



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

APR 18 2003

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

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

Dear Mr. Parrish:

This refers to the end-of-cycle performance assessment meeting conducted at the Richland Public Library Gallery in Richland, Washington, on April 11, 2003. The meeting attendance list and a copy of the slides presented during the meeting are enclosed.

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,

A handwritten signature in black ink, appearing to read "W.B. Jones", is written over the typed name.

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

Docket: 50-397  
License: DPF-21

Enclosures:

1. Attendance List
2. NRC Presentation
3. Licensee Presentation

## END-OF-CYCLE MEETING ATTENDANCE

LICENSEE/FACILITY	Energy Northwest Columbia Generating Station
DATE/TIME	April 11, 2003 6:30 p.m. (PDT)
LOCATION	Richland Public Library Gallery
NAME (PLEASE PRINT)	ORGANIZATION
Timmy S. Lovel	ENERGY Northwest
Douglas W. Coleman	Energy Northwest
Jim Givins	Energy Northwest
FRED KLAUSS	ENERGY NORTHWEST
David Hedengren	Citizen of Richland
DON FELDMAN	ENERGY NORTHWEST
Dan Richey	Energy Northwest
Don McManis	Energy Northwest

Electronic distribution by RIV:  
Regional Administrator (**EWM**)  
DRP Director (**ATH**)  
DRS Director (**DDC**)  
Senior Resident Inspector (**GDR**)  
Branch Chief, DRP/E (**WBJ**)  
Senior Project Engineer, DRP/E (**VGG**)  
Staff Chief, DRP/TSS (**PHH**)  
RITS Coordinator (**NBH**)

ADAMS: ☐ Yes ☐ No Initials: \_\_\_\_\_  
☐ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☐ Non-Sensitive

R:\ COL\2003\COL4-11-03 EOC MS.wpd

RIV:SPE:DRP/E	C:DRP/E			
VGGaddy,df	WBJones			
4/ /03	4/19 /03			

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

# **Nuclear Regulatory Commission**



**Annual Assessment Meeting for  
Columbia Generating Station  
April 11, 2003**

# **NRC Meeting Purpose**

- **Meeting with Licensee and Public**
- **Inform Public of Plant Performance**
- **Review NRC and Industry Activities**



