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Media Release

Origin Energy – shining the light on a more vibrant South Australia with Solar Power

Today, Origin hosted the Minister for Energy, Patrick Conlon and the Head of the Sustainability Roundtable, Tim Flannery at its new $20 million solar photovoltaic (PV) manufacturing plant at Regency Park. Origin showcased opportunities being provided to draw talent from across Australia and around the world to South Australia.

The opportunity to work at Origin's Regency Park solar plant is attracting talented people skilled in advanced manufacturing, science and engineering. As well as home grown talent, experts are joining the Origin solar team from countries including the UK, the USA and Germany.

Executive General Manager Andrew Stock said, "It is no wonder that the solar industry – and our plant – have been attracting bright young people wishing to join a dynamic industry. Globally, the take up of solar technology is growing at greater than 30% per annum with annual world-wide sales of A$5 billion. Solar power is a clean renewable energy for the future. Young people who want to do something positive for the future of our planet see solar as a way they can use their skills to make a real contribution.

"This is an exciting time – an Australian company developing leading edge Australian technology. Our plant is entering the commissioning phase, with the first solar panels due early next year."

Origin's revolutionary SLIVER cell, developed in conjunction with the Australian National University's Centre for Sustainable Energy Systems, is ground-breaking technology. The technology dramatically reduces expensive silicon use as SLIVER cells use 90% less of the expensive silicon than current conventional solar PV modules.

"We were very excited earlier this month when the launch of our SLIVER technology at the European Photovoltaic Solar Energy Conference in Paris generated great international interest. Companies want to market our product as well as develop the full application potential of our unique SLIVER cells." he said.

The new plant will initially create 30 highly skilled jobs for people with specialist knowledge in advanced physical and chemical sciences, and manufacturing. These numbers are expected to grow significantly as production is expanded to meet potential export markets.

A A$1million grant from the Australian Government, through the Australian Greenhouse Office, contributed to the project.

For more information, please contact:

Andrew Stock
Executive General Manager Generation
Origin Energy Limited
Phone 08 8217 5817

Yvette Reade
Manager Public Relations
Origin Energy Limited
Phone 08 8217 5376

Origin Energy SLIVER solar cell PHOTOS available by clicking:
http://www.originenergy.com.au/environment/environment.php?pageid=1131

About Origin Energy's Revolutionary SLIVER technology

Dramatically reduces expensive silicon use: SLIVER technology uses 90% less of the expensive silicon than current conventional solar PV modules yet delivers commercially competitive cell and module efficiencies. This means a solar power panel using SLIVER technology needs the equivalent of 2 silicon wafers to convert sunlight to 140 watts of power. By comparison, a conventional solar panel uses around 60 silicon wafers to achieve similar performance.

Substantially thinner than most solar cells yet highly efficient: Micromachined using innovative manufacturing techniques to less than 70 microns thick (thinner than a human hair) from monocrystalline silicon, SLIVER cells demonstrate efficiencies of 19.5%. While SLIVER cell efficiencies are competitive with other conventional solar cells, they perform much better than most other thin film technologies. SLIVER cell trial modules tested by Sandia National Laboratories in the United States show efficiencies comparable with other solar power module products now on the market.

Radically different in size and shape: SLIVER cells also differ radically from conventional solar cells in size and shape. They are long, ultra thin, quite flexible and perfectly bifacial. This is unlike conventional solar cells which are typically square or round, up to 4 to 5 times thicker, quite rigid and usually single sided.

New application possibilities: These unique and versatile SLIVER cell properties open up opportunities to use the sun to power a wide range of potential new applications including:

- Transparent SLIVER cell panes in buildings
- Flexible and roll up solar panels
- Small and very high voltage solar panels for consumer electronics, and
- Remote surveillance systems.

Origin Energy is currently seeking global technology and marketing partners to develop the full application potential of these unique SLIVER cell characteristics.

Solar industry growth. The solar PV industry generated over A$5 billion (560MW) in sales worldwide in 2002 is growing at over 30% annually. In 2002, production of solar PV modules grew by 56% in Europe and 46% in Japan. Use of solar power for homes and businesses in grid connected applications is the fastest growing use and now dominates world solar PV sales with over 50% of the total market. In Australia, 1.46MW of solar modules were installed in grid connected applications in 2002/3.

About Origin Energy: With a history dating back 140 years, Origin Energy is a leading Australian energy provider. It participates in most segments of the energy chain including power generation; energy retailing and trading; natural gas exploration and production; and asset management services. Origin Energy supplies energy to more than two million Australian homes and businesses. The company is one of the leading marketers of grid-connected solar systems in Australia. Since 1998, Origin has invested over $6 million in solar power research with the ANU's Centre for Sustainable Energy Systems.

Origin Energy is also Australia's leading Green Power retailer with over 30,000 Green Power customers. Green Electricity Watch, a body comprising Australia's peak environmental groups, has rated Origin Energy's Green Power products as market leaders. Visit our website: www.originenergy.com.au

The Australian National University is the premier research University in Australia. The ANU Centre for Sustainable Energy Systems (CSES) has an international reputation as a leader in R&D in the areas of photovoltaics, solar thermal power and solar energy systems. CSES undertakes work spanning basic research through to commercialisation of technology. Visit the website at http://solar.anu.edu.au