POLESTAR |
| Robert G. ... | Consultant |
| John ... | NPPD |
| PV FLEMING | CNS |
| N. Robinson | NPPD-CNS |
| Joe Bednar | NPPD - CNS |
| Beth Boesch | NPPD - Columbus |

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| NAME (PLEASE PRINT) | ORGANIZATION |
|----------------------------|-------------------------|
| Darrell Wellman | Auburn newspapers |
| GARY THOMPSON | NPPD Board |
| John Michael DeBartolo | CNS / NPPD |
| Bob ENGLES | Auburn City Govt |
| LaVerne Wheeler | Brownville, Ne |
| Steven Cochrum | Auburn, NE |
| Steven Cochrum | Auburn, NE Joan Cochrum |
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ENCLOSURE 2
NRC PRESENTATION SLIDES

ANNUAL ASSESSMENT MEETING WITH COOPER NUCLEAR STATION



Nuclear Regulatory Commission
Region IV



Meeting Purpose

- Meeting with Licensee and Public
- Inform Public of Plant Performance



NRC Meeting Guidelines

- Registration Table
- Questions and Answers
- Handouts
- Feedback Forms



Meeting Agenda

- Regulatory Oversight
- Findings and Assessments
- NPPD Response
- Questions and Answers



NRC Personnel

William Kane Deputy Executive Director
for Reactor Programs

Ellis Merschoff Regional Administrator

Kriss Kennedy Chief, Branch F
Division of Reactor Projects

Scott Schwind Senior Resident Inspector
Cooper Nuclear Station



NRC Personnel

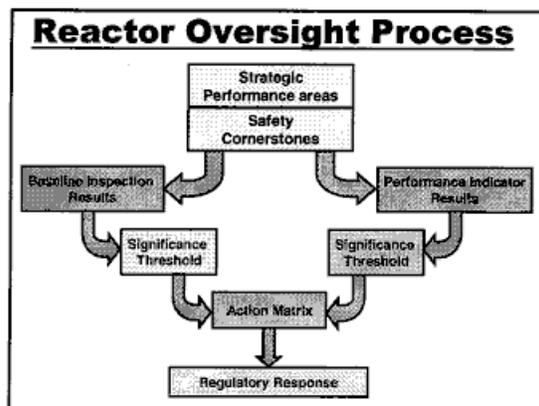
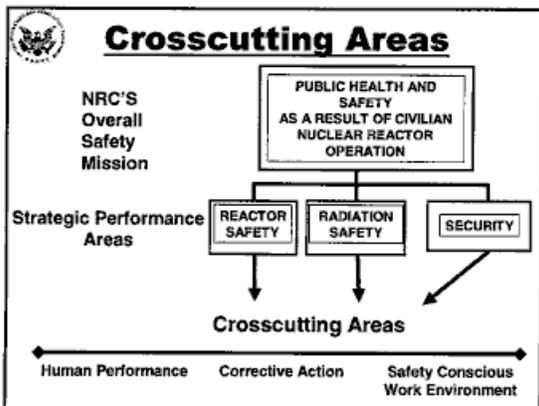
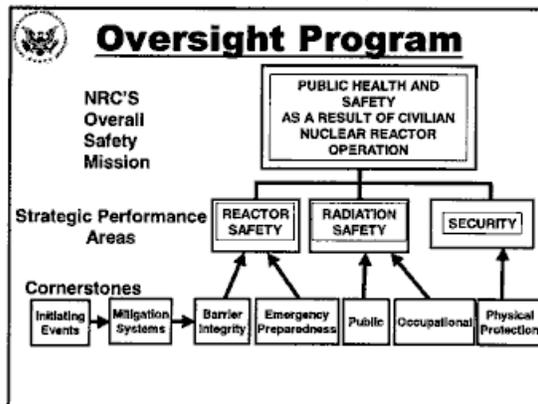
Tim McGinty Regional Coordinator
Office of the EDO

Victor Dricks Region IV Public Affairs
Officer

NPPD Introduction

- NRC Performance Goals**
- Maintain safety and protect environment
 - Enhance public confidence
 - Improve:
 - effectiveness
 - efficiency
 - realism of processes and decision making
 - Reduce unnecessary regulatory burden

- NRC Oversight Activities**
- Provide assurance plants are:
 - Operating safely
 - Complying with regulations
 - Based on a logical and sound framework
 - Inspections focused on key safety areas
 - Objective indicators of performance
 - Assessment program triggers regulatory actions





