Mogadishu industrial microgrids

So, this is a high time for Africa to leapfrog from the conventional solutions to the most modern and cost-effective ones, thus shaping a sustainable development trajectory for itself. Africa"s hydro, wind, and solar account for, respectively, 12%, 32% and 40%[1] of world"s resources, and these can thus substitute the present extensive use of basic biomass (wood) and fossils. CIGRE can play a relevant role, spreading technical knowledge, exchanging professional experiences, and fostering capacity building for the next generation of young African engineers.

Africa is the Continent with the youngest and most rapidly increasing population demographics, implying remarkable energy demand projections, due to industrial development and rapid urbanization, as well as higher quality of supply service. By 2050, energy demand is forecasted to double against 2015 figures, with electricity and peak power increasing 6-fold (3-folds in per capita values), which will be enabled by 1 TW of RES installed capacity (out of more than 3 TW potential) [2].

This is probably the toughest challenge for all major interconnections development within the African system, which is currently associated in 5 regional blocks 8 (Fig. 4). CIGRE is indeed supporting the creation of National Committees in each of these blocks, at regional level where individual membership would be too small; this is in place already in Southern and Western Africa, and underway in Eastern Africa.

Links into the Arabic peninsula (under consideration by Egypt, Saudi Arabia, and others), and beyond to the GCC (Gulf Cooperation Council) and from here to central Asia would represent the access to a future, potential global grid, which feasibility is currently being studied by WG C1.35 (TB 775 published Sept 2019) and C1.44 (on going, see article on Electra N.314 - February 2021); results from preliminary studies show a positive rationale for connecting Africa with Europe and Asia.

Various factors will dominate the transmission market in the years to come: the drive towardrenewable energy, the expansion and interconnection of grid infrastructure, and the need togradually replace and upgrade aging grid infrastructure. Discover how Siemens Energy?s broad portfolio of innovativeproducts and solutions for power transmission expertly supports these transformations.

The SMARTLINE-TCF transmission capacity forecasting platform reveals transmission lines" actual capacity. It actively learns from real-time data to develop dynamic line ratings (DLR) based on the conductor"s behavior. Advanced algorithms produce forecast line ratings for use in short- to medium-horizon operations. And optional conductor asset monitoring tracks conductor life based on loss of strength.

At PSC we"re helping power a more sustainable world. Our global team of electricity experts have been tackling the thorniest problems for some of the most prominent industry players for over 25 years. By empowering people to make a difference and do the right thing, we help our clients and employees innovate

and thrive in a rapidly changing industry.

Tridelta Meidensha GmbH is today one of the leading manufacturers of high and medium voltage surge arresters. We offer a complete portfolio to cover most of the demanding requirements in the electricity supply industry. Innovation is at the heart of our business.

For over 25 years, the RTDS Simulator has been the industry"s de facto tool for closed-loop testing of protection and control systems. Today, RTDS Technologies still leads the way with innovative developments, ensuring real-time simulation remains applicable for grid modernization practices that are critical for utilities, manufacturers, researchers, and consultants. Hardware-in-the-loop testing with the RTDS Simulator provides a safe, flexible environment for testing digital substation components via real-time streaming of IEC 61850 data.