

Fall 2000

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Recommended Citation

Bob Rowe, *Substance Plus Process- Telecom Regulation Reforms to Protect Consumers, Preserve Universal Service, and Promote Competition*, 71 U. COLO. L. REV. (2000).

Available at: <https://scholar.law.colorado.edu/lawreview/vol71/iss4/4>

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SUBSTANCE PLUS PROCESS—TELECOM REGULATION REFORMS TO PROTECT CONSUMERS, PRESERVE UNIVERSAL SERVICE, AND PROMOTE COMPETITION

BOB ROWE*

INTRODUCTION

"Affected with a public interest."

"The regulatory compact."

"Balancing shareholders' and ratepayers' interests."

"Regulation as a substitute for competition."¹

These are among the phrases that traditionally described economic regulation of networked industries—telecommunications, electricity, natural gas, and water—at both the federal and the state level. Today, however, rapid technological change and heightened competition are changing telecommunications and other utilities, and state regulatory agencies must change with them. Regulatory agencies and staff members in many states, at the federal level, and through cooperative fed-

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1. Economist Joseph Schumpeter focused more on pure theoretical than applied economics, and so discussed regulatory issues relatively little. However, he did contravene the currently popular view in writing that "it is . . . a mistake to base the theory of government regulation of industry on the principle that big business should be made to work as the respective industry would work in perfect competition." JOSEPH A. SCHUMPETER, *CAPITALISM, SOCIALISM, AND DEMOCRACY* 106 (1942), quoted in Johannes M. Bauer, *Market Power, Innovation, and Efficiency in Telecommunications: Schumpeter Reconsidered*, 31 J. ECON. ISSUES 557, 561 (1997).

eralist initiatives are striving to transform the classic forms of regulation to keep pace with these changes.

The classic form of economic regulation, as developed in the United States since the Progressive Era, was the multi-member commission or tribunal, with professional staff, making decisions on the basis of evidentiary records developed through elaborate, data-rich adjudications, known as "contested cases" under most American systems of administrative law.² A somewhat less significant share of work was done through rulemaking, which was also a stylized function, with formal requirements for each step in the process set forth under state Administrative Procedure Acts ("APAs").³ Almost as an afterthought, regulatory agencies also handled a small number of consumer inquiries and complaints. This function was often considered at best tertiary to the real work of adjudication and rulemaking.

Whether this picture ever fully represented the work of state public utility commissions ("PUCs") is open to debate. Clearly, it reflects a substantial portion of economic regulation at least from the 1930s through the 1960s.⁴ Starting generally in the 1960s, however, several factors combined to work major changes in the traditional picture, including a growing consumer movement; pressure by ordinary citizens for increased

2. See generally BERNARD SCHWARTZ, ADMINISTRATIVE LAW 202-04 (2d ed. 1984) (discussing procedural due process, and the elements of contested case proceedings under either the federal Administrative Procedure Act or similar state statutes). Schwartz distinguishes commissions from executive branch departments not on the basis of the legal issues which attach (delegation, procedure, judicial review), but instead based on organization and structure. See *id.* at 17-20. Commissions are independent (removed from the hierarchy of government) and specialized, in contrast to the executive agency head who must use "extensive subdelegation" of actual decisionmaking. See *id.* at 19.

3. See *id.* at 143-96 (discussing rulemaking); see also *id.* at 170-83 (analyzing requirements and complications of formal rulemaking); *id.* at 191-96 (explaining the differences between rulemaking and adjudication).

4. See generally ROBERT KUTTNER, EVERYTHING FOR SALE: THE VIRTUES AND LIMITATIONS OF MARKETS 225-80 (1997) (discussing economic regulation and "regulated competition"). Kuttner describes the first regulatory reform of electric power in the 1930s, which produced significant benefits lasting into the 1970s, when new crises were created by the combination of inflation, the energy crisis, and new technologies. See *id.* at 270-75. Schwartz traces a similar but broader history of government through agency. See SCHWARTZ, *supra* note 2, at 20-27. Schwartz notes that "[a]dministrative law and administrative agencies are as old as American governments themselves. The very first session of the First Congress enacted three statutes conferring important administrative powers." SCHWARTZ, *supra* note 2, at 20 (citation omitted).

participation in and access to government; and increasingly sophisticated forms of economic, legal, and financial analysis. Additionally, technological changes in all industries, specific issues such as claims for recovery of unused electric generation plant capacity, and statutory enactments such as the Public Utility Regulatory Policies Act of 1978 ("PURPA"),⁵ placed significant new burdens on PUCs and other agencies.

In part, PUCs addressed these new demands through further refinement of traditional adjudicatory methods with more process and more data. Adjudications became more elaborate. Testimony was pre-filed in writing. Supporting documentation provided by parties became complex, and was subject to extensive discovery. Hearings were primarily reserved for cross-examination.⁶ Consumer groups became parties,⁷ and were sometimes eligible for compensation for their contributions to a case.⁸

Over time, these incremental changes yielded to a fundamental reappraisal of the missions and methods of economic regulation. One of the earliest, most comprehensive and most thoughtful critiques of the developing regulatory practices in the 1970s and 1980s came from then-professor Stephen Breyer, and was stimulated by his work on airline deregulation for the Senate Commerce Committee.⁹ Breyer summarized and criticized dominant justifications for regulation,¹⁰ including control of monopoly power and "excess profits"; accounting for externalities;¹¹ offsetting information deficiencies; and the "empty

5. 16 U.S.C. §§ 2601–2645 (1994).

6. Judge Thomas Penfield Jackson's innovative management of the Microsoft antitrust trial—using pre-filed testimony and other devices—would look quite familiar to anyone who has practiced in front of a state PUC. *See, e.g., United States v. Microsoft Corp.*, 2 Trade Cas. (CCH) ¶ 72,231 (D.D.C. Aug. 11, 1998).

7. *See Office of Comm'ns of the United Church of Christ v. FCC*, 359 F.2d 994 (D.C. Cir. 1966) (finding groups representing listeners had standing in an FCC license renewal case, despite a lack of economic harm). Then-Judge Burger wrote: "The theory that the Commission can always effectively represent the listener interests . . . [in this case] is no longer a valid assumption which stands up under the realities of actual experience . . ." *Id.* at 1003–04.

8. *See* 16 U.S.C. § 2632(a)(1) (granting fees and reasonable costs to consumer intervenors who "substantially contributed" to approval by a state PUC of a position advocated in a PURPA proceeding by that intervenor, and who meet certain other conditions).

9. *See generally* STEPHEN BREYER, *REGULATION AND ITS REFORM* (1982).

10. *See id.* at 15–35.

11. Externalities may be either negative—costs which are not recovered in the purchase price, such as pollution—or positive—benefits which are not received

box" theory of excessive competition.¹² He identified, industry-by-industry, a series of mismatches, partial mismatches, and possible mismatches between the justification for regulation and the industry being regulated. For each industry, he suggested alternatives to classical regulation.¹³ Breyer concluded by describing "practical reforms," including better personnel for regulatory agencies, procedural changes, structural changes, and several substantive changes.¹⁴ According to Breyer,

[R]egulatory reform must proceed step by step, program by program. An agency . . . is identified as a likely candidate for reform insofar as the framework identifies a less restrictive method of attacking the problem thought to call for regulation. Then the program is investigated in depth, with the existing system judged against that less restrictive alternative.¹⁵

Change consistent with that advocated by Breyer has accelerated in the economic regulation of most industries. Retail rate regulation, while still important for customers who lack choice, is receding in relative importance, and is being replaced by a new focus on supporting the development of markets. Rather than simply balancing the interests of ratepayers against the interests of shareholders in a single service provider, regulatory agencies increasingly balance the interests of shareholders in several competing firms—setting wholesale terms such as pricing, collocation, and affiliate interest standards—for the ultimate benefit (one hopes) of retail customers in a more competitive marketplace. Similarly, the binary code of contested cases and stylized rulemaking is an increasingly inaccurate description of what PUCs do or should do. However, it is premature to jettison all the old methods entirely. We do not yet know the final shape of emerging markets in networked industries. For example, retail customers in many markets do

exclusively by the purchaser, such as ubiquitous telephone connection or environmental benefits of energy efficiency. The existence and measurement of positive externalities are controversial. *See id.* at 23.

12. "Empty box" describes the argument that competition in certain industries will be ruinous or excessive, and that therefore entry of firms into a market should be restricted. This justification for regulation was often cited for the airline and trucking industries.

13. *See* BREYER, *supra* note 9, at 191–314.

14. *See id.* at 341–68.

15. *Id.* at 341.

not yet consider themselves to have choices among providers of essential services.

This article describes the ways in which state PUCs are responding to and helping to shape the enormous changes in the "network industries"¹⁶—adapting to demands to facilitate more open markets while continuing to protect critical public interests. The article focuses on telecommunications, but also refers to relevant work within the energy industries, and occasionally draws on the author's own experience as a Montana Public Service Commissioner. Part I discusses several of the many external factors driving change, and suggests some initial responses. Part II describes the strong support of state commissions for the development of competition, pre-dating passage of the Telecommunications Act of 1996, and the conscious effort to restructure PUCs now underway by utility industries, ratepayers, state and federal governments, and especially by the commissions themselves. Part III summarizes four critical PUC roles in serving the public interest that should be preserved as the regulatory process is restructured: (1) protecting and informing consumers; (2) promoting competition; (3) preserving and advancing universal service; and (4) encouraging access to advanced technologies. The article's Conclusion examines citizen engagement in the regulatory process—a crucial and often overlooked value that overlaps other issues, and one which PUCs are well positioned to address. Currently, however, entities and procedures with relatively less transparency and customer focus are poorly suited to advance this principle.

16. Network industries are systems of interconnection and coordination. Economic regulation has traditionally focused on physical networks such as natural gas and electric production, transmission, and distribution; water and sewer systems; and telecommunications networks. Telecommunications networks require sophisticated coordination and integration of longer-term planning and shorter-term management, including the ability to handle daily fluctuations in traffic. See WILLIAM W. SHARKEY, *THE THEORY OF NATURAL MONOPOLY* 181–84 (1982). "The need for integrated planning is one of the most complex and difficult issues to be addressed in an examination of natural monopoly in telecommunications." *Id.* at 184. "[A] characteristic of demand, which distinguishes telecommunications from most other utilities, is the interdependent nature of demand. Communication is inherently a two-party or multiparty process. But only one party is typically charged. This results in an economic externality, which complicates somewhat the use of the prices in the industry." *Id.* at 185.

I. CHANGE DRIVERS—TECHNOLOGY, POLICY, FEDERALISM

A long list of factors drives change in network industry policy. The list includes growth of the consumer and citizen participation movements, as well as the globalization of utilities markets, to name just two examples. David Wirick, who leads the National Regulatory Research Institute's ("NRRI") Commission Transformation Program,¹⁷ has advised numerous state PUCs on agency change. Wirick identifies the external forces driving change as: legislative intervention; eroding consent of some parties to the traditional regulatory arrangements; a power shift from producers to at least some consumers; and the development of new models of decision making.¹⁸ Wirick's discussion is important because it describes ways that PUCs have been buffeted by the winds of change, and it suggests possible ways to correct the course and sail ahead. This section builds briefly on his analysis by discussing three additional change drivers that are especially important to economic regulation: technology, competition policy, and the development of national industry policy within a federalist framework.

A. Technology

It is impossible even to imagine the development of competition in network industries without recognizing the role of technological innovation in almost all segments of all industries. Local telecom competition depends on the sophisticated hardware and software of Operations Support Systems that have developed in recent years.¹⁹ Market demand sufficient to support local competition relies on innovation in applications

17. See *infra* Part II.B for a discussion of the NRRI and its role.

18. See DAVID W. WIRICK, NEW MODELS OF REGULATORY COMMISSION PERFORMANCE: THE DIVERSITY IMPERATIVE (Nat'l Reg. Res. Inst. Report No. 99-15, 1999) 1-11, available at National Regulatory Research Institute, *Download Research* (visited Mar. 28, 2000) <<http://www.nrri.ohio-state.edu/download.htm>> [hereinafter NRRI Download Research Web Site].

