1. Record Nr. UNINA9910820595503321 Autore Knapp Eric D Titolo Applied cyber security and the smart grid: implementing security controls into the modern power infrastructure / / Eric D. Knapp, Raj Samani; Joel Langill, technical editor Amsterdam; ; Boston, : Elsevier/Syngress, 2013 Pubbl/distr/stampa Waltham, MA:,: Syngress,, 2013 **ISBN** 1-299-40881-8 0-12-404638-X Edizione [1st edition] Descrizione fisica 1 online resource (xxii, 202 pages): illustrations (some color) Collana Gale eBooks Disciplina 621.310285/58 Soggetti Smart power grids - Security measures Computer networks - Security measures Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Machine generated contents note: Introduction Chapter 1: What is the Smart Grid? Chapter 2: Smart Grid Network Architecture Chapter 3: Hacking the Smart Grid Chapter 4: Privacy Concerns with the Smart Grid Chapter 5: Security Models for SCADA, ICS and Smart Grid Chapter 6: Securing the Smart Grid Chapter 7: Securing the Supply Chain Chapter 8: The Future of the Grid Appendix A: Reference Models and Architectures Appendix B: Continued Reading Glossary. "Understanding how the Smart Grid works first requires an Sommario/riassunto understanding of how industrial networks operate, which in turn requires a basic understanding of the underlying communications protocols that are used, where they are used, and why. There are many systems that comprise the larger system of the "Smart Grid," which utilize both common and open protocols as well as many highly specialized protocols used for industrial automation and control, most of which are designed for efficiency and reliability to support the economic and operational requirements of large distributed control

systems. Similarly, industrial protocols are designed for real-time operation requiring deterministic results with continuous availability. Combined together, this blend of open and proprietary networks

enables the much larger network of measurements, controls, metering and automation that is the Smart Grid. This amalgam of disparate systems and networks is also a major factor in the cyber security concerns facing the Smart Grid today"--