

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[* Denotes Original Publication Page Cite Where Available]

IS ENTRY INTO TELECOMS THE RIGHT STRATEGY FOR YOUR UTILITY?

Lawrence J. Spiwak*

Copyright (c) 1998 by Power Economics and Lawrence J. Spiwak

Abstract:

On the face of it, the argument for electric utilities to enter the telecoms market is irresistible, as they already possess many of the features that should ensure success in this new network business. However, the two industries are actually radically different, and require quite different approaches. If the US is any example, there will also be strong opposition from a wide variety of constituencies, all of which will attempt to game the regulatory process to deter entry. To wit, while telecoms incumbents obviously have no incentive to promote competition, consumer “ombudsmen” on the other end of the political spectrum often believe that electric utilities are unfairly exploiting a strong position that was gained and paid for exclusively by captive customers. Telecoms entry is therefore not a strategy to be entered into lightly.

* Lawrence J. Spiwak is the President of the Phoenix Centre for Advanced Legal and Economic Public Policy Studies (www.phoenix-center.org), a Washington, D.C.-based non-profit think-tank dedicated to filling the substantial vacuum for high quality, objective, independent and non-partisan analysis concerning the complex issues of the day. Mr. Spiwak is an internationally recognized and cited authority regarding the legal and economic issues affecting regulated communications and energy industries. In addition to making numerous presentations before industry leaders and foreign officials, Mr. Spiwak has written numerous articles addressing the complexity and variety of these issues. Prior to joining the Phoenix Centre, Mr. Spiwak was a Senior Attorney with the Competition Division in the FCC’s Office of General Counsel from 1994-1998. While with the Competition Division, Mr. Spiwak was responsible for, inter alia, providing the primary legal and economic analysis for the FCC’s landmark decision to de-regulate AT&T and to give his substantial public (Senior Attorney, Federal Energy Regulatory Commission, 1992-1994) and private sector experience in the US electric utility industry (including serving as the vice-chair of the Federal Energy Bar Association’s antitrust committee between 1993 and 1994) to draft the FCC’s rules regarding public utility entry into telecommunications and information services markets.

Courtesy of:
The Phoenix Center for Advanced Legal and Economic Public Policy Studies “Virtual” Library
www.phoenix-center.org

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[* Denotes Original Publication Page Cite Where Available]

[*27] Much has been said about the issue of “convergence” of disparate technologies and industries as Europe gropes its way towards the “Information Society.” While political rhetoric always makes people feel good (which, of course, is the intended purpose of political rhetoric in the first instance), the key question before utility executives today is whether they should enter the fray and attempt to compete in ancillary telecoms and information services markets.

Upon first blush, entry into telecoms may seem to be a very easy transition for utilities to make, especially as utilities already possess many of the quintessential characteristics inherent to a successful telecoms entry strategy. Utilities have excellent brand names, rights-of-way, back-office facilities, well-trained repair staffs and, perhaps most importantly, a business culture of understanding what it takes to obtain customer satisfaction in a market very often driven by political pressures in other words, an understanding of exactly what it means to be a “public utility” and all of the concomitant benefits and burdens of this characterisation.

Unfortunately, as tempting and as friendly as the telecoms waters may seem after a cursory examination, telecoms is in fact a very different industry from that of the electric utility industry. Telecoms networks and electric grids operate in different ways, the economics of the two industries differ in many important respects, and, perhaps most importantly, the two industries are regulated in very different ways. The purpose of this article, therefore, is to establish a basic analytical framework for utility strategic planners that will both: (a) help you evaluate whether you should pursue a telecoms entry strategy; and (b), if so, help you overcome some of the most common “public interest” arguments against utility entry into telecoms.

