


Book Reviews



Siddayao, Corazon Morales, ed., *Criteria for Energy Pricing Policy*, London: Graham & Trotman, 1985, 224 pp., \$37.00.

This is a collection of articles commissioned for the Energy Pricing Policy Workshop, Regional Energy Development Program, Bangkok, May 1984. The articles cover a number of issues related to energy pricing in developing countries. Overall the book provides a good background into the issues surrounding energy pricing and presents a diversity of opinions. This divergence shows how important pricing issues have become, and it provides avenues for continued debate. The book also contains a summary of the workshop as well as two short country papers (People's Republic of China and Nepal).

The first article in the book is by Mohan Munasinghe, a well-known author on energy pricing theory. Dr. Munasinghe begins with a summary of the general issues of energy pricing and the theory behind long-run marginal cost (LRMC) pricing, in a fashion similar to his previous works. This article, however, also includes discussions linking pricing issues to national energy planning and is a good, succinct discussion. He develops a two-step process for determining energy prices:

In the first stage, a set of prices that strictly meets the economic efficiency objective is determined . . . The second stage consists of adjusting these efficient prices to meet all other objectives [to meet minimum energy needs and cover financial objectives].

The adjustment to LRMC is the key to the discussion. It is followed by an example that shows how pricing policy can be integrated with conservation policies. The example is clear, straightforward, and helpful in understanding the concepts presented.

The second article, by Manmohan Kumar, is a qualitative discussion of how pricing policies affect the socio-economic goals of developing countries in Asia. The author relates the issues of marginal costs to the possible effects pricing has on a whole range of goals including equity, employment, industrialization, and rural development. This is the only paper that addresses the "traditional" fuels sector in some depth. Most of the other discussions pertain only to commercially traded fuels.

Dr. Kumar argues that direct pricing policies, especially those that attempt to promote commercial fuel use, may have little effect on traditional fuel use. "In the long run, the solutions may appear to lie with increasing the availability of firewood by public reforestation programmes." A major reason is that a sizeable portion of wood fuels is not bought and sold and has no market price. Kumar ends the article noting that pricing is not an isolated issue and that there is a need to undertake detailed empirical analyses because "still very little is known."

David Newberry provides a differing viewpoint on the issue of marginal cost pricing. He states that "the efficient price of electricity is the short-run marginal cost of producing . . ." He backs this up briefly by stating that 1) SRMC is well-defined, 2) that $SRMC = LRMC$ under conditions of constant yearly demand and optimal investment, and 3) that the arguments against SRMC can be corrected by developing

proper contracts. It is disappointing that the discussion justifying his position is so short. His paper does not adequately address the arguments given by proponents of LRMC pricing.

Dr. Newberry also presents some empirical evidence of the impacts of fuel taxes on the distribution of income. The applications are quite interesting, but the reader will need to refer to some other articles to fully understand the work presented.

The paper by the editor focuses on the issue of shadow pricing for indigenous resources and presents a good overview of alternative shadow pricing schemes for commercially-traded resources. Dr. Siddayao looks at the reasons behind using shadow pricing and at the various methods of developing shadow prices including export prices, import prices, and opportunity costs. She stresses that shadow prices different from market prices should only be used if they (a) will lead the economy to increasing efficiency and (b) the demand-supply forces in the market are not working properly.

While it is easy to agree with the last statement, in reality there are not many cases in developing countries where demand-supply forces are working properly. Therefore, shadow pricing will almost always become an issue because markets tend to be distorted and alternative pricing scenarios are important.

The other articles, by Drs. Bhatia and Gunter Schramm provide more background and some empirical evidence on two other pricing aspects. Dr. Bhatia introduces the role of pricing in the allocation of investments and the need for revenues to cover investment costs. Dr. Schramm provides some approaches to calculating "efficiency" prices and develops straightforward case-studies.

In sum, the book provides a good overview of the issues surrounding energy pricing policies in developing countries. It focuses on pricing issues related to commercial fuels. As with many volumes containing papers from workshops, there is some repetition of the major ideas. The strong point of this volume is that not all the authors agree on the "proper" development of energy prices nor on the necessary solutions. These different viewpoints are helpful in understanding the problems associated with pricing policy.

Mark Allen Bernstein
University of Pennsylvania

Saltzman, Sidney and Richard E. Schuler, eds., *The Future of Electrical Energy: A Regional Perspective of an Industry in Transition*, Praeger, 1986, \$47.95.

