



“Energy supplies have been an important factor in raising the standard of living in Norway. As the nation’s largest power producer, Statkraft has played a leading role in managing our ample and durable water resources. We think long-term, and we think ahead. That is why we have to do the right things today – so that future generations can benefit from environmental-friendly energy”.

Lars Uno Thulin
President and C.E.O.

here

Where are we going?

“Statkraft is going to be one of
the **leading**
Northern European
energy companies
with cutting edge competence in the field of
hydro power”

Introducing Statkraft

Statkraft SF is Norway's largest producer of hydro electric power and the second largest producer in the Nordic region. Statkraft's vision is to be one of the leading Northern European energy companies with cutting edge competence in the field of hydro power.

The company was established on 1 January 1992, and is owned by the Government of Norway, represented by the Ministry of Oil and Energy. It operates on commercial principles. Statkraft owns, wholly or partly, 86 power plants. The company is responsible for operating 48 of these plants, while 38 are operated by others. In total, Statkraft owns or has part ownership in 34 TWh, amounting to 30 per cent of the country's electric power production capacity. Statkraft has a 20 per cent ownership interest in Oslo Energi Produksjon, and a 17.1 per cent interest in the Swedish power producer Sydkraft. Statkraft owns 96 water reservoirs and is co-owner of a further 13. The 109 reservoirs have an aggregate maximum capacity of 33.7 TWh, corresponding to 40 per cent of Norway's total reservoir capacity. Statkraft has about 1,400 employees, and is **one of the nation's largest employers** in the land-based energy industry. In line with increasing technically advanced engagements in Norway and abroad, Statkraft has become one of Norway's leading competence centres in geology and concrete technology under severe weather conditions. Statkraft is Norway's largest land-based taxpayer.

In 1997, Statkraft recorded revenues of NOK 6,297 million, a decline of 10.2 per cent from 1996. The company's income before tax was NOK 1,277 million, compared to NOK 1,686 million in 1996. With an equity ratio of 39.7 per cent, Statkraft is financially sound.

SIX WHOLLY OWNED SUBSIDIARIES

Statkraft Anlegg AS was established in 1993 in order to compete for international construction assignments. The company bases its activities on the experience and competence that Statkraft has built up over more than 75 years of developing Norwegian hydro power. In 1997, Statkraft Anlegg recorded revenues of NOK 303 million.

Statkraft Engineering AS was established in 1993 to exploit the Group's engineering competence more effectively than before. The company's long-term goal is to be the leading hydro power engineering company in Norway, and to become globally recognised in certain selected fields. In 1997, Statkraft Engineering's revenues rose by NOK 16 million to NOK 96 million. In the same year, the company acquired 51 per cent of the shares in Grøner Holding AS.

Finnmark Energiverk AS was acquired by Statkraft in 1993. Finnmark Energiverk leases its output to Statkraft and is responsible for Statkraft's activities in the county of Finnmark. In 1997, Finnmark Energiverk's revenues rose by 4 per cent to NOK 144 million.

Statkraft Holding AS was established in 1996 and manages Statkraft's ownership interest in Oslo Energi Produksjon AS.

Statkraft Energy Enterprise AS was established in 1992 and manages Statkraft's ownership interest in Sydkraft AB.

Statkraft Forsikring AS is a captive insurance company established in 1997, offering insurance cover to Statkraft SF and its subsidiaries.

Is
the job
to secure
Norwegian
power supplies?

[Read more about this on the next page](#)





We must grow

Today, Statkraft is one of several Norwegian power producers. Our job is to operate our business profitably to the benefit of the Norwegian community as a whole. We do not have any overriding responsibility for Norwegian power supply. That responsibility lies with the political authorities.

Since Statkraft was established in 1992, we have constantly been improving our annual results, and this year we can report a net income of more than NOK 900 million. This shows that we have come far in making our production organisation more effective and in managing our water resources in an optimal manner. Buying and selling electric power demands good knowledge and a deliberate risk assessment.

But our ambitions are even higher. We have, however, a low return on total assets, and we must therefore continue our determined efforts to be a leading Northern European energy company with cutting edge competence in hydro power. In order to achieve our goal, we must have a return that is on a par with our international competitors. In an integrated Northern European power market, where power trading will increase, we should basically be well placed with our production organisation and our experience in market relations. Our competence must, therefore, be further developed, because demands become increasingly heavier **as we face stronger competition.**

1998 will be a decisive year with regard to our framework conditions. We manage significant values on behalf of the Norwegian community, and how we can generate capital back to our owners will to a great extent depend on the regulatory framework set. This year, several political decisions will be made which will have an impact on this. In brief, I will mention four of these: A new water resource law that may affect our production capacity, green taxes which may affect our profitability and thus the justification of the planned gas power plants, how the Government's ownership is to be taken care of with regard to access to capital and dividend policy, and finally whether a political price regime for the power-intensive industries is to be replaced by negotiated power contracts. The Report to the Storting (White Paper) no. 61 "On ownership in business", states: "Furthermore, State ownership shall be managed in a way that takes care of resources in the best possible manner." We feel that this statement should be a guideline when all of the above issues are being dealt with.

Statkraft placed the power balance on the agenda some years ago. Interest in this theme is growing. A public committee that is considering the power balance through toward the year 2020 will present its report before the summer. Norway has ample supplies of energy, with inter alia 25 per cent of Europe's total hydro power resources and more than 50 per cent of the petroleum resources in Western Europe as well, in addition to a great deal of wind energy. Paradoxically, at present we have to import coal-based power from Denmark in a year with normal precipitation. We hope that the committee will provide concrete directives as to how we are to cover the growing deficit. We are of the opinion that, with the benefits we enjoy with ready access to energy, it should be possible to obtain this.

Since Statkraft was established in 1992, we have adapted to the market, and consolidated our financial status. Norway, as an energy nation, should have an ambition of having at least one company that is a player in the Northern European power market. Statkraft has the know-how and the competence to assume this role, and our goals and our endeavours reflect this ambition. In order to succeed it is necessary to create an understanding for and an acceptance of the restructuring and change that is necessary to maintain competitiveness and

What were the
goals
for
97?

Read more about this on the next page





Profitability was improved

This is what we said: Statkraft will improve profitability. The company's equity ratio is going to be raised from 33 per cent in 1995 to 40 per cent in the year 2000.

This is what we did: Statkraft's 1997 result after tax and minority interests amounted to NOK 906 million. This is NOK 451 million better than the preceding year. At year-end, the equity ratio stood at 39.7 percent.

Quality all the way

This is what we said: We shall quality assure selected procedures at all levels within the organisation with a view to achieving ISO 9000 standards.

This is what we did: In 1997, as one of the first power companies in the Nordic area to do so, Statkraft succeeded in being certified in accordance with ISO 9001 standards.

Key figures

	Unit	1997	1996	1995	1994	1993
Net operating revenues	NOK mill.	4,702	4,698	3,837	3,371	2,781
Operating income	NOK mill.	1,998	2,354	1,589	1,190	849
Net income/loss	NOK mill.	906	455	328	-109	-518
Total assets	NOK mill.	38,739	39,089	32,821	31,851	32,334
Equity ratio	%	39.7	37.0	33.6	33.6	33.5
Net cash provided by operations	NOK mill.	1,188	1,814	1,126	697	185
Production after pumping and loss	TWh	27.5	32.2	32.0	32.3	33.5

A deregulated market demands internationalisation

This is what we said: We shall establish ourselves as a leading Northern European energy company and enter into new contracts with foreign companies.

This is what we did: Statkraft invested a total of NOK 1,085 million in 1997. Of this, NOK 359 million was invested in our own plants, while NOK 670 million was spent on buying shares in the Swedish power producer Sydkraft AB. About NOK 50 million was invested in international hydro power development.

Engagement in alternative energy

This is what we said: *We shall engage ourselves in the field of alternative, renewable energy sources.*

This is what we did: In 1997, Statkraft evaluated several energy sources, and the company decided to investigate the possibility of establishing wind mill parks. Statkraft has started to record wind velocity at selected points along the Norwegian coast in order to find suitable places for such establishments.

First commercial industrial power agreement in place

This is what we said: *Statkraft is interested in having power-intensive industries as customers, and we will carry out enter into real and honest negotiations with them. Statkraft believes that negotiated solutions create better supplier/customer relations than does having prices set by political authorities.*

This is what we did: Statkraft and Norsk Hydro entered into a framework agreement on sales of power for the period 2000–2020. This agreement represents a breakthrough for long-term, commercial contracts for power supplies to the Norwegian power-intensive industry.

The Svartisen Power Plant completed ahead of schedule

This is what we said: *The last part of the Svartisen development that was started in 1987, should be completed in 1998.*

This is what we did: Svartisen II, which includes the world's highest rock-filled dam with an asphalt core, and Norway's largest water reservoir was completed in 1997, one year ahead of schedule.

The power balance in the Nordic area gets worse every year

This is what we said: *Over the next ten years, a situation in the Nordic region is expected where the power balance deficit is about 15 TWh.*

This is what we did: Statkraft increased its engagement in order to focus on the power balance being out of step if decisions to increase production capacity should be put off.

The last two years have clearly
demonstrated the

uncertainty and the
challenges

that the **common**

Norwegian-Swedish

power market and the hydro power

producers are facing through

variations in precipitation

Whilst precipitation in 1996 was the lowest for 55 years, precipitation in 1997 was greater than normal in most parts of the country. Exploitable precipitation for the country as a whole was 124 TWh, which is 110 per cent of a normal year. In comparison, precipitation in 1996 was 86 TWh or 77 per cent of a normal year.

The power situation in Norway and Sweden There was a pronounced difference in the development of reservoir levels between Norway and Sweden in 1997. In Norway, as a result of the heavy precipitation and low spot market prices, reservoir levels rose considerably from 1996 to 1997. At year-end, reservoir levels for the country as a whole accounted for 70.4 per cent of total capacity. On the other hand, Sweden further reduced its reservoir levels in the same period, to 51.3 per cent.

Total annual consumption in Norway in 1997 was 113.1 TWh, which is an increase of 1.2 TWh compared to the preceding year. General consumption fell by 0.9 TWh, because 1997 was considerably milder than 1996. Temperature-adjusted, there was a growth of 2.6 per cent. Consumption in the power-intensive industries and by electric boilers rose by 1.2 TWh and 0.9 TWh respectively.

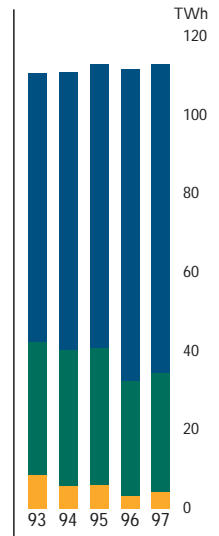
Total domestic net power production was 109.3 TWh, or 5.8 per cent more than in 1996. The rise in production was mainly due to a rise in demand and the improved water situation in 1997. Despite an increase in total production, Norway was a net importer of power from abroad, with 3.8 TWh. This was mainly imported from Sweden (2.9 TWh) and Denmark (0.6 TWh). Net imports to the Norwegian-Swedish electric power market in 1997 totalled 1.5 TWh, which was 13.7 TWh less than in 1996.

The average hourly-weighted spot price was NOK 0.135/kWh in 1997, compared to NOK 0.257/kWh in the dry year of 1996.

Power exchange over the Skagerrak connection Imports from Jutland over the Skagerrak connection were high early in 1997 when prices on the Norwegian-Swedish electric power market were relatively high. Falling prices as a consequence of the mild late winter, with temperatures above normal and a considerable amount of precipitation, resulted in imports stopping in March. Considerable inflow into the reservoirs during the spring and summer resulted in relatively low prices. The flow of power was then reversed, and just less than 1 TWh was exported to Jutland. Because of the higher prices toward the end of the year, the 4th quarter saw for the most part imports of power. For the year as a whole, 1.6 TWh was imported.

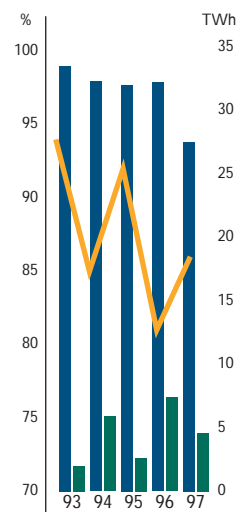
Statkraft's power production and sales Statkraft entered the year with low reservoir levels as a result of the high production level during much of 1996. The heavy inflow in 1997 and low market prices resulted in Statkraft reducing production and building up reservoir levels by almost 9 TWh during the course of the year. In 1997, Statkraft's production reached 27.5 TWh, or as much as 4.7 TWh less than in 1996. Physical purchases totalled 4.6 TWh, down almost 40 per cent compared to 1996. Total sales therefore amounted to 32.1 TWh. Realised gains on financial contracts entered into earlier compensated for the reduction in income from production.

Statkraft's production facilities have been expanded during the year as a result of assuming operating responsibility for power plants that have reverted to state ownership. On 1 January 1997, Statkraft assumed operating responsibility for the Bjølvo power plant, which had previously been leased out to and operated by Elkem. Similarly, operation of the power plants at Høyanger were taken over from Norsk Hydro on 1 January 1998.



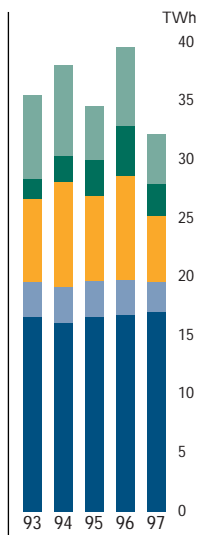
Domestic power consumption before loss

■ General consumption
■ Power-intensive industries
■ Electric boilers



Statkraft's power balance

■ Power produced
■ Power purchased
■ Own production ratio



Energy volume sold, by market segment

- Spot power
- Export
- General consumption
- Licence power
- Power-intensive industries

Power trading in the wholesale market was characterised by an increase in liquidity and by the fact that short-term focus has been increased even more. Financial trading with standard contracts has been dominated, and bilateral trading via brokers has accounted for 80-90 per cent of the total volume. Following lengthy negotiations, agreement was reached in September on a framework agreement for the sale of electric power by Statkraft to Norsk Hydro. In total, Statkraft will supply about 6.4 TWh a year to Norsk Hydro in the period 2000-2020. Statkraft considers this agreement to be a break-through for long-term, commercial agreements for electricity supplies to the Norwegian power-intensive industries.

FINANCIAL RESULTS

Revenues Statkraft's combined revenues in 1997 amounted to NOK 6,297 million. After deducting direct costs for power purchases and transmission costs, net operating revenues amounted to NOK 4,702 million, which was NOK 4 million more than in 1996.

Net power sales (power sales minus power purchases) totalled NOK 4,628 million, compared to NOK 4,970 million in 1996. Net revenues were based on a production of 27.5 TWh, which was as much as 4.7 TWh lower than in 1996. The decrease in production was a result of adapting to the lower market prices in 1997, and the fact that reservoir levels were raised by almost 9 TWh compared to the beginning of the year. The reason that net revenues did not fall more than NOK 342 million as a result of lower production was that 1997 deliveries had been hedged by entering into financial contracts at favourable prices in 1996.

The decrease in net contribution from power sales was partially compensated for by transmission costs falling by NOK 212 million from NOK 864 million in 1996 to NOK 652 million in 1997. This reduction in costs was a result of a combination of lower transmitted volume and lower exchange prices during the year reducing the price-dependent part of the tariffs, and thus Statkraft's expenses.

Other operating revenues totalled NOK 726 million in 1997, which was NOK 134 million higher than in 1996. The increase was mostly related to an increase in revenue in the subsidiary Statkraft Engineering, through the acquisition of a majority stake in Grøner Holding AS, and consolidating this company into the Group accounts.

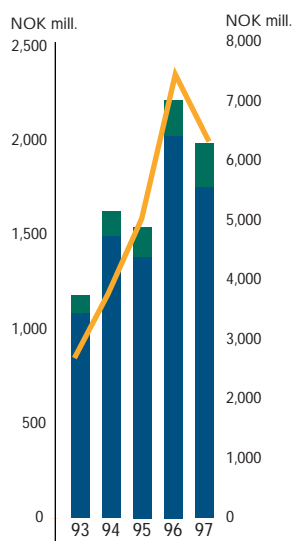
Costs Statkraft's operating costs in 1997 amounted to NOK 2,704 million, or NOK 360 million higher than in the preceding year. NOK 345 million of this increase refers to personnel expenses and other operating costs. This is mainly due to the consolidation of the newly acquired Grøner Holding AS. In addition, the maintenance costs of maintenance at Statkraft SF's power plants rose in accordance with scheduled activities. Net financial expenses amounted to NOK 976 million, or NOK 308 million higher than in 1996.

This increase is mainly due to interest on the subordinated loan from the Government. Interest service on this loan, which amounts to NOK 3,850 million, depends on the enterprise's financial results and instalments made. No interest accrued on the loan in 1996, but the income for 1997 resulted in full interest service of NOK 246 million.

Taxes and duties 1997 was the first financial year under the new regime for taxation of power producers. Taxes in the 1997 accounts also include items that have arisen as a result of the transition to the new tax regime.

In Statkraft SF's accounts for 1996, a provision of NOK 625 million was made, and in the Group's accounts NOK 521 million, for deferred tax liabilities on the basis of anticipated values of assets for tax purposes under the new tax system. The final fixing of these values was substantially higher than the preliminary estimates, and for that reason the provision for deferred tax liability has been taken to income in the 1997 accounts. The Board refers to Note 9 for further details of 1997 taxes.

For 1997, Statkraft has calculated taxes payable at NOK 889 million, compared to NOK 710 million in 1996. Adding the production levy and licence-related compensation and duties, the total tax and duty burden in 1997 amounted to NOK 1,565 million before accounting adjustments made in respect of deferred tax. The corresponding figure for 1996 was NOK 1,368 million. Much of the increase is a result of double taxation, in as much as the production levy was maintained in 1997, at the same time as the new taxes, which are to replace the levy, were introduced.



