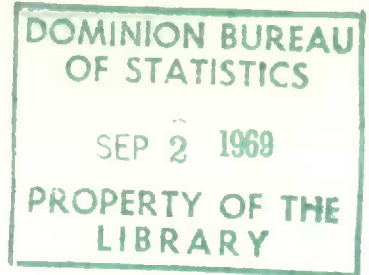


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VOLUME I

ANNUAL ELECTRIC POWER SURVEY
OF CAPABILITY AND LOAD

1668 Actual
1969 - 1973 Forecast

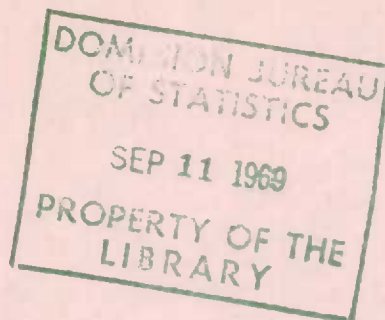
DOMINION BUREAU OF STATISTICS



CATALOGUE NO.

57-204

ANNUAL



Electric Power Statistics

Volume 1

Annual Electric Power Survey

of Capability and Load

1968 Actual
1969-1973 Forecast

ERRATUM

Cover page 1668 Actual should read 1968 Actual



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DOMINION BUREAU OF STATISTICS
Manufacturing and Primary Industries Division
Energy and Minerals Section

ELECTRIC POWER STATISTICS
VOLUME I

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

1968 Actual
1969 - 1973 Forecast

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57-201	Electric and Gas Meter Registrations. Approx. 150pp. Meter registrations by province, and company, by type of meter	\$1.50
57-202	Electric Power Statistics Vol. II - Annual Statistics. Approx. 70pp. Summary and detailed analyses of generation and use of electric power in Canada, power plant equipment, customers, employees, salaries and wages, financial statistics, and historical tabulation of supply and disposal of electric energy .....	.75
57-203	Electricity Bills for Domestic, Commercial and Small Power Service. Approx. 15pp. Includes an annual index of electricity bills for domestic service and bills for light and power in cities and representative municipalities .....	.50
57-204	Electric Power Statistics, Vol. I - Annual Electric Power Survey of Capability and Load. Approx. 45pp. Current and projected data of capability and load of major producers of electric energy in Canada .....	.75
Monthly		
57-001	Electric Power Statistics. Approx. 8pp. Production by utilities and industrial establishments, imports and exports, power made available for use in Canada, secondary energy used, sales to ultimate customers by rate category, cumulative monthly totals for year to date, by province .. 20¢ a copy; per year,	2.00
Occasional		
57-503	Electric Power Statistics. Vol III - Inventory of Prime Mover and Electric Generating Equipment. A list of generating plants in Canada by ownership showing the location, year of installation, name-plate rating and other details of each unit, as at December 31, 1966	1.50
<p style="text-align: center;">Remittances should be in the form of cheque or money order, made payable to the Receiver General of Canada and forwarded to the Publications Distribution, Dominion Bureau of Statistics, Ottawa, or to the Queen's Printer, Hull, P.Q.</p>		

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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 15th Annual Electric Power Survey of Capability and Load. The survey covers all producers of the electric energy in Canada which generate or will generate 10 million Kwh. or more per annum during the forecast period. 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 energy figures are common to the two publications: any differences are due to subsequent revisions. Final generation figures for all establishments are provided in Electric Power Statistics Vol. II (Catalogue No. 57-202).

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 is gratefully acknowledged.

1968 CAPABILITY AND LOAD SURVEY

Review of Survey Results

Total net generating capability in 1968 for firms which generate over 10 million Kwh. per year increased 3,053,000 Kw. or 9.73 per cent to 34,423,000 Kw. This is the largest annual net increase in generating capability in Canada's history. The forecast years 1968-73 indicate an anticipated growth of 17,351,000 Kw. to 51,774,000 Kw., a compound growth rate of 8.51 per cent as compared with the 1958-1968 growth rate of 6.33 per cent. Thermal capability is expected to grow at an annual rate of 12.93 per cent in the forecast period compared with an actual annual rate of 14.23 per cent in the previous ten year period, while hydro-electric capability is expected to increase at 6.38 per cent compared with 4.26 per cent in the previous ten years. Seventy-five per cent of the thermal capability growth will be in fossil-fuelled steam plants, twenty-four per cent in nuclear-fuelled steam plants and one per cent in gas turbine plants.

The first nuclear capability occurred in 1967. The nuclear capability does not include the 20,000 Kw. plant at Rolphton, Ontario, which is an experimental plant and therefore is not considered part of the capability. However, energy generated in this plant has been fed into the system and is included in Table 1. It is expected that by 1973 the nuclear capability will reach 2,250,000 Kw. or 4.34 per cent of the total Canadian generating capability.

In the previous forecast it was estimated that the net generating capability in 1968 would be 34,250,000 Kw. The actual net generating capability exceeded this estimate by 173,000 Kw.

The largest absolute growths in generating capability for the forecast period are indicated for: Ontario 6,516,000 Kw.; Newfoundland 3,502,000 Kw.; Quebec 3,078,000 Kw. and British Columbia 1,326,000 Kw. Of the increased generating capability in Ontario, 4,024,000 Kw. will be in fossil-fuelled plants, (steam, internal combustion and gas turbine) while nuclear-fuelled plants will account for 1,800,000 Kw. of the increase. Newfoundland plans to increase its capability by adding 3,052,000 Kw. hydro and 450,000 Kw. in fossil-fuelled steam plants. The Quebec forecast is for an increase of 2,847,000 Kw. in hydro capability and 250,000 Kw. in nuclear-fuelled thermal capability, while British Columbia estimates are for increases of 1,294,000 Kw. and 32,000 Kw. in hydro and thermal capability respectively.

In the period from 1958 to 1968 the compound growth rate of firm power peak load in Canada was 6.77 per cent. This growth rate is expected to increase to 7.34 per cent during the period 1968 to 1973. During the forecast period the indicated reserve is expected to increase from 4,128,000 Kw. in 1968 to 8,708,000 Kw. in 1973. The indicated reserve, stated as a percentage of firm power peak load, amounted to 13.6 per cent in 1968 and it is forecast that it will be 20.2 per cent in 1973.

It should be noted that the firm power peak load is the calendar year peak. Some companies have winter peak loads occurring in January and must provide capability to meet these peaks. For these companies the peak load tends to be understated and the reserve is overstated by the difference between the December peak load and the peak load for January of the following year.

Firm energy requirements increased 7.00 per cent from 162,629 million Kwh. in 1967 to 174,017 million Kwh. in 1968 compared with a compound growth rate of 7.15 per cent in the previous ten year period and a forecast growth rate of 7.20 per cent for the period 1968-1973. The increase of 11,388 million Kwh. was the result of an increase in net generation of 10,587 million Kwh., an increase in net imports of 201 million Kwh. and a decrease of 600 million Kwh. of secondary energy delivered within Canada.

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 about 60 per cent of the capability have only a slight variation between their coincident and non-coincident peak loads. Of twenty-six major systems serving Canada, five had peak loads on December 30, seventeen on other dates between November 30 and December 31 and four 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 power 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. No forecasts of generation are given for 1969-73.

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 36, 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).