This volume contains the edited versions of papers presented at a conference entitled "New York's Electrical Future," held in November of 1984. The participants spanned the spectrum from regulators and legislators to public interest agents and utility personnel. Most of the contributions are transcripts of rather short talks; however, a few chapters are journal-length pieces.

The topics covered include regional electricity demand forecasting, alternate supply sources and future generation technologies, environmental and public health issues of electricity generation and transmission, public perceptions of the electric utility industry, the future financial environment for utilities, and the evolving institutional and regulation atmosphere.

In the first two chapters, Richard E. Schuler and Lawrence R. Klein epitomize the history of electric power generation in New York state and discuss the impact of the oil price rise on New York. Chapter 3 in this introductory section is by James R. Schlesinger who predicts that future world energy prices will be highly sensitive to increasing politically-generated shocks.

Section II consists of shorter papers on electricity demand forecasting for New York state. They provide a glimpse at the results of some complex regional economic models. However, due to the presentation format, the nature of these models is difficult to judge. An exception is the more extensive treatment by Timothy D. Mount and William J. Deehan. Unlike most of the other sections of this book, there is some redundancy in these chapters. Furthermore, I think the lack of any econometric demand models would be a disappointment to many readers of *The Energy Journal*. The last chapter in this section, by Douglas R. Bohi and Joel Darmstadter, has more the flavor of the introductory section and provides an optimistic alternative to Schlesinger's outlook on the world energy market. The authors predict stability due to the existence of a more orderly market mechanism for the setting of world oil prices.

Several papers in Section III discuss alternative electricity supply issues. The papers by William E. Davis and Lester M. Stuzin point out the limited options available to New York utilities in shifting away from a major use of oil fired generators. Robert H. Hiney's paper deals with the importation of Canadian electricity that may take on a different light in the wake of the potential advances in super-conductor transmission technology. Robert V. Percival's chapter on the issue of conservation versus construction is an extensive overview of the recent history of this national debate in the context of New York's recent experience. The two concluding chapters of this section deal with alternative generation technology and the resurrection of nuclear power as a viable technology by Frank L. Hubbard and Alvin M. Weinberg, respectively.

Section IV concerns the environmental and public health issues relating to coal, oil and nuclear generation technologies and the transmission of hydroelectric power from northern New York and Canada. Robert T. Stafford writes from the perspective of a U.S. Senator dealing with the issue of acid rain. Harry H. Hovey, Jr. provides details on the costs of various pollution control equipment. William N. Stasiuk's paper surveys some recent public health literature on hazards generated by the electric power industry. Alan T. Crane closes this section with a piece that discusses risks from nuclear power.

In Section V methods to analyze the public perception of electric utilities are discussed. Donald R. Deluca furnishes an overview of survey methods in general and examines the results of a particular survey concerning the public perception of the risk from nuclear power. Using methods employed in anthropology, Steve Barnett analyzes a series of interviews conducted in New York to establish a "Consumer Energy Mindset". Howard Axelrod's concluding chapter in this section predicts some

future issues of interest in the regulatory setting employing a matrix of future issues and their relative importance to public opinion.

The future of the electric utility industry is strongly influenced by its financial environment, and in Section VI a number of trends in financial issues are discussed in the context of the New York utilities. Leonard S. Hyman, Doris A. Kelley, and Richard C. Toole analyze the financial futures of the major New York utilities. Philip C. Kron considers the damaging side effects of a bankruptcy by any of the utilities weakened by problems with the nuclear plants still under construction. In the most detailed chapter of this section Ronald Forbes provides a detailed discussion of the bond issue difficulties in the financing of New York Power Authority.

In treating the institutional and regulatory climate of the electric utility industry, the final section of the book deals with the opinions of former members of regulatory commissions in New York and elsewhere. Richard E. Schuler foresees the emerging competitive climate for utilities causing new changes in regulatory actions in the wake of the recent energy price rise and nuclear power plant moratorium. Charles G. Stalon reports on changes he observed in Illinois with the advent of "open meetings" and the emergence of citizen's utility boards. In this section's concluding chapter, Alfred E. Kahn focuses on the effects of changes in cost accounting and smaller scale generating plant construction on future rate designs.

