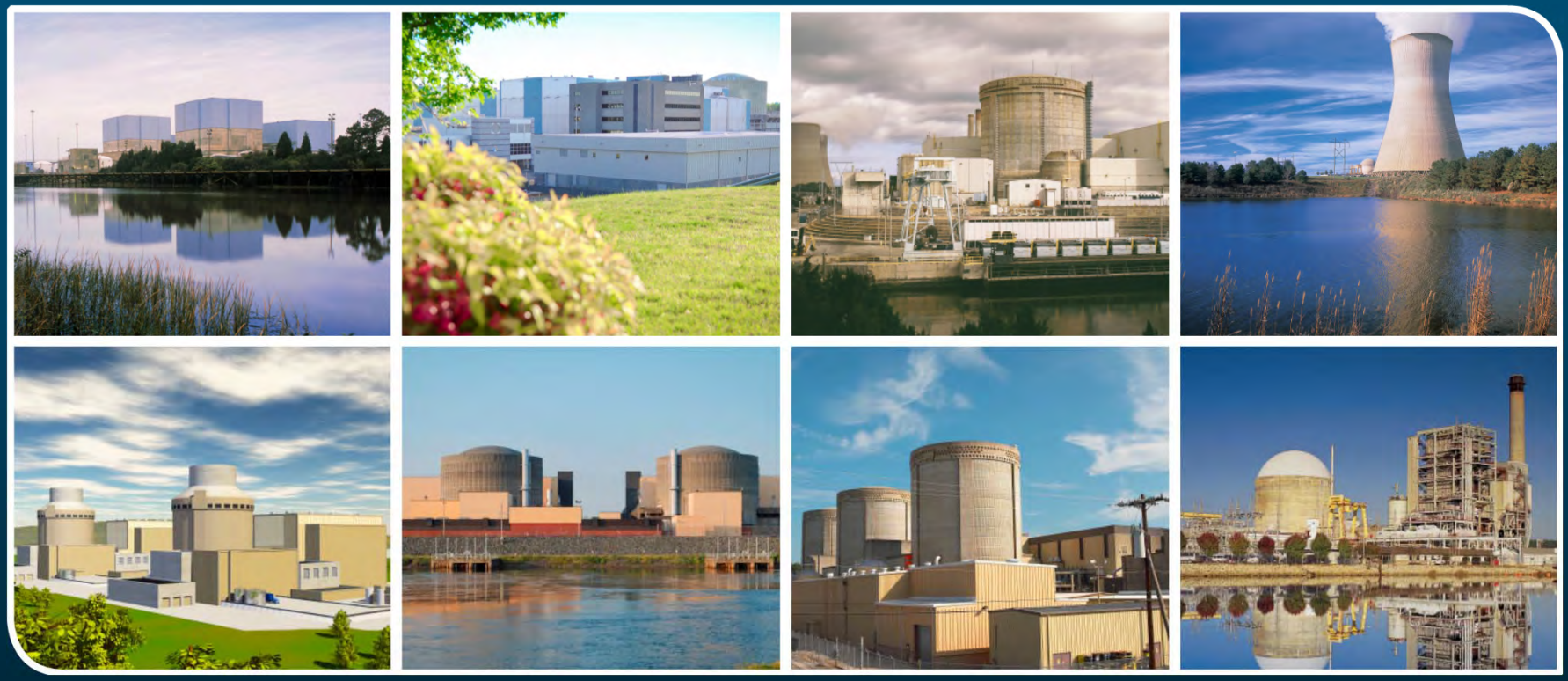
EXHIBIT DEC-005



Lee Nuclear Station – Overview