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CHART - A

TOTAL GENERATING CAPABILITY WITHIN CANADA 1958-1973

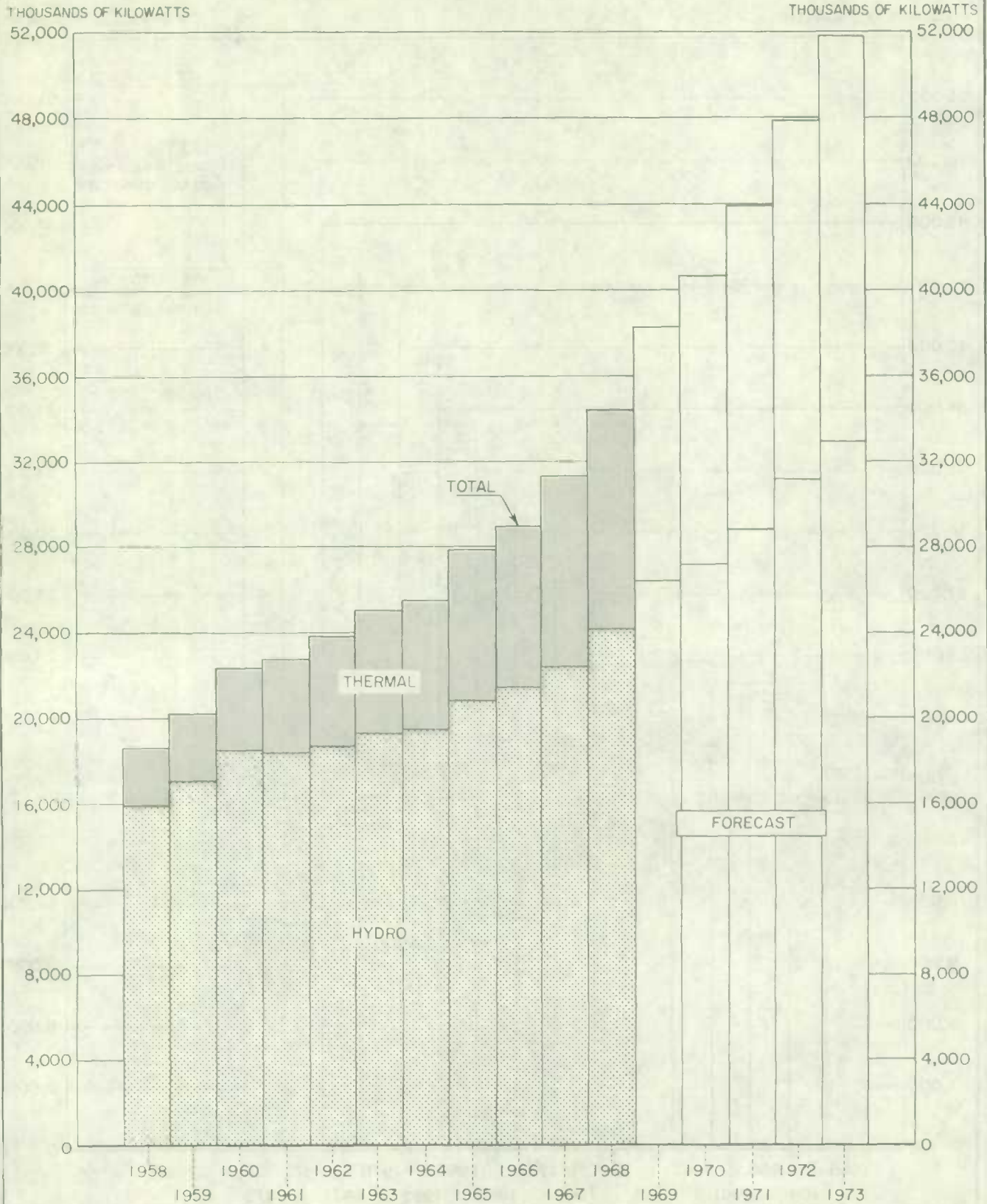


CHART - B

NET CAPABILITY AND PEAK LOADS WITHIN CANADA 1958 - 1973

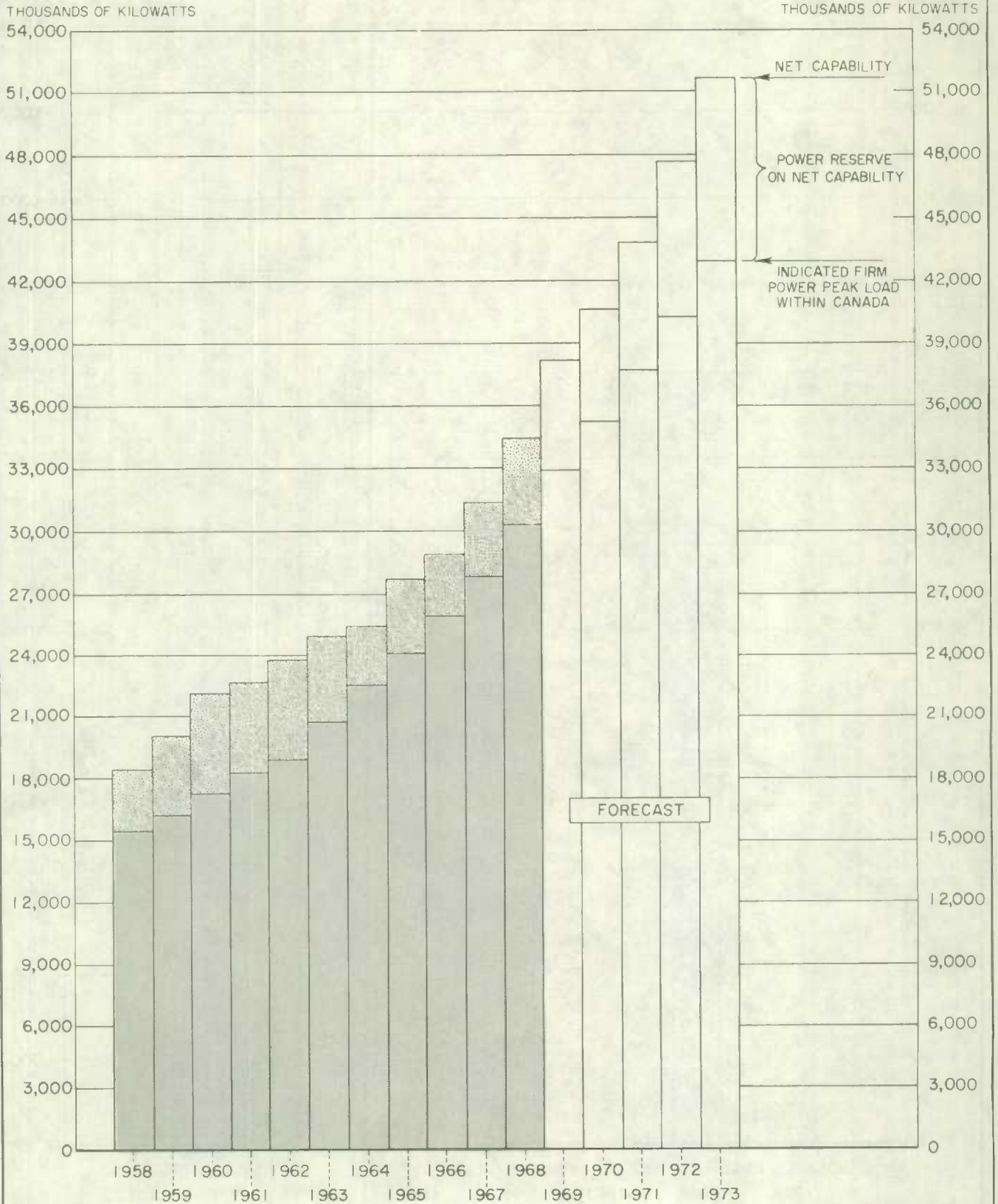
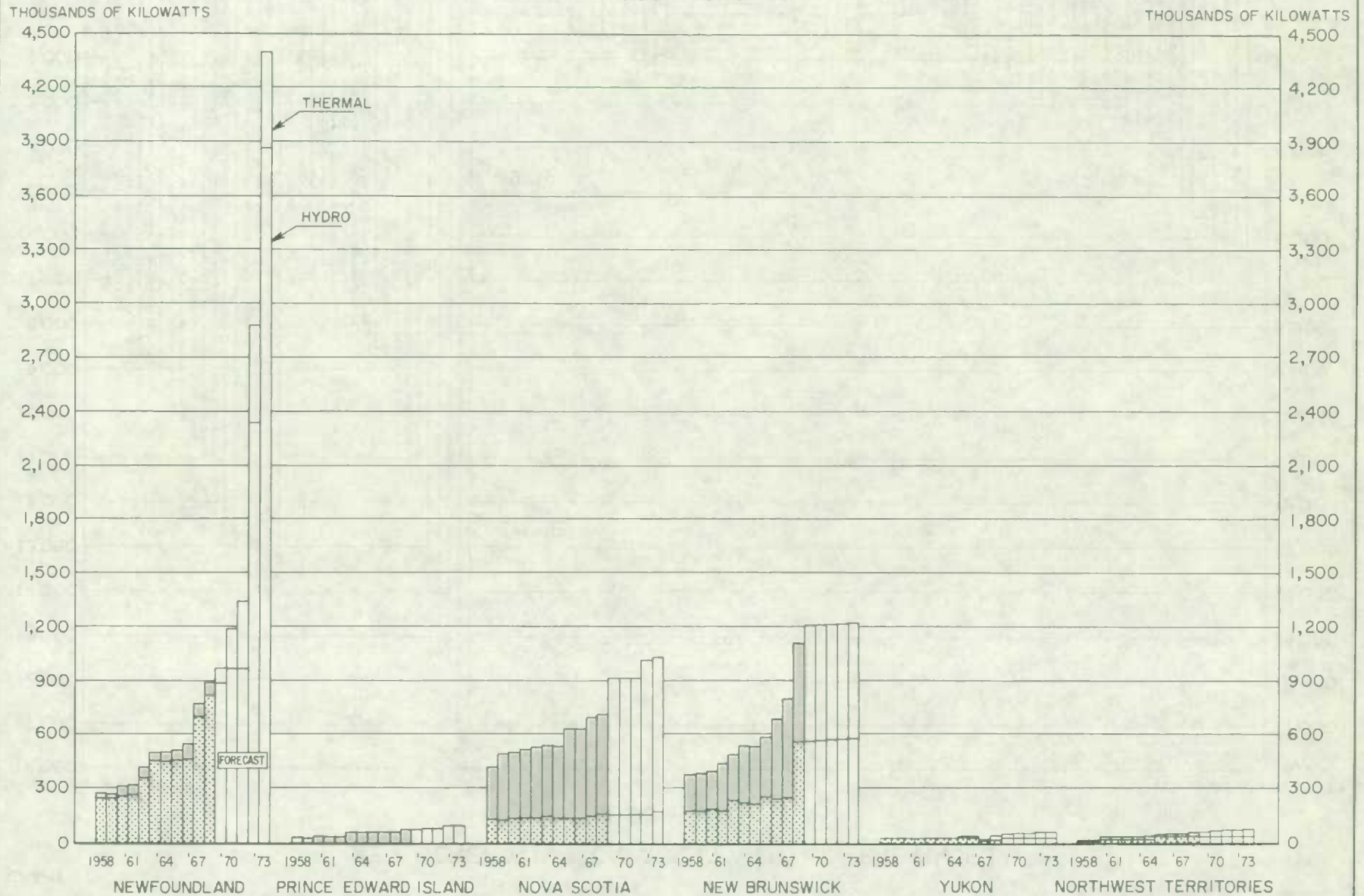


CHART-C

NET GENERATING CAPABILITY WITHIN PROVINCES 1958-1973



CHART—C

NET GENERATING CAPABILITY WITHIN PROVINCES 1958—1973

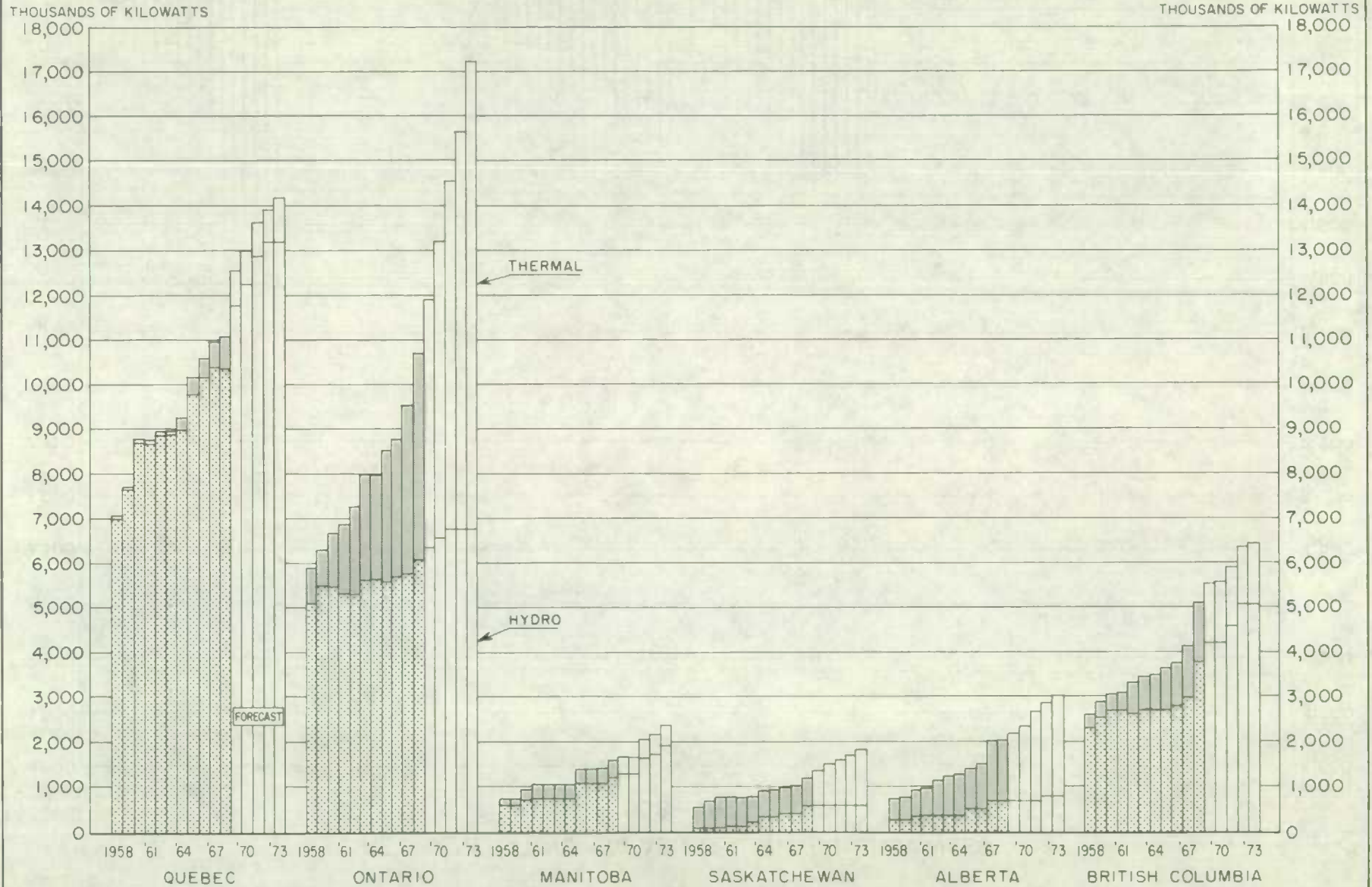
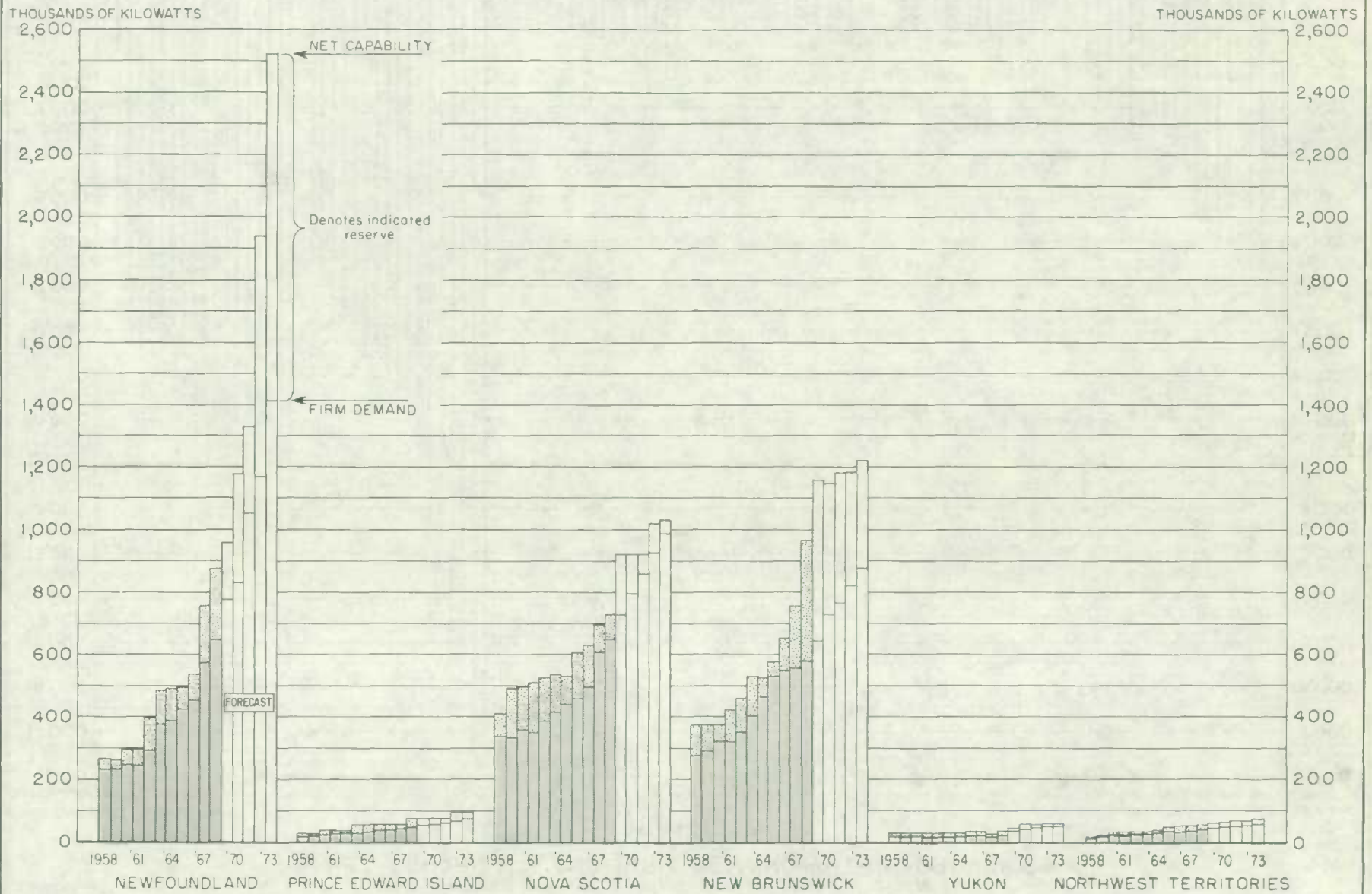


