Economic Justice in the Regulation of Infrastructural Industries:What is the Role of Law?

Scott Hempling¹

- Justice principles: What can we learn from scholars and philosophers?
- Economic principles: What are the justice implications of the economic principles that regulators routinely apply?
- The U.S. Constitution: Does it tell us anything about justice?
- Regulatory statutes: Do they reflect political decisions about justice?
- Justice actors: Who dispenses justice--regulators, legislators, judges, or all three?
- Common regulatory questions with justice implications
- Conclusion: Regulation's nine justice principles

This paper is based on a new course I teach at Georgetown University Law Center entitled "Economic Justice in the Regulation of Infrastructural Industries: Electricity, Gas, Water, Telecommunications, Transportation." The 2025 syllabus is available on my website, www.scotthemplinglaw.com.

An adjunct professor at Georgetown University Law Center, Hempling is a former Executive Director of the U.S. National Regulatory Research Institute, and a former Administrative Law Judge at the U.S. Federal Energy Regulatory Commission. He received a B.A. *cum laude* from Yale University in (1) Economics and Political Science and (2) Music, and a J.D. *magna cum laude* from Georgetown University Law Center. He can be reached at shempling@scotthemplinglaw.com, or 301-754-3869.

¹ Scott Hempling is an attorney, teacher, and expert witness. He has advised and testified before numerous state utility commissions, and appeared frequently before U.S. congressional and state legislative committees. He has addressed audiences throughout the United States and in Australia, Belgium, Canada, Central America, England, Germany, India, Italy, Jamaica, Mexico, New Zealand, Nigeria, Norway, Peru, and Vanuatu. He has authored *Regulating Public Utility Performance: The Law of Market Structure, Pricing and Jurisdiction* (American Bar Association 2d ed. 2021); *Regulating Mergers and Acquisitions of U.S. Electric Utilities: Industry Consolidation and Corporate Complication* (Edward Elgar Publishing 2020); and *Preside or Lead? The Attributes and Actions of Effective Regulators* (2d ed. 2013).

I. Introduction

- A. Our nation's infrastructure abounds in justice failures:
 - 1. In Flint, Michigan, officials subjected thousands of families to lead-poisoned water.
 - 2. In Puerto Rico, hurricanes have crippled an electricity infrastructure long neglected by its government-owned, previously unregulated monopoly utility, leaving thousands of families without electricity.
 - 3. Wildfires in Maui, arising in part from years of neglect by the utility, plantation owners, and government officials, have left thousands homeless.
 - 4. A gas pipeline in San Bruno, California exploded, killing eight people and destroying a neighborhood. The responsible utility, Pacific Gas & Electric, lied about its inspection practices, obstructed justice, and was convicted in federal court of both crimes. The state utility commission imposed a fine of \$1.6 billion, under a statute that, fully applied, would have meant fines exceeding \$100 billion. The same commission has allowed the utility to keep its government-granted franchise to serve as a monopoly.
 - 5. Water flooding in coastal Charleston, South Carolina disproportionately affects marginalized communities. The City carries on as a prime tourist destination, leaving the problem unsolved.
 - 6. Navajos lack reliable electric supply in most of their territory.
 - 7. Internet access in low-income neighborhoods is persistently lower quality than in high-income neighborhoods.
 - 8. In the District of Columbia, the government-appointed electricity monopoly, PEPCO, has retained contractors that paid their workers below minimum wage. Informed, the utility and its regulatory commission did nothing.
 - 9. New York City's taxi-cab owners are mostly members of minority communities. Many are now hundreds of thousands of dollars in debt, because the value of their medallions (effectively, the transferable license to own and drive a cab) has plummeted. The government and others are still trying to determine who is responsible for the practices that led to

inflated, then deflated, prices for the medallions, but there is no doubt about the victims.

