

57.

**INDUSTRIAL DEVELOPMENT COMMITTEE
STATE ELECTRICITY AUTHORITY**

REPORT

**on Alternative Electric Power
developments in Iceland**

Part 2.

Chapter VI . Financial Operation

Tables 27 - 49

April 1964

VI. FINANCIAL OPERATION.

a. Assumptions.

It is assumed that the Laxá system in the North is merged into the relatively far larger Sog system in SW-Iceland at the beginning of 1964, and the alternative plans for the expansion of power production integrated with the combined system. The Ellidaár reserve stations which are wholly owned by the Reykjavík Municipality are not formally merged, but they are assumed to be available for peak and emergency service. Provision is made for the cost of that service as shown in table 30. Additions to reserve capacity are on the other hand fully integrated.

Financial statements have been prepared for each of the following four situations: for the present Sog System for the years 1960-1963 (tables 27- 29) and for each of the following three alternatives for expansion after that (tables 34-42):

Alternative A: Búrfell in conjunction with an aluminium smelter in the South near Reykjavík.

Alternative B: Búrfell, in conjunction with a smelter in the North.

Alternative C: A program of power development comprising a small geothermal plant at Hveragerdi, and a small hydroplant at Efstidalur in the South and a small hydroplant at Laxá in the North.

The period covered is historically 1960-1963 and 1964-1980 for the future. The reason for extending the period to 1980 is that utilization of the ultimate installed capacity of the Búrfell project would not be achieved until the end of this period. Ultimate capacity in alternative C would, however, be reached as soon as 1974. The financial operating results are, therefore, not strictly comparable except in the early years.

The financial figures for 1960-1963 are on an historical basis without revaluation of fixed assets. The estimates for 1964-1980 are put on a new basis by the revaluation of existing fixed assets based on replacement cost at the beginning of 1964. This is necessary because of the considerable price inflation during World War II and the post-war period.

In the financial statements, figures for the existing system are shown separately and to avoid repetition, in one figure under each heading. Included with the existing system is a planned 7 MW addition in 1966 to Ljósafoss- one of the Sog stations. The reason is that the decision whether to build it

or not is independent of which alternative is chosen for the period after 1967. This addition is estimated to cost \$ 1.91 million including import duties. Annual operating and maintenance cost amounts to \$ 17,000. It is assumed to be financed by loans to the amount of \$ 1.05 million and the rest by internally generated funds and is assumed to start operations in 1967. A 2 MW diesel station costing \$ 230,000 is to be set up at Akureyri in 1964. Borrowing amounting to \$ 170,000 is assumed for that purpose.

Detailed figures for the existing system for the period 1964-1980 are provided in tables 30-33. Figures for the future system are the same as in chapters III and V of Part I except for assumed contribution for part of the Ellidaár reserve capacity in Alternative C in the economic comparison. In addition to data in Part I tables 43 and 44 show depreciation and work-in-progress. Figures for power sales and revenue are derived from chapter II. Revenue allocated to Sog and existing Laxá Stations in the economic comparison is now included.

The general assumptions discussed in Part I also apply to this chapter.

The basic financial statements for Alternatives A and B are made out on the basis of a price to the smelter of 2.5 mills per Kwh. Effects of higher prices (3.0 and 3.5 mills) on operating results are shown in tables 46 and 47.

b. Balance Sheets.

Balance sheets at the end of each year are shown in tables 34-36. End of 1963 figures reflect assets and liabilities of Sog and Laxá combined after revaluation of assets and before any assets or liabilities relating to the future system enter the picture. Included in the figure for the existing equity is the price regulation fund of the Sog System.

The revaluation of existing fixed assets is based on an estimate of replacement value at the beginning of 1964. The results are included in table 31.

Depreciation and fixed assets in operation are shown in detail in table 31 for the existing system and table 44 for the future system. Work-in-progress is shown in table 43 for the future system. Work-in-progress in the existing system is on account of a diesel station at Akureyri in 1964 and on account of a Ljósafoss addition in 1965 and 1966. The debt of the existing system is shown in table 33 and the debt of the future system comes from tables 23-25 and tables 40-42.

The development of total equity and the ratio of equity to total assets is shown below at intervals of three years. All figures are based on a price to the smelter of 2.5 mills per Kwh.

Year	<u>Total equity (\$ '000,000)</u>			<u>Equity ratio (%)</u>		
	Alt. A	Alt. B	Alt. C	Alt. A	Alt. B	Alt. C
1963	10.35	10.35	10.35	44.8	44.8	44.8
1968	18.12	20.10	14.13	35.0	34.7	44.8
1971	20.95	21.72	16.91	38.0	38.0	46.0
1974	25.35	25.64	20.74	42.9	42.7	-
1977	32.34	32.18	-	50.3	49.9	-
1980	42.97	42.38	-	-	-	-

c. Income Statement.

Income statements are shown in tables 37-39. Assumptions for sales of power and energy and pricing policy are discussed in chapter II of Part I and projections of sales are derived from load forecasts in table 1. It should be noted that no interest income is calculated on the accumulated cash surplus. The significance of this simplification is tested in table 48.

Estimates of operational, maintenance and administration expenses based on experience in the past few years are shown in table 30. Figures for Sog and Laxá are shown separately. Also included in table 30 is payment for use of reserve stations owned by the Reykjavík Municipality which are not to be merged into the proposed National Power Company. This payment covers all future expenditures on account of these stations except a relatively small fixed annual charge to the Reykjavík Hot Water System which also has a claim to the use of the boilers during cold spells as far as they are not required by the power system. Figures for fuel costs are derived from tables 7-9 for the period 1968-1980. Fuel costs 1964-1967 are based in the same way on thermal production as shown on page 10 in Part I.

Provision for depreciation is made on the straight line principle based on the life of plants assumed in chapter V, which gives the following annual depreciation rates:

Hydro plants	2.5%
Transmission lines	2.5%
Reserve stations (gas turbines)	2.5%
Geothermal plants	5%
Diesel stations (peaking)	5%

Depreciation of the existing system is made on the replacement value of assets as shown in table 31. A breakdown of depreciation of the future system is shown in table 44.

Table 32 contains projections of interest on the debt of the existing system. Interest during construction is derived from tables 23-25. Interest on the debt of the future system is shown in detail in tables 40-42.

The income statements in tables 37-39 are based on a 2.5 mills price to the smelter. Effects of higher prices (3.0 and 3.5 mills) on net income and net profit are calculated in table 46. Interest coverage is calculated in tables 45 and 47. The principal results from the income statements are tabulated below. Net income and net profit are shown in millions of dollars.

	1968	1971	1974	1980
Alternative A				
Net Income at 2.5 mills	1.94	3.05	3.62	5.47
Net Income at 3.0 mills	2.16	3.27	3.84	5.69
Net Income at 3.5 mills	2.39	3.50	4.07	5.92
Net Profit at 2.5 mills	0.06	1.25	1.77	3.80
Net Profit at 3.0 mills	0.28	1.47	1.99	4.02
Net Profit at 3.5 mills	0.51	1.70	2.22	4.25
Interest Coverage at 2.5 m	1.0	1.7	2.0	3.3
Interest Coverage at 3.0 m	1.1	1.8	2.1	3.4
Interest Coverage at 3.5 m	1.3	1.9	2.2	3.5
Alternative B				
Net Income at 2.5 mills	1.69	2.87	3.51	5.36
Net Income at 3.0 mills	1.91	3.09	3.73	5.58
Net Income at 3.5 mills	2.14	3.32	3.96	5.81
Net Profit at 2.5 mills	- 0.46	0.90	1.62	3.66
Net Profit at 3.0 mills	- 0.24	1.12	1.84	3.88
Net Profit at 3.5 mills	- 0.01	1.35	2.07	4.11
Interest Coverage at 2.5 m	0.8	1.5	1.9	3.2
Interest Coverage at 3.0 m	0.9	1.6	2.0	3.3
Interest Coverage at 3.5 m	1.0	1.7	2.1	3.4
Alternative C				
Net Income	1.16	2.01	2.51	-
Net Profit	0.23	1.21	1.55	-
Interest Coverage	1.2	2.5	2.6	-

d. Source and Application of Funds.

Statements of source and application of funds are shown in table 40-42. They are based on the lowest assumed price to the smelter as all other basic statements. The effects of a higher price to the smelter on the annual and cumulative cash surplus are shown in table 46.

Assumptions for financing are discussed in chapter IV and shown in detail in tables 23-25 and table 49. For convenience it is assumed that preliminary expenses before 1964 and new equity corresponding to these, enter the financial picture in 1964. Assumptions for construction expenditure for the future system are discussed in chapter III and shown in detail in tables 7-9. Construction expenditure and borrowing in the existing system in 1964 is on account of a small diesel plant at Akureyri and in 1965 and 1966 on account of an addition to the Ljósafoss plant in Sog System.

Debt service for the existing system is shown in detail in tables 32 and 33 and for the future system it is derived from tables 20-22 and tables 23-25 as regards interest during construction.

For simplification it was decided to omit both interest income on accumulated cash surplus and increase in working capital other than cash from the basic statements. The difference this makes is calculated in table 48 where it is assumed that working capital requirement increases by 20 per cent of annual increase in total income from general load and 10% of income from sales to smelter. Interest on cumulative cash surplus is assumed to be 5 per cent p. a. The resulting adjusted cash surplus compares with the unadjusted cash surplus as follows in selected years (millions of dollars).

	<u>Cash Surplus</u>			<u>Adjusted Cash Surplus</u>		
	A	B	C	A	B	C
1965	0.16	0.16	0.01	0.11	0.11	- 0.04
1968	0.51	0.25	0.24	0.38	0.11	0.16
1971	0.36	0.30	0.68	0.50	0.39	0.70
1974	1.18	1.00	1.78	1.49	1.23	2.02
1977	2.35	2.17	1.71	2.95	2.65	2.31

The calculation of debt service coverage is shown in tables 45 and 47. Interest during construction is not included in the calculations. It is capitalized as part of the investment.