CHART — D

NET CAPABILITY AND FIRM DEMAND WITHIN PROVINCES 1958—1973



CHART—D

NET CAPABILITY AND FIRM DEMAND WITHIN PROVINCES 1958—1973

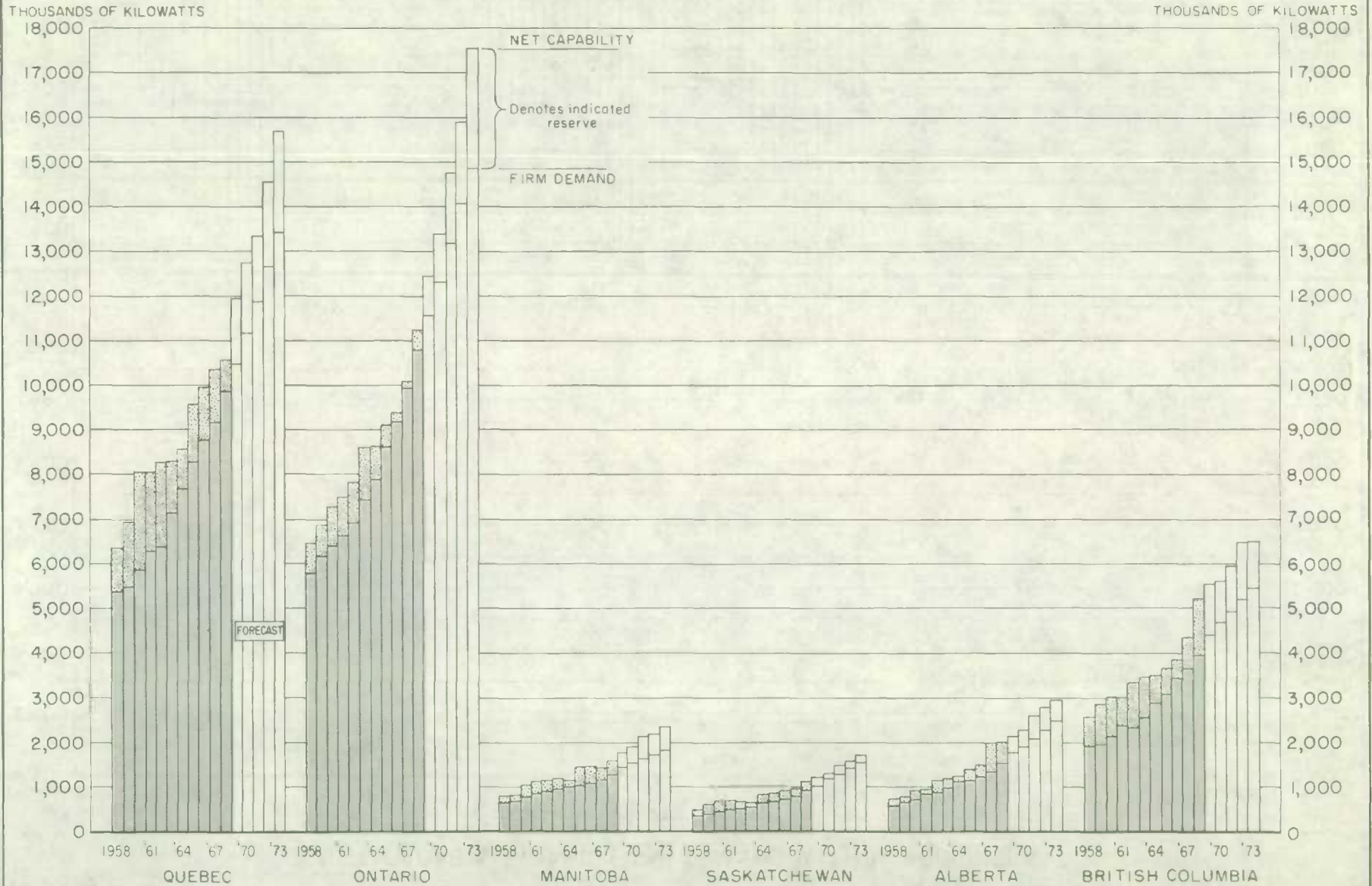


CHART - E

FIRM ENERGY REQUIREMENT WITHIN CANADA 1958-1973

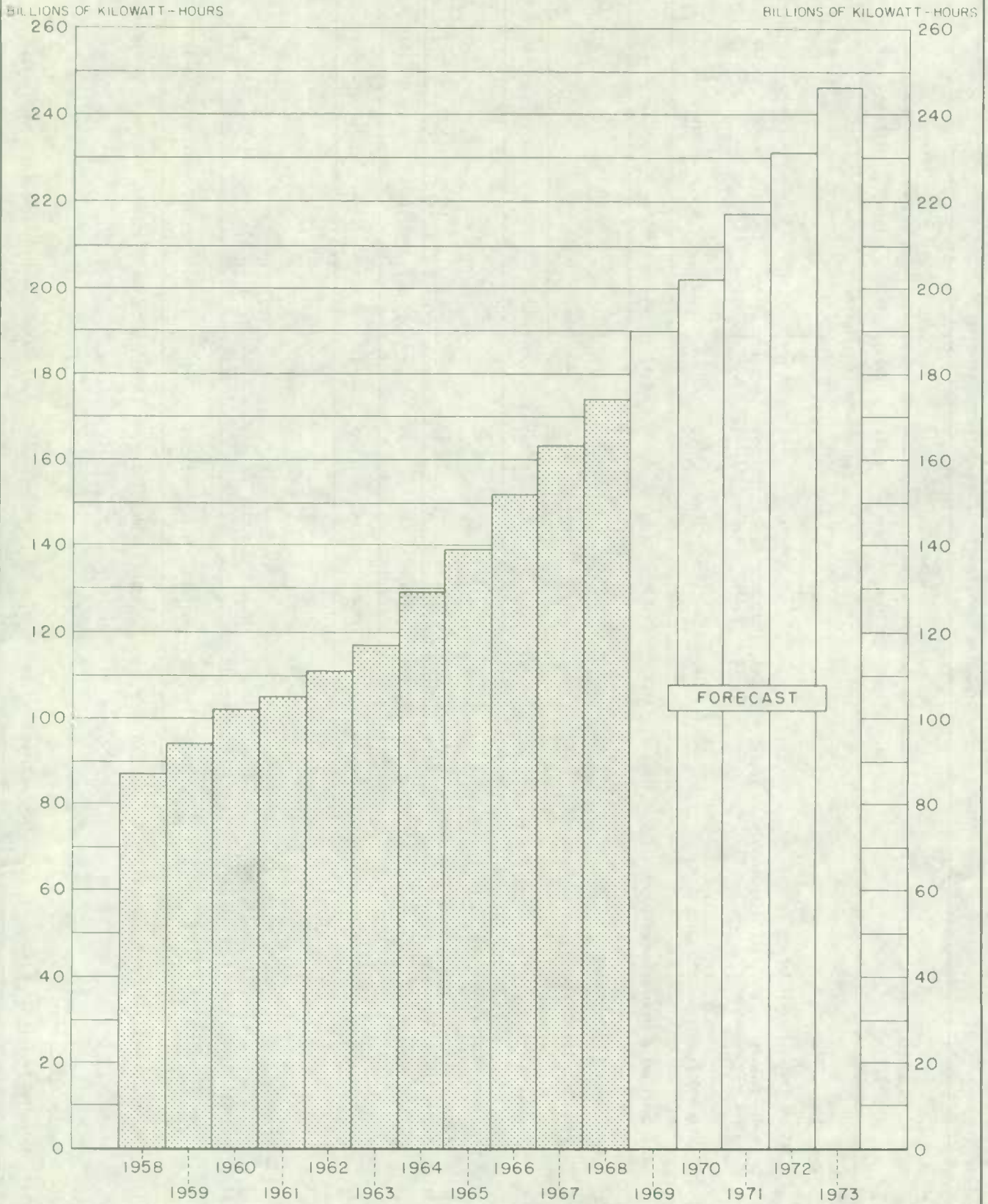


TABLE 1. Capability, Firm Power Peak Load, and Energy Requirements

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	15,912	19,493	20,779	21,459	22,393	24,161	26,397	27,166	28,806	31,178	32,911
2. Steam - Conventional)	(5,422	6,354	6,634	7,798	8,877	10,539	12,071	12,934	13,954	15,328	
3. Nuclear)	(-	-	-	167	200	200	200	950	1,500	2,250	
4. Internal combustion)	(255	243	257	264	310	305	319	318	324	331	
5. Gas turbine)	(384	460	583	748	875	873	887	932	934	954	
6. Total net generating capability	18,628	25,554	27,836	28,933	31,370	34,423	38,314	40,643	43,940	47,890	51,774
Receipts of firm power from:											
7. Other provinces .....	...	...	...	...	...	...	...	...	...	...	...
8. United States	-	2	-	100	180	110	-	90	-	-	-
9. Total receipts	-	2	-	100	180	110	-	90	-	-	-
Deliveries of firm power to:											
10. Other provinces .....	...	...	...	...	...	...	...	...	...	...	...
11. United States	152	127	89	87	95	105	105	119	107	107	106
12. Total deliveries	152	127	89	87	95	105	105	119	107	107	106
13. Total net capability (6 + 9 - 12)	18,476	25,429	27,747	28,946	31,455	34,428	38,209	40,614	43,833	47,783	51,668
<u>Peak loads:</u>											
14. Firm power peak load within province	15,568	22,503	24,167 ^r	25,921 ^r	27,812 ^r	30,151	32,923	35,256	37,775	40,333	42,960
15. Indicated shortages	-	13	-	-	-	149	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	15,568	22,516	24,167 ^r	25,921 ^r	27,812 ^r	30,300	32,923	35,256	37,775	40,333	42,960
17. Firm power peak load on province (12 + 16)	15,720	22,643	24,256 ^r	26,008 ^r	27,907 ^r	30,405	33,028	35,375	37,882	40,440	43,066
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	2,908	2,913	3,580 ^r	3,025 ^r	3,643 ^r	4,128	5,286	5,358	6,058	7,450	8,708

