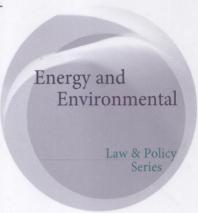
KLUWER LAW INTERNATIONAL



Independent Power Projects in Developing Countries

Legal Investment Protection and Consequences for Development

by Henrik M. Inadomi

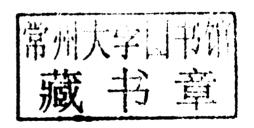


KLUWER LAW INTERNATIONAL

Independent Power Projects in Developing Countries

Legal Investment Protection and Consequences for Development

Henrik M. Inadomi





Published by: Kluwer Law International PO Box 316 2400 AH Alphen aan den Rijn The Netherlands

Website: www.kluwerlaw.com

Sold and distributed in North, Central and South America by:

Aspen Publishers, Inc. 7201 McKinney Circle Frederick, MD 21704 United States of America

Email: customer.service@aspenpublishers.com

Sold and distributed in all other countries by: Turpin Distribution Services Ltd. Stratton Business Park Pegasus Drive, Biggleswade Bedfordshire SG18 8TQ United Kingdom

Email: kluwerlaw@turpin-distribution.com

Printed on acid-free paper.

ISBN 978-90-411-3178-2

© 2010 Kluwer Law International BV, The Netherlands

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher.

Permission to use this content must be obtained from the copyright owner. Please apply to: Permissions Department, Wolters Kluwer Legal, 76 Ninth Avenue, 7th Floor, New York, NY 10011-5201, USA. Email: permissions@kluwerlaw.com

Printed in Great Britain.

Independent Power Projects in Developing Countries

Energy and Environmental Law & Policy Series Supranational and Comparative Aspects

VOLUME 7

Editor

Kurt Deketelaere

Professor of Law, University of Leuven, Belgium,
Honorary Chief of Staff, Flemish Government
Honorary Professor of Law, University of Dundee, UK;
Secretary – General, League of European Research Universities (LERU), Belgium

Editorial Board

Professor Philip Andrews-Speed, University of Dundee Professor Michael Faure, University of Maastricht Professor Gunther Händl, Tulane University, New Orleans Professor Andres Nollkaemper, University of Amsterdam Professor Oran Young, University of California

The aim of the Editor and the Editorial Board of this series is to publish works of excellent quality that focus on the study of energy and environmental law and policy.

Through this series the Editor and Editorial Board hope:

- to contribute to the improvement of the quality of energy/environmental law and policy in general and environmental quality and energy efficiency in particular;
- to increase the access to environmental and energy information for students, academics, non-governmental organizations, government institutions, and business;
- to facilitate cooperation between academic and non-academic communities in the field of energy and environmental law and policy throughout the world.

Preface

In June 2001, the Scandinavian Institute of Maritime Law at the University of Oslo gave me a six-month contract to write a short article on multinational corporations' investment in developing countries' power sectors. As the article progressed, it evolved into a PhD thesis, which was submitted in December 2005. The years of learning have been exhilarating and fun, necessarily coupled with recurring bouts of frustration. In retrospect, the valleys were actually not that deep, and the hilltops were satisfying and left lasting impressions. All in all, a positive and educating experience on both professional and personal levels.

This book would not have been written were it not for the environment at the Institute. My sincerest gratitude goes to my supervisors, Ulf Hammer and Ola Mestad – for prescient comments, for encouragement, for gentle (and occasionally not so gentle) prodding and for personal and professional support. Hans Jacob Bull, Erling Eide, Endre Stavang, Erling Selvig, Knut Kaasen and Erik Røsæg and my PhD Committee consisting of Trine-Lise Wilhelmsen, Asif Qureshi and Lars Gorton, all deserve gratitude for their adjudication, comments and encouragement. My kindred research fellows Ivar Alvik, Sondre Dyrland, Henrik Ringbom, Beate Sjåfjell, Anne Karin Nesdam, Odd-Harald Wasenden, Henrik Bjørnebye, Camilla Dalbak, Hermann Bruserud, Margrethe Buskerud, Ingunn Ikdahl, and Sverre Ellenes, were an encouraging source of constructive and collegial criticism and support. Inger Hamre, Anne Finne Jorunn Birkedal and Ingeborg Vedal provided high quality library and admin services. I thank the Norwegian Ministry of Oil and Energy for providing funding for *Energirettsprosjektet*.