The principal results from the projection of statements of source and application of funds are shown below. Cash surplus is shown in millions of dollars.

	1968	1971	1974	1977
<u>Alternative A</u>				
Cash Surplus at 2.5 mills	0.51	0.36	1.18	2.35
Cash Surplus at 3.0 mills	0.73	0.58	1.40	2.57
Cash Surplus at 3.5 mills	0.96	0.81	1.63	2.80
Cum. Cash Surplus at 2.5 mills	1.85	4.04	7.48	13.30
Cum. Cash Surplus at 3.0 mills	2.07	4.92	9.02	15.50
Cum. Cash Surplus at 3.5 mills	2.30	5.84	10.63	17.80
Debt Service Coverage at 2.5 mills	1.2	1.3	1.5	1.6
Debt Service Coverage at 3.0 mills	1.3	1.4	1.6	1.7
Debt Service Coverage at 3.5 mills	1.4	1.4	1.7	1.7
<u>Alternative B</u>				
Cash Surplus at 2.5 mills	0.25	0.30	1.00	2.17
Cash Surplus at 3.0 mills	0.47	0.52	1.22	2.39
Cash Surplus at 3.5 mills	0.70	0.75	1.45	2.62
Cum. Cash Surplus at 2.5 mills	1.59	3.30	6.15	11.43
Cum. Cash Surplus at 3.0 mills	1.81	4.18	7.69	13.63
Cum. Cash Surplus at 3.5 mills	2.04	5.10	5.30	15.93
Debt Service Coverage at 2.5 mills	1.1	1.2	1.5	1.6
Debt Service Coverage at 3.0 mills	1.1	1.3	1.5	1.6
Debt Service Coverage at 3.5 mills	1.2	1.3	1.6	1.7
<u>Alternative C</u>				
Cash Surplus	0.24	0.68	-	-
Cumulative Cash Surplus	0.52	1.99	-	-
Debt Service Coverage	1.1	1.6	-	-

BALANCE SHEETS.

(1000 \$)

	<u>1961</u>	<u>1962</u>	<u>1963</u> (preliminary)
<u>Assets:</u>			
Net Fixed Assets in Operation (before revaluation)	12,411	11,930	11,512
Current Assets:			
Cash	369	332	611
Accounts Receivable	474	845	627
Inventories	2		
Total Current Assets	845	1,177	1,238
Work-in-progress	5	95	1,177
Long Term Loans to Reykjavik Electric Utility	1,026	952	873
Total Assets	14,287	14,154	14,800
<u>Liabilities:</u>			
Long Term Debt:			
4% Bonds Loan 1943	19	9	
6% " " 1951	102	91	81
7% " " 1956	58	30	
IBRD-Loan	1,493	1,391	1,284
Counterpart Loan	1,955	1,816	1,670
ECA-Loan	1,282	1,222	1,161
Icel. Bank of Development	37	26	14
Central Bank Loan 1959	441	255	70
PL-480 Loans	3,560	3,509	3,546
ICA-Loans	3,535	3,358	3,263
Mantrust 1962 + New Loans		172	696
Central Bank 1963			232
Total Long Term debt	12,482	11,879	12,017
Current Liabilities:			
Maturities	288	300	304
Price Regulation Fund ^{x)}	309	437	453
Accounts Payable	42	5	51
Total Current Liabilities	639	742	808
Equity (before revaluation of fixed assets)	1,166	1,533	1,975
Total Liabilities	14,287	14,154	14,800

x) Excesses or deficiencies of income from what is legally permissible (cost plus 5 per cent) are adjusted over this price regulation fund.

INCOME STATEMENT.

(1000 \$)

	<u>1961</u>	<u>1962</u>	<u>1963</u> (preliminary)
<u>Energy & Power Sales:</u>			
Max. Load in KW	66,310	70,380	72,000
Millions of Kwh sold	415.5	418.0	444.0
<u>Revenue Account:</u>			
Operating Revenue	1,398	1,842	1,928
Price Regulation Fund	139		
Miscellaneous income	2	2	2
	<hr/>	<hr/>	<hr/>
Total Income	1,539	1,844	1,930
Operation, adm., mainten.	235	262	302
Cost of Power Purchase	216	228	232
Depreciation	416	416	418
	<hr/>	<hr/>	<hr/>
Total Expenses	867	906	952
Net Income	672	938	978
<u>Income Deductions:</u>			
Net interest	423	460	536
Payment to Price Reg. Fund		111	
	<hr/>	<hr/>	<hr/>
Net Income Deductions	423	571	536
Net Profit	249	367	442

SOURCE AND APPLICATION OF FUNDS.

(1000 \$)

	<u>1961</u>	<u>1962</u>	<u>1963</u> (preliminary)
<u>Source of Funds:</u>			
Net Profit	249	367	442
Depreciation	416	416	418
Interest	423	460	536
Net Receipts from Operations	1,088	1,243	1,396
Repaid Loan Reykjavik El. Utility Price Regulation Fund	107	77 146	79
<u>Borrowings:</u>			
Long Term Loans	1,150 x)		
Domestic Loan			232
PL-480			232
Mantrust + New Loan		172	527
Total Borrowing	1,150	172	991
Decrease Accounts receivable	26		218
Increase Current Liabilities	272	26	51
Decrease Current Assets		37	
Decrease Fixed Assets		79	130
Interest Income Price Regulation Fund	12	16	16
Total Source of Funds	2,655	1,796	2,881
<u>Application of Funds:</u>			
Contruction incl. interest		90	1,087
<u>Debt Service:</u>			
Amortization	664	776	980
Interest	423	460	535
Total Debt Service	1,087	1,236	1,515
Decrease Price Reg. Fund	128		
Increase Current Assets	269	372	279
Increase Fixed Assets	1,071 x)	12	
Increase Long Term Loans	100		
Decrease Current Liabilities		86	
Total Application of Funds	2,655	1,796	2,881

x) Includes devaluation adjustment to the amount of \$ 1.15 million

Existing System.

Table 30

Operation, Maintenance, Administration Expenses
and Contribution to Elliðaár Reserve Capacity.

(In thous. of dollars.)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
1. Operation, Maintenance, Administration:																	
Sog System	341	341	341	358	358	358	358	358	358	358	358	358	358	358	358	358	358
Laxá System	76	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
Total O & M & A	417	434	434	451	451	451	451	451	451	451	451	451	451	451	451	451	451
2. Contribution to Reserve Capacity																	
Elliðaár Hydro	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Elliðaár Thermal	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156
Debt Service	79 79	270 270	116 116	238 238	228 228	214 214	214 214	98 98	98 98	98 98	98 98	98 98	95 95	95 95	98 98	93 93	93 93
Less Thermal Sales	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
Total Contribution	233	424	424	389	382	368	252	249	249	252	249	249	249	252	254	247	210

215

Table 31

DEPRECIATION

(In thous. of dollars)

Existing System

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Replacement Value	2,418	3,720	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
Depreciation prior to 1964	700	1,395	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
	2,310	9,255	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231
	675	9,022	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
	1,442	1,907	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Total Sog	6,103	26,741	620	620	620	668	668	668	668	668	668	668	668	668	668	668	668

Sog System:

Ljósafoss I 1937	3,720	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
Ljósafoss II 1943	1,395	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Irafoss I 1953	9,255	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231
Steingrímstöðin 1960	9,022	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
Irafoss II 1963	1,442	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Ljósafoss III 1966	1,907	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Total Sog	26,741	620	620	620	668	668	668	668	668	668	668	668	668	668	668	668	668

Laxá System:

Laxá I a 1939	1,163	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Laxá I b 1944	326	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Laxá II 1953	3,140	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79
Diesel I & II	349	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Diesel III 1964	233	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Lake Mývatn 1961	395	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Total Laxá	5,606	149	165	165	154	142	142	142	142	142	142	142	142	142	142	142	142
Total Depreciation	32,347	769	785	785	833	810	810	810	810	810	810	810	810	810	810	810	810

Cumulative Depreciation

Table 32

INTEREST
(In thous. of dollars)

Existing System

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Sog System:																	
Bonds 6% 1951	7	2	5	2	2	2	13	18	3	11	14	16	12	9	9	7	5
Counterpart Fund 5 1/2 %	91	81	72	63	53	42	30	19	7	2	2	2	2	2	2	2	2
IBRD 4 3/8 % 1952	56	51	44	40	35	28	21	16	16	16	14	14	12	9	9	7	5
ECA 2 1/2 % 1951	30	28	26	26	23	21	21	19	16	16	14	14	12	9	9	7	5
Icel. Bank of Developm. 6 1/2 %	2																
Central Bank 1959	65	38	36	34	31	28	25	22	18	15	11	8	4	9			
ICA 3 - 4 % 1957	102	95	91	84	79	72	65	58	51	42	35	26	19	9			
PL-480 4% 1960	33	33	33	30	30	28	28	26	23	21	19	16	12	9	5		
PL-480 3% 1960	77	77	74	72	67	63	58	53	49	42	35	28	19	9			
PL-480 4 1/2 % 1960	30	30	30	30	30	28	28	26	23	21	21	19	14	12	9	5	
PL-480 1962	7	16	16	16	16	16	14	14	14	14	12	12	9	9	7	5	
Manufacturers Trust Co.	40	30	23	16	7												
Central Bank 1963	19	16	16	16	16	14	14	14	14	12	12	12	9	9	7	7	5
Loan for Ljósafoss III	10*	10*	40*	63	63	63	63	62	60	58	55	53	51	49	46	43	40
Total	559	474	470	458	421	377	342	307	266	230	203	180	145	115	83	67	55
Less Loans to Reykjav. Utility	40	33	30	26	21	19	16	12	7	5	5	5	5	5	5	5	5
Total Sog	519	441	440	432	400	358	326	295	259	225	198	175	140	115	83	67	55
Laxá System:																	
IBRD loan	12	11	9	8	7	6	5	3	2								
Marshall loan	6	6	5	5	5	4	4	4	3	3	3	3	2	2	2	1	1
Icel. Bank of Developm.	37	33	29	26	20	16	12	6	3	1							
Bonds 1946 and 1951	2	1	1														
Akureyri Electricity Utility	3	2	2	2	2	1	1	1	1								
Electricity Fund	6	5	4	3	1												
Other loans	2	16	12	10	7	4											
Total Laxá	68	74	62	54	42	31	22	14	9	4	3	3	2	2	2	1	1
Total Interest	587	515	502	486	442	389	348	309	268	229	201	178	142	117	85	68	56

x) Interest during construction.

