

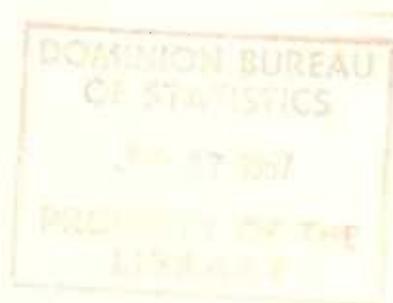
57-204 cr



CANADA

*Third*  
**ANNUAL ELECTRIC POWER SURVEY  
OF CAPABILITY AND LOAD**

**March, 1957**



**DOMINION BUREAU OF STATISTICS**  
Public Finance and Transportation Division  
Transportation and Public Utilities Section



DOMINION BUREAU OF STATISTICS  
Public Finance and Transportation Division  
Transportation and Public Utilities Section

*Third*

**ANNUAL ELECTRIC POWER SURVEY OF  
CAPABILITY AND LOAD**

**March, 1957**

*Published by Authority of*  
**The Right Honourable C. D. Howe, Minister of Trade and Commerce**

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Review of Survey Results	2
Definitions	5
Chart A: Net Generating Capability within Canada, 1950 through 1960	6
Chart B: Net Capability and Firm Demand within Canada, 1950 through 1960	7
Chart C: Net Generating Capability within Provinces, 1950 through 1960	9
Chart D: Net Capability and Firm Demand within Provinces, 1950 through 1960	10
Chart E: Firm Energy Requirement within Canada, 1950 through 1960	12
Table I: Summary by Provinces and Canada, 1950 through 1960	13
Table II: Net Generating Capability within Provinces, 1950 through 1960	25
Table III: Firm Power Peak Load within Provinces, 1950 through 1960	26
Table IV: Firm Energy Requirement within Provinces, 1950 through 1960	27
Table V: Indicated Reserve, 1950 through 1960	28
Canadian Electrical Association Statistical Policy Committee	31
Electric Power Survey Committee	32

## Introduction

This report presents the results of the third annual Electric Power Survey of Capability and Load which was conducted in March, 1957 by the Dominion Bureau of Statistics in co-operation with the Canadian Electrical Association. The 108 electric power producers covered by this survey include all major private and publicly - operated electric utilities and certain other power-producing companies. These 108 electric power producers generated approximately 93% of the total kilowatt hours produced in the country. The figures contained in this report can, therefore, be regarded as representative of the whole electric power industry in Canada. In some provinces, however, the percentage coverage is considerably lower than for the country as a whole.

Previous surveys incorporated only those major power-producing companies which sold part of their generation to the public. However, this year all power producers of 10,000,000 kilowatt hours or over were included in the survey regardless of whether they sold any energy. For comparative purposes, figures back to 1950, have been amended to include these additional companies.

Capability and load figures are based on the situation as it existed at the time of each company's annual firm power peak load. Throughout the report, the full amount of contractual commitments for firm power is reported.

Net generating capability, as shown in the tables, is the output of generating facilities after deducting station service. It is based on actual operating experience assuming all equipment available at the time of the annual firm power peak load with no deduction for equipment not operating at that time, and with no allowance made for the effect of unfavourable water and ice conditions. Net generating capability should not be construed as representing the total installed capacity of the facilities on the basis of name-plate ratings.

For the years 1950 to 1956, the net generating capability is shown for installations actually in existence during the month in which the firm power peak load occurred. For the years 1957 to 1960 it is forecast by adding new installations to the 1956 capability and deducting units retired.

The power situation in any province or for the country as a whole can be presented in several ways. Two of these are contained in the report and are based on the demand within the province (Table I) and the demand on the province (Table V). In each case the appropriate capability is also shown. Demand within the province is related to net capability which means generating capability plus purchases outside the province less deliveries outside the province.

Presenting the power situation within Canada and within the individual provinces provides a measure of the growth of the industry within geographic areas and is of interest in measuring the contribution of the industry to the economic growth of the country as a whole. Demand on the province, however, is related to gross capability which is generating capability plus purchases outside the province and is of interest primarily from a utility point of view.

Some care must be exercised in the interpretation of these data. For example, the difference between gross capability and total firm demand is an indication of available reserves of power. Since power producers are not, however, all fully interconnected, reserves of power cannot always be completely utilized.

#### Review of Survey Results

##### Summary:

Net Generating Capability: The generating capability of Canada in 1956 amounted to 14,983,000 kilowatts, an increase of 5.9 per cent over the 1955 total of 14,147,000 kilowatts. The generating capability is expected to be 22,111,000 kilowatts in 1960, an increase of 47.6 per cent over 1956. The proportion of thermal generation to the total is expected to rise from 14.3 per cent in 1955 to 19.5 per cent in 1959.

Firm Power Peak Load: The firm power peak load or demand within Canada amounted to 13,917,000 kilowatts in 1956, an increase of 11.0 per cent over the 1955 total of 12,536,000 kilowatts. By 1960 the load is forecast to rise 36.8 per cent to 19,040,000 kilowatts.

Indicated Reserve: The indicated reserve in Canada in 1956 was 1,008,000 kilowatts and is expected to be 3,011,000 kilowatts in 1960.

Firm Energy Requirement: The indicated firm energy requirement in Canada was 82,679,000,000 kilowatt hours in 1956, an increase of 11.7 per cent over the 1955 total of 74,032,000,000 kilowatt hours. It is expected to climb to 114,-365,000,000 kilowatt hours in 1960 or by 37.6 per cent.

Table I - Summary (Pages 13 to 24): This table presents the information which was collected from each of the 108 producers of power included in the survey, summarized for each of the provinces and for Canada. It shows the capability, firm power peak load, indicated reserve, and firm energy requirements.

Table II - Net Generating Capability Within Provinces (Page 25): The growth in net generating capability as illustrated in Table II is quite impressive. During the four-year period 1952-1956 the growth for Canada as a whole amounted to 3,979,000 kilowatts or 36.2 per cent over the 1952 total. The indicated

growth of 47.6 per cent during the forecast period 1956 to 1960 represents an additional 7,128,000 kilowatts of net generating capability. The total growth, both actual and planned over the period 1952 to 1960, is 101 per cent.

Although the forecast of net generating capability for Canada as a whole shows an increase of 101 per cent for the period 1952 to 1960, it varies considerably for the several provinces from a low of 48.0 per cent for Newfoundland to 258.4 per cent for Alberta.

Table III - Firm Power Peak Load Within Provinces (Page 26): During the period 1952 to 1960 the firm power peak load or demand within Canada is expected to increase by 9,096,000 kilowatts or 91.5 per cent.

Whereas the actual increase in firm power peak demand experienced during the period 1952 to 1956 amounted to 3,973,000 kilowatts or 40.0 per cent over the 1952 total, that forecast for the next four years amounts to 5,123,000 or 36.8 per cent over the 1956 total.

The increase, 1952-1960, for Canada as a whole, reflects a fairly steady and consistent growth from the 9,944,000 kilowatts in 1952 to 19,040,000 forecast for 1960. The actual growth experienced in the past four years, 1952 to 1956 amounted to a rate of 10.0 per cent per annum. The increase, forecast for the next four years 1956-1960 inclusive, is equal to a rate of growth of 9.2 per cent per annum.

Table IV - Firm Energy Requirement within Provinces (Page 27): Kilowatt hours needed to meet the firm energy requirement within the country totalled 82,679,000,000 in 1956, an increase of 23,873,000,000 kilowatt hours or 40.6 per cent over the 1952 total of 58,806,000,000. During the period 1956 to 1960, the firm energy requirement is expected to rise substantially each year to a total of 114,365,000,000 kilowatt hours in 1960, or by 37.6 per cent. By 1960, the energy requirements are forecast to be almost double those in 1952.

Table V - Indicated Reserve (Page 28): The electric utility industry must provide sufficient power to meet demand and to provide for contingencies.

Gross capability for any province may be defined as consisting of net generating capability (hydro plus thermal) plus purchases of firm power under firm obligation from utilities outside the province. Total demand for any province consists of firm power peak load within the province, plus any indicated shortage or rejected load as well as deliveries of firm power to utilities outside the province. In Table V, gross capability is related to total firm demand on the provinces and on Canada. The difference or indicated reserve, expressed as a percentage of total firm demand, shows to what extent productive resources have been able to keep pace with total firm demand in this rapidly growing industry.

For the three years 1952, 1956 and 1960, the indicated reserves in Canada were 905,000, 1,008,000 and 3,011,000 kilowatts, which correspond to reserves of 8.3, 6.8 and 15.1 per cent, respectively, over the total demand in those years. Figures for the various provinces and Canada vary considerably from year to year and are shown in detail in this table.

Charts: On pages 6 to 12, five charts are presented to show results of the survey of the electric power industry in Canada in graphic form.

Chart A - Net Generating Capability within Canada (Page 6): This chart portrays the rapid growth in ability to produce power and shows the extent to which thermal generation is becoming increasingly important. Total thermal generation has increased from 1,331,000 kilowatts or 12.1 per cent of the net generating capability within Canada in 1952 to 4,316,000 kilowatts or 19.5 per cent forecast for 1960.

Chart B - Net Capability and Firm Demand within Canada (Page 7): Chart B provides an indication of the reserves available to meet firm demand for electric power within Canada.

