



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

April 29, 2013

Mr. Joseph Shea  
Manager, Nuclear Licensing  
Tennessee Valley Authority  
3R Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

SUBJECT: PUBLIC MEETING SUMMARY – WATTS BAR NUCLEAR STATION –  
DOCKET NO. 50-390

Dear Mr. Shea:

This refers to the meeting conducted on April 16, 2013, at the Comfort Inn Hotel in Athens, TN. The purpose of this meeting was to discuss the NRC's Reactor Oversight Process (ROP) and the NRC's annual assessment of plant safety performance for the period of January 1, 2012, to December 31, 2012. The major topics addressed were the NRC's assessment program and the results of the assessment. 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 will be available electronically for public inspection in the NRC Public Document Room (PDR) 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 meeting, please contact me at (404) 997-4521.

Sincerely,

/RA/

Scott M. Shaeffer, Chief  
Reactor Projects Branch 6  
Division of Reactor Projects

Docket No.: 50-390  
License No.: NPF-90

Enclosures: 1. List of Attendees  
2. 2012 EOC WB1 Public Presentation

cc w/encls: (See page 2)

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☐ PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE

☐ SENSITIVE ☐ NON-SENSITIVE

ADAMS: ☐ Yes ACCESSION NUMBER: \_\_\_\_\_

☐ SUNSI REVIEW COMPLETE ☐ FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP					
SIGNATURE	CDJ:/RA/	SMS:/RA/					
NAME	C.Jones	S.Shaeffer					
DATE	4/ /2013	4/ /2013	4/ /2013	4/ /2013	4/ /2013	4/ /2013	4/ /2013
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRP\RPB6\WATTS BAR\MEETINGS\WATTS BAR 2012 EOC MEETING SUMMARY DRAFT.DOCX

J. Shea

2

cc: w/encls:

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Watts Bar Nuclear Plant  
Tennessee Valley Authority  
Electronic Mail Distribution

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Plant Manager  
Watts Bar Nuclear Plant  
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Tennessee Valley Authority  
Electronic Mail Distribution

County Mayor  
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Decatur, TN 37322

County Executive  
375 Church Street  
Suite 215  
Dayton, TN 37321

Tennessee Department of Environment &  
Conservation  
Division of Radiological Health  
401 Church Street  
Nashville, TN 37243

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
Watts Bar Nuclear Plant  
1260 Nuclear Plant Road  
Spring City, TN 37381-2000

Ann Harris  
341 Swing Loop  
Rockwood, TN 37854

J. Shea

3

Letter to Joseph W. Shea from Scott Shaeffer dated April 29, 2013

SUBJECT: WATTS BAR NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT  
05000390/2013

**DISTRIBUTION:** w/encls.

C. Evans, RII EICS

L. Douglas, RII EICS

OE Mail

RIDSNRRDIRS

PUBLIC

RidsNrrPMWattsBar1 Resource

RidsNrrPMWattsBar2 Resource

# SIGN-IN SHEET

## WATTS BAR ANNUAL ASSESSMENT MEETING

Date: 4/16/2013

Location: Comfort Inn, Athens TN.

Name

Company

Dave Lochbaum	VCS
R. E. Lochbaum	Public
Ray King	Public
Jim Callen	Public
Mary Anne Koltowich	Roane County Environmental Review Board (RCERB)
Jessica Monroe	TVA
Kay Whittenburg	TVA
Donna Guinn	TVA
L. Bryan Belvin	TVA
Jim O'Dell	TVA
Gordon Arent	TVA
Pete Johnson	Public
Tim Cleary	TVA

Enclosure 1

# Watts Bar Nuclear Plant Annual Assessment Meeting

2012 Reactor Oversight Process  
Nuclear Regulatory Commission – Region II



# Agenda



- Introduction
- Reactor Oversight Process
- Industry Performance
- Watts Bar 1 Performance Results
- Tennessee Valley Authority Response and Remarks
- NRC Closing Remarks
- Public Questions to NRC

