

LIST OF FIGURES

Figure	Description	Page No
1.1	Overview of Indian Power Sector Structure Vis-à-Vis Regulatory Framework	2
1.2	Transition of Indian Power Sector (1910 – 2014)	5
1.3	Profit /Loss(After Tax) of Power Sector (2003-11)	9
1.4	Debt Analysis of Power Sector	11
1.5	Power Sector Debt as a Percentage of GDP	12
1.6	Increase in Gap between Average Cost and Average Revenue over the Years (2004-11)	18
1.7	Composition of Power Cost	20
1.8	Number of Times Tariff increased by Indian States (2008 –13)	21
1.9	Electricity Prices Paid Worldwide by Retail Industry Consumers (1978-2004)	24
1.10	Electricity Prices Paid Worldwide by Retail Household Consumers (1978-2004)	25
1.11	EU Average Electricity Price (2004 Euro per MWh)	26
1.12	Residential and Commercial Consumer Switching in IEA Countries	27
1.13	Worldwide Effect of Competition on T&D Losses	28
1.14	Price of Electricity Transacted through Indian Power Traders and Power Exchanges (2008-16)	30
3.1	Four Models of Power Industry Structure	68
3.2	Vertically Integrated Model Structure of Power Industry	70
3.3	Single Buyer Model Structure of Power Industry	71
3.4	Wholesale Competition Model Structure of Power Industry	72
3.5	Retail Competition Model Structure of Power Industry	73
4.1	Refining of Research Gaps	108
4.2	Funnel Approach for Consolidation of Research Gap	109
4.3	Research Question Leading to Qualitative Research Design	112
4.4	Research Objective Outlining Methodology for Familiarization	114
5.1	Data Management Through Coding Matrix	126

5.2	Fields in a Coding Index	126
5.3	Deriving Core Concept through Establishing Links Between Categories and Themes	127
5.4	Process of Framework Analysis	128
5.5	Flow Chart of Research Process	138
6.1	Conceptual Lens Based on Indian Retail Regulations	146
6.2	Flow of Reforms [Mid 1980s - 1990], Power Sector of New Zealand	150
6.3	Flow of Reforms [1991-1999], Power Sector of New Zealand	151
6.4	Flow of Reforms [2000 Onwards], Power Sector of New Zealand	154
6.5	Flow of Reforms [Era of Pre Privatization], Power Sector of United Kingdom	161
6.6	Flow of Reforms [Era of Privatization], Power Sector of United Kingdom	163
6.7	Introduction of Supplier Choice, Power Sector of United Kingdom	165
6.8	Conceptual Lens based on Global (UK and NZ) Retail Regulations	177
6.9	Conceptualized Framework: Key Stages under Step 1 'Regulatory Provisions'	183
6.10	Conceptualized Framework: Key Stages under Step 2 'Transfer Scheme'	186
6.11	Conceptualized Framework: Key Stages under Step 3 'Separation of Carriage and Content Businesses'	189
6.12	Conceptualized Framework: Key Stages under Step 4 'The Electricity Code'	191
6.13	Conceptualized Framework: Key Stages under Step 5 'Consumer Choice and Switching'	194
6.14	Conceptualized Framework: Conceptualized Framework to Introduce Retail Competition in India	195
7.1	Proposed Framework: Key Stages under Step 1 'Regulatory Provisions'	228
7.2	Proposed Framework: New Entities after Separation of Carriage and Content Businesses	230
7.3	Proposed Framework: Key Stages under Step 2 'Unbundling/Separation of Distribution Business'	231
7.4	Proposed Framework: Phases of Separation of Carriage and Contents Business	232
7.5	Proposed Framework: Key Elements of the Transfer Scheme	234
7.6	Proposed Framework: Key Stages under Step 3 'The Electricity Code'	238
7.7	Proposed Framework: Key Stages under Step 4 'Open Access & Consumer Switching'	244

7.8	Framework for Bifurcation of Carriage and Content to Introduce Retail in Indian Power Sector	245
8.1	Restructuring Process During the Transition from the Monopoly to Mixed Oligopoly	275
8.2	Proposed Framework for Separation of Carriage and Content Business in Distribution Segment to Introduce Competitive Retail in Indian Power Sector	277