



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

April 13, 2004

J. V. Parrish (Mail Drop 1023)  
Chief Executive Officer  
Energy Northwest  
P.O. Box 968  
Richland, WA 99352-0968

SUBJECT: MEETING SUMMARY FOR END-OF-CYCLE PERFORMANCE ASSESSMENT  
FOR COLUMBIA GENERATING STATION

Dear Mr. Parrish:

This refers to the Category 1 public meeting conducted at the Energy Northwest Office Complex in Richland, Washington, on April 6, 2005. The meeting attendance list and a copy of the slides presented during the meeting are enclosed.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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).

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 "W. B. Jones", is written over a horizontal line.

William B. Jones, Chief  
Project Branch E  
Division of Reactor Projects

Docket: 50-397  
License: NPF-21

Enclosures:  
1. Attendance List  
2. Presentation

Energy Northwest

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cc w/enclosures:

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Frank H. Brock, Chair  
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Mayor of West Richland  
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The Honorable Rob Welch  
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WA State Emergency Management  
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Energy Northwest

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Electronic distribution by RIV:  
 Regional Administrator (**BSM1**)  
 DRP Director (**ATH**)  
 DRS Director (**DDC**)  
 DRS Deputy Director (**KSW**)  
 Senior Resident Inspector (**ZKD**)  
 Branch Chief, DRP/E (**WBJ**)  
 Senior Project Engineer, DRP/E (**VGG**)  
 Team Leader, DRP/TSS (**RLN1**)  
 RITS Coordinator (**KEG**)  
**RidsNrrDipmlipb**

SISP Review Completed:        ADAMS: ☒ Yes ☐ No Initials:         
☒ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☒ Non-Sensitive

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RIV C: DRP/E				
WBJones				
<u>      </u>				
4/12/05				

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

**6:00PM**

NAME	TITLE	COMPANY
HERB ROCKEY	SHIFT MANAGER	EN
Rich White	Training Mgr	EN
Dave Schenmann	Operations ETC	EN
Bob Sherrer	Nuclear Engineer	BPA
Cheryl Whitcomb	VP Org Performance	Staffing EN
DALBIT MAND	WC Manager	EN.
Kelly Butz	IS Manager	EN
SCOTT BOWNTON	SHIFT MANAGER	EN.
ROGER O. GREGORY	Control Room Supervisor	EN
Shawn Bond	Tech Support	EN
Tony Vogel	Dep Director - DRP	NRC
Bill Jones	Branch Chief - DRP	NRC
Zach Durham	SRI	NRC
Ron Cohen	RI	NRC
Vic PARRISH	CEO	EN

**NRC Public Meeting**  
**April 6, 2005**  
**6:00PM**

<u>NAME</u>	<u>TITLE</u>	<u>COMPANY</u>
Doug Coleman	Mgr., Reg. Programs	Energy Northwest
Daniel Carlson	Exec. Assistant, Tech Serv.	EN
Thomas A. Rogers	Radiation Health Physicist	VA Tech
Marian Hayden	Human Perf. Program Mgr.	EN
BRAD PECK	Communications	EN
DALE ATKINSON	U.P. NUCLEAR GENERATION	EN
Patty Lynch	home maker	
Jamie Lynch		
Zachary Lynch	Public	
Scott OXENFORD	VP Technical Services	
BRIAN GARNES	CAP SUPERVISOR	EN
Tom Lynch	PM	EN
Dennis Dinger	RSIA	EN
Louise Zychowicz	Site Secretary	NRC
RON COHEN	RESIDENT NR	NRC
Dan Richley	Fuels Dev Supv	EN
CARL KING	MGR chemistry	EN
Steve Swinnen	Resource Protection	EN
Quay Shinozaki	Ops Support Specialist	ENW
Harry Engbarth	Asst. to the PGM	EN
ABDUL KHAPOUR	ENG GEN MGR	EN
Greg Cullen	Licensing Supervisor	EN
Jeff St-John	TRCly Desk	
LEONARD HARVILLE	FFTF OPS MANAGER	FH
JIM ENGEBART	Asst to VP Nuclear	EN
Roberto Torres	Mgr Quality & Corrective Action	EN
George Hammond	Admin Asst	EN



