

“It is the finest piece of government work that I know of anywhere”: The Influence of the Hydro-Electric Power Commission of Ontario on the Giant Power Survey of Pennsylvania, 1923-1927

Mark Sholdice

Volume 37, Number 1-2, 2014

Énergie et société au Canada

URI: <https://id.erudit.org/iderudit/1030641ar>

DOI: <https://doi.org/10.7202/1030641ar>

[See table of contents](#)

Publisher(s)

CSTHA/AHSTC

ISSN

1918-7750 (digital)

[Explore this journal](#)

Cite this article

Sholdice, M. (2014). “It is the finest piece of government work that I know of anywhere”: The Influence of the Hydro-Electric Power Commission of Ontario on the Giant Power Survey of Pennsylvania, 1923-1927. *Scientia Canadensis*, 37(1-2), 77-104. <https://doi.org/10.7202/1030641ar>

Article abstract

Since its foundation in 1906, the Hydro-Electric Power Commission of Ontario exerted a major influence on the politics of electricity in the United States. American supporters of publicly-owned utilities saw the Hydro as a model worth emulating south of the border. Reformers who sought lower electric prices for consumers also looked to the Hydro for evidence of the technically-feasible lowest cost of producing and transmitting this source of energy. This paper will examine a specific instance when American Progressives sought to use the Hydro as both a source of information and inspiration for electric policy reforms: the Giant Power Survey of 1923-1927, an attempt by Pennsylvania Governor Gifford Pinchot to bring about lower electricity costs for consumers and to extend access to rural areas, through a mix of greater regulation and government action. The individuals involved in Giant Power came into close contact with Hydro officials for the vital administrative and technical information with which to argue for their cause; the Ontarians, however, had their own reasons to be wary of getting involved in a controversial proposal.

“It is the finest piece of government work that I know of anywhere”: The Influence of the Hydro-Electric Power Commission of Ontario on the Giant Power Survey of Pennsylvania, 1923-1927

Mark Sholdice

University of Guelph

Abstract : Since its foundation in 1906, the Hydro-Electric Power Commission of Ontario exerted a major influence on the politics of electricity in the United States. American supporters of publicly-owned utilities saw the Hydro as a model worth emulating south of the border. Reformers who sought lower electric prices for consumers also looked to the Hydro for evidence of the technically-feasible lowest cost of producing and transmitting this source of energy. This paper will examine a specific instance when American Progressives sought to use the Hydro as both a source of information and inspiration for electric policy reforms: the Giant Power Survey of 1923-1927, an attempt by Pennsylvania Governor Gifford Pinchot to bring about lower electricity costs for consumers and to extend access to rural areas, through a mix of greater regulation and government action. The individuals involved in Giant Power came into close contact with Hydro officials for the vital administrative and technical information with which to argue for their cause; the Ontarians, however, had their own reasons to be wary of getting involved in a controversial proposal.

Résumé : Depuis sa création en 1906, la Commission hydro-électrique de l'Ontario (HEPCO) a exercé une influence majeure sur les politiques électriques aux États-Unis. Les partisans américains des utilités publiques y voyaient un modèle à suivre et à émuler. Les réformateurs en quête d'électricité à bas prix se tournaient également vers HEPCO pour obtenir des preuves de la faisabilité technique d'une production et d'une distribution à faible coût. Cet article examine une des initiatives où les Progressistes Américains ont cherché à utiliser HEPCO comme une source d'information et d'inspiration pour réformer les politiques d'électricité: la Grande Enquête sur l'Énergie de 1923-1927, une tentative du Gouverneur de la Pennsylvanie Gifford Pinchot de faire baisser les prix de

l'électricité et d'étendre l'électrification des zones rurales. Les individus impliqués dans la Grande Enquête ont noués des contacts étroits avec les officiels d'HEPCO pour obtenir l'information technique et administrative essentielle à leur argumentation; les ontariens avaient, cependant, leurs propres raisons de se garder d'une trop grande implication dans cette initiative controversée.

The 1923-1927 gubernatorial administration of progressive Republican Gifford Pinchot in Pennsylvania made an attempt to promote lower electric costs and rural electrification through business-government cooperation in production and stronger regulation in distribution and transmission. The recommendations of the so-called "Giant Power Survey" were ultimately blocked in the state legislature, but it marks an interesting chapter in American thinking on electric policy, one in which the Hydro-Electric Power Commission of Ontario (HEPCO) served as an example of the technical possibilities for low rates, especially in rural areas. Morris L. Cooke, the director of the Giant Power Survey Board described the plan as "the establishment of large sized by-product and power stations, located near the coal mines, supplying current to the trunk lines of an integrated transmission and distribution system which also carries the electricity derived from water power; the while making possible the distribution of current to the rural population; together with a reduction of rates, especially to the small consumer..."¹ It was thus conceived of as both a political and technological solution to the issue of high electricity prices.

Incorporating a mix of public regulation and private ownership, the Giant Power plan and its advocates used HEPCO in different conceptual and rhetorical ways than the supporters of direct public ownership. In the 1920s, the public ownership movement, led by Senator George Norris and taking part in the national debate over the federal government's continued role in producing hydroelectricity at Muscle Shoals, used HEPCO as an example of the successful public operation of an electrical utility. The supporters of Giant Power, on the other hand, invoked the Ontario experiment to argue for broader access to electricity, especially in rural areas, and to criticize the inflated rate schedules of the privately-owned utilities. In its combination of policy recommendations, Giant Power can be seen as an example of the merger Jay L. Brigham describes between the progressive groups that supported public ownership and those that preferred regulation.² The Giant Power project also made direct connections between electric prices and public welfare. In the words of

1. Morris Llewellyn Cooke, "The Long Look Ahead," *Survey Graphic*, 1 March 1924, 602.

2. Jay L. Brigham, *Empowering the West: Electrical Politics Before FDR* (Lawrence: University of Kansas Press, 1998), 11.

Ronald C. Tobey (of whom Brigham was a student), Cooke “synthesized the rational housekeeping movement, with its emphasis on transformation of the household, and the progressive power movement.”³

This article is part of a wider project showing the reciprocal links between progressives in Ontario and throughout the United States, a relationship which led to the creation of HEPCO in 1906 and attempts to model it south of the border. The history of HEPCO’s creation and early operations within the Province of Ontario have been well-documented by H.V. Nelles and Keith Flemming.⁴ Influenced by Daniel Rodgers’ work on exchanges between American and European progressives in the field of social policy,⁵ my work will demonstrate the close interconnections between Canadian and American progressives in the field of electric energy. Although this theme has been mentioned by some American historians, such as the pioneering work of Richard Lowitt on Norris’ interest in HEPCO in the 1920s,⁶ my work will be an attempt to provide a comprehensive examination of this transnational exchange about electric policy. Perhaps most interestingly, Ontario continued to be seen by American progressives as a model for emulation in the field of electricity, and it thus came to be the focus of criticism from the private electric industry.

Pinchot moved to set-up an inquiry into the electric industry in Pennsylvania almost immediately after taking office in January 1923. The administration received an appropriation from the General Assembly of the Commonwealth of Pennsylvania of \$35,000 for the Giant Power Survey Board, although he asked for \$50,000.⁷ Two of the men Pinchot named to the Board were noted conservationists he had worked with in the U.S. Forest Service: Attorney General George Woodruff, and Deputy Attorney General Philip Wells.⁸ Morris Llewellyn Cooke was named director of the Giant Power Survey Board. Cooke was a key appointment, because of his earlier contact with HEPCO. As he later recounted:

About this time we began to hear more and more about the Ontario "Hydro Electric" and of its principal promoter – one of the great men of our time – Sir

3. Ronald C. Tobey, *Technology as Freedom: The New Deal and the Electrical Modernization of the American Home* (Berkeley: University of California Press, 1996), 50.

4. H.V. Nelles, *The Politics of Development: Forests, Mines and Hydro-Electric Power in Ontario, 1849-1941* (Toronto: Macmillan, 1974); Keith R. Flemming, *Power at Cost: Ontario Hydro and Rural Electrification, 1911-1958* (Montreal and Kingston: McGill-Queen’s University Press, 1991).

5. See Daniel Rodgers, *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge, MA: Harvard University Press, 1998).

6. See, for instance, his “Ontario Hydro: A 1925 Tempest in an American Teapot,” *Ontario History* 49, 3 (September 1968): 267-274.

7. M. Nelson McGeary, *Gifford Pinchot: Forester-Politician* (Princeton: Princeton University Press, 1960), 298.

8. *Ibid.*

Adam Beck, Kt., LL.D. That it was bitterly attacked principally by the commercial interests in this country, was probably a good thing because through the necessity for meeting these calumnies both the success and brilliant promise of the enterprise were widely advertised.⁹

In his role as Acting Director of the Utilities Bureau, Cooke had made contact with an official of the Toronto Hydro-Electric System as early as 1918.¹⁰ Cooke subsequently worked to defend HEPCO's reputation in the United States from attacks directed by the electric industry's lobby group, the National Electric Light Association (NELA).

