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

August 23, 2004

Randall K. Edington, Vice
President-Nuclear and CNO
Nebraska Public Power District
P.O. Box 98
Brownville, NE 68321

SUBJECT: SUMMARY OF THE MEETING WITH NEBRASKA PUBLIC POWER DISTRICT (NPPD) TO DISCUSS THE RESULTS OF THEIR SELF-ASSESSMENT REGARDING CONFIRMATORY ACTION LETTER (4-03-001) COMMITMENTS

Dear Mr. Edington:

This refers to the meeting conducted at the NRC Region IV office in Arlington, Texas, on August 18, 2004. The purpose of this meeting was to discuss the results of the Nebraska Public Power District's self-assessment of their progress in completing the actions of the NRC Confirmatory Action Letter issued on January 30, 2003.

In addition discussions were held to better understand NPPD's plans for requesting NRC closure of the Confirmatory Action Letter commitments. The meeting focused on the self assessment results in the six areas specified in the NRC Confirmatory Action Letter (i.e., emergency preparedness, human performance, equipment reliabilty, plant modifications, corrective action program, and engineering programs). The attendance list and presentation slides are enclosed.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," 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/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

Wayne C Walker for

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

Docket: 50-298
License: DPR-46

Enclosures:
1. Attendance List
2. NPPD Presentation Slides

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Electronic distribution by RIV:
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DRP Director **(ATH)**
DRS Director **(DDC)**
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Branch Chief, DRP/C **(KMK)**
Senior Project Engineer, DRP/C **(WCW)**
Staff Chief, DRP/TSS **(PHH)**
RITS Coordinator **(KEG)**
RidsNrrDipmLipb

ADAMS: ☒ Yes ☐ No Initials: RVA
☒ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☒ Non-Sensitive

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RIV:PE:DRP/C	C:DRP/C			
RVAzzalardo	KMKennedy			
	WC Walker for			
8/20/04	8/23/04			

OFFICIAL RECORD COPY T=Telephone E=E-mail F=Fax

NRC PUBLIC MEETING ATTENDANCE

LICENSEE/FACILITY	Nebraska Public Power District Cooper Nuclear Station
DATE/TIME	August 18, 2004; 12:00 Noon (CST)
LOCATION	Training Conference Room Region IV Office

NAME (PLEASE PRINT)	ORGANIZATION
WAYNE C WALKER	USNRC, RIV
Scott Schwind	USNRC, SRI - Cooper
Kriss Kennedy	USNRC, RIV
Art Howell	USNRC, RIV
Dwight Chamberlain	USNRC, RIV
Bruce Mallett	USNRC, RIV
Jared Nadel	USNRC, RIV

NRC PUBLIC MEETING ATTENDANCE

LICENSEE/FACILITY	Nebraska Public Power District Cooper Nuclear Station
DATE/TIME	August 18, 2004; 12:00 Noon (CST)
LOCATION	Training Conference Room Region IV Office

NAME (PLEASE PRINT)	**ORGANIZATION**
John McCann	Entergy Nuclear Northeast
Jim Sumpter	[redacted] NPPD
Jerry C Roberts	NPPD
[illegible]	NPPD
Randy Edington	NPPD/CNS VP/CNS
Gary Kline	NPPD
Mike Boyce	NPPD

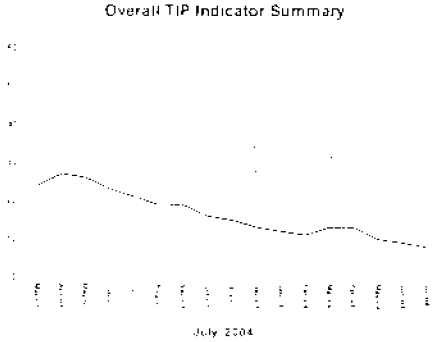
ENCLOSURE 2

Confirmatory Action Letter (CAL) Closure

Cooper Nuclear Station
August 18, 2004

Randy Edington

Vice President-Nuclear,
Chief Nuclear Officer



Agenda

• CAL Assessment	Jerry Roberts
• Equipment Reliability	Gary Kline
• Corrective Action Program	Mike Boyce
• Human Performance	Stu Minahan
• Summary	Randy Edington