19. OSS functions include pre-ordering, ordering, provisioning, billing, maintaining, and repairing services ordered by competitive telecom providers from incumbents. They are key to the fourteen-point competitive checklist in Section 271 of the Telecommunications Act. See generally FRANK P. DARR, THIRD-PARTY TESTING OF OPERATIONAL SUPPORT SYSTEMS: BACKGROUND AND RELATED MATERIALS (Nat'l Reg. Res. Inst. Report No. 99-13, 1999), available at NRRI Download Research Web Site, *supra* note 18. Similar systems are important to the development of energy competition.

and the long-awaited convergence of telecommunications, computing, consumer electronics, and broadcasting that is now finally occurring.²⁰ All kinds of information may be digitized, and digital information may be carried over networks with increasing speed and capacity. Moreover, realistic mass-market alternatives for local loop telecommunications services may be on the technological horizon.²¹

Similarly, in energy markets, the development of new hardware and software technologies to manage the electric transmission grid are facilitating complex power transactions.²² New generation technologies have challenged traditional economies of scale, and may change the relationship between the customer and the grid.²³

Technology has the potential to change everything. Networks are becoming bigger and more complex, while some customers are demanding more tailored and specific services. These demands might include particular pricing, billing, or service arrangements; specific telecommunications features or configurations of equipment and software; electricity believed to be from a more environmentally benign source; or an especially stable power supply to support a particular industrial process. This tailoring of service may develop as "fringe" or

20. See PENNSYLVANIA STATE UNIVERSITY'S INSTITUTE FOR INFORMATION POLICY, *THE NEW GLOBAL TELECOMMUNICATIONS INDUSTRY & CONSUMERS* (1999).

21. See GEORGE ABE, *RESIDENTIAL BROADBAND* (1997) (describing each of the broadband access paths and issues associated with each path). Much discussion of local telephone competition focuses on the importance of multiple paths to the retail customer. For large customers in urban areas, multiple providers now do exist. In rural areas for most customers, and in most areas for small customers, there is now likely to be only one provider of basic telecommunications service. Wireless alternatives are most promising. Currently, however, most customers use wireless service as a complement to (providing mobility) rather than a substitute for their primary wire line.

22. The Electric Power Research Institute ("EPRI") is an excellent source of information about technology research and development in the electricity industry. Technology issues associated with grid operation and management are discussed at *EPRI: Transmission Systems > Grid Operation and Management* (visited Mar. 28, 2000) <<http://www.epri.com/target.asp?program=83&torgid=281&Marketnid=8>>. More general information about EPRI's Strategic Science and Technology program is available at *EPRI: Strategic Science & Technology > About Strategic Science & Technology* (visited Mar. 28, 2000) <www.epri.com/programDesc.asp?program=198559&objid=223867>.

23. See John Rowe, *Profits and Progress Through Distributed Resources*, available at The Regulatory Assistance Project, *Distribution Utility* (visited Mar. 28, 2000) <<http://www.rapmaine.org/distribution.html>>.

“niche” competition on the mass market’s curtilage—for example, a specific “green power” market for wind-produced energy—or as “mass customization,” using information technology to customize mass-market products to the desires of particular groups of customers. Larger customers will likely seek and receive at least some of these options first.

Technology has the *potential* to change everything. However, public policy must recognize the gap between the research lab and deployment in the marketplace, and view markets as they are, not only as we want them to become. It is also occasionally necessary to resist the “public policy solipsism” of those (the author very much included) who are excited about new technology and who might otherwise tend to assume everyone else shares that passion. The telecom market remains highly segmented. Not all customers have access to, or even want, the same things. Many customers take bare-naked “Plain Old Telephone Service” (“POTS”), or have only one vertical service, such as call waiting, perhaps simply as a less costly alternative to a second line.²⁴

An appropriate compromise is to renew our commitment to affordable and reliable POTS while developing cooperative and coordinated approaches to expanding effective access to “Plenty of Amazing New Stuff” (“PANS”). The National Association of Regulatory Utility Commissioners (“NARUC”)²⁵ has proposed that the Federal Communications Commission (“FCC”) create a Federal-State Joint Conference on Access to Advanced Technologies to move past the political and regulatory arguments and concentrate on real solutions to real problems faced by the

24. The Consumers Union and Consumers Federation of America used material originally developed by the Florida Public Service Commission to document the high segmentation of the residential telecommunications market. See Dr. Mark Cooper & Gene Kimmelman, *The Digital Divide Confronts the Telecommunications Act of 1996: Economic Reality Versus Public Policy*, available at Consumers Union (visited Mar. 28, 2000) <<http://www.consunion.org/other/telecom4-0299.htm>>.

25. NARUC represents the interests of state PUCs nationally by working with Congress, the federal agencies, and through the courts. It provides training and technical assistance and supports research and education programs. Much of its work is done through standing committees, either focused on a particular industry or on a topic that affects several industries. As Chairman of the Telecommunications Committee and an officer of NARUC, the author helped develop many of the approaches described in this article. See generally *The National Association of Regulatory Utility Commissioners* (visited Feb. 14, 2000) <<http://www.naruc.org>>.

full range of real telecom customers.²⁶ In short, policy makers should rattle the POTS *and* the PANS.

B. Competition Theory

Between technology and competition-focused public policy, it is sometimes hard to say which is the chicken and which the egg. However, it is undeniable that advances in technology and aggressive competition policy go hand in hand. Across the political spectrum, there is strong support for workable competition where it can be achieved. To cite but one example, new technologies are enabling independent electrical producers to cheaply generate power for sale to the mass market. Consumer advocates were among the earliest to call for marginal cost pricing, to support the PURPA “qualifying facilities”²⁷ approach to bringing independent generators on the electric grid, and to support competitive bidding for a new generation. To paraphrase President Nixon explaining his embrace of Keynesianism, “we are all free marketers now.”

The differences do not focus on whether workable competition is good. Rather, the differences focus on how competition should be measured—what degree of market “policing” is appropriate, and how various “public purposes”²⁸ should be

26. See The National Association of Regulatory Utility Commissioners, Resolution Endorsing a Federal-State Joint Conference on Advanced Services (adopted July 23, 1999), available at NARUC Summer Committee Meetings (visited Mar. 28, 2000) <<http://naruc.org/Resolutions/summer99.htm>>.

27. See 16 U.S.C. § 824a-3 (1994). PURPA requires utilities to buy electric power from private “qualifying facilities” (“QFs”) at an avoided cost rate. This avoided cost rate is equivalent to what it would have otherwise cost the utility to generate or purchase that power themselves. To become a “qualifying facility,” an independent power supplier must produce electricity with a specified type of fuel (cogeneration or renewables), and meet certain ownership, size and efficiency criteria established by the Federal Energy Regulatory Commission. Utilities must also provide customers who choose to self-generate a reasonably priced back-up supply of electricity. See *id.*; National Association of Regulatory Utility Commissioners, *Glossary*, *Glossary* (visited Feb. 23, 2000) <<http://www.naruc.org/glossary.htm#PURPA>>.

28. “Public purposes,” also known as “public benefits” or “stranded benefits,” is shorthand for what are widely considered to be good things the traditional monopoly model accomplished. These include, for example, universal phone service, research and development, low-income energy assistance, and energy conservation. See National Association of Regulatory Utility Commissioners, *Glossary* (visited Feb. 23, 2000) <<http://www.naruc.org/glossary.htm#StrandedBenefits>>; see also MONT. CODE ANN. §§ 69-8-103(36) (1999) (defining public purposes to include programs designed to provide cost-effective local energy conservation, low-

achieved. One group of economists, sometimes called the idealists, focuses on the dynamic actors and technology that already exist, lowering barriers to entry, and the threat of further competitive entry.²⁹ Alfred Kahn offers a particularly compelling example of this school in urging regulators to “let go” in advance of competition, rather than attempt to manage competition as it advances.³⁰ A second group, the strategists,³¹ includes traditional industrial organization economists who are equally serious about markets, but who focus more on the strategic decisions of actors within specific market structures, and emphasize Structure Conduct Performance analysis³² and market concentration measurements.³³

income customer weatherization, renewable resource projects and applications, including those that capture unique social and energy system benefits or that provide transmission and distribution system benefits, research and development programs related to energy conservation and renewables, market transformation designed to encourage competitive markets for public purpose programs, and low-income energy assistance).

29. See THOMAS J. DUESTERBERG & KENNETH GORDON, *COMPETITION AND DEREGULATION IN TELECOMMUNICATIONS: THE CASE FOR A NEW PARADIGM* (1997); PETER HUBER, *LAW AND DISORDER IN CYBERSPACE: ABOLISH THE FCC AND LET COMMON LAW RULE THE TELECOSM* (1997).

30. See ALFRED E. KAHN, *LETTING GO: DEREGULATING THE PROCESS OF DEREGULATION* (1998) (criticizing regulators for micromanaging the entry and survival of new companies even if it results in inefficient competition). Kahn argues:

The continued responsibility of public utility regulatory commissions to ensure access by challengers to essential network facilities at reasonable rates presents them with a temptation—indeed, in a sense, a responsibility—to micromanage the process of deregulation At the same time, there is every difference between regulatory interventions establishing the conditions under which competition may be relied on to determine the outcome and interventions intended, whether consciously or unconsciously, to *dictate* that outcome.

Id. at 70.

31. See generally ROBIN MANSELL, *THE NEW TELECOMMUNICATIONS—A POLITICAL ECONOMY OF NETWORK EVOLUTION* (1993) (arguing that the strategic model better predicts investment and network deployment).

32. See Harry M. Trebing, *Structural Change and the Future of Regulation*, 71 *LAND ECON.* 401, 405 (1995).

The SCP [structure-conduct-performance] approach argues that market structure will influence conduct (behavior) and performance. Market structure is particularly affected by concentration, diversification, product differentiation, barriers to entry, and scale/scope economies. Conduct reflects, among other things, pricing, marketing, planning practices, and profit goals. Performance includes allocative, dynamic, and x-efficiencies, as well as equity and employment considerations.

Id.

33. Market concentration measurements typically examine the relevant geographic market, relevant product market, number of firms participating in the

Both approaches have influenced telecommunications policy. Both approaches have influenced PUCs. Taken to an extreme, either approach could distort public policy. A purely idealist approach could lead to Panglosian policies irrelevant to the structure of actual markets as experienced by consumers. A purely strategic approach could result in maintaining tight controls over markets that are in the process of becoming competitive, and distorting that process by never "letting go of the bicycle."³⁴ The challenge lays in finding an approach that allows markets to continue their move toward increased competition, but which allows commissions or other entities to continue their role of protecting the interests of citizens, ratepayers, and other constituents in the future.

C. *Federal Telecommunications Policy*

With technology and competition policy driving change, it is inevitable that the federal-state relationship will also change. Regulation of telecommunications, perhaps even more than electricity regulation, has always had a strong element of national-level policy. Universal service and the "jurisdictional separations" process are two examples. There is no equally robust analogue in energy policy to the nation's long-standing commitment to universal telephone service.³⁵ Similarly, jurisdictional separations—the complex process of tracking and al-

market, and the market share of each firm to produce a number which may be used to compare the concentration of markets, the change in concentration over time, or the possible change in concentration if a particular transaction occurs. The most common measurement is the Hirschman-Herfindahl Index, which, for example, is used in United States Department of Justice and Federal Trade Commission merger reviews. The Landes-Posner Index is also frequently cited. See William A. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937 (1981). Landes and Posner note the difficulty of applying market measurements directly to rate-regulated markets. See *id.* at 975-76.

34. Hon. Michael F. Powell, "Letting Go of the Bike": A Holiday Parable on Communications Mergers in a Season of Competition, 19 NRRI Q. BULL. 351 (1999) (suggesting possible principles to limit review of mergers).