Many individuals attached to the Giant Power Survey Board were known to Cooke from his days as Director of Public Works in Philadelphia, in the reform administration of Mayor Rudolph Blankenburg (1912-1916). In the summer of 1914, the administration brought an action against the local power monopoly, the Philadelphia Electric Company. One of the lawyers retained by the city was Harold Evans, who took part in Giant Power. Judson C. Dickerman, the head of the Bureau of Gas, and who assisted in the 1914 case, was later named the deputy director of the Giant Power Survey Board. Another future Giant Power associate acted as an expert witness in the 1914 rate case: "By an act of God, we located in the technical wilds of West Virginia the electrical engineer George H. Morse."¹¹ Cooke later claimed that Giant Power engineer Otto Rau was the first person in the United States to wire a house for electric light.¹² This team was also notable for the fact that many of its members later took leading roles in the public power movement, such as the creation of the Power Authority of New York State and the Tennessee Valley Authority.

HEPCO-Giant Power communication

The HEPC was a key supplier of information to the Giant Power Survey Board, particularly in establishing technically feasible minimums for electric rates and in outlining rural electrification strategies. Although the information flow was asymmetric, with HEPCO mostly supplying data to the Giant Power Survey, the Pennsylvanians did provide some material to the Ontarians. Cooke and the other power reformers provided information

9. Morris Llewellyn Cooke, "The Early Days of the Rural Electrification Idea: 1914-1936," *American Political Science Review* 42, 3 (June 1948): 439-440.

10. See Franklin Delano Roosevelt Presidential Library, Morris L. Cooke Papers (hereafter Cooke Papers), K. Giant Power Survey Papers, 1924-25, Box 200: Special Topics, File: "Cheap Electric Power," letter, Cooke to H.H. Couzens, 1 March 1918, and letter, Couzens to Cooke, 7 March 1918.

11. Cooke, *Survey Graphic*, 436.

12. Cooke Papers; D. General Correspondence, 1930-1932; Boxes 117-125; Boxes 118-119: "C, D, E, F, G"; File: "C"; Letter, Cooke to Clarence Cannon, 2 April 1932.

about anti-HEPCO propaganda by the power industry in the United States. But overall, the individuals involved in Giant Power were much more dependent on HEPCO for information and technical expertise than vice-versa. This contradicts a claim that the Giant Power plan did not significantly rely on the technical advice of outsiders.¹³

Prior to the creation of the Giant Power Board, Cooke had for a few years been in contact with the HEPCO, especially in his attempts to counter anti-HEPCO information in the United States. Writing to HEPCO chairman Adam Beck shortly before Pinchot's inauguration in January 1923, Cooke asked for a general outline of the provincial utility's rural operations.¹⁴ (This request seems to have been delayed due to error or inaction by HEPCO; after Beck referred the request to the "proper department," it was not answered for well over six weeks.¹⁵) Near the end of January, Cooke made a request to Beck for funds to create an American pro-HEPCO lobby group:

... we have been wondering whether it might not be well to create in this country some agency, committee, commission or board on which would sit twenty or thirty men of the highest standing and including a goodly percentage of engineers, the object of which would be to disseminate correct information in regard to your operations. An equally important function of course would be to help expose any false attack and other misleading information. It would be our hope to have this agency created to reflect the truth about any given matter that comes up in this connection rather than to carry on propaganda either for or against public ownership and public management. Of course it isn't our thought to announce that we are especially created to disseminate correct information about a foreign enterprise, but to have this relationship to any public enterprise in this country or abroad. But as your enterprise at the moment is the one that has most interest for us in this country the real purpose now and for some time to come would be to correctly reflect the truth about your operation.¹⁶

Beck replied that he liked the idea, but said that HEPCO did not have any statutorily-approved funds with which to bankroll such an

13. See Bayla Singer, "Power Politics," *IEEE Technology and Society Magazine*, (December 1988): 23. My attention was drawn to the importance of the HEPCO-Giant Power correspondence by an observation made by Sarah Phillips in her history of New Deal conservation policy; see Sarah Phillips, *This Land, This Nation: Conservation, Rural America, and the New Deal* (Cambridge: Cambridge University Press, 2007), 30.

14. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 34-35, File 389(1): Ontario Hydro-Electric Power Commission; Letter from Cooke to Beck, 5 January 1923.

15. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 34-35, File 389(1): Ontario Hydro-Electric Power Commission; Letter from Beck to Cooke, 9 January 1923; and letter from Gaby to Cooke, 21 February 1923.

16. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; letter from Cooke to Beck, 26 January 1923.

organization.¹⁷ A group like this, supporting a provincially-owned Canadian electric utility in the United States, would have been quite an innovation in the history of lobbying and public relations. Beck promised, however, to supply Cooke with any information required.

One source of information for the Giant Power Survey Board came, of course, from HEPCO's public reports. Otto Rau, for instance, provided Cooke with a memo that analyzed HEPCO's 1922 annual report. Repeating HEPCO's oft-repeated slogan, Rau noted: "The underlying policy and basis for charges is service at cost..."¹⁸ In March 1924, Cooke asked HEPCO Chief Engineer Fred Gaby for a copy of the report of the Gregory Commission, the inquiry set-up in 1922 by the United Farmer-Independent Labor coalition government of Ontario to investigate HEPCO's operations.¹⁹ Gaby replied that he would not be able to send one, because HEPCO only had one copy; instead he sent Cooke a copy of the Toronto *Globe* containing extracts and commentary.²⁰ While Gaby may have been telling the truth, it seems interesting that he was not able to send the highly critical report, and sent material from the friendly *Globe* instead. Similarly, when Cooke asked for a copy of an audit by Price Waterhouse, Gaby told him that HEPCO had not yet received a copy, but would send him one when available.²¹

The Giant Power Survey sought a great level of technical information from HEPCO, underlining the Pennsylvanians' dependence on the Ontario utility for engineering data that they could not otherwise afford to fund or acquire in the United States. In January 1924, Cooke contacted Gaby about a study Benjamin H. Williams was to make for the Giant Power Survey about effect of lower rates on electrical consumption: "I am enclosing herewith a copy of the memorandum which he has prepared outlining this study and wonder whether you have someone in your immediate staff that might be willing to go over this and suggest how the statement of the inquiry might be broadened so as to give us the best possible result."²² Gaby appears to have worked to get this data for

17. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 34-35, File 389(1): Ontario Hydro-Electric Power Commission; Letter from Beck to Cooke, 29 January 1923.

18. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 189; File: Rau, Otto; Memo, "Giant Power Survey" Rau to Cooke, no date.

19. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): "Ontario Hydro-Electric Power"; Letter from Cooke to Gaby; 24 March 1924.

20. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Gaby to Cooke, 28 March 1924.

21. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Cooke to Gaby, 27 September 1923; Letter from Gaby to Cooke, 2 October 1923.

22. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Cooke to Gaby, 14 January 1924.

Cooke.²³ In one February 1924 letter, Morse asked Gaby for HEPCO's regulations for the wiring of farm buildings, along with rates for remote rural districts.²⁴ Later that month Cooke asked for photographs of rural lines and installations, and for Gaby's opinion regarding the increase of power use by rural consumers.²⁵ In two February 1924 letters, Gaby directed Cooke to information in HEPCO's 1922 annual report; it seems Cooke did not take the time to read through these.²⁶ Morse asked Gaby for information on rural electric use in an area approximating an American county, about twenty-five miles square. After relating a long list of data he required, Morse ended: "We realize that we may be asking for a great deal of information in the above, but anticipate that you may be willing to detail one of your capable assistants to get this together for our use..."²⁷

On the same day, Morse sent another letter to Gaby, asking for data on a large number of farm electrical devices. He ended this letter: "We anticipate that the information we are now asking for and which we propose to use in our report, can be made the basis of popularizing and extending rural electrification in the State of Pennsylvania."²⁸ Cooke contacted Gaby in April 1924 for rural rate data on all or one of the Chatham, Ridgetown, Saltfleet, or Simcoe rural power districts, also mentioning the Morse may have already written for such data.²⁹ (They evidently wanted the data because of earlier rate information R.T. Jeffrey provided for each district in March 1923).³⁰ Gaby responded by saying that he'd look into the request; in reply to Morse's letter, regarding rural power supply, Gaby said that due to the lack of data, the quickest way would be for the Giant Power Survey to send someone to Ontario to

23. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Gaby to Cooke, 21 January 1924.

24. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Morse to Gaby, 11 February 1924.

25. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Cooke to Gaby, 20 February 1924, and Letter from Cooke to Gaby, 28 February 1924.

26. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Gaby to Cooke, 7 February 1924, and Letter from Gaby to Cooke, 23 February 1924.

27. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Morse to Gaby, 14 March 1924.

28. *Ibid.*

29. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Cooke to Gaby, 2 April 1924. The data was sent to Morse by Gaby on 4 June 1924, and appears to be the information included in the Giant Power report (see *ibid.*, 7 June 1924).

30. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; letter to Cooke from R.T. Jeffrey, 10 March 1923.

gather it.³¹ Morse later responded that it would not be possible to send an engineer to Ontario, but that the rural power district information would be sufficient.³² Perhaps understanding the demands he had placed on HEPCO, Cooke wrote Gaby: "...I am sorry if this put you to trouble in looking into the matter and assure you that in view of your very many courtesies we are distressed to feel we were unreasonable in that instance."³³

Yet Cooke, Morse, and other associates of Giant Power could be uncooperative when asked for information by HEPCO officials. In July 1924, Gaby sent a questionnaire to Cooke to be used in a rural power study in order to compare rates in Pennsylvania with Saltfleet Township in Ontario.³⁴ Morse seems to have been forwarded the questionnaire, but ignored it until February 1925, when he told Cooke he had neglected to respond to it because he thought Gaby was seeking information on Waukesha County, Wisconsin.³⁵ On reflection, Morse realized that Gaby in fact supplied the questionnaire as an example, but the former complained that Giant Power did not have the resources to gather the data. Cooke subsequently contacted Jeffrey with information on Giant Power's rural study, and apologized for not having responded to the questionnaire.³⁶

On an ideological level, help from HEPCO was also sought for the public relations efforts of the Giant Power project. In October 1923, Cooke seems to have asked Gaby for a ghostwritten section for an article the former intended to write for a New York-based progressive magazine, *The Survey*, about Giant Power. Regarding the control station at the Queenston-Chippewa power plant, Cooke wrote: "I remember the thrill that I had when you described to me the future of the control station on top of the Queenstown Chippewa plant... I wonder whether you would be willing to write me a letter or have someone else write it describing briefly, but as "poetically" as possible the functions of this control

31. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Gaby to Cooke, 8 April 1924, and Letter from Gaby to Morse, 9 April 1924.

32. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Morse to Gaby, 28 April 1924.

33. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Cooke to Gaby, 10 April 1924.

34. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): "Ontario Hydro-Electric Power"; Letter from Gaby to Cooke, 9 July 1924.

35. Cooke papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 13-14; File #131: Morse, George H.; Letter, Morse to Cooke, 14 February 1925.

36. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): "Ontario Hydro-Electric Power"; Letter from Cooke to Jeffrey; 18 February 1925.

station.”³⁷ Cooke also sent a finished draft of the article to Gaby for him to review.³⁸ A few weeks later, after the article appeared in print, Cooke contacted Gaby to verify a technical claim he had made, that rural load is less liable to seasonal fluctuations than average load in an electrical plant.³⁹ Cooke also requested photographs from HEPCO of farm appliances and the Chippewa Canal project for use in an article for the *Farm Journal* in mid-1923.⁴⁰

In early May 1924, Cooke invited Gaby to serve on the Giant Power advisory board. Gaby took several weeks to respond, evidently due to hesitation about potential political ramifications in Ontario and the time commitment. However, after discussing the matter with Beck, Gaby agreed to serve on the advisory board.⁴¹ Aside from Gaby, this board included *Survey* associate editor Martha Bensley Bruère, American Federation of Labor president Samuel Gompers, future TVA chairman Arthur E. Morgan, Senator George W. Norris, Henry L. Stimson, and dozens of other progressive figures.⁴² This diverse array of personalities were included on the board because of the intended national impact of Giant Power.⁴³ (The only other member of the advisory board with a Canadian connection was Rhode Island consulting engineer John Freeman, who worked on a planned development at the Lachine Rapids before the First World War.)⁴⁴

Sometimes Cooke sounded quite plaintive in his communications with HEPCO officials. In letters to Gaby in February 1925, Cooke suggested that Ontario should be more interested in coalmine-mouth power development in western Pennsylvania.⁴⁵ Gaby replied: “...I am sure that

37. Cooke papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): “Ontario Hydro-Electric Power”; Letter from Cooke to Gaby, 25 October 1923.

38. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): “Ontario Hydro-Electric Power”; Letter from Cooke to Gaby, 1 November 1923.

39. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Cooke to Gaby, 20 November 1923.

40. Cooke papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): “Ontario Hydro-Electric Power”; letters from Cooke to Gaby, 3 May 1923, 22 May 1923; letters from Gaby to Cooke, 8 May 1923, 8 June 1923, 11 June 1923.

41. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Gaby to Cooke, 28 May 1924.

42. See *Report of the Giant Power Survey Board to the General Assembly of the Commonwealth of Pennsylvania* (Harrisburg, PA: Giant Power Survey Board, 1925), 11.

43. Kenneth E. Trombley, *The Life and Times of a Happy Liberal: A Biography of Morris Llewellyn Cooke* (New York: Harper & Brothers, 1954), 104.

44. See Cooke papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36; File 391(2): Pinchot, Hon. Gifford; Letter to Pinchot from John Freeman, 4 June 1924.

45. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): letters from Cooke to Gaby, 3 February 1925, and 17 February 1925.

there must be some misunderstanding, as in my letter of February 11th I stated we were very much interested in sounding out the possibilities of power development in Pa. and its possible delivery to Niagara Falls.”⁴⁶ Indeed, immediately after his first trip to Ontario in the summer of 1923, Cooke asked Rau to compute the relative costs of shipping coal versus transmitting electricity to Ontario, as Cooke had been informed that the province’s hydroelectric sites would be fully developed by 1932.⁴⁷ Around the same time, Cooke urgently begged Gaby for copies of Ontario acts relating to rural electrification, and tried to interest Gaby in sending a HEPCO engineer to Pennsylvania to assist with the Giant Power Survey.⁴⁸ In a May 1924 letter, Cooke complained that Gaby had not responded to his letters of 12 February or 29 March for information on gross annual receipts from municipalities and average kilowatt hour receipts, data he apparently wanted to get for O.C. Merrill, executive secretary of the Federal Power Commission, who had been claiming that he was unable to secure the information from HEPCO.⁴⁹

Of course, Ontario was sometimes used as a negative example by those opposed to the work of the Giant Power Survey Board. For instance, Washington D.C.-based consulting engineer M.O. Leighton forwarded a critical publication by the Pacific Gas and Electric Company to Wells, citing its criticism of Ontario’s rural rates. With his connections to the private electric industry, Leighton took aim at HEPCO’s lack of transparency and ineffectiveness in providing information to interested observers. He wrote:

A lot of our good friends have been extolling the Ontario hydro-electric outfit, and pardonably so because the Ontario Commission is very skillful in fixing up outward appearances. It is only occasionally that Mr. Gaby and others let fall utterances that give a new aspect to the state of affairs. Whether or not we believe in public ownership and operation we can all agree that we want the truth and not a line of persuasive half-truths. I have heard the Ontario fellows make many speeches and I am free to confess that I have never seen or heard a body of men so profoundly ingenious in the telling of half-truths. The pity of it is that they

46. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): letter from Gaby to Cooke, 21 February 1925.

47. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Box 81; File #289: Rau, Otto M.; Letter, Cooke to Rau, 4 June 1923.

48. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): telegram from Cooke to Gaby, 16 February 1925, letter from Gaby to Cooke, 17 February 1925, and letter from Cooke to Gaby, 28 February 1925.

49. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): “Ontario Hydro-Electric Power”; Letters from Cooke to Gaby, 12 February 1924, 29 March 1924, and 7 May 1924.

don't need to resort to this doubtful practice. The Ontario system is well constructed and the rates, all things considered, are comparatively low.⁵⁰

When the Pennsylvania State Senate Committee on Corporations and the House of Representatives' Manufacturers Committee held joint hearings into the Giant Power proposals in early 1926, engineer Harold Buck cited Ontario as an example of the negative effect of government activity in the electric utility field.⁵¹ Clearly HEPCO was both an inspiration to American progressive power reformers and a cautionary tale used by their opponents in the private utility field.

