

---

## INSPECTION MANUAL CHAPTER 2515 APPENDIX E

---

### INSPECTION PROGRAM MODIFICATIONS DURING PANDEMICS, EPIDEMICS, OR OTHER WIDESPREAD ILLNESSES OR DISEASES

Effective Date: 03/27/2020

#### 2515E-01      PURPOSE

Pandemics, epidemics, or other widespread illnesses or diseases primarily affect people and develop more gradually, spread more widely, and could persist longer than other natural phenomena. During these times, the U.S. Nuclear Regulatory Commission's (NRC's) inspection implementing strategy should be agile and allow for flexibility in the completion of the baseline inspection program at affected facilities. The inspection program provides reasonable assurance that licensees are in compliance with their licenses and regulations. Licensees have the ultimate responsibility to safely operate their plants in accordance with their operating licenses.

During the time of a pandemic, epidemic, or other widespread illness or disease the NRC will use a graded approach to meet the objectives of the oversight program. A graded approach allows for deferring/rescheduling planned inspections, changing the inspection periodicity, adjusting inspection levels (number of completed samples), or a combination of these actions, while seeking to maintain as much of the normal inspection program as possible based on the conditions being experienced and information and guidance from Federal, State, and local government agencies, keeping in full view the health and safety of the personnel involved.

Continuity of Operations Procedure 429, "Agency Pandemic Plan" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14030A634), requires that certain aspects of the inspection program identified as mission essential functions be maintained to preserve the agency's statutory obligations during a pandemic including inspection oversight of licensed facilities and materials.

#### 2515E-02      OBJECTIVES

02.01 To provide direction for modifying the baseline inspection program in the event of a pandemic, epidemic, or other widespread illness or disease.

#### 2515E-03      APPLICABILITY

See Section 2515-03 of Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program – Operations Phase."

The agency formally enters its pandemic procedure when widespread illness has the potential to disrupt licensee staffing at the site and the licensee begins to formulate contingency plans, or when widespread illness has the potential for significant impact on NRC site coverage.

The Office of Nuclear Reactor Regulation (NRR) or the regional offices may supplement, alter, or suspend the provisions of this guidance by memorandum as the situation warrants. The Director of the Division of Reactor Oversight (and the Chief of the Reactor Inspection Branch) should be consulted when conditions requiring additional guidance are warranted.

#### 2515E-04 DEFINITIONS

None.

#### 2515E-05 RESPONSIBILITIES AND AUTHORITIES

See Section 2515-05 of IMC 2515

#### 2515E-06 REQUIREMENTS

See Section 2515-14 of IMC 2515

#### 2515E-07 GUIDANCE

In the event of a pandemic, epidemic, or other widespread illness or disease, the following considerations are in effect:

- a. The regions are expected to make a reasonable effort to complete the minimum number of samples for each inspection activity. However, the Regional Administrator, with concurrence from the Director of NRR can suspend implementation of the baseline inspection program should conditions warrant (such as a site quarantining). If this should occur, the primary function of resident inspectors and the regional office would be to maintain situational awareness and the ability to respond to emergency situations.
- b. Regions shall continue to adequately evaluate and respond to events at a facility during the pandemic, epidemic, or other widespread illness or disease. If onsite inspections by NRC personnel are not possible, then the regions shall collect information on the event remotely.
- c. Site coverage requirements remain in effect during the pandemic, epidemic, or other widespread illness or disease (see IMC 2515, Section 2515-11, paragraph 11.01). If site coverage requirements cannot be met, regions shall notify NRR and the Executive Director of Operations. In this situation, regions shall make arrangements with the licensee to monitor plant activities remotely.

Staff who are in temporary resident inspector RI positions may need to be recalled due to travel limitations (e.g. access to lodging and food). Regions may need to consider using backup sites, other nearby sites, or regional or NRC Headquarters personnel to help cover any gaps that may occur because the temporary resident inspector needs to leave the area to return home.

