

## Converting from hydraulic to all-electric gas control valves benefits Frame 6 owners

Posted on June 16, 2011 by [Team CCJ](#)

*Sponsored Statement*

[Young & Franklin Inc](#) (Liverpool, NY) stood out among the four-dozen exhibitors at the Frame 6 User Group's Vendor Fair last week showing its electromechanical actuators and gas valves that together offer several advantages over the combined control and stop valves traditionally relied on for electric generation service.

Chief among the all-electric control valve's advantages: It eliminates varnish issues by eliminating the control oil required by hydraulic actuators. Plus, electric valves are more responsive than hydraulically operated valves, have greater range, are easier to maintain, and enhance plant safety (no threat of fire, no oil to spill on the floor, etc). The high-tech/high-quality electric fuel valves are optimized for service conditions, and their modular design enhances onsite maintainability.

The Y&F valves have been in use on Frame 6 gas turbines for a decade. Conversion from hydraulic to electric actuation is relatively simple. Fig 1 shows the combined stop/ratio gas control valve assembly supplied with most engines in the fleet. Fig 2 shows the arrangement of isolation and control valves that replaces the existing combined valve. The upgrade is relatively simple: The combined valve is removed, a new cabinet is installed, plumbing modified (red piping), and the isolation and control valves installed (Fig 3).



Fig 1

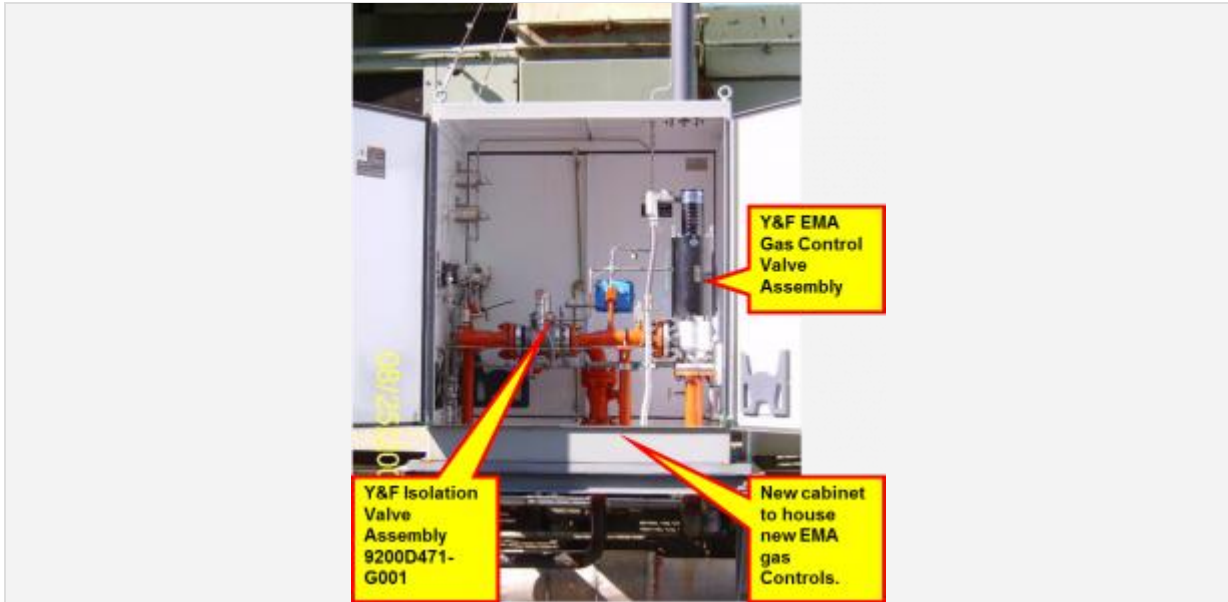


Fig 2

The company's family of electrically actuated, single-seat gas fuel control valves comes in 1-, 2-, and 3-in. line sizes with choked or unchoked flow capability. Features include balanced valve design and fail-safe spring closure for added safety and reliability.

The single-stage, solenoid-operated, pilot-controlled drop-in replacement isolation for line sizes from 1 to 3 in. closes in less than 100 milliseconds and has a Cv of 80.



Fig 3

More information is available at [www.yf.com](http://www.yf.com).

## One Response to "Converting from hydraulic to all-electric gas control valves benefits Frame 6 owners"



1. **Ross Kovanda** says:

June 20, 2011 at 9:31 am

Not all hydraulic fluids sludge and varnish as referenced in this article. Our EcoSafe EHC fluid chemistry cannot sludge or varnish as the oxidation by-products are soluble in the chemistry allowing for years or clean and continued use as compared to other fluid technologies. This fluid is also inert to water, so the issue of fluid breakdown, or creation of phosphoric acid if using Phosphate Ester based fluids is eliminated. Just wanting User's to know there are alternative fluids for consideration. Take care!