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Aller au sommaire du numéro

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#### Résumé de l'article

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## How Hydro Ontario Went Local: The Creation of Local Districts and the Ontario Central System

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**Abstract :** When Ontario Hydro was created, its task was to distribute electricity to local hydro commissions across Ontario. By the 1920s, however, it had become a local distributor itself, providing direct service to thousands of customers across the province. This essay examines the two major events that brought Ontario Hydro into local distribution during this period: the creation of the Central Ontario System in 1916 and the Rural Power District in 1920. This essay draws on previously unexplored archival sources to argue that the two processes were quite separate from one another, and that only one – the Rural Power District – left a lasting institutional legacy in Ontario's electricity sector. Both developments, however, reveal the "flexibility" of local political autonomy in Ontario – the cultural and political limits of appeals to local autonomy in the face of economic risk and opportunity and technological change.

Résumé: Lorsqu'Ontario Hydro fut créée, sa mission était de distribuer l'électricité à des commissions hydroélectriques locales, à travers la province. À partir des années 1920 cependant, elle était elle-même devenue un distributeur local, fournissant directement des milliers de clients. Cet article examine deux évènements majeurs qui ont amené Ontario Hydro à devenir un distributeur local: la création du Central Ontario System en 1916 et du Rural Power District en 1920. S'appuyant sur des archives originales, cet article argue que les deux évènements étaient indépendants l'un de l'autre et que seul le Rural Power District a laissé un héritage institutionnel durable dans le secteur électrique ontarien. Cependant, le développement des deux institutions révèle aussi la "flexibilité" de l'autonomie politique locale de l'Ontario, autrement dit, les limites politiques et culturelles des appels à l'autonomie locale au regard du risque et des opportunités économiques ainsi que du changement technologique.

Early in December, 2012, Murray Elston, Chairman of Ontario's Electricity Distribution Panel, released a report on the province's

electricity distribution system. The report was careful but clear. The central problem in Ontario, Elston argued, is that local distributors are too numerous and diverse. Some companies, like Hydro 2000 in eastern Ontario, serve just 1,000 customers. Others, like Toronto Hydro, serve millions. The sophisticated, integrated energy grid of the future, Elston concluded, simply cannot exist in so fragmented a system; the number of distributors must therefore be drastically reduced, from the current 89 down to no more than eight, each serving a customer base of more than 400,000 Ontarians.<sup>1</sup>

Elston was encouraged to find that many in the electricity sector agreed. "The panel found," he wrote, "that most presenters and submitters agreed that significant change was required." While Elston acknowledged that his panel's recommended changes would be complex, he was equally confident that they were both necessary and realistic.

Across Ontario, however, local governments reacted with fury. While much had changed in the electricity sector – a provincial statute in 1998 had forced municipal governments to convert their hydro utilities into private corporations, resulting in the elimination of more than two hundred local distributors – many municipalities still owned their local distribution utilities.<sup>3</sup> Those who did were reluctant to part with them. "I do not support the selling of this asset," declared one Ontario mayor, referring to his city's electrical utility, "and it would be irresponsible to be forced to do so." Many others agreed. Dalton McGuinty's Liberal government, with no taste for mandatory restructuring, quickly backed off. For the moment, at least, the distribution system would be left unchanged.

<sup>1.</sup> Murray Elston, Floyd Laughren, and David McFadden. *Renewing Ontario's Electricity Distribution Sector: Putting the Consumer First* (Toronto: Ontario Distribution Sector Review Panel, 2012).

<sup>2.</sup> Ibid., 1. A list of the diverse range of governments and organizations who made submissions to the Electricity Distribution Panel is provided at the end of the report, 44-45. 3. The eliminations occurred due to consolidation and sales of municipal utilities to larger corporations such as Hydro One. For a discussion of the changes during this period, see R. Daniels and M. Trebilcock, "Electricity Restructuring: The Ontario Experience," *Canadian Business Law Journal* 33, 2 (2000): 161-92.

<sup>4. &</sup>quot;McDonald says no to the sale of LDCs," Bay Today, 14 December 2012, 1.

<sup>5.</sup> For examples, see "Mayor Hints at Hydro Fight in annual Chamber address," 5 December 2012, 1; "Kingston Hydro Boss no fan of consolidation report," *Kingston Whig Standard*, 15 December 2012, 1; "Officials Oppose Utility Consolidation,", *North Bay Nugget*, 18 December 2012, 1; "Innovation or power grab?" *Woodstock Sentinel-Review*, 19 December 2012, 4; "Merge Ottawa River Power?," *Pembroke Daily Observer*, 19 December 2012, A1; "Hydro panel report disappoints," *Sarnia Observer*, 19 December 2012, A3; "FFPC Still Opposing Merger Proposal," *Fort Francis Times*, 19 December 2012, 1; "Utility faces forced merger plan," *Peterborough Examiner*, 30 December 2012, A3.

Taken in its immediate context, the local reaction to Murray Elston's report was little more than a political flash in the pan. From a wider perspective, however, what is striking about Elston's report, and its attendant reaction, is the enormous weight of history. Within the report itself, the legacy of the past is explicit:

If Ontario was to set out to establish a new electricity distribution system from scratch, it is highly doubtful that it would choose to replicate the current structure...The current distribution system is mainly a product of history. There is real danger that the heavy hand of history will hold the sector back from contributing to the future economic well-being of the province.

The provincial distribution system, for Elston and his colleagues, "is a product of history rather than the outcome of rational planning." If only we had the opportunity to start again from scratch, Elston laments – *then* we could build a sensible system.

If Elston's report was in part a lament about the weight of history, then the local reaction to the report was proof that the history is still with us. The reaction against Elston's recommendations in places like Sarnia, North Bay, and Halton Hills, was little more than the latest scene in an ongoing drama, one whose origin can be traced to the earliest days of Ontario's hydro-electric system. Whatever the details of Elston's recommendations, few could dispute his underlying thesis: in Ontario, hydro-electric policy is heavy with history.