## Meeting's Purpose

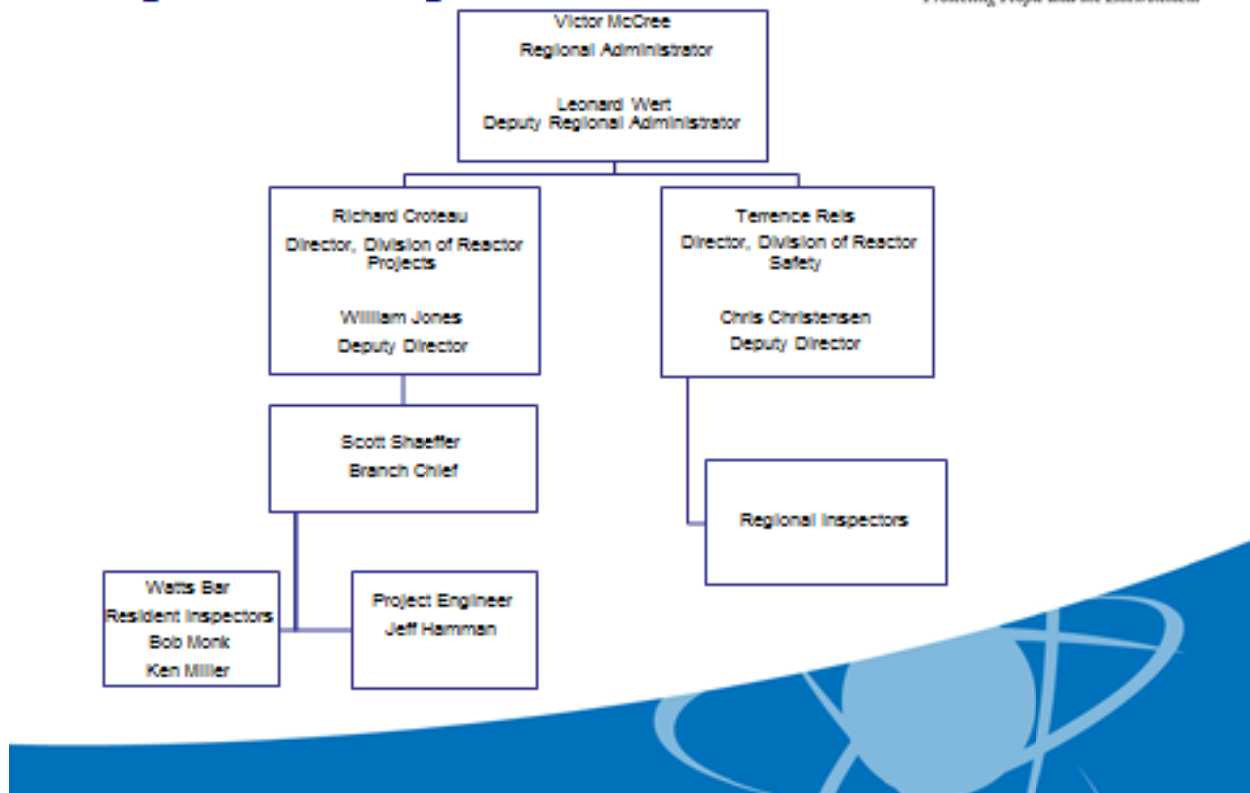


- Public forum for discussion of TVA's performance in 2012
- TVA will be given the opportunity to respond and inform the NRC of new or existing programs to maintain or improve performance