- B. Common to each of these situations are two things: economic regulation and economic regulators. One or more public bodies created, encouraged, tolerated, or ignored conditions that allowed private business conduct to produce adverse public outcomes. Private behavior, insufficiently constrained and guided by economic regulation, produced results that disproportionately harmed disadvantaged communities.
- C. What should, and can, regulatory lawyers do about justice failures--about preventing them and correcting them? To address this question, I consider justice philosophy principles, classic economic principles, constitutional clauses, statutory language, and the actions of government decisionmakers.

II. Justice principles: What can we learn from scholars and philosophers?

A. Types of justice

- 1. distributive justice, which is the equitable allocation of benefits and burdens;
- 2. procedural justice, which means fair access to process;
- 3. recognition justice, which is acknowledgment of and respect for all peoples; and
- 4. restorative justice, which addresses issues of past harms.

On these four topics, see generally Shelanda Baker, Revolutionary Power: An Activist's Guide to the Energy Transition, Ch.1 (2021).²

² Professor Baker there writes that "in my work on energy justice, I have come to include an additional element: the centering of the voices of marginalized communities"). On Procedural justice, Sovacool and Dworkin add that it "addresses how decisions are made in pursuing social goals, including who is involved and who has influence. It has four elements: access to information, access to and meaningful participation in decision-making, lack of bias on the part of decision-makers, and access to legal processes for redressed." Benjamin Sovacool and Michael Dworkin, *Global Energy Justice: Problems, Principles, and Practices*, Ch. 1 (2014).

B. Pope Francis on justice and injustice³

- 1. The source "created all human beings equal in rights, duties and dignity, and has called them to live together as brothers and sisters."
- 2. "Dreams . . . are built together."
- 3. "[F]raternal openness" helps others "become ever more fully themselves."
- 4. Aim for "a love that transcends the barriers of geography and distance"
- 5. Focus on "the least of . . . brothers and sisters"
- 6. Injustice: "Some parts of our human family, it appears, can be readily sacrificed for the sake of others considered worthy of a carefree existence."

C. Classical justice theories

1. Utilitarianism: Maximize total societal benefit.

But how to measure societal benefit? Sen. Robert F. Kennedy, 1968:

"Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl. It counts napalm and counts nuclear warheads and armored cars for the police to fight the riots in our cities. It counts Whitman's rifle and Speck's knife, and the television programs which glorify violence in order to sell toys to our children. Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile. And it can tell us everything about America except why we are proud that we are Americans."

³ Pope Francis, Encyclical Letter, On Fraternity and Social Friendship.

- 2. Libertarianism: Each of us has an individual, fundamental right to liberty, or right to do whatever we want with what we own, provided we do not violate other people's rights to do the same.
- 3. Outcome based on productivity: "To each according to what he and the instruments he owns produces." Put another way: "Payment in accordance with product." Put another way: "[E]nable resources to be allocated efficiently without compulsion." (Milton Friedman)
- 4. John Rawls: Provide at least the minimum to the least-advantaged; give all what they would opt for if they had were under a veil of ignorance.
- 5. Immanuel Kant: Individuals have fundamental rights, inalienable rights, that cannot be overridden even if consequences produce net gains.
- 6. Ethical individualism: Every person is of equal importance regardless of ethnicity, wealth, gender, or where or when they were born.

D. To whom, and to what, might principles apply?

- 1. to a society
- 2. to relationships between individuals
- 3. to relationships between economic actors and those affected by the actors' actions

III. Economic principles: What are the justice implications of the economic principles that regulators routinely apply?

A. Central regulatory principle: Cost responsibility lies with the cost causers and benefit recipients.

B. The job of regulation is to fix market failures

- 1. Paul Krugman defines a market failure as a situation in which an individual's pursuit of self-interest leads to bad results for the society as a whole. The market outcome is inefficient.
- 2. Krugman: "[M]arkets can fail when, in an attempt to capture more surplus, one party prevents mutually beneficial trades from occurring."

⁴ Krugman and Wells, *Microeconomics*.

