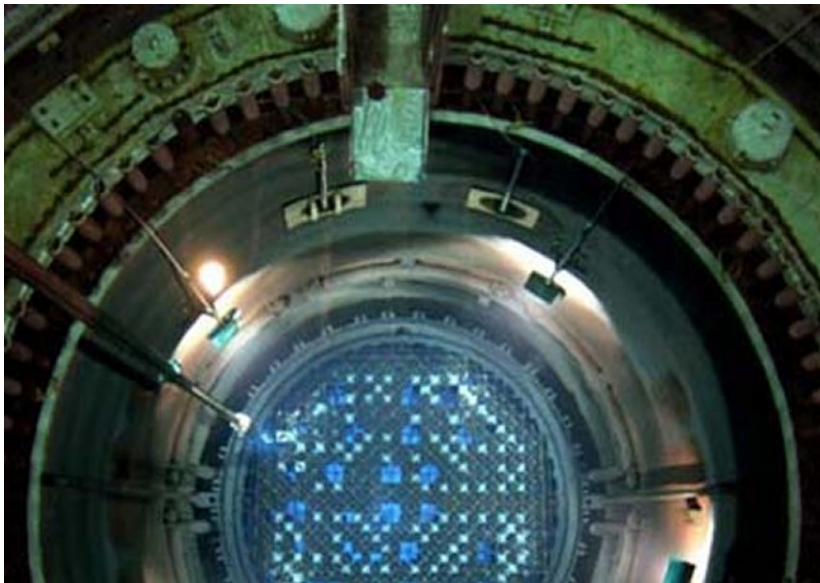


# **Point Beach Nuclear Plant Annual Assessment Meeting/Open House**

**2015 Reactor Oversight Process  
Nuclear Regulatory Commission – Region III  
May 25, 2016**

# Our Mission

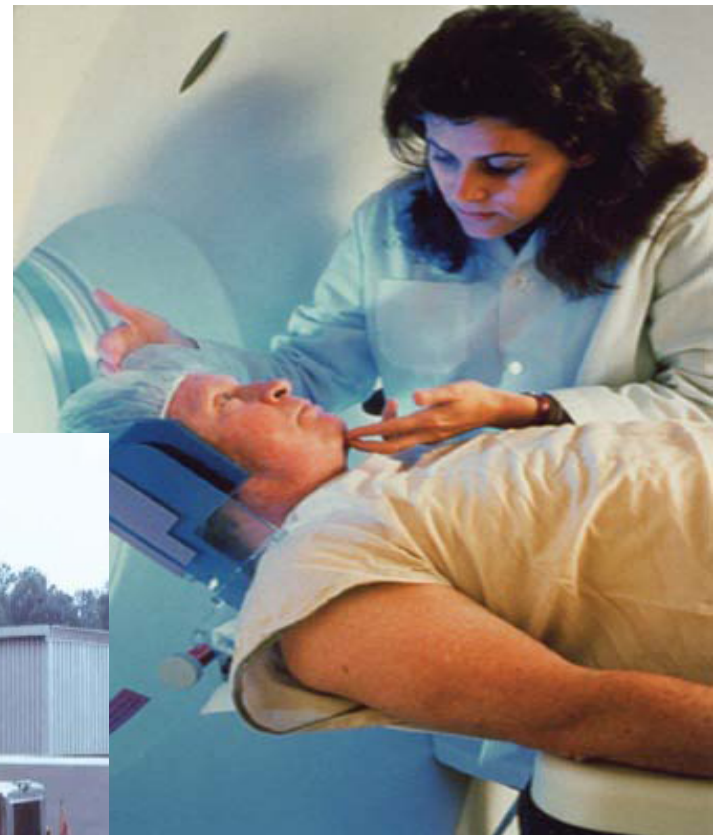


**To license and regulate the nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.