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CANADA

Sixth

ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

1959 Actual

1960 - 1963 Forecast

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

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Introduction

This report presents the results of the sixth annual Electric Power Survey of Capability and Load which was conducted in March 1960 by the Dominion Bureau of Statistics in cooperation with the Canadian Electrical Association. The Electric Power Survey embraces all producers of electric energy in Canada which generate 10,000,000 kilowatt hours or more per annum. The 1960 report is based on returns from 130 companies, half of which are utilities and the other half industrial establishments which generate power primarily for own use. As these 130 producers account for approximately 99 per cent of total generation in Canada, figures presented in this report may be regarded as being representative of the entire industry.

The statistics presented are for the years 1950, and 1954 - 1963 inclusive, the latter four years on a forecast basis. Capability and load figures are based on the situation as it existed at the time of each company's annual firm power peak load. This load is calculated in terms of contractual commitments for firm power.

Generating capability is the maximum output that can be maintained at the time of annual firm power peak load. Net generating capability refers to the amount left after power used in station service is deducted. It is calculated on the basis of actual operating experience assuming all equipment in working order and available for use. Net generating capability should not be construed as representing installed capacity, a term used in reference to the name plate ratings of generating equipment as designated by the manufacturers.

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 net generating capability plus purchases less deliveries outside the province.

Statistics of the power situation within Canada and within the individual provinces provide a measure of the growth of the industry within geographic areas and indicate 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

Net generating capability: Net generating capability in Canada rose 8.5 per cent in 1959 to 20,205,000 kilowatts from the 1958 total of 18,628,000. The increase was just under the 9.0 per cent averaged over the nine-year period covered since the survey was inaugurated and compares with an increase of 13.0 per cent forecast for 1960. Greatly below-average increases of 2.1, 4.0 and 5.1 per cent are planned for 1961, 1962 and 1963 because of the substantial reserves which have been built up since 1956. In 1963, net generating capability at 25,487,000 kilowatts will have advanced some 26.1 per cent over the current level.

More than half of the increase planned for the next four years will be thermal compared with less than 20 per cent in the four-year period ended 1959. Thermal generating capability will account for 23.1 per cent of the total in 1963, against 15.4 per cent in 1959.

Since 1950, annual increments to thermal generating capability have averaged 17.1 per cent; additions between 1959 and 1963 are expected to average 17.7 per cent. Annual increases in hydro generating capability, which averaged 8.2 per cent between 1952 and 1959, are forecast as declining sharply to 3.5 per cent during the next four years.

Firm power peak load: Firm power peak load within Canada in 1959 amounted to 16,201,000 kilowatts, an increase of 4.1 per cent over the revised 1958 total of 15,568,000. The forecast for 1963 is 21,170,000 kilowatts, an estimated rise of 30.7 per cent. Annual rates of increase have averaged 7.4 per cent since 1950, slightly higher than the 6.9 per cent forecast for the next four years. The forecast rate of increase, however, is somewhat higher than the 6.6 per cent achieved in the last four years.

During the eight-year period 1955-1963 a growth in firm power peak load of 162.5 per cent is indicated in Saskatchewan and 155.7 per cent in Alberta. The increase for all Canada during this period is expected to approximate 69 per cent.

Indicated Reserve: The indicated reserve for Canada rose sharply in 1959 to 3,852,000 kilowatts from the revised total of 2,908,000 in 1958. By 1963 it will have risen to 4,211,000 kilowatts, but represent only 19.8 per cent of firm demand as compared with this year's 23.5 per cent. From a low of 8.5 per cent in 1956 the margin of reserve is expected to reach a peak of 29.2 per cent in 1960 before subsiding to the 1963 level of 19.8 per cent.

Reserves for individual provinces varied in 1959 from a high of 49.7 per cent in Saskatchewan to a low of 11.6 per cent in Ontario.

Firm Energy Requirement: Firm energy requirement rose 7.5 per cent in 1959 to 93,656,000,000 kilowatt hours from 87,102,000,000 in 1958. Further annual increases averaging 7.4 per cent over the next four years are expected to result in a firm energy requirement of 124,743,000,000 kilowatt hours by 1963. The comparative stability of the rate of growth in firm energy requirement is evidenced by the fact that annual increments during the period 1950-1959 averaged 7.2 per cent.

Firm energy requirement within provinces showed much wider variations. During the eight-year period 1955-1963, firm energy requirement will increase 173.1 per cent in Saskatchewan, 160.5 per cent in Alberta and 131.4 per cent in Prince Edward Island. The comparable rate of growth for all Canada is 68.3 per cent.

During the recent survey a number of errors in reporting were uncovered which resulted, in some instances, in figures being revised for earlier years. Firm power peak load and firm energy requirement have been revised downwards for the province of Quebec in 1956 and 1957 and increased slightly in 1958. The changes in firm power peak load also affected indicated reserve. Small reductions in firm energy requirement were made for each year back to 1950 in Nova Scotia figures.

Chart A - Net Generating Capability Within Canada (Page 6): This chart graphically portrays the rapid growth in ability to produce power and shows the extent to which thermal generation is becoming increasingly important.

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): Chart C illustrates the growth in capability and the comparative importance of hydro and thermal generation within provinces.

Chart D - Net Capability and Firm Demand Within Provinces (Pages 10 - 11): This 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): Chart E shows the growth in Canadian firm energy requirement during the period 1950 - 1962.

Table I - Summary (Pages 13 to 24): This table summarizes capability, firm power peak load, indicated reserve and firm energy requirement for Canada and for each of the provinces.

Table II - Net Generating Capability Within Provinces (Page 25): This table compares provincial rates of growth in net generating capability.

Table III - Firm Power Peak Load Within Provinces (Page 26): This table compares rates of growth of firm power peak load within provinces.

Table IV - Firm Energy Requirement Within Provinces (Page 27): This table compares rates of growth of firm energy requirement within provinces.

Table V - Indicated Reserve (Page 18): This table shows the relationship between the demand for power and the ability to meet it in each of the provinces and in Canada as a whole. Demand on the province consists of firm power peak load within the province plus any indicated shortage or rejected load plus firm power deliveries outside the province. Gross capability consists of net generating capability (hydro and thermal) within the province plus purchases of firm power under firm obligation from sources outside the province. The difference between gross capability and firm demand is the indicated reserve, and this, expressed as a percentage of total firm demand, can be used as a measurement of the industry's ability to satisfy demand and meet contingencies. Since not all systems are fully interconnected it should be remembered that reserves of power cannot always be completely utilized.

DEFINITIONS

FIRM ENERGY REQUIREMENT

Energy required to meet firm obligations, or for use in own industrial plant other than in electric boilers.

FIRM POWER

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

FIRM POWER PEAK LOAD

The annual FIRM POWER maximum average net kilowatt load of one hour duration within the UTILITY, SYSTEM or INDUSTRIAL ESTABLISHMENT.

FIRM OBLIGATIONS

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

INDICATED DEMAND

The sum of firm power peak load and indicated shortage.

INDICATED RESERVE

Net capability less indicated demand (+ or -).

INDUSTRIAL ESTABLISHMENT

A firm which generates power primarily for use in own plants.

NET GENERATING CAPABILITY

The maximum net kilowatt output (after station service) available from the generating facilities of the UTILITY, SYSTEM or INDUSTRIAL ESTABLISHMENT 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.

NET CAPABILITY

The sum of net generating capability and purchases of firm power under firm obligation from other utilities less deliveries of firm power under firm obligation to other utilities.

SYSTEM

Two or more UTILITIES, having interconnections for the exchange of power, which although they may be separately incorporated, are controlled, managed or operated by one principal UTILITY.

UTILITY

The Company, Commission, or UTILITY reporting or included in a SYSTEM report under Section IV (which generates at least part of its own power).

