Power System Monitoring and Control (PSMC) is becoming increasingly significant in the design, planning, and operation of modern electric power systems. In response to the existing challenge of integrating advanced metering, computation, communication, and control into appropriate levels of PSMC, *Power System Monitoring and Control* presents a comprehensive overview of the basic principles and key technologies for the monitoring, protection, and control of contemporary wide-area power systems. A variety of topical issues are addressed, including renewable energy sources, smart grids, wide-area stabilizing, coordinated voltage regulation, and angle oscillation damping—as well as the advantages of phasor measurement units (PMUs) and global positioning systems (GPS) time signal. End-of-chapter problems and solutions, along with case studies, add depth and clarity to all topics. Timely and important, *Power System Monitoring and Control* is an invaluable resource for addressing the myriad of critical technical engineering considerations in modern electric power system design and operation.

- Provides an updated and comprehensive reference for researcher and engineers working on wide-area power system monitoring and control (PSMC)
- Links fundamental concepts of PSMC, advanced metering and control theory/techniques, and practical engineering considerations
- Covers PSMC problem understanding, design, practical aspects, and timely topics such as smart/microgrid control and coordinated voltage regulation and angle oscillation damping
• Incorporates authors’ experiences teaching and researching in various international locales including Japan, Thailand, Singapore, Malaysia, Iran, and Australia

---

𦭜 ABOUT THE AUTHOR(21,157),(949,819)

**Hassan Bevrani** is a Professor at the University of Kurdistan, and a Visiting Professor at the Kyushu Institute, Japan.

**Masayuki Watanabe** is an Associate Professor at the Department of Electrical and Electronic Engineering, Kyushu Institute of Technology, Japan.

**Yasunori Mitani** is a Professor at the Department of Electrical and Electronic Engineering and Head of Green Innovation Education & Research Center at Kyushu Institute of Technology, Japan.

---

**SERIES**

Wiley - IEEE

---

For additional product details, please visit [https://www.wiley.com/en-us](https://www.wiley.com/en-us)