Reactor Oversight Process

SAFETY SIGNIFICANCE

| | |
|---------------|-------------------|
| GREEN | - very low |
| WHITE | - low to moderate |
| YELLOW | - substantial |
| BLACK | - high |



Baseline Inspection Program

- Gathers objective evidence of plant safety
- Conducted at all plants
- Focuses on safety-significant:
 - Systems
 - Components
 - Activities
 - Events



Event Follow-Up and Supplemental Inspections

- Review events for significance
- Follow-up significant inspection findings
- Determine causes of performance declines
- Provide for graduated response



Additional Focus Areas

- NRC Responds As-Needed
- Mandated Licensee Actions
- Implemented Emergency Response



Security & Safeguards

- Creation of Office of Nuclear Security and Incident Response
- Top-to-Bottom Review of Security Program Initiated
- Issuance of Orders/Interim Compensatory Measures (ICMs)
- Verification of Licensee Actions on ICMs



Security & Safeguards

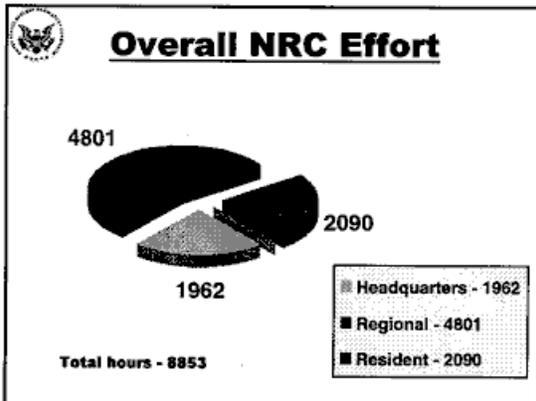
- Proposed Revisions to Design Basis Threats
- Pending Orders on Fatigue/Guard Training
- Initiation of Pilot Program for Force-on-Force Exercises
- Issuance of Access Authorization Order

 **Resident Inspectors**

- Live in Community
- Stationed at Plant
- Prompt Response Capability

 **Regional Inspectors**

- Specialized
- Team Inspections
- Reactive Inspections



 **Inspection Program**

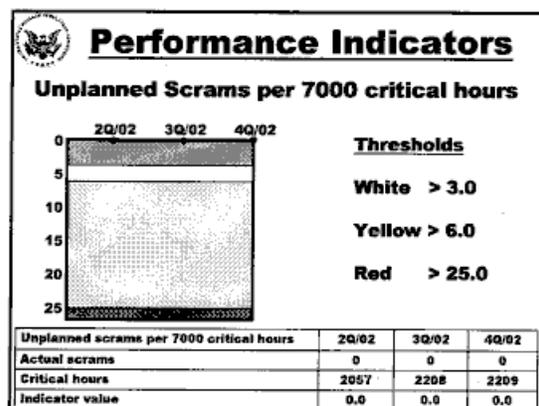
- Inspection reports describe significant findings and non-compliance
- Inspection reports are publicly accessible

www.NRC.gov/reading-rm/adams.html

 **Performance Indicators**

- Provide objective measures
- Indicators for all Strategic Areas
- NRC verifies through inspections
- Performance indicator results and other assessment information available on the NRC's public web site

www.NRC.gov/NRR/OVERSIGHT/ASSESS/CNS/cns_chart.html



Assessment Program

- Objective review of licensee performance
- "Action Matrix" to determine agency response in three areas:
 - Inspection
 - Management Involvement
 - Regulatory Actions
- Plant specific assessment letters
- Information on NRC public web site

Action Matrix

| | Licensee Response Column | Regulatory Response Column | Degraded Cornerstone Column | Multiple/Repetitive Degraded Cornerstone Column | Unacceptable Performance Column |
|----------------------|---|---|--|--|--|
| RESULTS | All Licensees meet Performance Indicators (PI) and Inspection Findings (IF) are Green | Three Top White (TW) (Critical Cornerstone) and One Orange (OC) (Performance Indicators) Licensee | One White (W) (Critical Cornerstone) and One Orange (OC) (Performance Indicators) Licensee | One White (W) (Critical Cornerstone) and One Orange (OC) (Performance Indicators) Licensee | One White (W) (Critical Cornerstone) and One Orange (OC) (Performance Indicators) Licensee |
| REGULATORY | None | None | None | None | None |
| MANAGEMENT | None | None | None | None | None |
| COMMUNICATION | None | None | None | None | None |

Note 1: The regulatory actions to plants in the Multiple/Repetitive Degraded Cornerstone column are not necessarily agency actions. However, the regional office should consider each of these regulatory actions when significant new information regarding licensee performance becomes available.