Table 33

AMORTIZATION AND TOTAL DEBT AT END OF YEAR
(in thous. of dollars)

Existing System	1964-1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Debt 1963	80	12	14	14	14	205	216	98	72	60	60	60	60	60	60	60
Sog System:																
Bonds 6% 1951	15	12	14	14	14	205	216	98	72	60	60	60	60	60	60	60
Counterpart Fund 5 1/2 %	1,675	156	172	184	193	205	216	98	72	60	60	60	60	60	60	60
IBRD 1952 4 3/8 %	1,287	112	123	128	133	140	144	151	81	60	60	60	60	60	60	60
ECA 2 1/2 % 1951	1,162	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Icel. Bank of Developm. 6 1/2 %	12	12														
Central Bank 1959	70	70														
ICA 3-4 % 1957	3,385	186	200	209	216	226	233	244	253	272	286	295	309			
PL-480 4% 1960	828	9	19	26	30	37	44	49	56	70	77	86	93	102	53	
PL-480 3% 1960	1,795	37	63	77	88	105	116	133	147	163	179	195	212	231		
PL-480 4 1/2 % 1960	697	2	12	16	21	26	30	35	42	53	58	65	72	77	84	50
PL-480 1962	326		2	2	7	9	12	14	21	19	23	28	30	33	35	35
Manufacturers Trust Co.	708	140	142	142	142											
Central Bank 1963	233	5	7	7	7	9	9	9	9	12	12	14	14	16	16	19
Loan for Ljósafoss III						29	30	32	34	37	39	41	43	46	49	52
Total	12,258	801	814	865	911	831	893	941	874	702	750	801	852	334	297	216
Less Loans to Reykjavik Utility	874	67	70	72	74	77	81	81	85	49	30	30	33	9	9	9
Total Sog	11,384	734	744	793	837	754	812	860	767	672	720	771	819	325	288	207
Laxá System: <i>Eldan Thermal Station</i>																
IBRD loan	272	24	25	26	27	28	29	31	32	33	17					
Marshall Loan <i>Union Bank</i>	236	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Icel. Bank of Developm. <i>PL 480/1959</i>	691	76	69	72	76	81	84	82	38							
Bonds 1946 and 1952 <i>PL 480/1964</i>	31	7	7	7	5	5	6	6	6							
Akureyri Electricity Utility	46	4	4	5	5	5	6	6								
Electricity Fund <i>PL 480/1965</i>	78	13	13	13	13	13	13	13								
Other loans	24	14	43	33	33	34										
Total <i>Laxá - Eldan Thermal</i>	1,378	150	173	168	171	174	133	132	89	61	12	12	12	12	12	12
Total Amortization	884	872	912	964	1,014	928	945	952	898	828	732	783	831	337	300	219
Borrowing for Ljósafoss III	166															
<i>other</i>																
Total Debt	12,762	12,044	11,584	11,315	10,351	9,337	8,409	7,464	6,472	5,574	4,746	4,062	3,330	2,547	1,716	1,079

87 87 83

Diff

Est

Union Bank
PL 480/1959
Bank of Developm. Bank 8/1959
PL 480/1964
PL 480/1965

Laxá - Eldan Thermal

other

412 - 643

29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

Existing and Future System

Table 34

ALTERNATIVE A.

BALANCE SHEETS (END OF YEAR)

(In millions of dollars)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
Assets																			
Fixed Assets in Operation	30.21	30.21	30.44	30.44	32.35	32.35	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Existing System					29.04	29.04	29.04	30.90	30.90	32.76	36.98	36.98	36.98	44.31	44.31	45.79	45.79	45.79	45.79
Future System																			
Less: Depreciation	7.98	8.75	9.53	10.32	11.16	11.98	12.44	13.25	14.06	14.87	15.68	16.49	17.30	18.11	18.92	19.64	20.35	21.05	21.05
Existing System					0.72	1.45	2.22	2.99	3.81	4.73	5.65	6.57	7.48	8.39	9.30	10.21	11.07	12.21	12.21
Future System																			
Net Fixed Assets in Operation	22.23	21.46	20.91	20.12	21.19	48.69	47.15	47.43	45.85	46.08	48.57	46.84	45.11	50.52	48.60	48.22	46.37	44.53	44.53
Work-in-Progress																			
Existing System	0.23	0.79	1.91																
Future System	1.65	8.45	19.36	29.04	0.41	1.86	0.56	4.39	4.22	0.16	3.83	7.33	7.33	0.55	1.48				
Future System																			
Net Current Assets	0.88	1.16	1.32	1.52	2.22	2.73	3.72	4.56	4.92	5.81	7.18	8.36	9.71	11.83	14.18	17.41	21.07	24.84	24.84
Total Assets	23.11	24.50	31.47	42.91	52.45	51.83	52.73	52.55	55.16	56.11	55.91	59.03	62.15	62.90	64.26	65.63	67.44	69.37	69.37
Liabilities																			
New Equity 1964-1967																			
Existing Equity	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35
Earned Surplus	0.46	1.09	1.89	2.71	2.71	2.77	3.43	4.35	5.60	6.85	8.23	10.00	12.08	14.32	16.99	20.16	23.82	27.82	27.82
Total Equity	10.35	12.46	13.84	15.94	18.06	18.12	18.78	19.70	20.95	22.20	23.58	25.35	27.43	29.67	32.34	35.51	39.17	42.97	42.97
Debt:																			
Existing System	12.76	12.04	11.58	11.31	10.35	9.34	8.41	7.46	6.47	5.57	4.74	4.06	3.33	2.55	1.72	1.38	1.08	0.86	0.86
North-South H.T. Line				0.72	1.85	1.85	1.85	1.85	1.80	1.75	1.69	1.63	1.57	1.50	1.43	1.35	1.27	1.18	1.18
Reserve Station I						0.33	1.50	1.50	1.45	1.40	1.34	1.28	1.21	1.14	1.06	0.98	0.89	0.80	0.80
Reserve Station II							0.33	0.33	1.50	1.50	1.45	1.40	1.34	1.28	1.21	1.14	1.06	0.98	0.98
Bürfell I			6.05	14.94	22.19	22.19	22.19	21.59	20.95	20.27	19.56	18.80	18.00	17.15	16.25	15.29	14.28	13.20	13.20
Bürfell II								0.12	2.04	3.42	3.42	3.42	3.33	3.23	3.12	3.01	2.89	2.76	2.76
Bürfell III										0.13	0.13	3.09	5.94	5.94	5.94	5.78	5.61	5.43	5.43
Bürfell IV														0.44	1.19	1.19	1.19	1.19	1.19
Total Debt	12.76	12.04	17.63	26.97	34.39	33.71	33.95	32.85	34.21	33.91	32.33	33.68	34.72	33.23	31.92	30.12	28.27	26.40	26.40
Total Liabilities	23.11	24.50	31.47	42.91	52.45	51.83	52.73	52.55	55.16	56.11	55.91	59.03	62.15	62.90	64.26	65.63	67.44	69.37	69.37

Table 35

ALTERNATIVE B.
BALANCE SHEETS (END OF YEAR)
(In millions of dollars)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Assets																		
Fixed Assets in Operation																		
Existing System	30.21	30.21	30.44	30.44	32.35	32.35	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Future System					35.99	35.99	35.99	35.99	35.99	35.99	40.21	40.21	40.21	47.54	47.54	49.02	49.02	49.02
Less: Depreciation																		
Existing System	7.98	8.75	9.53	10.32	11.16	11.98	12.44	13.25	14.06	14.87	15.68	16.49	17.30	18.11	18.92	19.64	20.35	21.05
Future System					0.90	0.90	1.80	2.70	3.60	4.50	5.50	6.50	7.50	8.69	9.88	11.10	12.32	13.54
Net Fixed Assets in Operation	22.23	21.46	20.91	20.12	21.19	55.46	53.75	52.04	50.33	48.62	51.03	49.22	47.41	52.74	50.74	50.28	48.35	46.43
Work-in-progress				1.91														
Existing System	0.23	0.79	1.32	1.91	2.53	3.15	3.77	4.39	5.01	5.63	6.25	6.87	7.49	8.11	8.73	9.35	9.97	10.59
Future System	1.65	8.43	21.13	35.99				0.15	2.53	4.22	6.03	7.83	9.63	11.43	13.23	15.03	16.83	18.63
Net Current Assets	0.88	1.16	1.32	1.52	2.22	2.47	3.28	3.88	4.18	4.84	6.03	7.03	8.20	10.14	12.31	15.36	18.84	22.43
Total Assets	23.11	24.50	31.45	44.68	59.40	57.93	57.03	56.07	57.04	57.68	57.22	60.08	62.94	63.43	64.53	65.64	67.19	68.86
Liabilities																		
New Equity 1964-1967																		
Existing Equity	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35
Earned Surplus	0.46	1.09	1.89	2.71	2.25	2.40	2.40	2.97	3.87	4.95	6.17	7.79	9.72	11.81	14.33	17.35	20.87	24.53
Total Equity	10.35	12.46	14.34	17.44	20.56	20.10	20.25	20.82	21.72	22.80	24.02	25.64	27.57	29.66	32.18	35.20	38.72	42.38
Debt:																		
Existing System	12.76	12.04	11.58	11.31	10.35	9.34	8.41	7.46	6.47	5.57	4.74	4.06	3.33	2.55	1.72	1.38	1.08	0.86
North-South H.T. Line				1.67	4.33	4.33	4.33	4.33	4.21	4.08	3.94	3.79	3.63	3.46	3.28	3.09	2.89	2.68
Reserve Station				0.50	3.44	3.32	3.44	3.32	3.19	3.05	2.90	2.74	2.57	2.20	2.00	1.79	1.57	1.33
Burrell I			5.53	13.76	20.72	20.72	20.72	20.15	19.55	18.91	18.23	17.51	16.75	15.95	15.10	14.20	13.24	12.23
Burrell II								0.12	2.04	3.42	3.42	3.42	3.33	3.23	3.12	3.01	2.89	2.76
Burrell III											0.13	3.09	5.94	5.94	5.94	5.78	5.61	5.43
Burrell IV													0.44	0.44	1.19	1.19	1.19	1.19
Total Debt	12.76	12.04	17.11	27.24	38.84	37.83	36.78	35.25	35.32	34.88	33.20	34.44	35.37	33.77	32.35	30.44	28.47	26.46
Total Liabilities	23.11	24.50	31.45	44.68	59.40	57.93	57.03	56.07	57.04	57.58	57.22	60.08	62.94	63.43	64.53	65.64	67.19	68.86

Table 36

ALTERNATIVE C.

