

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	Middle Ordovician	Beemerville intrusive complex	nepheline syenite, intrusive alkalic igneous rocks			
			Martinsburg Formation	slate, siltstone, graywacke			
			Jacksonburg Limestone	limestone, argillaceous limestone			
			Lower Ordovician	Kittatinny Supergroup	Beekmantown Group	Ontelaunee Formation	dolomite, limestone (Ontelaunee, Epler)
						Epler Formation	
	Rickenbach Dolomite	sandy dolomite (Rickenbach)					
	Cambrian	Lower Cambrian	Allentown Dolomite	dolomite, calcareous limestone			
			Leithsville Formation	dolomite, calcareous shale			
			Hardyston Quartzite	arkosic quartzite, conglomerate (Hardyston)			
	PROTEROZOIC	Middle Proterozoic	Late 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)		
Chestnut Hill Formation				greenschist-grade sedimentary and metavolcanic (?) rock			
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