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

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	90,250	113,212	116,692	129,444	132,192 ^F	134,712	...	...	...	...	...
20. Steam - Conventional)		(20,051	25,485	26,521	31,143 ^F	38,446	...	...	...	...	...
21. Nuclear)		(141	120	161	143	859	...	...	...	...	...
	6,507	(					...	...	...	...	...
22. Internal combustion)		(574	504	632	671	650	...	...	...	...	...
23. Gas turbine)		(282	313	376	615	684	...	...	...	...	...
24. Total net generation	96,757	134,260	143,114	157,134	164,764	175,351	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	...	...	...	...	...	...	...	...	...	...	...
26. United States:											
(a) Firm .....	..	6	4	133	1,363	1,417	2	2	1	1	1
(b) Secondary .....	..	2,971	3,573	2,922	2,779	2,713	...	...	...	...	...
27. Total receipts of energy	244	2,977	3,577	3,055	4,142	4,130	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces .....	...	...	...	...	...	...	...	...	...	...	...
29. United States	1,264	835	633	613	634	740	832	963	995	885	887
(b) Secondary:											
30. Other provinces .....	...	...	...	...	...	...	...	...	...	...	...
31. United States	2,883	3,392	2,937	3,697	3,234	2,915	...	...	...	...	...
32. Total deliveries of energy	4,147	4,227	3,570	4,310	3,868	3,655	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	92,854	133,010	143,121	155,879	165,038	175,826	...	...	...	...	...
34. Secondary energy delivered within province	5,615	3,671	4,072	4,226	2,409	1,809	...	...	...	...	...
35. Firm energy available within province (33 - 34)	87,239	129,339	139,049	151,653	162,629	174,017	189,600	202,248	216,624	231,135	246,335
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	87,239	129,339	139,049	151,653	162,629	174,017	189,600	202,248	216,624	231,135	246,335
38. Firm energy requirement on province (28 + 29 + 37)	88,503	130,174	139,682	152,266	163,263	174,757	190,432	203,211	217,619	232,020	247,222

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	243	442	446	454	690	808	885	960	960	2,340	3,860
2. Steam - Conventional)		(45	45	52	47	30	30	180	330	480	480
3. Nuclear)		(-	-	-	-	-	-	-	-	-	-
4. Internal combustion)	28	(11	11	13	13	20	20	20	20	20	20
5. Gas turbine)		(-	-	25	15	29	29	29	29	29	29
6. Total net generating capability	271	498	502	544	765	887	964	1,189	1,339	2,869	4,389
Receipts of firm power from:											
7. Other provinces	-	-	-	-	-	-	-	-	-	-	-
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	-	-	-	-	-	-	-	-	-	-	-
Deliveries of firm power to:											
10. Other provinces	8	8	7	10	12	12	12	12	12	936	1,870
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	8	8	7	10	12	12	12	12	12	936	1,870
13. Total net capability (6 + 9 - 12)	263	490	495	534	753	875	952	1,177	1,327	1,933	2,519
<u>Peak loads:</u>											
14. Firm power peak load within province	231	376	422	450	571	644	788	827	1,049	1,165	1,410
15. Indicated shortages	-	13	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	231	389	422	450	571	644	788	827	1,049	1,165	1,410
17. Firm power peak load on province (12 + 16)	239	397	429	460	583	656	800	839	1,061	2,101	3,280
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	32	101	73	84	182	231	164	350	278	768	1,109

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

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	1,330	2,278	2,485	2,555	2,888	3,685	...	...	...	...	...
20. Steam - Conventional)		(98	217	286	153	62	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion)	40	(12	24	24	28	26	...	...	...	...	...
23. Gas turbine)		(-	-	6	74	1	...	...	...	...	...
24. Total net generation	1,370	2,388	2,726	2,871	3,143	3,774	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	-	-	-	-	-	-	-	-	-	-
26. United States:											
(a) Firm .....	..	-	-	-	-	-	-	-	-	-	-
(b) Secondary .....	..	-	-	-	-	-	...	...	...	...	...
27. Total receipts of energy	9	-	-	-	-	-	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	44	54	56	57	58	56	55	55	55	5,817	13,983
29. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
30. Other provinces	2	30	28	24	26	26	...	...	...	...	...
31. United States .....	..	-	-	-	-	-	...	...	...	...	...
32. Total deliveries of energy	46	84	84	81	84	82	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	1,333	2,304	2,642	2,790	3,059	3,692	...	...	...	...	...
34. Secondary energy delivered within province	155	11	2	-	50	126	...	...	...	...	...
35. Firm energy available within province (33 - 34)	1,178	2,293	2,640	2,790	3,009	3,566	4,844	5,072	6,814	7,630	9,513
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	1,178	2,293	2,640	2,790	3,009	3,566	4,844	5,072	6,814	7,630	9,513
38. Firm energy requirement on province (28 + 29 + 37)	1,222	2,347	2,696	2,847	3,067	3,622	4,899	5,127	6,869	13,447	23,496

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	-	-	-	-	-	-	-	-	-	-	-
2. Steam - Conventional)		(51	51	51	51	67	67	67	67	86	86
3. Nuclear)	26	(-	-	-	-	-	-	-	-	-	-
4. Internal combustion)		(7	7	7	7	7	7	10	10	10	10
5. Gas turbine)		(-	-	-	-	-	-	-	-	-	-
6. Total net generating capability	26	58	58	58	58	74	74	77	77	96	96
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)	26	58	58	58	58	74	74	77	77	96	96
<u>Peak loads:</u>											
14. Firm power peak load within province	16	31	35	37	40	46	51	55	60	65	71
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	16	31	35	37	40	46	51	55	60	65	71
17. Firm power peak load on province (12 + 16)	16	31	35	37	40	46	51	55	60	65	71
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	10	27	23	21	18	28	23	22	17	31	25

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric .....	-	-	-	-	-	-	...	...	...	...	...
20. Steam - Conventional)		(119	131	150	175	192	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion)	63	(5	5	5	7	7	...	...	...	...	...
23. Gas turbine )		( -	-	-	-	-	...	...	...	...	...
24. Total net generation	63	124	136	155	182	199	...	...	...	...	...
Receipts of energy from:											
25. Other provinces	-	-	-	-	-	-	-	-	-	-	-
26. United States:											
(a) Firm	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary .....	-	-	-	-	-	-	...	...	...	...	...
27. Total receipts of energy .....	-	-	-	-	-	-	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	-	-	-	-	-	-	-	-	-	-	-
29. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
30. Other provinces .....	-	-	-	-	-	-	...	...	...	...	...
31. United States .....	-	-	-	-	-	-	...	...	...	...	...
32. Total deliveries of energy .....	-	-	-	-	-	-	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	63	124	136	155	182	199	...	...	...	...	...
34. Secondary energy delivered within province	-	-	-	15	21	24	...	...	...	...	...
35. Firm energy available within province (33 - 34)	63	124	136	140	161	175	190	213	240	270	303
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	63	124	136	140	161	175	190	213	240	270	303
38. Firm energy requirement on province (28 + 29 + 37)	63	124	136	140	161	175	190	213	240	270	303

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	127	141	141	141	151	161	160	160	160	160	170
2. Steam - Conventional)	(383	482	482	540	540	750	750	750	850	850	
3. Nuclear)	(-	-	-	-	-	-	-	-	-	-	-
4. Internal combustion)	(3	3	3	3	3	3	3	3	3	3	3
5. Gas turbine)	(-	-	-	-	-	-	-	-	-	-	-
6. Total net generating capability	411	527	626	626	694	704	913	913	913	1,013	1,023
Receipts of firm power from:											
7. Other provinces	-	-	-	-	-	20	-	-	-	-	-
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	-	-	-	-	-	20	-	-	-	-	-
Deliveries of firm power to:											
10. Other provinces	3	1	25	-	-	-	-	-	-	-	-
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	3	1	25	-	-	-	-	-	-	-	-
13. Total net capability (6 + 9 - 12)	408	526	601	626	694	724	913	913	913	1,013	1,023
<u>Peak loads:</u>											
14. Firm power peak load within province	335	438	457	496	604	645	723	796	854	922	989
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	335	438	457	496	604	645	723	796	854	922	989
17. Firm power peak load on province (12 + 16)	338	439	482	496	604	645	723	796	854	922	989
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	73	88	144	130	90	79	190	117	59	91	34

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

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	651	718	449	439	664	693	...	...	...	...	...
20. Steam - Conventional)		(1,662	2,158	2,408	2,267	2,345	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion)	911	( -	-	-	-	-	...	...	...	...	...
23. Gas turbine )		( -	-	-	-	-	...	...	...	...	...
24. Total net generation	1,562	2,380	2,607	2,847	2,931	3,038	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	-	-	59	96	230	200	54	61	61	61
26. United States:											
(a) Firm .....	..	43	44	-	-	-	-	-	-	-	-
(b) Secondary .....	..	-	-	-	-	-	...	...	...	...	...
27. Total receipts of energy .....	..	43	44	59	96	230	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	10	7	34	125	-	-	-	-	-	-	-
29. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
30. Other provinces	-	113	144	123	170	116	...	...	...	...	...
31. United States .....	-	-	-	-	-	-	...	...	...	...	...
32. Total deliveries of energy	10	120	178	248	170	116	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	1,552	2,303	2,473	2,658	2,857	3,152	...	...	...	...	...
34. Secondary energy delivered within province	-	2	7	10	27	30	...	...	...	...	...
35. Firm energy available within province (33 - 34)	1,552	2,301	2,466	2,648	2,830	3,122	3,531	3,774	4,105	4,369	4,650
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	1,552	2,301	2,466	2,648	2,830	3,122	3,531	3,774	4,105	4,369	4,650
38. Firm energy requirement on province (28 + 29 + 37)	1,562	2,308	2,500	2,773	2,830	3,122	3,531	3,774	4,105	4,369	4,650

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	185	222	260	251	253	564	565	566	567	568	569
2. Steam - Conventional )	(	305	310	421	533	533	636	636	636	636	636
3. Nuclear)	(-	-	-	-	-	-	-	-	-	-
4. Internal combustion )	(	7	7	7	7	7	7	7	7	7	7
5. Gas turbine)	(-	-	-	-	-	-	-	-	-	-
6. Total net generating capability	372	534	577	679	793	1,104	1,208	1,209	1,210	1,211	1,212
Receipts of firm power from:											
7. Other provinces	8	9	33	8	8	8	8	8	51	51	85
8. United States	-	2	-	-	-	-	-	-	-	-	-
9. Total receipts	8	11	33	8	8	8	8	8	51	51	85
Deliveries of firm power to:											
10. Other provinces	-	2	-	-	-	90	-	-	-	-	-
11. United States	9	31	37	38	45	55	61	75	80	81	82
12. Total deliveries	9	33	37	38	45	145	61	75	80	81	82
13. Total net capability (6 + 9 - 12)	371	512	573	649	756	967	1,155	1,142	1,181	1,181	1,215
<u>Peak loads:</u>											
14. Firm power peak load within province	273	461	528	544	551	579	642	728	767	819	876
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	273	461	528	544	551	579	642	728	767	819	876
17. Firm power peak load on province (12 + 16)	282	494	565	582	596	724	703	803	847	900	958
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	98	51	45	105	205	388	513	414	414	362	339

