

Media Release

Wednesday, 25 October 2006

World-leading mega scale solar power station for Victoria

Federal and State governments unite to award \$125M of grants to \$420M solar power project

A \$420 million large-scale solar power plant – the biggest and most efficient solar photovoltaic power station in the world - is to be built in north-west Victoria.

Australian company Solar Systems will demonstrate its unique, world leading design incorporating space technology in a 154MW solar power station connected to the national electricity grid.

The power station will use high performance solar cells originally developed to power satellites. Solar Systems has developed the capability to concentrate the sun by 500 times onto the solar cells for ultra high power output.

The Victorian power station will generate clean electricity directly from the sun to meet the annual needs of over 45,000 homes with zero greenhouse gas emissions.

The Australian Treasurer Peter Costello announced a \$75 million grant to the project under the Federal Government's Low Emissions Technology Demonstration Fund (LETDF). Solar Systems was one of more than 30 companies that bid for \$500 million under the LETDF program, which aims to foster competitive technology that will significantly reduce greenhouse gas emissions.

The Victorian Premier Steve Bracks announced that the Victorian Government will also support the project with a grant of \$50 million; recognising the significant benefits that the project will bring to the State.

The station will be built in north-west Victoria. Solar Systems will build the power station across a number of different sites and will consult with local Government and communities about appropriate locations. Solar Systems has formed a new company – Solar Systems Generation Pty Ltd to construct the station.

Solar Systems' Managing Director Dave Holland said it was an exciting day for the company, which has invested over \$50 million since it began developing the technology 16 years ago.

"This plant is the first step in a strategic plan to roll out large-scale solar technology across Australia and internationally. It represents the beginning of a new international industry," Mr Holland said. "This funding announcement significantly advances the company's technology commercialisation process that has already seen four smaller solar power stations established in central Australia.

"The plant will make a significant contribution towards reducing Victoria's environmental impact by reducing greenhouse gas emissions by approximately 400,000 tonnes per year.

"The vast majority of the power station technology will be Australian.

“The project is also important for Victoria’s and Australia’s economy. It is expected to create approximately 950 new jobs at the peak of construction and be a catalyst for a new industry that will create more than 10,000 permanent jobs,” Holland said.

“Two new manufacturing facilities will be constructed in Victoria and key suppliers are expected to invest in expansion to meet the project demand. Approximately 70 per cent of the total project cost is expected to be invested in Victoria.”

“The project is a major step towards harnessing the greatest, fully sustainable energy resource the world has. Less than 1% of the world’s arid lands could produce the world’s energy needs using Solar Systems’ current technology - without harmful emissions or concern about finite fuel supply.”

The power station will use technology known as ‘**Heliostat Concentrator Photovoltaic (HCPV)**’. It will consist of fields of heliostats (sun-tracking mirrors) focusing sunlight on receivers. The receivers house photovoltaic (PV) modules, which consist of arrays of ultra high-efficiency solar cells that convert the sunlight directly into electricity. Photovoltaic literally means ‘electricity-from-light’. The heliostat control system, PV modules and cooling system are patented by Solar Systems.

Solar Systems has collaborated with US company Spectrolab (a Boeing company) to optimise ultra high efficiency space technology for earth based power stations. The resulting photovoltaic cell arrays are three times more efficient than typical solar panels. Further cell efficiency improvements are underway.

Solar Systems’ Technical Director John Lasich has led the development of this technology to meet his vision for affordable, clean energy from the sun since the 1970s.

“This is a new generation of solar technology,” Mr Lasich said. “The secret is to be able to make a solar power module work about 1500 times harder than typical solar panels. If you can do this at high efficiency using low cost materials, you have the recipe for an infinite supply of clean energy at an affordable price.

“This new power station will demonstrate these principles and produce the most affordable solar energy yet generated.”

Solar Systems is a private Melbourne-based company that has established commercial solar power stations at four locations in Central Australia, where the essential technology to be used in the Victorian power station has already been proven.

... Ends ...

For further information and for interview and image requests, contact -

Anne-Marie Rosselli, Solar Systems, +61 3 9819 9544, 0429 990 064
Lyndon Humphrey, Socom, + 61 3 8317 0111, 0439 895 460