
ALL-ELECTRIC SUBSEA – A GAME-CHANGING TECHNOLOGY GOING FORWARD

All-electric subsea technology is the transition from electro-hydraulic actuation of subsea valves to direct electric driven actuators. Electric actuators have been used subsea for 20 years, the next step is to control safety functions in the subsea system with electric battery powered actuators.

“This is a great step towards more efficient development of tie-back fields, and it will enable cost efficient solutions for CO₂ injection wells.”

Dan Pedersen, Chief engineer SPS in Equinor.

A simpler subsea control infrastructure saves cost. Operations and maintenance are more efficient without hydraulic power unit topside. Reduced high-pressure testing and improved well barrier monitoring increases safety. Less discharge to sea of hydraulic fluid benefits the environment. The system facilitates condition monitoring and digitalization.

Development is based on broad industry cooperation between research institutes, the Norwegian Research Council/Demo 2000, main SPS suppliers and O&G Operators. A joint operator specification is developed. Technology qualification for fully electric actuated XT's is at the final stage. Work to build and test pilots are initiated.



TechnipFMC, eVXT