# **NRC Meeting Guidelines**

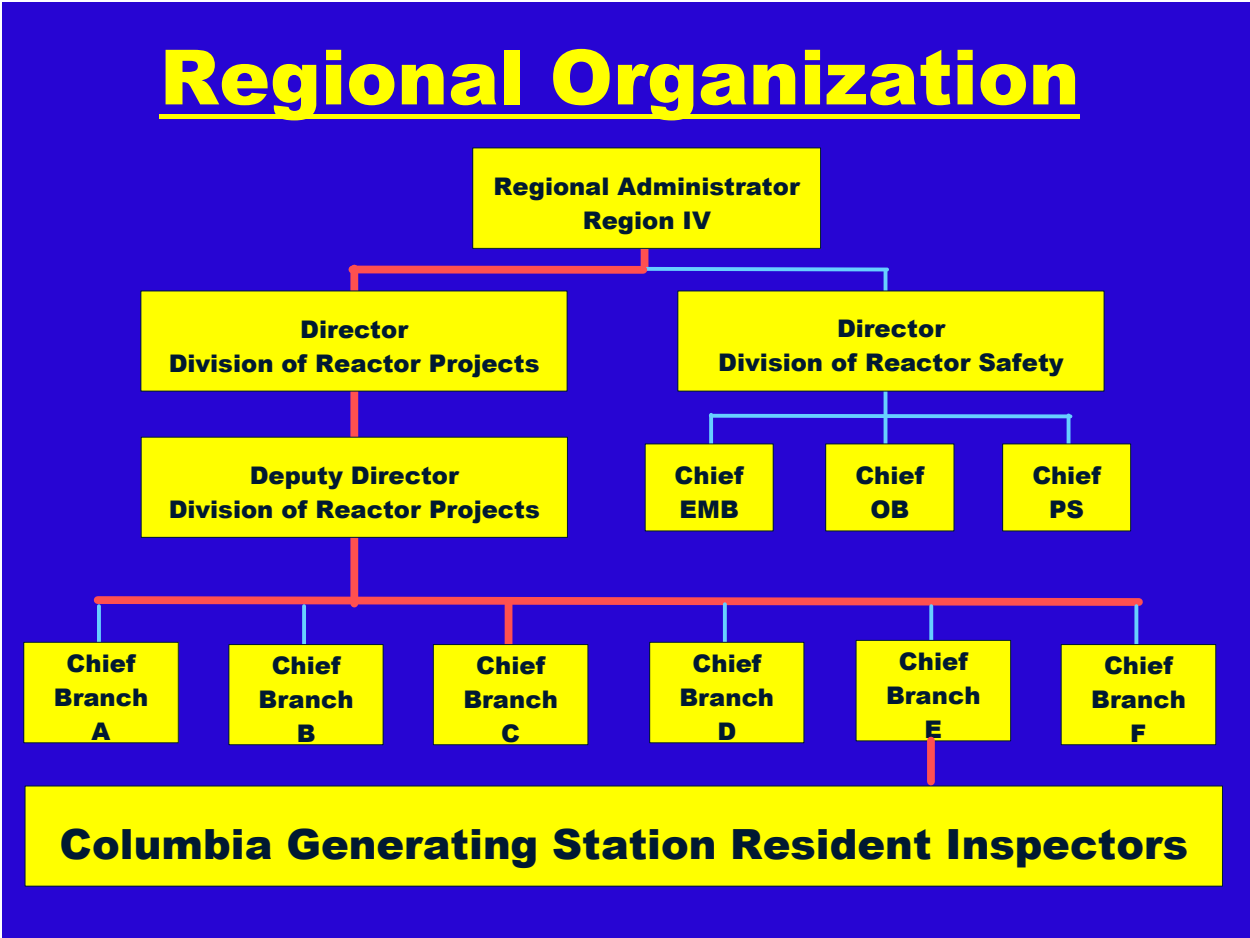
- **Registration Table**
- **Handouts**
- **Questions and Answers**
- **Feedback Forms**



# **NRC Performance Goals**

- **Maintain public safety and protect the environment**
- **Enhance public confidence**
- **Improve:**
  - **Effectiveness**
  - **Efficiency**
  - **Realism of processes and decision making**







# **Energy Northwest**

## **Introduction**

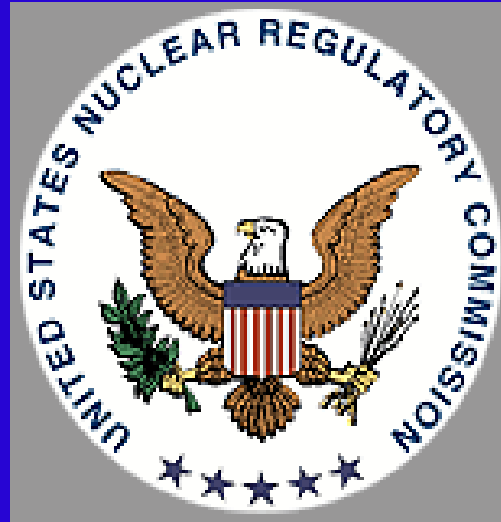


# **Meeting Agenda**

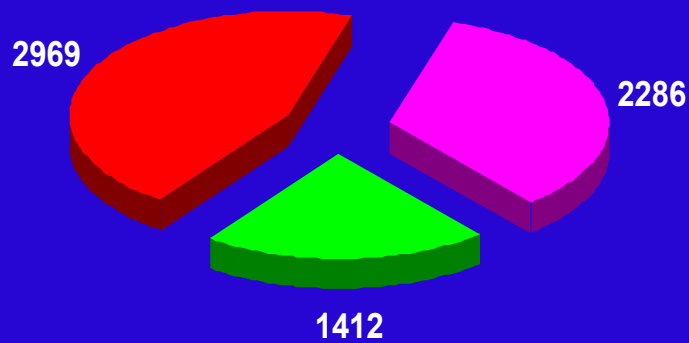
- **Regulatory Oversight**
- **Findings And Assessments**
- **Additional Focus Areas**
- **Questions And Answers**