- d. At the onset of and periodically during the pandemic, epidemic, or other widespread illness or disease, the regions should contact the U.S Department of Homeland Security or

designated State contacts to confirm the ability of affected States to perform their associated emergency response functions.

- e. At the onset of the pandemic, epidemic, or other widespread illness or disease and periodically thereafter, the inspectors shall verify that the licensees have sufficient staffing levels in key positions (e.g., operations, emergency response organization, security). Additionally, evaluate deferred maintenance and other activities, use of overtime, and the need for licensing or other regional support.

The licensee's operational status may be an additional consideration when determining modifications to the baseline inspection program and site coverage.

- f. The resident inspectors should discuss with their licensees the need to maintain situational awareness of the licensees' ability to cope with the challenges associated with a pandemic. They should use Regulatory Issue Summary 2010-04, "Monitoring the Status of Regulated Activities during a Pandemic," dated May 25, 2010, and other appropriate guidance as a resource.

The regulatory issue summary includes several questions that the resident inspectors should consider during routine business contacts with the licensees. The information obtained will enable the NRC to effectively respond to licensees with potential challenges. Inspectors should recognize that during a pandemic, epidemic, other widespread illness or disease, licensees' resources may be strained. Therefore, inspectors should work with licensees to obtain the best information possible given the circumstances.

- g. Inspectors should be cautious when accessing licensee facilities during a pandemic, epidemic, or other widespread illness or disease using conservative good judgment so as not to unnecessarily risk the health of licensee employees. A graded approach based on the current licensee response posture should be considered for determining inspector site access.

In order to minimize the spread of infections, NRC staff members at or visiting sites should strive to follow any licensee plans in place. Additionally, inspectors should follow any applicable Federal, State, or local health screening guidance in effect to determine if it is appropriate to enter a site and interact with licensee personnel.

If licensees are conducting health screenings to permit site access, inspectors should generally comply with those requests similar to their adherence to Occupational Safety and Health Administration or other industrial safety requirements. Inspectors should contact their management if the licensee implements changes to normal access to the site and coordinate with management if unfettered site access is denied or restricted.

- h. During the pandemic, epidemic, or other widespread illness or disease, the regions should consider modifications to the baseline inspections as follows:

- Heightened awareness
  - Resident inspectors: Conduct onsite activities as normal.
  - Region-based inspections: Conduct activities as normal.

- Local implementation of limited social distancing (e.g., canceling after-school activities, limiting public gatherings, or advising nonessential workers to remain home)
  - Resident inspectors: Reduced onsite activities in affected areas. Assess the use of resident inspector in-office staggering (i.e., a single resident inspector on site at a time, only coming on site for risk-significant in-plant operations, including for those sites undergoing refueling outages, applying flexibility with the 3-day rule) to reduce face-to-face interaction for affected personnel. Identify opportunities to leverage technology to work remotely for portions of time to perform preparation, documentation, and some inspection.
    - Identify opportunities to leverage technology to inspect remotely. Potential inspection candidates include, but are not limited to, problem identification and resolution samples, licensee event report closeouts, heat sink, maintenance effectiveness, operability assessments, plant modifications, and performance indicators.
    - Remote access to licensee information can broaden the spectrum of activities that can be inspected.
  - Region-based inspections: Assess the potential to postpone or reschedule onsite inspections. Assess the potential to perform inspection activities through remote/virtual means.
    - Identify opportunities to leverage technology to inspect remotely. Potential candidates include, but are not limited to, problem identification and resolution samples, licensee event report closeouts, and heat sink, etc.
- Local or national state of emergency or widespread implementation of aggressive social distancing (e.g. closure of schools, public parks, and nonessential businesses; requiring nonessential workers to remain home)
  - Resident inspectors: Maintain no routine presence on site; however, inspectors should look for additional guidance or consult with regional management regarding IMC 2515 provisions for site coverage.
    - Monitor plant status and activities remotely to the maximum extent practicable.
    - Monitor uncomplicated events and transients remotely. Obtain management approval for an onsite response to an event or transient.
    - Coordinate site access with the licensee.
  - Region-based inspections: Consider deferring/postponing all onsite inspection activities.
    - Assess inspection procedure objectives and licensee personnel support to determine whether procedures can be performed remotely.
  - Regional office: In consultation with the Office of Nuclear Security and Incident Response, consider the need to staff a portion of the Incident Response Center to monitor plant status and coordinate NRC activities.
- Implementation of the NRC Continuity of Operations Plan
  - Implement site coverage, plant status monitoring, and emergency response in accordance with the NRC Continuity of Operations Plan (ADAMS Accession No. ML14024A688)