## Region II Organization



# What We Do



Safety



Security



Environment



# What We Regulate



## Reactors



## Materials



## Waste



# What We Don't Regulate



Military



Radon



X-Rays



# Assurance of Plant Safety



Continuous  
Training

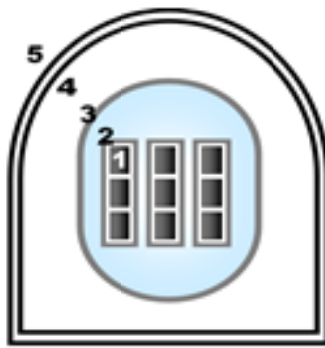


Defense  
In-Depth



Long-Term  
Maintenance

Regulation  
Compliance



# Regulatory Principles



## Principles of Good Regulation

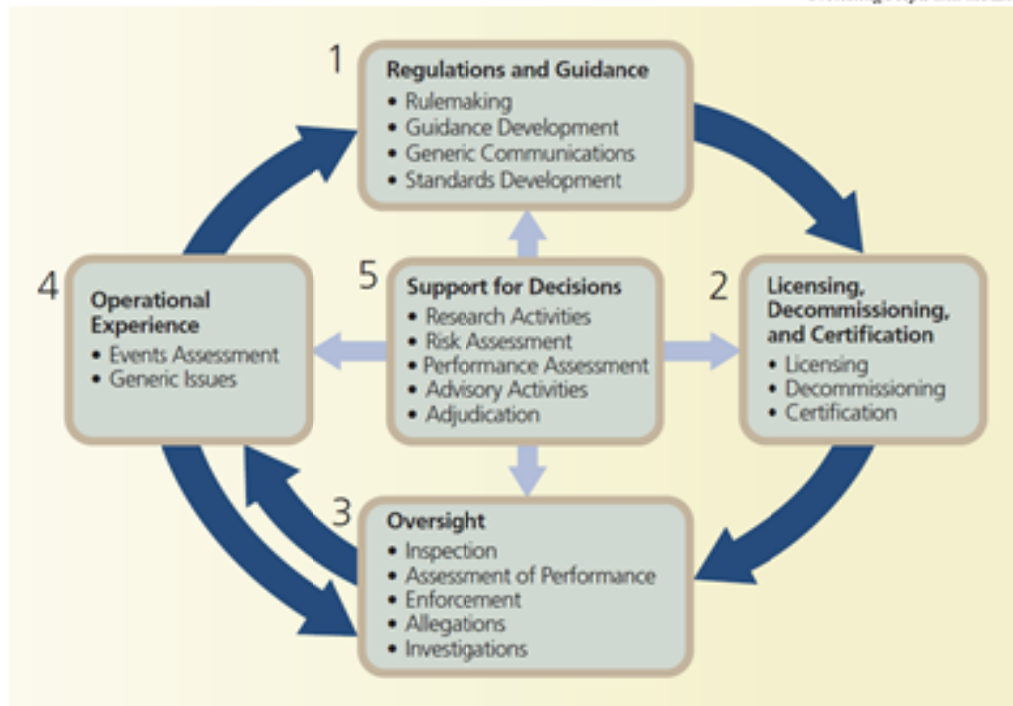
*The NRC adheres to the following Principles of Good Regulation*

<b>Independence:</b>	Nothing but the highest possible standards of ethical performance and professionalism should influence regulation. However, independence does not imply isolation. All available facts and opinions must be sought openly from licensees and other interested members of the public. The many and possibly conflicting public interests involved must be considered. Final decisions must be based on objective, well-founded assessments of all information, and must be documented with reasons explicitly stated.
<b>Openness:</b>	Nuclear regulation is the public's business, and it must be transacted publicly and candidly. The public must be informed about and have the opportunity to participate in the regulatory process as required by law. Open channels of communication must be maintained with Congress, other government agencies, licensees, and the public, as well as with the international nuclear community.
<b>Efficiency:</b>	The American taxpayer, the rate-paying consumer, and licensees are all entitled to the best possible management and administration of regulatory activities. The highest technical and managerial competence is required, and must be a constant agency goal. NRC must establish means to evaluate and continuously upgrade its regulatory capabilities. Regulatory activities should be consistent with the degree of risk reduction they achieve. Where several effective alternatives are available, the option which minimizes the use of resources should be adopted. Regulatory decisions should be made without undue delay.
<b>Clarity:</b>	Regulations should be coherent, logical, and practical. There should be a clear nexus between regulations and agency goals and objectives whether explicitly or implicitly stated. Agency positions should be readily understood and easily applied.
<b>Reliability:</b>	Regulations should be based on the best available knowledge from research and operational experience. Systems interactions, technological uncertainties, and the diversity of licensee and regulatory activities must all be taken into account so that risks are maintained at an acceptably low level. Once established, regulation should be perceived to be reliable and not susceptible to a state of transition. Regulatory actions should always be fully consistent with written regulations and should be promptly, fairly, and decisively administered so as to best stability to the nuclear operational and planning processes.

