A comprehensive solar forecast has three primary components: mean expected energy, a measure of uncertainty, and a quantification of variability. Since industry stakeholders must make quick, informed decisions, solar???forecast providers must take care to ensure that forecasts are informative and intuitive.

forecasting and assessing solar resources enables a complete understanding of the state of the art from the world's most renowned experts. - Demonstrates how to derive reliable data on solar resource availability and variability at specific

Demonstrates how to derive reliable data on solar resource availability and variability at specific locations to support accurate prediction of solar plant performance and attendant financial analysis.

SOLAR ENERGY FORECASTING AND RESOURCE ASSESSMENT

Solar resource assessment (How much solar radiation can be typically expected?) and forecasting (How much solar radiation can be expected in the next hour or next day?) are critical to expanding the penetration of solar power on the electric grid.

The field of solar energy can be broadly categorized into four parts: (1) solar resource assessment and forecast-ing, (2) photovoltaic (PV) technology, (3) concentrating solar power (CSP) technology, and (4) solar heating and cool-ing. Insofar as solar radiation is concerned, solar engineering takes a vital role in connecting atmospheric

Solar Energy Forecasting and Resource Assessment is a vital text for solar energy professionals, addressing a critical gap in the core literature of the field. As major barriers to solar energy implementation, such as materials cost and low conversion efficiency, continue to fall, issues of intermittency and reliability have come to the fore.