Recommendation of this volume as a general compendium on the future of electric power in the state of New York, or for any state, must be made with some reservation. The overall concept of the book is marred by the uneven nature of the contributions. Many lack the depth to serve as references for further research. The sections dealing with regulatory change, issues in the financial markets, and the public perceptions of electricity generation are potentially the most fruitful. Although the editors have provided some useful transitional passages, the potential buyer of this book should be aware of the "papers and proceedings" nature of the volume.

Joseph G. Hirschberg
Southern Methodist University

Acknowledgements

All manuscripts submitted to *The Energy Journal* are sent to anonymous referees for screening and review. Without their efforts, the standards of the Journal could not possibly be maintained. Since July 1986 the following referees volunteered their time and talents to *The Energy Journal*. The editors welcome this chance to thank them publicly for their time and dedication.

Catherine Abbott	Enron Corporation
Scott Atkinson	University of Georgia
Robert Ayres	IIASA
Connie Barlow	Tussing & Associates
Martin Baughman	University of Texas/Austin
Sanford V. Berg	University of Florida
Ernest R. Berndt	Mass. Institute of Technology
Peter Bird	Uranium Institute, London
Charles Blitzer	Mass. Institute of Technology
Robert Boaz	Midland Doherty Ltd.
Douglas Bohi	Resources for the Future
Richard Bower	Dartmouth University
Gale Boyd	Argonne National Laboratory
Paul Bradley	University of British Columbia
Stephen Braithwait	EPRI
Chaim Braun	EPRI
Nathan Buras	University of Arizona
Thorstein Bye	Central Bureau of Statistics, Norway
Michael Canes	American Petroleum Institute
Phillip Cartwright	University of Georgia
Cliff Chamberlain	University of Texas/Arlington
H. P. Chao	EPRI
Duane Chapman	Cornell University
Wen Chern	University of Maryland
Michael Crew	Rutgers University
Carol Dahl	Louisiana State University
Al Danielson	University of Georgia
Robert Deacon	University of California/Santa Barbara
Louis DeMouy	US Department of Energy
Jeff Dubin	California Inst. of Technology
Joy Dunkerley	Washington DC
Michael Einhorn	Rutgers University
Ahmad Faruqui	EPRI
Y. H. Farzin	World Bank
Fereidoon Fesharaki	East-West Center
Darrell Freeman	QED Research
Christopher Garbacz	University of Missouri/Rolla
Clark Gellings	EPRI

Ole Gjolberg	FMD, Oslo
John Gonzales	University of California/Santa Clara
Richard L. Gordon	Pennsylvania State University
James Griffin	Texas A&M University
Pradeep Gupta	EPRI
Phil Hanser	EPRI
Stephen Hanson	Western Washington University
Jerry Hausman	Mass. Institute of Technology
Ray Hartman	Boston University
David Henderson	Naval Postgraduate School
J. Stephen Henderson	Ohio State University
William Hermann	Chevron Corp.
Lawrence Hill	Oak Ridge National Laboratory
Joseph Hirschberg	Southern Methodist University
Eric Hirst	Oak Ridge National Laboratory
Irving Hoch	University of Texas/Dallas
Richard Hosier	University of Pennsylvania
Glenn Hubbard	Northwestern University
David Huettner	University of Oklahoma
Hilliard Huntington	Stanford University
Henry Jacoby	Mass. Institute of Technology
Edward Jesse	University of Wisconsin
William Johnson	Jofree Corp.
Paul Joskow	Mass. Institute of Technology
Edward Kahn	University of California/Berkeley
J. Daniel Khazoom	San Jose State University/Berkeley
Richard Kilgore	W.J. Levy Consultants
Charles Kolstad	University of Illinois
Edward Krapels	Energy Security Analysis, Inc.
Jeffrey Krautkramer	Washington State University
Stanford Levin	Southern Illinois University
Kenneth Linder	ICF, Inc.
Milton Lipton	W.J. Levy Consultants
Charles Macal	Argonne National Laboratory
Alan Manne	Stanford University
Robert Mansell	University of Calgary
Jaime Marquez	Federal Reserve Bank
Kenichi Matsui	Institute of Energy Economics, Tokyo
Eugene McCarthy	World Bank
Robert McCrae	University of Alberta
D. Mirza	Loyola University of Chicago
Carlisle Moody	College of William and Mary
William E. Morgan	University of Wyoming
Mohan Munasinghe	World Bank
Knut Mork	Vanderbilt University
Michael Mueller	Clarkson University
Abbas Naini	Energy Resources Conservation Board/Calgary
Dale Nesbitt	Decision Focus International
Richard Newcombe	University of Arizona
David Nissen	Exxon
Peter Odell	Erasmus University, Rotterdam