Ontario in the Giant Power Report

The Giant Power Survey Board's report, presented to Pennsylvania's General Assembly in 1925, involved a multi-faceted plan for greater regulation and government control over the electric industry. On its technical side, this involved the creation of huge electric plants at coal mine sites in the western part of the state, and the development of a high-voltage transmission and distribution network. But as Thomas P. Hughes shows, the Giant Power idea was most controversial because of the large amount of control it gave to the government of Pennsylvania to direct development in the electric industry, both in economic and technological terms.⁵² As Hughes explains, in addition to rate regulation by the Public Service Commission, a proposed Giant Power Board would oversee the creation of new (and separate) generation and transmission companies. Not only would regionally-based private electric utilities be converted into either single-purpose generation or transmission enterprises, but Giant Power legislation would allow the state to expropriate the new companies with the same fees these companies had paid into escrow, for the amortization of the cost of the coal mines and transmission line rights of way. The private companies were also alarmed by the proposal for electric rates not to be set according to the cost of investment, but rather the prudent investment theory (according to which rates were established by reference to the rational employment of assets, not their market value, in an attempt to avoid overcapitalization). Rural distribution cooperatives were also to be encouraged to further farmers' access to electricity. Lastly, the Giant Power plan involved a proposal for Pennsylvania to make agreements with neighbouring states, in order to regulate interstate transmission in the absence of stronger federal action.

50. Wells Papers; File: Giant Power: Rural Electric Service; Box 2894; Letter, Leighton to Wells, 7 May 1924.

51. See Thomas P. Hughes, *Networks of Power: Electrification in Western Society, 1880-1930* (Baltimore and London: The Johns Hopkins University Press, 1983), 310.

52. *Ibid.*, 302-304.

The many requests for information from HEPCO led directly to many of the technical details used in the Giant Power report. The importance of HEPCO for the Giant Power Survey Board's information is slighted, however, by the relative dearth of titles in the Ontario section of the bibliography.⁵³ In October and November 1924, Cooke wrote to HEPCO for details on power transmission losses from Niagara Falls to Windsor.⁵⁴ This information ended-up in the Giant Power report, along with an example from Germany, to argue for the feasibility of long-distance transmission.⁵⁵ HEPCO information was a key part of Morse's contribution, a technical report on rural electrification. In addition to Ontario, rural electrification examples were used from other states and foreign countries like France, Germany, New Zealand, and Sweden. Figures were cited for Toronto Township to show the low electric rate of 6.21 cents per kWh, which would fall to 3.92 cents per kWh once the local system's debt was fully amortized.⁵⁶ This compared to rates of well over 7 cents per kWh prevailing for farmers in Pennsylvania.⁵⁷ Morse also detailed HEPCO's method of extending transmission lines into rural areas, which involved recruiting local farmers into construction work and applying a government bonus to the costs. He stated, however, that this answer "may or may not be applicable in this state."⁵⁸ The data on Chatham, Ridgetown, Saltfleet, and Simcoe that Cooke and Morse begged Gaby for in spring 1924 appeared in the appendix to the latter's report.⁵⁹ HEPCO was also cited for rural rate structures.⁶⁰

The Ontario experience is also central to part of Appendix C, "A Study of the Amount of Electric Current Consumed with Special Reference to the Price Charged," by Benjamin H. Williams, a professor of political science at the University of Pittsburgh. Williams saw Ontario as proof of the egalitarianism implicit in lower electric prices: "In Ontario we find a most striking example of the democratization of electricity through lower rates."⁶¹ He very favourably compares commercial lighting rates in Ontario, at around 2-3 cents per kilowatt hour (kWh), to smaller towns in Massachusetts, where the prices ranged from 12 to 18 cents per kWh. He

53. *Report of the Giant Power Survey Board*, 1925, 399-400.

54. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): "Ontario Hydro-Electric Power"; Letters from Cooke to Gaby, 20 October 1924, and 4 November 1924; Letter from Gaby to Cooke, 28 October 1924; Letter from Jeffrey to Cooke, 11 November 1924; K. Giant Power Survey Papers, 1924-25; Box 187, File 10: Gaby, Frederick T.; Letter from Cooke to Jeffrey, 14 November 1924.

55. *Report of the Giant Power Survey Board*, 1925, 28-29.

56. *Ibid.*, 129-130.

57. *Ibid.*, 134.

58. *Ibid.*

59. *Ibid.*, 285-286.

60. *Ibid.*, 300, 303-304.

61. *Ibid.*, 319.

noted the importance of Ontario's lack of coal on its decision to develop HEPCO:

The work of the Ontario Hydro-Power Commission is, in its striving for industrial emancipation, as truly an expression of Canadian nationalism as was the rejection of reciprocity in 1911. The very noteworthy efforts of that commission as well as the equally noteworthy developments under private initiative in Quebec hold much significance for the student of national policies. These are the efforts of an ambitious and potentially great people to create for themselves the sources of power and to refute the dogma that industrialism without coal is possible. The United States, richer than all other nations in both coal and water power, can only wish them success in their endeavors and profit by their example.⁶²

Thus Williams praised HEPCO, but by including Quebec, did not unequivocally come down on the side of public ownership. As elsewhere, the Giant Power Survey was ambiguous in its stance towards direct government ownership in the field.

“Pilgrimages” to Ontario

Associates of the Giant Power project made a number of trips to inspect HEPCO's facilities and meet with its officials. Although organized as fact-finding missions, these trips were sometimes presented as quasi-religious pilgrimages by those who visited the province to see its experiment. As such, the narratives produced by these American progressives are quite interesting for what they can tell us about how they saw Ontario and what inspiration they drew from its “Hydro experiment.”

Some such trips were quite prosaic, of course. Harold Evans evidently went on vacation to Ontario in the late summer or early fall of 1924, during which he met with HEPCO officials and investigated the commission's installations.⁶³ Philip P. Wells took advantage of a meeting of the Great Lakes Harbors Association in Buffalo in November 1926 to travel to Ontario for a fact-finding mission.⁶⁴

One fact-finding trip took on quite heroic dimensions for its participants, and would have important ramifications, both for its American participants and HEPCO. In late May 1923, Cooke and Robert W. Bruère, associate editor of *The Survey*⁶⁵ (a major organ for American Progressive

62. *Ibid.*, 320.

63. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 193; File #135: George Morse; Letter, Morse to Ettinger, 11 August 1924.

64. Library of Congress, Gifford Pinchot Papers (hereafter Pinchot Papers); Box 1537; File: “Water Power: Ontario Hydro Electric Power”; Letter, Philip P. Wells to Pinchot, 15 October 1926.

65. For more on the place of *Survey* and *Survey Graphic*, its sister publication, in the social politics of the 1920s and 1930s, please see: Cara Finnegan, “Social Welfare and Visual Politics: The Story of *Survey Graphic*,” *New Deal Network*, no date, available at:

activists), visited HEPCO facilities after attending an American Society of Mechanical Engineers' convention in Montreal.⁶⁶ This was the first of many trips each man would make to Ontario. As Cooke described to Gaby:

I think both Mr. Bruère and I would like to use this trip in order to fully familiarize ourselves with the Ontario development, and by this I do not mean entirely of course its technical aspects. Mr. Bruère especially is interested in the social implications of all you are doing and will want to get in touch with your consumers of several classes.⁶⁷

Gaby evidently made arrangements to show them HEPCO facilities in Toronto and area.⁶⁸ Cooke seems to have greatly enjoyed his visit. He later asked HEPCO engineer R.T. Jeffrey for recommendations on a canoe trip for him and his wife.⁶⁹ To Gaby, Cooke wrote: "Both Mr. Bruere [sic] and I have returned very much enthused over all that we saw and anxious to pave the way for something of the same kind here in this country, whether under public or private auspices."⁷⁰ To Rau, Cooke wrote: "It is the finest piece of government work that I know of anywhere, so I have come back more than ever enthused over the possibilities of Giant Power not only in Pennsylvania but throughout the United States."⁷¹ Cooke evidently had several private conversations with Beck, in which the latter emphasized the anti-HEPCO propaganda then circulating in the

<http://newdeal.feri.org/sg/index.htm>, accessed 21 April 2015; Kay Davis, "Portrait of America: *Survey Graphic* in the Thirties," Spring 2001, available at:

<http://xroads.virginia.edu/~ma01/davis/survey>, accessed 21 April 2015; and Clarke A. Chambers, *Paul U. Kellogg and the Survey: Voices for Social Welfare and Social Justice*. Minneapolis: University of Minnesota Press, 1971.

66. Cooke had earlier endeavored to interest Beck in sending HEPC officials to present and discuss papers at the convention, to ensure sympathetic views towards the Commission's operation; see Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; letter to Beck from Cooke, 5 February 1923.

67. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; Letter from Cooke to Gaby, 3 May 1923.

68. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; Letter from Gaby to Cooke, 7 May 1923; the fateful visit seems to have taken place on 28 May 1923 (see *ibid.*, letter from Gaby to Cooke, 18 May, 1923).

69. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; Letter to R.T. Jeffrey, 2 July 1923; Jeffrey recommended that Cooke and his wife go to the Muskoka area for their trip (see *ibid.*, Letter from Jeffrey to Cooke, 13 July 1923).

70. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 34-35, File 389(1): Ontario Hydro-Electric Power Commission; Letter from Cooke to Gaby, 9 June 1923.

71. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Box 81; File #289: Rau, Otto M.; Letter, Cooke to Rau, 4 June 1923.

United States. As Cooke later recounted to a Pennsylvania correspondent: “He remarked to me with a merry twinkle in his eye ‘I think most of our difficulties are financed on your side of the border.’”⁷²

Bruère seems to have been accompanied to Ontario by his wife Martha Bensley Bruère (also an associate editor of *The Survey*) during the 1923 trip and another in 1924. She was evidently much inspired by her time in Ontario, enthusiasm which is shown in two articles she wrote in support of Giant Power. The couple been active supporters of the Country Life Movement before the First World War, and it is evident that their interest in HEPCO and Giant Power was mostly due to the issue of rural electrification.⁷³ Bensley Bruère’s “Hydro”-utopianism is evident in “Following the Hydro,” an article for the special Giant Power issue of *Survey Graphic* in March 1924. In recounting her summer 1923 trip to Ontario, she presents Woodstock as an ideal city, with “no poverty,” few servants (due to the accessibility of electric devices), a diverse industrial base, and a counted citizenry: “It seemed to me that in Woodstock the cure of cheap power was pretty effective.”⁷⁴ She was also pleased by the “long series of Hydro villages” of 1000-3000 people, such as Norwich, Petrolia, and Watford.⁷⁵ But her real enthusiasm was for “the real Hydro country,” the farming areas which now had access to electricity. Bensley Bruère delights in recounting the new freedom gained by farmers’ wives due to labour-saving devices, and the end of out-migration for farmers’ sons and daughters. She describes how she followed:

the Hydro along the smooth roads, till its steel towers stood out black against the sunset and the whole of Ontario was a field of fire fenced in by a ring of electricity, and not a factory chimney in any of the distant towns to smudge the sky with black, and all the whirling windmills that had once set like giant daisies against the sky, broken and wilted and useless, and all the mud roads turned to concrete, and all the pioneer poverty done away.⁷⁶

Religious imagery is also obvious from an anecdote she received from a HEPCO representative:

When they got Hydro in here, they wanted to get it into the church first thing, so on Saturday I had it connected up. Then on Sunday Sir Adam Beck spoke in the church, and Lady Beck gave the music. Well, what he said was as good a sermon as I ever heard. I don’t remember if he used a text or not, but the thing he spoke

72. Wells Papers; Box 2893; File: Giant Power – Misc – 1923; Letter, Cooke to Fred L. Miller, 3 July 1923.

73. See Ronald R. Kline, *Consumers in the Country: Technology and Social Change in Rural America* (Baltimore: Johns Hopkins University Press, 2000), 89, 133-135.

74. Martha Bensley Bruère, “Following the Hydro,” *Survey Graphic*, 1 March 1924: 591-594.

75. *Ibid.*, 592-593.

76. *Ibid.*, 594.

about was "Let there be light." And there was the Hydro while he talked blazing all over the place.⁷⁷

The combination of a modernist literary style, a technological utopianism, religious imagery, and Beck idol worship is evident throughout Bensley Bruère's Giant Power pieces on Ontario.

Another article, for the March 1925 Giant Power issue of the *Annals of the American Academy of Political and Social Science*, is incredibly evocative and emphatic in presenting HEPCO in utopian terms. Bensley Bruère describes an automobile trip across Ontario in 1924, poetically recalling the beautiful and orderly countryside, "where one long smooth concrete road crossed another long smooth concrete road like the white markings on a tennis court".⁷⁸ She stops at the house of a country doctor, and asks his wife to describe the benefits of electricity to rural life:

In the morning she turned on the current in the hot water heater so that there would be hot water for baths. By the time the doctor was ready for his, she was dressed and had the coffee percolator going and the toaster ready. The cereal had spent the night in the fireless cooker. After breakfast, if it was wash day she started the electric washing machine in which the clothes had been all night. Then she washed the dishes, - she had never found any way to "do" dishes or "make" beds except by hand! Usually she ironed all the clothes except the "flat work" before dinner, which was at one o'clock, - doctor liked it in the middle of the day if he could get home. Why not the "flat work?" Because the mangle worked better with two people at it, one to feed the things in and one to take them out, and her daughter-in-law, who didn't have one, brought her sheets and things over the next day and they did them together. Dinner? Of course she had to get every thing ready, vegetables and desserts, just as she always had, but her stove had a time clock and when things were once in it she hadn't any more to do till it was time to take them out. Oh, no, there wasn't any special sweeping day. She just used the vacuum cleaner when she thought the house needed it. What she really wanted was one of those new electric ice boxes! Did I know the best kind? She wished she could see Sir Adam Beck himself, he'd probably be able to tell her which make she ought to get. How much time did it take her? She hesitated to guess, wasn't used to figuring it out that way, but certainly not more than three or four hours a day, unless the furnace was running when, in spite of the thermostat, she had to put coal on about noon-doctor tended to it night and morning. Hard work? Drudgery? Why, no! Nothing that she even disliked except making blanc mange - and doctor was so fond of that!⁷⁹

Bensley Bruère presents rural electrification in Ontario as an emancipatory crusade for women, remarking of the doctor's wife and her daughter-in-law: "Both these women had been freed by the fact that

77. *Ibid.*, 593.

78. Martha Bensley Bruère, "What is Giant Power For?," *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 120-123.

79. *Ibid.*, 120-121.

plenty of electric power was available at their doors and that it cost them only about 3 cents a kilowatt hour. For them leisure and ease were not only possible but cheap.”⁸⁰ She goes on to compare two towns, one in New York State, in a beautiful setting on the Hudson River, the other in an ordinary landscape in rural Ontario, and concludes of the latter: “...cheap electricity has given its women not only freedom from drudgery and leisure and ease, but opportunity as well. With us drudgery survives because electricity is excessively *dear*.”⁸¹ But it goes without saying the Bensley Bruère seems to have ignored the ambiguous effects of electrification on the lives of rural women, who may not have seen significant changes to the gendered power relationships in their households.⁸²

In a short piece for the *Survey* about a trip to a plowing match near Sarnia during her 1923 trip, Bensley Bruère also described how a display by HEPCO held-out the benefits of modernity to all rural people:

...to the twenty thousand people at the Plowing Match the use of electricity was a vital matter, and they had come there anxious to learn of anything which could make their work easier... The people blocked the entrance to the Hydro tent, unable to get in till some of those slowly milling round and round inside came out. Old men and women were just as interested as young farmers' wives, and the children were entranced. But none were more spellbound than three Indian women, who kept the demonstrator busy a long time with the details of operation of a white enameled electric cook stove and then retired to a corner for earnest consultation among themselves. It is a bit startling to see an Indian woman, even one wearing something approaching modern dress, whose blanket-wrapped mother had held deer meat on a stick over the fire at the teepee door, preparing to buy an electric range. But why not, when her husband was a contestant in the Plowing Match?⁸³

She seems to have seen these First Nations women (probably from nearby Ipperwash or Walpole Island) as symptomatic of the modernity Ontario's rural population enjoyed, thanks in part to HEPCO: “This gathering was the social expression of a people whose economic organization was in a more or less primitive agricultural stage, but who had the most up-to-date mechanical equipment that an industrial civilization could furnish them.”⁸⁴ The 1923 and 1924 trips also seem to have brought Bensley Bruère recognition as an expert in the area of electric use by women. Morse evidently sought Bensley Bruère's advice

80. Ibid.

81. Ibid., 122.

82. For instance, see Katherine Jellison, *Entitled to Power: Farm Women and Technology, 1913-1963* (Chapel Hill: University of North Carolina Press, 1993).

