Preface to the Second Edition

My purpose is to present the fundamentals of public utility law: the legal principles that practitioners need to make public-spirited proposals and that policymakers need to make public-spirited decisions.

For over a century, these legal principles have supported and disciplined the nation's infrastructural industries: rail, trucking, electricity, gas, telecommunications and water. Regardless of industry or era, utility law has shared six characteristics:

- *mission*—to align private behavior with the public interest;
- *flexibility*—accommodating multiple market structures and public purposes;
- *integration of multiple professions*—accounting, economics, engineering, finance and management;
- *expansiveness*—from state grants of exclusive franchises to federal constitutional protection of shareholder investment;
- *sources*—constitutions, statutes, agency rules and orders, and judicial opinions; and
- *procedures*—legislation, rulemaking, adjudication, enforcement and judicial review.

Today's political challenges are causing policymakers and practitioners to stretch these six dimensions. Confronting *climate change*, they ask: Should we make utilities and their customers responsible for greening production and reducing consumption? Debating the *digital divide*, they ask: Should we bring broadband to every home—at what cost and at whose cost? Concerned about *privacy*, they ask: Should consumers' private consumption data be available to profit-seekers? These questions, and many others, expose *ideological tensions* (e.g., private vs. public ownership, government-protected monopolies vs. unregulated competition vs. mixed markets); and *federal-state tensions* (e.g., Which aspects of utility service are national, warranting uniform regulation, and which are local, warranting state experimentation?).

Regulation's New Challenges

Since the American Bar Association published this book in 2013, much has changed. We now have Uber and Lyft, electric vehicle charging stations, Facebook and YouTube, new

broadband content providers, microgrids, renewable energy mandates, demand response, smart grid, community solar, electricity storage and municipal aggregation. New market entrants, using new technologies, seek to convert old-world monopoly markets into new-world competitive markets. And we have new threats: cyberattacks, hundred-year storms, wildfires and pandemics.

These challenges are forcing policymakers to rethink their purposes, principles and procedures. Consider five examples:

Injecting competition: In the 1980s and 1990s, policymakers struggling to inject competition into historically monopolistic markets had one major tool: requiring incumbents to unbundle competitive services from monopoly services while providing nondiscriminatory access to the monopoly services. Central to these solutions were the incumbents. Today's regulators are inviting new entrants to displace those incumbents. Witness the Federal Energy Regulatory Commission (FERC), ordering regional transmission organizations to allow nonincumbents not only to build and own transmission, but also to provide alternatives to transmission. Witness state commissions ordering franchised utilities to accommodate distributed energy resources supplied by start-ups.

Improving competition: Like mastering a musical instrument, making competition work demands continuous work. A quarter century since FERC in Order No. 888 directed incumbent transmission owners to provide nondiscriminatory access, since some states introduced retail competition for electricity and gas, and since Congress made competition realistic for local and long-distance telephone service, numerous market suboptimalities remain. To address these problems, FERC has ordered regional transmission organizations to allow wholesale market entry by providers of nonconventional services—demand response, storage, frequency regulation and variable energy sources; states have announced new licensing requirements for retail energy sellers; and the Federal Communications Commission has issued multiple (and sometimes self-reversing) orders addressing content creators' access to bottleneck Internet facilities.

Compensating for stranded investment: In the 1980s and 1990s, stranded investment debates focused on natural gas pipeline capacity, gas take-or-pay obligations and nuclear generating facilities. In each of those contexts, cost recovery was made uncertain by newly introduced competition. Today's stranded investment debates arise less from competition than from decarbonization, decentralization and technological obsolescence. Policymakers are asking: Who should pay off the coal plants replaced by renewables; the electricity distribution lines replaced by storage and microgrids; and the old analog, one-way meters replaced by digital, two-way meters?

Modernizing quality-of-service rules: Quality shortfalls, some with tragic effects, have produced both traditional penalties and new mandates. Regulators are responding to the new risks with new standards—on cybersecurity, storm hardening, distribution line undergrounding and wildfire planning.

