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Memorandum

ELECTRIC POWER STATISTICS

(Central Electric Stations)

Price: \$1.00 per year

September, 1957

This report is the ninth of a revised monthly statistical series on electric power in Canada. It replaces "Central Electric Stations", which was a monthly compilation of the generation and distribution of electric power by firms which sold at least part of their electric power production. In the revised series certain firms which generate electricity solely for use in their own industry, mine, etc. with none for sale to the public have been included. These firms were excluded from the former Central Electric Stations series since none of their output was sold to the public, and in the revised series, their electric power generation has been classed as "generated by industry". To this "industrial" group has been added certain firms formerly included in the Central Electric Stations series. These firms include industrial producers with small amounts of electrical energy for sale. The remaining firms whose essential function is to sell electric energy have been classed as "Utilities" and their generation has been reported as "generated by utilities".

Statistics have been collected from only those firms which generate at least 10 million kilowatt hours per year. It is estimated, however, that the generation of these firms represents approximately 96 per cent of the total electricity production in Canada and consequently will reflect the growth of electric power generation more effectively than the previous series.

Total net generation as defined for the purpose of this series means total output less the amount used in station service; that is, the net amount available for domestic, commercial or industrial purposes. The amount of electric energy available for disposal in Canada is calculated by adding imports, and subtracting exports from the total net generation. These statistics on "Total available for disposal" in Canada and in the provinces were previously classed as "consumption". The classification "Used in electric boilers" replaces what was formerly termed "consumption secondary", although secondary consumption did contain a relatively small amount of energy used for purposes other than electric boilers.

In order to establish historical continuity, statistics have been compiled on the new basis back to 1949. These comprise net generation totals for utilities and industry, by province, and appear as a special supplement in the June 1957 report. Although presented for utilities, monthly 1956 net generation figures are not available for industry.

Total net generation in Canada in September, 1957, amounted to 6,964,083,000 kwh of which 5,646,-123,000 kwh were produced by utilities and 1,317,960,000 kwh by industrial firms. Generation by utilities increased 0.5 per cent from the August total of 5,615,756,000 kwh while the amount produced by industries rose 1.1 per cent from 1,303,420,000 kwh resulting in an overall increase of 0.6 per cent from the August total of 6,919,176,000 kwh.

Hydro plants were responsible for 91.5 per cent of September generation, the balance being generated by thermal plants. At 6,368,703,000 kwh, hydro generation increased 0.4 per cent from the previous month while thermal generation increased 3.2 per cent to 595,380,000 kwh.

Quebec lead the provinces in the production of electric energy with a September total of 2,851,-869,000 kwh. Totals for other provinces and the territories in order of production were as follows:
Ontario - 2,382,583,000 kwh; British Columbia - 841,798,000 kwh; Manitoba - 243,310,000 kwh; Alberta - 183,-742,000 kwh; Saskatchewan - 133,319,000 kwh; Nova Scotia - 116,843,000 kwh; New Brunswick - 105,693,000 kwh; Newfoundland - 90,574,000 kwh; Yukon and Northwest Territories - 9,810,000 kwh and Prince Edward Island - 4,-542,000 kwh.

Total imports of electric energy from the United States increased to 112,298,000 kwh from 98,317,000 kwh in August, while exports to the United States increased 5.8 per cent to 366,937,000 kwh. Total amount of electric energy available for disposal in Cansds in September was 6,709,444,000 kwh or 0.6 per cent more than that available in August; of this amount 206,608,000 kwh were used in electric boilers, an increase of 25.7 per cent over last month.

Prepared in the Transportation and Public Utilities Section.