Chris Fallon – Bob Kitchen – Paul Snead

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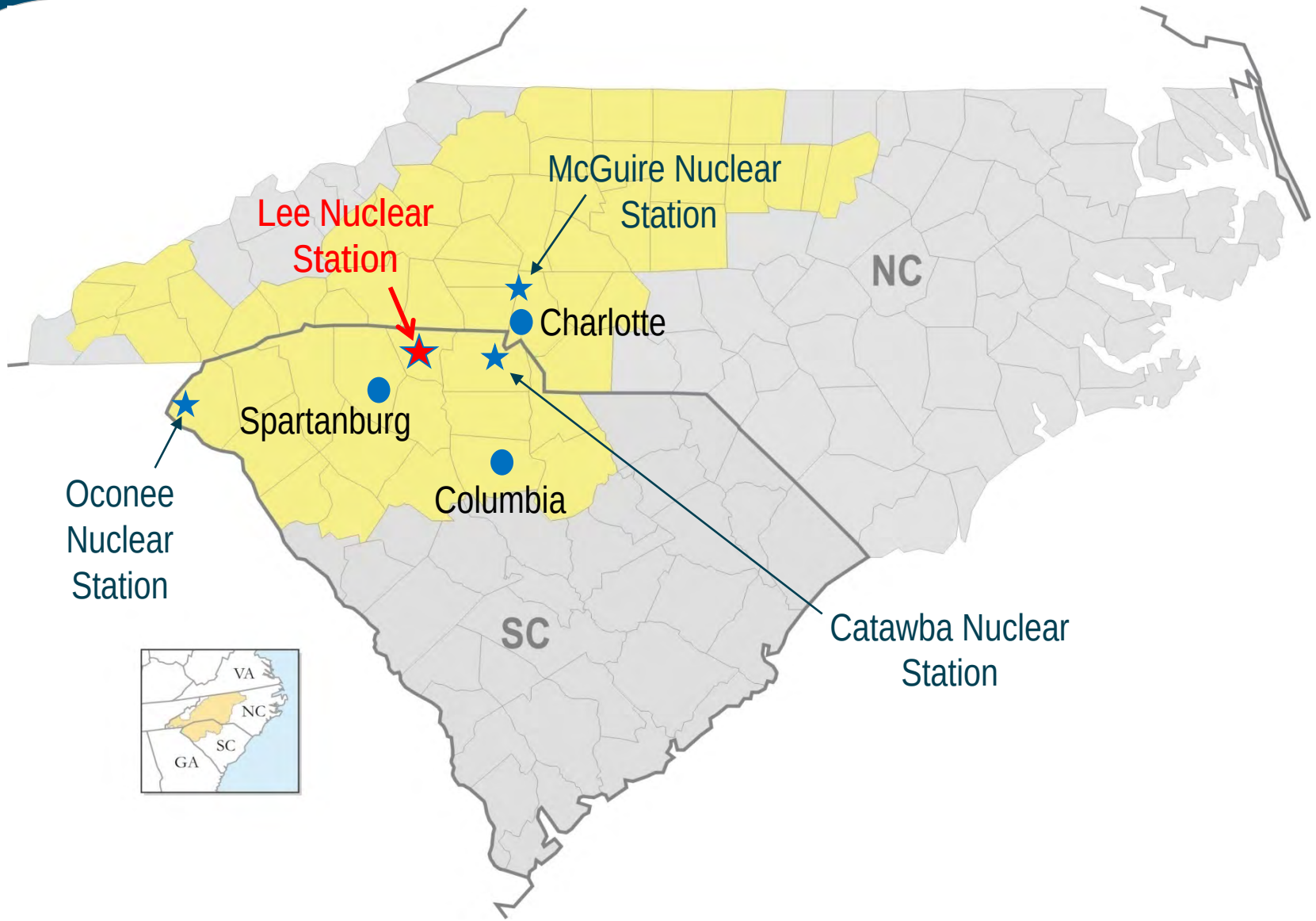
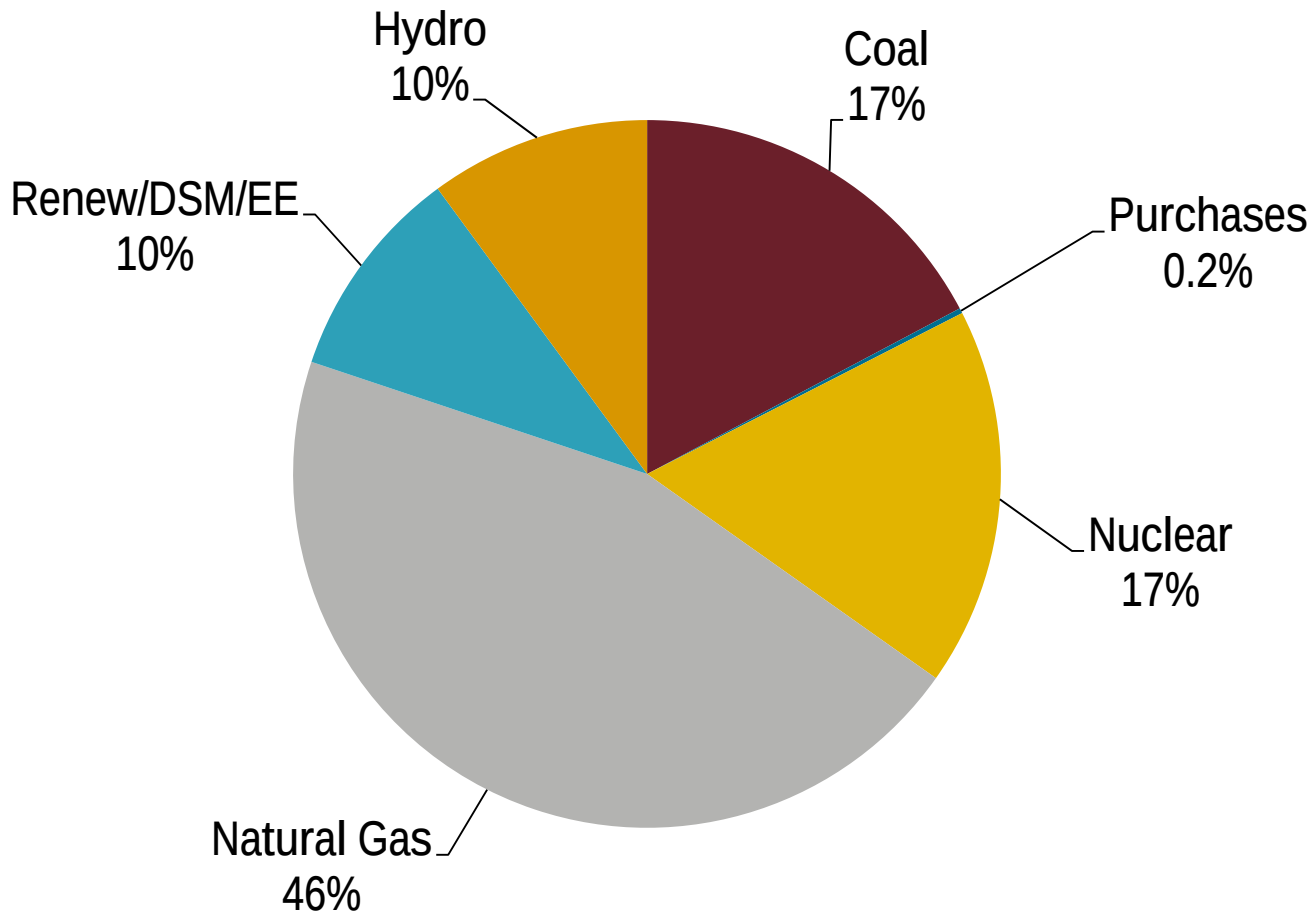
Duke Energy Carolinas Nuclear Fleet



