



U.S. Nuclear Regulatory Commission
**34th ANNUAL REGULATORY
INFORMATION CONFERENCE**

MARCH 8-10, 2022

PREPARING FOR
TOMORROW

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The Future of Incident Response: Leveraging Technology *NRC Experiences*



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Everything changes...



Timing matters...

The NRC made two significant improvements before COVID:

- We transitioned to a scalable incident response program that is more focused on role than location
- All NRC staff desktop computers were replaced with laptops





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NRC experience with remote incident response

- The NRC operated under “maximum telework” from March 2020 to November 2021
- During that time, we conducted 14 exercises and responded to one actual event (weather related)
- These were conducted mostly remotely, using Microsoft Teams, SharePoint, OneDrive, and WebEOC, supplemented with existing telephone bridge lines operated by the NRC Headquarters Operations Officers
- We conducted internal workshops, including with staff from headquarters and all four regional offices

External benchmarking—mission matters!

We benchmarked our experiences against—

- International regulators
- Other U.S. Federal agencies with an incident response mission
- U.S. state and local emergency response organizations
- Commercial entities, including NRC-licensed power generators

Tolerance for remote response varies with the mission of an organization

How did it work for the NRC?

- We accomplished most of our normal, nonincident-response mission in a fully virtual environment
- We successfully conducted incident response in a mostly virtual environment
- We recognize that some work must be accomplished in person, including physical tasks, some inspections, security/classified tasks, and some interactions with stakeholders

Remote response has advantages but introduces some challenges

Advantages of remote response

- Expands the pool of experienced participants regardless of location or time zone
- Allows geographic diversity/redundancy
- Reduces travel time, allowing shorter shifts and enhanced sustainability
- Permits remote collaboration, which is preferable for some tasks such as shared document editing and live collaboration and writing
- Makes it easy to join/monitor different teams
- Accommodates staff with varying communication and work styles

Advantages of in-person response

- Gives access to robust and redundant power, communications, and information systems
- Allows access to classified information and communication systems
- Permits face-to-face communication, which is richer and improves “high-trust” conversations and decisionmaking
- Enhances situational awareness
- Makes for more effective training, collaboration, and briefings



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The future is hybrid response

- Reap the benefits of both remote and in-person response
- Mitigate the challenges of both
- Recognize that some incident response positions are better suited for in-person staffing, some for remote personnel

The balance of in-person and remote response will change with the type, complexity, and even stage of an event