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Nota di contenuto	Front Cover; Electricity Cost Modeling Calculations; Copyright Page; Contents; Preface; Some Basic Economic Theory; A New Regulatory Paradigm; Acknowledgments; Chapter 1: Introduction; 1.1. The marginal cost pricing doctrine; 1.2. A brief overview of the u.s. electric market; 1.3. Reducing carbon emissions; 1.4. Internalizing the cost of reducing carbon emissions; 1.5. Optimal rate or tariff design and tax credits to promote efficient use of energy and a reduction in carbon emissions; 1.6. Conclusion; Chapter 2: The Theory of Natural Monopoly; 2.1. The natural monopoly conundrum 2.2. For a single-output market2.3. Literature review-economies of scale in generation: single-output models; 2.4. For a multiple-output natural monopoly; 2.5. Electricity as a multiple-output industry and economies of scope and subadditivity; 2.6. Economies of vertical integration and separability; 2.7. Relevant literature review-vertical integration and separability; 2.8. Conclusion; Chapter 3: The U.S. Electric Markets, Structure, and Regulations; 3.1. The U.S. electric industry structure; 3.2. Regulation of the electric utility industry; 3.3. State regulations

3.4. The future of the electric industryChapter 4: The Economics (and Econometrics) of Cost Modeling; 4.1. The general cost model; 4.2. The econometrics of cost modeling: an overview; 4.3. A brief history of cost models and applications to the electric industry; 4.4. Appendix; 4.5. Exercises; Chapter 5: Case Study: Breaking up Bells; 5.1. Introduction; 5.2. The natural monopoly conundrum; 5.3. Breaking up bell: the case of AT&T; 5.4. Economies of vertical integration: an argument for natural monopoly?; 5.5. Parallels between telephony and electricity; 5.6. Lessons to be learned 5.7. ConclusionChapter 6: Cost Models; 6.1. The determination of an appropriate objective function: a brief overview of the literature; 6.2. Flexible functional forms; 6.3. Multiproduct cost functions; 6.4. Measures of efficiency for multiple-output models; 6.5. Chapter conclusion; 6.6. End of chapter exercises: multiple-output cost models; 6.7. Appendix: proofs; Chapter 7: Case Study: Can Rural Electric Cooperatives Survive in a Restructured U.S. Electric Market?An Empirical Analysis; 7.1. Abstract; 7.2. Introduction; 7.3. Literature Review; 7.4. Cost Models 7.5. Implications for Public Policy7.6. Conclusion; Chapter 8: A Test of Vertical Economies for Non-Vertically Integrated Firms: The Case of Rural Electric Cooperatives; 8.1. Abstract; 8.2. Introduction; 8.3. Background: rural electric cooperatives; 8.4. Reasons that cooperatively owned utilities are different; 8.5. Literature review; 8.6. Data; 8.7. Methodology; 8.8. Preliminary results-all coops; 8.9. Economies of vertical integration; 8.10. Estimation results; 8.11. Tests for vertical integration; 8.12. Conclusion; Chapter 9: Load Forecasting-The ""Demand"" for Electricity 9.1. What is forecasting?

## Sommario/riassunto

A ""quick look up guide,"" Electricity Cost Modeling Calculations places the relevant formulae and calculations at the reader's finger tips. In this book, theories are explained in a nutshell and then the calculation is presented and solved in an illustrated, step-by-step fashion. A valuable guide for new engineers, economists (or forecasters), regulators, and policy makers who want to further develop their knowledge of best practice calculations techniques or experienced practitioners (and even managers) who desire to acquire more useful tips, this book offers expert advice for using such