## **Columbia Generating Station Annual Assessment Meeting**

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Reactor Oversight Program - CY 2004



Nuclear Regulatory Commission - Region IV  
Richland, WA  
April 6, 2005

### **Purpose of Today's Meeting**

- U.S. Nuclear Regulatory Commission assessment of Energy Northwest's performance in the operation of Columbia Generating Station
- Provide a forum for questions and comments from members of the audience



## **Agenda**

- Introductions
- NRC Review of Reactor Oversight Process
- NRC Discussion of Plant Performance Results
- Energy Northwest Response and Remarks
- Question and Answer Period
- NRC Closing Remarks

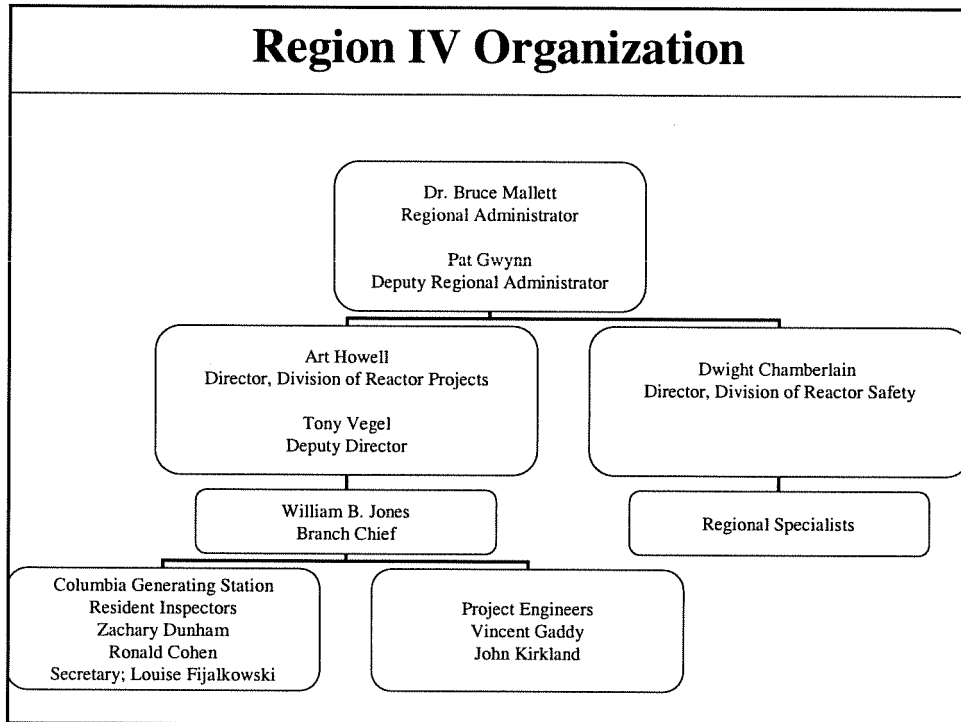


## **NRC Representatives**

- Tony Vogel                      Deputy Division Director, DRP
- William B. Jones              Branch Chief
- Zachary Dunham              Senior Resident Inspector
- Ronald Cohen                  Resident Inspector



