

PSE&G Pole-Attached Solar Project Frequently Asked Questions

Q. *What is the PSE&G pole-attached solar project?*

A. In July 2009, PSE&G received regulatory approval to install small solar energy units on 200,000 utility poles and street lights in the towns we service in the next two years. The solar power will flow to the electric grid, which serves all customers.

PSE&G's investment is the largest pole-attached solar installation in the world. Thanks to this and other programs, New Jersey has more installed solar capacity than any state except California.

Q. *How does this project benefit customers and the state?*

A. This project will bring the benefits of clean, renewable energy to all customers in New Jersey. In addition, it also will create jobs for people who are needed to assemble and install the units.

Q. *Where will the solar units be installed?*

A. The solar units will be installed in residential neighborhoods, as well as on poles and aluminum street lights along main streets near area businesses. We are informing municipal officials when we are working in their towns.

Q. *What do the solar units look like and how do they attach to the poles?*

A. The units are 5 feet wide by 2.5 feet high and weigh about 60 pounds. They are safely attached to the pole about 15-18 feet from the ground.

Q. *How does PSE&G select the poles that will have solar units installed on them?*

A. PSE&G is selecting poles that can support the units, face in a southerly direction and have no more than one transformer already on the pole.

Right now, PSE&G is using poles and street lights that it owns.

Q. *Who is installing the solar units?*

A. PSE&G will be using several contractors to install the units on all available poles during the next two years.

Q. *Will PSE&G move a solar unit if residents don't like where it is installed?*

A. PSE&G understands that residents may have concerns about the placement of the solar energy units in their neighborhoods. Because of many factors that must be considered, we regret that we are not able to move a particular unit to another location. Clean, renewable solar energy benefits everyone by reducing greenhouse gas emissions.



PSE&G'S SOLAR 4 ALL™ PROGRAM
Frequently Asked Questions: Pole-Attached Solar Safety

Q. Are the panels safe?

A. The panels are very safe. These are the same solar panels that are mounted on homes, schools and other buildings. The panels are very durable and shatterproof.

Q. What are the size and weight of the panels?

A. Solar units are 5 feet wide by 2.5 feet high and weigh about 60 pounds.

Q. How are the panels mounted?

A. Solar panels are mounted in accordance with the National Electric Safety Code (NESC). The panels are mounted on the pole below all communications and electrical wiring – typically 15'-18'. When over a roadway, all panels will be at, or above, 15 feet to avoid damage from traffic.

Q. What is the operating voltage of the panels?

A. The solar panels produce low voltage (120 volts) and are connected directly to PSE&G's electric grid.

Q. In the event of a power outage, will the panels provide back feed?

A. Solar units are designed not to provide back feed in accordance with UL Anti-Islanding Standard 1741. The inverter, mounted on the rear of the panel, will immediately turn off on loss of grid power. The unit will not turn back on until grid power has been restored for 5 minutes.

Q. What wind speeds and ice load can these installations handle?

A. Solar panels are designed to meet the NESC requirements for this area which include 90 mph wind gust for 3 seconds and 0.5 inches of ice loading.

Q. What actions can be taken by firefighters or emergency response personnel if a panel was to come down?

A. Firefighters or emergency response personnel should treat solar panels as they do other high voltage pole-mounted electrical equipment. The area should be cordoned off, made safe and PSE&G should be notified. Only trained PSE&G personnel with proper personal protective equipment should work on pole-mounted electrical equipment. While the panels themselves are safe and operate at 120V, all electric equipment must be treated as if it is energized at high voltage.

