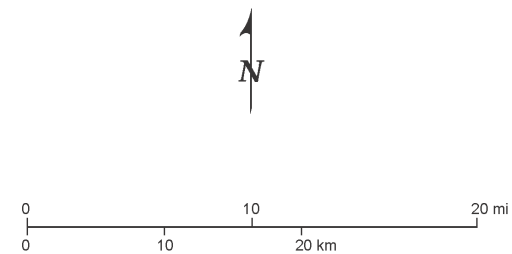


Modified from Horton and Dicken (2001) and NC Geological Survey (1998)



(See figure 2.3-8 Sheet 2 for explanation)

WILLIAM STATES LEE III NUCLEAR STATION UNITS 1 & 2

Area Geologic Map

FIGURE 2.3-8
(Sheet 1 of 2)

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Explanation

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 Metatrandjemite (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—Hornblende, 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

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

Area Geologic Map

**FIGURE 2.3-8
(Sheet 2 of 2)**

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