Deborah Ott	American Petroleum Institute
James Paddock	Tufts University
Francisco Parra	Energy Economics Research, Ltd.
Stephen Peck	EPRI
Henk Peer	Open University, Heerlen
William Peirce	Case Western Reserve University
Harlan Platt	Northeastern University
Charles Phelps	University of Rochester
William Ramsay	Washington, DC
Ali Reza	EPRI
Michael Rieber	University of Arizona
Libby Rittenberg	Lafayette College
Adam Rose	West Virginia University
Marshall Rose	US Geological Service
John Rowse	University of Calgary
Arun Sanghvi	Meta Systems
Jayant Sathaye	University of California
Kenneth Sautler	Michigan Electricity Option Study
Harry Saunders	Strategic Decisions Group
John Schatzberg	University of Arizona
Lee Schipper	University of California
Ben Schlesinger	Schlesinger & Associates
Gunther Schramm	World Bank
Fereidoon P. Sioshansi	Southern California Edison
James Smith	University of Houston
William Stevens	EPRI
Thomas Stevens	University of Massachusetts/Amherst
Richard Stevic	Cincinnati Gas & Electric
John Surrey	University of Sussex
Carl V. Swanson	Swanson Energy Group, Inc.
David Swanson	Bowling Green State University
James Sweeney	Stanford University
Michael Telson	U.S. House Budget Committee
Michael Toman	Resources for the Future
Kenneth Train	Cambridge Systematics
John Trepani	University of Texas/Arlington
Arlon Tussing	Tussing & Associates
Robin J. Walther	Southern California Edison
Steve Wan	EPRI
Campbell Watkins	Datametries Ltd.
Thomas Wilson	East-West Center
David Weimar	University of Rochester
Robert Weiner	ICF Inc.
John Weyant	Stanford University
C. K. Woo	Sausalito, CA
David Wood	Mass. Institute of Technology
Michael Yokell	Energy and Resource Consultants
Martin Zimmerman	University of Michigan

Volume 8 Index

AUTHORS

- ADEGBULUGBE, ANTHONY O., *see* DAYO, FELIX B.
- ARAB, A. T.: *see* METWALLY, M. M.
- BANKS, FERDINAND E.: The Reserve-Production Ratio, **2**, 147-151
- BECK, KONSTANTIN, *see* ZWEIFEL, PETER.
- BERRY, KEITH; AND LOUDENSLAGER, SAMUEL: The Impact of Nuclear Power Plant Construction Activity on the Electric Utility Industry's Cost of Capital, **2**, 63-75.
- BERNARD, JEAN-THOMAS; AND CAUCHON, PIERRE: Thermal and Economic Measures of Energy Use: Differences and Implications, **2**, 125-135.
- BERNSTEIN, MARK ALLEN: Book Review, "Criteria for Energy Pricing Policy" (Corazon Morales Siddayao, ed.), **4**, 91-92.
- BIRD, PETER J. W. N., Futures Trading and the European Oil Market, **3**, 149-155.
- BOLD, FREDERICK C., Responses to Energy Efficiency Regulations, **2**, 111-123.
- BOYD, G.; McDONALD, J. F.; ROSS, M.; AND HANSON, D. A.: Separating the Changing Composition of U.S. Manufacturing Production from Energy Efficiency Improvements: A Divisia Index Approach, **2**, 77-96.
- BRENKERT, A. L., *see* REILLY, J.M.
- BROADMAN, HARRY, G., Competition in Natural Gas Pipeline Wellhead Supply Purchases, **3**, 113-134.
- CAPONE, CHARLES, A., JR.; AND ELZINGA, KENNETH G.: Technology and Energy Use Before, During, and After OPEC: The U.S. Portland Cement Industry, **3**, 93-112.
- CAUCHON, PIERRE, *see* BERNARD JEAN-THOMAS.
- DAYO, FELIX B.; AND ADEGBULUGBE, ANTHONY O.: Oil Demand Elasticities in Nigeria, **2**, 31-41.
- DENNERLEIN, RUDOLF, K.-H.: Residential Demand for Electrical Appliances and Electricity in the Federal Republic of Germany, **1**, 69-86.
- DUNKERLEY, JOY; AND HOCH, IRVING.: Energy for Transport in Developing Countries, **3**, 57-72.
- EDMONDS, J. A., *see* REILLY, J. M.
- EINHORN, MICHAEL A.: Appliance Depreciation and the Demand for Energy, **1**, 147-149.
- ELZINGA, KENNETH G., *see* CAPONE, CHARLES A., JR.
- ERICKSON, EDWARD W.: Book Review, "Energy: Markets and Regulation: Essays in Honor of M. A. Adelman" (Richard L. Gordon, Henry D. Jacoby, and Martin B. Zimmerman, eds.), **2**, 171-174.
- GARDNER, R. H., *see* REILLY, J. M.
- GOPALAKRISHNAN, CHENNAT: Energy-Nonenergy Input Substitution in Western U.S. Agriculture: Some Findings, **1**, 133-146.
- GORDON, RICHARD L.: Book Review, "An Analysis of Japanese Coking Coal Procurement Policies: The Canadian and Australian Experience" (David L. Anderson); "United States Coal Goes Abroad: A Social Action Perspective on Interorganizational