Gross operating revenues

- Other revenues
- Power revenues
- Operating income

Acceptable
level of
profit?

[Read more about this on the next page](#)



• Statkraft must **act**
commercially
in an **international**
power market

Results Operating income amounted to NOK 1,998 million in 1997, compared to NOK 2,354 million in 1996. Most of the decline of NOK 356 million was a result of lower revenues from power sales, combined with higher costs for operating and maintaining the power plants.

In 1997, the consolidated result of the two associated companies Sydkraft AB and Oslo Energi Produksjon AS was NOK 255 million, compared to 0 in 1996.

Income before taxes amounted to NOK 1,277 million, which is a decline of NOK 409 million from 1996.

Net income after taxes and minority interests amounted to NOK 906 million, which is an improvement of NOK 451 million on the 1996 figure.

The Board proposes that the net income of NOK 821 million for Statkraft SF and NOK 906 million for the Group be used to cover previous deficits.

FINANCING AND LIQUIDITY

In 1997, Statkraft had limited needs for financing. New long-term loans raised totalled NOK 1,073 million. Instalments paid on long-term loans totalled NOK 441 million.

During the year, Statkraft established a Euro Commercial Paper programme (ECP) for an amount of USD 500 million, and a Euro Medium Term Note programme (EMTN) for USD1 billion. These programmes will simplify access to investors in the European and Asian credit markets. Moody's, the rating agency, upgraded Statkraft's long-term rating to Aaa in connection with the Kingdom of Norway being upgraded to Aaa. Standard & Poor's long-term rating of Statkraft is AA+. The Group's liquidity was good throughout the year, and net cash and cash equivalents stood at more than NOK 1.1 billion at year-end. Statkraft has unutilised drawing facilities for the countervalue of approximately NOK 1.8 billion.

INVESTMENTS

Statkraft invested a total of NOK 1,085 million in 1997. Of this amount, NOK 359 million was invested in Statkraft's own plants. NOK 670 million refers to the purchase of shares in Sydkraft AB, while other share acquisitions totalled NOK 6 million. NOK 50 million refers to equity investments in international hydro power development projects.

Investments in own plants The Svarfisen development was completed in 1997, a development that started in 1987, and which in total represents a mean annual production of 2.1 TWh. The final building stage, i.e. the completion of the rock-filled dams, Storglomvassdammen and Holmvassdammen, was completed one year ahead of schedule. Storglomvassdammen is the world's highest rock-filled dam with a sealing core of bituminous concrete. The total cost of the dams was approximately NOK 1.2 billion, which was slightly less than budgeted.

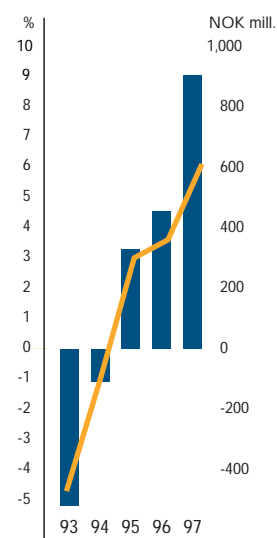
Work on replacing forge-welded piping to Nore I power plant with a new mountain tunnel was also completed in 1997.

In 1997, priority was given to the future development project at Sauda. In the Sauda river system and adjacent areas there is an undeveloped hydro power potential of 1.1 TWh. Statkraft has assessed this investment project in association with Elkem Energi and Sunnhordland Kraftlag. An application for a development licence will be made in the first half of 1998. Assuming that the application is decided within the normal time limits, building should start some time in the year 2001.

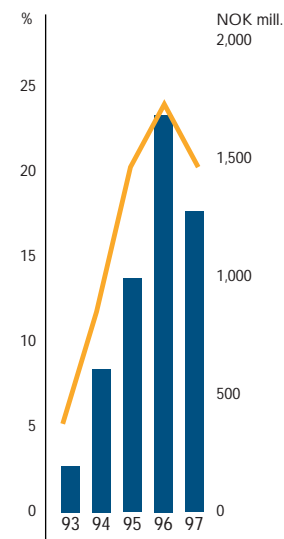
INTERNATIONAL DEVELOPMENT PROJECTS

The building of a 60 MW run-of-the-river power plant, Khimti I, in Nepal, continued in 1997. Statkraft has a 74 per cent stake in the company Himal Power Limited, under whose auspices the plant is being built. The project is progressing more or less as planned, but tunnelling has been more difficult than expected because of variations in rock qualities. Commercial operations are assumed to start at the beginning of the year 2000.

The development of the 210 MW run-of-the-river plant Theun-Ninboun in Laos was technically completed in December 1997. Statkraft has a 10 per cent interest through Nordic Hydro power AB, owned 50/50 by



Net income and return on equity
 ■ Net income
 — Return on equity



Income before taxes
 ■ Income before taxes
 — Gross profit margin

Statkraft and Vattenfall AB, Sweden. Commercial operations are planned to start on 1 April 1998. The project has been completed faster than anticipated and without any budget overrun. The project has been partially financed in local currency, and the recent foreign exchange-related unrest will not have any impact on its profitability. In 1997, the enterprise continued to work on the Merangin 2 project on West Sumatra, and considered concrete projects in India. With the unrest we have seen on the foreign exchange markets in some South-East Asian countries this winter, establishing hard currency power sales agreements in the region is hardly realistic in the short term. Statkraft will therefore postpone new projects in the area until the foreign exchange situation has stabilised.

SUBSIDIARIES AND ASSOCIATED COMPANIES

In 1997, Statkraft Anlegg as and Statkraft Engineering as increased still further their revenues from external markets, both national and international. In 1997, Statkraft Engineering acquired 51 per cent of the shares in Grøner Holding AS, a firm of consulting engineers, as part of its strategy for an extended resource base and deeper market penetration.

In 1997, Statkraft SF established a new subsidiary, Statkraft Forsikring AS, a captive insurance company with a share capital of NOK 30 million. It has a licence to engage in insurance activities, and its object is to provide companies in the Group with insurance cover.

an improvement

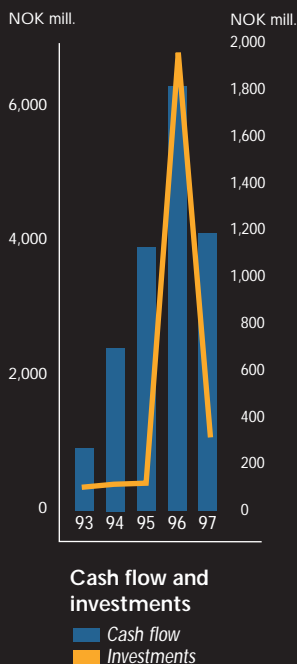
During 1997, Statkraft bought 7.1 million C-shares and sold 2.3 million A-shares in the associated company Sydkraft AB, so that the company's shareholding at the end of the year amounted to 17.1 per cent of the share capital and 20.8 per cent of the voting capital, compared to 14.6 per cent of share capital and 22.2 per cent of voting capital at the beginning of the year.

Sydkraft expects an ordinary profit after tax for 1997 of SEK 5.1 billion, of which SEK 2.3 billion is gains on the sale of shares. Profit before tax in 1996 amounted to SEK 2.5 billion.

Sweden's Riksdag (Parliament) passed a law on 18 December 1997 making it possible to close down the nuclear power plants. This will firstly affect the Sydkraft-owned Barsebäck Plant. It is planned to close one of the two reactors on 1 July 1998, and the other in the year 2001. The Swedish government has accepted that Sydkraft shall receive compensation and has already appointed its chief negotiator.

Statkraft has a 20 per cent ownership interest in Oslo Energi Produksjon AS, as a result of the acquisition of shares in 1996. The company, which was established at the end of 1996, had little production-related price hedging in 1997, and has therefore been exposed to low spot prices. In 1997, the company bought 33 per cent of the shares in Drammen Kraft Produksjon.

Naturkraft AS, which is owned equally by Statkraft, Statoil, and Norsk Hydro, was granted a licence gas heated power plant at Kårstø in the county of Rogaland, and at Kollsnes in the county of Hordaland. The decision to grant the licence, passed in 1996, was appealed to the Ministry of Oil and Energy. The Ministry upheld the Norwegian Water Resources and Energy Administration's (NVE) development licence in June 1997. This lays down that the guidelines for how Naturkraft is to ensure separation and disposal of CO₂, and to actively take part in research and development in this field of technology, will be assessed by the State Pollution Control Authority (SFT) when it deals with the emission licence application in accordance with the Pollution Act. Because of the technical and political uncertainty surrounding the external constraints, Naturkraft decided in 1997 to postpone the final investment decision.



RESEARCH AND DEVELOPMENT

Rising energy consumption and the planned closure of considerable production capacity in the Nordic region contribute to making the Scandinavian power balance even tighter. In 1997, Statkraft continued its work on introducing new technology with a view to improving exploitation of existing power plants, and to developing available hydro power potential that has so far not been profitable to develop.

A tight power balance and environmental restraints result in a need to research **alternative renewable energy sources**. In 1997, Statkraft has assessed various energy sources, and the company has decided to consider the possibility of establishing a wind mill park. Statkraft has started wind velocity recordings at selected places along the coast of Norway in order to find localities that are suitable for wind power production.

Statkraft gives high priority to further developing its control systems and emphasises exploiting up-to-date information technology in its work on models for optimal production control and market activities.

ORGANISATION, PERSONNEL, AND WORKING CONDITIONS

At the end of 1997, the Statkraft Group had 1,400 employees, representing 1,286 man-years, 722 of them with the parent company, and 564 with the subsidiaries. In addition, the company had 22 apprentices. The

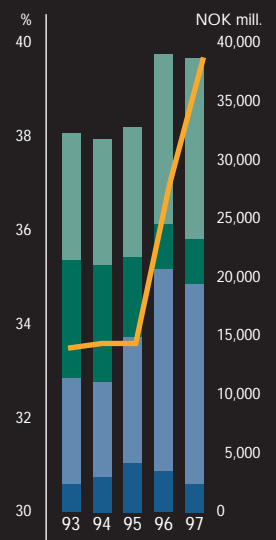
of nok **451 million**

rise in the number of employees of 386 man-years compared to 1996 was first and foremost a result of an increase at Statkraft Engineering as, through the acquisition of 51 per cent of the shares in Grøner Holding AS. Development of the enterprise's **human resources was given high priority** in 1997. Important elements in the development of the organisation were the introduction of competence planning, a continuation of management development through local development programmes, mapping out organisational and management needs, and ascertaining what the future demands will be on operators. Efforts to ensure management and control of the critical activities reached a milestone in 1997, when Statkraft was certified in accordance with the ISO-9001 standard. Certification was achieved after an introductory phase that had spanned a period of three years.

Measures have been implemented aimed at strengthening the enterprise's work on information and communication with the community, both centrally and locally in the environments in which Statkraft is represented. The "Year 2000 issue" affects Statkraft's administrative IT systems and process-related software. Work is underway in both areas to bring to light the problems and to introduce necessary measures, i.e. in association with the system suppliers. The scope of the measures will be clear by the end of the 2nd quarter of 1998.

Remuneration to the Board of Directors totalled NOK 845,000 in 1997. Salary and other remuneration to the President and Chief Executive Officer amounted to NOK 1,176,345.

Auditor's fees totalled NOK 675,000 for external auditing, NOK 822,550 for consultancy services, and NOK 3,025,000 for internal audit services.



Balance sheet structure
Equity
Subordinated loan
Long-term liabilities
Current liabilities
Equity ratio

The power production industry **is very** capital intensive

HEALTH, THE ENVIRONMENT AND SAFETY

In 1997, Statkraft worked systematically on health, the environment and safety (HES) as an important part of the quality assurance system. Emphasis is placed on exploiting experience and learning across organisational borders in connection with dangerous situations, injuries and near accidents. Average sick leave for the Group as a whole was 2.8 per cent in 1997. The Group has registered a continuing annual decline in sick leave, from 5.2 per cent in 1992 to the current relatively low level. The positive development continued in 1997, with a 0.6 per cent decline from the level in 1996.

The injury frequency (H-value) for the group was 29.7 in 1997. The injury frequency indicates the number of injuries per million hours worked, and is calculated on the basis of incidents and accidents with and without sick leave as a result.

There was a slight increase in the number of injuries compared to 1996. By systematically registering near accidents, we have also gained a better overview of what leads up to injuries, in order to prevent a further increase. In 1997, absence due to injury, or the so-called F-value, was 137, and shows the number of days of sick-leave due to injuries per one million hours worked. This value has been fairly stable over the last few years. One serious incident involving personal injury was recorded by the Group in 1997.

THE EXTERNAL ENVIRONMENT

The production of hydro power is environmentally friendly and has environmental benefits compared to other forms of energy production. The enterprise is environment conscious and emphasises preventing and limiting the environmental impact of its activities. Statkraft did not register any accidents in 1997 that had any significant negative impact on the environment.

The Group activities pollute the external environment to a very limited degree. As part of the preventive environmental work, the enterprise carried out a new and thorough analysis of components that might contain PCB. For 1998, a plan has been established for the phasing out, in 1998, of components that contain PCB, at an estimated cost of NOK 5 million.

In 1997, Statkraft spent about NOK 18 million on surveys and environmental measures in regulated river systems. Most of the measures carried out as part of the day-to-day operation, in order to compensate for damage caused by regulation, are connected to fish stocking. In 1997, about 450,000 smolt, young fish and fry of salmon and trout were released. Production of electric power by hydro power plants results in little pollution. Current hydro power development and the modernising of existing power plants take environmental protection into account to the greatest possible extent. The company is still active in rectifying the harmful effects of earlier development.

LEGAL DISPUTES

At present, Statkraft is involved in about 15 law-suits before the courts, in respect of taxation of power plants under the previous rules for publicly-owned power plants. In 1997, the number of cases was reduced as a result of settlement agreements with several local authorities on the basis of decisions in principle handed down by the Supreme Court.

A dispute has arisen between Statkraft and 8 companies that hold the so-called Tokke Certificate of Indebtedness regarding the terms for supplying power after 1 July 1996. The companies have brought action on a claim that they are entitled to take out the same volumes of "Tokke power" as before at a price equivalent to average full-cost for a representative selection of Statkraft's plants. Statkraft asks for a decision in its favour, since the company does consider that it is not obliged to supply power on other than market terms.

In order to obtain a decision in principle, Statkraft has brought action on how the production levy is to be calculated in connection with the regulations governing refunds of levies on contracts entered into. A judgment handed down by Oslo City Court in January resulted in a settlement being entered into with one of the customers, while the remaining disputes are still before the court.

Arbitration proceedings regarding the options passed by the Storting (Parliament) for Nordland County Authorities to buy 30 per cent of the Svartisen power Plant ended with a judgment in November 1997. In 1998, the county will decide whether the option is to be exercised.

Also the price that Sogn og Fjordane County Authorities are to pay for a 20 per cent ownership in Jostedal Power Plant has been decided by arbitration. The county has until the end of April 1998 to exercise its right to become a co-owner. However, with the assumptions given as to price, which have now been clarified, it is unlikely that the option will be exercised.

In April 1997, Vinje Local Authorities and 10 landowners in the Haukeli area brought legal action on the Government and Statkraft. They demand that the control rule for Kjela Power Plant shall direct Statkraft to release more water into the Kjela river course, and that 6 brooks shall be untouched by the regulation. In the accounts, provisions have been made for these disputes, based on a reasonable assessment of the obligations.

STRATEGY AND PROSPECTS

The tight power balance in Norway and the Nordic area provides a basis for a further development of Norway's hydro power potential. Furthermore, Statkraft will review the technical/financial basis for developing alternative renewable energy sources, first and foremost wind power.

The development of an enlarged Northern European market implies **new business opportunities**. Active power trading in this market is expected to contribute to higher earnings on the basis of Statkraft's competence in market activities and production control. The importance of power exchange contracts will increase in the years to come. Statkraft has entered into power exchange agreements and an agreement for the laying of new cables with Germany's PreussenElektra and Sep in the Netherlands respectively. The agreement with PreussenElektra will come into effect, in part, in 1998, via the existing Skagerrak connection, and into effect in full over the new cable, in 2004. The agreement with Sep is assumed to begin via the new cable in the year 2001. Statkraft's experience over many years in the field of hydro power development in Norway provides the basis for a limited involvement in hydro power development in countries where there are still considerable opportunities for further growth.

Political work has started on replacing the existing scheme for supplying power to Norway's power-intensive industry. A White Paper on this matter is expected to be presented to the Storting (Parliament), and the result of this will be of paramount importance to Statkraft.

The power sector is extremely capital-intensive, and the enterprise's strategy will call for a high degree of capital adequacy and financial flexibility. It is therefore important that Statkraft has high earnings and a high equity ratio.

At the beginning of 1998, Statkraft's reservoir levels were higher than normal. Assuming normal inflow, we will be able to increase production in 1998, compared to 1997. This will result in higher earnings, and net income for the Group of about the same level as in 1997. However, there is a great deal of uncertainty surrounding market prices, and thus also the financial result for 1998.

**The Board of Directors
of Statkraft SF**
Bærum, 3 March 1998

Hans O. Bjøntegård
Chairman

Britt Solvik

Anders Eckhoff

Gerd Halmø

Halvard Kaasa

Marit Büch-Holm

Odd Vanvik

Jon Ivar Nåsund

Tom Andersen

Lars Uno Thulin
President and C.E.O.

