



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

March 31, 2003

Gregg R. Overbeck, Senior Vice
President, Nuclear
Arizona Public Service Company
P.O. Box 52034
Phoenix, Arizona 85072-2034

**SUBJECT: MEETING SUMMARY FOR THE PALO VERDE NUCLEAR GENERATING
STATION END-OF-CYCLE PERFORMANCE ASSESSMENT**

Dear Mr. Overbeck:

This refers to the end-of-cycle performance assessment meeting conducted at the Estrella Mountain Community College, Avondale, Arizona, on March 19, 2003. The meeting attendance and copies of the slides presented at the meeting are included as Enclosures 1 and 2, respectively. In addition to the formal presentation, members of the public raised various concerns to the NRC staff. These concerns have been included in the NRC allegation program to ensure that they will be properly addressed.

Sincerely,

/RA/ by Arthur T. Howell, D:DRP

Linda Joy Smith, Chief
Project Branch D
Division of Reactor Projects

Dockets: 50-528
50-529
50-530
Licenses: NPF-41
NPF-51
NPF-74

Enclosures:

1. Presentation Slides
2. Attendance List

cc w/enclosures:

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Federal Emergency Management Agency
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The Honorable Ron Drake
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525 North Central
Avondale, Arizona 85323

The Honorable Dustin Hull
Mayor of Buckeye
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Buckeye, Arizona 85326

The Honorable Robert Robles
Mayor of El Mirage
P.O. Box 26

El Mirage, Arizona 85335

The Honorable Elaine Scruggs
Mayor of Glendale
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Glendale, Arizona 85301

The Honorable Seth Kanter
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The Honorable John Keegan
Mayor of Peoria
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Peoria, Arizona 85345

The Honorable Skip Rimsza
Mayor of Phoenix
200 West Washington
Phoenix, Arizona 85007

The Honorable Joan Shafer
Mayor of Surprise
12425 West Bell Road
Surprise, Arizona 85374

The Honorable Adolfo Gamez
Mayor of Tolleson
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The Honorable Daphne Green
Mayor of Youngtown
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 DRP Director (**ATH**)
 DRS Director (**DDC**)
 Senior Resident Inspector (**NLS**)
 Branch Chief, DRP/D (**LJS**)
 Senior Project Engineer, DRP/D (**JAC**)
 Staff Chief, DRP/TSS (**PHH**)
 RITS Coordinator (**NBH**)

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RIV:PE:DRP/D	ACES	C:DRP/D		
JAClark;vlh;dlf	RWise	LJSmith		
/RA/	/RA/	ATHowell for		
3/28/03	3/28/03	3/31/03		

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

END-OF-CYCLE MEETING ATTENDANCE (Enclosure 2)

LICENSEE/FACILITY	APS/Palo Verde Nuclear Generating Station
DATE/TIME	March 19, 2003; 7:00 PM (MST)
LOCATION	Estrella Mountain Community College
NAME (PLEASE PRINT)	ORGANIZATION
Aubrey Godwin	Arizona Radiation Regulation Agency
John Rich	Member of public
Daniel Marks	APS
Ruth Ann Aud	APS - ES Planner
Craig K. Seaman	APS - Director NA/RA
David Mauldin	APS - VP-Engineering and Support
Randy Sorensen	APS - Chemistry Department Leader
John W. Vanpool	Member of public
Bill Wolfe	APS
Terry Schoech	Member of public
John Frunefield	Member of public
Bruce Nordstrom	Member of public
Dave Smith	APS - Director of Operations

END-OF-CYCLE MEETING ATTENDANCE (Enclosure 2)

LICENSEE/FACILITY	APS/Palo Verde Nuclear Generating Station
DATE/TIME	March 19, 2003; 7:00 PM (MST)
LOCATION	Estrella Mountain Community College
NAME (PLEASE PRINT)	ORGANIZATION
Chuck Zell	APS-PV Work Management DC
Gregg Overbeck	APS
Paul Crabtree	El Paso Electric Co.
Darryl Henning	West Valley View Newspaper
A. K. Krainik	APS
M.D. Shea	APS
J.J. Compas	Westinghouse
Sheri Foote	APS
Jim Levine	APS
John Gaffney	APS
Guillerino L. Corte's	P.E. Cortes Engineering Inc.
Judith S. Bell	S.R.P. consumer
William G. Pool	Member of public

