ENERGY AND ENVIRONMENT

40. *Electricity Deregulation*

Congress should

- repeal the Federal Power Act of 1935 and abolish the Federal Energy Regulatory Commission (FERC);
- repeal the 1935 Public Utility Holding Company Act (PUHCA) and the 1978 Public Utility Regulatory Policy Act (PURPA);
- privatize federal power marketing authorities, the Tennessee Valley Authority, and all federal power generation facilities;
- eliminate all tax preferences afforded municipal power companies and electricity cooperatives;
- eliminate all federal price subsidies, tax incentives, and regulatory preferences for renewable energy;
- declare that any state or municipal regulation of the generation, transmission, distribution, or retail sale of electricity sold across state lines interferes with interstate trade and is a violation of the U.S. Constitution's commerce clause; and
- require open, nondiscriminatory access to all federal public rights-of-way for electricity transmission and distribution services, except when such services present a public safety hazard.

The Dynamic of Deregulation

The rollback of regulations protecting "monopolistic industries" from competition has been one of the main legislative stories of the past 20 years. The trucking, railroad, airline, bus, banking, natural gas, and telecommunications industries have all been—to one degree or another—introduced to the world of economic competition. And now, after several years of regulatory skirmishes, interest-group posturing, political calculation,

think-tank pontificating, and academic *Sturm und Drang,* the $200 billion electricity industry awaits its turn as the last great industry to receive federal regulatory parole.

The potential gains are great. A study by economists Michael Maloney and Robert McCormick of Clemson University estimates that freeing electricity markets would probably cut electricity prices by 25 percent or more, a substantial savings not only for residential electricity consumers but for consumers of products that require a great deal of energy to produce. Moreover, the electricity business is increasingly international in scope, and a lean, competitive American power industry would be better positioned in the global marketplace than the regulated, straightjacketed industry of today.

Before the 105th Congress begins to hammer out the interest-group compromises that typically constitute "deregulation," it would be wise to profit from the political and economic lessons of the past 20 years. To wit,

- Trusting the regulators to redesign the regulatory apparatus will probably perpetuate past regulatory errors and sabotage competition.
- "Deregulation" often serves as legislative cover under which new political coalitions seize regulatory control of an industry once it becomes clear that the old coalition of special interests can no longer sustain itself.
- Efficient market structures cannot be ascertained a priori by legislators or bureaucrats; only by letting markets spontaneously develop can we know the "best" industrial arrangements.

Unfortunately, the early debate over whether and how Congress should deregulate the electricity industry has been almost completely uninformed by the above observations. Most of the industry's would-be reformers seek to impose *their* vision of how the industry ought to be organized; delegate much if not most of the detail work of deregulation to federal and state regulators; and continue exercising political control over the transmission, distribution, and sale of electricity.

Managed Competition: Bad for Health Care, Good for Electricity?

The traditional argument for economic regulation of the electric utility industry is that it is a natural monopoly. Yet virtually all economists now agree that the generation of electricity is no longer characterized by sufficient economies of scale to warrant monopoly regulation. Thus, many

economists are also convinced that the retail sale of electricity is sufficiently competitive to justify the end of protected service territories for electric utilities. While some continue to extol the virtues of monopoly regulation and the status quo, overwhelming evidence exists that consumers are paying far more for electricity than is necessary and that monopoly regulation is the reason.

The remedy for this situation is commonly believed to be mandatory retail wheeling, which means requiring electric utilities to turn their private transmission and distribution systems into public highways. An electricity consumer would have the right to choose the company from which he would like to purchase power, and the utility company would be required to deliver that electricity to the consumer at regulated, nondiscriminatory rates.

The current debate surrounding electric utility reform presupposes mandatory retail wheeling and concentrates on the economic, social, and political consequences of wheeling. How much of the current social and environmental regulatory regime surrounding electricity service should survive? What should the timetable be for transition? Do new environmental controls need to be imposed to counterbalance increased emissions that generating lower priced electricity might cause? How much leeway should states have to oversee electricity competition? Should the economic losses many utilities will undoubtedly experience due to uncompetitive facilities and uneconomic third-party power contracts ("stranded costs") be compensated by ratepayers, and if so, how?

In sum, managed competition—retail competition under the continuing watchful eye of regulators and a tightened regulatory grip on the grid—is the starting point for both reformers and their opponents. Congress can and should do better.

Free flbe *Wires*

Mandatory retail wheeling is the popular foundation of reform because few regulators or political decisionmakers believe that alternative transmission and distribution grids would arise to challenge today's interconnected grid. Consequently, absent regulation, it is feared that utilities would either close their transmission or distribution lines to competitors or use their monopoly status to "gouge" both independent generators and consumers. Yet there is little cause for such handwringing. Those sorts of arguments, which were marshaled energetically before and during the debates about restructuring trucking, airlines, natural gas, and railroads, have been proven

wrong. Consequently, they should be met with skepticism today. Mandatory retail wheeling is *not* necessary for retail competition.

