

Proton Energy lands hydrogen-tech patent

By Greg Seay
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Operations director John Torrance of Proton Energy Systems in Wallingford looks on as student Janel Crespo of Milford tries out the emergency shutoff button on a newly-built hydrogen electrolysis unit on the production floor. Almost 100 Connecticut middle school students toured Proton's headquarters today as part of the Connecticut Kids For Fuel program. Seventh- and eighth-graders in the program learn to build solar cars and windmills; design solar ovens; work with automotive fuel cells; and learn recycling.

Wallingford hydrogen-technology producer **Proton Energy Systems** said today it earned a patent for its proprietary control system for regulating the purity and pressure of the fuel.

The **U.S. Patent and Trademark Office** award for its StableFlow hydrogen control system enhances its reputation as a global innovator in hydrogen technology, the company said.

One of its innovations is a commercial electrolysis device that produces hydrogen from water.

Proton also recently landed several Department of Defense projects, including developing regenerative fuel cell systems for backup power and creating advanced fueling systems for a military fleet of hydrogen-powered vehicles.

With the StableFlow system, electric-power generators that rely on hydrogen for fuel can monitor its purity, dew point and pressure, which provides more efficient power production and enhances capacity and generator life, Proton said.

Proton claims its StableFlow system can save most plants an average of one megawatt per hour, worth between \$50 and \$100 per hour, per generator in losses by reducing friction.