MEDIA COVERAGE

Low Carbon Technology Partnerships initiative

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Eskom seeks to learn microgrid lessons from global best-practice study

South African power utility Eskom is participating in the World Business Council for Sustainable Development's (WBCSD's) microgrids programme, itself a subcomponent of the council's larger Low Carbon Technology Partnerships initiative (LCTPi). WBCSD CEO Peter Bakker tells Engineering News Online that the LCTPi forms part of big business's response to climate change in the run-up to the Paris Climate Conference, or COP 21, which is scheduled for the French capital this December. A total of 150 large companies are participating in the initiative. '

The new microgrids working group, which was unveiled in Johannesburg this week, is also supported by other utilities and original-equipment manufacturers such as ABB, Alstom, EDF, Engie, Eskom, First Solar and Schneider Electric. Bakker says migrogrids are viewed as one of the immediately available solutions to both improving security of electricity supply, particularly in remote areas, and facilitating the transition to a lower-carbon economy. The working group participants plan to consolidate a series of case studies into a report ahead of COP21. Eskom climate change and sustainable development head Mandy Rambharos says the main objective is to publish a set of best practices arising from microgrid deployments globally and covering everything from supportive policy and regulation, through to community participation and buy-in. It is estimated that 1.3-billion people are without access to electricity globally and that renewable-energy-driven microgrids could displace highemission alternatives and improve electricity access in areas that cannot be reached by centralised grids.

Technology group ABB, which is a keen proponent of microgrids and has been selected to install flywheel-based microgrid stabilisation solution for the Marsabit wind farm in northern Kenya, is also planning to install an integrated solar-diesel microgrid at its South Africa headquarters in Longmeadow, Johannesburg. The solution includes a 750 kW rooftop photovoltaic plant and a 1 MVA/380 kWh battery-based PowerStore will be added to the existing back-up diesel generators. ABB South Africa MD Leon Viljoen says that, with a supportive regulatory framework, microgrid investments could help provide access to electricity and contribute to social development and economic growth.

The group also believes there are thousands of facilities across South Africa and the continent that could leverage microgrid technologies to address the power shortages and



environmental concerns. Rambharos says Eskom is keen to glean lessons from the roll-out of microgrids globally, indicating that there is still major community resistance locally to such solutions, which are often perceived to be inferior to traditional grid connections. The utility is already conducting its own research into how microgrids could complement its large-scale investments into power stations and transmission networks.

"We are looking at solutions that are not the typical solar panel outside the mud hut," Rambharos explains. "We are looking at microgrids that can connect a community so that they can do more than just heating and cooling and they can begin to start small businesses based on reliable and stable electricity supply.".

Engineering News - http://www.engineeringnews.co.za/article/eskom-seeks-to-learn-microgrid-lessons-from-global-best-practice-study-2015-09-04