First, the possible emergence of alternative grids is not at all far-fetched. Investigations by economists have found little evidence of electricity businesses ever having "naturally" achieved monopoly status before the advent of public utility commissions, which implies that the "monopoly" grid is more an artificial product of regulation than of economic efficiency or market inevitability. In fact, the two main characteristics of natural monopolies—high fixed costs and economies of scale—are largely absent in modern utilities, which suggests that the grid is vulnerable to competition. Interestingly, the few communities that already have a choice of electricity providers—each with its own separate grid—pay rates below regional averages.

The concern that local zoning and land-use regulations would block the construction of alternative grids ignores the fact that multiple "rights-of-way" (telephone and cable lines, natural gas pipelines, and sewage lines, for example) already connect both retail and commercial establishments to outside service providers. Those providers could conceivably piggyback power lines on their current rights-of-way and directly enter the electricity distribution business with a minimum of local disruption. Alternatively, power lines could be buried. While more costly, buried lines haven't led to substantially higher rates in town such as Lubbock, Texas, where some degree of limited competition exists. Finally, the power of eminent domain allows states to address local intransigence to grid expansions if absolutely necessary.

Yet alternative grids are not necessary prerequisites to competition. First, electric utilities already "compete" with other utility companies (who threaten to lure away industrial consumers and thus, ultimately, residential consumers), self-generation (an option that is gaining popularity with industrial consumers and is increasingly affordable even for homeowners), and energy-efficient technologies (which become more attractive as rates rise). The demand for electricity is not inelastic. In fact, the dynamic of competition already present in the industry is chiefly responsible for the collapse of the regulatory status quo.

Second, deregulation of transmission and distribution might well lead, not to alternative grids, but to user-owned grids. Consumers, after all, would have an incentive to protect themselves against rate gouging, while electric utilities—faced with well-positioned competitors in a newly freed market—would have an incentive to sell grid rights in order to stabilize

their customer base and raise capital. Jointly owned transmission and distribution lines are already common in the electricity business and numerous other businesses. Taxi dispatch services, natural gas pipelines, and large freight vessels, for instance, turn to user-owned arrangements as a market response where significant economies of scale exist.

Third, the electricity transmission and distribution network affords many paths around any bottlenecks that a monopolist might seek to exploit. As long as entry is not blocked, expansions or loops can be readily constructed and tied into the grid. Given the interconnectedness of the grid, no monopolist could survive under a system of transmission and distribution property rights.

Finally, the mere threat of—or potential for—competition is enough to force incumbent monopolies to act as if they were in competitive markets. As economist William Baumol and others have pointed out, as long as markets are contestable, monopolists typically act to deter entry by providing services at market rates and have little opportunity to extract monopoly profits should they behave otherwise. The relevant concern is not whether competitors do or do not exist in a given market. The real concern is whether entry to the market is open or closed. As long as entry is possible, there is little to fear from aspiring monopolists.

The most important reason, however, to discount the fear of price gouging on the grid is the inability of rate regulation—the remedy presupposed by mandatory retail wheeling—to make any difference in the price of services delivered to the consumer. As University of Chicago professor and federal judge Richard Posner observes, "Relatively moderate errors, of the kind that regulatory agencies can scarcely avoid committing given the intractable problems involved in the computation of revenue requirements, can render profit regulation quite ineffectual." Empirical studies by such noted economists as Thomas Gale Moore, Walter Mead, and the late Nobel laureate George Stigler demonstrate the empirical truth of that observation. They and others have found that rate regulators are incapable of forcing utilities to operate at a specified combination of output, price, and cost. Thus, they are unable to control rates. The price an electric utility monopolist would charge for power absent governmental oversight is, according to their empirical studies, the *current* price (at least, for today's set of services).

The Dangers of Retail Wheeling

Turning the grid into a common carrier while regulating the rates charged to third parties is the central mistake of the present reform agenda, not

only because such regulation is unnecessary for competition to emerge, but because it may sabotage economic gains that are otherwise within our grasp.

Retail wheeling presupposes the efficiency of the present ownership and operational structure of the transmission and distribution business: monopoly, preferably regulated. Yet the electricity industry has been subjected to so many decades of government planning, subsidy, and distortions that reformers are in no position to say with certainty what an efficient transmission and distribution system would look like. Would an efficient industry be better off with vertical disintegration, user-owned grids, competing grids, a small number of (relatively unregulated) monopoly providers, a pooling company arrangement (known in the trade as ''poolco''), or more widespread self-generation? No one can possibly know for certain absent the discovery process unleashed by the spontaneous workings of the market.