Nowhere is this history clearer than in the tension between local and central control – the very tension that Elston's mega-regional recommendations stirred up once again. Public hydro-electric distribution came to Ontario in the early years of the twentieth century when a movement of municipal actors, a diverse band of businessmen and urban boosters, persuaded the provincial government to assist in the transmission of electricity from its sources to the towns and cities of Ontario. The local origins of the transmission system, soon cemented into the field in the form of the Ontario Municipal Electric Association, became central to the mythology of "the Hydro," a lodestar by which everyone, even provincial politicians, regularly charted their course.

7. H.V. Nelles, *The Politics of Development: Forests, Mines, and Hydro-Electric Power in Ontario, 1849-1941* (Kingston: McGill-Queen's University Press, 2005, 2<sup>nd</sup> edition), chapters 6-7. See also *Canadian Annual Review*, 1906, 178.

<sup>6.</sup> Elston et al., *Renewing Ontario's Electricity Distribution Sector*, 9-10, 16. I have compressed two separate passages into a single quotation, but this does not distort the panel's argument, evident throughout the report, emphasizing the weight of history and the need to transcend it.

<sup>8.</sup> For an extended treatment of the deeply held view that the HEPC should be controlled by the municipalities, and its important implications for hydro restructuring discussions throughout the twentieth century, see Neil B. Freeman, *The Politics of Power: Ontario Hydro and its Government, 1906-1995* (Toronto: University of Toronto Press, 1996). For a

Still, much has in fact changed in Ontario's hydro-electric sector. In the years before the First World War, the system was indeed highly localized, with a provincial agency, the Hydro-Electric Power Commission of Ontario, simply transmitting electricity from private generators in Niagara to the municipalities. Today, on the other hand, just a handful of the province's local distribution companies are bounded by a single municipality. Despite the deep commitment to local hydro in Ontario's energy sector, non-local hydro distribution, including direct service provision by provincial agencies, is almost as old as Hydro itself.

How has this reality of deep provincial involvement coexisted with a continuing commitment, by powerful political actors inside the system, to local control? This essay offers the beginning of an answer to this question by exploring the origin of direct provincial electricity provision in the province of Ontario. Two important innovations in the early twentieth century – the creation of the "Central Ontario System" in 1916 and the creation of "Rural Power Districts" in 1920 - marked the beginning of a new era in the history of Hydro, one in which local distributors co-existed alongside direct, non-local provision by the province. The goal of this essay is to understand these two moments, and to explain how it was that local governments – so jealous of local control in the hydro sector – reacted to the province's first moves into the local hydro domain. We will show that these changes – particularly those in rural Ontario, which created a large, non-contiguous area of service provision with which any future restructuring was forced to grapple – left an important institutional mark on the provincial hydro-electric system in Ontario. But we will also argue that the changes reveal what we will call the *flexibility* of local autonomy in Ontario – the cultural and political limits of local identity in the face of economic risk and opportunity and technological change.

The changes that we will survey in this essay were important in creating the basic distribution system in which Ontarians continue to live today, but they have received very little attention from Canadian historians. Despite considerable scholarship on the development of the Hydro-Electric Power Commission of Ontario at the provincial level, 9 as well as

discussion of the strategic importance for Adam Beck of exploiting this administrative ambiguity, see H.V. Nelles, "Public Ownership of Electrical Utilities in Manitoba and Ontario, 1906-30," *Canadian Historical Review* 57, 4 (1976): 464, as well as W.D. Gregory, *History and General Relations* (Toronto: Gregory Hydro-Electric Inquiry Commission, 1924), 77.

<sup>9.</sup> These include Nelles, *The Politics of Development*; Freeman, *The Politics of Power*; Merrill Denison, *The People's Power: the History of Ontario Hydro* (Toronto: McLelland and Stewart, 1960); W.R. Plewman, *Adam Beck and the Ontario Hydro* (Toronto: Ryerson Press, 1947); Emerson B. Biggar, *Hydro-Electric Development in Ontario* (Toronto: Ryerson Press, 1920); Karl Froschauer, *White Gold: Hydroelectric Power in Canada* (Vancouver: UBC Press, 1999). Of these histories, Denison, Plewman and Biggar offer

the history of hydro-electric services at the municipal level<sup>10</sup>, no published account exists of the most important anomaly in the history of provincialmunicipal service provision in Ontario: the Central Ontario System. The Rural Power District has received more sustained attention, most notably in Keith Fleming's excellent account of rural hydro development in Canada, but it has not yet been discussed in relation to general debates about municipal autonomy or to the post-war discussions of regional and provincial energy restructuring in Ontario. 11 This paper is therefore meant to extend the work of those who have written the larger history of Ontario's local and provincial hydro-electric system – particularly those. such as Neil Freeman, H.V. Nelles, and Christopher Armstrong, who have explicitly addressed the implications of this history for provincialmunicipal relations in Ontario – with the aim of demonstrating the importance of an underexplored corner of that history for the larger development of local-provincial politics and energy policy in the province of Ontario.

### The Central Ontario System

Despite the fanfare, the mythology, and the deeply devoted activists, the original purpose of the Hydro-Electric Power Commission of Ontario was modest. It was nothing more than a middleman. The HEPC was a solution

descriptive (and generally celebratory) treatments. Nelles's celebrated history is a forceful intervention in debates concerning Canadian political economy and political culture (serving, among other things, as a rebuttal of a Hartz-Horowitz account of Canadian political culture). Froschauer's focus is on the interconnected tensions between public/private sources and foreign/domestic uses of Ontario's hydroelectricity. Freeman's focus, closest to my own in this paper, is on how Hydro's institutional ambiguity has repeatedly foiled attempts to reform its structure. A more polemical treatment of Ontario Hydro's more recent history can be found in Jamie Swift and Keith Stewart, *Hydro: The Decline and Fall of Ontario's Electric Empire* (Toronto: Between the Lines, 2004).