Chart C - Net Generating Capability within Provinces (Pages 8-9): This chart presents for each of the provinces, the information contained in Chart A. It illustrates the comparative importance of thermal and hydro generation within provinces.

Chart D - Net Capability and Firm Demand within Provinces (Pages 10-11): The fourth chart provides a graphic indication of the year to year ability of each of the provinces to meet its firm demand for electric power.

Chart E - Firm Energy Requirement within Canada (Page 12): This is an illustration of the growth in Canadian firm energy requirements by years for the period 1950 to 1960.

DEFINITIONS

NET GENERATING CAPABILITY

The maximum net kilowatt output (after station service) available from the generating facilities of the company, utility or system with all equipment available, at the time of the annual firm power peak load, determined as the average kilowatt output for one hour with no allowance for outages of generating units.

FIRM POWER

Maximum power always to be available, short of major outages caused by storm, explosion, strikes, etc.

NET CAPABILITY

The sum of net generating capability and purchases of firm power under firm obligation less deliveries of firm power under firm obligation.

FIRM OBLIGATIONS

Shall include only maximum commitments under contract agreements to accept or deliver power on an irrevocable basis.

FIRM POWER PEAK LOAD

The annual firm power maximum average net kilowatt load of one hour duration within the company, utility or system.

INDICATED DEMAND

The sum of firm power peak load and indicated shortage.

INDICATED RESERVE

Net capability less indicated demand (+ or -).

CHART-A

NET GENERATING CAPABILITY WITHIN CANADA  
1950 — 1960

THOUSANDS OF KILOWATTS

23,000

22,000

21,000

20,000

19,000

18,000

17,000

16,000

15,000

14,000

13,000

12,000

11,000

10,000

9,000

8,000

7,000

6,000

5,000

4,000

3,000

2,000

1,000

0

TOTAL

THERMAL

HYDRO

1950

1952

1954

1956

1958

1960

CHART-B

NET CAPABILITY AND FIRM DEMAND WITHIN CANADA

1950 - 1960

THOUSANDS OF KILOWATTS

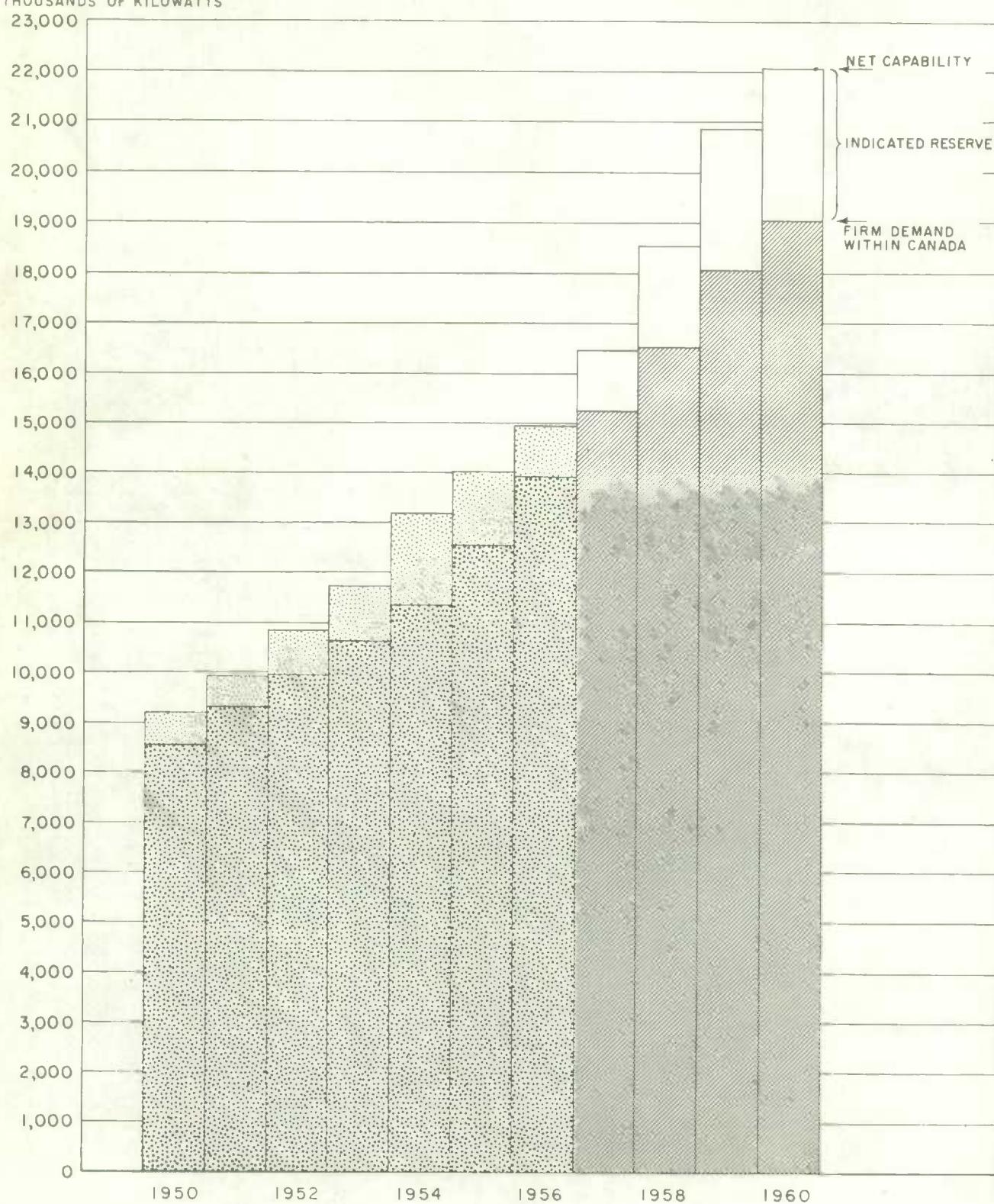
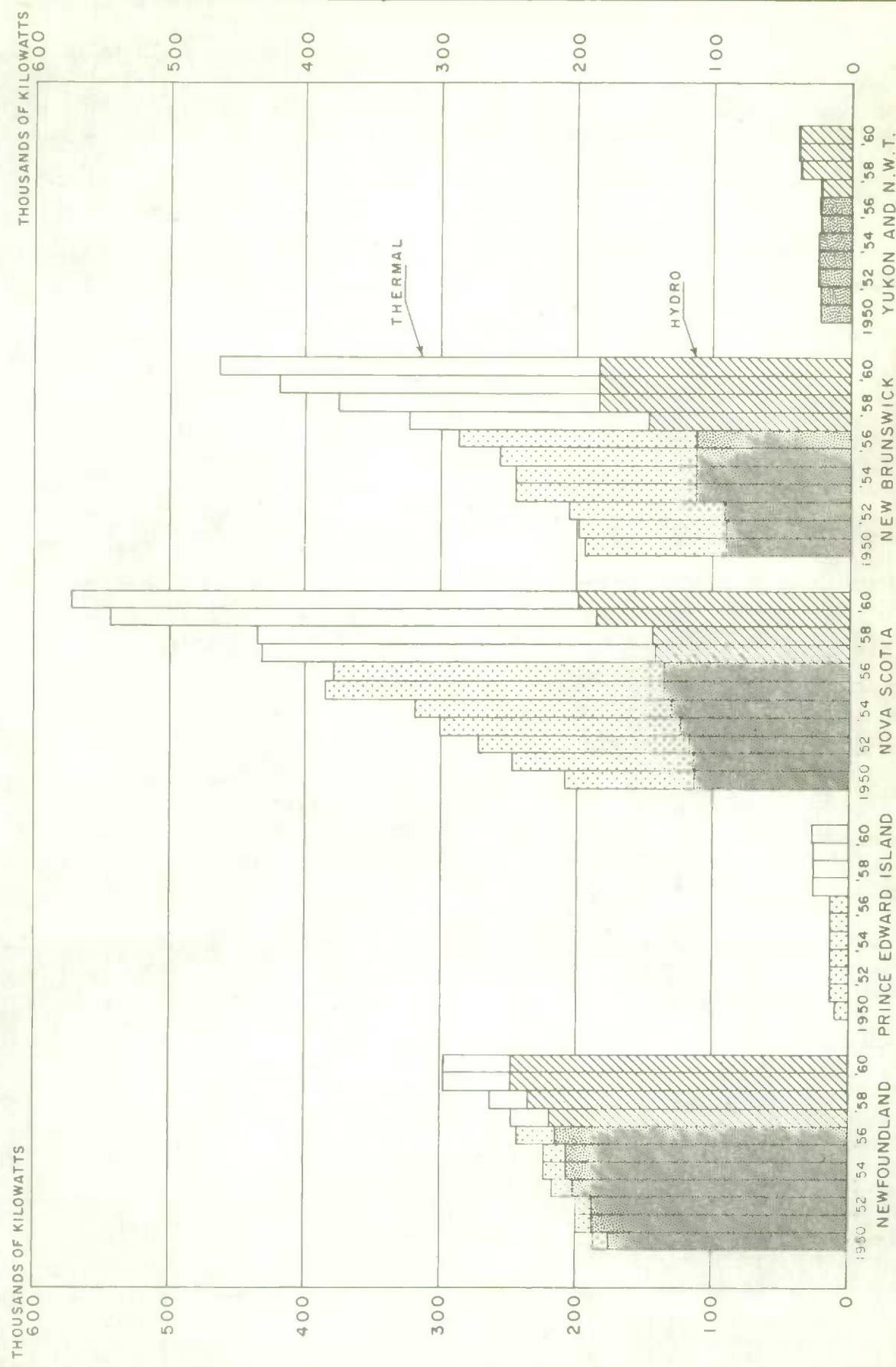


