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## **PREPARATION OF DATA FOR ANALYSIS OF INTEGRATION OF DISPERESED GENERATION OF ELECTRICITY OF DISTRIBUTION GRID**

### **ABSTRACT**

For many years power system were vertically operated. Large power generation plants ( nuclear plant for instance) produce most of the power. This kind of generation is often related to adequate geographical placement (water source, etc). The power is then transmitted toward large consumption centers over long distances and using different high-voltage levels. This operating structure was build on the basis of economy, security, and quality of supply. This very centralized structure is operated by hierarchical control centers and allows the system to be monitored and controlled continuously. This operating mode is changing. This energy is aimed at being produced locally, i.e., close to consumption centers and not intended to be transmitted over long distances. The rating of this generation has a scale from kilowatts to dozens of megawatts and can be coupled with heat generation. The insertion of such generation is performed essentially on distribution systems.

**Keywords:** dispersed generation, distribution network, grid connection.