BEYOND BORDERS

Dag Ove Skjold

Beyond borders

The internationalisation of Statkraft 1990–2015

Translated by Kevin M.J. Quirk

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Contents

0	CT	ΔТ	KI	2 Δ	F	Γ'ς	DD	FFA	CF

11 PREFACE

Chapter 1

- 15 THE LEGACY
- 16 Nature's gift
- 18 Hydropower, ownership and politics
- 21 The state's historical role in the supply of power in Norway
- 25 An organisation lacking an identity?
- 28 A difficult birth
- 32 An uncertain future
- 34 New energy legislation and a new organisational reform
- 37 New management in a new era
- 40 Branches and roots

Chapter 2

- 43 POWER EXPORTS AND POWER EXCHANGE AS COMMERCIAL STRATEGIES
- 44 Fire and water hand in hand
- 46 Early power exchange agreements
- 50 Liberalisation of power exports
- 53 Cable agreement with PreussenElektra
- 56 Cable agreement with SEP
- 58 The German alliance

Chapter 3

- 63 AN EASTERN ADVENTURE
- Norwegian hydropower expertise from development aid to business
- 66 A poor and unstable society
- 69 The founding of Himal Power Company Ltd.

- 70 The meeting with the real worlds
- 72 More expertise, new negotiations
- 76 Entering Laos
- 79 Establishing Nordic Hydropower and Theun Hinboun Power Company
- 82 The difficult route ahead

Chapter 4

- 87 NORDIC STRATEGY
- 88 Structural changes in the Nordic countries
- 89 A stronger financial foundation
- 90 Establishing a Nordic strategy
- 92 Project Tor
- 96 New acquisitions in Sydkraft
- 98 The Sydkraft ownership becomes political
- 102 On the offensive
- 105 Entering the continent
- 109 Trading offices in operation
- 111 An innovative culture

Chapter 5

- 115 STATKRAFT IN A LIBERALISED AND CLIMATE-FOCUSED EUROPE
- 116 New times, new solutions
- 119 Strategy Norway
- 123 Green or grey?
- 127 Mergers and acquisitions as a key to growth
- 131 Cable problems
- 133 From Viking Cable to Sydkraft agreement
- 136 German confusion
- 140 Expansion, internationalisation and ownership

Chapter 6

- 147 A NEW STRATEGY FOR GROWTH
- 148 Liberalisation and climate policy
- 151 The beginning of the end of the Sydkraft-story
- 153 Project Genoa
- 160 The mouse that gave birth to a mountain
- 163 Hunting new opportunities for growth
- 166 Involvement in gas power in Germany
- 172 A new area of growth: wind energy

174	Wind in the United Kingdom
180	Hydropower in Southeast Europe
181	A return trip to Russia
182	A cautious strategy
186	Entering Turkey
190	A focused renewable strategy
	Chapter 7
193	THE FOUNDING AND DEVELOPMENT OF SN POWER
195	At a crossroads
198	Preliminary discussions with Norfund
201	The creation and development of SN Power
203	Powering development
204	Chile and Peru in focus
215	Big challenges in India
219	A success story: The Philippines
221	Restructuring in 2008
224	Restructuring once more
227	International hydropower – from problem to solution
	Conclusion
229	TWENTY-FIVE YEARS OF INTERNATIONALISATION
236	LITERATURE
240	INTERVIEWS
241	NOTES
265	INDEX

271 IMAGE LIST

Statkraft's Preface

DEAR READER

or 120 years Statkraft has developed and managed Norwegian hydropower resources to the benefit of the Norwegian society. Over the past 25 years, the company has increased its international footprint, and is today one of Europe's largest producer of renewable energy.

Beyond borders. The internationalisation of Statkraft 1990–2015 documents Statkraft's journey from a national to an international energy company. The author, historian Dag Ove Skjold, has been given full access to key people and material, allowing him to give a complete account of Statkraft's international growth.

Statkraft's long-term growth ambition is to become a leading international company in pure energy. This ambition has evolved gradually, one step at a time. Every point in the journey is covered in this book. From the early energy export in the 1990's to full-scale projects across three continents – the emergence of Statkraft as an increasingly international company has been natural.

The world needs more renewable energy, and Statkraft is uniquely positioned to play an important role in addressing this green shift. Today, Statkraft's development and management of renewable energy sources creates significant value both in Norway and internationally. Tomorrow, the company's role will continue to grow to meet increasing energy needs.

This book describes an important period of change for Statkraft. It covers intense strategic discussions and visionary individuals, but also great challenges related to shifting market conditions, foreign business climates and cultural barriers.

I would like to thank the author, Dag Ove Skjold, with the support of Statkraft's project leader, Trond Rostad, for writing a thorough presentation of our recent history. Many more people involved in Statkraft's story helped bring this book to completion, and I would like to recognize their efforts as well. Finally, I would like to thank all past and present members of the Statkraft family that have shared insights, experience, documentation and knowledge with the author.

I hope you enjoy your copy of Beyond borders. The internationalisation of Statkraft 1990–2015!

Christian Rynning-Tønnesen President and Chief Executive Officer



From Yapui, Peru

Preface

tatkraft's history is well documented in the three-volume work *Statens kraft* [State power], which was published in 2006. Statens kraft deals with Norwegian state involvement in the power sector from the end of the 1800s until the first decade of the 21st century. One subject that received limited attention in this work, however, was Statkraft's international operations over the last two decades. Since the beginning of the 1900s, Statkraft gradually changed from being a national administrative entity to a commercial, international group. Once an exclusively Norwegian business, Statkraft now has operations in more than 20 countries in Europe, Asia, Africa and Latin America, and just over one-third of the company's 3,700 or so employees work outside of Norway. The purpose of this present book is to fill this knowledge gap. This book tells the story of Statkraft's process of internationalisation from the time when the first plans to export electricity to the continent were made, around 1990, to the company's broader international operations today, more than 20 years later.

Statkraft has provided funding for this project to the tune of approximately one and a half full-time equivalents. Work on this book has taken place on a free and independent basis, however, and no attempt has been made by the commissioning party to influence the author's choice of subject matter nor the angles chosen or assessments and conclusions drawn. Such a starting-point is necessary, but at the same time demanding. Over time, Statkraft's international operations have become diverse and extensive, and selecting key elements from those that are less important has been no easy task. Furthermore, determining what is more important and what is less important will often be a question of judgment, and there is no guarantee that others will agree with the decisions and priorities made. Some may feel one business area in particular has been dealt with in sparing detail – trading activities on the continent. This is not the result of a conscious decision on the part of the author, however. Rather, it is because, for business reasons, the market division's management does not wish to show its hand to others.

A book committee has followed this work from start to finish. This committee has consisted of professor Bent Sofus Tranøy (chair) and associate professor Sverre August Christensen, along with Lars Magnus Günther, Trond Rostad and Helge Skudal. The first two were commissioned by the author, while the other three were

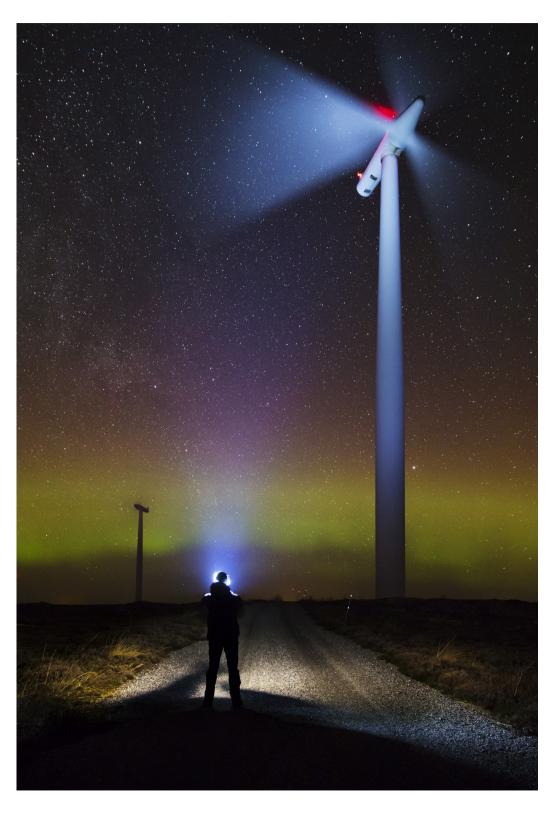
appointed by Statkraft. In the project's final stage, Trond Rostad was replaced by Anniken Haugen Jebsen, as a result of Rostad's retirement. A deep debt of gratitude is extended to this committee for the many helpful and constructive expert suggestions and advice it has provided as the project has progressed, and for much-appreciated encouragement at times when work has seemed insuperable.

Kåre Valebrokk, the late, great Norwegian media legend, once said that a good journalist should reek of beer after lunch. Valebrokk's point was that if they are to produce good copy, journalists need to be out and about speaking to people. It must be said, of course, that there is a world of difference in the way historians and journalists work. Nevertheless, when writing contemporary history where many of the people involved are still alive, the historian has a golden opportunity to supplement arid documents with living narrative. More than 70 individuals both in and outside the Statkraft organisation have given interviews during work on this project. A debt of gratitude is owed to all of you. A list of them can be found at the back of the book.

Some people at Statkraft have made a special contribution. Many thanks to Trond Rostad, who assisted in getting the project off the ground, and who made sure that the challenges encountered were resolved in a good way. Finn Fossanger has been an invaluable source of knowledge on the subject of Statkraft's involvement in Sydkraft, later E.ON Sverige, which to the outsider has not been an easy subject to fully grasp. Finn Fossanger has also read and commented on a large part of the manuscript. Kjell Heggelund has shared generously his knowledge of Statkraft and SN Power's hydropower operations outside Europe, while Jon Anders Holtan has read a large part of the manuscript and provided plenty of good advice and suggestions.

Chief Editor Hege Gundersen at Scandinavian University Press has read and commented on the entire manuscript and offered a good deal of advice and suggestions in the final stages of this project, while colleagues at Buskerud and Vestfold University College have commented on various parts of the text. Acknowledgements go to you all. Finally I want to thank Harald Borgersen, whose ability to surprise with his unconventional view of many matters has been a constant source of joy and benefit.

Tønsberg, april 2015 Dag Ove Skjold



Smøla Wind Park, Møre og Romsdal County



Power storehouse. Blåsjø is the main reservoir of Statkraft's largest Norwegian hydropower plant, Ulla-Førre, in Western Norway. The artificial lake has an energy potential of 7.8 TWh, corresponding to around seven per cent of average annual electricity consumption in Norway. Blåsjø was originally built to store water over several years to alleviate power shortage situations. Many of Statkraft's power stations have, as Ulla-Førre, large storage capacity and high flexibility. These characteristics have given Statkraft huge economic benefits in the market-based power system that was introduced in Norway and Scandinavia in the 1990s.

CHAPTER 1

The legacy

any people, politicians included, still don't fully grasp Statkraft's objectives and role. Many people believe the company remains a type of administrative entity."

Such was the wording in an internal Statkraft memo penned in 2002, exactly 10 years after the company had been transformed into a state enterprise mandated to operate commercially. The memo was written in connection with the Norwegian government's plan to transform the company into a limited liability company. Within Statkraft, it was hoped that this would happen, since, as stated in the memo: "A limited liability company could help clarify the company's situation and capabilities, thus creating the necessary distance between itself and the Norwegian state as its owner."²

In the 1990s, major changes were made in respect of Norwegian state ownership. During this period, many state enterprises were changed from administrative entities into commercial enterprises. This was the result of a new way of thinking that meant that companies without specific sectorial and political aims were to be operated in accordance with pure business principles. The aim was that they were to run at a profit, and politicians were not to be involved in everyday operations and commercial considerations. The idea was that this would make these enterprises more efficient. In practical terms, many enterprises were transformed into state-owned limited liability companies. A number of these companies, including several of the nation's most important infrastructure and energy companies such as the telecommunications company Telenor and the oil company Statoil, were also partially privatised. Telenor was listed on the stock exchange and partially privatised in 2000, while the same thing happened to Statoil one year later.

As for Statkraft, in 2002 politicians were still discussing whether the company's organisational form should be changed from a state-owned entity into a state-owned limited liability company, a highly controversial issue indeed. Statkraft was finally transformed into a limited liability company in 2004, but only following several years of hefty political debate. Partial privatisation, which had also been proposed at the turn of the new millennium, was not politically feasible. Opposition to such a suggestion had been massive, and this is still true more than a decade later.

Norwegian politicians have been far less willing to surrender control over Stat-kraft than they have over other comparable companies. In relation to the topic of this book, this is an important issue. One of the key arguments cited is that Norway's ownership policy has had a significant impact on Statkraft's opportunities to operate internationally, an argument to which we will return in greater detail later. In this chapter, however, let us look back to the time before Statkraft had been transformed into a state enterprise in 1992, since this will help us understand *why* political reluctance to relinquish control of the company has been so strong. Above all, this reluctance is linked to two issues: First, Statkraft's role as a significant manager of a highly esteemed natural resource – hydropower – and, second, the company's role as an industrial and political tool. Both of these roles have roots extending far back in time.

NATURE'S GIFT

If it can be said that a nation has been lucky, Norway's greatest fortune lies in its uncommon abundance of energy. Petroleum deposits in the North Sea have provided the country with enormous revenues since the 1970s. In addition, Norway has more hydropower than any other European country, if we disregard the European part of Russia. An estimated 180 terawatt hours (TWh), or 180 billion kilowatt hours of energy, course through Norwegian waterfalls every year. Around 1990, when development of hydropower installations began to wane, actual annual power generation totalled approximately 120 TWh, which at the time made Norway Europe's largest and the world's fifth largest generator of hydropower.³

Watercourses can present extremely diverse opportunities for hydropower usage, and in one such context, Norway has been fortunate in the sense that it has been relatively inexpensive to develop hydropower resources. As a consequence of the country's topography, with frequent shifts between mountains and low-lying areas, Norway has many watercourses with an abundance of high and concentrated waterfalls. In addition, nature has provided good opportunities to establish huge reservoirs in the high mountains.⁴ High waterfalls and good storage opportunities mean low development costs and opportunities to regulate power generation in order to meet demand, which often varies with regard to precipitation and natural watercourses. This opportunity is not available to the same degree in low-lying watercourses, which

Waterfalls hold a mythical position in Norwegian culture and are a common theme in the works of many Norwegian artists. The painting "Fossen" by Theodor Kittelsen, which was painted in 1907 and illustrates Svelgfossen in Telemark, was one of the first major falls developed for power generation. The person on the stone shelf to the right in the painting is thought to be Sam Eyde, founder of the industrial company Norsk Hydro, who, earlier than most, understood the economic value of the Norwegian hydropower. At the time the painting was done, Eyde was engaged in developing Svelgfossen.



are more prevalent in continental Europe. Such watercourses contain more water, but have in return low falls and often limited opportunities for dams. As a result, power generation must largely occur in line with the natural flow of water in the watercourses. The good storage opportunities offered in Norway have made it possible to base the country's electricity supply on a source of energy that is essentially unpredictable.

Hydropower has provided Norway with a unique basis for electrification. Abundant and inexpensive hydropower was the main reason why Norwegians used more electricity even early in the last century and why more of the nation's inhabitants had access to this utility than any other nation in the world. Low generation costs are a feature of Norway's electricity supply. A comparison of system costs in western European countries at the beginning of the 1990s showed that Norway was still in a class of its own. System cost, which expresses the average generation cost of a nation's power system, was at this time around NOK 0.14 per kWh.⁵ In Sweden, which was closest to Norway, it cost a little more than NOK 0.20 to generate 1 kWh, while the United Kingdom and Germany, at the other end of the scale, had system costs of around NOK 0.40 per kWh. On average, power generation in Sweden was 40 per cent more expensive than it was in Norway, while German and British power generation was three times as expensive.

When it comes to electricity, Norway has been particularly privileged. In a world where this resource is an expensive scarcity factor, hydropower has provided a basis in Norway for a particularly low price level with high consumption. In addition, it has formed a basis for an industrial structure that more so than in most other countries is based on inexpensive power. As such, hydropower has contributed considerably to economic and social development in Norway. Because of this, however, there are many strong interests linked to this resource. It is claimed, for example, that electricity prices have the same position in Norway as petrol prices have in the United States. Little can be done to them before this gives rise to protests and dissatisfaction. The actions of the power companies, who manage the hydropower resources, are consequently something that has both significant political and social importance. This is one thing that Statkraft most certainly has had to bear in mind when making decisions.

HYDROPOWER, OWNERSHIP AND POLITICS

The economic role of hydropower is of course important. Administration of this resource must be understood in a broader political and historical context. However, it must also be considered a key element in the story of the creation of an independent and modern Norway at the beginning of the last century. Furthermore, it is a reflection on the development of the Norwegian welfare state.

At the beginning of the 1900s, Norway had been under the rule of other states for more than four centuries, first as a dependency of Denmark, and after 1814 through its loose union with Sweden. During the 1800s, however, national awareness and a desire for freedom grew in Norway, and in 1905 Norwegian politicians resolved to break out of the union with Norway's neighbour. Norway's new-found freedom, won peacefully, created a wave of national emotions that also resulted in demands for *economic* independence. This wave of emotion coincided, however, with a move by foreign capital interests to gain control over the resource that could to a greatest degree secure an economically strong and independent Norway, namely hydropower. Around the turn of the century, when electricity really began to make its mark in

Hydropower formed the early foundation for comprehensive electricity development in Norway. Because there were so many small waterfalls scattered throughout the country, it was also possible to develop inexpensive local power supplies. In particular, the local municipalities began to develop hydropower. This picture shows Kiste power plant, which was built during the First World War.

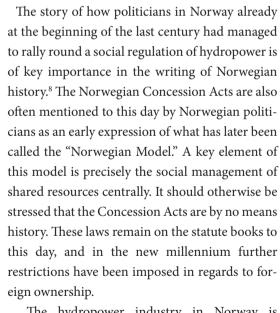


20

Gunnar Knudsen was prime minister of Norway in 1908–1910 and 1913–1920, and was one of Norway's foremost politicians in the early 1900s. Knudsen was an engineer, industrial owner and ship owner, and he took an interest in the industrial opportunities of hydropower. As a politician, he was concerned that hydropower was a national resource that could raise the worth of communities. The concession laws passed in Knudsen's period in office as prime minister introduced strong state control of the utilisation of hydropower. This legislation actively paved the way for public ownership (painting by Emanuel Vigeland 1921).

society, foreign participating interests began to acquire waterfalls on a grand scale. At the same time that Norway gained political independence, the fledgling nation was in the process of losing control over key economic resources.

In 1906, the purchase of waterfalls triggered a resolute backlash that took the form of Norway's Panic Act, a temporary piece of hasty legislation that introduced a requirement of state approval of the purchase of waterfalls by foreign interests. The Panic Act formed the basis for a series of laws enacted over the next decade, all of which were passed to regulate the ownership and utilisation of hydropower. One important feature of this legislation, collectively termed Norway's Concession Act, was that it gradually also introduced the requirement of state approval of private Norwegian purchasers. At the same time, this legislation paved the way for public ownership, among other things, since municipalities enjoyed a number of benefits compared with private parties. In addition, the laws included provisions concerning the so-called right of reversion, which meant that private hydropower rights were to be transferred at no charge to the state after a certain number of years. This opening up for public ownership was not only a way of securing national ownership; it was also an expression of a notion that hydropower resources belonged to society, and that public ownership was the best way of ensuring that society benefitted from this resource.



The hydropower industry in Norway is shrouded in many strong economic and political interests, at the same time as management of this resource symbolises for many people something genuinely and positively Norwegian. It is no coincidence that as early as the beginning of the 1900s



this resource had been termed "Norway's family silver" – family silver being something that follows a family through generations, carrying with it an economic and emotional value. Norwegian politicians at the time viewed hydropower similarly, and many people, including the general public, still view this resource in the same way. In a major opinion poll conducted in 2004, two-thirds of those polled wanted public ownership of Norway's hydropower resources, while one per cent was positive to foreign ownership.⁹

What is crucial is that attitudes like these impose clear restrictions on what the power industry can allow itself to do without being thought of as endangering national interests. This applies in particular to Statkraft, since it manages such a large part of the nation's resources, and also has an international role.

THE STATE'S HISTORICAL ROLE IN THE SUPPLY OF POWER IN NORWAY

In historical terms, the fundamental social importance of the power supply system has meant that the public sector has played a key role in this sector – always as a regulator, but often too as an owner. In many European countries, the power supply system was monopolised by the state after the Second World War.¹⁰ In other countries, the state has been one of several owners, be they private or public parties. Only in a few European countries, such as Denmark, Belgium and the Netherlands, has there been no direct state ownership whatsoever. In Belgium, private owners have dominated, while in the Netherlands and in Denmark it has been the municipalities.

In Norway, state ownership was relatively insignificant before the Second World War. In 1945, the state owned just over ten 10 cent of total power production facilities, with the remainder being distributed relatively equally between private parties and municipalities. The large private share of ownership had chiefly occurred before the Concession Acts had been passed, and was concentrated on a small number of large-scale power-dependent industrial enterprises. After that time, municipalities in particular had developed hydropower plants. Up until the beginning of the 1920s, the municipalities invested heavily in local hydropower plants and distribution systems, and this investment contributed most significantly to Norway's position as the world's most electrified country.

Municipal expansion continued after 1945. During this period, however, the Norwegian state came to play a far more significant role. In the 1950s and 1960s, the Norwegian state developed a series of major hydropower facilities in many parts of the country, gradually becoming by far the largest power generator. By the mid-1960s, the Norwegian state owned almost one-third of total production capacity, while the municipalities together owned around 55 per cent. This distribution of ownership has since remained relatively stable.

22



During the period between First and Second World War, electricity was the epitome of modern and future-oriented society. This mural by Norwegian artist Per Krogh adorns the old premises of Oslo municipality's energy company and is an eloquent expression of this tendency. For the first part of his life, Krogh lived in France, where he was a student of Henri Matisse. Krogh later painted, among other works, the colourful wall mural in the UN Security Council Chamber in New York.

Even though the Norwegian state increased its ownership share, the plan was not to make this position as large as possible. The intention was that municipalities would remain the mainstay of local electricity supplies. Essentially, the state would only be responsible for such tasks for which the municipalities were unable or unwilling to assume responsibility. It could be said that the state's role was to compensate for or to complement the municipalities' position, not to challenge it or replace them, and this was generally what happened in reality.

Three tasks in particular came to be of key importance for the state. First, the state was assigned the task of ensuring a fair geographical distribution of the benefits of hydropower. The state would develop power with a view to supplying municipalities and regions that either had no major hydropower resources or lacked the financial

wherewithal to invest in hydropower developments. In brief, the state was to distribute hydropower assets between rich and poor areas and between areas with abundant and limited hydropower resources. As a result of this objective, the state focused in particular on the development of hydropower plants in the most northern part of Norway, where the electricity supply was not well developed and where the municipalities' financial situation was weakest.¹²

Second, the state had a particular responsibility for developing major power transmission lines linking local and regional power grids. In the 1950s and 1960s, the state invested heavily in the development of such transmission lines, the result of which was that almost the entire country had been integrated into one common power distribution grid. Two motives in particular fuelled the desire for such integration. First, this helped provide a more stable power transmission system, since local and regional companies would be able to obtain power from a larger system at times when there was a deficit of power or they were experiencing production problems in their own grid. Second, large-scale systems provided an opportunity for an overall more efficient electricity supply, through what is known as "coordination." Power generators could channel electricity into the main grid when they had a surplus of electricity, and receive power when they had a deficit. This means that surplus energy that in a small, isolated system would otherwise go to waste could instead benefit others. Coordination yielded particularly large gains in hydropower-based systems such as the Norwegian system, since nature is unpredictable, often with major variations in precipitation levels between regions and areas of the country.¹³

Finally and importantly, the state had a particular responsibility for developing and delivering inexpensive electrical power to energy-intensive industrial enterprises. This politico-industrial function was one cited by the Norwegian Labour Party, the dominant political party for a large part of the after-war years. The Labour Party was concerned with promoting the development of industry, and in this context particular focus was given to promoting energy-intensive industry, where hydropower gave Norway perhaps its greatest competitive advantage. In the 1950s and 1960s, the Norwegian state entered into comprehensive and very long-term power agreements with a number of energy-intensive industrial enterprises on particularly favourable terms. Over time industrial customers came to lay claim to around half of all electricity generated by the state. Due to the long-term contracts, this share remained more or less stable until the year 2000. 14 Furthermore, the last politically agreed contracts from before 1992 did not expire until 2011.

In principle, liberalisation of the energy sector and reorganisation of Statkraft as a state enterprise at the beginning of 1990 put an end to Statkraft's traditional tasks. In 1992, the main grid was organised as a separate state enterprise. Statkraft would no longer have any distributional function or any special responsibility for

24



Norwegian hydropower builders could not suffer from vertigo. This picture is from the Glomfjord power plant in Nordland county, northern Norway, which was built around 1920 and was one of the state's first power plants. Plant construction was begun by private developers, but the state acquired the plant in 1918 and completed the development. The picture shows the pipeline that channels water from the intake reservoir, down to the plant itself.

energy-intensive industry. Some characteristics of the old system stuck with the company for quite a while. Among other things, many politicians still felt that Statkraft had a particular responsibility for securing inexpensive electricity for energy-intensive industries. This question would provide a number of challenges in the relationship between the company's management and politics.

Further, the company's historical function had a significant impact on which growth strategy the company would pursue following liberalisation, not only domestically but also internationally. One product of the historical sector structures was a clear division of labour, with the state on the one side as a pure producer and wholesale company, while the municipalities reigned supreme in terms of regional and local distribution. As we shall see in this book, Statkraft largely continued as such also after liberalisation, partly because it was in this area that the company had its strength, and partly because it had no experience of downstream operations. For this

reason, Statkraft has not become heavily involved in such operations, particularly not outside of Norway. Succinctly stated, Statkraft has remained a highly focused company after liberalisation.

AN ORGANISATION LACKING AN IDENTITY?

State-owned power companies in Europe frequently secured a dominant position in the sector. This was only natural for national state monopolies, but state enterprises with no monopoly also achieved a very strong position. In Sweden, Vattenfall gained considerable power over the rest of the industry. Among other things, Vattenfall set the standard for what electricity should cost, and the company was entitled to take over local power companies that were unable to comply with these standards. In Italy, Enel found itself in a similar position, which over time meant that the company acquired most of the country's private and municipal electricity supply. In Spain, the state enterprise Endesa became the dominant player in the post-war years. These positions were an expression of the companies having, or having managed to develop, a great deal of political legitimacy. In France, EdF, the state monopoly, gradually became the pride of the nation. Vattenfall gained a similar position in Sweden, the same applied to the partially state-owned regional power companies in Germany. In turn, these positions often resulted in strong corporate structures.

In Norway, there was a good deal of uncertainty regarding the state's involvement in the power sector. For one thing, there had long been political scepticism to the role of the state as a supplier of electricity to energy-intensive industries. This role was strongly linked, and rightly so, to the Norwegian Labour Party's plan-oriented industrial policy, with which most non-socialist parties were unwilling to be associated. And even though the state assumed more roles than supplying electricity to energy-intensive industries, this was the role many people primarily associated with state operations.

As well, several fundamental political and institutional structures in Norway restricted the state's role and power in the sector. More so than most other countries, Norway had had a decentralised power system even since the 1800s. Municipalities had enjoyed a wide range of political and financial freedom and rights, and there was no real tradition for state interference in local interests. As mentioned earlier, within the power sector the municipalities had held a strong position from an early stage, and this was a position that had always found broad political support. It had never been a topic of discussion in Norway that the state should challenge the place of the municipalities in this sector. It is also partly in such a perspective that we must understand the state's role in this sector as primarily compensatory. Further, one should take into account the fact that the municipal part of the sector has generally been sceptical to state involvement, particularly if this would represent a threat to the

Industry and nature in brotherly harmony. This picture shows the settlement Sunndalsøra in Møre and Romsdal County, with an illuminated Hydro aluminium Sunndal plant at the centre. Hydro aluminium Sunndal plant, owned by Norwegian industrial company Norsk Hydro, was a direct result of the Labour party's industrial policy after the Second World War. The state built a large hydropower plant here with the goal of attracting energy-intensive industries to the region. It resulted in the state itself building an aluminium smelter on site, partly funded by loans from U.S. authorities. During the early stages of the Cold War, the Americans were concerned about securing access to aluminium, and the loans were partially repaid with aluminium. In the 1980s, Norsk Hydro took over the plant, which today is Europe's largest aluminium smelter.

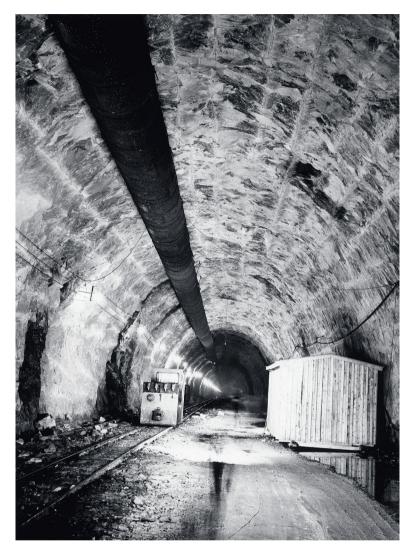


municipal companies' autonomy, and it has been important to stop such involvement. This is an attitude that has garnered considerable political sympathy throughout the post-war years, and is one that has survived well into the era of the liberalised power market.

In Norway, the state's involvement in the power sector thus caused a certain amount of political tension, which in part explains why operations were also subject to what is probably stronger and more direct political control than that experienced by similar companies in other countries. The reader may have noticed that in this section we have not yet spoken about Statkraft; rather we have spoken of "the state's involvement in the power sector." The reason for doing so is that this involvement was not actually organised as an independent company until 1986, and that this was the first time the name Statkraft was used. Before this time, the state's development of the power industry and sales of electricity had been placed under the Norwegian Watercourse and Electricity Directorate, or NVE. The NVE was the Norwegian state's overarching administrative body for the electricity sector, and here the development and operation of power production - those business areas that would later become Statkraft - were just one of its many areas of responsibility. Development and operations were admittedly organised in 1960 as a separate sub-directorate within the NVE under the name Statskraftverkene, but Statskraftverkene was also placed under the watchful eye of the NVE's senior manager, the director general, who had many other areas of responsibility. Statskraftverkene was not granted any financial autonomy either. Its funding came from the national budget, as had always been the case, and as such it was, in principle, a purely political affair. Furthermore, it was the Norwegian parliament, the Storting, that at all times decided how the state's electrical power should be used, and more importantly, what its price should be. This system remained in place right until Statkraft was restructured as a state enterprise in 1992.

One important consequence of this organisation and control was that operations developed a distinct organisational identity to only a limited extent. Through the extensive hydropower developments that took place over a number of decades, it is true that a high level of technological expertise was developed, and in many areas Norway led the world in this respect. NVE was responsible for most of the very large and spectacular Norwegian hydropower projects, and through these projects it became an international leader in the field of tunnelling and dam-building, for instance. Over time the Norwegian state also developed extremely advanced models for the operation of hydropower systems – systems that would also prove highly valuable in a market-based power system. Nevertheless, this was expertise and technology that was not associated with a distinct organisational identity; rather it is first and foremost linked to the general mandate the Norwegian state and the NVE had in

28 BEYOND BORDERS



World-class rock blasting. After the Second World War, the Norwegian state became a major developer of hydropower. The developments were mainly led by the state's own hydropower organisation Statskraftverkene – the predecessor of today's Statkraft. Large-scale building activities led to Statskraft plants obtaining great expertise in niches such as rock blasting and dam building. The tunnel in this picture is at Tokke power plant, which was built in the 1950s. Statskraft's tactical engineers were so proud of the result that this photo was distributed to sister organisations worldwide.

this sector. This mandate involved ensuring that the nation's hydropower resources were developed to the benefit of Norwegian society. It was not a political objective in itself that the state should develop these resources. Nor was it a strong objective in itself to support Statskraftverkene as such. No distinctive political or general pride existed about the *organisation* Statskraftverkene.

In sum, Statkraft never achieved the role of national champion that was enjoyed by many power companies in Europe after the Second World War. This fact is also important to the subject matter of this book, since internationalisation after 1990 also required willingness on the part of the owner to focus on and develop the company into something more than a tool with which to attain national objectives. In later chapters, we will explore this dilemma more closely.

A DIFFICULT BIRTH

The Norwegian state's involvement in the power sector was first organised as an independent company in 1986 under the name Statkraft. This transition was not carried out in order to build a stronger organisational entity or to boost political independence; rather it was primarily done to ensure improved financial management. Statskraftverkene did not have its own separate accounts. Instead it had been part of the NVE's total operations. Nor had there been any great

focus on operating results, particularly not in the technical divisions. Over time it almost became customary for the entity to exceed its budgets during the course of the year, which resulted in the ministry having to approach the Storting to request more funds. In the first half of the 1980s, operations posted a severe budget overrun in respect of a couple of specific projects, and both the Norwegian Ministry of Oil and Energy and the Storting gradually wished to put a stop to this sort of situation. By establishing an independent company, the entity's financial matters would become more transparent and be strengthened.²⁰

It was clear that the transition to an independent company would be a tough one. For the company itself, the process was probably even tougher than expected. If one looked at the operating results, Statkraft appeared to be a very bad business. In its



At long last an independent company. In 1986, the Norwegian state's power development and production operations were hived off from the Norwegian State Watercourse and Electricity Board and organised as an independent company under the name Statkraft. Pictured here is the management group of the newly created company. Front, from left: Finance director Helge Skudal, director of operations Ola Gunnes, director of organisational affairs and personnel Reidar Karlsen. Rear, from left: Director of planning Ingvald Haga, director of construction Tor Vinje and chief executive officer Gunnar Vatten. With the exception of Helge Skudal, all of these men had previously worked within the organisation. Skudal would remain part of the company's management far longer than everyone else, however. He remained finance director until 2001, and held a key position in the company's management group throughout the demanding period of restructuring that the company underwent in the 1990s.

first year of operation, 1986, the company posted a loss of more than half a billion kroner. One year later, this deficit had doubled. And in 1988, the company ended up with losses of almost NOK 1.3 billion. Not surprisingly, this attracted a lot of negative attention. Among the general public, who now had tangible annual accounts to look at, the company was presented as a loss-maker and a giant out of control. In some sectors of the political environment, particularly on the conservative side, this situation was interpreted as an expression of the weakness of state business enterprises. The Norwegian Conservative Party even went so far as to demand the partial privatisation of the company, so that the Norwegian state would no longer be saddled with all the responsibility. 22

These deficits were partly related to a lack of cost control and awareness, even though this was not the main reason. The problems encountered were also due to the

framework conditions under which the company was working, more specifically how the company's accounts were kept and how the company was taxed, how the energy market developed during this period, and which opportunities the company had to handle changes in this market.

Concerning the rules regarding taxation and depreciation, Statkraft was not taxed on its operating results, but instead on the value of the company's assets (reducing balance method of depreciation). As such, a bad year had no bearing in principle on how much tax the company would have to pay. For Statkraft, this was particularly unfortunate, since the company's operations were so capital-intensive. The company's assets, and its level of taxation, would therefore always be high. The outcome of this system was particularly evident towards the end of the 1980s, when Statkraft both posted historically poor results and was subjected to a historically high level of taxation.²³ Further, the company fared poorly from the rules governing state depreciation, which had relatively short depreciation periods. Under the rules, state investments were to be written down by 50 per cent over the first nine years, a practice that meant particularly capital-intensive operations such as power developments would have to take such write-downs at a very early stage, which also had an extremely negative effect on Statkraft's operating accounts. In many respects, the company's tax and depreciation rules deviated quite severely from "normal" principles, which resulted in a certain amount of frustration. "We wish to be taxed more in line with private businesses," said Helge Skudal, Statkraft's finance director, to business newspaper Dagens Næringsliv in 1988.²⁴ Skudal, who himself had been with the company for barely two years, was faced with a doubly demanding task. He had to tighten the reins within the company and personify the company in its dealings with the outside world. And as the 1980s were drawing to a close, this was no easy task.

Statkraft's deficits grew even larger due to the difficult market situation that arose towards the end of the 1980s. Following several years with high precipitation levels, the Norwegian system produced a large surplus of electricity. This meant that both Statkraft and many other power generators were stuck with a lot of electricity they were unable to sell. Consequently, a number of companies reduced their prices and sought new customers and markets outside their own monopoly areas. In reality, this represented a break with an old and well-established norm in the industry that power companies should not compete in each other's domains. With the growing problem of finding markets for surplus electricity, this norm came under a great deal of pressure, and as a consequence there emerged what some called a "grey" market – grey because it represented a break with established norms but was nevertheless not forbidden. ²⁶

In this situation, many companies lost money. Statkraft was particularly unfortunate, however, for two reasons. First, the company was a pure wholesale company

and therefore, unlike most other companies, it was not in a position to rely on a stable end-user monopoly. Second, the company was unable to use price as a competitive tool. Whereas most other municipal and private companies determined their own prices, the Storting was responsible for fixing Statkraft's prices. Statkraft was therefore unable to compete on price. In a market characterised by a glut of surplus energy, increased competition and falling prices, this meant that state energy was of no interest, and that Statkraft was stuck with huge amounts of surplus power.

The real crunch in this context came in the spring of 1990, when a large portfolio of contracts with municipal companies was being renewed. Many of these companies had been customers of the state for many years, and the renewal of contracts had been virtually automatic. In 1990, most of these companies took their leave.²⁷ The reason for this was that the prices offered by the state were too high, and it was now possible to buy electricity at far more favourable terms from a wide range of sellers. As one could read in the company's own annual report for that year: "Our new contracts offered to electricity distributors under parliamentary and ministerial constraints were not positively received in the market. Surplus power from power-intensive industries and country-wide wholesalers was offered at a price 10–15 per cent below the Statkraft price on terms of from three to 10 years."²⁸

For Statkraft, these problems brought the company into a self-fulfilling vicious circle. Since the company was unable to sell electricity on a contract basis, it was forced instead to sell it on the national coordination market, a market where producers were able to sell surplus energy. The glut of energy available, however, meant there was little interest in such electricity and prices were therefore extremely low in the period around 1990. Prices fell even lower when the largest power generator in the country was forced to pump huge amounts of electricity into this market. Consequently, a large part of Statkraft's production was on sale at bargain prices, and the company's revenues fell sharply, as evident in Table 1.1 below. The table shows that revenues per sold TWh dropped considerably after 1987, generally considered to be the last "normal" year of the 1980s.

Tabel 1.1: Production and turnover Statkraft, 1987-1991

Year	Production (TWh)	Revenues (NOK millions)
1987	35.1	4,464
1988	39.3	4,251
1989	47.6	4,733
1990	45.1	4,226
1991	36.6	3,802

Source: Annual reports for the respective years

What actually took place during these years was a considerable transfer of assets from Statkraft, and therefore the Norwegian state, to the rest of the industry. We can say this because it was essentially other companies that purchased the cheap electricity that the Norwegian state sold cheaply in the coordination market. In turn, this meant that these companies were able to outcompete Statkraft with electricity that in practical terms was the company's own electricity. It is important to emphasise that in reality it was not much Statkraft could do about this situation. So long as the company had no opportunity to determine the price of electricity, it was unable to act in the same way as the rest of the industry. Naturally, Statkraft asked the ministry to give it more influence over the process of price determination, but this request was not honoured.

AN UNCERTAIN FUTURE

Although the economic problems experienced in the period around 1990 were serious enough, they did not threaten the company's existence. Among other things, more normal precipitation levels, or a dry year, could have led to increased revenues. Other circumstances gave rise to greater concern about the future. As the 1980s progressed, the Norwegian hydropower adventure began to wane. There were simply not much more hydropower resources left to develop, and what was left was increasingly more difficult to obtain permission to "put in pipes." Norwegian society could afford, and wanted, to leave waterfalls untouched, and did so to an increasing extent. For Statkraft, which had by far the greatest planning and development organisation in the country, this situation was particularly demanding. What would these environments do in the future?