10. The best general treatment of municipal public utilities in Canada is H.V. Nelles and Christopher Armstrong, *Monopoly's Moment: The Organization and Regulation of Canadian Utilities, 1830-1930* (Toronto: University of Toronto Press, 1986). While my empirical focus in this paper is on different cases, I share Nelles and Armstrong's commitment to explaining local utilities in general, and hydro in particular, without ignoring "the importance of chance, choice, will, and frequently error and ignorance in the shaping of institutions", 5. For a broader defence of this approach to urban history, see H.V. Nelles and Christopher Armstrong, "The Great Fight for Clean Government," *Urban History Review* 5, 2 (1976): 50-66, as well as Jean Manore's arguments for complex explanation in *Cross-Currents: Hydroelectricity and the Engineering of Northern Ontario* (Waterloo: Wilfrid Laurier Press, 1999), 167. Elizabeth and Gerald Bloomfield provide a helpful overview of municipal hydro-electric systems in Ontario in *Urban Growth and Local Services* (Guelph: University of Guelph, 1983).

11. Keith R. Fleming, *Power at Cost: Ontario Hydro and Rural Electrification, 1911-1958* (Montreal and Kingston: McGill-Queen's University Press, 1992). Jean Manore's *Cross-Currents* also addresses rural hydroelectric development in Ontario, but her empirical focus is on northern development.

to a collective action problem: while there was plenty of electricity at Niagara Falls, and while all of the municipalities of southwestern Ontario would benefit from having access to that electricity, the cost for any *single* municipality of constructing a system to transmit electricity from its source to each municipality was prohibitive. <sup>12</sup> The solution was the province: if a provincial agency were to build a distribution system from Niagara Falls to the interested municipalities, charging those municipalities a portion of the construction costs, then all municipalities would be better off. The agency that was created to carry out this task was the HEPC. <sup>13</sup>

As soon as the lights began to switch on, however – the first switching-on ceremony was in Berlin, Ontario, in October, 1910 – the Commission's mission began to expand. This might have been inevitable; after all, stories of administrative "mission creep" are hardly rare in Canada, and demand for low-cost hydro-electricity in Ontario was high. In the case of the HEPC, however, the expansion of the Commission's mandate was all but assured by the fact that its leader was a man whose devotion to the hydro-electric enterprise was unwavering, whose strategic perception was Machiavellian, and whose political power was increasingly without parallel. This man was Sir Adam Beck.

Born in Baden, Ontario, in 1857, Adam Beck joined the hydro movement as a successful cigar-box manufacturer and mayor of London, Ontario. When he arrived at his first hydro meeting in Berlin, Ontario, in February, 1903, Beck told the newspaper that he was there to learn and

<sup>12.</sup> A "collective action problem" refers to a situation in which everyone would be better off by the provision of a particular good, but in which it is not in the interest of any one actor to pay the full cost of that good.

<sup>13.</sup> Nelles, *Politics of Development*; Freeman, *Politics of Power*; see also Denison, *The People's Power*. This is why the alternative was a municipal co-operative; see Nelles, *Politics of Development* for a convincing presentation of the personal and political reasons for the triumph of the provincial agency over the municipal co-operative option.

<sup>14.</sup> Froschauer, White Gold, 57.

<sup>15.</sup> Among many factors stimulating demand for new sources of electricity during this period was the contentious "Repatriation Crisis," in which export commitments during the First World War led to power shortages for domestic wartime manufacturers in Ontario. The timing of this crisis was too late to have affected the creation of the Central Ontario System in particular, though it is certainly relevant to the wider atmosphere of increasing demand and the HEPC's mission expansion. See Froschauer, *White Gold*, 72-75 and Nelles, *Politics of Development*, 367-75.

<sup>16.</sup> Ernest Drury – former premier of the province – called Beck "the most influential person in the province" during Drury's time in office. See Ernest Drury, *Farmer Premier* (Toronto: McLelland and Stewart, 1966), 122. For a broader discussion of Beck's political power during this era, see H. V. Nelles, "BECK, Sir ADAM," in *Dictionary of Canadian Biography*, vol. 15, University of Toronto/Université Laval, 2003. See http://www.biographi.ca/en/bio/beck adam 15E.html, accessed 9 April 2015. See also W.R. Plewman, *Adam Beck and the Ontario Hydro*.

observe.<sup>17</sup> But the student soon became the teacher: by 1905, Beck had become the chairman of a commission to investigate the possible hydroelectric scheme, and when the Hydro-Electric Power Commission of Ontario was officially created in 1906, Beck was the obvious choice as its first chairman.

In the early years, Beck and his colleagues at the HEPC were focused on building the transmission lines to transmit electricity to urban centres across southwestern Ontario. After 1910, however, with the construction process well under way, the Commission began its campaign of expansion. Each of the Commission's new distribution grids was organized around a specific source of hydro-electric power: the "Niagara System" from the generating stations at Niagara Falls; the "Wasdells System" from Wasdells Falls on the Severn River; the "Muskoka System" from the South Falls and Hanna Chute along the Muskoka River; and so on. 18 It was in the context of this rapid expansion that we find the story of the Central Ontario System.

