1. Record Nr. UNINA9910838280303321 Autore Gupta Om Hari **Titolo** Soft Computing Applications in Modern Power and Energy Systems [[electronic resource]]: Select Proceedings of EPREC 2023, Volume 4 / / edited by Om Hari Gupta, Narayana Prasad Padhy, Sukumar Kamalasadan Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 981-9980-07-0 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (361 pages) Lecture Notes in Electrical Engineering, , 1876-1119; ; 1107 Collana Altri autori (Persone) PadhyNarayana Prasad KamalasadanSukumar Disciplina 621.39 004.6 Soggetti Computer engineering Computer networks Electric power distribution Electric power production **Energy policy** Energy and state Computer Engineering and Networks **Energy Grids and Networks Electrical Power Engineering** Energy Policy, Economics and Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Intro -- Contents -- About the Editors -- Coordinated Design Nota di contenuto of Damping Controllers for Power System Stability -- 1 Introduction --2 System Description -- 2.1 SMIB System -- 2.2 Power System Stabilizer (PSS) -- 2.3 Static Synchronous Series Compensator (SSSC) --3 Problem Formulation -- 4 Proposed Method -- 5 Results and Discussions -- 5.1 Nominal Loading (NL) Condition -- 5.2 Light Loading (LL) Condition -- 5.3 Heavy Loading (HL) Condition -- 6

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Sommario/riassunto

This book includes select proceedings of EPREC 2023. It provides rigorous discussions, case studies, and recent developments in the areas of soft computing and its applications in power systems enabled with power electronics-based equipment, energy systems, and the energy community. The other topics to be covered are optimal planning, analysis, operation, and control related to modern power and energy systems, and applications of various soft computing methodologies. The readers find this book useful for enhancing their knowledge and skills in the domain areas.