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The vanishing utility

By Walt Patterson

What is a 'utility'? Electricity people use the word all the time; but if you ask one point blank what it means you will get no answer. The shorter Oxford English Dictionary does not even mention it in connection with electricity. Chambers says '(esp.U. S.) a public service', without amplification. At first glance that seems clearer. But if you try to grasp it dissolves. What kind of service, and how is it public? Is McDonald's a utility? It certainly serves the public, burger after burger. But no one has ever called it a utility. What makes electricity a utility, and does it matter? Is this not mere etymological pedantry?

No, it's not. It matters, now more than ever. As electricity is liberalized, many of the assumptions implied by the label 'utility' are being invalidated. The public service dimension of electricity, whatever it may be, is controversial as never before. The French government declares the role of Electricite de France to be a 'service publique', defending its monopoly privileges against the onslaught of liberalization and the EU Electricity Directive, to the wrath of other member states of the EU who see EdF aggressively buying up electricity facilities outside French borders. Is the public service role of EdF different from those of electricity systems elsewhere in the EU, and if so in what way? Meanwhile hundreds of thousands of trades unionists, members of the European Public Service Union and Public Service International, are up in arms about what they call 'the devastating social impact of liberalization', including the loss of more than 200 000 jobs in electricity in the last five years. They are organizing a 'European Day of Action' 11 May, 'for jobs and public services'. Can liberalization be reconciled with public service, and if so how?

Article 3, 2 of the EU Electricity Directive declares that 'Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and to environmental protection . . . As a means of carrying out the above-mentioned public service obligations, Member States which so wish may introduce the implementation of long term planning.' How member state governments can reconcile long term planning, however defined and implemented, with a market-based electricity system expanding to cover the entire EU is not readily apparent. The internal contradictions are deepening inexorably.

The root of the problem is obvious. Governments have spent the 1990s overturning key guiding premises that have shaped traditional electricity systems for most of the past century. Even while doing so, however, they have assumed that electricity systems will continue to look much the same, operate in much the same way, and fulfil the same role in society, more or less indefinitely. This assumption is wrong, not least in what it implies about public service. Electricity systems are

already changing; so, too, is their role and function in public service. The changes are leaving the policies behind. Unless the policies catch up quickly, uncomfortable times lie ahead.

A traditional electricity system is a monopoly franchise under the aegis of government, supplying an essential good to captive customers. Government, either directly as owner or indirectly through a regulator appointed by government, can impose public service obligations on the operators of the system. It can set standards for reliability or 'security of supply' - that is, delivery of units of electricity to customers' meters. To comply with these standards, system operators can install a margin of redundant generation and network capacity to accommodate fault conditions, on the basis that the redundancy will be paid for by captive customers as a form of compulsory insurance. For political and social reasons, government or regulator can mandate tariff structures incorporating tacit cross-subsidies between different groups of users, to ensure, for example, that electricity prices in rural areas are no higher than those in urban areas, although rural areas are much more expensive to supply. Government can impose environmental controls affecting siting of facilities, choice of fuels and other constraints that may raise the costs of electricity to users.

A traditional electricity system may be called a 'utility', therefore, because it is delivering a public service on terms defined by government on behalf of society. In the US, indeed, the process of defining the terms is usually overseen by an agency of government explicitly called a Public Utility Commission or Public Service Commission. Traditional electricity systems have long prided themselves on their culture of public service. Many electricity staff consider their jobs almost as a vocation. They regard it as their duty to keep the lights on, in all weathers and under all conditions. On the other hand, the captive customers of the system have no recourse if it fails. They cannot take their business elsewhere. They, not system management, bear all the risks.

Throughout most of the twentieth century this arrangement has come to be taken for granted. In most OECD countries for most of the time it has worked very well, although to be sure the same cannot be said for most non-OECD countries. In the 1990s, nevertheless, a lengthening roster of governments have begun liberalizing their electricity systems, in various ways and to various degrees; and the process is accelerating. Commentators still routinely refer to the organizations involved as 'utilities'. However, as systems are broken up and restructured, as competition enters, and facilities come to belong to international companies, where in a liberalized system - if anywhere - does this alleged 'utility' reside?

Member states of the EU, for instance, in compliance with Article 3,2 of the Directive, have notified the European Commission of plans to impose an assortment of public service obligations on electricity-sector companies within their national borders. Across the EU such obligations will include security of supply; obligation to supply; compulsory purchase of power from renewables and cogeneration; demand-side management; use of indigenous fuels; emergency power supply; environmental protection; and various compensation schemes. As liberalization proceeds, however, the mechanisms and policy levers that governments can use to impose such public service obligations are already controversial, and will grow more so. Which participants on a liberalized system are to provide which public service to whom, on what basis and why? Can such arrangements even be called 'public service' in the traditional sense?

Consider a simple example. In August 1996 a tree fell in Oregon, triggering a network collapse that blacked out nine states. At the time all the interlinked systems involved were franchised

monopolies. Although they failed to deliver the key public service of security of supply, none was penalized. The customers had no recourse but to wait until the lights came back on, or start up their own emergency equipment separate from the system. Suppose, however, a liberalized system, in which all the participants, generators, network operators and electricity users, are interconnected by contracts. What happens if the network collapses - if the system fails to deliver security of supply? Who bears the liabilities? Lawyers will have a field day.

Problems lie ahead. In OECD countries, and indeed elsewhere, the public still takes for granted the provision of electricity as a public service. In many systems, the residue of the old public service culture persists; but it is unlikely to survive for long. Job cuts, shareholder pressures, and competition between international companies intensify relentlessly. If a particular activity necessary to deliver a public service doesn't pay, no one will do it.

The key to resolving this dilemma may lie in recognizing the longer-term implications of changes already under way in world electricity, and redefining the public service dimension accordingly. Electricity users, whether they are industries using megawatts or householders using kilowatts, do not want units of electricity. They want the services that electricity helps to provide - comfort, illumination, motive power, information, entertainment and so on. Companies competing to sell anonymous electrons at a customer's meter can compete only on price. In a market of this kind they are going to find their margins perilously thin, and their customer base alarmingly volatile. Selling electricity by the unit, as a commodity, is going to be a good way to go bankrupt. Historically, traditional electricity companies have taken their captive customers for granted. Learning to deal with active customers able to take their business elsewhere will force companies to refocus both their corporate culture and the business they are in. They will have to offer customers not merely anonymous electrons but package deals that deliver the services customers want, and are prepared to pay for. In such a context, public service will become part of a broad portfolio of energy services, shaped and delivered by mutual agreement to fulfil the requirements of society.

Governments, in turn, will have to reassess their relationships with their electricity systems. The public service dimension, for which government accepts responsibility, will have to be - in the words of Article 3,2 of the EU Electricity Directive - 'clearly defined, transparent, non-discriminatory and verifiable', not only within the EU but wherever electricity is being liberalized. Moreover, it will have to be implemented by government measures that work in a liberal and international market framework.

As a result, within coming years, like electricity systems themselves, the public service dimension of electricity may evolve almost beyond recognition. The transition is going to be uncomfortable. If, however, policies can catch up with the process, the electrical utility will disappear. What takes its place will be better.

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