In Beck's ambitious vision, securing control of the electrical distribution assets in central Ontario was crucial for the eastward expansion of the HEPC's network. It was also important for combatting criticisms among central and eastern Ontarians who complained that the HEPC served only the small, southwestern portion of the province. 19 Beck had been trying to move into central Ontario for years, and the municipalities in the area had passed resolutions in support of a hydro-managed distribution grid akin to the Niagara System.<sup>20</sup> By 1915, however, the electrical utilities in the area were controlled by a single corporation, the Electric Power Company (EPC), with whom Beck had been unable, despite repeated attempts, to negotiate a selling price.<sup>21</sup> Beck attempted a flanking maneuver, applying for a lease from the federal government to set up competing generating stations along the Trent River, but the federal government was unwilling to sanction hydro-electric competition along the Trent. "On the one hand was the Commission seeking new fields for its activities," wrote W.D. Gregory in his survey of the Central Ontario System in 1923, "on the other hand was the Electrical Power Company, backed by the Sun Life Insurance Company, the holder of its bonds, and by the powerful

<sup>17.</sup> Nelles, *Politics of Development*, 247; W.V. Uttley, *A History of Kitchener, Ontario* (Kitchener; J.C. Jaimet, 1937), 341.

<sup>18.</sup> Fleming, Power at Cost, 7-8; Nelles, Politics of Development, 363.

<sup>19.</sup> W.D. Gregory, *Report on the Central Ontario System* (Toronto: Gregory Hydro Electric Inquiry Commission, March 2, 1923), 2-3. RG 18-83, Records of the Hydro Electric Inquiry Commission, Archives of Ontario. Gregory had been appointed as head of Royal Commission to investigate the HEPC's accounting and administration. 20. Ibid., 2.

<sup>21.</sup> The EPC operated the utilities through twenty-two subsidiaries. Hydro Electric Power Commission of Ontario, *Annual Report* (Toronto: Government of Ontario, 1924), ix.

influence of the Dominion Government. At length the contest resulted in a deadlock."<sup>22</sup>

As Beck grew more and more determined to secure a foothold in central Ontario, the EPC became less and less willing to sell. When Sir Henry Drayton, Chairman of the federal Board of Railway Commissioners, travelled to Toronto to provide an independent valuation of the EPC's assets, Beck and the HEPC refused to be bound by Drayton's valuation. The president of the EPC, believing Beck to have previously agreed to abide by the valuation, was enraged, and refused to negotiate further with the HEPC.<sup>23</sup>

The increasing tension between Adam Beck and the Electric Power Company meant that it would be the government itself, and not the HEPC, that would have to purchase the company's assets.<sup>24</sup> The plan was simple. First, the government would agree on a price in negotiation with the EPC. It would purchase the assets and would then sell them to the municipalities of central Ontario. As in other parts of the province, the HEPC would transmit electricity from the generating sources to the municipal boundaries. As in the case of the HEPC itself, the government's role would simply be to solve a straightforward collective action problem, providing the funds for the purchase that no single municipality in central Ontario could itself afford to supply.<sup>25</sup>

Thus, on Saturday, March 4, 1916, Strachan Johnston, President of the EPC, travelled to Toronto to meet with representatives of the provincial government. They soon settled on a price. Johnston then departed, and Adam Beck arrived – tension between the two had apparently reached the point that they could no longer be present in the same room – and Beck approved of the price. It seemed that the problem of central Ontario electricity had finally been solved.

Then the problems returned. Those who had negotiated with the EPC on March 4 had done so on the understanding that the final price included all of the EPC's assets. But the EPC claimed that a portion of its properties in the Nippising district were excluded from the deal. This was rather disingenuous; the Nippising properties had been included in the HEPC's initial valuation, and they had been discussed during the price negotiations. But Adam Beck's initial letter of interest had mentioned only the "Trent District", giving the EPC a wedge with which to crack the negotiations apart. If the government wanted the assets, the EPC declared, the price would have to increase. The government, with few options, agreed to the new price, and on the final day of the legislative session in

<sup>22.</sup> Ibid., 4.

<sup>23.</sup> Ibid., 4-5.

<sup>24.</sup> The various assets owned by the EPC may also have encouraged this. See Ibid., 6.

<sup>25.</sup> Gregory, Report on the Central Ontario System, 15.

<sup>26.</sup> Ibid., 8-9, 14.

1916, the requisite bill breezed through first, second, and third reading with little debate.<sup>27</sup> "The idea," said Howard Ferguson, Minister of Lands, Forests, and Mines, when reflecting on the negotiations some years later, "was to hand [the system] over to the municipalities at just what it cost."<sup>28</sup>

Unfortunately, no one had asked the municipalities to confirm that they would purchase the EPC's assets from the government. This put the municipalities in a position of exceptional strength, free to decide what *they* felt an appropriate price might be. Unsurprisingly, the municipalities drove a hard bargain, refusing to purchase the assets at what they saw as an inflated price. The government was therefore stuck with the Electrical Power Company's assets, and no one wanted to take them out of its hands.<sup>29</sup> No one, that is, except the HEPC.<sup>30</sup>

It was through this unpredictable turn of events, then, that the HEPC came to serve as the government's trustee for the assets that had belonged to the Electrical Power Company.<sup>31</sup> The core of these assets were of course the electrical utilities. But the purchase also included a diverse assortment of other assets as well: waterworks systems in Trenton and Cobourg; gas plants in Nappanee, Cobourg, Oshawa, and Peterborough; a street railway system in Peterborough; and most peculiar of all, a pulp mill in Campbellford. This was the first time in Ontario's history that a public body other than the municipalities had supplied electricity directly to consumers. It was also the first and only time that labourers in a local pulp mill received a paycheque signed by the Hydro-Electric Power Commission of Ontario.<sup>32</sup>

No one – including Adam Beck – had intended for the HEPC to bypass the municipalities and serve the residents of central Ontario directly, and it was obvious, from the very beginning, that the municipalities in the system would have preferred the more common localized model. In 1921, a meeting of municipalities in Central Ontario resolved that the government pass legislation "to allow the municipalities of Central

<sup>27.</sup> This last-minute passage of bills was a frequent, and occasionally criticized, HEPC tactic. See James Mavor, *Niagara in Politics: A Critical Account of the Ontario Hydroelectric Commission* (Toronto: E.P. Dutton, 1925), 52.