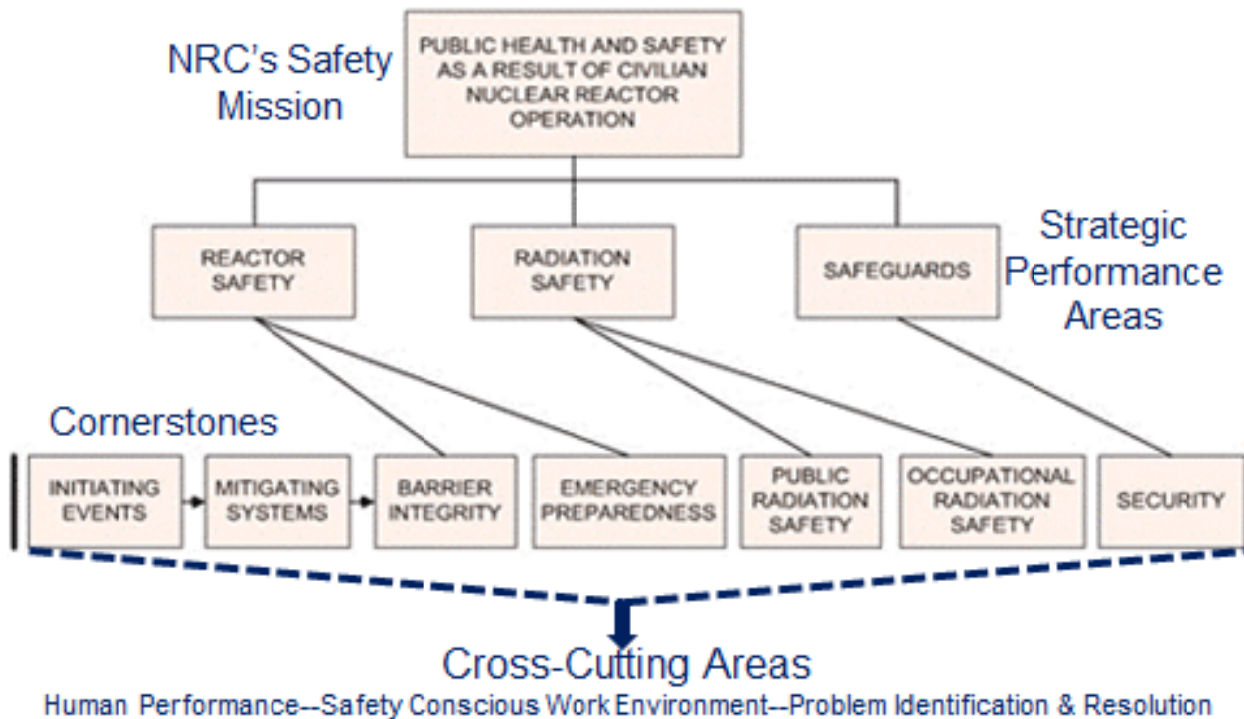
Independence  
Openness  
Efficiency  
Clarity  
Reliability