## Region IV Organization

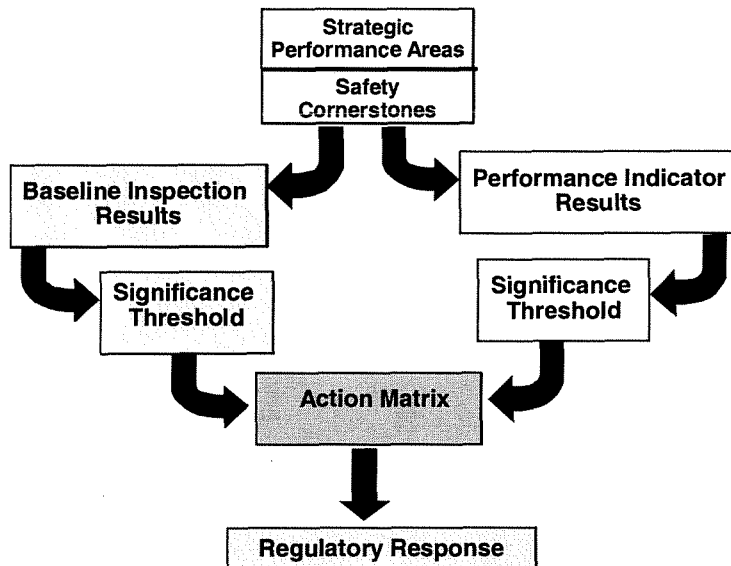


## NRC Performance Goals

- **Security:** Ensure the secure use and management of radioactive materials
- **Openness:** Ensure openness in our regulatory process
- **Effectiveness:** Ensure that NRC actions are effective, efficient, realistic, and timely
- **Management:** Ensure excellence in agency management to carry out the NRC' strategic objective
- **Safety:** Ensure protection of the public health and safety and the environment



## Reactor Oversight Process



## Types of Inspections Performed

- Baseline Inspections
- Follow up to Events and Conditions
- Supplemental Inspections



## **Examples of Baseline Inspections**

- Equipment Alignment
- Triennial Fire Protection
- Operator Response
- Emergency Preparedness
- Rad Release Controls
- Worker Radiation Protection
- Corrective Action Program
- Corrective Action Case Reviews



## **Performance Indicators**

- In addition to the baseline inspections
- Provided on a quarterly basis by licensees in each Strategic Performance Area
- Independently verified by the NRC



## Significance Threshold

### Inspection Findings

**Green:** Very low safety issue  
**White:** Low to moderate safety issue  
**Yellow:** Substantial safety issue  
**Red:** High safety issue

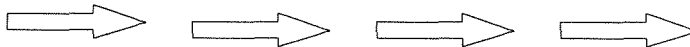
### Performance Indicators

**Green:** Only baseline inspection  
**White:** May increase NRC oversight  
**Yellow:** Requires more NRC oversight  
**Red:** Requires more NRC oversight



## Action Matrix Concept

Licensee Response	Regulatory Response	Degraded Cornerstone	Multiple/Rep. Degraded Cornerstone	Unacceptable Performance
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**Increasing Safety Significance**

**Increasing NRC Inspection Efforts**

**Increasing NRC/Licensee Management Involvement**

**Increasing Regulatory Actions**



## National Summary of Plant Performance

Status at End of CY 2004

Licensee Response	78
Regulatory Response	21
Degraded Cornerstone	0
Multiple/Repetitive Degraded Cornerstone	3
Unacceptable	0
<u>Total</u>	<u>102*</u>

\*Davis-Besse is in IMC 0350 process



## National Summary

### • Total Inspection Findings (CY 2004)

▶ Green	778
▶ White	11
▶ Yellow	0
▶ Red	0

### • Performance Indicator Results (at end of CY 2004)

▶ Green	1834
▶ White	6
▶ Yellow	0
▶ Red	0



## **Columbia Generating Station Inspection Activities**

**(Jan 1 - Dec 31, 2004)**

### **■ Regional Inspection Effort**

- Division of Reactor Projects 2050 hours
- Division of Reactor Safety 950 hours



## **Columbia Generating Station Inspection Activities**

**(Jan 1 - Dec 31, 2004)**

- Baseline Inspection Program
- March 2004 inspection of the Independent Spent Fuel Storage Installation





## **Columbia Generating Station Assessment Results**

**(Jan 1 - Dec 31, 2004)**

- Energy Northwest operated Columbia Generating Station within the Licensee Response Column of the NRC's Action Matrix
  - All inspection findings and performance indicators were of very low safety significance (licensee response)
- No Supplemental Inspections



