Bad Data Detection and Data Filtering in Power System

Abstract

With increase in advanced metering infrastructure and sensor systems there is increase in data collection. It is hard to handle a large amount of data and assure the quality of data. Good quality of data is essential in power system before taking decision. So data must be cleaned and filtered before operator takes any decision from the data. Otherwise it will cause hazardous condition if poor quality of data affects decision making without knowledge of operator. Bad Data detection and data cleaning is helpful to get over this risk. With use of MATLAB Bad Data can be easily detected. Bad Data can be also removed and Data filtering as well as Data smoothing is also possible. Data smoothing is necessary for some application ex. Load forecasting in power system. Here it is obtained by using Statistical techniques such as OWA (Optimally Weighted Average) and MA (Moving Average).

References

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Index Terms

Computer Science POWER SYSTEMS

Keywords

Big Data Analytic Advanced Metering Infrastructure, Load Forecasting, Smart Meter.