ECONOMICS OF TELECOMS ENTRY

What people must always understand is that regulation regardless of industry has both costs and benefits. Accordingly, notwithstanding the laudable intentions or merits of any rule or regulation that a national regulatory authority (NRA) promulgates, it does not *a fortiori* mean that consumers suddenly will be awash in “waves” of competition. Telecoms entry is an extremely time and capital intensive endeavour, and will only occur if the new entrant believes that entry will be profitable. George Ford,

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[Denotes Original Publication Page Cite Where Available]*

a leading US telecoms economist, has described a firm's decision to enter any market as the "entry condition" – *i.e.*, entry will only occur when:

- (1) Post-Entry Profit (d) minus
- (2) Inherent (exogenous) Entry Costs (x) minus
- (3) Incumbent or Regulation-Induced Entry Costs (endogenous) (e) plus any
- (4) Spillover Effects (s) (*i.e.*, when some firms can enter more cheaply than others can)
- (5) Are greater than Zero

A maxim which can be represented by the formula:

$$d - x - e + s > 0$$

Post entry profits might be (loosely) defined as revenues minus average cost (excluding amortised sunk costs). This margin must be sufficient to cover any sunk costs (x, e) the firm must incur upon entry (and possibly exit). Sunk costs are akin to a non-refundable deposit, and as such substantially increase the risk of entry. Sunk costs can be either a result of the capital expenses for technology and marketing necessary to enter a market (exogenous sunk costs) or the result of incumbent behaviour and regulatory decisions (endogenous sunk costs).

With the exception of some exogenous entry costs (x), NRAs have direct control over all elements of the entry condition equation. To wit, NRAs can, and often do, control (d) (revenue minus variable cost) through regulation. Indeed, both phone rates and collocation prices, loop prices, universal service fund (USF) taxes, etc. are direct controls over (d). Spillovers are less direct, but cross-ownership rules limit the use of spillovers. Furthermore, NRAs often recognise that customer base is a big spillover for new entrants in their pursuit of local markets. The effects on (e) of regulation deal specifically with sunk costs, but regulators are not limited to that.

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[* Denotes Original Publication Page Cite Where Available]

PUBLIC POLICY-RELEVANT BARRIER

Thus, whether we like it or not, we all have to come to the realisation that poorly-tailored or ill-conceived regulation can and [*28] will impose significant costs on society, including, inter alia, administrative and compliance costs, the possible deterrence or delay of innovation, the creation of market structures which can promote collusive behaviour, and the often denied, yet highly ubiquitous (and insidious) issue of “regulatory capture.” For this reason, utilities must insist that any regulation imposed should have a direct nexus to a specific anticompetitive harm and, moreover, must be narrowly tailored to mitigate only that specific anticompetitive harm. Stated colloquially:

Economic regulation is supposed to be a substitute for, and not a complement of, competitive rivalry. It is not, contrary to popular belief, “because we can”.

In other words, economic regulation is only appropriate where one or more firms are capable of successfully exercising market power (charging monopoly prices or restricting output) for a sustained period of time, and additional entry is unlikely.

Instead, regulators should only focus on what is referred to as “public policy-relevant” barriers to entry, *i.e.*, those situations where government intervention may be warranted, because the economic costs of imposing remedial regulation will not exceed the existing economic costs created by the barrier if no government intervention occurs. That is to say, from a public policy perspective, not all impediments to entry are necessarily barriers to entry that require some type of government intervention or remediation.

Thus, when analysing whether a particular structural characteristic is a “policy-relevant” barrier to entry, policy makers will have to engage in a cost-benefit analysis that identifies, *inter alia*: (1) all possible economic efficiencies, if any, that might result from the presence of the barrier to entry; (2) all offsetting economic efficiencies that might be attributable to the barrier to entry, if any; (3) all relevant positive and negative network externalities; and (4) the estimated economic cost of eliminating the barrier to entry or minimising its effects. When these basic principles are ignored, however, both consumers and suppliers are worse off, because all that has

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[* Denotes Original Publication Page Cite Where Available]

been accomplished is the improper promotion of “neo-competition” (*i.e.*, “fair, competition-like outcomes accompanied by the benevolent use of ‘market-friendly’ regulation”) rather than tangible competition which improves consumer welfare by producing both static and dynamic economic efficiencies (*i.e.*, lower prices and increased innovation).