THE GROUP					STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	Note	1997	1996	1995
5,571	6,421	4,389	Power revenues	1, 3	5,571	6,421	4,389
726	592	498	Other operating revenues	4	381	435	373
6,297	7,013	4,887	Gross operating revenues		5,952	6,856	4,762
-944	-1,451	-351	Power purchases	2	-943	-1,450	-351
-651	-864	-699	Transmission costs		-651	-864	-699
4,702	4,698	3,837	Net operating revenues		4,358	4,542	3,712
436	315	304	Salaries and other payroll costs	5, 22	260	234	236
220	241	215	Compensation and licence fees	6	220	239	214
456	417	396	Production levies		456	417	396
768	544	509	Other operating costs	7	663	554	540
824	827	824	Ordinary depreciation	15	787	780	784
2,704	2,344	2,248	Operating costs		2,386	2,224	2,170
1,998	2,354	1,589	Operating income		1,972	2,318	1,542
255	-	-	Result from associated companies		-	-	-
217	235	169	Financial income	8	276	233	191
-1,193	-903	-765	Financial expenses	8	-1,209	-910	-771
-976	-668	-596	Net financial items		-933	-677	-580
1,277	1,686	993	Income before taxes		1,039	1,641	962
-889	-710	-661	Taxes payable	9	-848	-699	-650
528	-521	-4	Change in deferred tax	9	630	-625	-2
-361	-1,231	-665	Taxes		-218	-1,324	-652
-10	-	-	Minority interest		-	-	-
906	455	328	Net income for the year	10, 20	821	317	310
906	455	328	Allocated to accumulated deficit		821	317	310

THE GROUP						STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	Note	1997	1996	1995	
			Assets					
1,153	1,314	2,061	Cash and cash equivalents	11	723	843	1,894	
178	319	471	Accounts receivable	12	135	330	485	
635	1,069	644	Other current assets	13	647	1,027	623	
1,966	2,702	3,176	Current assets		1,505	2,200	3,002	
1,078	1,087	160	Long-term receivables, shares etc.	14, 22	8,946	8,280	860	
7,175	6,248	-	Investments in associated companies	14	-	-	-	
349	751	550	Plant under construction	15	345	842	621	
28,171	28,301	28,935	Property, plant and equipment	15	27,650	27,661	28,278	
36,773	36,387	29,645	Long-term assets		36,941	36,783	29,759	
38,739	39,089	32,821	Total assets		38,446	38,983	32,761	
			Liabilities and equity					
448	1,751	3,086	Interest-bearing debt	16	441	1,751	3,086	
632	443	408	Taxes payable	9	591	432	407	
1,336	1,366	731	Other non interest-bearing liabilities	17	1,134	1,271	652	
2,416	3,560	4,225	Current liabilities		2,166	3,454	4,145	
17,063	17,199	10,714	Long-term liabilities and provisions	18	17,218	17,288	10,692	
3,850	3,850	6,850	Subordinated loan	19	3,850	3,850	6,850	
25	-	-	Minority interest		-	-	-	
15,400	15,400	12,400	Owner's capital		15,400	15,400	12,400	
-15	-920	-1,368	Accumulated deficit		-188	-1,009	-1,326	
15,385	14,480	11,032	Equity	20	15,212	14,391	11,074	
38,739	39,089	32,821	Liabilities and equity		38,446	38,983	32,761	
2,109	1,887	2,115	Mortgages	21	2,109	1,887	2,115	
1,426	1,553	18	Guarantees	21	1,231	1,397	13	

THE GROUP					STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	Note	1997	1996	1995
Cash flows provided by/used in operating activities							
906	455	328	Provided by the year's operations		821	317	310
-10	11	-30	Gain/loss on sale of fixed assets		-6	13	-16
824	827	824	Ordinary depreciation		787	780	784
-528	521	4	Change in deferred tax		-630	625	2
1,192	1,814	1,126	Net cash provided by operations		972	1,735	1,080
200	221	-152	Change in inventories, debtors and creditors		164	234	-176
-255	-	-	Result from associated companies		-	-	-
518	168	953	Change in other current assets and liabilities		528	161	990
1,655	2,203	1,927	Net cash provided by operating activities	A	1,664	2,130	1,894
Cash flows provided by/ used in investment activities							
-281 ¹⁾	-424	-339	Investments in fixed assets		-286 ¹⁾	410	-360
31	20	101	Proceeds from sale of fixed assets		13	13	34
-676	-6,248	-	Investments in other companies		-89	-6,248	-
-926	-6,652	-238	Net cash flow used in investment activities	B	-362	-6,645	-326
Cash flows provided by/used in financing activities							
1,073	8,900	3,848	Loan proceeds		1,073	8,900	3,848
-441	-3,086	-5,195	Repayment of long-term debt and subordinated loan		-441	-3,086	-5,195
-1,522	-2,112	804	Change in long-term receivables and debt incl. current instalment on long-term debt		-2,054	-2,350	935
-890	3,702	-543	Net cash flow from financing activities	C	-1,422	3,464	-412
-161	-747	1,146	Net change in cash and cash equivalents	A+B+C	-120	-1,051	1,156
1,314	2,061	915	Cash and cash equivalents 1.1.	11	843	1,894	738
1,153	1,314	2,061	Cash and cash equivalents 31.12.	11	723	843	1,894

1) After writing off Svartisen II by NOK 50 million, see note 8

Accounting principles for state-owned enterprises (statsforetak - SF) Statkraft SF is established as a state-owned enterprise, and its activities are regulated by the Act relating to State-owned Enterprises. The statutory requirement to record and disclose accounts is regulated by the Accounting Act, and generally accepted accounting principles.

Consolidation and Group accounts The Group accounts include those companies where Statkraft has a long-term interest of more than 50 per cent of the capital, and has a controlling interest. Subsidiaries that are acquired or established during the year are included with effect from the date of acquisition/date of establishment. Subsidiaries are included in the consolidated accounts in accordance with the purchase method of accounting. The difference between the price paid for the subsidiary's shares and the book value of the equity is, on the basis of a valuation, allocated to those specific company assets and liabilities which have values that differ from the book values. Insofar as differences cannot be assigned to the values of assets and liabilities, they are recorded as goodwill/badwill. In the Group accounts, inter-company sales and receivables are eliminated, as inter-company profits related to the Group's own investments.

Power plants with joint ownership are carried on the balance sheet at the value of Statkraft's holding in accordance with the gross method of accounting. Electricity produced, with the exception of licensed power, is administered by co-owners directly. Statkraft's share of the electricity is included in gross power revenues. Other operating revenues and operating expenses are recorded in accordance with the gross method of accounting in accordance with Statkraft's pro rata shares.

Statkraft's share of power from part-owned companies organised as joint-stock companies, is included in power revenues. Statkraft's share of other operating revenues and operating expenses is included in accordance with the shareholder agreement. The shares are recorded at cost.

Reverted power plants (power plants which have been returned to the Government on termination of the licensing period and transferred to Statkraft SF) which are leased to others, are recorded gross in the accounts, the gross leasing charge being recorded as other operating revenues and operating expenses etc. under their respective cost caption.

Associated companies, defined as companies where the Group owns between 20 and 50 per cent of the voting capital, has a long-term strategic interest and considerable control, are treated in accordance with the equity method of accounting. In the consolidated accounts, the Group's share of the company is recorded at cost as a fixed asset in the balance sheet, adjusted for the part of the accumulated net income after tax, dividend received, and the depreciation of added value.

The Group's part of the net income after tax and added value depreciation is shown as a separate item in the income statement.

Amendments to the Group accounts In 1997, Statkraft amended the principle for recording financial power trading contracts. Up to and including 1996, all financial contracts were recorded in accordance with the "lower value" principle, on a portfolio basis. In 1997, Statkraft has organised this trading in financial contracts in a hedging portfolio and a trading portfolio. Gains/losses on the hedging contracts are recorded on realisation, while trading contracts are assessed on the "lower value" principle on a portfolio basis. Further details of financial instruments are to be found below.

Translation of accounts in foreign currencies Accounts in foreign currencies are included in the consolidated accounts translated at the average exchange rate for the year. Balance sheet items are translated at the exchange rate on 31 December. Translation differences are recorded directly against equity. In the case of consolidated foreign subsidiaries with the object of holding the group's long-term strategic shareholdings hedged by loans in the same currency, the balance sheet is translated at historic exchange rates.

Principles governing income and expense recognition Income and expenses relating to goods and services are recorded on delivery. Transmission costs include energy loss during transmission. Contracts with substantial pre-payments are recorded as income on delivery. Interest income from pre-payments is classified as operating revenues.

Current production contracts In the case of ongoing projects, income is recorded by the Group's companies in accordance with the percentage of completion method. This implies that profit is recorded as income in line with the progress of the individual project. A project's profit is defined as income less attributable costs. Attributable costs - comprise materials, personnel costs, sub-contractors, machine leases and local management. Current appraisal of work in progress will, in many cases, entail uncertainty and estimates. The final result of the individual project may, therefore, deviate from what is reflected in the accounts for the previous years. In the case of projects which are expected to result in an overall loss, the total estimated loss is expensed at 31 December.

Financial instruments Financial instruments in power trading are financial bilateral contracts, futures and forward contracts, and options. The valuation of the financial instruments is dependent on whether they are considered to be hedging or trading.

Hedging: Financial contracts are used to hedge the price of underlying production in the form of call or put options. Put options are acquired to hedge the price of a certain part of production planned in the future. Call options are acquired to adjust the hedging level if the assumptions change and it can be seen that Statkraft's hedged position is too high. Net put options, that are within captive production capacity are recorded as hedging. Loss/gains on hedging contracts, calculated as the margin between contract price and spot price, are recorded on realisation. If net sales obligations exceed the ability to produce, the hedging contracts are transferred to the trading portfolio based on the LIFO principle.

Trading: Financial sales and purchase contracts that are not covered by captive production ability, are recorded as trading. Trading contracts are valued on the "lower value" principle on a portfolio basis. Unrealised losses are expensed, but unrealised gains are not recorded as income.

Contracts originally entered into for trading are not transferred to the hedging portfolio, even if they can be satisfied by the production ability.

Option premium: Paid and received option premium for future power supplies on fixed terms is recorded in the balance sheet and taken to income in line with realised deliveries, or at the time that the option expires.

Public grants Public grants are assessed on an individual basis, and are recorded in the accounts as a correction to the item for which the subsidy is intended.

Research and development costs Project development and project engineering costs are expensed through to critical action. Critical action is when necessary resolutions are passed and approval given. In the case of domestic projects, this means a Board resolution and a licence is obtained, if required, and for foreign projects a Board resolution and financial closing.

Maintenance Ongoing maintenance is recorded as an expense as incurred.

Compensation The Group pays compensation to landowners for the right to use waterfalls and ground. In addition, compensation is paid to others for damage caused to forests, land, telecommunication lines etc. These payments are in part lump sum, and in part recurring in the form of cash payments or in kind by the supply of compensatory power. Lump sum payments of compensation in relation to new power plants are capitalised as part of the investment in the plant, and depreciated over the life of the plant, while recurring payments are expensed as and when they arise. The present value of future compensation is calculated, and can be seen from Notes to the Accounts.

Licence fees Licence fees are paid annually to the Government and to local authorities, for the increase in hydro-electric power which is obtained from regulating water courses and catchment transfers. These fees are therefore permanent and payable so long as the licensee uses the water-course regulations on which they are based. These licence fees are expensed as incurred. The present value of future fees is calculated and can be seen from the notes to the accounts.

Production levies Production levies are a special tax on the production of electrical power which is discontinued with effect from 1998 in connection with the introduction of new taxation system.

Taxes Property taxes (up to 0.7 per cent of the assessed value for taxation purposes) are paid and expensed in the fiscal year. New rules for the calculation of property tax will be introduced with effect from 1999.

In 1996, new tax regulations for the power sector were approved, and they became effective as from 1 January 1997. 1997, therefore, is the first year in which the new tax rules have been applied when calculating the company's tax charge. Both Statkraft SF and Finnmark Energiverk AS will be subject to these rules. The other companies in the Group are subject to ordinary income tax pursuant to the Tax Act.

Deferred tax is calculated according to the debt method, and deferred tax in the income statement is calculated as the change in deferred tax in the balance sheet. The effect of the changes in the tax rules is recorded in the income statement in the year when the change was made, in accordance with the Draft Accounting Standard for treatment of taxes. Losses, unassessed natural resources tax and carry-forward negative resource rent tax is only recorded in the balance sheet as deferred tax benefit to the extent that it is highly probable that the benefit will be realised in the future. Furthermore, the deferred tax benefit is only recorded to the extent it does not exceed deferred tax obligations in the accounts.

When calculating deferred tax on temporary differences related to power production operating assets, consideration is given, to tax-free income. The tax rate for calculating deferred tax is reduced to the effective tax rate after correcting for tax-free income.

Classification of balance sheet items Assets not intended for retention by, or long-term use in Group companies, and receivables falling due within one year, are recorded as current assets. Other assets are classified as long-term assets. Liabilities maturing within one year are classified as current liabilities, while those maturing later than one year are classified as long-term debt.

Shares, bonds, certificates etc. The item shares, and the item bonds, certificates etc. which are classified as current assets are, for each group of assets, valued on a portfolio basis at the lower of cost and market value at 31 December.

Shares which are classified as fixed assets are assessed at cost, unless there has been a permanent diminution in value.

Reservoir inventory Water in the reservoirs is not recorded as an asset in the accounts. Details of volumes are to be found in the Notes to the Accounts.

Inventories/spare parts Standard inventories and spare parts that have been purchased for the operations of the power plants are recorded at average historical cost less an obsolescence reserve. Such items are recorded as current assets.

Non-standard spare parts which are related to specific long-term assets or groups of capital assets are capitalised, and depreciated over the economic life of the underlying asset.

Property, plant and equipment Investments in production facilities and other long-term assets are capitalised and depreciated on a straight-line basis over the expected useful economic life of the asset, from the date the asset is put into ordinary operations. Investments in power plants not operated by Statkraft SF are similarly depreciated using an average rate of depreciation.

Investments in construction machinery are depreciated according to the declining balance method over the estimated useful economic life of the asset.

Accrued costs for in-house construction work are recorded as cost reductions. Interest on construction loans for major investments is calculated and capitalised, using the average debt-financing and interest rate.

Rights associated with waterfalls, and the rights to take over power plants which have reverted to state ownership, are capitalised at cost and are not depreciated. Future power plants which revert will be depreciated from the date they are taken over.

Assets and liabilities denominated in foreign currencies Bank deposits, current receivables and payables denominated in foreign currencies are translated at the exchange rates on the balance sheet date. Long-term debt in foreign currencies, which is not used as part of the hedging of future foreign currency revenues in the same currency, is translated at the exchange rate on the date the debt is taken up, or the balance sheet date, whichever is higher. Liabilities denominated in foreign currencies, which have been acquired to hedge future earnings in the same currency, are recorded at the rate applicable on the day of the transaction. Similarly, future foreign currency income will be recorded at the forward contract rate.

Pension obligations In the accounts, pension obligations are treated in accordance with the Draft Norwegian Accounting Standard for pension costs. In accordance with this standard, the enterprise's pension scheme is treated as a benefit plan.

Statkraft, and its subsidiaries, are members of the National Pension Fund. Statkraft also has its own pension fund for certain obligations which arise in addition to the benefits from the National Pension Fund. The enterprise's portion of the annual premiums is included under Salaries and other staff costs.

The discounted value of pension obligations that is not covered by the National Pension Fund and Statkraft's own pension fund, is recorded as a long-term liability in the balance sheet, and the year's change in pension obligations is recorded in the income statement under Salaries and other staff costs.

When calculating the accrued pension obligation, the estimated obligation on the balance sheet date is utilised. This estimated obligation is updated annually in accordance with an actuarial report on the accrued pension obligations, made on the basis of information provided by Statkraft SF and its subsidiaries.

Principles for cash flow analysis The Statement of Cash Flows is prepared using the indirect method. This implies that the analysis is based on the enterprise's net income/loss for the year in order to show cash flows generated by the operating activities, investment activity, and financing activity respectively.

note 1 SALES OBLIGATIONS

Statkraft has the following delivery obligations to the power-intensive industry and the wood processing industry under long-term contracts at prices set by the Storting (Parliament), together with delivery at cost to licence power recipients.

Figures in TWh	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Firm delivery agreements	20.2	20.6	20.8	20.8	20.8	20.8	20.5	17.5	15.9	14.1	11.7

In addition, Statkraft has other physical contractual obligations of varying duration to both domestic and foreign customers. In order to hedge the price of its production, Statkraft uses various types of financial instruments, mainly financial bilateral contracts and forward contracts. At 31 December 1997, Statkraft had unrealised, unrecorded gains of NOK 114 million on its financial instruments.

note 2 POWER PURCHASES

Statkraft has no significant long-term obligations to purchase power.

note 3 WATER RESERVOIR AND SALEABLE PRODUCTION

Figures in TWh	RESERVOIRS			SALEABLE PRODUCTION		
	31.12.97	31.12.96	Normal variation	Actual 1997	Actual 1996	Mean
	24.6	15.7	-11/+5	27.5	32.2	31.9

In a normal year, the water in reservoirs varies by - 11 TWh with a minimum in April, and + 5 TWh with a maximum level in October (mean variations)

The substantial increase in reservoir levels in 1997 was a result of heavy precipitation and low annual production. This use of water in the reservoirs will have an impact of Statkraft's ability to produce power, and its financial result in 1998. However, this will depend on precipitation in 1998.

note 4 OTHER OPERATING REVENUES

THE GROUP				STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	1997	1996	1995
215	230	205	Income from leasing power plants	214	230	205
92	74	67	Income from leasing power transmission lines	90	72	64
415	247	210	Other lease income and sale of services	73	92	88
4	41	16	Tax refunded relating to years prior to 1992	4	41	16
726	592	498	Total	381	435	373

The tax refund, amounting to NOK 4 million, refers to refund of tax by local authorities for the years prior to the establishment of the State enterprise.

Pursuant to the regulations to the Energy Act, separate accounting information is presented for the profit centres for the central grid and the regional grid (monopoly activities) for Statkraft, cf. Income from leasing power transmission lines above. The figures for 1997 will be finally settled in 1998.