## **Cross-Cutting Areas**

- Human Performance
- Problem Identification and Resolution
- Safety Conscious Work Environment



## **Cross-Cutting Criteria**

- Multiple Green or Safety Significant Inspection Findings with Cross-Cutting Aspects
- Causal Factors have a Common Theme.
- Concern with the Licensee's Scope of Effort or Progress in Addressing Cross-Cutting Performance Deficiencies



## **Substantive Cross-Cutting Issues**

**(Jan 1 - Dec 31, 2004)**

- Problem Identification and Resolution Cross-Cutting Issue
- Human Performance Cross-Cutting Issue



## **Substantive Problem Identification and Resolution Cross-Cutting Issue**

- Problem Identification and Resolution Cross-Cutting Issue
  - Discussed in end-of-cycle letter dated March 3, 2004 and midcycle letter dated August 30, 2004
  - Problem identification and resolution issues contributed to a number of very low safety significance findings in the mitigating systems, barrier integrity, and occupational radiation safety cornerstones



## **Substantive Problem Identification and Resolution Cross-Cutting Issue**

- Problem Identification and Resolution Cross-Cutting Issue
  - Common performance characteristic primarily involved a lack of rigor with regard to aggressively identifying and correcting problems with plant design information
  - Fewer findings identified that appear to be direct result of improvement initiatives in this area
  - No further NRC focused inspections for this substantive cross-cutting area



## Human Performance Cross-Cutting Issue

- Human performance substantive cross-cutting issue identified for common performance characteristic of personnel performance
  - Failing to follow procedure or a lack of understanding of the procedural requirements and the impact on plant operations
  - Contributed to very low safety significant findings in initiating events, mitigating systems, barrier integrity, emergency preparedness and occupational radiation protection cornerstones



## Human Performance Cross-Cutting Issue

- Findings involved instances of failing to follow procedures or a lack of understanding of the procedural requirements and the impact on operations
- Performance issues resulted in:
  - Inadequate responses to plant conditions both from operational and radiological standpoint
  - Plant transients and scrams



## Human Performance Cross-Cutting Issue

- NRC concern with licensee improvement efforts
  - Energy Northwest has not demonstrated through the implementation of the Operations Department Performance Improvement Plan that the issues involving operator knowledge of systems and the emergency plan have been adequately addressed to insure the corrective actions are effective



## Human Performance Cross-Cutting Issue Resolution

- NRC review determines that operator performance has improved and Operations Department Performance Improvement Plan has been effective
  - Follow up inspection using Inspection Procedure 71152, "Identification and Resolution of Problems"
  - Semi-annual reviews during the next midcycle review
  - Problem Identification and Resolution team inspection focus, in part, on Energy Northwest's actions to address human performance



## **Columbia Generating Station Annual Assessment Summary**

- Energy Northwest operated Columbia Generating Station in a manner that preserved public health and safety and all cornerstone objectives were met
- NRC assessed Columbia Generating Station within the Licensee Response Column of the Action Matrix
- NRC baseline inspections at Columbia Generating Station



## **Licensee Response and Remarks**

J. V. Parrish  
Chief Executive Officer  
Energy Northwest



## Contacting the NRC

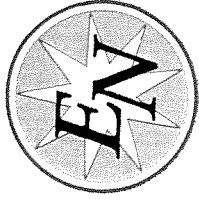
- Report an emergency
  - ▶ (301) 816-5100 (call collect)
- Report a safety concern:
  - ▶ (800) 695-7403
  - ▶ Allegation@nrc.gov
- General information or questions
  - ▶ [www.nrc.gov](http://www.nrc.gov)
  - ▶ Select “What We Do” for Public Affairs



## Reference Sources

- Reactor Oversight Process
  - ▶ <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>
- Public Electronic Reading Room
  - ▶ <http://www.nrc.gov/reading-rm.html>
- Public Document Room
  - ▶ 1-800-397-4209 (Toll Free)