BALANCE SHEETS (END OF YEAR)
(In millions of dollars)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
Assets																			
Fixed Assets in Operation	30.21	30.21	30.44	30.44	32.35	32.35	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Existing System	—	—	—	—	—	9.99	9.99	10.86	10.86	17.73	17.73	17.73	17.73	17.73	17.73	17.73	17.73	17.73	17.73
Future System	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Less: Depreciation	7.98	8.75	9.53	10.32	11.16	11.98	12.44	13.25	14.06	14.87	15.68	16.49	17.30	18.11	18.92	19.64	20.35	21.05	21.76
Existing System	—	—	—	—	—	0.42	0.84	1.30	1.77	2.40	3.04	3.68	4.31	4.95	5.58	6.22	6.85	7.49	8.12
Future System	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Net Fixed Assets in Operation	22.23	21.46	20.91	20.12	21.19	20.94	28.71	28.31	27.03	32.46	31.01	29.56	28.12	26.67	25.23	23.87	22.53	21.19	19.84
Work-in-Progress	0.23	0.79	1.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Existing System	0.84	1.65	5.49	10.07	0.22	2.29	4.14	6.87	—	—	—	—	—	—	—	—	—	—	—
Future System	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Net Current Assets	0.88	1.16	1.17	1.22	1.16	1.40	1.73	2.19	2.87	4.06	5.60	7.38	9.13	10.87	12.58	14.82	17.11	19.53	21.95
Total Assets	23.11	23.69	24.52	28.74	32.42	31.56	32.73	34.64	36.77	36.52	36.61	36.94	37.25	37.54	37.81	38.69	39.64	40.72	42.79
Liabilities																			
New Equity 1964	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Existing Equity	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35
Earned Surplus	0.46	1.09	1.89	2.71	2.94	3.57	4.51	5.72	6.72	8.00	9.55	11.17	12.86	14.61	16.52	18.50	20.57	22.71	24.84
Total Equity	10.35	11.65	12.28	13.08	13.90	14.13	14.76	15.70	16.91	17.91	19.19	20.74	22.36	24.05	25.80	27.71	29.69	31.76	33.94
Debt:																			
Existing System	12.76	12.04	11.58	11.31	10.35	9.34	8.41	7.46	6.47	5.57	4.74	4.06	3.33	2.55	1.72	1.38	1.08	0.86	0.64
Thermal Station I	—	—	—	—	—	0.11	0.70	0.70	0.67	0.64	0.61	0.58	0.55	0.51	0.47	0.43	0.39	0.34	0.29
Hveragerði I	—	—	0.29	3.04	5.50	5.31	5.11	4.90	4.67	4.43	4.18	3.91	3.62	3.32	3.00	2.66	2.30	1.92	1.54
Efstidalur	—	—	—	—	—	1.08	3.28	5.52	5.52	5.52	5.52	5.37	5.20	5.02	4.83	4.63	4.42	4.20	3.98
Laxá III	—	—	0.37	1.31	2.67	2.67	2.67	2.60	2.53	2.45	2.37	2.28	2.19	2.09	1.99	1.88	1.76	1.64	1.52
Total Debt	12.76	12.04	12.24	15.66	18.52	17.43	17.97	18.94	19.86	18.61	17.42	16.20	14.89	13.49	12.01	10.98	9.95	8.96	7.97
Total Liabilities	23.11	23.69	24.52	28.74	32.42	31.56	32.73	34.64	36.77	36.52	36.61	36.94	37.25	37.54	37.81	38.69	39.64	40.72	42.79

Existing and Future System

Table 37

ALTERNATIVE A.
INCOME STATEMENT.

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Power Sales																	
Primary Power in MW	89.1	94.2	99.5	105.6	120.5	132.0	141.5	151.0	160.5	171.0	181.5	193.0	208.0	221.0	235.5	248.5	247.5
Primary Energy in GWh	431	456	482	513	556	620	662	705	746	794	847	900	980	1037	1099	1165	1165
Off-Peak Energy in GWh	99	76.5	58.5	36	100	200	200	179	151	200	200	200	300	300	300	300	300
Aluminum Smelter in GWh	-	-	-	-	445	445	445	445	445	445	445	445	445	445	445	445	445

(In millions of dollars)

Revenue Account	1.88	2.14	2.26	2.40	2.74	3.00	3.21	3.43	3.64	3.86	4.12	4.38	4.72	5.02	5.35	5.64	5.62
Income from Primary Power	0.54	0.62	0.66	0.70	0.76	0.85	0.91	0.97	1.02	1.09	1.16	1.23	1.34	1.42	1.51	1.60	1.60
" " Primary Energy	0.07	0.05	0.04	0.02	0.07	0.27	0.27	0.25	0.21	0.27	0.27	0.27	0.41	0.41	0.41	0.41	0.41
" " Off-Peak Energy																	
Total Income from General Load	2.49	2.81	2.96	3.12	3.57	4.12	4.39	4.65	4.87	5.24	5.55	5.88	6.47	6.85	7.27	7.65	7.63
Income from Aluminum Smelter	-	-	-	-	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Total Income	2.49	2.81	2.96	3.12	4.68	5.23	5.50	5.76	5.98	6.35	6.66	6.99	7.58	7.96	8.38	8.76	8.74
Operation, Maintenance and Administration Expenses:																	
Existing System	0.42	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Future System	-	-	-	-	0.32	0.32	0.34	0.34	0.36	0.49	0.49	0.49	0.58	0.58	0.65	0.65	0.65
Fuel for Thermal Generation	0.02	0.04	0.06	0.13	0.05	0.05	0.08	0.09	0.23	0.12	0.12	0.22	0.12	0.17	0.12	0.12	0.12
Contribution to Reserve Capacity	0.23	0.42	0.42	0.39	0.38	0.37	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.21
Depreciation:																	
Existing System	0.77	0.78	0.79	0.84	0.82	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.72	0.71	0.70
Future System	-	-	-	-	0.72	0.73	0.77	0.77	0.82	0.92	0.92	0.92	1.11	1.11	1.14	1.14	1.14
Total Expenses	1.44	1.67	1.70	1.81	2.74	2.73	2.70	2.71	2.92	3.04	3.04	3.14	3.32	3.37	3.33	3.32	3.27
Net Income	1.05	1.14	1.26	1.31	1.94	2.50	2.80	3.05	3.06	3.31	3.62	3.85	4.26	4.59	5.05	5.44	5.47
Interest:																	
Existing System	0.59	0.52	0.50	0.49	0.44	0.40	0.35	0.31	0.27	0.23	0.20	0.18	0.14	0.12	0.08	0.07	0.06
Future System	-	0.18	0.63	1.14	1.45	1.49	1.54	1.61	1.70	1.70	1.75	1.86	1.89	1.85	1.80	1.71	1.61
Less Interest during Construction	-	0.19	0.67	1.14	0.01	0.05	0.01	0.12	0.16	0.00	0.10	0.27	0.01	0.05	-	-	-
Net Interest	0.59	0.51	0.46	0.49	1.88	1.84	1.88	1.80	1.81	1.93	1.85	1.77	2.02	1.92	1.88	1.78	1.67
Net Profit	0.46	0.63	0.80	0.82	0.06	0.66	0.92	1.25	1.25	1.38	1.77	2.08	2.24	2.67	3.17	3.66	3.80
Cumulative Net Profit	0.46	1.09	1.89	2.71	2.77	3.43	4.35	5.60	6.85	8.23	10.00	12.08	14.32	16.99	20.16	23.82	27.62