# How We Regulate

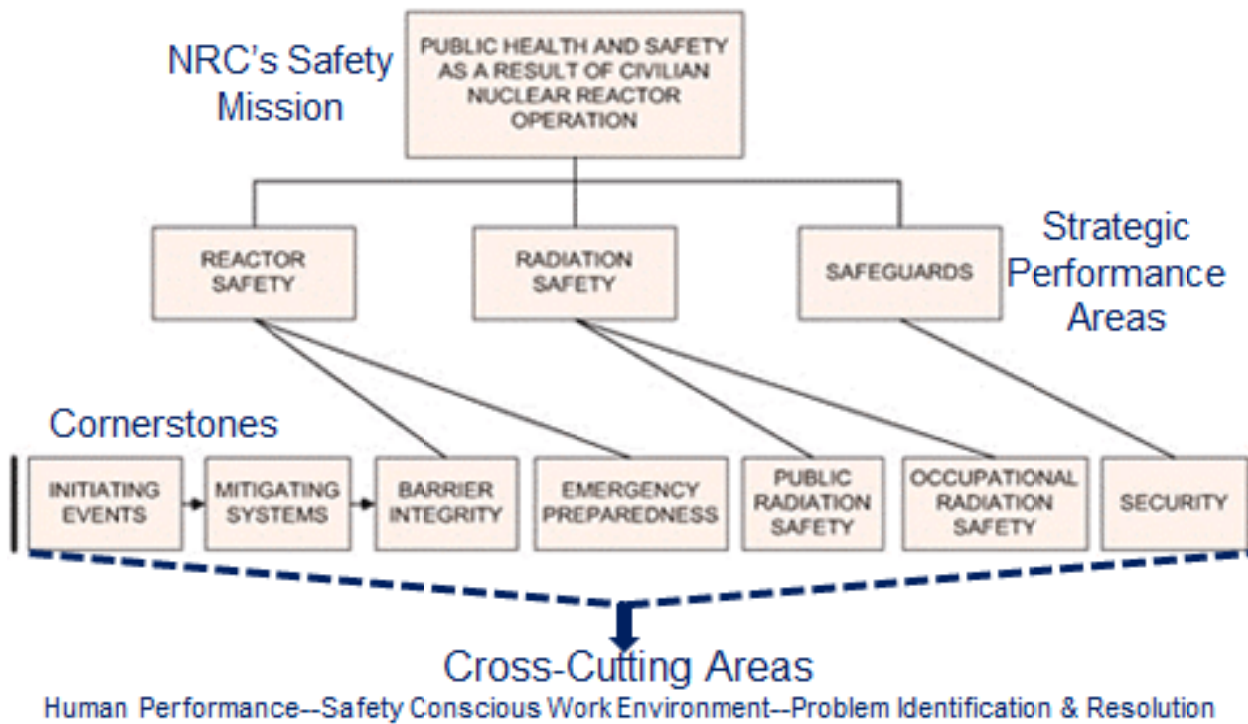


# Regulatory Framework





# Regulatory Framework



## Performance Indicators



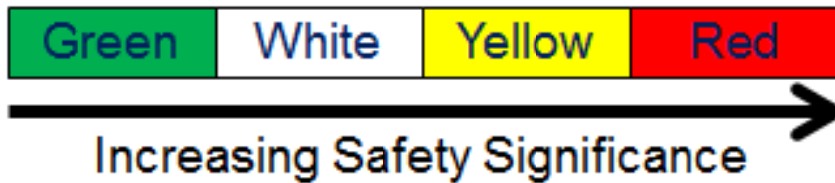
- 17 Performance Indicators
- PI's for each cornerstone
- Licensee submits data to NRC quarterly
- Inspection program verifies accuracy
- Data available on NRC website



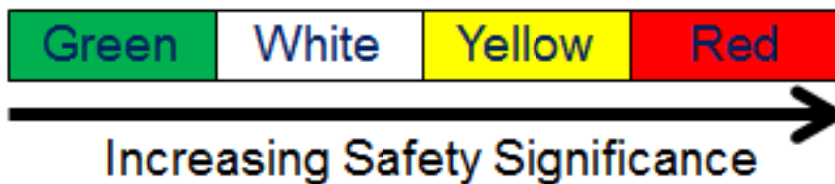
# Significance Threshold



## Performance Indicators



## Inspection Findings



## Action Matrix Columns



Licensee Response	Regulatory Response	Degraded	Multiple/Repetitive Degraded	Unacceptable Performance
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### Increasing