Jerry Roberts

Director of Nuclear Safety Assurance

CAL Closure

- CAL Items Completed
- Performance Improvement
- Completed CAL Assessment
- Sustainability

CAL Assessment

- Scope
  - 6 CAL focus areas
  - Status of CAL 19 items
- Methodology
  - Independent Team
    - Primarily Entergy Supervisors/Managers
  - NRC Shadow Team

CAL Assessment

- Objectives:
  - Confirm completed CAL-related actions
  - Determine extent to which CNS addressed CAL-related problem statements, and whether performance has improved in the 6 CAL focus areas
  - Evaluate past significant challenges/events

CAL Assessment

- Objectives
  - Evaluate actions above and beyond CAL
    Evaluate sustainability
  - Strengths, Areas for Improvement, and Observations
  - Rate measures of effectiveness

CAL Assessment Summary Matrix

CAL Focus Areas						
Actual Effectiveness						
Less Effective Measures	1/7	1/3	0/2	0/5	2/6	3/3
Largely Effective Measures	3/7	1/3	0/2	5/5	3/6	0/3
Marginally Effective Measures	3/7	1/3	2/2	0/5	1/6	0/3
Needs Improvement	1/6	3/6	3/6	0/6	1/6	0/6
Overall Rating	5/36	6/36	5/36	6/36	6/36	6/36

CAL Assessment Results

- Emergency Plan
- Engineering Programs
- Configuration Management

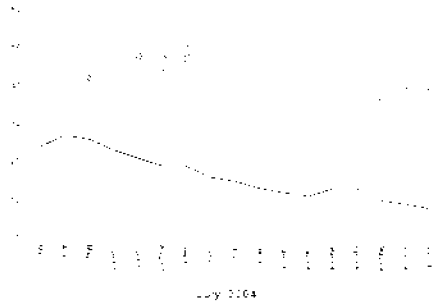
CAL Assessment Results – Configuration Management

- AFI – "Several recent root cause analyses identified errors that indicated less than adequate rigor and quality of engineering deliverables"
- Immediate Actions
  - All Hands Meetings
    Continuing Training
- On-going Actions
  - Engineering Human Performance Trainer

CAL Assessment Results

- Relationship of Assessment to CAL Release
  - Sustainability of performance evaluated, considering elements of "infrastructure" and "management commitment"
  - Assessment verifies that CNS has the infrastructure, monitoring, improvements and sustainability to close the CAL

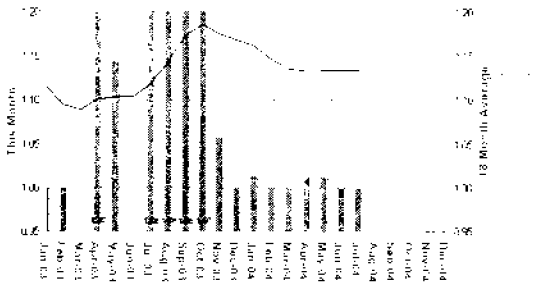
Overall TIP Indicator Summary



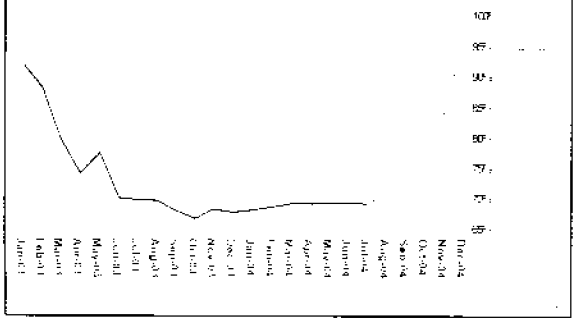
TIP Performance Indicators

- 52 TIP PI's
- 5 Yellow
- 3 Red
- 7 of 8 influenced by plant equipment and historical operations
- NRC PI's – all Green

