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ANNUAL

CANADA

ANNUAL ELECTRIC POWER SURVEY OF CAPABILITY AND LOAD

1964 Actual

1965 - 1969 Forecast

DOMINION BUREAU OF STATISTICS

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Industry Division
Energy Statistics Section

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SYMBOLS

The interpretation of the symbols used in the tables throughout this publication is as follows:

r Revised figures.

.. Figures not available.

... Figures not appropriate or not applicable.

- Nil or zero.

INTRODUCTION

This report presents the results of the Annual Electric Power Survey of Capability and Load which was conducted in March 1965. The survey covers all producers of electric energy in Canada which generate 10 million kwh. or more per annum. This report, therefore, covers the same group of firms which provide the statistics for the monthly "Electric Power Statistics" report (catalogue No. 57-001). The report is organized in such a manner that there is a direct comparison and link with the monthly "Electric Power Statistics" in that the generation figures are common to the two publications: Any differences are due to late revisions.

There are approximately 150 responding firms in the group, about half of which are utilities and half industrial establishments. The combined group accounts for 99.5 per cent of all generation, and all the imports and exports. The utilities group contributes approximately 80 per cent of the generation to the Canada total.

The survey is carried out in co-operation with the Canadian Electrical Association. Area representatives of the Association collect and edit the returns, which are forwarded to the Dominion Bureau of Statistics for final revision, editing, and compilation. The assistance received from the Canadian Electrical Association and its members has been invaluable.

Review of Survey Results

Total net generating capability in 1964 for firms which generate over 10 million kwh. per year increased 547,000 kw or 2.15 per cent to 26,025,000 kw. The forecast years 1965-69 indicate an anticipated growth of 11,543,000 kw. or a compound growth rate of 7.62 per cent as compared with the 1954-1964 growth rate of 6.92 per cent. Thermal capability is expected to grow at the rate of 12.7 per cent in the forecast period compared with 14.2 per cent in the previous ten year period, while hydro-electric capability is expected to increase at 5.9 per cent compared with 5.5 per cent in the previous ten years. The reversal of downward trend in hydro-electric capability which has been evident in the past few years is due to the large power projects which are now under construction in relatively remote areas and which will be put into service in the forecast years. The hydro-electric capability forecast figures do not include the Hamilton Falls development in Labrador. Ninety-four per cent of the thermal capability growth will be in conventional steam plants.

The first nuclear capability is forecast for 1967. The nuclear capability does not include the 20,000 kw. plant at Rolphton, Ontario, which is an experimental plant and therfore is no longer considered part of the capability. However, energy generated in this plant has been fed into the system and is included in Table 1.

In 1963 it was forecast that the net generating capability in 1964 would be 26,759,000 kw. or 734,000 kw higher than that actually obtained. This indicates that the completion of some plants has been delayed until 1965. The 1964 capability was significantly below the 1963 forecast in Ontario, Manitoba, Alberta and British Columbia.

The largest absolute growths in generating capability for the five forecast years are indicated for Quebec - 3,683,000 kw; Ontario, 3,517,000 kw; British Columbia 1,752,000 kw, and Alberta 822,000 kw. Eighty-five per cent of the increased generating capability in Quebec will be hydro capability. Ontario plans to increase its capability by adding 398,000 kw hydro and 3,119,000 kw in thermal capability, including 200,000 kw nuclear. British Columbia is forecasting an increase of 1,374,000 kw in hydro capability and 378,000 kw in thermal capability while Alberta estimates increases of 340,000 kw and 482,000 kw in hydro and thermal capability respectively.

In the period from 1954 to 1964 the growth rate of firm power peak load in Canada was 7.08 per cent. This growth rate is expected to drop slightly to 6.92 per cent during the forecast years 1964 to 1969. During the forecast period the indicated reserve is expected to increase from 3,379,000 kw in 1964 to 5,959,000 kw in 1969. The indicated reserve, stated as a percentage of firm power peak load, amounted to 14.9 per cent in 1964 and is forecast to reach 18.9 per cent in 1969.

Indicated reserve data does not take into account reduction in generating capability due to adverse flow conditions such as ice, low water, etc., which occur during the peak load season. In 1964, this reduction in generating capability amounted to about 690,000 kw with Quebec accounting for 68.9 per cent, Ontario 28.0 per cent, Newfoundland 1.8 per cent and British Columbia 1.3 per cent.

Firm energy requirements increased 10.3 per cent from 117,254 million kwh. in 1963 to 129,362 million kwh. in 1964 compared with a growth of 6.8 per cent in the previous ten year period and a forecast growth rate of 6.6 per cent for the period 1964-1969. The additional firm energy requirement was supplied by an increase in net generation of 12,632 million kwh. Net exports increased by 508 million kwh in 1964 and secondary energy delivered within Canada rose by 16 million kwh.

Concepts and Definitions

Table 1, Capability, Firm Power Peak Load and Energy Requirements:

The generating capability and firm power peak load concepts are virtually unchanged from previous reports. Generating capability measures the expected power of all available generating facilities of the province (or nation) at the time of one-hour firm peak load for each of the respondents. This may differ from the generating capacity as measured by the name plate rating of the equipment and published in the "Prime Mover and Electric Generating Equipment" report.

The variations between generating capability and generating capacity may be caused by high water in reservoirs resulting in a higher water head and greater generation than the name plate capacity; the impossibility of placing all pieces of equipment on the line at the same time, low water, ice, or some equipment being considered unreliable, thereby resulting in generation below capacity.

All figures in Table 1 of the report are calculated at the time of the one-hour peak load for each of the respondents. As a result, capability and peak loads are non-coincident (the arithmetic sum of the actual peak loads regardless of time of occurrence) and may be equal to, or greater than, the coincident peak load for each of the provinces. Insofar as the utilities have about 80 per cent of the load of the nation and most of the peak loads occur in December, the variation from the coincident peak will not be too great. Two major systems which account for almost 40 per cent of the capability have only a slight variation between their coincident and non-coincident peak loads. Of thirty major systems serving Canada, nine had peak loads on December 21, eight on other dates between November 30 and December 31 and thirteen outside this period.

Receipts and deliveries of firm power used in calculating net capability are the interprovincial and international transfers of power under firm contracts, or the best estimate of firm obligations possible in the absence of contracts. The actual receipts and deliveries of firm and secondary power are taken into account in the calculation of firm power peak loads.

Peak loads are the total demands within a province after all inter-changes have been taken into account to remove any duplication. The peak loads include all electricity consumed by ultimate customers, line losses, and manufacturing plants own consumption, but do not include generating station service which is deducted before arriving at generating capability. Firm power peak loads exclude the secondary or surplus energy used by ultimate customers on an interruptible basis, as these are not firm obligations.

Indicated shortages (line 15, Table 1) are a measure of the firm power commitments that a system was not able to meet at the time of its peak load.

The indicated power reserve of a province (shown in Table 1) is the reserve after all firm obligations and shortages have been met or received. It is the difference between net capability and total firm peak load within the province or gross capability less firm power peak load on the province, and is a measure of the industries' ability to satisfy demands of a province and meet contingencies.

Since not all systems are fully interconnected, the reserves of power shown cannot always be fully utilized.

Net generation figures which are identical with the figures presented in the monthly "Electric Power Statistics" report (or revisions thereof) are exclusive of station service and, for 1964, are subdivided by type of generation. No forecasts of generation are given for 1965-69.

Although complete historical figures are not currently available, it is expected that they will be included in future reports.

Firm energy receipts and deliveries are the actual receipts and deliveries under firm contracts or obligations.

Secondary energy delivered within the province is the surplus energy sold at time of low demand and when surplus generating capability is available. This energy may be interrupted at any time and, consequently, sells at very low rates, generally for use in electric boilers.

Firm energy available is the measure of primary demands of electric energy, including residential, commercial and power sales, and all line losses after deducting net exports. It is an important economic indicator and, as such, is of major importance in forecasting.

Indicated shortage (line 38, Table 1) is an estimate of the total quantity of energy a system was unable to deliver due to its inability to meet firm power commitments during the year; no shortages have occurred since 1957.

Firm energy requirements are a measure of the needs for electric energy that have been or can be met (firm energy available) and those that cannot be serviced (shortage).