Note: Boldface numbers refer to issue numbers: **1** (January 1987); **2** (April 1987); **3** (July 1987); **4** (October 1987).

- Networks" (Kathryn S. Rogers), 3, 163-164.
- GORDON, RICHARD L.: Book Review, "Australian Energy Policies in the '80s" (C. D. Trengrove, ed.); "Politics and Nuclear Power: Energy Policy in Western Europe" (Michael T. Hatch).
- GORDON, RICHARD L.: Book Review, "OPEC, Its Member States, and the World Energy Market" (John Evans); "OPEC: The Failing Giant" (Mohammed E. Ahrari); "Publishing Opportunities for Energy Research" (Robert A. Scull), 3, 160-161.
- GORDON, RICHARD L.: Book Review, "Ressources Naturelles et Théorie Économique" (Géraud Gaudet and Pierre Lasserre, eds.), 2, 176-177.
- GORDON, RICHARD L.: Book Review, "Revolution in the World Petroleum Market" (Mary Ann Tétreault); "Strategic Implications of the New Oil Reality" (Shemuel Meir); "Oil Products—Studies of Price Relationships (Ole Gjølberg and Inger-Lise Eilersen); "Spot Oil, Netbacks, and Petroleum Futures, Special Report 1063" (Fereidun Fesharaki and Hossein Razavi), 2, 169-171.
- GORDON, RICHARD L.: Book Review, "Struktur und Wandel der Energiewirtschaft in der Bundesrepublik Deutschland" (Hans-Wilhelm Schiffer), 2, 169.
- HANSON, D. A., *see* BOYD, G.
- HENDERSON, DAVID R.: The IEA Oil-Sharing Plan: Who Shares with Whom?, 4, 23-31.
- HIRSCHBERG, JOSEPH G.: Book Review, "The Future of Electrical Energy: A Regional Perspective of an Industry in Transition" (Sidney Saltzman and Richard E. Schuler, eds.), 4, 92-94.
- HIRST, ERIC: Energy and Economic Effects of Utility Financial Incentive Programs: The BPA Residential Weatherization Program, 2, 97-110.
- HOCH, IRVING, *see* DUNKERLEY, JOY.
- JOSKOW, PAUL L.: Productivity Growth and Technical Change in the Generation of Electricity, 1, 17-38.
- KHAZZOOM, J. DANIEL: The Demand for Insulation: A Study in the Household Demand for Conservation, 3, 73-92.
- KHAZZOOM, J. DANIEL: Energy Saving Resulting from the Adoption of More Efficient Appliances, 4, 85-89.
- KHER, LOV KUMAR; SIOSHANSI, FER-EIDOOON P.; AND SOROOSHIAN, SOROOSH: Energy Demand Modeling with Noisy Input-Output Variables, 4, 33-50.
- KRAPELS, EDWARD N.: Implementing Efficient Petroleum Product Pricing Programs in Developing Countries, 1, 39-52.
- KROL, ROBERT; AND SVORNY, SHIRLEY: A Time-Series Analysis of U.S. Petroleum Industry Inventory Behavior, 4, 65-78.
- LEVINE, MARK D., *see* RUDERMAN, HENRY.
- LOUDENSLAGER, SAMUEL, *see* BERRY, KEITH.
- LOWRY, MARK NEWTON: Book Review, "Oil Price Shocks, Market Response, and Contingency Planning" (George Horwich and David L. Weimer), 3, 157-158.
- LUCKE, ROBERT; AND TODER, ERIC: Assessing the U.S. Federal Tax Burden on Oil and Gas Extraction, 4, 51-64.
- MACDONALD, J. F., *see* BOYD, G.
- MANUEL, ERNEST H., JR., *see* RITTENBERG, LIBBY.
- MARINO, ANTHONY M.; AND SICILIAN, JOSEPH: Direct Investment in Conservation Measures by a Public Utility, 2, 137-146.
- MCMAHON, JAMES E., *see* RUDERMAN, HENRY.
- MCNAUGHTON, ROD B.: Book Review, "The Transportation of Soviet Energy Resources" (Matthew J. Sagers and Milford B. Green), 3, 164-165.