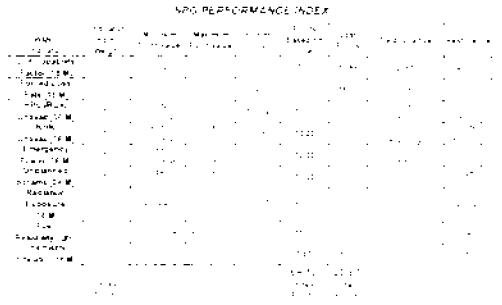
Chemistry Performance Index



INPO Performance Index



INPO Performance Index

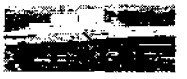


TIP Performance Indicators Conclusion

- 7 of 8 Yellow or Red indicators influenced by plant equipment and historical operations
- Improve Equipment Reliability
- Indicators Active
- Thresholds
- NRC PI's Green

Gary Kline

Director of Engineering



Agenda

- Equipment Reliability before CAL
- CAL/TIP Status
- Equipment Reliability Assessment
- Station Initiatives
- System Materiel Condition
- Performance Indicators and Trends
- Sustainability
- Conclusions

Equipment Reliability Before CAL

- No Performance Monitoring
- Undefined poorly implemented PdM
- No long-term focus beyond 2004
- Incomplete poorly implemented BOP PM Program
- Poor troubleshooting/equipment Root Cause
- Lack of station focus on reliability

Equipment Reliability Before CAL

- System Engineering off mission
- Minimized investment in materiel condition
- Lacked direction/focus to kill problems
- Lacked tools to effectively obtain and use data

CAL/TIP Status

• AP-913 PM Optimization	On Schedule
• Service Water	Complete RE22
• Feedwater Check Valves	Accelerated
• Offsite Power/Switchyard	Final Assessment
• Feedwater Controls	Open
• Water Sulfates	On Schedule
• HVAC	On Schedule
• Primary Containment VAC Breakers	Post RE22 Final Assessment

CAL/TIP Status

- Control Room Recorders — On Schedule
- Air Systems — Accelerated
- KAMAN — On Schedule
- Optimized Water Chemistry — On Schedule

Equipment Reliability Assessment

- CAL Closure Assessment Rating – Marginally Effective
  - Improving trend, including materiel condition
  - Areas with performance shortfalls exist

Equipment Reliability Assessment

- Improvement and Sustainability based on
  - Comprehensive plan to develop and establish infrastructure per AP-913 – currently on schedule
  - Rigorous management and monitoring of plan implementation
  - Dedicated focus by Engineering Reliability Group
  - Additional focus on equipment reliability maintained through Business Plan and Top Ten Technical Issues List

AP-913 Equipment Reliability Improvement Plan

- Critical Component Identification — Complete
- Function Equipment Grouping — Complete
- PMO Project Completion Schedule.

Phase 1	PM Strategy	12/31/04
Phase 2	Develop Work Instr.	3/31/05
Phase 3	Final Review and Scheduled	5/31/05

Assessment AFI's

AFI A-1 Implement Template for Improved Apparent Cause Analysis	Complete
AFI C-1 Accelerated Review of PO1 List & PMs	Complete
Schedule Identified Items Near Term Risk	5/23/04
AFI C-1 Accelerated Review of PO1 List & PMs	5/30/04
Schedule Identified Items Near Term Risk	6/13/04

Assessment AFI's (cont)

AFI C-2 Review PO1 Functional Locations Against Current Monitoring Plans	6/30/04
AFI C-3 Review PO1 List Versus Perf List	Complete
Implement New Perf. Monitoring	Complete

Equipment Reliability Assessment

Organizational Usage of PC1

- Used to prioritize work in System Week
- Used by Condition Review Group for proper evaluation, Extent of Condition, and Interim Actions
- Used by Outage Preparation Team for scoping decisions