Stagnation set in quite suddenly, since several major projects were concluded at around the same time. In 1988, Statkraft laid a final hand on four different developments, including Alta in Finnmark and Ulla-Førre in Rogaland. The only new projects on the table at this point were Svartisen and Beiarn, both in the county of Nordland. The latter was shelved until further notice, however, owing to the huge surplus of electricity, while Svartisen was scaled down for the same reason. In 1989, Statkraft's management expected to see a fall in investment activity by more than 50 per cent over the next five-year period – an estimate that would later prove to be far too optimistic.³¹

Generally speaking, Statkraft's management was faced with two alternatives. It could dismantle its technical divisions in line with the reduction in development projects, or it could attempt to develop new assignments and markets. Initially, it chose a strategy of doing both. Already in 1988, the company reduced its pool of construction workers from around 2,000 to just over 1,000.³² These individuals were primarily contract workers on construction projects that had ended that year.



Virdnejávri dam in Finnmark is the reservoir for the Alta power plant, which was state built and put into operation in 1987. The Alta development is Norway's most controversial power plant construction and sparked, in its time, strong protests. It was particularly controversial because it was located in the middle of Sami nuclear-protected areas. In addition to the environmental interventions that development would involve, there was a great fear that it would destroy the reindeer husbandry area, which was the main livelihood of the Sami people.



"Hunger strike!" reads the slogan in this picture. On Monday 8 October 1979, a group of Sami protesters erected a tent on the square in front of the Norwegian Parliament. Their protest was a message to Norway's prime minister and the president of the Storting about development of the Alta power plant. At the same time, a hunger strike was initiated. The protest received great public attention and sympathy both nationally and internationally, especially after police were deployed against the demonstrators. The impression many had was that the Norwegian authorities overran the indigenous population, and at the height of the protest, the people's campaign against development of the Alta-Kautokeino watercourse had over 20,000 members. The protests made a strong impression, but the development was still carried out. The case, however, highlighted Sami rights, which were substantially strengthened afterwards.

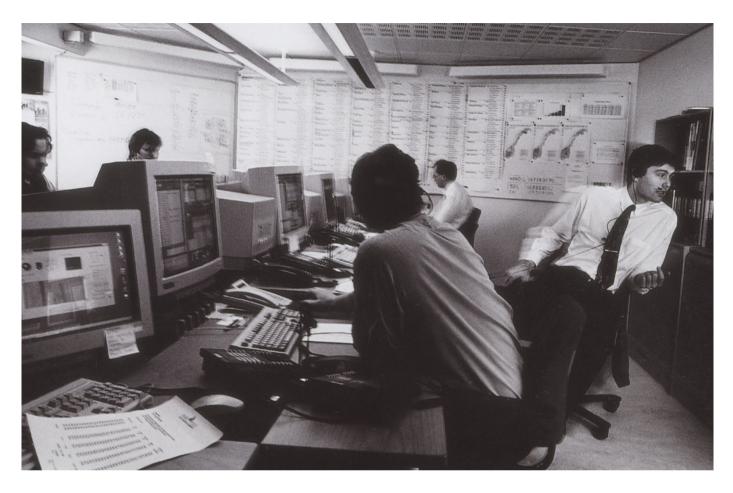
However, staff members in the planning and project department also lost their jobs, initially through natural wastage. Since a considerable share of the staff were older, quite a number of positions would come to disappear in the ensuing years.

There were limits, however, as to how far the company could and would wish to pursue such a route without also affecting existing operations. Statkraft's large portfolio of hydropower plants would require rehabilitation and rebuilding, and this would still require a regular highly competent staff. Added to this, the company had a central position as a knowledge base for other companies and environments in the sector, or, as stated in the 1990 report: "For Statkraft and for Norwegian society, it is necessary to ensure expert knowledge for future assignments relating to hydropower plants." A dismantling of the Statkraft organisation, therefore, would not only threaten the company, it would also threaten the entire Norwegian hydropower environment, an environment with long and strong traditions and one that was a gathering force in the eyes of many and a world leader in its field. In brief, the future of one of the country's leading technological environments was on the line. It did not help much, however, if the environment had too little to do. Consequently, new assignments had to be created.

NEW ENERGY LEGISLATION AND A NEW ORGANISATIONAL REFORM

We have now touched on the two most important driving forces behind Statkraft's early international orientation. Major surpluses of electrical power meant that in the years around 1990 Statkraft began to work resolutely to find customers outside Norway, a strategy we will explore in greater depth in the next chapter. The slowdown in hydropower developments in Norway meant in turn that the company began to seek out hydropower projects abroad. The results of this focused effort are something we will return to in Chapter 3. Both of these strategies must also be seen in the light of three important events in this period, however. First, the introduction of new energy legislation in 1991, which paved the way for a more market-based electricity supply; second, the restructuring of Statkraft as a commercial company in 1992; and third, the establishment of a new management group that same year.

In some parts of the public administration, one had long been critical of the power sector's zeal for investment. Particularly in the Norwegian Ministry of Finance, it was claimed that there had been an overinvestment in hydropower, and that this had led to poor profitability and to electricity prices that were too low. This, in combination with a monopoly-based system, meant that neither capital nor electricity was being utilised efficiently and effectively. The major surpluses of power and low prices that prevailed at the end of the 1980s confirmed in many ways the ministry's opinion. Combined with an increasingly stronger general emphasis on improved

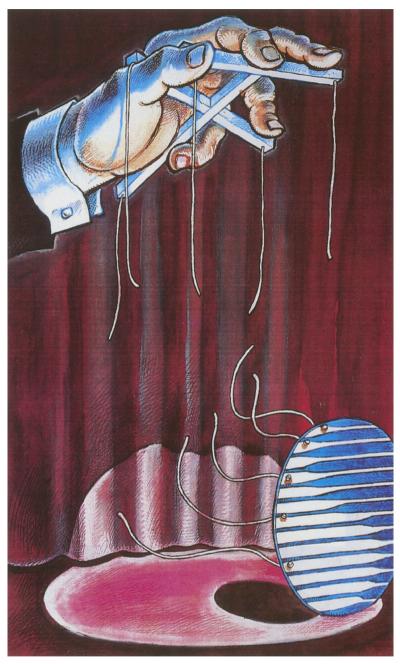


efficiency in the public sector, this meant that the power sector came under the scrutiny of reform-hungry powers within the public administration. In 1988, a project funded by the Ministry of Finance was initiated to look at alternative models for organisation of the sector. This project, which was essentially carried out by economists at the Norwegian School of Economics, culminated in a recommendation to introduce more market forces and competition in the sector. A more efficient electricity supply would be enforced by dismantling the power companies' monopoly positions and opening up the market so that everyone – both households and companies – would be able to purchase electricity from whichever supplier they wished. In addition, one would pave the way so that the power companies would have to change their financial objectives from developing and selling electricity inexpensively to earning as much money as possible. The introduction of profit motives would make the companies more critical to how they used their resources.

These principles formed the core of the new Energy Act that was passed by the Storting in the summer of 1990. The story of how this legislation came into existence

This picture is of Nord Pool, the world's first supranational power exchange. Norway introduced markets and competition in the power sector at a very early stage. It happened as early as 1991. In 1996, Sweden followed Norway's example, when the Norwegian and Swedish authorities agreed to establish a common energy exchange. Nord Pool entered the picture 1 January 1996. The Nord Pool Stock Exchange has emerged as a role model, and countless delegations from around the world have visited the company to learn how national and international energy markets can be organised.

36 BEYOND BORDERS



The message in this illustration, which is from Statkraft's 1990 annual report, is unequivocal: Statkraft will no longer be a politician's puppet. Although Statkraft became an independent company in 1986, political control of the company's operations continued. When the electricity market began to change towards the end of the 1980s, this control was perceived as an important reason why the company posted increasing deficits. Statkraft's management believed that freedom to act commercially was needed to reverse this trend.

is comprehensive and complicated. For this reason, we will not elaborate on this any further here and now, apart from stating that this legislation gave Norway the world's most liberalised power sector.³⁴ At this time, only the United Kingdom had introduced similar legislation, while some other countries had taken certain steps in the same direction.³⁵ The Norwegian Energy Act was also more radical than the UK legislation with regard to opening up the market. While the United Kingdom had initially only opened up to competition at the wholesale level, consumers were still tied to their existing suppliers. In Norway, larger consumers were, in principle, able to purchase electricity freely in the market from day one, as soon as the legislation had come into force on 1 January 1991.

Naturally, the new Energy Act brought with it major changes for the country's power companies, who had to begin operating like ordinary companies in an ordinary market, where their job was to sell electricity at the highest price possible. However, this required significant adjustments both organisationally and mentally, both within the company and among the owners. The vast majority of Norwegian power companies were organised as directly politically-controlled administrative entities, a model that did not suit companies that were required to act commercially. For this reason, many companies were restructured into more commercial organisations, first and foremost limited liability companies. Politics and business became more separated from one another - an important division, since most companies remained under public ownership after the market reform. In this respect, the Norwegian reform also differed strongly from the British one, where liberalisation was followed by extensive privatisation. The Norwegian market reform contained no objectives regarding privatisation.

THE LEGACY 37

For Statkraft, this market reform resulted in the company's transformation into a state enterprise, as a kind of political compromise. Politically, a fair amount of tussling had occurred with regard to how the company should be organised. Among other things, Norway's Conservatives wanted to transform Statkraft into a limited liability company. The Norwegian Labour Party, which was in power at the time, also wanted to give the company as much commercial freedom as possible but was also at pains to ensure that ownership remained in the hands of the state. Transforming Statkraft into a limited liability company would make it easier to privatise the company at the next crossroads, if there was a desire to do so. For this reason, a new form of company called a state enterprise was devised in connection with the liberalisation of Statkraft. This form of company had virtually the same managerial structure and commercial freedom as a limited liability company but was at the same time strongly tied to the state through its ownership. The State Enterprise Act established, among other things, that state enterprises could not be sold. Unlike ordinary limited liability companies, state enterprises could not go into receivership either, since the state as owner was a guarantor for any debts or other financial liabilities incurred by the company.

The changeover to state enterprise, which occurred, effective 1 January 1992, meant that for the first time ever Statkraft became an independent legal entity with full responsibility for its own finances. The price of the company's electricity was no longer to be determined politically, and the company would now be able to determine how the electricity generated was to be managed. The formal framework for a commercially based Statkraft was in place. In order to function as a commercial enterprise, however, mental and cultural adjustment was also required in this vast and traditional organisation. And this was something that the company's new management would have to arrange for and facilitate.

NEW MANAGEMENT IN A NEW ERA

Since its demerger from the Norwegian Watercourse and Electricity Board (NVE) in 1986, Statkraft had been chaired by civil engineer Gunnar Vatten. When Vatten took over the helm at Statkraft, he had enjoyed a long career at the NVE, and had worked most recently as director general at the Norwegian Ministry of Oil and Energy. Through these positions, he had developed quite a large network within the public administration and in politics. Within the Ministry of Oil and Energy, however, it was not felt he was the right person to lead Statkraft into a new era. He was considered a defender of the existing system, an impression that was strengthened during Statkraft's restructuring process in 1991. Among other things, Vatten had worked against the ministry in the question of the demerging of Statkraft's central grid system. The central grid system was crucial in a market context, and in order to achieve

Gunnar Vatten, Statkraft's first CEO. Vatten led the company from 1986 until 1992, but did not have an easy job. This period was one of major upheaval in the power sector, for financial reasons over which the company did not have full control. At the same time, this was the period when the company's very foundations were seriously challenged as the era of hydropower began to wane. What was a pure hydropower company to do when there were no more hydropower resources left to develop?



38



In the summer of 1991, Hans O. Bjøntegård was appointed as new chairman of the board of Statkraft. Bjøntegård had a lot of experience from Norwegian and international business, and the appointment was a clear expression of Statkraft's desire to operate commercially. Bjøntegård was chairman throughout the 1990s.

the best possible and well-functioning system of competition, the ministry wished to have freestanding, independent ownership of this system. Vatten felt, however, that demerging this system would be detrimental to Statkraft's interests, and he fought against the ministry in this matter by, among other things, attempting to raise political resistance to the system's demerger. In any case, when his period of tenure came up for renewal in early 1992, the ministry wanted a new broom in place. Vatten, who was interested in continuing, was informed that this would not be possible, and Statkraft's board of directors was notified that it needed to look for a new candidate.³⁶

A relatively new board of directors at Statkraft was charged with the task of finding Vatten's successor. In 1991, as part of its preparations for the changeover to state enterprise, the ministry had replaced virtually the entire board of directors. The new board was composed of candidates without ties to politics or the public administration. Engineer and business manager Hans O. Bjøntegård was appointed to the post of board chairman, and he was joined on the board by Gerd Halmø, Britt Solvik, Per Terje Vold, Gro Brækken and Anders Eckhoff, Eckhoff, one of Norway's foremost corporate lawyers and a man who often was appointed board representative, also had many assignments for the Norwegian state, particularly as someone who sorted out state-owned problem companies.

In its search for a new chief executive officer, the board had several ideal candidates in the Norwegian corporate sector. None of them felt the call to accept the challenge, however. Late in 1991, the board was left with one candidate from the public administration – secretary general Lars Uno Thulin from the Ministry of Industry and Trade. Some members of the board were sceptical of hiring a bureaucrat. However, as stated in the final recommendation, Thulin had a strong desire for the job.³⁷ And, if one reviewed Thulin's career, it quickly became clear that he had also been so much more than a mere bureaucrat.

Aged 53, Thulin had had a broad and comprehensive career. A graduate civil engineer from Norway's College of Science and Technology in 1965, he had worked for several years as a researcher. In 1971, he took his doctorate in chemistry, achieving very good grades. In the years after his studies at Norway's College of Science and Technology, he had made his mark as a relatively active member of the Norwegian Labour Party. In the mid-1970s, his political interests had brought him to the Norwegian Ministry of Education and Church Affairs as state secretary under Bjartmar Gjerde, and later on to the Ministry of Industry and Trade. At the end of that same decade, he ended his political career, however, moving instead to the stronghold of capitalism, to the Norwegian bank DnC, where he was given responsibility for the bank's industrial financing. Thulin distinguished himself so much that he gradually advanced to the top of the hierarchy to become the bank's vice president. Thulin's area of responsibility was the bank's international lending operations, an area that

THE LEGACY 39

would become quite extensive as the 1980s progressed. His work took him to the financial metropolis of London, where he lived and chaired DnC's British subsidiary bank for a large part of the late 1980s.

Thulin had broad experience of business, including international experience, a fact reflected in his thoughts, words and deeds. In a portrait interview in Norwegian financial daily *Dagens Næringsliv* in 1988, while stationed in London, Thulin declared himself a "defender of sheer capitalism." Further, it was claimed in the interview that he thrived among the harsh competitive spirit prevalent in the financial metropolis. "London is no place for training or rewarding co-workers. It's a market characterised by extreme competition, but there's nothing more exciting than that," he told the newspaper's readers. His international side came clearly to the fore, too: "It is exciting sitting in a financial capital where we can all feel the pulse of the world economy. It's quite fantastic, not only being in the City, but being part of the City."

If we allow ourselves to anticipate events a little, it is widely held when looking back that Thulin was the right man in the right place at the right time. Among those who worked most directly with him – group directors and others in key positions – this perception is virtually undisputable. The prevailing feeling is Thulin was precisely the person with the qualities needed to succeed in tackling the challenges the company faced in its restructuring process in the 1990s. Among Thulin's qualities, particular mention is made of his professional acumen, analytical capabilities and intellectual capacity that exuded authority both within the organisation and outside. Further, he is praised for being a clear, decision-oriented and resolute manager who was able to point the company in the right direction. This means, among other things, focusing uncompromisingly on commercial aspects – ensuring that everything one did would be profitable. This is something Thulin made very clear from day one. As well, importance is attached to Thulin's ability to forge international relationships, where his intimate knowledge of international arenas played a key role. In short, Thulin stands as the father of modern Statkraft and its uncontested leader.

Along with Thulin followed considerable changes in the rest of Statkraft's management Group. The only person to make the transition from the old to the new management group, was CFO Helge Skudal. Skudal had been a member of the management since he came to Statkraft in 1986,⁴⁴ and he continued as CFO in the new Thulin-group. During the first couple of years, virtually the entire group from Gunnar Vatten's epoch was replaced, essentially by individuals recruited from outside the company, some of them at the direct initiative of Thulin himself. Among these new individuals were Bjørn Blaker, a civil engineer, who in 1992 was appointed director of the market division. Blaker's background was from the ABB Group, and he had made Thulin's acquaintance when Thulin had been secretary general at the Norwegian Ministry of Industry and Trade.⁴⁵ Finn Quale, who in 1993 was brought in and assigned



At the beginning of 1992, Lars Uno Thulin was appointed Statkraft's new CEO. He would lead the company for almost 10 years, and is considered by many to be the "father" of modern Statkraft. Thulin combined a professional acumen and strategic skills with strong personal authority. He also had a strong international focus, was extremely good at building relationships, and was above all others the person who provided the basis for Statkraft's transition into an international company.

responsibility for organisation and human resources, also knew Thulin from earlier. Quale was also a civil engineer, but had worked mostly in organisation and management. The fifth and last new member of the management team was the young civil engineer and former McKinsey consultant Christian Rynning-Tønnesen, who joined the company in 1992, and two years later was appointed senior director for "Power NorthernEurope". As a consultant, Rynning-Tønnesen had primarily worked on energy-related issues, and had over several years been involved in a variety of assignments for Statkraft. In the spring of 1992, he was appointed to the position of strategic manager in the company, advancing to senior management two years later⁴⁶. These four men remained in place throughout Thulin's period as CEO, until the autumn of 2001. Rynning-Tønnesen's career in Statkraft continued after Thulin's time as CEO. He remained part of Group management under Thulin's successor, Bård Mikkelsen, who took over in 2001. And in 2010, after spending several years outside Statkraft, he returned to the company to take up the position of CEO. Rynning-Tønnesen will thus be remembered as a key individual in the history of Statkraft after 1990, and as someone who played a particularly important role in the company's process of internationalisation. As for international operations, which grew in the 1990s, there were three people in particular who were directly involved. Thulin and Rynning-Tønnesen were particularly involved in expansion into the Nordic countries and in Northern Europe, while Blaker was responsible for hydropower operations outside of Europe. Skudal also played an indirect role in connection with these operations, too, as the person responsible for financial matters.

BRANCHES AND ROOTS

The period around 1990 marks the beginning of Statkraft's commercial and international history. Through the story told in this book, Statkraft became in many ways a fundamentally different company. From being a Norwegian administrative company, Statkraft had become by 2015 a commercial and international energy group.

At the same time, it is important to bear in mind that Statkraft's origins and history extend far back before its commercial and international era. It is essential to remember this since origins and history shape both people and organisations. Statkraft's most tangible legacy takes the form of a most fantastic and well-run system of hydropower generation in Norway, a system that to this day represents the company's financial backbone. The company's legacy is also evident as a high level of expertise in many areas. Among other things, Statkraft's successful adjustment to market conditions can largely be ascribed to knowledge and experience accrued before 1990.

Statkraft's history and legacy also include less tangible but equally important elements –elements that in part have also been crucial to the company's development

THE LEGACY 41



Statkraft's board in 1996, photographed in a rural setting in Høvik outside Oslo, at the company headquarters. From left: Britt Solvik, Marit Buch-Holm, Jon Ivar Nålsund, Halvard Kaasa, Hans O. Bjøntegård, Tom Andersen Anders Eckhoff, Gerd Halmø and Odd Vanvik. Anders Eckhoff, a business lawyer who sat on many boards, sat for a total of 11 years, from 1991 to 2002 and was one of the directors with the most prominent and critical voice during this period. Eckhoff was partly sceptical of some of international investments made in the 1990s, particularly hydropower projects in developing countries.

during its period of commercialism and internationalisation. Statkraft's history also expresses more important and fundamental values, attitudes and preferences. Statkraft's role as a major owner of hydropower has also imposed important political principles on the company, and partly too on its opportunities for international growth. Further, for several reasons the company has not enjoyed a very strong position in the political environment *as a company*. On the one hand, this has meant that Statkraft has been able to operate without fervent and ongoing interference on the part of its owner in the way listed companies often experience. On the other hand, the company has at times lacked its owner's support when taking key decisions and planning the way ahead. Particularly in the international field, such features have been evident. It is within this context that we must understand Statkraft's process of internationalisation.



For the Norwegian electricity supply system, which is exclusively based on hydropower, it is advantageous to have electrical connections with other countries. During years with high levels of precipitation, excess power can be exported, while in years with low rainfall electricity can be imported. The ability to balance the hydropower system was one of the main motives behind construction of the two sea cables – the Skagerrak cables – between Norway and Denmark in the 1970s. A third cable to Denmark became operative in 1993.

CHAPTER 2

Power exports and power exchange as commercial strategies

n the early days of 1992, the Norwegian daily newspaper *Aftenposten* published an interview with Lars Uno Thulin, Statkraft's new CEO. Under the heading "A new boss with great ambitions," Thulin was given an opportunity to speak of his objectives for the company. Attaching great importance to making it clear that Statkraft's time as an administrative entity was over, he stated that from now on the company would be a commercial organisation. "We will be interested in selling the power we have available at the greatest possible profit," was his simple and unequivocal message to the world.¹

The first part of the 1990s was not a good time for earning money on power sales in Norway, however. Huge power surpluses since the end of the 1980s had forced prices down, and prices dropped even lower after the shift to a liberalised power market in 1991. The consequences of the market reform were particularly evident in 1992. Naturally, this had major economic consequences for power generators, including Statkraft. From 1991 to 1992, the company's revenues fell by more than 25 per cent, from NOK 3.8 billion to NOK 2.8 billion, despite the fact that the company generated and sold just as much power as it had done the year before. Falling prices played a significant role in the fact that in his first year as CEO of Statkraft, Thulin posted a net loss of more than NOK 1 billion.

The difficult situation in the power market meant there was a need for innovative thinking, and one solution that attracted a lot of interest in Statkraft in the first half of the 1990s was the sale of electricity abroad. The market potential here was huge. The generation of Norwegian hydropower was extremely inexpensive and the product should therefore be appealing to companies in other countries. In addition, hydropower has several special qualities that could make it of interest to thermal power generators abroad. Unlike thermal power plants, hydropower plants are extremely flexible in the sense that they can quickly be powered up or down. At Statkraft, an idea began to form of selling regulating power to the thermal power generation industry abroad.

The sale of electricity abroad was not only determined by commercial considerations. In Norway, the term "exporting electricity" had always had a bad ring to it.

The general feeling was that hydropower was a national resource that was the reserve of Norwegian society, and that it should not be sold abroad. In reality therefore, sales of electricity abroad had been forbidden for most of the 1900s. Even though restrictions were lifted somewhat in the period after liberalisation of the power market, the sale of electricity abroad nevertheless remained a politically sensitive and regulated area. The established view of hydropower as a national resource largely persisted in the wake of liberalisation, and added to this was the question of the consequences that increased sales of electricity abroad would have on the supply and demand for electricity domestically. Politically, there was concern that the sale of electricity abroad should not lead to a tighter market and higher prices in Norway. The sale of electricity abroad was consequently an issue that concerned far more than benefits for power generators.

At Statkraft, care was taken not to challenge these attitudes unnecessarily. Among other things, Thulin was at pains not to use the term electricity exports when talking about the sale of electricity abroad. Instead, he spoke of the *exchange* of electricity, which was an important nuance, both linguistically and in factual terms. The exchange of electricity involved sales in both directions – exports and imports. The message was that two-way trading was not only a good thing for Statkraft but also for Norwegian consumers of electricity and for Norway as a nation – and it was precisely this type of trading that Statkraft planned to implement.

Statkraft succeeded in gaining acceptance for two comprehensive power exchange agreements in the first part of the 1990s. The first agreement was entered into with the German company PreussenElektra in 1993, while the second was signed one year later with the Dutch company SEP. Both agreements were to run for a full 25 years, and also included the laying of sea cables to both Germany and the Netherlands. For this reason, they are often called the "cable agreements." These agreements, the first major international efforts made in the history of Statkraft, showed that from an early stage the company had set itself the goal of expanding beyond Norway's borders. In this chapter, we will therefore dedicate quite a lot of space to these agreements. We will also take a closer look at the development of the company's energy trading in the Nordic countries. In the first half of the 1990s, a common market in the Nordic countries gradually developed. In this market Statkraft became a very active participant, and equally importantly, a player that gradually managed to earn good money.

FIRE AND WATER - HAND IN HAND

In principle, the greatest value can be derived from power exchange when it occurs between parties using different production technologies, and the very greatest value when purely hydropower-based systems cooperate with purely thermal-based sys-

tems. As mentioned, hydropower facilities can quickly be powered up and down according to consumer demand, while thermal power plants need a long time to vary output. Power exchange means that thermal power plants can be run at a more even capacity, while fluctuations in consumption throughout the day can be met by more flexible hydropower facilities. This is profitable for the thermal power generator since high and stable operations make for optimum operating economy. In addition, the need for expensive peak-load capacity can be reduced. Apart from pure sales, power cooperation also provides benefits for the hydropower producer, particularly when one, in this case Statkraft, has ample opportunity to store water in reservoirs. In such contexts, the thermal power producer can maintain a high and even production throughout the day, and at night when demand is lower, can transfer surplus output to the hydropower generator. The latter can reduce its own production and save water in the reservoirs, which can then be used during the daytime when the demand for peak load is great. Such an exchange of power, which in actual fact means transforming thermal power with a low value to hydropower with a high value, will benefit both parties.

The advantages of power exchange and collaboration between different types of production technology were not "discovered" until the 1990s, however. This was an acknowledgement of what had been done already at the beginning of the 1900s. The United States and Germany, for example, had begun at an early stage to integrate hydropower and thermal power production with a view to achieving economies of joint operations.² More important in our context is the growth of cooperation between electricity generators in the Nordic countries that began in the first half of the 1960s with the establishment of the organisation Nordel. The goal of Nordel, which comprised Norway, Sweden, Finland, Denmark and Iceland,3 was to exploit the advantages of power exchange between the different countries and production systems, Sweden a mixed hydropower and thermal-power generator, Finland a thermal-power generator with some hydropower, and Denmark a pure thermal-power generator. Consequently, there was a lot to gain from cooperating. Over time, this collaboration became quite extensive, a number of electrical cables were laid and relatively extensive international power trading ensued. For Norway's part, transnational electricity cables began in earnest with the first major cable link to Sweden in the 1960s. In the 1970s, several undersea cables were laid to Denmark – known as the Skagerrak cables.⁴ In 1988, the first cable to Finland was laid, between Varangerbotn and Vajukoski. The Swedish system was connected to the Finnish and Danish grids at an earlier stage, however, which meant that all the Nordic countries were now integrated into a joint system.⁵ Large amounts of electricity were traded over this system each year, and the aim was, among other things, to exploit the benefits of joint operations between different types of production technology.

In other words, the Nordic countries had quite a strong tradition for international power trading that began before liberalisation of the power markets. This fact is interesting for several reasons. First, the Nordel cooperation was unique in a global context. During this period, no other country or region had developed such a comprehensive and systematic form of international trading collaboration. Second, and most important in our context, the experience gleaned from this cooperation played a significant role at the beginning of the 1990s when Statkraft began to develop the idea of commercial power exchange agreements. From the Norwegian side, the Norwegian state through Statkraft was responsible for organising foreign trade, and through its position Statkraft had a lot of experience in operating jointly with thermal power systems. In order to benefit in the best way from this trade, Statkraft had over several decades developed relatively advanced analytical and operating models where thermal power constituted a key component. Insight into the technological and financial peculiarities of thermal power had been obtained through the Nordel organisation, where the leading companies from member states had routinely discussed and exchanged knowledge about technology, financial aspects and production. 6 In brief, Statkraft gleaned a lot of important knowledge about thermal power production through this collaboration, and thus also a better basis for understanding how to exploit the interaction between hydropower and thermal power. This expertise was crucial when the idea of commercial exchange agreements was launched.

EARLY POWER EXCHANGE AGREEMENTS

In the narrative concerning modern Statkraft, a quite distinctive dividing line is often drawn at the year of 1992, marked most importantly by the entity's transformation into a state enterprise and Thulin's entry as the company's chief executive. The year 1992 is presented as the year when Statkraft changes its guise from a purely administrative company devoid of commercial ambitions to an entirely commercial company. The cable agreements with PreussenElektra and SEP, signed in 1993 and 1994, are often seen as a direct consequence of the new regime. In most respects, this is a correct historical account. In some areas, however, the strong emphasis on breakdowns means that key nuances and continuity are lost, particularly the view of commercial exports and power exchange. In this respect, a considerable amount of work had taken place before 1992.

Some people at Statkraft had long had an international orientation, first and fore-most Ingvald Haga, head of the company's planning division. Haga took part in a number of international fora in the field of electricity supply and had a broad international network. He also had good contacts in most major power companies in the other Nordic countries. Furthermore, he was a person who was open to new thoughts and ideas, which in turn had provided room for individual creative and innovative



In the autumn of 1990, Statkraft signed an agreement to export power to the Swedish state-owned energy company Vattenfall. The agreement was signed at Arlanda airport outside Stockholm, and was a historic event. *In Norway, there had always been strong* political opposition to the export of hydropower, and the agreement with Vattenfall was the first that involved binding power exports over a longer period. Second from the right in the back row is Bjørn Braaten. He was among those in Statkraft during the 1990s who was actively involved in finding foreign buyers for Statkraft's surplus power. Braaten was in many ways ahead of his time. He was commercial in his approach, and believed that Statkraft needed to think more like a normal store. At this time, there was little room for that kind of thinking, and Braaten received harsh criticism for his unconventional attitudes.

people, such as the company's sales manager and general counsel, Bjørn Braaten and Kjell Haagensen. Braaten was a civil engineer but his capacity at Statkraft also served as an economist. He distinguished himself otherwise in Statkraft as an uncommonly commercially oriented person. Haagensen had considerable international experience, primarily as an adviser on hydropower issues for developing countries. Haagensen was familiar with and thrived in international surroundings. Furthermore, he was a person who was skilled at building relationships. In the late 1980s, the Braaten-Haagensen constellation, along with Haga as a willing facilitator, triggered considerable energy that found expression in a series of international initiatives.

The first major plans for power exports came already in 1986, in connection with Norwegian ambitions to develop gas power with a basis in North Sea gas. Statkraft was initially cast in the role of a gas power operator. Exports were mentioned because Norway at this time had a good electrical power balance, unlike several of the other Nordic countries. There was particular interest in Norwegian power in Finland, where it was expected that demand for electric power would increase in the future. The 1986 disaster at the Chernobyl nuclear power plant in Ukraine had also led to increased scepticism to further nuclear power developments in the country, and

Finnish power companies were therefore on the lookout for alternative solutions. This was particularly true of the state-owned power company Imatran Voima Oy (IVO) with which Statkraft entered into serious negotiations. In the spring of 1990, the parties had gone as far as to draw up a specific agreement involving the export of just over 4 TWh each year for a 25-year period. At this time, negotiations were also underway with yet another Finnish company, the private industrial conglomerate TVS, for a corresponding agreement.⁹

Negotiations with the Finns never reached a conclusion, however, in part because the parties failed to agree on price. This matter also highlighted the challenges encountered in entering into international agreements in a monopoly-based system. Power from Norway to Finland would have to pass through the Swedish power transmission system, but reaching agreement with the Swedish grid owner, Vattenfall, regarding use of their system proved difficult. It was felt that Vattenfall wanted far too much in payment for power transmission. 10 According to Kjell Haagensen, who was very involved in the negotiations, a bold action managed to move the Swedes in the right direction. At one point in time, a rumour was spread that plans were afoot to build a direct connection between Norway and Finland in the far north. It was even alleged that a line had been marked out by Treriksrøysa, where the Norwegian, Swedish and Finnish borders converge. According to Haagensen, the Swedes, who wished to retain their position as a connecting link between Norway and Finland, had then swiftly returned to the table with a better offer. 11 As stories go, it is a good one, but it failed to clinch the deal, which in any case stalled owing to disagreement on price, even though the parties were ultimately not that far away from one another.12

Things actually went far better with the negotiations initiated in 1989 with a view to exports to Sweden's Vattenfall. At the end of the 1980s, there was uncertainty in Sweden too about the future of nuclear power, and Vattenfall was therefore on the lookout for opportunities to meet new demands for power until good alternatives to nuclear power had been found. Statkraft picked up on this possibility. Contact was made and negotiations initiated, which resulted in an agreement in the spring of 1990. The gist of this agreement was that Vattenfall would purchase 2.4 TWh a year for a five-year period from 1995 to 1999. For Statkraft, this agreement gave the prospect of a better yield than one could have expected to achieve domestically during the period in question.

A third initiative was made in respect of Denmark's Elsam, the dominant power company in Jutland. Elsam, a long-time acquaintance and partner of Statkraft, had been responsible for operating the Skagerrak cables on the Danish side of the Skagerrak. The Skagerrak cables had almost exclusively been used to exchange power on a random basis. In 1989, however, Statkraft raised the notion of a long-term binding

power export agreement, in which, it must be said, the Danes showed little interest. What they were interested in, however, was to extend cooperation on the exchange of power, which resulted in quite a comprehensive agreement in 1991. This agreement essentially consisted of four components. First, Elsam undertook to purchase each year 1 TWh regular electricity (electricity that Statkraft was obligated to supply regardless of the situation in Norway). As such, this represented an export agreement, even though it was rather limited. Second, Elsam undertook, under certain conditions, to purchase electricity when Statkraft had a surplus of electricity. Third, the agreement contained a provision concerning 24-hour power exchange, which meant that Statkraft would supply peak-load electricity to Elsam during the daytime and receive electricity at night. Finally, the agreement contained a provision concerning drought-year guarantees, which entailed that Elsam undertook under certain circumstances to supply power in the event of a deficit of electricity in Norway. The agreement was to run for 20 years, from 1993 until 2013, and stated that a third Skagerrak cable was to be laid in order to ensure sufficient transmission capacity.¹³

A fourth interesting initiative was made in respect of the Dutch company Samenwerkende Elektriciteits-Produktiebedrijven (SEP), which was owned by the four large regional power monopolies in the Netherlands and was responsible for looking after the national power balance. SEP also had a monopoly on the export and import of electricity. The Netherlands was inter-

esting because the country, like Denmark, was exclusively a thermal-powered country. This interest was mutual since the Dutch glimpsed an opportunity to avoid building additional costly and polluting peak-load capacity. In the spring of 1991, a letter of intent had been drafted and signed. Its form was the same as the Elsam agreement, with the one exception that it did not include a Norwegian export component. Naturally, a subsea cable was needed, and in the summer of 1991 a separate working party was appointed consisting of representatives from both parties to look into this matter. The plan was to lay a cable from one of the southernmost part of Norway to Eemshaven in the far north of the Netherlands. The cable, which would be 500 kilometres in length, would be the longest undersea cable in the world. 15

As in negotiations with the Finnish companies, a battle over price gradually ensued. SEP was unwilling to pay what Statkraft demanded to square the agreement and cable investments at home. At some point in time, negotiations began to make



Statkraft heads towards Europe is the title of this article, which was printed in Statkraft's company magazine in 1993. The occasion was the signing of a cable and power trading agreement with the German power company PreussenElektra. The agreement was celebrated as a breakthrough for Statkraft as a commercial, international energy company. Pictured is the team that led the negotiations with the German company, with team leader and legal director Kjell Haagensen in the middle. The Germans were said to have been puzzled that Statkraft put a team of young people together to negotiate such a large and important agreement.

little sense, at least when seen from Statkraft's perspective. The outcome was that the affair was not commercially interesting for Statkraft, as stated in an account of this matter prepared for the board of directors early in 1992.¹⁶

One final initiative took the form of negotiations initiated with the German company PreussenElektra in 1991. These negotiations also took as their starting point the establishment of a long-term exchange of power. Negotiations with PreussenElektra took the company one step further than negotiations with SEP, even though this initiative was also unsuccessful. The parties primarily disagreed on the financial terms and conditions, and, in the opinion of Statkraft, the Germans were unwilling to pay an acceptable price.

This matter is of great interest for posterity, however. SEP and PreussenElektra were the companies that Statkraft entered into a cable agreement with a couple of years later. Furthermore, both the SEP agreement and the other cable agreement, with Germany's PreussenElektra, were largely founded on the same principles on which the first round of negotiations was based. As a *concept*, the cable agreements of 1993 and 1994 represented nothing new. Here, new Statkraft stood in large part on the shoulders of old Statkraft. Later, when the agreements became a reality in 1993 and 1994, this point was undercommunicated. Bjørn Braaten, who had played a key role in most of the negotiations with foreign companies since the end of the 1980s, remembers that he reacted somewhat to the way in which the agreement with PreussenElektra was celebrated in 1993. By this time, he had already left the company, but he was invited to celebrate the agreement. Braaten was left with a feeling that he suddenly belonged to the old school regime – the people who had worked on things earlier but who had not quite understood how things should have been done.¹⁷

That is not to say that the new management did not make a difference. There is no doubt that Thulin played an important role in building relationships with foreign companies, and particularly with the management of PreussenElektra. Considerably more so than his predecessor, Thulin also managed to establish legitimacy for his company's plans among the politicians and bureaucrats at the Norwegian Ministry of Oil and Energy. At the same time, it is a fact that there was greater room to negotiate such agreements after 1992, simply because restrictions on foreign trade had been relaxed.

LIBERALISATION OF POWER EXPORTS

The export agreements that Statkraft had entered into in the years prior to 1992 were clearly in breach of the principle that hydropower was to be used in Norway. The fact that the Storting allowed Statkraft to enter into these agreements was due to the extraordinary situation when Norway had a surplus of electricity at this time (see Chapter 1). Statkraft had been refused flatly in 1990 when it applied for general per-

mission to enter into export agreements.¹⁸ One year later, several other Norwegian companies had also applied to enter into export agreements and they too had been rejected, even though they were virtually awash in unsold electricity.¹⁹ The threshold for selling power under binding agreements was therefore very high, and under normal circumstances, almost insurmountable.

The passing of the new Energy Act in 1991 placed the issue of power exports in a new light. One of the objectives of the economic theory underlying the reform was that electricity should be sold to whomever was willing to pay the most for it. The logic was that the party that was most willing to pay would also derive the greatest benefit from the commodity; at the same time, this would provide the greatest value for the seller. In principle, such an economic theory knew no national borders either. Nevertheless, not a single economist with his or her head screwed on properly could believe that all electricity must be exported if the price was higher abroad. Here economic theory had to be rooted in the realities of energy policy. Economic theory did enter as a new element with the Energy Act, and particularly in the Ministry of Oil and Energy this resulted in a wish to soften up the restrictions on foreign trade. Already in the spring of 1990, the ministry's state secretary stated in a lecture on the forthcoming Energy Act that "to a greater degree exports should represent a commercial opportunity for participants in an efficient power market."²⁰ This was also something that the ministry's experts wanted.²¹ And, in 1991, the ministry appointed a working party to consider strategies for power exports, in which representatives from the Ministry of Finance, the NVE and Statkraft also took part.²² The party's goals included drawing up specific guidelines and criteria for such sales, and an investigation of relevant markets. In part, this project was initiated by Statkraft's ongoing negotiations with SEP in the Netherlands, which essentially had the support of the ministries but which necessitated several clarifications of principles regarding financial and regulatory matters.23

Nevertheless, it was the politicians at the Storting who had the last word in this matter, not experts in the ministries and research environments. And, politically speaking, power exports were not a greater winner after the Energy Act. The intuitive reasoning was that less electricity in Norway meant higher prices in Norway. And one would have to look for a long time to find someone who thought that was a good idea, at least outside the walls of the power companies (the environmental organisations had not yet begun to argue for higher energy prices). Added to this was the fact that Norway's energy-intensive industries, a large employer in many local communities and a political force to be reckoned with, were consistently against power exports. These industries claimed that this would lead to a tighter power market and higher prices, and this in turn would have a detrimental effect on their competitiveness. It was also claimed that more power transmission lines and power cables abroad would

lead to the import of foreign price levels. Such arguments had been raised already in connection with the agreement that Statkraft entered into with Vattenfall in 1990. It had triggered relatively strong criticism from these industries, and was characterised as a breach with established Norwegian power policy.²⁴ For politicians in the Storting, it was difficult to ignore such comments. As a member of the Storting's Standing Committee on Industry and Energy stated during a debate on power exports in 1991: "As a committee, we often meet representatives of energy-intensive industries who tell us about the development plans they have that will increase their need for electric power. In our opinion, our hydropower is a resource that we need to refine, and we do not want to end in an position where we cannot say okay to development plans that will create new jobs in outlying areas."²⁵ When you have to choose between power exports and Norwegian jobs, which is the way this issue was presented, the decision was a foregone conclusion.

