Spectrolab and NREL Honored for High-Efficiency Terrestrial Solar Cell Technology

Spectrolab, a subsidiary of The Boeing Company [NYSE: BA], and the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) have received an award for a jointly developed terrestrial solar cell that is capable of record-breaking efficiency in converting sunlight to electricity.

The research and development award was given by the National Energy Resources Organization (NERO), a Washington, D.C.-based nonprofit association focused on the nation's energy activities. The award was presented May 15 at the annual NERO banquet, which was hosted by Rep. Billy Tauzin, (R-La.) chairman of the House Energy and Commerce Committee.

"We're very proud of this technology, and grateful for the recognition we've received from NERO and Congressman Tauzin," said David Lillington, president of Spectrolab, a unit of Boeing Space and Communications. "These solar cells, and the even more advanced versions we're now developing, offer tremendous promise. Because they are highly efficient and yet relatively inexpensive to manufacture, these solar cells could dramatically reduce the cost of electricity generation from solar energy."

The award is for a type of terrestrial solar cell that has the potential to be cost-competitive with conventional electricity generation technologies, when used in the appropriate light-concentrating system. These cells can convert 34 percent of the sun's energy to electricity -- a world record in conversion efficiency for solar cells.

"Solar power has enormous potential for helping our nation achieve greater energy efficiency in the future," Tauzin said. "Research and development in the solar field is developing rapidly, and will likely be an important source of domestic electricity generation in the future."

The same solar cell technology was included last year in Research and Development magazine's 100 most significant technologies. One public utility -- Arizona Public Service -- already has ordered these cells from Spectrolab.

Spectrolab shares the magazine's award with NREL, the DoE's premier laboratory for renewable energy and energy efficiency research, development and deployment. Spectrolab and NREL have collaborated on advanced solar cell technologies since the mid-1990s.

"These solar cells represent quite a success for the lab and for NREL's High Performance Photovoltaics Project," added Larry Kazmerski, director of the National Center for Photovoltaics at NREL. "The research involved here has deepened our understanding of materials, both for photovoltaics and for related solid-state technologies. It is leading the way toward the development of solar-cell concepts that have the potential to achieve efficiencies greater than 40 percent and to drop the cost of solar electricity even more."

Spectrolab, an ISO 9001-2000 certified company, was founded in 1958 and has been supplying solar cells and panels to the space industry for more than 40 years. It also is a leading supplier of searchlights and solar simulators. Spectrolab is headquartered in Sylmar, Calif., a suburb of Los Angeles. Visit Spectrolab's web site at www.spectrolab.com.

NERO was established in 1975 in the aftermath of the oil shocks to promote an industry-government dialogue about energy issues in Washington. A nonprofit 501(c)(3) organization, NERO promotes dialogue about energy issues among energy companies, nonprofit foundations and government policymakers.

Boeing Space and Communications (S&C), headquartered in Seal Beach, Calif., is the world's largest space and communications company. A unit of The Boeing Company, S&C provides integrated solutions in launch services, human space flight and exploration, missile defense, and information and communications. It is NASA's largest contractor; a leading provider of space-based communications; the primary systems integrator for U.S. missile defense; and a leading provider of intelligence, surveillance and reconnaissance. The global enterprise has customers worldwide and manufacturing operations throughout the United States and Australia.

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