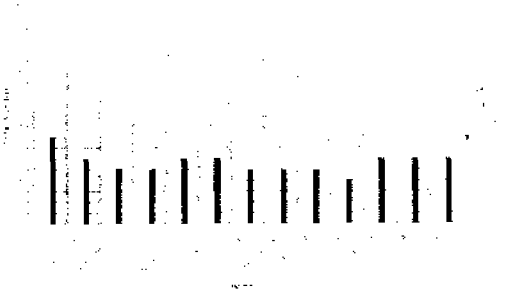
Station Initiatives

- ER Focus to Refueling 22 Scoping
- ER Focus to Refueling 23 Scoping
- Large Equipment Strategic Refurbishment Plan
- Equipment Training
- Zero Tolerance Campaign
- Top 10 List Evolution
- Entergy Common Initiatives

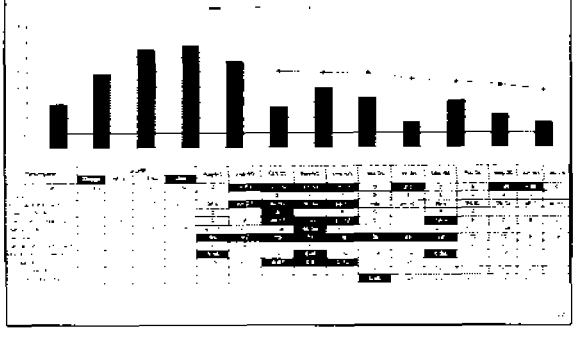
System Materiel Condition

- 6 Red Systems
- 3 Yellow Systems
- 33 White / Green Systems
- Overall Current PI Yellow
- Projected Overall PI Turn White - RE22

System Health



Equipment Reliability Index



RED Systems

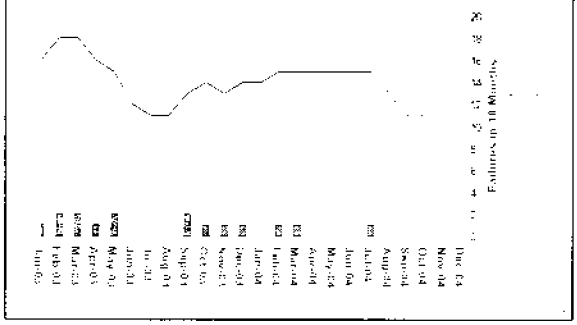
• HVAC	Yellow	RE22	MODs, OPs * Work-arounds
• DG	Green	RE22	Tank Coating, a(2) Level Switches
• RFC	White	RE23	Phase II, Phase III
• TG	White	5:05	Vapor Extractor/ Blades/Oil Clean-up

* Chiller Margin

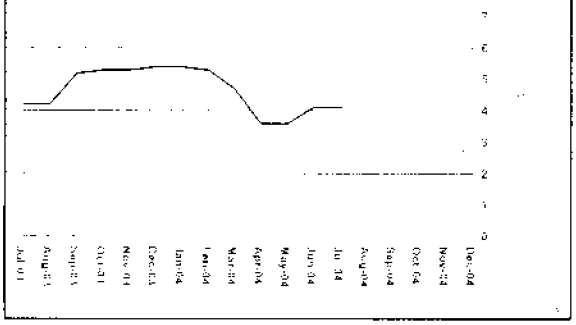
RED Systems

- ES Green 8:05 Valve Overhaul and Monitor
- RF White RE22 Copper Line Replace. Logic Mod. Trip CRT
- Yellow Systems – All White by RE22

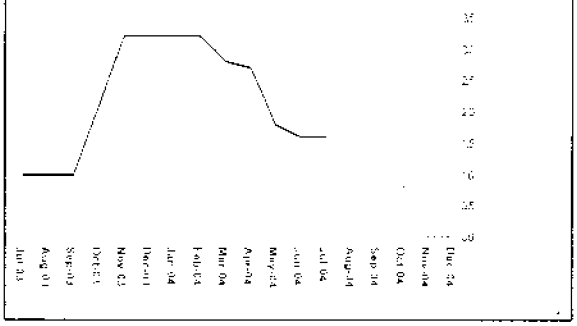
Risk Significant Functional Failures



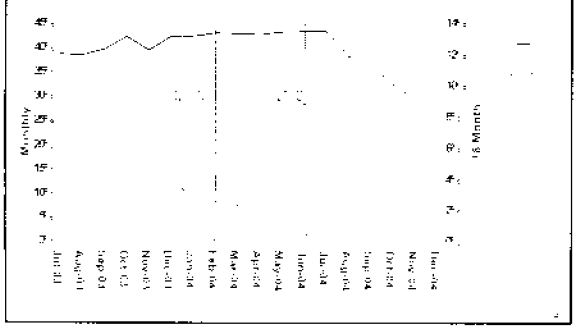
Unplanned Power Changes per 7000 Critical Hours



