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## **Smart Grids Cyber Security Issues and Challenges**

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**Abstract :** The energy need is growing rapidly due to the population growth and the large new usage of power. Several works put considerable efforts to make the electricity grid more intelligent to reduce essentially energy consumption and provide efficiency and reliability of power systems. The Smart Grid is a complex architecture that covers critical devices and systems vulnerable to significant attacks. Hence, security is a crucial factor for the success and the wide deployment of Smart Grids. In this paper, we present security issues of the Smart Grid architecture and we highlight open issues that will make the Smart Grid security a challenging research area in the future.

Keywords: smart grids, smart meters, home area network, neighbor area network

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