# *Salem and Hope Creek Assessment Meeting*

## Salem and Hope Creek Safety Performance in 2010

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## U.S. Nuclear Plant Safety in light of Japan Events

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**2010 Reactor Oversight Process**

**Nuclear Regulatory Commission – Region I**

# NRC Representatives

- Darrel Roberts – Director, Division of Reactor Projects
- Arthur Burritt – Branch Chief
- Daniel Schroeder – Senior Resident Inspector, Salem
- Brian Smith – Senior Resident Inspector, Hope Creek
- Amar Patel – Resident Inspector, Hope Creek

# Agenda

- Introduction
- Discussion of safety performance at Salem and Hope Creek
- Discussion of U.S. nuclear plant safety in light of Japan events
- NRC to address public questions
- Closing remarks

# NRC Assessment Summary Salem

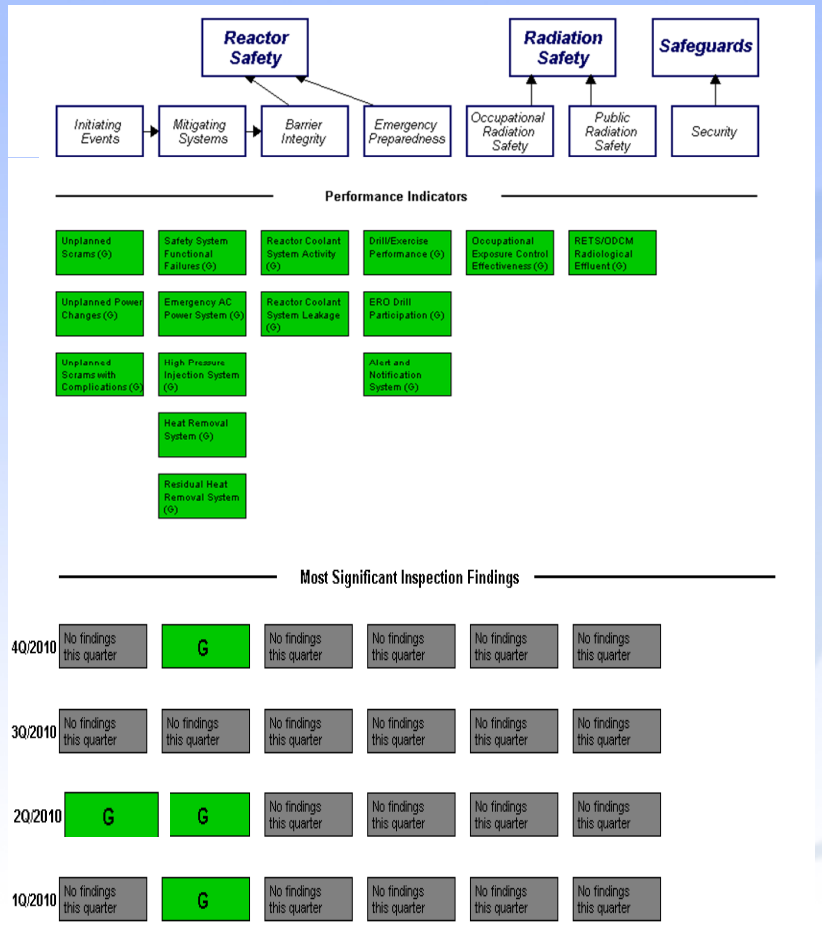
- PSEG operated Salem safely and in a manner that preserved the public health and safety and protected the environment.
- Licensee Response column of the Action Matrix
- Baseline inspections planned for 2011

# Inspection Activities 2010
# Salem

- 6932 hours of inspection and related activities
- 2 resident inspectors on site – residents perform inspections daily and can respond to plant events at any time
- 2 major team inspections
  - Permanent Modifications
  - Emergency Planning

# Performance Indicator and Inspection Results

## January 1 through December 31, 2010



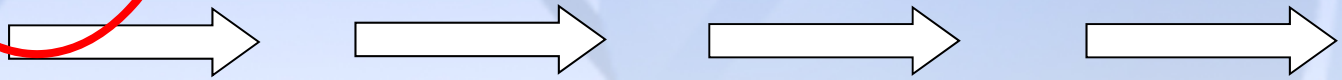

## Salem

- All Green Performance Indicators
- 4 Green inspection findings

*Protecting People and the Environment*

# NRC Action Matrix

| Licensee Response | Regulatory Response | Degraded Cornerstone | Multiple Repetitive Degraded Cornerstone | Unacceptable Performance |
|---|---|---|---|---|
| All Inputs are Green; Cornerstone Objectives Fully Met | 1 or 2 White Inputs; Cornerstone Objectives Fully Met | 2 White or 1 Yellow Input; Cornerstone Objectives Met w/ Moderate Degradation in Safety Performance | Multiple Yellow Inputs or 1 Red Input; Cornerstone Objectives Met w/ Significant Degradation in Safety Performance | Overall Unacceptable Performance; Plants not permitted to Operate w/in this Column; Unacceptable Margin to Safety |