REGULATION AS A BARRIER

As mentioned above, (1) entry into telecoms is a difficult enough endeavour *ceribus paribus*; and (2) is an endeavour which is made even more difficult given the ubiquity and omnipotence of the regulator. It should come as no surprise, therefore, that the empirical data bears out that regulatory policies (whether deliberate or accidental) rather than any market-related factor more often than not exacerbate, rather than eliminate, the significant barriers to entry inherent to the telecoms industry. For example, in the case of US telecoms, these policies include, but are certainly not limited to:

- The lack of meaningful access charge and interconnection reform
- Anticompetitive build-out and geographic rate averaging requirements
- The improper advancement of narrow “neo-mercantile” trade objectives over the appropriate promotion of consumer welfare overall (*see, e.g.*, the recent battle between the EC and the US over such divergent things as international settlement rate benchmarking and third-generation wireless standard-setting processes)
- Current (and apparently ever-expanding) universal service obligations on new entrants
- The lack of meaningful preemption or removal of local laws which prohibit utility entry.

What makes matters worse, however, is that not only do utilities have to overcome these difficult barriers, but that utilities must also uniquely

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[* Denotes Original Publication Page Cite Where Available]

overcome bizarre “public-interest” arguments that have absolutely no bearing on consumer welfare.

Two of the most powerful tools in these opponents’ arsenal is to perpetuate improperly what I have described as the “cultural myth” – *i.e.*, utilities, because of their established brand name, existing assets, and market position in a wholly separate and distinct industry (electricity) somehow have a competitive advantage in telecoms and therefore their entry into telecoms would be “unfair” – or the “cross-subsidisation myth” – *i.e.*, utilities are using assets that were paid for by captive ratepayers, and therefore any profits derived from ancillary business must *a fortiori* be passed back to consumers, not shareholders. While these issues are clearly beyond a telecom regulator’s ken, readers must nonetheless recognise that these barriers do exist, are deterring utility telecoms entry decisions, and are harming consumer welfare by denying them access to alternative competitive choices. Both of these arguments are specious at best.

In the former category, the notion that “competition” must be “fair” is just rubbish. There is no notion of equity in competition – competition requires rivalry, because only through aggressive rivalry will firms be forced to innovate and lower costs. Used in this context, therefore, “fair” should just be another obscene four-letter word that begins with the letter “F.”

Moreover, the notion that a utility’s “obligation to serve” its captive ratepayers with reliable service at just and reasonable rates must have a higher priority over a utility’s equally legally binding duty to uphold its fiduciary duty to its shareholders is just as ridiculous. Indeed, if this argument is taken to its (il)logical conclusion then, by definition, a utility would technically own no tangible assets and instead would serve only as a service company to manage the grid. Unfortunately, such a position just does not square with reality. For example:

- If a utility’s captive rate-payers are the ones who actually paid for, and therefore own, rate-base facilities, does this also mean *a fortiori* that anyone who bought a vehicle from General Motors – and not GM’s shareholders – actually own GM’s plants and facilities, because GM used the revenue stream it received from the sale of

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[* Denotes Original Publication Page Cite Where Available]

vehicles to pay for the costs of its plants and operating expenses and provide itself with a profit?

- If the utility serves only as a “service company” – because the captive ratepayers technically own all of the corporation’s assets – then why are the utility’s shareholders (and not captive ratepayers) liable for all of the debt incurred to build and maintain the facilities in the first instance?

Similarly, if a utility really serves only as a “service company” to manage the grid, then should not this company also have the ability to exit the market quickly with *de minimis* costs if it so chooses?