Mandatory retail wheeling subverts the market order by discouraging (and in some plans, absolutely prohibiting) alternatives to the heavily regulated monopoly system. Compulsory access to the grid would lessen the incentives for third parties to form alternative networks or various user-owned arrangements. The market experiments necessary to discover more efficient institutional arrangements for the grid will proceed far slower and more haltingly under a regime of mandatory retail wheeling.

Moreover, mandatory retail wheeling threatens another round of stranded cost recovery at ratepayers' expense. Once more efficient arrangements are discovered by the market (as they inevitably will be, albeit at a slower pace under mandatory retail wheeling), consumers will leave the monopoly grid for those more efficient (hence, less costly) transmission and distribution arrangements. Utilities will again, with some justification, claim that they made certain investments in the grid either because utility commissions explicitly ordered them to do so or only because they were guaranteed cost recovery by the government. Consumers then might well be forced into a *second* multi-billion-dollar bailout of the electricity industry, but this time of stranded grid assets as opposed to today's bailout of stranded generating capacity.

The allocation of transmission and distribution resources under retail wheeling will be made, not on the basis of highest expected value of service (the standard by which most business decisions are made), but on the basis of nondiscriminatory access. Access is based on legal and political formulations without consideration of economic efficiency.

Retail wheeling, then, will inevitably weaken the economic vitality of the grid. Moreover, by definition, it significantly weakens grid ownership rights and brings us dangerously close to de facto government ownership of transmission and distribution with all the problems attendant to such socialist enterprises.

In essence, mandatory retail wheeling transforms a privately owned and operated (albeit heavily regulated) electricity roadway into a public highway. Under a strict reading of the Fifth Amendment to the Constitution, it's hard to ignore that mandatory retail wheeling amounts to a "taking" of private property for a public purpose—expedited competition. The cost of that taking must also be considered by reformers. Either the public will be forced to compensate utilities for their lost property rights (which might well amount to billions of dollars), or they will fail to compensate utilities, in which case the "cost" of retail wheeling will be borne by all property owners who will experience a marginal erosion of the protections against governmental power.

Finally, the expansion of micromanagerial regulation of the grid that mandatory retail wheeling requires threatens to offset whatever deregulatory gains are obtained through retail consumer choice. That is because utility regulators and their constituents will undoubtedly be tempted to capture some (or perhaps all) of the surplus wealth generated by lower retail prices. As Benjamin Zycher of the Milken Institute has pointed out, "The universal characteristic of regulation, regardless of industry, time, or place," is a redistribution of wealth from political losers to those favored by regulators and politicians." Allowing regulators to keep their seats at the industry table (albeit in a slightly different seating arrangement) might simply mean that any larger economic "feast" cooked up by retail wheeling would be offset by the growing appetite of one of the least desirable dinner guests.

Up from Ira Magaziner!

Since rate regulation is incapable of controlling rates—and since electricity transmission and distribution are probably not natural monopolies anyway—true reform should be directed, not at reinventing regulation, but at actually eliminating it; not at managing competition, but at freeing it from political control.

The Federal Power Act should be repealed and FERC abolished. FERC's main remaining responsibility is to oversee the regulation of interstate electricity commerce, an oversight role that has proven counterproductive

and unnecessary. (FERC's other main responsibility—the regulation of interstate oil pipelines and gas markets—is even less necessary.)

PURPA should be repealed. Its main function is to force utilities to purchase power from third parties at avoided cost (as calculated by state public utility commissions), an unnecessary requirement that has done much to saddle utilities with uneconomic power contracts and consumers with excessive electricity rates.

Likewise, the archaic PUHCA should be repealed. By strictly controlling the ownership and management structures of electric utilities, PUHCA has crippled the industry by preventing market entry, prohibiting industry reorganization, and discouraging market discovery of new, more efficient ways of delivering electricity to consumers.

Congress should also ensure a level economic playing field by privatizing the federal power marketing authorities, the Tennessee Valley Authority, and all federal power generation facilities; and tax and fiscal preferences afforded municipal power companies and electricity cooperatives should be terminated. As Chapter 13 shows, public power generation facilities are in deteriorating condition and would be better off—as are all enterprises—were they owned by private businesses that should not be required to compete with their own government for customers. Subsidizing consumer power damages the economy and harms the environment. Similarly, tax and fiscal preferences afforded municipal power companies and rural electricity cooperatives presume that certain management and ownership structures should be encouraged at the expense of others. That bias against private, investor-owned businesses is inappropriate in a free-market economy and without any empirical merit.