83. Martha Bensley Bruère, “The Plowing Match,” *The Survey*, 15 November 1923, 212.

84. Ibid.

on estimating domestic electric usage by farm families in Ontario.⁸⁵ As he wrote to her: “The information desired is distinctly that of a woman’s sphere, and that is one reason we are appealing to the ladies to help us in the matter.”⁸⁶

After greater contact and personal visits to Ontario, the Giant Power Survey Board associates also generally welcomed the election of the Tories under Howard Ferguson in 1923. In doing so, these American progressives seem to have completely identified with Adam Beck. In the summer of 1923 Pennsylvania Deputy Attorney General Philip P. Wells wrote to O.C. Merrill, the Executive Secretary of the Federal Power Commission:

With respect to the policy of public against private ownership, I agree that neither should exclude the other from the field until it can definitively establish its unquestioned superiority. Whether public ownership can or cannot do that depends upon prevailing standards of political integrity and efficiency. I am therefore glad to learn that the attempt of the former Labor Party in Ontario to drag the hydro-electric commission into partisan politics has been rebuked in the recent Provincial election.⁸⁷

Of course, what Wells seems to have misinterpreted was the United Farmers of Ontario-Independent Labor Party government’s establishment of a royal commission to investigate Beck’s high-handed and unaccountable administration of HEPSCO. Cooke congratulated Beck for the Tory election victory in no uncertain terms:

Please permit me to express my sincerest congratulations on the result of the Ontario elections carrying with it such an obvious endorsement of the great work which you have done for the Province and for Canada – the effects of which we can see exerting more and more influence on public affairs on this side of the border. Your own election from London will give heart and true encouragement to the friends of good government everywhere.⁸⁸

To a Pennsylvania correspondent, Cooke showed that he had come to fully believe Beck’s political point-of-view about the outgoing government of Premier E.C. Drury:

...you will be interested to know that at an election held on June 25 “Hydro” received an overwhelming endorsement from the people... The Labor-Farmer

85. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 186; File: Bruere, Robert; Letter, Martha Bruere to George H. Morse, 19 March 1924.

86. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 186; File: Bruere, Robert; Letter, Morse to Martha Bruere, 24 March 1924.

87. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 200: Special Topics; File: “Cheap Electric Power”; Letter, Philip P. Wells to O.C. Merrill, 6 July 1923.

88. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 34-35, File 389(1): Ontario Hydro-Electric Power Commission; Letter from Cooke to Beck, 29 June 1923.

Government which has been in office for four years and consistently harassed and continuously investigated Hydro was overwhelmingly defeated by the Conservative party which has sponsored Hydro from the start.⁸⁹

Writing to one HEPSCO engineer, Cooke wrote: "We have interpreted your election as being rather an endorsement of hydro and as such we have welcomed it."⁹⁰ Cooke and the other American progressives had come to completely agree with Beck's position in Ontario politics.

Likewise, the Giant Power associates greatly mourned the death of the HEPSCO chairman in August 1925. Cooke suggested to Bruère that *The Survey* commission an article about Beck's legacy.⁹¹ Cooke had been greatly distressed at the news of Beck's illness in the spring of 1925: "I only wish that there was something I could do to lighten your hospital days, but in the absence of having that opportunity I want the privilege of saying this very sincere word of appreciation and real affection for an able, upstanding, distinguished public servant."⁹² After Beck's death, Cooke asked Gaby if any plans were being considered for a memorial; the HEPSCO engineer sent Cooke a fundraising circular for the tuberculosis sanatorium in London, Ontario, that was to be the Hydro chief's memorial.⁹³ Cooke responded by saying that perhaps this was not the best way for American admirers to memorialize the man; instead, he suggested that American progressives fundraise for the creation of a bust of Beck, to be installed in an Ontario park.⁹⁴ Cooke affirmed to Judson King that "I rather think it will have a bully effect in Ontario."⁹⁵ But it seems like the bust idea was soon forgotten.

89. Wells Papers; Box 2893; File: Giant Power – Misc – 1923; Letter, Cooke to Fred L. Miller, 3 July 1923.

90. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; Letter to R.T. Jeffrey, 2 July 1923.

91. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 1-2, File 14: Bruere, Robert W.; Letter from Cooke to Bruere, 10 September 1925.

92. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; letter from Cooke to Beck, 30 April 1925.

93. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): "Ontario Hydro-Electric Power"; letter from Cooke to Gaby, 10 September 1925; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; letter from Gaby to Cooke, 24 November 1925.

94. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; letter from Cooke to Gaby, 15 December 1925.

95. Cooke Papers; C. General Correspondence, Special Alphabetical File, 1925-1930; Boxes 97-116; Boxes 104-105: I, J, K; File: "K to 1929; Judson King"; Letter from Cooke to King, 21 October 1926.

Giant Power in Print

The promoters of Giant Power used the periodical press to advocate for their plan. The March 1924 issue of *Survey Graphic* and the March 1925 issue of the *Annals of the American Academy of Political and Social Science* were both devoted to discussing the merits of the project. In each case, HEPCO was invoked as an example of the social consequences of cheap electricity, especially for rural people. Beck and Gaby also contributed to these publications, but in their submissions they were not so much interested in promoting public ownership in the United States, but rather defended HEPCO's reputation from criticism, which was ultimately meant to secure the Commission's status in Ontario. Like some of the contributions from American writers, Beck and Gaby presented HEPCO as a "trustee" for, or "partnership" of the cooperating municipalities, rather than an arm of the provincial government.

Survey Graphic's special issue on Giant Power discussed the Pennsylvanian idea in several essays, by social reformers, technical experts, and politicians (Pinchot and Governor Al Smith of New York State). Ontario, of course, appears in many of the issue's articles, largely due, of course, to a sentiment which appeared on the "Editorials" page: "Why should the domestic rate per k.w. hour range from nine to fifteen cents in most American cities and towns when most towns and cities in Ontario get it for three cents and less?"⁹⁶ Elsewhere, an editorial note extolls the province in grandiose terms:

...here is an agricultural and manufacturing region – without natural coal resources – which has developed energy from rapids and waterfalls as has no other district in the western hemisphere. Here the issue of public control and development has been removed from the realm of theory to that of practical results; to be judged thereby. Here hamlet and countryside as well as factory center have felt the stirrings of a new day; and, moreover, here the city, town, village and smaller municipality have borne the work of constructing and operating a vast hydro-electric undertaking on a cooperative basis.⁹⁷

Although certainly not the only theme found in the *Survey's* Giant Power issue, HEPCO certainly figures prominently in it.

Aside from Bensley Bruère's piece, an article by Beck is the most pro-HEPCO item in the Giant Power issue. Aside from explaining the history and operations of HEPCO, Beck's article is interesting for the ways in which it is directed at internal political debates in Ontario. Thus it may be surmised that Beck's intention was not just to inform American progressives about HEPCO's operations, but also to influence public opinion in Ontario. Beck thus refers to HEPCO as the "trustee" and

96. "Editorials," *Survey Graphic*, 1 March 1924, 643.

97. Adam Beck, "Ontario's Experience," *Survey Graphic*, 1 March 1924, 585.

“special agent” of the participating municipalities.⁹⁸ As Neil B. Freeman has demonstrated, “municipal cooperative ownership was only an elaborate myth disguising government ownership,”⁹⁹ an ambivalence that arose from the circumstances of HEPSCO’s formation in 1906, and the efforts of the Commission and its member municipalities to maintain political independence from provincial control. Beck’s intervention in the Giant Power debate indicates that he used advocacy in the United States to promote and reinforce this idea of HEPSCO autonomy. In his Giant Power article, he also makes a very provocative statement, in light of the ongoing struggle between the Canadian federal government and the province for control of power produced on the international section of the St. Lawrence: “The province of Ontario is the owner of Canada’s equity in the water power in the international portion of the St. Lawrence river...”¹⁰⁰ He also strikes out against the recent critical works then circulating in the United States: “There has been a great deal of opposition to the program of the municipalities in their hydro-electric undertaking, but criticism of the results obtained has come almost entirely from outside sources. Probably no public reform has experienced more misrepresentation than has the work of the Commission.”¹⁰¹

Other articles in *Survey*’s Giant Power issue also approvingly cited HEPSCO. Gifford Pinchot mentioned examples from France and Ontario to show how governments had subsidized rural transmission construction, while also praising HEPSCO for more equally distributing current to smaller centres, which he hoped to do with Giant Power.¹⁰² Bruère praised the Pennsylvania plan for following the Ontario model: “It is highly significant that the Pennsylvania Giant Power Survey Board has made the service of farms its first consideration, and that decentralization and the increasing attractiveness of the small town and farm have been conspicuous results of large scale electrical development in the Province of Ontario.”¹⁰³ In discussing the poverty of many in the South, especially blacks, due to the underdevelopment of power sources, Atlanta activist Marion M. Jackson invoked religious imagery to argue for regional reforms:

The laws of California and Ontario, which have already produced superpower systems, not in name, but in fact, today actually supplying light and power to the great majority of their peoples, seem to point the way out of the powerless wilderness in which the majority of the people in the southern states are

98. *Ibid.*, 585-586.

99. Neil B. Freeman, *The Politics of Power: Ontario Hydro and Its Government, 1906-1995* (Toronto: University of Toronto Press, 1996), ix-x.

100. Beck, 1924, 588.

101. *Ibid.*, 650.

