

## Utilizing Grid Computing to Enhance Power Systems Performance

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**Abstract :** Power load is one of the most important controlling keys which decide power demands and illustrate power usage to shape power market. Hence, power load forecasting is the parameter which facilitates understanding and analyzing all these aspects. In this paper, power load forecasting is solved under MATLAB environment by constructing a neural network for the power load to find an accurate simulated solution with the minimum error. A developed algorithm to achieve load forecasting application with faster technique is the aim for this paper. The algorithm is used to enable MATLAB power application to be implemented by multi machines in the Grid computing system, and to accomplish it within much less time, cost and with high accuracy and quality. Grid Computing, the modern computational distributing technology, has been used to enhance the performance of power applications by utilizing idle and desired Grid contributor(s) by sharing computational power resources.

**Keywords :** DeskGrid, Grid Server, idle contributor(s), grid computing, load forecasting

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