CHART — A

TOTAL GENERATING CAPABILITY WITHIN CANADA

1954 — 1969

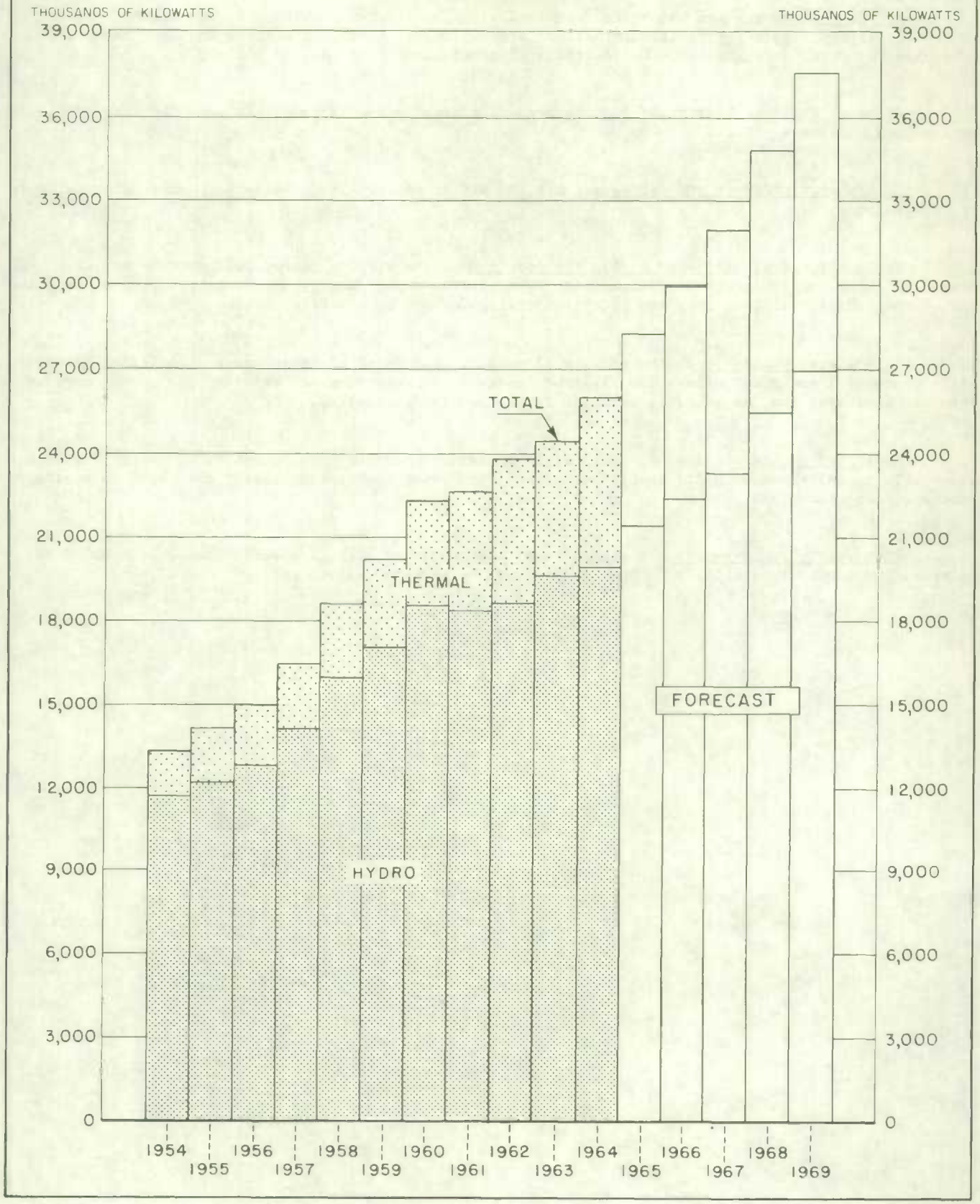


CHART — 8

NET CAPABILITY AND PEAK LOADS WITHIN CANADA

1954 — 1969

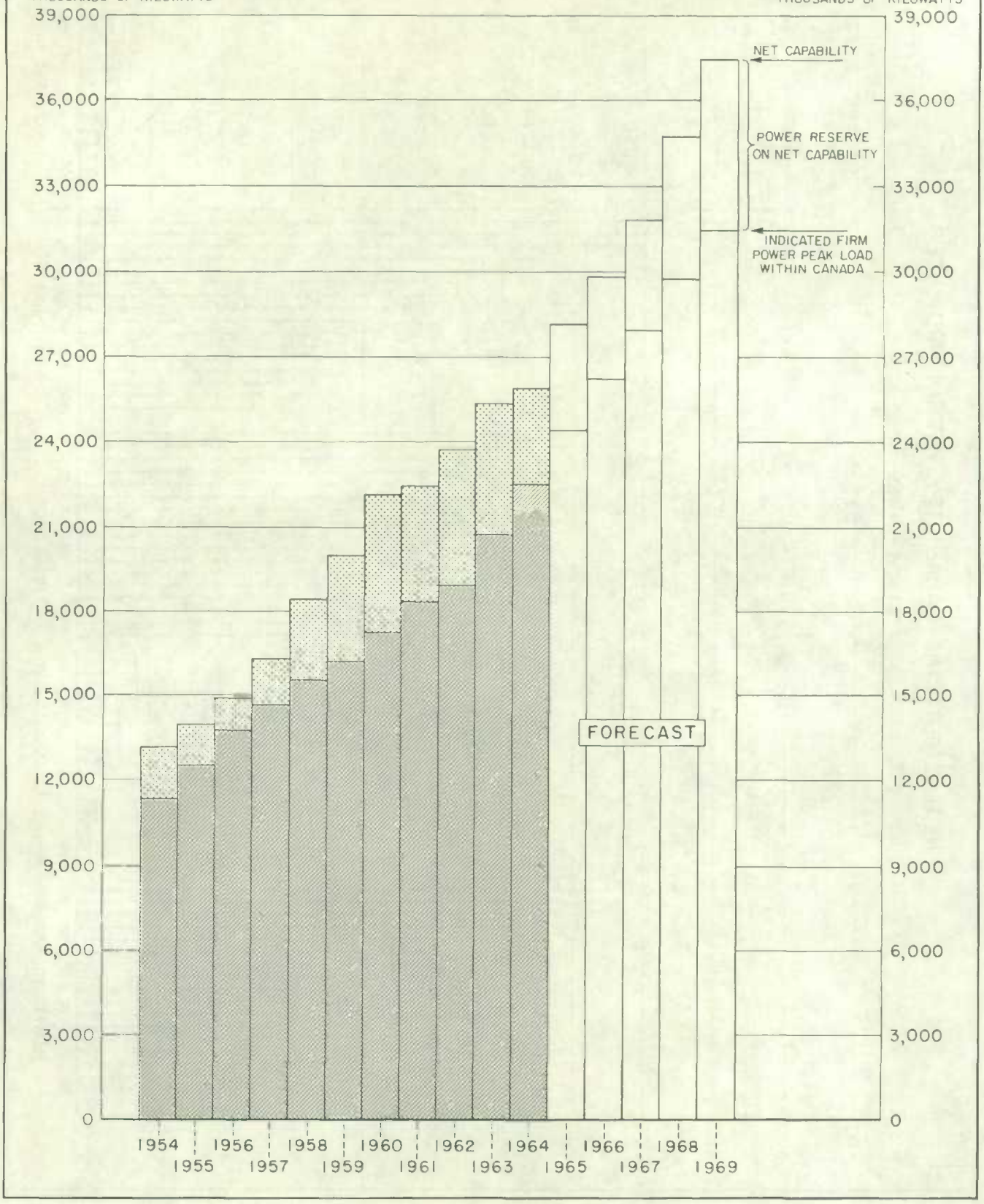


CHART — C

NET GENERATING CAPABILITY WITHIN PROVINCES

1954 — 1969

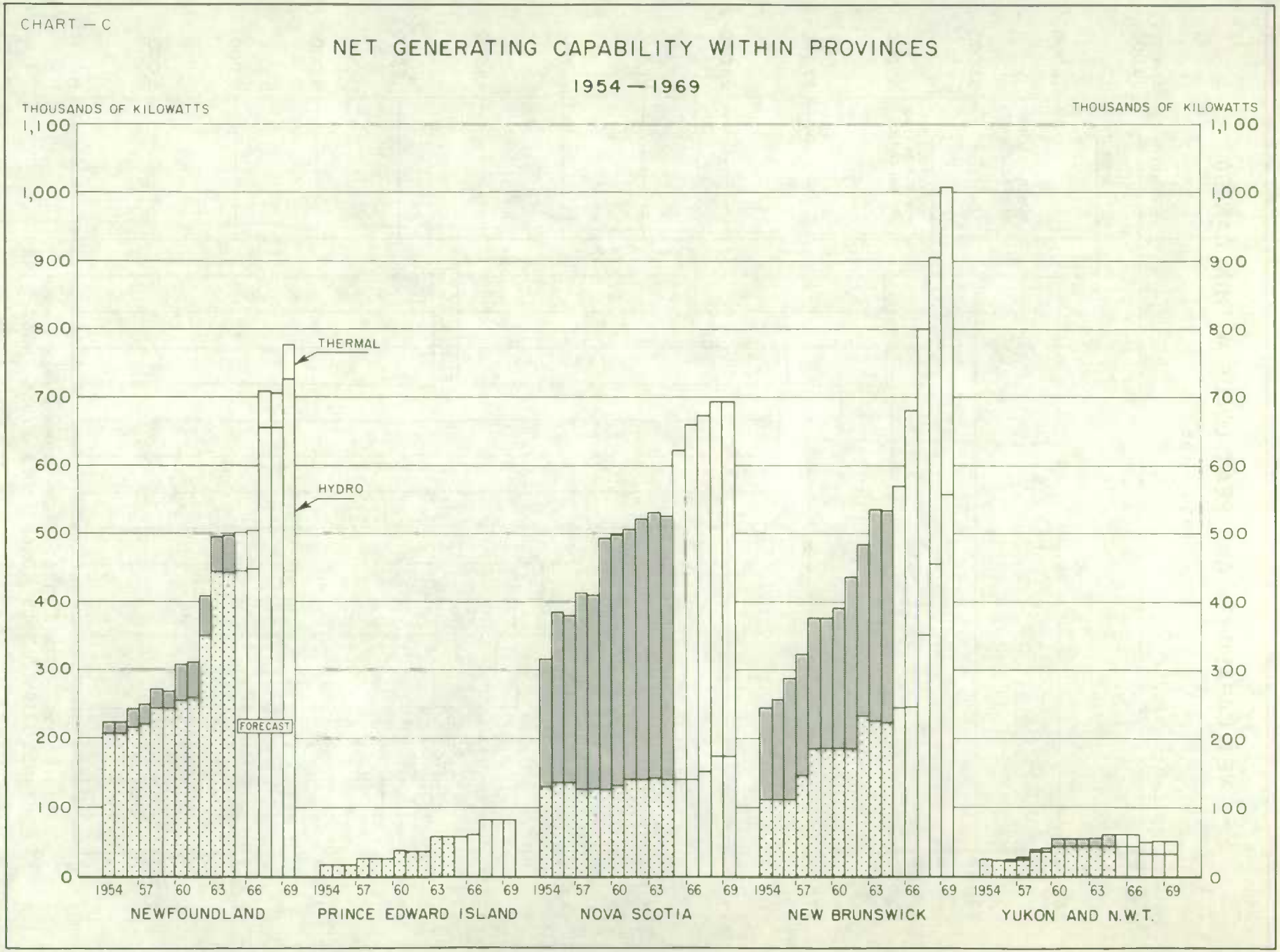
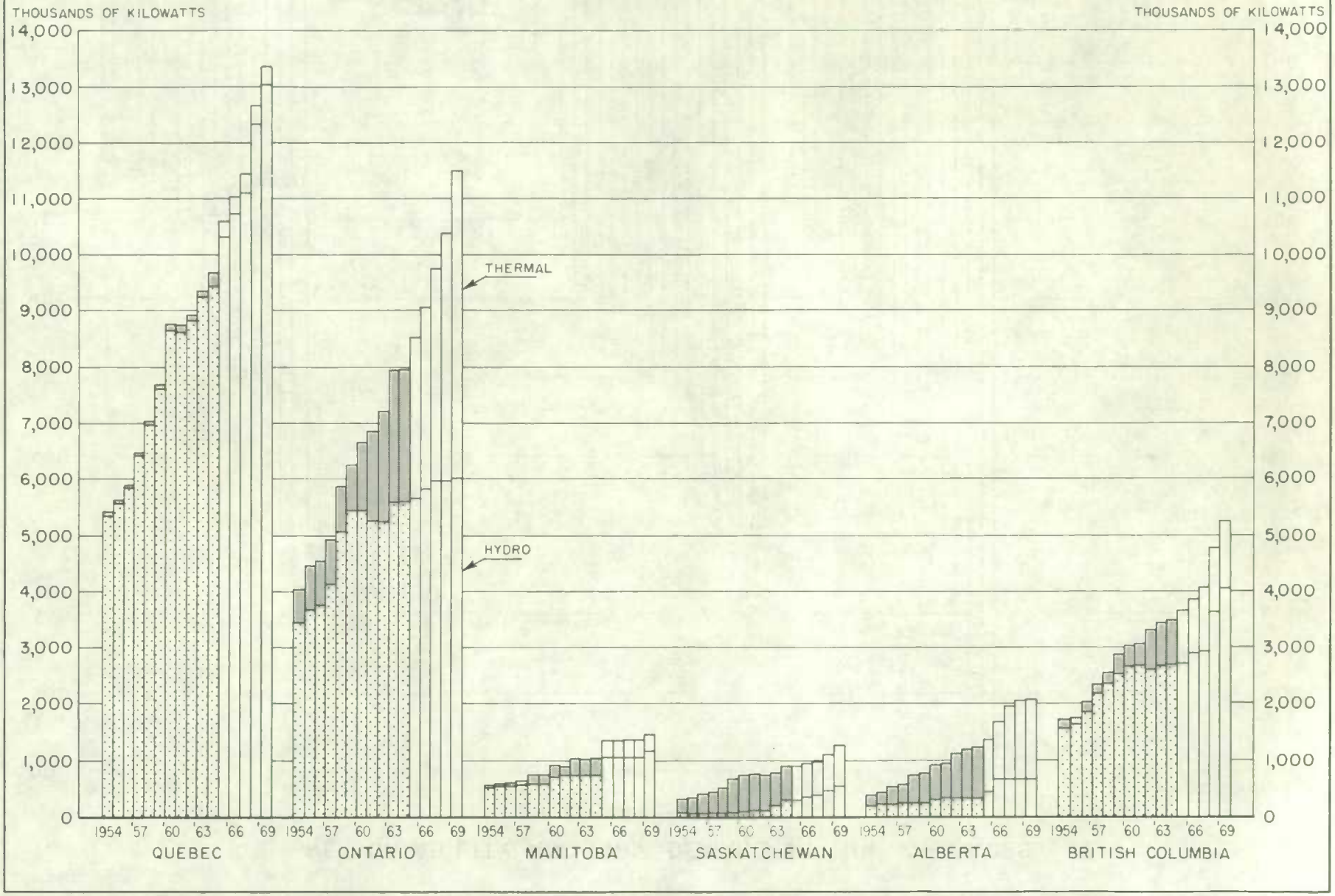


