

# Security Oversight for Nuclear Power Plants in Relation to the COVID-19 Public Health Emergency

June 16, 2020

---

---

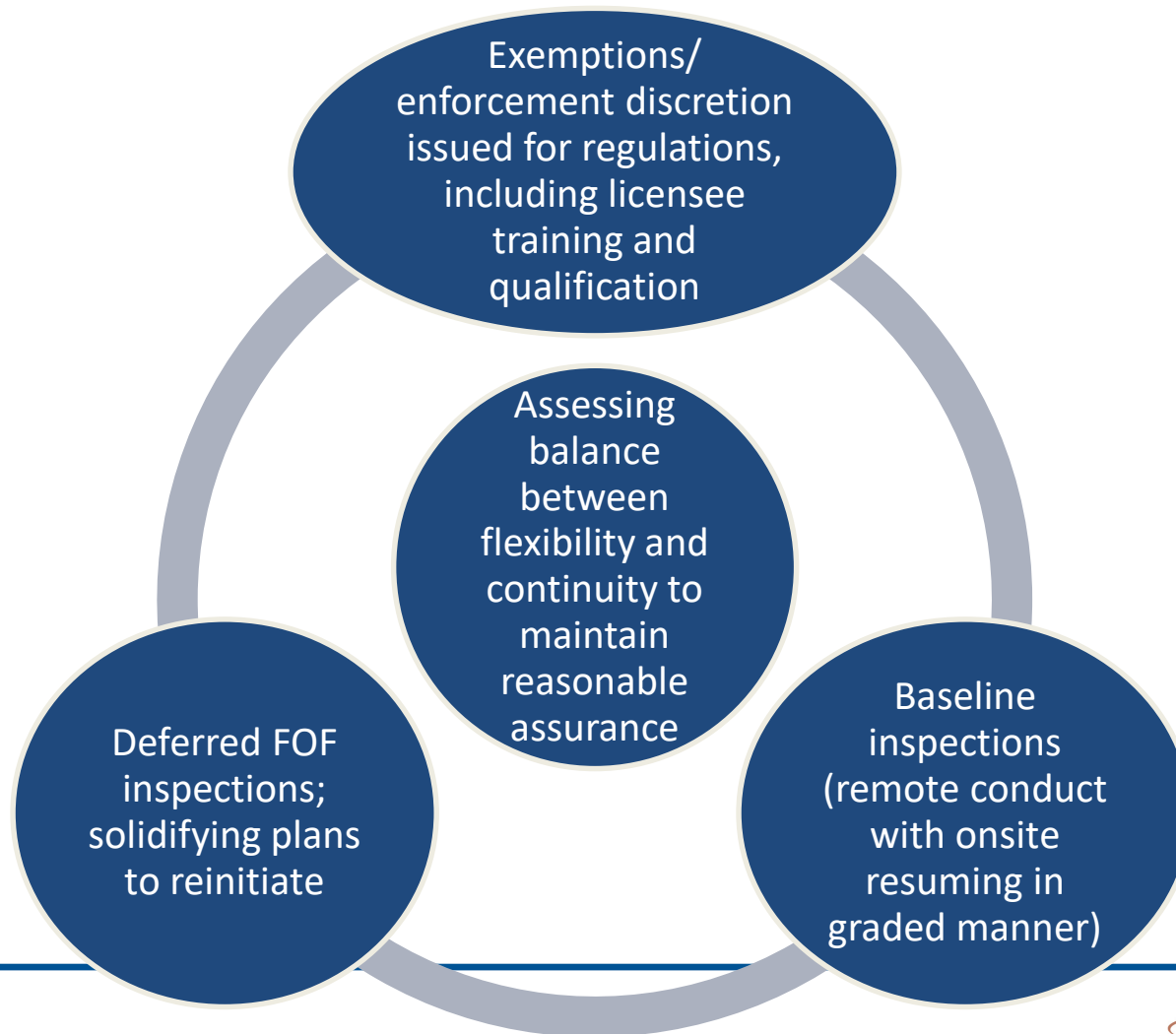
## ➤ Purpose

- To discuss the considerations surrounding security oversight for nuclear power plants in relation to the COVID-19 Public Health Emergency (PHE).

