

POWER'S DOMINION:  
*A Review of Recent Writings  
on Rivers and Hydroelectricity*

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*Gaslights to Gigawatts:  
A Human History of BC Hydro and its Predecessor  
BC Hydro Power Pioneers*

Vancouver: Hurricane, 1998. 236 pp. Illus., maps. \$37.25 cloth.

*The Business of Power:  
Hydro-Electricity in Southeastern British Columbia, 1897-1997*

Jeremy Mouat

Victoria: Sono Nis, 1997. 199 pp. Illus. \$21.95 paper.

*Forests, Power and Policy: The Legacy of Ray Williston*  
Eileen Williston and Betty Keller

Prince George: Caitlin. 1997. 318 pp. Illus. \$34.95 paper.

*Delusions of Power:  
Vanity, Folly and the Uncertain Future of Canada's Hydro Giants*  
Wayne Skene

Vancouver: Douglas and McIntyre, 1997. 230 pp. \$35 cloth.

*Transforming Power: The Politics of Electricity Planning*  
Aynsley Kellow  
Cambridge: Cambridge University Press, 1996. US\$59.95 cloth.

*The Organic Machine: The Remaking of the Columbia River*  
Richard White

New York: Hill and Wang, 1995. 130 pp. Map. \$11.50 paper.

**A** FRIEND OF MINE, who attended university in Pittsburgh, recalls asking a local student how the city was supplied with electricity: the student replied that he believed "they hauled it in in trucks." Most British Columbians have a better understanding of the workings of their electrical industry, but few appreciate

the complexity and consequences of modern society's reliance on electrical power. The nature of electricity, an invisible, featureless medium, encourages the public to ignore the political, social, and ecological concerns that underlie its generation and distribution. The resulting physical and mental detachment engenders a tabula

rasa for both the projection of deep-seated cultural assumptions and the composition of beneficial depictions of what electricity represents and promises. These characteristics make the study of the history of electrical development especially challenging, since it involves not only an examination of politics, economics, technology, and ecology, but also of the cultural glue that binds and structures these disparate forces. Several recent publications make significant contributions to depicting and explaining this network of relations that is integral to modern life.

For most British Columbians electricity means BC Hydro, the huge Crown corporation that occasionally makes the news when questions are raised about how it operates its facilities, sets its rates, or promotes overseas enterprises. But behind the public perception of the corporate behemoth stand people, thousands of present and past employees who have dedicated their working lives to supplying the province with electrical power. *Gaslights to Gigawatts* is an attempt by a group of retired employees of BC Electric, the BC Power Commission, and BC Hydro to capture the personal and human character of the corporation's history. They have met this challenge by combining interviews and reminiscences from scores of former employees with hundreds of old and recent photographs. The result is a handsome coffee-table book that holds many intriguing insights but lacks a strong narrative voice to bind the story together. The format, mostly a matter of introducing the interviewees by describing their position and tenure of employment and then inserting a very lengthy quotation, certainly allows many people to speak in their own voice, but it also makes for a virtual cacophony of competing and clashing voices.

Although current BC Hydro management was not involved in this publication, they would certainly be hard pressed to find anything between the covers that would tweak their public-image sensitivities. The authors make no apologies for having assembled a wholly "positive" publication and readily acknowledge that "investigative journalism and recrimination are not in the spirit of this book" (2). Having begun from this premise they not surprisingly present a rosy, upbeat view of BC Electric's and BC Hydro's influence on the province and minimize the importance of their labour troubles and environmental impact. For example, they quickly dismiss the 1950s opposition (which included respected naturalist Roderick Haig-Brown) to the damming of Buttle Lake, and they completely elide the ruinous environmental effects of the W.A.C. Bennett Dam. Because of this overweening positivism and the book's disjointed narrative, *Gaslights to Gigawatts*'s readership will likely be restricted to past and present employees of BC Hydro and committed electrical history buffs.