- 3. Other types of market failures that economic regulators face
 - a. Underinvestment in public goods
 - b. Insufficient cost responsibility for those who cause negative externalities
 - c. Insufficient compensation for those who produce positive externalities

C. The efficiency-equity tradeoff

Are departures from equity justified if they increase efficiency? Are departures from efficiency justified if they increase equity?

1. Efficiency analysis

- a. "An economy's resources are used efficiently when they are used in a way that has fully exploited all opportunities to make everyone better off. . . . An economy is efficient if it takes all opportunities to make some people better off without making other people worse off. . . . When an economy is efficient, it is producing the maximum gains from trade possible given the resources available. . . . There is no way to rearrange how resources are used in a way that can make everyone [or even anyone] better off. When an economy is efficient, one person can be made better off by rearranging how resources are used only by making someone else worse off."
- b. "Efficiency is only a means to achieve society's goals.

 Sometimes efficiency may conflict with a goal that society has deemed worthwhile to achieve. . . . There is typically a tradeoff between equity and efficiency: policies that promote equity often come at a cost of decreased efficiency in the economy, and vice versa. . . . What is important for economists . . . is always to seek to use the economy's resources as efficiently as possible in the pursuit of society's goals, whatever those goals may be." 6

⁵ Krugman and Wells, *Microeconomics*.

⁶ *Id*.

2. Distributional analysis

- a. "The conventional economic wisdom has been that regulations could safely ignore any distributional consequences. The supporting justifications range from the expectation that disproportionate effects on some groups would cancel out across regulations to the argument that it would be cheaper to address any remaining distributional concerns through progressive taxation rather than on a regulation-by-regulation basis."
- b. "For example, economists have long argued that there is diminishing marginal utility to additional income. This property would mean that the same costs imposed on very poor individuals would have much greater (negative) welfare effects on them than on very rich individuals. Conversely, benefits that accrue to very rich individuals would have only modest (positive) welfare effects compared to welfare effects for very poor individuals."

D. Benefit-cost analysis

- 1. Value of a dollar, value of time: "[L]ow-income individuals and high-income individuals make different dollars-for-lives trade-offs—not because low-income people value their lives less[,] but because they value their dollars more."
- 2. "[C]ost-benefit analysis proceeds by asking how much certain consequences are worth, in dollar terms, to the people who will bear them, and declares a winner by adding up the total dollar amounts on each side of the ledger. A dollar is a dollar in this world, and it matters the same whether a poor person or a rich person is spending or receiving it. It also matters the same whether one person is poor, and another rich, as a consequence of this country's long history of racism and racial subordination." [Heinzerling]
- 3. "Cost-benefit analysis's relentless insistence on converting all human interactions into economic transactions is most jarringly illustrated by a cost-benefit analysis conducted to evaluate a Department of Justice rule aimed at reducing rape and sexual assault in prisons. For purposes of this

⁷ Caroline Cecot, "Efficiency and Equity in Regulation," *Vanderbilt Law Review*, Vol. 76, No. 2, pp. 361427 (2023).

⁸ *Id*.

analysis, the Department tried to estimate how much money people would be willing to accept to endure rape or sexual assault. Converting rape and sexual assault into market transactions changed them from acts of coercion and violence into supposedly free and willing exchanges; in "valuing" them, the Department of Justice erased the harms that make these acts crimes." [Heinzerling]

4. "The Department pondered how much money people who use wheelchairs would be willing to pay to avoid the indignity of needing assistance in moving from the wheelchair to the toilet due to an inaccessibly designed space." [Heinzerling]

E. Discount rate

"Environmental stewardship is a long game, the benefits of which stretch into the indefinite future. Yet the farther into the future these benefits reach, the more discounting diminishes them." [Heinzerling]

IV. The U.S. Constitution: Does it tell us anything about justice?

A. What does our Constitution actually purport to do? What were the Framers' real purposes?

- 1. Democracy, by mostly majority rule
- 2. Establishment of certain rights that majorities cannot remove
- 3. One nation of commerce, with states barred from obstructing interstate commerce
- 4. Allow government to provide for the common good, by establishing how the three branches work together
- 5. Prevent tyranny of people by their government, (a) by making states and the national governments separate sovereigns, and (b) giving each of three national branches ways to limit one of the other branches (Exception: the executive branch has no authority to limit the judicial branch.)

