Short-Term Energy Load Forecasting Using Neural Networks in Smart Grid

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ABSTRACT

With the rapid increase in industries, buildings and residential homes in recent years, the usage of electrical appliances has also exponentially increased. It created the increase in demand of electricity and a gap between energy generation and consumption. With a proper energy demand prediction method, the aforementioned issues can be solved. So, in this work we have proposed a neural network based short-term energy demand prediction approach in smart grid. Different types of activation functions are used as the objective function to handle the real-time data. In addition to this, ensembles-based activation functions are employed in the neural network to get the accurate results in the energy prediction. The proposed approach is tested and compared against the existing energy prediction approach.

ACKNOWLEDGEMENT

This work was supported by the Science Research Center (SRC) funded by National Research Foundation (NRF) of Korea.

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