CHART — C

NET GENERATING CAPABILITY WITHIN PROVINCES

1954 — 1969



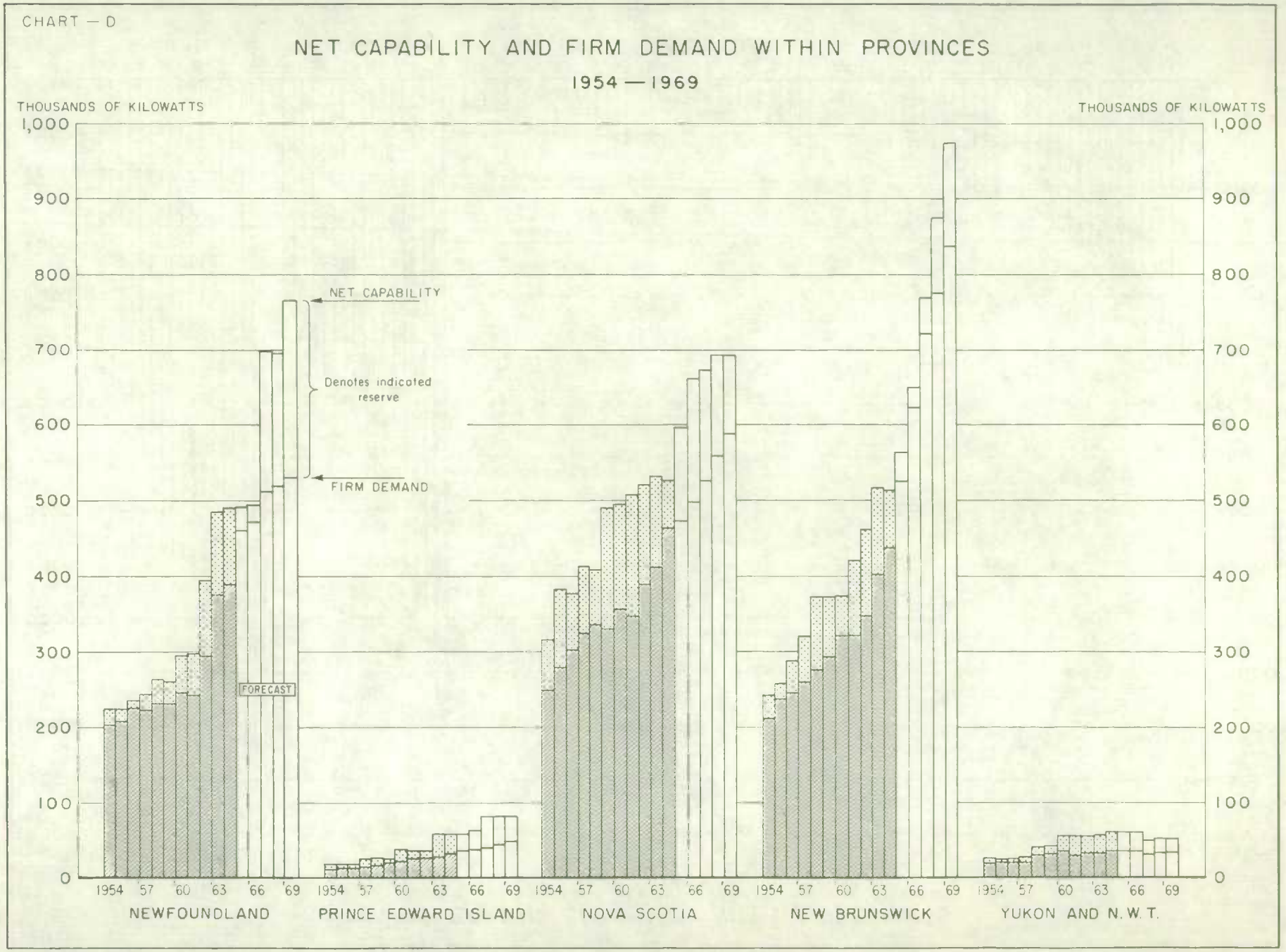


CHART — D
NET CAPABILITY AND FIRM DEMAND WITHIN PROVINCES
1954 — 1969
THOUSANDS OF KILOWATTS
THOUSANDS OF KILOWATTS
1,000
900
800
700
600
500
400
300
200
100
0
NET CAPABILITY
Denotes indicated reserve
FIRM DEMAND
FORECAST
1954 '57 '60 '63 '66 '69
NEWFOUNDLAND
PRINCE EDWARD ISLAND
NOVA SCOTIA
NEW BRUNSWICK
YUKON AND N.W.T.

CHART — D

NET CAPABILITY AND FIRM DEMAND WITHIN PROVINCES

1954 — 1969

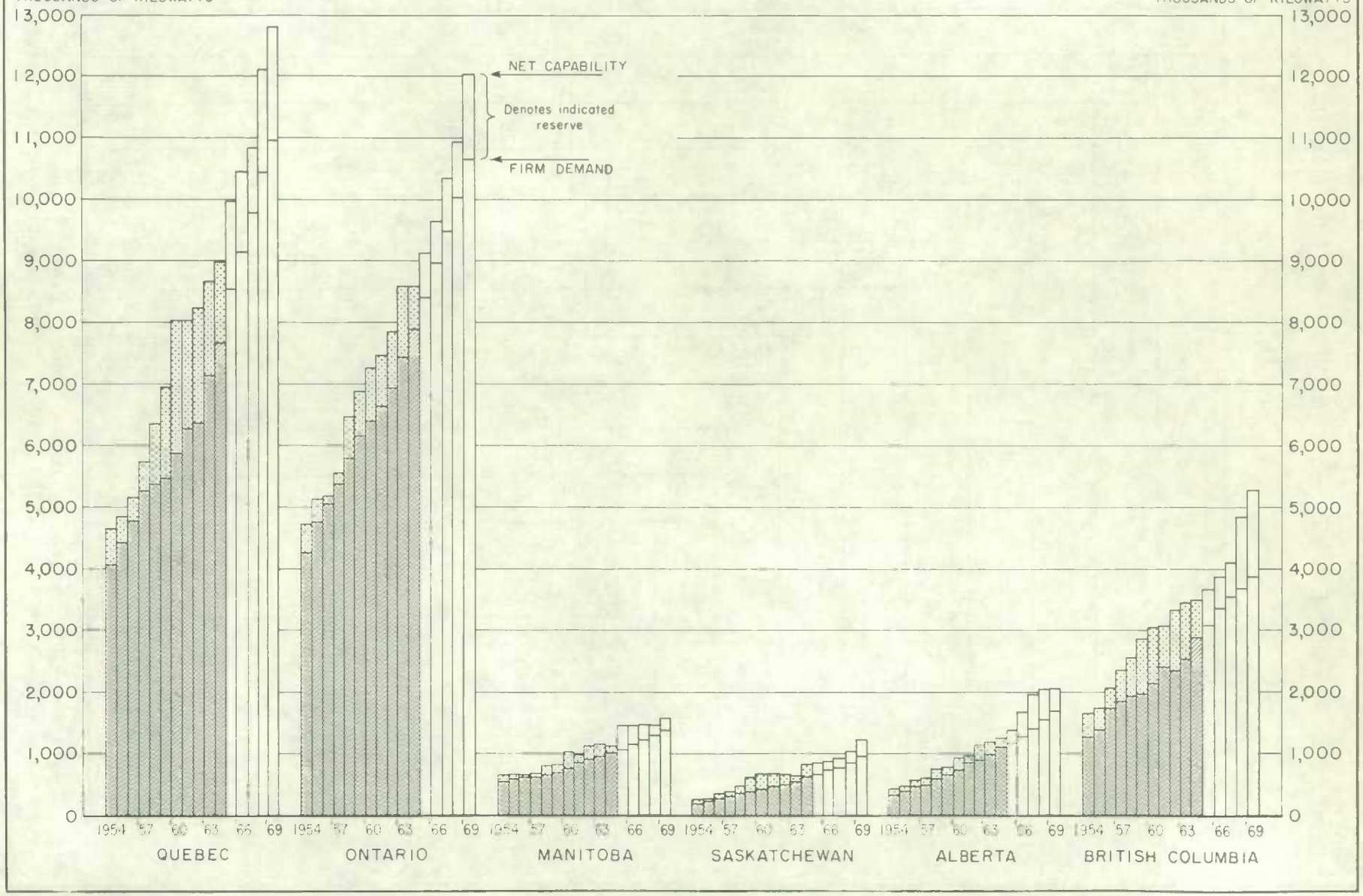
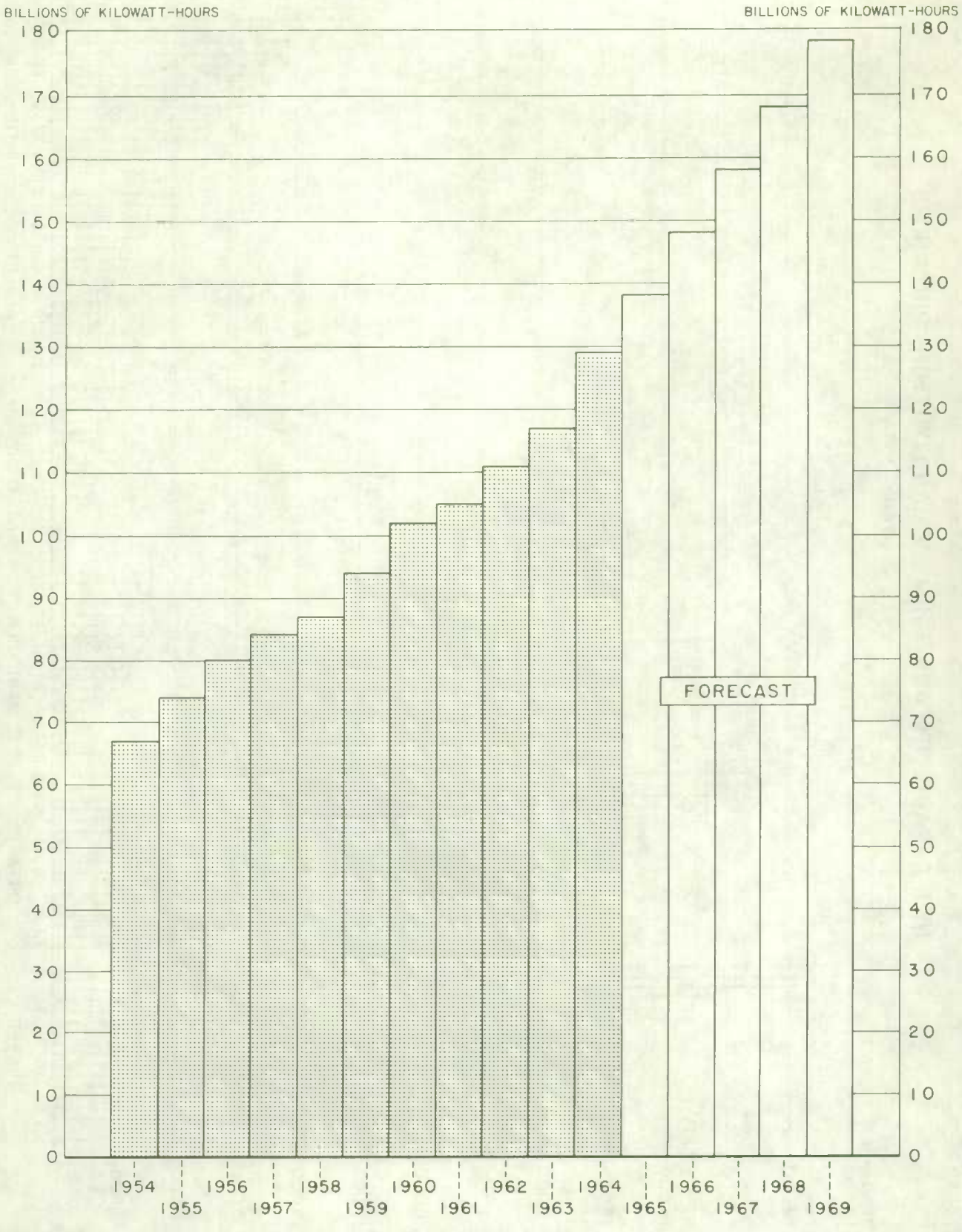