Amounts in NOK million	CENTRAL GRID		REGIONAL GRID	
	1997	1996	1997	1996
Operating income ¹⁾	74.8	60.2	12.2	8.9
Operating costs	35.8	29.5	7.8	6.3
Allocated overheads	-	2.1	-	0.8
Result	39.0	28.6	4.4	1.8
Adjustment	-	-5.4	-	1.0
Adjusted result	-	23.2	-	2.8
Yield	12.6 %	7.5 %	11.1 %	7.5 %

1) Income from plants run by other is not included.

note 5 SALARY AND OTHER PAYROLL COSTS

Salary and other remuneration to the President and C.E.O. of Statkraft SF amounted to NOK 1,176,345 in 1997, while remuneration to the Board of Directors totalled NOK 845,000. The President and C.E.O.'s pensionable age is 65 years, with a right to 66 per cent of his salary on the date he retires. On certain conditions, it is possible for him to gradually reduce his working hours from the age of 60. In 1997, auditor's fees of NOK 675,000 were paid for external audit, NOK 822,550 for consultancy services, and NOK 3,025,000 for internal audit services.

note 6 COMPENSATION AND LICENCE FEES

THE GROUP				STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	1997	1996	1995
181	181	175	Licence fees	181	180	174
39	60	40	Compensation	39	59	40
220	241	215	Total	220	239	214

Licence fees to local authorities are adjusted, based on the Consumer Price Index, 5 years after the licence has been issued, and thereafter at intervals of 5 years.

Annual, fixed compensation payments for damage and inconvenience, which arise as a result of hydro power development, are adjusted in accordance with the same rules which apply to licence fees.

The net present value of current and of fixed licence fees and compensation obligations related to plants in operation and plants under construction are estimated to be NOK 2.6 billion and NOK 0.33 billion, respectively, discounted at a real interest rate of 7 per cent in accordance with the regulations applicable to conversion to lump sum compensation.

note 7 OTHER OPERATING COSTS

THE GROUP				STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	1997	1996	1995
202	196	128	Materials	44	69	68
206	107	109	External services	247	168	122
116	118	110	Power plants leased	116	118	110
58	48	40	Power plants partly-owned, operated by others	58	48	40
2	21	13	Bad debts	2	20	13
184	54	109	Other operating costs	196	131	187
768	544	509	Total	663	554	540

Other operating costs rise as a result of consolidating new subsidiaries, and a higher level of activity in maintenance projects.

note 8 FINANCIAL INCOME AND EXPENSES

Financial income and financial expenses comprise, for the most part, interest items.

In 1992, in connection with Development Stage II of the Svartisen Power Plant, Statkraft received a NOK 100 million grant from the Government. In addition, an ordinary interest-bearing loan of NOK 750 million was converted into a subordinated loan.

Interest income on the cash grant is reversed in the accounts under the item Interest income, and allocated as a long-term liability. The interest expenses, which would have accrued had the loan conversion not taken place, are charged to the account as an interest expense and allocated in a similar manner. Reversed interest income and allocated interest expenses relating to the Svartisen II Development amount to NOK 4 million in 1997. The total provision has been capitalised and recorded against the investment in Svartisen II as the project advanced. The plant was commissioned on 31 October 1997 and the outstanding provision of NOK 50 million was capitalised in 1997, cf. notes 15 and 18.

note 9 TAXES

THE GROUP				STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	1997	1996	1995
421	-	-	Natural resource tax	417	-	-
93	-	-	Tax on profit	60	-	-
113	-	-	Resource rent tax	113	-	-
-	447	416	Income and capital tax ¹⁾	-	440	410
341	338	349	Property tax	337	334	344
-79	-75	-104	Refunded/reversed tax from previous years	-79	-75	-104
889	710	661	Taxes payable	848	699	650
-528	521	4	Change in deferred tax	-630	625	2
361	1,231	665	Tax charge	218	1,324	652

1) Refers to previous tax system.

The natural resource tax is calculated on the basis of each power plant's average production over the last seven years. The tax rate is set at NOK 0.012 per kWh. The natural resources tax can be offset against the common tax on profits. Any natural resource tax not offset can be carried forward, with interest, to later years.

Tax on profits is calculated in accordance with ordinary taxation rules. In the above, the tax on profits is presented after offsetting the natural resource tax.

The resource rent tax is in principle calculated on the basis of the individual plant's production hour by hour, multiplied by the spot price in the corresponding hour. In the case of licence power and power on long-term contracts over 7 years, the actual contract price is applied. Furthermore, the actual operating expenses etc., depreciation, and tax-free income are deducted in the calculation. Statkraft SF and Finnmark Energiverk AS pay 27% tax on the net resource rent income at the individual plant. Any negative resource rent income can be posted against later positive resource rent income and interest.

Property tax for 1997 is calculated in accordance with the old tax system. New tax rules in this area will not have effect until the accounting year 1999.

Deferred tax/deferred tax benefit is calculated on the basis of the temporary differences which exist on the balance sheet date between values for accounting purposes and values for tax purposes and the taxable loss to be carried forward.

In the accounts for 1996, a provision was made for a deferred tax liability for Statkraft SF of NOK 630 million. This provision was based on preliminary replacement calculations of Statkraft SF's operating assets in power plants. These replacement values were in turn used as a basis for calculating Statkraft SF's values for tax purposes at 31 December 1996. The Norwegian Water Resources and Energy Administration (NVE) has now made the final values available. These are considerably higher than expected at 31 December 1997. As will be seen above, this has resulted in the deferred tax provision being reversed in 1997. The following is a specification of the temporary differences and the taxable loss to be carried forward, as well as calculation of deferred tax/deferred tax benefit on the balance sheet date.

THE GROUP				STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	1997	1996	1995
-307	133	75	Current assets/current liabilities	-343	-	-
-2,455	1,117	66	Fixed assets	-2,297	1,370	73
-	-95	-117	Loss brought forward	-	-	-57
-2,762	1,155	24	Total temporary differences and loss brought forward	-2,640	1,370	16
-1,286	528	7	Deferred tax/deferred tax benefit	-1,215	630	5
-183	-	-	Natural resource tax brought forward	-183	-	-
-100	-	-	Resource rent tax brought forward	-100	-	-
-1,569	528	7	Total deferred tax/deferred tax benefit	-1,498	630	5
46 %/28 %	46 %/28 %	28 %	Tax rate	46 %	46 %	28 %

The calculated deferred tax is recorded under long-term liabilities. In accordance with generally accepted accounting principles, deferred tax benefits in excess of deferred tax obligations are not recorded.

note 10 TREATMENT OF REVENUES AND COSTS IN POWER PLANTS OPERATED BY OTHERS

In companies where Statkraft has an ownership interest without operating responsibility, cf. note 15, the enterprise takes out for own sale a part of that company's electricity production which corresponds to the ownership share. This is taken out for sale by Statkraft, and is part of the ordinary power sales. Exception is made for contractual sales of licence power arranged by the power company in question, where sales proceeds are distributed among the owners. For such joint ventures, the power company's operating costs and revenues related to the sale of licence power are distributed among the owners by means of current settlement accounts.

The following is a review of Statkraft SF's share of the income statement items in these power companies.

Amounts in NOK million	1997	1996	1995
Power revenues	23	23	23
Other operating revenues	10	8	9
Transmission costs	49	64	56
Compensation and licence fees	20	21	19
Production levies	53	49	48
Other operating costs	58	42	37
Ordinary depreciation	62	60	60
Financial income	4	7	-
Financial expenses	15	17	19
Taxes	62	64	76

note 11 CASH AND CASH EQUIVALENTS

THE GROUP				STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	1997	1996	1995
751	1,194	1,394	Cash and bank deposits	321	723	1,227
253	45	640	Certificates and promissory notes	253	45	640
149	75	27	Bonds	149	75	27
1,153	1,314	2,061	Total	723	843	1,894

Restricted bank accounts for withholding taxes at source totalled NOK 24.7 million for the Group and NOK 13.9 million for Statkraft SF. In addition, NOK 73.2 million is security for organised power trading.

note 12 ACCOUNTS RECEIVABLE

Accounts receivable are recorded after provision of NOK 26 million for bad debts, compared to NOK 25 million at 31 December 1996.

note 13 OTHER CURRENT ASSETS

THE GROUP				STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	1997	1996	1995
31	31	25	Inventories	31	31	25
317	605	508	Accrued income etc.	467	639	487
287	433	111	Prepaid expenses	149	357	111
635	1,069	644	Total	647	1,027	623

note 14 LONG-TERM RECEIVABLES, SHARES ETC.

The following items are included under long-term receivables:

Amounts in NOK million	THE GROUP	STATKRAFT SF
Ordinary loans given to subsidiaries and associated companies	749	3,095
Subordinated loans given to subsidiaries and associated companies	82	137
Other long-term receivables	119	86
Invested capital in Statkraft's pension fund	5	5
Net pension assets, cf note 22	15	9
Shares in subsidiaries	-	5,533
Shares in other companies	108	81
Total	1,078	8,946

Specification of shares:

Amounts in NOK 000s	Company's share capital	No. of shares	Total nominal value	Owner- ship	Book value
Shares in subsidiaries owned by parent company					
Statkraft Holding AS	545,000	545,000	545,000	100 %	2,179,851
Finnmark Energiverk AS	300,000	24,000	300,000	100 %	343,256
Statkraft Anlegg as	25,000	250,000	25,000	100 %	25,000
Statkraft Engineering as	14,000	140,000	14,000	100 %	18,500
Statkraft Energy Enterprise AS	734,000	7,340,000	734,000	100 %	2,936,000
Statkraft Forsikring AS	30,000	300	30,000	100 %	30,000
Total					5,532,607
Other shares owned by parent company					
Naturkraft AS	12,000	12,000	4,000	33 %	4,000
Røldal-Suldal Kraft AS ¹⁾	10,958	958	958	9 %	958
Lundamo Settefisk AS	1,500	70	700	47 %	700
Settefisk AS	3,004	648	648	19 %	566
Himal Power Ltd ²⁾	114,928	9,429,551	74,440	74 %	74,440
Norsk Krafteksport AS	500	1,000	200	40 %	200
Alternativ Viz-Energia	468	296	140	30 %	149
Nordic Hydro power AB	110	1,000	55	50 %	55
Fjordkraft AS	50	25	25	50 %	25
Total					81,093
Shares owned by group subsidiaries					
Nefo as	45,000	450	450	1 %	450
AS Kvænangen	500	25	25	5 %	25
Fosdalen Industrier A/S	6,000	2,000	2,000	33 %	1,660
Grøner Holding AS	8,000	41,028	4,103	51 %	17,617
Himal Hydro General Construction Ltd	9,563	271,130	3,156	33 %	3,607
Statkraft Anlegg Nepal AS	2,979	250,000	2,979	100 %	3,369
Total					26,728

1) Statkraft owns 8.74 per cent of the shares in IS Røldal-Suldal Kraft AS, which in turn owns 54.79 per cent of the power plant Røldal-Suldal Kraft. Thus, Statkraft's indirect stake in that partnership is 4.79 per cent.

2) As part of the development project, an issue was floated in 1997. Statkraft's ownership was not changed as a result of the new issue. The stake is to be reduced to 40 per cent, and the company, therefore, has not been consolidated.

note 14 LONG-TERM RECEIVABLES, SHARES ETC. (CONTINUED)

Specification of associated companies owned by Group companies:

Amounts in NOK 000s	Company's share capital	No. of shares	Total nominal value	Owner-ship	Book value
Shares in associated companies					
Oslo Energi Produksjon AS	3,000,000	3,000,000	600,000	20 %	1,948,000
Sydkraft AB	1,910,003	191,000,332	327,363	17.1 %	5,227,000
Total					7,175,000

Statkraft owns 17.1 per cent of the share capital in Sydkraft, and 20.8 per cent of the voting stock. With effect from 1997, Oslo Energi Produksjon and Sydkraft are treated as associated companies. There are no additional values linked to the investment in Oslo Energi Produksjon, while additional values related to Sydkraft correspond to an annual amortisation of NOK 70 million. Dividend received from Sydkraft for 1996, and realised gains on shares that Sydkraft has sold, have been adjusted against the cost price of the shares.

note 15 PROPERTY, PLANT AND EQUIPMENT

Amounts in NOK million	Regulating plants	Turbines, generators etc.	Shares in power plants operated by others	Buildings roads, bridges and docks	Rights	Plants under construction	Other	Good-will	Total
Statkraft SF:									
Historical cost 1.1.97	15,721	6,483	2,671	4,788	1,239	842	648	-	32,392
Added in 1997	738	5	4	1	-	273	36	-	1,057
Disposals in 1997	-	-	-	7	-	770	-	-	777
Acc. depreciation 31.12.97	1,735	1,677	357	564	-	-	344	-	4,677
Book value 31.12.97	14,724	4,811	2,318	4,218	1,239	345	340	-	27,995
Ordinary depreciation for the year	306	280	60	95	-	-	46	-	787
The Group:									
Historical cost 1.1.97	16,151	6,682	2,671	5,021	1,245	751	856	-	33,377
Added in 1997	610	5	4	1	-	273	67	2	962
Assets received on acquisition of subsidiary	-	-	-	-	-	-	25	4	29
Disposals in 1997	-	-	-	7	-	675	39	1	722
Acc. depreciation 31.12.97	1,916	1,773	357	665	-	-	412	3	5,126
Book value 31.12.97	14,845	4,914	2,318	4,350	1,245	349	497	2	28,520
Ordinary depreciation for the year	312	286	60	99	-	-	65	2	824
Expected useful economic life	30-60 yrs	15-30 yrs	5-50 yrs	50-60 yrs	-	-	3-40 yrs	20 yrs	-

note 15 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Additions and disposals during last 5 years

Amounts in NOK million		Regulating plants	Turbines, generators etc.	Shares in power plants operated by others	Buildings roads, bridges and docks	Rights	Plants under construction	Other	Good-will	Total
Statkraft SF:										
1993	Additions	2,315	794	5	724	-	366	135	-	4,339
	Disposals	-	-	8	19	-	3,972	30	-	4,029
1994	Additions	73	11	-	104	-	292	44	-	524
	Disposals	74	15	-	55	-	69	6	-	219
1995	Additions	135	74	3	12	-	363	19	-	606
	Disposals	-	-	1	16	137	109	-	-	263
1996	Additions	169	2	8	-	-	450	10	-	639
	Disposals	-	-	-	26	-	229	-	-	255
1997	Additions	738	5	4	1	-	273	36	-	1,057
	Disposals	-	-	-	7	-	770	-	-	777
Total	Additions	3,430	886	20	841	-	1,744	244	-	7,165
	Disposals	74	15	9	123	137	5,149	36	-	5,543

The Group:

1993	Additions	2,473	1,216	5	818	3	366	214	-	5,095
	Disposals	-	-	8	19	-	3,972	30	-	4,029
1994	Additions	73	11	-	105	-	292	194	-	675
	Disposals	74	15	-	55	-	106	24	-	274
1995	Additions	135	75	3	12	-	364	30	-	619
	Disposals	1	26	1	26	137	144	43	-	378
1996	Additions	169	2	8	1	-	452	43	-	675
	Disposals	-	-	-	26	-	251	6	-	283
1997	Additions	610	5	4	1	-	273	92	6	991
	Disposals	-	-	-	7	-	675	39	1	722
Total	Additions	3,460	1,309	20	937	3	1,747	572	6	8,054
	Disposals	75	41	9	133	137	5,148	142	1	5,686

Following Statkraft's acquisition of Finnmark Energiverk AS, that company has grouped its fixed assets in line with the other companies in the Group.

Power plants etc. where ownership is shared between Statkraft and with others or where the county local authorities etc. have rights to take out and administer the power in return for financing part of the costs involved, are recorded after deducting the value of others' take-off rights, calculated as their relative share of the off-take.

County local authorities and publicly-owned power companies have the following rights to take out power from power plants owned by Statkraft:

Power plant	Other's share
Kobbelv	35.00 %
Grytten	12.00 %
Svorka	50.00 %
Leirdøla	35.00 %
Vikfalli	12.00 %
Ulla-Førre	28.00 %
Folgefonn	14.94 %
Eidfjord	35.00 %

In connection with the development decision regarding the Svartisen Power Plant, the Storting (Parliament) has given Nordland County administration an option to buy 30 per cent of the electricity produced, against its covering a corresponding share of the development costs and ongoing operating costs. Similarly, Sogn og Fjordane County administration was given a 20 per cent option in respect of Jostedal Power Plant. The financial terms for the local authorities' possible part ownership of the two developments was decided by arbitration in 1997. The two county local authorities have a deadline of April 1998 to decide whether they will become co-owners on the terms fixed by the arbitration.

note 15 LONG-TERM ASSETS (CONTINUED)

Statkraft has the following ownership interests in power plants operated by others:

Amounts in NOK million	Ownership	Share of fixed assets
Kraftverkene i Øvre Namsen	50.00 %	277
Mørkfoss-Solbergfoss	33.33 %	107
I/S Sira-Kvina kraftselskap	32.10 %	1,507
Aurlandsverkene	7.00 %	427
Røldal-Suldal Kraft AS *)	8.74 %	-
Total		2,318

*) Note 14 shows that the value of the shares in Røldal-Suldal Kraft AS is stipulated at NOK 958,000.

Additions and disposals in 1997 for plant under construction are specified below. Transfers to fixed assets refer for the most part to capitalisation of Phase II of the Svartisen Power Plant.

