

| | | REGIONAL EVENTS | EFFECT AT SITE AND SITE AREA | |
|----------------|---------------|--|---|---|
| MESOZOIC | | Intrusion of diabase dikes | diabase dikes | |
| | | Opening of Atlantic basin; extensional tectonics | ← K-Ar Potassium feldspar, 219 Ma | |
| PALEOZOIC | PERMIAN | | | |
| | CARBONIFEROUS | LATE | 286 <i>Alleghenian Orogenesis</i> ; rapid unroofing and cooling | ← K-Ar hornblende, 290 Ma ← Rb-Sr biotite, 291 Ma ← K-Ar biotite, 296 Ma |
| | | EARLY | 333 Emplacement of Charlotte Terrane over Inner Piedmont; development of Central Piedmont shear zone | Most likely timing for D ₃ , D ₄ and D ₅ followed by lower greenschist overprint |
| | DEVONIAN | LATE | 362 | |
| | | MIDDLE | 382.5 <i>Devonian Orogenesis</i> | No clear effect in Site Area |
| | | EARLY | 394 Gold Hill dextral shear zone | D ₃ ? – D ₄ ? – D ₅ ? |
| | SILURIAN | LATE | 418 <i>Silurian Orogenesis</i> | No clear effect in Site Area |
| | | EARLY | 424 425 Ma - 430 Ma 40Ar/39Ar hornblende in North Carolina | D ₃ ? – D ₄ ? – D ₅ ? |
| | ORDOVICIAN | LATE | 443 | |
| | | MIDDLE | 458 | |
| EARLY | | 468 | | |
| CAMBRIAN | LATE | 490 | | |
| | MIDDLE | 500 | | |
| | EARLY | 510 535 <i>Virgilian Orogenesis</i> with fabric development and metamorphism to Upper Greenschist to Amphibolite facies; followed by Stage III mafic intrusions? | D ₁ and D ₂ deformation with development of upper greenschist to amphibolite facies assemblages | |
| NEOPROTEROZOIC | | 550 Gondwana Island Arc (Stage II) Accumulation of volcanic pile with intrusion of granodiorite-tonalite followed by clastic and carbonate sedimentation | Development of Site Area stratigraphy | |

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| <p>WILLIAM STATES LEE III NUCLEAR STATION UNITS 1 & 2</p> |
| <p>Site Area Geochronology Chart</p> |
| <p>FIGURE 2.5.1-223 Rev 0</p> |