CHART - A

NET GENERATING CAPABILITY WITHIN CANADA

1950 — 1963

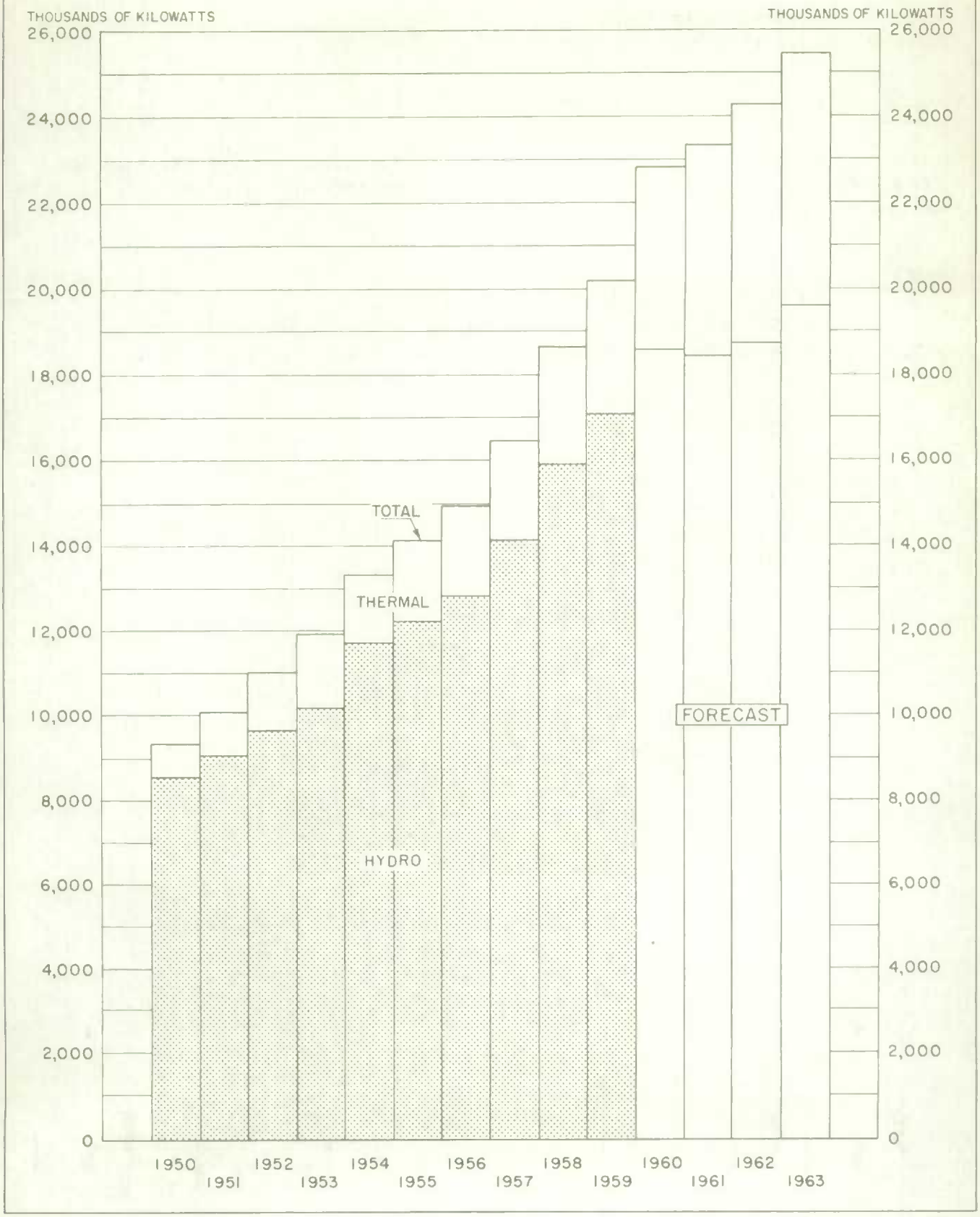


CHART-B

NET CAPABILITY AND FIRM DEMAND WITHIN CANADA

1950—1963

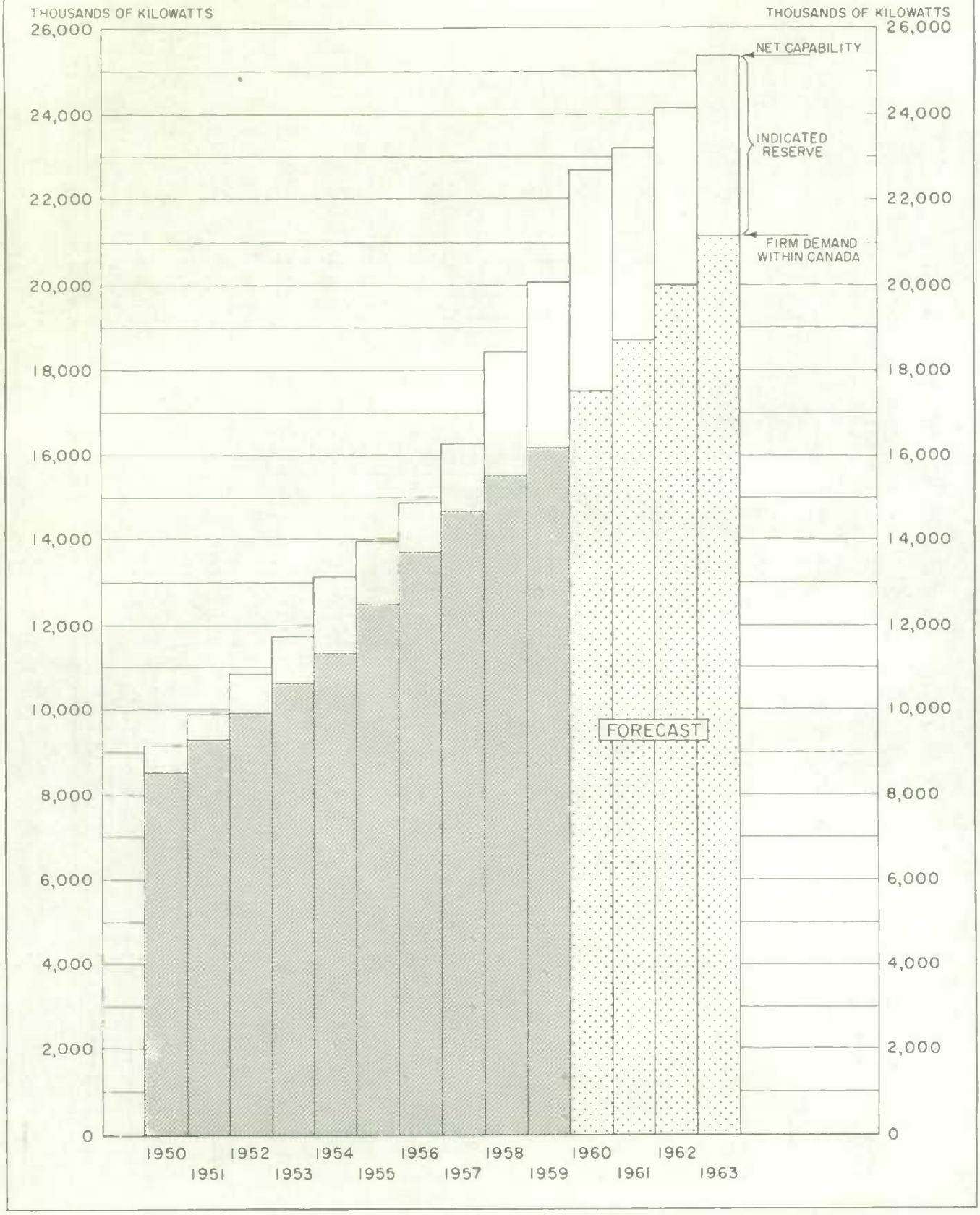


CHART – C