- **Increasing safety significance**
- **Increasing NRC inspection efforts**
- **Increasing NRC/Licensee management involvement**
- **Increasing regulatory actions**

# NRC Assessment Summary
# Hope Creek

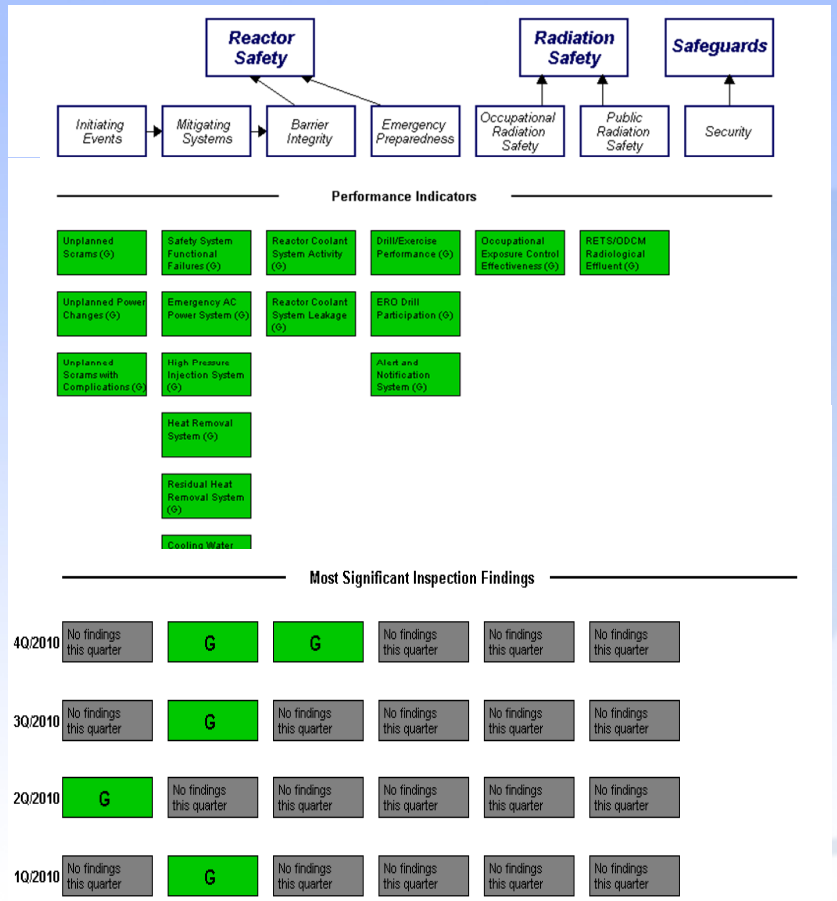
- PSEG operated Hope Creek safely and in a manner that preserved the public health and safety and protected the environment.
- Licensee Response column of the Action Matrix
- Baseline inspections planned for 2011

# *Inspection Activities 2010*
# *Hope Creek*

- **5342 hours of inspection and related activities**
- **2 resident inspectors on site – residents perform inspections daily and can respond to plant events at any time**
- **2 major team inspections**
  - **Fire Protection**
  - **Emergency Planning**

# Performance Indicator and Inspection Results

## January 1 through December 31, 2010



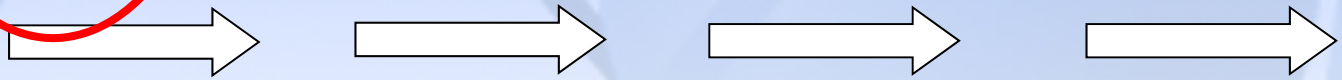

### Hope Creek

- All Green Performance Indicators
- 9 Green/Severity Level IV inspection findings

*Protecting People and the Environment*

# NRC Action Matrix

| Licensee Response | Regulatory Response | Degraded Cornerstone | Multiple Repetitive Degraded Cornerstone | Unacceptable Performance |
|---|---|---|---|---|
| All Inputs are Green; Cornerstone Objectives Fully Met | 1 or 2 White Inputs; Cornerstone Objectives Fully Met | 2 White or 1 Yellow Input; Cornerstone Objectives Met w/ Moderate Degradation in Safety Performance | Multiple Yellow Inputs or 1 Red Input; Cornerstone Objectives Met w/ Significant Degradation in Safety Performance | Overall Unacceptable Performance; Plants not permitted to Operate w/in this Column; Unacceptable Margin to Safety |



- **Increasing safety significance**
- **Increasing NRC inspection efforts**
- **Increasing NRC/Licensee management involvement**
- **Increasing regulatory actions**

# 2010 Salem and Hope Creek Assessment Summary

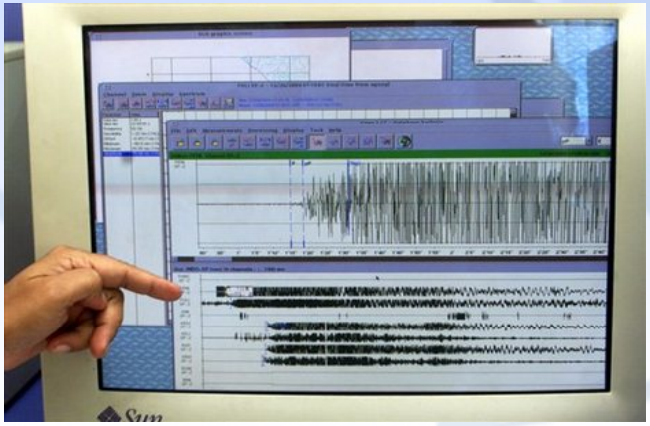
- Salem and Hope Creek were operated safely
- Licensee Response column of the Action Matrix
- Baseline inspections planned for 2011

