

BOOK REVIEW

MARKETS FOR POWER: AN ANALYSIS OF ELECTRICAL UTILITY DEREGULATION. By Paul L. Joskow and Richard Schmalensee. The MIT Press, 1983. Pp. xi, 269. Price \$19.95.

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*Markets for Power*¹ will be gravely disappointing to a good many economists and lawyers. The book is a study by two respected scholars—scholars who know well the social virtues of free markets with prices equal to marginal cost—who conclude that full deregulation of the electric power industry would be a mistake. Contrary to many advocates of deregulation, Paul Joskow and Richard Schmalensee find numerous reasons why much of the industry must be built and operated in an integral fashion. Common ownership of related functional units, pooling, and other forms of sometimes exclusive long-term contracting, all constrained by an overlay of regulation, are the structural ingredients for achieving an integrally efficient system.

To argue the need for governmental regulation of market activities is, of course, neither heretical nor seditious. Still, the recent fervor for deregulation has made it fashionable and, in some quarters, virtually *de rigueur* to point to the failures of regulation and the virtues of unfettered competition. When one compares regulation in its imperfect real world forms with perfect competition as it is found in textbooks, the former rarely wins. When, however, such regulation is compared with imperfect, real world competition, the victory for free markets is less certainly ordained. The great value of *Markets for Power* comes from the choice by Joskow and Schmalensee to adopt the latter analytic approach.

The organization of the book is quite straightforward. The first seven chapters, which comprise Part I, provide a background description of the electric power industry. This Part details current regulatory arrangements, the technologies of electrical power systems, and the pre-

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¹ P. JOSKOW & R. SCHMALENSSEE, *MARKETS FOR POWER: AN ANALYSIS OF ELECTRICAL UTILITY DEREGULATION* (1983).

sent structural and organizational characteristics of electricity generation, transmission, and distribution. Little is new here, save that the authors took the time to find out the facts. At the same time, they describe the facts in a way that makes nearly inevitable their conclusions concerning transactions costs and the potential for regulatory reform.

Chapter three is a brief review—really too brief a review for readers not already familiar with the literature—of two areas of recent theoretical work. The first of these reviewed is “transactions cost economics,”² with the chapter emphasizing the work of Oliver Williamson. The second area concerns multi-product natural monopolies.³ While nearly all economists agree that the existence of a natural monopoly causes market failure, the recognition that markets may fail due to transactions cost considerations is far less ubiquitous.

Chapter seven treats “Economic Efficiency: Dimensions and Issues,” but not in terms restricted to theoretical generalities. Short-run and long-run issues of efficiency are explored in the context of the present structural and regulatory industry schema. The authors’ views on the industry’s shortcomings are based on what must be seen as an empirical (and, happily, non-econometric) evaluation. Among the inefficiencies in need of correction are power generating plants of suboptimal scale, failures to exploit the “pooling” economies that result from sharing of facilities, and the setting of rates on bases other than the standard of marginal cost.

Part II, consisting of chapters eight through fourteen, begins by defining four possible scenarios for deregulation.⁴ Chapters ten, eleven

² Transactions cost economics analyzes the costs associated with market versus nonmarket (i.e., intrafirm) modes for the allocation of resources. For an excellent exposition and summary of the theory, see Williamson, *Transaction-Cost Economics: The Governance of Contractual Relations*, 22 J. LAW & ECON. 233 (1979) and see generally O. WILLIAMSON, *MARKETS AND HIERARCHIES* (1975).

³ Multiproduct natural monopoly occurs when a single firm produces a given set of outputs at lower costs than would be possible if several firms were utilized to produce the same set of outputs. Without some form of regulatory intervention, this condition may lead to market failure in the form of higher prices and lower output than would be socially ideal. See generally W. BAUMOL, J. PANZER, & R. WILLIG, *CONTESTABLE MARKETS AND THE THEORY OF INDUSTRIAL STRUCTURES* (1982).

