			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
		Ma 245		
PALEOZOIC	PERMIAN			
		286	*Alleghenian Orogenesis;* rapid unroofing and cooling	← K-Ar hornblende, 290 Ma ← Rb-Sr biotite, 291 Ma ← K-Ar biotite, 296 Ma
	CARBONIFEROUS LATE		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
		333		
	CARBONIFEROUS EARLY			
		362		
	DEVONIAN LATE			
	DEVONIAN MIDDLE	382.5	*Devonian Orogenesis* Gold Hill dextral shear zone	No clear effect in Site Area D_3? – D_4? – D_5?
	DEVONIAN EARLY	394		
		418		
	SILURIAN LATE		*Silurian Orogenesis* 425 Ma - 430 Ma 40Ar/39Ar hornblende in North Carolina	No clear effect in Site Area D_3? – D_4? – D_5?
	SILURIAN EARLY	424		
		443		
	ORDOVICIAN LATE			
	ORDOVICIAN MIDDLE	458		
	ORDOVICIAN EARLY	468		
		490		
	CAMBRIAN LATE			
	CAMBRIAN MIDDLE	500		
		510		
	CAMBRIAN EARLY	535	*Virgilian Orogenesis* 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

WLS COL 2.5-1

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 & 2

Site Area Geochronology Chart

FIGURE 2.5.1-223 Rev 0