Fall Outage Preparations and Lessons Learned

June 30, 2020 Thomas Basso Sr. Director Regulatory Affairs





Introduction – Tom Basso



- Spring Exemptions and Relief Requests
 - Greatly appreciate staff support, web page, electronic submittals, ability to work remotely, plan and conduct meetings
- NEI/Member Presentations
 - What was learned
 - What is being done differently
 - Why relief is still needed

Overview – Geoge Gellrich VP Regulatory Exelon



- COVID is significant learning opportunity making us think differently
- Paradigm changed Remote capabilities, what can be done to protect health, use of technology
- Spring Exemptions supported by safety analysis Sites used judiciously
- Industry shared and captured learnings
- Strong Nuclear Safety and COVID results
- Industry must plan for worst for Fall Outages must protect health and safety of employees and public
- Vaccine likely not available social distancing and technical lessons learned applied yet some activities still present a challenge
- Regulatory predictability is important for outage safety
- Many improved methods will become the new normal

What we learned



- Exelon Spring Outage
- Southern Company Fire Protection
- PSEG Medical Reviews
- Regulatory Relief
- Regulatory Oversight

Spring 2020 Outage Lessons Learned



COVID-19 Relief Requested & Benefits

Limerick Suppression Pool – ISI Relief Request

- Contractors on site, close proximity work under unique/challenging conditions
- 5000 person hours of close contact work eliminated
- Reduced contractors onsite and in community

Braidwood Steam Generator – Exigent LAR

- Specialty work requiring contractors, close proximity work, no safety impact with significant margin
- Eliminated 170 contractors onsite and in community



COVID-19 Relief Requested & Benefits

Limerick & Quad MSIV - Emergency LAR

- No safety impact with significant margin
- 1600 person hours person hours of close contact work eliminated

Limerick MOV - IST Relief Request

- Specialty testing
- Only requested relief from valves with no safety impact
- 550 person hours of close contact work eliminated

Work Hour Rule Experience

- Use in Spring outage resulted in no adverse human performance or industrial safety trends
- (+) feedback from work crews, as stability was preferred
- Planning on requesting in Fall



COVID-19 Relief Requested & Benefits

- Allowed increased focus on safety significant outage tasks
- Resulted in improved outage risk and personnel safety
- Minimized COVID-19 cases and decreased normal outage sick time
- Reduced COVID-19 potential exposure to local communities.
- Contributed to a safe environment to conduct outage related and post-outage NRC inspections.





Fire Protection Lessons Learned



COVID Relief Requested and Benefit

- Farley (NFPA 805) and Hatch (Appendix R)
 - Quarterly fire brigade drill exemption
 - Annual live fire training exemption
- Vogtle
 - Utilized self approval process for quarterly drills and live fire deferral per the Safety Evaluation Report

Benefit to Critical staff and Equipment

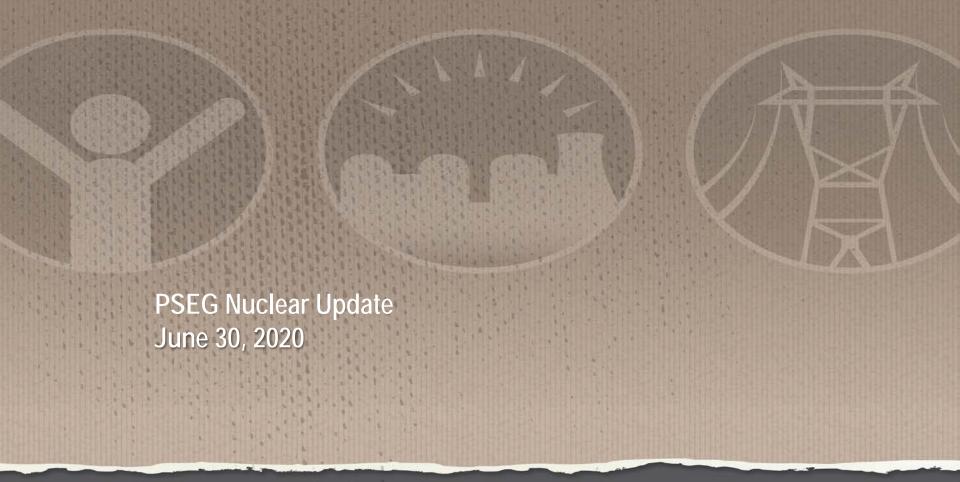
- Critical operations staff (operators, SRO's, SM)- Operations staffed Fire Brigade
- Facilities used to conduct live fire training with critical positions (ambulance, EMT, adjunct FP instructors)
- Gear is shared at most sites