Table 38

**ALTERNATIVE B.
INCOME STATEMENT**

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Existing and Future System																	
Power Sales																	
Primary Power in MW	89.1	94.2	99.5	105.6	120.5	132.0	141.5	151.0	160.5	171.0	181.5	193.0	208.0	221.0	235.5	248.5	247.5
Primary Energy in GWh	431	456	482	513	556	620	662	705	746	794	847	900	980	1037	1099	1165	1165
Off-Peak Energy in GWh	99	76.5	58.5	36	100	200	200	179	151	200	200	200	300	300	300	300	300
Aluminum Smelter in GWh	-	-	-	-	445	445	445	445	445	445	445	445	445	445	445	445	445
(In millions of dollars)																	
Revenue Account																	
Income from Primary Power	1.88	2.14	2.26	2.40	2.74	3.00	3.21	3.43	3.64	3.88	4.12	4.38	4.72	5.02	5.35	5.64	5.62
" " Primary Energy	0.54	0.62	0.66	0.70	0.76	0.85	0.91	0.97	1.02	1.09	1.16	1.23	1.34	1.42	1.51	1.60	1.60
" " Off-Peak Energy	0.07	0.05	0.04	0.02	0.07	0.27	0.27	0.25	0.21	0.27	0.27	0.27	0.41	0.41	0.41	0.41	0.41
Total Income from General Load	2.49	2.81	2.96	3.12	3.57	4.12	4.39	4.65	4.87	5.24	5.55	5.88	6.47	6.85	7.27	7.65	7.63
Income from Aluminum Smelter	-	-	-	-	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Total Income	2.49	2.81	2.96	3.12	4.68	5.23	5.50	5.76	5.98	6.35	6.66	6.99	7.58	7.96	8.38	8.76	8.74
Operation, Maintenance and Administration Expenses:																	
Existing System	0.42	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Future System	-	-	-	-	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.61	0.61	0.68	0.68	0.68
Fuel for Thermal Generation	0.02	0.04	0.06	0.13	0.05	0.05	0.08	0.09	0.23	0.12	0.12	0.22	0.12	0.17	0.12	0.12	0.12
Contribution to Reserve Capacity	0.23	0.42	0.42	0.39	0.38	0.37	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.21
Depreciation:																	
Existing System	0.77	0.78	0.79	0.84	0.82	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.72	0.71	0.70
Future System	-	-	-	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	1.00	1.00	1.19	1.22	1.22	1.22
Total Expenses	1.44	1.67	1.70	1.81	2.99	2.97	2.88	2.89	3.03	3.15	3.15	3.25	3.43	3.48	3.44	3.43	3.38
Net Income	1.05	1.14	1.26	1.31	1.69	2.26	2.26	2.87	2.95	3.20	3.51	3.74	4.15	4.48	4.94	5.33	5.36
Interest:																	
Existing System	0.59	0.52	0.50	0.49	0.44	0.40	0.35	0.31	0.27	0.23	0.20	0.18	0.14	0.12	0.08	0.07	0.06
Future System	-	0.16	0.62	1.28	1.71	1.71	1.70	1.73	1.76	1.75	1.79	1.90	1.93	1.89	1.84	1.74	1.64
Less Interest during Construction	-	0.17	0.66	1.28	-	-	-	0.07	0.16	-	0.10	0.27	0.01	0.05	-	-	-
Net Interest	0.59	0.51	0.46	0.49	2.15	2.11	2.05	1.97	1.87	1.88	1.89	1.81	2.06	1.96	1.92	1.81	1.70
Net Profit or (Loss)	0.46	0.63	0.80	0.82	(0.46)	0.15	0.57	0.90	1.08	1.22	1.62	1.93	2.09	2.52	3.02	3.52	3.66
Cumulative Net Profit	0.46	1.09	1.89	2.71	2.25	2.40	2.97	3.87	4.95	6.17	7.79	9.72	11.81	14.33	17.35	20.87	24.53

Existing and Future System

ALTERNATIVE C.
INCOME STATEMENT

Table 39

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Power Sales																	
Primary Power in MW	89.1	94.2	99.5	105.6	120.5	129.0	137.5	148.0	157.0	167.5	177.5	177.5	177.5	177.5	177.5	177.5	177.5
Primary Energy in GWh	431.0	456.0	482.0	513.0	558.0	596.5	636.5	680.5	723.0	772.0	826.5	826.5	826.5	826.5	826.5	826.5	826.5
Off-Peak Energy in GWh	99	76.5	58.5	36	100	100	100	100	100	100	100	100	100	100	100	100	100
(In millions of dollars)																	
Revenue Account																	
Income from Primary Power	1.88	2.14	2.26	2.40	2.74	2.93	3.12	3.36	3.56	3.80	4.03	4.03	4.03	4.03	4.03	4.03	4.03
" " Primary Energy	0.54	0.62	0.66	0.70	0.76	0.82	0.87	0.93	0.99	1.06	1.13	1.13	1.13	1.13	1.13	1.13	1.13
" " Off-Peak Energy	0.07	0.05	0.04	0.02	0.07	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Total Income	2.49	2.81	2.96	3.12	3.57	3.89	4.13	4.43	4.69	5.00	5.30	5.30	5.30	5.30	5.30	5.30	5.30
Operation, Maintenance and Administration Expenses:																	
Existing System	0.42	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Future System	-	-	-	-	0.33	0.33	0.35	0.35	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Fuel for Thermal Generation	0.02	0.04	0.06	0.13	0.00	0.00	0.01	0.09	0.04	0.11	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Contribution to Reserve Capacity	0.23	0.42	0.42	0.39	0.39	0.37	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.21
Depreciation:																	
Existing System	0.77	0.78	0.79	0.84	0.82	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.70
Future System	-	-	-	-	0.42	0.42	0.46	0.47	0.63	0.63	0.64	0.63	0.64	0.63	0.64	0.63	0.64
Total Expenses	1.44	1.67	1.70	1.81	2.41	2.38	2.33	2.42	2.62	2.70	2.79	2.78	2.79	2.78	2.70	2.68	2.64
Net Income	1.05	1.14	1.26	1.31	1.16	1.51	1.80	2.01	2.07	2.30	2.51	2.52	2.51	2.52	2.60	2.62	2.66
Interest:																	
Existing System	0.59	0.52	0.50	0.49	0.44	0.40	0.35	0.31	0.27	0.23	0.20	0.18	0.14	0.12	0.08	0.07	0.06
Future System	0.02	0.02	0.15	0.36	0.49	0.55	0.63	0.75	0.80	0.79	0.76	0.72	0.68	0.65	0.61	0.57	0.53
Less Interest during Construction	0.03	0.03	0.19	0.36	-	0.07	0.12	0.26	-	-	-	-	-	-	-	-	-
Net Interest	0.59	0.51	0.46	0.49	0.93	0.88	0.86	0.80	1.07	1.02	0.96	0.90	0.82	0.77	0.69	0.64	0.59
Net Profit	0.46	0.63	0.80	0.82	0.23	0.63	0.94	1.21	1.00	1.28	1.55	1.62	1.69	1.75	1.91	1.98	2.07
Cumulative Net Profit	0.46	1.09	1.89	2.71	2.94	3.57	4.51	5.72	6.72	8.00	9.55	11.17	12.86	14.61	16.52	18.50	20.57

Existing and Future System

ALTERNATIVE A.
SOURCE AND APPLICATION OF FUNDS.
(In millions of dollars)

Table 40

Source of Funds	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Net Income	1.05	1.14	1.26	1.31	1.94	2.50	2.80	3.05	3.06	3.31	3.62	3.85	4.26	4.59	5.05	5.44	5.47
Depreciation	0.77	0.78	0.79	0.84	1.54	1.54	1.58	1.58	1.63	1.73	1.73	1.73	1.92	1.92	1.86	1.85	1.84
Net Receipts, from Operation	1.82	1.92	2.05	2.15	3.48	4.04	4.38	4.63	4.69	5.04	5.35	5.58	6.18	6.51	6.91	7.29	7.31
New Equity (Cash)	1.65	0.75	1.30	1.30													
Borrowings:																	
Existing System	0.17	0.11	0.64														
Loan North-South H.T. Line																	
Loan Reserve Station I					0.33	1.17	0.33	1.17									
Loan Reserve Station II																	
Loan Bürfell I																	
Loan Bürfell II																	
Loan Bürfell III																	
Loan Bürfell IV																	
Total Borrowings	0.17	0.11	0.64		0.33	1.17	0.33	1.17	0.12	1.92	1.38	0.13	2.96	2.85	0.44	0.75	
Total Source of Funds	3.64	9.13	13.60	11.83	3.81	5.21	4.83	7.72	6.07	5.17	8.31	8.43	6.62	7.26	6.91	7.29	7.31

Application of Funds

Construction Expenditure (excluding capitalized interest):

Existing System	0.23	0.78	1.08														
North-South Line				0.80	1.25		0.40	1.40									
Reserve Station I																	
Reserve Station II																	
Bürfell I																	
Bürfell II																	
Bürfell III																	
Bürfell IV																	
Total Construction	1.88	7.40	11.36	8.54	0.40	1.40	0.55	3.71	1.53	0.16	3.57	3.23	0.54	0.88			

Debt Service:

Interest-Existing System	0.59	0.52	0.50	0.49	0.44	0.40	0.35	0.31	0.27	0.23	0.20	0.18	0.14	0.12	0.08	0.07	0.06
North-South Line																	
Reserve Station I																	
Reserve Station II																	
Bürfell I																	
Bürfell II																	
Bürfell III																	
Bürfell IV																	
Total Interest	0.59	0.70	1.13	1.63	1.89	1.89	1.89	1.92	1.97	1.93	1.95	2.04	2.03	1.97	1.88	1.78	1.67

Total Amortization

Existing System	0.89	0.87	0.91	0.96	1.01	0.93	0.95	0.99	0.90	0.83	0.68	0.73	0.78	0.83	0.84	0.80	0.78
North-South Line																	
Reserve Station I																	
Reserve Station II																	
Bürfell I																	
Bürfell II																	
Bürfell III																	
Bürfell IV																	
Total Amortization	0.89	0.87	0.91	0.96	1.01	0.93	0.95	0.99	0.90	0.83	0.68	0.73	0.78	0.83	0.84	0.80	0.78

Total Debt Service

Existing System	1.48	1.57	2.04	2.59	2.90	2.82	3.44	3.65	3.65	3.64	3.56	3.85	3.96	4.03	3.68	3.63	3.54
North-South Line																	
Reserve Station I																	
Reserve Station II																	
Bürfell I																	
Bürfell II																	
Bürfell III																	
Bürfell IV																	
Total Debt Service	1.48	1.57	2.04	2.59	2.90	2.82	3.44	3.65	3.65	3.64	3.56	3.85	3.96	4.03	3.68	3.63	3.54

Total Application of Funds

Existing System	3.36	8.97	13.40	11.13	3.30	4.22	3.99	7.36	5.18	3.80	7.13	7.08	4.50	4.91	3.68	3.63	3.54
North-South Line																	
Reserve Station I																	
Reserve Station II																	
Bürfell I																	
Bürfell II																	
Bürfell III																	
Bürfell IV																	
Total Application of Funds	3.36	8.97	13.40	11.13	3.30	4.22	3.99	7.36	5.18	3.80	7.13	7.08	4.50	4.91	3.68	3.63	3.54

Cash Surplus

Existing System	0.28	0.16	0.20	0.70	0.51	0.99	0.84	0.36	0.89	1.37	1.18	1.35	2.12	2.35	3.23	3.66	3.77
North-South Line																	
Reserve Station I																	
Reserve Station II																	
Bürfell I																	
Bürfell II																	
Bürfell III																	
Bürfell IV																	
Cash Surplus	0.28	0.16	0.20	0.70	0.51	0.99	0.84	0.36	0.89	1.37	1.18	1.35	2.12	2.35	3.23	3.66	3.77

Cumulative Cash Surplus

Existing System	0.28	0.44	0.64	1.34	1.85	2.84	3.68	4.04	4.93	6.30	7.48	8.83	10.95	13.30	16.53	20.19	23.96
North-South Line																	
Reserve Station I																	
Reserve Station II																	
Bürfell I																	
Bürfell II																	
Bürfell III																	
Bürfell IV																	
Cumulative Cash Surplus	0.28	0.44	0.64	1.34	1.85	2.84	3.68	4.04	4.93	6.30	7.48	8.83	10.95	13.30	16.53	20.19	23.96

Existing and Future System.