## ➤ Agenda

- NRC Response to PHE
- NRC Security Baseline Inspection Activities
- Considerations for Resuming Inspections
- Stakeholder Comments/Questions

# NRC Response to PHE



---

# NRC Response to PHE

- The regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 73, Appendix B, Section VI require individuals "assigned to perform duties and responsibilities required for the implementation of the Commission-approved security plans, licensee response strategy, and implementing procedures" to meet minimum training and qualification requirements.
- NRC issued EGM 20-002, Attachment 1, to allow enforcement discretion for training and qualification requirements in 10 CFR Part 73, Appendix B, Section VI (ML20083K794).
- On April 20, 2020, NRC issued guidance for expedited exemptions (ML20091L385).
  - The NRC-conducted FOF inspection is not part of the annual FOF exercise requirement and is therefore not part of the exemption.

---

# Enforcement Guidance Memorandum (EGM)

- Within the Coronavirus Guidelines for America, it states that individuals who work in a critical infrastructure industry, as defined by the DHS, have “a special responsibility to maintain [their] normal work schedule,” and establish practices.
  - Applied to licensees that take prudent and reasonable actions to limit and minimize staff exposure to the COVID-19 virus in an effort to maintain a healthy site work force and to maintain facility safety and security during the PHE.
- Conclusion in EGM - Security staff will be able to maintain proficiency if requalification periodicity is temporarily exceeded based on:
  - rigorous nature of nuclear security personnel training programs
  - scheduled training activities to include weapons training, contingency response drills and exercises,
  - demonstrated acceptable performance of day-to-day job activities (e.g., detection and assessment, patrols, searches, and defensive operations)

---

# Enforcement Guidance Memorandum (EGM)

- The following areas were included in the EGM and guidance letter for the expedited exemption process
  - Subsection B – Employment Suitability and Qualification
  - Subsection C – Duty Training (Annual Exercise and Quarterly Drills)
  - Subsection D – Duty Qualification and Requalification
  - Subsection E – Weapons Training
  - Subsection F – Weapons Qualification and Requalification
  - Subsection G – Weapons, Personal Equipment and Maintenance

---

# Exemption Guidance Letter

- Exemptions approved under the expedited review process will be in effect until 90 days after the PHE is ended or until December 31, 2020, whichever occurs first.
- Specific to requirements that challenge assembly restrictions and social distancing recommendations.
- Other requalification requirements impacted by COVID-19 (range closures; medical personnel/facility limitations).
- Expectations for licensees to apply other methodologies to support security training and response force readiness while limited by PHE restrictions.
  - Scenario-based evolutions (table top exercises; communication-based; lessons learned reviews; walkdowns of exercise travel routes)
  - Discussions regarding critical tasks needed to perform assigned security duties
  - Individual discussion of firearms fundamentals and weapons range objectives

---

# Industry Exemption Updates

- Operating Power Reactors (23) –
  - 10 sites have only requested an exemption from the annual exercise requirement; additional details on next slide
- Decommissioning Power Reactors (3)
- Independent Spent Fuel Storage Installations (4)



# Industry Exemption Updates

Licensee/Plant Name	Exemption Submittal Date	Scheduled for 2020 NRC FOF	10 CFR 73 Appendix B Subsection					
			B	C Annual FOF	D	E	F	G
Davis Besse	4/23/2020	X	X	X	X	X	X	
Perry	4/24/2020		X	X	X	X	X	
Beaver Valley	4/23/2020		X	X	X	X	X	
H.B. Robinson	4/30/2020	X		X				
Duane Arnold	5/1/2020			X	X	X	X	
Vogtle 1&2	5/8/2020			X				
Indian Point 2&3	4/29/2020			X				
Surry	4/6/2020			OJT Only				
Oconee	4/14/2020	X		X				
Peach Bottom 2&3	5/8/2020	X		X				
Salem 1&2	5/12/2020	X	X					
Hope Creek	5/12/2020	X	X					
Comanche Peak	5/14/2020			X				
Shearon Harris	5/20/2020			X				
Turkey Point	5/21/2020		X	X	X	X	X	
Point Beach	5/21/2020		X	X	X	X	X	
STP	5/21/2020		X	X	X	X	X	
Seabrook	5/21/2020	X						X
St. Lucie	5/21/2020	X	X	X	X	X	X	
North Anna 1&2	5/28/2020			X				
Millstone	5/29/2020	X		X				
Fitzpatrick	5/29/2020	X		X				
McGuire 1&2	6/4/2020			X				
Callaway	6/4/2020	X				X		
Ginna	pending							
DC Cook	pending							
Montecello	pending							
Praire Island	pending	X		X				
Farley	pending	X		X				
Hatch	pending							