ANNUAL ASSESSMENT MEETING



Nuclear Regulatory Commission

Region IV

Annual Licensee Assessment Meeting

- **Public forum to discuss licensee performance**
- **Licensee performance documented in Annual Assessment Letter**
- **Licensee responds to letter providing information related to improving their performance**



NRC Meeting Guidelines

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



NRC PERFORMANCE GOALS

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





Nuclear Regulatory Commission

Region IV

Palo Verde Nuclear Generating Station

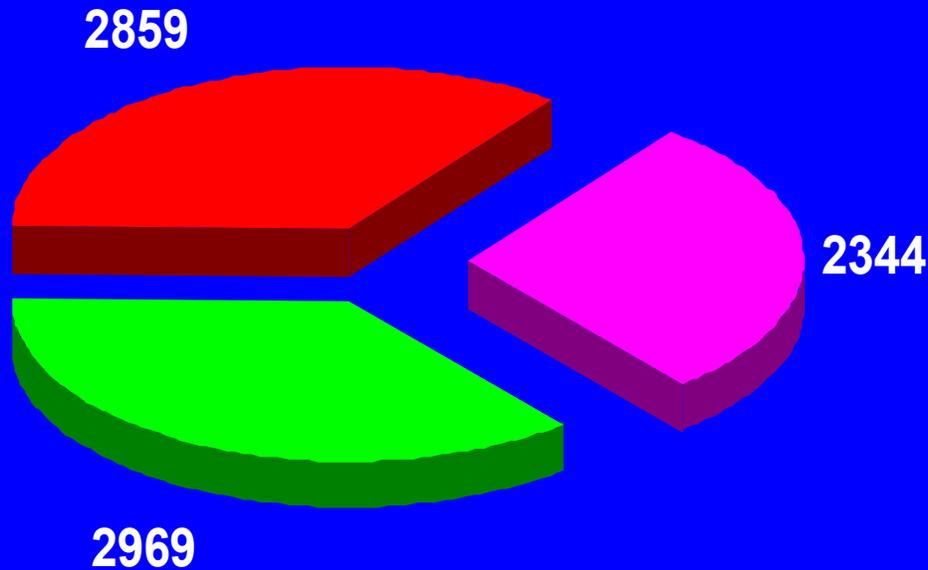


Meeting Agenda

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



Overall NRC Effort



Total hours – 8,172

- Headquarters - 2969
- Regional - 2859
- Resident - 2344

Nuclear Reactor Regulation

- **Reviewed multiple license change requests**
- **Reviewed documentation on the Palo Verde Independent Spent Fuel Storage Facilities (ISFSFs)**

2969 hours expended in the above effort



Resident Inspectors

- **Stationed at the plant**
- **Prompt response capability**
- **2344 hours of oversight**

