

SunEdison Photovoltaic Solar Power Farm

Fact Sheet

Aggregate Capacity: 18 MW (AC), or 21.5 MW (DC), is the nameplate combined size of facilities making up the PV Solar Farm.

The expected capacity delivered to Duke Energy customers is 16.1 MW (AC).

Total Output: 16.1 MW of photovoltaic (PV) solar capacity produces approximately 28,210,000 kilowatt hours (kWh) in its first year, the equivalent of powering 2,647 homes for one year.

Over 20 years, 16.1 MW of PV solar capacity will produce an estimated 513,685,000 kWh, the equivalent of powering 48,206 homes for one year.

Characteristics: Solar PV power plants are independent of fossil fuel use, use little to no water in operation, and produce no noise.

Photovoltaic, literally 'Photo' (light) and 'voltaic' (electricity), means the use of sunlight (photons) to generate electricity. Most solar photovoltaic systems use solar panels to create solar electricity. Photons from sunlight elevate electrons into a higher state of energy, creating electricity.

Location: Davidson County, North Carolina

Project Timeline: The PV solar farm will consist of 36 individual solar PV facilities, located at a single site
Construction is anticipated to start early 3rd Quarter, 2009
Targeted commercial operation date is December 31, 2010

Capital Costs: Zero. Under this project, Duke Energy pays no upfront capital costs.

SunEdison will develop, finance, build, operate, monitor and maintain the clean solar power plant under a solar power services agreement (SPSA) with Duke Energy. There are no up-front capital costs to Duke Energy or rate payers.

Environmental Impact: In one full year of production, 16.1 MW of PV solar power offsets 32,328,660 lbs of CO₂. This is the equivalent of taking 3,168 cars off the road for one year.

Over 20 years, the project would offset 598,026,392 lbs of CO₂, which is the equal to taking 58,607 cars off the road for one year.