The Nature of the Controversy

THE TAKINGS CLAUSE of the Fifth Amendment commands: “Nor shall private property be taken for public use, without just compensation.”¹ The sweeping deregulation of public utilities being proposed and implemented at the state and federal levels promises to bring the benefits of competition to markets for electric power and telecommunications. Those benefits include improvements in operating efficiencies, competitive prices, efficient investment decisions, technological innovation, and product variety. The benefits of competition, however, do not include forced transfers of income from utility shareholders to their customers and competitors as a result of asymmetries in regulation. Asymmetric regulation can serve only to impede competition and impair the financial health of public utilities. As regulators dismantle barriers to entry and other regulatory restrictions, they must honor their past commitments and avoid actions that threaten to confiscate or destroy the property of utility investors on an unprecedented scale.

In this book we examine regulatory commitments and the potential for the deregulation of regulated network industries to cause massive takings to occur. We connect that analysis to what has, until now, been regarded as principally a technical problem in economic theory and regulatory practice: the design of efficient access pricing. We consider the selection of access prices such that, in the new competitive environment, a public utility will have an opportunity to achieve for its investors the expected earnings associated with the former regulatory regime.

1. U.S. Const. amend. V.
2 Deregulatory Takings and the Regulatory Contract

under which the utility made (and regulators approved as prudent) enormous investments in long-lived facilities and other specialized assets to serve its customers. We weave together here the separate threads of access pricing theory, takings jurisprudence, and the transaction costs analysis of voluntary exchange. The resulting fabric will help to inform an emerging body of analysis in law and economics that one might term the jurisprudence of network industries.

THE TAKINGS LANDSCAPE

The prototypical takings case involves a physical invasion of land. It arises, for example, when the state needs a piece of private land to build a highway and commences a condemnation proceeding that results in the payment of compensation. The dramatic growth of the regulatory state, however, produced another class of takings case—the regulatory taking—in which the owner of private property is not forced to sell it to the government pursuant to a condemnation action, but rather is allowed to keep his property subject to significant constraints concerning its use that are issued in the name of the state’s police power.2 In 1922 Justice Holmes planted the seed for that legal theory when he observed in Pennsylvania Coal Co. v. Mahon that a state law making it “commercially impracticable to mine certain coal” on one’s property had “very nearly the same effect for constitutional purposes as appropriating or destroying it.”3 By 1992 the Supreme Court considered in Lucas v. South Carolina Coastal Council whether environmental regulations that prevent a landowner from building homes on his beachfront parcel so diminished the value of the property as to constitute an uncompensated confiscation.4

The prohibition against uncompensated takings descended from the Magna Charta.5 Not surprisingly, concern over regulatory takings is

5. Justice William Strong wrote in Northern Transp. Co. of Ohio v. City of Chicago, 99 U.S. 635, 642 (1879), that it was the “view of Magna Charta and the restriction to be found in the Constitution of every State, that private property shall not be taken for public use without just compensation being made.” See William B. Stoebuck, A General Theory of Eminent Domain, 47 Wash. L. Rev. 553, 563 (1972). On the philosophical
therefore a legal phenomenon not unique to the United States, but rather one that is manifest in other English-speaking nations that impose limitations on the state’s ability to make uncompensated confiscations of property.\(^6\) Moreover, the significance of takings cases involving factual situations other than the physical invasion of property is certain to grow. For the time being, the Supreme Court punctuates its takings cases with the quaint reminder from its 1978 decision in *Penn Central Transportation Co. v. New York City*, that “[a] ‘taking’ may more readily be found when the interference with property can be characterized as a physical invasion by the government . . . than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good.”\(^7\) The Court will surely let go of that security blanket before long. As William Fischel has observed, “legal ‘property’ is not a clod of earth but a bundle of legal entitlements.”\(^8\) As value in the economy arises to a greater relative extent from intellectual property and information-based assets than from land, legal analogies to physical invasion of real property will cease to shed light on the controversies at hand.


\(^7\) 438 U.S. 104, 124 (1978) (citation omitted); accord, Lucas, 505 U.S. at 1017.

\(^8\) FISCHEL, supra note 2, at 2.
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REGULATION AND CONTRACT

Courts will soon face a third genre of takings cases that will make the past analysis of regulatory takings seem simplistic by comparison. Regulatory change is precipitating the competitive transformation of network industries served by public utilities long presumed to be natural monopolies and subjected to extensive price regulation. The takings issue arises because those utilities assumed obligations to serve in return for the regulator’s assurance that the utilities would earn a competitive return on invested capital, along with compensation for the full cost of providing service. In that relationship regulators protect the utility’s opportunity to earn a competitive return by controlling entry into the firm’s market, restrict the maximum earnings of the utility through rate setting, and establish service requirements through universal service, carrier of last resort, and other rules. Such an arrangement, known as the regulatory contract, enables the regulators to reconcile their ceilings on the earnings of utilities with the requirement that, in terms of actuarially expected value, prospective investors be offered a competitive rate of return on their investments. The regulator is thus said to have entered into a bargain with the public utility: In return for assuming an obligation to serve and charging not more than “just and reasonable” prices on a nondiscriminatory basis, the utility is guaranteed a franchise protected by entry regulation and income sufficient to recover and to earn a competitive rate of return on its invested capital.