102. Gifford Pinchot, “Giant Power,” *Survey Graphic*, 1 March 1924: 561-562.

103. Robert W. Bruère, “Pandora’s Box,” *Survey Graphic*, 1 March 1924, 647.

wandering. Let the people of the South have such laws as those of California and Ontario, and give them the understanding of the possibility of multiplying the productiveness of labor by the use of electricity, and the strength of millions of men will leap to work.¹⁰⁴

But perhaps belying a lack of familiarity with HEPCO's operations, Jackson calls Ontario a "Canadian state."¹⁰⁵

The relationship between the Giant Power associates and HEPCO officials even dictated those who were chosen to write for the *Survey* on the issue. Bruère took the feelings of Beck and Gaby into account when he decided against asking HEPCO engineer J.W. Purcell to submit an article to *Survey*. As he told Cooke after their 1923 trip to Ontario:

I was guilty of shocking procrastination in sending him my thanks for his courtesies to us because I had wavered for sometime over the question of whether or not to invite him to do a special article on the rural service. A particular reason for the delay was the rather vehemently critical attitude of Sir Adam toward him when we told the story of the Scot there at Galt to whom he undertook to sell hydro, and also because of Gaby's slight frostiness when I asked him whether it would be proper to invite Purcell to write such an article. While Purcell's letter is highly cryptic, I read between the lines that Sir Adam's attitude toward him has not grown increasingly cordial since we were there.¹⁰⁶

Bruère prudently decided that the assistance of Beck and Gaby was much more important than anything Purcell could write for his publication.

A special issue of the *Annals of the American Academy of Political and Social Science* was also organized to promote the ideas of the Giant Power Survey. In these papers, HEPCO was presented alongside France, Germany, the United Kingdom, and other countries as foreign power experiments worthy of emulation in the United States. These included an article by French engineers A. Antoine and A. Libault,¹⁰⁷ two articles by Count Hugo Lerchenfeld, a Bayerische Volkspartei politician,¹⁰⁸ one by

104. Marion M. Jackson, "Idle Slaves in the South," *Survey Graphic*, 1 March 1924, 658.

105. *Ibid.*, 657.

106. Cooke Papers; K. Giant Power Survey Papers, 1924-25; Box 186; File: Bruere, Robert; Letter, Bruere to Cooke, 4 October 1923.

107. A. Antoine and A. Libault, "The Development of Electricity in France," *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 10-13; Cooke seems to have kept Antoine apprised of developments in Canada (see Cooke Papers; D. General Correspondence, 1930-1932; Boxes 117-118: "A, B, C"; File: "A"; Letter, Cooke to "M." Antoine, 7 December 1931).

108. Count Hugo Lerchenfeld, "Electric Power in the German Commonwealth," *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 14-20; and "The Use of Electricity in Bavarian Agriculture," *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 47-49.

Heber Blankenhorn, the London correspondent for *Labor*,¹⁰⁹ and a review of developments in Western Europe, Ontario, and New Zealand by Harold Evans, Counsel of the Rural Electric Committee, Pennsylvania Council of Agricultural Organizations.¹¹⁰ (Evans, probably in an unconscious error, characterizes Ontario as a “country” along with Germany, Denmark, Sweden, and the other states he reviews.¹¹¹)

In the section of his paper about HEPSCO, Evans repeats the error of the utility as municipal partnership: “The Hydro-Electric Commission of Ontario, created by Act of Parliament in 1908 [sic], acts as trustee for a partner-ship of municipalities in the wholesale generation and transmission of electrical energy.”¹¹² This mischaracterization of HEPSCO is repeated by an article in the issue by Gaby, in which he describes his organization as: “...an undertaking owned, controlled and operated by over three hundred and eighty municipalities that have co-operated to supply their citizens with electricity at cost...”¹¹³ Furthermore, he repeats the idea several times throughout what is otherwise presented as an objective review on electric development and policy in the Canadian provinces: “This Commission acts as trustee for co-operating municipalities.”¹¹⁴; “publicly-owned, municipal undertaking”¹¹⁵; “The Commission, acting as agent and trustee for the municipalities, exercises both administrative and constructional functions, and, by application of the principles adopted, has evolved a well-defined and successful working policy for the development, transmission and distribution of hydro-electric power under municipal ownership.”¹¹⁶ This mischaracterization of HEPSCO’s status was probably attractive to American progressives for its implications of federative co-operation, but otherwise enabled the Commission’s Canadian supporters to ideologically defend their independence vis-à-vis the Ontario government.

Other papers in the Giant Power issue of the *Annals* shows the use of technical information supplied by HEPSCO. In his short contribution on rural electrification, John McSparran, Master of the Pennsylvania State Grange noted: “The distribution of current from Niagara through Ontario Province seems to indicate that the cost of distribution is not very great and the extra power used by farmers seems to warrant a rate that is

109. Heber Blakenhorn, “Power Development in Great Britain,” *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 1-9.

110. Harold Evans, “The World’s Experience with Rural Electrification,” *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 30-42.

111. *Ibid.*, 31.

112. *Ibid.*, 35.

113. Frederick A. Gaby, “Electrical Development in the Dominion of Canada,” *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 27.

114. *Ibid.*

115. *Ibid.*, 28.

116. *Ibid.*, 29.

reasonable.”¹¹⁷ (McSparran, a personal friend of Pinchot, had been his Democratic opponent in the 1922 gubernatorial race.¹¹⁸). Cooke’s contribution included data on rural transmission line costs, of \$1,200 per mile for overhead lines and \$800 for underground, which he had earlier fact-checked directly with Gaby.¹¹⁹

Opposition to Giant Power: Superpower

The Giant Power idea was a direct challenge to the “Superpower” proposal of consulting engineer William S. Murray, who carried out a survey of northeastern power sources for the Department of the Interior in 1921.¹²⁰ This plan, later supported by Secretary of Commerce Herbert Hoover, entailed the creation of huge new electric plants to serve a new high-voltage transmission network. Unlike the Giant Power idea, however, there was no room for any notions of greater government regulation or public ownership.

In his book *Superpower – Its Genesis and Future*, Murray outlines the superpower idea, and goes to great lengths to attack public ownership. He devotes a significant amount of space in the text to a criticism of HEPCO: “Although the great natural falls at Niagara are not comparable with any other developed water-power service, the advocates of Federal, Municipal, or State ownership have used the Ontario hydro-electric system as their greatest argument.”¹²¹ He argued that the low HEPCO rates frequently cited by public ownership supporters were only prevalent in southern Ontario, and that domestic rates were unnaturally subsidized by commercial and industrial electric users.¹²² Data was presented to argue that Ontario was less efficient in producing electricity than the private power industry in Quebec.¹²³ Murray also published an extract from his 1922 report, published by NELA, which accused HEPCO of

117. John A. McSparran, “The Need for Electricity on the Farm,” *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 50.

118. Char Miller, *Gifford Pinchot and the Making of Modern Environmentalism* (Washington, DC: Island Press, 2001), 250.

119. Morris Llewellyn Cooke, “A Note on Rates for Rural Electric Service,” *Annals of the American Academy of Political and Social Science*, 118 (March 1925): 52-59. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): “Ontario Hydro-Electric Power”; Letter from Cooke to Gaby, 13 September 1923.

120. For more about the Superpower idea, see Hughes, *Networks of Power*, 296-297; Murray was a fellow student of Cooke at Lehigh University (see Jean Christie, *Morris Llewellyn Cooke: Progressive Engineer* (New York: Garland Publishing, 1983), 72). Singer downplays the differences between the Superpower and Giant Power ideas and casts Cooke in a very negative light; see 1988, 20-27.

121. William S. Murray, *Superpower, Its Genesis and Future* (New York: McGraw-Hill Book Company, 1925), 25.

122. *Ibid.*, 28.

123. *Ibid.*, 25-26.

hiding the true costs of producing electricity and lacking the management of prudential capitalist managers.¹²⁴ In explaining why comparatively little development in hydroelectricity on the eastern seaboard had taken place, Murray argued that the private power industry was not to blame: "Politics, propaganda, and reports of the character of the Pennsylvania Giant Power Survey Board, in my opinion, are the basic reasons for delay. These are the elements which prejudice the public mind."¹²⁵ Attacking Pinchot for his criticism of high rates for domestic electricity users, Murray wrote: "I wish it were recognized by our politicians and Bolshevik friends that the chief expense of furnishing power to the consumer lies in its distribution from the power station *after* it has been generated."¹²⁶ In criticizing the Giant Power idea to create farmers' electric cooperatives to distribute energy to rural areas, Murray dismissively wrote: "I am, indeed, in favor of according the farmer the fullest possible advantage in the use of electricity, but the carrying out of the plan suggested by Governor Pinchot, in my opinion would, instead of creating an asset to the farmer, impose upon him a serious liability."¹²⁷ Any benefit to the farmer, Murray surmised, would come from higher rates to others or tax increases.