B. The Federalist Papers No. 10

1. "By a faction, I understand a number of citizens, whether amounting to a majority or a minority of the whole, who are united and actuated by some

common impulse of passion, or of interest, adversed to the rights of other citizens, or to the permanent and aggregate interests of the community."

- 2. "The latent causes of faction are thus sown in the nature of man[.]"
 - a. "The diversity in the faculties of men, from which the rights of property originate, is not less an insuperable obstacle to a uniformity of interests. The protection of these faculties is the first object of government. From the protection of different and unequal faculties of acquiring property, the possession of different degrees and kinds of property immediately results; and from the influence of these on the sentiments and views of the respective proprietors, ensues a division of the society into different interests and parties."
 - b. "As long as the connection subsists between his reason and his self-love, his opinions and his passions will have a reciprocal influence on each other; and the former will be objects to which the latter will attach themselves."
- 3. "If the impulse and the opportunity be suffered to coincide, we well know that neither moral nor religious motives can be relied on as an adequate control."
- 4. "There are two methods of curing the mischiefs of faction: the one, by removing its causes; the other, by controlling its effects."
- 5. "The inference to which we are brought is, that the CAUSES of faction cannot be removed, and that relief is only to be sought in the means of controlling its EFFECTS."

C. San Antonio Independent School District v. Rodriguez, 411 U.S. 1 (1973)

1. Background

- a. Advocates for low-income children argued that Texas's reliance on the local property tax system to fund public education violated the Fourteenth Amendment's Equal Protection Clause.
- b. "Texas virtually concedes that its historically rooted dual system of financing education could not withstand the strict judicial scrutiny that this Court has found appropriate in reviewing legislative judgments that interfere with fundamental constitutional rights or that involve suspect classification"

- c. "We must decide, first, whether the Texas system of financing public education operates to the disadvantage of some suspect class or impinges upon a fundamental right explicitly or implicitly protected by the Constitution, thereby requiring strict judicial scrutiny."
- 2. Suspect-classification analysis: "[T]he Texas system does not operate to the peculiar disadvantage of any suspect class."
 - a. The lower courts' "approach largely ignores the hard threshold questions, including whether it makes a difference for purposes of consideration under the Constitution that the class of disadvantaged 'poor' cannot be identified or defined in customary equal protection terms, and whether the relative--rather than absolute--nature of the asserted deprivation is of significant consequence."
 - b. "[T]here is reason to believe that the poorest families are not necessarily clustered in the poorest property districts."
 - c. "[A]t least where wealth is involved, the Equal Protection Clause does not require absolute equality or precisely equal advantages."
 - d. "[L]ack of personal resources has not occasioned an absolute deprivation of the desired benefit. . . . "Texas asserts that the Minimum Foundation Program provides an 'adequate' education for all children in the State."
 - e. There is an "unsettled and disputed question whether the quality of education may be determined by the amount of money expended for it."
 - f. "For these two reasons--the absence of any evidence that the financing system discriminates against any definable category of 'poor' people or that it results in the absolute deprivation of education--the disadvantaged class is not susceptible of identification in traditional terms."
 - g. "The system of alleged discrimination and the class it defines have none of the traditional indicia of suspectness: the class is not saddled with such disabilities, or subjected to such a history of purposeful unequal treatment, or relegated to such a position of political powerlessness as to command extraordinary protection from the majoritarian political process."