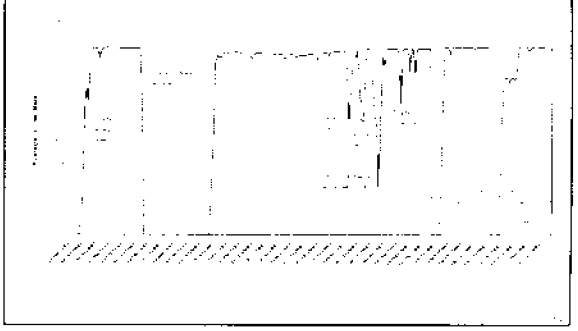
Unplanned Auto & Manual Scrams per 7000 Critical Hours



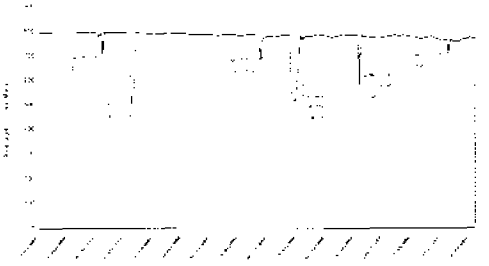
Forced Loss Rate



2003 Daily Average Power History

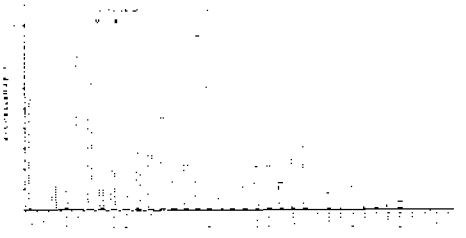


2004 Daily Average Power History



New SW System Equipment Reliability Corrective Maintenance Orders by Month

KAMAN Unavailability



Future Efforts

- Expand Instrumentation Backbone
- Single Failure Analysis
- Refine Engineering Organizational Structure
- Acoustic and L.E.M. Technologies
- Fleet System / Component Initiatives

Non-TIP Projects

- Traveling Screens
- Trash Racks / Rake
- Ronan
- AOG Upgrades
- Heater Bay Cable Replacement
- Service Water Gland System Upgrades
- Top 10 Technical Issues List

Sustainability

- Infrastructure in place
- Station focus on Equipment Reliability
- Programs/monitoring/trending in place
- System Improvement Plans working
- Learning from missed opportunities
- Performance Indicators improving

Sustainability

- RE22 Scope will improve Materiel Condition
- RE23 Scope will complete Identified Short-term Risk PMO Activities
- Prioritization/funding process (ERRG)
- Work Control Program improvement
- Plant Health Committee – Strength
- AP-913 Equipment Reliability - Strength

Conclusion

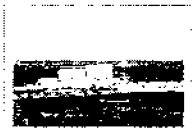
- Much Work Accomplished
  - Organizational Structure
  - Roles and Responsibilities
  - Process Improvements
  - Tools
- Significant Progress in Initiatives
  - AP-913
  - Technical Programs
  - Long-range System Strategies
  - Organizational Engagement

Conclusion

- Initiatives targeting industry best
- Performance improving in multiple areas
- Equipment Reliability is a fundamental belief and priority for Cooper and Entergy now and beyond the CAL

Mike Boyce

Corrective Action &
Assessments Manager



CAP Prior to CAL

- Inconsistent classification of issues
- Ineffective prioritization and evaluation
- Timeliness of corrective actions
- Effectiveness of corrective actions
- Weaknesses in Root Cause Analysis
- CAP ownership & accountability

Results of TIP/CAL Actions

- CRG Changes and Training
- CAP Process Changes
- Continuous Improvement Coordinators
- Root Cause Analysis Improvements
- CAP Oversight