# Regulatory Oversight Process



# Overall NRC Effort

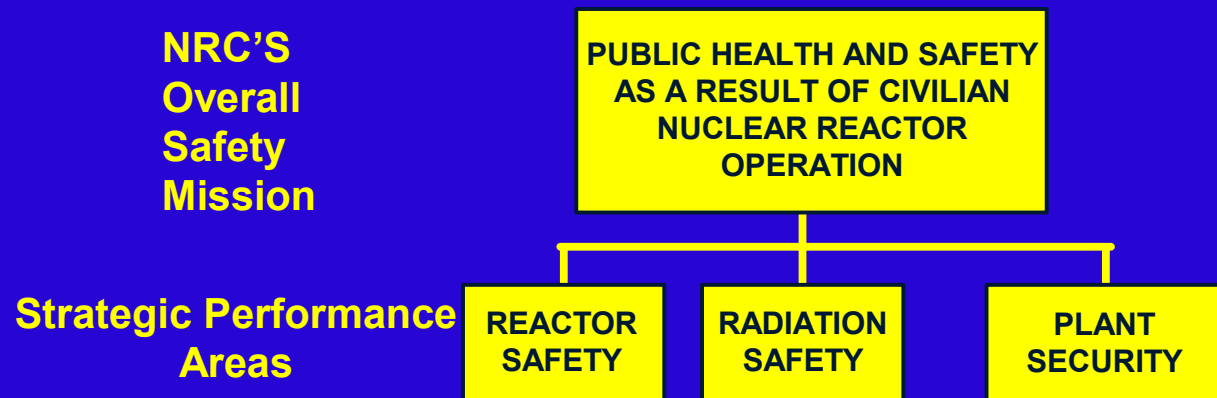


**Total hours - 6667**

- Headquarters - 1412
- Regional - 2969
- Resident - 2286



# Comprehensive Oversight Program

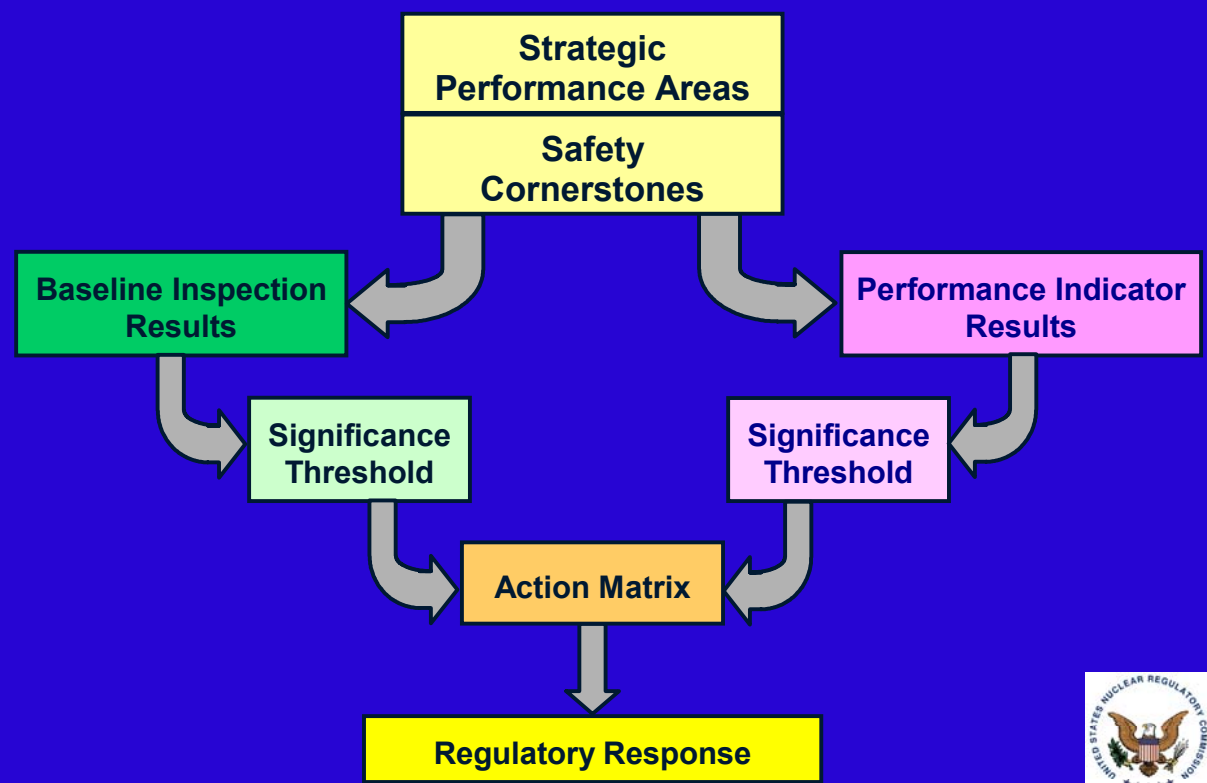


# **NRC Oversight Activities**

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



# Reactor Oversight Process



# **Baseline Inspection Program**

- **Gathers objective evidence of plant safety**
- **Conducted at all plants**
- **Focuses on safety-significant:**
  - **systems**
  - **components**
  - **activities**
  - **events**





# **Baseline Inspection Program**

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

**[www.NRC.gov/reading-rm/adams.html](http://www.NRC.gov/reading-rm/adams.html)**



# **Event Follow-up and Supplemental Inspections**

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



# Reactor Oversight Process

## SAFETY SIGNIFICANCE

---

**GREEN**

- very low

**WHITE**

- low to moderate

**YELLOW**

- substantial

**RED**

- high



# **Performance Indicator** **Program**

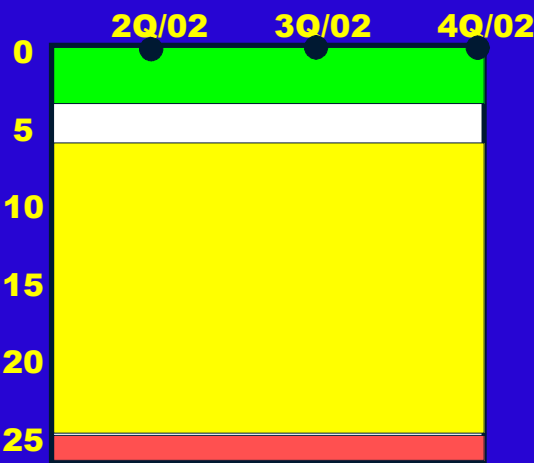
- **Licensee monitors key safety parameters**
- **Data supplied to NRC quarterly**