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	1,066	1,019	1,104	1,182	1,306	1,696	...	...	...	...	...
20. Steam - Conventional)		(1,525	1,844	2,023	2,316	2,480	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion)	478	(4	5	6	4	5	...	...	...	...	...
23. Gas turbine )		( -	-	-	-	-	...	...	...	...	...
24. Total net generation	1,544	2,548	2,953	3,211	3,626	4,181	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	145	211	307	216	148	32	34	92	379	423
26. United States:											
(a) Firm .....	..	3	1	10	-	-	-	-	-	-	-
(b) Secondary .....	..	3	17	1	7	24	...	...	...	...	...
27. Total receipts of energy	26	151	229	318	223	172	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	-	1	-	-	58	29	200	54	61	61	61
29. United States	63	163	179	203	216	306	396	519	553	552	552
(b) Secondary:											
30. Other provinces	-	43	45	59	38	232	...	...	...	...	...
31. United States	88	82	57	109	118	82	...	...	...	...	...
32. Total deliveries of energy	151	289	281	371	430	649	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	1,419	2,410	2,901	3,158	3,419	3,704	...	...	...	...	...
34. Secondary energy delivered within province	2	-	159	116	125	132	...	...	...	...	...
35. Firm energy available within province (33 - 34)	1,417	2,410	2,742	3,042	3,294	3,572	4,081	4,607	5,000	5,437	5,925
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	1,417	2,410	2,742	3,042	3,294	3,572	4,081	4,607	5,000	5,437	5,925
38. Firm energy requirement on province (28 + 29 + 37)	1,480	2,574	2,921	3,245	3,568	3,907	4,677	5,180	5,614	6,050	6,538

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	6,992	8,982	9,768	10,141	10,374	10,316	11,768	12,229	12,878	13,163	13,163
2. Steam - Conventional )	(	192	361	374	528	696	696	696	695	708	708
3. Nuclear )	(	-	-	-	-	-	-	-	-	-	250
4. Internal combustion )	(	15	13	15	19	23	24	25	26	27	28
5. Gas turbine )	(	36	36	36	36	36	36	36	-	-	-
6. Total net generating capability	7,053	9,225	10,178	10,566	10,957	11,071	12,524	12,986	13,599	13,898	14,149
Receipts of firm power from:											
7. Other provinces	9	18	7	10	12	82	12	12	12	936	1,870
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	9	18	7	10	12	82	12	12	12	936	1,870
Deliveries of firm power to:											
10. Other provinces	673	717	635	633	633	590	590	252	295	295	329
11. United States	57	6	6	2	2	2	2	2	2	2	2
12. Total deliveries	730	723	641	635	635	592	592	254	297	297	331
13. Total net capability (6 + 9 - 12)	6,332	8,520	9,544	9,941	10,334	10,561	11,944	12,744	13,314	14,537	15,688
<u>Peak loads:</u>											
14. Firm power peak load within province	5,375	7,651	8,228	8,761	9,142	9,880	10,453	11,163	11,876	12,634	13,399
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	5,375	7,651	8,228	8,761	9,142	9,880	10,453	11,163	11,876	12,634	13,399
17. Firm power peak load on province (12 + 16)	6,105	8,374	8,869	9,396	9,777	10,472	11,045	11,417	12,173	12,931	13,730
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	957	869	1,316	1,180	1,192	681	1,491	1,581	1,438	1,903	2,289

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

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	43,340	56,268	55,952	61,900	62,348	61,575	...	...	...	...	...
20. Steam - Conventional)		(424	897	470	1,413	3,430	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
	189	(					...	...	...	...	...
22. Internal combustion)		(6	13	17	24	30	...	...	...	...	...
23. Gas turbine)		(1	1	-	-	1	...	...	...	...	...
24. Total net generation	43,529	56,699	56,863	62,387	63,785	65,036	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	128	189	169	218	306	55	55	55	5,817	13,983
26. United States:											
(a) Firm .....	..	1	1	1	1	1	1	1	1	1	1
(b) Secondary .....	..	-	-	-	-	-	...	...	...	...	...
27. Total receipts of energy	61	129	190	170	219	307	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	4,205	4,979	4,317	3,855	3,853	3,862	3,775	3,558	2,785	5,960	7,338
29. United States	490	16	14	14	15	16	16	16	17	17	18
(b) Secondary:											
30. Other provinces	1,785	2,040	602	2,453	1,440	987	...	...	...	...	...
31. United States	36	40	33	12	10	21	...	...	...	...	...
32. Total deliveries of energy	6,516	7,075	4,966	6,334	5,318	4,886	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	37,074	49,753	52,087	56,223	58,686	60,457	...	...	...	...	...
34. Secondary energy delivered within province	4,732	2,672	2,860	2,858	1,836	1,217	...	...	...	...	...
35. Firm energy available within province (33 - 34)	32,342	47,081	49,227	53,365	56,850	59,240	63,505	67,449	70,957	74,807	78,381
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	32,342	47,081	49,227	53,365	56,850	59,240	63,505	67,449	70,957	74,807	78,381
38. Firm energy requirement on province (28 + 29 + 37)	37,037	52,076	53,558	57,234	60,718	63,118	67,296	71,023	73,759	80,784	85,737

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	5,081	5,603	5,548	5,687	5,772	6,085	6,328	6,542	6,777	6,777	6,777
2. Steam - Conventional )	(	2,379	2,885	2,947	3,280	4,044	5,014	6,088	6,405	6,946	8,020
3. Nuclear )	(	-	-	-	167	200	200	200	950	1,500	2,000
4. Internal combustion )	(	8	7	7	8	6	6	7	7	9	9
5. Gas turbine )	(	-	74	149	288	352	352	352	397	397	397
6. Total net generating capability	5,881	7,990	8,514	8,790	9,515	10,687	11,900	13,189	14,536	15,629	17,203
Receipts of firm power from:											
7. Other provinces	668	709	627	625	625	582	582	244	244	294	344
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	668	709	627	625	625	582	582	244	244	294	344
Deliveries of firm power to:											
10. Other provinces	1	8	-	-	-	-	-	-	-	-	-
11. United States	86	90	46	47	48	48	42	42	25	24	22
12. Total deliveries	87	98	46	47	48	48	42	42	25	24	22
13. Total net capability (6 + 9 - 12)	6,462	8,601	9,095	9,368	10,092	11,221	12,440	13,391	14,755	15,899	17,525
<u>Peak loads:</u>											
14. Firm power peak load within province	5,794	7,897	8,596	9,157	9,930	10,648	11,548	12,303	13,169	14,057	14,858
15. Indicated shortages	-	-	-	-	-	149	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	5,794	7,897	8,596	9,157	9,930	10,797	11,548	12,303	13,169	14,057	14,858
17. Firm power peak load on province (12 + 16)	5,881	7,995	8,642	9,204	9,978	10,845	11,590	12,345	13,194	14,081	14,880
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	668	704	499	211	162	424	892	1,088	1,586	1,842	2,667

TABLE I. Capacity, Firm Power Peak Load, and Energy Requirements - Continued

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	27,942	30,150	32,924	36,971	37,644	38,336	...	...	...	...	...
20. Steam - Conventional)		(9,313	11,661	11,262	14,152	17,004	...	...	...	...	...
21. Nuclear)		(141	120	161	143	859	...	...	...	...	...
22. Internal combustion)	1,197	(22	21	23	18	29	...	...	...	...	...
23. Gas turbine)		(-	4	13	23	87	...	...	...	...	...
24. Total net generation	29,139	39,626	44,730	48,430	51,980	56,315	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	7,026	4,893	6,263	5,481	4,892	3,743	3,524	2,693	5,845	7,528
26. United States:											
(a) Firm .....	..	-	-	-	-	-	-	-	-	-	-
(b) Secondary .....	..	2,907	2,897	2,339	2,516	2,610	...	...	...	...	...
27. Total receipts of energy	6,232	9,933	7,790	8,602	7,997	7,502	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	5	28	20	-	-	-	-	-	-	-	-
29. United States	711	654	438	393	400	414	415	423	309	309	309
(b) Secondary:											
30. Other provinces	46	255	258	99	161	293	...	...	...	...	...
31. United States	2,746	3,240	2,656	2,853	2,506	2,113	...	...	...	...	...
32. Total deliveries of energy	3,508	4,177	3,372	3,345	3,067	2,820	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	31,863	45,382	49,148	53,687	56,910	60,997	...	...	...	...	...
34. Secondary energy delivered within province	395	568	639	592	112	92	...	...	...	...	...
35. Firm energy available within province (33 - 34)	31,468	44,814	48,509	53,095	56,798	60,905	65,597	69,671	74,382	79,847	84,920
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	31,468	44,814	48,509	53,095	56,798	60,905	65,597	69,671	74,382	79,847	84,920
38. Firm energy requirement on province (28 + 29 + 37)	32,184	45,496	48,967	53,488	57,198	61,319	66,012	70,094	74,691	80,156	85,229

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	566	735	1,061	1,061	1,061	1,171	1,205	1,205	1,609	1,710	1,912
2. Steam - Conventional)	(291	291	291	291	291	291	389	389	389	389	389
3. Nuclear)	(-	-	-	-	-	-	-	-	-	-	-
4. Internal combustion)	168	(	(	(	(	(	22	17	17	17	17
5. Gas turbine)	(-	-	-	-	9	24	24	24	24	24	24
6. Total net generating capability	734	1,034	1,361	1,363	1,373	1,506	1,640	1,635	2,039	2,140	2,342
Receipts of firm power from:											
7. Other provinces	68	94	83	84	87	88	139	189	89	89	89
8. United States	-	-	-	-	-	-	-	90	-	-	-
9. Total receipts	68	94	83	84	87	88	139	279	89	89	89
Deliveries of firm power to:											
10. Other provinces	-	-	1	1	41	1	1	1	1	51	101
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	-	-	1	1	41	1	1	1	1	51	101
13. Total net capability (6 + 9 - 12)	802	1,128	1,443	1,446	1,419	1,593	1,778	1,913	2,127	2,178	2,330
<u>Peak loads:</u>											
14. Firm power peak load within province	646	1,004	1,022	1,083	1,160 ^F	1,265	1,436	1,534	1,630	1,723	1,819
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	646	1,004	1,022	1,083	1,160 ^F	1,265	1,436	1,534	1,630	1,723	1,819
17. Firm power peak load on province (12 + 16)	646	1,004	1,023	1,084	1,201 ^F	1,266	1,437	1,535	1,631	1,774	1,920
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	156	124	421	362	259 ^F	328	342	379	497	455	511

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

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	3,082	4,799	5,256	6,037	6,476	6,464	...	...	...	...	...
20. Steam - Conventional)		(148	199	75	26	271	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
	131	()									
22. Internal combustion)		(14	15	22	27	29	...	...	...	...	...
23. Gas turbine )		( -	-	-	-	-	...	...	...	...	...
24. Total net generation	3,213	4,961	5,470	6,134	6,529	6,764	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	900	777	627	642	762	658	658	658	658	658
26. United States:											
(a) Firm .....	..	-	-	-	-	-	-	-	-	-	-
(b) Secondary .....	..	-	-	-	-	-	...	...	...	...	...
27. Total receipts of energy	620	900	777	627	642	762	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	-	-	5	17	48	48	12	12	12	276	625
29. United States	-	-	-	-	-	-	-	-	110	-	-
(b) Secondary:											
30. Other provinces	43	49	111	303	407	210	...	...	...	...	...
31. United States .....	-	-	-	-	-	-	...	...	...	...	...
32. Total deliveries of energy	43	49	116	320	455	258	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	3,790	5,812	6,131	6,441	6,716	7,268	...	...	...	...	...
34. Secondary energy delivered within province	214	153	143	226	153	102	...	...	...	...	...
35. Firm energy available within province (33 - 34)	3,576	5,659	5,988	6,215	6,563	7,166	7,954	8,571	9,109	9,540	9,977
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	3,576	5,659	5,988	6,215	6,563	7,166	7,954	8,571	9,109	9,540	9,977
38. Firm energy requirement on province (28 + 29 + 37)	3,576	5,659	5,993	6,232	6,611	7,214	7,966	8,583	9,231	9,816	10,602