CHART — E

FIRM ENERGY REQUIREMENT WITHIN CANADA

1954 — 1969



Canada

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

	Capability and peak load	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		thousands of kilowatts										
	Capability:											
	Net generating capability:											
1.	Hydro-electric	11,719	18,516	18,389	18,651	19,666	19,964	21,293	22,259	22,886	25,058	26,551
2.	Steam - Conventional			3,773[r]	4,596	5,194	5,422	6,348	6,976	8,146	8,869	10,096
3.	Nuclear			-	-	-	-	-	-	200	200	200
		1,609	3,824									
4.	Internal combustion			240	251	236	255	260	268	271	275	279
5.	Gas turbine			351	371	382	384	384	441	441	442	442
6.	Total net generating capability	13,328	22,340	22,753[r]	23,869	25,478	26,025	28,285	29,944	31,944	34,844	37,568
	Receipts of firm power from:											
7.	Other provinces	...	...	...	...	...	...	...	...	...	...	...
8.	United States	4	-	2	4	2	2	2	2	2	2	2
9.	Total receipts	4	-	2	4	2	2	2	2	2	2	2
	Deliveries of firm power to:											
10.	Other provinces	...	...	...	...	...	...	...	...	...	...	...
11.	United States	176	166	146	121	122	129	92	94	96	100	104
12.	Total deliveries	176	166	146	121	122	129	92	94	96	100	104
13.	Total net capability (6 + 9 - 12)	13,156	22,174	22,609[r]	23,752	25,358	25,898	28,195	29,852	31,850	34,746	37,466
	Peak loads:											
14.	Firm power peak load within province	11,355	17,264	18,353	18,972	20,757	22,506	24,392	26,176	27,926	29,681	31,440
15.	Indicated shortages	4	-	-	-	28	13	30	45	53	59	67
16.	Total indicated firm power peak load within province (14 + 15)	11,359	17,264	18,353	18,972	20,785	22,519	24,422	26,221	27,979	29,740	31,507
17.	Firm power peak load on province (12 + 16)	11,535	17,430	18,499	19,093	20,907	22,648	24,514	26,315	28,075	29,840	31,611
	Indicated reserve:											
18.	Indicated reserve (13 - 16)	1,797	4,910	4,256[r]	4,780	4,573	3,379	3,773	3,631	3,871	5,006	5,959
18a	Reduction in generating capability due to adverse conditions	..	..	..	..	779	687	...	...	...	...	...

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

Energy	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	millions of kilowatt-hours										
Net generation by:											
19. Hydro-electric	..	105,770	103,692	103,695	103,539	113,212	...	...	...	...	...
20. Steam - Conventional)			(8,822	12,543	17,111	20,051	...	...	...	...	...
21. Nuclear)			(-	22	87	141	...	...	...	...	...
)	..	8,271	(								
22. Internal combustion)			(509	514	593	588	...	...	...	...	...
23. Gas turbine			(248	257	312	282	...	...	...	...	...
24. Total net generation	..	114,041	113,271	117,031	121,642	134,274	...	...	...	...	...
Receipts of energy from:											
(a) Firm:											
25. Other provinces	...	...	...	...	...	...	...	...	...	...	...
26. United States	..	..	8	22	12	6	2	2	2	2	2
(b) Secondary:											
27. Other provinces	...	...	...	...	...	...	...	...	...	...	...
28. United States	..	..	1,392	2,764	2,867	2,971	...	...	...	...	...
29. Total receipts of energy	..	367	1,400	2,786	2,879	2,977	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
30. Other provinces	...	...	...	...	...	...	...	...	...	...	...
31. United States	1,357	1,283	1,122	817	858	1,024	829	714	703	713	700
(b) Secondary:											
32. Other provinces	...	...	...	...	...	...	...	...	...	...	...
33. United States	..	4,228	3,058	3,267	2,754	3,194	...	...	...	...	...
34. Total deliveries of energy	..	5,511	4,180	4,084	3,612	4,218	...	...	...	...	...
35. Total energy available (24 + 29 - 34)	..	108,897	110,491	115,733	120,909	133,033	...	...	...	...	...
36. Secondary energy delivered within Canada	..	6,615	5,415	4,690	3,655	3,671	...	...	...	...	...
37. Firm energy available within Canada (35 - 36)	67,317	102,282	105,076	111,043	117,254	129,362	138,282	148,380	158,061	167,626	177,626
38. Indicated shortage	11	-	-	-	-	-	-	-	-	-	-
39. Firm energy requirement within Canada (37 + 38)	67,328	102,282	105,076	111,043	117,254	129,362	138,282	148,380	158,061	167,626	177,626
40. Firm energy requirement on Canada (30 + 31 + 39)	68,685	103,565	106,198	111,860[r]	118,112	130,386	139,111	149,094	158,764	168,339	178,326

Newfoundland

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

Capability and peak load	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	thousands of kilowatts										
Capability:											
Net generating capability:											
1. Hydro-electric	207	255	258	350	444	442	445	447	654	654	724
2. Steam - Conventional			40	45	45	45	45	45	45	40	40
3. Nuclear			-	-	-	-	-	-	-	-	-
Steam	16	54									
4. Internal combustion			13	14	7	11	11	11	9	10	10
5. Gas turbine			-	-	-	-	-	-	-	-	-
6. Total net generating capability	223	309	311	409	496	498	501	503	708	704	774
Receipts of firm power from:											
7. Other provinces	-	-	-	-	-	-	-	-	-	-	-
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	-	-	-	-	-	-	-	-	-	-	-
Deliveries of firm power to:											
10. Other provinces	-	14	13	13	10	8	9	9	9	9	9
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	-	14	13	13	10	8	9	9	9	9	9
13. Total net capability (6 + 9 - 12)	223	295	298	396	486	490	492	494	699	695	765
Peak loads:											
14. Firm power peak load within province	201	245	242	294	349	376	460	472	512	519	531
15. Indicated shortages	1	-	-	-	28	13	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	202	245	242	294	377	389	460	472	512	519	531
17. Firm power peak load on province (12 + 16)	202	259	255	307	387	397	469	481	521	528	540
Indicated reserve:											
18. Indicated reserve (13 - 16)	21	50	56	102	109	101	32	22	187	176	234
18a Reduction in generating capability due to adverse conditions	..	..	..	..	14	12	...	...	...	...	...

Newfoundland

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	1,403	1,322	1,556	1,930	2,278	...	...	...	...	...
20.	Steam - Conventional)			(116	101	96	98	...	...	...	...	...
21.	Nuclear)			(-	-	-	-	...	...	...	...	...
	)	..	76	(								
22.	Internal combustion)			(10	9	8	12	...	...	...	...	...
23.	Gas turbine)			(-	-	-	-	...	...	...	...	...
24.	Total net generstion	..	1,479	1,448	1,666	2,034	2,388	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	-	-	-	-	-	-	-	-	-
26.	United States	..	..	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
27.	Other provinces	..	..	-	-	-	-	...	...	...	...	...
28.	United States	..	..	-	-	-	-	...	...	...	...	...
29.	Total receipts of energy	..	..	-	-	-	-	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	-	49	80	81	36	54	55	55	55	55	55
31.	United States	-	-	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
32.	Other provinces	..	36	3	-	37	30	...	...	...	...	...
33.	United States	..	..	-	-	-	-	...	...	...	...	...
34.	Total deliveries of energy	..	85	83	81	73	84	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	1,394	1,365	1,585	1,961	2,304	...	...	...	...	...
36.	Secondary energy delivered within province	..	74	4	112	83	11	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	1,225	1,320	1,361	1,473	1,878	2,293	2,678	2,719	3,049	3,086	3,152
38.	Indicated shortage	9	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	1,234	1,320	1,361	1,473	1,878	2,293	2,678	2,719	3,049	3,086	3,152
40.	Firm energy requirement on province (30 + 31 + 39)	1,234	1,369	1,441	1,554	1,914	2,347	2,733	2,774	3,104	3,141	3,207

Prince Edward Island

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

Capability and peak load	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	thousands of kilowatts										
Capability:											
Net generating capability:											
1. Hydro-electric	-	-	-	-	-	-	-	-	-	-	-
2. Steam - Conventional	18	38	32	32	51	51	51	51	71	71	71
3. Nuclear			-	-	-	-	-	-	-	-	-
4. Internal combustion			5	5	7	7	7	10	10	10	10
5. Gas turbine			-	-	-	-	-	-	-	-	-
6. Total net generating capability	18	38	37	37	58	58	58	61	81	81	81
Receipts of firm power from:											
7. Other provinces	-	-	-	-	-	-	-	-	-	-	-
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	-	-	-	-	-	-	-	-	-	-	-
Deliveries of firm power to:											
10. Other provinces	-	-	-	-	-	-	-	-	-	-	-
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	-	-	-	-	-	-	-	-	-	-	-
13. Total net capability (6 + 9 - 12)	18	38	37	37	58	58	58	61	81	81	81
Peak loads:											
14. Firm power peak load within province	11	21	24	25	27	31	34	36	40	43	48
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	11	21	24	25	27	31	34	36	40	43	48
17. Firm power peak load on province (12 + 16)	11	21	24	25	27	31	34	36	40	43	48
Indicated reserve:											
18. Indicated reserve (13 - 16)	7	17	13	12	31	27	24	25	41	38	33
18a Reduction in generating capability due to adverse conditions	..	..	..	..	-	-	...	...	...	...	...