ROP Action Matrix 4Q 2002

| | Licensee Response | Regulatory | Degraded Cornerstone | Multiple/Repetitive Degraded Cornerstone | Unacceptable Performance |
|------------|-------------------|------------|----------------------|--|--------------------------|
| Nationwide | 74 | 25 | 2 | 1 | 0 |
| Region IV | 15 | 5 | 0 | 1 | 0 |

Plant Safety Performance Summary

Assessment Overview

- Cooper Nuclear Station operated in manner that preserved public health and safety
- All Performance Indicators for 2002 were Green
- All inspection findings identified in 2002 were of very low safety significance
- Problems implementing emergency preparedness plan, identified in 2001, resulted in significant increase in regulatory oversight in 2002
- Recurring problems with personnel errors and corrective action program

Assessment

- Began assessment period in Degraded Cornerstone Column of Action Matrix
- Three White inspection findings in Emergency Preparedness
 - Ineffective corrective actions
 - Untimely notification of State and County agencies
 - Untimely activation of CNS emergency response facilities
- Findings identified in 2001
- Discussed in 2001 assessment letter



NRC Response

- Supplemental inspection conducted April 2002
- NPPD did not identify and assess all contributing causes to EP program breakdown
- White findings remained open



Assessment

- CNS entered Multiple/Repetitive Degraded Cornerstone Column of Action Matrix in April 2002
- Degraded EP cornerstone for greater than four quarters



NRC Response

- NRC oversight of NPPD's improvement plan
- Supplemental inspection conducted June/July 2002
 - 13-member team from 3 NRC Regions and Headquarters
 - Three weeks onsite inspection
 - Most comprehensive supplemental inspection in inspection program



NRC Response

- Results
 - NPPD unsuccessful in previous efforts to improve
 - CNS unable to correct recurring performance issues
 - Reliability of safety systems
 - Personnel errors
 - Implementation of emergency plan
 - Engineering
 - Training
 - Maintenance
 - Improvement plan lacked actions to address recurring equipment problems
 - Improvement plan not comprehensive in addressing problems with corrective action program



NRC Response

- NRC Executive Director of Operations and Region IV Regional Administrator met with NPPD Board in August 2002
- NPPD revised and submitted Revision 2 of improvement plan in November 2002



Assessment

- White inspection finding in Mitigating Systems Cornerstone identified in 2001, finalized in 2002
- Failure to take immediate compensatory actions following identification of a compromise of the biennial requalification written exams
- Supplemental inspection conducted April 2002
 - NPPD took appropriate corrective actions
 - Finding closed in 3Q 2002



Crosscutting Issues

- **NRC identified continued problems**
 - **Human Performance**
 - **Problem Identification and Resolution**



Human Performance

- **Personnel performance issues and errors contributed to a number of inspection findings**
- **Issue in 2001 assessment**
- **Human performance errors resulted in:**
 - **Unplanned loss of power to effluent radiation monitors**
 - **Unplanned intake of radioactive material by three workers**



Problem Identification and Resolution

- **Continuing problems with identifying and correcting plant problems**
- **Issue in 2001 assessment**
- **Ineffective corrective actions for White findings in Emergency Preparedness**
- **Improvement plan did not contain action to correct some recurring equipment problems**
- **Improvement plan was not comprehensive in addressing problems with the corrective action program**



Confirmatory Action Letter

- **NRC issues Confirmatory Action Letter in January 2003**
- **Confirm NPPD commitments regarding completion of improvement plan actions**
- **Confirmatory Action Letter addresses long-standing performance issues**
 - **Emergency preparedness**
 - **Human performance**
 - **Material condition and equipment reliability**
 - **Plant modifications and configuration control**
 - **Corrective action program**
 - **Engineering programs**



Confirmatory Action Letter

- **Includes over 250 actions from Cooper's improvement plan**
- **Completion dates listed in letter**
- **CAL items scheduled for implementation through March 2004**
- **Quarterly inspections of CAL**
- **Quarterly public meetings**



Summary

- **Public Health and Safety Assured**
- **CNS in Multiple/Repetitive Degraded Cornerstone Column of Action Matrix**
- **NRC oversight of NPPD improvement plan**
- **Confirmatory Action Letter**
- **Quarterly inspections**