**

# What We Regulate

## Reactors

## Materials

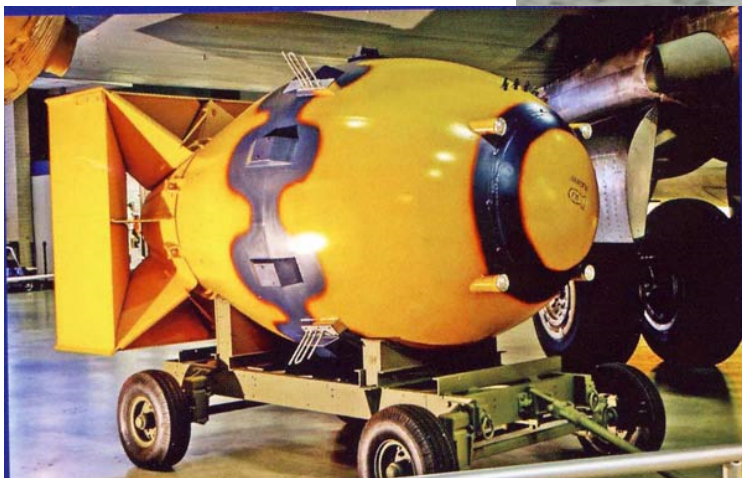


## Waste



# What We Don't Regulate

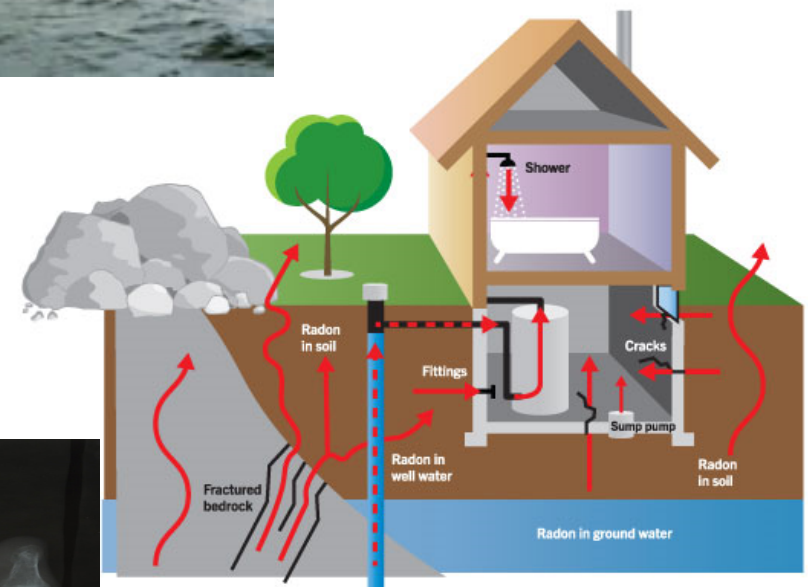
Military



X-Rays



Radon





# Some Nuclear Facts



- 100 nuclear power plants supply about 20 percent of the electricity in the U.S.



- Nuclear materials are used in medicine for diagnosis and cancer treatment.