2038 DEC Capacity by Fuel Type - Base IRP



Lee Site Background

Site partially developed for Cherokee Nuclear

Construction Activities

- Nuclear service water pond (Pond B)
- Cooling water sedimentation basin (Pond A)
- Excavation of power block
- Partial construction of Unit 1 containment

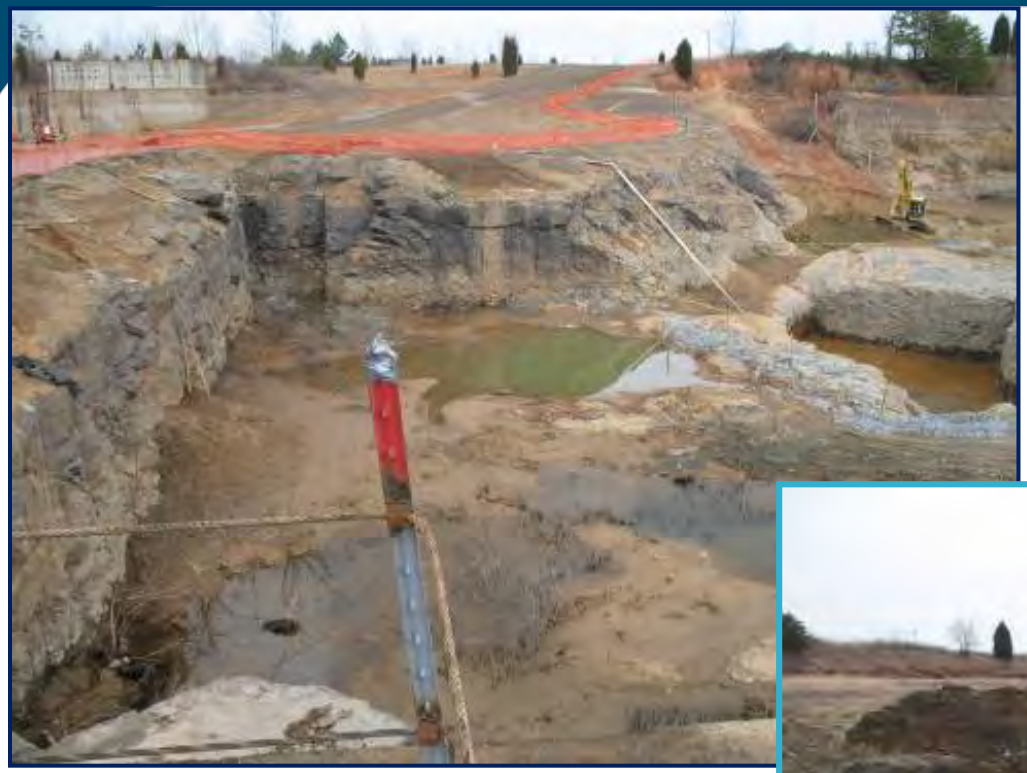
Permits Previously Issued

- Environmental Impact Statement
- Construction Permit
- 404 Permit
- NPDES Permit

Site Cleanup

Site Cleanup

COLA Investigation



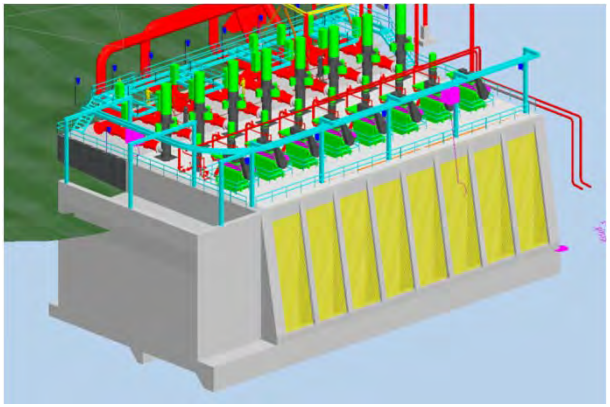
Existing Lee Unit 2
Excavation Cleanup

Lee Nuclear Foundation Support

Engineering and Construction Planning

Site Specific SSCs Design (70% Complete)

- Circulating Water System (CWS)
- Storm Drain System (DRS)
- Potable Water System (PWS)
- Raw Water System (RWS)
- Liquid Radwaste System (WLS)
- Waste Water System (WWS)
- Offsite Retail Power System (ZRS)



River Water Intake Structure (RWS)