Amounts in NOK million	Plant under Construction
Book value 01.01.97	842
Direct investments	236
Capitalisation of building loan interest	37
Transfers to fixed assets	- 720
Grant in respect of Svartisen II, cf. notes 8 og 18	- 50
Book value 31.12.97 Statkraft SF	345
Direct investments in subsidiaries	4
Book value 31.12.97 The Group	349

note 16 INTEREST-BEARING DEBT

Interest-bearing debt is primarily comprised of the instalment of NOK 425 million on Statkraft's loan from the Government. In addition, it includes the current portion of the long-term debt originally taken up by Finnmark Energiverk, and the current portion of the long-term debt, relating to the financing of Statkraft's interest in Sira-Kvina Kraftselskap totalling NOK 16 million. Statkraft SF has a committed credit line of USD 250 million which has not been utilised.

note 17 OTHER NON INTEREST-BEARING LIABILITIES

THE GROUP				STATKRAFT SF		
1997	1996	1995	Amounts in NOK million	1997	1996	1995
140	615	112	Accounts payable	100	601	80
-	-	-	Current debt to Group companies	37	34	20
239	137	230	Accrued holiday pay, payroll tax, and taxes withheld	201	118	215
857	614	389	Other accrued costs	696	518	337
100	-	-	Other non interest-bearing liabilities	100	-	-
1,336	1,366	731	Total	1,134	1,271	652

note 18 LONG-TERM LIABILITIES AND PROVISIONS

Amounts in NOK million	1997	1996	1995
Government loan	3,400	3,825	4,250
Other long-term loans in NOK	7,064	6,715	2,253
Loans in foreign currencies	5,685	4,979	1,853
Share of loan in Sira-Kvina Kraftselskap	179	186	208
Provision grant to Svartisen II, cf. note 8 and 15	-	46	114
Provision option premium	2	- 14	11
Provision foreign exchange and premium	124	89	-
Provision for early retirement pensions etc.	38	50	65
Deferred tax in Statkraft SF	-	630	5
Pre-payments/accrued power sales	726	782	1,933
Total Statkraft SF	17,218	17,288	10,692
Deferred tax in subsidiaries	-	- 102	2
Group items re bond loan taken over from subsidiary	21	13	20
Subsidiaries' loans	-275	-	-
External debt provision subsidiary	99	-	-
Total for the Group	17,063	17,199	10,714

Other long-term liabilities comprise five bond loans totalling NOK 4,975, and loans in foreign currencies for the countervalue of NOK 2,044 million, where Statkraft has a NOK exposure as a result of using foreign exchange and interest rate swaps. Statkraft's foreign currency loans are in DEM (countervalue of NOK 1,853 million), SEK (countervalue of NOK 3,387 million), and ECU (countervalue of NOK 444 million). The DEM loans were taken up as hedging of future revenues in DEM and are therefore recorded at the rate effective when the loans were taken up. The weighted average rate is DEM 100 = NOK 437.8. The loans in SEK were raised in connection with Statkraft's investment in Sydkraft AB, and are recorded at the NOK/SEK spot rate on the dates the loans were disbursed. The weighted average rate is SEK 100 = NOK 96.9.

In connection with the take-over of Finnmark Energiverk AS in 1994, Statkraft assumed the position of debtor for the company's bond loans. These loans are recorded at NOK 46 million net.

The share of the loan in Sira-Kvina Kraftselskap includes the countervalue of NOK 4 million in foreign currency.

The average interest rate on Statkraft's total loans at year-end was 5.6 per cent, while the average rate for loans in NOK was 6.0 per cent. The duration was 2.2 years for total loans, and 2.9 years for NOK loans.

Instalment schedule :

Amounts in NOK million	1998	1999	2000	2001	2002	Rest
Instalment schedule Government loans	425	425	425	425	425	1,700
Instalment schedule other loans	16	1,321	766	2,760	2,843	4,615
Total Statkraft SF	441	1,746	1,191	3,185	3,268	6,315

Statkraft is free to take up loans in the private market, provided that the company's total loans and guarantee obligations do not exceed the value of the company's assets. The value of the assets is fixed on the basis of the latest official balance sheet, corrected for additions and disposals of assets after the balance sheet date. In addition, consideration shall be given to post-balance sheet reductions and which are considered not to be of a temporary nature. These constraints do not apply to credits or guarantees on customary terms, and which are related to ordinary commercial transactions. In order to limit the Government's liability for Statkraft's obligations, a limit of NOK 32.5 billion is placed on the company's total loans and guarantee obligations.

note 19 SUBORDINATED LOAN

Interest payments on the subordinated loan are linked to Statkraft's net income. Total interest paid on the loan in any one year shall not exceed 75 per cent of the enterprise's net income after tax, but before interest on the subordinated loan. The interest rate is fixed on 15 December every year, and shall be equal to the interest on state certificates with a term of 12 months still to run, plus 2 percentage points. The subordinated loan must be repaid by 15 December 2006 at the latest. Statkraft can fix the repayment schedule at its own discretion. Statkraft repaid NOK 3,200 million of the loan in December 1995. In December 1996, the Storting passed a resolution to convert NOK 3,000 million of the subordinated loan into equity.

note 20 EQUITY

Amounts in NOK million	THE GROUP	STATKRAFT SF
Equity at 31.12.96	14,480	14,391
Result for the year	906	821
Conversion differences	-1	-
Equity at 31.12.97	15,385	15,212

note 21 MORTGAGES AND GUARANTEES

County administrations and publicly-owned power companies are, in certain cases, entitled to utilise part of the electricity production from Statkraft's power plants, in return for paying part of the construction costs, cf. note 15. As a basis for financing the acquisition of such rights, permission has been given for the county administrations/companies to offer collateral in the power plants in question to lenders. At 31 December 1997, such mortgage debt amounted to an aggregate NOK 2,109 million, while the book value of the pledged assets amounted to NOK 6,201 million.

Statkraft leases premises for its central administration. The lease runs to 30 June 2002, with an annual rent (1997) of NOK 13.7 million.

Obligations and guarantee liability Statkraft SF has obligations and has issued guarantees related to projects and power exchange contracts for a total of NOK 1,231 million. Of this amount, NOK 323 million refers to projects and NOK 908 million to power exchange contracts. In addition the subsidiaries have guarantees, mainly referring to contracts, for a total of NOK 195 million.

note 22 PENSIONS

The National Pension Fund Statkraft has a group pension scheme with the National Pension Fund. The pension scheme provides benefits in accordance with the National Pension Fund Act. These benefits are retirement pension, disability pension, surviving spouse's and dependent children's pension, and Agreement-linked early retirement pension (AFT). The pension benefits are co-ordinated with the benefits from the National Insurance Scheme.

For accounting purposes, the pension scheme is treated in accordance with the Draft Norwegian Accounting Standard for pension costs. In accordance with this standard, the pension scheme shall be treated as a benefit plan. The fixing of premiums and estimates of the value of pension obligations are made on actuarial principles. However, the scheme is not asset-based. Payment of pensions is guaranteed by the State (Section 1 of the Pension Act). A management of the pension assets (fictive assets) is simulated as though the assets were invested in long-term Government bonds. In this simulation, it is assumed that the bonds are held to maturity. The pension assets are therefore valued at book value.

Statkraft's own pension fund Statkraft has approved a supplementary pension scheme which provides benefits in addition to those from the National Pension Fund. The supplementary scheme covers full pension (66 per cent) up to 12 times the basic amount in the National Insurance Scheme (G), as well as surviving spouse's pension for all employees. All employees of Statkraft SF and Statkraft SF's wholly owned subsidiaries are members of the scheme.

Assumptions When calculating the year's net pension cost, and net pension assets (obligations), the following assumptions were made by the National Pension Fund and Statkraft SF's own pension fund:

Annual discount rate	6.0 %
Salary adjustments	3.3 %
Pension adjustments	2.9 %
Voluntary retirement:	
- Up to 45 years of age	2.5 %
- Between 45 and 60 years	0.5 %
- Over 60 years	0.0 %
Anticipated yield	5.6 %
Annual increase in G (Nat. Insurance Scheme basis amount)	2.9 %
Annual rate of inflation	2.5 %

Assessments include the actual yield on pension assets for 1997.

note 22 PENSIONS (CONTINUED)

The pension costs for the period were as follows:

Amounts in NOK million	The Group 1997	Statkraft SF 1997	The Group 1996	Statkraft SF 1996
Pension costs for the year	40.0	28.8	37.1	28.2
Interest expense on pension costs	28.0	15.4	19.6	13.5
Gross pension costs for the year	68.0	44.2	56.7	41.7
Expected yield on pension assets	36.7	20.7	26.3	18.6
Net pension costs for the year	31.3	23.5	30.4	23.1
Of which paid by employees	6.0	4.3	5.9	4.1

Reconciliation of pension obligations and pension assets:

Amounts in NOK million	The Group 31.12.97	Statkraft SF 31.12.97	The Group 31.12.96	Statkraft SF 31.12.96
Gross pension obligations	525.2	301.8	364.0	258.1
Pension assets in pension fund	540.6	310.4	369.4	263.7
Net pension assets (obligations)	15.4	8.6	5.4	5.6

note 23 OFF-BALANCE SHEET ITEMS

Forward contracts, foreign exchange:	Amount bought in million	Amount sold in million
DEM	-	280
DKK	-	600
SEK	-	862

The forward contracts mature in 1998 and 1999. These transactions are linked to agreed sales revenues in the respective currencies, or loans taken up to hedge such income. The forward contracts are therefore classified as hedging transactions, and according to the principles for recording, such hedging transactions are not recorded at market value in the accounts. This is countered by the sales revenues that are hedged being recorded at the agreed forward exchange rate for hedging transactions. Forward contracts are recorded gross. At 31 December 1997, the market value of the contracts was NOK 28.6 million.

Interest swaps:

Currency	Amount	Receive	Pay
DEM	196 mill.	Fixed	Floating
DEM	150 mill.	Floating	Fixed
NOK	925 mill.	Fixed	Floating
NOK	2,256 mill.	Floating	Fixed
NOK	200 mill.	Floating/Cap	Floating
SEK	600 mill.	Floating	Fixed

Interest swaps are used to adjust the interest sensitivity of the enterprise's loans to what the enterprise at any time regards as adequate hedging. At 31 December 1997, the market value of the agreements was NOK 100.3 million.

Future interest rate agreements Future interest rate agreements are intended to adjust the interest rate sensitivity inherent in the enterprise's floating loans to what the enterprise at any time considers adequate hedging. At the end of the year, Statkraft had hedged interest rate obligations in NOK for a total underlying amount of NOK 400 million. The market value of the agreements at 31 December 1997 was minus NOK 0.8 million.

Interest and foreign exchange swaps: Interest and foreign exchange swaps are used to achieve favourable financing in the desired currency when a combination of financing in another currency and a customised interest and foreign exchange swap gives lower interest costs than direct financing in the desired currency. At year-end, Statkraft had entered into interest and foreign exchange swaps for a total underlying amount of NOK 6,236 million. The market value of the agreements at 31 December 1997 was minus NOK 43.1 million.

note 24 CONTINGENCIES

The Norwegian Water Resources and Energy Administration (NVE) has ordered Statkraft to replace the inflow pipes at five power plants. One has already been completed (Nore), the next (Bjølvo) shall be completed by the year 2005, and the last three (Hakavik, Haukeli, and Glomfjord) have a deadline of 2006. These improvements will replace fixed assets that have been depreciated and are assumed capitalised.

In connection with the more stringent demands issued by the Norwegian Water Resources and Energy Administration regarding the dam regulations of 1981, Statkraft has prepared a plan for improvements to dams and flood-ways. This plan, which covers 32 dams, will be implemented by the end of the year 2001. These improvements will be capitalised or expensed on the basis of an individual evaluation.

AUDITOR'S REPORT

To the Corporate Meeting of Statkraft SF

We have audited the annual accounts of Statkraft SF for 1997, showing net income of NOK 821 million for the enterprise and net income of NOK 906 million for the group. The annual accounts, which consist of the Board of Directors' report, statement of income, balance sheet, statement of cash flows, notes and the corresponding consolidated financial statements, are the responsibility of the Board of Directors and the Chief Executive Officer.

Our responsibility is to examine the enterprise's annual accounts, its accounting records and the conduct of its affairs.

We have conducted our audit in accordance with applicable laws, regulations and generally accepted auditing standards. We have performed the auditing procedures we considered necessary to determine that the annual accounts are free of material errors or omissions. We have examined, on a test basis, the accounting material supporting the financial statements, the appropriateness of the accounting principles applied, the accounting estimates made by management and the overall presentation of the annual accounts. To the extent required by generally accepted auditing standards we have also evaluated the enterprise's asset management and internal controls.

In our opinion, the annual accounts have been prepared in conformity with the Accounting Act and present fairly the enterprise's and the group's financial position as of 31 December 1997 and the result of its operations for the fiscal year in accordance with generally accepted accounting principles.

Oslo, 3 March 1998
ARTHUR ANDERSEN & CO.

Finn Berg Jacobsen (sig.)
State Authorised Public Accountant (Norway)

THE GROUP

	Unit	1997	1996	1995	1994	1993
Financial result:						
Gross operating revenues	NOK million	6,297	7,013	4,887	5,166	3,786
Net operating revenues	NOK million	4,702	4,698	3,837	3,371	2,781
Operating income	NOK million	1,998	2,354	1,589	1,190	849
Income/loss before taxes	NOK million	1,277	1,686	993	608	197
Net income/loss for the year	NOK million	906	455	328	-109	-518
Investments:						
Investments	NOK million	1,085	6,817	403	387	342
Balance sheet 31.12:						
Cash and cash equivalents	NOK million	1,153	1,314	2,061	915	826
Equity	NOK million	15,385	14,480	11,032	10,704	10,816
Total assets	NOK million	38,739	39,089	32,821	31,851	32,334
Key ratios:						
Return on total assets 1)	%	5.4	3.8	3.4	1.8	0.8
Return on equity 2)	%	6.1	3.6	3.0	-1.0	-4.7
Gross profit margin 3)	%	20.2	24.0	20.3	11.8	5.2
Net profit margin 4)	%	14.3	6.5	6.7	-2.1	22.4
Equity ratio 5)	%	39.7	37.0	33.6	33.6	33.5
Current ratio 6)		0.8	0.8	0.8	0.5	0.7
Interest coverage 7)		1.8	1.5	1.4	0.8	0.3
Net cash provided by operations	NOK million	1,188	1,814	1,126	697	185
Staff:						
Employees 31.12.	Number	1,400	1,037	1,143	1,136	1,097
Production and turnover:						
Production (after pumping and loss)	TWh	27.5	32.2	32.0	32.3	33.5
Purchases	TWh	4.6	7.4	2.6	5.9	2
Sales, contract market	TWh	25.2	28.7	27.0	28.1	26.7
Sales, spot market	TWh	4.1	6.7	4.6	7.7	7.1
Export	TWh	2.8	4.2	3.0	2.3	1.7
Installed generator capacity (Statkraft's share) MW		8,700	8,700	8,700	8,700	8,600
Wholly and partly-owned plants	Number	86	86	86	86	86

Definitions:

$$1) \frac{\text{Net income/loss for the year} + \text{financial expenses}}{\text{Average total assets}} \times 100$$

$$5) \frac{\text{Equity}}{\text{Assets}} \times 100$$

$$2) \frac{\text{Net income/loss for the year}}{\text{Average equity}} \times 100$$

$$6) \frac{\text{Current assets}}{\text{Current liabilities}}$$

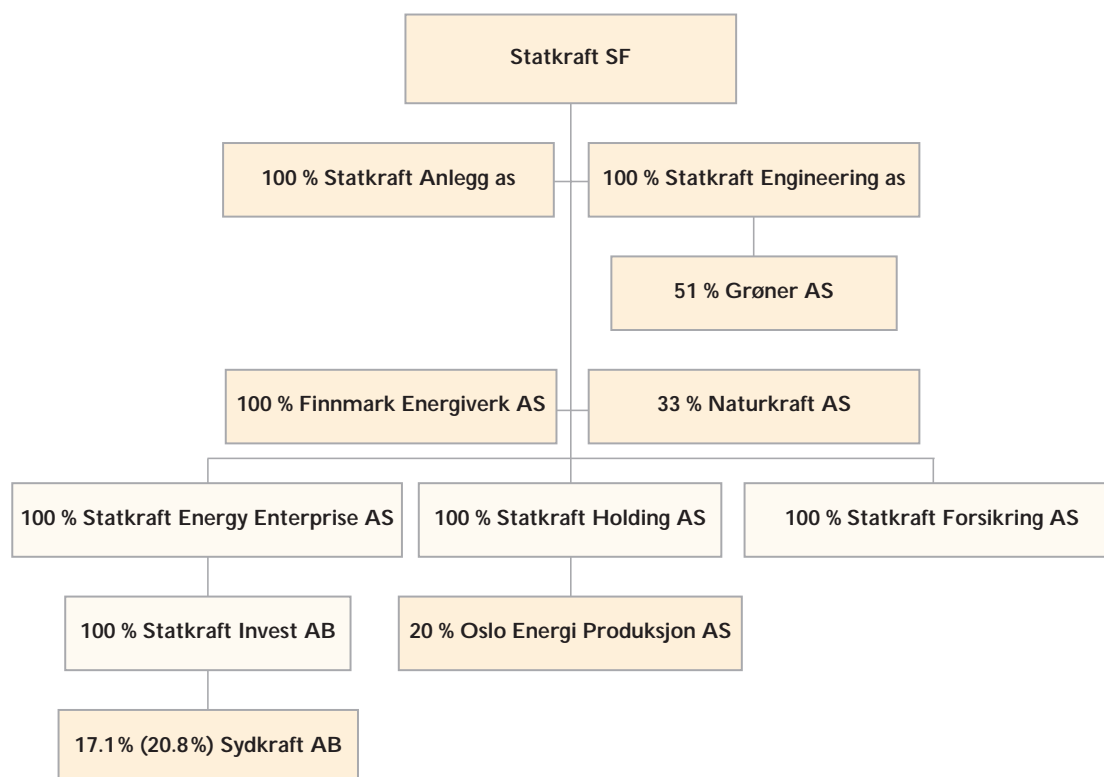
$$3) \frac{\text{Income before taxes}}{\text{Gross operating revenues}} \times 100$$

$$7) \frac{\text{Net income/loss for the year} + \text{financial expenses}}{\text{Financial expenses}}$$

$$4) \frac{\text{Net income/loss for the year}}{\text{Gross operating revenues}} \times 100$$

