

# Contents

## Introduction to Techno-Economic Assessment of Renewable Energy Sources

1	Introduction to Techno-Economic Assessment of Renewable Energy Sources .....	1
2	Introducing Basic Tools in DIgSILENT PoweFactory.....	21
3	Modeling and Optimal Operation of Renewable Energy Sources in DIgSILENT PoweFactory .....	51
4	Power Quality and Harmonics Analysis in the Presence of Renewable Energy Sources .....	83
5	Electrical Challenges Associated with Integrating Renewable Energy Sources into Power Grids .....	105
6	Reliability Assessment in the Presence of Renewable Energy Sources .....	131
7	Evaluation of the Real Grid-Connected Photovoltaic Systems in Iran .....	157
	Index.....	169