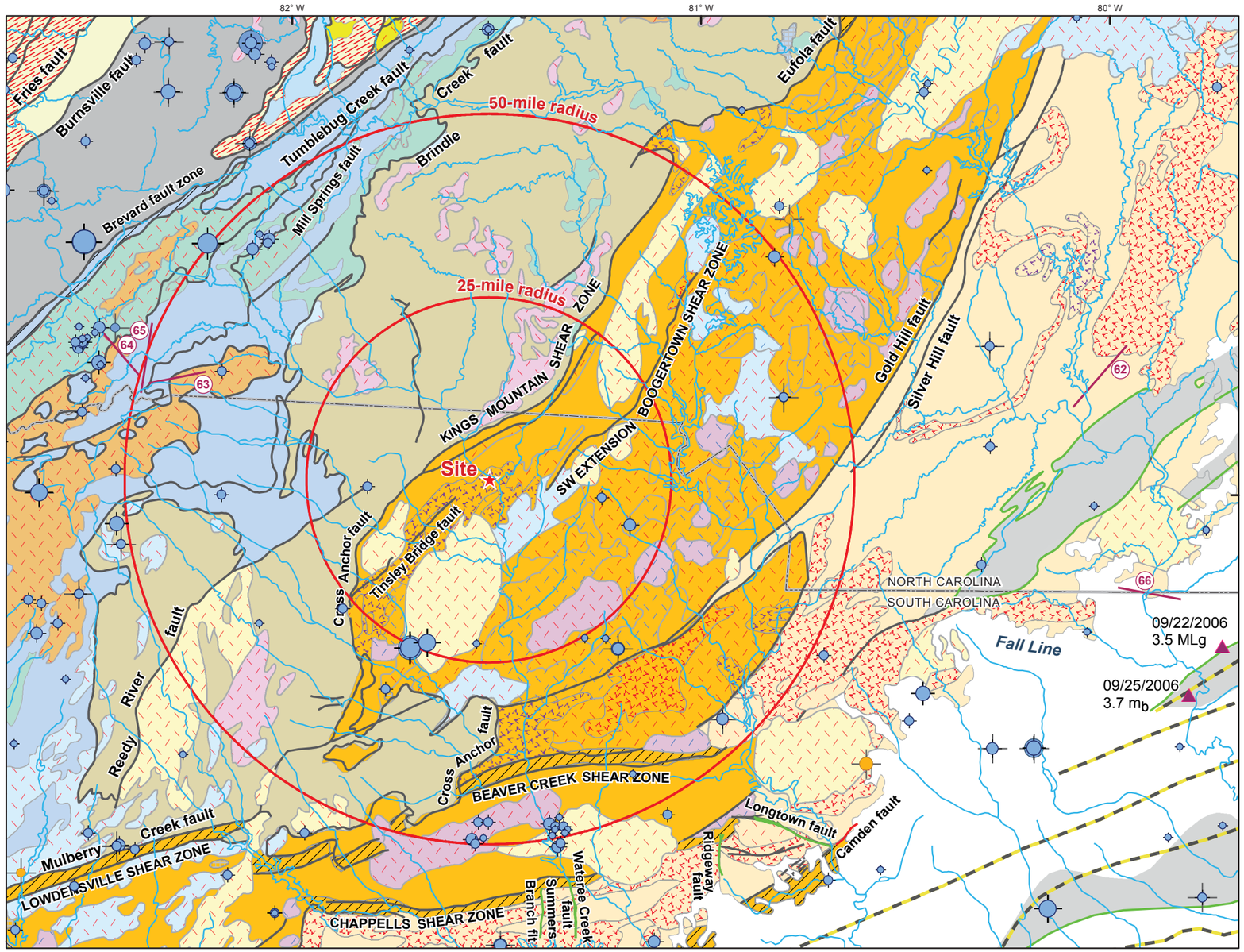

Explanation

Earthquake Epicenters (NUREG - 2115)

Uniform Moment Magnitude E[**M**]

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

Faults

- Paleozoic
- Cenozoic
- Mesozoic fault
- (66) 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
- Neoproterozic to Lower Paleozoic metasedimentary rocks
- Lower to Middle Ordovician metamorphic rocks
  - Intrusive, felsic
- Neoproterozoic to Lower Paleozoic clastic metasedimetary rocks
- Lower Paleozoic passive margin sequence
- Proterozoic magmatic and sedimentary rocks
- Proterozoic Grenville basement
  - Orthogneiss

N

0 10 20 mi

0 10 20 km

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