NET GENERATING CAPABILITY WITHIN PROVINCES

1950 – 1963

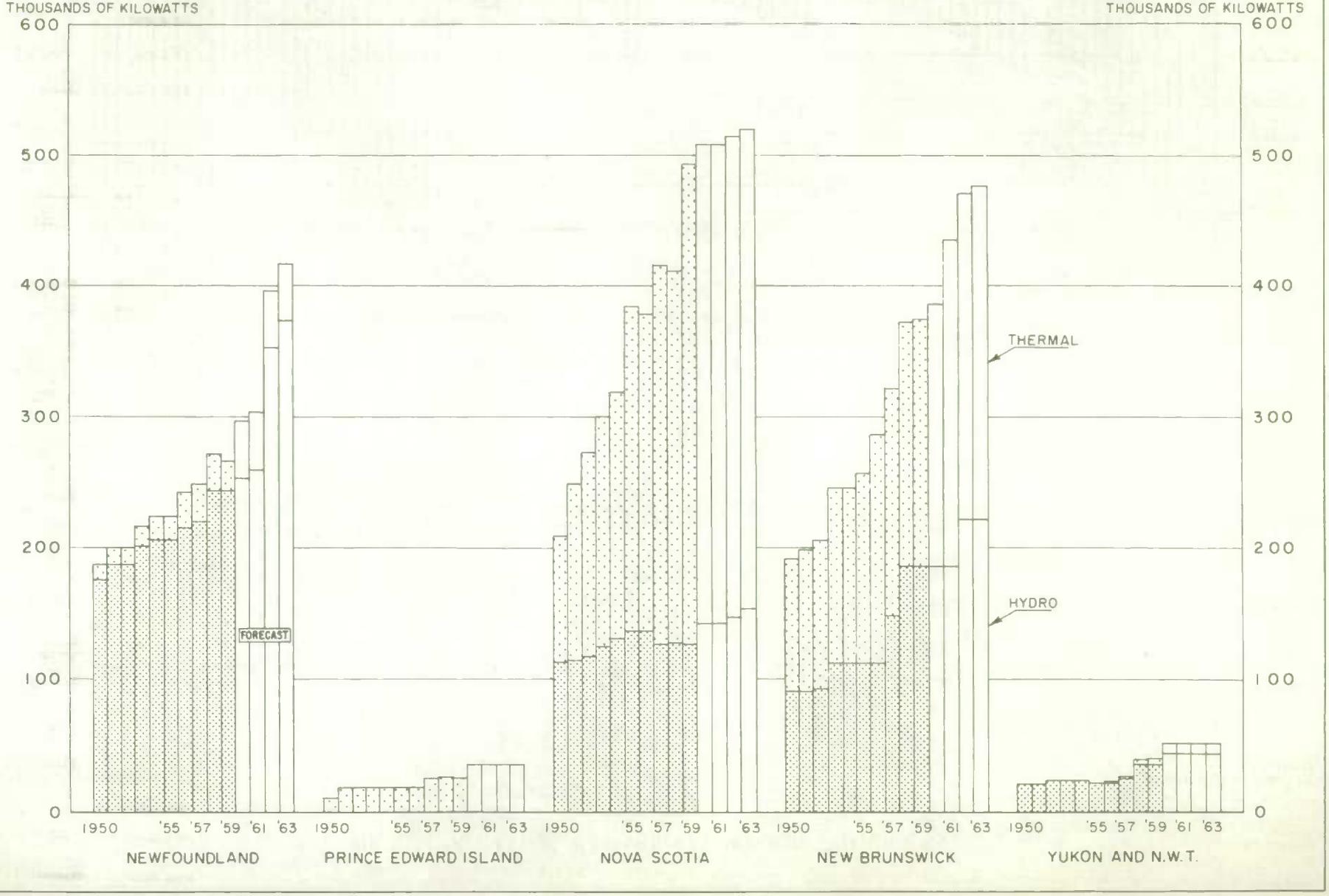


CHART – C

NET GENERATING CAPABILITY WITHIN PROVINCES

1950 – 1963

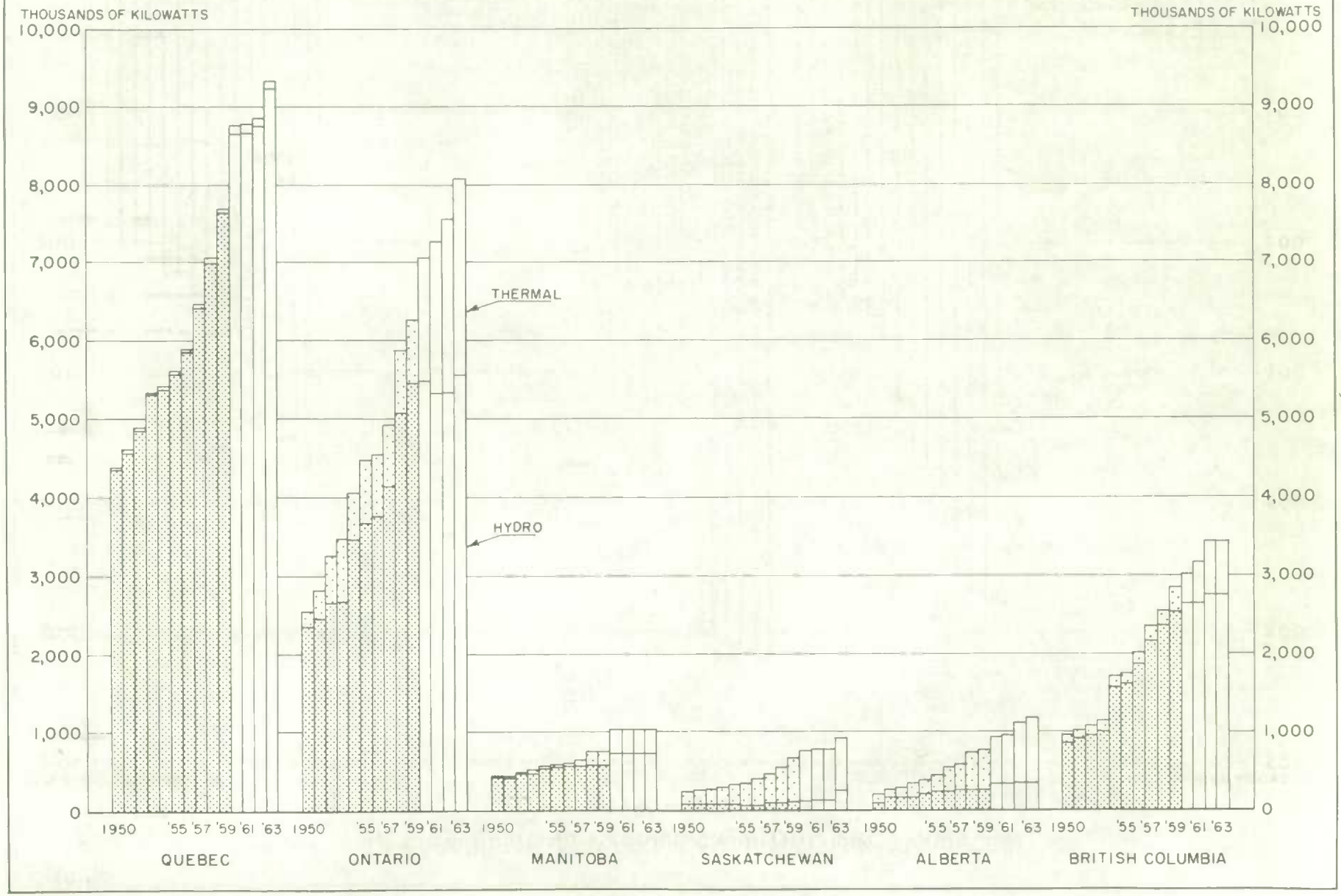


CHART – D

