

## Explanation

**CPSZ** Central Piedmont Shear Zone

### Modified from Horton and Dicken (2001)

#### Late Paleozoic Shear Zones

**ph** Phyllonite and phyllonitic schist (Late Paleozoic)

### Plutonic And Associated Igneous Rocks

#### Late Paleozoic Rocks

**Cg** Granite (Carboniferous and Permian)

#### Middle Paleozoic Plutonic Rocks

**DScg** Gabbro (Devonian to Silurian)

**Dp** Pacolet granite (Devonian)

**Dle** Equigranular granite (Devonian)

**Dlp** Porphyritic granite (Devonian)

**Pzgf** Gneissic biotite granite to granodiorite (Paleozoic)

**Ogt** Granite and associated metagranites (Ordovician?)

#### Plutons of Undetermined Affinity and Age

**Pzgsa** Granite (Paleozoic?)

**CZgr** Metagranite to metagranodiorite (Cambrian to Neoproterozoic)

**CZdi** Diorite (Cambrian to Neoproterozoic)

#### Early Paleozoic-Neoproterozoic Plutons and Subvolcanic Complexes

**mtg** Biotite metatonalite and granodiorite (Paleozoic or Neoproterozoic?)

**Ztr** Metatondhemite (Neoproterozoic?)

**Zto** Metatonalite (Neoproterozoic)

**PzZq** Metamorphosed quartz diorite to diorite (Paleozoic or Neoproterozoic?)

**CZmd** Metadiorite (Cambrian or Neoproterozoic?)

**PzZg** Metagabbro and minor metadiorite (Middle Paleozoic to Neoproterozoic?)

**CZdg** Metadiorite and minor metagabbro, Lockhart metadiorite (Cambrian or Neoproterozoic?)

#### Mafic-Ultramafic Complexes and Ultramafic Rocks

**um** Ultramafic rock, metamorphosed (Paleozoic or Neoproterozoic)

**hgg** Metagabbro

**hgu** Metamorphosed ultramafic rocks—Hornblendite, pyroxenite, serpentinite, and talc schist

### Layered and Stratified Metamorphic Rocks

#### Carolina Slate Belt and Charlotte Belt

**OZvi** Mafic to felsic metavolcanic rocks (Ordovician to Neoproterozoic?)

**OZvf** Felsic metavolcanic rocks and layered felsic gneiss (Ordovician to Neoproterozoic?)

**OZvm** Mafic to intermediate metavolcanic rocks (Ordovician to Neoproterozoic?)

**CZph** Quartz-sericite phyllite and schist (Cambrian to Neoproterozoic?)

**am** Amphibolite and amphibole gneiss (Paleozoic to Neoproterozoic)

#### Battleground And Blacksburg Formations

**CZbl** Sericite schist and phyllite, sericitic quartzite, marble, amphibolite, and calc-silicate rock

**Zba** Metagabbro grading into amphibolite (Paleozoic?)

**Zbp** Schistose to phyllitic volcanoclastic rocks

**Zbf** Felsic metavolcanic rocks

**Zbm** Mafic to intermediate metavolcanic rocks

#### Central Piedmont Allochthon

**pcc** Biotite-quartz-feldspar gneiss having interlayers of amphibolite and metagranite

**CZgi** Biotite gneiss (Cambrian to Neoproterozoic?)

**CZgl** Biotite-quartz-plagioclase gneiss (Cambrian or Neoproterozoic?)

**CZga** Amphibolite

**CZsp** Sillimanite schist and sillimanite-mica schist (Cambrian or Neoproterozoic?)

**CZms** Sillimanite-mica schist and muscovite-biotite schist (Cambrian or Neoproterozoic?)

**CZbg** Biotite gneiss and muscovite-biotite gneiss (Cambrian or Neoproterozoic?)

### Modified from NCGS (1998) and Horton and Dicken (2001)

#### Metamorphic Rocks

**CZbg** Biotite gneiss and schist

**CZms** Mica schist

**CZab** Amphibolite and biotite gneiss

**CZpg** Inequigranular biotite gneiss

**CZbl** Pacolet granite

**CZfv** Felsic metavolcanic rock

**CZg** Metamorphosed granitic rock

**Zbt** Metagabbro grading into amphibolite

#### Intrusive Rocks

**Mc** Granite

**OCgm** Migmatitic granitic gneiss

**OCg** Metamorphosed granitic rock

**PPmg** Foliated to massive granitic rock

**PzZq** Metamorphosed quartz diorite

**DOg** Granitic rock

———— Faults modified from Hibbard et al. (2006)

### Other Mapped Quadrangles, not shown

- ① Kings Mountain 7.5 minute quadrangle, Horton (2006), USGS OFR 2006-1238
- ② Grover 7.5 minute quadrangle, Horton (2006), USGS OFR 2006-1238
- ③ Blacksburg South 7.5 minute quadrangle, Nystrom (2004), SC Geological Survey
- ④ Kings Creek 7.5 minute quadrangle, Howard (2004), SC Geological Survey
- ⑤ Filbert 7.5 minute quadrangle, Nystrom (2003), SC Geological Survey

WLS COL 2.5-1

WILLIAM STATES LEE III  
NUCLEAR STATION UNITS 1 & 2

Site Vicinity Geologic Map Explanation

FIGURE 2.5.1-218b Rev 2