35. The Federal Telecommunications Act of 1934 sought "to make available, so far as possible, to all the people of the United States . . . a rapid, efficient . . . communication service with adequate facilities at reasonable charges . . ." 47 U.S.C. § 151 (Supp. III 1997). Section 254 of the 1996 Act expanded and made more specific this objective, for example by including schools, libraries and rural health care providers, and by requiring reasonable comparability of rural and urban rates and service. See *id.* § 254(h). In energy, specific federal programs support low-income energy assistance and weatherization, but there is no general national universal service policy in energy for customers of investor-owned utilities.

locating costs and revenues among the federal, state, and unregulated categories—is exceptionally well developed in telecommunications.³⁶

The Telecommunications Act is explicitly “cooperative federalist” in structure.³⁷ It lists detailed responsibilities for both federal and state regulators in areas including interconnection, consumer protection, universal service, provision of in-region long distance service by Regional Bell Operating Companies (“RBOCs”), and promotion of access to advanced technology. The Act’s passage made state PUCs instruments of federal policy to an unprecedented extent. Even among the many states that had already adopted pro-competitive telecommunications regimes, it was in some cases necessary for state legislatures to give their PUCs new authority to carry out the federal Act’s directives.³⁸

The Act’s passage obviously intensified the relationship between the FCC and state commissions.³⁹ Despite disagreement

36. See *Smith v. Illinois Bell Tel. Co.*, 282 U.S. 133 (1930) (holding that costs have to be recognized in the jurisdiction where they are incurred); 47 U.S.C. § 410(c) (Supp. III 1997). The core separations rules are set out in 47 C.F.R. pt. 36 (1998). Traditionally, the separations process starts with costs as accounted pursuant to Uniform System of Accounts for Telecommunications Companies, 47 C.F.R. pt. 32 (1998). These costs are then categorized as (generally) loop, local switch, trunk, tandem switch, and operator systems. Categorized costs are then allocated to the intrastate or interstate jurisdiction as specified in 47 C.F.R. pt. 36. Since 1987, non-regulated costs have been separated out before costs are assigned to one or the other jurisdiction.

37. See Philip J. Weiser, *Chevron, Cooperative Federalism, and Telecommunications Reform*, 52 VAND. L. REV. 1, 3 (1999). Weiser describes cooperative federalism systems as those in which state as well as federal agencies are charged with implementing federal law. He argues that “Chevron deference” should be afforded to state agencies charged with implementing the Telecommunications Act, as it is to the FCC. See *id.*; see also *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). For an early discussion of cooperative federalist approaches to telecommunications reform, see RAYMOND W. LAWTON, *THE TRANSFERABILITY OF THE COOPERATIVE FEDERALISM MODEL USED FOR ELECTRIC AND NATURAL GAS UTILITIES TO TELECOMMUNICATIONS REFORM LEGISLATION* (Nat’l Reg. Res. Inst. Report No. 94-31, 1994).

38. For example, Montana had never allowed exclusive local telephone franchises and had express policy in favor of competition. Nonetheless, in 1997 the Montana Legislature adopted extensive new provisions concerning, among other things, arbitrations, wholesale pricing, and universal service, see MONT. CODE ANN. §§ 69-3-836 to 69-3-843 (1999) and slamming, see MONT. CODE ANN. §§ 69-3-1301 to 69-3-1305 (1999).

39. See Bob Rowe, *Foxes, Hedgehogs, and Federalism: States Implement the Telecommunications Act*, in *IS THE TELECOMMUNICATIONS ACT OF 1996 BROKEN? IF SO, HOW CAN WE FIX IT?* 86 (J. Gregory Sidak ed., 1999). Isaiah Berlin famously quoted Archilochus: “The fox knows many things, but the hedgehog knows

over whether the FCC's wholesale pricing rules violated the reservation to states of authority over intrastate rates and services,⁴⁰ descriptions of federal-state tension were somewhat overblown.⁴¹ However, some tension is healthy and, in any event, is a design element of the American constitutional system. Since Congress has already provided us with broad policy goals, the challenge is to construct an overall framework for cooperation between federal and state agencies, and to develop specific "cooperative federalist" practices that capture the strengths of federal and state entities.

The FCC and state commissions have done that through a "Magna Carta" first proposed by Chairman William Kennard and developed cooperatively between the FCC and NARUC,⁴²

one big thing." *Id.* The author suggested that, immediately after passage of the Act, the FCC was occasionally a hedgehog focused on the "one big thing" of implementation, while state PUCs were foxes concerned with multiple objectives. The world needs both foxes and hedgehogs, but they can sometimes find one another frustrating. *See id.* at 87.

40. States challenged the FCC's Total Element Long Run Incremental Cost ("TELRIC") wholesale pricing rules (setting the prices which one carrier could charge another carrier for the use of portions of the network such as a loop or switch or for resale of service) under the Telecommunications Act, which reserves to states authority over retail prices and service. *See* 47 U.S.C. § 152(b) (Supp. III 1997). States believed setting wholesale prices necessarily affected terms for retail service. The United States Supreme Court decided in the FCC's favor, *see* *AT&T v. Iowa Utils. Bd.*, 525 U.S. 366 (1999). State PUCs did not participate in other issues on appeal, and generally did not oppose the substance of many of the FCC's rules. State PUCs are generally charged with arbitrating and approving agreements concerning wholesale level terms. *See* 47 U.S.C. § 252 (Supp. III 1997). The author and others had urged that the TELRIC rules be offered as a model or guidelines for state PUCs to consider and use as appropriate in determining wholesale prices. Indeed, while the rules were stayed, states generally adopted the FCC's TELRIC rules voluntarily.

41. During the crucial months following passage of the Telecommunications Act there were daily, productive discussions on a range of topics between FCC and state PUC staff, and frequent discussions between FCC and state PUC commissioners. The author participated in many of these.

42. *See* The National Association of Regulatory Utility Commissioners, Resolution Regarding the "Magna Carta" for State, U.S. Territories, and Federal Regulators, available at *Collocation* (visited Feb. 1, 2000) <<http://www.naruc.org/Resolutions/reswin99.htm>>. The "Statement of Participation" from the "Magna Carta" is as follows:

State and U.S. territory commissions and the FCC possess complementary strengths. We will work together to take full advantage of these, in the spirit of cooperative federalism.

Cooperation between the federal and State and U.S. territory decisionmakers takes advantage of the strengths of each. The federal, State and U.S. territory proceedings are fact-based and the commissions are able to analyze and act on complex records. States and U.S. territories are close to local markets and have developed methods for evaluating the

and through a growing list of joint projects. The fruits of these cooperative federalist efforts are reflected in the broad general agreement on regulatory actions that has developed between state and federal regulators. While there are specific disagreements, NARUC has adopted many more policy resolutions urging specific FCC actions than opposing FCC actions.⁴³ Con-

structure of those markets. States and the U.S. territories also benefit from experience with other industry restructurings, including natural gas and electricity. The FCC possesses not only a national, but also a global perspective. Moreover, it is expert in dealing with all forms of communications. Together, the FCC, the States and the U.S. territories can accomplish much in addressing customer concerns, the linchpin of the regulatory process.

FCC actions affecting States and U.S. territories should be undertaken in a manner that is consistent with its statutory obligations, while mindful of States' and U.S. territories' unique knowledge of local conditions and experience in regulating the local market. In areas where national standards are appropriate, the FCC will strive to implement them in a way that encourages State and U.S. territory input to the fullest extent possible. The parties recognize the value of diversity and of experimentation in many circumstances. The States and the U.S. territories will support the FCC in its efforts to meet the challenges presented by the implementation of the Act to the fullest extent possible.

Generally, certain practices can help federal, State and U.S. territory regulators achieve their goal of mutual cooperation. Such practices may include encouraging State participation in FCC proceedings, as well as FCC participation in crucial State and U.S. territory proceedings. Encouraging hands-on consultation among State, U.S. territory and federal policy-makers and developing and using "best practices" guidelines will contribute to the collaborative process. Cooperative development of substantive models or standards, which may be considered by States and U.S. territories in formulation of State/U.S. territory-specific policies, will aid in achieving the common goals.

Id.

43. A key current area of concern for some state commissioners is the FCC's decision to declare internet access services interstate rather than a combination of local, long distance, and private line elements. *See* Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 14 F.C.C.R. 3689 (1999) (declaratory ruling), *vacated and remanded sub nom.* Bell Atl. Tel. Cos. v. FCC, No. 99-1094, *consolidated with* 99-1095, 99-1097, 99-1106, 99-1126, 99-1134, 99-1136, 99-1145, 2000 U.S. App. LEXIS 4685 (D.C. Cir. Mar. 24, 2000). The D.C. Circuit vacated the FCC ruling and remanded the case, because the FCC finding was not based on a satisfactory explanation as to "LECs that terminate calls to ISPs are not properly seen as 'terminating . . . local telecommunications traffic,' and why such traffic is 'exchange access' rather than 'telephone exchange service.'" 2000 U.S. App. LEXIS, at *26. The appeal court stated that the incumbents are "free to seek relief from state-authorized compensation that they believe is wrongly imposed." *Id.* at *26-27.

As noted by state commissioner members of the Federal-State Joint Board on Separations, this decision has at least the potential to significantly shift revenues between the intrastate (local) side and the interstate side, with a possible mis-

sumer protection is a key area for FCC-state commission cooperation.

Even more than was the case with telecommunications competition in the 1980s, most of the impetus for electric competition is occurring in the states (with a varying mixture of legislative and PUC initiatives). Although Congress has not passed electric restructuring legislation, well over half the population lives in states that are somewhere in the process of opening retail markets, providing retail customers direct access to generation supplies of their choice.⁴⁴ NARUC has outlined a number of goals it believes should be incorporated into any future federal legislation. These include protecting low-income customers from harm, preserving low-income rate and energy

match of revenues and expenses. See Letter from James Bradford Ramsay, Assistant General Counsel, National Association of Regulatory Utility Comm'rs, to Magalie R. Salas, Secretary, FCC (Dec. 14, 1998) (on file with the author); James B. Ramsey, Comments of the State Members of the CC Docket 80-286 Federal-State Joint Board on Separations in *In re* Implementation of Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, and Inter-Carrier Compensation for ISP-Bound Traffic, CC Docket No. 99-68, (comments filed with the FCC on Apr. 16, 1999) (on file with the author); Letter from Hon. David Rolka, Comm'r, Penn. Public Utility Comm'n, et al., State Members of the Federal State Joint Board on Separations, to William E. Kennard, Chair, Federal State Joint Board on Separations, et al. (June 17, 1999) (on file with the author). This could in turn significantly affect retail rates, consumption and investment decisions. Separations reform is essential and overdue. So long as constitutional confiscation claims by carriers are possible, some form of separation is required. See *id.* at 3. However, a variety of simplifications and rationalizations are possible, and some proposals have the virtue of splitting authority along lines tied to the jurisdiction with the greatest interest. See *id.* at 2. Reform might range from a simple freeze to a fundamental realignment of federal and state responsibility to better match both areas of greatest expertise and the way networks are generally developed.

