

Abstract for Power Gen Conference

Title: “Lessons learnt from advanced battery energy storage and microgrid projects”

Sub-Saharan Africa’s power sector is significantly underdeveloped in terms of energy access, installed and generation capacity, and per capita consumption. About 86% of the rural population and 37% of the urban population have no electricity access.

Governments and industries across the region are working towards improving the power sector to sustain and enable economic development. Storage projects specifically are now mushrooming all over the world, thanks to reduced costs of all storage solution components, (in particular, battery modules and engineering), storage solutions are now becoming affordable. In addition, the various storage applications proposed to meet market needs are getting more and more mature, thanks to experience cumulated by the industry players through the various projects they delivered

The most advanced projects are:

- The hybridized solutions, i.e. a storage systems coupled with a conventional generation asset such as a gas turbine, a wind farm or a PV farm. These solutions bring many benefits, including fuel optimization, emission reduction, participation to ancillary services to the grid.
- The storage solutions equipped with black start capability enables to restore electricity supply in specific locations by orchestrating the power generation from the generation assets located in the neighborhood.

This presentation will illustrate by real projects how these advanced energy storage and microgrid solutions have been installed and what are the corresponding Key Performance Indicators (KPIs).