Norwegian industry was clearly right when it said that exporting electricity *could* affect conditions in Norway. Before determining how much power one should allow to be exported, a balance had to be struck between the interests of Norwegian consumers and the interests of Norwegian power generators. This balance would depend largerly on the current situation in the electricity market. At the beginning of the 1990s, the market was characterised by very large surpluses of electricity and very low prices, and the consequences of this on the power companies was something that worried many politicians. In such a situation, it became somewhat easier to leave the door slightly ajar.

Striking a balance was still demanding, as became very evident in 1992 when Gro Harlem Brundtland's Labour Party government presented its proposal to open up for some exports. The reason given for this move was that trading power with foreign countries was a natural continuation of market developments in the Norwegian power sector.²⁶ At the same time, the government was quick to stress that it would still impose a very restrictive line in this area.²⁷ Specifically, it was proposed to allow export agreements lasting no longer than five years. At the same time, total exports were not to exceed 4 TWh per year,²⁸ corresponding to around three per cent of the total Norwegian annual production. Thus, liberalisation was very limited. Admittedly, the government was also open to agreements of more than five years' duration, but such agreements were to be approved by the ministry in each individual case and, furthermore, only be permitted if they would not to any significant extent affect the domestic power balance.²⁹ The government was otherwise at pains to stress that the issue of exports would be assessed on an ongoing basis in respect of the power situation in Norway. This meant that the proposed export regime was not set in stone but could be changed if Norwegian interests indicated this was necessary. The opportunity to reassess the situation and impose restrictions was probably one important reason why the government, in spite of scepticism among many people, even within the government's own ranks, had a majority on its side in this matter.

In early discussions concerning foreign trade, exports received the greatest amount of attention. Gradually, however, greater focus was placed on the exchange of power. Power exchange entailed trade in both directions, and consequently it did not entail any direct reduction in domestic access to electricity. In fact, it was possible to argue that power exchange was a good thing for Norwegian consumers, since power generators would be able to exploit hydropower in a better way. In addition, such agreements would allow one to strengthen supply security in Norway, as Statkraft had done in the Elsam agreement in 1991 with the inclusion of a provision on security in years of low precipitation levels. Power exchange was therefore something that the Norwegian Ministry of Oil and Energy was particularly interested in, and one year after it had presented its export proposition, the Brundtland government presented a scheme for assessing and regulating such agreements.³⁰

In this round, however, one specific issue drove this question up to the Storting. Since the autumn of 1992, in consultation with and partly at the urging of the ministry, Statkraft had sought potential foreign partners for power exchange agreements.³¹ And some months later, the company had made contact with the German company PreussenElektra, which was very interested. The Norwegian Ministry of Trade and Industry³² had in principle the authority to license such an agreement, under the terms set one year earlier. However, the planned agreement was so comprehensive that it would have been unwise not to inform the Storting.

CABLE AGREEMENT WITH PREUSSENELEKTRA

As mentioned, negotiations with SEP back in 1991 broke down because the Dutch were unwilling to pay a price that would have been profitable for Statkraft. This fact is important since it shows that Norwegian electricity did not sell itself. At least in the case of buyers located a long way away, such as SEP and PreussenElektra, a considerable sum also had to be paid in transmission costs. Added to this was the fact that most power companies essentially wished to be as self-sufficient as possible. For this reason, it was primarily possible to reach major power sales agreements under special circumstances. As such, Statkraft's agreement with Vattenfall in 1990 was characteristic, initiated as it was on the basis of uncertainty regarding nuclear power.

As in Sweden, the generation of electricity from nuclear power also came under a lot of pressure in Germany, albeit somewhat later. In 1991–92, political signals in Germany pointed to the end of this form of power generation in the future. In addition, new environmental regulations slowly began to place restrictions on coal-fired energy. For the nation's power generators, this meant a more unpredictable future. Several of the major regional power companies put their nuclear power projects on

A large Norwegian-Dutch cable agreement signed in informal surroundings at Laksfors, Statkraft's estate in Nordland. In 1994, Statkraft signed another long-term power trading agreement with a foreign company, with the Dutch company SEP. In this project, it was decided that the Norwegian system operator, Statnett, should be owner of the cable on the Norwegian side. The picture shows the signing of the agreement between Statnett and SEP. From left: Statnett CEO Odd Håkon Hoelsæter, SEP CEO Guus Nicolaas Ketting and SEP director Gert Zilj.



The team that negotiated the cable and power trading agreement with SEP. The team consisted of many of the same people who negotiated the agreement with Preussen-Elektra the following year.

hold, and investments in coal-fired power generation were reassessed.³³ One such company was PreussenElektra, a dominating force in the northern part of Germany and a considerable generator of both nuclear and coal-fired power. This situation opened a window of opportunity for new ideas, among them supplementing their own electricity with Norwegian hydropower.



Initial contact between Statkraft and PreussenElektra took place in March 1993, when Thulin called Hans-Dieter Harig, PreussenElektra's CEO, to chat about the opportunity to cooperate on power exchange.³⁴ Although this approach was typical of Thulin, it was not as if these two gentlemen had not already made each other's acquaintance. During his time as secretary general at the Norwegian Ministry of Trade and Industry, Thulin had had regular contact with the oil and gas environments in Germany, including the oil company belonging to the industrial conglomerate VEBA, which also owned PreussenElektra. And so it was that VEBA regularly arranged hare coursing trips on the Northern German plains for revered contacts. Thulin and Harig were both keen hunters, and had met one another on a couple of such occasions.

The two senior executives quickly found themselves to be personal as well as commercial acquaintances. There could really have been no better starting point, and what started out as a mere idea quickly led to specific negotiations. A working party consisting of representatives from both companies was rapidly set up to negotiate a draft agreement. For Statkraft, these negotiations were led by general counsel Kjell Haagensen, who had with him Christian Rynning-Tønnesen, Anders Prietz, Atle Marøen and Henning Villanger.

In early May that same year, the working party was able to present guidelines for both cable-laying and organisation of power sales. As for the cable, this was to be jointly funded and owned by the parties. The sales agreement had two main components. First, Statkraft would supply PreussenElektra with 2 TWh regular power each year, primarily during the daytime. Second, a maximum of 6.5 TWh per year would be exchanged between the parties. One interesting feature of the exchange side of the deal was that it was binding on both parties, and that the direction of the flow of electricity would solely be determined by the price of electricity at either end of the cable. When the price was highest in Germany, electricity would flow in that direction, and the other way round when the price was highest in Norway. This provision would ensure correct use of the cable, and that commercial circumstances would affect the flow of electricity. The agreement would otherwise run for a full 25 years, effective from 1998.

According to Statkraft's calculations, there was no room for doubt on this matter. A good price had been negotiated for electricity on the export side of the agreement. On its own, it would yield a net income (income after the deduction of transmission costs) of around NOK 650 million per year. The power exchange part of the agreement was also good for Statkraft, even though this was more difficult to estimate. In what is known as a "positive scenario," with low prices in Norway and a high level of exports, one could expect to accrue a net income of up to NOK 600 million. Total annual net income could theoretically be as much as NOK 1.2 billion.³⁵

PreussenElektra's calculations must also have yielded good figures. Certainly, it did not take the Germans a long time to make up their minds. By the end of May, Thulin and Harig had already signed a letter of intent. All that remained now was to have the agreement approved by Statkraft's owner, the Norwegian Ministry of Trade and Industry.

CABLE AGREEMENT WITH SEP

At virtually the same time as the Preussen negotiations took place, Statkraft had also initiated negotiations on an exchange agreement with the Dutch company SEP.³⁶ Although the actual negotiations got underway somewhat later, a negotiated agreement with Statkraft's Dutch partners was largely in place at the end of 1993, and the final agreement was signed a year later.

Statkraft had already established a relationship with SEP, through earlier negotiations on electric power exchange held around 1991. Haagensen had taken part in the first round, and had chaired the negotiations in the next round. Thulin did not play such a prominent role in making contacts. The reason why it was possible to enter into an agreement this time and not previously was partly the result of changes to framework conditions in Norway, which opened for the formulation of agreements that could be interesting for the Dutch, and partly because changes to political framework conditions played a role in the Netherlands too. Increased environmental requirements made it more attractive than previously to use Norwegian electric power as a supplement rather than building gas-driven power plants in order to meet peak consumer demand.

The actual agreement was largely the same as the PreussenElektra agreement. An undersea cable was to be laid between the southern tip of Norway and the northernmost part of the Netherlands, and the agreement was to run for 25 years. Start-up was scheduled for 2001. Otherwise, this agreement also comprised both Norwegian export and market-based electric power exchange. Specifically, Statkraft was to supply a little more than 2 TWh of regular power to SEP each year, while the annual exchange would be up to 5.5 TWh. There was one important difference, however, namely that Statkraft would have the right to purchase up to 0.6 TWh each year from SEP. The price of this electricity was relatively high, but this right was primarily envisaged as security for years where less power was being generated in Norway. In terms of profitability too, the SEP agreement was on a par with the PreussenElektra agreement.³⁷

The really significant difference between the PreussenElektra agreement and the SEP agreement had nothing to do with the agreement itself; rather it had to do with how it was organised by the Norwegians. In the SEP agreement, Statkraft chose to include a number of Norwegian municipal power companies as partners. This deci-



sion was taken partly due to a desire to avoid competition on the Norwegian side on this type of agreement, and partly due to a need to avoid accusations from the rest of the industry that Statkraft was becoming too omnipresent.

In Norway, Statkraft was in no way alone in showing an interest in export and exchange agreements. Like Statkraft, most power companies had significant quantities of excess electric power during this period, and the market abroad appeared as an attractive market. Such agreements did require substantial capital if the laying of cables was also part of the agreement, and this was to be expected in most cases. In addition, such agreements needed relatively large volumes in order to justify such an investment, and this in turn required production. Statkraft was probably the only company large enough to bear such agreements on its own. After the passing of the Energy Act, however, a number of larger municipal power companies around the country had begun to plan cooperation in this area, and two constellations in particular gradually became quite determined. In the summer of 1993, one of these

Undersea cable: From the specially-constructed vessel CS Skagerrak (today Nexans Skagerrak). CS Skagerrak was built on commission by Statkraft in connection with the laying of the first subsea cables between Norway and Denmark in 1976-1977. Statkraft was to own the vessel, and it therefore became a shipping company as well. CS Skagerrak was apparently the first vessel in the world to be constructed specially for the laying of large subsea cables. This picture is from the unloading of the Norned subsea cable that was laid between Norway and the Netherlands in 2008. The spindle on which the cable is wound has a diameter of almost 30 metres and a capacity of around 7 000 tonnes of cable.

constellations, the Sørkraft group, had begun to negotiate a power exchange deal with the Dutch company EDON, which had previously been a co-owner of SEP.³⁸ Another group which called itself Eurokraft had initiated contact with the German company Hamburgische Electricitäts-Werke (HEW) regarding export and exchange of electrical power up to 5 TWh.³⁹ The latter negotiation included the laying of a subsea cable, and was to enter into force in 1998.⁴⁰

Seen from Statkraft's vantage point, this could result in competition for concessions, since a large number of power exchange agreements was not feasible in any case. There could also be competition for foreign partners. This latter issue not only concerned Statkraft; it also had a bearing on other Norwegian market players and state authorities. If Norwegian companies began to compete with one another for the same customers abroad, their counterparty could end up in a better negotiating position. Such a situation would not benefit anyone, nor would it be good for Norwegian society, which ran the risk of seeing diminishing returns on hydropower. In such a context, the key lay in the coordination of interests.

Statkraft had in fact realised at an early stage that this could be a problem. Already in the autumn of 1992, the company had therefore taken the initiative to form a separate export company, Norsk Krafteksport, together with seven municipal power companies. The purpose of this initiative was doubly strategic. In part, they wished to avoid competition. It was also important, however, to show that Statkraft had no intention of being omnipresent but that it did wish to include the municipal companies. Experience indicated that such things could quickly come back to haunt the company in the form of criticism and political uproar.

This cooperation resulted in Statkraft including Norsk Krafteksport as a partner in the exchange agreement with SEP. In specific terms, this was done so that ownership would be distributed to Norsk Krafteksport, which represented 40 per cent for Statkraft's part. This solution led to one of the constellations being dissolved. Several of the companies in Norsk Krafteksport were also involved in the Sørkraft group, which negotiated in parallel with Statkraft in the Netherlands. When the decision was made to go for Statkraft's SEP project, there was not enough strength left in Sørkraft to continue the project.

THE GERMAN ALLIANCE

Through the cable agreement negotiations, Statkraft came into quite close contact with three foreign companies in three different countries. The third company, in addition to PreussenElektra and SEP, was Denmark's Elsam. Since PreussenElektra wanted somewhat more transmission capacity than the forthcoming cable would be able to provide, plans were made to supplement this by using existing connections between Norway, Denmark and Germany, which also required the involvement of



Lars Uno Thulin used to stress that personal relationships were a significant key to commercial success. This picture from 1993 shows Thulin and Hans-Dieter Harig, CEO of the large German energy company PreussenElektra. The occasion was the signing of the Viking Cable Agreement. Thulin and Harig gradually developed a close and personal relationship that lasted until Thulin's untimely death in 2002, just months after he resigned as Statkraft's CEO.

Elsam. The Danish company owned the power transmission system in Jutland, which linked Norway in the north with Germany and PreussenElektra in the south.

Statkraft's negotiators, who essentially remained the same throughout the three rounds of negotiations, felt there was great variation in climate and culture. The Danes were perceived as being tough and uncompromising. The Dutch were keen to fight for the last Guilder, and one never felt sure about where one stood with them, while the Germans were rigid but at the same time they were the people one had greatest trust in and with whom one became best acquainted.

As for the Danes, however, they had good reason to act the way they did. They were in a monopoly situation, and exploited it. Nor did they have any interest in the actual power exchange agreements. And they essentially were unhappy that a cable was being laid between Germany and Norway, since this would take from them their position as the only link between the two countries, a position that historically had given them a great deal of advantages.⁴³ The Danes therefore demanded a high price for power transmission, and had little to lose but a lot to win by standing their ground.

60



Building alliances in the German-Norwegian way. The Viking Cable Agreement between Statkraft and PreussenElektra laid the foundation for a very close and long lasting collaboration between the two companies. Good relations were partly cultivated through the Viking Club, where key individuals from the two companies met regularly for years. Rituals including the reciting of oaths and prehistoric headdress may seem strange, but the club and the etiquette followed says a lot about how quickly the two companies' representatives established their relationships. Viking chieftains Hans-Dieter Harig and Lars Thulin are pictured here wearing brown Viking helmets.

The most important point, however, is that Statkraft's relationship with the Germans was so good, and far closer and more personal than it was with SEP. In respect of PreussenElektra, a climate was created that was characterised by openness, mutual trust and a willingness to reach a compromise. Quite why this occurred is difficult to explain. Perhaps PreussenElektra was particularly interested in reaching an agreement. Maybe it had something to do with the good personal relationship established between the companies' senior managers. Perhaps it was, as some people have claimed, that the general German fascination for Norway played a part. And perhaps it was the case, as is so often claimed, that there is a tradition in German business for long-term thinking, and that in connection with the cable agreement with Statkraft one saw an opportunity to achieve a larger and broader German-Norwegian power alliance in the future.

What was clear at least was that PreussenElektra was keen to retain and develop the good business and personal relationship that had emerged between the two com-

panies during the cable negotiations. Among other things, PreussenElektra took the initiative to establish an informal body in which the two companies' management groups and those involved in negotiations would meet at regular intervals, and whose goal would be to keep these personal relationships warm. The outcome of this was the establishment of the Viking Club – an informal, primarily social meeting point that came to play quite an important role in the 1990s. The Viking Club held regular meetings, and their gatherings were often held in spectacular surroundings and spiced with a variety of happenings.

The good relationship with PreussenElektra came to be highly important to Stat-kraft, and it came to include far more than collaboration on cables. The basis for this relationship was laid over a couple of months in the winter of 1993, and was the result of a good match of business, culture and people. At the same time, it is important to remember that the origins of the relationship were indirectly conditional on major forces, more precisely by changes in the overall energy systems in both Norway and Germany. Without these changes, it is less likely that Thulin would have made that first telephone call to Harig, and even less likely that Statkraft would have been allowed to enter into such comprehensive trade agreements abroad as the agreements with PreussenElektra and SEP entailed.



The Himalayas, Nepal: Magnificent mountain scenery and a temptation for hydropower developers. Massive mountains channel large quantities of water to rivers in Nepal. Statkraft decided to invest in hydropower in this poor country in the mid-1990s, and in doing so became a pioneer in private hydropower construction in developing countries.

An eastern adventure

n the summer of 1991, Statkraft engineer Øyvind Ulfsby travelled to India to lecture on the subject of the Nordic power supply, which in itself was nothing remarkable. Disseminating knowledge to less developed areas of the world had been a key aspect of Norwegian development aid policy since the 1950s. Furthermore, hydropower and the electrical power supply were among those areas where Norway really felt it led the world. For decades, a number of people from the power industry had been involved as advisors and consultants in the planning and development of power supplies in developing nations, and Statkraft had a long tradition of assisting such countries by providing experts and knowledge.

What is interesting about Ulfsby's trip to India is first and foremost the detour he took to neighbouring Nepal on his way home, where he visited a hydropower plant that would be using the type of sedimentation facility developed in Norway with support from Statkraft. The power plant belonged to the Nepalese company Butwal Power Company, where Norwegian missionary and engineer Odd Hoftun was a driving force. During the visit, Ulfsby and Odd Hoftun began rather by chance to speak about how Statkraft could assist in power developments in a hydropower-rich but financially impoverished country almost completely devoid of an electric power supply. Consultancy was discussed first, but for Hoftun capital in particular was the scant resource, and the conversation turned to the possibility of Statkraft investing in Nepal's hydropower developments. Ulfsby was thrilled by the idea, and the rest is history. Four years later Statkraft resolved to acquire a majority shareholding in the Khimti hydropower project. After a couple of years, the first ground had been broken, and by the year 2000 the power plant had gone into commission and the first electricity had been supplied to Kathmandu, the nation's capital. By this time, Statkraft had gone on to become owner of a second hydropower plant in Asia - the Theun Hinboun power plant in Laos.

Khimti and Theun Hinboun represented the beginning of Statkraft's involvement in hydropower projects in developing nations and so-called emerging economies. Over time, these would assume an important place in Statkraft's international focus. This involvement expanded in particular after the establishment of SN Power in

2002, to which we will return in Chapter 7. In this chapter, however, we will stick to the 1990s, looking more closely at why Statkraft initially chose to become involved in this type of ownership scheme, since it is not something one would necessarily assume would happen. At this time, Statkraft had scarcely any experience of operations abroad, and far less in countries such as Nepal and Laos, which were unfamiliar and unpredictable. For this reason, there was considerable scepticism among both management and the rest of the organisation about becoming involved in such countries, and this scepticism was not something that diminished over time. The Khimti project in particular came to present considerable difficulties, becoming for many people an example of how complicated and risky investing in developing countries could be. As such, enthusiasm for these types of commitments did not improve noticeably with the passing of time.

The story of Khimti and Theun Hinboun could be told in several ways. It could be related as a narrative on entrepreneurship, boldness and forward thinking. Alternatively, it could be told as a story of idealism, courage and naivety. Or it could be written as a story of how decisions are made, and not made, among other things. In this chapter, we will see that there is some truth to all of these approaches.

NORWEGIAN HYDROPOWER EXPERTISE

- FROM DEVELOPMENT AID TO BUSINESS

It is quite normal to look at bygone decisions and developments as rational responses to specific challenges or opportunities. To a certain extent, this is also one way of relating the story of Statkraft's involvement in hydropower projects outside Europe.\(^1\) Norwegian engineers, many of them affiliated to Statkraft, had long traditions as consultants in developing countries, and the road from there to *investing* in such countries was therefore not a very long one. Further, at the beginning of the 1990s Statkraft found itself in a situation that both necessitated and facilitated such an investment. The gradual reduction in hydropower developments in Norway created a need to find new assignments for Statkraft's development organisation, and available hydropower resources were primarily located in developing countries. Following Statkraft reorganisation into a state enterprise in 1992, the company had its first opportunity to invest outside Norway. Several factors indicated that it made sense to invest in hydropower developments in developing countries with an abundance of hydropower, and for this reason that is what happened.

Such a presentation of the facts may not be far off the mark, yet at the same time it does paint a constructed pictured of a reality that was far more unclear and unpredictable. At the beginning of the 1990s, Statkraft found itself in a very difficult position and was faced with huge organisational, financial and market-based challenges, and in such a situation hardly a soul would have thought of focusing resolutely on

hydropower developments in distant lands. Indeed, the Khimti project was initially brought to the table by pure coincidence, without it being part of a greater strategy. And the reason why one idea grew into more than just an idea was primarily down to a few key individuals who were positive to new initiatives – CEO Gunnar Vatten and Ingvald Haga, then director of the Planning Division. Furthermore, Vatten's successor, Lars Uno Thulin played a crucial role, in the sense that he too secured support for these projects from the company's senior management. Although there was a certain amount of room for untraditional ideas at Statkraft, one also needed people who could make sure that this space was actually utilised. In respect of Khimti, also two people in particular were of vital importance. At Statkraft, Øyvind Ulfsby played a key role, particularly during the earliest stage of the project, while on the outside, Odd Hoftun was crucial, also during the earliest stage.

It is difficult not to be fascinated by Hoftun's life and work.² A graduate electrical engineer from the Norwegian College of Technology in the early 1950s, Hoftun had worked for Norwegian power companies for several years. A deeply religious man, however, he felt a call to become a missionary, and towards the end of the 1950s, he travelled with his family to Nepal to join the Norwegian Tibetan Mission. Since then his family has lived more or less permanently in Nepal. Over the years, his work has shifted from preaching to more practical development assistance. Hoftun, who was interested in modernisation, felt that economic development would come as the result of education, technology and industrialisation, and in these areas he had made important contributions. Among other things, he had established a technical college, a construction company specialised in hydropower developments, a company involved in the production, installation and maintenance of power plants and electrical facilities, and, in particular, a power company called Butwal Power Company. All of these businesses were a cross between development aid projects and money-making enterprises. They were organised as private limited liability companies, but were in reality non-profit institutions. Hoftun also had good connections to NORAD, the Norwegian development assistance organisation, which had granted considerable funding to several small-scale hydropower projects operated under the auspices of the Butwal Power Company. Towards the end of the 1980s, however, Hoftun had begun to busy himself with far greater plans. In particular, his attention had been drawn to a large waterfall in the Khimti River several miles west of Kathmandu. Damming the waterfall would require much more capital than Hoftun's companies would be able to raise, and he therefore needed to find co-investors.

Ulfsby had enjoyed a long career in Statkraft. In 1964, he had begun as a graduate electrical engineer in Statkraftverkene, Statkraft's predecessor, and had worked for a number of years on plans to develop nuclear power. Later, in the second half of the 1980s, he had been involved in the planning of gas power plants, which for a while

had attracted a lot of attention. These nuclear and gas power plans were never realised, however, and around 1990 it was acknowledged that the golden days of hydropower were drawing to a close. Not least, this posed a threat to Ulfsby's working environment, the Planning Division, which was responsible for planning and development of hydropower projects.

Thus it was that one pondered with growing concern at Statkraft in Norway what could be done in the future, without having any clear answers, while Hoftun sat on the either side of the world with grand-scale plans requiring expertise and capital.

For people like Ulfsby, the Khimti project represented a golden opportunity to combine idealism with business.³ For Statkraft, on the other hand, it would be an opportunity to help a very poor country to generate electricity while at the same time the company would have a job to do and a chance to earn money. Statkraft imposed a condition right from the outset that investments made abroad should be commercial,⁴ but it soon became clear that such motives would not necessarily be that easy to combine. Investments in developing nations will always be complicated and associated with a great deal of risk, and in this context, Nepal was no exception.

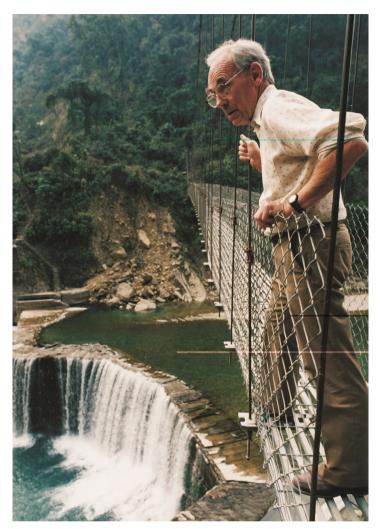
A POOR AND UNSTABLE SOCIETY

At the beginning of the 1990s, Nepal was one of the very poorest countries in the world. According to the International Monetary Fund (IMF) gross domestic product per inhabitant in 1990 was just above USD 200, on a par with the poorest of countries in Africa (GDP in Norway at this time was close to USD 27,000). More than 90 per cent of the country's almost 20 million inhabitants were farmers who generally lived in a barter economy. Most of the country lacked roads, and health and welfare services barely existed. Only a few per cent of the population had access to electricity. Furthermore, Nepal also lacked modern political and economic institutions. The country had for centuries had an absolute monarchy, and was very shut off from the outside world. With the exception of some development aid from the western world, including Norway, foreign capital was virtually non-existent. Additionally, the country was characterised by a great deal of corruption and a general scepticism of foreigners. Finally, Nepal lacked legislation and rules securing private ownership and business operations.

Signs of positive developments in the country coincided precisely with Ulfsby's first visit, however. Around 1990, the authorities had begun to lift some of the restrictions affecting foreign businesses, at the same time as plans were in progress for the privatisation of state enterprises. These reforms had primarily been pushed by the World Bank and the IMF, who made demands on liberalisation and privatisation in connection with loans offered to the country. Particularly positive, seen from the outside, were the democratic reforms that occurred in 1990–91. In 1990, the nation's



Statkraft engineer Øyvind Ulfsby, photographed in 1993. Ulfsby was responsible for Statkraft's involvement in the Khimti project in Nepal, and he drove the project forward at its earliest stage. The job was not a simple one. At the beginning of the 1990s, Statkraft had a lot of expertise with hydropower development, but no experience with investments abroad, much less in remote developing countries. For this reason, the Khimti project presented many legal, financial and organisational challenges.



Norwegian engineer and missionary Odd Hoftun has devoted much of his life to creating growth and development in Nepal. Hoftun, who was concerned about the importance of electrification, presented the Khimti project to Statkraft engineer Øyvind Ulfsby in 1991.

monarch, King Birendra, accepted the introduction of free elections and a multiparty system, and next spring a *de facto* democratically-elected government came to power for the first time. In the wake of this came great ambitions to create economic development. Rather shortly after the elections, the government launched an ambitious programme of modernisation that attached importance to market economics, private ownership and foreign investment.⁸ Plans were also made for a comprehensive development of the nation's huge hydropower resources. Due to its location at the foot of the Himalayas, Nepal had significant hydropower resources that could provide a basis for growth and development. In this area too, there were signs that foreign investors would also be granted access.⁹

Even though there were plenty of indications that things were moving in the right direction, Nepal was still a developing country rife with challenges when it came to commercial investment. Institutions, culture and social structures could not be changed overnight. And as 1992 progressed and Statkraft seriously began to consider getting involved in Nepal, it became clear that it would face many major challenges. Could one trust in the country's ability to survive, and what would happen if it did collapse? And even if this did not happen, could one be certain that the public authorities wanted to attract and were in a position to accommodate foreign interests? Added to all this were the more commercial challenges. Even though the country needed electricity, it was not certain that people would be able to afford it. Furthermore, there was virtually no transmission system or distribution grid over which electricity could be distributed. In reality, only the capital Kathmandu had in place an electrical network of sorts. Thus, it was far from clear whether it would be possible to sell electrical current from a large power plant such as Khimti. Or, to put it another way, any involvement by Statkraft in Nepal was not only about capital and technological knowledge. It had just as much to do with, and perhaps primarily revolved



around, handling the political and institutional challenges thrown up by such an involvement. Such aspects were particularly thought-provoking when dealing with such a capital-intensive business as the development of hydropower.

THE FOUNDING OF HIMAL POWER COMPANY LTD.

Initially, the Khimti project chiefly lived its own life in the shadow of larger and more urgent tasks in Norway. Throughout 1992, Øyvind Ulfsby worked on the technical, financial and organisational aspects of the project. This work was partly carried out with the support of others at Statkraft, but particularly in close cooperation with Odd Hoftun and Butwal Power Company (BPC). Via Hoftun, two other Norwegian companies became involved. ABB Energi and Kværner Energi had previously supplied equipment to BPC's power plant projects, and they wished to become involved as suppliers to the Khimti project. These companies found themselves in a situation similar to that experienced by Statkraft in the sense that they too were having a tough time in the Norwegian market. Reduction in hydropower developments also affected suppliers, and these companies were on the lookout for new clients.¹⁰

In this early stage, the main principles of organisation and ownership were drawn up. The starting-point was the organisation of the project in an independent holding company, which, it was felt, was necessary for at least two reasons. One was that BPC would be a co-owner of the project. Khimti was Hoftun's baby, at the same time as he had a clear ambition to develop BPC into a larger company. Further, Hoftun wanted to involve Nepalese capital to some extent, either public or private money. The project would therefore have to be organised as a limited liability company.

The second reason was that in doing so one could reduce economic risk. Traditionally, all of Statkraft's assets had been owned directly by the company. Before its reorganisation as a state enterprise in 1992, Statkraft had not actually been permitted to establish independent subsidiaries or to own other companies. Consequently, it was also fully liable for all investments. This ban was lifted, however, after reorganisation of the company in 1992, which meant, among other things, that Statkraft could establish or acquire shares in independent limited liability companies. This change opened up for completely new opportunities, including involvement in projects such as Khimti. In a limited liability company, the owner or owners are only liable for debts corresponding to the company's share capital. And, for Statkraft's management group, who felt that the Khimti project was a high-risk project, organising the project in this way was a clear prerequisite. It was made a requirement early on that the project should be financed by loans as far as this was possible, and that the capital should be borrowed by an independent company.

The holding company was formally established in February 1993 under the name Himal Power Company. Statkraft was to have a 38 per cent shareholding in the com-

pany, while BPC would have a 29 per cent share. Further, Kværner and ABB would each have a five per cent stake, apparently in order to secure deliveries to the project.¹¹ The final 20 per cent would be reserved for Nepalese capital. The company's share capital was set at just over NOK 250 million, corresponding to just below 30 per cent of the estimated total cost of the project.¹²

Within the framework of this structure, Statkraft was required to inject NOK 90 million in share capital. At a time when the company was struggling to make ends meet, this figure was actually a good deal of money. On the other hand, there were plenty of people and machinery in Norway that could be used in the project, and a plan was therefore hatched to contribute labour and material as share capital. In the shareholders' agreement that was drawn up, it was agreed that Statkraft would inject NOK 77 million in the form of payment in kind, around 90 per cent of its equity share. Statkraft would then only have to contribute a little more than NOK 10 million in cash. At a time of high and rising unemployment levels in Norway, this solution was exceptional. As a whole, the model devised also proved excellent in respect of other critical factors, particularly risk. In economic terms, there was actually very little that could go wrong, apart from loss of work effort and machinery – values that in any case had a limited alternative value. The only remaining issue was to find someone who was actually willing to bear this risk.

THE MEETING WITH THE REAL WORLDS

It was obvious that the capital requirement Statkraft had in addition to equity, amounting to around NOK 600 million, would have to be funded through financial leverage. At an early stage, Ulfsby had therefore begun to do the rounds visiting banks and financial institutions. Since Nepal was a developing nation, it was natural to approach the major development banks. This took Ulfsby to Washington and the World Bank-affiliated International Finance Corporation (IFC), which focused especially on the funding of private investments in developing nations. Ulfsby's journey also took him to Manila and the Asian Development Bank.

Meetings with these institutions proved disappointing.¹⁴ Ulfsby had expected that a state power company from affluent Norway wishing to develop power generation in one of the poorest countries in the world would be welcomed with open arms, but this was not the case. Although the banks clearly liked the idea, they were naturally concerned about the risks, and in this respect, there was plenty to put one's finger on.¹⁵

The structure of the project contract had ended up being very complicated. As mentioned earlier, the owners would consist of suppliers and operators, with Stat-kraft having chief responsibility for planning and construction, while Kværner and ABB would supply mechanical and electro-technical components. In addition,



In the early 1990s, Nepal was one of the world's poorest countries. In addition, the country's road systems were poorly developed. The lack of roads was one of many challenges faced during the building of Khimti. As a result, creative thinking was often needed. For example, large items of construction equipment, such as this bulldozer, were cut into pieces and flown to the construction area by helicopter. When in place, the machines were welded together again.

several of the Hoftun companies would be supplying equipment and services. In principle, a situation where owners and suppliers sat on both sides of the table was not a fortunate one. Nevertheless, the biggest problems, seen from the banks' point of view, lay in the responsibilities and risk exposure. For one thing, the suppliers would only be responsible for their own deliverables, while no one would assume overall responsibility. For the banks, this arrangement was far too irresponsible and uncertain. Ideally, they would have preferred turnkey contracts, where one main contractor would be responsible for the entire project until the facility had been completed and the owner could take over. This model would ensure that lenders and owners alike would be dealing with one responsible party, and that there would be less risk of the project collapsing should one supplier fail. Added to this was the fact that the deliverables were not given fixed prices in the agreements.

The most serious objection was that the deliverables were very poorly secured and therefore represented considerable financial risk. This criticism was particularly targeted at Statkraft, who had the decidedly largest role in the project. At this time, Statkraft had demerged the company's engineering and construction units into two independent subsidiaries, Statkraft Engineering AS and Statkraft Anlegg AS, and these companies would be legally responsible for planning and construction,

respectively. In principle, this meant that Statkraft's financial responsibility for the project was limited to the relatively modest shareholder's equity in these subsidiaries. In other words, Statkraft Anlegg would be responsible should anything go very wrong during construction of the power plant, which there would always be a risk of in major construction projects. This was a solution that the banks were not interested in, since they felt that Statkraft Anlegg would hardly be able to bear any major losses. And, if the project did collapse, it would be the lenders who would end up with egg on their face.

The project was simply too poorly anchored to be "bankable". The owners would therefore have to think innovatively if they were to raise the capital they required.

MORE EXPERTISE, NEW NEGOTIATIONS

The tough meeting with the banks was probably to some extent a result of the fact that Statkraft as an organisation lacked expertise in the field of complex finance. Up until 1992, the company had had no dealings with other sources of capital other than what it had received from the Storting, and the development of such expertise had only just begun in 1992–93.¹⁷ Seen in such a light, it becomes easier to understand why one was so out of sorts with the financial institutions' way of thinking. Nevertheless, this situation serves to show that the driving forces behind this project, particularly Ulfsby and Hoftun, had never entertained the notion the Norwegian state enterprise Statkraft would shirk its responsibility should problems occur. For this reason, one had simply failed to see the banks' perspective.

It must also be emphasised that Khimti was in essence a pioneer project, and for this reason no one had any particular experience of this type of project, not even internationally. This picture had admittedly changed somewhat in the 1980s, with increased focus on market-based solutions and the emergence of privatisation in this decade. Nevertheless, foreign ownership of the electrical power supply system was still a rarity. And, as regards hydropower, which had some special implications politically, financially and environmentally, very few examples of foreign ownership existed. The point is that Statkraft in any case had to clear a large part of the path itself, as is often the case with pioneers.

What Statkraft could not avoid was developing more expertise in respect of finance and project organisation. The first step towards this goal came in 1993, when civil engineer and hydropower expert Kjell Heggelund was hired. Heggelund had a great deal of experience as a consultant in developing countries, and was working at this time at the head office of Asian Development Bank in Manila, where he had met Ulfsby on several occasions and Ulfsby had managed to persuade him to come home. Early in 1994, the company was further strengthened by the appointment of civil economist Wenche Lund. Lund, whose background was in banking, was formally

appointed to the company's financial staff, but she was assigned almost immediately a central role in the task of financing the Khimti and Theun Hinboun projects.¹⁹ A third addition was the engineer and economist Sverre Nygaard, who was hired late in 1994. By this time, the Theun Hinboun project in Laos had also been initiated, the projects had been organised as a separate entity under the name "International Hydropower," which Nygaard had been assigned responsibility for managing.²⁰

Several other individuals were given significant roles in developing the projects and the environment. Bjørn Blaker gradually became a key individual and an important prop and mainstay. Blaker was part of group management with responsibility for technology and production, and was also assigned responsibility for international hydropower. Two additional people should also be mentioned since they had an important bearing on the environment and projects. One was general counsel Haagensen, who was assigned a key role on the contractual side of things and in relation to the authorities in the host countries, particularly in Laos. The other person was the London-based lawyer Kent Rowey, whose specialist field was project funding. Rowey played a very important role as an advisor for the Khimti project.

During 1994, the Khimti project underwent considerable reorganisation. The most important change had been a tightening of the contract structure and the suppliers' responsibility had been strengthened and made clearer. First, deliveries had been gathered under two consortia, one for building contracts and planning, for which Statkraft was responsible, and one for electromechanical deliveries, for which ABB and Kværner were responsible. This helped define responsibilities more clearly. In addition, the deliveries were given fixed prices. Second, Statkraft would guarantee in full for Statkraft Anlegg, which meant it assumed a far larger share of the risk. Statkraft Anlegg's contribution was priced at just over NOK 300 million. In other respects, Statkraft had to take a far greater position in the holding company, partly because it emerged that Hoftun's company, Butwal Power Company, was unable to raise the equity, and partly because it proved impossible to raise Nepalese capital. Statkraft's ownership share therefore increased from 38 to 73 per cent, while Butwal's ownership share was reduced from 29 to 14 per cent. Naturally, this also increased Statkraft's risk exposure.

These two changes meant that the two most important banks, IFC and Asian Development Bank were essentially willing to provide loans to the project.²³ Now, however, Statkraft's board was the one to put its foot down. At a meeting at the end of 1994, when the new agreement structure had been presented, the board expressed its strong concerns about the increased risk that had been placed on the shoulders of Statkraft. The board was particularly critical of the fact that Statkraft would have to pledge a full parent company guarantee in respect of Statkraft Anlegg. The increase in the company's equity share also gave rise to a great deal of scepticism. The feeling

was that in doing so Statkraft would become "too strongly exposed as owner and guarantor."²⁴ For the board, this matter was so serious that it sent it back to the administration with two very clear instructions. First, the parent company guarantee had to be removed. Second, a new partner had to be recruited who could take over for Butwal Power Company.

As 1995 progressed, yet another problem reared its head. The financing model that had finally been chosen was found to be more expensive than originally calculated, which would result in a poorer return on investment for the project, so poor in fact that it was rapidly approaching Statkraft's minimum requirement.²⁵ Under otherwise normal circumstances, this could conceivably have been acceptable. In 1995, however, it was perceived as yet another blow, and it was therefore a matter that needed to be resolved. The only effective way of increasing profitability was to raise project revenues, which meant the buyer of the electrical power, the Nepalese state, would have to pay more.

Already by the end of 1994, Statkraft had contacted the Nepalese authorities to discuss an increase in power prices. This was a topic of discussion that would gradually turn sour and actually threaten the entire project. For good reason, Nepal was unwilling to pay more, and several meetings were held without result. Statkraft for its part chose to stand its ground, and consequently the entire project gradually began to grind to a halt. The conflict came to a head in March 1995 after Lars Uno Thulin personally travelled to Kathmandu without achieving anything. ²⁶ Shortly afterwards, Statkraft decided to stop all preparatory work and withdraw its crew from the Khimti area, presenting a clear message that the project was over unless the power sale agreement could be modified.

To the outsider, Statkraft's actions may have resembled a cynical game played against a far weaker opponent, as there was no doubt that Nepalese society needed the Khimti project more than Statkraft did. In Nepal, Hoftun, among others, reacted strongly to the Norwegian company's decision. Within Statkraft too, some individuals, including Ulfsby, were left with a bad taste in their mouths.²⁷ Whether the company's profitability requirement had been taken too far is a question of judgement, however. What is quite certain, though, is that the project would not have been approved by the board unless profitability had been improved, and the Statkraft administration was fully aware of this.