NPPD RESPONSE



NRC CLOSING REMARKS



Contacting the NRC

- **Report an Emergency:**
(301) 816-5100 (collect)
- **Report a Safety Concern:**
(800) 695-7403 or Allegation@nrc.gov
- **General Information or questions:**
www.nrc.gov
Select "What we do" for Public Affairs



Contacts for Additional Information

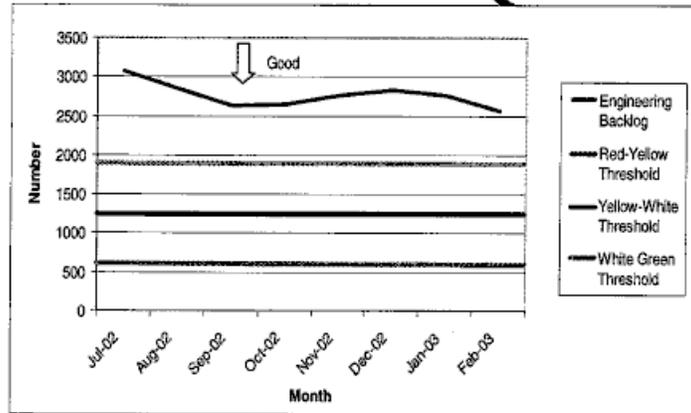
- **Regional Public Affairs Officer**
 - **Victor Dricks**
 - **Phone: (817) 860 - 8128**
- **State Liaison Officer**
 - **William (Bill) Maier**
 - **Phone: (817) 860 - 8267**



Questions and Answers

ENCLOSURE 3
NPPD PRESENTATION SLIDES
(and corrected slide)

Engineering Work Backlog



(corrected slide)

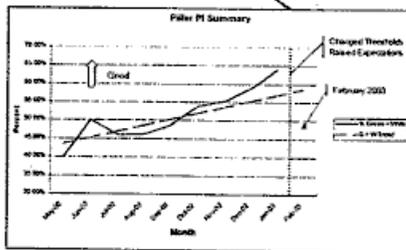
Nebraska Public Power District

Annual Performance Assessment

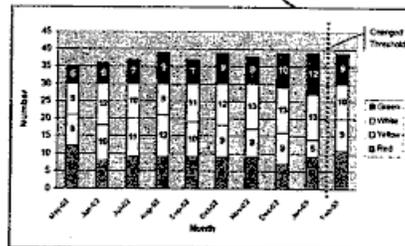
Agenda

- Opening Remarks Bill Farman
- Introduction Clay Warren
- Emergency Preparedness Mike Coyle
- Human Performance Jim Hutton
- Corrective Action Program Tom Palmisano
- Closing Remarks Clay Warren

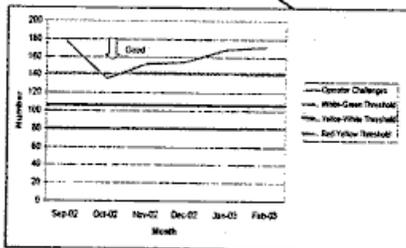
Overall Performance Improvement



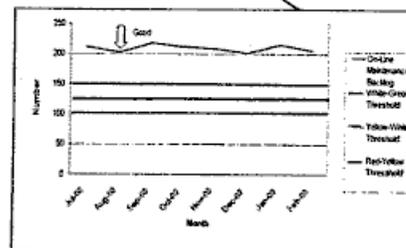
Performance Indicator (PI) Summary



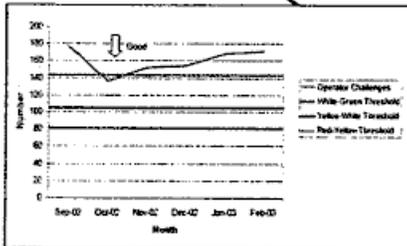
Operator Challenges



On-Line Maintenance Backlog



Engineering Work Backlog



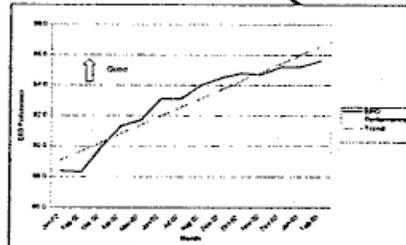
Emergency Preparedness (EP)

- Significant progress in 2002
- Robust TIP action plan
- Results of drill, inspection, assessments
- Improved use of corrective action
- White Finding issues successfully addressed