<sup>28.</sup> Ibid., 15. See also *Journals of the Legislative Assembly of the Province of Ontario* (Toronto: Government of Ontario, 1916), 244.

<sup>29.</sup> Gregory, Report on the Central Ontario System, 19.

<sup>30.</sup> The assets were owned by the province but managed by the HEPC. This arrangement was created by Order-in-Council of 5 May 1916; the HEPC formally took control of the assets on 1 June 1916. See *Annual Report of the Hydro-Electric Power Commission of Ontario* (Toronto: Government of Ontario, 1921), vii.

<sup>31.</sup> This issue was briefly politicized. See *Globe*, 30 November 1922, 11; 1 December 1922, 12; 5 January 1923, 9; and especially 21 June 1923, 3, for attempts on the part of critics and the opposition to make political capital of the error.

<sup>32.</sup> The mill closed and then re-opened in the 1920s. See *Globe*, 17 March 1921, 2; 22 September 1922, 18.

Ontario to acquire the Central Ontario Power system," and made plans for a large delegation to travel to Toronto to promote the resolution.<sup>33</sup> In 1922, seventeen municipalities at the Midland Municipal Association had passed a resolution seeking municipal control of the area utilities.<sup>34</sup> Similar resolutions were passed at the Annual Meetings of the Ontario Municipal Electric Association in 1922 and 1923.<sup>35</sup> In most cases, however, it was not until the late 1920s that the municipalities actually agreed with the province on a price for the purchase. Councillors in Peterborough refused to purchase the street railway from the HEPC until the Commission finally grew weary of operating the dilapidated system at a loss and simply ceased operations in 1927. <sup>36</sup> It was not until 1928 that Lindsay purchased its local hydro infrastructure from the provincial government; Oshawa and Belleville followed in 1929.<sup>37</sup> Even the Campbellford Pulp Mill, despite frequent losses, remained in operation by the HEPC until the 1930s – a most peculiar state of affairs that the HEPC defended as "a convenience to the farmers and small lumbermen of the district "38

In the end, then, the creation of the Central Ontario System was the first occasion in which the provincial government, with the HEPC as its agent, "invaded" the municipal sphere to supply electricity directly to customers. But this invasion was accidental and temporary. Were it not for the shortsightedness of the negotiators in 1916, who failed to secure the agreement of area municipalities before agreeing to a final price, the assets would have quickly been transferred to central Ontario municipalities. The Central Ontario System was viewed from the beginning as an anomaly, a problem that everyone – including the municipalities, who again and again expressed a desire to control their hydro distribution systems for themselves – hoped would soon be

<sup>33.</sup> Globe, 22 March 1921, 3.

<sup>34.</sup> Gregory, Report on the Central Ontario System, 17.

<sup>35.</sup> Ontario Municipal Electric Association (OMEA) Annual Meeting, 1922 and 1923, Box #0011674740, OMEA-AMEU Records, Hydro One Archives.

<sup>36.</sup> *The Globe*, 22 July 1925, 2; 25 July 1925, 3; 15 February 1927, 3; 5 March 1927, 3; 2 April 1927, 11; 12 April 1927, 2. The fact that the other municipalities of central Ontario were effectively subsidizing the street railway was a source of considerable frustration; see *Globe*, 22 July 1925, 2; 25 July 1925, 3.

<sup>37.</sup> *Globe*, 1 August 1929, 13; 3 August 1929, 1. The same year, Cobourg's residents voted *not* to purchase the assets from the Province; see *Globe*, 10 December 1929, p.1. By 1934, the *Globe* reported that "practically all municipalities comprising the Central Ontario System have purchased their distribution systems from the Commission.", see *Globe*, 5 December 1934, 4.

<sup>38.</sup> *Globe*, 14 March 1934, 6. The government claimed that the plant had been sold in 1927, and had been praised by opposition members for having done so; see *Globe*, 26 February 1927, 7.

remedied.<sup>39</sup> What is most revealing about the Central Ontario System, therefore, is not the precedent that it served, since the model was never again used in Ontario.<sup>40</sup> It instead provides an opportunity to witness the strategic action of the municipalities in the Central Ontario System, who faced a decision that no other Ontario municipalities would encounter. Despite a lasting and explicit desire to control their own local systems, Central Ontario municipalities waited years, until the price was attractive and the economic risks were low, before they agreed to purchase the distribution utilities from the provincial government.

#### **Rural Power Districts**

Rural Ontario was the second front in the HEPC's enthusiastic campaign of growth. From the beginning, many in rural Ontario had been enthusiastic about hydro and eager for local electrification. The serious demographic challenges in rural parts of the province in the early twentieth century – between 1901 and 1921, nearly 90 percent of Ontario's townships actually *lost* population – only increased the demand. Perhaps, rural dwellers hoped, electrification might bring both the new comforts and the new industries of the cities out into the countryside, helping to slow, if not to stop, the demographic bleeding.

The challenges of rural electrification, however, were immense. The basic problem was density: with fewer houses in the countryside, and with greater distances between the houses, the per capita costs of distribution were enormous, a problem that could be solved only if adoption rates and usage levels were high. To make rural electricity affordable, in other words, most people in the countryside would have to adopt the service, and all of them would need to use a great deal of electricity every month, making up in usage what they lacked in population density. For the HEPC, this meant an aggressive sales campaign, including the famous "Hydro circus" which toured to agricultural fairs across the province to

<sup>39.</sup> Globe, 30 March 1927, 1; Gregory, Report on the Central Ontario System, 17; Globe, 22 March 1921, 3; 22 March 1922, 11; 2 December 1927, 13; 19 March 1929, 13, as well as the resolutions in the OMEA's Annual Report, 1922 and 1923, Box 0011674740, AMEU-OMEA Records, Hydro One Archives.