Fire Protection Lessons Learned



Actions during Exemption period

- Training and evaluations of knowledge, skills and abilities
 - Computer based training for fire fighting fundamentals
 - Observations and reinforcement of fire protection fundamentals
 - Table top drills including critiques that are reviewed with entire fire brigade to share learnings
 - Review of previous drill critiques and training assessments



COVID-19 Relief Requested and Benefits

- Salem and Hope Creek Generating Station
 - Part 55 Licensed Operator medical exemption request
 - Temporary extension of medical physicals until September, 2020
 - Part 73 Security medical exemption request
 - Temporary extension of security personnel medical physicals
- Benefits
 - Strict adherence to federal & state mandates on social distancing
 - Reduced COVID-19 potential exposure to local communities
 - Reduce burden on community medical services

Regulatory Relief Lessons Learned – Dave Mannai Sr. Director Regulatory PSEG



- Exemption and Relief timeliness was (+)
 - Web portal (+), advocate continuing efforts
 - NRC PMs responsive and supportive (+)
 - Use of templates for submittals (+)
- Determination of Appropriate Regulatory Vehicle
 - Align on Exemptions, Relief Requests, and EGMs
 - Assess the regulatory options for optimal efficiency
 - Encourage proactive development of regulatory options
- 2006 NEI Pandemic Licensing plan submittal (missed opportunity)
 - NEI advocate stronger and continued dialogue in 2006
 - Finish conversation after current PHE

Regulatory Oversight Lessons Learned – Cheryl Gayheart Fleet Regulatory Affairs Director Southern Company



Resident Inspectors and ROP Inspections

- Remote inspections were a positive and should be considered a best practice
 - Excellent communications between inspectors and stations- Skype and conference calls
 - Use of component "photos" when needed
 - Allowed inspections to be conducted on schedule and within time allotted, with less travel and expenses
- Excellent response by stations to adapt to needs of residents
 - Laptops
 - Plant Computer and Logs Access
 - Shift Turnover and Station Update calls
- Unplanned scram response was a positive paradigm shift
 - Inspectors were effective in monitoring plant events remotely
- Recovery of initial operator exams was appreciated Region II Weekly Call- NRC and Utility Representatives-Enhanced Communication

What we are doing different – Tom Basso



- NEI is hosting four "Conducting an Outage during a Pandemic" Forums
 - Specialized sessions on: In-processing, Supplier Logistics, Conducting Work Safely, and Positive Case Identification and Response
 - Industry will share best practices and lessons learned from the Spring outage season in time for Fall
 - Includes All US Nuclear Power Reactors (including non-NEI members) and Canadian sites
- NEI has been conducting Industry Coordination calls and will continue to conduct through Fall outage season, with emphasis on outage conduct
- NEI issued, "Preventing and Mitigating the Spread of COVID-19, a Resource Guide"
 - Will be supplemented by an Outage specific lessons learned appendix
- NEI drafting lessons learned document
- Stations at different states of completing their lessons learned

What we are doing different (cont.)



- Stagger work time for various groups including staggered lunch and breaks times
- Designate specific turnstiles for critical employees to utilize
- Video or teleconference for turnovers
- Increased cleaning in common/high traffic areas
- Discourage car pooling
- Prohibit outage workers from sharing accommodations & socializing
- Isolate online and outage workers
- Create a team of social distance monitors to conduct observations of personnel and provide coaching on maintaining social distancing.
- Installing additional trailers for outage workers
- Survey workers to determine risk (spouse in medical field, overseas travel)

Fall Exemption Requests – Tom Basso NEI



- Licensee will seek regulatory relief for Fall outages
 - Until remedies are available, the risk of an outbreak remains
 - Stations are critical power grid assets and operational personnel need to be protected
 - Minimizing potential external exposure has been successful
- Optimize Approach for Fall and any future situations
 - Public Meeting before or after issuance of exemption letter
- Questions about Fall Outage Exemptions
 - What options are being considered by the NRC regarding the conditions in the exemptions that are tied to the Public Health Emergency?
 - Licensees are considering identifying specific dates and/or time periods for the exemptions to remain in place in their submittals, particularly outages later in the Fall. What thoughts or recommendations can the NRC provide licensees if this approach is applied?
 - How would the NRC address potential conflicts between Federal, State, and Local guidelines and COVID-19 requirements, particularly if the Federal PHE is lifted while State/Local requirements remain in place?