---

# Security Inspection Program

- The baseline security inspection program, which is risk-informed/performance-based, has been implemented for several Reactor Oversight Process cycles to date.
- NRC has observed improvement of licensee performance and adjusted the amount of licensee oversight based on this assessment.
  - COMSECY-19-0006 was developed based on robust licensee security programs and NRC's oversight using the security baseline inspection program.
- NRC-conducted FOF inspections are part of the security baseline inspection program and are required triennially per the Atomic Energy Act.
- Since 2014, NRC baseline inspection program includes observation of one licensee-conducted FOF triennially.

# Security Inspection Areas

- The Security baseline inspection program is comprised of a suite of inspection procedures that are conducted on varying periodicities and based on risk-significance.

Baseline Security Inspections for Power Reactors	Frequency
Access Control	Annual
Security Plan Changes	Annual
Security Training	Biennial
Equipment Performance, Testing, and Maintenance	Biennial
Contingency Response - Force-on-Force Testing (NRC-Conducted FOF)	Triennial
Protective Strategy Evaluation	Triennial
Access Authorization	Triennial
Fitness-For-Duty Program	Triennial
Review of Power Reactor Target Sets	Triennial
Protection of Safeguards Information	As Needed

---

# Security Baseline Inspection Activity

- Objective: To gather sufficient, factual inspection information to determine whether a licensee is meeting the objective of the security cornerstone.
- Inspectors are coordinating resumption of on-site inspections starting in June 2020.
- Licensee and NRC staff's health and safety will be considered as on-site inspections are resumed.
- Regional inspectors have partially completed some inspection procedures during the last few months through record reviews.
- None of the Security Baseline inspections can be fully completed without security inspectors on-site.
- Local social distancing and gathering size limitations will be followed consistent with on-site practices.

---

# NRC-Conducted FOFs

- NRC has taken action to enable licensees to implement social distancing and assembly recommendations to conform to guidance from the federal government as well as state and local policies.
  - NSIR postponed all FOF inspections scheduled through June 2020 with a tentative restart scheduled for July 2020.
  - Staff recognizes that social distancing measures implemented by sites present a challenge for conducting a FOF inspection per the IP 71130.03 as currently designed.
  - During a closed public meeting held on May 12, industry voiced concerns over resuming onsite inspections due to impacts to currently-implemented pandemic plans, risk of infection being introduced to sites, and the size and nature of FOF inspections (especially B-week activities)
    - Inspection concerns include challenges associated with use of PPE during exercises, the need to conduct multiple briefings to ensure social distancing due to conference room capacity, and having multiple individuals in a bullet resistant enclosure during exercises.

---

# Considerations for FOFs During a PHE

- Resuming NRC FOF Inspections:
  - NRC is benchmarking with other agencies to assess timing of oversight activities and is mindful of holistic regulatory paradigm (e.g., exemptions granted, modifications to oversight program)
  - 17 inspections are scheduled through the end of the CY2020; staff is considering a measured approach to account for the varied timelines for each region.
  - State and local officials are implementing a phased plan for lifting restrictions and guidelines. The timeline for each region/community varies based on the impact for the respective area. The timelines are not set which creates an element of uncertainty.
  - FOF inspections involve support from individuals that will travel from multiple geographic areas (i.e., NRC HQ staff, NRC regional inspectors, DOE contractors, SOCOM advisors, MAF) and involve sites bringing in additional shift security staff (B week only)

---

# Plan for FOF Inspections

- NSIR will institute a rolling 6-8 week look at the PHE conditions at the sites that are in this window for both “A” and “B” week activities.
- Decisions regarding FOF inspections will be made based on site-specific conditions
- Graded approach will be used for sites that are still under state/local PHE restrictions
  - Modified “A” week activities resuming in July
  - Longer than typical gap between “A” week and “B” week
  - “B” week activities will be conducted once conditions permit
  - Some inspections may be rescheduled in CY 2021
- All sites for CY 2020 have been notified of their scheduled FOF inspections and are kept updated with changes as determinations are made.
- Social distancing measures and PPE will be used to promote health and safety during inspections.