Prince Edward Island

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	-	-	-	-	-	...	...	...	...	...
20.	Steam - Conventional)			(81	93	102	119	...	...	...	...	...
21.	Nuclear)			(-	-	-	-	...	...	...	...	...
	)	..	79	(								
22.	Internal combustion)			(7	8	9	5	...	...	...	...	...
23.	Gas turbine)			(-	-	-	-	...	...	...	...	...
24.	Total net generation	..	79	88	101	111	124	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	-	-	-	-	-	-	-	-	-
26.	United States	..	..	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
27.	Other provinces	..	..	-	-	-	-	...	...	...	...	...
28.	United States	..	..	-	-	-	-	...	...	...	...	...
29.	Total receipts of energy	..	..	-	-	-	-	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	-	-	-	-	-	-	-	-	-	-	-
31.	United States	-	-	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
32.	Other provinces	-	-	-	-	-	-	...	...	...	...	...
33.	United States	-	-	-	-	-	-	...	...	...	...	...
34.	Total deliveries of energy	-	-	-	-	-	-	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	79	88	101	111	124	...	...	...	...	...
36.	Secondary energy delivered within province	-	-	-	-	-	-	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	46	79	88	101	111	124	139	155	173	193	212
38.	Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	46	79	88	101	111	124	139	155	173	193	212
40.	Firm energy requirement on province (30 + 31 + 39)	46	79	88	101	111	124	139	155	173	193	212

Nova Scotia

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

Capability and peak load	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	thousands of kilowatts										
Capability:											
Net generating capability:											
1. Hydro-electric	130	132	141	141	143	141	141	141	152	173	173
2. Steam - Conventional			365	378	387	383	478	516	516	516	516
3. Nuclear			-	-	-	-	-	-	-	-	-
	188	367									
4. Internal combustion			2	2	2	3	3	3	3	3	3
5. Gas turbine			-	-	-	-	-	-	-	-	-
6. Total net generating capability	318	499	508	521	532	527	622	660	671	692	692
Receipts of firm power from:											
7. Other provinces	-	-	-	-	-	-	-	-	-	-	-
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	-	-	-	-	-	-	-	-	-	-	-
Deliveries of firm power to:											
10. Other provinces	2	3	1	1	1	1	25	-	-	-	-
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	2	3	1	1	1	1	25	-	-	-	-
13. Total net capability (6 + 9 - 12)	316	496	507	520	531	526	597	660	671	692	692
Peak loads:											
14. Firm power peak load within province	245	356	347	388	411	462	473	499	526	558	588
15. Indicated shortages	3	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	248	356	347	388	411	462	473	499	526	558	588
17. Firm power peak load on province (12 + 16)	250	359	348	389	412	463	498	499	526	558	588
Indicated reserve:											
18. Indicated reserve (13 - 16)	68	140	160	132	120	64	124	161	145	134	104
18a. Reduction in generating capability due to adverse conditions	..	..	..	..	-	-	...	...	...	...	...

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Actual						Forecast				
Energy	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	millions of kilowatt-hours										
Net generation by:											
19. Hydro-electric	..	632	549	710	799	718	...	...	...	...	...
20. Steam - Conventional)			(1,301	1,300	1,313	1,662	...	...	...	...	...
21. Nuclear)			(-	-	-	-	...	...	...	...	...
)	..	1,162	(								
22. Internal combustion)			(-	-	-	-	...	...	...	...	...
23. Gas turbine)			(-	-	-	-	...	...	...	...	...
24. Total net generation	..	1,794	1,850	2,010	2,112	2,380	...	...	...	...	...
Receipts of energy from:											
(a) Firm:											
25. Other provinces	..	..	16	-	-	-	-	-	-	-	-
26. United States	..	..	-	-	-	-	-	-	-	-	-
(b) Secondary:											
27. Other provinces	..	..	-	67	57	43	...	...	...	...	...
28. United States	..	..	-	-	-	-	...	...	...	...	...
29. Total receipts of energy	..	..	16	67	57	43	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
30. Other provinces	7	80	12	7	8	7	186	-	-	-	-
31. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
32. Other provinces	-	-	79	101	60	113	...	...	...	...	...
33. United States	-	-	-	-	-	-	...	...	...	...	...
34. Total deliveries of energy	..	80	91	108	68	120	...	...	...	...	...
35. Total energy available (24 + 29 - 34)	..	1,714	1,775	1,969	2,101	2,303	...	...	...	...	...
36. Secondary energy delivered within province	..	-	-	4	1	2	...	...	...	...	...
37. Firm energy available within province (35 - 36)	1,253	1,714	1,775	1,965	2,100	2,301	2,430	2,597	2,758	2,927	3,115
38. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
39. Firm energy requirement within province (37 + 38)	1,253	1,714	1,775	1,965	2,100	2,301	2,430	2,597	2,758	2,927	3,115
40. Firm energy requirement on province (30 + 31 + 39)	1,260	1,794	1,787	1,972	2,108	2,308	2,616	2,597	2,758	2,927	3,115

New Brunswick

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

	Capability and peak load	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		thousands of kilowatts										
	Capability:											
	Net generating capability:											
1.	Hydro-electric	112	186	185	233	224	222	244	245	350	456	558
2.	Steam - Conventional)			(243	240	304	305	317	427	443	443	443
3.	Nuclear)			(-	-	-	-	-	-	-	-	-
	)	132	202	(								
4.	Internal combustion)			(8	7	7	7	7	7	7	7	7
5.	Gas turbine)			(-	-	-	-	-	-	-	-	-
6.	Total net generating capability	244	388	436	480	535	534	568	679	800	906	1,008
	Receipts of firm power from:											
7.	Other provinces	2	7	6	6	5	9	33	9	9	10	11
8.	United States	-	-	-	2	2	2	2	2	2	2	2
9.	Total receipts	2	7	6	8	7	11	35	11	11	12	13
	Deliveries of firm power to:											
10.	Other provinces	-	-	-	-	-	2	2	2	2	2	2
11.	United States	5	23	22	28	28	31	38	39	40	43	46
12.	Total deliveries	5	23	22	28	28	33	40	41	42	45	48
13.	Total net capability (6 + 9 - 12)	241	372	420	460	514	512	563	649	769	873	973
	Peak loads:											
14.	Firm power peak load within province	210	319	319	347	401	437	523	621	720	773	835
15.	Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16.	Total indicated firm power peak load within province (14 + 15)	210	319	319	347	401	437	523	621	720	773	835
17.	Firm power peak load on province (12 + 16)	215	342	341	375	429	470	563	662	762	818	883
	Indicated reserve:											
18.	Indicated reserve (13 - 16)	31	53	101	113	113	75	40	28	49	100	138
18a.	Reduction in generating capability due to adverse conditions	..	..	..	..	-	-	...	...	...	...	...

New Brunswick

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	887	994	1,191	1,272	1,019	...	...	...	...	...
20.	Steam - Conventional			870	895	1,019	1,525	...	...	...	...	...
21.	Nuclear			-	-	-	-	...	...	...	...	...
		..	842									
22.	Internal combustion			18	2	5	4	...	...	...	...	...
23.	Gas turbine			-	-	-	-	...	...	...	...	...
24.	Total net generation	..	1,729	1,882	2,088	2,296	2,548	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	31	28	29	32	213	29	31	34	37
26.	United States	..	..	-	14	12	3	-	-	-	-	-
	(b) Secondary:											
27.	Other provinces	..	..	79	101	60	113	...	...	...	...	...
28.	United States	..	..	14	3	2	3	...	...	...	...	...
29.	Total receipts of energy	..	111	124	146	103	151	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	-	-	-	-	-	1	1	1	1	1	1
31.	United States	59	58	125	166	178	163	235	130	130	130	130
	(b) Secondary:											
32.	Other provinces	..	-	16	67	57	43	...	...	...	...	...
33.	United States	..	107	78	84	68	82	...	...	...	...	...
34.	Total deliveries of energy	..	165	219	317	303	289	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	1,675	1,787	1,917	2,096	2,410	...	...	...	...	...
36.	Secondary energy delivered within province	..	1	5	5	1	-	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	1,199	1,674	1,782	1,912	2,095	2,410	2,921	3,415	3,895	4,165	4,464
38.	Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	1,199	1,674	1,782	1,912	2,095	2,410	2,921	3,415	3,895	4,165	4,464
40.	Firm energy requirement on province (30 + 31 + 39)	1,258	1,732	1,907	2,078	2,273	2,574	3,157	3,546	4,026	4,296	4,595

Quebec

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

	Capability and peak load	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		thousands of kilowatts										
	Capability:											
	Net generating capability:											
1.	Hydro-electric	5,378	8,658	8,628	8,830	9,271	9,453	10,196	10,594	10,668	11,900	12,593
2.	Steam - Conventional			59	41	59	192	359	371	699	699	699
3.	Nuclear			-	-	-	-	-	-	-	-	-
		35	106									
4.	Internal combustion			15	12	10	15	15	15	15	15	15
5.	Gas turbine			36	36	36	36	36	72	72	72	72
6.	Total net generating capability	5,413	8,764	8,738	8,919	9,376	9,696	10,606	11,052	11,454	12,686	13,379
	Receipts of firm power from:											
7.	Other provinces	1	16	19	15	12	18	19	19	20	20	21
8.	United States	4	-	2	2	-	-	-	-	-	-	-
9.	Total receipts	5	16	21	17	12	18	19	19	20	20	21
	Deliveries of firm power to:											
10.	Other provinces	719	698	696	697	703	717	635	636	636	594	595
11.	United States	56	57	38	4	6	-	-	-	-	-	-
12.	Total deliveries	775	755	734	701	709	717	635	636	636	594	595
13.	Total net capability (6 + 9 - 12)	4,643	8,025	8,025	8,235	8,679	8,997	9,990	10,435	10,838	12,112	12,805
	Peak loads:											
14.	Firm power peak load within province	4,092	5,871	6,258	6,370	7,118	7,654	8,517	9,139	9,791	10,406	10,967
15.	Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16.	Total indicated firm power peak load within province (14 + 15)	4,092	5,871	6,258	6,370	7,118	7,654	8,517	9,139	9,791	10,406	10,967
17.	Firm power peak load on province (12 + 16)	4,867	6,626	6,992	7,071	7,827	8,371	9,152	9,775	10,427	11,000	11,562
	Indicated reserve:											
18.	Indicated reserve (13 - 16)	551	2,154	1,767	1,865	1,561	1,343	1,473	1,296	1,047	1,706	1,838
18a.	Reduction in generating capability due to adverse conditions	..	..	..	..	435	474	...	...	...	...	...

Quebec

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	50,000	49,432	49,799	49,454	56,268	...	...	...	...	...
20.	Steam - Conventional)			(276	288	320	424	...	...	...	...	...
21.	Nuclear)			(-	-	-	-	...	...	...	...	...
	)	..	273	(								
22.	Internal combustion)			(7	13	44	6	...	...	...	...	...
23.	Gas turbine)			(11	29	1	1	...	...	...	...	...
24.	Total net generation	..	50,273	49,726	50,129	49,819	56,699	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	87	110	44	83	83	85	86	89	91
26.	United States	..	..	7	7	-	1	1	1	1	1	1
	(b) Secondary:											
27.	Other provinces	..	..	16	-	99	45	...	...	...	...	...
28.	United States	..	..	-	-	-	-	...	...	...	...	...
29.	Total receipts of energy	..	103	110	117	143	129	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	4,331	4,193	4,207	3,964	3,975	4,371	4,386	4,016	4,018	3,839	3,834
31.	United States	490	496	353	14	6	7	7	8	8	9	9
	(b) Secondary:											
32.	Other provinces	..	1,723	1,649	1,963	1,004	2,648	...	...	...	...	...
33.	United States	..	62	54	294	261	40	...	...	...	...	...
34.	Total deliveries of energy	..	6,474	6,263	6,235	5,246	7,066	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	43,902	43,573	44,011	44,716	49,762	...	...	...	...	...
36.	Secondary energy delivered within province	..	5,350	4,551	3,622	2,613	2,672	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	27,954	38,552	39,022	40,389	42,103	47,090	49,704	52,724	56,203	59,637	63,357
38.	Indicated shortage	1	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	27,955	38,552	39,022	40,389	42,103	47,090	49,704	52,724	56,203	59,637	63,357
40.	Firm energy requirement on province (30 + 31 + 39)	32,776	43,241	43,582	44,367	46,084	51,468	54,097	56,748	60,229	63,485	67,200

Ontario

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

	Capability and peak load	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		thousands of kilowatts										
	Capability:											
	Net generating capability:											
1.	Hydro-electric	3,481	5,464	5,292	5,285	5,601	5,603	5,666	5,802	5,986	5,986	6,001
2.	Steam - Conventional			1,555	1,926	2,376	2,379	2,879	3,264	3,579	4,209	5,295
3.	Nuclear	607	1,186	-	-	-	-	-	-	200	200	200
4.	Internal combustion			11	12	12	8	8	9	11	11	11
5.	Gas turbine			-	-	-	-	-	-	-	-	-
6.	Total net generating capability	4,088	6,650	6,858	7,223	7,989	7,990	8,553	9,075	9,776	10,406	11,507
	Receipts of firm power from:											
7.	Other provinces	732	694	695	692	699	709	627	627	627	584	584
8.	United States	-	-	-	-	-	-	-	-	-	-	-
9.	Total receipts	732	694	695	692	699	709	627	627	627	584	584
	Deliveries of firm power to:											
10.	Other provinces	1	2	5	2	2	8	8	8	9	9	10
11.	United States	85	86	86	89	88	98	54	55	56	57	58
12.	Total deliveries	86	88	91	91	90	106	62	63	65	66	68
13.	Total net capability (6 + 9 - 12)	4,734	7,256	7,462	7,824	8,598	8,593	9,118	9,639	10,338	10,924	12,023
	Peak loads:											
14.	Firm power peak load within province	4,261	6,391	6,615	6,913	7,412	7,897	8,399	8,959	9,471	10,035	10,657
15.	Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16.	Total indicated firm power peak load within province (14 + 15)	4,261	6,391	6,615	6,913	7,412	7,897	8,399	8,959	9,471	10,035	10,657
17.	Firm power peak load on province (12 + 16)	4,347	6,479	6,706	7,004	7,502	8,003	8,461	9,022	9,536	10,101	10,725
	Indicated reserve:											
18.	Indicated reserve (13 - 16)	473	865	847	911	1,186	696	719	680	867	889	1,366
18a	Reduction in generating capability due to adverse conditions	..	..	..	..	321	192	...	...	...	...	...