Q. Do the panels contain hazardous material?

A. The solar panels are not hazardous. They are made of polycrystalline silicone covered with tempered glass.

Q. Can the panels be handled when energized?

A. No! The panels should only be handled by trained PSE&G personnel with proper personal protective equipment.

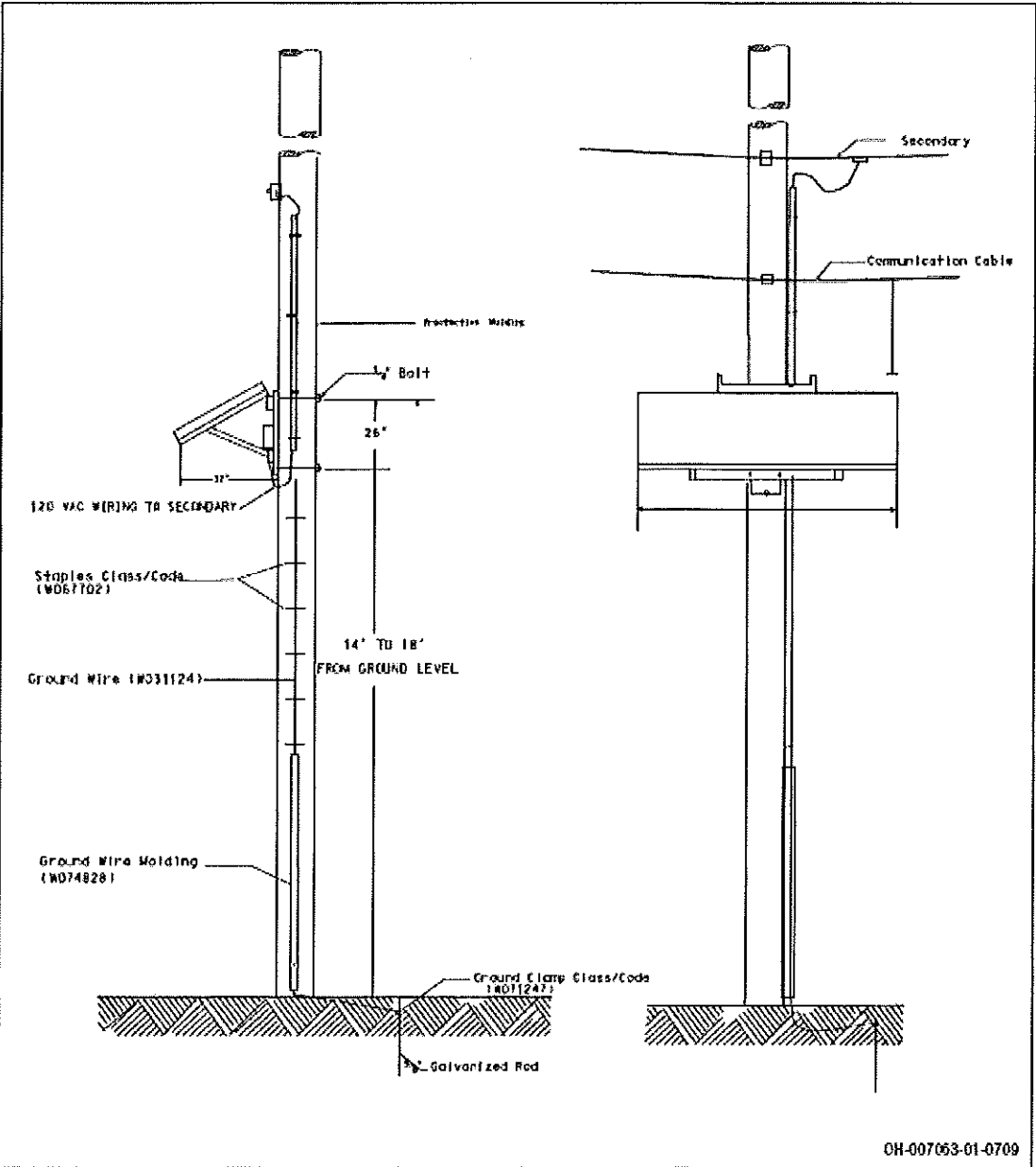
Q. Is there a number to report damage, vandalism, etc.?

A. To report damage to or vandalism of a panel, please notify our call center at 1-800-436-7734.

PSE&G Pole Attached Solar Cut Sheet, Construction Specification, MSDS List



Figure 1.2: Solar Panel Installation



Construction, installation, and structural analysis based on:

- NESC Edition: 2007
- Loading District Heavy
- Construction: Grade C
- Rule 250B Loading: Wind (psf): 4 Ice (in):0.5
- UL 1741 (Anti-Islanding)
- 90 mph wind at 3 sec gust

The following MSDS sheets are available upon requests:

- Module Components
- Silver paste (back contact)
- Silver paste (front contact)
- Module seal gel
- Silicon gel
- EVA sheet
- TPT

The following MSDS sheets are not available:

- Solar Cell
- Glass
- Aluminum frame
- Junction box
- Cable
- Ribbon

A Winner All Around

Are you one of those drivers who slow down when passing a solar panel on a home or business and say to your kids, "Someday you will see those everywhere."?

Well, that *someday* is just around the corner.

Last month, PSE&G received approval to mount solar units on 200,000 utility poles in New Jersey's six largest cities and roughly 300 other suburban and rural communities where the utility supplies electric service. That's about one out of every four poles. In three short years, you will not be able to go for a ride in your car without passing a few – or several dozen – of these solar units.

The panels will not be powering lights mounted on the poles, but will feed electricity directly into the grid, providing clean, emissions-free energy to all PSE&G customers.

An important added benefit is they will be creating green jobs. Some 100 people will be needed to install the units over the next three years, and another 100 will be employed by Petra Solar, a South Plainfield company that will produce the units for PSE&G right here in New Jersey.