---

# Benchmarking Team Inspections

- DOE – Temporarily Suspended oversight for 180 Days
  - Effective early March.
  - 30 day notification to sites to resume inspection activity.
  - Working on plan to conduct inspections, with social distancing guidelines.
  - No plan to cancel inspections for 2020, tentative resumption dates August/September.
  
- International – Following protocols as established per the affected region as well as state and local policies.
  - (e.g., Canada has postponed inspections until 2021)



# 2020 NRC FOF Schedule

Site	Location	Fleet
VC Summer	Jenkinsville, SC	South Carolina Electric
Salem & Hope Creek*	Hancocks Bridge, NJ	PSEG
Sequoyah	Soddy Daisy, TN	TVA
HB Robinson	Hartsville, SC	Duke Energy
Farley	Dothan, AL	Southern
Peach Bottom	Delta, PA	Exelon
Millstone	Waterford, CT	Dominion
Callaway	Fulton, MO	Union Electric Company
Seabrook	Seabrook, NH	NextEra
Oconee	Seneca, SC	Duke Energy
St. Lucie	Jensen Beach, FL	NextEra
Nine Mile Point	Oswego, NY	Exelon
Clinton	Clinton, IL	Exelon
Palisades	Covert, MI	Entergy
Davis-Besse	Oak Harbor, OH	FENOC
Fitzpatrick	Lycoming, NY	Exelon
Prairie Island	Welch, MN	Excel
Cooper	Brownville, NE	Nebraska Public Power

\*SHC completed "A" Week. "B" Week postponed until September.

# Considerations for Inspections During a PHE

Considerations for Force-on-Force Inspections during the COVID-19 Public Health Emergency	Current Status and Items for Discussion during Public Meeting
Access to hotels & restaurants within commuting area of site available	All 17 sites scheduled for inspection in 2020 have options available for food and lodging.
Airline travel available (as required)	Airline travel is available for all sites.
Stay-at-Home Orders Lifted	All 17 sites scheduled for inspection in 2020 have had the Stay-at-Home Orders lifted in their respective states.
Out-of-State travel restrictions lifted (i.e., requirement to self-quarantine upon arrival in state)	<p>15 out of 17 sites meet this criteria. Two sites are impacted by quarantine requirements. (Florida has a 14-day self-quarantine requirement for individuals traveling from New York, New Jersey, or Connecticut, and Nebraska has a 14-day self-quarantine requirement for individuals traveling from international locations.)</p> <p>No inspection participants are affected by travel restrictions (i.e., NRC, contractors who provide services associated with multiple integrated laser engagement systems (MILES), SOCOM advisors, or mock adversary force members).</p>
Travel conditions allow DOE MILES trailer travel to inspection location in reasonable duration	All 17 sites scheduled for inspection in 2020 are in locations where the trailer can be effectively routed.

# Considerations for Inspections During a PHE

Considerations for Force-on-Force Inspections during the COVID-19 Public Health Emergency	Current Status and Items for Discussion during Public Meeting
Personal protective equipment (PPE) available for the inspectors	PPE is available for NRC inspectors, SOCOM advisors, and MILES contractors.
Site conditions support inspection (less than 10 employees with active positive cases onsite)	All 17 sites scheduled for inspection in 2020 meet this criteria. NRC is interested in feedback in this area and information from industry on the criteria that are being used to make decisions related to exercising site pandemic plans.
Social distancing guidance can be achieved while on-site or PPE can be effectively used	Protocols were presented during closed meeting regarding NRC recommendations for implementing social distancing during exercise activities. The NRC recognizes that measures for protecting staff in bullet resistant enclosures is of high interest and should be discussed. Protocols for operator licensing, outages, and minimizing contact between different security shifts could be leveraged for best practices.
Security staff available from site shifts or other sites to support inspection positions	The NRC will coordinate with sites on an individual basis to obtain information on availability of staff to serve as players and controllers, and to ensure suitable coverage for routine shift coverage.