CHART - C

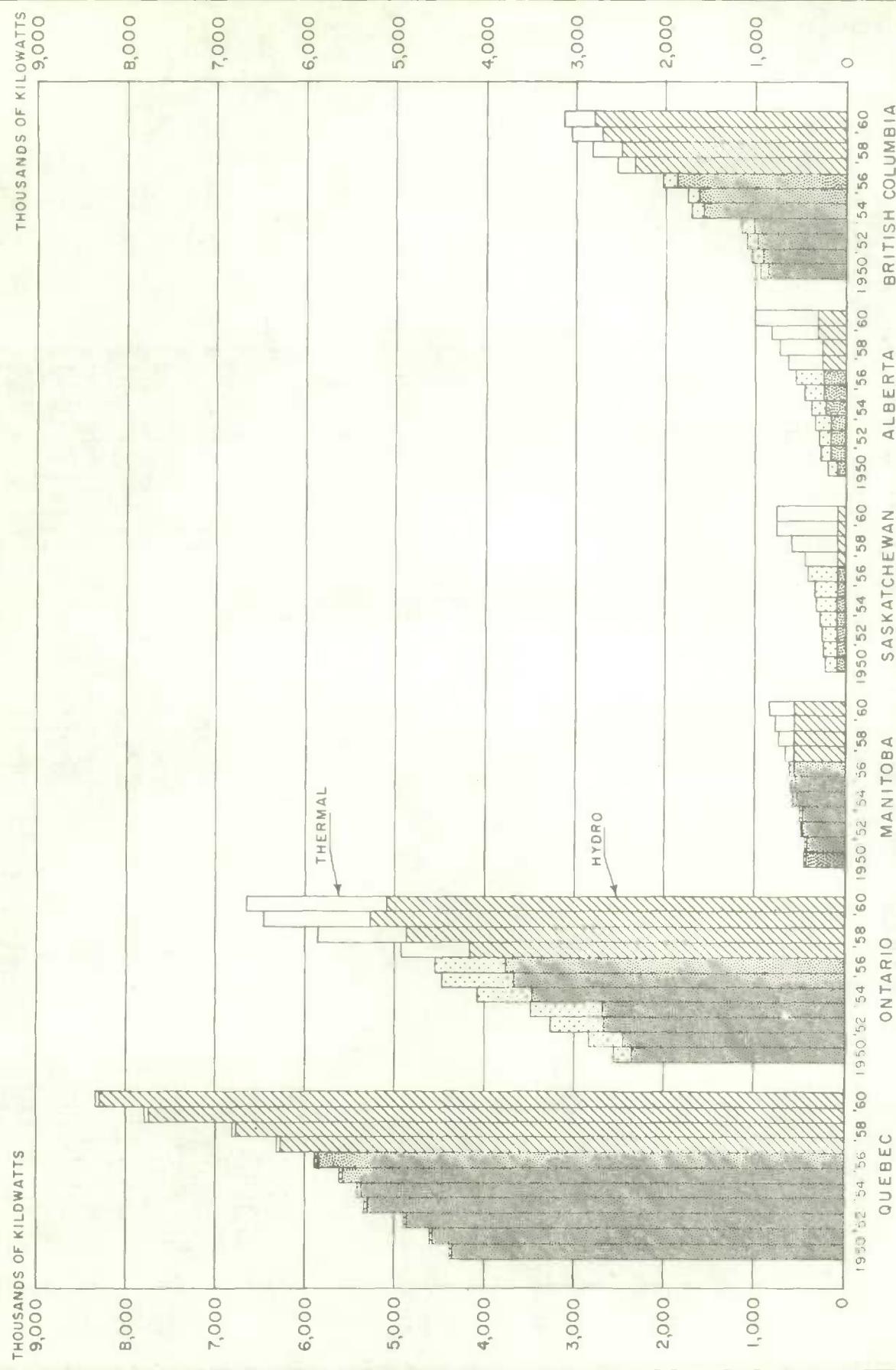
## NET GENERATING CAPACITY WITHIN PROVINCES

1950-1960



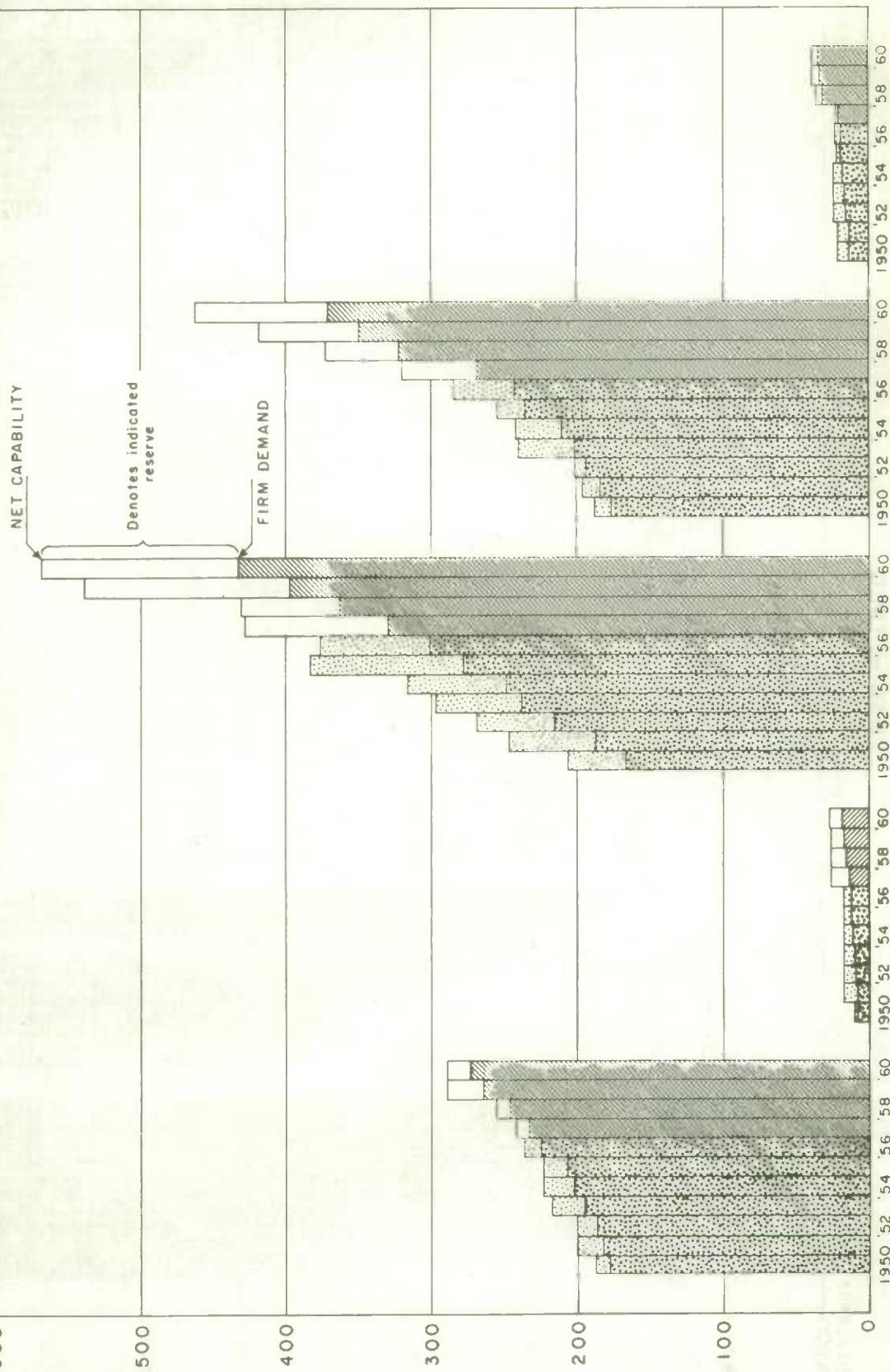
## NET GENERATING CAPABILITY WITHIN PROVINCES

1950—1960



## NET CAPABILITY AND FIRM DEMAND WITHIN PROVINCES

1950 - 1960

THOUSANDS OF KILOWATTS  
600  
500  
400  
300  
200  
100  
0

## NET CAPABILITY AND FIRM DEMAND WITHIN PROVINCES

1950 — 1960

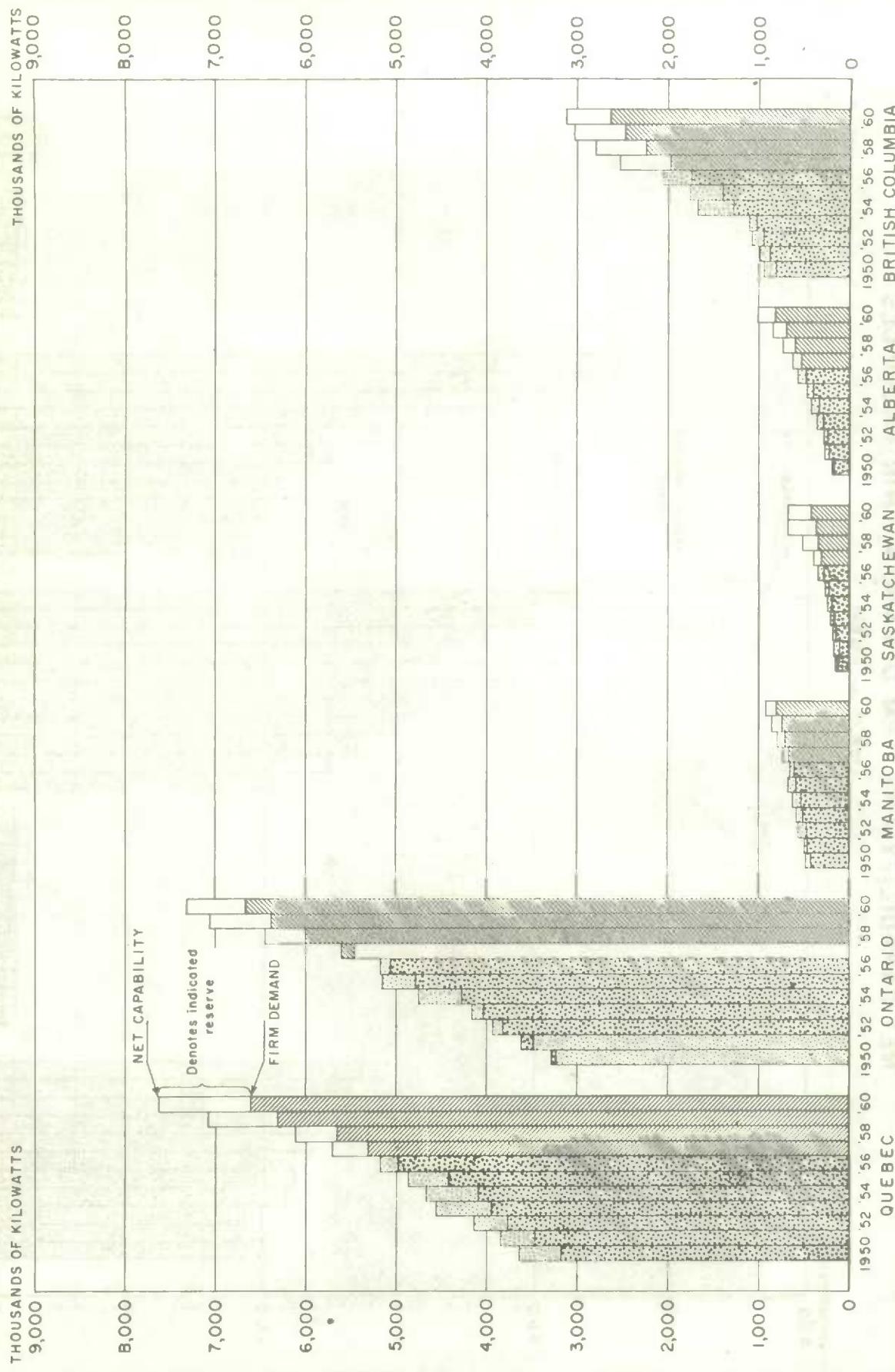


CHART-E

FIRM ENERGY REQUIREMENT WITHIN CANADA  
1950 - 1960

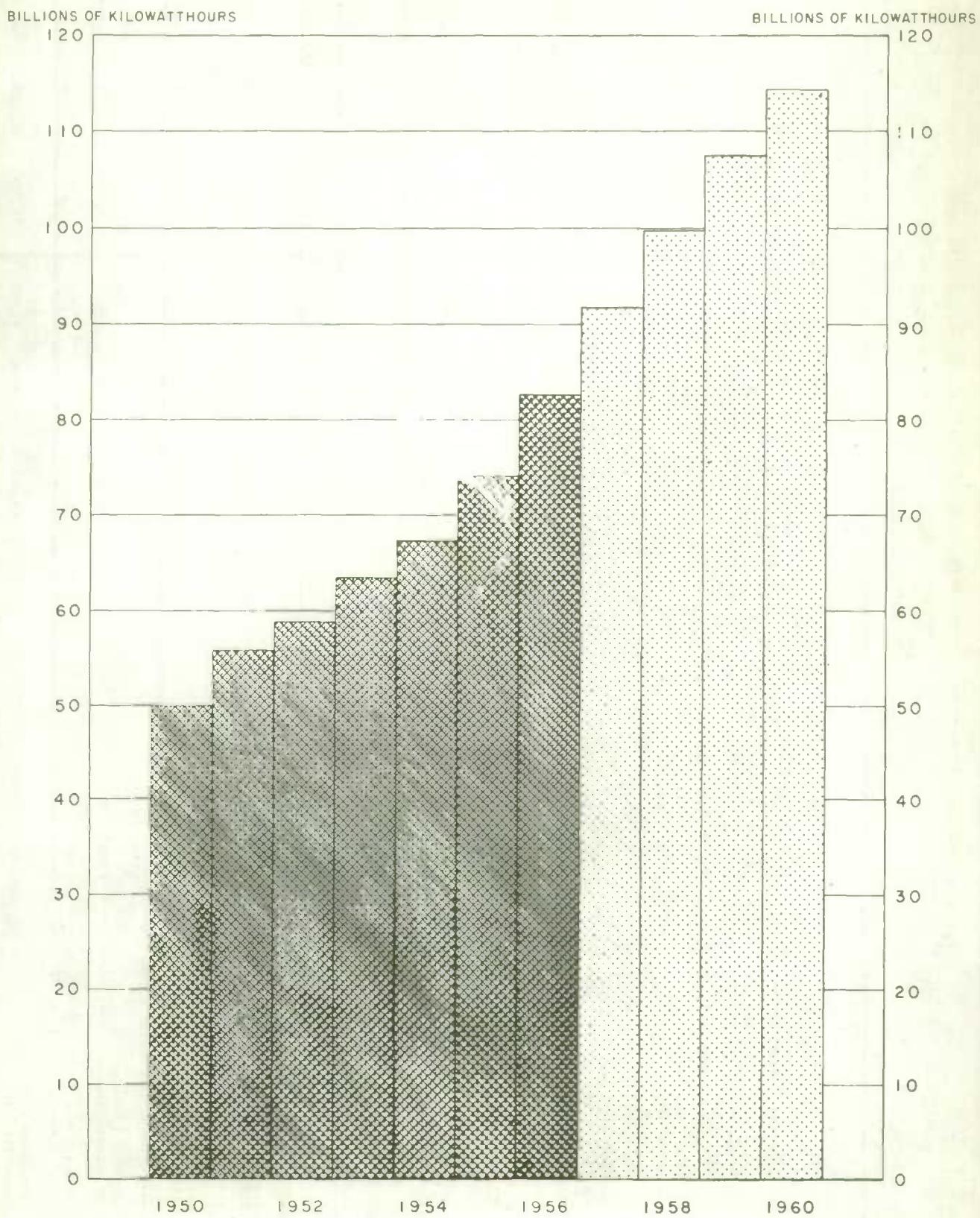


TABLE I

## SUMMARY - CANADA

Thousands of Kilowatts

CAPABILITY:						FORECAST					
	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
<b>1. Net generating capability:</b>											
(a) Hydro	8,575	9,044	9,673	10,183	11,719	12,211	12,841	14,148	15,586	17,316	17,795
(b) Thermal	788	1,032	1,331	1,720	1,609	1,936	2,142	2,404	3,043	3,632	4,316
<b>2. Receipts of firm power from:</b>											
(a) Other Provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	21	22	23	24	29	38	89	36	39	42	45
<b>3. Deliveries of firm power to:</b>											
(a) Other Provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	176	175	178	177	176	166	147	150	150	150	105
4. Net capability (1 + 2 - 3)	9,208	9,923	10,849	11,750	13,181	14,019	14,925	16,438	18,518	20,840	22,051
