



Efficient Markets, Effective Regulation

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By Travis Kavulla

Electricity Policy – the website ElectricityPolicy.com and the newsletter *Electricity Daily* – together comprise an essential source of information about the forces driving change in the electric power industry.

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In the early 1900s, the utility business was just a start-up industry. And like the start-up economy of today, scrappy enterprises were locked in a race to provide a service that most people had never thought they needed, for the simple and obvious reason that retail electricity and telephone service had never before existed. Technology opened up that space, and a free-for-all ensued. To look at a photograph of an urban area in the era before the monopoly utility is to see a mass of wires coursing along the city street. It looks chaotic. It looks dangerous. It looks uneconomic. And it may have continued this way, but for a coalition of industrialists and politicians who decided to reorganize the Wild West of early utilities from the top down, into a world of legal monopoly.

A so-called “bargain” was struck: delineated and uncompetitive service territories for the utility, leavened by economic regulation that limited prices to the cost of service. In addition, worried about the potential that a monopoly would risk customer safety, or

would self-deal, or would grant preferential treatment to certain customers, another part of the “bargain” of utility regulation gave our commissions not only the duty to set prices but to regulate unsafe or discriminatory business practices.

How well this “bargain” has worked is a question on which we should constantly reflect. That is true of any industry where those most in favor of regulation are

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frequently the regulated parties themselves.

Being an economic regulator is a bit of a paradox. Our jobs would not exist but for the decision to foreclose an industry to competition, and therefore we are—as we are often told—a substitute for competition. Put another way, the central premise of utility regulation is that competition—if it could work with respect to the physical nature of an industry—would work better than we do. That is a humbling thing. To be needed by default. And it begs the question: Can competition work? And if it can, what does that mean for our duty?

Today, virtually no one could argue that consumers would be better off in the era of Ma Bell. Families and businesses have benefitted enormously from the competitive and diversified marketplace that we have seen develop in communications in the last two decades.

But that does not mean that we have backed down on our mission to ensure that this flurry of competition does not lead to a retrenchment of the characteristics of monopoly that at one time were the most pernicious: particularly, denial of service, self-dealing, and discrimination. We expect basic service quality, that people who dial a number produce a ringing sound on the other side. We police against

unauthorized charges on customer bills. We insist on the right to interconnection.

NARUC is proactive on these issues. Our organization is already taking steps, thanks to the leadership of President Edgar, Chairman Nelson, Commissioner Brisé and many others, to catch the law up to speed with the facts of the technological revolution that has occurred in

the communications sector. I hope that in the coming year we can bring that same sense of initiative to bear on a number of other matters.

Today, the question on everyone's mind

is whether the energy utility industry will come full circle: Whether, like the communications industry, it will look something more like the free-for-all that began the industry and less like the monopoly industry it became.

Some say that rising retail prices from monopoly providers, combined with data-driven tools that unlock consumer behavior to interact directly with the market, and the falling cost of transformative technologies, will turn the sector on its head. Others argue that the physical properties of electricity mean that a natural monopoly is largely inevitable, and that the economics of central-station power are likely to be more favorable than any distributed alternative.

Both of these viewpoints deserve our consideration and respect. Probably, each of

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us associates more with one viewpoint than the other. But it should be a hallmark of our restraint that we not presume to decide this future. It is a future that should be decided by the fundamentals that drive resource cost, and of the choice that resides with each consumer.

What we should do, I believe, is focus on making sure that whatever future is the most affordable and reliable will ultimately prevail in the regulatory setting we create. That system of regulation should be durable enough to accommodate either future. And that consideration leads us to ask questions that may be

applied to new circumstances, but are not exactly new themselves.

The foremost question, it would seem to

me, is as old as regulatory economics. It is the question: How, in a system dominated by large, up-front capital costs, can we send efficient price signals? Put another way: How can we keep the door open to innovation, even while recovering the cost of the system on which those novel applications often rely?

Those of us who regulate vertically integrated utilities set an all-in, retail rate that is well in excess of the wholesale price of energy these days. Yet even those from restructured states must cope with the many embedded costs of the distribution and transmission network, which remains a monopoly. Of this conflict between sunk costs and marginal prices, the economist and regulator Alfred Kahn

remarked, with his trademark subdued wit: “Notice how, at once, the traditional practices of public utility price regulation diverge from economic principles.”

If this all sounds a bit abstract, let me assure you that it is not. On the contrary, how utility commissioners resolve this basic question of economics is at the core of every rate application you hear. And this problem is at the core of essentially every significant “hot topic” surrounding the transformation of the utility industry today.