# FOF Inspection Considerations

2020 FOF Schedule - Cycle 6, Year 1

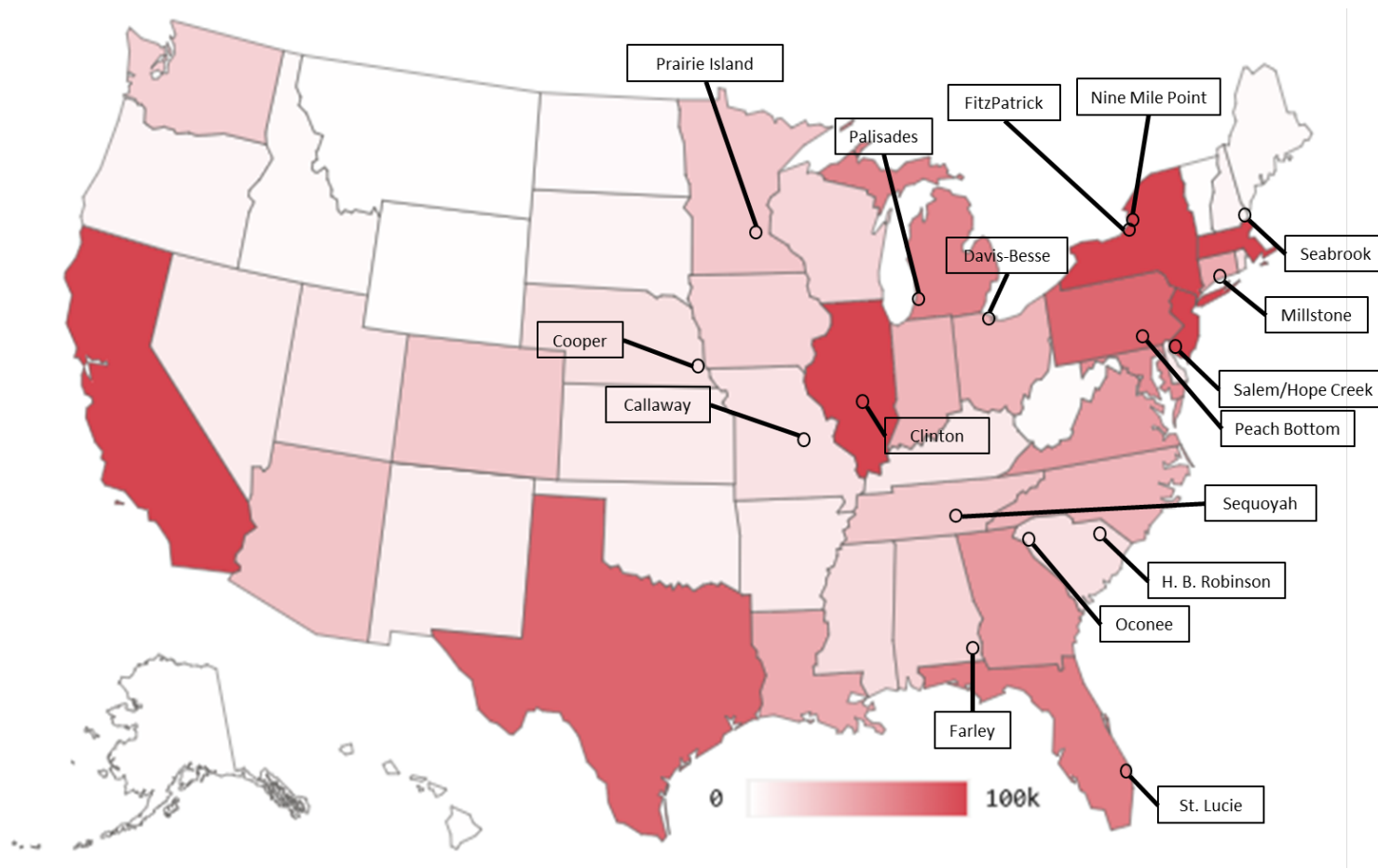
Ctrl. No.	Site	Fleet	Region	Team	Planning Week	Exercise Week	Notification Date (1-2 Weeks)	Measured Approach Planning Week (6-8 weeks)	Measured Approach Exercise Week (6-8 weeks)	SAH Order Lifted	NRC PPE Available	Access Hotel/R est	Air Travel Restricti ons	No OOS Travel Restrictions	Social Distancing Available	Travel conditio ns allow MILES	Security Staff Available for Support	Licensee Supports On-site Inspections	Licensee Supports On-Site A Week	Licensee Supports On-Site B Week	Contact with Licensee
20.02	V. C. Summer	South Carolina Electric	II	A	3-Feb-20	24-Feb-20	11-Nov-19														
20.03	Salem & Hope Creek	PSEG	I	C	24-Feb-20	21-Sep-20	8-Jun-20		8/3/2020												4/28/2020
20.11	Sequoyah	TVA	II	A	6-Jul-20	19-Oct-20	6-Jul-20	5/18/2020	8/31/2020												5/21/2020
20.04	HB Robinson	Duke Energy	II	B	13-Jul-20	21-Sep-20	8-Jun-20	5/25/2020	8/3/2020												6/10/2020
20.12	Farley	Southern	II	C	20-Jul-20	14-Sep-20	1-Jun-20	6/1/2020	7/27/2020												5/28/2020
20.13	Peach Bottom	Exelon	I	B	27-Jul-20	31-Aug-20	18-May-20	6/8/2020	7/13/2020												6/10/2020