It was in fact Asian Development Bank that finally got the project back on the rails. In the early summer of 1995, Wenche Lund received a call from a representative for the bank who wished to make a final attempt at reaching a solution.²⁸ The resulting meeting in Manila in June that same year with all parties involved sitting around the table marked the start of a process that gradually ended in a Dutch treat where "everybody" reduced their demands somewhat, while some reduced them quite a



Nepalese teenage girls carrying their characteristic baskets. The Khimti development showed the challenges of operating in foreign cultures. In Nepal, the family is a collective work group. When the father got a job at the power plant, it was quite natural that his children helped too. One can imagine the arousal at Khimti when early one morning young carriers were discovered among the adults, clambering up the hillside with baskets on their backs. Such cultural differences put Norwegian HSE standards to the test.

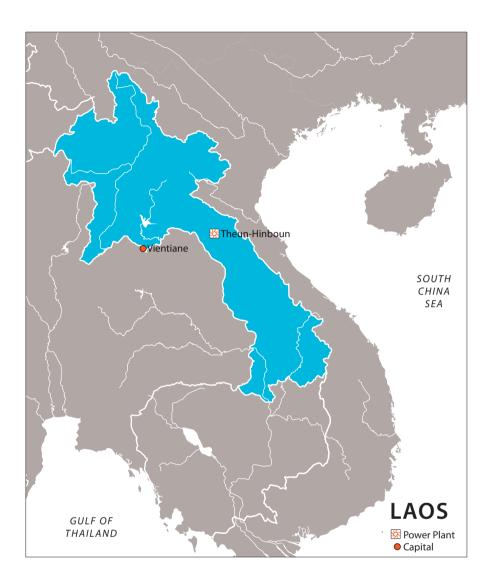
lot. The Nepalese authorities accepted a slightly higher price.²⁹ Statkraft, BPC, ABB and Kværner all made slight reductions to payment for supplies. ABB and Kværner accepted a back-end-payment solution, which meant they would first be paid for their deliveries once the power plant was in operation. The Norwegian state also made a contribution via NORAD, which gifted NOK 25 million to the project.³⁰

The banks also made some contributions, modest though. They accepted to reduce lending rates and provide loans for some more equity in the holding company. Most importantly, however, they chose to set to one side the requirement made to Statkraft regarding the parent company guarantee in respect of Statkraft Anlegg. As a concession, it was actually quite a large one, and must be interpreted as an expression of the banks' decision to trust that Statkraft would stand by the company's obligations no matter what. The consequence of this for Statkraft was that its risk would be limited to the amount of equity in HPL, thereby reducing it significantly. Specifically, it represented a reduction in permanent exposure from well above NOK 400 million to a little over NOK 100 million.³¹ And even though not all of the board's demands had been met - no additional partners had been included - these changes were sufficient for the board in November of that same year to give its final approval to the investment. The board did direct quite clear criticism to the way in which the administration had handled this project, however, requesting that "future projects be organised in a more orderly manner".32 Direct criticism from those quarters was a rare thing. As we shall see later, the experience gleaned from the Khimti project meant that the board was considerably more sceptical to new projects of this kind.

ENTERING LAOS

Early in 1993, while the Khimti project was still in its early stages, technology director Ingvald Haga presented to Statkraft's group management yet another hydropower project in Asia,³³ quite a large project in the landlocked state of Laos, in one of the Mekong tributaries. Ingvald Haga was given the go-ahead to take a further look at matters, and over the ensuing months it was concluded that it was worth moving forward with this project. In September the same year, the administration therefore approached the board and asked to spend a couple of million kroner on further processing, and received a positive response.³⁴

The Laos project too was originally a product of Ulfsby's enterprise and commitment. During one of his earlier visits to the Asian Development Bank to raise capital for the Khimti project, Ulfsby had asked Heggelund whether he knew of any more hydropower projects that would be worth investigating.³⁵ Heggelund said he did. At this time, he had become somewhat involved in a feasibility study on a hydropower project in Laos that appeared to show promise. This project, a relatively large one in one of the Mekong tributaries with the working title Nam Theun, had a planned

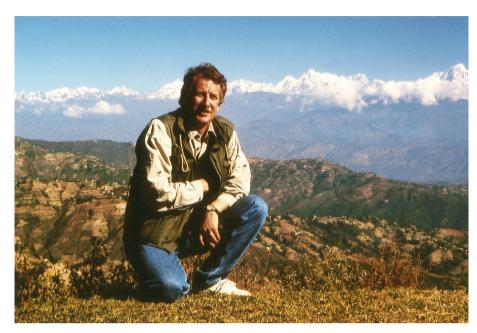


capacity of around 200 MW. Responsible for this study was Heggelund's former employer, the consultancy company Norconsult. Heggelund therefore recommended that Ulfsby stop by when he had returned to Norway. Ulfsby did so, and with that the first seeds had been sown.

In hindsight, Nam Theun, which later changed its name to Theun Hinboun, seemed to be a much more "correct" project for Statkraft than Khimti. First, Laos seemed to be a more stable and predictable country than Nepal, and a country that appeared to be far less risky to invest in. Admittedly, Laos was one of the poorest countries in the world, almost as poor as Nepal if one took as one's basis the UN figures for average earnings. Nevertheless, Laos' system was more stable, although Laos had also had a turbulent history. Since the end of the 1800s until the beginning of the

78

Statkraft's long-serving general counsel, Kjell Haagensen, in his element. Haagensen was a specialist in water resource law, and had a long career as a consultant and adviser to developing countries in the field of water resources and energy issues. In Nepal and later in Laos, he was engaged, along with other Norwegian energy and water specialists, as a consultant to national governments. The mission was to help countries establish a modern legal framework that facilitated private investment in the energy sector. Haagensen was given clear instructions by his boss Lars Uno Thulin to distinguish between his roles as adviser and as a Statkraft employee. Nepal enacted concession laws that in some respects resembled the Norwegian legislation, with clear guidelines regarding, among other things, public control and social responsibility in connection with hydropower developments.



1950s, the country had been a French protectorate. In 1953, however, in connection with the First Indochina War, Laos declared its independence and became a constitutional monarchy. Political tension had grown quickly between the monarchy and Pathet Lao, the emerging communist movement, and in 1975 the latter managed to seize power. Since then, Laos had been a one-party state governed by the politburo, which was dominated by the military. Laos never became as shut off and authoritarian as some of the other communist dictatorships, and there was less tension between the authorities and the nation's inhabitants. The authorities had a more relaxed attitude to the outside world. In addition, the country had pursued a policy of perestroika by instituting a number of cautious economic reforms, in which opening up to foreign capital was an important factor.³⁶ One of the areas where the authorities wished to entice investment was hydropower, of which Laos had a veritable abundance.37 According to the International Division, "foreign investors were virtually [...] queuing up to take part in the development of the country's hydropower resources."38 The point was that the combination of rich natural resources, a stable dictatorship and economic liberalisation seemed to be a relatively favourable framework for investments.

Second, the Theun Hinboun project was well under way both in organisational and financial terms. Partly due to the aforementioned reforms in the country, the project had received high priority in the Asian Development Bank which wanted to test out a new ownership model with combined public and private ownership. Among those in the know, this model was called Public-Private-Partnership, abbre-

viated to PPP. The idea was that private co-ownership would have a disciplinary effect on developing nations, which had a rather shady reputation when it came to organising and running financial operations. The starting point for the Theun Hinboun project was that the Laotian state would be a significant owner, facilitated through a loan from the Asian Development Bank, at the same time as private owners would be stakeholders too.³⁹

Third, a couple of investors were already partly in the picture. The most interesting investor was the Thai investment company MDX, which was controlled by Thailand's royal family. MDX was considered to be a serious and robust company, at the same time as the monarchy's role apparently instilled a special confidence in the region. The other relevant investor was particularly interesting to Statkraft, since it was Sweden's Vattenfall. That sturdy and robust Vattenfall was showing interest in this project was an important signal within the corridors of Statkraft, perhaps particularly so in respect of the board of directors, which had initially been sceptical to this type of participation. Furthermore, some individuals quickly recognised this represented an opportunity to establish broader cooperation with the Swedish company on international hydropower developments. A partnership with Vattenfall would most probably strengthen this business area's position within the company.

Last, but not least, a potential buyer of electricity from the Theun Hinboun project already existed, since the Laotian and Thai authorities had signed a letter of intent for construction of a 1500 MW capacity hydropower plant in Laos that would be distributed directly to the energy-intensive Thai market. Theun Hinboun could be the first power plant in this collaboration. A letter of intent had already been signed with the state-owned power company EGAT, which was considered a well-run and very robust company.⁴⁰

ESTABLISHING NORDIC HYDROPOWER AND THEUN HINBOUN POWER COMPANY

The Scandinavian parties involved in the project were quick to find one another. During the autumn of 1993, Statkraft and Vattenfall agreed to establish a joint venture in which any ownership would be coordinated, and early in 1994 the company Nordic Hydropower AB was founded with its headquarters in Sweden. The company was to be jointly owned by the parties (50–50 share), and was also intended to serve as a platform for a more extensive form of cooperation, or, as established in the shareholder agreement, "in a profitable manner, directly or through a subsidiary or holding company, to develop and implement international hydropower projects." In order to ensure "a reasonable degree of equality in participation from the Swedish and Norwegian side," the company's director was to be recruited from Vattenfall while the board chairman and project manager would come from Statkraft.



From the dam to the Theun Hinboun power plant in Laos. Theun Hinboun was one of the very first international hydropower projects that was organised as a public-private partnership. The Asian Development Bank supported the project, and the Laotian government joined as its largest shareholder. In 1994, Statkraft decided to purchase an ownership stake of 10 per cent, and in 2001, three years after the plant had come into operation, the company increased its stake to 20 per cent. To date, Theun Hinboun is one of Statkraft's most profitable international hydropower investment.

When Nordic Hydropower was founded, no formal decision had been taken on whether Statkraft and Vattenfall would be assigned a place in the project. The reason for this was predominantly that Laos had no corporate legislation offering security to foreign investors. In reality, the Laotian authorities, MDX, Statkraft and Vattenfall had already begun to cooperate early in the autumn of 1993. At that time, a steering committee had been established consisting of representatives from the four parties and from Asian Development Bank. As chair of the committee, the parties had appointed Kjell Heggelund, who by now had become Statkraft's representative. According to a status report issued at year-end that year, the Laotian authorities, MDX and Asian Development Bank were "very satisfied with the Nordic group's efforts in the project." In the opinion of Statkraft, this was why no one doubted that the Nordic companies should not be included.⁴³

As was the case with the Khimti project, the Theun Hinboun project also had its clear share of challenges, the largest of which related to the legal framework in Laos. Overall, the project nevertheless appeared to be far more robust. On the financial side, it was extremely important that Asian Development Bank had been involved at an early stage and was so dedicated. In doing so, one could avoid many of the teething troubles that hampered the Khimti project. It was also a great benefit having MDX, which represented both a commercial partner and a company that was "well acquainted with the local area." For Statkraft in particular, it was also important to

have in place Kjell Heggelund, who knew the field. Heggelund was assigned chief responsibility for the project. Further, it was also important, naturally, that estimates indicated that the project could be very profitable.

A solution to the legal issues was in place quite early on. In the autumn of 1994, the Laotian authorities issued a decree guaranteeing investors' rights, which made it possible to establish formal ownership and determine share distribution. The company, which was called Theun Hinboun Power Company, had the Laotian state as majority owner with a 60 per cent share, while MDX and Nordic Hydropower each had a 20 per cent stake, and Statkraft was allocated a 10 per cent share. The company's share capital, which was set at USD 110 million, corresponded to just below 40 per cent of an estimated total investment cost of USD 280 million. Statkraft would thus have to fork out USD 11 million in shareholder equity.

In brief, there were many indications that Statkraft should opt for this project. Within the International Division, it was actually felt that "it would be difficult for Statkraft to find projects with better conditions than in those found in this project." Such things had of course been said before, but the board chose to follow the administration's assessments and recommendations. In January 1995, the board gave the goahead for Statkraft's involvement in the project by providing equity capital to the tune of USD 11 million. In addition, permission was granted to furnish considerable guarantees during the construction period. The board was very concerned that it be kept abreast of progress made, and that the administration would immediately report any cost overruns or other circumstances that changed project conditions.



A pleasant atmosphere in simple surroundings in Laos. Civil engineer Kjell Heggelund began working at Statkraft in 1993. He had extensive international experience as a hydropower consultant, and in the early 1990s worked at the Asian Development Bank headquarters in Manila, in the Philippines. Through his work at the Asian Development Bank, Heggelund became familiar with the hydropower project Theun Hinboun in Laos and was later responsible for Statkraft's involvement in this power plant project. Pictured is the Theun Hinboun Power Company office in the Laotian capital Vientiane. Along with Heggelund sits engineer Vonexay Vinthilath, who was the Laotian government representative on this project. Vinthilath holds a doctorate from Minsk, Belarus and was later employed by Norconsult's office in Laos.

The doubts one had about this type of involvement were and continued to be greater than those prevalent in most of the company's other business areas. As we shall review in Chapter 7, this uncertainty remained in place for a long time, even though the Theun Hinboun project in isolation was in part a very successful project.

THE DIFFICULT ROUTE AHEAD

The projects in Nepal and Laos were not essentially the result of a targeted strategy but rather of coincidences and the involvement and commitment of individuals. The gradual development of a separate professional environment in this area, and the establishment of an International Division late in 1994, indicated, however, that this was an area that the company wanted to focus on, albeit cautiously. In January 1995, the following was established in the company's strategic plan: "To a limited extent, and with limited risk, the company will also become involved in the ownership of new development projects in countries where Norwegian hydropower expertise will be able to provide a good return on investment."

In the newly established International Division, work soon got underway to design a platform for operations. A strategic memo was prepared and presented to group management and the board of directors early in 1995. Particular focus was given to the market potential of international hydropower in this highly optimistic memo, which stated in general terms that there was a considerable potential for hydropower development in many parts of the world, particularly in Southeast Asia and South America.⁴⁷ Further, it was pointed out that there were a large number of small and medium-sized projects that were very well suited for Statkraft. Finally, it was intimated that it was a favourable time for investment, since some countries appeared now to be more positive to private investors in hydropower developments. In almost every country, hydropower had so far been virtually closed to private capital. In addition, the memo also raised questions concerning organisation and financing. In this respect, the board's signals from the Khimti process had clearly been understood. As we have mentioned, the board was concerned that these types of projects should occur in cooperation with other companies. The memo also proposed the creation of a separate company together with one or more investors. As such, one was to "professionalise the investor role and diversify risk." Further, a great deal of importance was attached to establishing good routines for decision-making and implementation of new projects, to avoid such challenges as those encountered in Khimti.

The board was not quite satisfied with the memo, and wanted a more thorough assessment of markets, economy/finance and project organisation, all of which had to be in place before the board would be willing to support new projects, if indeed it chose to do so.⁴⁹ What happened afterwards is slightly unclear. From the board docu-

ments, it is not evident that this matter was discussed in principle. It is not inconceivable that this is linked to the fact that this was when the Khimti project was entering its most difficult stage. As we mentioned above, the project halted completely in the spring of 1995. In any case: This issue was not raised by the board again, neither in 1995 nor the year after.

Nevertheless, the International Division began to work resolutely to identify new hydropower projects. In the course of 1995 and 1996, a selection of possible projects were considered, of which one project in particular on the island of Sumatra in Indonesia, "Merangin," initially received most attention. Merangin, a river power project with a planned installation of just above 350 MW, was deemed promising, and in the autumn of 1996 Statkraft and the Indonesian authorities signed a letter of intent outlining the main project framework.⁵⁰ One year later, a so-called heads of agreement was signed regarding the sale of power to the state power company PLN.⁵¹ In addition, particularly from 1998, work was to be carried out on projects in Latin America, ideally in Peru and Brazil. At the end of 1997, staff from the International Division came across a seemingly promising project (Cheves) in Peru, in the Andes Mountains several miles north of the capital Lima. In the following year, a lot of effort was invested in this project, and in the summer of 2001 the Peruvian authorities issued Statkraft with a licence for hydropower development.⁵² The International Division also became interested in a company in Peru called Egenor, where a considerable equity shareholding went on sale in 1999. Egenor had originally been part of the state energy company Electroperu, but in the mid-1990s it had been partially privatised and sold to a U.S. energy company. In 1999, the Peruvian authorities wished to sell all their shares in Egenor, and due to cyclical downturn in Peru at the time, an opportunity arose to acquire the shareholding (30 per cent) at a low price.⁵³ In Brazil too, several opportunities to make acquisitions appeared, and at least one of these, Onyx Energia, piqued the interest of the International Division. Onyx was a German-owned development company that, among other things, had a shareholding in a large planned power project, "Campos Novos" with a planned installation of almost 900 MW in the River Canoas, in the state of Santa Catarina.⁵⁴ In 1999, it was learned that the majority shareholder in Onyx wished to sell its share, and in the spring of 2000, discussions concerning an acquisition were initiated.

The extensive efforts made in connection with these and other projects were not in proportion to the results achieved, however. None of the projects considered and recommended by the International Division in the period leading up to 2001 came to fruition. In other words, the division worked for more than half a decade without getting a single new project accepted. Why was this?

In some instances, there was a natural explanation. The Merangin project in Indonesia, for example, seemed less interesting after the Asian Crisis of 1997 flared

A gloomy atmosphere in Jakarta. In the mid-1990s, Statkraft was involved in a possible hydropower project on the Indonesian island of Sumatra, together with the Indonesian state power company PLN. In the autumn of 1996, a letter of intent was drawn up. The signing was scheduled to coincide with an official visit to the country by Norway's Minister for Trade and Energy Jens Stoltenberg's. Just days before Stoltenberg was scheduled to get on a plane, the Norwegian Nobel Committee decided to award the Nobel Peace Prize to Bishop Carlos Filipe Ximenes Belo and José Ramos-Horta for their struggle against Indonesia's occupation of the island of East Timor. This decision caused strong dissatisfaction among Indonesian authorities. The letter of intent was in fact signed, but the body language displayed by Indonesian Minister of Energy I.B. Sudjana speaks for itself. To the left sits Statkraft's board chairman Hans O. Bjøntegård and the Norwegian Ambassador to Indonesia, Jan Wessel Hegg. To the right is PLN's CEO. There were several reasons why this project did not proceed, but the Nobel award ceremony did not help strengthen Statkraft's position in the country.

up. This financial crisis affected a number of countries in the region, including Indonesia, which was amongst those hardest hit. The Asian crisis put a damper on general interest in investing in the region. In addition, some people feel that Norway and Statkraft were brought into discredit with the Indonesian authorities in the autumn of 1996 after the Norwegian Nobel Committee awarded the Nobel Peace Prize to Ramos Horta and Carlos Belo.⁵⁵ However, projects that were achievable and considered commercially viable were not implemented either, e.g. the Egenor project in Peru, which was rejected by group management in the late summer of 1999, and which in hindsight was deemed an obvious lost opportunity.⁵⁶ The explanation for these lie not only in circumstances outside their control, such as politics and fluctuations in the market.

There can be little doubt that Statkraft's board in particular cast a damper on operations in the International Division. The board, which primarily consisted of the same people throughout the period under review, harboured a general scepticism towards investing in developing nations and emerging economies. The experiences learned from Khimti probably played a role in this context. Further, several of the board representatives, including several of the most vociferous members, harboured doubts about the competence of the division's leaders.⁵⁷ In addition, the division had been unsuccessful in finding a business partner, as the board had demanded right from the mid-1990s. Discussions had been held with a range of possible partners over the years, including several U.S. companies operating in the same markets in Latin America, but nothing specific had come out of these talks. Experience showed that it was difficult to find a partner at an overarching level. Until a partner was in place, however, the board appeared to be almost consistently unsympathetic to every



project. Admittedly, it is conceivable that projects might still have been accepted if group management and Lars Uno Thulin had fought harder for them. The problem was also that group management was divided in its view of this business area. Lars Uno Thulin was allegedly positive but not passionate. Furthermore, his gaze was set on other areas, particularly the Nordic countries and Europe. Moreover, several others in group management were openly sceptical.

The result was considerable frustration in the International Division, where year in and year out they had kept things going without achieving anything. People working out in the field felt more and more like "techno-tourists" who travelled around looking at projects that they with growing certainty would assume would not succeed. The biggest problem, and the most striking one, was that Statkraft's management never managed to decide what they wanted to do with this business area. This lack of clarification helped to demoralise the staff. Some staff members left the company, while others looked for other jobs. Nevertheless, some did stay on, and for these individuals their everyday life became increasingly meaningless. It was first towards the end of 2001 that it was resolved to clarify once and for all the future of the division and this business area. At this time, one genuine alternative was to close down the division. We will return to the outcome of this process in Chapter 7.



CHAPTER 4

Nordic Strategy

n the spring of 1996, Statkraft acquired a small shareholding in Sydkraft AB, Sweden's second largest power company. This acquisition marked the beginning of an investment that would come to play a very important role in Statkraft's development in the longer term. During the period up until 2002, Statkraft invested almost NOK 15 billion in the Swedish company, for which it received an ownership share of more than 44 per cent. The reason why this shareholding was so important is partly that Sydkraft was a well-run and profitable company paying out good annual dividends. What was most important, however, was that the value of Statkraft's shareholding increased significantly over time. In the period after the year 2000, Sydkraft was the subject of a tug-of-war between Statkraft and the company's other major owner, Germany's energy giant E.ON (former PreussenElektra). This battle was decided in 2008 when E.ON acquired Statkraft's ownership share, for the sum of NOK 44 billion. Settlement was made partly in the form of power plants in Sweden, Germany and the UK, giving Statkraft direct control over financially and strategically valuable power generation facilities. If we add to this the fact that Statkraft as owner of Sydkraft received almost NOK 9 billion in dividend payments, the total return on the investment was very good. Through the acquisition of production facilities and shareholdings abroad, it also went some way to define Statkraft as an international group.

Statkraft's success with Sydkraft can largely be explained by sound business acumen. In many ways, it reflects the best of Statkraft as an organisation. This investment was the result of a targeted strategy based on thorough and systematic analysis and decisions, and at all times a shrewd and conscious development of the potential of Statkraft's equity interest. In the final stage, in connection with the sale in 2007–2008, Statkraft also managed to produce considerable benefit through the carefully planned coordination of environments and people. At the same time, it is clear that this increase in value was also due to various general market-based fluctuations and policy and regulatory changes during this period, as well as changes in E.ON's strategy. These were changes that were impossible to predict but had a positive effect on the value of Statkraft's equity holding.

Statkraft's involvement with Sydkraft extended over a period lasting many years. In this chapter, however, we will limit our review to what we could call the first stage, comprising the period from the first acquisition in 1996 until the last in 2002. In Chapter 5, we will look more closely at developments in the period from 2002 to 2007, a wait-and-see stage, while the sale of Sydkraft in 2007–2008 will be discussed in Chapter 6. The reason why this topic spans different chapters is the changes that took place over time in the external surroundings, which affected values and thus strategies.

STRUCTURAL CHANGES IN THE NORDIC COUNTRIES

The power exchange agreements with PreussenElektra and SEP, which were discussed in Chapter 2, were partly the result of the prevailing situation in the Norwegian and Nordic markets in the first part of the 1990s where there was a large surplus of power and extremely low prices. There were clear limits, however, as to how comprehensive this type of agreement could be. For this and several other reasons, Statkraft's focus shifted to the Nordic region. Geographical proximity and good existing transmission lines provided the greatest potential for capitalising on the company's domestic power generation system. Already in 1993, a separate division was established – division for supply in Northern Europe, headed by Christian Rynning-Tønnesen, whose focus would be on expansion and strategies for the Nordic market.

Sweden in particular, with which Norway had the best electrical connection, was given greater focus. In 1993, plans were laid to establish a separate sales company there. The idea was that such a company would buy electricity from Norway and sell it directly to Swedish distribution companies and major consumers. In the same way that Japanese car manufacturers in the 1970s established production in the United States in order to avoid U.S. tariff barriers, Statkraft would go behind the Swedish monopolists' front lines by becoming Swedish. Another objective was to gain better insight into the workings of the Swedish power system.1 Obtaining information about production and market conditions rapidly became the most important objective. The ambition was to integrate the Swedish market better into the company's analytical and production models. Perhaps the clearest expression of this objective was the merger that took place between the division for supply in Northern Europe and the division for marketing in order to form the marketing division at the end of 1994. This merger marked the fact that Norway and the market abroad were no longer considered to be separate entities as regards to operation of the Norwegian production system.

While it could be said that the production and market dimension has roots extending back to the traditional plan and monopoly system, the idea of building alliances with other Nordic companies was a true-born child of the new market logic. This idea was first discussed in a strategy memo in the autumn of 1993.² The reasoning was that by establishing strategic alliances with companies in the Nordic countries, Statkraft would be in a stronger position should these countries also begin to liberalise their energy sectors. In doing so, Statkraft would be able to strengthen its position if, for example, major European energy companies began to show interest in the Nordic region.

This last scenario was not one that was produced out of thin air. Already in 1990, the German company PreussenElektra had acquired a small shareholding in Sydkraft, Sweden's second largest power producer. Together with Sweden's state-owned Vattenfall, PreussenElektra and Sydkraft had begun to lay a sea cable between Sweden and Germany that same year. Here it was fully possible to imagine an upcoming large-scale Nordic-German alliance. Later, another European market player emerged in Sweden, the French energy giant Electricité de France (EdF). In 1994, the French company also purchased a small shareholding in Sydkraft, declaring that the Nordic region was an area of focus. For this reason, it became more important for Statkraft to find an alliance partner. In terms of power generated, Statkraft was actually the second largest company in the Nordic region, only surpassed by Vattenfall. In relation to companies such as PreussenElektra, EdF and other major players in Europe, however, it was a dwarf and on its own, would be completely overshadowed in the event of a move towards liberalisation and a burgeoning battle for markets and equity positions.

The autumn of 1995 became a crossroads in this respect, since Riksdagen, Sweden's parliament, resolved to liberalise Sweden's electrical power supply effective 1 January 1996. In addition, Norwegian and Swedish authorities entered into an agreement at the same time to establish a joint Norwegian-Swedish power exchange to start at the same time.³ Sweden's zeal for reform spurred on the Statkraft organisation. In the autumn of 1995, one began to analyse the consequences of developments in Sweden, and to lay plans for how Statkraft best could meet this new situation. We will review this work later. First, however, we must cast a sideways glance at Statkraft's financial development during this period, since it would naturally have a bearing on what the company could do.

A STRONGER FINANCIAL FOUNDATION

Statkraft found itself in a tough financial position in the initial years after 1992. Low market prices coupled with stringent demands on profitability meant the company posted large losses. In 1995, operations ran at a profit for the first time. Profit after tax of NOK 328 million was not excessive, taking into account revenues and capital assets. Nor were they overwhelmingly large in the ensuing years, as shown in Figure 4.1 below.

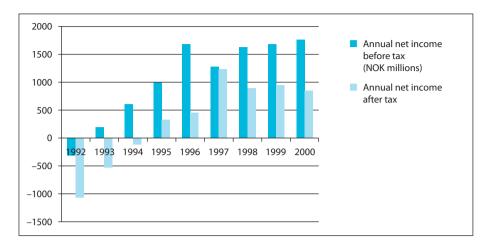


Figure 4.1 Statkraft, annual net income before and after tax, 1992–2000 Source: Statkraft, annual reports

What was most important, however, was that things were steadily moving in the right direction. This helped convince the owner that the company was under control. The Norwegian Ministry of Trade and Industry was actually impressed that the company had managed to post a profit in 1995 already. More importantly, it contributed to the ministry giving the company greater freedom. In 1996, the ministry recommended providing Statkraft with NOK

3 billion in increased equity. At the same time, the Storting gave its approval allowing Statkraft to borrow more money. In the ensuing years, the company received a number of new capital contributions and extended its borrowing limit several times. In total, the company had NOK 33 billion more at its disposal in the period between 1995 and 2000, of which NOK 20 billion took the form of a raised borrowing limit and NOK 13 billion in increased equity.⁵

If we allow ourselves to anticipate these events, Statkraft essentially used this capital to buy in to other power companies. As such, we could say that the company's strategy of expansion, in which acquisitions came to play a highly central role, had the support of its owner. At the political level, one primarily wanted Statkraft to spend money on acquisitions in Norway, in order to secure public ownership of hydropower resources at a time when foreign companies were beginning to jostle for position and an increasing number of municipalities were considering selling their power companies. As we see later (Chapter 5), a lot of the capital available was spent on precisely this purpose. In the period from 1996 until 2002, Statkraft made acquisitions totalling NOK 42 billion, of which NOK 26 billion were spent in Norway. Politicians were less concerned that Statkraft should acquire ownership abroad, and in some political camps, there was even clear scepticism to such actions. This aspect of Statkraft's expansion was therefore primarily driven by the company itself. Even though these actions were not supported, they were not halted either. In the period up until 2002, Statkraft spent NOK 16 billion on acquisitions outside Norway.

ESTABLISHING A NORDIC STRATEGY

Sweden's decision in the autumn of 1995 to liberalise its power sector led to an almost immediate reaction at Statkraft. A working group was established to analyse the consequences and to develop strategies. Director for market operation Christian Rynning-Tønnesen chaired this working group, which otherwise consisted of Tony Ellis,

Lars Hjermann and Finn Fossanger from the market division, and Eli Skrøvset and Børre Evensen from the financial staff. The working group presented its provisional report just before Christmas that same year.⁷

The report concluded that Statkraft should focus on ownership in Sweden, the argument being that this would provide the best basis for positioning the company in Sweden. An important point was that several Swedish power companies were listed on the stock exchange and it was therefore possible to acquire shares. Furthermore, this was the right time to do so. According to the working group's analyses, several of the listed companies were still relatively inexpensive, meaning they had a low market capitalisation compared with their underlying values. In the opinion of the working group, this advantage would gradually disappear as other parties began to show interest in the liberalised Swedish market. By making an early start, it would be possible to secure equity positions at a favourable price in a relatively relaxed market.

Both the management group and the board supported this opinion. The next step was to consider specific companies. During the first couple of months in 1996, three listed companies in particular, came in for considerable scrutiny: Graningeverken AB with its main focus in northern Sweden, Gullspång Kraft AB with its core operations in central Sweden, and Sydkraft AB, which dominated the southern part of the country.

These were three different companies in terms of size, type of power generation and activities. Graningeverken AB was the smallest of the three and had an annual output of approx. 2.5 TWh. Purely a hydropower company, it also owned vast forest areas. Gullspång Kraft AB was larger, with an annual output of just above 8.5 TWh. This company too had some hydropower output, but also produced a considerable amount of nuclear power through part-ownership of the Forsmark and Oscarshamn nuclear power plants. Sydkraft AB was by far the largest of the three, with an annual output of more than 25 TWh. 8 This company also generated a mix of hydropower and nuclear power. Sydkraft was a majority owner of Oscarshamn, the sole owner of Barsebäck and had a minority shareholding in Forsmark, all of which were nuclear plants. 9

The working group felt it was worthwhile taking a closer look at Gullspång and Sydkraft in particular. First, both of them were considered inexpensive. In January 1996, Gullspång's market capitalisation was around SEK 7 billion. Statkraft felt it was worth at least SEK 8.5 billion, a conservative estimate at best, since Swedish brokers hinted at a value of well over SEK 9 billion. Sydkraft's market capitalisation was just over SEK 25 billion, while the working group had landed at a figure of SEK 30 billion. Here too, one had the support of leading banks and financial institutions. Both companies posted good profits, and the working group was also convinced that

the values of the companies would increase in connection with the liberalisation process. ¹² Their conclusion was that buying shares in these companies could be justified on financial considerations alone, and that the risk of losing money was moderate.

Beyond financial profitability, the industrial and strategic benefits would determine where would be the best place to acquire shares. In fact, one was faced with two very different concepts. With Gullspång, which was a smaller company, Statkraft could manage to acquire a dominant equity position and therefore gain direct control – something that was not feasible in the far larger Sydkraft. Given Statkraft's financial scope of action, it would in this case have to make do with a minority position. In relation to achieving strategic and industrial gains, Gullspång would be the most obvious alternative. However, a majority position in this company also posed clear challenges, especially since it was a nuclear power company. As a majority shareholder, Statkraft, and therefore the Norwegian state, would become a direct owner of nuclear power. In Norway, where there was strong criticism of nuclear power, such a position would pose major challenges.

It would be simpler and less of an obligation to hold a minority position in Syd-kraft. Other circumstances pointed towards investing in this company too, however. First, it would be possible to achieve industrial benefits even though one was not a large shareholder. Among other things, considerable synergies could be achieved through collaboration on power generation, since Sydkraft had a lot of thermal energy that could be coordinated with Statkraft's flexible hydropower. Further, Sydkraft was favourably located in strategic terms, situated right in the middle between the Scandinavian peninsula and the continent. Last, but not least, Sydkraft co-owned an undersea cable between Sweden and Germany together with Preussen-Elektra, which really opened up some interesting possibilities. As mentioned, Statkraft also had links to the German company via the cable agreement from 1993 (see Chapter 2). In addition, the German company had acquired a larger share in Sydkraft over the last couple of years. Joint ownership of the Swedish company would allow Statkraft and PreussenElektra to develop their partnership by including Sydkraft in a more comprehensive industrial collaboration.

This type of visionary thinking was close to Thulin's heart. In fact, for several months, Thulin had been secretly discussing ownership with Sydkraft's largest shareholder.

PROJECT TOR

In the summer of 1995, Thulin gave a speech at an energy conference in Frankfurt, Germany. He had been invited to speak about development of the future electricity supply system in Europe and about Statkraft's ambitions for growth. Among those present were two representatives from the Swedish bank Swedbank whose interest

was piqued by Thulin's speech. Swedbank had on its client list the municipality of Malmö in southern Sweden. Malmö owned a large stake in Sydkraft but was interested in selling part of this shareholding. So far, the bank had been unable to find a buyer with the profile desired by the municipality. In Thulin and Statkraft, however, the two brokers immediately saw a potential major buyer.¹⁴

After the Frankfurt conference, Swedbank arranged several meetings between Thulin and Malmö's influential mayor, social democrat Ilmar Reepalu. Since Sydkraft was a listed company, these conversations took place covertly and in secrecy, in among other places a private apartment in Stockholm.¹⁵ Thulin and Reepalu got on well with each other, which probably had some bearing on subsequent events. Most importantly, Reepalu liked Statkraft. He was keen on public ownership, and wanted above all to have the Swedish company Vattenfall as a co-owner of Sydkraft. To Reepalu's surprise, inquiries he had made to his party colleagues in the social-democratic government that same year were never answered, and he therefore had to start looking for other solutions. Even though Statkraft was not Swedish, it was at least state-owned, which Reepalu considered a strength. In addition, Thulin spoke in his discussions of several interesting opportunities, including industrial cooperation. However, he also launched the idea of cross-ownership between the two companies, a notion that inspired Reepalu. 16 Last but not least, Malmö's mayor felt that Statkraft could act as a good counterbalance to the other foreign power companies who had acquired shareholdings in Sydkraft in recent years, and which had gradually begun to challenge both each other and the company's municipal owners.

A certain amount of drama lay behind this latter issue, since several of the municipalities who had held stakes in Sydkraft for almost a century had begun to sell off their shares. Sydkraft had been established in 1906 by the five municipalities of Malmö, Helsingborg, Halmstad, Lund and Landskrona.¹⁷ Later the company had been reorganised as a limited liability company with a considerable amount of private ownership, but as a group, the municipalities had retained full control. At the beginning of the 1990s, however, some of these municipalities had begun to sell off their shareholding. The reason for their doing so was partly a need for money and partly ideological. In 1992, the conservative party (Moderaterna) in the municipality of Helsingborg had sold off the municipality's entire shareholding in Sydkraft to PreussenElektra. Two years later the same thing occurred in the municipality of Halmstad, which sold the majority of its shareholding to French EdF. These sales reduced the total municipal stake to below 50 per cent of voting capital.¹⁸ At the same time, PreussenElektra had acquired a full 27 per cent of voting capital and had become the company's largest single owner.

In Malmö, Moderaterna had also had plans to reduce their municipality's shareholding. Malmö's position was particularly important because the municipality was 94

Social democrat Ilmar Reepalu (left) was mayor of the Swedish city of Malmö for 19 years, from 1994 to 2013. He is pictured with fellow party member Göran Persson, who was Sweden's prime minister in the period 1996–2006. Malmö municipality was a major shareholder in the power company Sydkraft, and as the owner representative and board member, Reepalu participated actively in the company's development. He became a central figure in the tough battle for ownership of Sydkraft in the 1990s. Reepalu was obsessed with public ownership of the power supply system, and wanted the state to become its owner. The state did not become owner, however, and this opened up an opportunity for Statkraft. Reepalu liked the fact that Statkraft was publicly owned. Besides, he quickly became a good acquaintance of Statkraft's CEO Lars Uno Thulin.



the largest municipal owner, holding more than a quarter of the voting capital in Sydkraft. At the municipal elections in the autumn of 1994, however, the party lost to the social democrats, and Ilmar Reepalu became mayor. Although Reepalu continued these plans to sell off the municipality's shareholding, he was concerned that the sell-off should be limited, that the municipalities should act in concert, and that they should have a clear strategy about who should be allowed to acquire the shares. He felt that it was important to spread ownership so that individual players, such as PreussenElektra, did not gain too strong a position. Consensus on these principles was easier to achieve after the elections, since the social democrats also won in most of the other municipalities. Added to this is the fact that Reepalu was highly persuasive and he was good at getting everyone to pull together. In him, the municipalities had a representative who attached importance to strategic and holistic thinking. As mayor of the largest municipality, Reepalu took up the position as member of the board of Sydkraft, and from this vantage point he was well placed to shape developments.

NORDIC STRATEGY 95

Discussions with Reepalu and the municipal group of owners resulted in an offer to Statkraft, at the beginning of April 1996, to acquire a block of Sydkraft shares comprising 5.1 per cent of share capital and 8.1 per cent of the company's voting capital. The reason for the difference between share capital and voting capital was that Sydkraft had two share categories, category A and category C shares. These categories of shares had the same nominal value and dividend, but while each category A share carried one vote at the company's general meeting, each category C share carried only one-tenth of a vote. The category A shares had been issued to enable the municipalities to retain influence over the company even though ownership had been diluted among additional owners. For this particular package of shares, Statkraft was to pay a little less than SEK 1.36 billion.

This issue was discussed at an extraordinary board meeting on 9 April 1996. Several of the board's representatives remember this séance as something quite special. ²¹ The administration came well prepared, and the matter was presented and supported so thoroughly and soundly that it was difficult to fault anything of substance. Thulin put his full weight behind the issue, as he had done in this case, and most people allowed themselves to be persuaded by the visions presented. Rynning-Tønnesen reviewed all the figures and facts, and few doubted this side of the matter. When Helge Skudal assured everyone, in that special way he had of inspiring confidence, that this investment was justifiable financially, then there was no reason to doubt the business concept as such.

Nevertheless, some people were quite concerned about the political side of things. As mentioned above, Sydkraft owned nuclear power facilities, and in Norway it would be no exaggeration if one said this was an unpopular form of energy. Acquiring shares in Sydkraft could therefore give rise to criticism from both politicians and public opinion. Halvard Kaasa, the employees' representative, was the most openly critical board member. In his opinion, this matter would have to be approved in advance by the Norwegian Ministry of Industry and Energy.²² Others also felt this would be a wise move. A majority said no to this suggestion. First, one was afraid of the response this might produce. Second, this question touched on a matter of principle. The majority felt that this particular matter was clearly within the bounds of the board's mandate and authority, and that it was important to stand by the principle of the board's independence.²³ The administration was therefore given the goahead, and the next day Thulin, Skudal and Rynning-Tønnesen travelled to Malmö to sign the purchase agreement. The signing took place ceremoniously at Malmö's City Hall together with representatives for the municipalities who were selling their shares, Swedbank and the management of Sydkraft. At a press conference afterwards, the acquisition was characterised as important and good for both Statkraft and Sydkraft.