Results of Other Actions

"CAP is core business"

- 100% CAP backend reviews
- Revised CRG focus
- Revised CARB focus
- Implementing PCRS (Entergy CAP Process)
- Meaningful PI reviews in MRM – with action and accountability

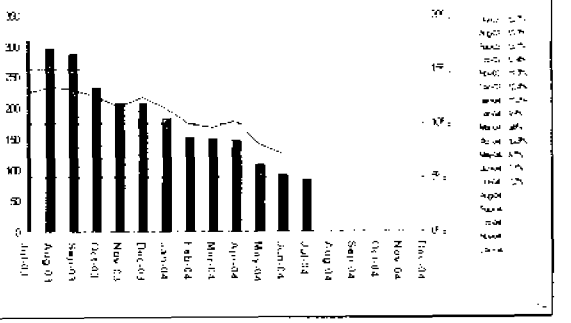
CAL Assessment Results Corrective Action Program

- Problem Identification – Largely Effective
- CAP Ownership – Largely Effective
- CAP PIs – Largely Effective
- Operating Experience – Largely Effective
- Quality & Timeliness of Evaluations – Marginally Effective
- Timeliness & Effectiveness of Corrective Actions – Marginally Effective
- Trending – Marginally Effective

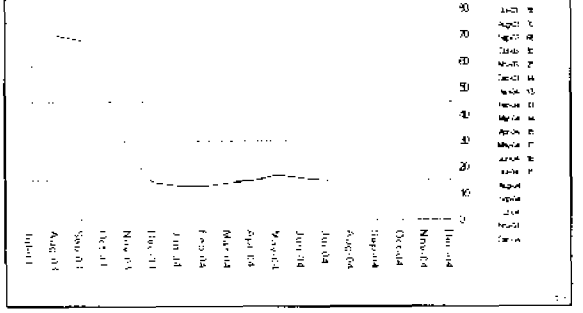
Quality and Timeliness of Evaluations

- Timeliness of evaluations improved
- RCR and SCR Quality Indicator
- Root Cause evaluations good
- Overall improvement in Apparent Causes – 100% Review Results
- Marginally Effective Rating – Critical Component failure Apparent Causes
- Conclusion

CAP Backlog



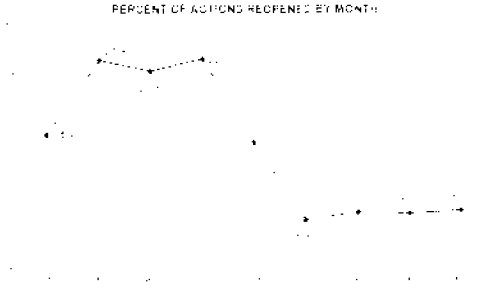
CAP Evaluations Average Age



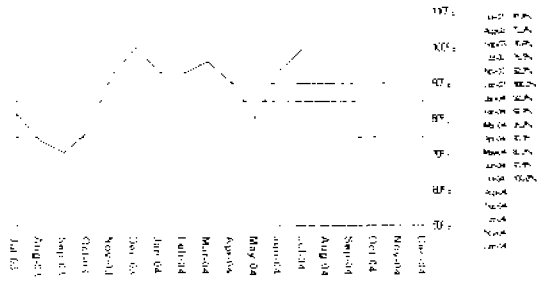
Timeliness and Effectiveness of Corrective Actions

- Timeliness improving
- Recurring significant events
- Conclusion

100% Review Results



SCR On-Time Completion



Trends identified, entered into CAP and addressed

- Trending is performed
- Equipment trending
- Problems communicating and prioritizing trend results lead to trend deliverables not being used to full advantage
- Actions Taken
- Conclusion

Sustainability

- Significant improvement demonstrated
- Backlogs reduced
- Infrastructure sound & improving
- Performance measures established
- Management ownership & oversight

Conclusions

- All CAL action steps are complete
- Current performance trend improving
- Infrastructure, monitoring, oversight and responsiveness are sufficient to sustain performance improvement and drive toward excellence
- CAP is ready to exit CAL