NET CAPABILITY AND FIRM DEMAND WITHIN PROVINCES

1950 – 1963

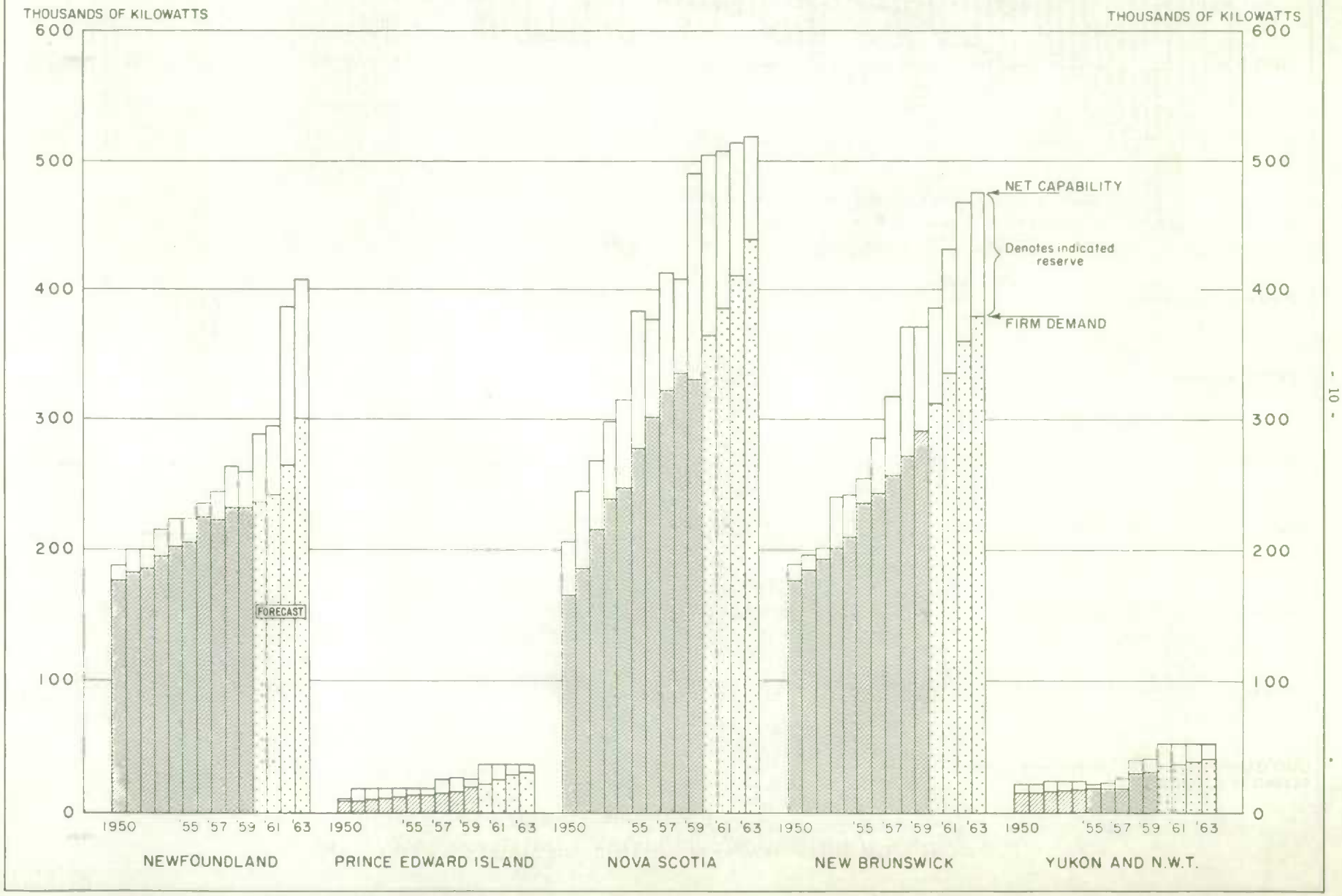


CHART – D

NET CAPABILITY AND FIRM DEMAND WITHIN PROVINCES
1950 – 1963

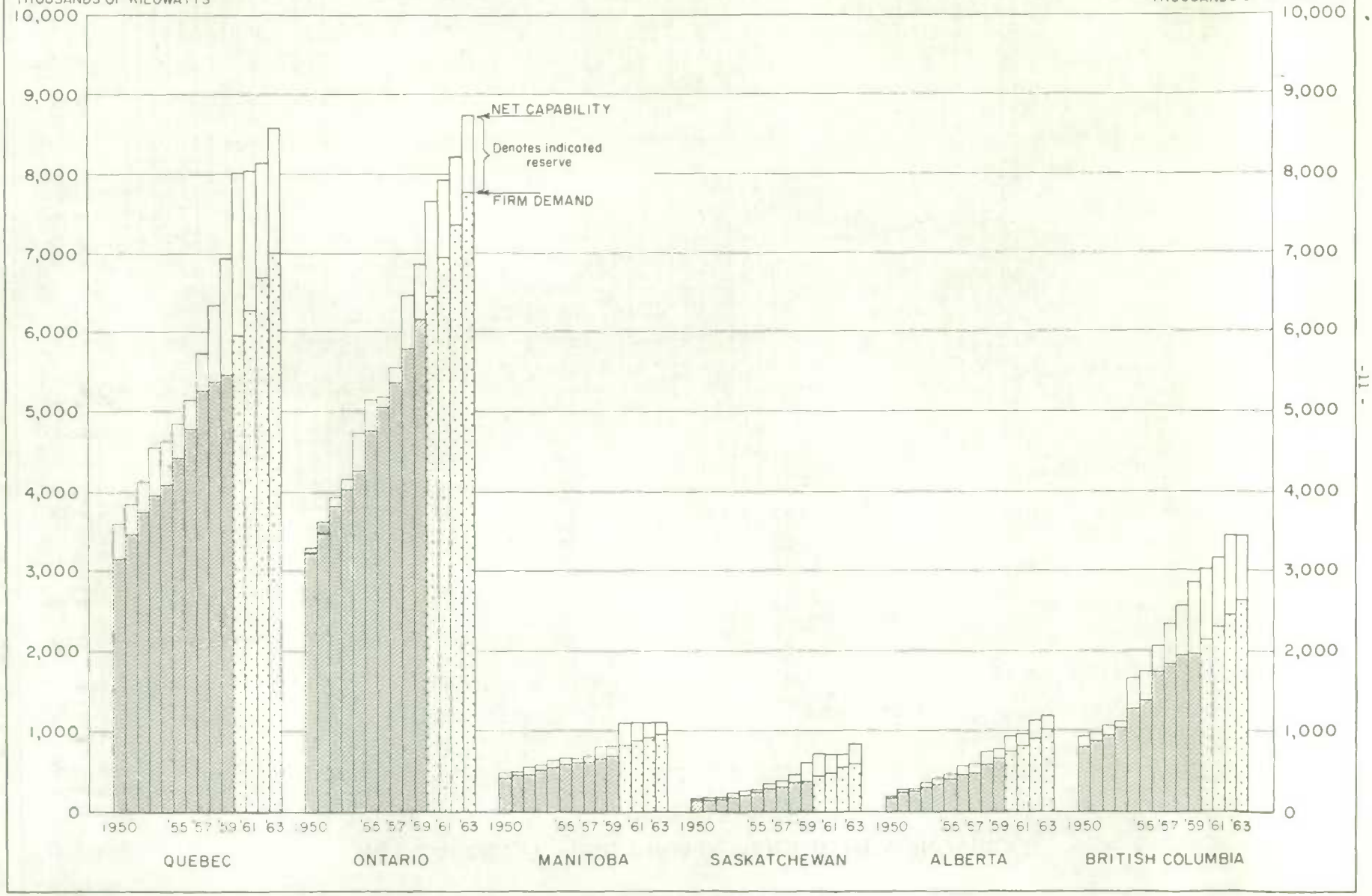
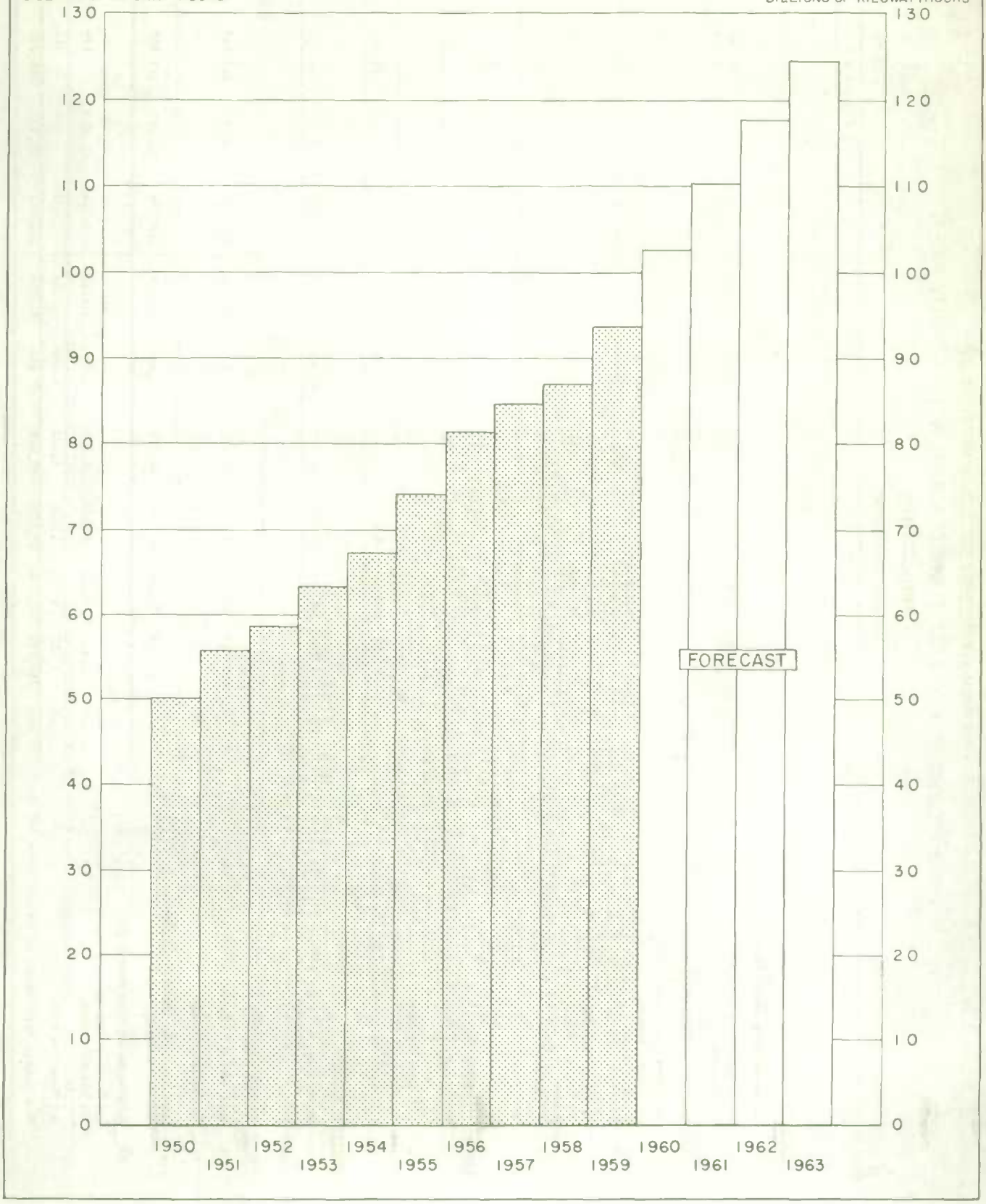