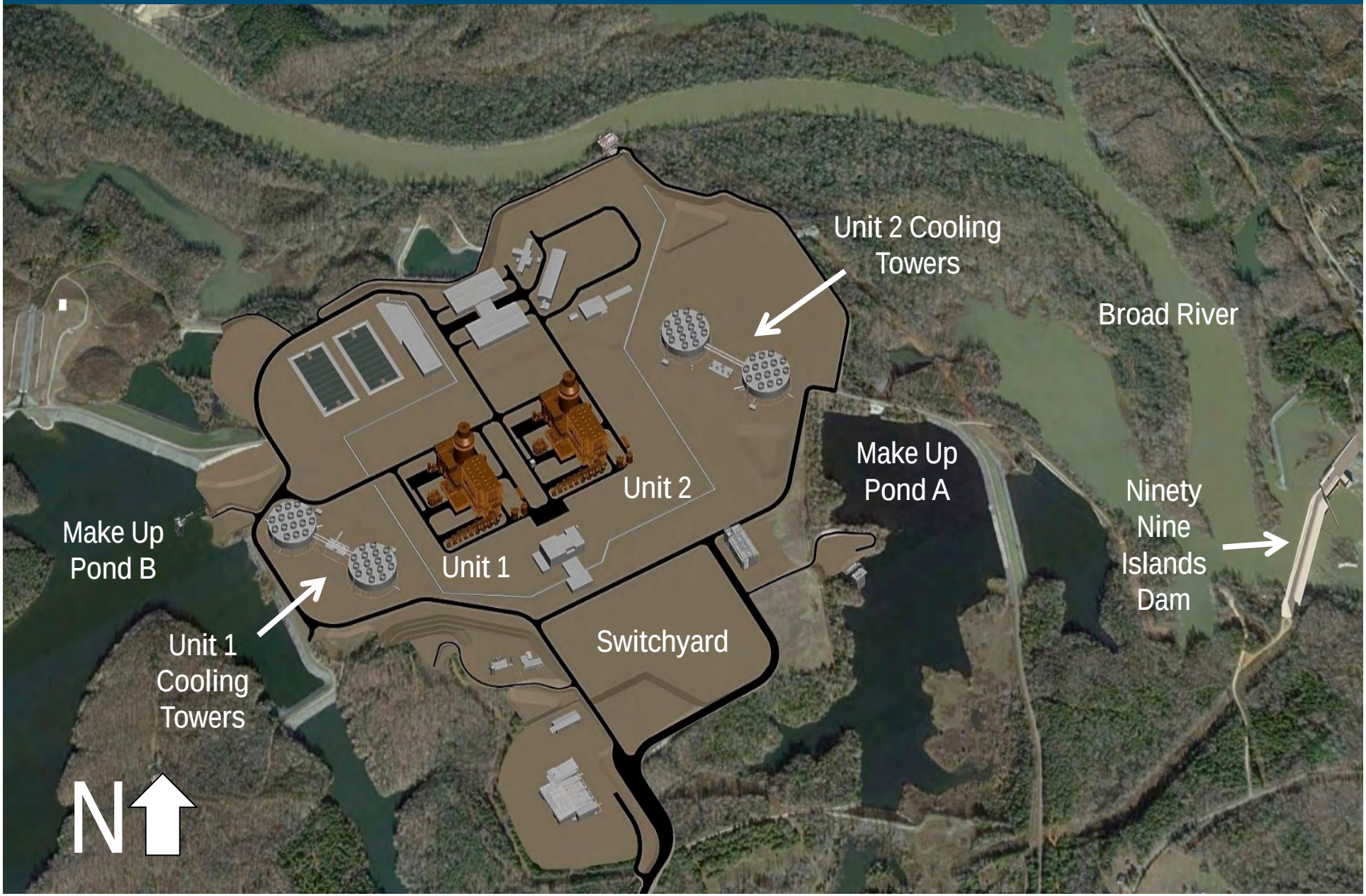
Infrastructure Design (90% Complete)

- Commercial Buildings
- Water and Sewer
- Rail and Road Improvements
- Make-Up Pond C Dam

