

Data Management and Analytics for Intelligent Grid

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Abstract : Power distribution utilities two decades ago would collect data from its customers not later than a period of at least one month. The origin of SmartGrid and AMI has subsequently increased the sampling frequency leading to 1000 to 10000 fold increase in data quantity. This increase is notable and this steered to coin the term Big Data in utilities. Power distribution industry is one of the largest to handle huge and complex data for keeping history and also to turn the data in to significance. Majority of the utilities around the globe are adopting SmartGrid technologies as a mass implementation and are primarily focusing on strategic interdependence and synergies of the big data coming from new information sources like AMI and intelligent SCADA, there is a rising need for new models of data management and resurrected focus on analytics to dissect data into descriptive, predictive and dictatorial subsets. The goal of this paper is to is to bring load disaggregation into smart energy toolkit for commercial usage.

Keywords : data management, analytics, energy data analytics, smart grid, smart utilities

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