8504-509-97

Electric Power Statistics

September, 1957

	Canada	Newfoundland	Prince Edward Island	Nova Scotia
		(Thousand	i kwh)	
Generated by:				
Utilities - Hydro	5,178,563	59,819		31,170
- Thermal	467,560	1,622	4,542	74,866
- Total	5,646,123	61,441	4,542	106,036
Industry - Hydro	1,190,140	26,480		1,647
- Thermal	127,820	2,653		9,160
- Total	1,317,960	29,133		10,807
Total net generated	6,964,083	90,574	4,542	116,843
Energy imported:		His way		
From other provinces	XXX		TAIR I	
From United States	112,298			-
Total	112,298			-
Energy exported:				
To other provinces	XXX	3,421		685
To United States - primary	101,219	m		
- secondary	265,718	-	-	
Total	366,937	3,421	100	685
Cotal available for disposal in Canada (includes interruptable and at will energy and energy used in electric boilers)	6,709,444	87,153	4,542	116,158
Used in electric boilers	206,608	2,870		_

Cumulative totals, January - September

Generated by:				
Utilities - Hydro	48,443,627	690,558		368,849
- Thermal	4,118,753	10,291	40,842	613,643
- Total	52,562,380	700,849	40,842	982,49
Industry - Hydro	12,346,062	249,618		23,280
- Thermal	1,316,150	30,791		84,67
- Total	13,662,212	280,409		107,95
Total net generated	66,224,592	981,258	40,842	1,090,44
nergy imported:		HIE MINISTER		
From other provinces	жж			
From United States	626,983	-		
Total	626,983	10.00		
nergy exported:				
To other provinces	XXX	32,944		6,285
To United States - primary	956,260			
- secondary	2,642,540	-		
Total	3,598,800	32,944		6,285
Cotal available for disposal in Canada (includes interruptable and at will energy and energy used in electric boilers)	63,252,775	948,314	40,842	1,084,162
Used in electric boilers	1,548,777	66,606		

Electric Power Statistics

September, 1957

New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and N.W.T.
			(Thousa	nd kwh)			
32,384	2,282,688	2,102,712	243,270	43,573	63,568	314,373	5,006
46,158	60	128,017	40	87,494	112,868	11,719	174
78,542	2,282,748	2,230,729	243,310	131,067	176,436	326,092	5,180
3,481	555,538	106,591	40			491,773	4,630
23,670	13,583	45,263	10 - 11 Dec - 1	2,252	7,306	23,933	-
27,151	569,121	151,854	-	2,252	7,306	515,706	4,630
105,693	2,851,869	2,382,583	243,310	133,319	183,742	841,798	9,810
1,823	4,472	487,423	45,915	193	2,016	55	
854	33	23,152	-	*	-	88,259	-
2,677	4,505	510,575	45,915	193	2,016	88,314	
	479,030	1,141	9,724	4E 00E		0.014	
199	420	100,506	2,724	45,825	55	2,016	
3	3,278	262,365	2			92 72	
202	482,728	364,012	9,726	45,825	55	2,180	
108,168	2,373,646	2,529,146	279,499	87,687	185,703	927,932	9,810
	175,871	10,066	15,647			1,192	962

Cumulative totals, January - September

FL. (21)							
		A					
356,252	20,526,809	20,033,185	2,451,597	400,562	597,554	2,972,954	45,307
352,222	1,163	1,133,239	1,493	810,584	1,051,585	102,320	1,371
708,474	20,527,972	21, 166, 424	2,453,090	1,211,146	1,649,139	3,075,274	46,678
51,076	6,345,873	1,028,334	-		_	4,608,907	38,974
237,459	142,215	447,774	-	20,624	60,710	291,902	-
288,535	6,488,088	1,476,108	-	20,624	60,710	4,900,809	38,974
997,009	27,016,060	22,642,532	2,453,090	1,231,770	1,709,849	7,976,083	85,652
16,569	49,910	3,959,322	416,483	1,671	15,724	3,031	
4,936	297	217,069	-		-	404,681	
21,505	50,207	4,176,391	416,483	1,671	15,724	407,712	1 1 1 1 1
	100 (30%)						
-	3,849,806	17,538	121,471	415,911	3,031	15,724	
16,906	3,777	934,719	15	-	-	843	
4,321	31,711	2,603,100	-	-	-	3,408	-
21,227	3,885,294	3,555,357	121,486	415,911	3,031	19,975	-
997,287	23,180,973	23,263,566	2,748,087	817,530	1,722,542	8,363,820	85,652
	100						
117	983,633	144,528	280,345			65,086	8,462