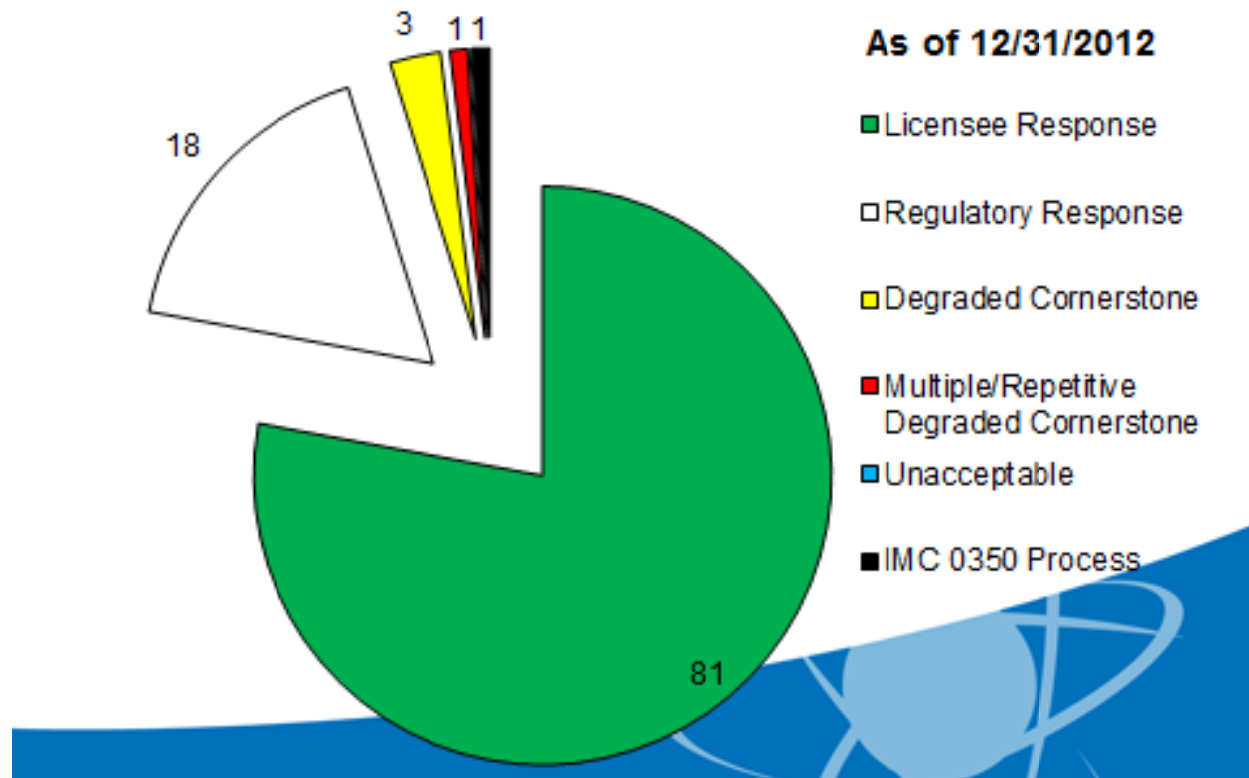
- Safety Significance
- Inspection
- Management Involvement
- Regulatory Action