# U.S. Nuclear Plant Safety in Light of Japan Events

# U.S. Nuclear Plants Remain Safe

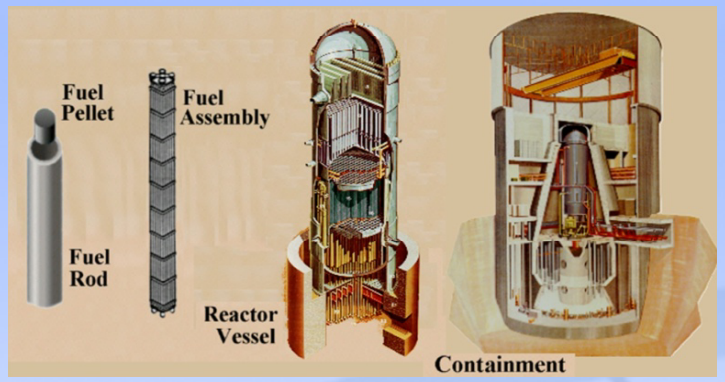
- NRC requires plants to be designed to withstand external events
- NRC requires a defense-in-depth approach to safety
- NRC performs independent safety inspections
- NRC assesses new safety information and requires improvements

# *Designed for Site Specific Natural Events*



- **Earthquakes**
- **Tsunamis**
- **Hurricanes**
- **Floods**
- **Tornadoes**

# The NRC Requires Defense-In-Depth




- Redundant and diverse safety systems
- Multiple physical barriers to contain radioactive material
- Testing and inspection of systems important to safety
- Emergency planning

# NRC Independent Safety Inspections

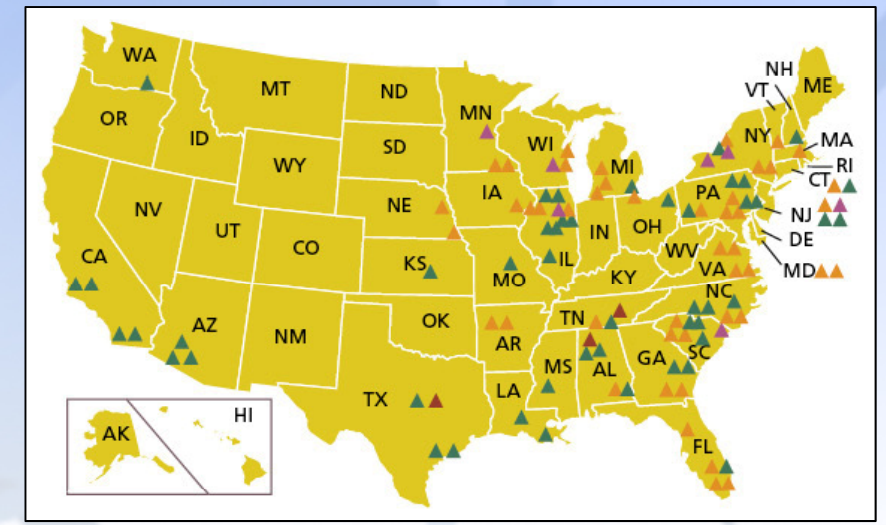
## Reactor Oversight Program

- NRC inspectors have unfettered access to all plant activities related to nuclear safety and security
- At least two full-time NRC resident inspectors at each nuclear plant
- NRC specialists conduct additional inspections at each nuclear plant

# NRC Requires Safety Improvements

**NRC assesses new safety information, develops lessons learned, and requires safety enhancements:**

- NRC operating experience program
- Rulemaking (Station Blackout)
- Post TMI Actions
- Post 9/11 Orders
- Generic Safety Issues



# NRC Response to Events in Japan

- NRC conducting a methodical and systematic review
- Near-term actions (<90 days)
  - conducting additional inspections
  - identifying near term operational issues
- Longer-term actions

# *Director's Comments*

**Darrell Roberts**

**Director**
**Division of Reactor Projects**
**Region I**

# *Meeting Ground Rules*

1. **Please be respectful to the speaker – only one speaker at a time**
2. **See NRC staff if you have procedural questions/concerns or still want to sign up.**
3. **NRC staff members will be available after the meeting to talk to those interested**

# Questions

# Contacting the NRC

- Report a safety concern
  - 1-800-695-7403
  - allegation@nrc.gov
- General questions
  - www.nrc.gov
  - Region I Public Affairs
    - Diane Screnci, 610-332-5330 or diane.screnci@nrc.gov
    - Neil Sheehan, 610-332-5331 or neil.sheehan@nrc.gov