Murray was a key mover behind Secretary of Commerce Hoover's Northeastern Superpower committee. Cooke was appointed by Pinchot to be one of the Commonwealth of Pennsylvania's representatives on the committee. Cooke later wrote to Gaby about a preliminary technical meeting he attended in January 1924, at which Murray was inexplicably present:

On more than one occasion during the day's proceedings he paid his respects to Ontario. For instance, he said at one point, "Ontario power costs 6 mills per kilowatt hour." Again in answer to a direct question from Secretary Hoover, he stated that your construction costs "equal \$270. per horsepower capacity." At another time when the possible expenditures on the St. Lawrence were up for discussion he blurted out "they (i.e. the Ontario Hydro Electric Commission) spent seventy million dollars and it is a disgrace."

You can rest assured that his statements were not allowed to go unchallenged. In one way his attitude was fortunate because it gave me an opportunity to enlighten the representatives of eight states as to the real facts...¹²⁸

124. Ibid., 29-31. This report was titled *Government Owned and Controlled Compared with Privately Owned and Regulated Electric Utilities in Canada & the United States* (New York: National Electric Light Association, 1922).

125. Murray, *Superpower, Its Genesis and Future*, 69.

126. Ibid., 156.

127. Ibid., 204-205.

128. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; Letter from Cooke to Gaby, 6 January 1924.

Cooke also suspected that Hoover's 1923 conference with the chairmen of the northeastern states' public service commissions was organized and led by Murray and M.H. Aylesworth, the secretary of NELA.¹²⁹

However, the Superpower idea, like Giant Power, failed to gain traction. Although not a plan involving regulation of rates or government ownership, Superpower was of little interest to the electric industry, which wanted to maintain its autonomy. As Thomas Hughes writes: "America's utilities proceeded with interconnection, but not in accordance with a master government scheme for an entire state or region. The vision of planned social revolution through technology gave way to the long-standing confidence that private enterprise and American technological genius would bring profit and progress."¹³⁰

Conclusion

In a memo dated 20 April, 1925, Cooke outlined the administration's strategy for power reforms, to be centred in three offices: the Public Service Commission (PSC), the Attorney General's office, and the Governor's office. Action was to be followed in four areas: formation of a national super-power committee; negotiations with five neighbouring states; cooperation with Norris and other congressional leaders for favourable federal legislation; and a Muscle Shoals committee to be formed "along lines already discussed with Norris and Wells".¹³¹ In an attached memo, Cooke suggested the appointment of Clyde King and Harold Evans to the PSC, along with the appointment of Dickerman as chief engineer.¹³² In every area, Cooke and Pinchot faced setbacks.¹³³

It is perhaps unsurprising that the radical proposals in the Giant Power plan failed due to the widespread opposition of the private electric

129. Pinchot Papers; Box 1370; File: "Cooke, Morris L."; Letter, Cooke to Pinchot, 16 October 1923. Kendrick A. Clements claims that Hoover was not motivated by any mercenary interests in his support for the Superpower plan, but rather by an inflexible commitment to an older progressive notion of "efficiency" and an engineer's aversion to entering a political debate over public ownership. See Kendrick A. Clements, *Hoover: Conservation and Consumerism: Engineering the Good Life* (Lawrence, KS: University Press of Kansas, 2000), 88-89.

130. Hughes, *Networks of Power*, 313.

131. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; memo to Pinchot from Cooke, 20 April 1925; Muscle Shoals was a federally-owned hydroelectric and nitrate-production complex that became the future basis for the operations of the Tennessee Valley Authority.

132. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(2): "Ontario Hydro-Electric Power"; memo to Pinchot from Cooke, 20 April 1925, "P.S.C. Memorandum for Governor Pinchot".

133. For a comprehensive account of the defeat of Giant Power, see Jean Christie, "Giant Power: A Progressive Proposal of the Nineteen-Thirties," *The Pennsylvania Magazine of History and Biography*, 96, 4 (October 1972): 480-507.

industry. As Thomas Hughes says, “Pinchot and Cooke were not simply proposing a radical technology; they were proposing radical change in the deepest sense of the word. They were calling for a shift in power, an economic revolution.”¹³⁴ In 1925, the Pinchot administration introduced 19 bills in the General Assembly to enforce the recommendations of the Giant Power report; all of these measures died in committee, after facing strong opposition from the utility industry, business organizations, and the state’s various Republican factions.¹³⁵ (In fact, Pinchot tried to make the issue a national one, by making speeches in Denver, Los Angeles, and San Francisco in the summer of 1925.¹³⁶) Pinchot saw interstate federal regulation as unachievable, and thus sought to form an alliance with other regional governors. In the fall of 1925, New Jersey, New York, and Pennsylvania formed a “Tri-State Power Commission”, but the effort collapsed due to the opposition of William A Prendergast, the chairman of the New York State Public Service Commission, and the disinterest of New Jersey politicians.¹³⁷

The governor also faced opposition from his state’s regulatory commission. Pinchot fought a continual battle against the state PSC over its perceived lack of initiative in fighting the utilities.¹³⁸ After the clear defeat of the Giant Power proposals by 1926, the PSC put out an order requiring private utilities to extend lines to any rural area with at least three electricity-using farms to a mile, with construction costs to be fully borne by the utilities.¹³⁹ The order also called for the creation of “rural distribution associations,” similar to Ontario’s rural power districts. By 1927, with Pinchot out of office, the state’s utilities convinced the PSC to cancel the order and substitute it with one requiring farmers to pay part of the construction costs.

But despite the failure of the Giant Power plan by the time Pinchot ended his gubernatorial term in January 1927,¹⁴⁰ the proposal is significant for the way it brought American progressives into even closer contact with HEPCO officials and thus disseminated the idea of Ontario’s “Hydro experiment.” Cooke (who later joined the Power Authority of New York State and led the Rural Electrification Administration) continued his long

134. Hughes, *Networks of Power*, 312.

135. McGeary, *Gifford Pinchot*, 299, and Christie, “Giant Power,” 495-496; Char Miller also points out that the defeat of Giant Power was connected to the fact that Pennsylvania had one-term limits for governors, thus limiting their ability to influence events over the long term, see Miller, *Gifford Pinchot and the Making of Modern Environmentalism*, 261; Christie particularly blames a lack of support from Pinchot’s farmer allies, along with the tepid response of organized labour, for the defeat, see Christie, “Giant Power,” 501-505.

136. McGeary, *Gifford Pinchot*, 299, and Christie, “Giant Power,” 498.

137. Christie, *Morris Llewellyn Cooke*, 80-81.

138. McGeary, *Gifford Pinchot*, 299-302.

139. Kline, *Consumers in the Country*, 135.

140. Pinchot ran again in 1930 and narrowly won.

stream of missives to Toronto. In 1926, he seems to have sought HEPCO's help with a purely commercial project he was developing: a method of artificially curing alfalfa with an electric appliance. A number of letters indicate that Cooke asked Gaby for HEPCO engineers to look over his invention, to see if it would work in Ontario, a request which Gaby fulfilled.¹⁴¹ In February 1927, Cooke even tried to get Judson C. Dickerman a job with HEPCO, but he was politely rebuffed by Gaby.¹⁴²

But even without formal employment, American power reformers had become well acquainted with the HEPCO thanks to the Giant Power Survey Board. Alongside the Pennsylvanians, other American progressives such as Senator George W. Norris and New York governors Al Smith and Franklin D. Roosevelt came into close contact with the Ontario utility during the 1920s. Norris' attempt to create a regional public power network at Muscle Shoals, Alabama, was similarly frustrated throughout the decade, and Smith and Roosevelt were blocked in their efforts to promote government ownership and development on the St. Lawrence River. Although American progressives sometimes looked to Europe and elsewhere for ideas, it was Ontario that provided the most significant and sustained point of contact for electric policymaking. This transnational dialogue with HEPCO contributed vital ideological and technical sustenance to public ownership debates in the United States, which concluded in the 1930s with the creation of agencies like the Tennessee Valley Authority, the Rural Electrification Administration, and the New York State Power Authority. Cooke and Pinchot's dream of Giant Power did not materialize, but it represents a central link between the inspiration of Ontario's public ownership experiment and these key New Deal projects.

141. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 35-36, File 389(3): "Ontario Hydro-Electric Power"; Letter from Cooke to Gaby, 25 February 1926; letter from Gaby to Cooke, 2 March 1926; letter from Cooke to Gaby, 26 July 1926; letter from Gaby to Cooke, 6 August 1926; letter from Cooke to Gaby, 9 August 1926.

142. Cooke Papers; A. General Correspondence, Numerical File, 1910-1929; Boxes 34-35, File 389(1): Ontario Hydro-Electric Power Commission; Letter from Cooke to Gaby 4 February 1927, and Letter from Gaby to Cooke, 12 February 1927.