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	34,870	33,654	30,872	29,099	30,150	...	...	...	...	...
20.	Steam - Conventional			1,187	4,335	8,291	9,313	...	...	...	...	...
21.	Nuclear			-	22	87	141	...	...	...	...	...
	)	..	822	(								
22.	Internal combustion			31	29	24	22	...	...	...	...	...
23.	Gas turbine			-	1	-	-	...	...	...	...	...
24.	Total net generation	..	35,692	34,872	35,259	37,501	39,626	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	4,186[r]	3,943	3,954	4,346	4,359	3,987	3,987	3,805	3,797
26.	United States	..	..	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
27.	Other provinces	..	..	1,651[r]	2,009	1,008	2,680	...	...	...	...	...
28.	United States	..	..	1,362	2,704	2,846	2,907	...	...	...	...	...
29.	Total receipts of energy	..	6,182	7,199	8,656	7,808	9,933	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	3	6	7	7	8	28	27	29	30	33	35
31.	United States	624	727	642	635	672	852	585	574	563	571	558
	(b) Secondary:											
32.	Other provinces	..	131	275	221	257	255	...	...	...	...	...
33.	United States	..	4,043	2,909	2,875	2,406	3,042	...	...	...	...	...
34.	Total deliveries of energy	..	4,907	3,833	3,738	3,343	4,177	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	36,967	38,238	40,177	41,966	45,382	...	...	...	...	...
36.	Secondary energy delivered within province	..	585	511	546	437	568	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	23,928	36,382	37,727	39,631	41,529	44,814	47,742	51,161	54,044	57,462	60,790
38.	Indicated shortage	1	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	23,929	36,382	37,727	39,631	41,529	44,814	47,742	51,161	54,044	57,462	60,790
40.	Firm energy requirement on province (30 + 31 + 39)	24,556	37,115	38,376	40,273	42,209	45,694	48,354	51,764	54,637	58,066	61,383

Manitoba

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

Capability and peak load	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	thousands of kilowatts										
Capability:											
Net generating capability:											
1. Hydro-electric	522	701	735	735	735	735	1,061	1,061	1,061	1,061	1,171
2. Steam - Conventional			291[r]	291	291	291	291	291	291	291	291
3. Nuclear	46	231	-	-	-	-	-	-	-	-	-
4. Internal combustion			4	7	7	8	8	8	9	9	11
5. Gas turbine			-	-	-	-	-	-	-	-	-
6. Total net generating capability	568	932	1,030[r]	1,033	1,033	1,034	1,360	1,360	1,361	1,361	1,473
Receipts of firm power from:											
7. Other provinces	80	86	83	87	134	94	85	85	85	85	85
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	80	86	83	87	134	94	85	85	85	85	85
Deliveries of firm power to:											
10. Other provinces	13	-	-	-	-	-	-	-	-	-	-
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	13	-	-	-	-	-	-	-	-	-	-
13 Total net capability (6 + 9 - 12)	635	1,018	1,113[r]	1,120	1,167	1,128	1,445	1,445	1,446	1,446	1,558
Peak loads:											
14. Firm power peak load within province	533	772	849	907	955	1,004	1,078	1,142	1,215	1,293	1,370
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	533	772	849	907	955	1,004	1,078	1,142	1,215	1,293	1,370
17. Firm power peak load on province (12 + 16)	546	772	849	907	955	1,004	1,078	1,142	1,215	1,293	1,370
Indicated reserve:											
18. Indicated reserve (13 - 16)	102	246	264[r]	213	212	124	367	303	231	153	188
18a Reduction in generating capability due to adverse conditions	..	..	..	..	-	-	...	...	...	...	...

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	3,735	3,591	4,220	4,736	4,799	...	...	...	...	...
20.	Steam - Conventional)			(238	120	61	148	...	...	...	...	...
21.	Nuclear)			(-	-	-	-	...	...	...	...	...
	)	..	75	(								
22.	Internal combustion)			(11	12	13	28	...	...	...	...	...
23.	Gas turbine)			(-	-	-	-	...	...	...	...	...
24.	Total net generation	..	3,810	3,840	4,352	4,810	4,975	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	623	647	687	651	650	650	650	650	650
26.	United States	..	..	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
27.	Other provinces	..	..	301	199	198	249	...	...	...	...	...
28.	United States	..	..	-	-	-	-	...	...	...	...	...
29.	Total receipts of energy	..	739	924	846	885	900	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	114	-	-[r]	-[r]	-	-	-	-	-	-	-
31.	United States	-	-	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
32.	Other provinces	..	4	6[r]	75[r]	65	49	...	...	...	...	...
33.	United States	..	-	-	-	-	-	...	...	...	...	...
34.	Total deliveries of energy	..	4	6	75	65	49	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	4,545	4,758	5,123	5,630	5,826	...	...	...	...	...
36.	Secondary energy delivered within province	..	344	60	120	185	153	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	2,886	4,201	4,698	5,003	5,445	5,673	6,023	6,347	6,731	7,068	7,440
38.	Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	2,886	4,201	4,698	5,003	5,445	5,673	6,023	6,347	6,731	7,068	7,440
40.	Firm energy requirement on province (30 + 31 + 39)	3,000	4,201	4,698[r]	5,003[r]	5,445	5,673	6,023	6,347	6,731	7,068	7,440

Saskatchewan

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

Capability and peak load	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	thousands of kilowatts										
Capability:											
Net generating capability:											
1. Hydro-electric	85	99	107	107	208	309	309	352	392	498	551
2. Steam - Conventional)			(572	575	492	529	529	529	529	529	670
3. Nuclear)			(-	-	-	-	-	-	-	-	-
)	243	653	(								
4. Internal combustion)			(35	37	36	35	35	35	35	35	35
5. Gas turbine)			(43	33	39	39	39	39	39	39	39
6. Total net generating capability	328	752	757	752	775	912	912	955	995	1,101	1,295
Receipts of firm power from:											
7. Other provinces	-	1	-	-	-	-	-	-	-	-	-
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	-	1	-	-	-	-	-	-	-	-	-
Deliveries of firm power to:											
10. Other provinces	80	86	88	87	134	94	85	85	85	85	85
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	80	86	88	87	134	94	85	85	85	85	85
13. Total net capability (6 + 9 - 12)	248	667	669	665	641	818	827	870	910	1,016	1,210
Peak loads:											
14. Firm power peak load within province	196	418	466	497	531	619	669	729	752	861	936
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	196	418	466	497	531	619	669	729	752	861	936
17. Firm power peak load on province (12 + 16)	276	504	554	584	665	713	754	814	837	946	1,021
Indicated reserve:											
18. Indicated reserve (13 - 16)	52	249	203	168	110	199	158	141	158	155	274
18a Reduction in generating capability due to adverse conditions	..	..	..	..	7	-	...	...	...	...	...

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	620	658	704	985	1,369	...	...	...	...	...
20.	Steam - Conventional)			(1,682	1,844	1,833	1,782	...	...	...	...	...
21.	Nuclear)			(-	-	-	-	...	...	...	...	...
	)	..	1,659	(								
22.	Internal combustion)			(109	97	106	106	...	...	...	...	...
23.	Gas turbine			(62	37	49	64	...	...	...	...	...
24.	Total net generation	..	2,279	2,511	2,682	2,973	3,321	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	-	-[r]	-	-	-	-	-	-	-
26.	United States	..	..	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
27.	Other provinces	..	..	6	29[r]	62	17	...	...	...	...	...
28.	United States	..	..	-	-	-	-	...	...	...	...	...
29.	Total receipts of energy	..	6	6	29	62	17	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	558	575	621	647	687	651	650	650	650	650	650
31.	United States	-	-	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
32.	Other provinces	..	44	41	-	4	9	...	...	...	...	...
33.	United States	..	-	-	-	-	-	...	...	...	...	...
34.	Total deliveries of energy	..	619	662	647	691	660	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	1,666	1,855	2,064	2,344	2,678	...	...	...	...	...
36.	Secondary energy delivered within province	..	-	-	-	17	20	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	742	1,666	1,855	2,064	2,327	2,658	2,939	3,266	3,542	3,859	4,207
38.	Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	742	1,666	1,855	2,064	2,327	2,658	2,939	3,266	3,542	3,859	4,207
40.	Firm energy requirement on province (30 + 31 + 39)	1,300	2,241	2,476	2,711	3,014	3,309	3,589	3,916	4,192	4,509	4,857

Alberta

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

Capability and peak load	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	thousands of kilowatts										
Capability:											
Net generating capability:											
1. Hydro-electric	202	318	327	327	326	326	476	666	666	666	666
2. Steam - Conventional)			(498	643	713	748	748	822	1,107	1,203	1,203
3. Nuclear)			(-	-	-	-	-	-	-	-	-
)	194	607	(								
4. Internal combustion)			(28	33	31	31	33	34	34	35	36
5. Gas turbine)			(100	130	130	130	130	151	151	152	152
6. Total net generating capability	396	925	953	1,133	1,200	1,235	1,387	1,673	1,958	2,056	2,057
Receipts of firm power from:											
7. Other provinces	4	3	-	-	-	-	-	-	-	-	-
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	4	3	-	-	-	-	-	-	-	-	-
Deliveries of firm power to:											
10. Other provinces	-	1	5	4	10	12	13	15	18	25	25
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	-	1	5	4	10	12	13	15	18	25	25
13. Total net capability (6 + 9 - 12)	400	927	948	1,129	1,190	1,223	1,374	1,658	1,940	2,031	2,032
Peak loads:											
14. Firm power peak load within province	313	714	836	882	984	1,106	1,160	1,274	1,399	1,532	1,696
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	313	714	836	882	984	1,106	1,160	1,274	1,399	1,532	1,696
17. Firm power peak load on province (12 + 16)	313	715	841	886	994	1,118	1,173	1,289	1,417	1,557	1,721
Indicated reserve:											
18. Indicated reserve (13 - 16)	87	213	112	247	206	117	214	384	541	499	336
18a Reduction in generating capability due to adverse conditions	..	..	..	..	-	-	...	...	...	...	...