<sup>40.</sup> In 1930, the Central Ontario System was merged with the Rideau and St. Lawrence Systems under the new name "Eastern System". See *Globe*, 30 May 1930, 14.

<sup>41.</sup> Fleming, *Power at Cost*, 25; W.D. Jeffrey, "History of Hydro Rural Power Supply," v.1. 520-7 to 524-6, Box C0011671257, Hydro One Archives.

<sup>42.</sup> These numbers are based on a dataset created by the author, using Canadian census data. See also Cheuk Wong, *Ontario's Changing Population* (Toronto: Government of Ontario, 1976).

<sup>43.</sup> Fleming, *Power at Cost*, 4, 25; Julie Andres, *Power to the Remotest Hamlet: the Promotion of Rural Hydro in Ontario*, 1910-1929 (Master's thesis, University of Guelph, 2007), 45-46; W.D. Jeffrey, "History of Hydro," v.1.

demonstrate the many uses to which electricity could be put.<sup>44</sup> It also meant new "experimental farms" to test the potential applications of electrical machinery on the farm.<sup>45</sup> Some of these strategies were more successful than others – widespread adoption of electrical tractors and other machinery never materialized – but demand for rural hydro nevertheless continued to increase.<sup>46</sup>

A solution to the density problem, however, remained elusive. Before 1920, the process by which rural townships secured a hydro connection resembled that of the towns and cities: township councils would seek an estimate from the HEPC, sign a provincial contract, and then submit a bylaw to a vote of local ratepayers. This system worked well in urban Ontario, where population density was high, but in the townships, municipal boundaries divided users off from one another rather than lumping them together into efficient units. As rural demand for electricity continued to increase, the provincial government became ever more eager to find a solution to the density problem. So in March of 1919, the government asked the HEPC's rural rate committee, led by W.D. Jeffrey, to determine if the rural system would be sustainable if it were supported by a 33% grant for construction costs in rural areas. The committee investigated and reported back with disappointing news: even a one-third percent grant would not be sufficient to make rural hydro affordable.

Having delivered the bad news, however, Jeffrey and his colleagues continued to ruminate on the problem. On May 2, 1919, the committee met for an extended session, working through the rural hydro problem from every possible angle. The fundamental challenge, they concluded, was the inefficiency of township boundaries. There were simply too few people in each township, scattered too widely, to permit efficient distribution. As long as the rural systems were organized on local boundaries, like their urban cousins, it would be impossible to provide affordable electricity to the countryside. To bring hydro to rural Ontario, township boundaries would have to be ignored.<sup>49</sup>

To replace the township as the organizing boundary for rural hydro, Jeffrey and his colleagues began to envision something very different, a

<sup>44.</sup> Andres, Power to the Remotest Hamlet, 36.

<sup>45.</sup> Fleming, Power at Cost, 30.

<sup>46.</sup> Andres, *Power to the Remotest Hamlet*, 45-6, 72, 86; W.D. Jeffrey, "History of Hydro," v.1.

<sup>47.</sup> Fleming, *Power at Cost*, 40. The government had also introduced a provision in 1917 to allow suburban areas to join with adjacent urban municipalities; see W.D. Jeffrey, "History of Hydro", v.2; 520-7 to 524-6, Box C0011671257, Hydro One Archives.

<sup>48.</sup> Assistant Engineer to Chief Engineer, March 26, 1919, included in W.D. Jeffrey, "History of Hydro," v.2. The amount required to make rural service affordable was not specified beyond a general statement that increased rates or a higher number of consumers would be required beyond the one-third subsidy.

<sup>49.</sup> W.D. Jeffrey, "History of Hydro," v.2.

geographic unit that came to be called the Rural Power District (RPD). If a township council expressed an interest in electricity, the HEPC's engineers would carry out an extensive survey, just as they had done in the past. Now, however, they would not only survey the interested township, but other surrounding townships as well, and they would then draw a line around the most technically efficient service area. The engineers would then prepare a cost estimate assuming adoption rates of 100 percent, 75 percent, 50 percent, and 25 percent within the geographic districts, and the relevant townships would decide if they were interested. If so – and this was perhaps the most important innovation – the system would be built and operated directly by the HEPC, bypassing the township completely. In the Rural Power District, in other words, there would be no rural equivalent to the urban public utilities commission. Rural customers would receive their bill directly from the HEPC. <sup>50</sup>

Jeffrey wrote up a memorandum describing his committee's proposal and sent it to the F.A. Gaby, HEPC's chief engineer. "After careful consideration of all of the details entering into the matter of supplying rural power," wrote Jeffrey, the committee recommended that the "Hydro Electric Power Commission of Ontario shall arbitrarily fix the boundaries of each rural system." The chief engineer then wrote to Adam Beck, explaining and endorsing the committee's suggestion. Not only are present townships unhelpful as organizing areas for rural hydro, he explained "it is practically impossible to obtain competent men to operate township systems in a satisfactory manner." For this reason it was important not only that the boundaries of the Rural Power District ignore the townships' borders, but that those responsible for the new districts be "appointed by, and under the control of, this Commission."

Adam Beck agreed. In August, 1919, the HEPC officially endorsed the Rural Power District, and in the next legislative session, the proposal was introduced as a government bill.<sup>53</sup> Dougall Carmichael, a Minister without Portfolio in the Drury government, explained to the legislature that the bill was "designed to make it easier for farmers and rural municipalities generally to get power."<sup>54</sup> The bill passed into law with little debate.

The Rural Power District did not solve the problem of high-cost electricity in the countryside – the very next year, the provincial government introduced a grant to cover 50 percent of the capital cost of

<sup>50.</sup> W.D. Jeffrey to Chief Engineer, 9 May 1919; included in Jeffrey, "History of Hydro," v.2. See also Fleming, *Power at Cost*, 47-48.