<b>ACTUAL</b>											
<b>FIRM POWER PEAK LOAD:</b>											
5. Within Canada	8,313	8,989	9,941	10,553	11,355	12,472	13,870	15,237	16,527	18,048	19,040
6. Indicated shortage	217	321	3	80	4	64	47	xxx	xxx	xxx	xxx
7. Indicated demand within Canada (5 + 6)	8,530	9,310	9,944	10,633	11,359	12,536	13,917	15,237	16,527	18,048	19,040
<b>INDICATED RESERVE:</b>											
8. Difference (4 - 7)	+ 678	+ 613	+ 905	+ 1,117	+ 1,822	+ 1,483	+ 1,008	+ 1,201	+ 1,991	+ 2,792	+ 3,011
<b>MILLIONS OFF KILOWATT HOURS</b>											
<b>FIRM ENERGY REQUIREMENT:</b>											
9. Firm energy requirement within Canada	49,635	55,516	58,760	63,437	67,331	73,654	81,133	91,834	99,826	107,639	114,365
10. Indicated shortage	378	312	46	3	11	378	1,546	xxx	xxx	xxx	xxx
11. Indicated firm energy requirement within Canada (9 + 10)	50,013	55,828	58,806	63,440	67,342	74,032	82,679	91,834	99,826	107,639	114,365
12. Deliveries of firm energy to:											
(a) Other Provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	1,748	1,762	1,728	1,713	1,715	1,332	1,226	1,229	1,229	1,229	1,043
(c) Total (a + b)	1,748	1,762	1,728	1,713	1,715	1,332	1,226	1,229	1,229	1,229	1,043
13. Firm energy requirement on Canada (11 + 12)	51,761	57,590	60,534	65,153	69,057	75,364	83,905	93,063	101,055	108,868	115,408