20.14	Millstone	Dominion	I	C	3-Aug-20	24-Aug-20	11-May-20	6/15/2020	7/6/2020												5/19/2020
20.08	Callaway	Union Electric Company	IV	A	10-Aug-20	31-Aug-20	18-May-20	6/22/2020	7/13/2020												5/28/2020
20.10	Seabrook	NextEra	I	D	14-Sep-20	5-Oct-20	22-Jun-20	7/27/2020	8/17/2020												4/28/2020
20.01	Oconee	Duke Energy	II	B	14-Sep-20	5-Oct-20	22-Jun-20	7/27/2020	8/17/2020												
20.16	St. Lucie	NextEra	II	C	28-Sep-20	19-Oct-20	6-Jul-20	8/10/2020	8/31/2020												
20.17	Nine Mile Point	Exelon	I	A	5-Oct-20	26-Oct-20	13-Jul-20	8/17/2020	9/7/2020												
20.05	Clinton	Exelon	III	D	19-Oct-20	16-Nov-20	3-Aug-20	8/31/2020	9/28/2020												3/13/2020
20.18	Palisades	Entergy	III	B	26-Oct-20	16-Nov-20	3-Aug-20	9/7/2020	9/28/2020												4/24/2020
20.15	Davis-Besse	FENOC	III	B	2-Nov-20	30-Nov-20	17-Aug-20	9/14/2020	10/12/2020												3/20/2020
20.06	Fitzpatrick	Exelon	I	A	2-Nov-20	14-Dec-20	31-Aug-20	9/14/2020	10/26/2020												3/20/2020
20.07	Prairie Island	Excel	III	A	16-Nov-20	7-Dec-20	24-Aug-20	9/28/2020	10/19/2020												
20.09	Cooper	Nebraska Public Power	IV	C	16-Nov-20	14-Dec-20	31-Aug-20	9/28/2020	10/26/2020												4/13/2020