NEW ACQUISITIONS IN SYDKRAFT

The predictions made by the Statkraft administration that Sweden's electricity supply would be faced with a more comprehensive structural change were confirmed in the first weeks and months after Statkraft acquired shares in Sydkraft. The first indication that something was brewing had come in March when Finnish Imatran Voima acquired shares in Gullspång. Nevertheless, it was only after Statkraft had acquired shares in Sydkraft that the snowball really began to roll. The next day, power company Graninge also acquired shares in Gullspång. Then, barely a week later, over a two-day period, EdF, Sydkraft and PreussenElektra all acquired shares in Graninge. Concurrently, Sweden's state-owned company Vattenfall began to acquire shares in Gullspång. In addition, smaller blocks of shares in Sydkraft were purchased by unknown buyers on the stock exchange. After this sudden flurry, things calmed down until July, when Imatran Voima, following an open bidding process, acquired the entire company Skandinaviska Elverk, which was owned by the Wallenberg-controlled investment company Incentive. At a purchase price of SEK 4.2 billion, the acquisition of Skandinaviska was the largest single transaction that had ever taken place in the Swedish power sector. By the end of July, however, shares in power companies totalling a full NOK 17 billion had changed hands.²⁴ These rapid changes attracted considerable attention both in Sweden and abroad. Norwegian media spoke of the situation as a wild battle, 25 and these events drew attention elsewhere in Europe.26

At this point in time, Statkraft had actually had an opportunity to acquire further shares in Sydkraft. As mentioned above, the French company EdF had acquired a stake in the company in 1994. The French had never been accepted, neither by the Sydkraft administration, the municipalities who owned the company nor PreussenElektra. The explanation for this was apparently that they had acted in an arrogant manner. After several incidents, they gave up. EdF began instead to invest its money in the company Graninge, where it gradually managed to gain control together with another major owner. In turn, this led to Statkraft proposing to buy EdF's shares in Sydkraft.

The French were interested, and in the summer months they offered to sell their entire stake in Sydkraft at a price of SEK 2.9 billion, approximately SEK 240 million above the current share price. That stake it would gain from obtaining an increased equity position more than justified the price. In a memo on this matter, it was stated that the shareholding would provide Statkraft a better balance in relation to the main shareholder in Sydkraft; PreussenElektra [...] and greater influence over the formulation of joint efforts in the future. In particular, the memo highlighted the opportunity of achieving more comprehensive coordination of operations among PE, Sydkraft and Statkraft, which was expected would provide major synergies.

Acquisition of EdF's shareholding also received the full support of the board, ²⁹ as did a third initiative hatched out during the summer months. In parallel with the EdF negotiations, contact was made with the largest institutional owner of Sydkraft shares, the Fourth Swedish National Pension Fund (AP4). AP4 held a large share of category A shares, but as an institutional owner it was mainly concerned with dividend payments rather than control of the company. Statkraft, for its part, would end up with a large portfolio of category C shares if the EdF deal went ahead, but that was precisely the influence Statkraft desired. Statkraft's plan was to exchange its category C shares for category A shares. ³⁰ AP4 was keen to sell, and during the autumn it was agreed that Statkraft should take over AP4's 9.2 million category A shares in return for 10.7 million category C shares. Based on the agreed value of the shares, this deal would have cost Statkraft SEK 174 million, which was not a high price compared with the voting power the company received in return. The exchange, which was carried out immediately prior to year-end that same year, raised Statkraft's share of voting capital from 15 to 21 per cent.

Over the space of three months and three rounds of acquisitions in 1996, Stat-kraft had become an owner to reckon with in Sweden's second largest power company. By the end of the year, Statkraft had actually become the second largest owner, if we disregard the municipalities as a block. Only PreussenElektra held a larger stake. The German company was not much larger measured in equity capital (18 per cent) but was a good deal larger in terms of voting capital (27 per cent). The difference was not that large in any case.

It was not that unnatural for the outside world to view Statkraft's actions as a raid, and as a signal that the company had ambitions to do something quite significant. PreussenElektra in particular had reason to speculate about which plans the Norwegians had. In 1996, the Germans had already decided to acquire all shares available for sale in Sydkraft. Meanwhile, Statkraft was poised to quietly assess opportunities and take action when the situation presented itself. At PreussenElektra, one was surprised and irritated at these actions, since it was believed that Statkraft was an ally and not a challenger. Both Statkraft as a company and Thulin as a person had been balancing on a knife's edge in this respect, at least if the intention was to maintain the good relationship established with the Germans. Even though the outside world did not understand it, Statkraft would find itself faced with a major contender in any open battle for equity positions. PreussenElektra had plenty of capital and an equity position that gave its administration ample scope for action. Statkraft did not have much capital at its disposal, and could hardly expect to receive much support from its owner in any battle over a Swedish nuclear power company.

What happened in the next year is important as to later developments in the history of Sydkraft, and particularly in the relationship between Statkraft and Preussen-

Elektra. Another German company, Hamburgische Electricitäts-Werke (HEW), acquired a considerable stake in Sydkraft (16 per cent of share capital). This action immediately posed a problem for PreussenElektra, since it also held an equity share in HEW. The German cartel authorities, who are not too fond of cross-ownership, became involved. Simply put, PreussenElektra was unable to acquire additional shares in Sydkraft so long as HEW held shares in the same company. Statkraft was not in any immediate position to act on this news, partly since it lacked capital, but perhaps especially for political reasons. In any case, it could not be taken for granted that Statkraft would be able to gain a majority shareholding in the Swedish nuclear power company. The question was then raised as to what would happen if other Sydkraft owners wish to sell off a large shareholding. Other players, such as affluent European companies, could quickly gain access and take over control of the company. Such a situation was hypothetical as long as the municipal owners wished to retain their shareholdings, but it could not be assumed that this situation would continue.

At one point in time, the two CEOs and friends, Lars Thulin and Hans-Dieter Harig, began to speak together,³² which resulted in an agreement that would secure both coordination and the balance of power between the two companies. It was agreed that Statkraft should acquire shares if HEW decided it wanted to sell off its stake in Sydkraft. Statkraft would then transfer part of these shares to Preussen-Elektra. For its part, the German company would transfer shares from new acquisitions if HEW withdrew and the company could then acquire shares in Sydkraft. An agreement was also reached that the companies should coordinate their interests in management of the company. Further, Statkraft should be granted some special privileges if PreussenElektra were to gain a majority interest. These privileges included guaranteed representation on the board. In doing so, the two companies would cooperate on ensuring control of Sydkraft. This agreement, which according to Harig would hardly have been possible without the good relationship that existed between the two companies, would gradually have a great bearing on Statkraft's equity position. First, Statkraft had to go through a difficult round of negotiations with its own owner, in which the key point of discussion would be precisely the issue of nuclear power.

THE SYDKRAFT OWNERSHIP BECOMES POLITICAL

On Monday 3 March 1997, Swedish journalists flocked to Barsebäck nuclear power plant just north of Malmö in southern Sweden. The evening before, it had become known that Sweden's social democratic government had done a little horse-trading with two other parties in Sweden's national assembly (Riksdagen) which, would entail closure of Barsebäck. There had long been talk in Sweden of closing down the

nation's nuclear power plants, and now was the time to translate vision into actions, and the first action was closure of Barsebäck. Details of the agreement were still unknown, but it was rumoured that the first of the power plant's two reactors was scheduled to close the year after, while the second reactor would be shut down by 2001.³³

At Statkraft, this news caused a certain amount of unrest. Barsebäck was owned by Sydkraft, and the power plant was responsible for a considerable part of the company's total power generation and revenues.³⁴ This was valued at more than SEK 4.5 billion. A shutdown without compensation would have major consequences for the company, but the government initially had no plans to provide compensation for the plant's shutdown. To begin with, not everyone was convinced that this initiative would be implemented. Precisely one year later, in February 1998, the government resolved to forbid operation of one of the Barsebäck reactors from 1 July that same year. Reactor number two was to be shut down no later than in 2001. Payment of compensation was not mentioned in this decision.

Deference to foreign policy made the Swedish government close Barsebäck first, and not, for example, one of the country's state-owned nuclear power plants. In Denmark, which had already said no to nuclear power in the 1970s, they had always been very irritated by Barsebäck, which on a clear day was visible to the naked eye from Copenhagen.

Sydkraft did not see it as its responsibility to bear the cost of this type of problem, and the company responded by taking the Swedish government to court. This action put a temporary stop to the planned shutdown, at the same time as it became clear that the government did not have a watertight case, particularly on the question of compensation. The final outcome was that the Swedish government granted Sydkraft full compensation in the form of co-ownership in the state-owned nuclear power plant Ringhals. In financial terms, the shutdown would not affect Sydkraft and the company's owners. We will pursue this matter in a little more detail, however, since it did damage Statkraft's political goodwill in Norway, and in turn affected Statkraft's ongoing strategy in respect of Sydkraft.

In certain political quarters, Statkraft's involvement with Sydkraft had been met with criticism from day one. There had always been strong political opposition to nuclear power. Statkraft's involvement in Sydkraft, which indirectly made the Norwegian state an owner of nuclear power plants, was in breach of a fundamental national principle of energy policy. For this reason, several political parties had already demanded after the initial acquisition of Sydkraft shares in the spring of 1996 that Statkraft should sell off its shareholding.³⁵ In other respects, Statkraft had managed to spur this criticism through its relatively unfortunate handling of the media. After the acquisition, the company's strategy manager, among others, had said to the

media that Statkraft considered ownership in nuclear power plants to be quite unproblematic.³⁶ Under Prime Minister Gro Harlem Brundtland, Norway's social democratic government had backed Statkraft, stating that political intervention was not an option. Jens Stoltenberg, who was then Minister of Industry and Energy, indirectly assumed responsibility for this matter. Stoltenberg had been informed that Statkraft had plans to make acquisitions in Sweden, and even though he claims he had not been informed which company these plans concerned, he supported the company's decision. Countering criticism, Stoltenberg stated, "Swedish nuclear power is already being used in Norway, to heat up Norwegian homes," and continued saying that for this reason it did not represent a breach of Norwegian energy principles.³⁷

It was not until the Barsebäck issue that Statkraft's involvement in Sydkraft became a serious political problem, since Statkraft in this matter appeared to be a direct champion for maintaining nuclear power production. Admittedly, Sydkraft was the one that brought the case against the Swedish authorities, but it was neither a secret nor a surprise that Statkraft as an owner backed the Sydkraft administration. Therefore, a situation arose in which the Norwegian authorities could be accused of indirectly resisting the shutdown of a form of energy of which the exact same authorities were highly critical. In the spring of 1998, representatives of the Swedish government openly began to criticise Statkraft's role in the Barsebäck affair. Anders Sundström, Sweden's Minister of Industry, lashed out in Norwegian media with surprisingly sharp criticism of the company. Indirectly, this could not be interpreted as anything other than criticism of the Norwegian authorities too, at least as long as no intervention occurred in respect of the company. Gradually, the message was spelt out clearly by Prime Minister Göran Persson, among others. Prominent Danish politicians too began to question the Norwegians' seemingly double standard.³⁹

This matter was a delicate one for the government that was now in power. After the general elections in the autumn of 1997, Norway's social democratic government had been replaced by a tripartite government consisting of representatives from the Christian Democrats, the Liberal Party and the Centre Party, all of whom had presented themselves in one way or other as environmental parties. In addition, the Centre Party was one of the parties that had always been most critical of Statkraft's investment in Sydkraft. This party had even been charged with responsibility for the Ministry of Oil and Energy, which was the ministry that owned Statkraft. The minister herself, Marit Arnstad, as a member of parliament had been among those who had supported the demand that Statkraft sell its shareholding in Sydkraft.

Arnstad in particular came under a considerable amount of pressure from all sides in this conflict. On the one hand, she had declared herself to be in opposition to nuclear power and critical of Statkraft's investment in Sydkraft, while on the other

hand, she as the responsible minister had to adhere to the framework of rules set forth by the Storting for exercising ownership of Statkraft. This framework set clear formal limits to political control. In addition, a minister could not openly criticise her own companies without this being interpreted as a declaration of no confidence in the company's management. In reality, Arnstad would therefore have to support the company.

This can hardly have been an easy thing to do. Criticism from the Swedish government could probably be countered on a formal basis, since Statkraft alone, which had only two of Sydkraft's 16 board representatives, was not in a position to dictate Sydkraft's attitude. Furthermore, Statkraft's board representatives, Thulin and Rynning-Tønnesen, had been appointed by Sydkraft's general meeting and were therefore not formally subject to the wishes of the Norwegian government. Finally, board members of listed companies were obliged to follow the interests of their shareholders, and not others. In brief, Thulin and Rynning-Tønnesen could not be ordered to act against the views of a majority of shareholders. In reality, there was little Arnstad could do. The outside world was left with two indelible impressions. First, that the minister and the government parties failed to stand by their previous views, and second, that the politicians were not able to control their own companies, even in such fundamental issues as one was dealing with here. Scandal⁴⁰ and embarrassing⁴¹ were

just some of the words bandied about in the Norwegian newspapers.

Statkraft's investment in Sydkraft, and the Barsebäck issue in particular, was in many ways an acid test to see whether the political system could accept the ground rules laid down in the neo-liberal ownership model. Independent state enterprises could also have constraints imposed on them by their owner, the Storting and government. The difference lay first in the way in which this happened. Ownership control was to take place via formal channels, in Statkraft's case through enterprise meetings, and through general and clearly formulated guidelines enshrined in the company's articles of association. Within these general guidelines, the company



Fond of hydropower, but not fond of nuclear power. Marit Arnstad was Minister of Oil and Energy in Kjell Magne Bondevik's coalition government during the period 1997–2000. Arnstad had previously criticised Statkraft's acquisition of Sydkraft because the Norwegian state indirectly became the owner of nuclear power. As minister, she had to accept that Statkraft continued to buy shares in the Swedish company. The situation created some tension between Statkraft and the minister.

would then operate on purely commercial terms, without interference from its owner. It would appear that this acid test had been passed. The system could hardly have been challenged more strongly than it had been with the Bondevik government and Minister Arnstad acting as guinea pigs.

ON THE OFFENSIVE

During 1997 and 1998, the distribution of ownership in Sydkraft remained relatively stable, with the municipal block remaining the largest shareholder, and Preussen-Elektra and Statkraft as number two and three, respectively. These parties held 38, 28 and 21 per cent of the voting capital, respectively. HEW held 16 per cent of share capital but largely had category C shares and therefore held only three per cent of voting capital. A large group of financial investors held about 25 per cent of share capital and 10 per cent of voting capital.

Stability of ownership during this period is mainly due to the fact that the municipalities had at one point entered into a reciprocal and binding agreement preventing further sell-offs until 1999 at the earliest – the result of Ilmar Reepalu's ownership strategy. In any circumstances, major changes in ownership were blocked for a while. For both Statkraft and PreussenElektra, this meant a welcome breather, for reasons we have mentioned already. For Statkraft, it would clearly have been rather challenging to take a large concentrated bite while things were reaching a boiling point around Barsebäck.

It is also significant that Statkraft's equity share in Sydkraft was first reviewed for more thorough consideration at the beginning of 1999. At this point in time, it began to be clear that the municipalities intended to sell additional shares, and this put pressure on Statkraft to clarify the company's objectives and ambitions for the future as regards to ownership of Sydkraft. The main question was whether to go in for an increase in Statkraft's stake in Sydkraft, and, if the answer to this question was yes, by how much.

If one took a starting point as the original main argument for acquiring shares in Sydkraft, to achieve industrial synergies, it could not be assumed automatically that the answer would be yes. The industrial synergies of ownership had not actually been that great. ⁴² Some joint development projects had admittedly been initiated. Characteristic in this respect was the hydrogen project, initiated in 1998, in which one was to "assess and clarify the future commercial role of hydrogen and demonstrate the significance of hydrogen in a 15–20 year perspective." Nevertheless, neither this project nor the other industrial collaborative projects had made much headway. This does not mean that the relationship between the companies was not a good one. On the contrary, good contacts were established on several levels in Statkraft and Sydkraft. It was just that the industrial connection was never realised.

103



"One for all, all for one." Statkraft's management team in the years 1994 to 2001. Lars Uno Thulin's principle was that group management should not be a group of leaders, but a management team responsible for all decisions. This was evident in a meeting before the acquisition of the first Sydkraft shares in 1996. When (from left, standing) Finn Quale, Helge Skudal, Bjørn Blaker and Christian Rynning-Tønnesen (sitting, to the right for Thulin), each and one had to express their honest opinion about an acquisition of a shareholding in a Swedish nuclear company. Everyone said yes, albeit with varying degrees of enthusiasm.

Then again, this was not really a major problem, as long as Statkraft's shareholding produced such a good financial yield. During the time Statkraft had been an owner, Sydkraft had developed soundly both in terms of its value and the results it produced. Between the years 1996 and 1999, dividend payments and share price increases totalled SEK 2.1 billion, corresponding to an annual return on investment of no less than 16 per cent.⁴⁴

In a broader perspective, however, financial profitability alone was not an argument for tying up huge amounts of capital. That Statkraft's investment had done so well in financial terms did not make it easier for the administration to argue for further acquisitions of the Sydkraft share. A memo from the strategy department in April 1999 states there was "broad consensus" that the electrical power supply system in northern Europe would be moving towards fewer key entities, and that Statkraft's ambition to become a leading energy company in this region was conditional on strong and controllable relationships with other large companies. This would seem to indicate that the acquisition of additional shares would be a good move. As a necessary first step, according to the strategy department, negative control, that is control of more than one-third of the company's capital, should be secured. This would form the starting-point for two subsequent routes. One was to take a majority shareholding in the company, to enable full integration into Statkraft. The other route was to secure such control in collaboration with PreussenElektra, and then to integrate the operations of all three companies.

The first of these alternatives is something it was unlikely Statkraft would have had the financial capability to achieve in the near future. Equally important, both this route and the other one were also strongly dependent on the plans of the far larger PreussenElektra. The point was that the first step – acquisition to a position of negative control - was considered to represent little risk. The value of Sydkraft had increased steadily in recent years, and according to the strategy department there was reason to believe it would increase further in the future. Among other things, this assumption was based on an expectation of rising power prices in the Nordic market. In addition, gaining such a position would represent a major strategic value. By attaining a negative majority, one would be in a stronger position in the event of any collaboration with Preussen Elektra. And if no collaboration were to occur, Statkraft could, by holding such a position, block any unwanted initiatives on the part of the Germans. Finally, if PreussenElektra did desire to acquire such a shareholding and Statkraft saw it could earn money from selling its shareholding, the price would clearly be good. Alternatively, Statkraft could, as stated in the memo, "use its shareholding as an important wildcard." In brief, it would be difficult to lose anything on the back of such an increase. The greatest risk, according to the strategists, would actually be if one stuck with the existing equity share. One might then find oneself in a situation where PreussenElektra achieved a majority shareholding and Statkraft's influence was marginalised. That would probably also reduce the value of Statkraft's portfolio.

The decision was then made to acquire further shares. During 1999, Statkraft acquired a rather large block of A shares from several of the owner municipalities, bringing its shareholding up to 29 per cent of both shares and voting capital, taking

Statkraft past PreussenElektra in terms of share capital, while the German company still held a larger share of voting capital. One year later, Statkraft took a further step when it purchased a large portion of C shares, bringing its portion of share capital up to 35 per cent. Following these acquisitions, Statkraft had attained a negative majority, and an important strategic position. The question then was what should be done now. By this time, it was clear that the municipalities would sell off more of their shareholding, perhaps even ridding themselves completely of their shares. If that were to happen, an additional 27 per cent of voting capital and 17 per cent of equity capital would be up for grabs. In total, this would be sufficient for both Statkraft and PreussenElektra to achieve a majority.

What happened next is unclear and disputed, but it has been claimed that at one point Statkraft's owner, represented by Oil and Energy Minister Marit Arnstad, put her foot down and stopped Statkraft from acquiring a majority in Sydkraft. Arnstad herself has refuted this claim. Internal Statkraft documents indicate something else. We cannot say for sure what is correct. In any case, PreussenElektra, or E.ON, as the company was now called, ended up with the remaining block of municipal shares. In January 2001, the company purchased 10.1 million category A shares from the municipalities, bringing its stake to more than 40 per cent of voting capital, and was obliged to offer to purchase all the remaining shares in the company. Most shareholders accepted the offer, but Statkraft did not. Subsequently, in compliance with the agreement between PreussenElektra and Statkraft and subsequent agreements, Statkraft was able to acquire part of these shares at the price offered, which brought the company's equity share and share of voting capital to 43 and 45 per cent, respectively. Through this sale to the Norwegians, the Germans reduced their equity share from 65 to 57 per cent and their share of voting capital from 71 to 55 per cent.

In 2002, E.ON and Statkraft had taken overall control of the entire company, with just under half of one per cent remaining in other hands. For E.ON, this position as majority shareholder gave them an opportunity to integrate the company as a subsidiary, which it did in May 2001. Consequently begins the "static" period of Sydkraft ownership, to which we will return in Chapter 5.

ENTERING THE CONTINENT

In late August 1998, a handful of Statkraft employees left for Amsterdam with the following assignment: To settle in the Dutch capital, establish an office there and develop an environment that would trade in power in the Dutch market. This move was the consequence of a decision by Statkraft's management that same year to establish trading operations in the major power markets on the European continent. In 1996, the European Union had adopted the Electricity Directive, which ordered member states to open their electricity markets gradually to competition, and Stat-

106



kraft was keen to make an early entry into these markets. The Netherlands was the first country to adopt specific reforms, and it was therefore natural to make a start there. In formal terms, operations would be organised as a holding company, Statkraft Energy Europe AS, under which subsidiaries would be established in the various national markets. The first of these was Statkraft Energy Nederland B.V., which was formally founded in August 1998. Early in the planning process, however, the objective was to establish a presence in Germany, the largest national power market in Europe.

Behind these efforts lay both short-term and long-term objectives. The short-term goal was purely opportunistic and meant making the most of markets undergoing change, which as often as not provided opportunities for super profits. Stat-kraft had learned this from the liberalisation process in Norway in the first part of the decade, when a number of market players had made huge profits since the market and competition had not yet begun to function properly. The experiences gleaned from the domestic market were considered a competitive advantage. Statkraft recognised the opportunities and challenges that arose in markets undergoing change, and few power companies had the benefit of this experience. Several of the individuals who had played an important part in developing the company's market strategy in Norway and the Nordic region moved to the Netherlands. The most important of these was Jon Anders Holtan. Øystein Løseth, who was appointed manager of the Amsterdam office, also had experience from the Norwegian power market. Løseth came to Statkraft in 1997 from his position as trading manager of the gas power company Naturkraft, where Statkraft also had an ownership share. 48

The more long-term objective was to gain access to what one expected would be an integrated European power market, into which Statkraft believed Norway and the Nordic region would become increasingly integrated. According to the analyses, this meant that Statkraft's domestic market would become far more strongly influenced by market developments in Europe, and it was therefore important to follow events and position oneself in this market.⁴⁹ There is a lot to suggest that this objective was more important than the short-term opportunities for profits for Lars Thulin and Christian Rynning-Tønnesen, who were the brains behind this initiative. When Løseth was offered the position as manager of the Amsterdam office, it was this element of learning and positioning that was given greatest focus by Thulin. In somewhat exaggerated terms, the following message was given: "Your office will receive NOK 100 million. Observe, learn and develop relationships, and see what else you can make of it." ⁵⁰

It is interesting to note that this project was essentially planned as a collaborate project with the company's new German partner, PreussenElektra. In the early planning stages, great importance was attached to this aspect. First, collaboration with PreussenElektra would open for asset-backed trading, meaning trade in support in one's own production. Among other things, access to production would reduce the risk of power trade. Second, it was hoped that such collaboration would provide a greater opportunity to gain access to the German market, which was a stated objective. Germany had, as stressed in a memo in the autumn of 2007, "an unfavourable market structure with a cartel of strong vertically integrated incumbents." By creating an alliance with an established compnay, it would be easier to get on the inside of this market. Last, but not least, in line with Thulin's penchant for thinking big and in

a long-term perspective, it was envisaged that market collaboration with PreussenElektra could form the basis of a larger northern European power trade bloc. This vision also included the forthcoming cables and cable agreements with Preussen-Elektra and SEP in the Netherlands and joint ownership of Sweden's Sydkraft. In the space of a few years, the cables would give Statkraft a stronger direct link to the continent. Furthermore, both Sydkraft and PreussenElektra were owners of the Baltic Cable, which linked the electrical power systems of southern Sweden and northern Germany. For those with grand thoughts, like Thulin, here one could envisage a future alliance between three companies offering a strong position in the northern European power market.⁵²

Collaboration with PreussenElektra would most likely require the approval of the competition authorities both in the companies' respective countries and in the European Union. Things never got that far, however, because the Germans gradually withdrew from the project. The reason for this retreat was apparently a fear that establishing such a company, which it was planned would operate in the German market, could "disrupt stability in the domestic market," as stated in a presentation in the spring of 1998.⁵³ In clear terms, this meant that PreussenElektra had no wish to have competition on its own territory. At an early stage, the company had made it a condition that a joint trading company would not be able to operate in the company's own area.⁵⁴ It is possible that the Germans gradually became concerned that their participation in this collaboration could help support the demand for the introduction of more market and competition throughout the German market. Although PreussenElektra did not close the door to collaboration at a later juncture - the company had, among other things, expressed a great interest in being party to Statkraft's knowledge of liberalised markets - the establishment of a trading office in the Netherlands was exclusively a Statkraft project.⁵⁵

Operations were organised as a separate holding company, Statkraft Energy Europe AS (SEU), which would also own the trading office in Amsterdam. The idea was that in the longer term SEU would also be owner of the new trading offices, with the first of these expected to be in Germany. SEU had its own board with market director Rynning-Tønnesen appointed chairman and director of finance Ola Idland and HR director Morten Sando regular board members. This composition reflected which areas were most important initially. The market aspect was of course quite central, and, in addition, a lot of importance was attached to securing good financial management and control. Further, HR was to be given high priority. Among other things, it was important that the trading office should not become a Norwegian office. The working language was to be English, and focus was given to creating an international environment that would also be attractive to people who were not Norwegian. The cultural dimension was deemed so important that one person was

recruited whose duties would include taking care of such matters. In the spring of 1998, Einar O. Haugen was appointed as manager of personnel and administration. Haugen came from a position at the Norwegian Export Council, and was recruited for his international experience. He had spent a lot of his professional life abroad, both in and outside Europe, and was therefore well-acquainted with international environments.⁵⁶

The Amsterdam office, which became operative in September 1998, was headed by Løseth. Besides Løseth, Jon Anders Holtan and Einar O. Haugen, the staff would initially consist of Ivar Rørstad, Tony Ellis and Hans Hval Webjørnsen. Several Dutch employees were recruited as well, including Stef Peters, who would become a key individual in this environment. Special mention should also be made of Pål Moen, who spent a long period in Amsterdam developing a modelling tool for the European power market. Moen was also affiliated with the market environment at home in Norway, and fascilated knowledge sharing from this market. Last, but not least, Geir Holler played an important role on the market side. Holler was head of Statkraft's Nordic market entity, and was among the company's foremost capacities regarding market analysis, portfolio analysis and risk management. He joined the SEU board early on.

TRADING OFFICES IN OPERATION

Early forecasts of market and profit potential in the European market were highly promising. A report published in the autumn of 1997, written by the consultants McKinsey, predicted very good market and revenue prospects.⁵⁷ The report pointed to major differences between prices and production costs in the Dutch system, indicating that this gave plenty of room for new market players who could undercut the established producers and still earn good money. Profit forecasts were set so high that when Løseth presented these predictions to the board of Statkraft he apparently dropped the final zero and still ended up with convincing figures.

In reality, it proved impossible to utilise Statkraft's market expertise as much as had been expected, initially at least. First, the Dutch power system (as most European power systems) was dominated by thermal power, which meant that production and cost differed significantly from those in the Nordic and, in particular, the Norwegian system. Analytical and modelling tools were not therefore directly applicable. Second, liberalisation of the Dutch market had yet to get underway when the office became operative in the autumn of 1998. The European Union's Electricity Directive required a 22 per cent market opening by the beginning of 1999 and full market opening in 2007. Even though the Netherlands had made an early start on introducing market reforms, there was still some way to go in 1999 before a genuine market had been established. Among other things, there was no spot market nor had

110

High spirits at Statkraft's trading office in the Netherlands. At the end of 1998, a few months after its establishment, the trading office managed to sign its first power contract. Here, office manager Øystein Løseth pops a cork or two in celebration. For Løseth, his time at the Dutch office launched an impressive international career. In 2002, he became part of Statkraft's group management in Norway, but the following year he returned to the Netherlands to join the company NUON. In 2005, he became part of the executive management of NUON and in 2008 he became the company's CEO. In 2009, he was headhunted to group management of the Swedish company Vattenfall and the following year he became the company's CEO. Vattenfall was at the time the fourth largest power company in Europe.



any rules been inroduced concerning third-party access to the transmission systems and pricing of transport services. In other words, the framework conditions were very different to those in place in the Nordic region, which meant that trading operations essentially had to be developed from scratch. As such, this task was characterised by pioneering activities and entrepreneurship.

The absence of an operative spot market meant that trading initially had to be based on bilateral contracts. The company's first business plan, for the year 1999, stated that trading would begin "when trading becomes possible" – hopefully when the announced power exchange Amsterdam Power Exchange (APX) started up operations that year. The main objective was to enter into 10 contracts with a total volume of 0.5 TWh, and the primary strategy was to purchase power from foreign utilities and sell this on to distribution companies and major end-users in the Netherlands. This strategy presupposed that one first had to establish contact with sellers and then gain an overview of potential buyers.

The latter of these two tasks was the most demanding, and required two things: First, one had to gain an overview of the market potential, which in reality included any company using more than 2 MW (this was the lower limit initially set by the Dutch regulations for trading freely in the market). Apparently, around 700 such companies existed, but a list of these companies was publicly available, and the sales executives in the office therefore had to pick up a telephone catalogue and start

calling companies whose energy consumption was assumed to be large. These companies then had to be persuaded to "plug in bij Statkraft." Hardly anyone had heard of Statkraft, however, and this made the job a demanding one. In the first months, one single contract had been secured.

It was not until the end of 1999 that volumes grew larger, however. In the last months of the year, more than 300 GWh was sold on the wholesale market. Owing to some unforeseen consequences of regulatory changes at year-end 1999, these agreements incurred a nasty loss that left its mark on next year's results. ⁵⁹ After the year 2000, however, operations began to run at a profit, at the same time as volumes increased considerably.

As mentioned above, the plan from the outset was to enter the German market as well, and exactly one year after the Amsterdam office became operative, in September 1999, an office was established in Düsseldorf, based almost entirely on the Amsterdam model. The first CEO here was Harald von Heyden, who was recruited by Løseth. Harald von Heyden came from McKinsey, and had been part of the group that had prepared the reports prior to establishing the Amsterdam office. Besides von Heyden, Ola Kvennås was a key employee in the Düsseldorf office's early period. Like Jon Anders Holtan in Amsterdam, Kvennås also had a background from the market environment in Norway.

The Düsseldorf office was initially placed under the Amsterdam office, and von Heyden reported to Løseth. In the ensuing years, however, the centre of focus gradually shifted eastwards. This was primarily because the German market was by far the largest, at the same time as market liberalisation gradually made it easier to operate in Germany. Consequently, it was here that both the organisation and turnover would be dominant. By 2001, the number of employees in Düsseldorf had reached 18, and this figure would rise over the next year to 32 (compared with 19 in Amsterdam). The year 2002 also represented a breakthrough in financial terms in Germany, when turnover grew from approximately \in 138 million to more than \in 702 million. The shift towards Germany led to consilidation of the Dutch office into Statkraft Markets GmbH (the Düsseldorf office) at the end of 2001.

AN INNOVATIVE CULTURE

Trading operations on the continent developed over time to be a major activity and a highly profitable one. In 2006, Statkraft Markets GmbH's total turnover was almost \in 2 billion. The year 2005 was a top year so far in terms of profitability, with net income after tax of \in 5.5 million. Subsequently, continental trading activities have become even more important, in terms of both revenues and profitability, and this, admittedly, brings us over to a new era in Statkraft's international development, to which we will return in the next two chapters. In this chapter, however, we will allow

ourselves to look some way into the new millennium and hint at why this activity has been so successful. To a considerable extent, its success can be linked to the business, organisational and cultural philosophy that had already been developed at an early stage.

As previously mentioned, importance was attached from the outset to developing an international culture at the trading offices. A great deal of focus was also given to fostering what may be called a culture of meritocracy, which means a culture allowing skilled individuals to advance. For example, age and seniority - that is "rising in the ranks" – was not a criterion, unlike normal practice in, say, German business circles. One consequence of this policy was that the trading offices became attractive for young, gifted individuals, and that the chance of advancement meant that people remained in their jobs. Løseth helped pursue this line, by, among other things, employing 29-year-old Harald von Heyden as the first manager of the Düsseldorf office. In his wake followed a steady flow of young people who were appointed to leading positions, including Stef Peters, Stefan-Jörg Göbel, Helge-Jürgen Beil and Jürgen Tzschoppe. In addition, importance was attached to fostering an open and informal culture, by, for example, establishing flat structures that would remove obstacles between the ranks. In doing so, one combined an international environment with several typical features of Nordic business culture, which helped to grow an innovative environment. Focusing on this combination also affected recruitment processes. One looked for bright individuals who also appeared to fit in with the Nordic Model.60

The young average age of the workforce was combined with a strong focus on clear mandates and sound systems for managing risk. Individuals involved in power trading can incur significant liabilities on the part of their organisation. Faithfully complying with imposed mandates was something that Lars Thulin, among others, was very concerned with in the initial stages, and a breach of mandate could have highly unpleasant consequences – as Jørgen Kildahl discovered on one occasion during his early period in Statkraft's market division. Kildahl, who in 2001 was appointed head of this division, later pursued this same line.

Finally, a certain amount of luck was involved as well, in the sense that access to skilled individuals was particularly good during the expansive stage after the turn of the millennium. In the wake of the Enron scandal at the end of 2001 and the ensuing closure of U.S.-owned trading companies in Europe, a buyers's market emerged for this type of expertise. Several of the people who have since held key positions at Statkraft Markets Continental, including Stefan-Jörg Göbel, Helge-Jürgen Beil and Jürgen Tzschoppe, came from Enron's European trading company.

A lot of this business area's success can be ascribed to this combination of skilled individuals, an open, innovative culture and a parent company with enormous finan-

NORDIC STRATEGY 113

cial and professional resources. Profits have admittedly fluctuated in this business area too, but on the whole they have been very good – so good in fact that Statkraft has been, and continues to be, cautious about providing specific figures. One important part of the success it has achieved is due to the company's general ability to continually develop new trading products, which is quite crucial in power trading, since the profit margins on established products tend to fall as the market becomes more developed. In this respect too, Statkraft has been extremely careful about telling the world what it is doing. In addition to its earnings on spot trading, Statkraft Markets Continental has profited from the development of green energy products, cross border trading, origination and structured trade products. In addition, the company has become a significant participant in the field of gas trading.

Both green energy and gas were also areas that became much more important for Statkraft as a whole as the energy sector entered the new millennium. That is a central theme of the next chapter.



From above, Europe looks like a continuous electrical grid. Historically, electric power systems largely followed national boundaries. Around 2000, however, many European countries began to liberalise their electricity sector, and with the liberalisation of national electric systems, they became more closely linked. Statkraft began to exploit the opportunities opened up by the liberalisation and internationalisation of the continent.

CHAPTER 5

Statkraft in a liberalised and climate-focused Europe

ound figures rarely have more than symbolic significance. Within the field of European power supply, however, the turn of a new millennium coincided with the start of two new major trends. First, a number of countries began to liberalise their electrical power supply systems at the beginning of the new millennium. The driving force behind this move was the European Union, which in the second half of the 1990s enacted legislation obliging member states to liberalise their power sectors, opening up for market forces and competition. While some countries had already begun to take the first steps to establish such structures before the turn of the millennium, the main wave of liberalisation came around the year 2000. Liberalisation of the market had many consequences. Most importantly, it triggered comprehensive consolidation within the industry. The initial years of the new millennium were characterised by a range of major acquisitions and mergers, most of which were transnational. And the companies that were most active in this process were those that were already among the largest, which in return resulted in a considerable concentration of ownership.

The second megatrend was a breakthrough in climate policy. In the last half of the 1990s, the phenomenon of global warming attracted growing international political attention. The first tangible indication of this focus came with signing of the 1997 Kyoto Agreement, when many of the world's richest countries undertook to reduce emissions of greenhouse gases over the next decade. In Europe, concrete initiatives came in earnest around 2000. These initiatives targeted the energy sector in particular, since power generation from fossil fuels was the largest single source of ${\rm CO}_2$ emissions. They essentially had two objectives: To reduce ${\rm CO}_2$ -producing power generation, and to foster the development of clean, renewable power generation. Over time, this policy change had a crucial effect on the way the industry developed.

Most major European power companies were significantly affected by these trends, and Statkraft was no exception. From around 2000 the company began to focus on growth through mergers and acquisitions. A number of initiatives were taken in respect of other companies in the Nordic countries and elsewhere in Europe with a view to building alliances, and some of these representations led to specific

negotiations regarding mergers. Further, the company considered several acquisitions of energy companies. As well, Statkraft began to market itself more actively as an environmentally friendly company. In this sense, Statkraft was in a unique position since it was the only major European energy company whose power generation was based almost completely on renewable energy. In a Europe where renewable energy to an increasing extent symbolised the future, this opened for the door to a number of opportunities.

This raising of ambitions was a natural continuation of the line marked out during the 1990s under the management of CEO Lars Uno Thulin. At the same time, several specific issues during the period after 2000 drove Statkraft's level of ambition upwards. One clearly important factor was the surprisingly swift liberalisation of the electricity sector that occurred in a number of European countries. The extensive process of acquisitions and consolidation that followed in many countries, led to a perception that size would be crucial in the integrated power market of the future. "Buy or be bought" had quickly become a mantra, and for Statkraft, which in international terms was only a small player, this forced in many ways a more aggressive growth strategy.

In this chapter, which will primarily concentrate on the years 2000 to 2005, we will see how the company embarked on a number of major plans for acquisitions and mergers, both in the Nordic region and in northern Europe. Such plans did pose challenges, however, which one had previously only met to a limited extent. In part, these challenges related to the financing of acquisitions, while they also touched upon, rather naturally, the nature of ownership to a completely different degree than they had done earlier.

NEW TIMES, NEW SOLUTIONS

Statkraft's annual report for the year 2000 would be the last one Thulin would sign as the company's CEO. He retired in September 2001, only a few months after publication of the report. Even though his retirement had already been decided, Thulin was not the type to use this opportunity to look backwards, and chose instead to speak about the present and the future, and most preferably about international topics. In particular, the year 2000 gave him good opportunity to do so. Under the heading "Major changes in the market." Thulin pointed to the new trend in Europe where large power companies were beginning to merge to form even larger entities. Among other things, he referred to the recent establishment of the company E.ON in Germany. E.ON was the result of a merger between two industrial conglomerates, the power companies PreussenElektra and Bayernwerk. This company, Thulin emphasised, had a larger output than the entire Norwegian power generation system. This trend, he wrote, would intensify in the coming years, and this in turn would create a far tougher competitive situation throughout Europe.



Two prominent and environmental oriented Nordic social democrats: Norway's Gro Harlem Brundtland and Denmark's Ritt Bjerregaard. Brundtland was Norway's first minister of the environment (1974–1979). In 1980, she won international recognition as head of the UN Special Commission of Environment and Development (Brundtland Commission). Bjerregaard began her career in Danish politics in the early 1970s. From 1995 to 1999, she was European Commissioner for Environmental Protection and Nuclear Safety, and she was a leading force in the introduction of the first key climate policy decisions in the EU.

The feeling of facing a period of mergers and increased consolidation was by no means exaggerated. The founding of E.ON was only the beginning of a development that would grow considerably in the coming years - a development to which this company made a significant contribution. Already in 2001, E.ON acquired Powergen in the UK for \in 15.3 billion. In addition, E.ON invested heavily in gas supplies through its takeover of Germany's Ruhrgas in 2003. Another large German company, RWE, established a presence in the United Kingdom, initially through its acquisition of the company Innogy in 2002. In 2003, the French company Suez invested heavily in Electrabel, Belgium's largest power company, and in 2005 French EdF acquired shares in the Italian company Edison. In addition, a large number of smaller individual acquisitions took place that in sum made a significant contribution to concentrating ownership in the industry.² Perhaps particularly interesting in a Nordic perspective was Swedish Vattenfall's major offensive in Germany in the years 2000 to 2002. During this relatively short period, Vattenfall acquired shareholdings totalling more than € 5 billion, and in doing so actually became the fourth largest power generator in the large German market.³ After 2000, Finland's Fortum also began to make acquisitions outside the Nordic region, preferably in Poland and Russia, even though the size of these acquisitions was considerably smaller.