When the state maintains regulatory obligations while simultaneously easing entry restrictions, existing utilities encounter costly competitive disadvantages, known as incumbent burdens. Regulators typically

10. Another name given that arrangement is the regulatory compact. Throughout this book, we treat the regulatory contract and the regulatory compact as synonymous.
require public utilities to provide universal service at a fixed price, regardless of the true cost of service; to act as the carrier of last resort; or to employ production processes mandated by regulators that do not lead to minimization of cost but serve other social objectives, such as use of renewable but more costly fuels. Moreover, even legislation that is popularly viewed as “deregulatory,” such as the federal Telecommunications Act of 1996\(^\text{13}\) and Pennsylvania’s Electricity Generation and Customer Choice and Competition Act of 1996,\(^\text{14}\) has increased incumbent burdens by expanding the definition of universal service. In addition, regulation denies the public utility the pricing flexibility of the entrant and thus places the utility at a competitive disadvantage. New entrants into regulated markets, of course, first target those customers whom regulators require the regulated firm to charge prices exceeding cost so that other customers may be charged prices below cost. Furthermore, deregulatory legislation may allow new entrants to avoid regulations that thwart the use of the least-cost production technology and thus may enable them to be more efficient producers than the incumbent public utility. As a consequence, when the state removes entry regulation, it will jeopardize the financial solvency of the public utility unless it simultaneously allows the utility to “rebalance” its rate structure to eliminate the implicit subsidies and unless all firms in the market either share the costs of incumbent burdens or some third party explicitly reimburses the public utility for those costs.

In reality, however, federal regulatory agencies and state public utilities commissions (PUCs)—which are subject to the Takings Clause through the Due Process Clause of the Fourteenth Amendment\(^\text{15}\)—are allowing entry into regulated network industries before rates are rebalanced and the financing of special-service obligations is accomplished more efficiently and equitably. In the electricity industry, Congress has stimulated entry by passing the Energy Policy Act of 1992,\(^\text{16}\)

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15. U.S. Const. amend. XIV; Chicago, B. & Q. R. Co. v. Chicago, 166 U.S. 226, 239 (1897); Penn Central, 438 U.S. at 122; Nollan v. California Coastal Comm’n, 483 U.S. 825, 827 (1987). In addition, twenty-six states have constitutional provisions that are stronger than the Takings Clause in that they expressly require compensation for private property “damaged” by state action (as opposed to being confiscated). See Fischel, supra note 2, at 87; William B. Stoebuck, The Property Right of Access Versus the Power of Eminent Domain, 47 Tex. L. Rev. 733, 734 (1969).
which amended section 211 of the Federal Power Act\textsuperscript{17} to empower the Federal Energy Regulatory Commission to order vertically integrated electric utilities to deliver competitively generated power over their transmission lines to wholesale customers, a process known as wholesale wheeling.\textsuperscript{18} Meanwhile, regulators in California and other states have announced plans to allow the same type of transmission to retail customers, known as “retail wheeling” of power.\textsuperscript{19}

In local telephony, even before the Telecommunications Act of 1996 a number of states had removed all statutory entry barriers into local exchange service and toll service within a local access and transport area (LATA).\textsuperscript{20} Furthermore, several states had ordered local exchange carriers (LECs) to provide interexchange carriers 1+ dialing parity for intralATA toll calls; customers would then “presubscribe” to such service in the same manner that they presubscribe to AT&T, MCI, or Sprint for long-distance calls that cross LATA boundaries.\textsuperscript{21} Presubscription for intralATA toll services makes entrants more effective providers of such services, but at the same time that policy reduces for the LEC one of its most significant revenue streams making a positive contribution to the firm’s overall profitability. Other proceedings in the United States and abroad require interconnection to the

\textsuperscript{17} 16 U.S.C. § 824 et seq.
LEC’s network or unbundled access to the LEC’s basic service elements, such as switches, customer loops, databases, and network software used to produce “enhanced services” such as call waiting and call forwarding. Early experience from New Zealand and from state proceedings in Ohio and Illinois suggested that such proceedings would be contentious, because the access charge that is ultimately set has the potential to subsidize entry and penalize incumbency, or vice versa. In two 1995 decisions, regulators in California and Washington summarily rejected the argument that a “bill and keep” system of reciprocal compensation between interconnected local telephone companies amounted to a taking of the incumbent’s property because the volume of calls in its direction grossly outnumbered those originating on its system and terminating on the entrant’s.