44. See Brubaker & Associates, Inc., *Restructuring Map* (visited Mar. 28, 2000) <<http://www.consultbai.com/restructmap.htm>>. Wholesale competition refers to distribution companies which purchase power in the competitive wholesale power markets rather than relying on their own generation. Retail competition refers to retail customers who purchase power directly. Under most retail competition schemes, distribution and transmission continue to be considered monopoly functions. Billing, collection and customer-related functions may be assigned to the regulated distribution company or may be provided competitively. In Montana, for example, generation makes up perhaps thirty percent of a typical residential customer's total electric bill. Unlike a phone call, electricity is not routed through a switch. Electricity flows across the transmission and distribution lines according to its own laws. Therefore, a retail customer's decision to purchase from a particular supply source is most accurately seen as affecting how generating plants connected to the transmission grid are dispatched (turned up or down, on or off). Bill Spratley's *Leap Letter* is an excellent source of detailed information on state efforts to restructure energy policy and markets. See generally Bill Spratley, *Leap Letter* (last modified Dec. 24, 1999) <<http://www.spratley.com/leap>>.

conservation programs,⁴⁵ preventing unfair cost shifting between customer classes, maintaining fair customer policies, preserving system reliability, and ensuring effective participation of all citizens in the restructuring debate.⁴⁶ A very active coalition of low-cost states, operating independently of NARUC in this instance, does not necessarily oppose a federal role in energy restructuring outright, but rather focuses on ensuring that low-cost states are able to design regimes that best serve their customers.⁴⁷ Montana, for example, is a rural state with very low per capita income and high heating degree days, but with very low energy rates. Nonetheless, Montana was among the first states in the country to begin the complete restructuring of its electric industry, now including the divestiture of virtually all generation capacity by the major investor-owned utility, Montana Power Company.⁴⁸

Internally, states are applying transferable skills from one industry undergoing restructuring to another. Externally, NARUC and states are applying lessons learned from passage

45. Many PUCs have approved utility programs that provide rate assistance and energy conservation services for low- and moderate-income customers (often including the elderly). Costs are expensed by utilities and recovered through the current "bundled" rate (which includes generation, transmission, distribution, customer service and other elements). With competitive generation supply and "unbundled" bills, new ways to pay for these programs must be devised if they are to continue. A common approach is an end-user charge which appears on the retail customer's bill. See MONT. CODE ANN. §69-8-402 (1999).

46. See The National Association of Regulatory Utility Commissioners, Resolution Re-Affirming NARUC's Fundamental "Principles to Guide the Restructuring of the Electric Industry" (Nov. 10, 1999) (on file with the author).

47. See Letter from Low Cost States to Members of Congress (Dec. 3, 1998) (discussing low-cost states initiatives) (on file with the author).

48. The Montana PSC conducted a series of restructuring roundtables in 1995, ordered the Montana Power Company to file a restructuring plan, and approved several market-based pricing proposals. It has also acted on a comprehensive natural gas restructuring case. The 1997 Montana Legislature enacted sweeping restructuring legislation for both energy industries, which the PSC has been busy implementing since. See Inquiry into Restructuring Electric Utility Industry, Montana Pub. Serv. Comm'n Docket No. D95.7.96 (filed June 9, 1995); MPC Transition Plan—Electric Restructuring, Montana Pub. Serv. Comm'n Docket No. D97.7.90 (filed May 28, 1997); MPC Revenue Requirements, Gas Costs, Allocated Cost of Service and Rate Design, Montana Pub. Serv. Comm'n Docket No. D96.2.22 (filed Feb. 14, 1996); *The Energy Page* (visited Mar. 4, 1999) <<http://www.psc.state.mt.us/gaselec/gaselec.htm>>. The author raised specific concerns about the 1997 electric restructuring legislation, however, a majority of the PSC endorsed the legislation as proposed. See Bob Rowe, Electric Industry Restructuring: Overview of Regional and Montana Issues, available at Bob Rowe (visited Mar. 4, 2000) <<http://www.psc.state.mt.us/browe/electric.txt>>.

and implementation of the Telecommunications Act to work on federal energy legislation. For example, PUCs must be able to coordinate with one another on an ongoing basis, share information, and make decisions quickly. PUCs must think through appropriate structures for federal-state relations, and devise ways to achieve appropriate national objectives while preserving state ability to respond to particular circumstances and to innovate, for example, by improving on or customizing a flexible national approach. PUCs must clearly explain what they are for, not just what they oppose. States and PUCs are particularly well suited to engage citizens in consideration of how the rules governing utility markets may change and are changing, and to ensure citizens' views help to inform the debate. Together, they have had an important impact on the formation of national telecommunications policy.

II. FORM FOLLOWS FUNCTION—STATE PUCs INITIATE MARKET CHANGE AND REINVENT THEMSELVES

A. *Substantive Changes Highlight Strengths and Weaknesses in the Current Structure of State PUCs*

NARUC and many state PUCs have supported a rigorous understanding of competition, a renewed emphasis on consumers, and the general move to restructure state commissions. It is widely recognized that the competition provisions of the Telecommunications Act of 1996 were based in significant part on the work of states as diverse as New York, Illinois, and Oregon,⁴⁹ demonstrating broad support for the provisions of the Act among PUCs. From 1994 through 1996, NARUC undertook an extensive project aimed at developing specific technical policies on local competition and presenting an orderly approach to all the key competition issues. The project reflected the learning and experience of many PUCs.⁵⁰ In its advocacy before passage of the Telecommunications Act, NARUC specifically endorsed

49. See VIVIAN WITKIND DAVIS, *BREAKING AWAY FROM FRANCHISES AND RATE CASES: A PERSPECTIVE ON THE EVOLUTION OF STATE TELECOMMUNICATIONS POLICY* (Nat'l Reg. Res. Inst. Report No. 95-06, 1995).

50. See NARUC Staff Subcommittee on Communications, Local Competition Work Group Summary Report (Feb. 1996) (on file with the author).

federal preemption of statutory barriers to competitive local entry, now part of section 253 of the Act.⁵¹

While many PUCs have aggressively promoted workable competition, they have also reassessed their own structures, and attempted to develop methods more appropriate to their new missions. As described below, NRRI has supported NARUC in this work. Expanding and redesigning the consumer function is a critical part of most PUC restructuring efforts.

PUCs have certain clear strengths. They are structurally separate from the management of the utility firm, in contrast to the public ownership model traditional in some nations. By structure, legal requirement, and tradition, they are relatively more independent in their decision making than are other governmental agencies.⁵² The multi-member design of state PUCs, coupled with specific administrative procedure act requirements and more general "government sunshine" requirements,⁵³ results in decisions that are "transparent" to consumer and industry participants, as well as other interested parties. That is, both the reasons for the decision and the process through which the decision was reached are clear to anyone who has the ability and patience to read the record. PUCs have developed significant expertise in relevant specialties in accounting, finance, economics, engineering, and law, and they are developing similar expertise in consumer education and

51. See The National Association of Regulatory Commissioners, Resolution Adopting NARUC Federal Telecommunications Legislative Policy Principles (Mar. 1994) (on file with the author). Section 253 of the Telecommunications Act prohibits state or local enactments which block any entity from providing telecommunications service. See 47 U.S.C. § 253(a) (Supp. III 1997). Section 253 recognizes state authority to preserve and advance universal service, protect public safety and welfare, ensure service quality, and protect consumers. See *id.* § 253(b). Competitively neutral rights-of-way management and the ability to require fair compensation for their use is also preserved. See *id.* § 253(c).

52. See NANCY N. ZEARFOSS, THE STRUCTURE OF STATE UTILITY COMMISSIONS AND PROTECTION OF THE CAPTIVE RATEPAYER: IS THERE A CONNECTION? (Nat'l Reg. Res. Inst. Report No. 98-14, 1998), available at NRRI Download Research Web Site, *supra* note 18. Zearfoss concludes from her research that PUCs react not so much to political pressure or economic incentives, but to information, and that information is a significant determinant in their decision making process. Where the public has insufficient information to take a position on an issue, a PUC with greater resources, including more professional personnel, is more likely to be its champion. See SCHWARTZ, *supra* note 2, at 19.

53. See MONT. CONST. art. II, §§ 8, 9; see also MONT. CODE ANN. §§ 2-3-103, 2-3-201, 2-3-221 (1999).

protection. They have also developed aggressive and often innovative ways to involve and inform citizens. These strengths are worth preserving, as they will certainly be useful to restructured regulatory agencies.

At the same time, PUCs face severe limitations. Turnover among commissioners and key staff is sometimes high. Moreover, a commission's authority may be inconsistent with the scope of converged markets. Regulators may have limited authority to conduct necessary proceedings, to craft appropriate remedies, or even to forbear from regulation that is not necessary. PUCs sometimes have limited authority to gather and disseminate certain kinds of information. Procedural requirements may restrict or appear to restrict the ability of PUCs to conduct alternative proceedings, negotiated rulemakings, or expedited proceedings. The end-of-the-day prospect of judicial review may force PUCs to develop a perhaps overly comprehensive (and therefore costly) record, and protracted (and therefore costly) hearing processes. Their organizational culture may be stagnant or resistant to change. Insufficient financial resources may hinder their ability to undertake aggressive consumer education or other programs. Some PUCs may therefore lack the flexibility needed to respond well to changes in the marketplace.

William H. Melody studies comparative industry and regulatory structures in support of privatizing publicly owned networks and opening markets to greater competition.⁵⁴ He divides the critical issues into policy development, operations management, and regulation. He describes the regulator's appropriate role as one that is independent both from the utility and, on a day-to-day basis, from general political influences as well.⁵⁵ Regulation requires professional management able to

54. See generally WILLIAM H. MELODY, *Policy Objectives and Models of Regulation*, in TELECOM REFORM: PRINCIPLES, POLICIES AND REGULATORY PRACTICES 13, 13-27 (William H. Melody ed.) (1997).

55. See *id.* at 21. Melody continues:

The regulator's task is to implement government policy, ensure performance accountability by the PTO [public telecom operators] and other players to economic and social policy objectives, resolve disputes between competitors and between customers and competitors, and between consumers and operators, monitor changing industry conditions, and advise government on developments bearing on policy. The regulatory agency acts as a buffer between telecom operators and government, helping to ensure the separation of functions. Whereas the PTO and other opera-

adapt its operations to a dynamic environment. Regulators must understand technical and market developments. "Public transparency [is] especially important."⁵⁶ This may be achieved through methods including professional qualification, independent budget and employment processes, public reporting and accountability, and reliance on several commissioners with staggered terms rather than on a single regulator.

A growing number of state PUCs have adopted innovative approaches while preserving the strengths described by Melody. PUCs are generating innovative new approaches to resolving disputes among parties, creating enforcement mechanisms, and addressing issues affecting quality and customer service. For example, the Texas PUC uses settlement conferences to address informal complaints arising under interconnection agreements, and expedited formal complaints for interconnection-related complaints.⁵⁷ The New York Public Service Commission pioneered the use of collaboratives⁵⁸ and alternative dispute resolution techniques.⁵⁹ The Wisconsin Public Service Commission employs informal dispute resolution

tors, once separated from direct government influence, may focus too narrowly on economic objectives, the regulatory agency can ensure recognition of social and other policy objectives as well. Although regulation has been used primarily with privately owned operators, it has been found increasingly beneficial with publicly owned operators as well in implementing the same policy objectives.

Id.

56. *Id.* at 23.

57. See David Turetsky, *Informal Settlement of Interconnection Agreements*, in A COMPILATION OF "BEST PRACTICES" TO IMPLEMENT THE TELECOMMUNICATIONS ACT OF 1996, at 11 (Bob Rowe & Vivian Witkind Davis eds.) (Nat'l Reg. Res. Inst. Report No. 99-07, 1999), available at NRRRI Download Research Web Site, *supra* note 18.

58. In the author's experience, collaboratives are typically relatively informal multi-meeting undertakings, made up of interested parties representing a range of perspectives, working with a neutral facilitator. Collaboratives may be useful to develop a shared understanding of an issue, identify agreed-upon principles, or outline more specific proposals. They may also help identify and narrow areas of disagreement. Often, the results of a collaborative are submitted to an authoritative decision-maker (for example, a PUC) for formal consideration and action.

59. See Jaelyn A. Brillig et al., *Dispute Resolution Techniques*, in A COMPILATION OF "BEST PRACTICES" TO IMPLEMENT THE TELECOMMUNICATIONS ACT OF 1996, *supra* note 57, at 4-6. The NARUC Staff Subcommittee on Administrative Law Judges developed Model Settlement Guidelines in 1989. See CENTER FOR PUBLIC RESOURCES, INC., NEGOTIATED SETTLEMENT OF UTILITY REGULATORY PROCEEDINGS: RECOMMENDED PRACTICES (1993).

among carriers.⁶⁰ The Montana Public Service Commission uses roundtables to scope and discuss related issues in its several restructuring proceedings, and also informally notices more complex proposed rules for comment before preparing final proposed rules for publication and formal comment. The District of Columbia, Florida, and other states allow certain (non-dominant) carriers to implement tariff changes on one day's notice.⁶¹ The Colorado PUC did groundbreaking work on wholesale service quality,⁶² and is now addressing retail service quality through means including extensive and well-attended public hearings.⁶³

These and other efforts are in part responses to specific situations but are often part of a larger rethinking of PUC missions and practices. For example, the Iowa Utilities Board created internal work groups in four areas—organization, leadership, education, and electronic communication—leading to recommendations that were implemented by the Board.⁶⁴ The Illinois Commerce Commission has created a Millennium Review Committee composed of key stakeholders to make recommendations concerning such things as personnel, information technology, and administrative procedures.⁶⁵ The Tennessee

60. See Craig Siwy, *Informal Mediation of Carrier Disputes*, in A COMPILATION OF "BEST PRACTICES" TO IMPLEMENT THE TELECOMMUNICATIONS ACT OF 1996, *supra* note 57, at 7.

