

# ABB to install microgrid solution in South Africa integrating multiple energy sources

Zurich, Switzerland, September 3, 2015 – Solar-diesel microgrid with battery-based stabilizer to provide power back-up to ABB premises in Johannesburg

ABB, the leading power and automation technology group, announced today that it will install an integrated solar-diesel microgrid at its Longmeadow premises in Johannesburg, South Africa. The 96,000 square meter facility houses the company's country headquarters as well as medium voltage switchgear manufacturing and protection panel assembly facilities, with around 1,000 employees. The innovative solution includes a rooftop solar photovoltaic (PV) field and a PowerStore™ grid stabilizer, that will help to maximize the use of clean solar energy and ensure uninterrupted power supply to keep the lights on and the factories running even in the event of a power outage on the main grid supply.

A 750 kW rooftop PV plant and a 1 MVA/380 kWh battery-based PowerStore will be added to the existing back-up diesel generators. This will enhance the use of renewable energy and provide continuity of supply when power supply is disrupted and during transitions from grid to island operation.

Power shortages, availability of renewable energy sources like wind and solar, fossil fuel price volatility and environmental concerns are leading to the search for sustainable solutions and there are thousands of facilities across South Africa and the continent that could leverage microgrid technologies to address these challenges.

South Africa has the highest electricity consumption in the sub-Saharan region and demand continues to outpace supply. As highlighted in a recent report by McKinsey & Company, sub-Saharan Africa will consume nearly 1,600 terawatt hours of electricity by 2040 – four-fold increase on 2010 consumption. This is based on assumptions such as a fivefold increase in GDP, a doubling of population, electricity-access levels reaching more than 70 percent by 2040, and increased urbanization. This would imply that by 2040, sub-Saharan Africa could consume as much electricity as India and Latin America combined did in 2010.

“Alongside traditional and renewable generation, microgrids are increasingly being deployed to provide electricity to remote or isolated areas” said Claudio Facchin, President, Power Systems division. “They can also serve as a flexible backup source for industrial and commercial facilities and help address power disruptions.”

ABB has a broad range of microgrid solutions including automation and intelligent control and stabilization systems. They enable very high levels of wind and solar power penetration in diesel-powered grids, reducing dependency on fossil fuel supplies and curtailing CO2 emissions. ABB's comprehensive microgrid offering includes a range of technologies for off-grid applications like islands, isolated grids, remote communities as well as commercial and industrial facilities, ensuring utility-grade power quality and grid stability. ABB is a global leader in microgrid technologies with a proven track record of more than 30 installations.

ABB is present in more than 20 countries in Africa with over 5,000 employees. Penetration of growth markets like Africa and supporting the emergence of power trends microgrids are key elements of ABB's Next Level strategy.

ABB ([www.abb.com](http://www.abb.com)) is a leader in power and automation technologies that enable utility, industry, and transport and infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 140,000 people.

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