The question of marginal prices and sunk costs is the debate over energy versus capacity markets. It speaks to how renewables play into our resource mix, and to the future of baseload

generation, especially nuclear power. The question is as central to how customer-owned electric generation is compensated, as it is to the pricing of unbundled network elements of copper- or even fiber-based networks.

The importance of this question means we should be focused on at least two important initiatives that mirror our work on telecom.

First, NARUC’s membership needs a better understanding and a more useful participation in the organized wholesale electricity markets. We need to understand that an RTO or an ISO can facilitate competition and the efficient use of resources that our consumers are already paying for.

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Yet we should be careful not to assume that these markets are free markets, and that they automatically result in efficient outcomes. After all, these institutions are subject to some of the same political pressures that influence state commission proceedings, and they are subject to an even more complex system of regulation than cost-of-service regulation.

Regulation may not fix the price of electric power in RTOs, as it does in traditional utility regulation, but regulations prescribe the definition of market products, the way in which those products are bid into and procured from the market, and even the amount of those products one needs to avoid

penalties. Most commissioners barely have time to keep up with our own dockets, but we owe it to ourselves to better understand these wholesale

markets. NARUC, working together with the existing organizations of state regulators that advise RTOs and ISOs, can help in that role.

Second, for those customers who generate their own power or who respond to the market by reducing demand, we need clear and economic price signals that do not overcompensate or undercompensate those customer-side actions. I want to thank Chairman Ackerman, Chairman Gardner and all the members of the Electricity and ERE committees for their work to establish a Staff Subcommittee on Rate Design.

I hope this subcommittee will work to create a practical set of tools—a manual, if you will—for regulators who are having to grapple with the complicated issues of rate design for distributed generation and for other purposes. NARUC’s manuals have long been in use in certain regulatory settings, and we have an ability, through a staff subcommittee, to produce a practical, expert and most importantly ideologically neutral guide that offers advice to the dozens of states who are grappling with this question, and yet do not have the resources to do it themselves.

Similar issues of pricing exist in conversations about the water and gas utilities. How can

water systems survive an era of under-investment? Is the rate-base model of investment sufficient? On the commodity side, prices for acre-feet of water are hugely divergent, even

within the same watersheds. Is there a way to create a market that will supply increasingly dry areas of our country with water, and send an efficient price signal for the use of this scarce resource? Our Water Committee, under the leadership of Chairman Burtenshaw, is trying to grapple with those questions.

Gas infrastructure, meanwhile, has a long history of practice with capacity payments and volumetric charges. What lessons does that industry have to teach others? More importantly, NARUC and the

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Federal Energy Regulatory Commission have done much to study the inter-relationship between the gas and electric sectors. Are there additional things we need to do to make those sectors talk to one another? Chairman Wise and the Gas Committee are leading the charge on these issues, even as we continue our focus on pipeline safety and an important re-write of federal legislation on this topic.

Finally, it would be impossible to overlook the fact that change is not just coming to this industry as a result of technological revolutions and consumer empowerment. It is coming also as a result of the regulations issued by our counterparts in environmental agencies.

Again, each of us has a view on the most important environmental regulations of our era, which are those concerning carbon-dioxide emissions from new and existing power generation facilities. Some of us may challenge them; some of us may support them. But in either case, we should acknowledge that we are living in a new context where environmental considerations appear to be the major force driving the procurement and dispatch of resources.

As economic regulators, we need to understand the implications of that. In my view, it should be our job to make sure that whatever environmental regulation may be the law of the land is

accomplished in as economically efficient a manner as possible. This means seeking the best examples out of the laboratory of democracy, the states. It means seeking avenues of cooperation with other states to engage in trading.

It also means resisting the kind of parochialism and rent-seeking behavior that will try to find a home in a state implementation plan. Our unique role as economic regulators means we should play the skeptic of the political logrolling that is all

too common in this industry. We need to be wary of a so-called “solution,” where interest groups line up for a dollar apiece of consumers’ money in order to accomplish something that should

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only take half that.

Regulation is not a good in and of itself. We cannot credibly argue for the cause of economic regulation by states unless we, as state regulators, are up to the challenges of our time. Therefore, NARUC’s purpose is twofold: to argue for the cause of state competency in the role of regulating utilities, and to serve as an educational forum for those state commissions, lest we forget that the first part of our advocacy presupposes that our institutions know what we are doing.

In that spirit of humility, knowing always that there is something more to know, I am extremely grateful for your support, your ideas, and your energy in making NARUC a better and more useful institution. ■