The other major provider of domestic and industrial power in British Columbia is West Kootenay Power (wkp), which celebrated its centenary in 1997. Jeremy Mouat's *The Business of Power* is a traditional business history, evidently published to commemorate the company's 100 years of service to British Columbia's southeast corner. Mouat introduces his subject with a nod to some of the current leading social historians of electricity, such as David E. Nye and Thomas Hughes, but his account is basically a straightforward narrative of the development and successes of wkp. We learn of the company's modest beginnings at the Lower Bonnington site on the Kootenay River below Nelson, with the

first power generated in 1898 for the booming smelters in Trail and Rossland, and its acquisition by the CPR and, later, Cominco. Mouat also covers WKP's role in Canada's efforts during the First World War, its entanglement in the development of the Columbia River after the Second World War, and its eventual 1987 sale to UtiliCorp, a rapidly expanding transnational electrical company based in Missouri.

Given Mouat's earlier work on the history of mining in the West Kootenays, *Roaring Days* (1995), it is not surprising that this subject receives inordinate space in his new volume, although some readers may be surprised by the striking similarities between specific passages in the two books. Few historians understand the intricacies of the mining and smelting industries as well as Mouat, and he provides an excellent account of how the development of hydroelectric power was integral to Cominco's success. Unfortunately, Mouat does not extend this analysis to capture WKP's larger role in transforming the social and environmental landscape of the Kootenays. For example, although he inexplicably dedicates several pages to adumbrating the history of the Doukhobors in the West Kootenays, he dismisses the flooding of the Arrow Lakes, and its concomitant dislocation of local residents, in one paragraph. Consequently, *The Business of Power* illuminates WKP's role in the economic development of the Kootenays, but, in contrast to Nye's and Hughes' work, it leaves us in the dark as to electricity's wider social and political implications.

Having been near the centre of political deliberations during British Columbia's "big dam" era, Ray Williston is in a unique position to comment on the political aspects of electrical development. *Forests, Power and Policy*

consists of Williston's recollections of his two careers, first as a BC educator, and later as a high profile cabinet minister in W.A.C. Bennett's government. Mostly written by Williston's second wife (based on conversations with her husband), the volume promises insights into the inner workings of Bennett's Sacred government at the height of its power and hubris; unfortunately, it fails to deliver. Williston was minister of lands and forests during Bennett's forestry and hydroelectric initiatives of the 1950s and 1960s, but instead of highlighting his policy contributions, his biography supports David Mitchell's assessment that Bennett ran a one-man show. Bennett may have surrounded himself with competent and loyal cabinet ministers, such as Williston, but their role was to implement his orders, not to act as advisers and confidants. Instead of being treated to privileged knowledge of how Bennett decided to "nationalize" British Columbia Electric in 1961, we learn about Williston's efforts to sell his house in Prince George and that his secretary could not type.

While there is nothing revelatory in *Forests, Power and Policy*, there are a few nuggets to appreciate. Williston, like many Sacreds, was mesmerized by the charismatic international entrepreneur Axel Wenner-Gren and admits that he was "very, very supportive" of Wenner-Gren's fantastic plan to "develop" the Peace River country. In comparison, Williston had only contempt for General Andrew McNaughton, the abrasive and bombastic old war-horse who, after retiring as the Canadian chairman of the International Joint Commission, launched a fervent nationalistic attack on the Columbia River Treaty. It is in the section on the treaty and Bennett's Two River Policy that Williston proffers a novel, though incredible, assertion. He claims that

Bennett, the self-proclaimed defender of British Columbia's economic sovereignty, was willing to allow Ottawa to take over the entire Columbia River hydroelectric project in return for the power being delivered to Vancouver at four mills per kilowatt and a lump sum payment for flood-control benefits (187).

