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Sommario/riassunto

A practical, hands-on approach to power distribution system reliability
As power distribution systems age, the frequency and duration of consumer interruptions will increase significantly. Now more than ever, it is crucial for students and professionals in the electrical power industries to have a solid understanding of designing the reliable and

cost-effective utility, industrial, and commercial power distribution systems needed to maintain life activities (e.g., computers, lighting, heating, cooling, etc.). This books fills the void in the literature by providing readers with everything they need to know to make the best design decisions for new and existing power distribution systems, as well as to make quantitative "cost vs. reliability" trade-off studies. Topical coverage includes: . Engineering economics. Reliability analysis of complex network configurations. Designing reliability into industrial and commercial power systems. Application of zone branch reliability methodology. Equipment outage statistics. Deterministic planning criteria. Customer interruption for cost models for load-point reliability assessment. Isolation and restoration procedures. And much more Each chapter begins with an introduction and ends with a conclusion and a list of references for further reading. Additionally, the book contains actual utility and industrial power system design problems worked out with real examples, as well as additional problem sets and their solutions. Power Distribution System Reliability is essential reading for practicing engineers, researchers, technicians, and advanced undergraduate and graduate students in electrical power industries.