With regard to support from practitioners, special thanks go to Kjell Haagensen, Ole Gran, Lully Heje, Astrid Brunt, Jason Roth, various host country utility representatives (who all have asked to remain anonymous), Louis T. Wells, Ole Sten-Olsen, Fransisco Toureilles, Apinya Subsaeng, Wolfram Anders, Nabil Moukarbel, Jannik Lindbæk, Erling Naper, Bundhit Eua-arporn, Giuditta Cordero Moss, Philip Andrews-Speed, and Steven Dow.

xxii Preface

I am indebted to Odd Ivar Biller, Anders Daae, Terrance Conley and my other colleagues in the legal department in Norsk Hydro ASA for providing a supporting, stimulating, and fun working environment, and for allowing me some time off work to transform my thesis into this book. My very good friends Atle Beisland, Gaute Erichsen, Erik Solvang, Torkel Lindeland, Sigvart Eriksen and Christopher Holm also have donated time and effort through their professional and personal support.

Special thanks go to Professor Kurt Deketelaere and Karel van der Linde at Kluwer Law International for a quick and positive decision-making process and excellent editorial work, and to Gunabala Saladi and R. Gnaneswaran at Newgen Imaging Systems for excellent copyediting services.

Needless to say, while all of the above have contributed in making this book possible, the responsibility for errors rests solely with me.

I round off by thanking my closest. Our families in Thailand and Japan, and the Holm family, have been so kind and caring. My mother Inger deserves gratitude, respect and love for raising me and providing me with ballast after my father passed away in 1982. My wife Sariya has used her wisdom and humor to support both me and the conclusion of this book, and our daughter Helena has filled our life with so much joy and happiness. I dedicate this work to Sariya, for being there for me, for her good companionship, and for the wonderful time and all the fun we have together.

Oslo, September 08, 2009 Henrik M. Inadomi

Summary of Contents

Table of Contents	xi
Preface	xxi
Part I Introduction	1
Chapter 1 Foreign Direct Investment in Power Generation in a Developing Country	3
Part II A Multifaceted Investment Protection: Legal Structure and Risk Allocation	25
Chapter 2 The Developing Country's Power Sector and the Need for Investment Protection	27
Chapter 3 Legal and Financial Structure	39
Chapter 4 Passing through the Project Company's Obligations	71

Chapter 5 The Project Company's Remuneration: Firm Capacity	89
Chapter 6 Protection against Changes in Law and Changes in Tax	109
Chapter 7 Breach of Contract, Remedies and Host Government Responsibility	119
Chapter 8 External Investment Protection Measures	139
Chapter 9 Legal Characterizations of the IPP Model's Investment Protection	157
Part III The IPP Model's Consequences for Development	16 7
Chapter 10 The International IPP Market: Can it Maximize Social Welfare?	169
Chapter 11 Risk Bearing Superiority and Exposure to Market Risks	183
Chapter 12 The Host Country's Procurement Process Decides the Sponsors' Incentives	205
Chapter 13 The East Asian Crisis and the IPP Model's Experiences	225
Chapter 14 An Analysis of IPP Case Law	243
Chapter 15 A Scope for Proactive Legal Adjudication	277
Chapter 16 The Role of Political Risk Coverage	293
Chapter 17 The IPP Model's Consequences for Development: A Mixed Record	305

