Title: Securing Cyber-Physical Systems: Distributed Power Grids

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Abstract

With the rise of the Internet of Things and inclusion of increasingly autonomous computers in networks, a host of new security challenges must be addressed. We consider the specific security concerns of distributed power grids, which may be targeted for financial gain or to cause disruption. Because power systems rely on accurate information shared throughout the system and are designed to respond quickly and automatically to crises, security breaches could cause cascading failures. We then discuss how ontological methods of divining attacker intentionality could be applied to recognize and thwart such attacks.