Unexpectedly, Williston's reminiscences have much in common with Wayne Skene's ominous survey of the current state of Canada's electrical industry. Skene and Williston may occupy opposite ends of the political spectrum, but they both believe that Bennett's nationalization of BC Electric and his later dam-building spree were good things. In *Delusions of Power*, Skene, a BC resident who has written an earlier doomsday book on the CBC and co-authored former BC premier Mike Harcourt's defence of his premiership, argues that without public ownership of electricity companies and strict government regulation of supply and demand, Canada risks destructive electrical projects, higher prices, and calamitous blackouts. Skene subscribes to the "great-man" school of history and so emphasizes the roles of the titans of Canada's electrical industry: Adam Beck, Robert Bourassa, Gordon Shrum, and Bennett. As for the latter, British Columbia's first Socred premier is described as a visionary who had the foresight and wisdom to harness both the Columbia and the Peace Rivers for the good of the entire province. In Skene's view, this type of government intervention and control is necessary in order to combat corporate mendacity and predator capitalism.

The political economy of electrical development represents a unique convergence of politics, capital, technology, and public interest, which overwhelms Skene's earnest but flimsy analytical structure. A more sophisticated analysis

is proffered by Australian environmental policy scholar Aynsley Kellow in *Transforming Power*. Kellow's book consists of comparative case studies of electricity planning in Australia, New Zealand, Tasmania, British Columbia, and Ontario. He argues that, in contrast to the confident reliance on relentlessly expanding demand in the 1950s and 1960s – a manifestation of modernism – current electrical industry planners must adapt to the fragmentation, discontinuity, and chaos of the postmodern age. According to Kellow, the Tasmanian and New Zealand examples illustrate the folly of electricity planning dominated by technocrats, myopic politicians, and a positivism that transforms forecasts into reality. He employs Langdon Winner's theory of reverse adaptation to explain why, throughout the 1980s, New Zealand and Tasmanian electricity planners continued to adjust forecasts to suit their preferred means of generation. In contrast, Kellow argues that BC Hydro and Ontario Hydro have successfully adapted to the uncertainties of the postmodern world by adopting the methods of least-cost utility planning. His description of BC Hydro is especially sanguine and may be a consequence of both geographical distance and a heavy reliance on BC Hydro's annual reports. BC Hydro's transformation, Kellow argues, began with the newly formed BC Utility Commission's refusal to grant BC Hydro approval to proceed with the Peace River Site C development in 1983. This decision, coupled with the Bonneville Power Administration's decision to limit access to its transmission system (and so effectively cut off the lucrative California market), forced BC Hydro to introduce radical new approaches to demand and supply-side management,

including its successful Power Smart program.

The electricity industry in North America is rapidly changing, and recent developments undermine Kellow's optimism. In British Columbia the provincial government has amended the Utilities Commission Act to allow the minister responsible for BC Hydro to exempt the utility from public review. The fact that the BC Utilities Commission is susceptible to the vagaries of political expediency tempers Kellow's estimation of its efficacy. Also, since June 1997 the government has been pursuing a "Jobs for Power" development policy that seeks to attract energy-intensive industry (primarily aluminum smelters) to British Columbia in exchange for inexpensive power, something BC will have in abundance due to its failure to convince the Bonneville Power Administration to purchase the Columbia River Treaty's downstream benefits. This government initiative is similar to the New Zealand National Party's "Think Big" election campaign of 1981, an example of political interference Kellow abhors. Finally, the deregulation of the electricity industry in Canada and the United States and, particularly, BC Hydro's new opportunities to sell power to US utilities and industrial consumers, undermine Kellow's argument for the long-term beneficial effect of limited external markets.

Kellow focuses on a specific aspect of the relationship between society and energy – electricity planning. In *The Organic Machine*, American environmental historian Richard White steps several paces back to examine the evolution of energy systems on the Columbia River. For many people, this energy system is fully represented by giant dams such as Grand Coulee, which, it seems obvious, have destroyed

pristine, wild rivers and stand as hideous monuments to industrialized society's "rape" of the natural world. According to White, the rape metaphor is just as simplistic and misleading as the image of trucks carrying loads of electricity. White argues that the history of American society's relationship with the energy flows of the Columbia, as exemplified by the salmon fishery, irrigation, and the development of waterpower, has been dominated by the dialectic of the mechanical and the organic. The result has been a hybrid, the "organic machine," which represents the inseparability of humans and nature. His argument owes much to Leo Marx's *The Machine in the Garden* and Lewis Mumford's *Technics and Civilization*. The latter represents the early, optimistic Mumford who believed that the machine was being revitalized by society's increasing awareness and appreciation for the role of the organic. Marx's literary analysis warned of the contradictions between the machine and the organic and concluded that, while Americans continually espoused the rhetoric of a "middle landscape" between art and nature, they were unable to identify the moment when the balance shifted and the machine began to obliterate the natural world. White's contribution is to explain how this fundamental concern developed on the American section of the Columbia River.