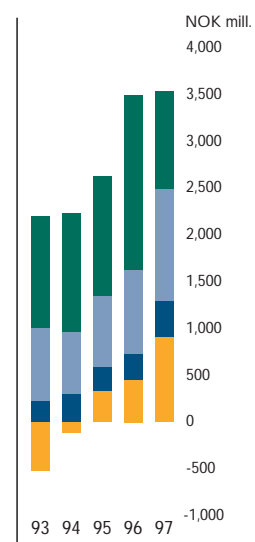
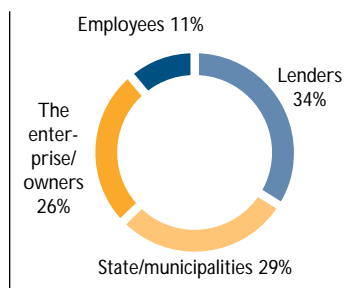
KEY GROUP FIGURES

NOK million	Statkraft SF	Statkraft Anlegg	Statkraft Engineering	Finnmark Energiverk	Statkraft Holding	Statkraft Energy Enterprise	Others/ eliminations	The Group
Financial result:								
Gross operating revenues	5,952	303	247	144	-	-	-349	6,297
Operating income	1,972	-1	20	46	-	-	-39	1,998
Net financial items	-933	12	2	-10	11	-11	-47	-976
Associated companies	-	-	-	-	40	215	-	255
Income/loss before tax	1,039	11	22	36	50	204	-85	1,277
Net income/loss after tax	821	-2	12	20	48	186	-179	906
Balance sheet 31.12.:								
Cash and cash equivalents	723	90	70	20	5	133	112	1,153
Equity	15,212	79	31	292	2,220	3,085	-5,534	15,385
Total assets	38,446	295	190	546	2,233	5,360	-8,331	38,739
Equity ratio	39.6 %	26.8 %	16.3 %	53.5 %	100.0 %	57.6 %	-	39.7 %

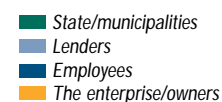


Value added. Amount in NOK million	1997	1996	1995	1994	1993
Gross operating revenues	6,297	7,117	4,887	5,166	3,786
- Consumption of goods and services purchased	2,402	3,024	1,599	2,297	1,435
Gross value added	3,895	4,093	3,288	2,869	2,351
- Ordinary depreciation	824	827	824	830	794
Net value added	3,071	3,266	2,464	2,039	1,557
+ Financial income	217	235	169	91	131
+ Result from associated companies	255	-	-	-	-
- Minority interest	10	-	-	-	-
Values available for distribution	3,533	3,501	2,633	2,130	1,688
Distribution of value added. Amount in NOK million	1997	1996	1995	1994	1993
Employees					
Gross pay and social benefits	396	276	267	298	230
Lenders/owner					
Interest	1,193	903	765	673	783
Dividends	-	-	-	-	-
Taxes and levies	1,038	1,867	1,273	1,268	1,193
The enterprise					
Change in equity	906	455	328	-109	-518
Total distributed	3,533	3,501	2,633	2,130	1,688

Distribution of value added 1997



Distribution of value added



SOCIAL AUDIT AND VALUE ADDED

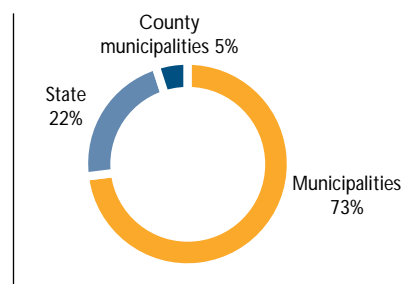
The Social Audit (Statement of Value Added) shows the value added that has taken place within the enterprise through labour input, capital input, expertise and technology input, together with a breakdown of the distribution among the various stake-holders who have contributed to the value added. The employees obtain their share of value creation in the form of pay and social benefits. The owners get their share in the form of dividends or retained earnings, while lenders receive their part of the value added in the form of interest. The central and local authorities receive their share in the form of taxation levied on the enterprise, and duties/levies paid by the enterprise. Over the last few years, Statkraft's value added has risen steeply, from NOK 1,557 million in 1993 to NOK 3,071 million in 1997. This represents a total growth in value added of 97 per cent, or an annual growth of 14.5 per cent.

Statkraft's 10 largest municipal recipients of tax in 1995 - 1997

Municipality: Amounts in NOK million	Taxes and levies paid in 1997	Taxes and levies paid in 1996	Taxes and levies paid in 1995
1 Suldal	66.9	66.9	68.9
2 Vinje	61.3	62.3	57.9
3 Meløy	41.3	37.5	36.2
4 Eidfjord	38.1	37.2	36.2
5 Luster	37.4	36.6	36.7
6 Tokke	37.3	37.2	35.1
7 Rana	35.7	36.3	36.7
8 Hemnes	35.0	38.4	37.5
9 Narvik	31.0	31.5	27.4
10 Bykle	22.6	22.6	23.0
Total	406.8	406.5	395.6

Statkraft is one of Norway's most important taxpayers. In 1997, Statkraft expended a total of NOK 1,038 million in taxes and duties to Norwegian local authorities and to the Norwegian treasury.

Taxes and levies 1997



COMMERCIAL RISK

MARKET RISK

Statkraft's main activities are the production of and trading in hydro power. In a market where access to water varies a great deal from year to year, price and production capacity will also vary considerably. This may have a marked impact on Statkraft's results as production and price are often negatively correlated, i.e. ample water supply and high production results in lower prices, and vice versa. This means that the outcome on the results is naturally dampened.

In addition, Statkraft is active in portfolio management in order to adjust the relationship between price-hedged production and production that is not hedged in the actual market situation. This way, Statkraft endeavours in the long term to achieve maximum earnings from production, taking into account the risk criteria.

Portfolio management To a great extent, Statkraft uses contracts to hedge the price of production in the long term. This is necessary taking into consideration the great uncertainty surrounding the total revenue from power sales, as a result of both the uncertain spot prices and uncertain production capacity. In this connection there is no difference between physical and financial contracts which are traded bilaterally or via a broker, and contracts in the forward market (NordPool). Price is primarily the guiding force when selecting the trading form. Statkraft is mainly interested in the outcome for total sales revenue. Hence, the most important factor is that new contracts are good, seen in relation to existing power contracts and the scope of the outcome on both own production and spot prices. The company is constantly developing the contract portfolio so that expected earnings are maximised without the downside risk increasing. Contract trading and portfolio management help stabilise Statkraft's revenue from year to year.

Trading in derivatives Statkraft deals in various instruments, physical and financial, in order to hedge the price of some of the company's production capacity. Active portfolio management, which takes into consideration the company's present and future production capacity, is intended to ensure an optimal division between price-hedged volume and unhedged volume. Statkraft considers all trading that is intended to secure the price of some of the production capacity as trading in derivatives for hedging purposes. At the end of 1997, the company had hedged more than 60 per cent of its mean production through to and including the year 2004. In addition to such hedging, Statkraft uses financial derivatives to take limited, short-term positions in the market.

Internal guidelines have been established for both purposes as regards market exposure.

FINANCIAL RISK

Statkraft's financial risk is mainly linked to the company's external debt financing, and can be divided into liquidity risk, interest rate risk, and foreign exchange risk. Statkraft can freely raise debt in the private market, provided that the company's total loans and guarantee obligations do not exceed the value of its assets, or a maximum of NOK 32.5 billion.

Liquidity risk In principle, the company's financing shall reflect the life span of its assets. A liquidity risk arises when the term of the company's financial obligations is not matched by the cash flow generated by the assets.

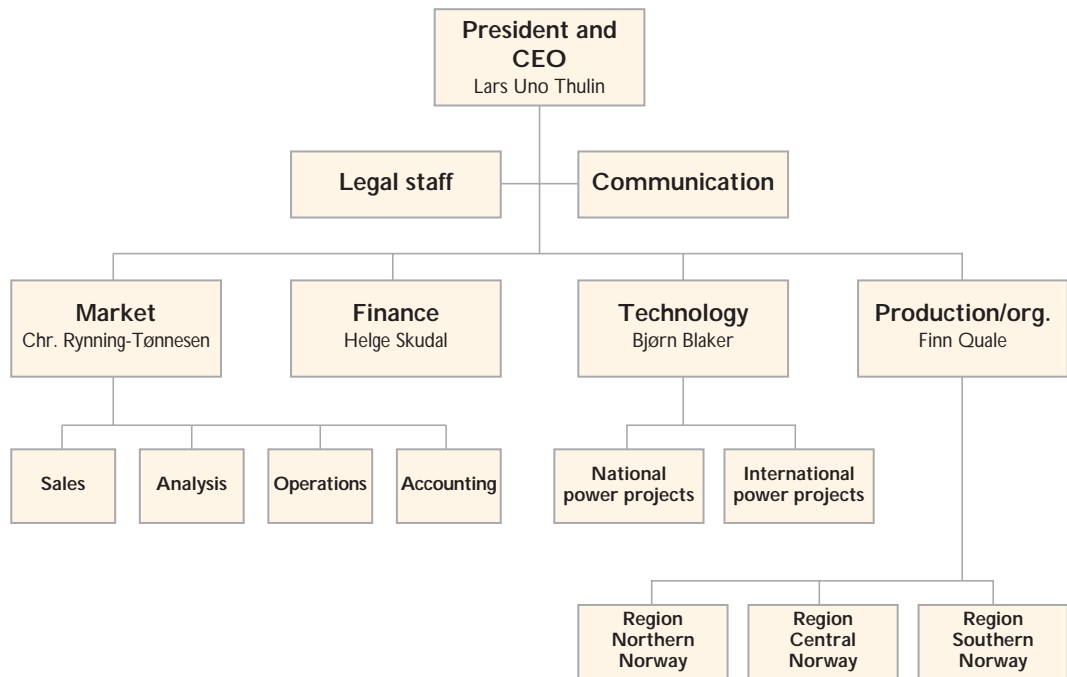
However, being a state-owned enterprise, Statkraft is in a special position with regard to the raising of new loans. The enterprise's credit worthiness is high, which is confirmed by the long-term credit ratings, Aaa and AA+ from the rating agencies Moody's Investor Service and Standard & Poor's respectively. These good ratings are rooted to a great extent in the provision in the State Enterprises Act, which stipulates that winding up proceedings cannot be filed against State enterprises. In the event that the enterprise is wound up, the state is responsible for the creditors receiving full cover. Based on the state enterprise corporate form and the good ratings, Statkraft has excellent access to the credit markets. Thus, the enterprise will normally be able to finance, at fairly short notice, the payment obligations that might arise. As an extra security against possible unrest on the financial markets, Statkraft has established a long-term committed credit line for the countervalue of USD 250 million.

Interest rate risk Interest rate risk arises in the short and medium term as a result of some of the company's debt bearing interest at floating rates. Statkraft's Board has therefore set maximum limits for how much of the debt can be at floating rates. In addition, to minimise the effect of negative interest rate adjustments, the company has sought to spread the interest rate period of the debt. The enterprise has entered into several interest rate swaps and FRAs in order to adapt the interest rate sensitivity of its debt to what the enterprise considers to be an adequate hedging level at all times. At the end of 1997, 32 per cent of the long-term interest-bearing debt was tied to such agreements, compared to 21 per cent at the beginning of the year. In the long term, Statkraft is to a lesser extent exposed to rising floating interest rates and inflation, since Statkraft's revenue will rise in line with inflation.

Foreign exchange risk Statkraft is exposed to foreign exchange risk because the enterprise has entered into long-term power exchange agreements denominated in foreign currencies. At the same time, Statkraft owns shares in foreign companies. On this basis, the enterprise has assumed substantial obligations in foreign currencies in order to hedge future foreign exchange revenue and assets denominated in foreign currencies.

If the exchange rate between NOK and a foreign currency should change, this will have an effect on the enterprise's income and its financial expenses. Of Statkraft's total long-term interest-bearing debt of NOK 17,218 million, NOK 5,685, or 33 per cent, was raised in foreign currencies. Statkraft's foreign currency loans are in DEM (countervalue of NOK 1,853 million), SEK (countervalue of NOK 3,387 million), and ECU (countervalue of NOK 444 million). Statkraft has set internal limits for its foreign exchange exposure in order to limit the impact on results of fluctuations in foreign exchange rates.

Statkraft's organisational structure remained more or less unchanged throughout the year. The main focus was on system efficiency, and the implementation of a quality assurance system for the enterprise. In 1997, a new method of registering and developing competence was introduced. Further, a series of development programmes were run, i.a. management development and a research project that is evaluating the demands that will be made on operators in the future. A comprehensive organisational and management assessment was made which clearly shows that we have had considerable success in our management of human resources, but at the same time it identified new areas where improvements can be made. As one of the first power companies in the Nordic region, Statkraft has been certified in accordance with the ISO-9001 standard. This milestone was reached following an introductory phase that spanned a period of three years and involved the entire organisation. An ISO Main Audit has also been carried out, and the process went as planned, both with regard to deadlines and resources employed. The audit unveiled improvement potential that will be followed up in the ongoing work. The development of the quality control system has entered the consolidation phase, with focus on improvements within the framework of existing systems. Work on corporate communications and contact with the community has been strengthened both centrally and locally. Emphasis has been placed on developing our regional centres toward a clearer information role in their local environments, including power plants that are open to visitors. The IT field is characterised by rapid technological strides. The new Power control system in the Marketing Division has been especially focused on, as has availability planning and maintenance management in the Production Division. With an increasing number of advanced user-systems being phased in, quality demands on stable operation of equipment and systems had a central place in 1997, and will remain in focus in 1998. At the end of 1997, the Statkraft Group had 1,400 employees, representing 1,286 man-years, 722 of them with Statkraft SF, and 564 with the subsidiaries. In addition, the company had responsibility for 22 apprentices. The rise in the number of employees of 386 man-years compared to 1996 was related to the acquisition of Grøner Holding AS.



Has Statkraft become too dominant?

Read more about this on the next page





Large in Norway,

small in the Nordic region,

but with a

determination to

compete

1997 was a year of higher temperatures and considerably more precipitation than is normal. For the country as a whole, exploitable inflow was 124 TWh in 1997, or 110 per cent of the average for a normal year. In comparison, inflow in 1996 was 86 TWh, or 77 per cent of what is normal.

Large amounts of precipitation throughout the winter, and temperatures above normal, resulted in prices falling sharply during the first quarter. From the turn of the year to the end of March, prices fell from NOK 0.24/kWh to NOK 0.12/kWh. This price remained stable until a cold spring caused a delayed spring flood, resulting in a great deal of snow melting in July, and much unregulated inflow. This put the power producers' operations under pressure at a time of low loads, and prices fell to about NOK 0.08/kWh.

In August, snow melting was reduced somewhat, and this, combined with little precipitation and slightly higher loads, caused prices to begin to rise to about NOK 0.15/kWh. September brought with it large amounts of precipitation, and prices were forced down to about NOK 0.07/kWh. November was colder than usual, and the load therefore increased. This, combined with the fact that Sweden's nuclear power production suffered technical problems, resulted in spot prices for electricity rising to NOK 0.20/kWh. A mild December caused prices to fall again, at the end of the year the price was NOK 0.16/kWh.

For 1997 as a whole, the average temperature was somewhat higher than normal, while precipitation was considerably above normal levels. The average hourly-weighted spot price in 1997 was NOK 0.135/kWh. Sweden, like Norway, experienced a more rainy year than normal. Exploitable inflow was 66.9 TWh, which is 4.5 per cent higher than normal.

THE NORDIC POWER MARKET

Development in the Nordic wholesale market in 1997 was characterised by adjustment and following up the power portfolios at the individual players. This has resulted in liquidity in the market increasing, and the short-term focus has been further strengthened. Direct bilateral trading has been reduced. A number of players who were previously regarded as customers or suppliers, are now considered to be competitors. In the end-user market in Norway, we see a development toward a more dynamic market. From 1 January 1998, any consumer can change supplier weekly, at no cost. At the same time, competition for these customers is fierce. Many suppliers are currently selling outside their licence areas at prices that generate very thin contribution margins.

Consumers in Sweden who want to swap suppliers, must currently measure their consumption hour by hour. Competition appears, however, to be forcing itself on the market, and companies are now offering a range of solutions where the supplier finances the meters to a greater or less extent.

Restructuring of ownership interests in the Swedish market, which started in 1996, continued also in 1997, when many small and medium size companies were bought up. Finland's IVO now has full control of Gullspång since it owns almost 100 per cent of the shares. Gullspång is negotiating a merger with Stockholm Energi, and if these negotiations are successful, the company will be about the same size as Sydkraft. (Further comments on the developments in the integrated Norwegian-Swedish market, and the major Northern European market are to be found in a separate article on page 58).

CONSUMPTION AND PRODUCTION IN NORWAY

Total consumption in 1997 amounted to 113.1 TWh, which was 1.2 TWh more than in 1996. General consumption fell by 0.9 TWh, but consumption by the power-intensive industries and electric boilers rose by 1.2 and 0.9 TWh respectively.

Consumption figures for 1997 (all figures referred power plant) changed as follows from 1996:

All figures in TWh	1997	1996
General consumption	78.5	79.4
Power-intensive industry	30.3	29.1
Electro-boilers	4.3	3.4
Total Norway	113.1	111.9

Total Norwegian domestic net production of power was 109.3 TWh, which is 5.8 per cent more than in 1996.

By way of comparison, normal production is 113 TWh. Net imports to the Norwegian power market totalled 3.8 TWh

P O W E R E X C H A N G E I N G E N E R A L

Statkraft has entered into agreements to exchange power with the Continent. The agreements are based on exploiting the differences in the characteristics of the Norwegian hydro power system and the thermal power system on the Continent. In addition, the agreements are intended to ensure an effective flow of power and supply of power in dry years, and they contain provisions to the effect that power shall flow from the Continent to Norway when NordPool's spot prices exceed the marginal production costs on the Continent. Correspondingly, power shall flow from Norway to the Continent when spot prices are lower than the marginal production costs on the Continent.