- METWALLY, M. M.: Price Elasticity of Demand for Oil and the Terms of Trade of the OPEC Countries, **1**, 53-67.
- MORK, KNUT ANTON: Some General-Equilibrium Considerations for the Analysis of Oil Import Restrictions, **4**, 79-94.
- NELSON, RANDY: Alternative Technological Indices and Factor Demands in the Electric Power Industry, **3**, 135-147.
- NYSTAD, ARILD N., *see* STENSLAND, GUNNAR.
- PARHIZGARI, ALI M.: Optimum Depletion of Oil Resources in a Developing Country, **3**, 31-56.
- PÉREZ-LÓPEZ, JORGE F.: Cuban Oil Reexports: Significance and Prospects, **1**, 1-16.
- PICKENS, T. BOONE: IAEE 1986 Annual Conference: Debate Between T. Boone Pickens and Lester C. Thurow, **2**, 1-17.
- RAVID, S. ABRAHAM: On Marginal Cost Pricing When Consumers Can Also Produce, **4**, 17-22.
- REILLY, J. M.; EDMONDS, J. A.; GARDNER, R. H.; AND BRENKERT, A. L.: Uncertainty Analysis of the IEA/ORAU CO₂ Emissions Model, **3**, 1-29.
- REISTER, DAVID B.: Validating Allocation Functions in Energy Models: A Comment, **1**, 151-152.
- RITTENBERG, LIBBY; AND MANUEL, ERNEST H., JR.: Sources of Labor Productivity Variation in the U.S. Surface Coal Mining Industry, 1960-1976, **1**, 87-100.
- ROSS, M.; *see* BOYD, G.
- ROWSE, JOHN: Canadian Natural Gas Exports, Domestic Gas Prices, and Future Gas Supply Costs, **2**, 43-62.
- RUDERMAN, HENRY; LEVINE, MARK D.; AND MCMAHON, JAMES E.: The Behavior of the Market for Energy Efficiency in Residential Appliances Including Heating and Cooling Equipment, **1**, 101-124.
- SIOSHANSI, FEREDOON P., *see* KHER, LOV KUMAR.
- SMITH, V. KERRY; AND HILL, LAWRENCE, J.: On Straw Men, Free Parameters, and Validating Allocation Functions: A Reply to Reister, **1**, 153-156.
- SOLO, ROBERT A.: The Great Plains Gasification Project: The Problem of Juridical/Administrative Incompatibility, **2**, 153-168.
- SOROOSHIAN, SOROOSH, *see* KHER, LOV KUMAR.
- STENSLAND, GUNNAR; AND NYSTAD, ARILD N.: Optimal Choice of R&D Strategy for Enhanced Recovery from Petroleum Reservoirs, **1**, 125-132.
- SVORNY, SHIRLEY, *see* KROL, ROBERT.
- THOMPSON, WILLIAM F.: Book Review: "Electric Power: Deregulation and the Public Interest" (John C. Moorhouse, ed.), **3**, 161-162.
- THUROW, LESTER C.: IAEE 1986 Annual Conference: Debate Between T. Boone Pickens and Lester C. Thurow, **2**, 1-17.
- TODER, ERIC, *see* LUCKE, ROBERT.
- TRAIN, KENNETH E.: Book Review, "An Econometric Model Integrating Conservation Measures in the Residential Demand for Energy" (J. Daniel Khazzoom), **3**, 159-160.
- WOOLF, ARTHUR G.: The Residential Adoption of Electricity in Early Twentieth-Century America, **1**, 19-30.
- ZWEIFEL, PETER; AND BECK, KONSTANTIN: Utilities and Cogeneration: Some Regulatory Problems, **4**, 1-15.