This short but weighty book has received much deserved praise. Instead of repeating accolades, I would like to voice a few basic reservations. First, while White problematizes the concepts of natural and artifice for those who continue to adhere to a naive dualism (a worthy endeavour and to be expected, given the book's non-academic audience), there is a tendency in *The Organic Machine* towards obfuscation. For example, White argues that as

much as the Columbia has been twisted and contorted for hydro-electricity and irrigation, it has not been destroyed; like energy, it continues to exist but in an altered state. Those who harbour regrets should realize that "we have not killed the river; we have disappointed ourselves" (60). This contention obscures the sheer magnitude and significance of the transformation. Physics teaches that energy cannot be destroyed; it also warns that through entropy (the principle of diminishing utility) energy can be driven towards less complexity and greater homogeneity. The denouement is the irretrievable loss of its significance and its potential. Identifiable social, cultural, and ecological manifestations of the Columbia have been destroyed, and with them have gone unimagined possibilities. These are losses in a very human and natural sense.

Similarly, although White is concerned with the evolving struggle between the organic and the mechanical on the Columbia, he evades a direct evaluation of the power dynamics that directed its transformation (see, for example, his discussion of aluminum interests on 72 and 73). Leo Marx warned that vested interests degenerate culture into a rhetoric that masks intentions and consequences. White fails to adequately evaluate this aspect of the political economy and so mistakenly conflates Emerson's philosophical ideal with the crude boosterism of twentieth-century developers. Economic and political power dictated the transformation of the Columbia into the "organic machine," or into what Mumford would have identified in his later writings as a "megamachine." White accuses Mumford of employing a totalizing analysis and contends that the transformation has been more complicated and dynamic than Mumford

recognized. This is a fair criticism of Mumford and much of the intellectual tradition he represents, but it does not invalidate their core argument that the current natural predicament has resulted from a complex of power relations that have been both multidimensional and inequitable. Specific interests have exerted inordinate influence on the development of the Columbia, and these interests have often been shortsighted, anti-democratic, and destructive. White evades this basic question through the repeated use of the pronouns "we" and "our." His description implies that American society has been involved in an informed and vigorous debate over the Columbia and now must live with the consequences of its decisions. White's own work, as well as important publications by other historians and environmentalists, repudiates this assumption. Until the 1970s a large majority of the population gave little sustained thought to the natural and social consequences of river development, exhibiting a willingness to either continue on in ignorance or to accept the hollow rhetoric and empty promises of politicians and developers.

Electrical development is a fertile ground for such rhetoric, attracting populist stalwarts such as Woody Guthrie to spin songs of how jobs and happiness would flow from the harnessing of a mighty river. This simple and appealing deception is manifest today in British Columbia's "Jobs for Power" economic enticement policy. The logic of swapping power (invisible, ephemeral, and illusive) for solid, tangible, food-on-the-table jobs appears inescapable. But this logic rests on a depth of understanding that supports the assumption that electricity is hauled to a city in trucks. Jobs in aluminum smelters are not created in exchange for "power," their price is

spawning grounds, nesting areas, farmland, Aboriginal communities, traplines, orchards, and a myriad of other natural and human creations that depend on flowing rivers and natural lakes. Society cannot exist outside of the natural world, and certain sac-

rifices and despoilments are unavoidable, but informed and responsible choices are only possible when we dispel the rhetoric of power development and weigh the social and environmental costs of our contrivances and luxuries.