61. See Turetsky, *supra* note 57, at 14.

62. Information about Colorado's wholesale service quality efforts is available on the Colorado Commission web page. See Anthony Marquez, *Local Telephone Competition—Proceedings at the Colorado Public Utilities Commission* (visited Mar. 28, 2000) <<http://www.dora.state.co.us/puc/basic.htm>>.

63. See US West Communications, Pub. Util. Comm'n of Co. Dec. No. C00-34 (Jan. 7, 2000).

64. See Structure Team of the Iowa Utilities Board Staff, *A Proposed Structure For the Iowa Utilities Board*, 19 NRRI Q. BULL. 83 (1998). According to Board Chairman Allan Thoms, a key to success was assuring no one would lose their job, even as managers did have to reapply for their positions. This assured all were free to offer any suggestions without employment risk. See Electronic Mail Message from Allan Thoms, Chairman, Iowa Utilities Board, to Bob Rowe, (Jan. 10, 1999) (on file with author). The Board adopted a vision "[t]o provide our customers with high quality services through innovative and progressive policies, practices, and personnel." *Iowa Utilities Board Home Page* (last modified Feb. 1, 2000) <<http://www.state.ia.us/government/com/util/util.htm>>.

65. According to the Illinois Commission web page, the Millennium Review Committee's role will be:

Reviewing the Commission's regulatory processes, communications between parties, interaction between staff and the commissioners, the

Regulatory Authority uses annual management retreats to examine its mission and develop action steps for the following year; at each retreat, managers develop about thirty steps for the coming year.⁶⁶ The California PUC used scenario planning early in its restructuring effort, convened a Stakeholders Innovation Roundtable, and has pursued creative approaches to consumer affairs, complementing their work on telecom and energy restructuring.⁶⁷ California, New Jersey, and Pennsylvania⁶⁸ have undertaken creative marketing approaches to explain retail electric competition to customers. These initiatives illustrate admirable advances in the administration and performance of PUCs.

However, commissions must continue to focus on engaging individuals both as citizens and as consumers in thinking

Commission's role in policy development, and the use of information technologies in cases.

Identifying structural impediments which effect commissioners decision-making processes.

Examining existing laws, rules and practices related to the evolution of the Commission as arbiter of disputes in competitive markets and its enforcement authority.

Consideration of the Commission's proper role in addressing consumer issues and disputes as well as consumer education.

The Millennium Review Committee will make specific recommendations regarding proposed changes in Commission policies and procedures as well as suggestions for statutory changes to the Public Utilities Act that may be required to enact recommended changes. The Committee's report will be presented to the Illinois Commerce Commission by the end of 1999.

ICC: Millennium Review Committee: Overview (visited Jan. 26, 2000) <<http://www.icc.state.il.us/icc/mrc/overview.asp>> .

66. See Telephone Interview with Sara Kyle, Director, Tennessee Regulatory Authority (Jan. 12, 2000). The Tennessee Regulatory Authority's web page is at *History of the Tennessee Regulatory Authority* (last modified Aug. 4, 1999) <<http://www.state.tn.us/tra/history.htm>>.

67. See Telephone Interview with Wesley M. Franklin, Executive Director, Public Utilities Commission of California (Jan. 10, 1999). See generally Memorandum from Wesley M. Franklin, Executive Director, Public Utilities Commission of California, California to Staff and Commissioners (Sept. 10, 1996) (on file with author). The California PUC's web page features a full page dedicated to innovation for public participation found at *Responsive Government—Innovations at the CPUC* (last modified Nov. 4, 1999) <http://www.cpuc.ca.gov/home_page_files/innovations/default.htm>.

68. The Pennsylvania PUC web page, *PA PUC Home Page* (visited Feb. 1, 2000) <<http://puc.paonline.com/>>, includes sections concerning electric competition generally and electric suppliers specifically. See Regina R. Johnson & Bruce W. Radford, *Rating the Consumer Education Campaigns*, PUB. UTILS. FORTNIGHTLY, Jan. 15, 2000, at 38, 40–43 (describing Pennsylvania's Electric Choice consumer education program and web page at <http://www.electricchoice.com>).

about how changes in the market rules will affect them. Key issues include how to capture citizens' attention in the midst of busy lives, and how to provide meaningful, balanced information to help them form their opinions. Moreover, commissioners have a responsibility to help citizens think through the various issues and alternative positions, to register their views, and to account for them in thoughtful, reasoned ways. For example, commissions should try to provide information in a variety of forms and in multiple settings. They should participate in community meetings and, where possible, work through existing organizations such as clubs and civic groups. They should consider using information plus discussion strategies to educate citizens.

B. Research Supports a Rational Approach to PUC Restructuring

NARUC's think tank is the National Regulatory Research Institute ("NRRI"), located at The Ohio State University. NRRI is sometimes called the "Brookings Institute of Columbus," or vice versa. NRRI produces a range of technical papers on each of the regulated industries. It also provides a growing list of publications and projects on competition, especially including the application of industrial organization antitrust economics to regulation. It has generated an equally long list of consumer-oriented reports, including detailed surveys of customer service quality preferences, a compendium of consumer education resource materials, and specific reports on issues such as slamming and cramming. There are also reports on commission restructuring that seek to identify the optimal structure, staffing, and practices for state commissions in emerging markets.

These three research fields—competition, consumer protection, and commission restructuring—are closely related to one another. To cite one example, a key topic in commission restructuring is how to address the consumer protection function.⁶⁹ Consumer protection is important in itself. It is also a

69. See generally ROBERT J. GRANIERE, DETERMINING THE STRUCTURE OF AN OPTIMAL PERSONNEL PROFILE FOR A TRANSFORMED COMMISSION (Nat'l Reg. Res. Inst. Report No. 98-17, 1998), available at NRRI Download Research Web Site, *supra* note 18; RAYMOND W. LAWTON ET AL., STAFFING THE CONSUMER EDUCATION FUNCTION: ORGANIZATIONAL INNOVATION, NECESSARY SKILLS AND

source of information about practices that may indicate some sort of market failure. It helps discipline markets. It gives customers the confidence and knowledge they need to participate in markets. The advent of competition means new and much bigger challenges for state commissions in the area of consumer protection and education. Where competition may become workable, the goal should be to support change from relatively passive "ratepayers" to more active "shoppers."

Commentators have identified a variety of ways to view telecommunications and regulatory policy issues. For example, Raymond Lawton has suggested a scenario planning approach: identify critical principles and goals a regulatory scheme is intended to advance, consider a wide range of possible regulatory models, and test the ability of particular models to achieve these principles in the context of possible future environments.⁷⁰ For purposes of discussion, Lawton identifies ten principles, including "deregulation is not the same as competition," "regulators optimize, others sub-optimize," and "convergence confusion is an enduring fact-of-life."⁷¹ He then sketches thirty-six possible approaches to regulation,⁷² not all mutually exclusive, and tests their possible performance in three different scenarios.

One of Lawton's approaches concerns a consumers' bill of rights, which he describes as a "micro-regulatory model."⁷³ This approach has attracted special attention among commentators and regulators. For example, in 1995 and 1996, the author consciously sought to consider telecommunications competition from a customer's perspective (especially a small customer), using the metaphor of a "telecommunications customers' bill of rights."⁷⁴ The author's version included fair rates, good quality, universal service, innovation, disclosure, effective remedies, privacy, and especially citizen participation in public policy decision making.⁷⁵

RECOMMENDATIONS FOR COMMISSIONERS (Nat'l Reg. Res. Inst. Report No. 98-10, 1998), available at NRRI Download Research Web Site, *supra* note 18.

70. See Raymond W. Lawton, *Successor Regulatory Regimes: A Transition to What?*, 19 NRRI Q. BULL. 3 (1999).

71. *Id.* at 4, 6.

72. See *id.* at 6-10.

73. See *id.* at 13.

74. See Bob Rowe, *Telecommunications Customers' Bill of Rights: A Proposal for Discussion*, 19 NRRI Q. BULL. 25, 25-27 (1998).

75. Recently, Dr. Vivian Witkind Davis subjected the "bill of rights" metaphor to thoughtful scrutiny. See generally VIVIAN WITKIND DAVIS, A CRITICAL

Each of these approaches emphasizes somewhat different regulatory tools and goals, and it would be foolish to select one approach to the exclusion of all others. Regulators cannot know how markets will grow and develop, and therefore they require tools and strategies that are likely to be useful over a range of most probable futures. A bill of rights is one such tool, a useful way to think about customers' and citizens' reasonable expectations in an organized fashion.

In the last five years, NARUC and NRRI have convened two commissioner-only summits focused on commission restructuring. The 1995 summit identified core missions including preserving the societal benefits of the current system, fostering a more customer-driven environment, and a new emphasis on consumer protection, often in cooperation with others. The summit identified new tools including market analysis, alternative procedures such as ADR and structured negotiations, and a strong emphasis on outreach to customers and the use of forums such as workshops which would be more accessible to customers and other stakeholders than are traditional contested cases. The 1995 summit also described the barriers to this new vision, including legal constraints, budgetary pressures, staffing issues, and external pressures.

A 1998 follow-up meeting, "Ensuring the Relevance of Commissions at 2003," further developed future missions and roles for state commissions, identified changes required for PUCs to be effective in new environments, and outlined implementation strategies. The 1998 conference report concluded with an outline of the broad goals commissioners hold for the future:

First, . . . commissioners . . . are committed to extensive change in the way commissions perform their missions. Second, commissioners are strongly committed to ensuring that the public is protected and striving for low-cost, high quality, universally available, non-discriminatory utility service. Third, commissioners are committed to removing barriers to competition. Fourth, commissioners believe that changes need to be made in commission processes to allow less formal methods of decision-making. And lastly, commissioners envision a more proactive role, which includes

more interaction with legislatures, other state agencies, federal policy-makers, and outreach to consumers and the public at large.⁷⁶

Protecting the public, promoting workable competition, and embracing appropriate organizational change are laudable and straightforward guiding principles for PUC restructuring. These principles are beginning to be reflected within many state commissions in a variety of ways. As was discussed above, some commissions have undertaken formal internal or external planning reviews. Others have evolved more informally, but still distinctly.

The Montana Public Service Commission ("PSC") provides one example of a small commission coping with rapid change. It has a staff of thirty-nine, including commissioners, who are immersed in restructuring the state's electricity, natural gas, and telecommunications utilities. To accomplish these goals, the commission created multi-discipline teams for each industry (proving that lawyers and economists can be friends). It assigned full time staff to conduct outreach on the new federal and state universal service programs, with responsibilities including coordinating with other PUCs and with federal program administrators on various issues. The commission uses roundtables to get perspectives from industry and consumer representatives more flexibly and cost-effectively before commencing formal proceedings. Some commissioners hold town meetings, field hearings and other public events. The Montana Commission is attempting to learn from its experience in telecommunications, starting with long-distance competition, as it develops electric competition rules concerning consumer protection, information disclosure, service to low-income customers, and "default service."⁷⁷

76. See PROCEEDINGS OF THE SECOND NARUC/NRRI COMMISSIONERS SUMMIT: ENSURING THE RELEVANCE OF COMMISSIONS AT 2003; A SUMMIT MEETING OF STATE PUBLIC UTILITY COMMISSIONERS (Nat'l Reg. Res. Inst. Report No. 98-13, 1998), available at NRRI Download Research Web Site, *supra* note 18, at 11-12.

