

NRC 2021 ANNUAL ASSESSMENT DAVIS-BESSE NUCLEAR POWER STATION

Interactive Audio for this presentation will be available only through the Microsoft Teams Application.

Rest Trends



HOST

Billy Dickson

Branch Chief Division of Reactor Projects Branch 2





PURPOSE OF TODAY'S MEETING

- A public forum for discussion of the licensee's performance in 2021
- NRC will address the performance issues identified in the annual assessment letter
- Licensee will be given the opportunity to respond and inform the NRC of new or existing programs to maintain or improve performance



AGENDA

Introduction

- Review of Reactor Oversight Process
- National Summary of Plant Performance
- Discussion of Plant Performance Results
- NRC Closing Remarks
- ▶ Break
- NRC available to address public questions



ABOUT THE NRC



The NRC licenses and regulates the Nation's civilian use of radioactive material to achieve the following goals:

 <u>Safety</u> – Ensure adequate protection of public health and safety and the environment

 <u>Security</u> – Ensure adequate protection of the secure use and management of radioactive materials



SOME NUCLEAR FACTS



- 92 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

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THE NRC REGULATES

- <u>Nuclear reactors</u> commercial power reactors, research and test reactors, new reactor designs
- <u>Nuclear materials</u> 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



HOW WE REGULATE

- Establish rules and regulations
- ► Issue licenses
- Provide oversight through inspection, enforcement, and evaluation of operational experience
- Conduct research to provide support for regulatory decisions
- Respond to events and emergencies



WHAT WE <u>DON'T</u> 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



REACTOR OVERSIGHT PROCESS (ROP)





REACTOR OVERSIGHT PROCESS (ROP)





SAFETY/SECURITY SIGNIFICANCE

REEN	WHITE	YELLOW	RED
			1

GREEN	WHITE	YELLOW	RED	
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ROP ACTION MATRIX

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

- Safety Significance
- Inspection
- Management Involvement
- Regulatory Action



EXAMPLES OF BASELINE INSPECTIONS

- Equipment Alignment
- Triennial Fire Protection
- Operator Response
- Emergency Preparedness
- Rad Release Controls
- Worker Radiation Protection
- Corrective Action Program
- Corrective Action Case Reviews

~80 hrs/yr ~240 hrs every 3 yrs ~125 hrs/yr ~80 hrs/yr ~110 hrs every 2 yrs ~95 hrs/yr ~250 hrs every 2 yrs ~60 hrs/yr



91

2

NATIONAL SUMMARY OF PLANT PERFORMANCE

Status as of 2/23/2022

Licensee Response Regulatory Response Degraded Cornerstone Multiple/Repetitive Deg. Cornerstone Unacceptable IMC 0350 Oversight Total



NATIONAL SUMMARY

• Performance Indicator Results for 2021*

2

- Green 6314
- White 5
- Yellow 0
- Red

*Pls are counted per unit per quarter

- Total Inspection Findings in 2021
 - Green 289
 - Greater-than-Green
 - White
 - Yellow
 - Red



DAVIS BESSE RESIDENT INSPECTORS



Daniel Mills Senior Resident Inspector



Russell Cassara Resident Inspector



2021 ANNUAL ASSESSMENT DAVIS BESSE NUCLEAR POWER STATION

- The plant operated safely
- Regulatory Response
 Column
 - All performance indicators were Green
 - Two (2) White inspection findings

Licensee Response	Regulatory Response	Degraded Performance	Multiple/Repetitive Degraded Cornerstone	Unacceptable Performance
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2021 NRC INSPECTIONS

- 3176 hours of direct inspection
- 12 regional inspections
- 5 major team inspections
 - Biennial Problem Identification and Resolution Inspection
 - Biennial Emergency Preparedness Exercise Evaluation
 - Operating License Initial Examinations
 - Design Bases Assurance Inspection (Programs)
 - Cyber Security Inspection



2021 NRC INSPECTIONS SPECIAL INSPECTION

Multiple failures of the safety-related emergency diesel generator (EDG) circuits within relatively short time period (16 month) along with failure of Station Blackout Diesel.

Complicated Reactor Trip in July of 2021





2021 NRC INSPECTIONS SPECIAL INSPECTION RESULTS

- Four (4) findings
- Three(3) findings determined to be of very low safety significance (Green).
 Two of these findings have associated violations, which we are treating as non-cited violations (NCVs)
- One (1) finding determined to be of low to moderate safety significance (White) and as a violation of NRC requirements



SAFETY SIGNIFICANT FINDINGS OR PIS

- A WHITE finding and associated violation of the Davis-Besse License Condition 2.D requirement to fully implement and maintain in effect all provisions of the Commission-approved Cyber Security Plan.
 - A WHITE finding and associated violation involving the failure to select a suitable replacement part for the emergency diesel generators. The selected speed switch was not compatible with the station's direct current (dc) battery system.





NRC PLANS FOR 2022

NRC plans baseline inspections and two supplemental Inspections at the Davis-Besse Power Station for the remainder of 2022



NRC RESPONSE TO COVID-19

- Maintained mission critical functions
 - Monitored plant activities
 - Maintained emergency response capabilities
 - Risk-informed "eyes on" inspections through residents and regional inspections
- Expanded use of telework
- Coordinated actions with industry on best practices
- For more information visit: <u>https://www.nrc.gov/about-nrc/covid-19/reactors/</u>





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Meeting Feedback

Or -



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1. The meeting achieved its stated purpose.	1	2	3	4	5	
2. This meeting helped me to understand the topics discussed.	1	2	3	4	5	
The meeting location, format, starting time, and duration were reasonably convenient.	1	2	3	4	5	
 The meeting facility, room set up, microphones, and visuals used contributed to the success of the meeting. 	1	2	3	4	5	
 Attendees, including those participating remotely, were given sufficient opportunity to ask questions or express their views. 	1	2	3	4	5	
6. Attendees were listened to and understood by NRC staff.	1	2	3	4	5	
 The presentations and explanations given by the NRC staff were understandable, fair and balanced. 	1	2	3	4	5	
8. I am satisfied overall with the NRC staff who participated in the meeting.		2	3	4	5	
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You will then be allowed to unmute your microphone and ask your question in the order it was received.



- Please provide your name and any affiliation (e.g., member of the public, local government official, non-government organization, etc.)
- Each speaker will be given up to 3 minutes for their question/comment. Your microphone will be muted at the conclusion of your question.
- The NRC will then respond. You will then be allowed to unmute your microphone for a follow-up or clarifying question.
- The meeting will end promptly at 6:00 pm (EDT) or earlier if we have no further questions.
- ▶ Please be respectful.
- ► Thank you!

Questions



In order to ask a question please use the "Raise Hand" feature in Teams



Public Affairs



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