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	87	309	309	392	392	574	575	575	575	575	575
2. Steam - Conventional )	(	529	535	531	531	501	641	781	877	977	1,117
3. Nuclear)	(-	-	-	-	-	-	-	-	-	-
4. Internal combustion )	(	35	35	33	33	33	33	33	33	33	33
5. Gas turbine )	(	39	41	40	55	88	88	88	88	88	88
6. Total net generating capability	538	912	920	996	1,011	1,196	1,337	1,477	1,573	1,673	1,813
Receipts of firm power from:											
7. Other provinces	1	-	1	1	41	1	1	1	1	1	1
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	1	-	1	1	41	1	1	1	1	1	1
Deliveries of firm power to:											
10. Other provinces	68	94	83	84	87	88	139	189	89	89	89
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	68	94	83	84	87	88	139	189	89	89	89
13. Total net capability (6 + 9 - 12)	471	818	838	913	965	1,109	1,199	1,289	1,485	1,585	1,725
<u>Peak loads:</u>											
14. Firm power peak load within province	353	619	653 ^F	709 ^F	783 ^F	922	1,070	1,169	1,276	1,410	1,535
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	353	619	653 ^F	709 ^F	783 ^F	922	1,070	1,169	1,276	1,410	1,535
17. Firm power peak load on province (12 + 16)	421	713	736 ^F	793 ^F	870 ^F	1,010	1,209	1,358	1,365	1,499	1,624
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	118	199	185 ^F	204 ^F	182 ^F	187	129	120	209	175	190

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

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	569	1,369	1,698	1,686	1,736	1,753	...	...	...	...	...
20. Steam - Conventional)		(1,782	1,855	2,048	2,374	2,782	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion)	1,333	(					...	...	...	...	...
23. Gas turbine)		(106	91	106	126	161	...	...	...	...	...
		(64	69	80	104	158	...	...	...	...	...
24. Total net generation	1,902	3,321	3,713	3,920	4,340	4,854	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	17	109	306	221	183	12	12	12	12	12
26. United States:											
(a) Firm .....	..	-	-	-	-	-	-	-	-	-	-
(b) Secondary .....	..	-	-	-	-	-	...	...	...	...	...
27. Total receipts of energy	3	17	109	306	221	183	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	504	651	599	614	600	645	658	658	658	658	658
29. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
30. Other provinces	79	9	4	2	15	17	...	...	...	...	...
31. United States .....	-	-	-	-	-	-	...	...	...	...	...
32. Total deliveries of energy	583	660	603	616	615	662	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	1,322	2,678	3,219	3,610	3,946	4,375	...	...	...	...	...
34. Secondary energy delivered within province	-	20	14	14	9	2	...	...	...	...	...
35. Firm energy available within province (33 - 34)	1,322	2,658	3,205	3,596	3,937	4,373	5,018	5,588	6,223	6,923	7,723
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	1,322	2,658	3,205	3,596	3,937	4,373	5,018	5,588	6,223	6,923	7,723
38. Firm energy requirement on province (28 + 29 + 37)	1,826	3,309	3,804	4,210	4,537	5,018	5,676	6,246	6,881	7,581	8,381

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	238	326	490	490	680	681	681	681	681	781	781
2. Steam - Conventional)		(748	750	820	1,156	1,155	1,296	1,456	1,757	1,854	2,014
3. Nuclear)		(-	-	-	-	-	-	-	-	-	-
4. Internal combustion)	496	(31	24	26	24	36	26	28	23	24	25
5. Gas turbine)		(130	131	155	155	155	155	155	191	191	191
6. Total net generating capability	734	1,235	1,395	1,491	2,015	2,027	2,158	2,320	2,652	2,850	3,011
Receipts of firm power from:											
7. Other provinces	4	-	-	-	-	-	-	-	-	-	-
8. United States	-	-	-	-	-	-	-	-	-	-	-
9. Total receipts	4	-	-	-	-	-	-	-	-	-	-
Deliveries of firm power to:											
10. Other provinces	1	12	19	19	15	13	36	56	60	60	60
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	1	12	19	19	15	13	36	56	60	60	60
13. Total net capability (6 + 9 - 12)	737	1,223	1,376	1,472	2,000	2,014	2,122	2,264	2,592	2,790	2,951
<u>Peak loads:</u>											
14. Firm power peak load within province	580	1,106	1,121	1,219	1,340	1,516	1,767	1,913	2,078	2,263	2,484
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	580	1,106	1,121	1,219	1,340	1,516	1,767	1,913	2,078	2,263	2,484
17. Firm power peak load on province (12 + 16)	581	1,118	1,140	1,238	1,355	1,529	1,803	1,969	2,138	2,323	2,544
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	157	117	255	253	660	498	355	351	514	527	467

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

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	991	896	1,411	1,425	1,436 ^F	1,063	...	...	...	...	...
20. Steam - Conventional)		(3,770	3,794	4,310	4,784 ^F	6,083	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion)	1,616	(90	57	80	97	88	...	...	...	...	...
23. Gas turbine)		(209	230	252	382	427	...	...	...	...	...
24. Total net generation	2,607	4,965	5,492	6,067	6,699	7,661	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	22	11	19	29	24	1	1	2	2	2
26. United States:											
(a) Firm .....	..	-	-	-	-	-	-	-	-	-	-
(b) Secondary .....	..	-	-	-	-	-	-	-	-	-	-
27. Total receipts of energy	19	22	11	19	29	24	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	-	-	-	18	15	22	80	250	290	340	340
29. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
30. Other provinces	2	-	-	-	-	-	...	...	...	...	...
31. United States .....	-	-	-	-	-	-	...	...	...	...	...
32. Total deliveries of energy	2	-	-	18	15	22	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	2,624	4,987	5,503	6,068	6,713	7,663	...	...	...	...	...
34. Secondary energy delivered within province	-	-	4	-	-	-	...	...	...	...	...
35. Firm energy available within province (33 - 34)	2,624	4,987	5,499	6,068	6,713	7,663	8,614	9,397	10,483	11,488	12,627
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	2,624	4,987	5,499	6,068	6,713	7,663	8,614	9,397	10,483	11,488	12,627
38. Firm energy requirement on province (28 + 29 + 37)	2,624	4,987	5,499	6,086	6,728	7,685	8,694	9,647	10,773	11,828	12,967

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	2,356	2,689	2,692	2,779	2,968	3,748	4,168	4,186	4,537	5,042	5,042
2. Steam - Conventional )	(	498	643	664	840	1,019	1,019	1,027	1,027	1,027	1,027
3. Nuclear)	(-	-	-	-	-	-	-	-	-	-
4. Internal combustion )	(	117	115	121	124	127	121	127	126	127	127
5. Gas turbine )	(	177	177	177	189	189	189	191	191	193	213
6. Total net generating capability	2,568	3,481	3,627	3,741	4,121	5,083	5,497	5,531	5,881	6,389	6,409
Receipts of firm power from:											
7. Other provinces	-	12	19	19	15	13	36	56	60	60	60
8. United States	-	-	-	100	180	110	-	-	-	-	-
9. Total receipts	-	12	19	119	195	123	36	56	60	60	60
Deliveries of firm power to:											
10. Other provinces	4	-	-	-	-	-	-	-	-	-	-
11. United States	-	-	-	-	-	-	-	-	-	-	-
12. Total deliveries	4	-	-	-	-	-	-	-	-	-	-
13. Total net capability (6 + 9 - 12)	2,564	3,493	3,646	3,860	4,316	5,206	5,533	5,587	5,941	6,449	6,469
<u>Peak loads:</u>											
14. Firm power peak load within province	1,935	2,886	3,058	3,421	3,647	3,951	4,369	4,684	4,925	5,179	5,417
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	1,935	2,886	3,058	3,421	3,647	3,951	4,369	4,684	4,925	5,179	5,417
17. Firm power peak load on province (12 + 16)	1,939	2,886	3,058	3,421	3,647	3,951	4,369	4,684	4,925	5,179	5,417
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	629	607	588	439	669	1,255	1,164	903	1,016	1,270	1,052

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	11,148	15,516	15,196	16,978	17,420	19,144	...	...	...	...	...
20. Steam - Conventional)		(1,207	2,727	3,486	3,480	3,794	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion)	534	(	293	255	331	315	241	...	...	...	...
23. Gas turbine)		(4	5	20	30	9	...	...	...	...	...
24. Total net generation	11,682	17,020	18,183	20,815	21,245	23,188	...	...	...	...	...
Receipts of energy from:											
25. Other provinces .....	..	-	-	18	15	22	80	250	290	340	340
26. United States:											
(a) Firm .....	..	2	2	122	1,362	1,416	1	1	-	-	-
(b) Secondary .....	..	61	659	582	256	79	...	...	...	...	...
27. Total receipts of energy	18	63	661	722	1,633	1,517	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	6	1	11	19	29	1	1	1	2	2	2
29. United States	-	2	2	3	3	4	5	5	6	7	8
(b) Secondary:											
30. Other provinces	13	21	-	-	-	23	...	...	...	...	...
31. United States	13	30	191	723	600	699	...	...	...	...	...
32. Total deliveries of energy	32	54	204	745	632	727	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	11,668	17,029	18,640	20,792	22,246	23,978	...	...	...	...	...
34. Secondary energy delivered within province	89	180	196	337	18	20	...	...	...	...	...
35. Firm energy available within province (33 - 34)	11,579	16,849	18,444	20,455	22,228	23,958	25,929	27,508	28,888	30,380	31,850
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	11,579	16,849	18,444	20,455	22,228	23,958	25,929	27,508	28,888	30,380	31,850
38. Firm energy requirement on province (28 + 29 + 37)	11,585	16,852	18,457	20,477	22,260	23,963	25,935	27,514	28,896	30,389	31,860

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	27	27	29	28	17	18	27	27	27	27	27
2. Steam - Conventional)		(-	-	-	-	-	-	-	-	-	-
3. Nuclear)		(-	-	-	-	-	-	-	-	-	-
4. Internal combustion)		(-	3	4	4	15	16	16	16	17	17
5. Gas turbine)		(-	-	-	-	-	-	12	12	12	12
6. Total net generating capability	27	27	32	32	21	33	43	55	55	56	56
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)	27	27	32	32	21	33	43	55	55	56	56
<u>Peak loads:</u>											
14. Firm power peak load within province	18	15	16	17	14	17	34	39	43	46	49
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	18	15	16	17	14	17	34	39	43	46	49
17. Firm power peak load on province (12 + 16)	18	15	16	17	14	17	34	39	43	46	49
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	9	12	16	15	7	16	9	16	12	10	7

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

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	48	94	103	103	102	106	...	...	...	...	...
20. Steam - Conventional )		( -	-	-	-	-	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion )	-	(					...	...	...	...	...
23. Gas turbine)		(-	6	7	7	9	...	...	...	...	...
24. Total net generation	48	94	109	110	109	115	...	...	...	...	...
Receipts of energy from:											
25. Other provinces	-	-	-	-	-	-	-	-	-	-	-
26. United States:											
(a) Firm	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary .....	-	-	-	-	-	-	...	...	...	...	...
27. Total receipts of energy .....	-	-	-	-	-	-	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	-	-	-	-	-	-	-	-	-	-	-
29. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
30. Other provinces .....	-	-	-	-	-	-	...	...	...	...	...
31. United States .....	-	-	-	-	-	-	...	...	...	...	...
32. Total deliveries of energy .....	-	-	-	-	-	-	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	48	94	109	110	109	115	...	...	...	...	...
34. Secondary energy delivered within province	2	29	27	27	26	23	...	...	...	...	...
35. Firm energy available within province (33 - 34)	46	65	82	83	83	92	135	186	197	206	217
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	46	65	82	83	83	92	135	186	197	206	217
38. Firm energy requirement on province (28 + 29 + 37)	46	65	82	83	83	92	135	186	197	206	217