Under the program recently approved by the Board of Public Utilities, aptly named Solar 4 All, PSE&G will install 80 megawatts of solar generation by 2013. That is enough to power about 64,000

homes. Half of the energy will come from the pole-mounted solar installations and the other half from Solar Gardens, land-based solar installations that can power several hundred to a few thousand homes.

Utility businesses in New Jersey no longer own power plants, but it makes sense for them to be the owners of solar facilities. The sun is free, but turning its rays into electricity is not. Solar power is still more

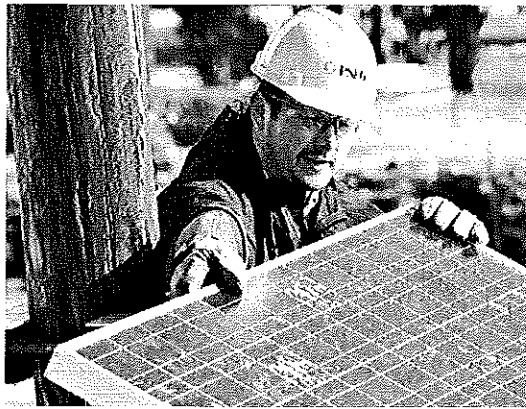
expensive than traditional generation and requires tax credits and state subsidies to spur development.

If a home or business owner invests in solar, we all benefit from cleaner air and less dependency on foreign oil, while the owner receives the tax and state subsidies, which are paid for by all taxpayers and

ratepayers. However, if the utility owns solar facilities, the benefits – tax credits, the sale of solar credits and the value of generated electricity – flow back to the customer.

Utility-owned solar is a win all around – for the environment, our customers and for New Jersey.

What's your view? Please let us know at Opinion@PSEG.com.



***Coming soon to New Jersey:
200,000 solar panels
mounted on utility poles***



PSEG

We make things work for you.

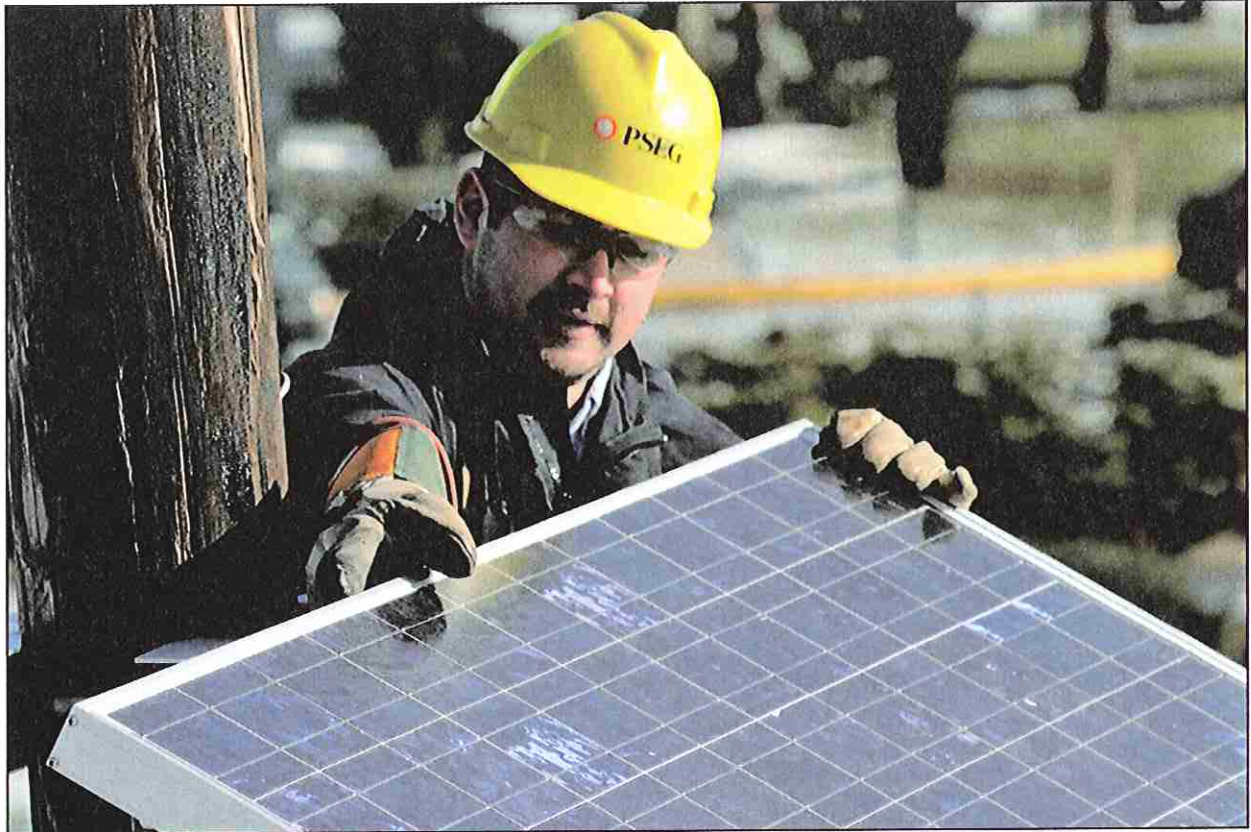
Green Solutions

for Customers



PSEG

We make things work for you.