Inspection Count	
Team A	6
Team B	5
Team C	5
Team D	2

Yes
Partial
No
No Data

\*SHC completed "A" Week. "B" Week postponed until September.

# FOF Heat Map



---

# Social Distancing Recommendations for Inspection Activities

## Modified “A” Planning Week:

- NRC Team on site 1 to 2 days, Tuesday or Tuesday & Wednesday.
  - Conduct/Observe: Protective Strategy Brief, Site Tours (multiple tours/smaller groups), Table Top, Target Set review, coordinate with MAF Lead, and develop Target Set Worksheet.
- MAF on-site 2 days, Coordinate days with NRC
  - Site tour, coordinate with NRC, insider coordination.
  - Develop draft Mission Narratives.
- Return to HQ for review of mission
  - Review draft MAF Mission Narratives.
  - Coordinate with site and MAF on any site changes prior to “B” Week.
  - Final Mission Narratives will be sent to site 3 weeks prior to “B” Week.

---

# Social Distancing Recommendations for Inspection Activities

- **Planning (“A”) Week Activities:**

- Entrance/Exit Meetings: conducted virtually
- Protective Strategy Briefing: NRC review presentation with minimal licensee personnel. Room large enough to exercise social distancing.
- Site Tours: Conduct tours simultaneously; limit personnel on each tour.
- Tabletop Drills: Conduct only with lead and adversary controllers to minimize personnel.
- MAF Interface: Limit number of staff interaction in room big enough to practice social distancing.
- Modified “A” week will be conducted to reduce on-site time

---

# Social Distancing Recommendations for Inspection Activities

- **Exercise (“B”) Week Activities:**

- Scenario Matrix Review: Conducted virtually.
- Adversary Mission Overview and Controller Briefing: Attended by minimal personnel in room/area big enough to practice social distancing.
- Controller/Safety Briefings/Critiques/Hot Washes: Room big enough to practice social distancing, multiple briefing may be necessary due to number of personnel required. Conduct virtually, if possible.
- MILES Issue and Return: Conducted outside with social distancing practices in place. Equipment sanitized after each exercise. Ultraviolet light used in MILES trailer overnight.
- Exercise:
  - Inspection team observe from “distant” areas.
  - Limit personnel in BREs.
  - Players and MAF practice social distancing and wear facemasks when unable to space.
  - Licensee consider positioning of on-duty force to minimize exposure and stay in compliance.



---

# Summary of Path Forward

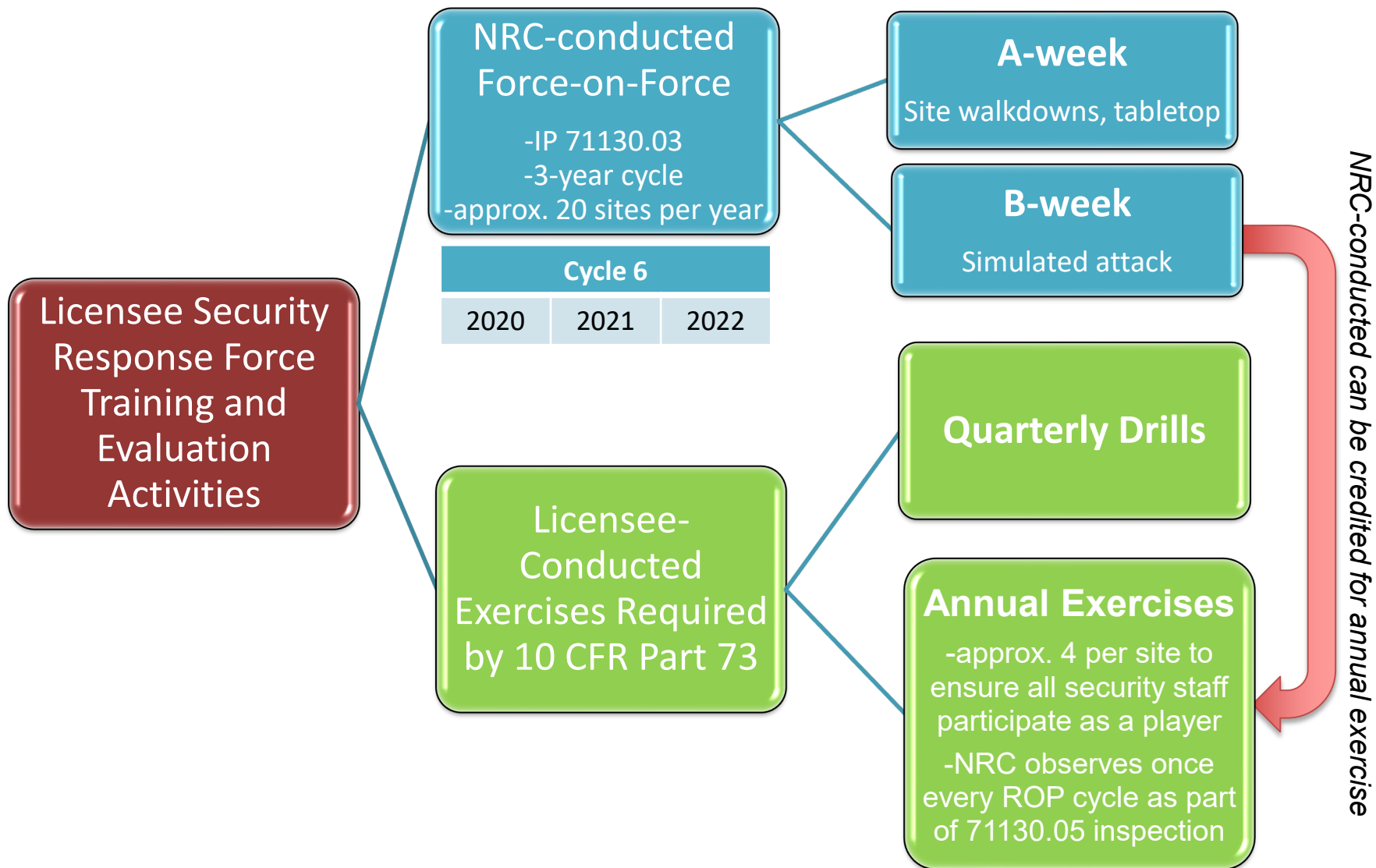
- Consider feedback received from stakeholders on considerations for resuming exercises
- Use graded approach to conduct inspections to the extent that activities can be conducted safely and in harmony with site/locality/State-conditions and controls
  - Coordinate with sites 6-8 weeks prior to scheduled inspection date to consider decision criteria
  - A Week activities resume in July; B week activities Fall as conditions permit

