

WD Partners collaborates with UTC Power on implementing fuel cell technology for Stop & Shop

Alternative energy system is generating 95% of store's energy requirements

WD Partners, in collaboration with UTC Power and Stop & Shop Supermarket Company, announces that it has completed the engineering, design and implementation of the mechanical/electrical systems at Stop & Shop's Torringford Street store in East Torrington, Conn. The system includes using a UTC PureCell® System Model 400, a 400 kilowatt fuel cell. Coupled with the thermal energy produced by the fuel cell's waste heat, which is used for heating, cooling and refrigeration, the total electric and natural gas utility bills for the store have been reduced by roughly 50%.

Since the fuel cell was commissioned in June 2010, it has produced over 1.7 million kilowatt hours of electricity, providing up to 95% of the store's total electric energy requirements. In addition, the fuel cell meets the latest emission standards of the California Air Resources Board (CARB), the strictest air quality regulations in the United States.

By generating most of its power on site, Stop & Shop is able to reduce the burden on the local power grid and its impact on the environment. The fuel cell operates without fossil fuel combustion, which in turn makes electricity production virtually pollution-free.

- Stop & Shop anticipates it will prevent the release of more than 523 metric tons of carbon dioxide annually the equivalent of planting more than 120 acres of trees.
- The annual nitrogen oxide emissions reduction will be equivalent to removing 88 cars from roadways.
- Designed to operate in water-balance, with no consumption or discharge of water under normal operations, the fuel cell at the Torrington Stop & Shop store will save 3.5 million gallons of water compared to central utility generated electricity.

The fuel cell is part of the store's state-of-the-art "green design," which also includes daylight harvesting, LED lighting for frozen food cases, and dimmable fluorescent lamps to reduce the demand on store lighting; a building energy management system, and a refrigeration system that reduces HFC refrigerants.

The innovation was supported with a grant from the Connecticut Clean Energy Fund's On-Site Renewable Distributed Generation Program and is the first fuel cell utilized by the Stop & Shop Supermarket Company.

About WD: WD Partners is a customer experience expert for global food and retail brands. The company helps food and retail brands innovate through strategy, design, architecture & engineering, and implementation services. For more information, please visit www.wdpartners.com.