

## 4<sup>th</sup> March 2011

## SUCCESSFUL INITIAL RESULTS FROM SOLAR TESTING

K2 Energy is pleased to report that the initial testing of the Mears Technologies solar cells has been very successful.

Side-by-side testing of ultra-thin MST<sup>TM</sup>-Photovoltaic solar cells compared to crystalline and polycrystalline silicon solar cell controls fabricated under the same process conditions has made significant progress.

Two separate solar cell fabrication processes are being run, one in the US and one in Japan. This was done for comparison and verification purposes. Preliminary optical characterization of the US-fabricated solar cells has now been completed.

The results indicate a substantial improvement in optical power generation per unit thickness of silicon for the MST<sup>TM</sup>–PV enabled solar cells compared to the controls. Various designs of MST<sup>TM</sup>-PV technology were tested. A number of successful designs emerged, which generated increased power output of up to 60%.

There remains much work to optimize the technology and to prove-out the manufacturability of such ultra-thin cells, but the results substantiate the proposition that the MST<sup>TM</sup>-PV technology could be used to create significantly more efficient, ultra-thin solar cells than currently available.

On the basis of results and analysis to date, the Mears' research team believes that significant further improvements can be made on the results already achieved.

Dr Robert Mears commented, "We regard these results as a major breakthrough, as they verify that the MST<sup>TM</sup>–PV technology could be used to create more efficient, ultra-thin silicon solar cells. We will now be accelerating our research and development program, so that commercialization can commence in 2011".

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