Summary of Contents	ix
Chapter 18 Will Rectification Compromise the Private Sector's Willingness to Invest?	333
Part IV Conclusions and Perspectives	355
Chapter 19 The Interaction between Investment Protection and Development	357
List of Sources	367
Index	387

Table of Contents

Prefa	ice		xxi
Part Intro	I duction		1
Chap			
Forei	ign Direc	ct Investment in Power Generation in a	
Deve	loping C	ountry	3
1.1.	The To	opic	3 3 5
1.2.	Overvi	ew of the IPP Model	
1.3.	Backgr	round	6
	1.3.1.	A Product of Three Trends	6
	1.3.2.	The Model's Volatile History	9
1.4.	Can Be	eneficial Consequences for Development Be	
	Improv	red without Detrimentally Compromising the	
	Willing	gness to Invest?	10
	1.4.1.	Investment Protection and Consequences for	
		Development	10
	1.4.2.	Multinational Corporations, Development and	
		the Law	13
1.5.	Methodology and Sources		14
		Legal Methodology	14
	1.5.2.	"Development" as Social Welfare	17
		Primary Sources	19
		Secondary Sources	22
1.6.	Progres		23

		25
		25
		27
0		25
		27
		20
		28
		30
2.3.1.		20
222		30
2.3.2.		20
		32
		34
		35
o. Progres	SION	36
4 2		
	non sial Chrystops	39
•		
		39
		41
		41
		43
		1
		44
		47
		47
3.4.2.		48
2 1 2		50
		51
		51
		53
		54
		54
		57
		59
		61
		64
		64
		66
		67
	Multifaceted Risk Allo napter 2 ne Developing Investment Legal I Allocate Characte Locating 2.3.1. 2.3.2. In The Print Characte	Multifaceted Investment Protection: Legal Structure d Risk Allocation napter 2 the Developing Country's Power Sector and the Need Investment Protection Legal Investment Protection: Structure and Risk Allocation The Challenges Caused by a Power Grid's Physical Characteristics Locating the Investment in a Developing Country 2.3.1. Some Stereotypical Problems in a Developing Country's Power Sector 2.3.2. Vulnerability to Political Risk: "The Obsolescing Bargain" The Private Sector's Interests: Profit Maximization "Investment Protection": Three Components Progression napter 3 gal and Financial Structure The Build-Operate-Transfer Model The Sponsors and Their Project Company 3.2.1. Who Are the Project Sponsors? 3.2.2. The Project Company The Power Purchase Agreement: An Off-Take Contract Facilitating Private Financing The Concession Agreement with the Host Government 3.4.1. To What Extent Is the Host Government Involved? 3.4.2. Supplementing the Host Country's Regulatory Framework 3.4.3. Expanding the Protection under Public International Law Project Finance 3.5.1. The Main Principles 3.5.2. Integrated Commercial and Financial Structures The Project Company's Obligation to Obtain Financing 3.6.1. The Financing Risk 3.6.2. Reaching "Financeability" through Risk Mitigation 3.6.3. Main Sources of Finance 3.6.4. "Prominent Victims" as Investment Protection The Loan Agreements 3.7.1. Syndication Is the Norm 3.7.2. Conditions Precedent, Warranties and Covenants

