Table of Contents

of Abbreviations of Contributors	xix
1 Energy Networks and the Law: Innovative Solutions in Changing Markets Donald N. Zillman, Martha M. Roggenkamp, Lila Barrera-Hernández, and Iñigo del Guayo	1
PART I CROSS-BORDER ENERGY INFRASTRUCTURE AND SUPPLY SECURITY	3
2 Canadian Energy Infrastructure and the Federalist Dilemma *Alastair R. Lucas**	19
3 Law and Regulation Governing Electricity Networks in Mexico in the Context of Regional Integration with North and Central Americ <i>José Juan González</i>	a 42
4 South American Energy Network Integration: Mission Possible? Lila Barrera-Hernández	61
The Chad–Cameroon Pipeline Project: Some Thoughts about the Legal Challenges and Lessons Learned from a World Bank-financed Large Infrastructure Project Mohammed A. Bekhechi	78
6 Contractual and Treaty Arrangements Supporting Large European Transboundary Pipeline Projects: Can Adequate Human Rights and Environmental Protection Be Secured? Catherine Redgwell	102
7 Protecting Energy Infrastructure in the EU: The Impact of External Damages on Supply Security Martha M. Roggenkamp	118
PART II NEW ENERGY SOURCES AND INNOVATIVE NETWORK MANAGEMENT	
8 Smart Grids and Intelligent Energy Systems: A European Perspective	141

Anita Rønne

9	the United States LeRoy Paddock and Charlotte Youngblood	161
10	Establishing an Offshore Electricity Grid: A Legal Analysis of Grid Developments in the North Sea and in US Waters Olivia Woolley, Peter J. Schaumberg, and Graham St. Michel	180
11	The Role of Energy Networks in Facilitating the Production and Use of Renewable Energy Sources in Norway Ulf Hammer	205
12	The Role of Energy Networks in Developing Renewable Energy Sources in China Wang Mingyuan	213
13	Economic Regulation and the Design of a Carbon Infrastructure for Alberta Nigel Bankes and Rick Nilson	231
	PART III MARKET LIBERALIZATION AND CHALLENGES FOR NETWORK INVESTMENTS AND PLANNING	
14	Transportation Regulation as an Instrument for Developing Natural Gas Networks in Brazil Yanko Marcius de Alencar Xavier and Anderson Souza da Silva Lanzillo	255
15	Law and Regulation for Energy Networks in New Zealand Barry Barton	274
16	Electricity Network Development: New Challenges for Australia Lee Godden and Anne Kallies	292
	Evolution and Revolution in British Energy Network Regulation: From RPI-X to RIIO Aileen McHarg	313
18	Third Party Access Exemption Policy in the EU Gas and Electricity Sectors: Finding the Right Balance between Competition and Investments Tjarda van der Vijver	333
19	Electricity and Gas Infrastructure Planning in the European Union Iñigo del Guayo and Johann-Christian Pielow	353

	Table of Contents	ix
20	Regulating the Extension of Electricity Networks: A German Perspective Gunther Kühne	371
	The Development of Electricity and Gas Networks in Russia Sergey S. Seliverstov and Ivan V. Gudkov	394
	PART IV OVERVIEW AND CONCLUSION	
	The Role of Networks in Changing Energy Markets and the Need for Innovative Solutions Martha M. Roggenkamp, Donald N. Zillman, Lila Barrera-Hernández, and Iñigo del Guayo	417
Ind	ex	437