CHART-E

FIRM ENERGY REQUIREMENT WITHIN CANADA

1950—1963



SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - CANADA

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	8,575	11,719	12,211	12,841	14,143	15,912	17,086	18,573	18,413	18,737	19,605
(b) Thermal	788	1,609	1,936	2,142	2,326	2,716	3,119	4,268	4,916	5,524	5,882
2. Receipts of firm power from:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	-	4	5	56	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	176	176	166	147	150	152	152	152	106	106	106
4. Net capability (1 + 2 - 3)	9,187	13,156	13,986	14,892	16,319	18,476	20,053	22,689	23,223	24,155	25,381
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within Canada	8,313	11,355	12,472	13,668	14,664	15,568	16,201	17,529	18,710	19,999	21,170
6. Indicated shortage	217	4	64	47	2	-	-	-	-	-	-
7. Indicated demand within Canada (5 + 6)	8,530	11,359	12,536	13,715	14,666	15,568	16,201	17,529	18,710	19,999	21,170
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 657	+1,797	+1,450	+1,177	+1,653	+2,908	+3,852	+5,160	+4,513	+4,156	+4,211
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within Canada	49,627	67,317	73 748	79,913	84,222	87,102	93,656	102,794	110,287	117,869	124,743
10. Indicated shortage	378	11	378	1,546	554	-	-	-	-	-	-
11. Indicated firm energy requirement within Canada (9 + 10)	50,005	67,328	74,126	81,459	84,776	87,102	93,656	102,794	110,287	117,869	124,743
12. Deliveries of firm energy to:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	1,418	1,357	1,332	1,226	1,172	1,264	1,253	1,251	946	844	843
(c) Total (a + b)	1,418	1,357	1,332	1,226	1,172	1,264	1,253	1,251	946	844	843
13. Firm energy requirement on Canada (11 + 12)	51,423	68,685	75,458	82,685	85,948	88,366	94,909	104,045	111,233	118,713	125,586

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - NEWFOUNDLAND (including Labrador)

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	FORECAST 1961	FORECAST 1962	FORECAST 1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	176	207	207	215	220	243	243	252	259	352	373
(b) Thermal	12	16	16	27	29	28	24	45	44	44	44
2. Receipts of firm power from:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	-	-	-	6	6	8	7	8	9	9	9
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	188	223	223	236	243	263	260	289	294	387	408
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	177	201	206	222	222	231	231	237	241	264	300
6. Indicated shortage	-	1	1	2	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	177	202	207	224	222	231	231	237	241	264	300
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 11	+ 21	+ 16	+ 12	+ 21	+ 32	+ 29	+ 52	+ 53	+ 123	+ 108
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	1,058	1,225	1,289	1,374	1,333	1,320	1,369	1,424	1,496	1,683	1,885
10. Indicated shortage	-	9	10	-	-	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	1,058	1,234	1,299	1,374	1,333	1,320	1,369	1,424	1,496	1,683	1,885
12. Deliveries of firm energy to:											
(a) Other provinces	-	-	-	31	46	44	33	34	35	36	37
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	-	-	-	31	46	44	33	34	35	36	37
13. Firm energy requirement on the province (11 + 12)	1,058	1,234	1,299	1,405	1,379	1,364	1,402	1,458	1,531	1,719	1,922

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - PRINCE EDWARD ISLAND

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	-	-	-	-	-	-	-	-	-	-	-
(b) Thermal	10	18	18	18	25	26	25	37	37	37	37
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	25	26	25	37	37	37	37
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	8	11	12	12	14	16	19	21	24	28	30
6. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	8	11	12	12	14	16	19	21	24	28	30
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 2	+ 7	+ 6	+ 6	+ 11	+ 10	+ 6	+ 16	+ 13	+ 9	+ 7
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	31	46	51	53	60	69	81	85	96	108	118
10. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	31	46	51	53	60	69	81	85	96	108	118
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	46	51	53	60	69	81	85	96	108	118

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - NOVA SCOTIA

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	113	130	136	136	126	127	126	141	141	147	153
(b) Thermal	96	188	248	242	289	284	367	367	367	367	367
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	3	3	3	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	207	316	382	376	413	408	490	505	508	514	520
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	163	245	278	301	322	335	330	364	386	411	439
6. Indicated shortage	4	3	-	-	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	167	248	278	301	322	335	330	364	386	411	439
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 40	+ 68	+ 104	+ 75	+ 91	+ 73	+ 160	+ 141	+ 122	+ 103	+ 81
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	874	1,253	1,340	1,464	1,447	1,551	1,634	1,722	1,822	1,929	2,046
10. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	874	1,253	1,340	1,464	1,447	1,551	1,634	1,722	1,822	1,929	2,046
12. Deliveries of firm energy to:											
(a) Other provinces	6	7	8	8	8	10	14	15	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	6	7	8	8	8	10	14	15	-	-	-
13. Firm energy requirement on the province (11 + 12)	880	1,260	1,348	1,472	1,455	1,561	1,648	1,737	1,822	1,929	2,046