Table	of Conte	ents	xiii
Chapt	ter 4		
Passir		gh the Project Company's Obligations	71
4.1.	The Pro	oject Company's Completion Risk	71
4.2.	Project	Finance Leads to a Fixed Price and Date EPC/T Contract	74
4.3.	The PP	A and the Construction Contract	77
	4.3.1.		77
	4.3.2.	The Construction Contractor's Obligation to Design	78
	4.3.3.	Fixed Price and Date Completion	79
	4.3.4.	The Employing Project Company's Obligations	81
	4.3.5.	"Back to Back" Risk Allocation	82
	4.3.6.	Liability and Risk Premiums	84
4.4.		ons and Maintenance	84
4.5.	Fuel Ri	sk: Price and Availability	85
Chapt	ter 5		
		Company's Remuneration: Firm Capacity	89
5.1.		apacity Income Regulation and Allocation of	
	Market	1 ,	89
	5.1.1.	Availability versus Income	89
	5.1.2.		
		on Equity	90
	5.1.3.	Structuring (Weighting) the Capacity Charge	92
5.2.		apacity as Risk Allocation	93
		Providing Delayed or Reduced Capacity	93
	5.2.2.	Providing More Than the Contracted Capacity	94
	5.2.3.	Regular Force Majeure	95
	5.2.4	Host Government Force Majeure	97
	5.2.5.	Reservoir and Hydrological Risks	98
5.3.		ergy Charge Covers Variable Operations and	70
0.01		nance Expenses	99
5.4.	Currence		100
<i>.</i>		Differing Denominations	100
	5.4.2.		100
	3.4.2.	Host Country Side	102
5.5.	Interest	· · · · · · · · · · · · · · · · · · ·	103
5.6.	Inflatio		105
5.7.		llocation Leading to "Guaranteed Profits" as Investment	105
5.7.	Protecti		106
Chart	on 6		
Chapt Protect		ainst Changes in Law and Changes in Tax	109
6.1.	Questio		109
6.2.	-	s in Law and Tax Are Binding but Entitle Compensation	110
•	6.2.1.	Changes in Law and Tax Are Binding	110
		But Entitle Compensation	112

6.3.	Stabilization through Risk Allocation		
	6.3.1.	Introduction to Stabilization Clauses and	
		Internationalized Contracts	114
	6.3.2.	Comparisons between Change in Law Clauses	
		and Stabilization Clauses	116
Chap	ter 7		
		ntract, Remedies and Host Government Responsibility	119
7.1.		of Default and Buyout: The Condition Side	119
	7.1.1.	Contractual Mechanisms	119
	7.1.2.	Main Event of Defaults	120
	7.1.3.	Cure Periods	123
7.2.	Project	Company Remedies	123
	7.2.1.		123
	7.2.2.	Damages: Initial Remarks	125
	7.2.3.	Power Purchaser Buyout: A Put Option	126
7.3.	Host G	overnment Responsibility through Contractual	
	Obligat	tions	128
	7.3.1.	A Guarantee for the Power Purchaser's Obligations	128
	7.3.2.	Investment Protection in the Concession Agreement	
		is Broader than in the PPA	130
	7.3.3.	Availability, Convertibility and Repatriation of Hard	
		Currency	131
7.4.	"Politic	cal Risk" and Contractual Obligations	133
7.5.	Dispute	e Resolution	135
	7.5.1.	Informal Dispute Settlement	135
	7.5.2.	International Arbitration as Investment Protection	135
Chap	ter 8		
		stment Protection Measures	139
8.1.		ng the Final Consumers of Power to Improve	
		ver Purchaser's Creditworthiness	139
8.2.		Cerm Payment Difficulties and Initial Credit	
	Risk Su		141
		Letter of Credit	141
	8.2.2.		142
8.3.		al Coverage of Political and Credit Risks	143
		Terminology: Insurance or Guarantees?	143
	8.3.2.	The Traditional Political Risks	143
	8.3.3.	Breach of Contract Coverage: An Example from MIGA	146
0.4	8.3.4.	Partial Risk and Credit Guarantees	150
8.4.		tor Recourse to the Host Government	151
	8.4.1.	Claim Transfer and the Multiple Pledge of Shares	151
	8.4.2.	Recourse and Information Strategies	153
	8.4.3.	Expanding the Scope of Preferred Creditors	155

