

**Explanation**

**Earthquake Epicenters (NUREG - 2115)**  
Uniform Moment Magnitude E[M]

◆ 2.00 - 2.49	● 4.00 - 4.49
◆ 2.50 - 2.99	● 4.50 - 4.99
◆ 3.00 - 3.49	● 5.00 - 5.49
◆ 3.50 - 3.99	

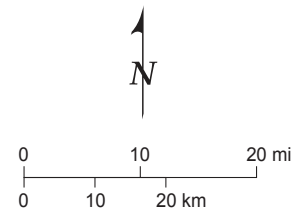
**Faults**

— Paleozoic	— Mesozoic fault
— Cenozoic	— 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	Volcanic, felsic
Intrusive, mafic	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 8