

Lessons Learned and Best Practices on Oversight of Operating Reactors During COVID-19 Public Health Emergency

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The Bottom Line

Reasonable assurance of safe nuclear plant operation was achieved through satisfactory completion of inspection samples, on-site inspector presence and continued monitoring of licensee activities, and response to plant events.

Background

- NRC staff was required to perform extensive telework during the COVID-19 public health emergency.
- Resident inspectors were expected to be on-site about every three business days.
- Some inspections were either not performed or delayed due to COVID-19 restrictions.
- Initial reactor operator exams restarted to ensure a pipeline of reactor operators.
- Goal established to complete the minimum number of inspection samples.
- NRC inspectors and examiners worked with licensees to ensure their personnel safety.

Scope/Methodology

- Lessons learned effort focused on oversight of operating reactors and related support functions.
- A 24-question survey was developed to identify lessons learned and best practices (March – July 2020).
- A second survey was sent to all senior resident inspectors on IT capability.
- Interviews were conducted with NRC Office Directors (NRR, NSIR) and Regional Administrators.

Recommendations Overview

- Improve implementation of oversight during COVID public health emergency.
- Ensure oversight program is adequately prepared for future emergencies.
- Identify processes and actions taken during the COVID-19 PHE that can be used during normal operations to enable the NRC to become a more modern, risk-informed regulator.

**Recommendations are under consideration
with no decisions made**

Near Term Recommendations

IT Capability and Reliability

- Formalize agreements with licensees to ensure inspectors have continued access to plant information.
- Provide second computer monitor to staff.
- Continue to educate staff and licensees about the capabilities and benefits of available IT tools.

Inspection Guidance Enhancements

- Consider revisions to inspection procedures or guidance to indicate activities and inspection requirements can be performed either fully remotely, partially remotely, or onsite.

Long Term Recommendations

IT Capability and Reliability

- Improve remote access to Safeguards Information for security inspectors and designated HQ staff.

Remote Inspection Practices

- Expand use of remote work practices for resident inspectors.
- Evaluate the current team inspection framework to determine if changes should be made to improve efficiency and effectiveness.

Inspection Guidance Enhancements

- Revise ROP program documents to include best practices and guidance developed since the COVID-19 PHE began.

Select Best Practices

- Conducting townhalls and inspector seminars
- Developing dashboards to monitor local and site conditions
- Using internal information exchanges through MS SharePoint
- Using direct lines of communication with licensee staff
- Alternating onsite presence for team inspections
- Using personally owned vehicles and traveling alone
- Scheduling routine, and often daily, communications with licensees

Other Perspectives Summarized

- Report relies too heavily on survey results.
- Lessons learned should only be applied to future emergencies – not normal conditions.
- Immediate action should be taken to expand telework for inspectors.
- Survey questions should have focused on inspection activities that could be performed remotely versus how many hours per week inspectors telework.
- Use of the term “remote inspection” causes concern for some.
- Evaluate versus expand the routine use of telework for inspectors.

Next Steps

- Coordinate results with NRC COVID-19 Coordination Team.
- Determine which recommendations will be accepted and acted upon with focus on near-term actions.
- Seek feedback from with industry and public to finalize approaches.
- Evaluate effectiveness of actions taken for both emergency and non-emergency conditions (after implementation and appropriate run-time).

Conclusions

NRC oversight of operating reactors during the COVID-19 PHE was appropriate, mostly as a result of the NRC staff and management's ability to adapt to telework and the challenges the PHE presented.

NRC inspectors, staff, and management learned a great deal in a short time and the lessons learned and best practices identified should prove highly beneficial for future emergencies that limit or prevent access to nuclear plant sites.