Finally, utility-bashing is one of the most time-honoured campaign techniques used by aggressive politicians to win popular support at election time. Why? Just think about it. Utility assets are very large, visible and (to some) extremely unaesthetic things to look at. Moreover, as the dictionary’s definition of “sunk costs” is often nothing more than a large picture of a nuclear power plant, a utility’s ability to exit the market (to put it politely) is limited at best. As such, because utilities are not going anywhere (and everybody knows it) it is very easy to rally the proletariat against the big bad utility to gain political popularity.

Perhaps the greatest master of this game was none other than America’s own beloved President, William Jefferson Clinton, when he was active in state politics. If you think that I am kidding, let’s just go to the proverbial video tape. During Governor Clinton’s first term as governor of Arkansas, his administration’s most famous and most popular battles were fought against Arkansas Power & Light (AP&L). In fact, he was known then as a so-called “reform governor”, complete with his own “whiz kids” to run a newly-created Arkansas Energy Department. However, as he and his whiz kids apparently also decided to reform not only the Arkansas electric utility industry, but several other major sectors of the Arkansas economy as well, Governor Clinton lost a supposedly easy re-election. Despite this loss, the former Governor Clinton knew that utility-bashing was still a strong, populist hot-button issue. As such, former Governor Clinton campaigned strongly on utility issues when he sought, and eventually won, reelection to the Governor’s office.

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[* Denotes Original Publication Page Cite Where Available]

Back in office after his involuntary hiatus, newly elected Governor Clinton apparently picked up right where he left off. His piece de la resistance of utility bashing came in the Grand Gulf nuclear plant litigation (affectionately known to many of us in America as “Grand Goof”). Specifically, Governor Clinton challenged FERC’s decision that Arkansas ratepayers – as part of [*29] the overall Middle South (now Entergy) System – should have to pay for their *pro rata* share of the cost of Middle South’s Grand Gulf nuclear plant (which just happened to be located in Louisiana). The press reports from this time indicate that Governor Clinton unleashed an unending stream of vitriolic attacks against AP&L and FERC. Moreover, Governor Clinton often publicly threatened that if this rate-case was not settled to his satisfaction, Arkansas would actually seek to take over (*i.e.*, condemn) AP&L from Middle South. Unfortunately, this type of improper “strong-arm” regulatory approach is very similar to the one employed by many NRAs (especially FERC) today.

The only problem with this political rhetoric was it was just that: rhetoric, without any serious analytical backing. Thus, while Governor Clinton was arguing that FERC and AP&L were evil incarnate to seek political favour with constituents, the United States Supreme Court reached the exact opposite conclusion. Indeed, not only did the Supreme Court uphold FERC’s allocation decision, but it also found that FERC’s allocation proceedings preempted a prudence inquiry by affected state commissions.

THE PRO-ENTRY STORY

Accordingly, if utilities decide to adopt a telecoms entry strategy, then they must tell a pro-consumer welfare maximisation story. That is to say, utilities must remind NRAs that the problem with current telecoms market performance is that the key input of production remains highly constrained – *i.e.*, the local loop. Thus, the solution to the problem is not that we need more individual competitors *per se*, but that we need more competitive alternative sources for local loops. Because utilities are well poised to be alternative suppliers of local loops (or ADCos), then – so the argument goes – utility entry will have a demonstrable and immediate benefit on consumer welfare.

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[* Denotes Original Publication Page Cite Where Available]

For example, it has been argued recently that policy makers should force the incumbent local exchange provider (ILEC) to “spin-off” major functions of its distribution network (e.g., unbundled local loops, local central office building structures, and ancillary local network components) from the existing ILEC corporate organisation, and place these functions into in a separate, unaffiliated “LoopCo” organisation. By doing so, all LoopCo customers (including ILECs, *sans* distribution functions, and Competitive Local Exchange Carriers or CLECs) supposedly would purchase network elements from the LoopCo on a non-discriminatory basis. While this proposal certainly seems attractive on paper, a significant sticking point about this approach is that it will require substantial legislative and/or regulatory efforts to make the proposal work. Given incumbents’ natural recalcitrance against giving up any assets that produce substantial monopoly rents, and the demonstrated proliferation of regulatory capture discussed *supra*, I would not hold my breath in baited expectation of the success of this proposal. Indeed, look at how British regulators recently permitted the reintegration of the UK electric utility sector ostensibly just to protect a few thousand coal-workers’ jobs.