## Industry-Wide Performance



**As of 12/31/2012**

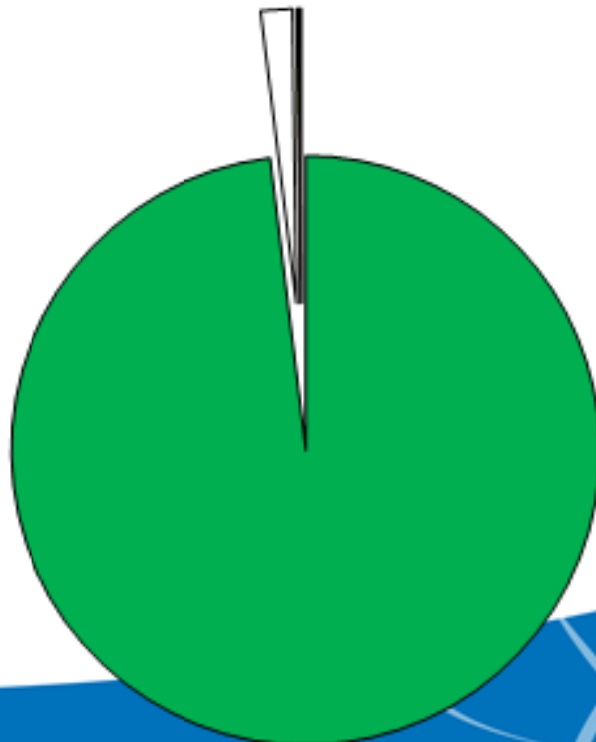


## Industry-Wide Inspection Findings

Finding data does not include security findings



### Calendar Year 2012 data



■ Green 914

□ White 16

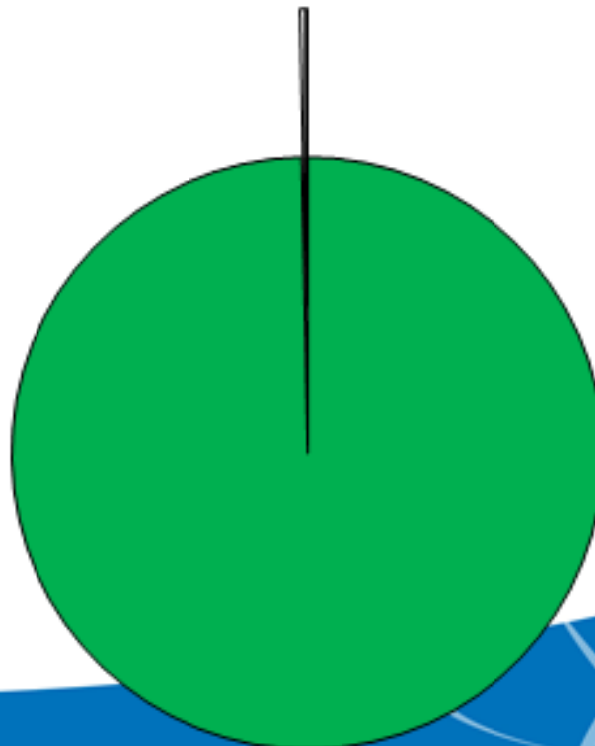
■ Yellow 1

■ Red 1

## Industry-Wide Performance Indicators



Calendar Year  
2012 data



■ Green 6926

□ White 23

■ Yellow 0

■ Red 0

## NRC Annual Assessment Summary



### Watts Bar

- Watts Bar Unit 1 operated the plant safely and in a manner that preserved the public health and safety and protected the environment.
- Watts Bar was in the Licensee Response Column of the NRCs ROP Action Matrix for the last quarter of 2012.
- Watts Bar 1 was in the Regulatory Response column due to a greater than green security finding through the second quarter 2012.



## NRC Annual Assessment Summary



### Watts Bar

- All cornerstone objectives were met.
- NRC plans baseline inspections at Watts Bar for 2013



## NRC Inspection Activities Watts Bar for 2012



- 6,298 hours of inspection and related activities
  - Direct Inspection 2,641
  - Indirect 3,657  
(Preparation, travel, documentation etc.)
- 2 resident inspectors on site – residents make four quarterly inspections per year and walk through the plant every day
- 5 regional inspections
- 2 major team inspection
  - Component Design basis Inspection
  - Modifications Inspection
- Watts Bar Unit 1 refueling outage was conducted September through November of 2012

## Watts Bar PIs and Findings



January 1 through December 31, 2012

- All Green Performance Indicators
- 12 Green / Severity Level IV inspection findings
- No inspection findings that were greater than Green safety significance



## NRC Inspection Findings



### Watts Bar

- Failure to Comply With Technical Specification 3.4.12 by Allowing a Safety Injection Pump to Inject in to the RCS in Mode 5
- Failure to Comply with Technical Specification 3.8.4, 3.8.3, and 3.0.3 by Failing to Recognize Vital Battery II and IV Degradation
- Failure to Establish Test Procedures to Assure Satisfactory ACAS Performance during Design Basis Accidents Failure to Perform a Transient Combustible Evaluation
- Failure to Adequately Test the AFW Discharge Check Valves
- Inadequate Acceptance Criteria in Maintenance and Surveillance Procedures.
- Failure to Maintain Steam Generator Blowdown Valves in the Equipment Qualification Database.

## NRC Inspection Findings



### Watts Bar

- Failure to Identify Degraded Auxiliary Charging Pump and Initiate Corrective Actions
- Failure to Follow Scaffold Procedure Threatens ERCW Pump Operability
- Inadequate Corrective Action for C ERCW Pump Breaker
- Failure to implement Ice Basket Repairs in Accordance With Approved Engineering and Maintenance Documents.
- Failure to Adhere to OPDP-1 Conduct of Operations
- Late State Notification of Unusual Event





## TVA Response and Remarks

Mr. T. Cleary

Site Vice President



## **Actions in Response to the Japan Nuclear Accident**



- Actions in response to Japan Nuclear Accident

Website: <http://www.nrc.gov/japan/japan-info.html>

- Mailbox for comments on staff actions:

[JLD\\_Public.Resource@nrc.gov](mailto:JLD_Public.Resource@nrc.gov)

- Office of Public Affairs Point of Contact:

[OPA.resource@nrc.gov](mailto:OPA.resource@nrc.gov) or 301-415-8200

# NRC Social Media Channels



- Blog: <http://public-blog.nrc-gateway.gov/>
- Flickr: <http://www.flickr.com/photos/nrcgov/>
- Twitter: <https://twitter.com/#!/nrcgov>
- YouTube: <http://www.youtube.com/user/NRCgov>
- RSS: <http://www.nrc.gov/public-involve/listserver.html#rss>





## 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)
- Contact Watts Bar Resident Inspectors
  - 423-365-5487

# **End of Presentation**

**Nuclear Regulatory Commission  
Region II  
Atlanta, GA**

**April 16, 2013**