77. For example, based on experience with long-distance telephone slamming (the unauthorized switching of a customer's service provider), what rules should be in place to protect against possible energy provider slamming? Considering customers' confusion over telephone bills, how should electric bills be designed to allow customers to make informed, efficient comparisons between alternative providers? Taking into account, among other things, the slow growth of long distance competition in its first few years, especially for smaller customers,

The author especially seeks opportunities to work with communities on longer-term projects with community development implications,⁷⁸ and has conducted field hearings and participated in a variety of public fora to engage citizens in consideration of key issues in energy restructuring. These are examples of how utility policy and issues of citizenship converge.

David Wirick advances the thinking about PUC restructuring based on his own experience consulting with state commissions. He urges that PUCs adopt flexible approaches, learning from a variety of regulatory models.⁷⁹ He proposes that PUCs implement administrative procedures that may be better suited to policy making than are adjudications—advocating the legislative or policy model.⁸⁰ Further, he argues for the centrality of information, both to empower customers and to create the information infrastructure to support more competitive markets—the regulation by information model.⁸¹ He urges a shift to greater use of collaboration with other entities, and to ensuring that all parties are able to participate—the regulation by negotiation model.⁸² Finally, he elaborates on the centrality of consumer protection and the appropriateness of strengthening this role at PUCs—the “cop on

how should “default” electric service be provided to customers whom no competitive supplier seeks to serve, to customers who have been terminated from service by a competitive supplier, or who simply do not choose a competitive supplier? Are there ways to provide default service that are more or less consistent with encouraging the development of competition and other goals. See Application Process for an Electricity Default Supplier License, Montana Pub. Serv. Comm’n Docket No. D99.12.282/L-99.7.9-RUL (filed Dec. 22, 1999); Proposed Adoption and Repeal of Rules Implementing the Electric Utility Industry Restructuring and Customer Choice Act (Title 69, ch. 8, MCA) and the Natural Gas Utility Restructuring and Customer Choice Act (Title 69, ch. 3, MCA) Pertaining to Consumer Information and Protection, Dep’t of Pub. Serv. Reg. of the State of Montana Docket No. L-99.7.9-RUL.

78. Economic development as a key function for state public utility commissions is more fully explored in Bob Rowe, *Strategies to Promote Advanced Telecommunications Capabilities*, 52 FED. COMM. L.J. 381 (2000). Community-based approaches involve citizens in an ongoing process of determining their community’s service needs, developing strategies to meet those needs, and also providing local training or other resources to maximize the value derived from the services that are available. Rural telephone and electric cooperatives often perform extraordinary services supporting such community efforts.

79. See WIRICK, *supra* note 18, at 24.

80. See *id.* at 23–40.

81. See *id.* at 43–62.

82. See *id.* at 63–83.

the beat" consumer protection model.⁸³ No model is preferred across all situations. On the contrary, all are consistent with and at times complimentary to the others. Wirick describes his models as "visions for the future," and explains that an organization's vision must combine its fundamental reason for existence, its unchanging core values, and its "huge and audacious, but ultimately achievable, aspirations for its own future."⁸⁴ Wirick's flexible approach is appropriate for the rapidly changing environment in which PUCs function. His work deserves further attention and development by practitioners and by observers, as it could serve as the starting point for specific PUC restructuring efforts.

III. FOUR CRITICAL ROLES

This section summarizes work to be done in four critical areas: protecting and informing consumers,⁸⁵ promoting competition,⁸⁶ preserving and advancing universal service,⁸⁷ and encouraging access to advanced technologies.⁸⁸ The NARUC Telecommunications Committee's work, resolutions, research, and deliverable products generally fall within one of these four areas.

A. *Consumer Protection Emerges as a Core Function*

Within NARUC itself, each of the industry-specific standing committees has developed a consumer emphasis. This is especially true of the Telecommunications Committee. Moreover, and most significantly, NARUC has created a separate Consumer Affairs Committee to address consumer issues throughout all regulated industries. The relationship between

83. *See id.* at 85-100.

84. *Id.* at 101. State commission work on the recent "Y2K bug" is an example of the kind of flexibility Wirick urges. Under the leadership of Commissioner Leon Jacobs of Florida, states cooperated with one another, with federal agencies, and with regulated companies to devise a monitoring and compliance system across industries. This was an effort characterized by experimentation, use of non-adjudicatory processes, and a premium on collection and distribution of information. FCC Commissioner Michael Powell, the FCC's "Y2K Commissioner," exemplified the entrepreneurial zeal Wirick has in mind.

85. *See infra* Part III.A.

86. *See infra* Part III.B.

87. *See infra* Part III.C.

88. *See infra* Part III.D.

Telecommunications and Consumer Affairs is especially close and productive, and has resulted in customer-oriented products including:

(1) Web-available consumer education templates for each industry, which may be customized by state commissions.⁸⁹

(2) The "No Surprises" Package, which suggests principles for telecom education and information such as the use of plain, understandable language, protecting consumers from deceptive practices, and providing consumers clear information about rights and responsibilities.⁹⁰ In addition to use by states, the report was used by the FCC in developing its "Truth in Billing" docket.⁹¹

(3) The State and National Action Plan ("SNAP"), which creates a forum of state commission and FCC staff to work together on consumer education, enforcement, database development and other areas.⁹²

Service quality is an area of long-standing concern to state PUCs.⁹³ A variety of factors, such as rapid or inadequately-forecasted growth in demand and increased complexity, among others, have caused renewed concern with service quality over the past few years.⁹⁴ PUCs have addressed these concerns in a

89. See, e.g., *Telephone, Electric, and Water Options* (visited Jan. 26, 2000) <<http://dit1.state.va.us/scc/naruc>>. See also COMPENDIUM OF RESOURCES ON CONSUMER EDUCATION (Francine Sevel ed., Nat'l Reg. Res. Inst. Report No. 98-18, 1998), available at NRRI Download Research Web Site, *supra* note 18; FRANCINE SEVEL, AN ANALYSIS OF CRAMMING: STAKEHOLDER ACTIONS, POLICY RECOMMENDATIONS, AND RELATED RESOURCES (Nat'l Reg. Res. Inst. Report No. 99-12, 1999), available at NRRI Download Research Web Site, *supra* note 18.

90. See National Association of Regulatory Utility Commissioners, Resolution Urging Support of Principles Promoting Consumer Awareness and Protection by Policy Makers Involved With Telecommunications Regulation (July 29, 1998), available at *Summer Meetings 1998 Resolutions* (visited Jan. 26, 2000) <<http://www.naruc.org/Resolutions/summer98.htm>>.

91. See Truth-in-Billing and Billing Format, 14 F.C.C.R. 7492 (1999).

92. See National Association of Regulatory Utility Commissioners, Resolution Urging Support of State and National Action Plan (SNAP) for Consumers Strike Force Mission Statement, available at *Collocation* (visited Jan. 26, 2000) <<http://www.naruc.org/rescont.htm>>.

93. The NARUC Staff Subcommittee on Telephone Service Quality was established in 1972. See *tcomm* (visited Feb. 2, 2000) <<http://www.naruc.org/Committees/Telecommunications/T-com.htm>>.

94. See MICHAEL CLEMENTS, QUALITY OF SERVICE AND MARKET IMPLICATIONS OF ASYMMETRIC STANDARDS IN TELECOMMUNICATIONS (Nat'l Reg. Res. Inst. Report No. 98-24, 1998), available at NRRI Download Research Web Site, *supra* note 18; see, e.g., VIVIAN WITKIND DAVIS ET AL., TELECOMMUNICATIONS SERVICE QUALITY (Nat'l Reg. Res. Inst. Report No. 96-11, 1996); RAYMOND W. LAWTON, SURVEY AND ANALYSIS OF THE

variety of ways, including monitoring, disclosure, target setting, coordination among states within a region,⁹⁵ and, when necessary, penalties. Promoting retail service quality is recognized as closely related to other customer-focused work, and it requires a combination of engineering, economic, and consumer affairs skills. Ultimately, customers may even be able to purchase a certain level of service quality, perhaps with a standardized offer as one of the choices, along with the opportunity to purchase better service quality at higher rates.

At the great majority of state commissions, consumer protection and education has become a primary emphasis, and a source of creativity. Many state commissions have been granted new statutory authority to compensate for and penalize consumer abuses. A 1998 NRRI report explained:

No area of commission change has been more pervasive than the movement toward educating consumers. Though the focus of this effort has largely been on creating mechanisms for informing consumers about competitive markets, it also has involved the development of information about consumer needs and preferences, the creation of two-way communications with consumers, a heightened awareness of the need to provide user-friendly service to consumers at all levels of the commission, with a particular emphasis on residential customers, and the recognition of the need for commissions to reposition themselves in the minds of the public.⁹⁶

Customer service jobs at state commissions are more challenging than ever, but they also have a higher profile, and carry greater responsibility. They have moved from the periphery of PUC work to the core, and they present vast opportunities for public service entrepreneurialism. Given the trend

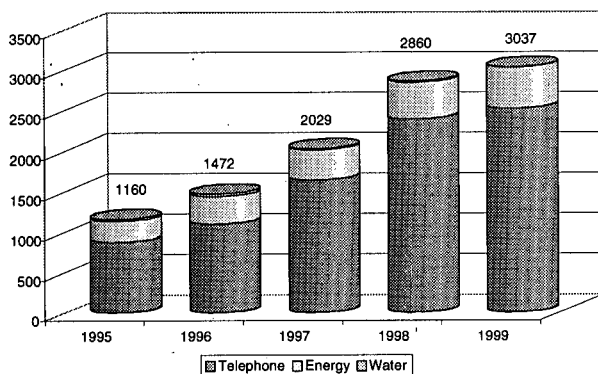
TELECOMMUNICATIONS QUALITY OF SERVICE PREFERENCES AND EXPERIENCES OF THE CUSTOMERS OF OHIO LOCAL TELEPHONE COMPANIES (Nat'l Reg. Res. Inst. Report No. 96-33, 1996).

95. The Regional Oversight Committee for US West ("ROC") developed model Service Quality Standards, which were considered by state PUCs in revising their own standards. See Regional Oversight Committee for US West, Service Quality Standards (1995) (on file with the author).

96. DAVID W. WIRICK ET AL., ORGANIZATIONAL TRANSFORMATION: ENSURING THE RELEVANCE OF PUBLIC UTILITY COMMISSIONS 5 (Nat'l Reg. Res. Inst. Report No. 98-06, 1998), available at NRRI Download Research Web Site, *supra* note 18.

lines for slamming,⁹⁷ cramming,⁹⁸ and service quality complaints (all of which have been increasing in recent years), these positions offer great job security.

The Montana Public Service Commission, for example, has long had good consumer protection rules covering the traditional areas of credit, termination, repairs, access to customer service centers, outages, and other matters. Over the last few years, the Montana commission has moved much more aggressively into monitoring service quality, customer outreach, and education. It has been given valuable new statutory tools to combat abuses such as slamming and cramming.⁹⁹ As a result of market changes and of the Montana Commission's more aggressive efforts, the total number of complaints received by the Montana PSC requiring some kind of active intervention more than tripled over four years to nearly 3,000 for 1998, and passed 3,000 for 1999 (Graph 1), a significant number for a state with fewer than 900,000 people.



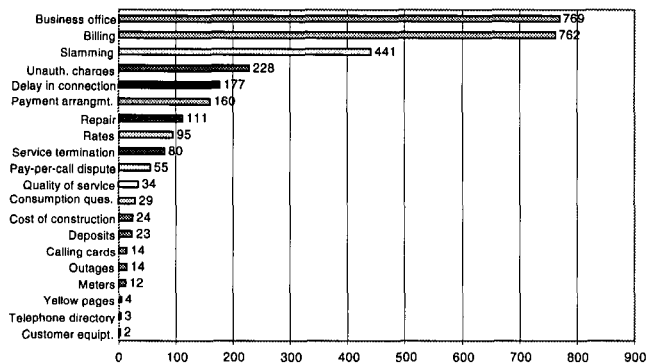
97. Slamming is defined here as changing a customer's service provider without the customer's permission, or obtaining permission deceptively. To date, slamming has been primarily a long-distance issue, but could become a concern in other areas as well. See FRANCINE SEVEL, AN ANALYSIS OF CRAMMING: STAKEHOLDER ACTION, POLICY RECOMMENDATIONS, AND RELATED RESOURCES 1 (Nat'l Reg. Res. Inst. Report No. 99-12, 1999), available at NRRI Download Research Web Site, *supra* note 18.