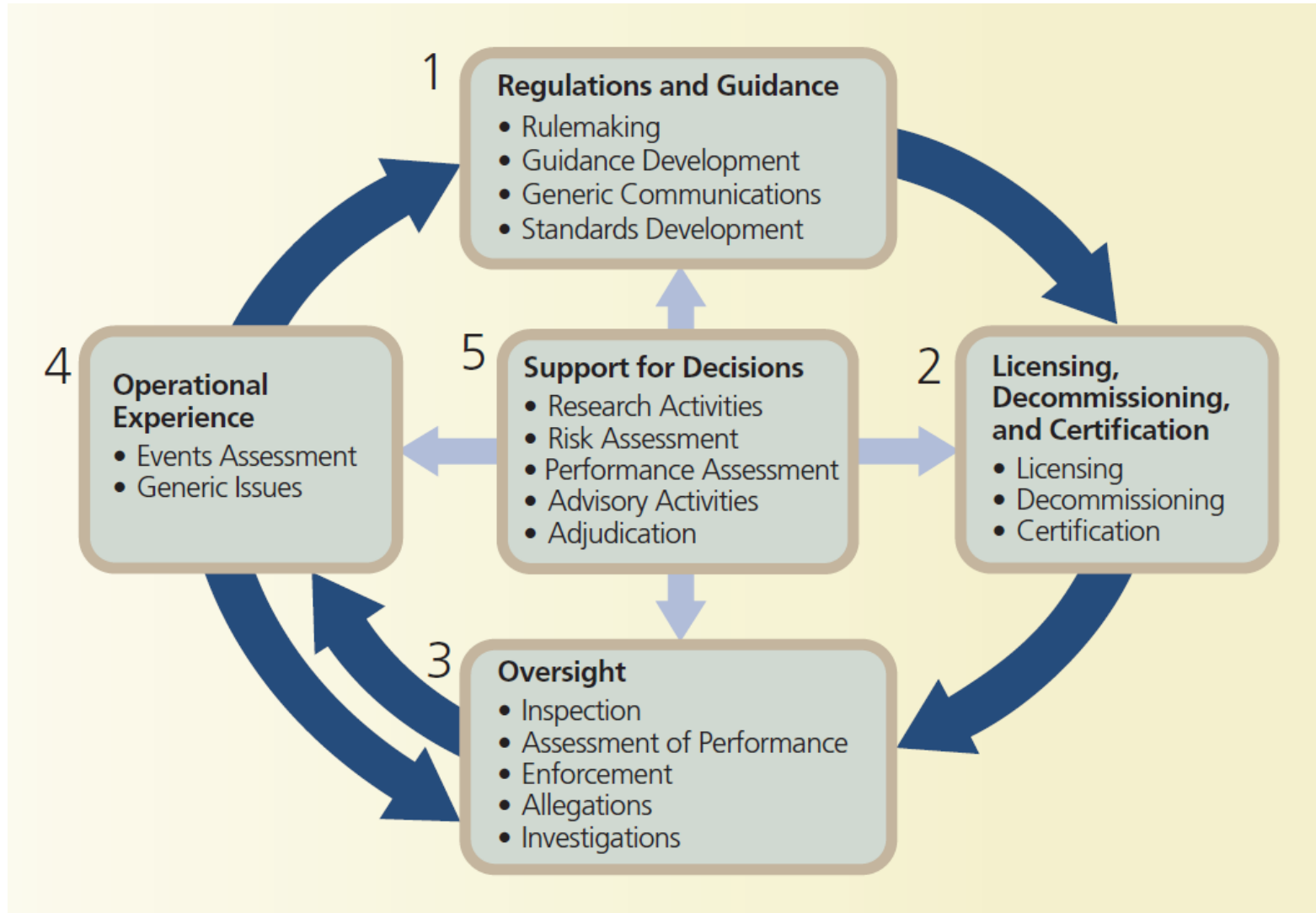
- Nuclear materials are widely used in industry, such as in density gauges, flow measurement devices, radiography devices, and irradiators.

