

# Press Release

9th February 2009



ZENERGY POWER

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Zenergy Power plc ('Zenergy' or the 'Group')

## RWE Hydro Power Contract

Zenergy Power plc (AIM:ZEN.L), the specialist manufacturer and developer of high efficiency industrial and renewable energy devices employing superconductor technologies, is pleased to announce that it has been commissioned by RWE Power AG ('RWE') to draft a study evaluating the potential increase in electrical output that could be achieved from RWE's existing run-of-river hydro plants by the use of superconductor variable speed generators.

By using superconductors, RWE intends to increase the efficiency and output of their run-of-river hydro plants, and at the end of January 2009 commissioned the Group's wholly owned subsidiary, Zenergy Power GmbH, to draft a study to provide a detailed evaluation on the potential of its superconductive technology to do this. Accordingly, Zenergy will now receive data from RWE originated from a selected representative run-of-river hydro plant location situated on the river Mosel in Germany. Using this data, the Group will report to RWE on how modernising its run-of-river hydro plants with hydro generators based on superconductor components could increase efficiency and overall output. The assessment will also take into account water flow-rates, turbine efficiencies and turbine conditions.

The results of the study will then be used as the basis for estimating how superconducting variable speed generators could contribute to increases in efficiency and output of a further eight similar hydro sites operated by RWE along the river Mosel. The results of which are expected by the second half of this year. In total, RWE operates ten run-of-river hydro plants on the river Mosel which combine to generate over 800 GWh of electrical power every year. Once received and evaluated, the data from the Group's study will be used by RWE to compile an economic evaluation of the business case for replacing conventional generators in run-of-river hydro plants with generators based on superconductor components.

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Below is an extract from a statement made today by RWE concerning its investigation into the use of superconductor technologies:

'Superconductors are one of the key technologies for meeting the 21st Century's challenge in the field of energy technology and climate protection. Improvements in run-of-river hydro plant efficiency created by superconductors provide the potential to produce additional renewable clean energy free of CO2 emissions.'

- Ends -

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## About Zenergy Power plc

Zenergy Power plc is a global specialist manufacturer and developer of high efficiency industrial and renewable energy devices that employ superconductor technologies. Comprising three operating subsidiaries located in Germany, USA and Australia, Zenergy is highly focussed on the commercialisation of a number of energy efficient applications to be adopted in energy intensive industrial processes, power distribution and renewable power generation. Zenergy achieved the world's first sale of an industrial scale HTS induction heater which is now in operation.

## About RWE AG

RWE AG is the largest power provider in Germany and number two in the UK through its npower brand. RWE operates run-of-river plants and storage power stations across Germany which every year produce more than 1.4 billion kWh of energy, which equates to the power requirement of roughly 400,000 households. RWE plans, builds and operates these plants to generate regenerative electricity and energy in Europe.

In total RWE has over 20 million electricity customers and in 2007 achieved revenues of €43 billion. RWE is currently running the biggest investment programme in its history, with an overall investment volume of over €32 billion by 2012, including over €1 billion per annum of investment dedicated to increasing its installed renewable energy capacity.

## About superconductivity

Superconductive materials are capable of conducting electricity without any resistance and were first discovered in 1911 in what was to prove to be one of the most significant scientific breakthroughs of the 20th century.

Superconductors enable:

- (a) Induction Heaters to be twice as efficient for the metals industry
- (b) Fault Current Limiters to protect power grids from blackouts
- (c) Direct-drive wind generators to be significantly reduced in size and weight allowing the operation of wind generators in excess of 8 MW
- (d) Existing hydro-power sites to increase energy efficiency and electrical power output

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