



Duke Energy Pre-Submittal Meeting – August 7, 2019



License Amendment Request

Duke Energy Common Emergency Plan

- Brunswick Steam Electric Plant (BNP)
- Catawba Nuclear Station (CNS)
- Harris Nuclear Power Plant (HNP)
- McGuire Nuclear Station (MNS)
- Oconee Nuclear Station (ONS)
- Robinson Steam Electric Plant (RNP)

Duke Energy Participants

- David Thompson, Emergency Preparedness CFAM
- Eric White, Emergency Preparedness Specialist
- Art Zaremba, Fleet Licensing Director
- Josh Duc, Fleet Licensing Engineer

- I. Description of Change
- II. Regulatory Requirements and Guidance
- III. Evaluation Approach
- IV. Precedents
- V. Conclusion / Schedule

I. Description of Change

- Combine BNP/CNS/HNP/MNS/ONS/RNP emergency plans into a Duke Energy Common Emergency Plan (DECEP) with site-specific annexes
- DECEP developed consistent with draft 2015 NUREG-0654 Rev. 2 (as updated by alternative guidance in June 12, 2018 NRC letter), with exceptions
 - Each NUREG-0654 evaluation criterion (planning element) is explicitly stated, followed by a description of how the DECEP addresses that criterion
 - TSC/OSC/EOF activated at Alert declaration, augmentation within 75 minutes
 - DECEP defers to ANS Design Report for description of alert methods (future Wireless Emergency Alerts / Integrated Public Alert & Warning System)
- Potential “reductions in effectiveness” (RIE) with respect to the current emergency plan or NUREG-0654 Rev. 2 are justified to show continued adequate emergency preparedness
 - Staffing changes; maintain 75 min augmentation; other site-specific changes

I. Description of Change

- RIE with respect to current emergency plan (all sites)
 - Changes that align with NUREG-0654 Rev. 2 (exceptions noted below)
- RIE with respect to NUREG-0654 Rev. 2 (all sites)
 - Maintain existing 75 minute augmentation response time
 - NUREG-0654 Rev. 2 augmenting ERO positions not included in the DECEP:
 - TSC Offsite Communicator (Communications function)
 - TSC Dose Assessor (Dose Assessment function)
 - OSC Electrical Supervisor (Supervision of Repair Team Activities function)
 - OSC I&C Supervisor (Supervision of Repair Team Activities function)
 - OSC On-site FMT Driver (Field Monitoring Teams function)
 - TSC IT Lead (Information Technology function)
 - EOF IT Lead (Information Technology function)
 - Off-hours report-in drill once per 8 year cycle (vs. biennial)
 - Biennial Period for the Off-hours Call-in Drills (vs. quarterly – each ERO member biennially)

I. Description of Change

- Site-specific RIE with respect to current emergency plan
 - [BNP/HNP/RNP] Removed computers staged for offsite agency use at near-site facility
 - [CNS/MNS/ONS] Replaced FMT radios with cell phones
 - [CNS/MNS] Discontinued monthly phone check to National Weather Service
 - [MNS/ONS] Removed semiannual site assembly drill requirement
 - [BNP/ONS] Off-hours report-in drill once per 8 year cycle
 - [BNP] Removed US Coast Guard as initial notification agency
 - [HNP] Removed tone alert radios from Alert and Notification System
 - [HNP] Revised TSC design characteristic description of Seismic Category I, tornado, wind and missile safety-related criteria
- Site-specific RIE with respect to NUREG-0654 Rev. 2
 - [HNP/RNP] One (1) on-shift Radiation Protection Technician (vs. two (2) specified in NUREG-0654 Rev. 2)

II. Regulatory Requirements and Guidance

- 10 CFR 50.47, "Emergency Plans"
- 10 CFR 50 Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities"
- 10 CFR 50.54(q), "Conditions of Licenses - Emergency Plans"
- NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"
- NRC Regulatory Issue Summary 2016-10, "License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation"

III. Evaluation Approach

- Side-by-side comparison of each current emergency plan against the DECEP identified potential RIE
- Potential RIE with respect to the current emergency plan or NUREG-0654 Rev. 2 are justified to show continued adequate emergency preparedness
 - Description of technological advancements to support staffing changes
 - Functional analysis performed to support staffing changes
 - RIS 2016-10 reviewed with respect to 75 minute augmentation time
- Offsite Response Agency concurrence letters included

Southern Nuclear, 2015 – Standard Emergency Plan

- Sites: Farley, Hatch, Vogtle Units 1, 2, 3, and 4
- Merged site emergency plans into Standard Emergency Plan with site-specific annexes
- Did not modify emergency plans to be consistent with NUREG-0654 Rev. 2
- The amendment was issued by the NRC on March 14, 2017.

Exelon, 2018 – Change to Effluent Threshold and to a 'Loss of Fuel Clad Barrier Threshold.

- January 2018 – Braidwood, Byron, Clinton, Dresden, LaSalle, Quad Cities
- May 2018 – Limerick and Peach Bottom
- Modified ERO staffing consistent with NUREG-0654 Rev. 2 (June 12, 2018 NRC letter)
- Did not merge emergency plans nor update to NUREG-0654 Rev. 2 beyond staffing
- The amendment was issued by the NRC on March 21, 2019 and May 24, 2019.

- LAR will request approval of a Duke Energy Common Emergency Plan developed consistent with NUREG-0654 Rev. 2 (Draft 2015), as updated by alternative guidance in June 12, 2018 NRC letter
- Submittal to the NRC 3rd Quarter 2019
- Request 1 year NRC review