When the incumbent firm has cast interconnection as a physical


invasion of property, the takings argument has received greater attention. In 1994 the U.S. Court of Appeals for the District of Columbia Circuit overturned a Federal Communications Commission rule—as exceeding the agency’s authority—that ordered unbundling of the local loop and physical or virtual collocation of competitors’ transmission equipment on the premises of the incumbent local exchange carrier. In 1995 the Oregon Supreme Court held that the state public utilities commission violated the Takings Clause of the U.S. Constitution when it ordered collocation on LEC premises of enhanced service providers as part of the commission’s policy on open network architecture. Generally, however, state PUCs have dismissed the possibility that their policies of interconnection or unbundling may violate the Takings Clause. The Telecommunications Act of 1996 includes numerous instances of mandatory unbundling, many of which will surely prompt takings challenges if, as seems inescapable, they entail either physical invasion of facilities or demands from entrants for the incumbent regulated firm to offer such access at uncompensatory prices, whether or not such access is deemed to be a physical invasion.

It is easy to cheer the arrival of competition to industries where it previously has been discouraged or forbidden by law. But the predictable appeal that competition holds for legislators and regulators should not obscure the fact that the transition from regulated monopoly to competition, like the transition from dirty air to clean, is not free. The advent of competition in local telephony and the electric power industry will preclude the recovery, through market-determined prices, of the costs that incumbent burdens entail for public utilities. The potential magnitude of that phenomenon is staggering. Electric utilities alone may face $200 billion or more in “stranded costs” as a result of the growth of independent power producers and the advent of wholesale

26. Bell Atlantic Tel. Cos. v. FCC, 24 F.3d 1441, 1445 (D.C. Cir. 1994) (noting that the FCC’s order of physical collocation “directly implicates the Just Compensation Clause of the Fifth Amendment, under which a ‘permanent physical occupation authorized by government is a taking without regard to the public interests it may serve’”) (quoting Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 426 (1982)).
and retail wheeling. That is a public policy challenge at least as large as the savings and loan cleanup.

Not surprisingly, state and federal regulators are already addressing the problem of stranded cost recovery in the electric power industry. Critical questions in that policy debate include how stranded costs are defined, how they are measured, and what percentage of such costs the utility’s shareholders should bear. Pennsylvania, for example, enacted legislation that took effect in 1997 to ensure full recovery of stranded costs by electric utilities. Some state PUCs, such as California’s, have announced that electric utilities may recover 100 percent of nonmitigable stranded costs through a nonbypassable competition transition charge, although at a reduced rate of return on investment to reflect the reduced degree of risk that utilities supposedly will face in recovering those costs. Other state PUCs have advocated shareholder recovery of a lesser percentage. New Hampshire, for example, has proposed that shareholders of franchised electric utilities bear 50 percent of the burden of stranded costs caused by retail wheeling.

But in local telephony, where substantial competitive entry is likely to occur before 2000, state and federal regulators are only beginning to address the issue of stranded costs. Indeed, at least one state regulator, the California Public Utilities Commission, has refused to consider testimony on the takings question in its proceedings on competition in local telephony until after it has ordered mandatory unbundling by that


31. Proposed Policies Governing Restructuring California’s Electric Services Industry and Reforming Regulation, R.94-04-031, 1.94-01-032 (Cal. Pub. Utils. Comm’n Dec. 20, 1995). Under the California proposal, the rate of return on generation-related stranded costs would be set at the cost of debt for the debt portion, but the return on the equity portion would be set at 10 percent less than the cost of debt. The overall rate of return is estimated to be approximately 7.4 percent.

state’s local exchange carriers. The Federal Communications Commission similarly deferred consideration of such cost recovery issues in its May 1997 order on reform of access charges for interstate calls.

THE SCOPE OF ANALYSIS

In chapter 2 we review the basic economic issues associated with deregulation of the network industries served by public utilities, particularly the telecommunications and electric power industries. In particular, we examine the effect of asymmetric regulations borne by the incumbent utility but not entrants, which we call incumbent burdens. We consider the effects of deregulation and incumbent burdens on stranded costs, and the consequences of mandatory unbundling and open access regulation.

In chapter 3 we examine at length the regulatory quarantine, one of the most significant of incumbent burdens. Under the quarantine an incumbent utility is forbidden to enter one or more competitive markets. We show that the economic rationale for the quarantine theory is unpersuasive in the important case of local exchange telephony.

In chapter 4 we present the economic, historical, and legal case for the existence of the regulatory contract. We first explain the economic rationale for why a regulatory contract must exist between the utility and the municipality (or its successor, the state). Next, we provide historical evidence that such a contract has long been recognized. We then examine the principal elements of the regulatory contract. In light of what our analysis shows, the state cannot credibly assert that it owes no remedy to the utility when the state breaches the regulatory contract while adopting policies that promote competitive entry.

In chapter 5 we examine the utility’s remedy for the regulator’s breach of the regulatory contract, which we show to be the standard remedy for breach of any contract: damages for lost expectations. If a regulator permits entry into a network industry served exclusively by a


34. Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; End User Common Line Charges, First Report and Order, CC Dkt. Nos. 96-262, 94-1, 91-213, 95-72, ¶ 14 (released May 16, 1997).