Abstract

The electrical deregulated market increases the need for short-term load forecast algorithms in order to assist electrical utilities in activities such as planning, operating and controlling electric energy systems. Methodologies based on regression methods have been widely used with satisfactory results. However, this type of approach has some shortcomings. This paper proposes a short-term load forecast methodology based on Artificial Intelligence techniques.

The work presented in this paper makes use of local linear wavelet neural networks (LLWNN) to find the electric load for a given period, with a certain confidence level.

References

- S. Rahman, O. Hazim. Generalized knowledge based short term load forecasting
Application of Local Linear Wavelet Neural Network in Short Term Electric Load Forecasting


Index Terms

Computer Science
Power Systems

Keywords
Wavelet neural network (WNN)  artificial neural network (ANN)  artificial intelligence (AI)  Weekly mean absolute percentage error (WMAPE)