Clarifying federal-state jurisdictional relations: Our nation's jurisdictional gears continue to grind. States are taking actions—some to make competition more effective, some to protect their residents where competition is ineffective, some to protect their monopoly utilities when competition is too effective. Because these in-state actions affect interstate markets, they have produced an unusually large number of Supreme Court and circuit court decisions interpreting and applying the federal-state boundaries Congress created over 80 years ago.

Substantive Coverage and Organization

Public utility law makes trillions of dollars flow from consumers to providers. It affects market structure, seller conduct and customer conduct. It rewards and punishes. With so much at stake, practitioners must master the powers, rights and responsibilities of those who make or live with these decisions: legislators and regulators, utilities and their competitors, investors and consumers, workers and environmentalists, states and localities.

To serve this educational purpose, I have organized the polyglot of legal sources from regulatory statutes, agency decisions, constitutional law, antitrust law, contract law and tort law into four major areas:

- *Market structure*: What is the appropriate mix of monopoly markets and competitive markets? How do we convert historically monopolistic markets into competitive markets? And because authorizing competition does not guarantee effective competition, how do we prevent a small number of sellers from dominating markets and acting anticompetitively?
- *Pricing*: What statutory and constitutional standards ensure that sellers are fairly compensated and customers not exploited?
- *Federal-state jurisdiction*: Most utility services today are produced and consumed in interstate markets. With a governmental structure designed in the 1780s and regulatory statutes enacted in the 1930s, how do, and should, federal and state policymakers interact when regulating the same providers and the same transactions?
- *Corporate structure, mergers and acquisitions*: What mix of business activities should take place within a utility's corporate family? What policy choices exist to cause mergers and acquisitions to improve, and prevent them from undermining, competitiveness, efficiency and accountability?

The present book addresses the first three subjects in Parts One, Two and Three, respectively. I deal with the fourth subject in my *Regulating Mergers and Acquisitions of U.S. Electric Utilities: Industry Concentration and Corporate Complication* (Edward Elgar Publishing 2020).

Pedagogical Purposes

By offering mastery of utility law's foundations, I hope to achieve four overlapping goals:

Enable readers to act effectively in all regulated industries: Many regulatory practitioners burrow into a single industry; even into subspecialties like gas purchasing, electric transmission pricing or telecommunications mergers. Policymakers lack that luxury; they must address all industries and all specialties. While this book is not a substitute for in-depth works on specific industries (examples of which are cited throughout), its illustrations from multiple industries can help readers spread the successes and quarantine the failures.

Help non-lawyers become conversant with law: Every regulatory decision is a legal decision. It establishes powers, rights and responsibilities. It must be built on facts and logic, respecting precedent or explaining departures from precedent. Anyone intending to make, influence, explain or defend a regulatory decision—any expert witness, advocate,

commissioner or legislator—needs to know the law. For 50 years, Alfred Kahn's great treatise, *The Economics of Regulation: Principles and Institutions*, has made lawyers literate in that foundational field. The present book aspires to replicate that purpose, by bringing legal literacy to new lawyers and non-lawyers.

Prepare policymakers to adjust the law to accommodate technological change: By mastering current regulatory law, we can spot its mismatches with our current economic and social goals. A monopoly held for a century casts a long shadow into the next. Anyone working to introduce competition, especially into markets where the incumbent still dominates, needs to know the legal bases for that dominant market position so as to design lawful ways to loosen it.

Preserve the credibility of regulation: While this book aims for neutrality, it is shaped by this perspective: The purpose of regulation is to regulate—to define standards of performance, hold utilities accountable for their performance, and compensate them consistent with their performance. Only by knowing the law can policymakers shape their decisions to achieve regulation's purpose.

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A new generation of regulators and practitioners is entering the field. Many are motivated to improve the world—by expanding broadband to underserved areas, using renewable energy to reduce carbon emissions, enabling new market entrants to compete on the merits, and empowering customers to demand and receive the most cost-effective service. My book of essays, *Preside or Lead? The Attributes and Actions of Effective Regulators*, describes the personal qualities, institutional structures and political forces that support, and undermine, regulation's public interest mission. That book's premise is clear from its title: The public interest is best served by those who lead. For readers who accept that role, I hope this book will support their personal leadership with substantive muscle.