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

## SUMMARY - NEWFOUNDLAND (INCLUDING LABRADOR)

Thousands of Killowatts

CAPABILITY:	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
							FORECAST				
<b>CAPABILITY:</b>											
1. Net generating capability:											
(a) Hydro	176	188	188	202	207	207	215	219	234	247	247
(b) Thermal	12	12	12	15	16	16	27	28	28	49	49
2. Receipts of firm power from:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	188	200	200	217	223	223	236	241	256	290	290
<b>ACTUAL</b>											
FIRM POWER PEAK LOAD:											
5. Within province	177	182	186	195	201	206	222	233	247	265	274
6. Indicated shortage	-	-	-	-	1	1	2	xxx	xxx	xxx	xxx
7. Indicated demand within province (5 + 6)	177	182	186	195	202	207	224	233	247	265	274
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 11	+ 18	+ 14	+ 22	+ 21	+ 16	+ 12	+ 8	+ 9	+ 25	+ 16
<b>MILLIONS OF KILOWATT HOURS</b>											
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	1,058	1,040	1,157	1,190	1,225	1,289	1,374	1,325	1,425	1,529	1,582
10. Indicated shortage	-	-	-	-	9	10	-	xxx	xxx	xxx	xxx
11. Indicated firm energy requirement within province (9 + 10)	1,058	1,040	1,157	1,190	1,234	1,299	1,374	1,325	1,425	1,529	1,582
12. Deliveries of firm energy to:											
(a) Other provinces	-	-	-	-	-	-	-	31	68	68	68
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	-	-	-	-	-	-	-	31	68	68	68
13. Firm energy requirement on the province (11 + 12)	1,058	1,040	1,157	1,190	1,234	1,299	1,374	1,325	1,425	1,529	1,582

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPACITY AND LOAD

TABLE I

SUMMARY - PRINCE EDWARD ISLAND

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	FORECAST		
								1957	1958	1959
<b>CAPABILITY:</b>										
1. Net generating capability:										
(a) Hydro	-	-	-	-	-	-	-	-	-	-
(b) Thermal	10	18	18	18	18	18	18	26	26	27
2. Receipts of firm power from:										
(a) Other provinces	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:										
(a) Other provinces	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	10	18	18	18	18	18	18	26	26	27
<b>ACTUAL</b>										
<b>FIRM POWER PEAK LOAD:</b>										
5. Within province	8	8	9	10	11	12	12	13	15	17
6. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx
7. Indicated demand within province ( 5 + 6 )	8	8	9	10	11	12	12	13	15	17
<b>INDICATED RESERVE:</b>										
8. Difference (4 - 7)	+ 2	+ 10	+ 9	+ 8	+ 7	+ 6	+ 6	+ 13	+ 11	+ 8
<b>MILLIONS OF KILOWATT HOURS</b>										
<b>FIRM ENERGY REQUIREMENT:</b>										
9. Firm energy requirement within province	31	34	37	41	46	51	53	60	67	75
10. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx
11. Indicated firm energy requirement within province (9 + 10)	31	34	37	41	46	51	53	60	67	75
12. Deliveries of firm energy to:										
(a) Other provinces	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	-	-	-	-	-	-	-	-	-	-
13. Firm energy requirement on the province (11 + 12)	31	34	37	41	46	51	53	60	67	75

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - NOVA SCOTIA

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
<b>CAPABILITY:</b>											
1. Net generating capability:											
(a) Hydro	113	114	117	124	130	136	141	143	185	199	
(b) Thermal	96	134	154	176	188	248	242	290	357	372	
2. Receipts of firm power from:	-	-	-	-	-	-	-	-	-	-	
(a) Other Provinces	-	-	-	-	-	-	-	-	-	-	
(b) United States	-	-	-	-	-	-	-	-	-	-	
3. Deliveries of firm power to:	-	-	-	-	-	-	-	-	-	-	
(a) Other Provinces	2	2	2	2	2	2	2	2	2	3	
(b) United States	-	-	-	-	-	-	-	-	-	-	
4. Net capability (1 + 2 - 3)	207	246	269	298	316	382	376	429	431	539	568
<b>ACTUAL</b>											
<b>FIRM POWER PEAK LOAD:</b>											
5. Within province	163	185	213	235	245	278	301	330	364	397	432
6. Indicated shortage	4	2	2	4	3	-	-	xxx	xxx	xxx	xxx
7. Indicated demand within province (5 + 6)	167	187	215	239	248	278	301	330	364	397	432
<b>INDICATED RESERVE:</b>											
8. Difference (4 - 7)	+ 40	+ 59	+ 54	+ 59	+ 68	+ 104	+ 75	+ 99	+ 67	+ 142	+ 136
<b>MILLIONS OF KILOWATT HOURS</b>											
<b>FIRM ENERGY REQUIREMENT:</b>											
9. Firm energy requirement within province	891	1,027	1,122	1,211	1,277	1,357	1,486	1,616	1,742	1,880	2,021
10. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx
11. Indicated firm energy requirement within province (9 + 10)	891	1,027	1,122	1,211	1,277	1,357	1,486	1,616	1,742	1,880	2,021
12. Deliveries of firm energy to:	-	-	-	-	-	-	-	-	-	-	-
(a) Other Provinces	6	6	7	7	7	8	8	9	10	11	12
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	6	6	7	7	7	8	8	9	10	11	12
13. Firm energy requirement on the Province (11 + 12)	897	1,033	1,129	1,218	1,284	1,365	1,494	1,625	1,752	1,891	2,033

TABLE I

## SUMMARY - NEW BRUNSWICK

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	FORECAST
<b>CAPABILITY:</b>												
1. Net generating capability:												
(a) Hydro	90	90	92	112	112	112	112	148	184	184	184	
(b) Thermal	102	108	114	132	132	144	174	174	191	235	279	
2. Receipts of firm power from:												
(a) Other provinces	2	2	2	2	2	4	5	6	6	8	8	
(b) United States	-	-	-	-	-	-	-	-	-	-	-	
3. Deliveries of firm power to:												
(a) Other Provinces	5	4	7	6	5	5	5	-	-	-	-	
(b) United States	-	-	-	-	-	-	-	8	8	8	8	
4. Net capability (1 + 2 - 3)	189	196	201	240	241	255	286	320	373	419	463	
<b>ACTUAL</b>												
<b>FIRM POWER PEAK LOAD:</b>												
5. Within province	177	184	193	201	210	235	243	269	322	350	371	
6. Indicated shortage	-	-	-	-	-	1	-	xxx	xxx	xxx	xxx	
7. Indicated demand within province ( 5 + 6 )	177	184	193	201	210	236	243	269	322	350	371	
<b>INDICATED RESERVE:</b>												
8. Difference ( 4 - 7 )	+ 12	+ 12	+ 8	+ 39	+ 31	+ 19	+ 43	+ 51	+ 51	+ 69	+ 92	
<b>MILLIONS OF KILOWATT HOURS</b>												
<b>FIRM ENERGY REQUIREMENT:</b>												
9. Firm energy requirement within province	961	1,002	1,024	1,044	1,189	1,237	1,262	1,392	1,778	1,921	2,018	
10. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx	
11. Indicated firm energy requirement within province ( 9 + 10 )	961	1,002	1,024	1,044	1,189	1,237	1,262	1,392	1,778	1,921	2,018	
12. Deliveries of firm energy to:												
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-	
(b) United States	41	41	33	36	59	33	32	40	40	40	40	
(c) Total ( a + b )	41	41	33	36	59	33	32	40	40	40	40	
13. Firm energy requirement on the province ( 11 + 12 )	1,002	1,043	1,057	1,080	1,248	1,270	1,294	1,432	1,818	1,961	2,058	

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - QUEBEC

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
<b>CAPABILITY:</b>											
1. Net generating capability:											
(a) Hydro	4,370	4,587	4,877	5,300	5,378	5,583	" 5,854	6,281	6,763	7,749	8,299
(b) Thermal	26	26	28	35	35	36	36	41	41	41	41
2. Receipts of firm power from:											
(a) Other Provinces	1	1	1	1	1	1	1	7	7	7	7
(b) United States	-	-	-	-	-	4	5	4	-	-	-
3. Deliveries of firm power to:											
(a) Other Provinces	711	713	713	713	694	696	658	572	638	660	660
(b) United States	56	56	56	56	56	56	56	56	56	56	56
4. Net capability (1 + 2 - 3)	3,630	3,845	4,137	4,567	4,668	4,873	5,187	5,701	6,117	7,081	7,631
<b>ACTUAL</b>											
<b>FIRM POWER PEAK LOAD:</b>											
5. Within province	3,174	3,462	3,752	3,951	4,092	4,367	4,951	5,308	5,647	6,309	6,604
6. Indicated shortage	-	-	-	4	-	44	44	xxx	xxx	xxx	xxx
7. Indicated demand within province (5 + 6)	3,174	3,462	3,752	3,955	4,092	4,411	4,995	5,308	5,647	6,309	6,604
<b>INDICATED RESERVE:</b>											
8. Difference (4 - 7)	+ 456	+ 383	+ 385	+ 612	+ 576	+ 462	+ 192	+ 393	+ 470	+ 772	+ 1,027
<b>MILLIONS OF KILOWATT HOURS</b>											
<b>FIRM ENERGY REQUIREMENT:</b>											
9. Firm energy requirement within province	20,442	23,189	24,469	26,711	27,954	29,479	31,088	35,472	38,448	40,671	45,101
10. Indicated shortage	123	215	37	1	1	362	1,546	xxx	xxx	xxx	xxx
11. Indicated firm energy requirement within province (9 + 10)	20,565	23,404	24,4506	26,712	27,955	29,841	32,634	35,472	38,448	40,671	45,101
12. Deliveries of firm energy to:											
(a) Other provinces	4,287	4,288	4,304	4,272	4,155	4,049	3,896	3,838	3,941	3,945	3,950
(b) United States	820	834	821	825	848	490	491	500	500	500	500
(c) Total (a + b)	5,107	5,122	5,125	5,097	5,003	4,539	4,387	4,338	4,441	4,445	4,450
13. Firm energy requirement on the province (11 + 12)	25,672	28,526	29,631	31,809	32,958	34,380	37,021	39,810	42,889	45,116	49,551

## THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

## SUMMARY - ONTARIO

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	FORECAST
CAPABILITY:												
1. Net generating capability:												
(a) Hydro	2,367	2,476	2,672	2,684	3,481	3,688	3,778	4,140	4,871	5,251	5,084	
(b) Thermal	199	348	590	809	607	800	787	776	986	1,193	1,573	
2. Receipts of firm power from:												
(a) Other Provinces	720	722	722	722	707	708	669	582	634	655	655	
(b) United States	21	22	23	24	25	33	33	36	39	42	44	
3. Deliveries of firm power to:												
(a) Other Provinces	85	85	85	85	85	85	85	86	86	86	86	
(b) United States												
4. Net capability (1 + 2 - 3)	3,221	3,482	3,921	4,153	4,734	5,143	5,180	5,447	6,443	7,054	7,314	
												FORECAST
												A C T U A L
FIRM POWER PEAK LOAD:												
5. Within Province	3,078	3,292	3,803	3,969	4,261	4,757	5,064	5,603	6,004	6,375	6,669	
6. Indicated shortage	213	319	1	60	-	18	-	xxx	xxx	xxx	xxx	
7. Indicated demand within province (5 + 6)	3,291	3,611	3,804	4,029	4,261	4,775	5,064	5,603	6,004	6,375	6,669	
INDICATED RESERVE:												
8. Difference (4 - 7)	- 70	- 129	+ 117	+ 124	+ 473	+ 368	+ 116	- 156	+ 439	+ 679	+ 645	
												MILLIONS OF KILOWATT HOURS
FIRM ENERGY REQUIREMENT:												
9. Firm energy requirement within Province	18,016	20,395	21,630	22,985	23,928	26,376	28,875	31,915	34,158	36,204	37,833	
10. Indicated shortage	255	97	9	2	1	6	-	xxx	xxx	xxx	xxx	
11. Indicated firm energy requirement within Province (9 + 10)	18,271	20,492	21,639	22,987	23,929	26,382	28,875	31,915	34,158	36,204	37,833	
12. Deliveries of firm energy to:												
(a) Other Provinces	2	3	3	3	3	3	4	4	4	4	4	
(b) United States	703	703	690	668	624	687	703	689	689	689	503	
(c) Total (a + b)	705	706	693	671	627	690	707	693	693	693	507	
13. Firm energy requirement on the Province (11 + 12)	18,976	21,198	22,332	23,658	24,556	27,072	29,582	32,608	34,851	36,897	38,360	

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - MANITOBA

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
<b>CAPABILITY:</b>											
1. Net generating capability:											
(a) Hydro	418	413	487	487	522	547	556	556	556	556	556
(b) Thermal	10	10	10	23	46	46	46	106	166	229	292
2. Receipts of firm power from:											
(a) Other Provinces	68	77	79	79	80	79	64	68	68	68	68
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other Provinces	9	9	9	9	13	14	14	14	14	14	14
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	487	491	567	580	635	658	652	716	790	853	916
<b>ACTUAL</b>											
<b>FIRM POWER PEAK LOAD:</b>											
5. Within province	419	454	460	512	533	594	605	663	705	748	793
6. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx
7. Indicated demand within province (5 + 6)	419	454	460	512	533	594	605	663	705	748	793
<b>INDICATED RESERVE:</b>											
8. Difference (4 - 7)	+ 68	+ 37	+ 107	+ 68	+ 102	+ 64	+ 47	+ 53	+ 85	+ 105	+ 123
<b>MILLIONS OF KILOWATT HOURS</b>											
<b>FIRM ENERGY REQUIREMENT:</b>											
9. Firm energy requirement within province	2,216	2,427	2,526	2,670	2,852	3,086	3,295	3,521	3,701	3,931	4,151
10. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx
11. Indicated firm energy requirement within province (9 + 10)	2,216	2,427	2,526	2,670	2,852	3,086	3,295	3,521	3,701	3,931	4,151
12. Deliveries of firm energy to:											
(a) Other Provinces	79	79	79	79	114	114	94	94	31	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	79	79	79	79	114	114	94	94	31	-	-
13. Firm energy requirement on the province (11 + 12)	2,295	2,506	2,605	2,749	2,966	3,200	3,389	3,615	3,731	3,931	4,151

## THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

## SUMMARY - SASKATCHEWAN

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
CAPABILITY:								FORECAST			
1. Net generating capability:											
(a) Hydro	85	85	85	85	85	85	82	82	82	82	82
(b) Thermal	129	160	172	197	243	257	320	377	509	671	671
2. Receipts of firm power from:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other Provinces	68	77	79	79	80	79	64	68	68	68	68
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	146	168	178	203	248	260	338	391	523	685	685
ACTUAL											
FIRM POWER PEAK LOAD:								FORECAST			
5. Within province	128	127	144	169	196	227	278	309	339	377	419
6. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx
7. Indicated demand within province ( 5 + 6 )	128	127	144	169	196	227	278	309	339	377	419
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 18	+ 41	+ 34	+ 34	+ 52	+ 33	+ 60	+ 82	+ 184	+ 308	+ 266
MILLIONS OF KILOWATT HOURS											
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	407	483	583	664	776	813	1,620	1,742	1,865	2,086	2,245
10. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx
11. Indicated firm energy requirement within province (9 + 10)	407	483	583	664	776	813	1,620	1,742	1,865	2,086	2,245
12. Deliveries of firm energy to:											
(a) Other provinces	500	515	542	559	558	571	522	526	526	561	563
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	500	515	542	559	558	571	522	526	526	561	563
13. Firm energy requirement on the province (11 + 12)	907	998	1,125	1,223	1,334	1,384	2,142	2,268	2,391	2,647	2,808

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - ALBERTA

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
<b>CAPABILITY:</b>											
1. Net generating capability:											
(a) Hydro	83	162	162	202	220	220	237	237	317	317	
(b) Thermal	108	109	119	187	194	238	338	386	508	508	690
2. Receipts of firm power from:											
(a) Other provinces	-	-	-	-	4	-	4	3	2	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	3	5	7	8	-	3	-	-	-	-	2
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	188	266	274	341	400	455	562	626	722	825	1,005
	<b>ACTUAL</b>										
<b>FIRM POWER PEAK LOAD:</b>											
5. Within province	176	220	233	284	313	391	451	526	606	697	801
6. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx
7. Indicated demand within province (5 + 6)	176	220	233	284	313	391	451	526	606	697	801
	<b>MILLIONS OF KILOWATT HOURS</b>										
<b>INDICATED RESERVE:</b>											
8. Difference (4 - 7)	+ 12	+ 46	+ 41	+ 57	+ 87	+ 64	+ 111	+ 100	+ 116	+ 128	+ 204
	<b>MILLIONS OF KILOWATT HOURS</b>										
<b>FIRM ENERGY REQUIREMENT:</b>											
9. Firm energy requirement within province	1,023	1,114	1,167	1,372	1,581	1,859	2,180	2,444	2,795	3,193	3,662
10. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx
11. Indicated firm energy requirement within province (9 + 10)	1,023	1,114	1,167	1,372	1,581	1,859	2,180	2,444	2,795	3,193	3,662
12. Deliveries of firm energy to:											
(a) Other provinces	14	20	30	6	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	14	20	30	6	-	-	-	-	-	-	-
13. Firm energy requirement on the province (11 + 12)	1,037	1,134	1,197	1,378	1,581	1,859	2,180	2,444	2,795	3,193	3,662