All federal price subsidies, tax incentives, and regulatory preferences for renewable energy should also be eliminated. First of all, the environmental benefits of renewable energy are dramatically overstated. In fact, every single renewable energy source has drawn legitimate opposition from environmental organizations on various counts. Second, fossil fuel is far less expensive than renewable energy because it is both more abundant and less costly to deliver to consumers. If and when fossil fuels become more scarce, the electricity industry will turn to more abundant (i.e., cheaper) alternatives without prompting from government. Third, the price disparity between fossil and renewable fuels simply cannot be attributed to present or past subsidies. According to the Department of Energy's Energy Information Administration, federal subsidies account for only 4 percent of the total energy economy. Finally, renewable energy subsidies

and preferences are one of the main reasons that electricity rates are far higher than they should be.

Yet the most damaging electricity regulations emanate from state public utility commissions, not FERC or Congress. Those bodies must be reined in by Congress in order for the full benefits of deregulation to be realized.

While many legislators are (rightly) reluctant to interfere in state regulatory affairs, the Constitution's celebrated commerce clause gives Congress the power to remove barriers to interstate trade erected by state lawmakers. Congress should therefore preempt all state or municipal regulations that control the generation, transmission, distribution, or retail sale of electricity sold across state lines. States would retain the right they have under the Tenth Amendment to regulate purely *intrastate* trade but would find that the interstate nature of electricity service would render such intervention rather ineffectual.

Conservatives predisposed to respect states' rights should recognize that states have no right to erect barriers to interstate commerce, which only serve to inflate electricity rates, limit consumer sovereignty, and damage the vitality of the nation's economy. Congress would be shirking its duty if it allowed such economic violence to continue indefinitely.

Finally, nondiscriminatory access to all federal rights-of-way should be provided for electricity transmission and distribution services, except when such services present a public safety hazard. Such a move would mitigate any efforts of those who might seek to block competitive transmission and distribution markets, and it would provide a revenue stream to the federal government, which might help to balance the budget.

Recipes for *"Haifa Loaf"*

Given the ambitious nature of the reforms recommended in this chapter, it might be that the 105th Congress is reluctant to take such bold deregulatory steps. While one certainly wouldn't want the "best" to become the enemy of the "better," it is questionable whether mandatory retail wheeling—particularly as it is currently evolving—is any significant improvement over the status quo. Legislators should energetically resist attempts to impose new regulations of any kind—or to take utility property or uses without compensation—regardless of the rationale offered by even the best intentioned. Mandatory retail wheeling is simply *not* consistent with a deregulatory agenda.

Achieving "half a loaf" of reform is perhaps best done by piecemeal adoption of the agenda laid out above. Other, more ambitious second-

best answers might include forcing utilities to initially divest either their generation or transmission assets as a precondition to deregulation, transforming FERC into a specialized antitrust body (akin to the Surface Transportation Board) to hear complaints in an otherwise deregulated industry, and capping rate increases for *present* electricity services for a short period of time after deregulation (a step that would prove largely superfluous since deregulated rates would go down for all but the most heavily subsidized). The virtue of the above reforms is that, while by no means perfect, they provide maximum freedom for electricity markets while addressing the real (yet unfounded) fear of monopoly power in the least damaging way possible.

Reforms other than the above threaten to prove counterproductive. The archaic regulatory structure in place is crumbling, and legislators must take care not to inadvertently arrest its collapse with measures that reinforce the political control of electricity. As Zycher has noted,

> Economic regulation carries the seeds of its own destruction, as market forces tend over time to find ways to provide services to the political losers at marginal cost, and so to deprive the winners of the largesse generated by political and social institutions. No stranger to this process, the electric utility sector is deregulating itself, as market forces yield a more competitive environment by circumventing the restrictions and inefficiencies imposed by traditional rate-of-return regulation.

Electricity deregulation would provide more, better, and cheaper electricity service to both commercial and residential ratepayers while increasing the vitality of an industry crucial to the economy of the next century. No greater deregulatory opportunity faces the 105th Congress.

Suggested Readings

Bradley, Robert L. Jr. "Is Renewable Energy for Electric Generation Really 'Green' and 'Almost Competitive'?" Cato Institute Policy Analysis, forthcoming.

_____. "The Origins of Political Electricity: Market Failure or Political Opportunism?" *Energy Law Journal* 17, no. 1 (1996): 57-102.

Ballonoff, Paul. *Ending the Never Ending Energy Crisis*. Washington: Cato Institute, in press.

Gordon, Richard. "Deregulation and the New Competitive Order in Electricity Generation." Paper presented at the Cato Institute/Institute for Energy Research conference, "New Horizons in Electric Power Deregulation," Washington, March 2, 1995.

Posner, Richard. "Natural Monopoly and Its Regulation." *Stanford Law Review* 21, no. 3 (1969): 548-643.

Taylor, Jerry. "Electric Utility Reform: Shock Therapy or Managed Competition?" *Regulation*, no. 3 (1996): 63-76.

Zycher, Benjamin. "Market Deregulation of the Electric Utility Sector." *Regulation* 15, no. 1 (1992): 13-17.

—*Prepared by Jerry Taylor*