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# Operational Performance

April 6, 2005

*Tom Lynch*

*Plant General Manager  
Columbia Generating Station*



# ***Human Performance***

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- Energy Northwest has implemented a systematic approach for improving human performance
- Energy Northwest has heightened the emphasis on managing human performance at all levels
- Examples of recent actions:
  - Error Prevention Tools Training
  - Barrier Management Training
  - Improvements in Error Investigation
  - Station Event Free Clock



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# Assessment Letter Comment

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*“The NRC will review this substantive crosscutting issue to determine whether operator performance has improved and to determine whether the Operations Department Performance Improvement Plan has been effective”*



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# ***Performance Plan Status***

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We did what we said we would do:

- Operations Performance Improvement Plan presentation - October 2004 Public Meeting
  - Leadership Improvements
  - Training Improvements
  - Operations' Role in Work Management
  - Human Performance Initiatives
  - Control Room Conduct and Professionalism Improvements



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# ***Performance Plan Status***

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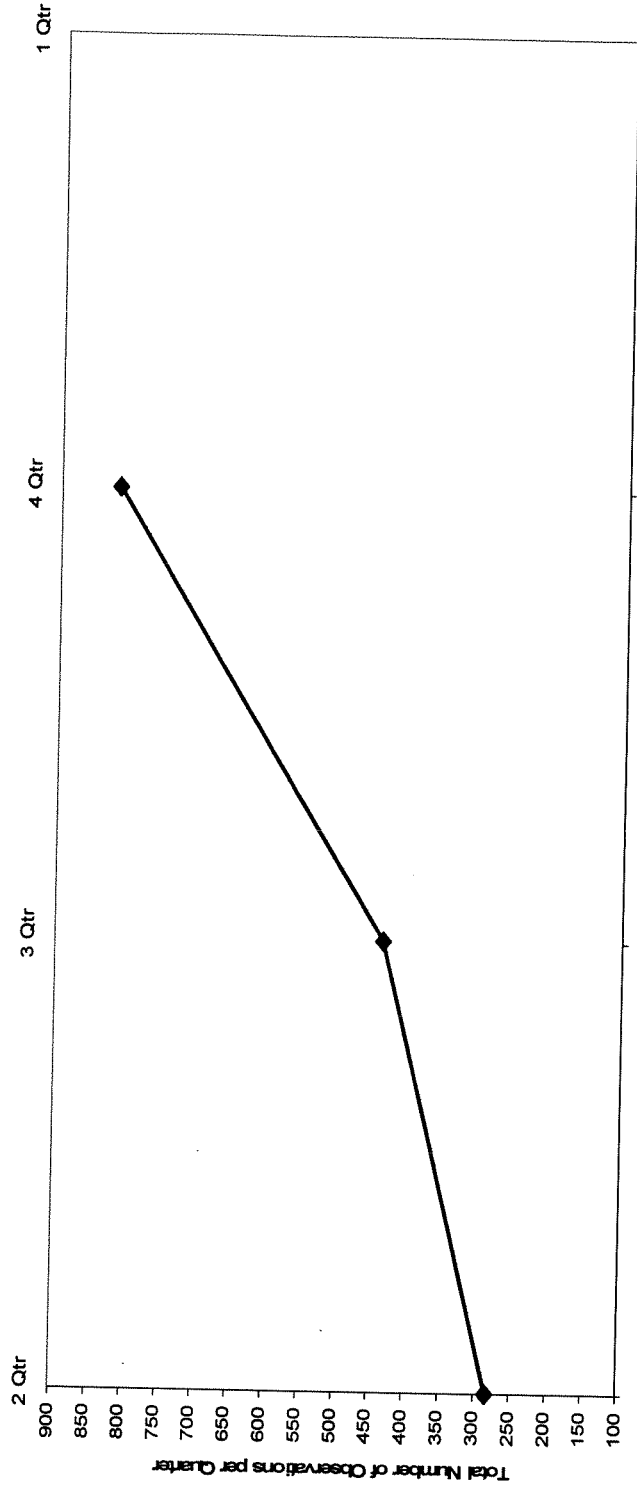
- Identifies gaps to excellence and action plans to close gaps
- Living document - currently revision 7
- Continued ongoing assessments incorporated into plan (both external and internal)



