Substation Automation Systems: Design And Implementation

The book was found

DOWNLOAD EBOOK
Synopsis

Substation Automation Systems: Design and Implementation aims to close the gap created by fast changing technologies impacting on a series of legacy principles related to how substation secondary systems are conceived and implemented. It is intended to help those who have to define and implement SAS, whilst also conforming to the current industry best practice standards. Key features: Project-oriented approach to all practical aspects of SAS design and project development. Uniquely focusses on the rapidly changing control aspect of substation design, using novel communication technologies and IEDs (Intelligent Electronic Devices). Covers the complete chain of SAS components and related equipment instead of purely concentrating on intelligent electronic devices and communication networks. Discusses control and monitoring facilities for auxiliary power systems. Contributes significantly to the understanding of the standard IEC 61850, which is viewed as a “black box” for a significant number of professionals around the world. Explains standard IEC 61850 “Communication networks and systems for power utility automation” to support all new systems networked to perform control, monitoring, automation, metering and protection functions. Written for practical application, this book is a valuable resource for professionals operating within different SAS project stages including the: specification process; contracting process; design and engineering process; integration process; testing process and the operation and maintenance process.

Book Information

Hardcover: 304 pages
Publisher: Wiley; 1 edition (December 2, 2015)
Language: English
ISBN-10: 1118987209
Product Dimensions: 6.9 x 0.7 x 9.9 inches
Shipping Weight: 1.6 pounds (View shipping rates and policies)
Average Customer Review: 5.0 out of 5 stars 1 customer review
Best Sellers Rank: #1,045,911 in Books (See Top 100 in Books) #144 in Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Power Systems #5048 in Books > Engineering & Transportation > Engineering > Electrical & Electronics #5717 in Books > Science & Math > Nature & Ecology > Conservation

Customer Reviews
Substation Automation Systems: Design and Implementation aims to close the gap created by fast changing technologies impacting on a series of legacy principles related to how substation secondary systems are conceived and implemented. It is intended to help those who have to define and implement SAS, whilst also conforming to the current industry best practice standards. Key features:

- Project-oriented approach to all practical aspects of SAS design and project development. Uniquely focusses on the rapidly changing control aspect of substation design, using novel communication technologies and IEDs (Intelligent Electronic Devices). Covers the complete chain of SAS components and related equipment instead of purely concentrating on intelligent electronic devices and communication networks. Discusses control and monitoring facilities for auxiliary power systems. Contributes significantly to the understanding of the standard IEC 61850, which is viewed as a "black box" for a significant number of professionals around the world.

Explains standard IEC 61850 “Communication networks and systems for power utility automation” to support all new systems networked to perform control, monitoring, automation, metering and protection functions. Written for practical application, this book is a valuable resource for professionals operating within different SAS project stages including the: specification process; contracting process; design and engineering process; integration process; testing process and the operation and maintenance process.

Evelio Padilla, ELEUNION, Caracas, Venezuela

With over a decade of experience in substation control systems, Evelio Padilla has project managed numerous substation designs and constructions and has written several relevant technical publications. He is currently a consultant at ELEUNION C.A., which is dedicated to supplying high and medium voltage apparatus and components to electrical utilities and general industries. Previously, as Substation Division Manager at EDELCA (now CORPOELEC), he was responsible for design and construction of substations including technical specification, bids analysis, contracting procedure, review of detailed design, follow-up on the milestones, follow-up on the site work progress regularly. He was also Head of Substation Engineering Department, responsible for basic design of high voltage substations including preparation of technical specification for purchase order of secondary items, bids analysis, review of detailed design.

In my view, this book describes the main constructive characteristics and functional principles of very high voltage substations. It also offers in a detailed and comprehensive manner a myriad of useful technical aspects, and managerial strategies for the design of secondary electrical systems.
according to the latest technologies. I strongly recommend it for everyone involved in the design and construction of very high voltage power systems. But since this book is a whole treatise on substations of any voltage level, it will also be useful for young engineers entering the electrical power system business. I particularly like the chapter related to technological trends, but what I love most are the pictures inside this book.