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Sommario/riassunto	Solar and wind energy systems have flourished throughout the United States in the last few years as the public calls for reduced dependence on foreign oil. Government programs have been established to meet the public demand. Many states have passed legislation that requires electric utilities to include a portfolio of renewable energy sources in their generation mix. The resulting public demand has stimulated the growth of an industry that provides wind and solar systems, and many small businesses have grown to install these systems. Training programs and courses are now ubiquitous as the demand for designers and installers increases, and almost every educational institution offers renewable energy classes or curriculum. The goal is to provide a

resource for engineering students interested in the design and operation of solar electric, solar thermal, wind, and other renewable systems. In particular, the author found that a text that provides challenging problems and solutions that stimulate engineering thinking was necessary. While there are many good reference books on power systems and renewable energy, the objective here is to integrate the engineering basics of existing power systems with design problems and solutions using renewable energy sources.