WATERTOWN SOLAR

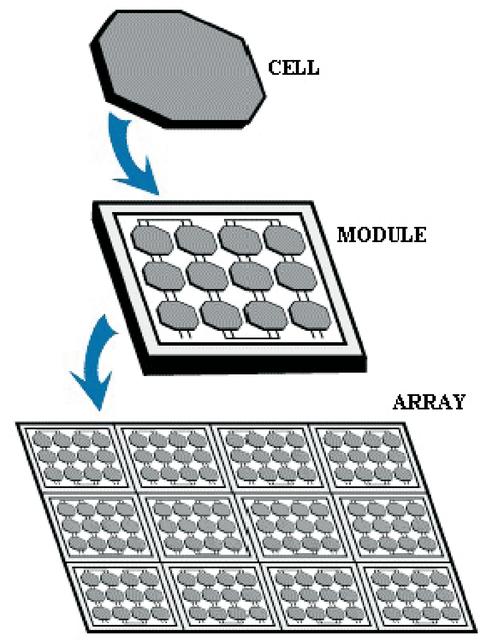
What is Solar Electric Power?

Solar cells collect solar radiation from sunlight. These cells are small but efficient when combined in solar arrays. Energy is generated when the sun excites and frees electrons in the cells and can be induced to travel through an electrical circuit, powering electrical devices or sending electricity to the grid.

Solar Equipment

Photovoltaics (PV)

is the technology used to convert sunlight to electricity. Solar PV panels will be used and designed to achieve optimal energy production on the Watertown project. A number of solar cells electrically connected to each other and mounted in a support structure or frame is called a photovoltaic module. Multiple modules can be wired together to form an array. Photovoltaic modules and arrays produce direct-current (DC) electricity.



Inverters

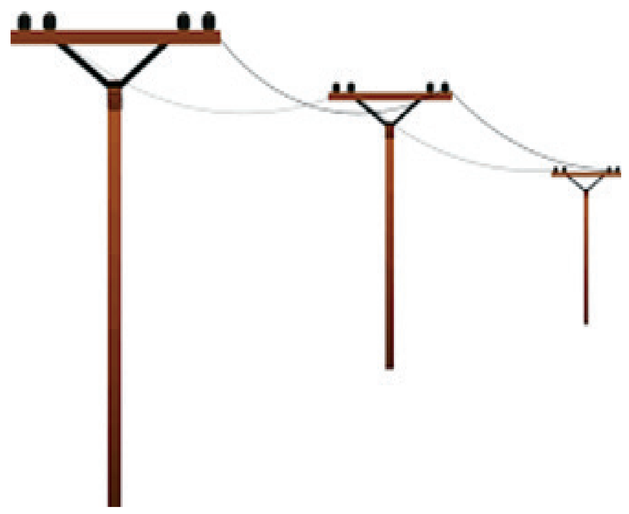
Inverters convert the direct current (DC) electricity from the solar panel into alternating current (AC) electricity, so it can be added to the utility grid system.

Transformers

A transformer converts, or steps up, the electricity to the same voltage carried by the grid transmission lines.

Electrical Collector System

The electricity generated will be collected on site using underground cables to a single switching station. The switching station will aggregate and feed the electricity to the local electric grid.



SAMSUNG C&T AMERICA