If the licensee implements social distancing or quarantine controls in excess of the local or national stance, consider implementing controls similar to those specified above.

i. During the pandemic, epidemic, or other widespread illness or disease regional offices should also consider the following:

- Plant status activities should continue to the extent possible; however, consideration should be given to all means to access information remotely using technological resources available through the licensee. This could include virtual attendance at licensee meetings (by phone or computer). If resident inspectors are not available at the site, consideration should be given towards sending region-based inspectors to the facility if possible. However, this could be challenging due to staff illness, travel restrictions, licensee quarantine actions, and other factors. If plant status activities cannot be performed on site, remote means should be considered. The regions should make arrangements with licensees to obtain information from a remote location. Resident inspectors can achieve this by accessing the licensee's computer systems and networks, licensees providing key information packages and logs electronically, conducting discussions by phone or video with licensee personnel, using licensee cameras, performing physical walkdowns with video capture, and looking for other online indications, for example.
- For control room access, inspectors should minimize visits to the extent practicable in accordance with licensee health-protective measures. Resident inspectors should make efforts not to loiter in the control room or other public areas longer than necessary to obtain the plant status. Inspectors should communicate by telephone rather than face-to-face and use remote monitoring and technology to the maximum extent practicable
- For event response, the regions should consider the threshold at which onsite response is needed for an event. For example, the NRC may be able to perform remote monitoring of unplanned down powers or uncomplicated reactor trips, depending on the accessibility of the licensee's network. If onsite response is appropriate, the regions could consider limiting the response, such as having the senior resident inspector respond to the emergency response facility or technical support center only.
- For inservice inspections, inspectors should maximize the use of record reviews, remote video or recorded inservice inspections where possible.
- Resident inspectors should reduce, as appropriate, the selected baseline inspections they perform.
- The NRC should postpone scheduled supplemental inspections, temporary instructions, and special and infrequently performed inspections (see IMC 2515 Appx C, "Special and Infrequently Performed Inspections").
- For annual assessment meetings, the NRC should evaluate use of virtual meetings or the deferral of such meetings, within program requirements.
- The NRC should reduce, as appropriate, management site visits required in accordance IMC 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities." In addition, the requirement for regional management to tour containment during outages may be waived.

- In consultation with program office, the regions should determine whether the suspension of site coverage metrics would be acceptable during the period of increased health concerns.

#### 2515E-08 REFERENCES

IMC 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities"

IMC 2515, "Light-Water Reactor Inspection Program – Operations Phase"

IMC 2515, Appendix D, "Plant Status"

Regulatory Issue Summary 2010-04, "Monitoring the Status of Regulated Activities during a Pandemic"

10 CFR Part 26, "Fitness for Duty Programs"

END

Attachment 1  
Revision History Sheet for Inspection Manual Chapter 2515 Appendix E

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-decisional, Non-public Information)
N/A	ML062640337 01/26/07 CN 07-004	Initial issuance of Appendix E	n/a	n/a
N/A	ML20079E700 03/27/20 CN 20-018	Revisions were made to update guidance regarding reactor oversight process inspection program modifications, resident inspector site staffing, the expanded use of technology and other considerations to perform inspections remotely. The format of the appendix was revised to adopt the formatting required by Inspection Manual Chapter 0040, "Preparing, Revising and Issuing Documents for the NRC Inspection Manual."	n/a	n/a