Chap	ter 9			
		erizations of the IPP Model's Investment Protection	157	
9.1.	Legal S		157	
9.2.				
9.3.	Underst	anding the Extent of the Host Country Side's Legal		
	Obligati		160	
	9.3.1.	Flexible Predictability	160	
	9.3.2.		161	
	9.3.3.	"Debt" or "Investment"?	162	
	9.3.4.		164	
Part I		el's Consequences for Development	167	
Chap	ter 10			
The I	nternatio	onal IPP Market: Can it Maximize Social Welfare?	169	
10.1.		ing Socio-Economic Effects through Law, Incentives		
		tual Observations	169	
10.2.		ng the IPP Marketplace	172	
		Pre-East Asian Crisis Literature	172	
		Is Competition during Procurement Sufficient?	173	
		Information is Curtailed and Asymmetrical	174	
	10.2.4.	, , ,		
		of Surplus	176	
	10.2.5.	"Rational" Decision-Making is Beset by		
		Agency Problems	178	
10.3.		e IPP Market Benefit from "A Market Infrastructure"?	180	
10.4.	The Ma	rket Conditions Suggest an Unbalanced Contract	182	
Chap			100	
		Superiority and Exposure to Market Risks	183	
11.1.		earing Superiority: Causation and Insurance	183	
11.2.		Procurement: Are the Sponsors Exposed to	10/	
11.2	Compet		184	
11.3.		d and Business Cycle Risk	187	
		Risk Bearing Superiority for Demand Projections	187 189	
11.4		Business Cycle Risk	191	
11.4.		earing Superiority for Currency Risk	19	
	11.4.1.	Host Government "Causation" of Regular Currency	191	
	11.4.2	Fluctuations Do the Spansors Heye Superior Ability to Insure and	19	
	11.4.2.	Do the Sponsors Have Superior Ability to Insure and	193	
	11.4.3.	Diversify? Financial Crises and Catastrophic Devaluation	193	
11.5.		tual Regulations Absent from IPP	190	
11.3.		Economic Hardship	197	
	11.3.1.	Leonomic Hardship	1)	

	11.5.2.	A Comparison with Infrastructure Investment with	
		Less Income Protection	199
11.6.	Credit I	Risk as a Source of Discipline	201
11.7.	The Co	mparison to a "Monopolist"	203
Chan	ter 12		
		ntry's Procurement Process Decides the	
	sors' Inc		205
12.1.		mal Incentives Can Lead to Adverse Consequences for	20.
	Develop		205
		Do Incentives Lead to Efficiency or to Moral Hazard?	205
	12.1.2.		200
	12.1.2.	Appropriation? If Yes, How Can the Law and the	
		Surrounding Institutions Respond?	207
12.2.	Incentiv	ves in Directly Negotiated Projects: Price Padding	
		fficient Reliance	210
	12.2.1.		210
		Financing Risk and Supplementary Contracts	213
	12.2.3.	Inefficient Reliance on Contractual Promises	214
	12.2.4.	The Risk Allocation Is Susceptible to Moral Hazard	216
	12.2.5.	A Thought Experiment	217
12.3.		ves during Competitive Procurement	220
	12.3.1.		220
	12.3.2.	The state of the s	221
		Intense Competition Changes the Risk Allocation	222
Chap	ter 13		
		n Crisis and the IPP Model's Experiences	225
		e Model Suffer from a Structural Weakness in the	
	Event o	of Economic Downturns?	225
13.2.	A Struc	tural Weakness I: The Risk Allocation and Inability	
	to Bear	Costs	226
		Demand and Currency Risk	226
	13.2.2.	Hard versus Local Currency Debt Financing	229
	13.2.3.	Wholesale versus Retail Tariffs	231
13.3.	Structur	ral Weakness II: Directly Negotiated Projects	232
		Procurement: Competitive Tender or Direct Negotiations	232
		Credible Accusations of Corruption	234
13.4.		ral Weakness III: Project Company Decision-Making	237
13.5.	Key Co	emponents behind IPP'S Structural Weakness	239
	ter 14		
		f IPP Case Law	243
14.1.		tual Argumentation: Changed Circumstances, Breach and	
	Termina	ation	243