# NRC Performance Goals

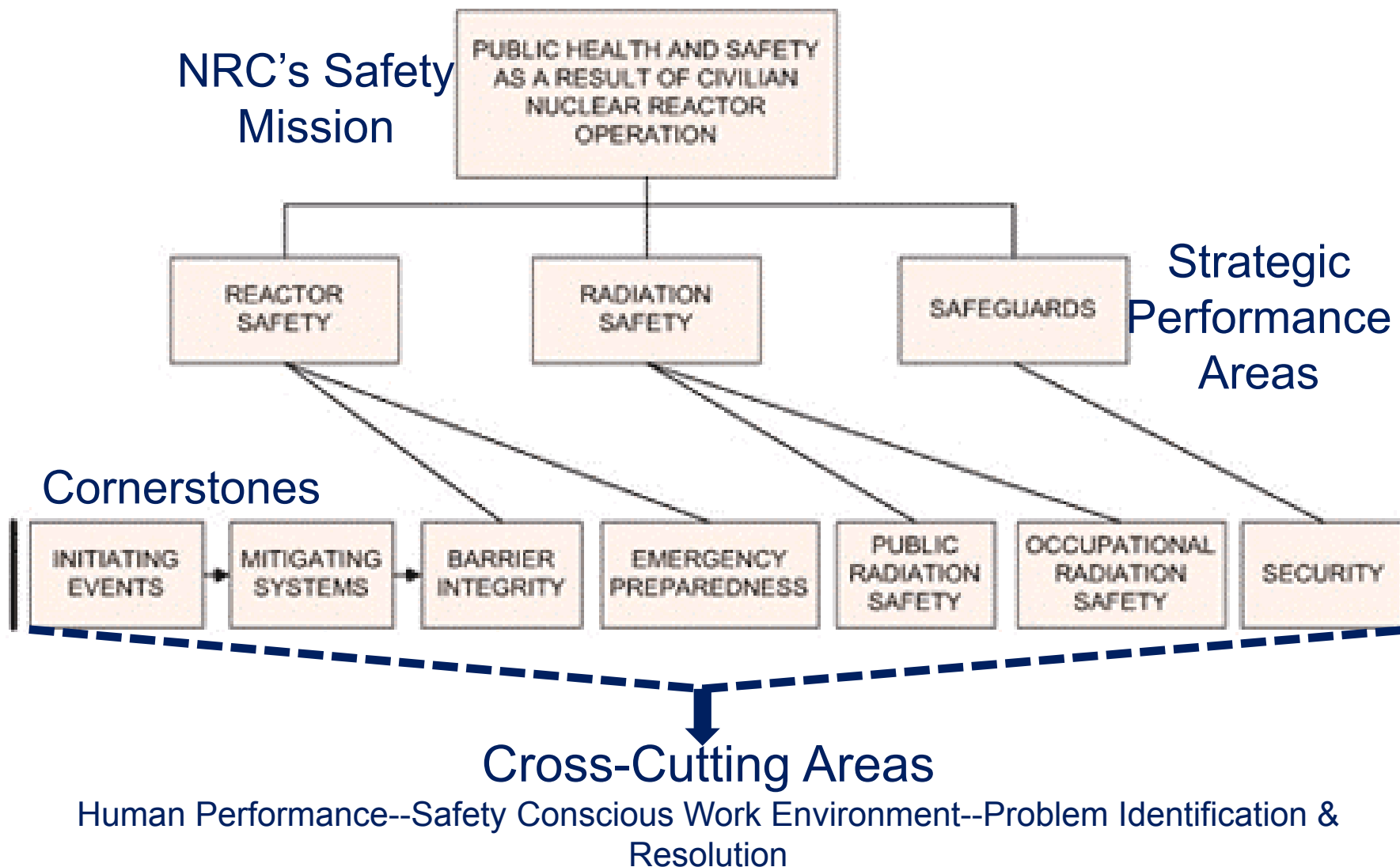


- **Safety** – Ensure adequate protection of public health and safety and the environment
- **Security** – Ensure adequate protection in the secure use and management of radioactive materials

