

Era	System	Series	Stratigraphic Unit	Predominant Lithology			
CENOZOIC	Quaternary	Holocene	alluvial, coastal, marsh, and eolian deposits	sand, gravel, silt, mud, and peat			
		Pleistocene	COASTAL AREAS Wisconsin alluvium, Cape May Formation, colluvium	INLAND, NORTHERN NEW JERSEY Wisconsin and pre-Wisconsin alluvial, colluvial, glacial, lacustrine, and eolian deposits	sand, gravel, silt, clay (statewide), till and till-like deposits (northern New Jersey)		
	Tertiary	Miocene		Pensauken Formation	sand, clayey silt		
				Bridgeton Formation			
				Beacon Hill Gravel	gravel, sand		
				Cohansey Sand	sand, some clayey silt		
				Kirkwood Formation	sand, gravel, clayey silt		
		Oligocene		ACGS Beta Unit (Piney Point)		sand, some glauconitic sand	
				Mays Landing Unit			
		Eocene		Shark River Formation		clayey silt, fine quartz sand, glauconitic sand	
				Manasquan Formation			
		Paleocene		Vincetown Formation		sand, clayey silt, glauconitic sand, calcarenite	
			Hornerstown Formation		glauconitic sand		
	MESOZOIC	Cretaceous	Upper Cretaceous		Tinton Sand	sand, glauconitic sand	
					Red Bank Sand	sand, clayey silt, some glauconite sand	
				Navesink Formation	glauconite sand		
				Mount Laurel Sand	sand		
				Wenonah Formation	silty sand, some glauconite		
				Marshalltown Formation	clayey silt, glauconitic sand		
				Englishtown Formation	sand, clayey silt		
				Woodbury Clay	clayey silt		
				Merchantville Formation	clayey silt, glauconitic sand		
					Magothy Formation	sand, clayey silt	
					Raritan Formation		
Lower Cretaceous					Potomac Group		gravel, sand, silt, clay
Jurassic		Lower Jurassic	Newark Supergroup	Brunswick Group	Boonton Formation	sandstone, siltstone, shale, conglomerate	
					Hook Mountain Basalt	basalt	
	Towaco Formation				sandstone, siltstone, shale, conglomerate		
	Preakness Basalt				basalt, intercalated sedimentary rock		
	Felville Formation				sandstone, siltstone, shale, conglomerate, limestone		
	Orange Mtn. Basalt				diabase intrusives	basalt	diabase
	Passaic Formation					sandstone, siltstone, shale, conglomerate	
Triassic	Upper Jurassic		Lockatong Formation	siltstone, mudstone, sandstone, shale			
			Stockton Formation	arkosic sandstone, siltstone, shale, conglomerate			

VALLEY AND RIDGE				
	Stratigraphic unit	Predominant lithology		
PALEOZOIC	Devonian	Marcellus Shale	shale, siltstone	
		Buttermilk Falls Limestone	argillaceous limestone	
		Schoharie Formation	calcareous siltstone	
		Esopus Formation	siltstone, sandstone	
		Oriskany Group	Ridgely Sandstone	sandstone, calcareous conglomerate
			Shriver Chert	shale, siltstone, chert
			Glenerie Formation	limestone
		Helderberg Group	Port Ewen Shale	calcareous shale, siltstone
			Minisink Limestone	limestone, calcareous shale
			New Scotland Formation	calcareous silty shale
			Coeymans Formation	limestone, sandstone, conglomerate
		Rondout Formation	limestone, calcareous shale, dolomite	
	Silurian	Decker Formation	calcareous sandstone, silty limestone	
		Bossardville Limestone	argillaceous, partly dolomitic limestone	
		Poxono Island Formation	calcareous shale, dolomite	
Bloomsburg Red Beds		shale, siltstone, sandstone		
Shawangunk Formation	conglomeratic quartzite			

GREEN POND MOUNTAIN REGION	
Stratigraphic unit	Predominant lithology
Skunnemunk Conglomerate	conglomerate
Bellvale Sandstone	sandstone, siltstone, shale
Cornwall Shale	shale, siltstone
Kanouse Sandstone	conglomeratic sandstone, siltstone
Esopus Formation	siltstone, sandstone
Connelly Conglomerate	conglomeratic quartzite
Berkshire Valley Formation	calcareous siltstone, silty dolomite, sandstone
Poxono Island Formation	calcareous shale, dolomite
Longwood Shale	shale, siltstone
Green Pond Conglomerate	conglomeratic quartzite, siltstone

		Stratigraphic Unit	Predominant Lithology				
PALEOZOIC	Ordovician	Beemerville intrusive complex	nepheline syenite, intrusive alkalic igneous rocks				
		Martinsburg Formation	slate, siltstone, graywacke				
		Middle Ordovician	Jacksonburg Limestone	limestone, argillaceous limestone			
			Lower Ordovician	Kittatinny Supergroup	Jutland klippe units (not part of Kittatinny Supergroup)	dolomite, limestone (Ontelaunee, Epler)	shale, limestone, chert (Jutland)
		Beekmantown Group				Ontelaunee Formation	
		Epler Formation					
			Rickenbach Dolomite	sandy dolomite (Rickenbach)			
	Cambrian	Upper Cambrian	Allentown Dolomite	dolomite, calcareous limestone			
		Middle Cambrian	Leithsville Formation	dolomite, calcareous shale			
		Lower Cambrian	Hardyston Quartzite	arkosic quartzite, conglomerate (Hardyston)			
PROTEROZOIC	?	Manhattan Schist, Wissahickon Formation, serpentinite, Chickies Quartzite	sillimanite-garnet-muscovite-biotite schist (Manhattan); schist, metagraywacke, amphibolite, altered ultramafics (Wissahickon); highly sheared serpentinite preserving few original igneous structures; quartz-sericite schist, conglomerate (Chickies)				
	Late Proterozoic (?)	Chestnut Hill Formation	greenschist-grade sedimentary and metavolcanic (?) rock				
	Middle Proterozoic	Byram Intrusive Suite, Lake Hopatcong Intrusive Suite, Mount Eve Granite	granite, quartz syenite, syenite, quartz monzonite, monzonite, and granodiorite				
		metasedimentary rocks	quartzofeldspathic and calcareous metasedimentary rocks including the Franklin and Wildcat Marbles				
	Losee Metamorphic Suite	highly sodic gneissic and granitoid rocks; amphibolite					

from New Jersey Geological Survey, 1990
(Reference 2.5.1-141)

PSEG Power, LLC
PSEG Site ESPA
Part 2, Site Safety Analysis Report
Generalized Stratigraphic Table
for New Jersey
FIGURE 2.5.1-11
Rev 0