118

The end of Norwegian hydropower development? In the year 2000, Statkraft decided to build a power plant in the Beiar watercourse in Nordland. These plans triggered strong protests both in the local community and in the Storting. Statkraft had received approval from Jens Stoltenberg's Labour government, and in the autumn of the same year, construction machinery was in place ready to make a start. Work was stopped, however, by the group of people shown here, who asked Statkraft to go home again. A little later, after massive pressure, the government also turned full circle. In his speech on 1 January 2001, Stoltenberg declared: "The major era of hydropower development is over."



This trend created quite a common notion that size would be increasingly important in order to succeed, or even to survive. Everybody agreed there was a move towards far fewer entities in the European power supply industry. Some people even believed we would end up with a handful of gigantic companies, as was the case in the oil industry. In turn, this naturally affected the way many companies began to view their own future. In simple terms, were we to believe the prophecies, we would be confronted with two options: eat or be eaten. Sweden's Vattenfall, for example, applied this logic to justify its offensive in Germany. As the company's board chairman said in 2001: "We anticipated the current trend in which large energy companies are being created as transnational European companies [...] We wanted to take the initiative instead of becoming dependent on foreign giants."

This logic also washed in over the Statkraft organisation. Towards the end of his career at Statkraft, Thulin became increasingly focused on international developments and the effects these would have for Statkraft. This topic also received a far more central position in the company's overarching strategies, particularly from 2001. In a revised strategic plan presented in autumn the same year, the following is stated in the introduction: "An extensive consolidation is taking place in the Nordic

and continental power market through a series of acquisitions and mergers. The transformation of traditional power companies into dynamic internationally exposed companies will require that these companies undergo a number of acquisitions and/or mergers and later sales of non-core business activities. Increased demands will be made with regard to size, capital, expertise, innovation and systems in order to succeed in the European power market."⁵

Statkraft had no plans to become a marginalised company on the outer edge of Europe. On the contrary, from around the year 2000 the company entered a stage where international growth and positioning came to have a central position. We have seen in the previous chapters that the company turning towards the international arena was nothing new. What was novel in the new millennium was the increased importance Statkraft

attached to more fundamental solutions such as mergers and acquisitions. At the time when the strategic plan had been prepared, the company was already involved in negotiations concerning a merger with another Nordic company. In the ensuing years, there were several merger and acquisitions projects, to which we will return shortly. First, however, we will look at the international trends for change that also affected Statkraft's strategy in Norway.

STRATEGY NORWAY

During the period between 1996 and 2002, Statkraft became a much larger company in Norway. By means of a series of acquisitions in municipal power companies, Statkraft gained direct or indirect control over almost 55 per cent of Norway's hydropower output (compared with approximately one-third previously). The lion's share of these acquisitions took place in the years 1999 to 2002, when the company acquired shares in several of the country's large regional power companies, such as Bergenshalvøens Kommunale Kraftselskap in western Norway, Skiensfjorden Kommunale Kraftselskap, Vestfold Kraftselskap and HEAS in south-eastern Norway, Agder Energi in the south of Norway and Trondheim Energi in central Norway.

Statkraft's expansion during these years represented perhaps the greatest structural change in the sector since the Second World War. For us, however, Statkraft's expansion is particularly interesting since it is closely related both to Statkraft's



From PreussenElektra to E.ON. In the year 2000, the two German industrial conglomerates VEBA and VIAG merged to become E.ON. VEBA owned PreussenElektra while VIAG owned the power company Bayernwerk, and these companies came to constitute the core of the new E.ON. The alliance between Statkraft and old PreussenElektra lived on, however. Several of the leading individuals in PreussenElektra also played a central role in E.ON. Among these, Hans-Dieter Harig, former CEO of PreussenElektra, became head of the merged company. Furthermore, business relations were maintained.

strategy of internationalisation and to the management of variable Norwegian hydropower, which could be used in connection with power trading in northern Europe. Partly, this strategy was driven by the goal of keeping expansion-hungry foreign companies out of the Norwegian market.

A necessary precondition for Statkraft's expansion in Norway was naturally that the municipalities were interested in selling. In this respect, a noticeable change in attitudes had occurred in the 1990s, particularly towards the end of the decade. Norwegian municipalities had long and strong traditions as owners in the power sector, and many municipalities continued to uphold this view of ownership, also after liberalisation. A growing number of municipalities, however, began to view selling off operations as an opportunity to bring in money for the municipal treasury. Especially during the second half of the decade, when a market for power ownership began to develop, the actual value of their assets became clear to the municipalities.

To a considerable extent, this market was driven by foreign companies. As we have discussed previously (Chapter 4), foreign power companies had already gained entry to Sweden's electrical power system in the first part of the 1990s, and later, after liberalisation in 1996, had really focused on gaining positions. Some of these companies had set their scopes on the entire Nordic region, however, partly because the region had undergone liberalisation so early and partly because several of the countries were home to huge hydropower resources. Hydropower was something most power companies wanted to lay their hands on. The combination of early liberalisation and a desirable form of power generation was the main reason why large companies such as PreussenElektra and EdF had begun to jostle for position in the region at such an early stage. So much for Sweden, but Norway too attracted its share of attention from foreign companies. Neither EdF nor PreussenElektra concealed the fact that they wished to acquire a share of the Norwegian electrical power supply system.8 The same was also true of other Nordic companies such as Sweden's Vattenfall and Finland's Fortum. Vattenfall established a subsidiary in Norway in 1996, expressing at the same time an ambition to acquire at least a 10 per cent stake in the Norwegian market.9 Fortum founded a Norwegian subsidiary one year later. The point in our context is that eager foreigners on a spending spree helped create a market for power ownership that clearly encouraged a number of municipalities to consider selling.

At Statkraft, there was concern that large foreign companies would take on Norway. Besides the fact that increased competition for Norwegian hydropower was undesirable, the view was that a strong international position required a strong position on the domestic front too. Further, this was an opinion that was quite commonplace in the European power industry in the wake of liberalisation. For this reason, Statkraft devised a strategy at an early stage to prevent foreign acquisition of Norwegian hydropower resources. This strategy, known as Strategy Norway, consisted nat-

urally of making sure that Statkraft itself acquired everything that was up for sale. Over time, Statkraft also took an active role in influencing municipalities to sell. Several of the company's major acquisitions at this time occurred because Statkraft had taken an initiative in respect of companies and municipalities and initiated sales negotiations.

Statkraft had to wage war in 1996 already, when two shareholdings in two major companies went on sale on the open market. The strongest competitor on both occasions was Sweden's Vattenfall. Statkraft won both rounds. One of these two sales was admittedly withdrawn later, but Statkraft submitted the highest bid and acquired a 20 per cent stake in Oslo Energi, one of Norway's largest municipal power generators.

After 1996, things quietened down somewhat, but around the year 2000 Statkraft made a serious effort to become an owner in larger regional companies. The timing of this initiative was partly due to the fact that liberalisation had begun in earnest in Europe and because a number of large companies had started to focus on international growth. In addition, there was growing opinion in Norway at this time that there would be a softening up of the concession laws, which had so far restricted the opportunity for foreign ownership. Put simply, far tougher times could be expected, or as stated in a strategy memo in 2001: "To a growing extent, Fortum, Vattenfall, Sydkraft, E.ON, and oil and gas companies will be competitors in a bidding war for Norwegian production companies as the Norwegian rules concerning concessions and reversion to state ownership are relaxed."10 The conclusion drawn was that Statkraft would have to make sure it could acquire as much as possible while the concession laws still provided the company with protection and a competitive advantage. At the same time, it was important to ensure that foreign companies were not able to establish connections with Norwegian companies. One had to "block other alliances" as stated at a group management meeting early in 2001.11

Statkraft managed to grab an awful lot of shares on sale during this period. As such, it could be said that the company's strategy was a success. This is probably the result of three things in particular. First, as we have mentioned, Norwegian legislation did not allow foreign or private ownership of hydropower plants in excess of a certain percentage (30 per cent), and ownership that did not give control was not of much interest to the major foreign companies. Second, Statkraft was relatively successful in its proactive strategy, which involved befriending companies and assisting them in initiating sales processes. Essentially, this was no easy task, since Statkraft was not high in favour in the municipal part of the industry (see Chapter 1). The reason why it still managed to succeed, even in several of those companies that were most sceptical to Statkraft, has primarily been explained by the role played by CFO Helge Skudal as a strategist and bridge-builder. Skudal chaired the formulation of Strategy Norway and he later personified this strategy in the company's dealings with the municipal companies. He made a conscious effort to establish personal

relationships with leading stakeholders in the most interesting companies, and to market Statkraft as a good and attractive potential co-owner. Skudal's strongest quality in this context was that he had the ability to build trust and credibility with local politicians and company managers.¹²

Third, the Statkraft solution fit in well with a widely held political desire for continued Norwegian control of Norwegian hydropower. Even though it was felt that the Norwegian concession laws could come under pressure, there were strong forces in play that did not want such things to happen. And if foreign requirements were to weaken this legislation (EU Competition Law posed the greatest threat), it was important to many politicians that Statkraft should be able to buy as much as possible while it had the opportunity. Among others, the Norwegian oil and energy minister from the Labour Party said the following early in 2001: "In the face of increasing international competition, it is important that Norwegian power companies assert themselves, which is something a stronger Statkraft can contribute to." This statement was made in connection with the government's decision to strengthen considerably the company's financial position, by, among other things, injecting fresh capital. Statkraft was thus explicitly equipped to secure continued Norwegian ownership of hydropower.

We can therefore say that in connection with its expansion in Norway, Statkraft (also) functioned as an energy policy instrument, which in itself is an important point. Strategy Norway sheds light on a more general feature of Statkraft's ownership, and in particular on its owner's attitude to the company's international initiative. While Statkraft's expansion in Norway found active support, the company's international expansion was almost exclusively driven by its administration, and was at best something its owner accepted. Consequently, there is good reason to assume that the owner would not have granted the company as much money had its goal primarily been to spend this money abroad. The political context therefore also explains to some extent why Statkraft actually chose to spend so much capital on acquisitions in Norway. In the period from 1996 until 2002, Statkraft spent more than NOK 42 billion on acquisitions, of which almost NOK 28 billion was invested in Norway. It is no secret that opinion in the company was divided over such priorities, and that some people felt this money would have yielded a higher return abroad. 14 However, besides the strategic values that some felt were inherent in a strong domestic position, this issue concerned making use of those opportunities that actually existed. It was better to make a lot of money grow in Norway than to make a little money grow abroad.

So Statkraft's owner had a clear influence on the company's expansion strategy and financial framework in general. This had become even clearer in the period after 2002, and in the final part of this chapter we will therefore return to the role of ownership.

GREEN OR GREY?

In the wake of renewed focus on climate, Statkraft found itself in a unique situation, as the only large company in Europe that generated electricity exclusively from a pure and renewable power source. But cultivating this profile could end up compromising the company's growth ambitions. There were no other companies in Europe to acquire or with which to merge that were as "pure" as Statkraft. Growth would therefore have to occur with a basis in less environmentally friendly power sources. In somewhat exaggerated terms, Statkraft's management was faced with a choice of remaining green and independent or going grey and taking part in something bigger.

Among several initiatives designed to meet the requirements laid down in the 1997 Kyoto Agreement to reduce greenhouse gas emissions, the EU Commission adopted in 2001 a Renewables Directive.¹⁵ This directive set forth specific objectives as to how large a share of renewable energy production each member state should have by 2010. For the European Union as a whole, the share of energy produced from renewables was to be increased from 14 per cent in 2001 to 22 per cent in 2010,

From blessing to upsets. Coal was a cornerstone of the European power supply system throughout the 1900s. Around the year 2000, climate issues began to permeate European energy policy, and coal has since become the bad boy of power generation. The climate dimension has also contributed to the strong growth of investments in renewable energy.



124

In the autumn of 2001, Bård Mikkelsen became Statkraft's CEO. Mikkelsen had a long career as a business executive, including a period as managing director of the Norwegian airline Widerøe. Unlike his predecessor, Lars Uno Thulin, Mikkelsen was concerned with marketing Statkraft as a brand. In a world where climate issues were receiving increasing attention, it was natural to focus on Statkraft's position as a primarily renewables company. This picture is from the opening of the Smøla wind park in 2002. To the left for Mikkelsen is director of communications and organisation, Ragnvald Nærø, and to the right is Knut Fjerdingstad from the communications department.



representing an increase of 300 TWh, or close to three times Norway's annual electricity production. In addition, plans were made to introduce a system for the trading of greenhouse gas emission quotas. One such Quota Directive was adopted one year later. In 2001, several member states also had in place plans to introduce schemes ordering power suppliers to include a certain share of renewable energy in their sales. In brief, everything pointed clearly in the direction of renewable energy playing a growing role and that it would become an important growth area in the coming years.

In Thulin's successor, Bård Mikkelsen, Statkraft had a chief executive who saw great opportunities in Statkraft's renewables profile. Mikkelsen also had a completely different background to that of his predecessor. He came to Statkraft from a position as head of Oslo Energi Holding, but had spent most of his active professional career working for private industry and service companies. Before he came to Oslo Energi Holding, he had been CEO of the airline Widerøe for more than 10 years. Mikkelsen's background from a customer-oriented brand company was probably an important reason why he picked up on the commercial potential of Statkraft's renewables profile. From Widerøe, Mikkelsen also took with him Ragnvald Nærø, who was appointed the position of group director for communication and organisation. Ragnvald Nærø's background was that of a journalist and communications advisor, and he had great ambitions of transforming a relatively anonymous Statkraft into a strong, clear and recognised brand. In a world where climate and the environment were on the verge of becoming highly important, the company's renewables position appeared to be an excellent starting-point.

One of the first things Mikkelsen did was to begin work on upgrading the company's vision. Statkraft's existing vision – becoming "a leading northern European energy company with expertise in the field of hydropower" – had remained unchanged since 1992 and was felt to be outdated. Mikkelsen became personally involved in this process. In addition, he chose to draw heavily on external forces. The consultancy company Econ was assigned an important role as Mikkelsen's discussion partner, and had considerable influence on the formulation of a new corporate vision.

Gradually, two specific alternatives in particular appeared to distinguish themselves. One was "A leader in Europe in renewable energy," while the other was "A leader in Europe in eco-friendly energy". 18 Both Mikkelsen and Econ's consultants preferred the first alternative, since this was felt to be most modern. Renewable was, as stated in one of the memos from Econ, "unconventional, young and forwardthinking." Further, it was emphasised that Statkraft, which was already an exclusively renewables company, was in a unique situation. 19 In terms of its reputation, the company could surf on the trend of climate awareness at no cost and with no competition. The second alternative, the eco-friendly alternative, was, in the view of the consultants, more vague and less targeted. It was at the mercy of discretion and fluctuating trends, depending on what the authorities and public opinion felt was environmentally friendly. It therefore failed to provide an equally clear framework and direction. Furthermore, it could be considered to be opportunistic.²⁰ One was looking for an environmental profile but at the same time trying to keep several doors open. For this reason, when the matter was presented to the board, the administration chose to recommend the alternative "A leader in Europe in renewable energy".21

The board of Statkraft was less convinced that the renewables alternative was the wisest. Admittedly, the board did like the renewables vision in principle but felt that committing oneself explicitly to renewables would limit the company's scope of action in an unfortunate way.²² By committing explicitly to a renewables profile, the board was of the opinion that one would exclude most potential acquisitions. As already mentioned, hardly any other companies in the Nordic region or Europe owned only renewable production facilities. By the same token, it would also be difficult to enter into negotiations on mergers with other companies. Entering into negotiations with generators of coal-fired and nuclear power was not of interest in any case, if for no other reason than out of deference to Statkraft's owner. Nevertheless, it would not be possible to become more closely involved in companies that owned cleaner non-renewable energy sources. This was an important point, since gas power, among other things, increasingly seemed to be an eco-friendly alternative to coal in particular. As well, the board felt that opportunities for growth within

126



Statkraft's group management in 2003, smiling in the rain. The shift from Lars Uno Thulin to Bård Mikkelsen also saw the replacement of almost the entire group management. Only Christian Rynning-Tønnesen remained. Pictured here, from left: Ragnvald Nærø (communication and organisation), Jørgen Kildahl (market), Bård Mikkelsen (CEO), Christian Rynning-Tønnesen (finance and strategy), Inge Arntsen (production and development) and Jon Brandsar (ownership of Norwegian companies).

renewable energy were limited. Apart from hydropower, which was difficult to find, one had wind power, solar power and several other small-scale energy forms. A renewable profile would therefore provide value in the form of goodwill, and that was a value that was difficult to make concrete. In brief, a renewable vision could limit the company's commercial scope of action and prevent the possibility of growth. The board's conclusion was therefore that the environmentally friendly alternative was the right one and commercially the best alternative.

An important feature of many successful companies is their ability to anticipate and adapt to new trends at an early stage. As such, it may be said that in this respect, the board appeared to lack a sense of daring and vision. As the new millennium progressed, it became increasingly more profitable to invest in renewable energy, particularly due to the establishment of public support schemes. In reality, Statkraft also came to focus primarily on this type of energy, particularly hydropower in and outside Europe, in addition to wind power. It should also be noted that Statkraft's investments in gas-fired power in the decade after 2000 would be among the company's least profitable. Applying a consistent renewables profile, it would not have been possible to make these investments. Nevertheless, it would be unreasonable to link the company's gas power history directly to the board's decision in 2002. As we shall see in the next chapter, the decision to become involved with gas-fired power was not

taken until 2005, and then the prime mover was Statkraft's administration headed by Mikkelsen, not the board. The same applied to several of the merger and acquisitions projects in the coming years, which had not been compatible with a renewables-based vision either.

MERGERS AND ACQUISITIONS AS A KEY TO GROWTH

In the initial years after the year 2000, Statkraft's management focused a great deal of attention and resources on mergers and acquisitions, preferably outside Norway. Contact was made with a number of European companies, discussions on collaboration were held, some of which led to in-depth investigations concerning alliances and mergers. In some cases, these discussions went as far as to reach specific negotiations. The notion of merging Statkraft with foreign companies naturally had a number of implications and posed a range of challenges. Industrial mergers are essentially highly complex, and even more complicated when one is dealing with companies that manage key national and social values, and when the company additionally has an owner that is not exclusively concerned with commercial aspects of ownership.

Statkraft clearly belonged to this latter category. The requirement of national control of hydropower resources, which had become no less stringent after liberalisation, would produce major political challenges after any merger. Added to this were the concession laws, which imposed clear legal limitations on foreign ownership of hydropower production. Furthermore, general business policy objectives required that companies of major significance should preferably be managed from Norway. Retaining the head offices of important companies in Norway was actually the most important reason why the Norwegian state had maintained ownership in a number of companies that had been transformed into purely commercial enterprises in the 1990s. By retaining a minimum blocking minority position, the state could ensure that head office functions would not be moved abroad. Since the second half of the 1990s, both social democratic and non-socialist governments had stressed the importance of retaining such control.²³ This was also underscored by the Centrist-Conservative government that took over after Jens Stoltenberg's Labour Party government in the autumn of 2001. About Statkraft in particular, this government stated in its ownership report in 2002 that it was important, among other things, to retain a firm Norwegian foundation in the company.²⁴

The point is that these issues placed certain restrictions on Statkraft's opportunities to become involved in other companies. In reality, Statkraft would not in any case be able to merge with companies that were unwilling to accept that the merged company's headquarters should remain in Norway. The need for control also meant that it was of little interest to merge with companies that were much larger, where the



Terje Vareberg, Statkraft's board chairman from 2000 to 2004. Vareberg excelled early as a prominent and outspoken board chairman. Among other things, he publicly criticised the owner's dividend policy. During the period when Vareberg was chairman, between 85 and 95 per cent of the company's annual profits was paid out as dividends to the Norwegian state. Vareberg believed that the high dividend payments hampered the company's development, and for this, he openly cracked his whip over both parliament and government. His confrontational approach ultimately cost him his job. In the summer of 2004, the Ministry of Industry chose to replace Vareberg.

Norwegian state would end up in a minority position. This outlines the political framework concerning ownership within which Statkraft would have to operate.

We will not go into detail about all the discussions and negotiations that took place, among other things because they involve other companies and are therefore subject to considerations of confidentiality. For this reason, the other parties involved in these cases will not be mentioned by name. The nature and outcome of these discussions and talks nevertheless tell us a lot about the conditions under which Statkraft had to work, and the issues that arose in Statkraft's meetings with other parties.

The first discussions proper with other companies took place at the end of Thulin's period as CEO, in 2000-2001. Two companies in particular, both of which were Nordic, were of interest. One, which in Statkraft's documents went under the cover name "Catfish" was soon put to one side, because, among other things, it would have been difficult to "sell" the main owner to Statkraft's owner in Norway. Already after introductory talks, it became clear that this owner would demand strong influence, as stated in a memo about this matter.²⁵ Far greater hopes were pinned on the other Nordic company, which was given the cover name "Lion," a company with a mix of public and private owners, which in value and size was to Statkraft. In recent years, the company had distinguished itself through its rather bold investments abroad. The starting-point for initiating talks with this company was to establish a dominant Nordic-based energy group with a European focus. Conversations were most active in 2001, and in the autumn of this same year, an understanding had been negotiated that clarified several of the most complicated aspects of a prospective merger. On several points, however, there was still some distance between the parties. This related first and foremost to the respective owners' influence. At Statkraft, it was estimated a Norwegian share of the merged company would be around 45 per cent, which would give Statkraft a strong position. The largest stakeholder in the other party stipulated a requirement, however, concerning the limitation of the individual owner's influence that was well below this share, which would have meant that Statkraft's influence would be much less than its ownership share. In a legal opinion on this point, it is stated that the Norwegian state would end up in the back seat, should such a provision be included.²⁶ In this opinion, it was also assumed that there would be little political interest in placing Statkraft in a new international company where the Norwegian state had no rigorous control.²⁷ Added to this was the fact that the question of the location of the merged company's head office remained unresolved. In this respect, too, seen from a Norwegian political vantage point, there was only one alternative. Even though great hopes were pinned on this alternative and a lot of work had gone into it, interest in this project therefore petered out.

In 2002, negotiations were initiated with a third Nordic company, a company that produced considerable amounts of hydropower but was also involved in oil produc-

tion and industry. The starting-point for this constellation, which went under the name "Ohm," was to merge Statkraft's assets with the other party's power generation activities along with gas operations "from wellhead downwards." The stated vision was to create an integrated energy company with European clout. The rationale, besides growing on the production side, was to prepare for a situation where there would be closer integration between the power and gas markets in Europe. At the beginning of the new millennium, it was commonly held that natural gas would come to play a far more important role in European power generation, since this was a more environmentally friendly form of energy than coal, 29 and that this would lead to the two markets converging. In the opinion of Statkraft, being involved in both areas would therefore provide a large market-based advantage.

Negotiations on the Ohm project continued with varying intensity throughout most of 2003, and resulted in agreement in a number of key areas. This alternative too presented considerable challenges, however. The largest of these was the parties' widely differing assessments of the value of Statkraft, which would naturally have a great bearing on how the two companies' equity positions would be in the event of a merger. In turn, these issues would most probably have a bearing on the attitudes of Norway's politicians. A lower value would mean less direct state influence and control, and in respect of all Statkraft business, this would be a sensitive matter. In any case, the Ohm project did not get as far as a formal presentation being made to Statkraft's owner either. The project stranded primarily due to the discrepancy between valuations, and in the autumn of 2003 discussions were therefore halted.³¹

The year 2003 was also the year when Statkraft entered into one of its greatest, and some feel, astounding, acquisition projects – "Project V." Earlier this year, it became clear that E.ON, as a consequence of its merger with Ruhrgas, would have to rid itself of some of its gas-related assets in Germany, and the company chose, among other things, to sell its assets in the two companies VNG and EWE. VNG was involved in the transportation and distribution of gas in former East Germany, while EWE's core operations related to the distribution of gas and electricity on the north-western part of the country, of which the lion's share was purchased from E.ON. Statkraft showed interest in acquiring the stakes in these companies (27.4 per cent in EWE and 42.1 per cent in VNG) and in due time presented a total indicative offer of just over NOK 13 billion. Statkraft's bid gave the company status as one of a small bunch of preferred buyers.

The strategic justification for ownership of these companies was not that obvious. Statkraft's experience of gas was limited to a certain amount of gas trading at its trading offices in Amsterdam and Düsseldorf. The operation of major transportation and distribution systems was also something else. And even though gas power would probably come to play a greater role in the generation of power, the synergies between

130



Statkraft's trading operations expanded strongly shortly after the turn of the millennium. Operations gradually gravitated towards Germany and the Düsseldorf office. This picture shows the management of Statkraft Markets GmbH. From left: Carsten Poppinga, Jürgen Tzschoppe, Torsten Amelung, Stef Peters and Stefan-Jörg Göbel. Peters had been part of operations almost since a trading office was established in Amsterdam in 1998. Tzschoppe and Göbel, and others, had a background from Enron's trading activities in Europe. When the American company was scandalised and went into receivership in late 2001, Statkraft's trading offices managed to secure talented people who were looking for new opportunities.

gas power production and gas distribution were essentially limited. Statkraft had no specific plans to establish itself as a gas power generator in Germany either. This particular case is somewhat more understandable if we choose to see it in context with the Ohm project, since it would then include upstream gas production. The other party in the Ohm project was already supplying gas to the German market. In the early assessments, it was said that Statkraft alone would not have a sufficiently strong strategic rationale to buy a share of the German companies, and that the industrial justification would have "to be seen in context with the Ohm project.³⁴ Nevertheless, Statkraft continued to work on Project V even after Ohm was shelved. And in October 2003 at a meeting with the Norwegian Ministry of Industry and Trade, when Statkraft's management spoke about Ohm and Project V, the ministry learned that Ohm had been put on hold while Project V continued unabated and was considered a "rare opportunity both strategically and in terms of wealth creation." ³⁵

There is little doubt that the industrial and strategic rationale behind Project V was somewhat more unclear than in these merger cases. For this reason, opinion in group management was more divided in this instance than in the aforementioned projects.³⁶ It is interesting in this context that the German authorities too were uncertain about Statkraft's strategic rationale. There was concern that the new owner

would have to have sufficient financial, industrial and expert strength to develop these companies (particularly VNG) as genuine competitors to E.ON/Ruhrgas, and Statkraft did not immediately strike the Germans as being such an owner.³⁷

There is reason to believe that Project V was at least to some extent opportunistically motivated. Christian Rynning-Tønnesen, who was one of the most active driving forces in respect of this matter, points in retrospect, among other things, to the fact that the price of the VNG shareholding was felt to be low, and that this was a key element of the assessments. It was simply seen as an opportunity to purchase something at a low price. Rynning-Tønnesen also claims that a purchase would absolutely be fair and genuine had not the other owners of the two companies, and particular the owners of VNG, attached so much importance to maintaining control. Through existing shareholder agreements, these owners had the opportunity to retain considerable control with the companies, so considerably that they in principle could prevent Statkraft from gaining industrial influence. The immediate reason why the project was shelved was given by E.ON, however. Just before Christmas 2003, it became known that E.ON had negotiated agreements for the sale to German investors, in the opinion of Statkraft's management apparently because there was a wish in Germany to find a national solution.

It is of course impossible to know what would have happened had Statkraft been given a genuine opportunity to acquire stakes in EWE and VNG. One wonders whether it would have been feasible to obtain the desired influence and the blessing of the German authorities. Had Statkraft been given this opportunity and had chosen to acquire a stake, the company would undoubtedly have developed differently. According to Rynning-Tønnesen, it is likely that Statkraft would then have shifted its focus even more towards the gas segment on the continent than was actually the case. 41 Given the way the gas market developed afterwards, it is perhaps just as well that this did not happen. Another thing is that the plan was to fund the acquisition of EWE and VNG through the sale of a share of Statkraft's stake in Sydkraft to E.ON. This would have had major consequences. In doing so, it would not have been possible to develop the value of this shareholding, and the especially important barter transaction with E.ON in 2008 would naturally enough never had happened. As we will see in the next chapter, this deal was particularly lucrative for Statkraft. An important basis for this increase in value, and for the barter transaction that took place in 2008, was otherwise laid in 2003.

CABLE PROBLEMS

One international initiative during this period led to something tangible, namely the acquisition of part of the hydropower resources belonging to the Swedish company Graninge. In 2005, Statkraft acquired from this company a full 20 hydropower plants

in Sweden and four in Finland. This acquisition gave Statkraft a valuable position in the Swedish market, and was, seen from the outside, really quite surprising. It was not an everyday occurrence to see hydropower resources on sale; in fact, this hardly ever happened. Then again, the circumstances surrounding this deal were not normal either. In reality, Statkraft's acquisition of Graninge was the result of a long chain of events that, if we stretch the causal connections slightly, began already in 1993. Further, the purchase was only one tiny piece in a far bigger jigsaw puzzle where Statkraft's ownership of Sydkraft and Statkraft's relationship with the German company PreussenElektra helped make up the big picture. In fact, the Graninge acquisition was only a small twig in the nest that Statkraft had already been feathering for several years. So let us begin with the nest itself.

In the space of several months before and after New Year 2001, two very important things occurred in the relationship between Statkraft and its old ally Preussen-Elektra, or E.ON, as the company was called after 2000. The first incident took place in the autumn of 2000, when Statkraft was notified from Düsseldorf that E.ON wished to drop the so-called Viking Cable agreement – the long-term agreement from 1993 regarding power exchange and exports as explained in Chapter 2. Subsequently, in January 2001, E.ON acquired additional shares in Sydkraft, bringing its stake to more than 40 per cent of voting capital. Under Swedish company law, the Germans were then obliged to offer to purchase all the remaining shares in the company. E.ON offered a good price, most shareholders chose to sell their shares, and in the spring of 2001 E.ON share of the voting capital had risen to 71 per cent. Both of these matters were serious for Statkraft.

The reason why E.ON's wanted to pull out of Viking Cable was that following liberalisation in Germany, the agreement had begun to make very little business sense. Liberalisation had led to a surplus of power and falling electricity prices, which had completely undermined the project's economy, though only on the German side. For Statkraft, which had entered into the agreement within the Norwegian market-based framework, the agreement was still profitable. For this reason, resolving this issue was no simple matter.

Sydkraft represented a far greater dilemma, however, affecting as it did the fate of Statkraft's entire involvement in this project. What was Statkraft to do after E.ON had attained a completely dominating position? This question was particularly difficult since E.ON, which after triggering its obligation to make an offer to buy all shares in January 2001, elected to offer to buy all the remaining shares at a considerable premium. It was thus possible for Statkraft at this point to sell its entire shareholding at a good price. There were plenty of indications that this would be a good thing to do. Since E.ON had become so dominant, Statkraft's shareholding would hardly be attractive to anyone besides E.ON in the future. In other words, Statkraft could risk

ending up with a considerable minority shareholding, without being able to wield much influence, and with only one potential buyer who would hardly be interested in paying a high price. Many people at Statkraft were convinced that the only right thing to do would be to sell. Nevertheless, some people were not as clear in their view. Among this latter group were also Lars Thulin, Christian Rynning-Tønnesen and the company's new and pronounced board chairman, Terje Vareberg, i.e. people who were not entirely without significance. Their reticence was partly due to a fundamental reluctance to lose the only real lead they had to the outside world. At the same time, they also had a strategy to secure their assets in Sydkraft. Statkraft was not at the complete mercy of the Germans. E.ON also had a lot to worry about, including an obligation to lay a highly unprofitable undersea cable to Norway. For Statkraft, it would prove to be particularly expedient that these two issues occurred concurrently.

FROM VIKING CABLE TO SYDKRAFT AGREEMENT

Already in the spring of 2000, the sentiment at Statkraft was that things were slowing down on the other side regarding Viking Cable. The deadline for beginning work on laying the cable was drawing near but the Germans appeared to be in no hurry. Then, in the autumn that same year, notice was given that E.ON wished to drop the entire project. As mentioned earlier, this project was still important to Statkraft, and since the contract was absolutely clear, the company's attitude was that "Ein Deal ist ein Deal." Therefore, tough negotiations were called for, and, if necessary, a court settlement.

Behind closed doors, however, one felt absolutely sure that E.ON could be forced to implement the agreement. As stated previously, E.ON's reason for cancelling was that liberalisation of the market in Germany had completely changed the fundamental conditions, and such changes were not something the company could have foreseen in 1993. E.ON therefore felt that this constituted a force majeure situation, and that the agreement allowed for termination in such special and unforeseen circumstances. The agreement also opened for arbitration if the parties were in dispute, which is where the greatest challenge lay. At Statkraft, one was far from certain about the outcome of such arbitration. In reviewing the case, Statkraft's general counsel Kjell Haagensen pointed out that it was difficult to predict the outcome of arbitration cases in general. 43 But – and this was perhaps the most important thing – Haagensen was also not convinced that the Germans did not want the case to be brought before an arbitration tribunal. This opinion was listened to, not least because Haagensen had chaired negotiations with E.ON and was acquainted with this matter and the surrounding circumstances. For this reason, it was decided early on to steer clear of the courts and accept termination of the agreement. E.ON would nevertheless have

In the summer of 2004, Arvid Grundekjøn took over as board chairman of Statkraft. Like his predecessor Terje Vareberg, Grundekjøn had extensive business experience, particularly from the shipping industry. Among other things, he had a background as CEO of the Wilhelmsen Group and the Royal Caribbean Cruise Line. Grundekjøn also held a number of positions on various boards. He also shared Vareberg's view of the owner's dividends policy, and over time he too began to criticise this policy publically. He held the position as chairman until 2010, when he was replaced, reputedly because he publicly criticized the way the state was acting as owner. In Grundekjøns view, the owner didn't offer the company predictable conditions regarding investments and capital access.



to compensate Statkraft for losses incurred, and the Norwegians decided to squeeze every last drop out of the lemon.

Proper negotiations regarding termination of the agreement and the process of compensation first began in the spring the year after. In the meantime, however, Stat-kraft's management had been saddled with the Sydkraft issue too, which resulted in a considerable change in the balance of power between the two parties. Now, it was no longer the case that Statkraft was on to a good thing while E.ON was in bad position. Instead, both parties had one good case and one bad one. E.ON's representatives had the following to say about the situation at hand: "In Viking Cable we are in a bad position. In Sydkraft we are in a good position." For Statkraft, the opposite was true.

At Statkraft, these two issues were quickly lumped together. After some rather tough rounds of negotiations regarding the size of the compensation, which finally ended up at NOK 2.4 billion, the parties began to devise what form the settlement should take. Statkraft's objective in this context was to get as much as possible out of the settlement in the form of assets and as little as possible in cash. E.ON largely accepted this demand. In the final settlement package, which was ready in the early summer of 2001, "only" NOK 0.7 billion was payable in cash, while the remainder would be settled in assets. Statkraft would take over E.ON's one-third stake in the Baltic Cable, an undersea cable in the Baltic Sea linking the Swedish and German electrical power systems, in which Vattenfall and Sydkraft owned the remaining twothirds. Statkraft considered Baltic Cable to be small consolation for the loss of the Viking Cable. The value of this element was set at approximately NOK 200 million. As well, Statkraft would acquire from E.ON 17 million category A shares in Sydkraft, which would increase Statkraft's share of voting capital in the Swedish company from 29 to almost 45 per cent, and reduce E.ON's stake to 55 per cent. This shareholding was to be acquired with a discount corresponding to approximately NOK 1 billion, which tallied perfectly with the sum of compensation set in the settlement agreement.

The Sydkraft element of the settlement, however, was composed of a much more comprehensive arrangement, and one with which Statkraft could be particularly pleased. During negotiations, Statkraft had achieved acceptance for an option agreement with E.ON guaranteeing a good value for its entire stake in Sydkraft for a longer period of time. Specifically, this agreement entailed that E.ON undertook to purchase Statkraft's entire shareholding, if and when Statkraft wished to sell up. This obligation would apply until the end of 2005. E.ON also undertook to pay the same share price that the company had offered in connection with the obligation to make an offer earlier the same year, and which was therefore considered to be extremely good. In reality, this meant that Statkraft could retain its shareholding in Sydkraft for

more than four years without worrying whether the value of its stake would fall. At the same time, the agreement would provide great flexibility in the sense that Statkraft would be able to cash in huge values at any time. Given the price agreed upon in the option, NOK 240 per share, Statkraft had essentially been granted a deposit account with E.ON totalling almost NOK 20 billion.

The most important thing about the option agreement was that it gave Statkraft some much-needed breathing space. Statkraft would not be able to remain involved in Sydkraft without running the risk of ending up in a deadlocked position, and so long as there were no other or better properties to invest in, it was better to retain a valuable and risk-free shareholding than to be stuck with a sack full of money. Furthermore, this option eased the minds of those who felt that Statkraft would have to sell while it had an opportunity to get out on guaranteed terms. For Statkraft, this obligation to make an offer was to all intents and purposes extended right up until the end of 2005.

At first glance, Statkraft appeared to have been presented with quite a golden egg, which raises one essential question to which the written sources provide no good answer: Why on Earth did E.ON agree to obligate itself in this way? This is an interesting question for several reasons. The Germans did not need to accept Statkraft's demands for an option, and given the fact that they clearly wanted full control of Sydkraft, why would they actively pave the way so that Statkraft could continue to be a major owner of the company?

Several of the individuals who took part in negotiations on behalf of Statkraft feel that E.ON actually wanted Statkraft to retain its stake in Sydkraft. The reason is that the Germans wanted to maintain their connection to Statkraft, and that joint ownership of Sydkraft was one way of achieving this after the Viking Cable agreement had broken down. It was claimed that this connection was important because having a strong partner in Norway, for example, could be valuable if hydropower legislation ever looked like it might be liberalised. As mentioned earlier, at the beginning of the new millennium, this was not a completely mindless notion. In such a perspective, the option represented a strategic swap in return for relationship capital.

Hans-Dieter Harig, E.ON's CEO at the time, confirms in retrospect that the Statkraft relationship was important and formed part of the overall assessment. Wevertheless, he attaches greater importance in fact to the gentleman's agreement he and Thulin had entered into in 1997. This was only a verbal agreement between the two CEOs regarding the division of power in Sydkraft. In Hannover, it was noted that Statkraft had stood by this agreement even in situations where the company seemingly had an opportunity to attain a stronger position in the Swedish company. Among other things, PreussenElektra was checkmated in Sydkraft at the end of the 1990s due to HEW's involvement and the ensuing ban on further acquisitions imposed on the company by the German competition authorities. At the time, Stat-kraft found itself in a position where it could have acquired a larger stake in Sydkraft without competition from the German co-owner, but it chose not to do so. In 2001, it was therefore payback time, according to Harig. If this is correct, it provides a fascinating expression of the strength of the relationship between Harig and Thulin. Let us leave to one side the fact that on several occasions during this period Statkraft actually considered taking a majority stake in Sydkraft. The obstacle to doing so was not PreussenElektra, however; it was actually Statkraft's owner. In any case, Statkraft had a sound platform on which to continue building a stake in Sydkraft, and 2003 was the time to continue developing this platform.

GERMAN CONFUSION

Just after New Year 2003, Mikkelsen received a telephone call from E.ON's CEO Hans-Dieter Harig. E.ON was in a tight spot and required Statkraft's assistance. The situation was as follows: Since 2001, E.ON's goal had been to acquire Ruhrgas, Germany's dominant gas company. These plans had given rise to powerful protests from other companies operating in the German energy market. They objected to the fact that a merged E.ON-Ruhrgas would become far too powerful in the Central European power and gas market. This opinion was supported by the German competition authorities, and the merger had therefore received the thumbs down from those quarters. Admittedly, the federal government had later overruled the competition authorities and given the merger the go-ahead. Gerhard Schröder's social democratic government felt it was of great national importance that Germany had a strong energy company, a national champion, in an increasingly liberalised European energy market.⁴⁵ This matter had not been finally decided, however, since a case could still be brought before a court of law. In the autumn of 2002, nine energy and trading companies in the German market sued E.ON (Statkraft, represented by its trading office at in Düsseldorf, was not one of the nine plaintiffs, even though such an action is alleged to have had been considered).46 In order to avoid a lengthy legal process with an uncertain outcome, E.ON had then used a variety of bargaining chips in an attempt to reach a solution with the plaintiffs, finally succeeding with all but one of the parties. E.ON's Achilles heel was the Finnish company Fortum, which made demands that E.ON found difficult to fulfil, unless Statkraft also played along.