# How We Regulate

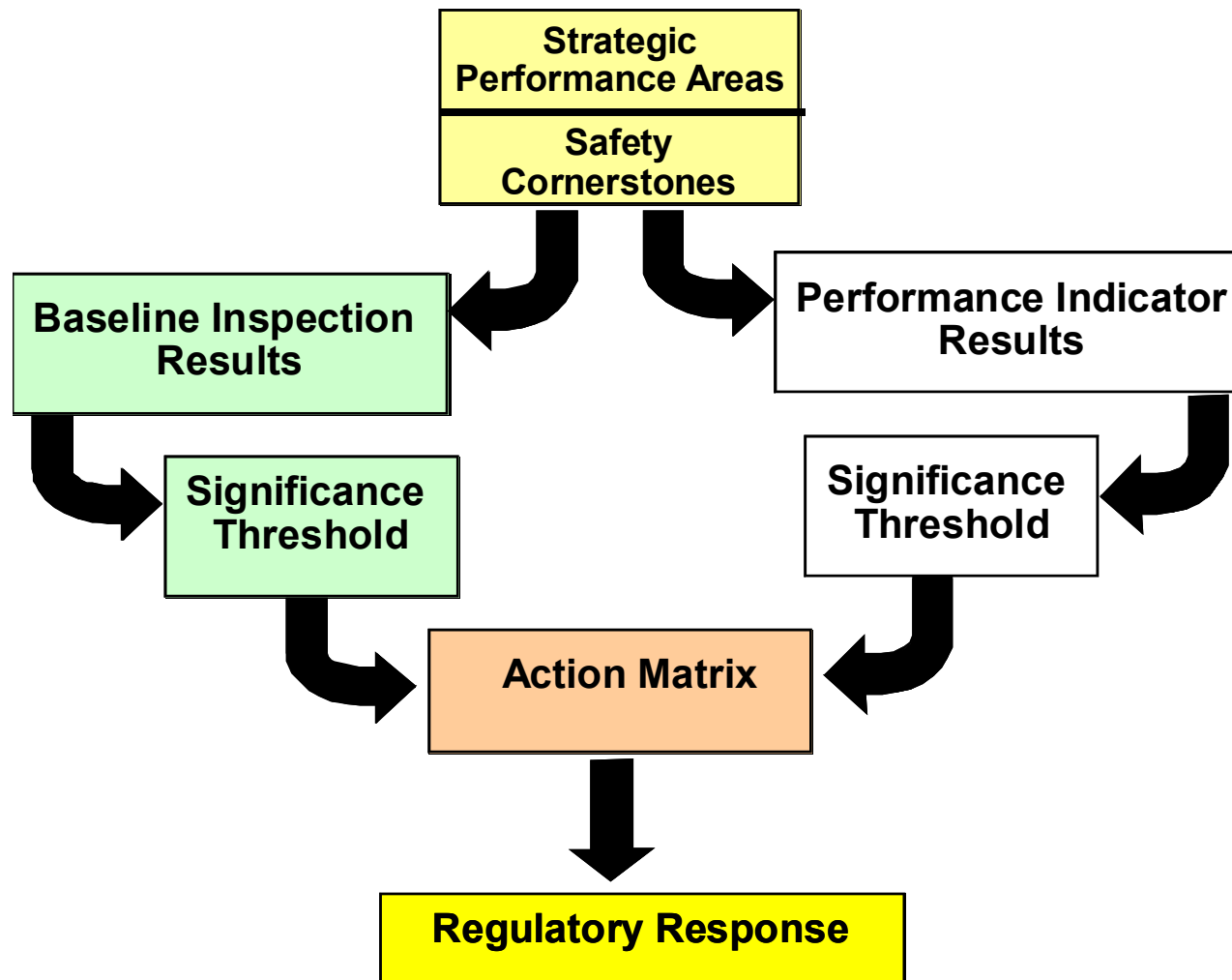


# Regulatory Framework





# Reactor Oversight Process



# Significance Threshold



## Performance Indicators



Increasing Safety Significance

## Inspection Findings



Increasing Safety Significance

# 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

# National Summary of Plant Performance

Status as of 02/22/2016

Licensee Response	90	
Regulatory Response	7	
Degraded Cornerstone	0	
Multiple/Repetitive Deg. Cornerstone		3
Unacceptable	0	
IMC 0350 Oversight	0	
Total	100	

# National Summary

- **Performance Indicator Results for 2015\***

— <b>Green</b>	<b>6686</b>
— <b>White</b>	<b>12</b>
— <b>Yellow</b>	<b>0</b>
— <b>Red</b>	<b>0</b>

**\*PIs are counted per plant per quarter**

- **Total Inspection Findings in 2015<sup>#</sup>**

— <b>Green</b>	<b>782</b>
— <b>White</b>	<b>8</b>
— <b>Yellow</b>	<b>0</b>
— <b>Red</b>	<b>0</b>

**# Finding data current as of 2/22/2016**



# **NRC Annual Assessment Summary**



## **Point Beach Nuclear Plant**

- **NextEra Energy operated the plant safely and in a manner that preserved the public health and safety and protected the environment**
- **Point Beach Unit 1 and Unit 2 were in the Licensee Response Column of the NRC's Action Matrix from March 17, 2015, through the remainder of 2015**
- **At the start of 2015 Point Beach Unit 1 was in the Degraded Response Column due to a previous external flooding violation and an auxiliary feedwater pump violation. Unit 2 was in the Regulatory Response Column due to the external flooding violation.**
- **No Substantive Cross-Cutting Issues were identified**

# **NRC Inspection Activities**

## **Point Beach 2015**



- **7591 total hours expended by NRC on Reactor Oversight Process activities**
  - **3304 inspector hours of direct inspection activity**
  - **499 inspector hours reviewing and observing plant operating status**
  - **2265 inspector hours of preparation for and documentation of inspection activities**
  - **1523 hours for other Reactor Oversight Process elements (e.g., assessments and communications)**