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - NEW BRUNSWICK

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	90	112	112	112	148	185	185	185	185	221	221
(b) Thermal	102	132	144	174	173	187	188	201	249	249	256
2. Receipts of firm power from:											
(a) Other provinces	2	2	4	5	5	8	7	8	5	6	6
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	5	5	5	5	8	9	9	9	8	8	8
4. Net capability (1 + 2 - 3)	189	241	255	286	318	371	371	385	431	468	475
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	177	210	235	243	258	273	291	312	337	360	380
6. Indicated shortage	-	-	1	-	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	177	210	236	243	258	273	291	312	337	360	380
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 12	+ 31	+ 19	+ 43	+ 60	+ 98	+ 80	+ 73	+ 94	+108	+ 95
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	970	1,199	1,248	1,275	1,347	1,402	1,523	1,753	1,902	2,008	2,115
10. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	970	1,199	1,248	1,275	1,347	1,402	1,523	1,753	1,902	2,008	2,115
12. Deliveries of firm energy to:											
(a) Other provinces	-	-	-	-	-	-	-	-	-	-	-
(b) United States	41	59	33	32	29	63	51	49	47	45	43
(c) Total (a + b)	41	59	33	32	29	63	51	49	47	45	43
13. Firm energy requirement on the province (11 + 12)	1,011	1,258	1,281	1,307	1,376	1,465	1,574	1,802	1,949	2,053	2,158

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - QUEBEC

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	4,370	5,378	5,583	5,854	6,406	6,992	7,612	8,656	8,677	8,767	9,217
(b) Thermal	26	35	36	36	55	61	69	105	105	112	112
2. Receipts of firm power from:											
(a) Other provinces	1	1	1	7	7	9	9	10	11	11	11
(b) United States	-	4	5	4	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces*	732	719	729	691	694	673	696	699	700	702	703
(b) United States	56	56	56	56	56	57	57	57	57	57	57
4. Net capability (1 + 2 - 3)	3,609	4,643	4,840	5,154	5,718	6,332	6,937	8,015	8,036	8,131	8,580
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	3,174	4,092	4,367	4,749	5,256	5,375	5,466	5,959	6,284	6,691	7,000
6. Indicated shortage	-	-	44	44	2	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	3,174	4,092	4,411	4,793	5,258	5,375	5,466	5,959	6,284	6,691	7,000
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 435	+ 551	+ 429	+ 361	+ 460	+ 957	+1,471	+2,056	+1,752	+1,440	+1,580
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	20,442	27,954	29,479	30,331	30,572	31,763	33,303	38,260	40,606	43,659	45,841
10. Indicated shortage	123	1	362	1,546	540	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	20,565	27,955	29,841	31,877	31,113	31,763	33,303	38,260	40,606	43,659	45,841
12. Deliveries of firm energy to:											
(a) Other provinces*	4,425	4,331	4,260	4,117	4,075	4,205	4,211	4,217	4,229	4,241	4,253
(b) United States	490	490	490	491	485	490	492	490	490	490	471
(c) Total (a + b)	4,915	4,821	4,750	4,608	4,560	4,695	4,703	4,707	4,719	4,731	4,744
13. Firm energy requirement on the province (11 + 12)	25,480	32,776	34,591	36,485	35,672	36,458	38,006	42,967	45,325	48,390	50,585

* Includes deliveries supplied from Cedars on a short term basis.

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - ONTARIO

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	FORECAST 1961	FORECAST 1962	FORECAST 1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	2,367	3,481	3,688	3,778	4,145	5,081	5,467	5,495	5,304	5,312	5,569
(b) Thermal	199	607	800	787	787	800	808	1,5 5	1,958	2,241	2,523
2. Receipts of firm power from:											
(a) Other provinces*	741	732	741	702	705	668	692	694	695	696	697
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	1	1	1	1	1	1	2	2	2	2	2
(b) United States	85	85	85	86	86	86	86	86	41	41	41
4. Net capability (1 + 2 - 3)	3,221	4,734	5,143	5,180	5,550	6,462	6,879	7,666	7,914	8,206	8,746
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	3,078	4,261	4,757	5,064	5,369	5,794	6,154	6,470	6,920	7,375	7,775
6. Indicated shortage	213	-	18	-	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	3,291	4,261	4,775	5,064	5,369	5,794	6,154	6,470	6,920	7,375	7,775
INDICATED RESERVE:											
8. Difference (4 - 7)	- 70	+ 473	+ 368	+ 116	+ 181	+ 668	+ 725	+1,196	+ 994	+ 831	+ 971
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	18,016	23,928	26,376	28,875	30,768	31,401	34,844	36,612	38,996	41,411	43,690
10. Indicated shortage	255	1	6	-	-	-	-	-	-	-	-
11. Indicated form energy requirement within province (9 + 10)	18,271	23,929	26,382	28,875	30,768	31,401	34,844	36,612	38,996	41,411	43,690
12. Deliveries of firm energy to:											
(a) Other provinces	2	3	3	4	4	5	5	5	5	5	5
(b) United States	703	624	687	703	658	711	710	712	409	309	309
(c) Total (a + b)	705	627	690	707	662	716	715	717	414	314	314
13. Firm energy requirement on the province (11 + 12)	18,976	24,556	27,072	29,582	31,430	32,117	35,559	37,329	39,410	41,725	44,004

* Includes deliveries received from Cedars on a short term basis.

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - MANITOBA

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	418	522	547	556	561	566	566	723	723	723	723
(b) Thermal	10	46	46	46	78	168	168	294	294	294	294
2. Receipts of firm power from:											
(a) Other provinces	68	80	79	64	69	68	72	73	76	76	76
(b) United States	-	-	-	-	-	-					
3. Deliveries of firm power to:											
(a) Other provinces	9	13	14	14	14	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	487	635	658	652	694	802	806	1,090	1,093	1,093	1,093
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	419	533	594	605	608	646	690	814	884	924	969
6. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	419	533	594	605	608	646	690	814	884	924	969
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 68	+ 102	+ 64	+ 47	+ 86	+ 156	+ 116	+ 276	+ 209	+ 169	+ 124
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	2,218	2,886	3,122	3,414	3,435	3,557	3,828	4,224	5,067	5,268	5,569
10. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	2,218	2,886	3,122	3,414	3,435	3,557	3,828	4,224	5,067	5,268	5,569
12. Deliveries of firm energy to:											
(a) Other provinces	79	114	114	94	136	-	-	-	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	79	114	114	94	136	-	-	-	-	-	-
13. Firm energy requirement on the province (11 + 12)	2,297	3,000	3,236	3,508	3,571	3,557	3,828	4,224	5,067	5,268	5,569

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - SASKATCHEWAN

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	85	85	82	82	87	87	88	108	111	111	245
(b) Thermal	129	243	257	320	376	451	583	669	669	669	669
2. Receipts of firm power from:											
(a) Other provinces	-	-	-	-	-	1	1	1	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	68	80	79	64	69	68	72	73	76	76	76
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	146	248	260	338	394	471	600	705	704	704	838
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	128	196	227	278	299	353	377	430	479	538	596
6. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	128	196	227	278	299	353	377	430	479	538	596
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 18	+ 52	+ 33	+ 60	+ 95	+ 118	+ 223	+ 275	+ 225	+ 166	+ 242
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	405	742	877	1,047	1,276	1,422	1,527	1,709	1,917	2,142	2,395
10. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	405	742	877	1,047	1,276	1,422	1,527	1,709	1,917	2,142	2,395
12. Deliveries of firm energy to:											
(a) Other provinces	500	558	571	554	503	504	517	520	530	530	530
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	500	558	571	554	503	504	517	520	530	530	530
13. Firm energy requirement on the province (11 + 12)	905	1,300	1,448	1,601	1,779	1,926	2,044	2,229	2,447	2,672	2,925

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - ALBERTA

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	FORECAST 1961	FORECAST 1962	FORECAST 1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	83	202	220	220	238	238	238	318	318	319	319
(b) Thermal	108	194	238	338	350	496	530	604	645	795	869
2. Receipts of firm power from:											
(a) Other provinces	-	4	-	4	4	4	3	3	2	1	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	3	-	3	-	-	1	1	1	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	188	400	455	562	592	737	770	924	965	1,115	1,188
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	176	313	391	451	476	580	649	729	809	899	1,000
6. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	176	313	391	451	476	580	649	729	809	899	1,000
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 12	+ 87	+ 64	+ 111	+ 116	+ 157	+ 121	+ 195	+ 156	+ 216	+ 188
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	1,023	1,581	1,859	2,180	2,424	2,760	3,156	3,534	3,936	4,375	4,843
10. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	1,023	1,581	1,859	2,180	2,424	2,760	3,156	3,534	3,936	4,375	4,843
12. Deliveries of firm energy to:											
(a) Other provinces	14	-	-	-	-	-	5	2	-	-	-
(b) United States	-	-	-	-	-	-	-	-	-	-	-
(c) Total (a + b)	14	-	-	-	-	-	5	2	-	-	-
13. Firm energy requirement on the province (11 + 12)	1,037	1,581	1,859	2,180	2,424	2,760	3,161	3,536	3,936	4,375	4,843

