


DOE Hydrogen Program Record		
Record #: 5040	Date: December 12, 2008	
Title: 2005 Hydrogen Cost from Water Electrolysis		
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Approved by: Sunita Satyapal	Date: December 19, 2008	

Item:

The 2005 cost status for hydrogen produced from distributed water electrolysis is \$5.90/gge.

Assumptions and References:

The H2A analysis used to determine the projected cost of \$5.88/gge (rounded up to \$5.90/gge) was performed by Directed Technologies, Inc. and can be found in [Record 5040a, H2A MYPP Current Forecourt Electrolysis Storage & Dispenser Case \(2005\) Supporting Record 5040.](#)

The increase in cost compared to the 2004 analysis (\$5.45/gge) is due to two assumptions changed in the model: (a) an increase in the industrial electricity price from 5¢/kWh to 5.5¢/kWh from the EIA Annual Energy Outlook, and (b) an increase in the capital cost estimate of the electrolyzer. The other assumptions in the analysis used standard values as detailed in the H2A model and the H2A analysis website: http://www.hydrogen.energy.gov/h2a_analysis.html.