# **NRC Inspection Activities**



## **Point Beach Nuclear Plant for 2015**

- **2 resident inspectors on site – residents produced four quarterly inspection reports and walked through the plant daily**
- **37 other inspectors participated in various inspections**
- **3 major team inspections**
  - **Supplemental Inspection for a Degraded Cornerstone and Regulatory Response column entry**
  - **Component Design Basis Inspection**
  - **Biennial Problem Identification and Resolution Inspection**

# Significance Threshold

## Performance Indicators

- **Green** Baseline Inspection
- **White** Requires additional NRC oversight
- **Yellow** Requires more NRC oversight
- **Red** Requires most NRC oversight

## Inspection Findings

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

# Point Beach Pls and Findings

January 1 through December 31, 2014



- **All Green Performance Indicators**
- **12 Green/Severity Level IV  
Inspection Findings**
- **1 White Inspection Finding  
(External Flooding) Carryover from  
2014**



# **Safety Significant/White Findings**



## **Point Beach Nuclear Plant**

- **None Identified in 2015**
- **Lake Wave Run-Up External Flooding Protection Features**
  - **NRC Identified in First Quarter of 2013**
  - **Remain Opened Due to Significant Weaknesses with Licensee's Corrective Action During Inspection in First Quarter of 2014**
  - **Corrective Actions Found Sufficient during Re-Examination in First Quarter of 2015**

# **NRC Inspection Findings**

## **Some Examples of Green Findings**

### **Point Beach Nuclear Plant**

- **Failure to evaluate Containment Spray System for potential gas intrusion**
- **Failure to perform a written Safety Evaluation for Final Safety Analysis Report changes**
- **Failure to address potential effects on a safety-related system in the event of a failure of a non-seismic portion of the Service Water System**
- **Failure to quantify radionuclides potentially in the body for internal radiation dose assessments**

# **NRC Inspection Plans for 2016**

## **Point Beach Nuclear Plant**



- **NRC Plans Baseline Inspections for 2016 This includes the following major team inspections:**
  - **Triennial Heat Sink Inspection**
  - **Triennial Fire Protection Inspection**
  - **Biennial Problem Identification and Resolution Inspection**

# Point Beach Fukushima Recommendations Status



## Mitigating Strategies (MS) & Spent Fuel Pool Instrumentation (SFPI) Order

- MS Order requires strategies to cope with a long term loss of safety systems
- SFPI Order requires plants to be able to tell if water is at or above certain levels
- Site Audit was performed in June 2015
- Site Safety Evaluation scheduled to be issued after the NRC receives the site compliance letter
- Regional inspection of MS inspection (TI 191, Rev 1) will be performed after Safety Evaluation issued

# **Point Beach Fukushima Flooding Response Status**

- **Flooding Hazard Reevaluations**
  - **Reevaluate Hazards using present-Day information**
  - **Flooding Was Submitted March 2015**
  - **Staff assessments will be issued by December 2016**
  - **Inspectors completed TI-190 which verified a licensee's interim actions were appropriate to mitigate the reevaluated flood levels.**
- **Licensees will address the reevaluated flood heights as part of their Mitigating Strategies Assessment, and if impacted take one of four potential paths:**
  - 1) No change; 2) procedural change;**
  - 3) physical modifications; 4) Revised Mitigating Strategies**



# **Point Beach Fukushima Seismic Response Status**



- **Seismic Walkdowns**
  - **Verify that the site can meet its current requirements for hazard protection**
  - **Walkdowns are complete; Staff assessments issued**
- **Seismic Hazard Reevaluations**
  - **Reevaluate Hazards using present-Day information**
  - **Seismic Reevaluations submitted March 31, 2014**
  - **NRC assessment of the licensee submittal was issued on August 3, 2015**
  - **NRC assessment in letter dated October 27, 2015, stated that a seismic risk evaluation was not required**
- **Sites will evaluate the impacts of the updated Seismic hazards as part of their mitigating strategies assessment.**

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



- **Actions in response to Japan Nuclear Accident:** <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>

# Reference Sources

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