98. Cramming is defined here as adding to a customer's bill charges for services the customer did not request.

99. See MONT. CODE ANN. §§ 69-3-1301 (1997) (amended 1999), 69-3-1302 (1997), 69-3-1303, 1305 (1997) (amended 1999).

Graph 1. Montana PSC Informal Complaints from 1995 Through 1999 by Service Type.

The greatest growth in complaints received by the Montana PSC has been in telecommunications, including slamming. Cramming—that is, placing unauthorized charges onto a service invoice—was unheard of only several years ago, but it is now the fourth most common complaint (Graph 2).



Graph 2. Montana PSC 1999 Informal Complaints By Complaint Category.

Actions by the Montana legislature granting the commission greater authority to enforce consumer protections have contributed to these improvements. Over the past two legislative sessions, the Montana PSC received significant new powers, exceeding those available to the FCC at the federal level. The 1997 legislature gave the PSC new authority concerning slamming, including a prohibition on charging for slammed calls: the customer gets her money back.¹⁰⁰ Moreover, the 1999 legislature, for the first time, gave the PSC the authority to impose fines directly on slammers and crammers, rather than having to go to court to have fines imposed, and finally gave the PSC a way to terminate the worst abusers' operations in Montana.¹⁰¹ While complaints to the Montana PSC have skyrocketed, the number of slamming complaints received by the

100. See MONT. CODE ANN. § 69-3-1305 (1997) (amended 1999).

101. See *id.*

FCC that originated in Montana dropped to less than one hundred in 1998.¹⁰² In summary, market changes have caused an explosion in certain kinds of consumer problems. Together with expanded PSC authority and aggressive outreach by the PSC, these market changes have resulted in more consumer complaints to the PSC. However, customers have generally received better results for their meritorious claims.

A growing number of states now provide more robust remedies than are available at the federal level. The General Accounting Office recently issued a report documenting the vigorous anti-slamming and anti-cramming efforts by the FCC, the Federal Trade Commission ("FTC"), and especially by state commissions. By 1998, state commissions were handling 40,000 slamming complaints and 20,000 cramming complaints per year. State enforcement actions resulted in orders to pay \$27 million in restitution and penalties, and, since 1994, the FCC has ordered an additional \$17 million in penalties.¹⁰³ The GAO report understates the scope of state efforts, as commissions in states such as Montana received their strongest new powers during the 1999 legislative sessions.

At the federal level, NARUC has advocated an approach to consumer protection that builds on the cooperative federalism of the Telecommunications Act, the FCC-state PUC Magna Carta, and the State and National Action Plan. It seeks to enhance a consumer-oriented federal-state partnership, provide robust remedies, and resolve complaints close to the customer, with a minimum of administrative obstacles. NARUC has suggested the following elements in any federal legislation: (1) Preserving state enforcement of anti-slamming laws; (2) Eliminating subscriber liability for payment of any charges if the subscriber was slammed; (3) Penalizing carriers who engage in slamming; and (4) Establishing strict procedures for third-party verification of carrier change requests.¹⁰⁴

102. Compared to 216 slamming complaints received by the FCC from Montana in 1997. Based on data provided by the FCC to Montana PSC staff (on file with the author).

103. See GENERAL ACCOUNTING OFFICE, TELECOMMUNICATIONS: STATE AND FEDERAL ACTIONS TO CURB SLAMMING AND CRAMMING 2-3 (1999).

104. See Letter from Bob Rowe, Chairman, NARUC Telecommunications Committee, to John McCain, Chairman, Committee on Commerce, Science, and Transportation (May 13, 1999) (on file with the author).

The key to these initiatives will be close coordination between state commissions and the FCC. For example, some PUCs have advocated voluntary FCC-state commission agreements under which slamming complaints received at the federal level could be automatically transferred through a "hot link"¹⁰⁵ to participating state commissions for resolution under state law, with FCC rules setting minimum protections that states could exceed.¹⁰⁶ While this strategy has yet to be implemented, it demonstrates the advances that may be possible through a cooperative federalist approach.

B. Promoting Competition

Important competition-related work remains to be done with respect to a range of issues including, for example, implementing wholesale deaveraging,¹⁰⁷ creating appropriate ways to resolve complaints between carriers concerning provisioning of wholesale service (often described as "enforcement"), and fine-tuning other rules based both on experience and on new developments, such as the creation of Data Competitive Local Exchange Carriers ("DCLECs").¹⁰⁸ More generally, Robert Burns and his colleagues¹⁰⁹ argue that PUCs should embrace a form of market analysis drawing on antitrust economics, consumer protection, and trade practice law.¹¹⁰ In telecommunications,¹¹¹

105. For example, a call received at a national toll free number could be automatically answered by the PUC in the state where the call originates. This would ensure the complainant receives the benefit of any state remedy that might be available. Resolving a disputed slamming complaint can be labor-intensive; for example, it might involve listening to a tape recording of an alleged authorization to determine whether it was deceptively obtained.

106. See Letter from Bob Rowe, Chairman, NARUC Telecommunications Committee, to William Kennard, Chairman, Federal Communications Commission (Apr. 20, 1999) (on file with author); see also Letter from Bob Rowe, Chairman, NARUC Telecommunications Committee, to William Kennard, Chairman of the FCC (Sept. 1, 1999) (on file with author).

107. Under FCC rules, states must deaverage wholesale rates charged by one carrier to another carrier into at least three different cost zones. See 47 C.F.R. § 51.507(f) (1999); Federal-State Joint Board on Universal Service, 14 F.C.C.R. 8078, 8139 (1999).

108. Data CLECs are CLECs specializing in providing higher-speed data services, especially using digital subscriber loop technology over incumbent local exchange carriers loops.

109. See ROBERT E. BURNS ET AL., MARKET ANALYSIS OF PUBLIC UTILITIES: THE NOW AND FUTURE ROLE OF STATE COMMISSIONS (Nat'l Reg. Res. Inst. Report No. 99-14, 1999), available at NRRI Download Research Web Site, *supra* note 18.

110. See *id.*

this would involve a transition away from retail rate regulation toward market regulation, with PUCs becoming referees—setting rules of the game, imposing penalties, and protecting customers. Burns argues it is especially important to focus on “linchpin” networks as the telecommunications industry evolves toward a network of networks. He believes market analysis should be employed in merger and acquisition assessment, affiliate transaction review, examining interconnection arrangements, and even PUC Section 271¹¹² proceedings concerning RBOC authorization to provide in-region long distance service. According to Burns, policy issues concern developing appropriate levels of regulation, criteria for reducing dominant firm regulation, establishing codes of conduct, and conducting market analysis.

The corner piece in the section 271 jigsaw puzzle is in place: the FCC’s decision to grant Bell Atlantic’s application to provide service in New York state.¹¹³ That successful result was grounded in the work of the New York PSC over the preceding years. States such as New York, Texas, and Pennsylvania have provided tremendous leadership in their work implementing section 271. The structure of section 271 places an especial burden on state commissions to develop a record, and creates an opportunity for them to solve problems before a section 271 application is filed with the FCC. In the US West region, for example, many states are participating in an Operations Support System collaborative, designed to work through

111. *See id.*

112. Section 271 of the Telecommunications Act of 1996 provides that an RBOC may provide long distance service within its own territory (determined on a state-by-state basis) once it has met certain conditions, including a fourteen-point competitive checklist and a determination by the FCC that granting the RBOC’s application is consistent with the public interest. The FCC must act on an application within ninety days after its filing. It must consult with the United States Department of Justice, giving the DOJ recommendation substantial but not preclusive weight. It must also consult with the PUC for the state that is the subject of the application. In practice, the RBOC typically files its proposal with the state PUC well in advance of a filing with the FCC, and files with the FCC only after the PUC has endorsed the application. *See* Telecommunications Act of 1996 § 271, 47 U.S.C. § 271 (Supp. III 1997).

113. *See* Bell Atlantic New York, Rel. No. DA 99-3015, CC Docket No. 99-295 (Dec. 27, 1999). AT&T and Covad Communications appealed to the US Court of Appeals for a stay of the FCC order. *See* AT&T v. FCC, No. 99-1538 (D.C. Cir. 2000); Lisa I. Fried, *FCC Ruling: Circuit Court Review to Decide for Whom Bells Toll*, N.Y.L.J., Jan. 6, 2000, at 5. The AT&T and Covad cases were consolidated by the D.C. Circuit, and the stay was denied on Jan. 4, 2000. *See* Covad Communications v. FCC, No. 99-1540 (D.C. Cir. 2000).

the most difficult “competitive checklist” issues in an open, problem-solving approach involving both US West and potential wholesale customers.¹¹⁴

C. *Preserving and Advancing Universal Service*

The goal of providing universal service to United States citizens presents special challenges to regulators striving to balance competition with customer interests. Regulators must consider whether universal service is itself antithetical to competition, or perhaps a necessary quid pro quo for the Telecommunications Act’s competition provisions. Alternatively, one might view universal service as one of the “twin pillars” of telecommunications policy. Or, structured properly, universal service might be used as a tool to extend the benefits of competition to more customers and more regions.¹¹⁵

The Telecommunications Act, in Section 254, set ambitious goals for universal service, expanding its scope to include the “demand pull”¹¹⁶ of rural health care, libraries and schools, and raising the bar to require “reasonable comparability” of rural and urban rates and service, including access to advanced service, and declaring that universal service is an evolving concept. For the non-rural fund (supporting companies with over 100,000 access lines, including RBOCs) the FCC’s Fall 1999 orders¹¹⁷ set a framework for providing support to larger compa-

114. Information about this collaborative is available on the National Regulatory Research Institute web page. See *ROC OSS Repository* (visited Jan. 26, 2000) <<http://www.nrri.ohio-state.edu/oss.htm>>; see also Resolution Encouraging Regional Collaborative Independent Third Party Testing of RBOC OSS, available at *NARUC Summer Committee Meetings Westin St* (visited Jan. 26, 2000) <<http://www.naruc.org/Resolutions/summer99.htm>>. Regional OSS collaboratives were suggested by Bob Rowe. See Bob Rowe, *Let's Work Together to Resolve Bell Operating Company Long Distance Entry*, 20 NRRI Q. BULL. 53 (1999). State-to-state cooperation within regions is a topic of growing importance in both telecommunications and energy. It presents problems of information flow, coordination, and authority in some respects analogous to international law.

115. The author’s views on high cost fund support are more fully set out in Bob Rowe et al., *Universal Service: The Case for Rural America*, PUB. UTILS. FORTNIGHTLY, July 15, 1999, at 48.

116. Supporting these uses will generate additional demand for higher capacity services, which may in turn stimulate the deployment of additional facilities.

117. See Federal-State Joint Board on Universal Service, Rel. No. FCC 99-304, CC Docket No. 96-45 (Nov. 2, 1999).

nies serving high-cost areas, which may be revised through reconsideration or appeal.¹¹⁸

To date, there is much less controversy concerning the importance of "getting it right" for the small cooperatives and companies, which generally provide first-rate service to the most rural areas. So far, the Rural Task Force, which will make recommendations to the Universal Service Joint Board next fall, has been exemplary in moving beyond position-based advocacy to try to do the right thing for rural America.¹¹⁹ The Rural Task Force plans to issue a series of reports identifying the unique characteristics of small companies and strategies to provide high-cost support without harming service to rural telecom customers.