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - BRITISH COLUMBIA

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	852	1,578	1,614	1,866	2,187	2,356	2,524	2,651	2,651	2,741	2,741
(b) Thermal	96	130	133	153	163	212	353	372	539	707	702
2. Receipts of firm power from:											
(a) Other provinces	3	-	3	-	-	-	-	-	-	-	-
(b) United States	-	-	-	52	-	-	-	-	-	-	-
3. Deliveries of firm power to:											
(a) Other provinces	-	4	-	4	4	4	3	3	2	1	-
(b) United States	30	30	20	-	-	-	-	-	-	-	-
4. Net capability (1 + 2 - 3)	921	1,674	1,730	2,067	2,346	2,564	2,874	3,020	3,188	3,447	3,443
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	799	1,275	1,386	1,724	1,821	1,935	1,963	2,158	2,309	2,470	2,640
6. Indicated shortage	-	-	-	1	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	799	1,275	1,386	1,725	1,821	1,935	1,963	2,158	2,309	2,470	2,640
INDICATED RESERVE:											
8. Diffarence (4 - 7)	+ 122	+ 399	+ 344	+ 342	+ 525	+ 629	+ 911	+ 862	+ 879	+ 977	+ 803
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	4,523	6,414	8,011	9,802	11,445	11,726	12,234	13,290	14,263	15,092	16,041
10. Indicated shortage	-	-	-	-	14	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	4,523	6,414	8,011	9,802	11,459	11,726	12,234	13,290	14,263	15,092	16,041
12. Deliveries of firm energy to:											
(a) Other provinces	-	10	10	10	9	6	6	5	5	4	3
(b) United States	184	184	122	-	-	-	-	-	-	-	-
(c) Total (a + b)	184	194	132	10	9	6	6	5	5	4	3
13. Firm energy requirement on the province (11 + 12)	4,707	6,608	8,143	9,812	11,468	11,732	12,240	13,295	14,268	15,096	16,044

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE I

SUMMARY - YUKON AND NORTHWEST TERRITORIES

Thousands of kilowatts

	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963
CAPABILITY:											
1. Net generating capability:											
(a) Hydro	21	24	22	22	25	37	37	44	44	44	44
(b) Thermal	-	-	-	1	1	3	4	9	9	9	9
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	24	22	23	26	40	41	53	53	53	53
	ACTUAL							FORECAST			
FIRM POWER PEAK LOAD:											
5. Within province	14	18	19	19	19	30	31	35	37	39	41
6. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
7. Indicated demand within province (5 + 6)	14	18	19	19	19	30	31	35	37	39	41
INDICATED RESERVE:											
8. Difference (4 - 7)	+ 7	+ 6	+ 3	+ 4	+ 7	+ 10	+ 10	+ 18	+ 16	+ 14	+ 12
	MILLIONS OF KILOWATT-HOURS										
FIRM ENERGY REQUIREMENT:											
9. Firm energy requirement within province	67	89	96	98	115	131	157	181	186	194	200
10. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
11. Indicated firm energy requirement within province (9 + 10)	67	89	96	98	115	131	157	181	186	194	200
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)	67	89	96	98	115	131	157	181	186	194	200

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE II

NET GENERATING CAPABILITY WITHIN PROVINCES*

Thousands of kilowatts

PROVINCE	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963	PERCENTAGE CHANGE 1955-1959	1959-1963	1955-1963
Newfoundland (including Labrador)	188	223	223	242	249	271	267	297	303	396	417	19.7	56.2	87.0
Prince Edward Island	10	18	18	18	25	26	25	37	37	37	37	38.9	48.0	105.5
Nova Scotia	209	318	384	378	415	411	493	508	508	514	520	28.4	5.5	35.4
New Brunswick	192	244	256	286	321	372	373	386	434	470	477	45.7	27.9	86.3
Quebec	4,396	5,413	5,619	5,890	6,461	7,053	7,681	8,761	8,782	8,879	9,329	36.7	21.4	66.0
Ontario	2,566	4,088	4,488	4,565	4,932	5,881	6,275	7,060	7,262	7,553	8,092	39.8	28.9	80.3
Manitoba	428	568	593	602	639	734	734	1,017	1,017	1,017	1,017	23.8	38.5	70.9
Saskatchewan	214	328	339	402	463	538	671	777	780	780	914	68.4	36.2	169.6
Alberta	191	396	458	558	588	734	768	922	963	1,114	1,188	67.7	54.7	159.4
British Columbia	948	1,708	1,747	2,019	2,350	2,568	2,877	3,023	3,190	3,448	3,443	64.7	19.7	97.1
Yukon and N.W.T.	21	24	22	23	26	40	41	53	53	53	53	86.4	29.3	140.9
CANADA	9,363	13,328	14,147	14,983	16,469	18,628	20,205	22,841	23,329	24,261	25,487	42.8	26.1	80.1

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

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE III

FIRM POWER PEAK LOAD WITHIN PROVINCES*

Thousands of kilowatts

PROVINCE	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963	PERCENTAGE CHANGE 1955-1959	1959-1963	1955-1963
Newfoundland (including Labrador)	177	202	207	224	222	231	231	237	241	264	300	11.6	29.9	44.9
Prince Edward Island	8	11	12	12	14	16	19	21	24	28	30	58.3	57.9	150.0
Nova Scotia	167	248	278	301	322	335	330	364	386	411	439	18.7	33.0	57.9
New Brunswick	177	210	236	243	258	273	291	312	337	360	380	23.3	30.6	61.0
Quebec	3,174	4,092	4,411	4,793	5,258	5,375	5,466	5,959	6,284	6,691	7,000	23.9	28.1	58.7
Ontario	3,291	4,261	4,775	5,064	5,369	5,794	6,154	6,470	6,920	7,375	7,775	28.9	26.3	62.8
Manitoba	419	533	594	605	608	646	690	814	884	924	969	16.2	40.4	63.1
Saskatchewan	128	196	227	278	299	353	377	430	479	538	596	66.1	58.1	162.5
Alberta	176	313	391	451	476	580	649	729	809	899	1,000	66.0	54.1	155.7
British Columbia	799	1,275	1,386	1,725	1,821	1,935	1,963	2,158	2,309	2,470	2,640	41.6	34.5	90.5
Yukon and N.W.T.	14	18	19	19	19	30	31	35	37	39	41	63.1	32.2	115.8
CANADA	8,530	11,359	12,536	13,715	14,666	15,568	16,201	17,529	18,710	19,999	21,170	29.2	30.7	68.9

* Indicated Firm Demand (Table I, item 7).

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE IV

FIRM ENERGY REQUIREMENT WITHIN PROVINCES*

Millions of Kilowatt Hours

PROVINCE	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963	PERCENTAGE CHANGE 1955-1959	1959-1963	1955-1963
Newfoundland (including Labrador)	1,058	1,234	1,299	1,374	1,333	1,320	1,369	1,424	1,496	1,683	1,885	5.4	37.7	45.1
Prince Edward Island	31	46	51	53	60	69	81	85	96	108	118	58.8	45.7	131.4
Nova Scotia	874	1,253	1,340	1,464	1,447	1,551	1,634	1,722	1,822	1,929	2,046	21.9	25.2	52.7
New Brunswick	970	1,199	1,248	1,275	1,347	1,402	1,523	1,753	1,902	2,008	2,115	22.0	38.9	69.5
Quebec	20,565	27,955	29,841	31,877	31,112	31,763	33,303	38,260	40,606	43,659	45,841	11.6	37.6	53.6
Ontario	18,271	23,929	26,382	28,875	30,768	31,401	34,844	36,612	38,996	41,411	43,690	32.1	25.4	65.6
Manitoba	2,218	2,886	3,122	3,414	3,435	3,557	3,828	4,224	5,067	5,268	5,569	22.6	45.5	78.4
Saskatchewan	405	742	877	1,047	1,276	1,422	1,527	1,709	1,917	2,142	2,395	74.1	56.8	173.1
Alberta	1,023	1,581	1,859	2,180	2,424	2,760	3,156	3,534	3,936	4,375	4,843	69.8	53.4	160.5
British Columbia	4,523	6,414	8,011	9,802	11,459	11,726	12,234	13,290	14,263	15,092	16,041	52.7	31.1	100.2
Yukon and N.W.T.	67	89	96	98	115	131	157	181	186	194	200	63.5	27.4	108.3
CANADA	50,005	67,328	74,126	81,459	84,776	87,102	93,656	102,794	110,287	117,869	124,743	26.3	33.2	68.3

* Table I, item 11.