Alberta

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

Energy	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	millions of kilowatt-hours										
Net generation by:											
19. Hydro-electric	..	887	1,023	956	881	896	...	...	...	...	...
20. Steam - Conventional)			(2,534	2,900	3,294	3,770	...	...	...	...	...
21. Nuclear)			(-	-	-	-	...	...	...	...	...
)	..	2,540	(								
22. Internal combustion)			(51	59	60	90	...	...	...	...	...
23. Gas turbine			(165	187	257	209	...	...	...	...	...
24. Total net generation	..	3,427	3,773	4,102	4,492	4,965	...	...	...	...	...
Receipts of energy from:											
(a) Firm:											
25. Other provinces	..	..	6	23	4	1	1	1	1	1	1
26. United States	..	..	-	-	-	-	-	-	-	-	-
(b) Secondary:											
27. Other provinces	..	..	30	-	23	21	...	...	...	...	...
28. United States	..	..	-	-	-	-	...	...	...	...	...
29. Total receipts of energy	..	30	36	23	27	22	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
30. Other provinces	-	3	1	4	-	-	-	-	-	-	-
31. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
32. Other provinces	..	2	-	-	-	-	...	...	...	...	...
33. United States	..	-	-	-	-	-	...	...	...	...	...
34. Total deliveries of energy	..	5	1	4	-	-	...	...	...	...	...
35. Total energy available (24 + 29 - 34)	..	3,452	3,808	4,121	4,519	4,987	...	...	...	...	...
36. Secondary energy delivered within province	..	-	-	-	-	-	...	...	...	...	...
37. Firm energy available within province (35 - 36)	1,581	3,452	3,808	4,121	4,519	4,987	5,535	6,067	6,585	7,128	7,759
38. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
39. Firm energy requirement within province (37 + 38)	1,581	3,452	3,808	4,121	4,519	4,987	5,535	6,067	6,585	7,128	7,759
40. Firm energy requirement on province (30 + 31 + 39)	1,581	3,455	3,809	4,125	4,519	4,987	5,535	6,067	6,585	7,128	7,759

British Columbia

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

Capability and peak load	Actual						Forecast				
	1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	thousands of kilowatts										
Capability:											
Net generating capability:											
1. Hydro-electric	1,578	2,659	2,672	2,599	2,670	2,689	2,693	2,889	2,906	3,613	4,063
2. Steam - Conventional)			(117	424	475	498	650	659	865	867	867
3. Nuclear)			(-	-	-	-	-	-	-	-	-
)	130	369	(								
4. Internal combustion)			(109	112	106	117	120	123	124	125	126
5. Gas turbine)			(172	172	177	177	177	177	177	177	177
6. Total net generating capability	1,708	3,028	3,070	3,307	3,428	3,481	3,640	3,848	4,072	4,782	5,233
Receipts of firm power from:											
7. Other provinces	-	-	5	4	10	12	13	15	18	25	25
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	-	-	5	4	10	12	13	15	18	25	25
Deliveries of firm power to:											
10. Other provinces	4	3	-	-	-	-	-	-	-	-	-
11. United States	30	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	34	3	-	-	-	-	-	-	-	-	-
13. Total net capability (6 + 9 - 12)	1,674	3,025	3,075	3,311	3,438	3,493	3,653	3,863	4,090	4,807	5,258
Peak loads:											
14. Firm power peak load within province	1,275	2,123	2,368	2,317	2,537	2,886	3,037	3,263	3,459	3,617	3,765
15. Indicated shortages	-	-	-	-	-	-	30	45	53	59	67
16. Total indicated firm power peak load within province (14 + 15)	1,275	2,123	2,368	2,317	2,537	2,886	3,067	3,308	3,512	3,676	3,832
17. Firm power peak load on province (12 + 16)	1,309	2,126	2,368	2,317	2,537	2,886	3,067	3,308	3,512	3,676	3,832
Indicated reserve:											
18. Indicated reserve (13 - 16)	399	902	707	994	901	607	586	555	578	1,131	1,426
18a Reduction in generating capability due to adverse conditions	..	..	..	..	2	9	...	...	...	...	...

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	12,584	12,295	13,500	14,194	15,516	...	...	...	...	...
20.	Steam - Conventional)			(535	665	780	1,207	...	...	...	...	...
21.	Nuclear)			(-	-	-	-	...	...	...	...	...
	)	..	729	(								
22.	Internal combustion)			(246	261	300	293	...	...	...	...	...
23.	Gas turbine			(10	3	5	4	...	...	...	...	...
24.	Total net generation	..	13,313	13,086	14,429	15,279	17,020	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	1	4	-	-	-	-	-	-	-
26.	United States	..	..	1	1	-	2	1	1	1	1	1
	(b) Secondary:											
27.	Other provinces	..	..	-	-	-	-	...	...	...	...	...
28.	United States	..	..	16	57	19	61	...	...	...	...	...
29.	Total receipts of energy	..	72	18	62	19	63	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	10	3	6	23	4	1	1	1	1	1	1
31.	United States	184	2	2	2	2	2	2	2	2	3	3
	(b) Secondary:											
32.	Other provinces	..	27	30	-	23	21	...	...	...	...	...
33.	United States	..	16	17	14	19	30	...	...	...	...	...
34.	Total deliveries of energy	..	48	55	39	48	54	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	13,337	13,049	14,452	15,250	17,029	...	...	...	...	...
36.	Secondary energy delivered within province	..	233	242	230	268	180	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	6,414	13,104	12,807	14,222	14,982	16,849	17,998	19,727	20,891	21,902	22,924
38.	Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	6,414	13,104	12,807	14,222	14,982	16,849	17,998	19,727	20,891	21,902	22,924
40.	Firm energy requirement on province (30 + 31 + 39)	6,608	13,109	12,815	14,247	14,988	16,852	18,001	19,730	20,894	21,906	22,928

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

	Capability and peak load	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		thousands of kilowatts										
	Capability:											
	Net generating capability:											
1.	Hydro-electric	24	44	44	44	44	44	62	62	51	51	51
2.	Steam - Conventional			1	1	1	1	1	1	1	1	1
3.	Nuclear			-	-	-	-	-	-	-	-	-
		-	11									
4.	Internal combustion			10	10	11	13	13	13	14	15	15
5.	Gas turbine			-	-	-	2	2	2	2	2	2
6.	Total net generating capability	24	55	55	55	56	60	78	78	68	69	69
	Receipts of firm power from:											
7.	Other provinces	-	-	-	-	-	-	-	-	-	-	-
8.	United States	-	-	-	-	-	-	-	-	-	-	-
9.	Total receipts	-	-	-	-	-	-	-	-	-	-	-
	Deliveries of firm power to:											
10.	Other provinces	-	-	-	-	-	-	-	-	-	-	-
11.	United States	-	-	-	-	-	-	-	-	-	-	-
12.	Total deliveries	-	-	-	-	-	-	-	-	-	-	-
13.	Total net capability (6 + 9 - 12)	24	55	55	55	56	60	78	78	68	69	69
	Peak loads:											
14.	Firm power peak load within province	18	34	29	32	32	34	42	42	41	44	47
15.	Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16.	Total indicated firm power peak load within province (14 + 15)	18	34	29	32	32	34	42	42	41	44	47
17.	Firm power peak load on province (12 + 16)	18	34	29	32	32	34	42	42	41	44	47
	Indicated reserve:											
18.	Indicated reserve (13 - 16)	6	21	26	23	24	26	36	36	27	25	22
18a	Reduction in generating capability due to adverse conditions	..	..	..	..	-	-	...	...	...	...	...

TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements - Concluded

	Energy	Actual						Forecast				
		1954	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
		millions of kilowatt-hours										
	Net generation by:											
19.	Hydro-electric	..	152	174	187	189	199	...	...	...	...	...
20.	Steam - Conventional)			(2	2	2	3	...	...	...	...	...
21.	Nuclear)			(-	-	-	-	...	...	...	...	...
	)	..	14	(								
22.	Internal combustion)			(19	24	24	22	...	...	...	...	...
23.	Gas turbine)			(-	-	-	4	...	...	...	...	...
24.	Total net generation	..	166	195	213	215	228	...	...	...	...	...
	Receipts of energy from:											
	(a) Firm:											
25.	Other provinces	..	..	-	-	-	-	...	...	...	...	...
26.	United States	..	..	-	-	-	-	...	...	...	...	...
	(b) Secondary:											
27.	Other provinces	..	..	-	-	-	-	...	...	...	...	...
28.	United States	..	..	-	-	-	-	...	...	...	...	...
29.	Total receipts of energy	..	..	-	-	-	-	...	...	...	...	...
	Deliveries of energy to:											
	(a) Firm:											
30.	Other provinces	-	-	-	-	-	-	-	-	-	-	-
31.	United States	-	-	-	-	-	-	-	-	-	-	-
	(b) Secondary:											
32.	Other provinces	-	-	-	-	-	-	...	...	...	...	...
33.	United States	-	-	-	-	-	-	...	...	...	...	...
34.	Total deliveries of energy	-	-	-	-	-	-	...	...	...	...	...
35.	Total energy available (24 + 29 - 34)	..	166	195	213	215	228	...	...	...	...	...
36.	Secondary energy delivered within province	..	28	42	51	50	65	...	...	...	...	...
37.	Firm energy available within province (35 - 36)	89	138	153	162	165	163	173	202	190	199	206
38.	Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
39.	Firm energy requirement within province (37 + 38)	89	138	153	162	165	163	173	202	190	199	206
40.	Firm energy requirement on province(30 + 31 + 39)	89	138	153	162	165	163	173	202	190	199	206

TABLE 2. Total Net Generating Capability within Provinces(1)

Province	1954	1960	1961	1962	1963	1964	Forecast					Percentage change (compounded)		
							1965	1966	1967	1968	1969	1954 1964	1960 1964	1964 1969
	thousands of kilowatts													
Newfoundland (including Labrador)	223	309	311	409	496	498	501	503	708	704	774	8.36	12.67	9.22
Prince Edward Island	18	38	37	37	58	58	58	61	81	81	81	12.41	11.15	6.91
Nova Scotia	318	499	508	521	532	527	622	660	671	692	692	5.18	1.37	5.60
New Brunswick	244	388	436	480	535	534	568	679	800	906	1,008	8.15	8.31	13.55
Quebec	5,413	8,764	8,738	8,919	9,376	9,696	10,606	11,052	11,454	12,686	13,379	6.00	2.56	6.63
Ontario	4,088	6,650	6,858	7,223	7,989	7,990	8,553	9,075	9,776	10,406	11,507	6.93	4.70	7.57
Manitoba	568	932	1,030[r]	1,033	1,033	1,034	1,360	1,360	1,361	1,361	1,473	6.17	2.63	7.34
Saskatchewan	328	752	757	752	775	912	912	955	995	1,101	1,295	10.77	4.94	7.27
Alberta	396	925	953	1,133	1,200	1,235	1,387	1,673	1,958	2,056	2,057	12.05	7.49	10.74
British Columbia	1,708	3,028	3,070	3,307	3,428	3,481	3,640	3,848	4,072	4,782	5,233	7.38	3.55	8.50
Yukon and Northwest Territories	24	55	55	55	56	60	78	78	68	69	69	9.60	2.20	2.83
Canada	13,328	22,340	22,753[r]	23,869	25,478	26,025	28,285	29,944	31,944	34,844	37,568	6.92	3.89	7.62

(1) Table 1, item 6.