<sup>51.</sup> Jeffrey v.2 19 May 1919 memoranda Jeffrey to Chief Engineer; included in Jeffrey, "History of Hydro," v.2.

<sup>52.</sup> Engineer to Adam Beck, 16 September 1919; included in Jeffrey, "History of Hydro," v.2.

<sup>53.</sup> Fleming, Power at Cost, 48.

<sup>54.</sup> Quoted in ibid., 50. The information on Dougall Carmichael is also from this source.

transmission lines and cables in rural Ontario, a subsidy that would persist in the province for more than three decades. <sup>55</sup> But the RPD did allow rural electrification to proceed more quickly and efficiently than in the past. By 1935, fifteen years after their introduction, some 171 Rural Power Districts had been created across Ontario, all of them bypassing the township and providing service directly to rural customers from the HEPC. <sup>56</sup>

Indeed, the spread of the Rural Power District was so extensive that the problem soon became abundance rather than scarcity. With more than 180 Rural Power Districts in operation by the end of the 1930s, and with improvements in technology making larger distribution systems possible, hydro officials began to think that even larger rural districts would increase the efficiency of the rural system.<sup>57</sup> In 1942, the province's existing Rural Power Districts were consolidated into a more manageable 120 districts. Just two years later, however, the province went much further, consolidating the entire rural system into just two enormous districts, one in the north and the other in the south of the province.<sup>58</sup> Through all of the changes, however, the fundamental structure of the Rural Power District – direct service provision to rural customers by a provincial rather than a local agency - remained firmly in place. Even today, it is the successor to the HEPC – a corporation now called Hydro One – that provides electrical service to most of Ontario's rural customers. Unlike the accidental innovation of the Central Ontario System, the Rural Power District created an institutional legacy that persists in Ontario up to the present.

### Pathways to Invasion: How Ontario Hydro Went Local

The Central Ontario System and the Rural Power District represent the first two moments in which a provincial agency, the Hydro-Electric Power Commission of Ontario, bypassed municipalities and provided electricity to Ontario customers directly. Several simple observations emerge from the events that we have described above. The first is that the two developments were quite unrelated – they were in no sense part of a broader strategy on the part of the provincial government or the HEPC to move into the local arena in a more systematic way. Some have suggested that the ease with which the Rural Power District glided through the

<sup>55.</sup> Denison, *The People's Power*, 152. The grant was broadened in 1924. See also Fleming, *Power at Cost*, 8-9.

<sup>56. 1941</sup> Legislative Assembly Questions and Answers, 36, in "Legislative Assembly Questions and Answers", 0011671231, Hydro One Archives.

<sup>57.</sup> This efficiency was technical, based on reducing complexity in the rural power system, and also economic, balancing out RPDs that sustained perpetual deficits with others that sustained perpetual surpluses. See Fleming, *Power at Cost*, 378-81.

<sup>58.</sup> Fleming, Power at Cost, 188-192.

legislature was because the path had been partially cleared by the Central Ontario System.<sup>59</sup> If this was so, no one chose to mention it at the time, either in public reports or in archival correspondence. These were separate developments, and while both grew from a widespread desire for hydroelectricity in Ontario, the processes by which they came about were very different from one another.

One of the fundamental reasons for this difference, of course, was that the Central Ontario System was widely viewed as an accident, a model to avoid. The Gregory Commission, when asked to review Ontario's hydro system, criticized the Central Ontario System relentlessly – both the circumstances of its creation and its ongoing operation – and the government worked hard to return central Ontario to "normalcy" by selling the provincially-owned assets to the municipalities. While it took many years until the assets were finally sold, the process began almost immediately, and both the municipalities and the provincial government were interested in a more normal state of affairs. The Central Ontario System was never emulated elsewhere in Ontario, and left little lasting institutional memory behind.

The legacy of the Rural Power Districts, on the other hand, was substantial. By the end of the Second World War, as we have seen above, the RPDs had been reduced to just two massive districts which together comprised the HEPC's "Rural System". Unlike all of the Commission's other distribution "Systems", which were organized around particular regions – the Niagara System, the Ottawa System, and so on – the rural system covered major, non-contiguous geographic areas across the entirety of the province. Any attempt to create "shoulder to shoulder" distribution utilities in Ontario – that is, a system of non-overlapping regional utilities - has therefore been forced to contend with the elimination of Ontario Hydro (what is today Hydro One), whose assets range across the province as a whole. When Murray Elston and other contemporary observers refer to the weight of history in the hydro sector, they are usually thinking of the municipal origin of the system, and the reluctance on the part of many towns and cities to surrender control of their local utilities. But the most serious challenge created by the longterm development of hydro-electric service in Ontario may in fact have originated in rural rather than urban Ontario. Every attempt at hydro restructuring since the Second World War has been forced to grapple with the fact that there is one utility – now called Hydro One – whose territory is not organized regionally, and which would therefore need to be

59. Fleming, *Power at Cost*, 49. This is a very minor argument in Fleming's overall narrative, but I believe that it is nevertheless an incorrect interpretation.

<sup>60.</sup> See W.D. Gregory, *Hydro-Electric Inquiry Commission General Report* (Toronto: Government of Ontario, 1924), 231. For the legacy of this recommendation, see *Globe*, 1 August 1929, 13.

dismantled and divided up if the hope for shoulder-to-shoulder regional utilities were ever to become a reality. Simply put, shoulder-to-shoulder hydro service would require that Hydro One be divided up into regional pieces. And this fact is a direct legacy of the creation of Rural Power Districts.<sup>61</sup>

Overall, then, our investigation of the Central Ontario System and the Rural Power Districts fills in a previously unexplored area in the history of Ontario's hydro-electric system. But this analysis also has implications for our understanding of provincial-local relations in Canada more broadly. Perhaps the most striking feature of the changes that we have surveyed above is what we might call the *flexibility* of local identity. While representatives of municipal governments were eager, when all else was equal, to maximize their local autonomy, they have also been willing to surrender this autonomy in the face of economic cost or policy demands.

