



Turnkey Approach

For

Installation of Rooftop PV Solar Plant

By

GENERAL ENERGY CORPORATION (GEC)



GEC Awards

- 2012 ASHRAE National-level Technology Award Category 1 Commercial Building – New for Evelyn Pease Tyner Interpretive Center, Glenview, IL
- 2011 ASHRAE Region VI 1st place Category 1 Commercial Building – New for Evelyn Pease Tyner Interpretive Center, Glenview, IL
- 2010 Excellence in Engineering, ASHRAE Illinois Chapter for Evelyn Pease Tyner Interpretive Center, Glenview, IL
- 2005-2006 Technology Award ASHRAE Region VI, Energy Savings from Boiler & Chiller Upgrades, Conant High School, Hoffman Estates, Illinois
- 2005 Excellence in Engineering Award ASHRAE Chicago, Energy Savings from Boiler & Chiller Upgrades, Conant High School, Hoffman Estates, Illinois
- 2004 Energy Project of the Year Award AEE Chicago Chapter for James B. Conant High School, Hoffman Estates, Illinois
- 2000 ASHRAE Illinois Chapter “Excellence in Engineering Award” for Schaumburg High School Life Safety Mechanical Work, Schaumburg, Illinois
- 1992 Thomas H. Madigan Special Merit Award Madden Mental Health Center Hot Water Heater Replacement, Hines, Illinois
- 1991 ASHRAE Illinois Chapter “Energy Design Award” for Energy Conservation Retrofit of Lighting System site wide, Argonne National Laboratory, Argonne, Illinois



ZERO Energy Building – Operating Since 2007

Evelyn Pease Tyner Interpretive Center, Glenview, Illinois

Special Design Features

- 1/3rd Roof – Photo Voltaic Panels
- 2/3rd Roof – Green Roof
- Heat Recovery System
- Geothermal Heat Pumps
- Displacement Ventilation
- Efficient Lighting & Occupancy Sensors
- Day Lighting Controls
- Water Conservation – Ultra Low Flow Fixtures
- **USGBC Certified LEED Platinum**



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PV Project Services

- Design a system which will produce the maximum kW your site will allow
- Work closely with your CFO to help understand the financial cost/benefits of the system
- Work with your facilities manager to determine safety protocol and staging of material
- Help to acquire financial incentives and identify financing options
- Work with your current roofing company to maintain all warranties
- Liaison with the Utility Company for the interconnect agreement and net meter
- Work with government officials to ensure all applicable codes are met
- Supervise and manage all aspects of the system installation
- Train facilities personnel on future operations and maintenance
- Monitor and maintain your system for the first 5 years







Drivers of PV Solar Installations

- Illinois RPS – 25% Renewables by 2025
- Illinois Senate Bill 2814 – 15 Years SRECs available in first 5 years
- ComEd Incentives - \$250/ kW
- Federal Income Tax Credit - 30% Cost of Construction
- Accelerated Depreciation



Typical Roof Top Solar Layout



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Rooftop Solar - GEC Advantage

- GEC uses best available software to size the solar plant capacity, preliminary layout, and cost
- The initial panel layout is based on Google Earth view of the roof and is likely to change after on-site investigation and detailed engineering
- System size and specifications are based on preliminary engineering and Google Earth estimates
- Actual size may vary slightly depending on final engineering and layout
- Most of the equipment and materials proposed are made in USA
- Panels warranty – 25 years
- Inverters warranty – 20 years
- Annual Operation and Maintenance, 2 annual site visit – 5 years
- An award-winning organization
- 3 years of track record in excellence in engineering
- More than 100 years of combined engineering experience

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