TABLE 3. Firm Power Peak Load within Provinces(1)

Province	1954	1960	1961	1962	1963	1964	Forecast 1965	1966	1967	1968	1969	Percentage change (compounded) 1954 1964	1960 1964	1964 1969
	thousands of kilowatts													
Newfoundland (including Labrador)	201[r]	245	242	294	349	376	460	472	512	519	531	6.46	11.30	7.15
Prince Edward Island	11	21	24	25	27	31	34	36	40	43	48	10.92	10.23	9.14
Nova Scotia	245[r]	356	347	388	411	462	473	499	526	558	588	6.55	6.73	4.94
New Brunswick	210	319	319	347	401	437	523	621	720	773	835	7.60	8.19	13.83
Quebec	4,092	5,871	6,258	6,370	7,118	7,654	8,517	9,139	9,791	10,406	10,967	6.44	6.86	7.46
Ontario	4,261	6,391	6,615	6,913	7,412	7,897	8,399	8,959	9,471	10,035	10,657	6.37	5.43	6.18
Manitoba	533	772	849	907	955	1,004	1,078	1,142	1,215	1,293	1,370	6.54	6.79	6.41
Saskatchewan	196	418	466	497	531	619	669	729	752	861	936	12.19	10.31	8.62
Alberta	313	714	836	882	984	1,106	1,160	1,274	1,399	1,532	1,696	13.45	11.56	8.93
British Columbia	1,275	2,123	2,368	2,317	2,537	2,886	3,037	3,263	3,459	3,617	3,765	8.51	7.98	5.46
Yukon and Northwest Territories	18	34	29	32	32	34	42	42	41	44	47	6.57	0.00	6.69
Canada	11,355[r]	17,264	18,353	18,972	20,757	22,506	24,392	26,176	27,926	29,681	31,440	7.08	6.85	6.92

(1) Table 1, item 14.

TABLE 4. Firm Energy Requirement within Provinces(1)

Province	1954	1960	1961	1962	1963	1964	Forecast 1965	1966	1967	1968	1969	Percentage change (compounded) 1954 1964	1960 1964	1964 1969
	millions of kilowatt-hours													
Newfoundland (including Labrador)	1,234	1,320	1,361	1,473	1,878	2,293	2,678	2,719	3,049	3,086	3,152	6.39	14.81	6.57
Prince Edward Island	46	79	88	101	111	124	139	155	173	193	212	10.43	11.93	11.32
Nova Scotia	1,253	1,714	1,775	1,965	2,100	2,301	2,430	2,597	2,758	2,927	3,115	6.27	7.64	6.25
New Brunswick	1,199	1,674	1,782	1,912	2,095	2,410	2,921	3,415	3,895	4,165	4,464	7.23	9.54	13.11
Quebec	27,955	38,552	39,022	40,389	42,103	47,090	49,704	52,724	56,203	59,637	63,357	5.35	5.13	6.11
Ontario	23,929	36,382	37,727	39,631	41,529	44,814	47,742	51,161	54,044	57,462	60,790	6.48	5.35	6.29
Manitoba	2,886	4,201	4,698	5,003	5,445	5,673	6,023	6,347	6,731	7,068	7,440	7.09	7.80	5.57
Saskatchewan	742	1,666	1,855	2,064	2,327	2,658	2,939	3,266	3,542	3,859	4,207	13.61	12.39	9.62
Alberta	1,581	3,452	3,808	4,121	4,519	4,987	5,535	6,067	6,585	7,128	7,759	12.17	9.63	9.24
British Columbia	6,414	13,104	12,807	14,222	14,982	16,849	17,998	19,727	20,891	21,902	22,924	10.14	6.49	6.35
Yukon and Northwest Territories	89	138	153	162	165	163	173	202	190	199	206	6.24	4.25	4.80
Canada	67,328	102,282	105,076	111,043	117,254	129,362	138,282	148,380	158,061	167,626	177,626	6.75	6.05	6.55

(1) Table 1, item 39.

TABLE 5. Indicated Reserve(1)

Province	1954	1960	1961	1962	1963	1964	Forecast 1965	1966	1967	1968	1969	Percentage change (compounded) 1954 1964	1960 1964	1964 1969
	thousands of kilowatts													
Newfoundland (including Labrador):														
1. Gross capability	223	309	311	409	496	498	501	503	708	704	774	8.36	12.67	9.22
2. Firm power peak load on province	202	259	255	307	387	397	469	481	521	528	540	6.99	11.27	6.35
3. Indicated reserve (1 - 2)	21	50	56	102	109	101	32	22	187	176	234	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	10.4	19.3	22.0	33.2	28.2	25.4	6.8	4.6	35.9	33.3	43.3	...	...	...
Prince Edward Island:														
1. Gross capability	18	38	37	37	58	58	58	61	81	81	81	12.41	11.15	6.91
2. Firm power peak load on province	11	21	24	25	27	31	34	36	40	43	48	10.92	10.23	9.14
3. Indicated reserve (1 - 2)	7	17	13	12	31	27	24	25	41	38	33	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	63.6	81.0	54.2	48.0	114.8	87.1	70.6	69.4	102.5	88.4	68.8	...	...	...
Nova Scotia:														
1. Gross capability	318	499	508	521	532	527	622	660	671	692	692	5.18	1.37	5.60
2. Firm power peak load on province	250	359	348	389	412	463	498	499	526	558	588	6.36	6.57	4.90
3. Indicated reserve (1 - 2)	68	140	160	132	120	64	124	161	145	134	104	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	27.2	39.0	46.0	33.9	29.1	13.8	24.9	32.3	27.6	24.0	17.7	...	...	...
New Brunswick:														
1. Gross capability	246	395	442	488	542	545	603	690	811	918	1,021	8.28	8.38	13.38
2. Firm power peak load on province	215	342	341	375	429	470	563	662	762	818	883	8.14	8.27	13.44
3. Indicated reserve (1 - 2)	31	53	101	113	113	75	40	28	49	100	138	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	14.4	15.5	29.6	30.1	26.3	16.0	7.1	4.2	6.4	12.2	15.6	...	...	...

(1) Gross capability (Table 1, items 6 + 9); firm power peak load on province (Table 1, item 17); indicated reserve (Table 1, item 18).

TABLE 5. Indicated Reserve(1) - Continued

Province	1954	1960	1961	1962	1963	1964	Forecast 1965	1966	1967	1968	1969	Percentage change (compounded) 1954 1964	1960 1964	1964 1969
	thousands of kilowatts													
Quebec:														
1. Gross capability	5,418	8,780	8,759	8,936	9,388	9,714	10,625	11,071	11,474	12,706	13,400	6.01	2.56	6.65
2. Firm power peak load on province	4,867	6,626	6,992	7,071	7,827	8,371	9,152	9,775	10,427	11,000	11,562	5.57	6.02	6.68
3. Indicated reserve (1 - 2)	551	2,154	1,767	1,865	1,561	1,343	1,473	1,296	1,047	1,706	1,838	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	11.3	32.5	25.3	26.4	19.9	16.0	16.1	13.3	10.0	15.5	15.9	...	...	...
Ontario:														
1. Gross capability	4,820	7,344	7,553	7,915	8,688	8,699	9,180	9,702	10,403	10,990	12,091	6.08	4.33	6.81
2. Firm power peak load on province	4,347	6,479	6,706	7,004	7,502	8,003	8,461	9,022	9,536	10,101	10,725	6.30	5.42	6.03
3. Indicated reserve (1 - 2)	473	865	847	911	1,186	696	719	680	867	889	1,366	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	10.9[r]	13.4	12.6	13.0	15.8	8.7	8.5	7.5	9.1	8.8	12.7	...	...	...
Manitoba:														
1. Gross capability	648	1,018	1,113[r]	1,120	1,167	1,128	1,445	1,445	1,446	1,446	1,558	5.70	2.60	6.67
2. Firm power peak load on province	546	772	849	907	955	1,004	1,078	1,142	1,215	1,293	1,370	6.28	6.79	6.42
3. Indicated reserve (1 - 2)	102	246	264[r]	213	212	124	367	303	231	153	188	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	18.7	31.9	31.1[r]	23.5	22.2	12.4	34.0	26.5	19.0	11.8	13.7	...	...	...
Saskatchewan:														
1. Gross capability	328	753	757	752	775	912	912	955	995	1,101	1,295	10.77	4.90	7.27
2. Firm power peak load on province	276	504	554	584	665	713	754	814	837	946	1,021	9.96	9.06	7.45
3. Indicated reserve (1 - 2)	52	249	203	168	110	199	158	141	158	155	274	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	18.8[r]	49.4	36.6	28.8	16.5	27.9	21.0	17.3	18.9	16.4	26.8	...	...	...

(1) Gross capability (Table 1, items 6 + 9); firm power peak load on province (Table 1, item 17); indicated reserve (Table 1, item 18).

TABLE 5. Indicated Reserve(1) - Concluded

Province	1954	1960	1961	1962	1963	1964	Forecast 1965	1966	1967	1968	1969	Percentage change (compounded) 1954 1964	1960 1964	1964 1969
	thousands of kilowatts													
Alberta:														
1. Gross capability	400	928	953	1,133	1,200	1,235	1,387	1,673	1,958	2,056	2,057	11.93	7.41	10.74
2. Firm power peak load on province	313	715	841	886	994	1,118	1,173	1,289	1,417	1,557	1,721	13.58	11.83	9.01
3. Indicated reserve (1 - 2)	87	213	112	247	206	117	214	384	541	499	336	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	27.8	29.8	13.3	27.9	20.7[r]	10.5	18.2	29.8	38.2	32.0	19.5	...	...	...
British Columbia:														
1. Gross capability	1,708	3,028	3,075	3,311	3,438	3,493	3,653	3,863	4,090	4,807	5,258	7.42	3.64	8.52
2. Firm power peak load on province	1,309	2,126	2,368	2,317	2,537	2,886	3,067	3,308	3,512	3,676	3,832	8.23	7.94	5.83
3. Indicated reserve (1 - 2)	399	902	707	994	901	607	586	555	578	1,131	1,426	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	30.5	42.4	29.9	42.9	35.5	21.0	19.1	16.8	16.5	30.8	37.2	...	...	...
Yukon and Northwest Territories:														
1. Gross capability	24	55	55	55	56	60	78	78	68	69	69	9.60	2.20	2.83
2. Firm power peak load on province	18	34	29	32	32	34	42	42	41	44	47	6.57	0.00	6.69
3. Indicated reserve (1 - 2)	6	21	26	23	24	26	36	36	27	25	22	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	33.3	61.8	89.7[r]	71.9	75.0	76.5	85.7	85.7	65.9	56.8	46.8	...	...	...
Canada:														
1. Gross capability	13,332	22,340	22,755[r]	23,873	25,480	26,027	28,287	29,946	31,946	34,846	37,570	6.92	3.89	7.62
2. Firm power peak load on Canada	11,535	17,430	18,499	19,093	20,907	22,648	24,514	26,315	28,075	29,840	31,611	6.98	6.77	6.89
3. Indicated reserve (1 - 2)	1,797	4,910	4,256[r]	4,780	4,573	3,379	3,773	3,631	3,871	5,006	5,959	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	15.6	28.2	23.0[r]	25.0	21.9	14.9	15.4	13.8	13.8	16.8	18.9	...	...	...

(1) Gross capability (Table 1, items 6 + 9); firm power peak load on province (Table 1, item 17); indicated reserve (Table 1, item 18).
[r] Revised figures.

GLOSSARY OF TERMS

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 or the best estimate of firm obligations in the absence of contracts.

Indicated Demand

The sum of firm power peak load and indicated shortage.

Indicated Reserve

Net capability less indicated firm power peak load within the province or gross capability less firm power peak load on the province.

Industrial Establishment

A firm which generates power primarily for use in its 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, Industrial Establishments or a combination of these, having interconnections for the exchange of power, which although they may be separately incorporated, are controlled, managed or operated by one principal.

CEA

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1964-1965

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ANNUAL ELECTRIC POWER SURVEY Of CAPABILITY AND LOAD