

Cove Point LNG Expansion

Lusby, Maryland



The Cove Point gas liquefaction plant, the first on the East Coast, adds diversity to the nation's energy production and management resources, many of which are located on the Gulf Coast; and thus, vulnerable to natural disasters such as hurricanes.

Liquefied Natural Gas (LNG), is a natural gas used to heat homes and power businesses. Energy companies liquefy the gas by cooling it, in order to reduce its volume, making it more efficient to transport, especially by sea. Then it is returned to its natural gaseous state before it is used for cooking, heating, and other energy needs.

The new plant will facilitate the export of LNG, allowing energy producers to reach new markets as well as help balance global dependence on oil. Now, natural gas produced in the US can be exported for use in a European kitchen or Japanese home. Natural gas proponents say LNG has lower greenhouse gas emissions than oil and cleaner than both oil and coal.

To build a facility that liquefies natural gas is a huge undertaking that requires the muscle of galvanized steel. In 2015, the Cove Point LNG Facility project in Lusby, Maryland began with a plan to build nine new steel buildings – all utilizing hot-dip galvanizing (HDG) for corrosion protection.

The collaboration of the galvanizers, fabricators, erection team, and off-site storage area was critical and well-executed. The fabrication and galvanizing began mid-year 2015 and was completed in 2016. Quality corrosion protection and aesthetics were crucial on this project, as well as adherence to the strict schedule necessary on such a massive project. Because of these requirements, hot-dip galvanizing was chosen as the best corrosion protection system for the project.

The galvanizer was required to undergo a pre-project supplier certification and hosted periodic inspections to demonstrate the quality of work. Essential to the galvanizing success was implementation of a piece-mark tag system to identify parts before, during, and after galvanizing. This helped with strategic flow of galvanized materials to the job site.

Keeping the LNG facility at full capacity consistently required a durable, long-lasting corrosion protection system, and hot-dip galvanized steel provided the strength and reliability necessary to withstand the rigors of such a harsh environment. Thanks to hot-dip galvanizing, the Cove Point Facility will be able to supply an alternative energy source within and well beyond our borders for generations to come. ■



Galvanizers

Valmont Coatings - Virginia Galvanizing
V&S Columbus Galvanizing LLC
V&S Delaware Galvanizing LLC
V&S Lebanon Galvanizing LLC

Engineer

IHI/Kiewit

Fabricators

United Structures of America
Merrill Steel

Grating Manufacturer

Ohio Grating, Inc.

Owner

Dominion Cove Point LNG, LP