Electric Power Statistics

September, 1957

Month	Daily Average		Total	Imports from	Exports to	Total available
	Total net generation	Total available for disposal	net generation	United States	United States	for disposal in Canada
			(Thousa	nd kwh)		
January February March April May June July August September October November December Total	261,718 261,378 * 252,400 250,799 245,734 * 226,600 230,496 223,199 232,136	252,503 250,002 * 240,476 237,453 233,750 * 216,420 217,039 215,183 223,581	8,113,273 7,318,572 * 7,824,401 * 7,523,956 * 7,617,758 * 6,798,006 7,145,367 6,919,176 6,964,083	64,939 31,221 19,464 27,701 64,733 95,110 113,200 98,317 112,298	350,610 349,741 389,110 428,069 436,229 400,519 530,357 346,829 366,937	7,827,602 7,000,052 * 7,454,755 * 7,123,588 * 7,246,262 * 6,492,597 6,728,210 6,670,664 6,709,444

* Revised

Hydro

5,662,916

5,166,252 5,641,265 5,443,329

5,557,863

5,121,716 5,493,938 5,177,785 5,178,563

Month

January

February

March

April

May

June

July

August

September

October
November
December

Utilities

Thermal

632,830 527,507

		Grand		
Total	Hydro	d kwh) ,555	total	
	(Thousand kwh)			
6,295,746	1,654,555	162,972	1,817,527	8,113,273
5,693,759	1,466,697	158,116	1,624,813	7,318,572
6,145,648	1,509,030	169,723	1,678,753	7,824,401
E 061 250	1 502 052	101 (17	1 400 404	7 500 056

527,507 504,383 6,145,648 1,509,030 169,723 1,678,753 1,678,753 1,678,753 1,678,753 1,677,487 1,677,487 1,677,487 1,677,487 1,677,487 1,677,487 1,677,487 1,677,487 1,677,487 1,677,487 1,677,487 1,677,487 1,289,651 6,798,006 358,432 5,852,370 1,170,830 1,22,167 1,292,997 7,145,367 437,971 5,615,756 1,164,490 138,930 1,303,420 6,919,176 467,560 1,190,140 127,820 1,317,960 1,317,960 1,317,960

Net generation - 1957

Net generation, 1949-1956 CANADA

		Utilities		Industry			Industry		Grand
Year and month	Hydro	Thermal	Total	Hydro	Thermal	Total	total		
				Thousand kwh)				
1949	36,204,809	1,390,562	37,595,371	n.a.	n.a.	12,889,749	50,485,120		
1950	39,783,365	1,647,557	41,430,922	10	19	13,428,593	54,859,515		
1951	46,322,206	1,732,652	48,054,858	93	10	13,369,527	61,424,385		
1952	49,618,513	2,222,115	51,840,628	88	- 11	14,086,950	65,927,578		
1953	49,542,536	3,797,345	53,339,881	19	11	16,400,824	69,740,705		
1954	52,155,854	3,178,434	55,334,288	14	23	17,547,555	72,881,843		
1955	58,444,886	3,197,153	61,642,039	PF	63	18,381,161	80,023,200		
1956 - Total	64,551,948	4,292,898	68,844,846	11	30	19,119,968	87,964,814		
January	5,253,744	380,823	5,634,567	0	11	n.a.	n.a.		
February	4,999,928	367,465	5,367,393	0	01	(4	88		
March	5,232,703	378,947	5,611,650	- 11	- 11	11	-11		
April	5,168,073	292,701	5,460,774	- 11		11	11		
May	5,549,616	263,531	5,813,147	- 11	- 01	- 11	11		
June	5,334,952	239,425	5,574,377	11	11	- 11	- 11		
J:ly	5,265,802	275,108	5,540,910	11	11		- 11		
August	5,368,420	313,748	5,682,168	† 1	11	(1	0		
September	5,387,879	347,156	5,735,035	11	98	0	- 11		
October	5,758,423	427,078	6,185,501	11	89	11	H		
November	5,543,552	488,630	6,032,182	11	01	11	11		
December	5,688,856	518, 286	6,207,142	11	11	U	- 11		