In order to withdraw the lawsuit, Fortum demanded that it take over considerable assets belonging to Sydkraft in Norway. As mentioned previously, the Finnish company had quite an aggressive focus on the Norwegian market during this period, and clearly wished to exploit E.ON's problem in order to strengthen its own position – perhaps too they wished to rid themselves of a challenger. The Finns laid claim to one company that was wholly owned by Sydkraft – Østfold Energi – as well as



Brynge power plant in Västernorrland in Sweden. In 2005, Statkraft acquired 20 hydropower plants in Sweden and four in Finland from Sydkraft, including the Brynge power plant. These power plants had been part of the traditional company Graninge, which had been acquired by Sydkraft two years earlier. The acquisition of these 24 power plants, comprising half of Graninge's total hydropower production, was part-payment for the assistance Statkraft provided to E.ON in acquiring Ruhrgas in Germany, At Sydkraft, not everyone liked the fact that the owners used the company's assets to resolve external affairs.

shareholdings in two other companies: Fredrikstad Energiverk and Hafslund ASA.⁴⁷ At E.ON, there was a willingness to accept this demand. The problem was, however, that the Germans, even though they had a majority shareholding, were unable to do anything at all in a company where another shareholder held a significant stake. A majority shareholder of a limited liability company could not freely compel that company to sell its assets. Furthermore, Sweden's company law provided especially strong protection for minority shareholders. Finally, in order to avoid any legal disputes after the event, the Finns apparently demanded that Statkraft accept such a solution.

The gut reaction at Statkraft was a desire to help an old ally. In a report concerning this matter, a great deal of importance was attached to the company's "good relationship with E.ON," and that it was right to "help E.ON in a difficult and tough situation." At the same time, there was, naturally, concern that the value of Sydkraft should not be negatively affected. Relationship costs were also at risk here. Among other things, Statkraft had spent a lot of time building good links to one of the companies that might end up being sold. The E.ON relationship, to which Mikkelsen had devoted a great deal of effort in cultivating, was nevertheless felt to be most important. If Statkraft was to be the little stroke that felled the Ruhrgas merger, there was no doubt that this would put the alliance to a tough test, and it was therefore decided to accept the solution. In business, however, everything has its price, even good alliances. This situation gave Statkraft scope to demand favours in return, and this was not an opportunity that Statkraft would let slip.

E.ON urgently wanted to clarify this matter, and for this reason a number of things happened very quickly. Rynning-Tønnesen, together with strategy manager Stein Dale, Finn Fossanger and a number of others were given responsibility for devising a suitable consideration for the support Statkraft had given, and this is where the Sydkraft option was quickly raised as a trump card. The option was considered to be extremely important, and Statkraft therefore agreed to demand a two-year extension on this option, until the end of 2007. In addition, Statkraft would be granted certain additional benefits in connection with any realisation. ⁵⁰ After several hectic meetings, which essentially took place at Kastrup Airport in Copenhagen, E.ON accepted this demand.

Then, just before the matter came up for discussion by Sydkraft's board of directors in March 2003, an idea was presented that would later be termed the "napkin agreement," which brings us back to where we began this chapter – Statkraft's purchase of hydropower plants from the Swedish company Graninge in 2005. Statkraft was always open to purchasing hydropower resources, but at the beginning of the new millennium, there was only one company in the Nordic region with significant hydropower resources that *could* conceivably be put on sale, namely Graninge in

northern Sweden. The French company EdF and Sweden's Sydkraft each owned a little more than 36 per cent, while the remaining shares were essentially held by the plant owner, the Nordin family, who had previously dominated the company. The indications were, however, that the French were in the process of pulling out of the Nordic region, which meant Statkraft could possibly get its hands on these hydropower resources. As mentioned above, Sydkraft also held a stake in Graninge, and Sydkraft was a clear candidate to acquire more of Graninge. In any competition for shareholdings, however, Statkraft would very likely encounter problems matching a coordinated effort on the part of Sydkraft/E.ON. This was one scenario that had been envisaged for quite some time. Right before it concluded discussions with E.ON, Statkraft therefore presented a demand that would secure the company an opportunity to help itself to a piece of the Graninge cake. Specifically, it demanded an agreement stating that if Sydkraft or Statkraft gained control of the company, that party would have to sell half its hydropower portfolio to the other party. This obligation would go both ways, but it was clearly most valuable to Statkraft. E.ON accepted this demand, by sending a coarse-grained fax from Düsseldorf to Lysaker the evening before Sydkraft's board of directors was due to discuss the sale to Fortum, and that is why this undertaking bears the name the Napkin Agreement.

Both the extension of the Sydkraft option and the Graninge agreement would turn out to be highly beneficial. The extension of the Sydkraft option meant that Statkraft could keep hold of its shareholding in the Swedish company for some time to come. This would later prove to be extremely favourable, since the value of Sydkraft rose considerably, particularly from 2005. It is not inconceivable that Statkraft would have exercised its option had this extension not been negotiated. The two extra years gave Statkraft an opportunity to reap considerable benefits during these years. We will return to this matter in greater detail in the next chapter.

The Graninge agreement too proved to be highly favourable. Only months after the agreement had been entered into, both EdF and the Nordin family declared that their shares were for sale. Both Statkraft and Sydkraft submitted bids. Not surprisingly, Sydkraft's bids were accepted and Sydkraft acquired control of these shares. In doing so, Sydkraft became sole owner of the company, and in 2003–2004 Graninge was integrated into Sydkraft. As a consequence of the Napkin Agreement, Sydkraft/E.ON was in turn obliged to transfer half of Graninge's hydropower resources to Statkraft. Quite shortly after the acqui-

Jorgen Kildahl came to Statkraft in 1999 and in 2001 moved into the role of group manager responsible for markets when Bård Mikkelsen took over as CEO. Kildahl distinguished himself as a skilled analyst and strategist and quickly won a position as the undisputed leader of the company's large and growing market division. When Mikkelsen left in 2010, many thought Kildahl would take over as the company's CEO. This did not happen, however. Kildahl instead moved over to the group management of German giant E.ON, which was no small feat and a rare career opportunity for a Norwegian business leader.



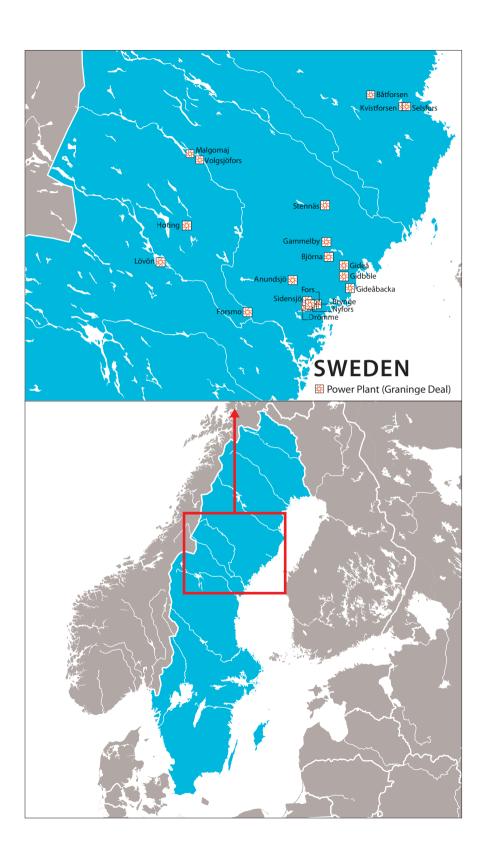
sition, negotiations regarding division of hydropower resources therefore began. These negotiations proved to be extremely tough and lengthy, due, among other things, to the difference of opinion in Statkraft and E.ON as to how the value of the hydropower plants should be determined. The transaction did not therefore take place until the autumn of 2005. Specifically, Statkraft took over 20 hydropower plants in Sweden and four in Finland with a total annual production of approximately 1.6 TWh. In selecting these resources, Statkraft attached importance to geographical dispersion. It was an important goal for the company to have power plants in as many watercourses as possible in Sweden, in order to gain the best possible access to information about generation of electricity in the Swedish hydropower system. According to Swedish legislation, owners of hydropower resources were entitled to information about catchment and reservoir conditions along the entire watercourse. Statkraft's goal was to integrate this information into the company's analytical and model tool for the Nordic market.

EXPANSION, INTERNATIONALISATION AND OWNERSHIP

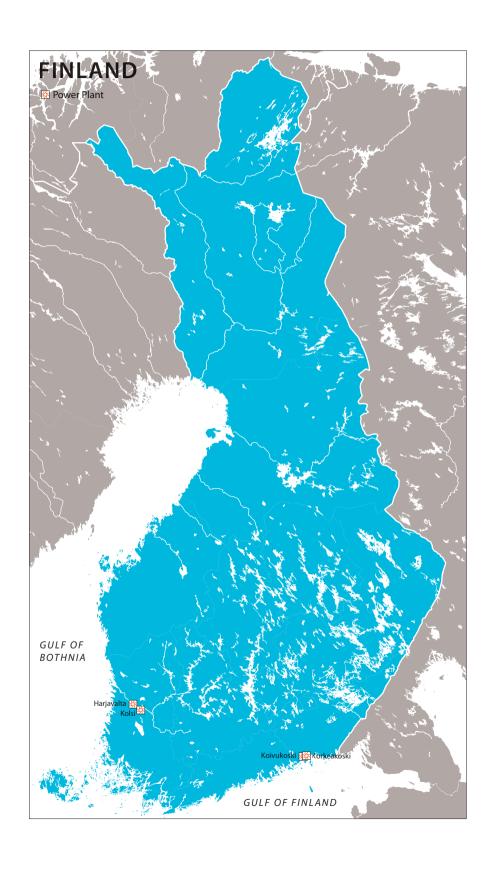
Realising the company's emerging ambition for growth after the turn of the new millennium was conditional on several circumstances. Access to investment opportunities, as we have seen, was one crucial factor. Growth also requires capital, however, and in the following we will take a closer look at the company's capital situation. In parallel with Statkraft's increasing ambition for growth, there was growing uncertainty about the company's access to capital – an uncertainty that at least in part was linked to changes in the political balance of power during this period.

State ownership had yielded considerable advantages in the 1990s. Since Statkraft was a state enterprise, the Norwegian state guaranteed all the company's liabilities. Moreover, with the affluent Norwegian state backing it, the company enjoyed an extremely high credit rating, which in turn meant favourable loans in the capital markets. In addition, the state had at times supplied the company with considerable amounts of equity, as we mentioned in Chapter 4. Although the company also supplied the state with considerable capital, through high dividend payments, injections of equity had more than weighed up for these dividend payments.

After the year 2000, the capital situation became more complicated, however, due to some extent to circumstances over which Norway had no control. In 2001, the Norwegian authorities were notified by the EFTA Surveillance Authority (ESA) – the European Union's surveillance body for EEA countries – that state guarantees were considered to distort competition, and were therefore in breach of the EEA Agreement. This was a serious matter for Statkraft, which had undoubtedly benefited from the scheme. In 2002, Statkraft had the highest possible credit rating – a Triple A rating – from international credit rating agencies, and the company therefore ranked



142



among the elite in the European energy industry as far as financial strength was concerned. This position meant less expensive credit, but was also important because Statkraft then appeared to be an extremely attractive company, which of course proved very valuable in negotiations on mergers, partnership agreements and acquisitions. According to Statkraft, losing the state guarantee would lead to a significant reduction in the company's official credit rating. Based on the credit rating agencies' normal assessment criteria, which essentially compared debt and interest obligations with operating revenues, Statkraft, in its own estimation, risked falling considerably down the credit rating scale, possibly down to a BB rating, corresponding to "noninvestment grade" or, to put it bluntly, no creditworthiness.² Although it was believed that state ownership would still be a positive factor in the agencies' assessments, it was still felt the company could end up with a BBB rating, the lowest category of creditworthiness. In the company's own opinion, this would have lead to increased capital costs and reduced market value, among other things. According to the same estimates, maintaining an acceptable credit rating would require more than NOK 20 billion in new equity.3

This was the simple message Statkraft gave its owner in the autumn of 2002. By this time, Jens Stoltenberg's Labour government had been replaced by the Bondevik II government, which consisted of an alliance between the Christian Democratic Party, the Liberal Party and the Conservative Party, the latter of which was by far the most dominant party. Not wishing to battle against the ESA on the matter of state guarantees, the Bondevik II government decided to dismantle this scheme early in 2003.

Statkraft had cause for concern over this decision. The Bondevik government had indicated that it essentially did not wish to supply the company with more equity either. Among other things, this attitude had been set forth in a government white paper *Et mindre og bedre statlig eierskap [Smaller and better state ownership]*,⁴ published in the spring of 2002. Furthermore, it gradually became clear that the government intended to follow up this line of thinking, also after the matter of dismantling state guarantees had been tabled. Right at the end of 2002, Statkraft asked the Norwegian state for an equity increase of NOK 12 billion. The application made reference to the company's increased ambition for growth and to the need to improve its financial situation as a consequence of the dismantling of the guarantee scheme. Six months after the application had been lodged, however, the Ministry of Industry and Trade (which was now responsible for Statkraft) had yet to respond.

Responses to applications for capital increases had taken their time before. Furthermore, the Bondevik II government had its reasons for waiting. In the government white paper on state ownership, the government had indicated that it wished to list Statkraft on the stock exchange and then partially privatise the company, and for this

reason it was understandable that they chose to sit on the fence. Statkraft found it difficult to wait for time-consuming political processes to run their course, however, and this gave rise to a certain amount of frustration. This disappointment was also expressed publically, primarily through board chairman Terje Vareberg's more or less open criticism of the company's owner for delaying clarification of the application for additional capital.⁵ In combination with high dividend payments, Vareberg felt that Statkraft in this situation was in reality being prevented from following up on the company's international strategy.

This matter also caused considerable conflict in the Storting, with the Labour Party being the most vociferous critic of the government's policy. In the early summer of 2003, a handful of representatives from the party's parliamentary group tabled a proposal to grant NOK 10 billion to Statkraft.⁶ Admittedly, this proposal was primarily linked to a Norwegian issue, Oslo Municipality's plans to sell its shareholding in the energy company Hafslund. This matter triggered demands from many quarters to keep the company in Norwegian hands, and Statkraft was probably the only company that could compete with any foreign players. For this reason, it was felt it was important to strengthen the company's capital base. The Labour Party was not alone in having such a view, and in June 2003, just before the Storting's summer recess, the Labour Party joined forces with the Socialist Left and the Progress Party to gain a majority in the Storting.

The government took up this matter again in the autumn, in connection with its proposed National Budget for 2004, and chose to drop Statkraft's capital increase. The reason it gave was that Oslo Municipality had since changed its mind in the Hafslund matter and had decided not to sell its shareholding. For this reason, the government argued, one significant precondition for the majority decision by the Storting had been removed. In the wake of this, a new political battle emerged that finally ended in a compromise. At a meeting behind closed doors at the beginning of 2003, the leaders of the opposition parties pressured prime minister Kjell Magne Bondevik personally to grant a capital increase to Statkraft.⁷ This compromise consisted of reducing the capital increase to NOK 4 billion. The opposition parties' decision to reduce this amount so significantly was due to two circumstances in particular. First, this matter was no longer as important for the opposition after the Hafslund matter had lost its significance. Second, for the Labour Party, it was also important that in connection with discussions concerning the National Budget earlier that autumn, a collaborative agreement had been entered into with the government that largely bound the party. For this reason, the capital issue was affected considerably by various political considerations that had nothing to do with Statkraft in isolation.

The point of highlighting the situation in the period between 2002 and 2004 is to shed light on the somewhat difficult sides of ownership, seen from the point of view

of company management. As we have seen in this chapter, the company's ambitions for international growth were high in this period in particular. For this reason, Statkraft was also more dependent on its owner's support for its strategy, in financial terms as well. Such support was only partially forthcoming and, seen from the government's vantage point, it was given reluctantly too. As such, the situation in this period illustrates the point highlighted in Chapter 1: On the whole, political support for the company was not very strong, particularly perhaps as regards the company's international growth strategy.

At the same time, it would be wrong to say that Statkraft's owner was the reason why few of the company's international initiatives were unsuccessful during this period. Perhaps it was just as much due to a lack of very good investment opportunities. The company had one major source of capital it could have used had it really wanted to do so – its shareholding in Sydkraft. Because Statkraft had negotiated a sales option with E.ON in 2001, it had in reality a bank account containing NOK 18 billion that could be realised if other investment opportunities were to appear. Among other things, the intention was to finance the planned acquisition of the German companies EWE and VNG in 2003 through sale of the company's Sydkraft shares. In hindsight, it was probably best that this did not go ahead. It was not the lack of capital that stopped the acquisition of these companies, however, rather it was due to circumstances outside the control of both Statkraft and its owner.



A new strategy for growth

n the spring of 2005, Statkraft resolved to build two gas-fired power plants in Germany: Knapsack, an 800 MW facility outside Köln, and Herdecke, a 400 MW plant south of Dortmund. Statkraft would build and own Knapsack on its own, while Herdecke would be a collaborative project with the German company Mark-E. The start-up of both of these plants, which would take place around two years later, in the autumn of 2007, would be celebrated as a milestone. In Europe, Statkraft had so far only generated electricity in the Nordic region. Now the company was seriously positioning itself on the continent, and its objective was for further developments. As the first decade of the new millennium progressed, and as a consequence of the breakthrough in climate policy, many people felt that gas power would play a very key role as a transitional solution on the road towards a renewable society. Gas power is far cleaner than coal-fired power, and the feeling was therefore that gas should replace coal until renewable forms of energy could take over completely from carbon-based power generation.¹

Involvement in German gas power marked a change in Statkraft's growth strategy. It was one thing that a green company like Statkraft had become involved in power generation using fossil resources, even though gas power in a European context could be justified in terms of climate policy. Nevertheless, ownership and involvement in German gas-fired power plants was also an expression of a new way of expanding that would become dominant over the next decade. In the previous chapter, we saw that in the period between 2000 and 2005 Statkraft's ambition was to grow through mergers and acquisitions. From around 2005, the company began to focus more on organic growth, meaning the development of production under its own auspices. Even though this shift in direction was not the result of a formal and consistent change in strategy, mergers and acquisitions were hardly mentioned after 2005. At the same time, Statkraft began focusing aggressively on developing power production around Europe. The gas-fired power plants in Germany were one example of this focus. Statkraft also began to invest heavily in development of wind power and hydropower.

In this chapter, we will concentrate on Statkraft's involvement in Europe in the decade after 2005. In Chapter 7, we will look more closely at Statkraft's operations in the rest of the world during this same period, which have primarily occurred through the company SN Power. SN Power was founded in 2002 to operate hydropower developments in emerging economies, continuing the efforts initiated in the 1990s with projects in Laos and Nepal (see Chapter 3). The creation of SN Power, however, meant that Statkraft's operations outside Europe got a far more central place in the company's strategy. We have chosen to mention SN Power already at this point since Statkraft's initiatives both in Europe and elsewhere in the world have in recent years converged into one common strategy – that of being an international developer of renewable energy. This development too should largely be understood in the light of two major trends: the global emergence of climate policy, and the economic growth and growth in demand for electricity that has occurred most strongly over the last decade on the outer reaches of Europe and elsewhere.

One event during the period after 2005 stands out in respect of Statkraft's international involvement though, namely the major swap that took place with E.ON in 2008 when Statkraft sold its much discussed shareholding in E.ON Sverige (formerly Sydkraft) to the German company. In return, Statkraft acquired assets in the Nordic region and in Europe with a total value of more than NOK 44 billion. Besides the fact that the price paid for the Sydkraft shares was particularly good, this trade-off meant that Statkraft gained direct ownership of considerably more power production resources in Europe, particularly in Sweden and Germany, but also in the UK. The E.ON transaction is the single most important event in Statkraft's recent history. In this chapter, we will therefore devote a good deal of attention to this transaction.

LIBERALISATION AND CLIMATE POLICY

Several factors lay behind the shift in focus from mergers and acquisitions to organic growth in the period around 2005. This was partly an expression of a certain weariness on the part of group management after the many demanding rounds of talks and negotiations that for one reason or another had proved unsuccessful. It was difficult to find an owner that was suited to Statkraft's needs and profile. Furthermore, the company's owner was no driving force in this respect – quite the reverse in fact. It was also probably significant that director of finance and strategy Christian Rynning-Tønnesen resigned from his position in 2005, and that the company therefore lost what was perhaps its strongest motivator for mergers and acquisitions.² Rynning-Tønnesen, who had worked closely with the visionary and grand thinker Lars Thulin throughout the 1990s, had played a key role in both the conceptualisation and operationalisation of the company's strategy for mergers and acquisitions at the beginning of the new millennium.

Concerning a stronger orientation towards organic growth, it is also important, however, to stress that the scope for such a strategy became greater with the passing of time, as liberalisation really gained a foothold in the European countries. Establishing a presence as an independent power producer requires systems and regulations that guarantee producers access to local and national transmission systems on equal terms, which do not provide scope for the exercising of market power. Many countries spent quite some time establishing such systems. This was true in particular of those countries where established companies retained ownership of the transmission systems, and where the ownership structures were initially most centralised.³ By the middle of the first decade of the new millennium, however, most EU member states had begun to put in place regulatory systems that ensured better market access for new independent power producers. Particularly important was the European Union's introduction of the Second Electricity Directive in 2003, which imposed far more stringent requirements on member states to introduce regulations that secured competition.4 At the same time, this directive meant that a lot of regulatory authority was transferred from the national level to the EU level, which led to harmonisation of the national regulatory regimes. This development was further strengthened by the fact that the Federal Energy Regulatory Commission (FERC) developed at the same time a standard market design intended to be a best practice for regulating power systems.5

In other words, over time there was far more opportunity for the creation of independent production units in the EU countries, for example, freestanding gas-fired power plants in Germany. In the year 2000, such a facility would have been met with great challenges in terms of access to transmission systems and market power, in connection with shut-out mechanisms from established companies, and in accessing customers and sales arenas. By 2005, most countries had introduced systems that secured a reasonable degree of competition, including regulated access to transmission systems and organised marketplaces. In addition, a number of countries outside the EU had gradually introduced such market-based regulatory systems. This was true of most countries in Southeast Europe, where Statkraft had seriously begun to become involved in the years around 2010. This development was a necessary precondition for Statkraft's increased focus on organic growth.

Climate policy was the second major force that helped shape Statkraft's strategies and development after 2005. As mentioned in the previous chapter, the origins of burgeoning climate policies can be traced to the formation of the 1997 Kyoto Agreement. In Europe, this agreement led to the introduction by both the European Union and individual countries of a variety of measures to reduce greenhouse gas emissions. It was not until the period after 2005, however, that climate policy seriously began to have consequences, particularly for the energy sector.

Increasingly more ambitious climate objectives and regulations were introduced in the years leading up to 2010, driven in particular by the EU, which helped change the entire sector's development. One extremely important step was taken in 2007, when the heads of the EU member states agreed that 20 per cent of the EU bloc's total power output should come from renewable energy sources by 2020. This resulted in the introduction of the Renewables Directive in 2009, which stipulated individual member states' obligations.6 The Renewables Directive has led to major changes in energy policy in many countries, with the introduction of the Energiewende project in Germany in 2010 as the most radical example. With this project, German politicians set themselves the goal that 60 per cent of the country's energy consumption and 80 per cent of electricity production should come from renewables by 2050 (in 2010, the share of renewable energy in the largest EU country was barely seven per cent). However, most other countries began from around the mid-2000s to introduce even more ambitious objectives and aggressive instruments to entice the energy systems over to renewable energy sources such as wind, solar power and other "new" renewable sources of energy. Countries on the outer reaches of Europe, including some of the Balkan states and Turkey, have also introduced climate-based incentive schemes for the development of hydropower.

One important feature of developments after 2005 was that many countries outside of the western world began to encourage the development of renewable energy. As we will see in our review in the next chapter, this trend coincided with a considerable increase in economic growth in many developing countries and emerging economies in the first decade of the new millennium, and therefore also an increase in the need for electricity. The consequence of these developmental features is, among other things, that the development of hydropower has become far more attractive. Hydropower is one of the renewable source of energy in the world with the greatest potential, and plenty of the world's unutilised hydropower resources lie precisely in those countries in Asia, Latin America and Africa that have experienced the greatest economic growth.⁷

The other side of climate policy and focus on renewables is that the production of electricity from fossil-based resources has become far less attractive. This is particularly true of Europe, where the introduction of increasingly more lucrative incentive schemes for renewable energy production together with increased carbon taxation has led to strong competition and the ousting of fossil production. Coal-fired power has admittedly maintained a lot of its profitability owing to a dramatic fall in coal prices, especially after around 2010. This development is particularly due to two factors: the fall in demand due to increased competition from renewable energy sources, increased taxation and a general lower level of economic growth after the financial crisis of 2008; and an increase in extraction capacity in several of the major coal-

producing countries (the latter is a result of a strong rise in coal prices in the years *before* 2010).8 New developments of coal-fired power plants hardly ever occur in Europe now. In addition, other forms of fossil-based power production – primarily gas-fired power – were hard hit by new climate and renewables policies. Statkraft too has experienced the consequences of this development. After 2010, gas-fired power generation found itself in a terrible situation in Europe, and Statkraft's investment in gas-fired power in Germany has gradually become one of the company's least profitable investment.

All in all, focus on climate policy after 2005 has helped push most western energy companies towards more eco-friendly production technologies. Investments in power generation from fossil fuels have subsequently fallen strongly, while investments in renewables have increased significantly. As such, Statkraft's cultivation of its role in renewables over the last 10 years could largely be said to be part of a European and global trend. In this context, however, Statkraft's route has been far shorter than it has for almost every other major power company.

We will return to Statkraft's involvement in gas-fired power in due time. First, however, let us discuss the most significant international issue in the period after 2005 – the E.ON transaction in 2008, which gave the company a lot of new production capacity, particularly hydropower, and increased financial vitality.

THE BEGINNING OF THE END OF THE SYDKRAFT-STORY

After Statkraft negotiated an extension in 2003 of its sales option in Sydkraft from 2005 until the end of 2007 (see Chapter 5), ownership of the Swedish company entered a stable phase. Up



Climate campaigners battling against coal-fired power production in the Netherlands in 2008. Carbon-based power generation has come under increasing pressure in many European countries since the year 2000, both from environmental organisations and politicians. Statkraft has adapted to this trend. Particularly after 2005, the company has consciously marketed itself has a renewables company.



After the turn of the millennium, climate issues have begun to have a great impact on international politics, due in particular to public mobilisation for a cleaner world. This photograph was taken in New York in the autumn of 2014, in connection with the worldwide campaign the People's Climate March. In New York alone, more than 100 000 people took part, demanding that world leaders take climate issues seriously.

until 2007, no major changes occurred in either the ownership situation or in the relationship between Statkraft and E.ON. Thanks to this option, Statkraft was able to rest on its laurels and reap good annual dividend payments without having to worry about tomorrow. So long as no other investment projects popped up that appeared to be more profitable, there was no reason to sell some or all of these shares, and in fact, this did not happen.

Something else did happen during this period, however, that would have a great bearing on how Statkraft would act in relation to its option. The value of Sydkraft, or E.ON Sverige, as the company had been called since 2005, increased considerably. This was due to two factors in particular. First, electricity prices in the Nordic market began to rise after 2003, at the same time as most prognoses indicated this would be a lasting trend. Since the future price of electricity is the single most important factor in assessing the value of power companies, this meant that the value of E.ON Sverige appeared to be increasingly higher than it was when the option agreement was entered into in 2001. Second, a general increase in the price of energy shares in Europe occurred during this period, which also affected value estimates of E.ON Sverige. Already in mid-2005, when Statkraft commissioned an external valuation of its shareholding, it was estimated that the value was just below SEK 30 billion. This was approximately SEK 10 billion more than the price determined in the option agreement, which meant that exercising the option appeared to be increasingly less lucrative.

It was essentially a good thing that the value of the company increased, but Statkraft was faced with the dilemma of how it should realise this increase in value. Due to the ownership situation in E.ON Sverige, with a completely dominating owner that clearly had a long-term perspective for its involvement, it would probably be very difficult to find another party that would be interested in purchasing Statkraft's shareholding – at least at the right price. One could probably rule out the major energy companies in Europe, since they had a tendency to seek majority positions when they first made acquisitions. Such companies were unlikely to buy into a company where a competitor sat with a controlling stake. So E.ON was probably the only genuine buyer of Statkraft's shareholding, but naturally enough they would not be interested in paying more than necessary. On at least one occasion, Statkraft had raised the question of selling its shareholding with E.ON, at a meeting that is said to have lasted three quarters of an hour, including lunch, primarily because Statkraft's representatives saw no point in remaining in the room any longer. The ownership situation gave no reason for E.ON to accept a higher price than that determined in the option.

Statkraft's situation early in the summer of 2007, only a few months before the option was due to expire, could thus seem deadlocked. Statkraft admittedly did have an opportunity to sell itself out, but without any real prospects of getting properly compensated for its shareholding. Therefore, the question was what the company

should do with its option. Externally, in respect of the Germans, Statkraft had made it clear it had no interest in selling its shareholding at the terms stated in the option. Within the company, however, there was some uncertainty. Furthermore, Statkraft was in the weakest position. For E.ON, there was not that much at stake. The Germans had nothing to lose by playing a waiting game, and they would be in no worse a position if Statkraft chose not to exercise its option. After 2007, E.ON would no longer be under an obligation to buy. Statkraft for its part *could* find itself in a worse position, if, for example, the company for one reason or another found it needed to or was obliged to sell off its shareholding.

This picture changed dramatically early in the summer of 2007, when Stein Dale was contacted by Johannes Teyssen, E.ON's vice president, who wanted to inform him of an ongoing restructuring project called "One E.ON." During the first half of the decade, the German company had expanded considerably through acquisitions of companies in a number of European countries. It was now time to consolidate and to reap synergies. Among other things, E.ON wanted to gather all its trading activities in Düsseldorf, including trading in E.ON Sverige. Even though E.ON argued that this would benefit E.ON Sverige, and would not therefore have a negative effect on other shareholders, it did raise the question of whether such a wide-ranging intervention could be done without the acceptance of the other major shareholder. A legal opinion, produced by Swedish lawyers, concluded that E.ON could not do this without contravening the Swedish Companies Act. At the same time, it was clear that a transfer of trade operations was extremely important for E.ON. For this reason, Statkraft finally had an opportunity to take up a negotiating position in respect of its shareholding in Sweden. 15

PROJECT GENOA

E.ON's representation and plans quickly led to a discussion of Statkraft's ownership. In the ensuing period, talks began with E.ON in which the acquisition of Statkraft's shareholding gradually became the key topic of discussion. For Statkraft, two principles formed the basis of these conversations: any sale would have to take place at market price, and Statkraft should receive as much as possible of the settlement in the form of assets, including hydropower resources in Sweden. The parties reached agreement on these principles during the summer months that same year, and by the end of August they had in place a basis for exchanging assets. In return for its shareholding in E.ON Sverige, Statkraft would take over a third of this company's hydropower production. Among other things, Statkraft would also acquire 11 hydropower plants and two gas-fired power plants in Germany. What would be included in addition to these assets would depend on the price agreed for Statkraft's stake, and this was the most difficult part of the entire matter.



Stein Dale came to Statkraft in 2002 and in 2005 moved into group management as director of strategy when Christian Rynning-Tønnesen left the company. Dale also became responsible for negotiating the agreement with E.ON, which formed the basis for the large Genoa transaction in 2007–2008. He excelled as a skilled, tough and occasionally uncompromising negotiator. In 2011, he left Statkraft and joined the German company E.ON.

Discussions in the summer of 2007 formed the basis of a process that would be particularly demanding but also particularly lucrative for Statkraft. Negotiations initially took place behind closed doors, and only went under the name "Genoa." The idea for this cover name, which was arrived at by rearranging the letters in E.ON AG, came from sailing enthusiast Stein Dale (a Genoa is a type of sail). On the German side, these negotiations had their own cover name – "Elk."

Statkraft quickly established a group assigned to work on legal aspects, and the valuation and selection of assets. This group, led by Dale, had a core team consisting of Anders Prietz, Rolf Busch, Finn Fossanger and Kjell Hartvedt Nilsen. The group's most important task was to calculate a market price for the company's shareholding in E.ON Sverige, as well as the one-third share of E.ON Sverige hydropower resources. Not surprisingly, the two parties ended up with very different figures, rendering the ensuing negotiations all the more difficult. Final clarification only came after a very exhausting round of negotiations in September in Laksfors, Statkraft's residence up in the north of Norway. At the time, Statkraft had only a few weeks previously resolved not to exercise its sales option, and had notified E.ON of this decision. ¹⁶

At Laksfors, the Germans were represented by CEO Wulf Bernotat, vice president Johannes Teyssen and head of mergers and acquisitions Lutz Feldman. Statkraft's representatives were board chairman Arvid Grundekjøn, Bård Mikkelsen and Stein Dale, accompanied by a comprehensive range of figures and documentation prepared by the group. Over a two-day period, intense negotiations ensued, until the parties finally found common ground somewhere in between their respective starting positions. The value of Statkraft's shareholding was set at EUR 4.4 billion, while the value of the Swedish hydropower resources was set at EUR 1.65 billion. Once these figures had been determined, two of the most important and most difficult components were in place. The value of the hydropower and gas-fired power plants in Germany, as well as some other assets that Statkraft would acquire, would be negotiated over time. The remainder of the settlement would be paid to Statkraft in the form of shares in E.ON.

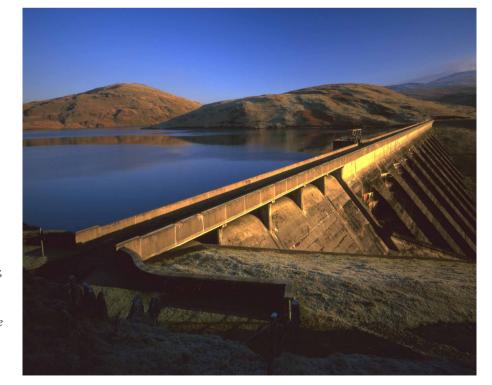
E.ON and Statkraft agreed that this matter should be presented to the board of E.ON Sverige at their first meeting, which was barely one week later, on Monday 24 September. By that time, the parties would enter into a Memorandum of Understanding. This meant also, among things, that they only had a few days in which to pick specifically which hydropower plants would be acquired from the Swedish company. In this respect, Statkraft largely followed the same strategy as it had done in connection with the Graninge affair a few years earlier, when the most important thing had been to acquire hydropower plants in as many watercourses as possible in order to gain access to hydrological information (see Chapter 5).¹⁷ In this respect, it was possible to make considerable use of the extensive screening of Swedish



Two happy gentlemen. On 24 July 2008, the Genoa agreement was signed in Stockholm, and Statkraft's CEO Bård Mikkelsen was able to shake E.ON's CEO Wulf Bernotat by the hand. The Genoa-agreement marked the end of a period of close cooperation between Statkraft and E.ON in the Swedish company Sydkraft (later E.ON Sverige) that had lasted 12 years. The relationship between the two old partners was not quite over, however. The agreement gave Statkraft a shareholding of around 4.2 per cent in E.ON, which made the Norwegian company one of the largest industrial owners of the German energy conglomerate. Statkraft's shareholding was finally sold in 2013.



Nant-y-moch, the reservoir that feeds the Rheidol hydropower plant in Wales. Statkraft acquired the plant in 2008 as part of the big swap with E.ON. It may seem strange to buy a single hydropower plant in the UK. For Statkraft, however, information has become an increasingly important factor, and an important reason for the acquisition was to gain further insight into the workings of the British market. Rheidol, which became operational in 1962, has an installed capacity of 49 MW and is one of the largest hydropower plants in the UK.



watercourses and hydropower plants that had taken place at the time. In addition, a simulation model had been produced to estimate the value of the power plants. In the afternoon of Sunday 23 September, the day before the board meeting, Finn Fossanger met with Tron Engebrethsen and Jon Ulrik Haaheim, the latter two from Statkraft's production division, to hold a conference call with E.ON Sverige, represented by the company's head of hydropower. During the course of the conversation, which lasted long into the night, Statkraft acquired 40 hydropower plants, with a production capacity of 975 MW and a normal production of 4.1 TWh. These power plants, which were located in watercourses from Skellefteälven in the northeast to Lagan in southwestern Sweden, gave Statkraft access to five of the six largest developed rivers in Sweden.

In the middle of October, the framework for the entire settlement package was set forth, which in turn formed the basis for the signing of a formal letter of intent. It was formally signed on 12 October, and published the same day at a press conference at Lysaker headed by Bård Mikkelsen and CEO of E.ON Wulf Bernotat. In addition to the Swedish hydropower resources, Statkraft would also acquire two gas-fired power plants in Germany, Emden Gas and Robert Frank, both in Niedersachsen, with a total production capacity of 917 MW, plus the 220 MW Erzhausen hydropower plant in the same region. Erzhausen, which was a pumped-storage power plant, was well suited to Statkraft's focus on flexible production. As well, Statkraft would acquire a handful of smaller river-based hydropower plants with a total production capacity of 42 MW on the River Weser in the central/western part of the country. Finally, the agreement included assets in several other countries, including the Rheidol hydropower plant in Wales, a biomass facility in Germany and a number of district heating facilities in Sweden.



Oberbecken is a reservoir feeding the Erzhausen hydropower plant in Lower Saxony, Germany. In 2009, Statkraft acquired this power plant in connection with a swap with E.ON. Erzhausen has an installed capacity of 220 MW and is a pumped storage power plant. The power plant has two reservoirs, one above and one below the power station itself. During periods when electricity prices are high, the power plant operates using water from the upper reservoir. When electricity prices are low, water is pumped up from the lower reservoir using power from the grid.



Statkraft CEO Bård Mikkelsen in his element. Mikkelsen had a background from the airline industry, and he is a keen helicopter pilot. Here he is in the air over Sweden, on his way to inspect the power plants Statkraft acquired in the 2008 swap deal with E.ON.

In addition, Statkraft in Germany would be awarded a long-term power supply agreement and a gas agreement with E.ON that were worth a considerable amount.

Including Swedish hydropower resources, the total estimated value of the assets included in the letter of agreement was just over EUR 2.2 billion, or around half of the total value of Statkraft's shareholding in E.ON Sverige. The other half would, as agreed previously, be paid in the form of shares in E.ON AG. Based on the share price as at September 2007, this would give Statkraft an equity stake in the German company of just above 2.2 per cent. Since E.ON had a very diverse ownership structure, Statkraft would be one of the company's four largest shareholders.

The gist of the letter of intent was relatively specific. As for the technical, legal and financial aspects of the assets, however, this was when work would really start in earnest. A due diligence review was required, for a more thorough valuation of all assets. Such an extensive transfer of ownership also required discovery and clarification of a large range of factors. For example, there was some uncertainty concerning water rights at the hydropower plants in Germany. As well, a number of production units and employees, spread over four different countries, had to be integrated into

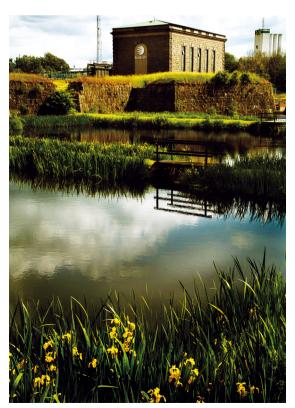
Statkraft. In specific terms, this involved more than 60 operating units and more than 200 individuals who would have to be transferred to Statkraft or Statkraft's subsidiaries and incorporated into new systems in an effective and efficient manner.

At most, more than 100 people were involved in the various parts of the Genoa process. Among other things, a great deal of effort was invested in ensuring good implementation of the new operations, with operations running as smoothly as possible from day one. This process began long before the acquisition occurred. By the end of 2007, a separate group had been established, chaired by head of market operations Jørgen Kildahl, who would be responsible for implementation. The project manager for this work was Hilde Bakken. The greatest task in this context was planning for the integration of the 40 hydropower plants in Sweden. This job was led by Jon Ulrik Haaheim.