3. Fundamental interest analysis

- a. The *Brown v. Board of Education* Court stressed "the importance of education to our democratic society. It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship. Today it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training, and in helping him to adjust normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms."
- b. "[T]he Constitution does not provide judicial remedies for every social and economic ill."
 - (1) "[T]he importance of a service performed by the State does not determine whether it must be regarded as fundamental for purposes of examination under the Equal Protection Clause."
 - (2) The "need for decent shelter" and the "right to retain peaceful possession of one's home" are not constitutional rights.
 - (3) "[I]f the degree of judicial scrutiny of state legislation fluctuated, depending on a majority's view of the importance of the interest affected, we would have gone 'far toward making this Court a 'super-legislature.'"
- c. "It is not the province of this Court to create substantive constitutional rights in the name of guaranteeing equal protection of the laws. [The question is] . . . whether there is a right to education explicitly or implicitly guaranteed by the Constitution."
- d. "Whatever merit appellees' argument might have if a State's financing system occasioned an absolute denial of educational opportunities to any of its children, that argument provides no basis for finding an interference with fundamental rights where only relative differences in spending levels are involved."

D. Kelo v. City of New London, 545 U.S. 469 (2005)

- 1. Hawai`i statute took property from plantation owners (with compensation) and transferred it to individual Hawaiians.
 - a. The state interest was "the interest in breaking up a land oligopoly that 'created artificial deterrents to the normal functioning of the State's residential land market." *Hawaii Housing Authority v. Midkiff*, 467 U.S. 229 (1984).
 - b. Public purpose? Court "unanimously upheld the statute and rejected the Ninth Circuit's view that it was 'a naked attempt on the part of the state of Hawaii to take the property of A and transfer it to B solely for B's private use and benefit.' . . . [W]e concluded that the State's purpose of eliminating the "social and economic evils of a land oligopoly" qualified as a valid public use."
- 2. "[N]or shall private property be taken [by the federal government] for public use, without just compensation." U.S. Const., Amdt. 5. That Clause is made applicable to the States by the Fourteenth Amendment.
- 3. The phrase "for public use" prevents government from merely transferring private property from one private owner to another.
- 4. The Court has "embraced the broader and more natural interpretation of public use as 'public purpose."
- 5. In *Kelo*, Connecticut's statute "specifically authorizes the use of eminent domain to promote economic development." "Given the comprehensive character of the plan, the thorough deliberation that preceded its adoption, and the limited scope of our review, it is appropriate for us, as it was in Berman, to resolve the challenges of the individual owners, not on a piecemeal basis, but rather in light of the entire plan. Because that plan unquestionably serves a public purpose, the takings challenged here satisfy the public use requirement of the Fifth Amendment."
- 6. "Petitioners contend that using eminent domain for economic development impermissibly blurs the boundary between public and private takings. . . . [T]he government's pursuit of a public purpose will often benefit individual private parties. For example, in Midkiff, the forced transfer of property conferred a direct and significant benefit on those lessees who were previously unable to purchase their homes."

V. Regulatory statutes: Do they reflect political decisions about justice?

A. The purpose of all regulation: Align private behavior with the public interest

Edmund Burke: "Men are qualified for civil liberty in exact proportion to their disposition to put moral chains upon their own appetites. Society cannot exist unless a controlling power on will and appetite be placed somewhere, and the less of it there is within, the more there must be without. It is ordained in the eternal constitution of things, that men of intemperate minds cannot be free. Their passions forge their fetters."

B. The purpose of economic regulation: Align sellers' and buyers' actions with the public interest

- 1. Ask: What is the public interest? The public interest is defined by statutory language.
- 2. Ask: Who are the actors whose motivations might conflict with public interest? What are those motivations?
- 3. Ask: For these actors, what are their actions, or inactions, that align with their motivations but might conflict with the public interest?
- 4. Ask: From these actions or inactions, what are the possible harms to the public interest?
- 5. Ask: Which regulatory measures will most effectively induce the actions that serve the public interest, and prevent the actions that disserve the public interest?

