

Session Title: Grid Integration of Renewables

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5 megatrends (5D's: Deregulation, Decentralization, Decarbonization, Digitalization and Depopulation) will bring about changes to the Japanese energy business. Exponential DER market penetration due to price destruction means that 5D's inevitably promote Electrification (e.g. Electric Vehicle, Heating with Heat Pump technology). The future T&D Grid will be a matching platform for end-to-end devices (e.g. DERs, EVs) to shape the cyber-physical system in which all devices will be Connected, Autonomous, Shared and Electrified. Under this context, initiatives by TEPCO Power Grid for maximization of renewable integration by coordination of the T&D grid and renewables with intelligence and flexibility will be described.