# Performance Trend

Columbia Generating Station  
Operations

## SUPERVISOR & MANAGER OBSERVATIONS

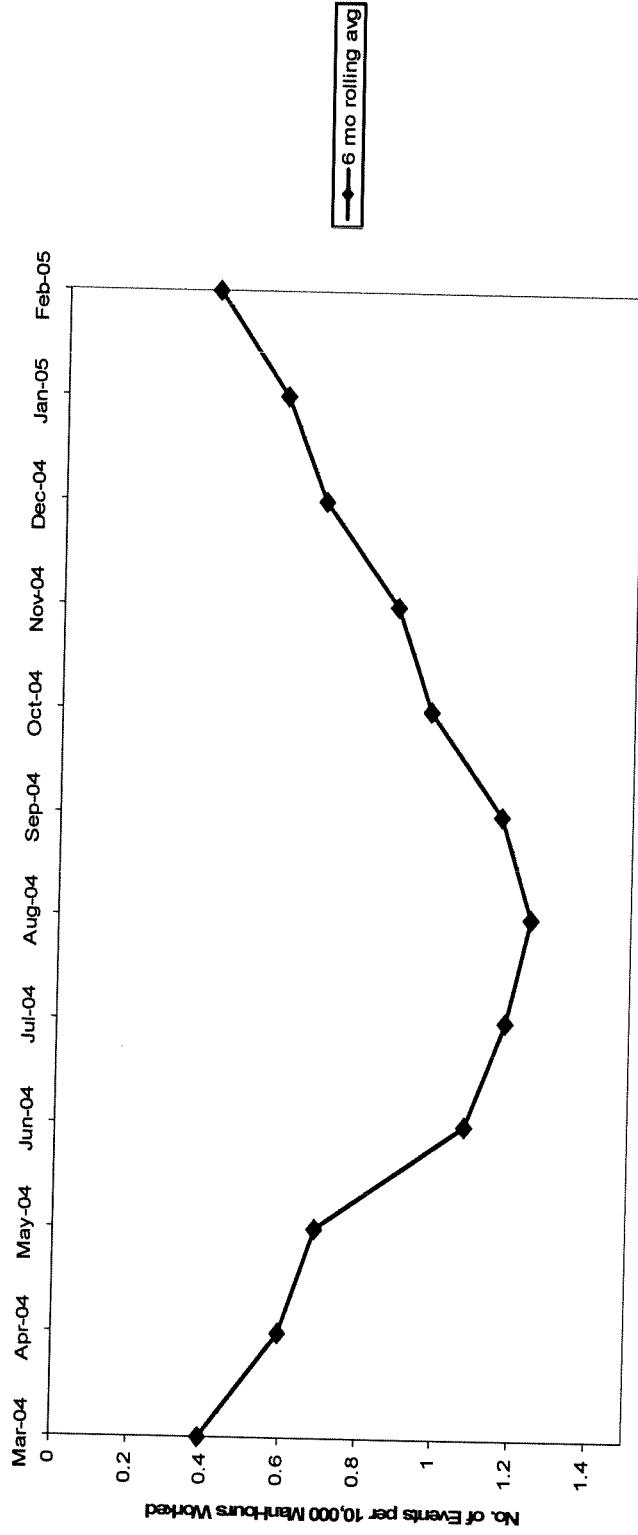


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# Performance Trend

Columbia Generating Station  
Operations

PERSONNEL ERROR RATE (6 month rolling average)



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# Results

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- Positive performance trends in Operations
- A learning organization is evident
- Effective accountability initiatives
- Operations leadership is visible
- Identifying error precursors, reducing error rate, and eliminating events



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# Summary

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- Our efforts to improve human performance will remain vigilant
- Our metrics demonstrate improvements are being achieved
- Our commitment to safe operation will not be compromised



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