---

# Industry Presentation

---

# Open Discussion



# FOF Heat Map

COVID-19 FOF Table								
Site	Location	County	State Pop.	# of cases in state	% of State pop.	County Pop.	# of cases in county	% of County pop.
Salem & Hope Creek	Hancocks Bridge, NJ	Salem	8,882,000	165,816	1.87%	62,385	689	1.10%
Sequoyah	Soddy Daisy, TN	Hamilton	6,829,000	28,340	0.41%	367,804	1210	0.33%
HB Robinson	Hartsville, SC	Darlington	5,149,000	16,441	0.32%	66,618	342	0.51%
Farley	Dothan, AL	Houston	4,903,000	22,845	0.47%	105,882	270	0.26%
Peach Bottom	Delta, PA	York	12,800,000	81,848	0.64%	449,058	1117	0.25%
Millstone	Waterford, CT	New London	3,565,000	44,461	1.25%	265,206	1147	0.43%
Callaway	Fulton, MO	Callaway	6,137,000	15,699	0.26%	44,743	34	0.08%
Seabrook	Seabrook, NH	Rockingham	1,360,000	5,209	0.38%	309,769	1400	0.45%
Oconee	Seneca, SC	Oconee	5,149,000	16,441	0.32%	79,546	70	0.09%
St. Lucie	Jensen Beach, FL	Martin	21,480,000	69,069	0.32%	161,000	760	0.47%
Nine Mile Point	Oswego, NY	Oswego	19,450,000	380,892	1.96%	117,124	119	0.10%
Clinton	Clinton, IL	DeWitt	12,670,000	130,603	1.03%	15,769	4	0.03%
Palisades	Covert, MI	Van Buren	9,987,000	65,449	0.66%	75,448	195	0.26%
Davis-Besse	Oak Harbor, OH	Ottawa	11,690,000	40,004	0.34%	40,525	112	0.28%
Fitzpatrick	Lycoming, NY	Oswego	19,450,000	380,892	1.96%	117,124	119	0.10%
Prairie Island	Welch, MN	Goodhue	5,640,000	29,316	0.52%	46,340	86	0.19%
Cooper	Brownville, NE	Nemaha	1,934,000	16,315	0.84%	6,958	4	0.06%
Totals:			157,075,000	1,509,640	0.96%	2,331,299	7678	0.33%

Updated: 6/12/2020