TITLES

Alternative Technological Indices and Factor Demands in the Electric Power Industry, by Randy Nelson, **3**, 135-147

"An Analysis of Japanese Coking Coal Procurement Policies: The Canadian

- and Australian Experience" (David L. Anderson), book review by Richard L. Gordon, **3**, 163-164
- Appliance Depreciation and the Demand for Energy, by Michael A. Einhorn, **1**, 147-149
- Assessing the U.S. Federal Tax Burden on Oil and Gas Extraction, by Robert Lucke and Eric Toder, **4**, 51-64
- "Australian Energy Policies in the '80s" (C. D. Trengrove, ed.), book review by Richard L. Gordon, **2**, 174-175
- The Behavior of the Market for Energy Efficiency in Residential Appliances Including Heating and Cooling Equipment, by Henry Ruderman, Mark D. Levine, and James E. McMahon, **1**, 101-124
- Canadian Natural Gas Exports, Domestic Gas Prices, and Future Gas Supply Costs, by John Rowse, **2**, 43-62
- "Criteria for Energy Pricing Policy" (Corazon Morales Siddayao, ed.), book review by Mark Allen Bernstein, **4**, 91-92
- Competition in Natural Gas Pipeline Wellhead Supply Purchases, by Harry G. Broadman, **3**, 113-134
- Cuban Oil Reexports: Significance and Prospects, by Jorge F. Pérez-López, **1**, 1-16
- The Demand for Insulation—A Study in the Household Demand for Conservation, by J. Daniel Khazzoom, **3**, 73-92
- Direct Investment in Conservation Measures by a Public Utility, by Anthony M. Marino and Joseph Sicilian, **2**, 137-146
- "An Econometric Model Integrating Conservation Measures in the Residential Demand for Energy" (J. Daniel Khazzoom), book review by Kenneth E. Train, **3**, 159-160
- "Electric Power: Deregulation and the Public Interest" (John C. Moorhouse, ed.), book review by William F. Thompson, **3**, 161-162
- Energy and Economic Effects of Utility Financial Incentive Programs: The BPA Residential Weatherization Program, by Eric Hirst, **2**, 97-110
- Energy Demand Modeling with Noisy Input-Output Variables, by Lov Kumar Kher, Fereidoon P. Sioshansi, and Soroosh Sorooshian, **4**, 33-50
- Energy for Transport in Developing Countries, by Joy Dunkerley and Irving Hoch, **3**, 57-72
- "Energy: Markets and Regulation: Essays in Honor of M. A. Adelman" (Richard L. Gordon, Henry D. Jacoby, and Martin B. Zimmerman, eds.), book review by Edward W. Erickson, **2**, 171-174
- Energy-Nonenergy Input Substitution in Western U.S. Agriculture: Some Findings, by Chennat Gopalakrishnan, **1**, 133-146
- Energy Saving Resulting from the Adoption of More Efficient Appliances, by J. Daniel Khazzoom, **4**, 85-89
- "The Future of Electrical Energy: A Regional Perspective of an Industry in Transition" (Sidney Saltzman and Richard E. Shuler, eds.), book review by Joseph G. Hirschberg, **4**, 92-94
- Futures Trading and the European Oil Market, by Peter J. W. N. Bird, **3**, 149-155
- The Great Plains Gasification Project: The Problem of Juridical/Administrative Incompatibility, by Robert A. Solo, **2**, 153-168
- IAEE 1986 Annual Conference: Debate Between T. Boone Pickens and Lester C. Thurow, **2**, 1-17
- The IEA Oil-Sharing Plan: Who Shares with Whom?, by David R. Henderson, **4**, 23-31
- The Impact of Nuclear Power Plant Construction Activity on the Electric Utility Industry's Cost of Capital, by Keith Berry and Samuel Loudenslager, **2**, 63-75