Regional Inspectors

- **Specialized**
- **Inspection teams**
- **2859 hours of oversight**

Comprehensive Oversight Program

**NRC'S
Overall
Safety
Mission**

**PUBLIC HEALTH AND SAFETY
AS A RESULT OF CIVILIAN
NUCLEAR REACTOR
OPERATION**

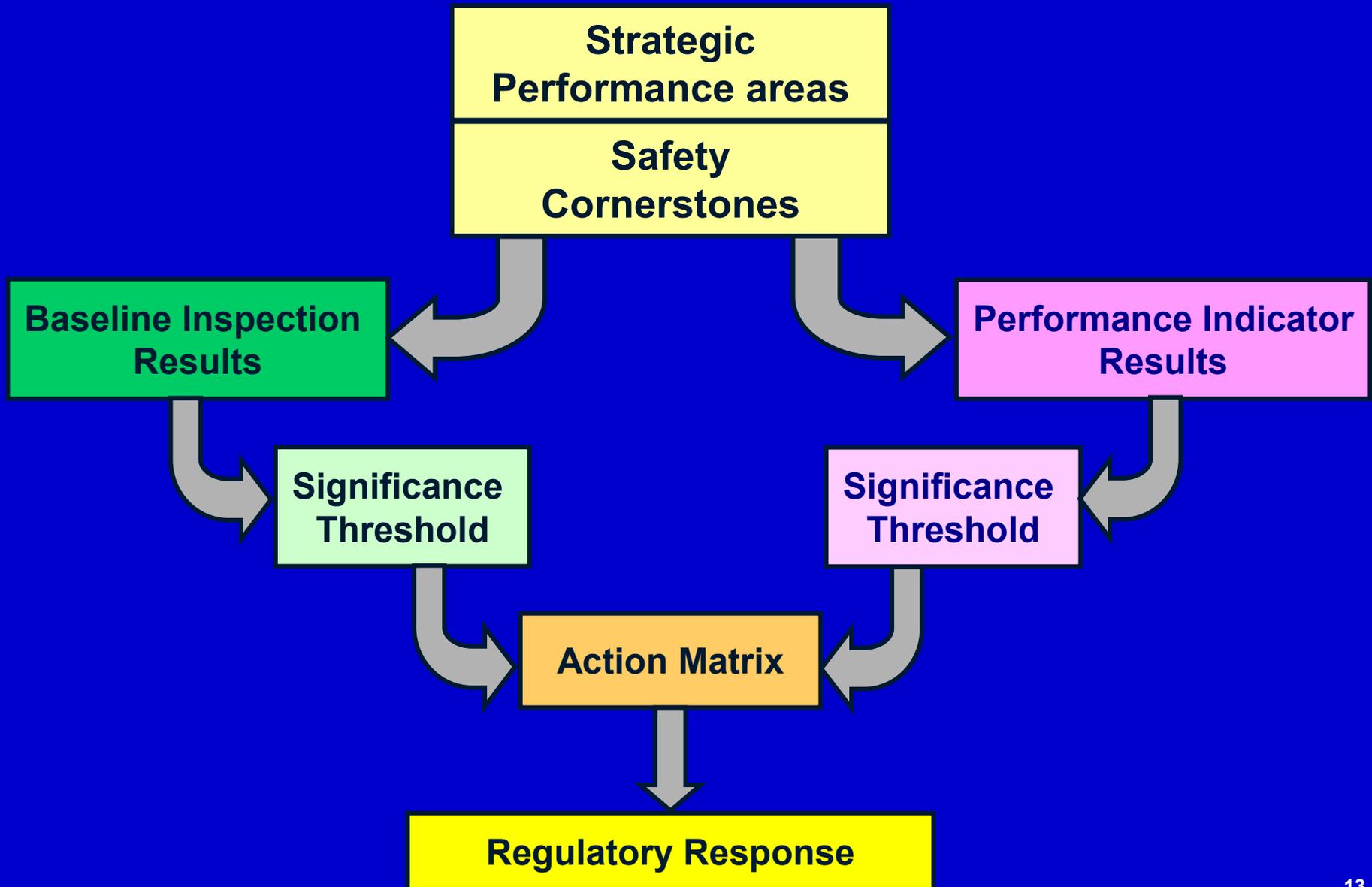
**Strategic Performance
Areas**

**REACTOR
SAFETY**

**RADIATION
SAFETY**

**PLANT
SECURITY**

Reactor Oversight Process



Key Aspects of the Assessment Program

- **Objective review of licensee performance**
- **“Action Matrix” identifies agency response commensurate with safety significance:**
- **Increasing safety significance results in:**
 - **Increase levels of inspection**
 - **Involvement of higher levels of NRC and Licensee Management**
 - **Increased regulatory action**