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE V

INDICATED RESERVE*

Thousands of Kilowatts

PROVINCE	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963	PERCENTAGE CHANGE 1955-1959	1959-1963	1955-1963
Newfoundland (including Labrador)														
1. Gross capability	188	223	223	242	249	271	267	297	303	396	417	19.7	56.2	87.0
2. Total firm demand on the province	177	202	207	230	228	239	238	245	250	273	309	15.0	29.8	49.3
3. Indicated reserve (1 - 2)	11	21	16	12	21	32	29	52	53	123	108	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	6.2	10.4	7.7	5.2	9.2	13.4	12.2	21.2	21.2	45.0	34.9	xxx	xxx	xxx
Prince Edward Island														
1. Gross capability	10	18	18	18	25	26	25	37	37	37	37	38.9	48.0	105.5
2. Total firm demand on the province	8	11	12	12	14	16	19	21	24	28	30	58.3	57.9	150.0
3. Indicated reserve (1 - 2)	2	7	6	6	11	10	6	16	13	9	7	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	25.0	63.6	50.0	50.0	78.6	62.5	31.6	76.2	54.2	32.1	23.3	xxx	xxx	xxx
Nova Scotia														
1. Gross capability	209	318	384	378	415	411	493	508	508	514	520	28.4	5.5	35.4
2. Total firm demand on the province	169	250	280	303	324	338	333	367	386	411	439	18.9	31.8	56.8
3. Indicated reserve (1 - 2)	40	68	104	75	91	73	160	141	122	103	81	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	23.7	27.2	37.1	24.8	28.1	21.6	48.0	38.4	31.6	25.1	18.4	xxx	xxx	xxx
New Brunswick														
1. Gross capability	194	246	260	291	326	380	380	394	439	476	483	46.1	27.1	85.8
2. Total firm demand on the province	182	215	241	248	266	282	300	321	345	368	388	24.5	29.3	61.0
3. Indicated reserve (1 - 2)	12	31	19	43	60	98	80	73	94	108	95	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	6.6	14.4	7.9	17.3	22.6	34.8	26.7	22.7	27.2	29.3	24.5	xxx	xxx	xxx

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

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE V

INDICATED RESERVE*

Thousands of Kilowatts

PROVINCE	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963	PERCENTAGE CHANGE 1955-1959	1959-1963	1955-1963
Quebec														
1. Gross capability	4,397	5,418	5,625	5,901	6,468	7,062	7,690	8,771	8,793	8,890	9,340	36.7	21.4	66.0
2. Total firm demand on the province	3,962	4,867	5,196	5,540	6,008	6,105	6,219	6,715	7,041	7,450	7,760	19.7	24.8	49.3
3. Indicated reserve (1 - 2)	435	551	429	361	460	957	1,471	2,056	1,752	1,440	1,580	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	11.0	11.3	8.3	6.5	7.7	15.7	23.6	30.6	24.9	19.3	20.4	xxx	xxx	xxx
Ontario														
1. Gross capability	3,307	4,820	5,229	5,267	5,637	6,549	6,967	7,754	7,957	8,249	8,789	33.2	26.1	68.1
2. Total firm demand on the province	3,377	4,347	4,861	5,151	5,456	5,881	6,242	6,558	6,963	7,418	7,818	28.4	25.2	60.8
3. Indicated reserve (1 - 2)	- 70	473	368	116	181	668	725	1,196	994	831	971	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	-	11.1	7.7	2.3	3.3	11.4	11.6	18.2	14.3	11.2	12.4	xxx	xxx	xxx
Manitoba														
1. Gross capability	496	648	672	666	708	802	806	1,090	1,093	1,093	1,093	19.9	35.6	62.6
2. Total firm demand on the province	428	546	608	619	622	646	690	814	884	924	969	13.5	40.4	59.4
3. Indicated reserve (1 - 2)	68	102	64	47	86	156	116	276	209	169	124	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	15.9	18.7	10.5	7.6	13.8	24.1	16.8	33.9	23.6	18.3	12.8	xxx	xxx	xxx
Saskatchewan														
1. Gross capability	214	328	339	402	463	539	672	778	780	780	914	98.2	36.0	169.6
2. Total firm demand on the province	196	276	306	342	368	421	449	503	555	614	672	46.7	49.7	119.6
3. Indicated reserve (1 - 2)	18	52	33	60	95	118	223	275	225	166	242	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	20.0	21.3	12.0	17.5	25.8	28.0	49.7	54.7	40.5	27.0	36.0	xxx	xxx	xxx

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

SIXTH ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

TABLE V

INDICATED RESERVE*

Thousands of Kilowatts

PROVINCE	1950	1954	1955	1956	1957	1958	1959	FORECAST 1960	1961	1962	1963	PERCENTAGE CHANGE 1955-1959	1959-1963	1955-1963
Alberta														
1. Gross capability	191	400	458	562	592	738	771	925	965	1,115	1,188	68.3	54.1	159.4
2. Total firm demand on the province	179	313	394	451	476	581	650	730	809	899	1,000	65.0	53.8	153.8
3. Indicated reserve (1 - 2)	12	87	64	111	116	157	121	195	156	216	188	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	6.7	27.8	16.2	24.6	24.4	27.0	18.6	26.7	19.3	24.0	18.8	xxx	xxx	xxx
British Columbia														
1. Gross capability	951	1,708	1,750	2,071	2,350	2,568	2,877	3,023	3,190	3,448	3,443	64.4	19.7	96.7
2. Total firm demand on the province	829	1,309	1,406	1,729	1,825	1,939	1,966	2,161	2,311	2,471	2,640	39.8	34.3	87.8
3. Indicated reserve (1 - 2)	122	399	344	342	525	629	911	862	879	977	803	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	14.7	30.5	24.5	19.8	28.8	32.4	46.3	39.9	38.0	39.5	30.4	xxx	xxx	xxx
Yukon and N.W.T.														
1. Gross capability	21	24	22	23	26	40	41	53	53	53	53	86.4	29.3	140.9
2. Total firm demand on the province	14	18	19	19	19	30	31	35	37	39	41	63.1	32.2	115.8
3. Indicated reserve (1 - 2)	7	6	3	4	7	10	10	18	16	14	12	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	50.0	33.3	15.8	21.1	36.8	33.3	32.2	51.4	43.2	35.9	29.3	xxx	xxx	xxx
CANADA														
1. Gross capability	9,363	13,332	14,152	15,039	16,469	18,628	20,205	22,841	23,329	24,261	25,487	42.8	26.1	80.1
2. Total firm demand on Canada	8,706	11,535	12,702	13,862	14,816	15,720	16,353	17,681	18,816	20,105	21,276	28.7	30.1	67.5
3. Indicated reserve (1 - 2)	657	1,797	1,450	1,177	1,653	2,908	3,852	5,160	4,513	4,156	4,211	xxx	xxx	xxx
4. Indicated reserve expressed as a % of total firm demand	7.5	15.6	11.4	8.5	11.2	18.5	23.5	29.2	24.0	20.7	19.8	xxx	xxx	xxx

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

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The Policy Sub-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.

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Members of the Surveys Sub-Committee serve as area representatives. 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.

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