

**CITY COUNCIL AGENDA ITEM**  
CITY OF SHORELINE, WASHINGTON

<b>AGENDA TITLE:</b>	Authorize the City Manager to sign the NW Mechanical contract to install the Solar Panel System on the City Hall garage
<b>DEPARTMENT:</b>	Public Works
<b>PRESENTED BY:</b>	Jesus Sanchez, Civic Center/City Hall Project Manager; Rika Cecil, Environmental Programs Coordinator

**PROBLEM/ISSUE STATEMENT:**

Council Goal 6 is to “construct the Civic Center/City Hall Project” and “acquire Leadership in Energy and Environmental Design (LEED) certification.” Council Goal 4 is to “create an ‘environmentally sustainable community.’”

One of the major components of the City Hall /Civic Center construction project is the City’s commitment to sustainable living. The Solar Panel Project will visibly demonstrate this commitment. With a potential energy generation of 20-21kilowatt hours, the Project will offset the City Hall’s energy consumption and secure additional points towards LEED Silver and perhaps LEED Gold certification.

Silicon Energy, an Arlington-based company, will produce the City’s solar panels. As the first made-in-Washington solar panels, they represent a significant advance in durability, longevity of performance, ease of installation and clean aesthetics. Built without frames on the top or bottom, dirt and ice can easily slide off, washing the panels clean in the process. With glass stacked on glass, the panels are stronger than the typical plastic-backed versions.

The NW Mechanical contract also includes the construction of solar ‘trees’ to hold the photovoltaic panels. This attractive system of metal trees with a canopy of solar panels will provide shading to cars, additional LEED certification points, clean energy for our region, and a model for residents and businesses to replicate.

**FINANCIAL IMPACT:**

The \$314,122 cost for the NW Mechanical contract is in the City Hall project budget (\$174,122) and supported through grants from Seattle City Light (\$50,000), King County Solid Waste Division (\$15,000), and the U.S. Department of Energy (\$75,000).

After comparing several solar photovoltaic panels that would be the most likely to be in competition with Silicon Energy panels, the City Attorney and the Finance Director have approved this sole source contract, based on the following:

- Solar panels that are made in Washington receive an annual production credit bonus for ten years by the State for every kilowatt hour of produced solar energy up to \$5,000. Since Silicon Energy panels are made in Washington State, the State offers a 10-year rebate of \$5,000 per year for 10 years, totaling \$50,000.
- The Seattle City Light grant (\$50,000) is contingent upon the use of Silicon Energy panels in the project.

### **RECOMMENDATION**

Staff recommends that Council authorize the City Manager to sign the NW Mechanical contract to install the Solar Panel System on the City Hall garage.

Approved By:      City Manager  City Attorney \_\_\_\_\_

Attachment A:      Silicon Energy Solar Panels Photo



## **Cascade Series**

### **PV Module and Installation System**

Grown in Washington

Silicon Energy's mission is to manufacture quality PV systems specifically for the US market that significantly advance durability, longevity of performance, ease of installation, and aesthetics.

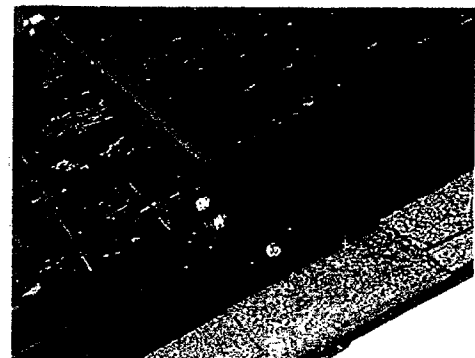
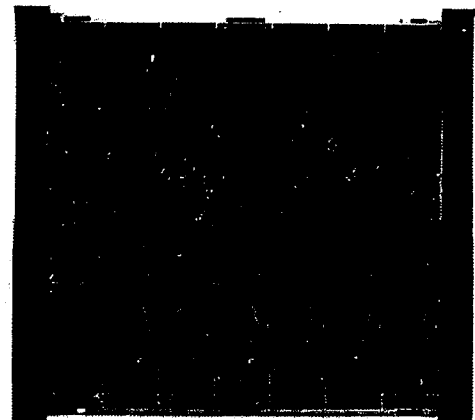
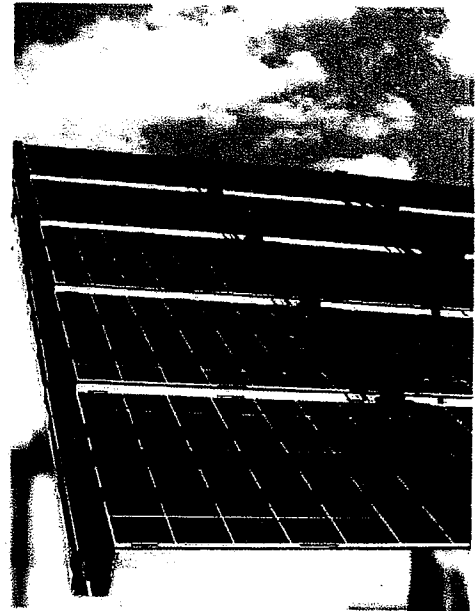
The result is the Cascade Series PV Module and Installation System that has some unique features that differentiate it from other PV systems presently on the market.

#### **PV Module Features:**

- Highly efficient polycrystalline silicon cells manufactured from silicon processed in Moses Lake, Washington
- Strong and durable glass on glass construction with advanced encapsulant material
- Transparent module construction allows light to pass between cells
- Six bypass diodes per module to provide better performance in partial shade
- Class A fire rating
- 20 year limited power warranty / 2 year materials and workmanship

#### **Installation System Features:**

- Cascaded module mounting system allows water, snow and ice to easily flow off
- Increased air flow behind modules to help boost performance
- Integrated wire channel system - no exposed wires or connections
- Installs on standard 4 foot centers – specifically designed for the US market
- Aesthetically pleasing design achieves a more modern appearance



Made in Washington  
Pending UL-1703 Certification

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