ALTERNATIVE B.
SOURCE AND APPLICATION OF FUNDS
(In millions of dollars)

Table 41

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Source of Funds																	
Net income	1.05	1.14	1.26	1.31	1.69	2.26	2.62	2.87	2.95	3.20	3.51	3.74	4.15	4.48	4.94	5.33	5.36
Depreciation	0.77	0.78	0.79	0.84	1.72	1.71	1.71	1.71	1.71	1.81	1.81	1.81	2.00	2.00	1.94	1.93	1.92
Net receipts from operation	1.82	1.92	2.05	2.15	3.41	3.97	4.33	4.58	4.66	5.01	5.32	5.55	6.15	6.48	6.88	7.26	7.28
New equity	1.65	1.25	2.30	2.30													
Borrowings:																	
Existing System	0.17	0.41	0.64														
Loan North-South H.T. Line																	
Loan Reserve Station																	
Loan Burrell I																	
Loan Burrell II																	
Loan Burrell III																	
Loan Burrell IV																	
Total borrowings	0.17	0.41	0.64														
Total Source of Funds	3.64	9.11	15.39	17.01	3.41	3.97	4.45	6.50	6.04	5.14	8.28	8.40	6.99	7.23	6.88	7.26	7.28
Application of Funds																	
Construction Expenditure (excluding capitalized interest):																	
Existing System	0.23	0.78	1.08														
North-South Line																	
Reserve Station																	
Burrell I																	
Burrell II																	
Burrell III																	
Burrell IV																	
Total Construction	1.88	7.40	13.16	13.58													
Debt Service:																	
Interest - Existing system	0.59	0.52	0.50	0.49	0.44	0.40	0.40	0.31	0.27	0.23	0.20	0.18	0.14	0.12	0.08	0.07	0.06
- North-South H.T. Line																	
- Reserve Station																	
- Burrell I																	
- Burrell II																	
- Burrell III																	
- Burrell IV																	
Total Interest	0.59	0.68	1.12	1.77	2.15	2.11	2.05	2.04	2.03	1.98	1.99	2.08	2.07	2.01	1.82	1.81	1.70
Amortization - Existing System	0.89	0.87	0.91	0.96	1.01	0.93	0.95	0.99	0.90	0.83	0.68	0.73	0.78	0.83	0.83	0.80	0.77
- North-South H.T. Line																	
- Reserve Station																	
- Burrell I																	
- Burrell II																	
- Burrell III																	
- Burrell IV																	
Total Amortization	0.89	0.87	0.91	0.96	1.01	0.93	0.95	0.99	0.90	0.83	0.68	0.73	0.78	0.83	0.83	0.80	0.77
Total Debt Service	1.48	1.55	2.03	2.73	3.16	3.16	3.70	3.89	3.85	3.79	3.71	4.00	4.11	4.16	3.83	3.78	3.69
Total Application of Funds	3.36	8.95	15.19	16.31	3.16	3.16	3.85	6.20	5.38	3.95	7.28	7.23	4.65	5.06	3.83	3.78	3.69
Cash Surplus	0.28	0.16	0.20	0.70	0.25	0.81	0.60	0.30	0.66	1.19	1.00	1.17	1.94	2.17	3.05	3.48	3.59
Cumulative Cash Surplus	0.28	0.44	0.64	1.34	1.59	2.40	3.00	3.30	3.96	5.15	6.15	7.32	9.26	11.43	14.48	17.96	21.55

Table 42

ALTERNATIVE C.
SOURCE AND APPLICATION OF FUNDS
(in millions of dollars)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Source of Funds																	
Net Income	1.05	1.14	1.26	1.31	1.16	1.51	1.80	2.01	2.07	2.30	2.51	2.52	2.51	2.52	2.60	2.62	2.66
Depreciation	0.77	0.78	0.79	0.84	1.24	1.23	1.27	1.28	1.44	1.45	1.45	1.44	1.45	1.44	1.36	1.34	1.34
Net Receipts from Operation	1.82	1.92	2.05	2.15	2.40	2.74	3.07	3.29	3.51	3.75	3.96	3.96	3.96	3.96	3.96	3.96	4.00
New Equity Cash	0.84																
Borrowings:																	
Existing System	0.17	0.41	0.64														
Thermal Station I					0.11	0.59											
Hveragerði I		0.29	2.75	2.46													
Efstidalur		0.37	0.94	1.36		1.08	2.20	2.24									
Laxá III		0.17	1.07	4.33	3.82	0.11	1.67	2.20	2.24								
Total Borrowings	2.83	2.99	6.38	5.97	2.51	4.41	5.27	5.53	3.51	3.75	3.96	3.96	3.96	3.96	3.96	3.96	4.00
Total Source of Funds																	
Application of Funds																	
Construction Expenditure (excluding capitalized interest):																	
Existing System	0.23	0.78	1.08														
Thermal Station I					0.14	0.70											
Hveragerði I	0.64	0.35	2.76	2.69													
Efstidalur	0.08	0.44	0.93	1.53		1.30	2.60	2.47									
Laxá III	1.07	1.57	4.77	4.22	0.14	2.00	2.60	2.47									
Total Construction Cost	0.99	0.52	0.50	0.49	0.44	0.40	0.35	0.31	0.27	0.23	0.20	0.18	0.14	0.12	0.08	0.07	0.06
Interest = Existing System						0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02
Thermal Station I						0.32	0.31	0.29	0.28	0.27	0.25	0.23	0.22	0.20	0.18	0.16	0.14
Hveragerði I	0.01	0.10	0.25	0.33	0.33	0.04	0.12	0.26	0.33	0.33	0.33	0.31	0.30	0.29	0.28	0.27	0.26
Efstidalur	0.01	0.05	0.11	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.12	0.11	0.11
Laxá III	0.59	0.34	0.85	0.85	0.93	0.95	0.98	1.06	1.07	1.02	0.96	0.90	0.82	0.77	0.69	0.64	0.59
Total Interest	0.89	0.87	0.91	0.96	1.01	0.93	0.95	0.99	0.90	0.83	0.68	0.73	0.78	0.83	0.84	0.80	0.72
Amortization = Existing System						0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05
Thermal Station I						0.19	0.20	0.21	0.23	0.24	0.25	0.27	0.29	0.30	0.32	0.34	0.36
Hveragerði I											0.15	0.17	0.18	0.19	0.20	0.21	0.22
Efstidalur											0.07	0.07	0.08	0.09	0.10	0.10	0.12
Laxá III	0.89	0.87	0.91	0.96	1.20	1.13	1.23	1.32	1.25	1.19	1.22	1.31	1.40	1.48	1.03	1.03	0.95
Total Amortization	1.48	1.41	1.56	1.81	2.13	2.08	2.21	2.38	2.32	2.21	2.18	2.21	2.22	2.25	1.72	1.67	1.58
Total Debt Service	2.55	2.98	6.33	6.03	2.27	4.08	4.81	4.85	2.32	2.21	2.18	2.21	2.22	2.25	1.72	1.67	1.58
Total Application of Funds																	
Cash Surplus or (Deficit)	0.28	0.01	0.05	(0.06)	0.24	0.33	0.46	0.68	1.19	1.54	1.78	1.75	1.74	1.71	2.24	2.29	2.42
Cumulative Cash Surplus	0.28	0.29	0.34	0.28	0.52	0.85	1.31	1.99	3.18	4.72	6.50	8.25	9.99	11.70	13.94	16.23	18.65

Table 43

WORK-IN-PROGRESS.
(In millions of dollars)

Future System

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<u>ALTERNATIVE A.</u>														
Reserve Station I					0.40	1.80		0.40	1.80					
Reserve Station II														
North-South H.T. Line			0.80	2.05										
Burfiell I	1.65	8.27	17.75	25.04			0.15	2.46	3.99	0.16	3.73	6.96		
Burfiell II														
Burfiell III													0.54	1.42
Burfiell IV													0.01	0.06
Interest during Construction	0.18	0.81	1.95	0.01	0.01	0.06	0.01	0.13	0.23	0.10	0.37	0.01	0.01	0.06
Total Work-in-progress	1.65	8.45	19.36	29.04	0.41	1.86	0.56	4.39	4.22	0.16	3.83	7.33	0.55	1.48

ALTERNATIVE B.

