Name: NC Solar Farm
Location: North Carolina
Install Completion: January 2012
Project Size: 1.2 MW
Panel Type: 72 Cell - 280W
Racking Type: Fixed Tilt - Post Driven Ground Mount
Terrain: Open Field
Installation Services: N/A
General Contractor: N/A

Project Overview

Patriot Solar Group (PSG) began working on initial racking designs during Summer of 2011. At that time, the site was still yet to be cleared, but early soil testings confirmed that a driven post design would be suitable for the site conditions.

PSG's sales and engineering team worked closely with project engineers to ensure the racking design met all local building codes and to ensure maximum capacity on the 10 acre site.

The array consisting of over 4,300 modules will produce over 1,800 mWh annually.

Why Patriot Solar Group?

- Over 20 years of manufacturing and design expertise.
- Vast amounts of inventory ready to ship. High capacity/ high production manufacturing.
- Custom Engineering to meet any design criteria.
- Wet stamp drawings provided at no cost for project sizes 500kW and above.
- Patriot offers site prep and installation services for any size project.
- Renowned customer service and in-field technical support.
- Made in USA – BAA & ARRA Compliant. 10 year structural warranty.

Project Objectives

- Design racking system in compliance with all local building codes.
- Engineer post design to work with site soil conditions and achieve desired height clearance above grade.
- Deliver racking material within 6 week lead time to ensure no project delays.
- Design rail lengths to work adequately with module string sizes and maximize array capacity.

Project Results

- Racking design met the desired height clearance in accordance with 100MPH wind load and 20PSF snow load.
- Rail configuration was designed to meet panel strings of 12 and met all aesthetic project requirements.
- Hat-shaped post design was ideal for clay soil conditions.
- All racking material was delivered on schedule, allowing contractors to meet the project completion deadline.