



**LEGEND**

- ★ HAR Site
- 320-km (200-mi.) Radius from Site
- A-A' Cross-section line
- Geologic Boundary
- Steeply-dipping fault, sense of motion poorly known
- Thrust fault
- Normal fault
- ↔ Anticline (antiform), arrow indicates plunge
- ↔ Syncline (synform)
- ↔ Overturned anticline (antiform)
- ↔ Overturned syncline (synform)
- ↔ Strike-slip fault, arrows indicate dominant dextral sense of motion.
- ↔ Thrust fault with major dextral strike-slip component.
- ↔ Strike slip motion, both dextral and sinistral at different times
- Triassic-Jurassic rift basins / Mesozoic intrusions and associated rocks (New England).
- Late Mississippian-Permian molasse and Middle Devonian-Permian molasse (New England) Carboniferous-Permian intrusions.
- North American Paleozoic platform / Taconian clastic wedge (Upper Ordovician-Silurian Martinsburg-Shawangunk patterned) / Acadian clastic wedge.
- Late Proterozoic and Cambrian clastic deposits of the North American continental margin / Late Proterozoic-Ordovician outer margin deposits of the Taconic allochthons and Hamburg klippe.
- North American basement massifs / Late Proterozoic alkalic plutons, Southern Appalachians / Chain Lakes massif / Chain Lakes pre-Arenigian cover.
- Alleghenian metamorphic overprint (approx; extent).
- Ultramafic rocks (includes mafic-Ultramafic complexes).
- North American outer margin cover sequence including late Proterozoic-Ordovician accretionary prisms / Cambrian-Middle Ordovician intrusions.
- Cambrian-Ordovician cover (including Ordovician arc volcanic rocks medial New England) Late Proterozoic-Ordovician tonalitic gneisses amphibolites and granitoid intrusions. Includes Penobscottian (?) intrusions in entire orogen / basement of medial New England.
- Silurian-Early Devonian cover of the medial New England / Ordovician-Silurian-Devonian deep-water facies of the Talladega and Murphy belts Acadian (Late Ordovician through Devonian) intrusions.
- Late Proterozoic-Cambrian sedimentary and volcanic rocks of Avalon / Late Proterozoic sedimentary and volcanic rocks of Avalon (basement? sequences belonging either to avalon or medial New England / Late Proterozoic-Cambrian intrusions



Source: Hatcher et al. (1989)

Progress Energy Carolinas  
**Shearon Harris Nuclear Power Plant  
 Units 2 and 3  
 Part 2, Final Safety Analysis Report**  
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Tectonic Map of the Central Appalachians  
 Showing Locations of  
 Regional Cross Sections C-C' and D-D'  
 FIGURE 2.5.1-211