C. In utility regulation, the "public interest" is defined by statutes, as applied by commissions

- 1. National Association for the Advancement of Colored People v. Federal Power Commission, 425 U.S. 662 (1976)
 - a. If you are the regulator, you have a statute. The public interest is bounded by the statute. NAACP petitioned the Federal Power Commission for a rule prohibiting utilities from committing racial discrimination in their employment decisions. The Commission, D.C. Circuit, and U.S. Supreme Court all held that the rule fell outside the Commission's jurisdiction.

b. "Congress in its earlier labor legislation unmistakably defined the national interest in free collective bargaining. Yet it could hardly be supposed that in directing the Federal Power Commission to be guided by the "public interest," Congress thereby instructed it to take original jurisdiction over the processing of charges of unfair labor practices on the part of its regulatees."

2. The Supreme Court's two main holdings

- a. In a regulatory statute, the term "public interest" has a meaning bounded by the statute's purpose. Prohibiting racial discrimination was not a purpose of the Federal Power Act. "The use of the words 'public interest' in the Gas and Power Acts is not a directive to the Commission to seek to eradicate discrimination, but, rather, is a charge to promote the orderly production of plentiful supplies of electric energy and natural gas at just and reasonable rates."
- b. But: Utility actions that are not subject to the Commission's jurisdiction can affect utility actions that *are* subject to the Commission's jurisdiction. A utility's nonjurisdictional actions can affect the utility's performance of its jurisdictional actions.
- 3. D.C. Circuit: Six matters with possible nexus to utility performance
 - (1) duplicative labor costs incurred in the form of back pay recoveries by employees who have proven that they were discriminatorily denied employment or advancement,
 - (2) the costs of losing valuable government contracts terminated because of employment discrimination,
 - (3) the costs of legal proceedings in either of these two categories,
 - (4) the costs of strikes, demonstrations, and boycotts aimed against regulatees because of employment discrimination,
 - (5) excessive labor costs incurred because of the elimination from the prospective labor force of those who are discriminated against, and
 - (6) the costs of inefficiency among minority employees demoralized by discriminatory barriers to their fair treatment or promotion.

D. Substantive regulatory statutes: Purposes and design

- 1. Substantive statutes authorize and constrain actions by sellers.
- 2. They set standards.
- 3. They guarantee compensation.
- 4. They enforce standards.
- 5. Key statutory phrases: "consistent with the public interest," "just and reasonable," "no undue preference or advantage"

E. Possible applications of *NAACP* to today's societal issues

- 1. Environmental
- 2. Racial and ethnic
- 3. Gender
- 4. Treatment of workers generally
- 5. Poverty
- 6. Economic development and jobs

VI. Justice actors: Who dispenses justice--regulators, legislators. judges, or all three?

- A. Legislative role: Declare principles of justice, then stand for reelection
- B. The regulatory role: Use technical expertise to achieve the justice values established by legislators

VII. Common regulatory questions with justice implications

- A. Does regulatory price-setting reward construction of new infrastructure more than it rewards energy conservation?
- B. Is it appropriate for a CEO's compensation to be in conflict with customers' needs?
- C. Is it appropriate for utilities to raise prices during shortages?
- D. Is it appropriate to shut off service to those who can't pay?

- E. Is it just to provide discounts to attract or keep new industry (because then they contribute to fixed costs) but to deny discounts to the disadvantaged (because that's undue discrimination)?
- F. In competition between newcomers and incumbents: Do incumbents have unearned advantages? (data centers example)

VIII. Conclusion: Regulation's nine justice principles

Political philosophers pose this proble:

At the time of your birth, you did not know what you would become as an adult. You did not know whether you would be the chief of Mobil Oil, or the owner of a pipeline, or a producer of renewable energy, or a consumer, or an owner of vast oil supplies. You did not know if you would be rich or poor.

Now suppose that, in that situation, you could choose the principles that would apply to the regulation of the energy industry. What principles would you choose, so that no matter what position you attained as an adult, you would be treated fairly?

I believe that your answer would consist of the following nine principles.

