

**Explanation**

**Earthquake Epicenters**

(by estimated body wave magnitude, Emb)

EPRI Catalog Main Events  
(1627 - 1984)

Eastern US seismicity  
(1985 - 2005)

- 3.11 - 3.49
- 3.50 - 3.99
- 4.00 - 4.49
- 4.50 - 4.99

- 3.00 - 3.49
- 3.49 - 3.99

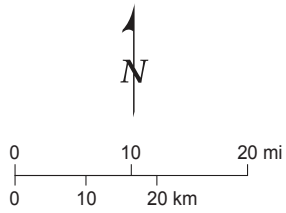
**Faults**

- Paleozoic
- Cenozoic
- Mesozoic fault
- Cenozoic fault (Prowell, 1983)
- Eastern Piedmont Fault System (modified after Hatcher et al. 2007)

**Lithotectonic Units (Hibbard et al. 2006)**

- Plutonic rocks of unknown origin (felsic)
- Plutonic rocks of unknown origin (mafic)
- Mesozoic rift basins
- Carboniferous to Permian plutonic rocks (felsic)
- Middle Devonian Carboniferous plutonic rocks
- Silurian and Devonian sedimentary and plutonic rocks (felsic)
- Silurian and Devonian sedimentary and plutonic rocks (mafic)
- Middle Ordovician to Lower Silurian plutonic rocks
- Neoproterozoic to Cambrian metavolcanic rocks
- Intrusive, felsic
- Intrusive, mafic
- Volcanic, felsic
- Volcanic, mafic
- Neoproterozoic to Lower Paleozoic magmatic sequences
- Intrusive, mafic
- Volcanic, mafic
- Volcanic, felsic
- Neoproterozoic to Lower Paleozoic metasediments
- Neoproterozoic to Lower Paleozoic metasedimentary rocks
- Lower to Middle Ordovician metamorphic rocks
- Intrusive, felsic
- Neoproterozoic to Lower Paleozoic clastic metasedimentary rocks
- Lower Paleozoic passive margin sequence
- Proterozoic magmatic and sedimentary rocks
- Proterozoic Grenville basement
- Orthogneiss

WLS COL 2.5-1



**WILLIAM STATES LEE III  
NUCLEAR STATION UNITS 1 & 2**

Tectonic Features and Seismicity  
Within 50 Miles of the Site

FIGURE 2.5.1-210 Rev 2