IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 1, October 2023

Research of Smart Grid Monitoring System

Vaishnavi S. Tumbade, Rakshanda P. Jadhav, Shubham S. Kanake, Diksha S. Marbade, Aditya V. Bhagat, Prof P S Wankhade
Jagadambha College of Engineering and Technology, Yavatmal, India

Abstract: *Real-time data of power system is an important data for power system equipment measurement and acquisition. These data are important basis for analyzing power system stability, predicting grid load and power equipment failure and aging, and are the data that must be monitored for grid operation. Aiming at the problem of massive monitoring data access and processing in smart grid monitoring system, this paper proposes a smart grid monitoring system based on cloud computing framework by comprehensively utilizing geographic information technology, network communication technology and distributed database technology. The system's workflow is more efficient and reliable for information processing than traditional database models and existing methods.*

Keywords: Real-time data

REFERENCES

[1] REN Jianfeng, DING Yawei, FU Lei, et al. An improved strategy for out-of-step separation based on phase angle principle for 1 000 kV ultra-high voltage AC power grids [J]. Automation of Electric Power Systems, 2011, 35 (10): 104 - 107.
[2] Li Chenghua, Zhang Xinyi, Jin Hai, Xiang Wen. MapReduce: A New Distributed Parallel Computing Programming Model [J]. Computer Engineering and Science, 2011, 33 (3): 129 - 135. [3] Luo Junzhou, Jin Jiahui, Song Aibo, et al. Cloud computing: architecture and key technologies [J]. Journal of Communications, 2011, 32 (7): 3 - 21.
[4] Lu Wei, Zhang Tianbing, Li Guozhi. Design and key technology of power grid emergency command information management system [C]. Proceedings of China Communications Society 2011 Optical Cable and Cable Academic Annual Conference, 2011: 45 - 50.
[5] Shu Qiang. Information Network Support Platform for Smart Grid [J]. Equipment Manufacturing Technology, 2011 (3): 118 - 121.
[6] Li Xiangzhen, Liu Jianming. IoT technology for smart grid and its application [J]. Telecom Network Technology, 2010, 8: 41 - 45.
[7] Wang Dewen, Song Yaqi, Zhu Yongli. Smart grid information platform based on cloud computing [J]. Power System Automation, 2010, 34 (22): 7 - 12.
[8] Meteorological industry standards of the People's Republic of China. Power grid dispatching meteorological warning and forecasting service products (draft for comments) [S]. Beijing: China Meteorological Administration, 2011.