- Implementing Efficient Petroleum Product Pricing Programs in Developing Countries, by Edward N. Krapels, **1**, 39–52
- Oil Demand Elasticities in Nigeria, by Felix B. Dayo and Anthony O. Adegbulugbe, **2**, 31–41
- “Oil Price Shocks, Market Response, and Contingency Planning” (George Horich and David L. Weimer), book review by Mark Newton Lowry, **3**, 157–158
- “Oil Products—Studies of Price Relationships” (Ole Gjølberg and Inger-Lise Eilersen), book review by Richard L. Gordon, **2**, 169–171
- On Marginal Cost Pricing When Consumers Can Also Produce, by S. Abraham Ravid, **4**, 17–22
- On Straw Men, Free Parameters, and Validating Allocation Functions: A Reply to Reister, by V. Kerry Smith and Lawrence J. Hill, **1**, 153–156
- “OPEC: The Failing Giant” (Mohammed E. Ahrari), book review by Richard L. Gordon, **3**, 160–161
- “OPEC, Its Member States, and the World Energy Market” (John Evans), book review by Richard L. Gordon, **3**, 160–161
- Optimal Choice of R&D Strategy for Enhanced Recovery from Petroleum Reservoirs, by Gunnar Stensland and Arild N. Nystad, **1**, 125–132
- Optimum Depletion of Oil Resources in a Developing Country, by Ali M. Parhizgari, **3**, 31–56
- “Politics and Nuclear Power: Energy Policy in Western Europe” (Michael T. Hatch), book review by Richard L. Gordon, **2**, 174–175
- Price Elasticity of Demand for Oil and the Terms of Trade of the OPEC Countries, by M. M. Metwally and A. T. Arab, **1**, 53–67
- Productivity Growth and Technical Change in the Generation of Electricity, by Paul L. Joskow, **1**, 17–38
- “Publishing Opportunities for Energy Research” (Roberta A. Scull), book review by Richard L. Gordon, **3**, 160–161
- The Reserve-Production Ratio, by Ferdinand E. Banks, **2**, 147–151
- The Residential Adoption of Electricity in Early Twentieth-Century America, by Arthur G. Woolf, **2**, 19–30
- Residential Demand for Electrical Appliances and Electricity in the Federal Republic of Germany, by Ruldolf, K.-H. Dennerlein, **1**, 69–86
- Responses to Energy Efficiency Regulations, by Frederick C. Bold, **2**, 111–123
- “Ressources Naturelles et Théorie Économique” (Gérard Gaudet and Pierre Lasserre, eds.), book review by Richard L. Gordon, **2**, 176–177
- “Revolution in the World Petroleum Market” (Mary Ann Tetreault), book review by Richard L. Gordon, **2**, 169–171
- Separating the Changing Composition of U.S. Manufacturing Production from Energy Efficiency Improvements: A Divisia Index Approach, by G. Boyd, J. F. McDonald, M. Ross, and D. A. Hanson, **2**, 77–96
- Some General-Equilibrium Considerations for the Analysis of Oil Import Restrictions, by Knut Anton Mork, **4**, 79–94
- Sources of Labor Productivity Variation in the U.S. Surface Coal Mining Industry, 1960–1967, by Libby Rittenberg and Ernest H. Manuel, Jr., **1**, 87–100
- “Spot-Oil, Netbacks, and Petroleum Futures, Special Report 1063” (Fereidun Fesharaki and Hossein Razavi), book review by Richard L. Gordon, **2**, 169–171
- “Strategic Implications of the New Oil Reality” (Shemuel Meir), book review by Richard L. Gordon, **2**, 169–171

- "Struktur und Wandel der Energiewirtschaft in der Bundesrepublik Deutschland" (Hans-Wilhelm Schiffer), book review by Richard L. Gordon, **2**, 169
- Technology and Energy Use Before, During, and After OPEC: The U.S. Portland Cement Industry, by Charles A. Capone, Jr. and Kenneth G. Elzinga, **3**, 93-112
- Thermal and Economic Measures of Energy Use: Differences and Implications, by Jean-Thomas Bernard and Pierre Cauchon, **2**, 125-135
- A Time-Series Analysis of U.S. Petroleum Industry Inventory Behavior, by Robert Krol and Shirley Svorny, **4**, 65-78
- "The Transportation of Soviet Energy Resources" (Matthew J. Sagers and Milford B. Green), book review by Rod B. McNaughton, **3**, 164-165
- Uncertainty Analysis of the AEA/ORAU C02 Emissions Model, by J. M. Reilly, J. A. Edmonds, R. H. Gardner, and A. L. Brenkert, **3**, 1-29
- "United States Coal Goes Abroad: A Social Action Perspective on Inter-organizational Networks" (Kathryn S. Rogers), book review by Richard L. Gordon, **3**, 163-164
- Utilities and Cogeneration: Some Regulatory Problems, by Peter Zweifel and Konstantin Beck, **4**, 1-15
- Validating Allocation Functions in Energy Models: A Comment, by David B. Reister, **1**, 151-152