

## **The Role of Control in Renewable Energy**

These are interesting times in the energy sector. Consumer gas prices in the US are at an 11-year low for this time of year as the summer driving season officially begins. California is closing its last remaining nuclear power plant. Many coal-fired power plants are converting to natural gas. Then, there is the new frontier of renewable energy.

According to ITR Economics, solar, hydroelectric, and wind power will continue to offer new opportunities for market growth throughout 2016 and beyond. Solar energy is up 30.1% and wind energy has increased 8.5% over last year. Hydroelectric power is down 3.9%, but internal trends are showing signs of year-over-year growth.

While these energy industries are not highly reliant on distributed control systems, process controls may have a role to play in their future growth. "I do believe process controls has a place in these areas, but delivered on smaller, less expensive systems," said Peter Martin, Vice President of Strategic Ventures for Schneider Electric | Invensys.

"We are seeing a considerable level of interest in these areas," Martin continued. "I believe the process control industry will be playing a larger and larger role as the industry moves toward more flexible, asset-centric packaging."

MCAA's 2016 Industry Market Forecast estimates renewable energy sources will add 142 Gigawatts to the nation's power supply between now and 2020. "It is a massively important shift," said Bob Carrell, President of Hoffer Flow Controls, Inc.

"There are a number of utility sized solar facilities running and being added all around northeast North Carolina and I drive past a couple every day," Carrell said. "The entire (unmanned) control house for these facilities is smaller than a semitrailer."

"They have zero need for any pressure, level or flow measurement and minimal for temperature. The whole site can be run remotely through relatively small automation systems. The utilities will spend more on vegetation control for these sites than they will for instrumentation and controls. Not the best news for our industry, however, it is important to recognize that it is happening."