⁴ See P. JOSKOW & R. SCHMALENSEE, *supra* note 1, at 93-107. The scenarios are (1) elimination of all price and entry regulation with no mandated structural changes; (2) deregulation of wholesale power sales with open power pooling and with continued regulation of distribution and transmission natural monopolies; (3) divestiture of distribution natural monopolies from presently integrated firms and continued regulation of distribution; integration of generation and transmission functions, with mergers encouraged to gain minimal size for scale economies and gains from coordination and pooling; and (4) complete vertical disintegration and deregulation of wholesale power sales; regional power pooling and creation of transmission entities for coordination and planning; reorganized generating facilities to achieve scale economies.

and twelve—really the heart of the analysis—investigate the complications and frailties of the contractual relationships that each scenario would require. As seen by the authors, new types of complex long-term contracts will necessarily emerge under any substantial program of deregulation, and these contracts would necessarily have some characteristics in common with public regulation of price and entry.⁵ Limited use of short-term contracts and spot markets would also arise as overlays on the long-term contractual foundation.⁶

Joskow and Schmalensee find “little support for the assumption that all relevant markets would be competitive under deregulation.”⁷ They assert that the “[l]ong-run prospects for market forces to reduce existing levels of concentration seem dim”⁸ and conclude that “[i]t is thus unclear that competition can be relied on to produce efficient outcomes in the absence of regulation.”⁹

In the end Joskow and Schmalensee do not despair of all regulatory reform possibilities. In particular, they find that greater reliance on free market contracting at the wholesale power level *may* be possible, and this *might* be facilitated by further divestiture of wholesale producers and distributors of electricity. This conclusion, nonetheless, is presented in a highly tentative voice. As the authors emphasize, long-term contracting and other cooperative ventures would have to emerge to replace the presently existing ownership integration. Additional problems might arise in the transition from the present regulatory arrangements to the alternative deregulation scenarios.¹⁰ Whether integration by contracting and cooperative ventures would be more or less efficient than integration by ownership is clearly debatable.¹¹

What sort of reforms can more unequivocally be advocated? Well, one possibility is rate reform at the retail level, where regulation of

⁵ See *id.* at 126-27.

⁶ *Id.* at 151-52.

⁷ *Id.* at 198.

⁸ *Id.*

⁹ *Id.*

¹⁰ See *id.* at 199-209.

¹¹ A provocative analysis of the circumstances in which vertical integration may be welfare dominant over ostensibly competitive contracting can be found in Klein, Crawford & Alchian, *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, 21 J. LAW & ECON. 297 (1978). Demonstrations in the mainstream of economics of the welfare superiority of market-mediated transactions depend, among other things, on the sufficiency of price information as the basis for transactions. That is, in circumstances where buyers' knowledge of sellers' offering prices and sellers' knowledge of buyers' demand prices are the *only* relevant transactional information for trading, competitive markets can be shown to be Pareto optimal. When information other than price is relevant to either or both buyers and sellers, this may no longer be true.

natural monopoly remains a necessity. This proposal is not revolutionary; consistent with fundamental principles of microeconomics, prices charged to the many classes of consumers should more nearly reflect the marginal social costs of the electricity they consume.

That Joskow and Schmalensee fail to propose radical reforms is not to their discredit. Quite the opposite is true. Structural separation of a series of necessarily interrelated economic activities, without replacement with alternative governance mechanisms, is often impossible. Sometimes markets govern themselves well and sometimes they do not. In the electric power industry, markets are likely to govern well only in very limited areas, and it is important that Joskow and Schmalensee have told us that this is the case. One can but wonder whether parallel analyses of other old-fashioned regulatory activities might temper somewhat the current zeal for deregulation.¹² Perhaps two and one-half cheers for deregulation are more than enough!

¹² This reviewer wonders too whether there may not be such market pressure for rapid publication of works on deregulation that old-fashioned editing has disappeared. *MARKETS FOR POWER*, unfortunately, contains many stylistic shortcomings and typographical errors.