Human Performance

Stu Minahan
General Manager of
Plant Operations

Cooper Human Performance at Time of CAL

- Low Human Performance Reliability
  - High Error Rate
  - High Event Rate
  - One Station Event Every 17.7 days
  - Inconsistent Use of Error Prevention Tools/Techniques
  - No Human Performance Trainer
  - No Program Advocate
  - Limited Analysis

Human Performance at Time of CAL

- Largely Unmanaged

  No Comprehensive Human Performance Program
  - No clearly defined standards
  - Difficult to establish accountability & alignment
  - Insufficient monitoring and measurement

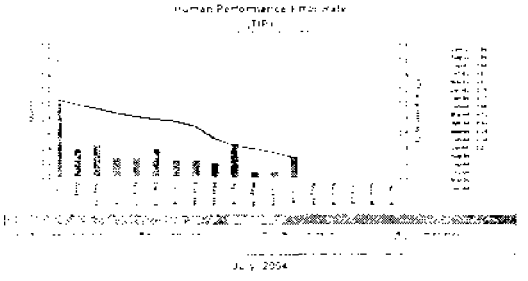
Current Human Performance

- Improved/Improving Human Performance Reliability
  - Lower error rate indicative of improved performance at individual level

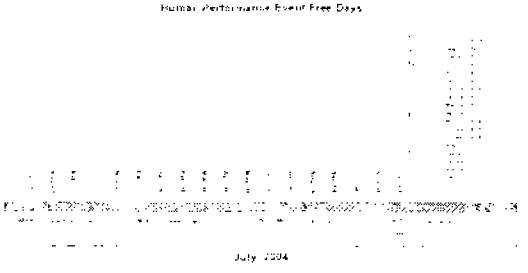
    Reduced event rate and significance indicative of fewer organizational (latent) issues

    Workforce better understands and uses error prevention tools/techniques although use is not fully internalized (rule-based rather than skill-based performance)

Human Performance Error Rate



Human Performance Event Free Days



Event Free Clock Data

- 5 resets in 2004
- Service Water Gland Restoration
- Discretionary reset based on multiple errors (battery arc, forklift operations, Group 2/6 isolation)
- DG Fuel Oil compensatory valve line-up error
- H2/O2 analyzer trip during maintenance
- Discretionary reset based upon electrical safety errors/near misses

Current Human Performance

- Effective Management of Human Performance
  - Human Performance Program Implemented (Entergy Fleet-wide Program)
    - Program Owner established
    - Strong Senior Management support
    - Human Performance standards and lines of accountability are clearly established
    - Improved Human Performance monitoring and measurement

Current Human Performance

- Effective Management of Human Performance
  - Improved Monitoring of Human Performance
    - Quarterly Department On-Going Self Assessments
    - Management Observation Program
    - Use of Snapshot Assessments
    - Periodic Focused Self Assessments
    - MRM
    - Comparison to Entergy Fleet Performance
    - Use of Common Cause Evaluations

Current Human Performance

- INPO E&A identified a Strength (Leadership/Management) related to implementation of effective Human Performance initiatives
- INPO Technical Training ATV identified proposed Strength related to use, modeling, and reinforcement of Human Performance error prevention tools/techniques in Training (Engineering Specific Human Performance Trainer)

CAL Assessment Results

- Largely Effective Overall Rating
- Fully Engrained in Culture – Marginally Effective
- AFI Post-Job Critiques
- Sustainable

Human Performance for Remainder of 2004

- Continuing training on Human Performance (Phase 3) prior to the outage
- Completion of a focused self-assessment (Oct)
- Continued evolution of Pre-Job Brief
- Recent revision to TIP Action Plan
- First Line Supervisor focus

Human Performance Remainder of 2004

- Business Plan Initiative for Procedure Use
- Outage Focus
- Configuration SCR
- Operator Interviews

In Closing

- Human Performance Reliability is greatly improved
- TIP was properly scoped and Initiatives have been successful
- Performance effectively monitored and measured
- Cooper HP is not as good as it will be and will continue to evolve and improve

Randy Edington

Vice President-Nuclear,
Chief Nuclear Officer

Summary