TABLE I

## SUMMARY - BRITISH COLUMBIA

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	FORECAST
<b>CAPABILITY:</b>												
1. Net generating capability:												
(a) Hydro	852	908	969	1,003	1,078	1,614	1,866	2,323	2,481	2,708	2,790	
(b) Thermal	96	107	114	128	130	133	153	199	322	322	321	
2. Receipts of firm power from:												
(a) Other provinces	3	5	7	8	-	3	-	-	-	-	-	2
(b) United States	-	-	-	-	-	-	52	-	-	-	-	1
3. Deliveries of firm power to:												
(a) Other provinces	-	-	-	-	30	30	30	20	20	20	20	-
(b) United States	30	30	30	30	30	30	30	20	20	20	20	-
4. Net capability (1 + 2 - 3)	921	990	1,060	1,109	1,674	1,730	2,067	2,519	2,801	3,030	3,114	
<b>ACTUAL</b>												
<b>FIRM POWER PEAK LOAD:</b>												
5. Within province	799	861	932	1,010	1,275	1,386	1,724	1,963	2,247	2,480	2,624	
6. Indicated shortage	-	-	-	12	-	-	1	xxx	xxx	xxx	xxx	xxx
7. Indicated demand within province (5 + 6)	799	861	932	1,022	1,275	1,386	1,725	1,963	2,247	2,480	2,624	
<b>INDICATED RESERVE:</b>												
8. Difference (4 - 7)	+ 122	+ 129	+ 128	+ 87	+ 399	+ 344	+ 342	+ 556	+ 554	+ 550	+ 490	
<b>MILLIONS OF KILOWATT HOURS</b>												
<b>FIRM ENERGY REQUIREMENT:</b>												
9. Firm energy requirement within province	4,523	4,741	4,979	5,466	6,414	8,011	9,802	12,248	13,734	15,995	15,511	
10. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx	xxx	
11. Indicated firm energy requirement within province (9 + 10)	4,523	4,741	4,979	5,466	6,414	8,011	9,802	12,248	13,734	15,995	15,511	
12. Deliveries of firm energy to:												
(a) Other provinces	-	-	-	-	-	10	10	10	11	11	11	12
(b) United States	184	184	184	184	184	184	184	122	-	-	-	-
(c) Total (a + b)	184	184	184	184	184	194	194	132	10	11	11	12
13. Firm energy requirement on the province (11 + 12)	4,707	4,925	5,163	5,650	6,608	8,163	9,792	12,237	13,723	15,984	15,499	

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - YUKON AND NORTH WEST TERRITORIES

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	FORECAST		
								1957	1958	1959
<b>CAPABILITY:</b>										
1. Net generating capability:										
(a) Hydro	21	21	24	24	24	22	22	21	35	37
(b) Thermal	-	-	-	-	-	-	1	1	1	1
2. Receipts of firm power from:										
(a) Other Provinces	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:										
(a) Other Provinces	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	21	21	24	24	24	22	23	22	36	38
<b>ACTUAL</b>										
<b>FIRM POWER PEAK LOAD:</b>										
5. Within province	14	14	16	17	18	19	19	20	31	33
6. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx
7. Indicated demand within province (5 + 6)	14	14	16	17	18	19	19	20	31	33
<b>INDICATED RESERVE:</b>										
8. Difference (4 - 7)	+ 7	+ 7	+ 8	+ 7	+ 6	+ 3	+ 4	+ 2	+ 5	+ 4
<b>MILLIONS OF KILOWATT HOURS</b>										
<b>FIRM ENERGY REQUIREMENT:</b>										
9. Firm energy requirement within provincial	67	64	66	83	89	96	98	99	113	154
10. Indicated shortage	-	-	-	-	-	-	-	xxx	xxx	xxx
11. Indicated firm energy requirement within province (9 + 10)	67	64	66	83	89	96	98	99	113	154
12. Deliveries of firm energy to:										
(a) Other Provinces	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	-	-	-	-	-	-	-	-	-	-
13. Firm energy requirement on the provincial (11 + 12)	67	64	66	83	89	96	98	99	113	154
										158

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE II  
NET GENERATING CAPABILITY WITHIN PROVINCES\*  
Thousands of Kilowatts

PROVINCE	1950	1951	1952	1953	1954	1955	1956	FORECAST			PERCENTAGE CHANGE		
								1957	1958	1959	1960	1952-1956	1956-1960
Newfoundland (including Labrador)	188	200	200	217	223	242	247	262	296	296	21.0	22.3	48.0
Prince Edward Island	10	18	18	18	18	18	18	26	26	26	27	0.0	50.0
Nova Scotia	209	248	271	300	318	384	378	431	433	542	571	39.5	51.1
New Brunswick	192	198	206	244	244	256	286	322	375	419	463	38.8	61.9
Quebec	4,396	4,613	4,905	5,335	5,413	5,619	5,890	6,322	6,804	7,790	8,340	20.1	41.6
Ontario	2,566	2,824	3,262	3,493	4,088	4,488	4,565	4,916	5,857	6,444	6,657	43.9	45.8
Manitoba	428	423	497	510	568	593	602	662	722	785	848	21.1	40.9
Saskatchewan	214	245	257	282	328	339	402	459	591	753	753	56.4	87.3
Alberta	191	271	281	349	396	458	558	623	720	825	1,007	98.6	80.8
British Columbia	948	1,015	1,083	1,131	1,708	1,747	2,019	2,522	2,803	3,030	3,111	86.4	54.1
Yukon and N.W.T.	21	21	24	24	24	22	23	22	36	38	38	-4.2	65.2
Canada	9,363	10,076	11,004	11,903	13,328	14,147	14,983	16,552	18,629	20,948	22,111	36.2	47.6
													101.0

\* Hydro plus thermal (Table I, item 1a + 1b)

## THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE III

## FIRM POWER PEAK LOAD WITHIN PROVINCES\*

Thousands of Kilowatts

PROVINCE	1950	1951	1952	1953	1954	1955	1956	FORECAST			1952-1956	1956-1960	
								1957	1958	1959	1960		
Newfoundland (including Labrador)	177	182	186	195	202	207	224	233	247	265	274	20.4	22.3
Prince Edward Island	8	8	9	10	11	12	12	13	15	17	19	33.3	58.3
Nova Scotia	167	187	215	239	248	278	301	330	364	397	432	40.0	43.5
New Brunswick	177	184	193	201	210	236	243	269	322	350	371	25.9	52.7
Quebec	3,174	3,462	3,752	3,955	4,092	4,411	4,995	5,308	5,647	6,309	6,604	33.1	32.2
Ontario	3,291	3,611	3,804	4,029	4,261	4,775	5,064	5,603	6,004	6,375	6,669	33.1	31.7
Manitoba	419	454	460	512	533	594	605	663	705	748	793	31.5	31.1
Saskatchewan	128	127	144	169	196	227	278	309	339	377	419	93.1	50.7
Alberta	176	220	233	284	313	391	451	526	606	697	801	93.6	77.6
British Columbia	799	861	932	1,022	1,275	1,386	1,725	1,963	2,247	2,480	2,624	85.1	52.1
Yukon and N.W.T.	14	14	16	17	18	19	19	20	31	33	34	18.8	78.9
Canada	8,530	9,310	9,944	10,633	11,359	12,536	13,917	15,237	16,527	18,048	19,040	40.0	36.8

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE IV

FIRM ENERGY REQUIREMENT WITHIN PROVINCES\*

Millions of Kilowatt Hours

PROVINCE	1950	1951	1952	1953	1954	1955	1956	FORECAST			PERCENTAGE CHANGE		
								1957	1958	1959	1960	1952-1956	1956-1960
Newfoundland (including Labrador)	1,058	1,040	1,157	1,190	1,234	1,299	1,374	1,325	1,425	1,529	1,582	18.8	15.1
Prince Edward Island	31	34	37	41	46	51	53	60	67	75	83	43.2	56.6
Nova Scotia	891	1,027	1,122	1,211	1,277	1,357	1,486	1,616	1,742	1,880	2,021	32.4	36.0
New Brunswick	961	1,002	1,024	1,044	1,189	1,237	1,262	1,392	1,778	1,921	2,018	23.2	59.9
Quebec	20,565	23,404	24,506	26,712	27,955	29,841	32,634	35,472	38,448	40,671	45,101	33.2	38.2
Ontario	18,271	20,492	21,639	22,987	23,929	26,382	28,875	31,915	34,158	36,204	37,833	33.4	31.0
Manitoba	2,216	2,427	2,526	2,670	2,852	3,086	3,295	3,521	3,701	3,931	4,151	30.4	26.0
Saskatchewan	407	483	583	664	776	813	1,620	1,742	1,865	2,086	2,245	177.9	38.6
Alberta	1,023	1,114	1,167	1,372	1,581	1,859	2,180	2,444	2,795	3,193	3,662	86.8	68.0
British Columbia	4,523	4,741	4,979	5,466	6,414	8,011	9,802	12,248	13,734	15,995	15,511	96.9	58.2
Yukon and N.W.T.	67	64	66	83	89	96	98	99	113	154	158	48.5	61.2
Canada	50,013	55,828	58,806	63,440	67,342	74,032	82,679	91,834	99,826	107,639	114,365	40.6	38.3
												94.5	

\* Table I item 11.