This is clear in both of the cases that we have examined. In the Central Ontario System, a full commitment to local autonomy in central Ontario would have led to the quick sale of the assets to the municipalities, even if the cost was higher than the municipalities might have preferred. And it is certainly true that many central Ontario municipalities demanded that the assets be handed over as soon as possible. But those municipalities were equally willing to wait years, even decades, before purchasing the assets. These municipal governments would have *preferred* to have operated the utilities themselves – but they were unwilling to pay any economic price in order to do so

In rural Ontario, the flexibility of local autonomy is even clearer. While the Central Ontario System could be pitched to the public as a temporary measure, one that would soon be resolved, the Rural Power District was a permanent solution for rural Ontario. For township councils in Ontario, the Rural Power District represented the permanent removal of hydroelectric policy from the local domain. Yet when the time came for the townships to express their opinions on the matter, the reaction was almost complete silence. In the years that followed, individual residents would often complain about the price of electricity in their districts, and about

<sup>61.</sup> This is not, to my knowledge, a legacy that has previously been noted in the literature on rural hydro-electric power in Ontario. However, the problem that I describe here has been quite clear in recent debates on hydro restructuring in Ontario. See William Farlinger, G.J. Homer and B.S. Caine, *Ontario Hydro and the Electric Power Industry: Vision for a Competitive Industry* (Toronto: Government of Ontario, 1995), available at the Ontario Legislative Library; Advisory Committee on Competition in Ontario's Electricity System, *A Framework for Competition* (Toronto: Queen's Printer for Ontario, 1996); Ontario Ministry of Energy, *Direction for Change: Charting a Course for Competitive Electricity and Jobs in Ontario* (Toronto: Government of Ontario, 2009).

<sup>62.</sup> *Globe*, 22 March 1921, 3. See also the resolutions in *OMEA Annual Meeting*, 1922, AMEU-OMEA Records 0011674740, Hydro One Archives.

the lengthy contracts that rural customers were forced to sign. <sup>63</sup> But there is no evidence of an organized campaign on the part of the townships to regain control of the local distribution system. The technical challenges of hydro-electricity in a low-density environment, combined with the high demand for electrical service in rural Ontario, led the municipalities of rural Ontario to surrender control of hydro without any evidence of a fight.

This conclusion suggests an interesting new research agenda for historians of public policy in Canada, and especially for those who are focused on scientific innovation and technological change. The first challenge is to understand how these local and provincial processes have developed across various fields of public policy. Is it the case, for example, that changes in other areas of local policy, such as public health or education, reveal the same basic flexibility as hydro? The widespread but varied adoption of consolidated township school boards and public health units in the 1930s and 1940s across rural Ontario – combined with the acknowledgement that such consolidations represented some loss of autonomy on the part of local communities – suggests that a preliminary answer is yes, although the uniquely high demand for hydro-electric service may also have made hydro an outlying case. Only further comparative research will be able to resolve these questions fully.

A second implication of the "flexibility" that we have noticed here is that the most interesting and revealing cases will be those at the threshold between opportunity and autonomy, those in which the costs of autonomy are low but nevertheless real. It is in these cases between the two extremes – very high risk on the one hand, and cost-free policy innovation on the other – that we will learn the most about why local actors sometimes yield their autonomy willingly, and why they sometimes fight to retain it. This research would enrich our understanding of the implications of technological change on the ongoing politics of local-provincial relations across Canada's provinces.

### Conclusion

This essay has provided a detailed survey of two important moments in the history of hydro-electric politics in Ontario: the creation of the Central Ontario System in 1916 and of the Rural Power District in 1920. These events mark the first appearance, in urban and rural Ontario, respectively,

<sup>63.</sup> Fleming, Power at Cost, 97.

<sup>64.</sup> For more detailed discussion of these cases, see Jack Lucas, *Explaining Institutional Change: Local Special Purpose Bodies in Ontario, 1810-2010* (Ph.D Thesis, University of Toronto, 2014), chapters 6-8. The extent to which Adam Beck was able to present himself as a *representative* of the municipalities may also have been an important factor in explaining this difference; see note 15 above for discussions of Beck's skill in this regard.

of a hydro-electric system which bypasses local governments and provides electrical service directly to customers.

While our research has suggested that these two events, while temporally proximate, were largely unrelated to one another, we have argued that both events reveal an important and inadequately appreciated aspect of local political history in Ontario. We have called this the flexibility of local autonomy; while arguments for local autonomy do have cultural salience in Canada, they are bounded by the hard realities of cost, risk and demand - as those realities are understood by decision makers in each era. 65 To understand the long-term development of provincial and local politics in Canada therefore requires that we track the times and places in which arguments for local autonomy were passionately made, and those in which arguments for local autonomy seem to disappear. What has driven these changes, in cases such as hydroelectric power, has been the introduction of technological innovations and technically complex public services into the local arena. The flexible and ongoing construction of local autonomy by local political actors in Canada is therefore an area of research in which historians of science and technology are well equipped to make an important contribution.

<sup>65.</sup> For recent treatments of local autonomy in Canada, see Mary Louise McAllister, *Governing Ourselves? The Politics of Canadian Communities* (Vancouver: UBC Press, 2004) and Kenneth Woodside, "An Approach to Studying Local Government Autonomy: The Ontario Experience," *Canadian Public Administration* 33, 2 (2008): 198-213. For a brief but perceptive discussion of institutional change and perceptions of risk, see Andrew Abbott, "An Old Institutionalist Reads the New Institutionalism," *Contemporary Sociology* 21, 6 (1992): 754-56.