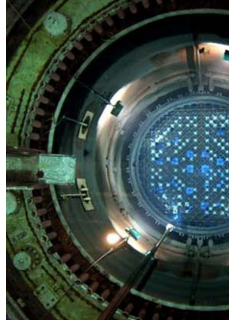


Davis-Besse Nuclear Power Station Annual Assessment Meeting Open House June 11, 2015

2014 Reactor Oversight Process
Nuclear Regulatory Commission – Region III

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.

The NRC Regulates

- Nuclear reactors - commercial power reactors, research and test reactors, new reactor designs
- Nuclear materials - nuclear reactor fuel, radioactive materials for medical, industrial, and academic use
- Nuclear waste – transportation, storage and disposal of nuclear material and waste, decommissioning of nuclear facilities
- Nuclear security – physical security of nuclear facilities and materials from sabotage or attacks

What We Don't Do

- Regulate nuclear weapons, military reactors, or space vehicle reactors
- Own or operate nuclear power plants
- Regulate some radioactive materials, such as X-rays and naturally occurring radon

Some Nuclear Facts




- 99 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.

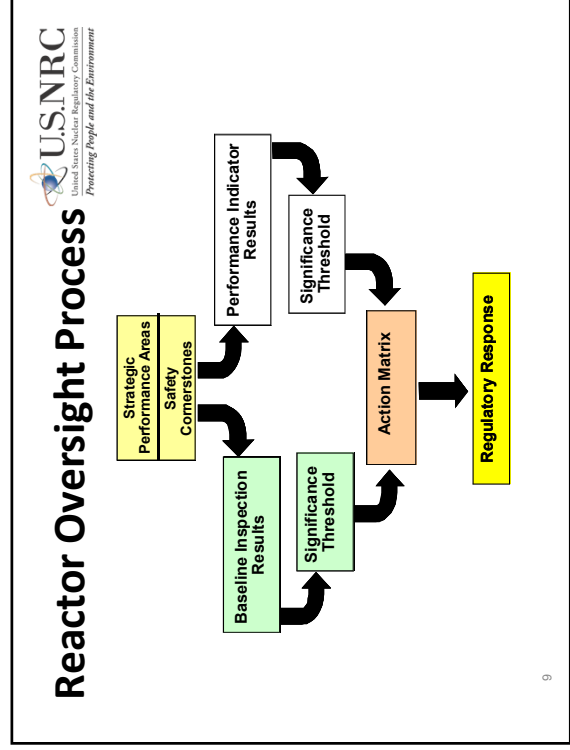
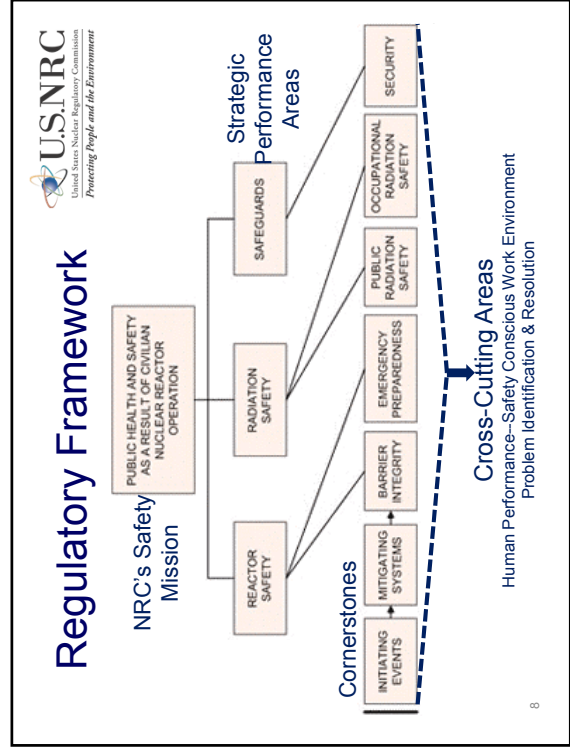
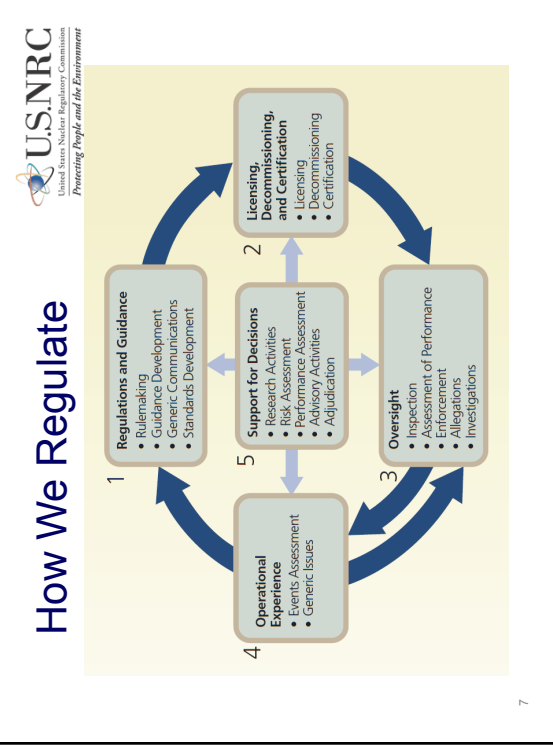



- Nuclear materials are widely used in industry, such as in density gauges, flow measurement devices, radiography devices, and irradiators.



