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From Edison to Enron

By Walt Patterson

Why has no one written a history of world electricity? If one exists please tell me about it, because I've been looking for one for years without success. What I have in mind is a volume to set beside Dan Yergin's masterpiece *The Prize* (Simon&Schuster 1991). The subtitle of Yergin's hefty Pulitzer-Prize winner is 'The Epic Quest for Oil, Money & Power'. A history of the world petroleum business, it is, as you might expect, utterly engrossing. It is packed with incident and larger-than-life dramatis personae - Rockefeller, Deterding, Churchill, Gulbenkian, Mossadegh, Kissinger, Pahlavi, Samuel, Ibn Saud, and a cast not merely of thousands but millions. The story of oil as Yergin tells it is a riveting, rumbustious tale, not only for specialists but for general readers, a sprawling true adventure all over the globe.

Why, then, has no similar chronicler tackled the story of world electricity? It, too, has its larger-than-life characters; Thomas Edison, Nikola Tesla and Samuel Insull, to mention only three, can easily hold their own with the oilmen. The impact of electricity on human life is at least as sweeping as that of oil. Depending on how you do the sums, the world electricity business may be even bigger than the oil business. But the only serious scholarly chronicle of electricity internationally that I can find is *Networks of Power*, by T. P. Hughes, published by Johns Hopkins Press in 1983. It deals essentially only with the US, the UK and Germany; and it stops at 1930. Otherwise, electricity history has been recorded by country or by company more or less exclusively.

That, of course, may be indicative. Until perhaps 1990 electricity appeared to be essentially a national, regional or even local affair - not international and certainly not global. But even then that was misleading. Electricity organizations, companies and networks might not have crossed borders much; but technology certainly did - technology, system design, operation and finance, all the concepts and language that reproduced worldwide the common technical and institutional model of synchronized AC electricity systems everywhere. How did this model become the global standard? The history of world electricity has still to be told.

In the meantime, in its absence, a national history is better than none. The latest, entitled *From Edison to Enron*, by Richard Munson (Praeger) is a lively and readable account of electricity in the US, starting in fact before Edison and continuing beyond the debacle of Enron. Munson is director of what the blurb calls 'a non-partisan policy research centre in Washington, DC'. 'Non-partisan' here presumably means not party-political; but Munson certainly has his own policy agenda, which emerges most clearly in the chapters after Enron.

Munson's subtitle is 'The Business of Power and What It Means for the Future of Electricity'. He presents the US electricity story as a clash of monopolies, privately-owned or government-owned, jockeying for advantage decade after decade, with the public caught in between. He makes a good case, bolstering it with anecdotes about people and politics, told with intensity and flair. His accounts, for example, of Sam Insull's rise and fall, the Tennessee Valley Authority, the US nuclear power programme and the August 2003 blackout are crisp and vivid even for non-specialist readers.

In due course Munson makes clear his own preference, for a dramatic increase in cogeneration and trigeneration - 'recycling energy', as he calls it - which he declares will happen if the power of the monopolies is broken and the federal government gets out of the way. He is less convinced about renewable energy, and declares that regulatory measures such as a Renewable Portfolio Standard are misguided and interfering. He does, however, advocate much more decentralized generation, in

what he sees as a competitive context: 'a more significant struggle has emerged between competitors and monopolists, where entrepreneurs promoting an open market face stiff opposition from both public and private utilities'. 'Today's debate is about what balance of competition and regulation will deliver more consumer choices, cost savings, environmental sustainability, and reliable electrical service.'

The question of 'balance of competition and regulation' likewise arises outside the US. But it does not go far enough. It still takes too much for granted, accepting the historical role and nature of electricity in society. In that sense Munson's book is traditional, advocating a form of historical continuity, evolution rather than revolution. He may nevertheless be underestimating the disruptive impact of the new electricity technologies on system configuration, operation and finance. A much more dramatic transformation of electricity looks increasingly plausible and indeed desirable.

Meanwhile, however, we face the problem of electricity decision-makers and opinion-formers who appear to know no history at all, local, national or global. Anyone who reads Munson, or a short list of other national histories of electricity, will be aghast at the idea of attempting to resuscitate nuclear power as a response to climate change. Nothing could be more guaranteed to make the climate problem insoluble than diverting time, resources and political commitment to flogging the nuclear dead horse. Those seeking chapter and verse on nuclear history, and on the abundance of more promising and exciting energy opportunities, might like to explore a new website, Walt Patterson On Energy, <www.waltpatterson.org> , a cumulative archive of more than 35 years of commentary, opinion and polemic.

We have been here before. Let's not make the same mistakes all over again.

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