Reserve Station			0.60	4.00										
North-South H.T. Line			2.00	5.00										
Burfiell I	1.65	8.27	17.75	24.93			0.15	2.46	3.99	0.16	3.73	6.96		
Burfiell II														
Burfiell III													0.54	1.42
Burfiell IV													0.01	0.06
Interest during Construction	0.16	0.78	2.06				0.07	0.23	0.23	0.10	0.37	0.01	0.01	0.06
Total Work-in-progress	1.65	8.43	21.13	35.99			0.15	2.53	4.22	0.16	3.83	7.33	0.55	1.48

ALTERNATIVE C.

Thermal Station I					0.14	0.84								
Hveragerði I	0.64	0.99	3.75	6.44										
Estidalur	0.08	0.08	0.08	0.08	0.08	1.38	3.98	6.45						
Laxá III	0.12	0.56	1.49	3.02										
Interest during Construction	0.02	0.02	0.17	0.53			0.07	0.16	0.42					
Total Work-in-progress	0.84	1.65	5.49	10.07	0.22	2.29	4.14	6.87						

Existing and Future System.

DEBT SERVICE AND INTEREST COVERAGE.

Table 45

Excluding Interest during Construction.
(In millions of dollars)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
Debt Service Coverage																		
Alternative A																		
Debt Service (cf. table 40)	1.48	1.57	2.04	2.59	2.90	2.82	3.44	3.65	3.65	3.64	3.56	3.85	3.96	4.03	3.68	3.63	3.54	
Less: Interest during Construction (cf. table 37)	-	0.19	0.67	1.14	0.91	0.65	0.01	0.12	0.16	-	0.10	0.27	0.01	0.05	-	-	-	
Net Debt Service	1.48	1.38	1.37	1.45	2.89	2.77	3.43	3.53	3.49	3.64	3.46	3.58	3.95	3.98	3.68	3.63	3.54	
Net Receipts from Operation (cf. table 40)	1.82	1.92	2.05	2.15	3.48	4.04	4.38	4.63	4.69	5.04	5.35	5.58	6.18	6.51	6.91	7.29	7.31	
Debt Service Coverage	1.2	1.4	1.5	1.5	1.2	1.5	1.3	1.3	1.3	1.4	1.5	1.6	1.6	1.6	1.9	2.0	2.1	
Alternative B																		
Debt Service (cf. table 41)	1.48	1.55	2.03	2.73	3.16	3.16	3.70	3.89	3.85	3.79	3.71	4.00	4.11	4.18	3.83	3.78	3.69	
Less: Interest during Construction (cf. table 38)	-	0.17	0.66	1.28	-	-	-	0.07	0.16	-	0.10	0.27	0.01	0.05	-	-	-	
Net Debt Service	1.48	1.38	1.37	1.45	3.16	3.16	3.70	3.82	3.69	3.79	3.61	3.73	4.10	4.13	3.83	3.78	3.69	
Net Receipts from Operation (cf. table 41)	1.82	1.92	2.05	2.15	3.41	3.97	4.33	4.58	4.66	5.01	5.32	5.55	6.15	6.48	6.88	7.26	7.28	
Debt Service Coverage	1.2	1.4	1.5	1.5	1.1	1.3	1.2	1.2	1.3	1.3	1.5	1.5	1.5	1.6	1.8	1.9	2.0	
Alternative C																		
Debt Service (cf. table 42)	1.48	1.41	1.56	1.81	2.13	2.06	2.21	2.38	2.32	2.21	2.18	2.21	2.22	2.25	1.72	1.67	1.58	
Less: Interest during Construction (cf. table 39)	-	0.03	0.19	0.36	-	0.07	0.12	0.26	-	-	-	-	-	-	-	-	-	
Net Debt Service	1.48	1.38	1.37	1.45	2.13	2.01	2.09	2.12	2.32	2.21	2.18	2.21	2.22	2.25	1.72	1.67	1.58	
Net Receipts from Operation (cf. table 42)	1.82	1.92	2.05	2.15	2.40	2.74	3.07	3.29	3.51	3.75	3.96	3.96	3.96	3.96	3.96	3.96	4.00	
Debt Service Coverage	1.2	1.4	1.5	1.5	1.1	1.4	1.5	1.6	1.5	1.7	1.8	1.8	1.8	1.8	2.3	2.4	2.5	
Interest Coverage																		
Alternative A																		
Net Interest (cf. table 37)	0.59	0.51	0.46	0.49	1.88	1.84	1.86	1.80	1.81	1.93	1.85	1.77	2.02	1.92	1.88	1.78	1.67	
Net Income (cf. table 37)	1.05	1.14	1.26	1.31	1.94	2.50	2.80	3.05	3.06	3.31	3.62	3.85	4.36	4.59	5.05	5.44	5.47	
Interest Coverage	1.8	2.2	2.7	2.7	1.0	1.4	1.5	1.7	1.7	1.7	2.0	2.2	2.1	2.4	2.7	3.1	3.3	
Alternative B																		
Net Interest (cf. table 38)	0.59	0.51	0.46	0.49	2.15	2.11	2.05	1.97	1.87	1.98	1.89	1.81	2.06	1.96	1.92	1.81	1.70	
Net Income (cf. table 38)	1.05	1.14	1.26	1.31	1.69	2.26	2.26	2.87	2.95	3.20	3.51	3.74	4.15	4.48	4.94	5.33	5.36	
Interest Coverage	1.8	2.2	2.7	2.7	0.8	1.1	1.1	1.5	1.6	1.6	1.9	2.1	2.0	2.3	2.6	2.9	3.2	
Alternative C																		
Net Interest (cf. table 39)	0.59	0.51	0.46	0.49	0.93	0.88	0.86	0.80	1.07	1.02	0.96	0.90	0.82	0.77	0.69	0.64	0.59	
Net Income (cf. table 39)	1.05	1.14	1.26	1.31	1.16	1.51	1.80	2.01	2.07	2.30	2.51	2.52	2.51	2.52	2.60	2.62	2.66	
Interest Coverage	1.8	2.2	2.7	2.7	1.2	1.7	2.1	2.5	1.9	2.3	2.6	2.8	3.1	3.3	3.8	4.1	4.5	

Table 47

EFFECTS OF INCREASED PRICE TO SMELTER FROM 2.5 TO 3.0 AND 3.5 MILLS PR. KW. ON DEBT SERVICE AND INTEREST COVERAGE.

Existing and Future System

(in millions of dollars)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<u>Debt Service Coverage</u>													
Alternative A													
Net Debt Service (cf. table 45)	2.89	2.77	3.43	3.53	3.49	3.64	3.46	3.58	3.95	3.98	3.68	3.63	3.54
Net Receipts from Operation:-at 2.5 mills (cf. table 40)	3.48	4.04	4.38	4.63	4.69	5.04	5.35	5.58	6.18	6.51	6.91	7.29	7.31
-at 3.0 mills	3.70	4.26	4.60	4.85	4.91	5.26	5.57	5.80	6.40	6.73	7.13	7.51	7.53
-at 3.5 mills	3.93	4.49	4.83	5.08	5.14	5.49	5.80	6.03	6.63	6.96	7.36	7.74	7.76
Debt Service Coverage:-at 2.5 mills	1.2	1.5	1.3	1.3	1.3	1.4	1.5	1.6	1.6	1.6	1.9	2.0	2.1
-at 3.0 mills	1.3	1.5	1.3	1.4	1.4	1.4	1.6	1.6	1.6	1.7	1.9	2.1	2.1
-at 3.5 mills	1.4	1.6	1.4	1.4	1.5	1.5	1.7	1.7	1.7	1.7	2.0	2.1	2.2
Alternative B													
Net Debt Service (cf. table 45)	3.16	3.16	3.70	3.82	3.69	3.79	3.61	3.73	4.10	4.13	3.83	3.78	3.69
Net Receipts from Operation:-at 2.5 mills (cf. table 41)	3.41	3.97	4.33	4.58	4.66	5.01	5.32	5.55	6.15	6.48	6.88	7.26	7.28
-at 3.0 mills	3.63	4.19	4.55	4.80	4.88	5.23	5.54	5.77	6.37	6.70	7.10	7.48	7.50
-at 3.5 mills	3.86	4.42	4.78	5.03	5.11	5.46	5.77	6.00	6.60	6.93	7.33	7.71	7.73
Debt Service Coverage:-at 2.5 mills	1.1	1.3	1.2	1.2	1.3	1.3	1.5	1.5	1.5	1.6	1.8	1.9	2.0
-at 3.0 mills	1.1	1.3	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.6	1.9	2.0	2.0
-at 3.5 mills	1.2	1.4	1.3	1.3	1.4	1.4	1.6	1.6	1.6	1.7	1.9	2.0	2.1
<u>Interest Coverage</u>													
Alternative A													
Net Interest (cf. table 37)	1.88	1.84	1.88	1.80	1.81	1.93	1.85	1.77	2.02	1.92	1.88	1.78	1.67
Net Income:-at 2.5 mills (cf. table 37)	1.94	2.50	2.80	3.05	3.06	3.31	3.62	3.85	4.26	4.59	5.05	5.44	5.47
-at 3.0 mills	2.16	2.72	3.02	3.27	3.28	3.53	3.84	4.07	4.48	4.81	5.27	5.66	5.69
-at 3.5 mills	2.39	2.95	3.25	3.50	3.51	3.76	4.07	4.30	4.71	5.04	5.50	5.89	5.92
Interest Coverage:-at 2.5 mills	1.0	1.4	1.5	1.7	1.7	1.7	2.0	2.2	2.1	2.4	2.7	3.1	3.3
-at 3.0 mills	1.1	1.5	1.6	1.8	1.8	1.8	2.1	2.3	2.2	2.5	2.8	3.2	3.4
-at 3.5 mills	1.3	1.6	1.7	1.9	1.9	1.9	2.2	2.4	2.3	2.6	2.9	3.3	3.5
Alternative B													
Net Interest (cf. table 38)	2.15	2.11	2.05	1.97	1.87	1.98	1.89	1.81	2.06	1.96	1.92	1.81	1.70
Net Income:-at 2.5 mills (cf. table 38)	1.69	2.26	2.26	2.87	2.95	3.20	3.51	3.74	4.15	4.48	4.94	5.33	5.36
-at 3.0 mills	1.91	2.48	2.48	3.09	3.17	3.42	3.73	3.96	4.37	4.70	5.16	5.55	5.58
-at 3.5 mills	2.14	2.71	2.71	3.32	3.40	3.65	3.96	4.19	4.60	4.93	5.39	5.78	5.81
Interest Coverage:-at 2.5 mills	0.8	1.1	1.1	1.5	1.6	1.6	1.9	2.1	2.0	2.3	2.5	2.9	3.2
-at 3.0 mills	0.9	1.2	1.2	1.6	1.7	1.7	2.0	2.2	2.1	2.4	2.7	3.1	3.3
-at 3.5 mills	1.0	1.3	1.3	1.7	1.8	1.8	2.1	2.3	2.2	2.5	2.8	3.2	3.4

