Record Nr. UNISA996218102203316 Autore Mazer Arthur <1958-> Titolo Electric power planning for regulated and deregulated markets // Arthur Mazer Hoboken, New Jersey:,: IEEE Press:, c2007 Pubbl/distr/stampa **ISBN** 1-280-83930-9 9786610839308 0-470-13057-1 0-470-13056-3 Descrizione fisica 1 online resource (335 p.) Disciplina 333.79320681 338.47621310684 Soggetti Electric utilities - Management Risk management Competition 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 (p. 291-293) and index.

Nota di bibliografia iniciddes bibliographical references (p. 291-293) and index.

Nota di contenuto Overview -- Energy, load, and generation technologies -- The

Overview -- Energy, load, and generation technologies -- The grid -- Short-term utility planning -- Long-term utility planning -- Midterm utility planning -- A market environment -- Asset management in short-term markets -- Investment analysis : long-term planning in a market environment -- Risk management in the midterm markets --

The California experience.

Sommario/riassunto As the industry environment transforms from a completely regulated

setting to a broader, deregulated marketplace, new market participants must understand planning and operations of power systems to effectively participate in markets. This industry overview provides a description of utility operations and traditional planning, and then explains asset management, investment analysis, and risk management within the context of a market environment. Written to provide a broad,

working knowledge of the industry, Electric Power Planning for Regulated and Deregulated Markets: . Includes descriptions of generation and transmission network equipment. Provides an overview

of the regulatory framework, system design and systems operations for

ensuring reliable delivery of power. Presents system planning across different time horizons with the objective of minimizing power production costs. Explains the principles and architecture of a market environment coupling operational imperatives with financial transactions. Addresses approaches of various participants, including power producers, retailers, and integrated energy companies toward bidding in day ahead markets, managing risks in forward markets, portfolio development and investment analysis. Provides numerous examples addressing cost minimization, price forecasting, contract valuation, portfolio risk measurement and others. Examines past news events and explains what went wrong at Three Mile Island, the Northeast blackout of 2003, and the California energy crisis This is an ideal reference for professionals in the public and private power service sectors such as engineers, lawyers, systems specialists, economists, financial analysts, policy analysts, and applied mathematicians.