Reactor Oversight Process

SAFETY SIGNIFICANCE

GREEN

- very low

WHITE

- low to moderate

YELLOW

- substantial

RED

- high

Baseline Inspection Program

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

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

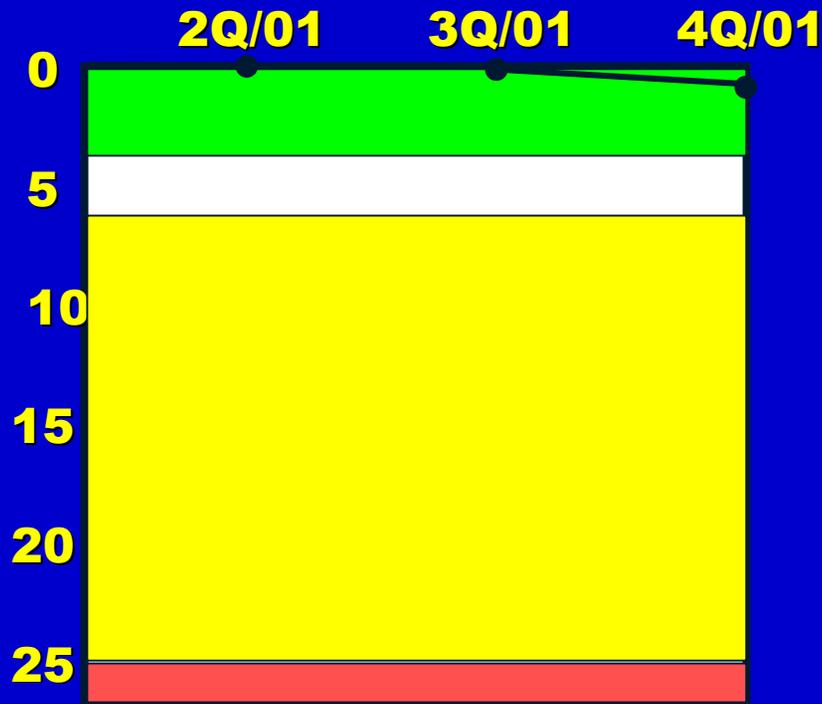
Performance Indicator Program

- **Licensee monitors key safety parameters**
- **Data supplied to NRC quarterly**



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	1
Critical hours	2184.0	2136.0	1450.1
Indicator value	0.9	0.0	0.9

Assessment Results and Performance Indicators

- **Performance indicator results and other assessment information available on the NRC's public web site:**

**[www.NRC.gov/NRR/OVERSIGHT/ASSESS/
PALO1/palo1_chart.html](http://www.NRC.gov/NRR/OVERSIGHT/ASSESS/PALO1/palo1_chart.html)**

**[www.NRC.gov/NRR/OVERSIGHT/ASSESS/
PALO2/palo2_chart.html](http://www.NRC.gov/NRR/OVERSIGHT/ASSESS/PALO2/palo2_chart.html)**

**[www.NRC.gov/NRR/OVERSIGHT/ASSESS/
PALO3/palo3_chart.html](http://www.NRC.gov/NRR/OVERSIGHT/ASSESS/PALO3/palo3_chart.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

Licensee safety performance is monitored by:

- performance indicators**
- evaluating inspection findings**

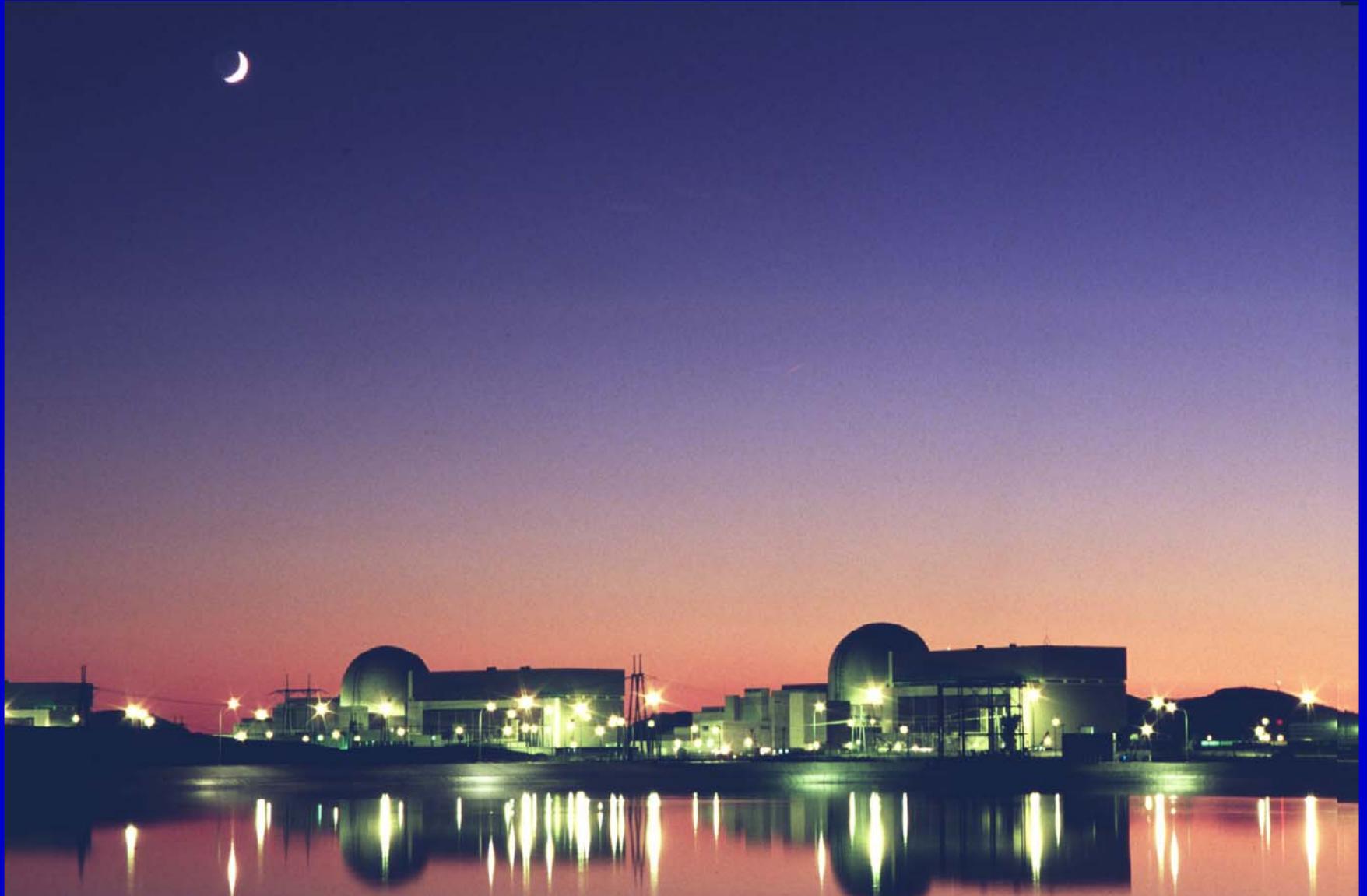
Safety performance letter written every six months

Public meetings on annual basis

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



Plant Safety Performance Summary



Inspection Results

- **NRC and Licensee identified inspection findings were of very low safety significance**
- **Inspection results within the Licensee Response Band**
- **No special or supplemental inspections necessary**



Performance Indicator Results

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



Assessment Conclusion

Licensee effectively managed:

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

**Palo Verde Nuclear Generating Station
operated 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



Palo Verde Nuclear Generating Station



Additional Focus Areas

- **NRC Responds As-Needed**
- **Mandate Licensee Actions**
- **Implement Emergency Response**



Nuclear Industry Issues

- **Potential Reactor Vessel Head Degradation**
- **Security at Nuclear Power Plants**



Reactor Vessel Head Degradation

- **Wastage found on Davis-Besse reactor vessel head**
- **Inspections required by Bulletins**
- **Lessons Learned**
- **Order Issued**



Reactor Vessel Head Degradation

- **NRC monitored Palo Verde reactor vessel head inspection during Unit 1 and Unit 2 Outages**
- **Reactor vessel head did not have wastage**
- **Unit 3 reactor vessel head considered low risk and will be inspected in April**



Security at Nuclear Power Plants

- **NRC created Office of Nuclear Security and Incident Response**
 - **Provides more efficient counterpart to Office of Homeland Security**
- **Top-to-bottom review of Security Program Initiated**



Security at Nuclear Power Plants

- **Issuance of Orders/Interim Compensatory Measures (ICM)**
- **Verification of licensee actions regarding ICMs**



Security at Nuclear Power Plants

- **Pending Orders on fatigue/guard training**
- **Initiation of pilot Force-on-Force Exercise**
- **NRC working with FAA has prohibited planes from circling or loitering above nuclear power plants**
- **Has expanded involvement with other federal agencies**



Threat Advisory and Protective Measures System

- **communicates threats affecting NRC licensees**
- **corresponds to color-coded Homeland Security Presidential Directive**
- **Identifies specific actions to be taken by NRC licensees for each threat level**



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