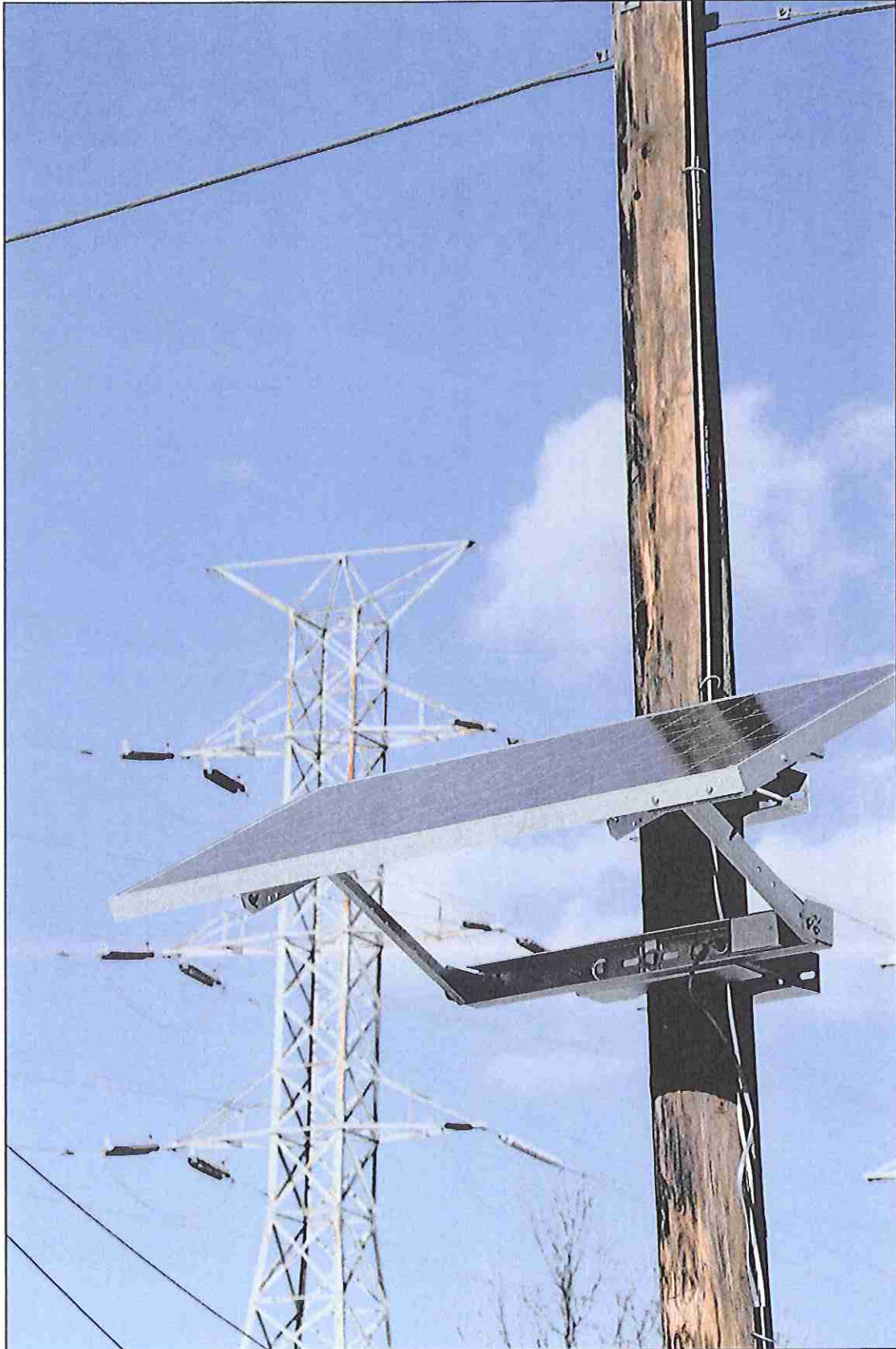
Green Solutions

for Customers



PSEG

We make things work for you.



Green Solutions
for Customers



PSEG

We make things work for you.

For more information regarding
the Solar 4 All™ program and
pole-attached installations,

Visit:

pseg.com/solar4all

Call:

1-800-664-4761, option 2

Email:

LargeCustomerSupport@pseg.com