- **Performance indicator results available on the NRC's public web site:**

**[www.NRC.gov/NRR/OVERSIGHT/ASSESS/  
WASH2/wash2\\_chart.html](http://www.NRC.gov/NRR/OVERSIGHT/ASSESS/WASH2/wash2_chart.html)**



# Performance Indicators

## Unplanned Scrams per 7000 critical hours



Thresholds:

White >3.0,

Yellow >6.0,

Red >25.0

Unplanned scrams per 7000 critical hours	2Q/02	3Q/02	4Q/02
Actual scrams	0	0	0
Critical hours	2183	2208	2209
Indicator value	0	0	0

# **Key Aspects of the Assessment Program**

- **Objective review of licensee's performance**
- **“Action Matrix” to determine agency response in three areas:**
  - **Inspection**
  - **Management Involvement**
  - **Regulatory Actions**
- **Plant specific assessment letters**



# **Plant Safety**

## **Performance Summary**

- **Performance Indicator Results**
- **Inspection Results**



# **Performance Indicator** **Results**

**All performance indicators within  
the Licensee Response Band**





# **Inspection Results**

## **Yellow Finding**

- **Identified in 3<sup>rd</sup> Quarter 2001**
- **Failure to follow and maintain emergency plans and procedures**
- **Supplemental Inspection May 2002**