A. The purpose of regulation is performance.

- 1. The purpose of regulation is to induce performance of high quality and reasonable cost. The purpose is the same whether we are addressing monopoly markets or competitive markets.
- 2. This purpose of performance requires regulators to define standards of performance, to create rewards for good performance and to impose penalties for poor performance. By taking all these steps, we align self-interest with public interest.
- 3. To produce performance, effective regulators define their goals. They envision the products and services they want. They design the market structures most likely to produce that mix of products and services. Then they take the actions necessary to make that vision real, because vision without action is useless.
- 4. To produce performance, regulation must be realistic about human nature. We must identify behaviors that conflict with the public interest, and

prohibit them. We must identify behaviors that promote the public interest, and reward them.

B. Financial success should depend on merit.

Success should not depend on incumbency. Nor should success depend on connections to politicians. In both regulation and competition, rewards and penalties must be based on merit. We must define the job, then find the best entity to do that job. We do not protect or preserve the incumbent if someone else can do the job better. We must create and maintain a culture that challenges everyone to improve.

C. Economic efficiency comes first.

- 1. Economic efficiency means that we allocate costs to those who cause the costs. It means we allocate benefits to those who take the risks and bear the burdens.
- 2. Economic efficiency is the first priority; allocating the gains from efficiency is the second priority. We are baking a pie for dessert. If we are going to fight over who gets the largest slice, let us first cooperate to make the largest possible pie.

D. There must be symmetry of risk and reward.

- 1. If investors want rewards for taking risks, they must accept the losses when they fail.
- 2. If customers want reliable, environment-friendly service, they should pay for it.

E. "Competition" is not a religion; it is a market structure and a process.

Religion is based on beliefs and prayers. We create competition not by believing and praying, but by working with facts. For competition to benefit the consumer, it must be effective competition. To have effective competition there must be many viable suppliers, many educated customers, and low barriers to entry. If those physical and economic facts do not exist, we cannot have competition, regardless of how much we believe and pray.

F. Competition and regulation are not in conflict.

Competition and regulation share a common purpose: to align private behavior with the public interest. Effective competition induces competitors toward efficiency, customer service, and reliability. Effective regulation does the same. Together, they induce accountability to the consumers, investors and the public. Again, as Alfred Kahn wrote: We need "the best possible mix, of inevitably imperfect competition and inevitably imperfect regulation."

G. When regulators make decisions, what matters most are the facts.

For most of the last century, customers have been served by vertically integrated monopolies. Regulators assumed this fact: Vertically integrated monopolies enjoyed economies of scale that made competition inefficient. But facts change. Economies of scale change, because other things change: cost structure, technology, customer preferences, and production processes. The alert regulator looks for changes in facts that challenge historic assumptions.

H. Consumers are actors, not victims.

- 1. Politicians talk about prices, like taxes, as "low" or "high." But in regulation, rates are not "low" or "high"; rates are either right or wrong: either they reflect reasonable cost, making them efficient; or they do not reflect reasonable cost, making them inefficient.
- 2. In competitive markets, prices are not determined by sellers alone; prices are determined by sellers interacting with buyers by supply curves intersecting with demand curves. So customer behavior affects prices.
- 3. If we want to help consumers, we should do so not by lowering their rates below the market levels, not by giving them artificial discounts or subsidies. We help consumers by educating and empowering them to reduce their usage. That way, we lower prices the efficient way by shifting the demand curve.
- 4. Because consumers are actors, not victims, it is less important to protect them; more important to empower them. We should empower them to find new ways to reduce their usage and to produce their own power, as with solar energy. And because they are actors, not victims, we must penalize them if they are inefficient, wasteful or dishonest.

5. Some politicians want to protect customers from competition. Protecting customers from competition weakens the forces of competition, making customers worse off. For markets to work, customers cannot be passive recipients of a market's products; they have to be alert, responsible decisionmakers who pressure sellers to perform. So the regulatory job is not to protect customers from competition but to prepare them for competition.

I. Our regulatory agencies must be expert, professional, and properly compensated.

They must not be susceptible to persuasion by any means other than facts and logic. A commission is not a supermarket, where powerful companies buy favors. It is an expert agency that makes decisions based on facts and logic.