

The Emerging Distributed Generation Market

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Deregulation of the energy market will accelerate the deployment of distributed generation technologies including renewable energy systems. The extent to what investors are interested in distributed resource technologies can be measured by large market capitalization of related technology companies that issued public offerings. This "customer choice" driven phenomenon in the United States will likely have a much larger impact on the international scene particularly in emerging economies. Distributed generation technologies are modular and typically limited in size to below 50MW. They are located within the power distribution system of a utility, as opposed to the transmission or sub-transmission system. Therefore, distributed resource is clearly a competitor in the current electric utility infrastructure offering at the same time a new paradigm of evolving micro-grids and interconnection of micro-grids for less capital intensive rural electrification. In addition self-generation while using the grid as a back up, is also an emerging trend. Case studies illustrating the above applications of distributed generation technologies in the Philippines, Indonesia, and Peru will be presented.