Yet, there may be a way that competitive pressures – rather than regulatory initiatives – can force this divestiture, whether the incumbent wants to disaggregate or not. That is to say, as technology continues to progress and advance, it may be possible for a new entrant to contemplate an entry strategy where they would act as a competitive and ubiquitous alternative wholesale distribution provider (*i.e.*, the aforementioned ADCo), rather than an entry strategy where they would attempt to act simply as just another end-to-end retail service provider. If this entry strategy is successful, then this entry would expand greatly the overall market potential for the distribution business beyond just providing an alternative to the “traditional” loop. When this competitive pressure becomes sufficiently large enough to noticeably affect market structure, conduct and performance, then the ILEC may have a strong financial incentive to disaggregate to retain profits much like the recent AT&T disaggregation experience. Given utilities’ existing economies of scope and scale, sunk assets and, in particular, their corporate culture of serving the customer, utilities are well poised, and have already started (although they may not have intended deliberately to do so), to enter as ADCos.

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[Denotes Original Publication Page Cite Where Available]*

The ADCo story is made even more attractive by the promise of power-line technology (PLT). Indeed, what makes power line technology so attractive from a public policy point of view are the facts that: (a) the power grid is ubiquitous, *i.e.*, it constitutes an already existing network infrastructure to billions of private consumers as well as businesses; (2) the power grid offers last-mile conductivity; and (3) the power grid supports information-based services with strong growth potential. Moreover, utilities need not offer power line services to consumers on an end-to-end basis. Rather, they can act as a carrier's-carrier and sell alternative infrastructure on a non-discriminatory basis to other advanced services providers such as the digital subscriber line (DSL) companies and perhaps even to video providers on an "open video system" (OVS) basis.

What is particularly exciting about the promise of PLT, however, is the fact that power line telecommunications may actually be the one way to solve the extremely important, yet politically-charged, issue of universal service. Think about it. Because utility penetration is higher than telecommunications or cable TV penetration – especially in rural and high-cost areas – power line telecommunications, once fully deployed, actually holds out the true promise of realising the universal service objectives as set forth in the WTO Regulatory Reference Paper in a more effective and cheaper way than under the current system. Indeed, the US universal service system is a disaster and has acted as a significant barrier to entry for new firms, all in the name of promoting Al Gore's year 2000 presidential aspirations. In this way, unlike, for example, the current US system, not only would the total cost of having to subsidise telephone service to those consumers and to high-cost rural areas substantially decrease, but would actually help increase overall consumer welfare demonstrably at the same time.

CONCLUSION

In sum, if utilities want to pursue a telecoms entry strategy, they have a very persuasive pro-consumer story to tell. When they tell this story, however, it is crucial for utilities to adopt the "analytical high road", for any argument they attempt to raise as a new telecoms entrant can and will be used against them as the dominant incumbent in their core utility business. Thus, as I have argued publicly in the past, even if utilities decide

Reprinted From:
POWER ECONOMICS (November 1998)
(Cite as: POWER ECONOMICS (November 1998) at 27)
[Denotes Original Publication Page Cite Where Available]*

not to adopt a telecoms entry strategy *per se*, they must, at minimum, develop some telecoms expertise to ward off inappropriate and inaccurate comparisons between the telecoms and electricity sectors. As explained above, while there are many similarities between the two industries – including assets capable of multiple cross-industry functions – practitioners must recognise and respect the substantial differences between these two industries as well. If this distinction is not made, then the public policy mistakes of one industry restructuring are likely to be continued (rather than disregarded and abandoned appropriately) in the other, and the dream of the “Information Society” will remain nothing more than political hyperbole.