The power exchange with Denmark, which takes place over three installed cables, is regulated through an agreement with the Danish company I/S ELSAM. Statkraft has a 44.6 per cent share and operates the agreement on behalf of Norway. In addition, Statkraft has signed agreements with the German company PreussenElektra, and Sep in the Netherlands, regarding power exchange and the laying of new cables respectively. The agreement with PreussenElektra will come into effect, in part, in 1998 via the existing Skagerrak connection, and will be fully effective over the new cable in the year 2004. The agreement with Sep is expected to begin in the year 2001 over the new cable. Statkraft's share of this agreement is about 38.9 per cent.

S T A T K R A F T ' S P O W E R T R A D I N G

Statkraft entered 1997 with low reservoir levels as a result of high production through much of 1996. The large inflow in 1997 and low spot prices resulted in Statkraft opting for reducing production volumes in favour of building up reservoir levels. As a result, reservoir levels rose substantially in 1997, by an estimated 9 TWh, while gross production fell considerably compared to 1996. Realised gains on contracts previously entered into compensated for the fall in revenue from production.

Statkraft's saleable own production fell by 4.7 TWh to 27.5 TWh in 1997. Physical power purchases fell compared to 1996, totalling 4.6 TWh over the year. Total power sales therefore amounted to 32.1 TWh. 18.0 TWh was sold on long-term restricted industrial contracts. Sales for other purposes amounted to 14.1 TWh in 1997.

The table below shows the distribution of Statkraft's volume sold in 1997:

All figures in TWh	1997	1996
Restricted contracts	18.0	18.5
Unrestricted contracts (Norway and Sweden)	9.4	13.6
Export to Denmark	0.6	0.8
Variable sales (incl. exchange 1.3)	4.1	6.7
Total sales	32.1	39.6
Purchase contracts	0.5	1.2
Variable purchases (incl. exchange 1.3)	4.1	6.2
Total purchases	4.6	7.4
Saleable own production	27.5	32.2

The production division is responsible for operations, maintenance, rehabilitation, and further development of the power plants that Statkraft has responsibility for. In 1997, the division particularly focused on introducing a computer-based maintenance system, improving effectiveness, and new software programmes for the operations centre at Høvik.

The operational organisation is made up of the divisional management and staff at Høvik, and three regions: Region Northern Norway, which is managed from Narvik, Region Central Norway, which is managed from Gaupne, and Region Southern Norway, managed from Sauda. The offices of the technical service centre and the property management sector are located at Glomfjord.

At present, Statkraft has operating responsibility for 48 production plants and 6 separate pumping stations. The production division's most important assignments, in addition to the controlling and short-term optimising of production, is the daily supervision of these plants, and ensuring a level of rehabilitation that maintains their function over time.

In 1997, special focus was placed on implementing and taking into use a computer-based maintenance system at all power plants. A wide-ranging and comprehensive analysis of most power plants components was carried out, as a basis for selecting maintenance measures. This will also form the basis of further work aimed at optimising the spare parts inventories at the plants in 1998.

In 1997, the operational/rehabilitation project volume was the highest in the history of Statkraft. Focus on effective project implementation has been given high priority.

The quality assurance programme was fully integrated with the division's work in 1997 through the ISO certification.

The introduction of new systems in the division has made heavy demands on managers at all levels. An MMI survey of management was carried out in 1997, along the same lines as in 1993. The results show a very positive trend, while at the same time, we have received important correctives that will form the basis for development in the future.

PRODUCTION CAPACITY

Statkraft is the largest producer of hydro power in Norway, with almost 30 per cent of the country's production. Statkraft's average available energy production in a mean year is in the region of 31.9 TWh. Of this, 28.7 TWh is the enterprise's share of production from the 48 power plants for which Statkraft has operational responsibility. 3.2 TWh is produced at power plants where Statkraft holds rights but does not have operational responsibility. In addition, Statkraft owns 11 power stations with regulation plants, which are leased to the original licence holders after reversion to the State and the transfer of property rights to Statkraft. These have a combined production of 2.1 TWh.

Statkraft has ownership rights to a total production capacity of 34 TWh and 32 per cent of Norway's total generator output. Of the company's 8,732 MW, 316 MW is leased out in connection with plants where the rights have reverted to the State, so the enterprise controls an output of 8,416 MW.

In 1997, anticipating a reversion to the State, Statkraft assumed operating responsibility for Bjølvo power plant at Ålvik in Hardanger. This is now part of the Eidfjord power plant group. The company was also active in the take-over of the reversions of Høyanger (840 GWh), and of the Oksla plants (Oksla 860 GWh and Skjeggedal 17 GWh). The Høyanger plants were taken over on 1 January 1998, and the Oksla plants on 8 February 1998. The original licence owner's right to lease production has been transferred to firm power contracts.

About half of Statkraft's energy resources are sold to the power-intensive industries and the wood processing industry. As far as the rest of the portfolio is concerned, the enterprise has considerable flexibility.

Norway's largest

Average usage time for the rest of the energy is about 3,000 hours, so this is ideally suited for sales to customers whose consumption patterns vary a great deal.

Statkraft's reservoir capacity is 33.7 TWh. This represents 40 per cent of the country's aggregate reservoir capacity. With a regulation rate of 98 per cent of the mean inflow, Statkraft will thus be able to guarantee supplies with minimal risk of disruption. Many of the reservoirs are multi-year reservoirs, which means that these reservoirs are capable of balancing out the use of water inflow over a period of several years.

OPERATIONS

Statkraft's saleable production in 1997 was 27.5 TWh, compared to 32.2 TWh in the preceding year. The year's production was 87 per cent of a normal year.

Statkraft entered 1997 with reservoir levels that were lower than normal. A great deal of precipitation and low prices resulted in low production volumes in the first half of the year. Inflow from the snow reservoirs resulted in production increasing somewhat in the summer months, and production and inflow were close to normal by the autumn.

At the turn of the year, reservoir levels were at 24.6 TWh, which is 73 per cent of total reservoir capacity. This is 8.8 TWh higher than at the end of the preceding year. Reservoir levels last year were 15.7 TWh, or 47 per cent. Inflow in 1997 was 38.7 TWh or 116 per cent of normal.

In 1997, total availability was 90.2 per cent on average. Non-availability as a result of scheduled maintenance programmes was 8.5 per cent. Total other non-availability was 1.3 per cent, covering repairs, operational faults, and unsuccessful start-ups. The technical availability in 1997 was therefore 98.7 per cent, which is highly satisfactory. Statkraft places a great deal of emphasis on maintaining high safety standards at its plants, and on ensuring that personnel is not exposed to unnecessary risk. There were no serious accidents at the plants in 1997, and overall absence from work in the production division owing to injury was 148 days.

Health, the environment, and safety (HES), is taken care of by the introduction of a new quality assurance system at Statkraft. In addition to this, special focus has been placed on ensuring good attitudes regarding openness surrounding accidents and incidents, with the intention of having all accidents/near misses reported and dealt with.

SPECIAL EVENTS

Hove power plant was out of operation for three weeks as a result of a flood in the turbine cellar. When carrying out annual work on the power plant, the level of water rose to above the underwater stop logs, and into the station.

The Bleikvass Dam in the municipality of Hemnes in the county of Nordland sank about one metre because of ground subsidence. This seems to be connected to the mining operation at Bleikvassli Mines. Statkraft is currently investigating the circumstances surrounding this incident, and implementing measures that will re-establish the reservoir situation at Bleikvatnet.

Emphasis has been placed on good co-operation with the Norwegian Water Resources and Energy Administration (NVE) in the field of dam safety and contingency planning. Through discussions and meetings during the course of the year, we have jointly arrived at good solutions for several concrete projects. Close

producer of hydro power

project co-operation has also been established on planning for dam safety by using risk analyses, which should give both parties valuable competence and great benefits.

PROJECTS/ENERGY EFFICIENCYENHANCING MEASURES

In 1997, work on more than 400 small and large maintenance projects was carried out, at a total cost of about NOK 238 million. Because of a high future project volume as well, project selection and project implementation is specially focused.

Emphasis has also been placed on measures aimed at increasing energy efficiency. In the fourth quarter of 1997, a plan was prepared for generating some additional 700 GWh from the existing production plants through to the year 2010.

In 1997, two rehabilitation programmes were performed that increased total production by about 4 per cent at each of the plants.

ENVIRONMENTAL MEASURES

Environmental measures carried out in conjunction with everyday operations to compensate for damage caused by regulation, are mainly connected to fish stocking. In 1997, Statkraft released about 450,000 smolt, young fish, and fry of salmon and trout into the enterprise's regulated waters.

Marine biology tests were carried out at several locations to evaluate and possibly adjust measures that have been introduced.

Specification of power plants where Statkraft is owner or has rights

	No. of pumps	No. of plants	Installed gen. output	Production mean year GWh ²⁾
Plants operated by Statkraft ¹⁾	6	48	9,000	33,280
- Other's rights in these	(4)	(15)	-1,445	-4,612
Statkraft's share of own operated plants	-	-	7,555	28,668
+ Statkraft's share of plants operated by others	-	27	861	3,229
Total at Statkraft's disposal	6	75	8,416	31,897
+ Power plants leased to others	2	11	316	2,052
Statkraft total	8	86	8,732	33,949

1) Including Finnmark Energiverk AS

2) Estimated loss and pump plant consumption has been deducted

In 1997,
focus
has again been
on following
up the company's
involvement
in Nepal, Laos og Indonesia

The recent financial crisis in South-East Asia has resulted in increased attention, and priority being given to the resources in order to ensure successful completion of these projects.

In order to reach its long-term goals in the region, Statkraft assumes that strategic co-operation will be established with an international partner. Work on this started in the second half of the year, and will continue in 1998. The foreign exchange crisis will have an impact on the pace at which we realise our long-term plans in the region. To what extent it will also have an impact on the project scope in the long term is, however, more uncertain, since this will depend on developments in the economy of the individual country.

NEPAL

Khimti I is a 60 MW run-of-the-river plant on the Khimti Khola river in Nepal. This development is run under private management by the licensee, Himal Power Limited (HPL). This company will own and operate the power plant for a period of 50 years. The project company was founded in 1993 by Statkraft, ABB Energi,

Kværner Energy, and Butwal Power Company of Nepal. Statkraft holds roughly 74 per cent of Himal Power Ltd.'s equity.

Construction on the Khimti project started in June 1996, and commercial operations are planned for the beginning of the year 2000. However, areas with poor rock qualities are causing problems and are delaying the project's progress, but work continues in line with the original plans for commercial operations.

L A O S

The Theun-Hinboun project is a 210 MW run-of-the river power plant in Laos, along the Nan Theun river, which is a tributary of the Mekong River. Statkraft owns 10 per cent through Nordic Hydro power AB, which is owned 50/50 by Statkraft and Vattenfall. The other owners are the Thai investment company, MDX Power Company Ltd. (20 per cent), and the Laotian national power company EdL (60 per cent).

A 25-year power sales agreement has been signed with the Thai power company, EGAT.

Construction started in the autumn of 1994, stayed on schedule throughout, and the power plant was technically completed in December 1997. Commercial operations are planned to start on 1 April 1998, after which deliveries to EGAT also start. At present it is unsure whether the unrest on the foreign exchange markets in South-East Asia will have any negative impact on the project, since this will depend on the performance of the Thai baht, but at current exchange rates it is obvious that revenue will be reduced. On the other hand, the project is partially financed in local currency, so a weak baht, in itself, will still allow for the generation of a satisfactory return on equity in the long run.

I N D O N E S I A

In June 1995, Statkraft signed a general agreement with the Indonesian national power company, PLN, to develop the nation's hydro power resources. As an extension to the agreement, Statkraft signed an agreement in principle in October 1996 to develop the Merangin project, a 350 MW run-of-the-river power plant on West Sumatra.

Negotiations with PLN continued in 1997, with a view to establishing a joint venture company for the building of the power plant. The recent foreign exchange crisis will, however, have an effect on the progress of this project, and it is not possible, today, to say when the project will be realised.

In the long term, Indonesia is still regarded as an important market, with large exploitable hydro power reserves, and with a possibility of participating in existing power companies. To support this activity, Statkraft SF established a representative office in Jakarta in the autumn of 1997.

N E W I N T E R N A T I O N A L P R O J E C T S

The next phase of the Khimti development project is currently being assessed. Discussions have been held with the Nepalese authorities with a view to enter into negotiations on power sales. The project is a peak load plant, which necessitates a fairly high price for its power. This is considered to be the greatest hindrance to the realisation of the project. It is assumed that any further development will take place simultaneously with Khimti I. A decision on whether the project is to be implemented is expected in the first quarter of 1998.

Several potential projects in India have been evaluated, and promising projects have been identified.

However, any further work on these projects has been postponed, pending a clarification by the Indian authorities on the tariff structure in the power industry.

Work on Latin American markets and potential projects are on-going. Initially, this region is considered to be very interesting. The power markets in the region are well developed, and to some extent deregulated.

There is a considerable degree of privatisation going on, which helps to create interesting business opportunities.

M A J O R N O R W E G I A N P R O J E C T S

The Sauda project In the Sauda river system and surrounding areas there is a hydro power potential of more than 2.1 TWh. Development of the Sauda project is a joint venture with Elkem Energi and

Sunnhordland Kraftlag. The application for a licence, which is currently being prepared, will be ready for submission in the first quarter of 1998. The project may result in the production of more than 2.1 TWh, of which 1.1 TWh is new power. This development implies an investment of about NOK 2.6 billion. In August 1997 the Jagland Government decided that Statkraft should be responsible for the development of the Sauda project. However, since the change of government, the situation has been somewhat uncertain, and so long as power agreements and agreements on ownership shares have not been clarified, co-operation on the project continues. Assuming that the application for a licence is dealt within the normal time-frame, construction should be able to start in the year 2001.

Beiarn, Bjøllånes, and Melfjord Statkraft was granted a licence to develop the Beiarn and Bjøllånes projects by Royal Decree in 1989, and to develop Melfjord by Royal Decree in 1990. All three plants are situated in Nordland county. At the time these decrees were issued, the Ministry was of the opinion that the country faced a situation where there was a surplus of power. At the same time, there was considerable uncertainty surrounding future power needs and the building of possible gas heated power plants and other hydro power projects.

Against this background, the Ministry found that the time-limits for starting and completing work on the projects should be postponed indefinitely. These development plans are now being looked at again, and in 1997 a great deal of work was carried out to make the plans realisable, both from a financial and from a technical point of view. So far, it would appear that this work has brought to light substantial positive elements. All in all, these developments represent a potential of almost 1 TWh. The plan is to develop the projects further, and in the case of Beiarn an application for changes of the plan to be allowed will be prepared early in 1998. A corresponding application will be prepared for Melfjord at the end of 1998. As the plans for progress are viewed today, construction start for the first plant is expected in the year 2000.

Nore I – Phasing out forge-welded pipes In 1992, the Norwegian Water Resources and Energy Administration (NVE) ordered the replacement of the forge-welded pipes in the pipe trench at the Nore Power Plant. Statkraft decided to replace the pipes with a mountain tunnel, and work on rebuilding the power plant started in the summer of 1994. It was completed in 1997, within the original time schedule and budget.

Svartisen II This project is the final part of the very big Svartisen development that started in 1987, and which represents a mean annual production of about 2.1 TWh.

Svartisen II comprises the building of two dams, Storglomvassdammen and Holmvassdammen, with a total volume of 6.4 mill. cu. m. This makes Storglomvatnet Norway's largest reservoir with a volume of 3,506 mill. cu. m., corresponding to an energy content of about 4.6 TWh. The regulation height is 125 metres. Storglomvassdammen is the world's highest filling dam with a sealing core of bituminous concrete. The construction of the dam itself was completed in 1997, one year ahead of schedule.

Landscape-related measures, post-construction work, down-rigging, and tidying up will be completed in 1998. The forecast project cost is NOK 1.2 billion, or slightly under the original budget.

Ulla-Førre Since 1989, in connection with the Ulla-Førre regulation, a comprehensive environmental programme has been carried out in the Suldal river system. One goal was to achieve better utilisation of the water resources, both to strengthen the local natural salmon population in Suldalslågen, and to achieve better economic exploitation of the water resources. The results will be used when preparing new control rules in the future.

In 1997, this project cost about NOK 11 million. The results are positive, both with regard to the development of new methods for strengthening the salmon population, and also the possibilities of using technical installations in regulated water courses for strengthening the basis for life of natural salmon populations, and for simultaneously achieving economic optimisation of water resources.

Even though the basic intention is to find results for Suldalslågen, the project also has as its goal to find answers that can be transferred to other water resources, at home and abroad. This project is a wide-reaching co-operation between experts in technology and in ecology. Emphasis is placed on developing a good, professional relationship between the various parties (environmental administration, water course administration, local interests, the power industry, and research circles). So far, a series of 43 professional reports have been published, and are publicly available.

Environmental- friendly?

Read more about this on the next page



 We are committed for
ever-lasting
and **renewable**
energy sources

In 1997, Statkraft continued its work on introducing new technology, enhancing energy effectiveness, and energy conservation measures, in order to improve the exploitation of existing power plants, and to further develop available hydro power potential that has so far not been commercially exploitable.

The continually increasing power consumption and the planned disconnection of substantial production capacity in the Nordic region has resulted in the Nordic power balance becoming even tighter. In order to avoid net imports of polluting coal and oil-based power, production capacity in Norway must be significantly increased over the next few years.

Both market considerations and the environmental framework conditions point towards alternative renewable energy sources as an interesting and necessary means to this end. In 1997, Statkraft carried out thorough evaluations of different alternative energy sources, and the company has decided to investigate the possibility of establishing wind mill parks. Statkraft has started to gauge wind at selected places along the Norwegian coast in order to find places well-suited for the establishment of such wind power parks. The objective is to establish wind mill parks in the 30–40 MW range.

In 1997, Statkraft also started to investigate the possibility of producing electricity based on salt gradients. If this technology can be commercialised it may well make a significant long-term contribution to the power balance.

In line with its overriding goal, the company will continue to emphasise new renewable energy, and in the years to come considerable sums will be invested in developing suitable technologies for such energy production. In 1998, Statkraft will have completed the preparation of a Group environmental policy. This is the first stage in the development of an environmental management system.

