# **PSE&G's Solar 4 All™ Program: Pole-Attached Solar Installations** in Your Area

**December 22, 2009 January 12, 2010** 

#### **Welcome and Ground Rules**

- Host introductions
- Please mute your phones
- Please do NOT put your phone "on hold"
- Questions will be answered at the end of each segment of our presentation
- The best way to ask your question is to use the "raise hand" button for those of you logged in
- Feel free to use the "chat with presenter" option on your screen at anytime

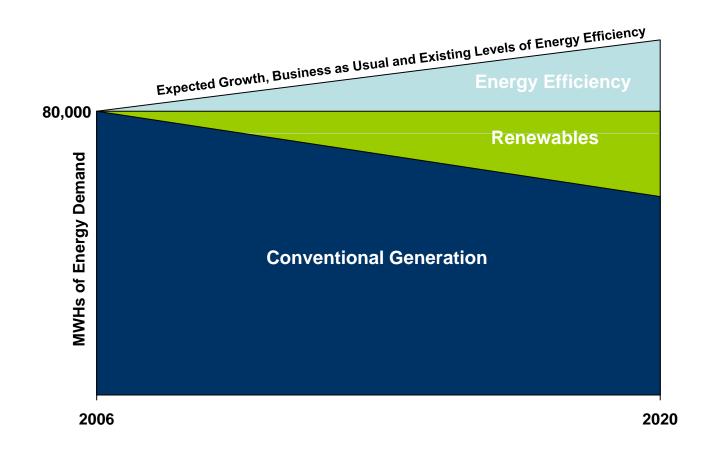
## Today's Agenda

- PSEG Vision
- NJ Energy Master Plan
- PSEG's Environmental Initiatives
- Solar Basics
- PSE&G's Solar 4 All™ Program and Benefits
- What the Solar Units Look Like
- Location of Solar Unit Installations
- Selection of Pole Sites
- Safety Information
- Who Is Assembling and Installing the Solar Units?
- Notification of Installation Work
- Contact Information
- Questions?





#### NJ Energy Master Plan Goal: Meet 30% of State's electricity needs with renewable energy sources by 2020 (2.12% must be solar)





#### **PSEG's Environmental Initiatives**

## The Solar 4 All<sup>™</sup> program is one of several PSEG environmental initiatives:

- **PSE&G Solar Loan Program** -- PSE&G is offering \$248 million in loans to help expedite and finance the installation of 81 megawatts of solar power on homes, businesses and municipal buildings throughout its electric service area
- **PSE&G Energy Efficiency programs --** PSE&G is investing more than \$240 million to provide energy audits for homes, small businesses and hospitals, and install insulation, programmable thermostats and efficient lighting
  - Direct Install Program for Small Business, Government, and Non-Profit facilities
  - Hospital Efficiency Program
- **PSE&G installation of high-efficiency street lighting --** PSE&G is investing \$50 million to replace mercury vapor municipal street lighting with more efficient induction fluorescent lighting that will provide immediate cost savings to municipalities and reduce energy consumption



#### **Solar Basics**



- One of the cleanest, greenest, and quietest electric technologies available today
- A proven technology
- Solar systems convert light directly into electricity using semiconductor technology

## PSE&G's Solar 4 All™ Program

- Approved July 29, 2009 by the NJ BPU to bring the benefits of clean, renewable energy to all customers in our state
- PSE&G to install, own, and operate 80 MW of solar generating systems in the next four to five years
- Project includes largest pole-attached solar installation in the world (40 MW)

## Solar 4 All™ Program

#### 80 MW solar generation capacity

#### **Pole-attached Solar** (40 MW)

- 200,000 utility poles
- About 200 watts/panel
- Connected directly into PSE&G's distribution system
- Power sold into PJM wholesale grid
- Solar developer awarded this contract is Petra Solar, a NJbased company
- Installed by PSE&G crews and contractors

#### Centralized Solar (40 MW)

- 25 MW at PSE&G-owned sites
- 15 MW of solar systems at third-party sites
  - 10 MW any third-party
  - 5 MW UF7 site
- Solar developers have already submitted proposals for these sites and some projects are underway



#### **PSE&G's Solar 4 All™ Program Benefits**

#### \$515 million Solar 4 All™ investment will:

- Nearly double the size of New Jersey's solar capacity
- Create green jobs for people who are needed to assemble and install the units
- Result in New Jersey having more installed solar capacity than any state except California

#### What the Solar Units Look Like



- Solar units are 5 feet wide by 2.5 feet high and weigh about 60 pounds
- Units are safely attached to the pole about 15 – 18 feet from the ground

#### **Location of Solar Unit Installations**



- Solar units will be installed on 200,000 utility poles in **PSE&G's service territory.** 
  - Includes state's six largest cities and roughly 300 rural and suburban communities
  - In residential neighborhoods, as well as on poles and aluminum street lights along main streets near area businesses.

#### **Selection of Pole Sites**

#### PSE&G selects poles that:

- Can support the solar units
- Have an unobstructed view of southern sky
- Have no more than one transformer already on the pole
  - Poles can have cable, but no junction boxes

### **Safety Information**

- Solar panels are safe:
  - Same panels that are mounted on homes, schools and other buildings
  - Mounted at or above 15 feet to avoid damage from traffic
  - Tested to withstand 90 mph wind load
  - Durable/shatterproof
  - Low voltage (120 volts) and designed not to provide back feed
- Additional safety information is available upon request

For emergencies, call 1-800-436-PSEG (7734)

#### Who Is Assembling and Installing the Solar Units?

- PSE&G will use several contractors to install the units on available poles over the course of the solar project
- The Solar 4 All<sup>™</sup> program will create green jobs:
  - About 100 people will be needed to install the units over the next few years
  - Another 100 will be employed by Petra Solar, a South Plainfield company that will assemble the units for PSE&G right here in New Jersey

#### **Notification of Installation Work**



- A PSE&G customer representative will notify municipal officials when installations are to begin in their towns
  - Additional information is available upon request

## **Contact Information For Municipal Officials**

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

#### Visit:

pseg.com/solar4all

#### Call:

1-800-664-4761, option 2

**Emergencies**: 1-800-436-PSEG (7734)

#### **Email:**

LargeCustomerSupport@pseg.com

Putting the **power of green** within your reach



## Questions?