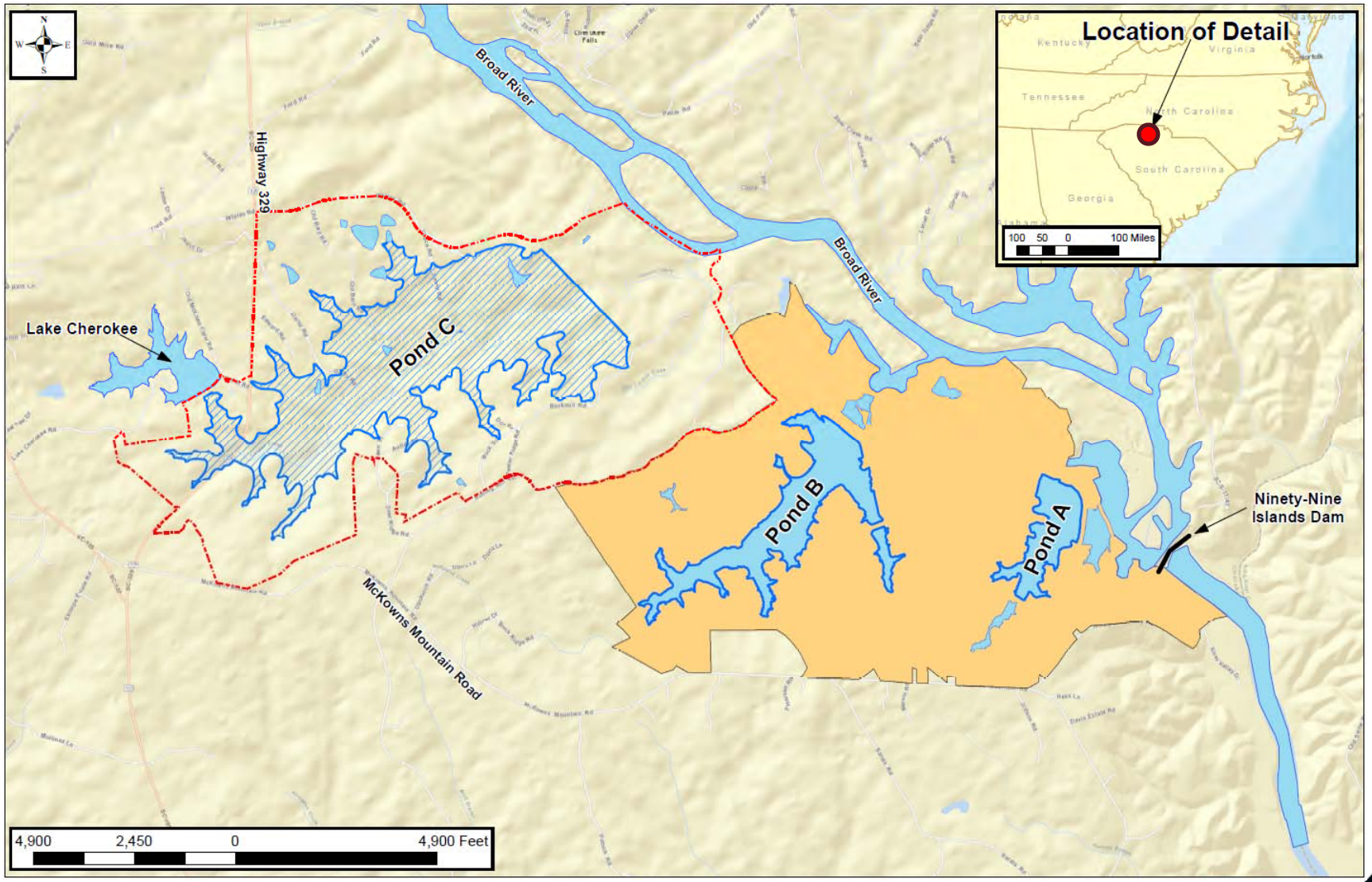
Site Construction Plan (70% Complete)

- Site Construction Schedule
- Construction Staffing & Training
- Temporary Buildings
- Assembly Pads, Areas & Modules
- Laydown & Staging Areas
- Excavation/Backfill
- Heavy Lift Crane
- Batch Plant Concrete Qualification