Statkraft wants to take environmental consideration in all its operations and activities. The following main/interim goals were set in 1997:

- By the year 2000, within the constraints of profitability, Statkraft is to establish an organisation and make investments with a view to producing energy from renewable, alternative energy sources.
- Statkraft shall establish contacts with, and co-operate with, companies and organisations that help us to exploit competence and capacity to the maximum. The objective is to create an environment for developing alternative energy resources that has “clout” and weight.
- Maintain world class position on cross functional competence on the environment when it comes to construction and management of hydro power plants.

THE INTEGRATED NORWEGIAN - SWEDISH MARKET

The integration and the dynamics in the Norwegian-Swedish market are constantly growing. With effect from 1 January 1998, any power consumer whatsoever in Norway can swap his/her electricity supplier every week, at no charge. Competition for these customers is now so fierce that many producers sell outside their licence areas at prices that make little or even a negative contribution.

Also Swedish consumers can change their supplies, but today they must measure their consumption hour by hour. This, however, does not seem to deter the competition which is forcing itself through as a result of several companies offering a range of solutions where the supplier more or less finances the meters.

Based on the Act that was passed in December 1997, allowing for nuclear power plants to be closed down, one reactor at Barsebäck is scheduled to be shut down in July 1998, and another one in the year 2001.

Sydkraft, which owns the nuclear power plant at Barsebäck, must be compensated for the imposed closing of the reactor, and has claimed compensation in the form of access to other power with similar costs and environmental profiles. So far, the compensation negotiations have not produced any results.

Deregulation continues in Finland. The network was opened to all customers in January 1997. The two main

a gradual **Opening** of the power markets

Finnish networks were spun off from the production companies and merged into a new national network company (Suomen Kantaverkko). The two major producers (IVO and PVO) own one third each, and the Finnish state and several insurance companies each own one sixth of the network. The network company has full ownership and operational responsibility for the grid. The national power exchange, EL-EX, has been functioning since August 1996. Full integration with NordPool is planned for 1 April 1998. Environmental levies on Finnish power production were abolished in 1997.

THE CONTINENTAL EUROPEAN MARKET

Subsequent to the EU directive for the electricity markets coming into effect in February 1997, member states must have implemented the directive in their national legislation by February 1999.

Under the directive, the EU countries' power markets will gradually be opened: by 22 per cent in 1999, 28 per cent in the year 2000, and 33 per cent in the year 2003. The percentage opening is binding on all member states, but as there are considerable differences in the industrial structures of the different countries, the outcome of the liberalisation may be very different from one country to another.

While a 22 per cent opening of the market in some countries will imply that only a few major consumers will be able to trade freely, the same percentage in other countries will provide market access also to many small consumers. However, in all countries, consumers with an annual consumption in excess of 100 GWh must be allowed to trade freely.

The directive allows for a choice between two models: Third party access to the network gives a right to negotiate on access to the network, and the exclusive buyer system where an exclusive buyer enters into all agreements between consumers and other sellers of power in the exclusive buyer's area.

The Danish Electricity Act (L-486) was passed by the Folketinget (Parliament) in June 1996, and approved by the EU Commission in December 1997. The Act follows the lines in the EU's directive, and opens for negotiated third party access, establishes Elsam and Elkraft as system operators in their respective areas, liberalises power trading for players with an annual consumption in excess of 100 GWh, and makes the power supply companies responsible for buying power from wind turbines and centralised and decentralised thermal power plants at prices fixed by the politicians. The EU Commission has been particularly sceptical about the special treatment of the large thermal power plants.

System responsibility in the Elsam area was transferred to I/S Eltra on 1 January 1998. Eltra was spun off

from Elsam, and is owned by the distribution companies on Jutland and Fyn. Eltra will introduce spot tariffs, and is positive to NordPool's initiative to incorporate the Eltra region as a separate spot price region from the second half of 1998.

Germany has discussed new electricity legislation for a long time. After a long period of uncertainty as to political agreement on the content and form of the Act, it was passed by Parliament in November 1997. The final procedures have, however, not been completed, and it is still uncertain when the new law will come into force.

The German legislation assumes that the entire German electricity market will, in principle, be opened to competition at one time, rather than gradually as indicated in the EU directive. The large producers will lose their monopoly rights in their own areas. Negotiated third party access to the network (NTPA) will be introduced for all market participants, with the exception of customers of the towns' power companies (Stadtwerke). The Stadtwerke are to have the option of selecting a status of exclusive buyer, and thus be able to keep their customers, by entering into all contracts between customers and possible new suppliers. The law contains no clauses relating to transmission fees. The price of transmission shall be based on a solu-

in the EU **member states**

tion negotiated by the major interest organisations in the power sector. It would appear that the tariffs will partially be based on distance.

A new electricity law is expected to be passed in the Netherlands in April/May 1998, and will come into force on 1 January 1999. The Netherlands has opted for a gradual deregulation: 650 major consumers and 23 distributors will be able to choose their supplier in 1999, followed by medium size consumers in the year 2002, and households in the year 2007.

The four largest producers are to merge into one major production company (GPB) which will control 64 per cent of total Dutch production. The present company Sep, will be responsible for the operating system for the high voltage network. Transfer charges will be based on spot tariffs, and the intention is to establish a power exchange in 1999.

In Spain, a new "Electrical Protocol" was signed by the players in the electricity sector in December 1996. As a result, Spain will have one of the most liberal systems in Europe. There will be third party access and a physical spot market for all players with market access, and a financial contract market based on underlying spot prices. The market will be opened gradually with effect from 1998.

The other member states are working on amending legislation in order to implement the directive. How far countries such as Austria, France, Belgium, Ireland, Italy, and Greece have come in the deregulation process is unclear. Claiming "special technical circumstances" in their systems, Belgium and Ireland have been granted a one-year postponement, and Greece a two-year postponement, before the directive must be implemented by legislation in the respective countries. With the exception of Austria, all the countries favoured the exclusive buyer model during the negotiations on the directive, but it is uncertain whether they will actually choose this solution.

Switzerland is monitoring the EU countries carefully. Because of its geographic position in Europe, and its importance as a transit country and as a hub for power trading, the Swiss want to be in a position where they can offer the players the same terms and conditions that apply within the EU. However, no concrete moves toward a deregulation have yet been made.

The power market in Poland is to be deregulated on the UK model. Competition and a power exchange are to be introduced in 1998, but it is uncertain whether the current price regulations will be abolished at the same time.

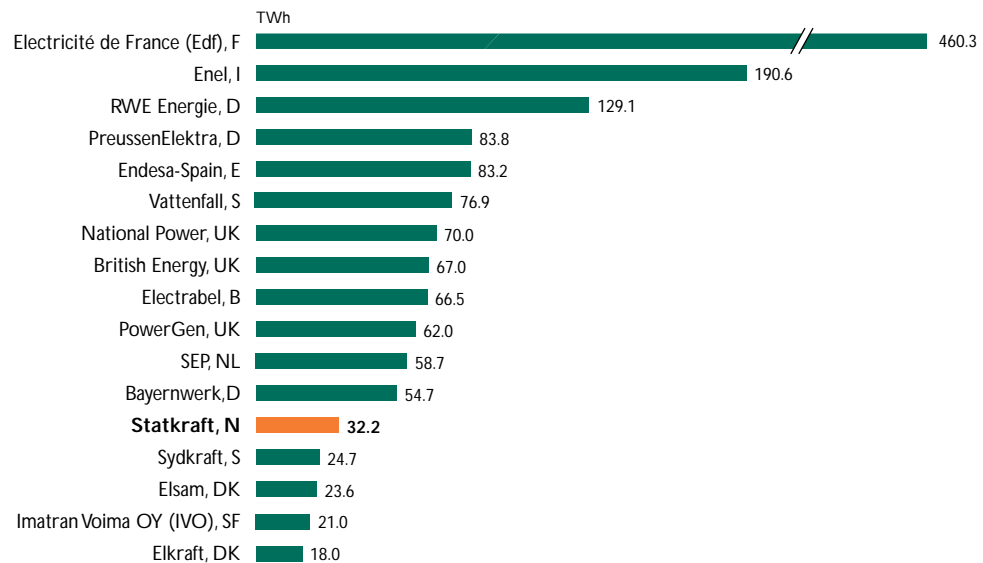
NEW CHALLENGES AND NEW OPPORTUNITIES

The European power market will be affected not only by the EU directive on electric power markets, but also by the gas directive that was issued in December 1997. The directives themselves are characterised by minimalism in their approach to deregulation, but nevertheless, they have a strong signal effect. They contribute to changes in attitude and expectations regarding structural development and competition terms. In this way, and with the help of technological advances, which make new solutions possible, one can see an emerging self-strengthening process that is moving in the direction of a liberalisation of the energy markets, and which is much stronger than the content of the directives as such, and of legislation.

This development results in the players having to face new challenges. Competition will undoubtedly increase, even if the markets will be far from perfect. The rules of the game, the number of players, and the success factors are very different between markets that are monopolistic and markets that are exposed to competition. The large Continental companies will have to learn to think differently and defend an exposed cost situation. New players, and companies coming from other lines of business, will be attracted by the new opportunities that the market can offer. As in the UK and Scandinavia, we will see some mergers and acquisitions, and some companies being closed down.

Liberalisation on the Continent will have a considerable influence on our domestic Nordic market. European price trends will have an effect on Nordic prices, and Continental companies will look for new market opportunities, including Scandinavia, when their own home markets become exposed to competition. With more integration and new framework conditions, the Nordic players will also have to deal with changes in the energy markets on the Continent, whether they like it or not. An efficient production organisation, as well as experience and competence from a deregulated market, will be important success factors in the years to come. With our starting point, we should be ideally placed to tackle the challenges that will be presented by a future Northern European power market.

European power companies (by production in 1996)



One of Norway's
greatest
challenges?

[Read more about this on the next page](#)





The growth in consumption

calls for action

Traditionally, Norway has developed hydro power in line with the general growth in the economy. In the period 1970-1990, the growth in mean production capacity was greater than the growth in consumption, so that we had a fairly ample Norwegian power balance. Since 1990, consumption has continued to grow, but the low investment level has resulted in a tighter power balance.

In a regime with market-based power sales, the additional costs of unsuccessful dispositions, cannot be placed on the shoulders of the consumer. The new Energy Act of 1991 has therefore resulted in more prudent investments in the power sector. The players themselves must bear complete financial responsibility for their own investments, and new projects are only developed if and when the players find it is profitable on the basis of an assessment of costs and future revenues from sales in the market.

In a so-called "normal year", Norway's mean production capacity is about 113 TWh, while consumption is a good 115 TWh. Experience tells us that exploitable inflow varies between 86 TWh in a dry year and 158 TWh in a wet year. Historically, we have exported a great deal of cheap surplus power to Sweden and Denmark in wet years. The deficit of about 9 TWh in 1996 demonstrates the vulnerability of a system that is 100 per cent hydro power based, and our need to import when inflow fails. 1996 was a year with little precipitation and inflow, which we experience from time to time. Norway is completely dependent on being able to import from our neighbours', and the Continent's, thermal systems. New power exchange contracts with neighbouring countries have been signed, and new exchange capacity with the Continent is under planning. Power will flow both ways, and make dry year hedging possible, as well as ensuring more correct prices for Norwegian power supplies' output capacity and regulating ability.

HIGHER CONSUMPTION

A moderate annual growth in consumption of electric power of 1 per cent over the next 10 years will mean that consumption grows equivalent to one Øvre Otta development (1.1 TWh) per year, or 40 TWh on a Nordic basis over the same period. This is a rate of growth that is much lower than the historic growth in the last decade. There are grounds for believing that this will be a reality even with considerable energy conservation and some transition to water-borne heat by using bioenergy. This is also indicated in the analyses made by the Ministry of Petroleum and Energy. About 20,000 homes are being built annually, and new reforms in the health and education sectors, more activity, and low unemployment, are all factors that will contribute to an increase in the consumption of electricity. In addition, the power-intensive industry has plans for expansion which will call for great amounts of energy. Norsk Hydro's plans for Sunndalsøra alone will call for power volumes equivalent to the two gas power plants that are planned to be built in the west of Norway. A power balance that is already tight can be made even worse with the phasing out of Swedish nuclear power and the introduction of the proposed new Water Resources Act in Norway. These are two "measures" that singly can reduce production capacity in a common Norwegian-Swedish market by 8-9 TWh.

NEW CAPACITY

Hydro power It is possible to develop more hydro power in Norway. All in all, it is possible to apply for licences for just less than 20 TWh under the Overall Plan. In addition, licences may be applied for upgrading and expansion projects, new water-ways and the like for existing plants, for about 7 TWh. However, the cost of many of these projects considerably exceeds the market's willingness to pay, but it will still be sensible to develop some parts of the remaining capacity on the basis of both financial conditions and consideration to nature and the environment. Some of these projects are quite gentle, and their impact on nature and the biological multiplicity is minimal. But hydro power development takes time. Often, 6-7 years pass from plans being laid to new energy production coming on line. This is a long process with many surveys, hearing rounds, consequence analyses, and not least, political deliberations/processing. Considerable opposition to this type of investment must be expected.

Wind power In all the Nordic countries there is a potential for wind power, but maybe in Norway in particular. It is expected that 13 TWh wind power can be developed in Norway, but this a theoretical figure which does not take into consideration market conditions, land-owners, network hook-ups, local political aspects, or conflicts of any kind. Wind power may be a positive supplement to other energy sources, but in the long term is unlikely to come anywhere near covering the need for electricity on its own.

Thermal power In Statkraft's opinion, it would be sensible to use some of the Norwegian gas resources for power production in Norway. Gas heated plants will reduce total emissions of greenhouse gases in the Nordic area, because our neighbours' coal-fired plants would produce less, and reduce their emissions more than the Norwegian CO₂ emission, seen in isolation, will increase. Licences have been issued to Naturkraft to build two gas power plants in Norway with a combined production capacity of 5.5 TWh. There are also plans for several other plants in other parts of Norway. In addition, it may be of interest to build gas power plants along the west coast of Sweden, even though also this might be controversial from a political point of view.

Growth in demand has been higher in Finland than in the other Nordic countries, and the Finns are considering building coal-fired or gas-fired power plants to meet their future needs. The Finns also have plans for a new nuclear power plant, although at the moment this is less likely.

CONCLUSION

In addition to work on enhancing effectiveness and on energy conservation, the way should be paved for further expansion of production capacity by way of:

- Upgrading old hydro power plants
- Exploiting hydro power potential that is not protected, and which can be realised in an environmentally friendly and acceptable manner
- Using some of the Norwegian gas reserves for power production in the Nordic area
- Acceptable development of wind power
- Contributing to research into other energy sources

A precondition for all plans and expansions is that the projects generate acceptable profitability, and that their impact on the environment is also acceptable.

STATKRAFT ANLEGG AS

Statkraft Anlegg has recorded total revenues of NOK 303 million in 1997, compared to NOK 421 million in 1996. The company returned income before tax of NOK 11 million in 1997, compared to NOK 20 million in 1996. The decline was due to the level of construction activity in Norway and abroad being lower, and provision for losses in connection with a project in Nepal.

In spite of the activity in the Norwegian market being lower than expected, the company enjoyed very good results in 1997, both financially and operationally. The Svartisen project was completed one year ahead of schedule, and delivered to the owner in the autumn of 1997. Other important hydro power projects in Norway are Altevann, Bjerka, Bordalen, and Nesjødammen. In December 1997, the company was awarded the contract for the Grøa power project. The most important transport-related projects in 1997 were the tunnelling in Tromsø, Finneidfjord in Nordland, and Åkrafjord in Rogaland.

The international hydro power activities experienced much weaker growth during the year. The main reason was the very demanding geological conditions for the Khimti project in Nepal. Negotiations with the owner on compensation for the extraordinary conditions are not yet completed. The development of the TBM activities was weaker than expected in 1997. All business areas are expected to register an increase in the activity level in 1998.

STATKRAFT ENGINEERING AS

Statkraft Engineering's total revenues rose by NOK 16 million to NOK 96 million in 1997. Of this, NOK 62 million was consultancy fees. The company's income before tax rose by 83 per cent to NOK 4 million. This growth was the result of an increase in the volume of assignments in Norway and abroad. Following the acquisition of 51 per cent of the shares in Grøner Holding AS in 1997, the two companies' market activities were co-ordinated during the year. The Norwegian market for consultancy services in the field of hydro power grew in 1997 as well, but because of the decline in construction activity, this growth was lower than had been expected. The Norwegian activity has concentrated on studies concerning licence-related issues, environmental consequence analyses, and technical-financial planning surveys for a number of principals. Major assignments include the assessment of the licence for Sauda Kraftverk and the complete licence report for Salten Kraftsamband.

In the international market, Statkraft Engineering was awarded several major contracts in Latin America and South-East Asia. Among the contracts signed last year are the detailed engineering of the Balsa Superior hydro power project in Costa Rica, the preliminary study of the Los Llanitos hydro power project in Honduras, and the preliminary study of the Se San 3 hydro power project in Vietnam.

Activity is expected to increase at home and abroad in 1998, but the financial crisis in South-East Asia will probably result in growth being lower than in the preceding year.

FINNMARK ENERGIVERK AS

Finmark Energiverk increased its revenues by 4 per cent in 1997, to NOK 144 million, while operating costs rose by 8.5 per cent. The company's income before tax was NOK 36 million, compared to NOK 21 million in the preceding year. This is a rise of 73 per cent. Because of the new tax regime in 1997, income after tax did not develop at a similar rate.

As a result of little precipitation in the second half of 1997, production for the year was only 390 GWh, or 84.3 per cent of mean annual production. In 1996, the company's annual production was 499.4 GWh, or 111.5 per cent of normal production.

Power transmission revenues in 1997 were 2 per cent below expectations, as a result of lower transmission tariffs in the Norwegian market. The company expects further cuts in tariffs in the future, and is working on enhancing the efficiency of this part of the operation.