



**ITM Power plc**

(“ITM” or “the Company”)

**Technical Update – March 2008.**

ITM Power Plc is developing the technology to provide alternatives to the present dependence upon hydrocarbon fuels. The technology is based upon the manufacture of hydrogen by electrolysis from sustainable resources, and its re-conversion using heat engines or fuel cells.

During January 2008, the Company announced that it had operated an electrolyser stack at low pressure using inputs in excess of 25kW, and another smaller unit at a pressure of 50 bar. At that time it had not been possible to operate an electrolyser at 75 bar as required so that the Home Refuelling Unit (HRU) could give the ITM bi-fuel hydrogen-petrol car a range of 25 miles when operating on hydrogen.

The Company is now pleased to announce that it has constructed an electrolyser stack and operated it at 75 bar using the ITM designed balance of plant, thus demonstrating all the components of the HRU at full specification pressure for the first time.

During these tests, an electrolyser stack was pressure tested to 110 bar, and then operated under the control of the refueller unit to self pressurise up to the maximum design operating pressure of 75 bar after which it repeatedly filled an external portable pressure cylinder to the same pressure.

In summary, the present trials demonstrate the capability of the ITM electrolyser system to operate at the design pressure to charge external pressure vessels to the operating pressure required to give the ITM car its full design range of 25 miles.

Jim Heathcote, CEO ITM Power, commented:

“This is a major step in the demonstration of ITM's electrolyser technology and equally importantly the associated balance of plant. The 75 bar pressure objective is important because it ensures that the ITM hydrogen car can achieve the 25 mile range; but once achieved, it also means that the Company can be confident that it can meet and service many other commercial opportunities for which the pressure requirements are less than 75 bar; for example, low carbon homes and standby power systems.”

For further information please contact:

**ITM Power plc**  
Jim Heathcote, Chief Executive Officer

**01799 542 222**

**Panmure Gordon & Co.**  
Katherine Roe

**020 7459 3600**

**Buchanan Communications**  
Ben Willey  
Richard Darby  
Ben Romney

**020 7466 5000**

**Notes to the Editors:**

ITM Power is a developer of low-cost hydrogen technologies. The Company has developed new materials and processes that dramatically reduce the cost of fuel cells and electrolyzers. The patented membrane materials used in the devices have higher performance and are 1% of the cost of the industry standard materials.

Electrolyzers work by converting water and electricity into hydrogen and oxygen. The hydrogen produced can be used as a replacement for fossil fuels and facilitate zero carbon domestic housing and pollution free motoring.

ITM Power was founded in 2000 and floated on the London Stock Exchange's Alternative Investment Market in June 2004.