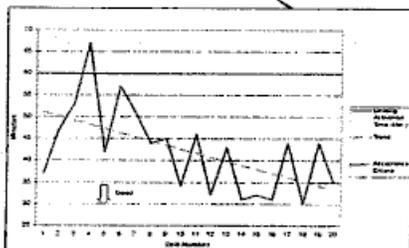
Management Commitment to EP

- Significant commitment of resources
- Strong site leadership presence in Emergency Response Organization (ERO)
- Positive trends in key performance indicators
 - ERO performance
 - ERO staff augmentation time

Emergency Response Organization (ERO) Performance



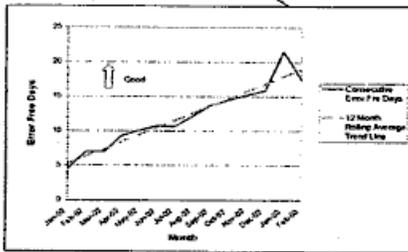
ERO Staff Augmentation Time



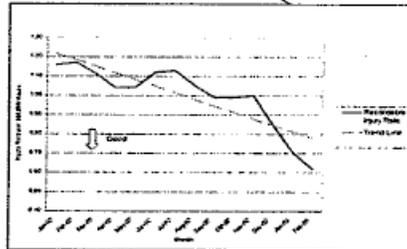
Human Performance

- Declining performance arrested
 - Human Error Free Days
 - OSHA Recordable Injury Rate
- Long-term positive trend
 - Individual issues will be promptly addressed
- RFO 21 performance improved
- Constant reinforcement of standards

Human Error Free Days



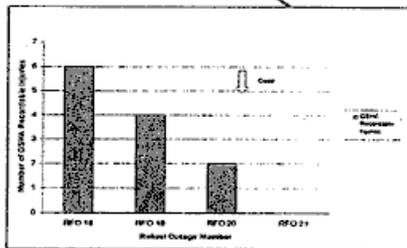
OSHA Recordable Injury Rate



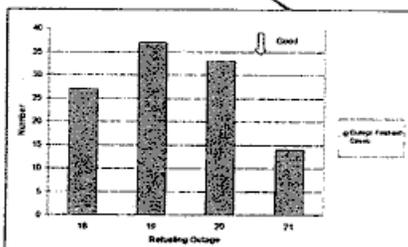
Refueling Outage Performance

- Completed 12,300 of 14,500 outage activities through April 6th
 - Includes 3000 emergent activities
 - Cancelled activities less than 3% of total scope
- Outage dose significantly improved
 - Almost 25 person-REM less than last outage
 - More work accomplished this outage
- Industrial safety has improved

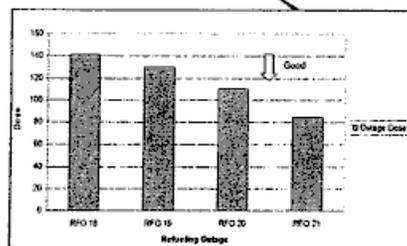
OSHA Recordable Injuries



Outage First-aid Cases



Outage Dose



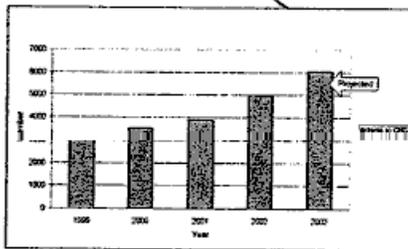
Corrective Action Program (CAP)

- Focus on continuing CAP improvements
- Improved management oversight of CAP
 - Expectations and Accountability
 - Plant Manager chairs CRG
 - Site VP chairs CARB
 - Grading root cause analyses
 - Review of Department quarterly assessments
 - Review of Trend Reports

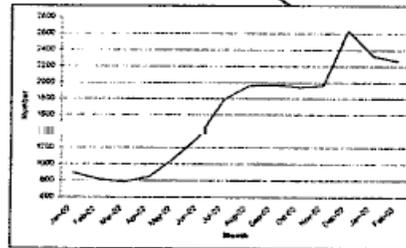
CAP Improvements

- Improved line management ownership
- Improved use of trending
- Root cause improvements
- Self-Assessment actions in CAP
- TIP implemented through CAP
 - Complete actions, monitor results, sustain performance

Condition Report Generation Rate



CAP Open Items



Closing Remarks

- Not satisfied
- Good Plan
- Committed to Success