



photovoltaic system

The Octagon includes a 50kW photovoltaic system located on the roof of the north and south towers. This system, sized to light the Octagon's hallways, operates in parallel with the local utility provider and is the largest array of solar panels on a residential building in NYC. Photovoltaic systems, along with fuel cells, wind, solar thermal, biomass, tidal, geothermal and methane waste, are examples of renewable energy sources.



The Octagon's solar panels, located on top of the 14-story building, are subject to strong winds and dramatic weather conditions. As a result, a heavy-duty system involving concrete pavers and a steel frame secure the panels to the roof.



The Octagon's solar panel array includes a data acquisition system with weather monitoring equipment and a web-based interface demonstrating the system's real-time energy production in relation to various environmental characteristics, including temperature, wind speed and irradiance (the intensity of the sun).