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





Significance Threshold

Performance Indicators

Green	White	Yellow	Red
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Increasing Safety Significance

Inspection Findings

Green	White	Yellow	Red
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Increasing Safety Significance

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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

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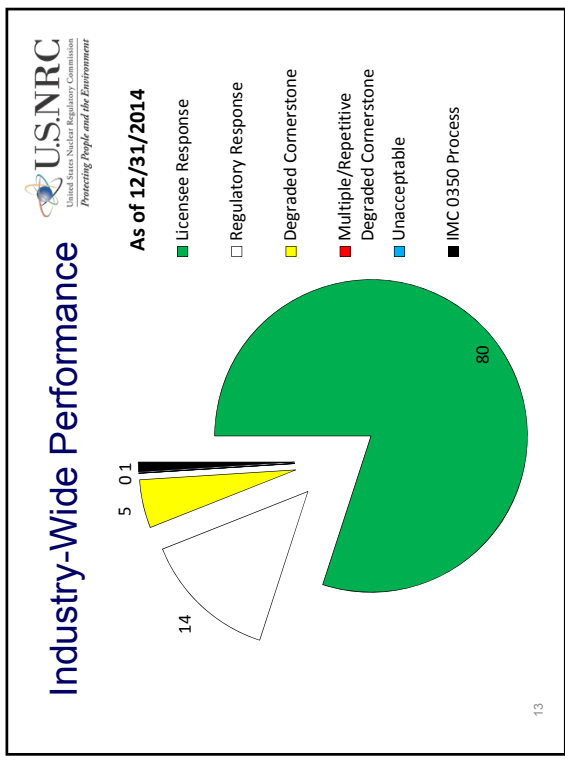
Action Matrix Columns

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

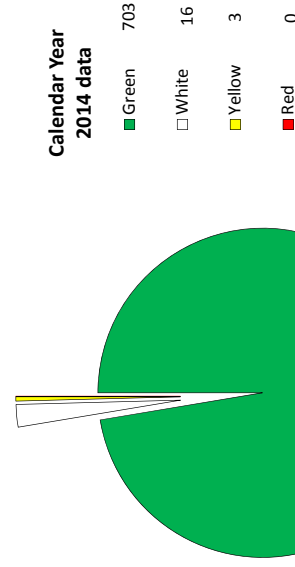
- Safety Significance
- Inspection
- Management Involvement
- Regulatory Action

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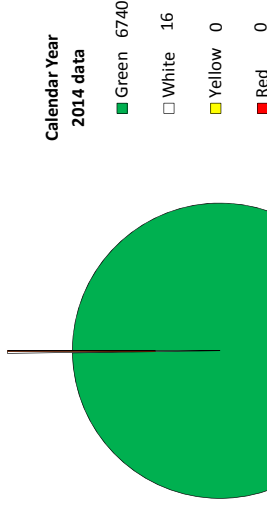
Industry-Wide Inspection Findings

Finding data current as of 1/31/2015



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Industry-Wide Performance Indicators



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NRC Annual Assessment Summary Davis-Besse Nuclear Power Station 2014



- FirstEnergy Nuclear Operating Company operated the station safely and in a manner that preserved the public health and safety and protected the environment.
- Davis-Besse was in the Licensee Response Column of the NRC's Action Matrix for the first two quarters of 2014
- Davis-Besse transitioned to the Regulatory Response Column in third quarter of 2014 due to a Greater-than-Green violation associated with the Physical Protection cornerstone
- No Substantive Cross-Cutting Issues were identified

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NRC Inspection Activities

Davis-Besse 2014



- 7041 total hours expended by NRC on Reactor Oversight Process activities
- 3390 inspector hours of direct inspection activity
- 628 inspector hours reviewing and observing plant operating status
- 1621 inspector hours of preparation for and documentation of inspection activities
- 1402 hours for other Reactor Oversight Process elements (e.g., assessments and communications)

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NRC Inspection Activities

Davis-Besse Nuclear Power Station 2014

- 2 resident inspectors on site – residents produced four quarterly inspection reports and performed daily plant walk-throughs
- 25 other NRC inspectors participated in various inspections
- 3 major team inspections
 - Triennial Heat Sink Inspection
 - Modifications/50.59 Inspection
 - Steam Generator Replacement Inspection

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Davis-Besse Pls and Findings

January 1 through December 31, 2014

- All Green Performance Indicators
- 13 Green/Severity Level IV Inspection Findings
- 1 Greater-than-Green Inspection Finding

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NRC Inspection Findings

Some Examples of 2014 Green Findings

Davis-Besse Nuclear Power Station

- Repair work priority did not support timely repair of issues with control room annunciators
- Failure to identify and correct a void area in the concrete of the shield building
- Unqualified procedures used for ultrasonic examination of shield building reinforcing bars
- Fire watch individual did not make required visual observation of a room due to difficulties with the room's door

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NRC Inspection Plans for 2015

Davis-Besse Nuclear Power Station

- NRC Plans Baseline Inspections and Supplemental Inspections for 2015. This includes the following major team inspections
 - Biennial Problem Identification and Resolution process (completed in April)
 - Component Design Basis (completed first quarter)
 - Emergency Planning Exercise and Performance Indicator verification (completed second quarter)
 - Initial Licensed Operator Examinations (third quarter)

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Davis-Besse Shield Building (SB)



- In 2013, indications of crack growth were identified by licensee during scheduled bore hole examinations
- Possibility of continued crack growth is being addressed by licensee's SB long-term monitoring program
- Re-establishment of SB licensing basis to accept laminar cracking will require a license amendment
- Using conservative calculations, the licensee showed that the SB remains capable to perform its design safety functions with laminar cracks

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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
- Office of Public Affairs Point of Contact: OPA.resource@nrc.gov or 301-415-8200

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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>

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Additional Questions? NRC Representatives



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Email: OPA3.Resource@nrc.gov

NRC Resident Inspector Office — Davis-Besse Nuclear Power Station — 419-244-4494

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