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE V  
INDICATED RESERVE\*  
Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	PERCENTAGE CHANGE		
	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1952-1956	1956-1960	1952-1960
<u>Newfoundland</u> (including Labrador)														
1. Gross capability	188	200	200	217	223	223	242	247	262	296	296	21.0	22.3	48.0
2. Total firm demand on the province	177	182	186	195	202	207	230	239	253	271	280	23.7	21.7	50.5
3. Indicated reserve (1-2)	11	18	14	22	21	16	12	8	9	25	16	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	6.2	9.9	7.5	11.2	10.4	7.7	5.2	3.3	3.6	9.2	5.7	xxx	xxx	xxx
<u>Prince Edward Island</u>														
1. Gross capability	10	18	18	18	18	18	18	26	26	26	27	0.0	50.0	50.0
2. Total firm demand on the province	8	8	9	10	11	12	12	13	15	17	19	33.3	58.3	111.1
3. Indicated reserve (1-2)	2	10	9	8	7	6	6	13	11	9	8	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	25.0	125.0	100.0	80.0	63.6	50.0	50.0	100.0	73.3	52.9	42.1	xxx	xxx	xxx
<u>Nova Scotia</u>														
1. Gross capability	209	248	271	300	318	384	378	431	433	542	571	39.5	51.1	110.7
2. Total firm demand on the province	169	189	217	241	250	280	303	332	366	400	435	39.6	43.6	100.5
3. Indicated reserve (1-2)	40	59	54	59	68	104	75	99	67	142	136	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	23.7	31.2	24.9	24.5	27.2	37.1	26.8	29.8	18.3	35.5	31.3	xxx	xxx	xxx
<u>New Brunswick</u>														
1. Gross capability	194	200	208	246	260	291	328	381	427	471	38.5	61.8	124.0	
2. Total firm demand on the province	182	188	200	207	215	241	248	277	330	358	379	22.5	52.7	87.0
3. Indicated reserve (1-2)	12	12	8	39	31	19	43	51	51	69	92	xxx	xxx	xxx
4. Indicated reserve expressed as a % of Total firm demand	6.6	6.4	4.0	18.8	14.4	7.9	17.3	18.4	15.5	19.3	24.3	xxx	xxx	xxx

\* Gross capability (Table 1, item 1 + 2) less total firm demand on the provinces ( Table 1, item 7 + 3 ).

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE V

INDICATED RESERVE\*

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	F O R E C A S T			PERCENTAGE CHANGE 1952- 1956
								1957	1958	1959	
<u>Quebec</u>											
1. Gross capability	4,397	4,614	4,906	5,336	5,418	5,625	5,901	6,329	6,811	7,797	8,347
2. Total firm demand on the province	3,941	4,231	4,521	4,724	4,842	5,163	5,709	5,936	6,341	7,025	7,320
3. Indicated reserve (1-2)	456	383	385	612	576	462	192	393	470	772	1,027
4. Indicated reserve expressed as a % of total firm demand	11.6	9.2	8.6	13.1	12.0	9.0	3.4	6.6	7.4	11.0	14.0
<u>Ontario</u>											
1. Gross capability	3,307	3,568	4,007	4,239	4,820	5,229	5,267	5,534	6,530	7,141	7,356
2. Total firm demand on the province	3,377	3,697	3,890	4,115	4,347	4,861	5,151	5,690	6,091	6,462	6,711
3. Indicated reserve (1-2)	-70	-129	117	124	473	368	116	-156	439	679	645
4. Indicated reserve expressed as a % of total firm demand	-	-	3.1	3.1	11.1	7.7	2.3	-	7.2	10.5	9.6
<u>Manitoba</u>											
1. Gross capability	496	500	576	589	648	672	666	730	790	853	916
2. Total firm demand on the province	428	463	469	521	546	608	619	677	705	748	793
3. Indicated reserve (1-2)	68	37	107	68	102	64	47	53	85	105	123
4. Indicated reserve expressed as a % of total firm demand	15.9	8.0	22.8	13.1	18.7	10.5	7.6	7.8	12.0	14.0	15.5
<u>Saskatchewan</u>											
1. Gross capability	214	245	257	282	328	339	402	459	591	753	753
2. Total firm demand on the province	196	204	223	248	276	306	342	377	407	445	487
3. Indicated reserve (1-2)	18	41	34	34	52	33	60	82	184	308	266
4. Indicated reserve expressed as a % of total firm demand	20.0	25.4	18.8	16.8	21.3	12.0	17.5	21.8	45.2	69.2	54.6

\* Gross capability (Table I, item 1 + 2) less total firm demand on the provinces (Table I, item 7 + 3)

THIRD ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE V

INDICATED RESERVE\*

Thousands of Kilowatts

	1950	1951	1952	1953	1954	1955	1956	FORECAST			PERCENTAGE CHANGE		
								1957	1958	1959	1960	1952-1956	1956-1960
<b>Alberta</b>													
1. Gross capability	191	271	281	349	400	458	562	626	722	825	1,007	100.0	79.2
2. Total firm demand on the province	179	225	240	292	313	394	451	526	606	697	803	87.9	78.0
3. Indicated reserve (1-2)	12	46	41	57	87	64	111	100	116	128	204	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	6.7	20.4	17.1	19.5	27.8	16.2	24.6	19.0	19.1	18.4	25.4	xxx	xxx
<b>British Columbia</b>													
1. Gross capability	951	1,020	1,090	1,139	1,708	1,750	2,071	2,522	2,803	3,030	3,114	90.0	50.4
2. Total firm demand on the province	829	891	962	1,052	1,309	1,406	1,729	1,966	2,249	2,480	2,624	79.6	51.9
3. Indicated reserve (1-2)	122	129	128	87	399	344	342	556	554	350	490	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	14.7	14.5	13.3	8.3	30.5	24.5	19.8	28.3	24.6	22.2	18.7	xxx	xxx
<b>Yukon and N.W.T.</b>													
1. Gross capability	21	21	24	24	24	22	23	22	36	38	38	- 8.3	72.7
2. Total firm demand on the province	14	14	16	17	18	19	19	20	31	33	34	18.8	78.9
3. Indicated reserve (1-2)	7	7	8	7	6	3	4	2	5	5	4	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	50.0	50.0	50.0	41.2	33.3	15.8	21.1	10.0	16.1	15.2	11.8	xxx	xxx
<b>Canada</b>													
1. Gross capability	9,384	10,098	11,027	11,927	13,357	14,185	15,072	16,588	18,668	20,990	22,156	36.7	47.0
2. Total firm demand on Canada	8,706	9,485	10,122	10,810	11,535	12,702	14,064	15,387	16,677	18,198	19,145	38.9	36.1
3. Indicated reserve (1-2)	678	613	905	1,117	1,822	1,483	1,008	1,201	1,991	2,792	3,011	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	7.8	6.5	8.9	10.3	15.8	11.7	7.2	7.8	11.9	15.3	15.7	xxx	xxx

\* Gross capability (Table 1, item 1 + 2) less total firm demand on the Provinces (Table I, item 7 + 3)

CANADIAN ELECTRICAL ASSOCIATION STATISTICAL POLICY COMMITTEE

Mr. G.A. Gaherty,  
President, Calgary Power Ltd.,  
Calgary, Alberta.

Mr. N.T. Smith,  
General Manager,  
Nova Scotia Light and Power Co. Ltd.,  
Halifax, Nova Scotia.

Mr. J.L. Feeney,  
Chief Engineer,  
New Brunswick Electric Power Commission,  
Fredericton, New Brunswick.

Mr. L. O'Sullivan,  
Assistant General Manager,  
Quebec Hydro-Electric Commission,  
Montreal, Quebec.

Mr. W.R. Way,  
Vice-President, Generation and Transmission,  
Shawinigan Water and Power Co. Ltd.,  
Montreal, Quebec.

Mr. A.W. Manby,  
General Manager,  
Hydro-Electric Power Commission of Ontario,  
Toronto, Ontario.

Mr. W.D. Fallis,  
General Manager,  
Manitoba Power Commission,  
Winnipeg, Manitoba.

Mr. D. Cass-Beggs,  
General Manager,  
Saskatchewan Power Corporation,  
Regina, Saskatchewan.

Mr. T. Ingledow,  
Vice President and Executive Engineer,  
British Columbia Electric Co. Ltd.,  
Vancouver, British Columbia.

The Canadian Electrical Association Statistical Policy Committee  
serves as an over-all co-ordinating agency for these surveys - the connecting  
link between the Dominion Bureau of Statistics, The Canadian Electrical Association  
and the interests of the electric power utility industry-at-large.

ELECTRIC POWER SURVEY COMMITTEE

Mr. W.K. Murray,  
Nova Scotia Light and Power Co. Ltd.,  
Halifax, Nova Scotia.

Mr. A.J. Cyr,  
New Brunswick Electric Power Commission,  
Fredericton, New Brunswick.

Mr. J.C. Antliff,  
Quebec Hydro-Electric Commission,  
Montreal, Quebec.

Dr. Huet Massue,  
Shawinigan Water and Power Co. Ltd.,  
Montreal, Quebec.

Mr. W.S. Preston,  
Hydro-Electric Power Commission of Ontario,  
Toronto, Ontario.

Mr. C.P. Haltalin,  
Manitoba Hydro-Electric Board,  
Winnipeg, Manitoba.

Mr. W.A. Reed,  
Saskatchewan Power Corporation,  
Regina, Saskatchewan.

Mr. M.M. Williams,  
Calgary Power Ltd.,  
Calgary, Alberta.

Mr. H.W. Smith,  
British Columbia Engineering Company Ltd.,  
Vancouver, British Columbia.

Mr. G.A. Richardson,  
Dominion Bureau of Statistics,  
Ottawa, Ontario.

The function of an Area Representative is primarily to act as the direct liaison between the company representatives in his area and the Dominion Bureau of Statistics on all matters relating to the power survey. For this reason Area Representatives must have the complete co-operation of Company representatives in securing the information required for the power survey.



DATE DUE  
DATE DE RETOUR

DEC - 8 1980

LOWE-MARTIN No. 1137



STATISTICS CANADA LIBRARY  
BIBLIOTHÈQUE STATISTIQUE CANADA



1010700103