Lee Site Layout



Lee Nuclear and Make-Up Pond C Sites



Lee COLA Safety Content – Exemptions

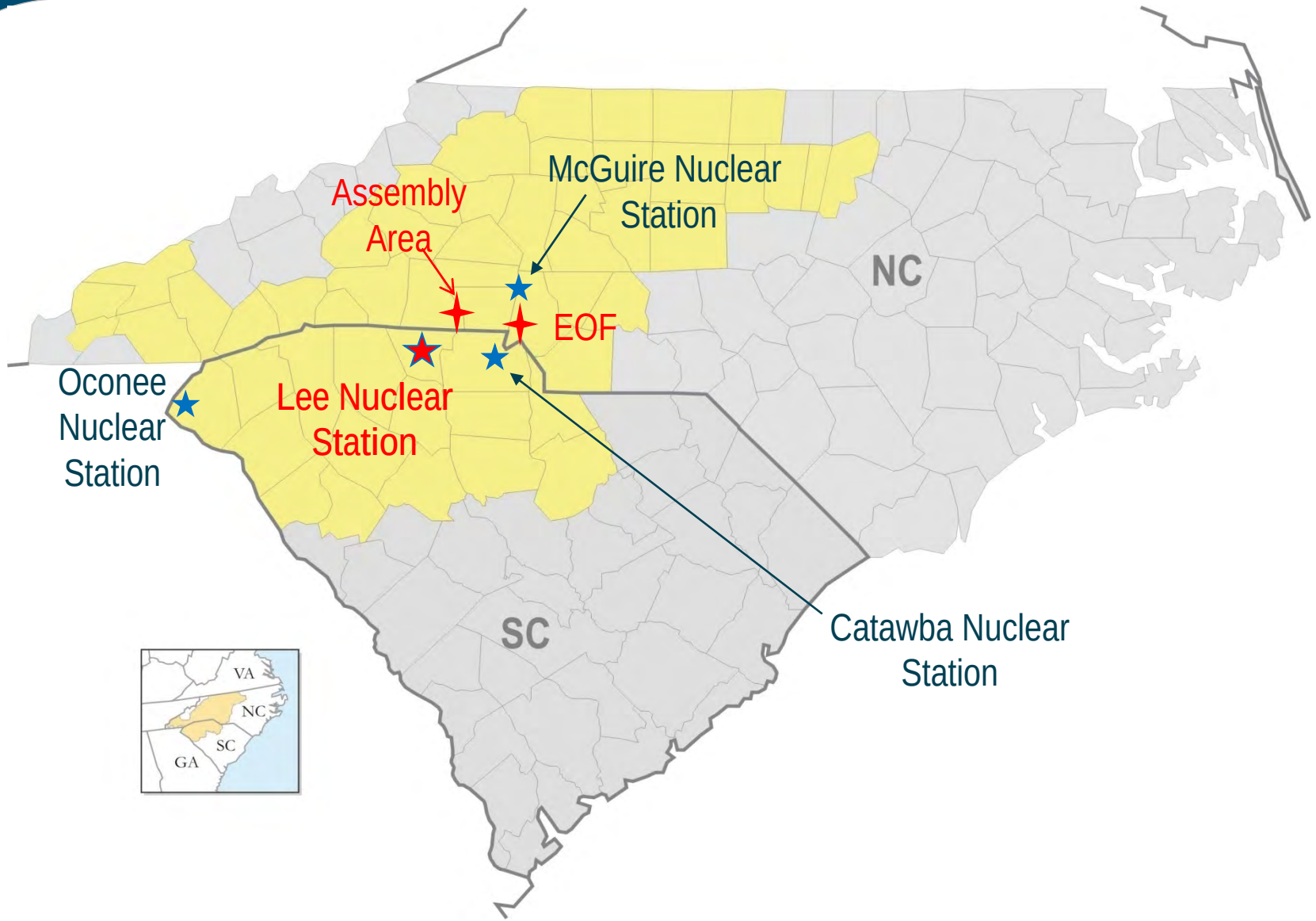
- Standard (Reference COL)
  - DCD Numbering and Organization
  - Special Nuclear Material Control and Accountability (MC&A) Program Description (Consistent with Part 50 requirements)
- Lee COLA
  - Condensate Return Design Change
  - Main Control Room Dose
  - Main Control Room Heatup
  - Combustible Gas Control in Containment
  - Source Range Neutron Flux Doubling Block Permissive

