

Project Spotlight

Hope Creek Canyon-Salem, New Jersey

Installer: CJ Geo

Owner: PSE&G

General Contractor: RE Pierson



Background Information

Public Service Electric and Gas (PSE&G) is New Jersey's largest provider of electric and gas service. As such, PSE&G has numerous high-powered facilities throughout the northeastern United States, including a number of nuclear power plants. Recently, one of their power plants, Hope Creek Canyon in Salem, New Jersey, underwent significant geotechnical construction to protect its backup generators.

Project Details

Hope Creek Canyon nuclear power plant houses a fleet of backup generators that require protection from flooding. As part of a flood armoring project, PSE&G decided to build a wall dam over the underground pipes surrounding these generators.

The four-person installation crew from CJGeo Geotechnical Contractors first excavated the existing overburden and replaced it with a 30-pcf low-density cellular concrete in preparation for the installation of a HESCO wall dam. They chose to use a low-density cellular concrete mixed with AERLITE™, a synthetic foaming agent manufactured by Aerix Industries. The installation crew batched and installed 100 cubic yards of AERLITE low-density cellular concrete into a 30'x30'x3' pit above the existing pipelines.

Aerix Added Value

When combined with cement slurry, AERLITE produces a non-permeable, low-density concrete ideal for geotechnical applications that require significant weight-bearing and load-reduction capabilities. For this unique project, the use of low-density cellular concrete with Aerix's AERLITE foaming agent provided the light weight needed to protect the underlying pipes while its low water absorption and permeability provided the flood protection needed for the generators. With AERLITE, Hope Creek Canyon can continue operations without interruption from flood or rainwater events.