As recognized in the Act, universal service implicates important national and state policies. Many states have implemented intra-state universal service funds.¹²⁰ States generally view universal service as a key tool to mitigate any deleterious effects on retail customers of, for example, wholesale rate deaveraging or erosion of implicit support.¹²¹ Universal service is

118. See *US West Communications, Inc. v. FCC*, No. 99-9546 (10th Cir. 1999). This case was reactivated in the 10th Circuit on Mar. 15, 2000, but no final order had been issued as of publication time. At the time of this writing, the Wyoming commission has filed for reconsideration, but the filing has not yet been noticed. Questions concerning the FCC's orders have included whether specific inputs to the economic cost model are correct, whether the model itself is sufficiently able to estimate the cost of providing service, and whether the policies (the "methodology") which are applied to the model's outputs are in compliance with § 254.

119. See *Rural Task Force Home Page* (visited Jan. 24, 2000) <<http://www.wutc.wa.gov/rtf>>. The Rural Task Force was established by the FCC. It is chaired by Washington State Commissioner Bill Gillis, and includes various industry, consumer, and rural representatives. The Universal Service Joint Board includes three FCC commissioners, four state commissioners, and one consumer advocate, along with substantial staff support. The Joint Board conducts proceedings on issues which are referred to it by the FCC pursuant to § 254, and makes formal recommendations to the FCC, which are in turn the subject of FCC proceedings and eventual action.

120. See EDWIN A. ROSENBERG & JOHN D. WILHELM, *STATE UNIVERSAL SERVICE FUNDING AND POLICY: AN OVERVIEW AND SURVEY* (Nat'l Reg. Res. Inst. Report No. 98-20, 1998), available at NRRRI Download Research Web Site, *supra* note 18.

121. Supports used to keep basic local rates affordable include relatively higher business rates than residential rates; averaging of rural and urban rates to keep rural rates lower than would otherwise be the case; a portion of the charges paid by long distance companies for their use of the local phone network to reach customers; and charges paid by users of vertical services such as call waiting and caller identification. Over time, competition is expected to erode many of these

also one of the few areas where state interests tend to diverge between higher-average cost and lower-average cost states.¹²² However, NARUC did adopt a set of principles to guide implementation of the Section 254 universal service mandate.¹²³

It is unlikely that, in the foreseeable future, universal service expectations will completely vanish, given the expanded scope of universal service in Section 254, the irreducible cost differences regardless of technology deployed, and, as suggested by Professor Eli Noam, the expanding nature of societal expectations coupled with the centrality of telecommunications infrastructure to economic and social structures.¹²⁴ It is

implicit supports, causing concern that they be replaced with explicit support such as universal service. Various economists, consumer advocates and industry representatives take sometimes wildly differing views of what approaches are the most economically efficient or fair. Economic subsidies are said to exist when the price charged for a service does not cover the marginal cost of providing the service. Subsidies are a subset of implicit support.

122. Virtually all states have a mixture of higher-cost and lower-cost areas. Some states may have significant high-cost rural areas, but have even more substantial lower-cost urban areas, making them, on average, lower-cost states, and, as a result, net payors into national universal service support mechanisms. As a result of factors including density (dirt between customers) and geography (dirt piled into mountains) other states have average costs that are higher, sometimes much higher, than the national average.

123. See National Association of Regulatory Utility Commissioners, Resolution Regarding Implementation of Universal Service High Cost Funding (Nov. 12, 1997). See also National Association of Regulatory Utility Commissioners, Resolution to Support Alternatives to the Federal High Cost Support Mechanism Announced by the FCC in its May 8, 1997 Universal Service Order (Nov. 12, 1997) (on file with the author); National Association of Regulatory Utility Commissioners, Resolution on Definition of Voice Grade Service for Universal Service Purposes, available at *Winter Meetings 1998 Resolutions* (visited Jan. 24, 2000) <<http://www.naruc.org/Resolutions/winter98.htm>>; National Association of Regulatory Utility Commissioners, Resolution Supporting Access to Advanced Communications for Schools and Libraries and Rural Health Care Providers and Use of the Telephone Excise Tax to Fund These Programs (adopted July 29, 1998), available at *Summer Meetings 1998 Resolutions*, *supra* note 90; National Association of Regulatory Utility Commissioners, Resolution on the Universal Service Rural Health Care Program, available at *NARUC Summer Committee Meetings Westin St*, *supra* note 114; Rowe, *supra* note 115, at 48.

124. See Eli M. Noam, *The Future of Telecommunications, The Future of Telecommunications Regulation*, 20 NRRI Q. BULL. 17 (1999). Noam writes:

Many people believe that somehow the efficiency of competition will shrink the subsidy slice of the pie to zero. But that assumes that the definition of the pie does not grow over time. Yet with telecommunications becoming ever more important, not having full connectivity to the new and powerful means of communication becomes a major disadvantage. That is why we now hear about helping the information poor, those beyond the digital divide, the fourth world, the schools and hospitals,

equally unlikely that over the short and medium term—when some but not all variables are subject to change—competition or new technology will result in significantly diminished demand for universal service support.

D. Promoting Access to Advanced Capabilities

Section 706 of the Telecommunications Act of 1996 directs both the FCC and state commissions to promote access to advanced telecommunications capabilities.¹²⁵ NARUC has described Section 706 as an invitation to “grab the brass ring” rather than “pick low level fruit.”¹²⁶ In August, NARUC submitted to the FCC a detailed proposal for a Federal-State Joint Conference on Section 706.¹²⁷ Last fall, the FCC created the Joint Conference, which is now undertaking a series of regional field hearings and pursuing other efforts.¹²⁸ State commissions are undertaking a variety of strategies to promote technology deployment, often working closely with other units of government, with the private sector and with non-governmental organizations.

and that is why we will, inevitably, expand our definition of what is being spread throughout society.

Id. at 19.

125. Section 706(a) provides:

IN GENERAL.—The Commission and each State commission with regulatory jurisdiction . . . shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition . . . [or] . . . that remove barriers to infrastructure investment.

Telecommunications Act of 1996 § 706(a), 47 U.S.C. § 157 (Supp. III 1997).

126. See National Association of Regulatory Utility Commissioners, Resolution Regarding Petitions To The FCC For Action Under Sec. 706, available at *Winter Meetings 1998 Resolutions*, *supra* note 123.

127. See National Association of Regulatory Utility Commissioners, Resolution Endorsing a Federal-State Joint Conference on Advanced Services, available at *NARUC Summer Committee Meetings Westin St.*, *supra* note 114.

128. See Federal-State Joint Conference on Advanced Telecommunications Services, Rel. No. FCC 99-293, CC Docket No. 99-294, (Oct. 8, 1999). The Joint Conference web page is available at *Federal-State Joint Conference on Advanced Services* (last modified Mar. 3, 2000) <<http://www.fcc.gov/Jointconference>>. State opportunities to implement Section 706 are described in more detail in Rowe, *supra* note 78.

CONCLUSION—THE IMPORTANCE OF CITIZEN ENGAGEMENT

As is true for many other public and private sector entities, regulatory commissions must change, and often change quickly, or risk becoming irrelevant or even becoming obstacles to needed developments. This is of particular concern due to the crucial role of networked industries in our economic and social life. Every actor in this arena has a particular responsibility. Policy makers and implementers must know when it is time to let go of functions that are no longer needed, and at the same time preserve and adapt what is useful. Regulators and other stakeholders, especially consumers, should more thoughtfully discuss what conditions would allow elimination of various requirements. Regulatory agencies must also have the legal ability to let go, the authority to forbear.¹²⁹

A useful decision tree, through which many of the topics in this article could be evaluated, would be:

- (1) What values underlie the work?
- (2) What needs to be done (objectives)?
- (3) How should it be done, most consistently with the underlying values?
- (4) Who should do what needs to be done?
- (5) How will we know when we don't need to do something any more, do less of it, or do it differently?

With these considerations in mind, this article summarized several of the factors driving change in network industries and regulation. It suggested that regulatory agencies are among the primary proponents of substantive policy change and are frequent advocates of workable competition. It outlined some of the efforts to reform the process of regulation even as the substance is restructured, and it suggested specific areas where important work remains to be done, including consumer protection and education. Competition, universal service, and technology remain important areas for PUC involvement.

It may be objected that some of these functions could be accomplished elsewhere, perhaps by other agencies or even through the operation of common law,¹³⁰ and in specific instances this may be appropriate. However, premature disman-

129. See Mont. Code Ann. § 69-3-910 (1999), granting authority to forbear from regulation of small telephone companies similar to the authority granted the FCC in § 10 of the Telecommunications Act.

130. See HUBER, *supra* note 29, at 7-9.

ting of regulatory agencies, in contrast with measured reform, risks losing the significant benefits these structures provide, and also raises important citizenship concerns.

PUCs are uniquely engaged with a range of network industries, each affected with fundamental public interests. The ability to work in-depth across industries produces ordinary, static efficiencies associated with using the same resources to work in each of these different sectors. It also produces dynamic efficiencies associated with comparing approaches and applying lessons learned in one industry to work in others. For example, PUCs apply what they learn in telecommunications to energy restructuring.

There is tremendous value in integrating a variety of functions associated with one industry, including economic analysis, engineering and technical work, and consumer-related functions. Each of the disciplines informs the others. Well-designed consumer protection programs provide economists with critical information about the development of markets and about failure within those markets. Economists, in turn, provide consumer protection specialists useful information about how information may best be provided to reduce these failures. In sum, there are cross-industry and cross-discipline benefits from the combination of resources and authority that resides in PUCs. The challenge is to capture these benefits creatively, flexibly, and efficiently.

Equally fundamental matters involve access to and participation in government, and the transparency of governmental action. These directly affect public confidence in government.

Commercial or consumer values concern all aspects of the provision of goods and services: information before the purchase, price and other terms at purchase, remedies and the ongoing customer relationship after the purchase. Commerce is governed by rules on a continuum, from common law, to statutes including the Uniform Commercial Code and unfair trade practices laws, to industry-specific regulation and rate-base rate of return adjudication. As developed in this article, the focus is now moving toward more flexible, less prescriptive approaches to rule setting. The effort to craft thoughtful and balanced rules of electronic commerce is an exciting endeavor, and is a positive example of how important rule setting can be to support the growth of robust markets, taking each of these

sources of law into account. The chaos and mistrust characteristic of some foreign markets that lack transparent, publicly accepted rules is a negative example. Last December's demonstrations at the World Trade Organization meeting in Seattle are at least a reminder, at the international level, of the importance of transparency and accessible processes, even as we work hard to open markets and expand competition.¹³¹

Citizenship values concern how we view our responsibilities to and our relationships with our fellow citizens, whether through government, the private sector, or through our celebrated American "voluntary associations."¹³² One school of public sector ethics focuses not on prohibitions or rules of conduct, but instead draws on the American Founders and political traditions to describe an "ethics of citizenship."¹³³ It is within this context that economic regulation should be reformed.

131. See Paul Schell, *What a Week* (visited Feb. 16, 2000) <http://cityofseattle.net/wto/sm_120699.htm>.

132. See 2 ALEXIS DE TOCQUEVILLE, *DEMOCRACY IN AMERICA* (Phillips Bradley ed., Alfred A. Knopf 1984) (1835).

There is only one country on the face of the earth where the citizens enjoy unlimited freedom of association for political purposes. This same country is the only one in the world where the continual exercise of the right of association has been introduced into civil life and where all the advantages which civilization can confer are produced by means of it.

Id. at 115.

133. See TERRY L. COOPER, *AN ETHIC OF CITIZENSHIP FOR PUBLIC ADMINISTRATION* (1991). Cooper notes the challenges of active citizenship in a large and complex polity, and the challenges posed to the concept by interest group theory. Nonetheless, he challenges the Wilsonian view that government administration should be removed from "meddlesome" citizens. See *id.* at 2 (quoting Woodrow Wilson). He argues for an ethics grounded in, among other sources, Locke, Puritan settlers, Federalists and Anti-federalists, and the Jeffersonian concept of republican virtue. Based on this, he advocates "the public administrator as virtuous citizen," with various affirmative obligations. *Id.* at ch.5.