*Net income 2.5
3.0
3.5
Return on net worth at 2.5*

nd

Existing and Future System

Table 48

ADJUSTED CASH SURPLUS AND
DEBT SERVICE COVERAGE
(In millions of dollars)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alternative A																	
Cash Surplus (cf. table 40)	0.28	0.16	0.20	0.70	0.51	0.99	0.84	0.36	0.89	1.37	1.18	1.35	2.12	2.35	3.23	3.66	3.77
Less Assumed Increase in Working-Capital	0.05	0.06	0.03	0.03	0.20	0.11	0.05	0.05	0.04	0.07	0.06	0.07	0.12	0.08	0.08	0.08	0.00
Adjusted Cash Surplus Excluding Interest	0.23	0.10	0.17	0.67	0.31	0.88	0.79	0.31	0.85	1.30	1.12	1.28	2.00	2.27	3.15	3.58	3.77
Interest on Cumulative Free Cash Surplus	0.01	0.01	0.02	0.04	0.07	0.10	0.15	0.19	0.22	0.29	0.37	0.44	0.55	0.68	0.85	1.06	1.30
Adjusted Cash Surplus Including Interest 5%	0.24	0.11	0.19	0.71	0.38	0.98	0.94	0.50	1.07	1.59	1.49	1.72	2.55	2.95	4.00	4.64	5.07
Cumulative Adjusted Cash Surplus	0.24	0.35	0.54	1.25	1.63	2.61	3.55	4.05	5.12	6.71	8.20	9.92	12.47	15.42	19.42	24.06	29.13
Adjusted Receipts from Operation	1.78	1.88	2.04	2.16	3.35	4.03	4.48	4.77	4.87	5.26	5.65	5.95	6.61	7.11	7.68	8.27	8.61
Net Debt Service (cf. table 45)	1.48	1.38	1.37	1.45	2.89	2.77	3.43	3.53	3.49	3.64	3.46	3.58	3.95	3.98	3.68	3.63	3.54
Adjusted Debt Service Coverage	1.2	1.4	1.5	1.5	1.2	1.5	1.3	1.3	1.4	1.4	1.6	1.7	1.7	1.8	2.1	2.2	2.4
Alternative B																	
Cash Surplus (cf. table 41)	0.28	0.16	0.20	0.70	0.25	0.81	0.80	0.30	0.66	1.19	1.00	1.17	1.94	2.17	3.05	3.48	3.59
Less Assumed Increase in Working-Capital	0.05	0.06	0.03	0.03	0.20	0.11	0.05	0.06	0.04	0.07	0.06	0.07	0.12	0.08	0.08	0.08	0.00
Adjusted Cash Surplus Excluding Interest	0.23	0.10	0.17	0.67	0.05	0.70	0.55	0.24	0.62	1.12	0.94	1.10	1.82	2.09	2.97	3.40	3.59
Interest on Cumulative Free Cash Surplus	0.01	0.01	0.02	0.04	0.06	0.10	0.10	0.15	0.18	0.23	0.29	0.35	0.44	0.56	0.71	0.90	1.11
Adjusted Cash Surplus Including Interest 5%	0.24	0.11	0.19	0.71	0.11	0.80	0.65	0.39	0.80	1.35	1.23	1.45	2.26	2.65	3.68	4.30	4.70
Cumulative Adjusted Cash Surplus	0.24	0.35	0.54	1.25	1.36	2.16	2.81	3.20	4.00	5.35	6.58	8.03	10.29	12.94	16.62	20.92	25.62
Adjusted Receipts from Operation	1.78	1.87	2.04	2.16	3.27	3.96	4.38	4.67	4.80	5.17	5.55	5.83	6.47	6.96	7.51	8.08	8.39
Net Debt Service (cf. table 45)	1.48	1.38	1.37	1.45	3.16	3.16	3.70	3.82	3.69	3.79	3.61	3.73	4.10	4.13	3.83	3.78	3.69
Adjusted Debt Service Coverage	1.2	1.4	1.5	1.5	1.0	1.3	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.7	2.0	2.1	2.3
Alternative C																	
Cash Surplus (cf. table 42)	0.28	0.01	0.05	-0.06	0.24	0.33	0.45	0.68	1.19	1.54	1.78	1.75	1.74	1.71	2.24	2.29	2.42
Less Assumed Increase in Working-Capital	0.05	0.06	0.03	0.03	0.09	0.06	0.05	0.06	0.05	0.06	0.06	-	-	-	-	-	-
Adjusted Cash Surplus Excluding Interest	0.23	-0.05	0.02	-0.09	0.15	0.27	0.41	0.62	1.14	1.48	1.72	1.75	1.74	1.71	2.24	2.29	2.42
Interest on Cumulative Free Cash Surplus	0.01	0.01	0.01	0.01	0.01	0.03	0.05	0.08	0.13	0.21	0.30	0.39	0.47	0.60	0.73	0.87	1.03
Adjusted Cash Surplus Including Interest	0.24	-0.04	0.03	-0.08	0.16	0.30	0.46	0.70	1.27	1.69	2.02	2.14	2.21	2.31	2.97	3.16	3.45
Cumulative Adjusted Cash Surplus	0.24	0.20	0.23	0.15	0.31	0.61	1.07	1.77	3.04	4.73	6.75	8.89	11.10	13.41	16.38	19.54	22.99
Adjusted Receipts from Operations	1.78	1.87	2.03	2.13	2.32	2.71	3.07	3.31	3.59	3.90	4.20	4.35	4.43	4.56	4.69	4.83	5.03
Net Debt Service (cf. table 45)	1.48	1.38	1.37	1.45	2.13	2.01	2.09	2.12	2.32	2.21	2.18	2.21	2.22	2.25	1.72	1.67	1.58
Adjusted Debt Service Coverage	1.2	1.4	1.5	1.4	1.1	1.4	1.5	1.6	1.5	1.8	2.0	2.0	2.0	2.0	2.7	2.9	3.2

FINANCING OF INVESTMENT AND
ADJUSTED FREE CASH SURPLUS.

(In millions of dollars)

Years	Investment Including Capitalized Interest	Financed by			Adjusted Free Cash Surplus	Cumulative Free Cash Surplus
		Loans	New Equity	Reinvested Cash Surplus		
	1	2	3	4	5	6
<u>Alternative A</u>						
1964	1.88	0.17	1.65	0.06	0.24	0.24
1965	7.59	6.46	0.75	0.38	0.11	0.35
1966	12.03	10.25	1.30	0.48	0.19	0.54
1967	9.68	8.38	1.30	-	0.71	1.25
1968	0.41	0.33	5.00	0.08	0.38	1.63
1969	1.45	1.17		0.28	0.98	2.61
1970	0.56	0.45		0.11	0.94	3.55
1971	3.83	3.09		0.74	0.50	4.05
1972	1.69	1.38		0.31	1.07	5.12
1973	0.16	0.13		0.03	1.59	6.71
1974	3.67	2.96		0.71	1.49	8.20
1975	3.50	2.85		0.65	1.72	9.92
1976	0.55	0.44		0.11	2.55	12.47
1977	0.93	0.75		0.18	2.95	15.42
1978					4.00	19.42
1979					4.64	24.06
1980					5.07	29.13
	47.93	38.81	5.00	4.12	29.13	
<u>Alternative B</u>						
1964	1.88	0.17	1.65	0.06	0.24	0.24
1965	7.57	5.94	1.25	0.38	0.11	0.35
1966	13.82	11.04	2.30	0.48	0.19	0.54
1967	14.86	12.56	2.30	-	0.71	1.25
1968	-	-		-	0.11	1.36
1969	-	-		-	0.80	2.16
1970	0.15	0.12		0.03	0.65	2.81
1971	2.38	1.92		0.46	0.39	3.20
1972	1.69	1.38		0.31	0.80	4.00
1973	0.16	0.13		0.03	1.35	5.35
1974	3.67	2.96		0.71	1.23	6.58
1975	3.50	2.85		0.65	1.45	8.03
1976	0.55	0.44		0.11	2.26	10.29
1977	0.93	0.75		0.18	2.65	12.94
1978					3.68	16.62
1979					4.30	20.92
1980					4.70	25.62
	51.16	40.26	7.50	3.40	25.62	
<u>Alternative C</u>						
1964	1.07	0.17	0.84	0.06	0.24	0.24
1965	1.60	1.07		0.53	-0.04	0.20
1966	4.96	4.33		0.63	0.03	0.23
1967	4.58	3.82		0.76	-0.08	0.15
1968	0.14	0.11		0.03	0.16	0.31
1969	2.07	1.67		0.40	0.30	0.61
1970	2.72	2.20		0.52	0.46	1.07
1971	2.73	2.24		0.49	0.70	1.77
1972					1.27	3.04
1973					1.69	4.73
1974					2.02	6.75
1975					2.14	8.89
1976					2.21	11.10
1977					2.31	13.41
1978					2.97	16.38
1979					3.16	19.54
1980					3.45	22.99
	19.87	15.61	0.84	3.42	22.99	

5.0
4.1
15.4
24.5