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

Capability and peak load	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
thousands of kilowatts											
<u>Capability:</u>											
Net generating capability:											
1. Hydro-electric	10	17	35	35	35	35	35	35	35	35	35
2. Steam - Conventional)		(1	1	1	1	1	1	1	1	1	1
3. Nuclear)		(-	-	-	-	-	-	-	-	-	-
4. Internal combustion)	3	(13	9	10	10	13	20	26	30	30	35
5. Gas turbine)		(2	1	1	1	2	-	-	-	-	-
6. Total net generating capability	13	33	46	47	47	51	56	62	66	66	71
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)	13	33	46	47	47	51	56	62	66	66	71
<u>Peak loads:</u>											
14. Firm power peak load within province	12	19	31	27	30	38	42	45	48	50	53
15. Indicated shortages	-	-	-	-	-	-	-	-	-	-	-
16. Total indicated firm power peak load within province (14 + 15)	12	19	31	27	30	38	42	45	48	50	53
17. Firm power peak load on province (12 + 16)	12	19	31	27	30	38	42	45	48	50	53
<u>Indicated reserve:</u>											
18. Indicated reserve (13 - 16)	1	14	15	20	17	13	14	17	18	16	18

Energy	Actual						Forecast				
	1958	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
millions of kilowatt-hours											
Net generation by:											
19. Hydro-electric	83	105	114	168	172	197	...	...	...	...	...
20. Steam - Conventional)		(3	2	3	3	3	...	...	...	...	...
21. Nuclear )		( -	-	-	-	-	...	...	...	...	...
22. Internal combustion)	15	(22	12	11	18	25	...	...	...	...	...
23. Gas turbine)		(4	4	5	2	1	...	...	...	...	...
24. Total net generation	98	134	132	187	195	226	...	...	...	...	...
Receipts of energy from:											
25. Other provinces	-	-	-	-	-	-	-	-	-	-	-
26. United States:											
(a) Firm	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary .....	-	-	-	-	-	-	...	...	...	...	...
27. Total receipts of energy .....	-	-	-	-	-	-	...	...	...	...	...
Deliveries of energy to:											
(a) Firm:											
28. Other provinces	-	-	-	-	-	-	-	-	-	-	-
29. United States	-	-	-	-	-	-	-	-	-	-	-
(b) Secondary:											
30. Other provinces .....	-	-	-	-	-	-	...	...	...	...	...
31. United States .....	-	-	-	-	-	-	...	...	...	...	...
32. Total deliveries of energy .....	-	-	-	-	-	-	...	...	...	...	...
33. Total energy available (24 + 27 - 32)	98	134	132	187	195	226	...	...	...	...	...
34. Secondary energy delivered within province	26	36	21	31	32	41	...	...	...	...	...
35. Firm energy available within province (33 - 34)	72	98	111	156	163	185	202	212	226	238	249
36. Indicated shortage	-	-	-	-	-	-	-	-	-	-	-
37. Firm energy requirement within province (35 + 36)	72	98	111	156	163	185	202	212	226	238	249
38. Firm energy requirement on province (28 + 29 + 37)	72	98	111	156	163	185	202	212	226	238	249

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

Province	1958	1964	1965	1966	1967	1968	Forecast					Percentage change (compounded)			
							1969	1970	1971	1972	1973	1958 1968	1964 1968	1968 1973	
thousands of kilowatts															
Newfoundland (including Labrador)	271	498	502	544	765	887	964	1,189	1,339	2,869	4,389	12.59	15.52	37.69	
Prince Edward Island	26	58	58	58	58	74	74	77	77	96	96	11.03	6.28	5.34	
Nova Scotia	411	527	626	626	694	704	913	913	913	1,013	1,023	5.53	7.51	7.76	
New Brunswick	372	534	577	679	793	1,104	1,208	1,209	1,210	1,211	1,212	11.49	20.88	1.88	
Quebec	7,053	9,225	10,178	10,566	10,957	11,071	12,524	12,986	13,599	13,898	14,149	4.61	4.67	5.03	
Ontario	5,881	7,990	8,514	8,790	9,515	10,687	11,900	13,189	14,536	15,629	17,203	6.14	7.54	9.99	
Manitoba	734	1,034	1,361	1,363	1,373	1,506	1,640	1,635	2,039	2,140	2,342	7.45	9.86	9.23	
Saskatchewan	538	912	920	996	1,011	1,196	1,337	1,477	1,573	1,673	1,813	8.32	7.01	8.67	
Alberta	734	1,235	1,395	1,491	2,015	2,027	2,158	2,320	2,652	2,850	3,011	10.69	13.19	8.24	
British Columbia	2,568	3,481	3,627	3,741	4,121	5,083	5,497	5,531	5,881	6,389	6,409	7.07	9.93	4.75	
Yukon	27	27	32	32	21	33	43	55	55	56	56	2.03	5.14	11.16	
Northwest Territories	13	33	46	47	47	51	56	62	66	66	71	14.65	11.50	6.84	
Canada	18,628	25,554	27,836	28,933	31,370	34,423	38,314	40,643	43,940	47,890	51,774	6.33	7.73	8.51	

(1) Table 1, 1974-5.

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

Province	1958	1964	1965	1966	1967	1968	Forecast					Percentage change (compounded)			
							1969	1970	1971	1972	1973	1958 1968	1964 1968	1968 1973	
thousands of kilowatts															
Newfoundland (including Labrador)	231	376	422	450	571	644	788	827	1,049	1,165	1,410	10.80	14.40	16.97	
Prince Edward Island	16	31	35	37	40	46	51	55	60	65	71	11.14	10.37	9.07	
Nova Scotia	335	438	457	496	604	645	723	796	854	922	989	6.77	10.16	8.92	
New Brunswick	273	461	528	544	551	579	642	728	767	819	876	7.88	5.86	8.63	
Quebec	5,375	7,651	8,228	8,761	9,142	9,880	10,453	11,163	11,876	12,634	13,399	6.28	6.60	6.28	
Ontario	5,794	7,897	8,596	9,157	9,930	10,648	11,548	12,303	13,169	14,057	14,858	6.27	7.76	6.89	
Manitoba	646	1,004	1,022	1,083	1,160 ^x	1,265	1,436	1,534	1,630	1,723	1,819	6.95	5.95	7.53	
Saskatchewan	353	619	653 ^x	709 ^x	783 ^x	922	1,070	1,169	1,276	1,410	1,535	10.08	10.47	10.73	
Alberta	580	1,106	1,121	1,219	1,340	1,516	1,767	1,913	2,078	2,263	2,484	10.08	8.20	10.38	
British Columbia	1,935	2,886	3,058	3,421	3,647	3,951	4,369	4,684	4,925	5,179	5,417	7.40	8.17	6.51	
Yukon	18	15	16	17	14	17	34	39	43	46	49	- 0.57	3.18	23.58	
Northwest Territories	12	19	31	27	30	38	42	45	48	50	53	12.22	18.92	6.88	
Canada	15,568	22,503	24,167 ^x	25,921 ^x	27,812 ^x	30,151	32,923	35,256	37,775	40,333	42,960	6.77	7.58	7.34	

(1) Table 1, item 14.

TABLE 4. Firm Energy Requirement within Provinces(1)

Province	1958	1964	1965	1966	1967	1968	Forecast					Percentage change (compounded)			
							1969	1970	1971	1972	1973	1958 1968	1964 1968	1968 1973	
millions of kilowatt-hours															
Newfoundland (including Labrador)	1,178	2,293	2,640	2,790	3,009	3,566	4,844	5,072	6,814	7,630	9,513	11.71	11.67	21.68	
Prince Edward Island	63	124	136	140	161	175	190	213	240	270	303	10.76	8.99	11.64	
Nova Scotia	1,552	2,301	2,466	2,648	2,830	3,122	3,531	3,774	4,105	4,369	4,650	7.24	7.93	8.29	
New Brunswick	1,417	2,410	2,742	3,042	3,294	3,572	4,081	4,607	5,000	5,437	5,925	9.69	10.34	10.65	
Quebec	32,342	47,081	49,227	53,365	56,850	59,240	63,505	67,449	70,957	74,807	78,381	6.24	5.91	5.76	
Ontario	31,468	44,814	48,509	53,095	56,798	60,905	65,597	69,671	74,382	79,847	84,920	6.83	7.97	6.87	
Manitoba	3,576	5,659	5,988	6,215	6,563	7,166	7,954	8,571	9,109	9,540	9,977	7.20	6.08	6.83	
Saskatchewan	1,322	2,658	3,205	3,596	3,937	4,373	5,018	5,588	6,223	6,923	7,723	12.71	13.25	12.05	
Alberta	2,624	4,987	5,499	6,068	6,713	7,663	8,614	9,397	10,483	11,488	12,627	11.31	11.34	10.51	
British Columbia	11,579	16,849	18,444	20,455	22,228	23,958	25,929	27,508	28,888	30,380	31,850	7.54	10.10	5.86	
Yukon	46	65	82	83	83	92	135	186	197	206	217	7.18	9.07	18.72	
Northwest Territories	72	98	111	156	163	185	202	212	226	238	249	9.90	17.22	6.12	
Canada	87,239	129,339	139,049	151,653	162,629	174,017	189,600	202,248	216,624	231,135	246,335	7.15	7.70	7.20	

(1) Table 1, Item 37.

TABLE 5. Indicated Reserve (1)

Province	1958	1964	1965	1966	1967	1968	Forecast					Percentage change (compounded)			
							1969	1970	1971	1972	1973	1958 1968	1964 1968	1968 1973	
thousands of kilowatts															
<u>Newfoundland (including Labrador)</u>															
1. Gross capability	271	498	502	544	765	887	964	1,189	1,339	2,869	4,389	12.59	15.52	37.69	
2. Firm power peak load on province ...	239	397	429	460	583	656	800	839	1,061	2,101	3,280	10.62	13.38	37.97	
3. Indicated reserve (1 - 2)	32	101	73	84	182	231	164	350	278	768	1,109	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	13.4	25.4	17.0	18.3	31.2	35.2	20.5	41.7	26.2	36.6	33.8	...	...	...
<u>Prince Edward Island</u>															
1. Gross capability	26	58	58	58	58	74	74	77	77	96	96	11.03	6.28	5.34	
2. Firm power peak load on province ...	16	31	35	37	40	46	51	55	60	65	71	11.14	10.37	9.07	
3. Indicated reserve (1 - 2)	10	27	23	21	18	28	23	22	17	31	25	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	62.5	87.1	65.7	56.8	45.0	60.9	45.1	40.0	28.3	47.7	35.2	...	...	...
<u>Nova Scotia</u>															
1. Gross capability	411	527	626	626	694	724	913	913	913	1,013	1,023	5.83	8.26	7.16	
2. Firm power peak load on province ...	338	439	482	496	604	645	723	796	854	922	989	6.68	10.10	8.92	
3. Indicated reserve (1 - 2)	73	88	144	130	90	79	190	117	59	91	34	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	21.6	20.0	29.9	26.2	14.9	12.2	26.3	14.7	6.9	9.9	3.4	...	...	...
<u>New Brunswick</u>															
1. Gross capability	380	545	610	687	801	1,112	1,216	1,217	1,261	1,262	1,297	11.33	19.52	3.13	
2. Firm power peak load on province ...	282	494	565	582	596	724	703	803	847	900	958	9.89	10.03	5.76	
3. Indicated reserve (1 - 2)	98	51	45	105	205	388	513	414	414	362	339	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	34.8	10.3	8.0	18.0	34.9	53.6	73.0	51.6	48.9	40.2	35.4	...	...	...