Site Specific Seismic Evaluation

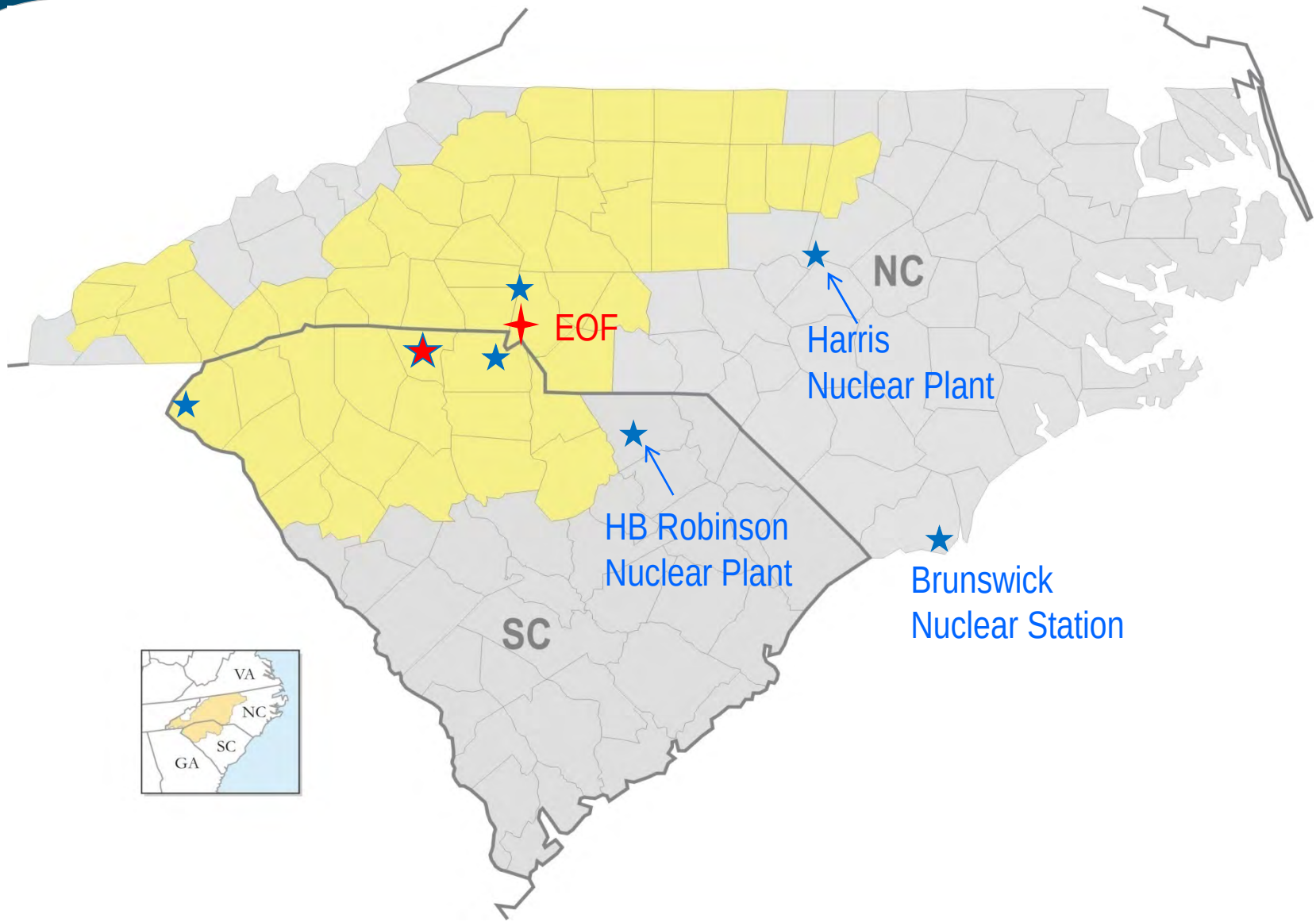
Evaluation per AP1000 DCD

- Structures
- Major Equipment
- Piping Systems and Supports
- Equipment Qualification

Duke Energy Carolinas Common EOF



Duke Energy Fleet License Amendment Request
Common EOF



Environmental

- ER and FEIS – SMALL or MODERATE impacts
- SCDHEC issued NPDES Operating Permit in July 2013
  - Water Management Plan
  - Alternate water withdrawal requirements – EPA concurred
- SCDHEC issued 401 Water Quality Certification in January 2014
- US Army Corps of Engineers 404 Permit issued September 2015

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