# **Inspection Results**

## **White Finding**

- **Identified 1<sup>st</sup> Quarter 2002**
- **Degraded Performance of Safety Related 4160-volt Breakers**
- **Supplemental Inspection December 2002**



# **Inspection Results**

## **Human Performance Substantive Crosscutting Issue**

- **Identified During Previous Assessment Period**
- **Multiple Findings Related to Lack of Procedural Adherence**
- **Deficiencies Noted in Several Areas and Affected Multiple Cornerstones**



# **Inspection Results**

## **Supplemental Inspection**

- **Human Performance Area**
  - **Improved human performance for non-outage period since April 2001**
  - **Finding will remain open to assess corrective action effectiveness during scheduled 2003 refueling outage**



# **Assessment Results**

- **Began assessment period in Degraded Cornerstone Column (Yellow Finding)**
- **Ended assessment period in Regulatory Response Column (White Finding)**



# ACTION MATRIX

	Calendar Year 2001		Calendar Year 2002			
	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
<b>Cornerstone</b>	7/1/01 - 9/30/01	10/01/01 - 12/31/01	1/1/02 - 3/31/02	4/1/02 - 6/30/02	7/1/02 - 9/30/02	10/01/02 - 12/31/02
Initiating Events	Green	Green	Green	Green	Green	Green
Mitigating Systems	Green	Green	White	White Continued	White Continued	White Continued
Barrier Integrity	Green	Green	Green	Green	Green	Green
Emergency Preparedness	Yellow	Yellow	Yellow	Yellow	Green	Green
Public Radiation Safety	Green	Green	Green	Green	Green	Green
Occupational Radiation Safety	Green	Green	Green	Green	Green	Green
Physical Protection	Green	Green	Green	Green	Green	Green
Action Matrix	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Regulatory Response	Regulatory Response

# **Assessment Conclusion**

**Licensee effectively managed:**

- Reactor safety**
- Radiation safety**
- Plant security**

**Energy Northwest operated Columbia Generating Station in a manner that protected the health and safety of the public**



# ROP Action Matrix Summary for 2002

	Licensee Response	Regulatory	Degraded Cornerstone	Multiple/ Repetitive Degraded Cornerstone	Unacceptable Performance
Nationwide	59	33	7	3	0
Region IV	13	5	2	1	0

(Note: Nationwide number does not include Davis Besse)



## **Additional Focus Areas**

- **NRC Responds As-Needed**
- **Mandated Licensee Actions**
- **Implemented Emergency Preparedness**



# **Nuclear Industry Issues**

- **Lessons Learned From Reactor Vessel Head Degradation**
- **Security at Nuclear Power Plants**



# **Post Davis-Besse**

## **Industry Initiatives**

**Address Process and Performance  
Issues that Contributed to the Vessel  
Head Degradation**

## **NRC Actions**

- **Observation of Licensee Inspections  
and Examinations**
- **Independent Inspection and**



## **Security & Safeguards Update**

- **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 Update**

- **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**



# **Energy Northwest**

## **Response**



# **Future Outlook**

- **Power Uprates**
  - **Not new**
  - **Licensee's taking advantage of improved power measurement techniques**
  - **Better analytical methods demonstrate that reactor power can be increased without significant reductions in safety margin**
- **NRC has approved more than 80 applications to increase reactor power**
- **Approximately 51 applications for power**



## **Future Outlook (Cont.)**

- **License Renewal**
  - **A recent initiative**
  - **Applications for 14 units have been approved**
  - **16 applications are currently under review**
- **Early Site Permit**
  - **Three applications expected in 2003**





# **Conclusions**

- **Assured Public Safety**
- **Flexible/Predictable Response**
- **Risk-Informed Programs**



# **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”**



## **Contacts for Additional Information**

- **Regional Public Affairs Officer**

- **Victor Dricks**

- **Phone: (817) 860 – 8128**

- **State Liaison Officer**

- **William (Bill) Maier**

- **Phone: (817) 860 - 8267**

