

High Shares of Renewable Energy Sources and Electricity Market Reform

Preface

Historic energy transitions, such as the one that led to the Industrial Revolution, spanned many decades, but much of the change took place in a decentralized manner. The one in which we find ourselves today is complicated by the existence of delicately balanced infrastructure—the electricity grid is considered by some to be among the most complex engineering achievements of the 20th century. Tinkering with it is no mean feat: like a circulatory system, its conduits must continue delivering even as modifications take place, if the patient is to remain alive. Two critical features of renewables, particularly wind and solar, must also be accommodated—they are intermittent and they are becoming ever more widely distributed.

The papers in this Special Issue of *The Energy Journal* address a wide range of subjects relating to integration of renewables. Some focus on market design issues, optimal pricing and impacts of renewables on market prices and their volatility. Others discuss regulatory and policy issues. Still others consider the evolution of industrial and institutional structures. Two central underlying themes are the preservation of incentives for continued investment, and security and reliability of supply.

The *Energy Journal* is especially pleased to present this timely body of research on a most important topic. Even a superficial review of its contents will yield valuable insights to the reader. A deeper examination will no doubt deliver very considerable benefits.

Adonis Yatchew
Editor-in-Chief, The Energy Journal
August 19, 2016.