(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	1958	1964	1965	1966	1967	1968	Forecast					Percentage change (compounded)		
							1969	1970	1971	1972	1973	1958 1968	1964 1968	1968 1973
thousands of kilowatts														
<u>Quebec</u>														
1. Gross capability	7,062	9,243	10,185	10,576	10,969	11,153	12,536	12,998	13,611	14,834	16,019	4.68	4.81	7.51
2. Firm power peak load on province ...	6,105	8,374	8,869	9,396	9,777	10,472	11,045	11,417	12,173	12,931	13,730	5.54	5.75	5.57
3. Indicated reserve (1 - 2)	957	869	1,316	1,180	1,192	681	1,491	1,581	1,438	1,903	2,289	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	15.7	10.4	14.8	12.6	12.2	6.5	13.5	13.8	11.8	14.7	16.7	...	...	...
<u>Ontario</u>														
1. Gross capability	6,549	8,699	9,141	9,415	10,140	11,269	12,482	13,433	14,780	15,923	17,547	5.58	6.68	9.26
2. Firm power peak load on province ...	5,881	7,995	8,642	9,204	9,978	10,845	11,590	12,345	13,194	14,081	14,880	6.31	7.92	6.53
3. Indicated reserve (1 - 2)	668	704	499	211	162	424	892	1,088	1,586	1,842	2,667	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	11.4	8.8	5.8	2.3	1.6	3.9	7.7	8.8	12.0	13.1	17.9	...	...	...
<u>Manitoba</u>														
1. Gross capability	802	1,128	1,444	1,447	1,460	1,594	1,779	1,914	2,128	2,229	2,431	7.11	9.03	8.81
2. Firm power peak load on province ...	646	1,004	1,023	1,084	1,201 ^F	1,266	1,437	1,535	1,631	1,774	1,920	6.96	5.97	8.69
3. Indicated reserve (1 - 2)	156	124	421	363	259 ^F	328	342	379	497	455	511	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	24.1	12.4	41.2	33.5	21.6 ^F	25.9	23.8	24.7	30.5	25.6	26.6	...	...	...
<u>Saskatchewan</u>														
1. Gross capability	539	912	921	997	1,052	1,197	1,338	1,478	1,574	1,674	1,814	8.31	7.03	8.67
2. Firm power peak load on province ...	421	713	736 ^F	793 ^F	870 ^F	1,010	1,209	1,358	1,365	1,499	1,624	9.14	9.09	9.96
3. Indicated reserve (1 - 2)	118	199	185 ^F	204 ^F	182 ^F	187	129	120	209	175	190	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	28.0	27.9	25.1 ^F	25.7 ^F	20.9 ^F	18.5	10.7	8.8	15.3	11.7	11.7	...	...	...

(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 3. Indicated Reserve(1) - Concluded

Province	1958	1964	1965	1966	1967	1968	Forecast					Percentage change (compounded)			
							1969	1970	1971	1972	1973	1958 1968	1964 1968	1968 1973	
thousands of kilowatts															
<u>Alberta</u>															
1. Gross capability	738	1,235	1,395	1,491	2,015	2,027	2,158	2,320	2,652	2,850	3,011	10.63	13.19	8.24	
2. Firm power peak load on province ...	581	1,118	1,140	1,238	1,355	1,529	1,803	1,969	2,138	2,323	2,544	10.16	8.14	10.72	
3. Indicated reserve (1 - 2)	157	117	255	253	660	498	355	351	514	527	467	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	27.0	10.5	22.4	20.4	48.7	32.6	19.7	17.8	24.0	22.7	18.4	...	...	...
<u>British Columbia</u>															
1. Gross capability	2,568	3,493	3,646	3,860	4,316	5,206	5,533	5,587	5,941	6,449	6,469	7.32	10.49	4.44	
2. Firm power peak load on province ...	1,939	2,886	3,058	3,421	3,647	3,951	4,369	4,684	4,925	5,179	5,417	7.38	8.17	6.51	
3. Indicated reserve (1 - 2)	629	607	588	439	669	1,255	1,164	903	1,016	1,270	1,052	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	32.4	21.0	19.2	12.8	18.3	31.8	26.6	19.3	20.6	24.5	19.4	...	...	...
<u>Yukon</u>															
1. Gross capability	27	27	32	32	21	33	43	55	55	56	56	2.03	5.14	11.16	
2. Firm power peak load on province ...	18	15	16	17	14	17	34	39	43	46	49	0.57	3.18	23.58	
3. Indicated reserve (1 - 2)	9	12	16	15	7	16	9	16	12	10	7	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	50.0	80.0	100.0	88.2	50.0	94.1	26.5	41.0	27.9	21.7	14.3	...	...	...
<u>Northwest Territories</u>															
1. Gross capability	13	33	46	47	47	51	56	62	66	66	71	14.65	11.50	6.84	
2. Firm power peak load on province ...	12	19	31	27	30	38	42	45	48	50	53	12.22	18.92	6.88	
3. Indicated reserve (1 - 2)	1	14	15	20	17	13	14	17	18	16	18	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	8.3	73.7	48.4	74.1	56.7	34.2	33.3	37.8	37.5	32.0	34.0	...	...	...
<u>Canada</u>															
1. Gross capability	18,628	25,556	27,836	29,033	31,550	34,533	38,314	40,733	43,940	47,890	51,774	6.37	7.82	8.44	
2. Firm power peak load on Canada	15,720	22,643	24,256 ^F	26,008 ^F	27,907 ^F	30,405	33,028	35,375	37,882	40,440	43,066	6.82	7.65	7.21	
3. Indicated reserve (1 - 2)	2,908	2,913	3,580 ^F	3,025 ^F	3,643 ^F	4,128	5,286	5,358	6,058	7,450	8,708	...	...	...
4. Indicated reserve expressed as a per cent of firm power peak load	18.5	12.9	14.8 ^F	11.6 ^F	13.1 ^F	13.6	16.0	15.1	16.0	18.4	20.2	...	...	...

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

GLOSSARY OF TERMS

Firm Energy Requirement

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

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.

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1968-1969

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14. F.G. Ursel, Saskatchewan Power Corporation, Regina, Sask.

Construction Index Subcommittee

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List of Respondents

Utilities

Industrials

Newfoundland

The Bowater Power Co. Ltd.
Churchill Falls (Labrador) Corp. Ltd.
Department of Transport
Newfoundland & Labrador Power Commission
Newfoundland Light & Power Co. Ltd.
Twin Falls Power Corp.

Iron Ore Co. of Canada, Menihek
Price (Nfld.) Pulp & Paper Ltd.

Prince Edward Island

Maritime Electric Co. Ltd.
Town of Summerside Electric Light Department

Nova Scotia

Nova Scotia Light & Power Co. Ltd.
Nova Scotia Power Commission

Bowaters Mersey Paper Co. Ltd.
Imperial Oil Enterprises Ltd.
Minas Basin Pulp & Power Co. Ltd.
Nova Scotia Pulp Co.
Scott Maritimes Pulp Ltd.
Sydney Steel Corp.

New Brunswick

City of Campbellton
City of Edmundston Power Plant Department
Maine & N.B. Electric Power Commission
New Brunswick Electric Power Commission

Atlantic Sugar Refineries Ltd.
Consolidated-Bathurst Ltd.
Fraser Companies Ltd.
Atholville Mill
Edmundston
Newcastle
Irving Pulp & Paper Ltd.
N.B. International Paper Co.

Quebec

Gulf Power Co.
Hart-Jaune Power Co.
La Cité de Jonquiere
MacLaren Quebec Power Co.
The Manicouagan Power Co.
Ottawa Valley Power Co.
Pembroke Electric Light Co. Ltd.
Commission Hydroélectrique de Québec
Saguenay Power Co.
City of Sherbrooke
Smelter Power Corporation

Abitibi Ste. Anne Paper Co. Ltd.
Aluminum Co. of Canada Ltd.
Anglo-Canadian Pulp & Paper, Limouli Plant
Ayers Limited
Canadian International Paper Co.
Gatineau Mills
Trois-Rivières
Chemcell Limited
Consolidated-Bathurst Ltd., Port Alfred Plant
Dominion Textile Co. Ltd.
Domtar Ltd., Donnacona
Domtar Pulp & Kraft Paper Co. Ltd., Windsor
E.B. Eddy Co., Hull Plant
Electric Reduction Co. of Canada Ltd.
Gaspé Copper Mines Ltd.
Gaspesia Pulp & Paper Co. Ltd.
Iron Ore Company
James MacLaren Company Ltd.
Noranda Mines Ltd.
The Price Co. Ltd.
Quebec North Shore Paper Co.
Thoreson Pulp & Paper Co.

List of Respondents - Continued

Utilities

Industrials

Ontario

Atonic Energy of Canada Ltd.
Bracebridge Water, Light and Power Commission
Campbellford Public Utilities Commission
Canadian Niagara Power Co. Ltd.
Cedars Rapids Transmission Co. Ltd.
Gananoque Electric Light & Water Supply Co. Ltd.
Great Lakes Power Co. Ltd.
Huronian Company Limited
Ontario Hydro-Electric Commission
Orillia Water, Light & Power Commission
Ottawa Hydro-Electric Commission
Pembroke Hydro-Electric Commission
Peterborough Hydraulic Power Co. Ltd.
Renfrew Hydro-Electric Commission
St. Lawrence Power Co.

Abitibi Power & Paper Co. Ltd.
Iroquois Falls
Smooth Rock Falls
Sturgeon Falls
Algoma Steel Corp. Ltd.
Allied Chemical Canada Ltd., Amherstburg Plant
American Can of Canada Ltd.
Brown Forest Industries Ltd.
Canadian General Electric Co. Ltd.
Continental Can Company of Canada Ltd.
Dow Chemical Co. Ltd.
Dryden Paper Co., Ltd.
E.B. Eddy Co., Ottawa Plant
Ford Motor Co. of Canada Ltd.
Great Lakes Paper Co. Ltd.
Hiram Walker & Sons Ltd.
International Nickel Co. Ltd.
Ontario-Minnesota Pulp & Paper Co. Ltd.
Fort Frances
Kenora
The Ontario Paper Co. Ltd.
The Polymer Corp. Ltd.
St. Lawrence Seaway Authority
Spruce Falls Power & Paper Co. Ltd.
The Steel Co. of Canada Ltd.
Sturgeon Paper Co. Ltd.

Manitoba

Manitoba Hydro
Northern Manitoba System
Southern Manitoba System
Northern Manitoba Power Co. Ltd.
City of Winnipeg Hydro-Electric System

Hudson Bay Mining & Smelting Co. Ltd.
Sherritt Gordon Mines - Lynn Lake

Saskatchewan

Churchill River Power Co. Ltd.
Northern Power Co. Ltd.
Saskatchewan Power Corp.

Eldorado Mining & Refining Ltd.
Hudson Bay Mining & Smelting Co. Ltd.
Kalium Chemicals Limited

Alberta

Calgary Power Ltd.
Canadian Utilities Limited
City of Edmonton
City of Lethbridge
Corporation of the City of Medicine Hat
Northland Utilities Ltd.

Chemcell (1963) Limited
Cloverbar Plant
Duvernay Plant
Great Canadian Oil Sands
Gulf Oil Canada Limited, Rimbey Plant
North Western Pulp & Power Ltd.
Pan American Pet. Corp., West Whitecourt Plant
Sherritt Gordon Mines Ltd.

British Columbia

British Columbia Hydro and Power Authority

Aluminum Co. of Canada Ltd.
Anaconda Company (Canada) Ltd.

List of Respondents - Concluded

Utilities

Industrials

British Columbia - Concluded

City of Nelson
Corp. of the City of Revelstoke
West Kootenay Power & Light Co. Ltd.

B.C. Forest Products Ltd.
Cowichan Sawmill Division
Hammond Sawmill Division
Victoria Sawmill Division
Canadian Forest Products Ltd.
Elburne Sawmills
Port Mellon
Columbia Cellulose Company Ltd.
Celgar Ltd.
Prince Rupert Pulp. Division
Cominco Ltd.
Crown Zellerbach Building Materials Ltd.
Crown Zellerbach Canada Ltd.
Elk Falls Co. Ltd.
Kicking Horse Forest Products Ltd.
MacMillan Bloedel Ltd.
Alberni Pulp & Paper Division
Powell River Division
MacMillan Bloedel Industries Ltd.
Canadian White Pine Division
Chemainus Division
Harmac Pulp Division
Pacific Petroleum Ltd.
Rayonier Canada (B.C.) Ltd.
Fort Alice Division
Woodfibre Division
Westco Mines

Yukon

Northern Canada Power Commission
(a) Mayo River
(b) Whitehorse
Yukon Electrical Co. Ltd.
Yukon Hydro Co. Ltd.

Northwest Territories

Northern Canada Power Commission
(a) Forbisher Bay
(b) Inuvik
(c) Taltson River
(d) Yellowknife
Northland Utilities Limited

Cominco Ltd.

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