

# Cybersecurity Risks and AI Integration for Enhanced Power Transformer Protection

Najmuddin Amer<sup>1</sup> and Dr. Kusum Rajawat<sup>2</sup>

Research Scholar, Department of Computer Science & Engineering<sup>1</sup>  
Associate Professor, Department of Computer Science & Engineering<sup>2</sup>  
Sunrise University, Alwar, Rajasthan, India

**Abstract:** *This paper examines the convergence of cybersecurity risks and the integration of Artificial Intelligence (AI) to fortify power transformer protection systems. As power systems become increasingly interconnected and reliant on digital infrastructure, the vulnerability to cyber threats amplifies. The study delves into the potential applications of AI in mitigating these risks and enhancing the security of power transformers. It reviews the current cybersecurity landscape, identifies potential threats, and evaluates the efficacy of AI-driven solutions in fortifying the protection mechanisms..*

**Keywords:** Power Transformer Security, Risk Mitigation, Integration Challenges.

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