The final settlement package was in place in the summer of 2008, and a binding agreement was signed on 24 July. The deadline for completing the transaction was set at year-end that same year. This final matter would have a great bearing on the size of the Statkraft's shareholding in E.ON. Under the terms of the agreement, Statkraft would receive settlement in the form of shares based on a predetermined amount stipulated in Euros, and at the share price applicable at the time when the transaction took place – 31 December that same year. The price of E.ON shares fell considerably during the autumn months, however, which meant that Statkraft therefore ended up with a 4.2 per cent stake, compared with the estimated 2.2 per cent shareholding in the summer the same year.

In hindsight, and taken as a whole, Statkraft's involvement with Sydkraft/E.ON Sverige appears to have been an extremely lucrative deal. During the period between 1996 and 2002, Statkraft invested a





Beautiful power stations in Sweden, which are today owned by Statkraft. Karsefors power plant (above) and Laholm power plant (left) were acquired in 2008 in connection with the Genoa agreement. Under the terms of this agreement, Statkraft acquired 40 hydropower plants in Sweden.

160



Hilde Bakken has worked at Statkraft since 2000. She has long experience from the business areas Production and Markets. She is now part of the company's group management with responsibility for Power Generation. In 2008, Bakken was assigned responsibility for leading the integration of all assets that Statkraft had acquired in connection with the swap with E.ON. More than 100 Statkraft employees in eight offices in five countries were involved in this task. Bakken has compared this process with removing an engine from a car and putting it in a new vehicle without damaging any parts in the process. In addition, everything had to happen quickly, and work from day one.

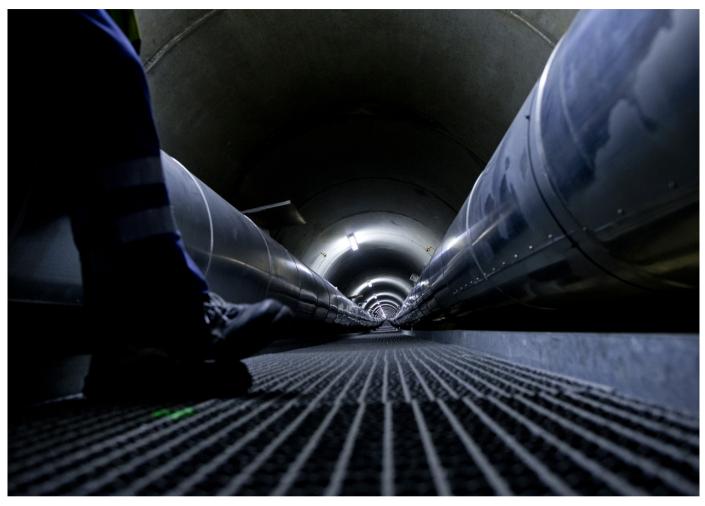
total of NOK 14.9 billion in shares in the company. During the period from 1996 until 2008, when the swap took place, Statkraft received NOK 8.8 billion in dividend payments. In addition to the value of the assets acquired, this gave an annual return on investment throughout the entire period of 14 per cent. As such, there was no reason to be ashamed of this result.

If one calculates ahead and includes the return on all assets up until 2013, the result is somewhat poorer, but still a sound 10 per cent return on investment. Interestingly, this reduction is due to two factors that can both be attributed to the new climate trend we mentioned earlier. First, E.ON's market value had fallen in recent years, due among other things to its large portfolio of coal-fired, gas-fired and nuclear power plants that was affected by the Energiewende policy in Germany. Second, the value of the two gas-fired power plants that Statkraft acquired as part of the swap in 2008 fell to almost nothing, for reasons mentioned earlier in this chapter.

THE MOUSE THAT GAVE BIRTH TO A MOUNTAIN

According to legend, it is said that after a meeting with Sweden's Chancellor Axel Oxenstierna in 1629 Denmark's King Christian IV quoted Horatio in Hamlet, who had said, "Parturiunt montes, nascetur ridiculus mus." A direct translation would be "The mountain in labour gave birth to a ridiculous mouse." Later, the term "the mountain that gave birth to a mouse" has been used as an expression of situations where huge, meticulous preparations yield small results. As for Statkraft's involvement in Sydkraft/E.ON Sverige, it is tempting to turn this sentence around, and speak of a mouse that gave birth to a mountain. Not because this involvement yielded great results following minor preparations, but because it became something much larger than one could have predicted when Statkraft purchased its first small shareholding in the company in 1996.

Statkraft undoubtedly made some very wise strategic decisions both initially and during its investment period. Statkraft's first investment was largely the result of Thulin's visionary and strategic thinking, and his ability to build up relationships both with Swedish and German players, enabling the company to gain such a good position in Sydkraft in the initial years. The idea of an option in 2001 was also important. Even though this is only speculation, it is not wholly inconceivable that Statkraft would have sold off its shareholding already in 2003 when E.ON triggered its obligation to purchase all shares. The option gave Statkraft an important breathing space and a good argument whenever it met people who felt that Statkraft should sell off its shareholding. Further, extending the option in 2003 clearly helped make it possible to hang on to the shares even longer with a certain amount of certainty, and to reap the benefit of the considerable increase in value that occurred between 2005 and 2007. In addition, the Napkin Agreement, which we spoke of in the previous chapter,



In connection with the E.ON swap in 2008, Statkraft also acquired gas-fired power plants in Germany. This picture shows the interior of the Emden gas-fired power plant in Lower Saxony. Emden went into operation in the mid-1950s. The plant was modernised in the 1970s but was nevertheless an old facility with considerably lower energy efficiency than modern gas-fired power plants. Due to reduced profitability in gas-fired power production after 2010, Emden was put in cold reserve in 2012, which in reality means it was shut down until further notice. The fate of gas-fired power is in many ways a paradox, since it is a far cleaner source of energy than coal-fired power. The future of gas-fired power will depend in large part on coal prices and climate policy. And if there is anything the last two decades have shown, it is that such factors can change very quickly.

gave Statkraft access to valuable Swedish hydropower resources. This was clearly a result of Statkraft's ability to read future developments.

A number of circumstances outside the control of Statkraft provided a basis for making these wise strategic decisions, however. In reality, the option issued in 2001 came as the result of liberalisation in Germany, which in turn meant that E.ON found itself in a bind in relation to its cable agreement with Statkraft (see Chapter 5). Without these major changes, the termination of Viking Cable would not have been

162



raised in 2001. Nor would the question of Sydkraft ownership, and the option issue, have been raised initially either. In addition, both the extension of the option in 2003 and the Napkin Agreement were triggered by external circumstances, more specifically by E.ON's problems with the Ruhrgas transaction and the fact that the Finnish company Fortum laid claim to Sydkraft assets. Without these, Statkraft would not have had the opportunity to enter into new lucrative rounds of negotiations with E.ON. As well, E.ON's restructuring process in 2007 (the "One E.ON" programme) contributed to Statkraft once again finding itself in a favourable negotiating position in respect of the German company after Statkraft had not really been in a very fortunate position.

That these circumstances outside the control of Statkraft became so important does not make the wise choices taken any less wise. On the contrary, they can be seen as a way of maximising opportunities available at any given time. And the ability to maximise opportunities is not a given. The point is that the increase in value, and the outcome of the Genoa process, must be seen as the consequence of a fruitful interplay between external and internal circumstances.

HUNTING NEW OPPORTUNITIES FOR GROWTH

In the latter part of 2004, Statkraft's group management decided to establish a new business area called "New Energy". In simple terms, this area, which was placed under the auspices of group director Ingelise Arntsen, would identify and assess eco-friendly energy forms and projects in Europe in which Statkraft could invest and earn money. The establishment of such a business area was part of a larger restructuring process in which the goal was to gather operations involved in new technologies and business development. In addition, this reflected an ambition to provide a greater and more targeted focus on organic growth.

One of the first things that was done at New Energy was to initiate a comprehensive project in order to chart and assess investment opportunities in Europe. Bjørn Holsen was given responsibility for the project, and a working group consisting of around ten people was appointed. The group's mandate was twofold: to analyse general production and market conditions in the various European regions and then identify specific production technologies, countries and projects that could be of interest to Statkraft. In other words, the project had an ambition to carry out a coordinated assessment of the company's involvement, in response to the scattered and uncoordinated focus the company had had so far.

The results of the screening project, as it was called, were presented in the early summer of 2005. ¹⁸ In line with Statkraft's environmental profile, the working group had restricted itself to assessing three energy sources – wind, hydropower and gas. Wind and hydropower were clean, renewable and unproblematic. Gas, although occupying a grey area, was far cleaner than coal. There were great differences in the growth potential of these respective areas. The greatest potential appeared to be in the field of gas power, which had expanded strongly since the end of the 1990s, and where future developments were expected to be even stronger. In Europe as a whole, gas-fired power capacity was around 75 000 MW at the beginning of 2005. At the same time, according to the working group, there was a pipeline of projects totalling almost 150 000 MW. Wind energy always appeared to offer great growth potential. Wind energy totalling 30 000 MW had been developed so far, while projects corresponding to around 50 000 MW were under planning or development. Poorest were the prospects for hydropower, since plenty of hydropower resources had already



been developed and there were few potential projects remaining. The working group had identified potential projects totalling around 3 000 MW.

The report recommended a targeted focus on both gas and wind power. It also indicated which countries seemed to be most favourable. Growth in gas-fired power was particularly strong in Germany, the United Kingdom, Italy and Spain. The latter two were considered difficult markets to gain access to, however, while Germany in particular was felt to be promising. Also as far as wind energy goes, these four countries ranked highest. In this respect, the United Kingdom in particular, and to some extent Italy and Spain, were highlighted as being most interesting. Unlike gas energy, wind power developments were closely linked to national support schemes.

As highlighted in the previous chapter, growing awareness of climate threats resulted in greater focus on renewable energy in energy policy. Particularly after 2000, a number of countries began to introduce public support schemes in order to promote such energy forms, and besides solar power, wind energy was the energy form that attracted most attention. The potential, and here the profitability, of wind power was in other words largely determined by national environmental policy. About the United Kingdom, the report stated that the country had "an ambitious renewable obligation scheme [which] makes investment in wind very attractive". 19

In specific terms, the report drew up a programme for the next five years that planned for quite considerable investments in the field of both gas and wind power. It recommended acquisitions and/or developments of between 500 and 1000 MW in gas power by 2010, and approximately 350 MW in wind power. Specific investments in hydropower were also planned. It was pointed out, however, that there could be opportunities in this area in some of the former eastern bloc countries in Southeast Europe. Several of these countries had considerable hydropower resources at the same time as there was a clear tendency in some of these countries to approach Western Europe through institution-building and liberalisation. The countries had achieved good economic growth, had a general under-absorption of electrical power supply, and there was a tendency towards privatisation. In particular, focus was given to Romania and former Yugoslavia: "Investments in the Balkans must have a long-term perspective and will represent a considerable cultural, political and geographical leap for Statkraft."²⁰

The biomass heating plant at Emden, Germany, in which Statkraft took over a stake from E.ON in 2008. The biomass plant started operations in 2003 and is owned by the German energy company EWE (55 per cent), Statkraft (30 per cent) and the municipal energy company Emden (15 per cent). Statkraft is responsible for operating the plant. In the power plant, a generator produces 20 MW by using the steam produced from the incineration of old wood.



Ingelise Arntsen became part of Statkraft's group management in 2003, as the first women ever to have been part of the company's senior management. Arntsen's background was from industry, consultancy and the energy industry. She also had extensive experience from international business, and had lived and worked in Japan and Singapore for a number of years. At Statkraft, Arntsen was charged with responsibility for New Energy, which was established in late 2004. New Energy was responsible for finding new investment opportunities in eco-friendly energy in Europe.

As we shall see in the following, the actual development of Statkraft's European investments largely coincided with the recommendations given in the screening project. During the period between 2005 and 2010, Statkraft invested in both gasfired and wind power production in several European countries. In addition, the company established offices and projects in several Southeast European countries. It is not quite right, however, to claim that the strategy came first and actions followed afterwards. Strategic plans can often serve more as confirmation of what one has already decided to do than as guidelines. This is the case too, particularly with gas and partly also with wind energy. Both of these investments had an incubation period before the screening project got underway, and the project was also to some extent governed by this.

INVOLVEMENT IN GAS POWER IN GERMANY

During the period from 2005 to 2010, Statkraft developed a presence as a considerable producer of electricity from gas-fired power plants on the continent, and we will take a closer look later at why the company chose to focus as much as it did in this area. First, however, we need to look several years back in time. Gas had been a subject of discussion within the company for quite a while, and even though ownership in gas-based production only on the continent became relevant in 2004–2005, this was partly the result of several years of thinking and conceptualisation.

In a number of European countries such as the United Kingdom, the Netherlands, France, Germany and Italy, natural gas had been a key part of the energy mix for decades.²¹ Historically, however, and with a certain exception for the Netherlands, this source of energy played a very tiny role in electricity generation. This situation changed during the 1990s. During this decade, gas came to play a more important role in this area, particularly in larger countries such as Germany, Italy, Spain and the United Kingdom. While gas stood for less than seven per cent of total European electricity production in 1990, this share had risen to almost 10 per cent in 1995 and to more than 16 per cent in 2000.²² Around 2000, it was quite widely held that gas would become even more important in the future.

The breakthrough of gas power was driven by a mix of politics, economics and technology.²³ Traditionally, a number of countries had in place restrictions concerning the use of natural gas in the production of electricity. In the United Kingdom, for example, it was forbidden until 1990. As a consequence of increased access to gas in Europe in the 1980s and the beginning of the 1990s, however, such restrictions were lifted in most countries. Further, the generally high level of interest rates in the 1990s stimulated increased development of gas-fired power plants, since gas-fired power plants were less expensive and quicker to build than coal-fired and nuclear power plants. Gas-fired power plants had traditionally had far higher operating costs than

coal-fired and especially nuclear power plants. This situation changed also in the second half of the 1980s, which hailed the beginning of a long period of falling gas prices that lasted right up until after the turn of the new millennium. Last but not least, major progress was made in respect of gas power technology during this decade, with the development of large-scale combined cycle gas turbines (CCGT) as the most important breakthrough. CCGT facilities used surplus heat, or the exhaust, from gas burning in a secondary steam turbine, which helped produce higher energy efficiency. While conventional gas-fired power plants utilised 25 to 40 per cent of the energy content of the gas, CCGT facilities could reach an efficiency rate of almost 60 per cent.

A commercial investment in gas power required some framework conditions, however. It would have to be genuinely possible for independent players to establish themselves as producers. This requirement also was partly fulfilled in most EU member states in the years after 2000. Naturally, access to gas pipelines and, in particular, access to gas on acceptable terms was a requirement too. This requirement had not

From the official opening of the Knapsack gaspower plant in Nordrhein-Westfalen in Germany in the autumn of 2007. Knapsack, which has an installed capacity of 800 MW and an annual production capacity of 7 TWh, was then Statkraft's largest foreign production facility. Start-up of Knapsack was highlighted as a milestone in the company's international development. The speaker is Haakon Alfstad, Statskrafts project manager. Far right, Norway's minister of industry Dag Terje Andersen, and to the right of Andersen is King Harald, who was paying an official visit to Germany.



Statkraft focuses on sound operations and proper working conditions, both at home and abroad. This picture shows the inside of the Knapsack gas-fired power plant in Germany, which is possibly even cleaner and tidier than one could wish. After 2010, gas-fired power generation has become unprofitable in Germany, and Statkraft's gas-fired power plants have been operated at a minimum or been decommissioned for long periods. The investment in German gas power is the only project in which the company has made an substantial loss.



been fulfilled to the same extent at the beginning of the new millennium. At the end of the 1990s, the EU countries had admittedly resolved to liberalise the gas industry, which like the energy industry had historically been organised in national and regional monopolies. The introduction of market mechanisms in this sector was highly complicated, however, partly due to historical principles, and partly due to resistance from established gas companies and national authorities. As late as 2005, only the United Kingdom had established a genuinely competitive gas market. In other words, the establishment of gas power production was largely defined by specific national and regional framework conditions. And these were conditions one needed to know well to ensure that market risk would not be too high. The absence of well-functioning markets also led to high gas prices, partly because petroleum prices were high, but also because of monopoly pricing according to old patterns.

An understanding of the market and system was an important argument in 2005 when Statkraft resolved to involve itself in gas-fired electricity production in Germany. From quite an early stage, and far earlier than many other major European energy companies, Statkraft had become involved in gas trading in several of the emerging markets on the continent. This activity began already in the year 2000 from the trading office in the Netherlands, preferably from the gas hub in Zeebrugge in Belgium. A year later, after thoroughly assessing the market and strategic environment, group management at home in Norway decided to focus even more specifically on this type of trading.²⁶ At this point in time, one was aware that the gas markets in Europe, with the exception of the British gas market, were difficult to operate in, due among other things to limited openness and poorly developed marketplaces. This was particularly true of Germany.²⁷ For this reason, the company's ambitions were initially rather moderate. The main objective was not initially to earn much money either. What was most important was to develop systematic knowledge of the gas markets and how these worked and developed. The logic, as it was when the trading offices were established in the Netherlands and Germany in 1998 and 1999, was that by establishing a presence at an early stage of the liberalisation process one would be able to obtain first-mover advantages. In 2001, an analytical environment for gas was established that would serve the European trading offices with fundamental analyses.

In key areas, gas and the gas market differed significantly from electrical power and the power market. For example, gas had very different physical qualities, and production and market conditions were very different to those in the power sector. At Statkraft, it was nevertheless felt one had some special capabilities for entering this field. In particular, importance was attached to the value of the company's analytical and market expertise, which it was felt was amongst the best in Europe. The idea was that this expertise could also be applied to liberalised gas markets.²⁸

Furthermore, it was felt that the electrical power and gas markets would become more integrated as gas became increasingly important in power production and liberalisation of the gas market began in earnest. In other words, the gas market would have an increasing impact on the electrical power market. This assumed convergence would, it was held, increase the value of established market expertise at the same time as involvement in gas trading would provide important information for analysis of the power market. Such informational synergies, as stated in reports and reviews, were perhaps just as important as gas trading in itself. In short, to understand the dynamics of the power market, it would be necessary in the future to gain a greater understanding and knowledge of the gas market.

Statkraft's involvement with gas was essentially limited to trading, while ownership of production facilities was not part of the company's plans. Things changed during 2004–2005, however. As is often the case, it was a specific project more than an explicit change in strategy that led in the space of a few months in the spring of 2005 to the company's decision to become owner of two gas-fired power plants in Germany.

The gas power initiative did not originally come from the head office in Norway; rather it came from the trading offices in Düsseldorf and Amsterdam, where it was argued early on that trading operations would benefit greatly from having some access to one's own production. So far, continental trading had only been financial, meaning it was based on the purchase of electricity in the market for further sale. The argument was that "asset backed trading" (trading with own production at hand), would both increase profitability in operations and contribute to reduce market risk.

It was not immediately possible to purchase individual power plants in countries such as Germany and the Netherlands, however, at least not any that justified the price and satisfied Statkraft's environmental profile. But in the autumn of 2003, employees at the Düsseldorf office learned of a planned CCGT-based gas-fired power plant outside the city of Cologne in North Rhine-Westphalia in which it was possible to become a shareholder. The project's owner was the U.S. company Intergen, which in turn was owned by the oil company Shell and the engineering company Bechtel. Intergen wished to find partners for this project, and in the trading environment it was felt that this could be a golden opportunity. Besides the general advantage of owning one's own production facility, two factors in particular were highlighted as favourable about the Knapsack project. First, the plant would be built using modernised CCGT technology, developed by the Siemens Group, which would give an even rate of energy efficiency. As such, the project fit in well with Statkraft's environmental profile. Second, gas-fired power plants, like hydropower plants, were relatively flexible in the sense that they could be quickly powered up or down in line with price fluctuations. Gas-fired power fit in well with Statkraft's general market



Statkraft's wind power investment started in Norway. In 2002, King Harald opened the company's first wind power project, Smøla wind farm in western Norway. Fully developed, the park has a capacity of 150 MW distributed among 68 wind turbines. Smøla also originally had an international dimension. The Dutch company NUON, which wanted to sell green power, purchased a large part of the power generated. The agreement with NUON secured a predictable and strong income, and probably played a crucial role in getting the farm built, as the project would not otherwise have been profitable enough. The agreement with NUON was negotiated by Statkraft's trading office in Amsterdam. For NUON, however, the agreement was unprofitable as access to renewable energy increased in Europe and prices fell. As a result, the company later paid out to be released from the agreement.

strategy, which was founded on variable production capacity – to exploit market fluctuations. In short, Knapsack could be anchored both in the company's environmental vision and in its commercial strategy, and the head office in Norway was therefore urged to take a closer look at this project.²⁹

At the time, group management in Norway was responsive to most international project ideas, including ownership of power generation facilities. It was also agreed that Knapsack fit Statkraft's profile and strategy. Nevertheless, group management failed to embrace the project straight away. At a group management meeting late in 2003 several substantial objections were raised.³⁰ For one thing, the project was felt to be immature. Several key factors remained undetermined, including from where and under which terms the plant would have access to gas. Most important was the fact that doubts were raised about the general profitability of gas power. In part, reference was made to the fact that gas was expected to be subjected to increased environmental taxation. In addition, the company's own long-term analyses expected gas to be more expensive in years to come. For these reasons, group management actually expressed doubts about whether Knapsack would ever be built. In other respects, the pertinent point was raised that Statkraft as a company had no technological, operational or commercial experience in gas power.³¹

The project did not die, however, primarily because the trading environment on the continent continued to keep it alive. A certain amount of contact had already been established with Intergen, and this contact was maintained. During 2004, the project was also developed further. The consequence of this was that in early 2005 Intergen decided to put Knapsack, or more precisely, the company in which the project was organised, on the market. Intergen had at this time also decided to sell off the entire project, apparently due to restructuring of the company's strategic focus. In any case, the result was a lot of publicity about Knapsack, and several German energy companies, including some of the larger companies, began to show interest. The psychological effect of the latter can hardly be underestimated. Among Statkraft's management, there was also considerably more interest.

In June 2005, Statkraft's group management resolved to acquire Knapsack. In a presentation to the board in May, it was emphasised that the project was highly profitable and that in commercial terms it would be the best project available in the German market in coming years.³² It was also pointed out that there should be good opportunities to find a partner over time. At the same time, it was stated that the goal was to have in place a long-term power sales agreement for part of the electricity generated, so that the power plant would be guaranteed an important stable income.

By this time, another German gas-fired power project had been realised – Herdecke south of Dortmund – and construction of a 400 MW power plant in collaboration with the German company Mark-E was underway. This project had also been discussed by the board in the spring of 2005. Herdecke was a smaller project than Knapsack, and Statkraft was initially to invest in only a 50 per cent share of ownership. The decision to go ahead nevertheless marked the fact that gas power had become an important area of focus over a short space of time, and if we take as our starting-point the scope of investment, this was perhaps the most important thing.

A NEW AREA OF GROWTH: WIND ENERGY

As late as the end of the 1990s, wind energy was largely a curiosity. The technology was admittedly several decades old, and some European countries such as Germany and Denmark had already invested quite a lot in wind energy, particularly in the 1990s. As late as 1998, however, wind power plants with a total output of no more than 6000 MW had been built in all of Europe. In terms of output, this corresponded to a single French nuclear power plant. More than two-thirds of these plants were located in these two countries.³³ There were several reasons for this low distribution of wind power plants, but the most important reason was undoubtedly costs. Wind power was an expensive form of energy, particularly since the load factor, meaning the actual production in relation to technical production capability, is low. There is hardly anywhere the wind blows a lot continuously, and even in countries with plenty

of wind, wind turbines can rarely produce at full capacity for more than a tiny part of the year.³⁴ A small load factor means that each produced kilowatt hour must pay a relatively large part of the cost, which in turn requires high prices.

Over a number of years, developments in wind energy technology did admittedly contribute to improved profitability. Nevertheless, technological progress does not explain the almost revolutionary growth in developments in Europe that took place from around the beginning of the new millennium. In addition to the traditional wind energy producers in Germany and Denmark, windmill parks began to shoot up in a number of countries after 2000. By 2005, European installation had risen to more than 40 000 MW, and this expansion would continue in the ensuing years. In 2011, capacity was nearing 100 000 MW.35 What primarily drove this growth was the comprehensive introduction of financial incentive schemes for new renewable energy sources that occurred in many European countries during this period. As we have mentioned in previous contexts (Chapter 5), growing awareness of threats to our climate around the new millennium led to far greater focus on renewable energy. Public support schemes became a key instrument in the promotion of such forms of energy. Besides solar power, wind was the form of energy that received most attention. The wind energy market was in other words largely a politically created market. Even in countries with favourable wind conditions and high electricity prices, such as the United Kingdom, support schemes were necessary in order to promote more comprehensive investments in wind energy.

Statkraft had explored wind energy quite early. Already in 1997, a project had been initiated to assess new potential production technologies. This initiative was said to have come from Lars Thulin himself. Responsibility for this project was placed under the Technology Division, which at the time was led by Jon Brandsar. The result of the investigations led to a decision by Statkraft in 2001 to build a wind farm on the island of Smøla in the county of Møre og Romsdal in western Norway. Smøla went into commission in 2002 and initially had a capacity of 40 MW, distributed among 20 wind turbines, and an estimated annual production of around 120 GWh (corresponding to around 0.003 per cent of the company's normal annual production). In the ensuing years, the park was expanded, and an additional two parks were developed.³⁶

Statkraft's investment in wind energy could have been just a flash in the pan, however, had it not been for the fact that focus gradually turned to operations abroad. Even though Norway had some of the best natural conditions in Europe for wind energy, it would not be profitable without incentive schemes. The Norwegian authorities had therefore introduced such schemes at the end of the 1990s, a share of which Statkraft had also received.³⁷ In a review of wind energy investments in 2003, however, it was established that "the financial framework conditions for wind energy

developments in Norway were not sufficient".³⁸ And as for projects that had already been implemented, it was said that these had been initiated in spite of, rather than because of, the framework conditions.³⁹ No specific mention is made of what was understood by these framework conditions. This assessment could be interpreted in at least two ways. One interpretation would be as criticism of the support schemes as such, in which case one would have to assess these in relation to the specific objectives the authorities had for wind energy developments. Another interpretation would be quite simply as an acknowledgement of the fact that electricity prices in Norway were so low that it was impossible to achieve good enough profitability. In any case, the potential for further development in Norway was considered to be minimal, at least in the short and medium term.

WIND IN THE UNITED KINGDOM

In connection with the Norwegian wind power projects, a small yet ambitious expert environment had emerged under the management of development director Haakon Alfstad, who wanted to develop Statkraft's wind power efforts. When the potential for new projects in Norway began to wane, he turned his attention overseas. There were several good reasons for doing so. Internationalisation was high on the agenda among the company's management. Wind energy was a market undergoing strong growth in Europe. An increasing number of countries had begun to introduce support schemes that made it possible to earn money on renewable energy. As well, wind energy fit in extremely well with Statkraft's green profile.

The first serious attempt to chart possibilities internationally was done early in 2003, as part of the project Renewable Energy in Europe. 40 The objective of this project was to investigate opportunities within various types of renewable energy in Europe in light of the increased priority given to such forms of energy. Wind was highlighted as the most interesting form of renewable energy. In this area, one had reviewed and assessed the potential in a good number of countries, several of which seemed promising. One country in particular, the United Kingdom, appeared to be especially attractive.

The United Kingdom had very good natural conditions for wind power. In addition, the British authorities had recently introduced favourable incentive schemes for renewable energy, which had particularly increased interest in wind energy. In the wind energy environment, one therefore chose primarily to focus on this market. In the wake of this report, a business plan was drawn up which planned an investment in 300 to 350 MW wind energy developments in the United Kingdom over the next five to six years. In addition, it was recommended that one establish a separate holding and development company for these operations with offices in London. Such an organisation would guarantee flexibility, including the opportunity to



involve other owners. Importance was attached to seeking cooperation with other players, both in order to reduce risk and to attract knowledge that Statkraft did not have itself.

An opportunity to acquire new expertise arose in connection with work on the business plan. In February 2003, Statkraft received a request from the Danish state energy company DONG (Dansk Olie og Naturgas), which was looking for partners for a wind project in the United Kingdom. DONG had already made some investments in wind energy in Denmark, but had recently drawn up an ambitious international wind strategy. In the United Kingdom, the company had been interested for around six months in a sea-based, or offshore, wind project in the Irish Sea. Barrow, as the project was called, had a planned installation of 100 MW and had been developed by a small English company that needed affluent partners. The plan, which entailed DONG and Statkraft acquiring a total of 75 per cent of the project company, was met with great interest. Calculations indicated that the Barrow project would be very profitable. Perhaps just as important, however, was that fact that cooperation with DONG would give Statkraft access to important knowledge and a larger project portfolio.⁴³

The business plan, which was presented to group management in March 2003, received a rather poor reception.⁴⁴ Admittedly, Øystein Løseth, who at the time was group director for production and development, was positive. Otherwise, there was a good deal of scepticism. In part, this scepticism was rooted in widespread resistance to getting involved in an area that was so strongly dependent on public support schemes. In part, it was also due to the fact that wind energy did not fit in well with the company's market strategy, which was founded on flexible and variable production. The fact that group management nevertheless decided to give these UK plans the go-ahead is due to the "DONG lead", as development director Haakon Alfstad had written in the group management presentation at the last minute. 45 At a time when management was very concerned with building alliances with other energy companies, this was found to be very interesting. DONG was a highly reputable company, it was strategically placed in relation to the European market, and as a gas company it complemented Statkraft. The fact that access to an alliance came through a technology one was not that enthusiastic about was not that important. Wind energy as such was not the most interesting aspect.

After a while, it looked as though nothing would come of either the Barrow project or cooperation with DONG. In the autumn of 2003, Statkraft and DONG each acquired a 37.5 per cent stake in Barrow. Somewhat later, a third industrial partner became involved, when the British energy company Centrica acquired the remaining shareholding (25 per cent) from the original development company. Centrica, which was one of the United Kingdom's largest energy companies, also wanted to enter into a long-term power purchase agreement that would guarantee the sale of a large part of the electricity generated by Barrow. This would contribute to predictable revenue flows over most of the project's financial lifetime.

Nevertheless, people at Statkraft soon began to get cold feet. It gradually became clear that the challenges facing offshore wind energy had been somewhat underestimated. One had largely trusted in the people at DONG, who had experience from offshore oil extraction, and who would be responsible for developing the project. Barrow was one of the first large offshore wind power projects in the world, however, so it was associated with great risk. This risk increased further as it became clear that British legislation imposed unlimited liability on owners of offshore installations. Last, but not least, as 2004 progressed, Statkraft came under increasing pressure from the other owners, who were less disquieted and far more impatient about making a start. As a result of this, Statkraft risked being a killjoy as far as the project was concerned. It had no intention of being so, however, and in the autumn of 2004 it therefore decided to withdraw from the Barrow project, even though this put an end to its alliance with DONG.⁴⁶

By this point, however, wind power had gained such a foothold in the Statkraft organisation that Barrow did not mark the end of the story of wind energy. In parallel with the Barrow project, the development division had established contact with several British companies involved in the development of *onshore* wind power. In the spring of 2004, good contact had been established in particular with the London-based company Force9 Energy and the Scottish company GreenPower. Both companies were typical entrepreneurs that had grown on the back of the green revolution in the United Kingdom. This meant they were small and lacked capital. There were two reasons in particular why Statkraft had found it interesting to become involved with these companies. They had a local affiliation, and they had portfolios containing specific projects.

Offshore and onshore wind power were really two completely different concepts, each with its own advantages and disadvantages. In technological terms, offshore wind power is far more complicated and untested. One problem were the geotechnical aspects, meaning the challenges posed by attaching large and heavy windmills to the seabed. Another perhaps equally great challenge concerned operation and maintenance. It is very difficult to access windmills at sea, and gaining access required costly logistics. The *advantage* of offshore wind was largely that it had an impact on few economic or other interests. Offshore wind energy primarily required contact with state regulatory authorities. Onshore wind for its part was far simpler in technological terms. On the other hand, the stakeholder side was far more complicated. Wind energy required quite large areas of land, and had a far greater impact on humans and other commercial operations. This meant, among other things, that projects required local approval, plus local support and legitimacy, if they were to be realised. The point is that these differences had a great impact on the need for and on which type of partners one should choose. In offshore wind energy, technology was



Construction of offshore wind power requires very different methods and technology than onshore wind power, including custom-built vessels capable of manoeuvring very heavy components in a steady manner. Pictured here is a jack-up rig during construction of the Sheringham Shoal wind farm off the east coast of Britain. The rig has a platform that can be hoisted up and down along its legs, which are attached to the seabed. Maintenance and repair of offshore wind turbines also require special vessels.

perhaps the most critical individual factor, whereas in onshore wind energy, it was difficult to make any headway without a good local anchoring. The latter was the reason why Statkraft began at an early stage to make contact with English development companies who had the necessary local knowledge and anchoring.

The first wind energy project was the Alltwalis project in Wales, a small project comprising 10 windmills with a total output of 23 MW, which Statkraft carried out on its own. Alltwalis, which went into operation in 2009, was only the start of a

relatively aggressive investment in wind power in the United Kingdom that over time would come to include offshore wind energy. In 2010, planning of Sheringham Shoal got underway, an offshore wind project on the eastern coast of the United Kingdom where Statkraft was an equal partner with Statoil, the Norwegian oil company. Sheringham Shoal was developed during the period up to 2012 and is a large facility with 88 wind turbines and an installation of a full 317 MW. The reason for cooperating with Statoil was to combine Statkraft's expertise in the power market with Statoil's offshore expertise.

In 2013, a third British wind energy project went into commission, Baillie park in Scotland, and one year later Berry Burn park, also in Scotland, was ready to go into production. At Baillie, Statkraft cooperates with local landowners, while Berry Burn is a wholly-owned Statkraft facility. Statkraft and Statoil also have plans for an additional offshore project, the Dudgeon project totalling more than 400 MW.

Since 2010, investments in wind power have also been extended to Sweden, where Statkraft has initiated cooperation with Europe's largest private forest owner, the industrial company Svenska Cellulosa Aktiebolaget (SCA). Statkraft SCA Vind AB has put into commission the first of four large wind parks, totalling 514 MW in Jämtland and Västernorrland. Statkraft owns 60 per cent of the company while SCA owns 40 per cent. In addition, Statkraft has initiated cooperation in southern Sweden with Södra Skogsägarna. This agreement comprises the supply of electricity and distant heating to Södra's factories, and the development of around 600 MW of wind power on Södra's properties in Sweden. Statkraft owns 90.1 per cent of the wind power projects, while the Swedish partner owns the rest. So far, two wind farms have gone into commission.



Today, wind turbines have become gigantic structures. Pictured here is a fitter installing wind turbine blades at Stamåsen wind farm in northern Sweden. Stamåsen, owned by Statkraft and the Swedish industrial company SCA, became operational in 2013. Statkraft and SCA have an additional three wind farms under construction in Västernorrland and Jämtland. Overall, these four wind farms, three of which were in operation at the beginning of 2015, make Statkraft one of the major wind power generators in Sweden.

Wind turbines in the beautiful scenery. This picture is from Stamåsen wind farm in Sweden. Statkraft's Swedish wind farms stand out from the company's other wind farms since they are in the woods and not in or near the open sea.



HYDROPOWER IN SOUTHEAST EUROPE

As mentioned at the beginning of this chapter, the screening project in 2005 did not give much room for expansion in Europe in the area where Statkraft really had its core expertise. In Western Europe, hydropower resources had largely been developed or protected. In eastern and Southeast Europe, the opportunities for access to hydropower were far greater. This was particularly true of Russia, but also of other countries in the Balkan area, such as Romania, Croatia, Albania, Montenegro, Bulgaria and Macedonia. As well, there was Turkey, which also in part belongs to the Southeast part of Europe. These countries were often rumoured to be risky to invest in. Political instability, a lack of predictable framework conditions, and corruption were characteristics that were often cited in connection with at least some of these countries. In the mid-2000s, few western European energy companies had therefore taken a chance on investing in capital-intensive hydropower developments in these countries.

In the period after 2005, this picture changed considerably. From being virtually a non-existent area, Southeast Europe became an area of focus for a growing number of western European energy companies. There were several reasons for this change, but four factors in particular played an important role. First, the stronger orientation towards Western Europe in general and to the EU in particular as the new millennium progressed, with the accession of Estonia, Latvia, Lithuania, the Czech Republic, Poland, Hungary, Slovakia, and Slovenia to the EU in 2004, being the clearest expression of this.⁴⁹ Three years later, Romania and Bulgaria followed suit. These countries' accession to the EU placed clear obligations on them with the introduction of good governance principles in business. Second, some of these countries experienced considerable economic growth after the turn of the new millennium, which among other things resulted in increased demand for electrical power and a great need for investments in new production. Added to this is the fact that the electrical power supply in some of these countries was initially in a bad state. The consequence was a deficit of electricity and in some countries, for example, in Albania, a veritable collapse of the country's electrical power supply. This in turn led to strong political pressure in order to promote investments. Finally, several of these countries, partly due to the latter consequences, opened up for more private and foreign involvement in the sector.

The result was that foreign energy companies began to rush to invest in this area, among other things in the hope of gaining access to hydropower resources. Statkraft too followed suit. Investments of this kind had a patchy prehistory and quite a long incubation stage. The prehistory had its roots in Russia, which for a period in the early 2000s, attracted a great deal of interest from European, American and other international companies

A RETURN TRIP TO RUSSIA

Statkraft first set foot in Russia in 2002, when Tormod Hermansen, CEO of Norway's telecommunications company Telenor, introduced Stein Dale to a group of powerful businessmen in Moscow. Dale, who at the time had recently started work in Statkraft's strategy division, knew Hermansen from his recent past in the telecommunications industry. Telenor, under the management of Hermansen, had ventured into the Russian market in 1992 already, just one year after the demise of the Soviet Union, and had built up quite a large base of contacts in the country. With Hermansen as a door-opener, Dale made contact with, among others, Vladimir Petrovich Yevtushenkov, CEO and majority owner of the industrial conglomerate Sistema, which was involved in a number of industries and sectors, including telecommunications and energy.

Sistema was at this time only one of a number of feelers, and a rather more exotic one. In 2005, however, Russia reappeared on Statkraft's horizon, this time after CEO Bård Mikkelsen had met and got on well with the influential Russian politician Anatoly Chubais, whose political career could be traced right back to the Soviet era. At the beginning of the 1990s, Chubais, who had been part of the reform-friendly section of the Communist Party, had been given responsibility for implementing the contentious privatisation of state property. Towards the end of the same decade, he was also appointed chairman of the board of the state-dominated energy holding company RAO UES, which owned a large part of Russia's power companies.⁵¹ At a meeting with Mikkelsen in 2005, the conversation turned to the possibility of cooperation, and somewhat later contact was established with the management of RAO UES's hydropower company Hydro OGK. In December that same year, a non-binding agreement was entered into to explore the opportunity for cooperation on hydropower projects in Russia.

In early 2006, a working group was established to develop Project Russia. ⁵² An executive group consisting of group directors Stein Dale, Ingelise Arntsen and Jørgen Kildahl was charged with monitoring the group's work, while Torgunn Oldeide was assigned responsibility as project manager. The working group otherwise consisted of Bjørn Holsen, Amund Ljødal and Eivind Torblaa, all of whom came from New Energy, in addition to associated resources from the strategy, legal, finance, development and operations divisions. In specific terms, the group was to assess four hydropower projects presented by Hydro OGK as possible cooperative projects.

The project gave rise to several eventful trips to Russia, including inspections on horseback in roadless mountain areas in Krasnaya Polyana, not far from the area of Sochi.⁵³ During what would become countless meetings with Hydro OGK, there was a growing amount of uncertainty about what the Russians actually wanted to get out of this cooperation. In addition, it was felt that both the legislation and the

agreements proposed by the Russians were incompatible with Norwegian practices and traditions.⁵⁴ The upshot was that the cooperative project died a slow death and Russia as an area of focus was put to one side.

A somewhat parallel initiative in Romania gave rise to many of the same experiences. Romania was the country in Southeast Europe with the largest hydropower potential, at the same time as it had plans to sell off state-owned hydropower production. In addition, Romania was the country in Southeast Europe that was considered to have made most progress in adapting to the European Union. Statkraft's entry into this country came following an invitation from a Romanian company that wanted to find a partner in connection with the acquisition of state-owned hydropower. After some investigations, meetings with authorities and negotiations with the company in question, which was owned by the country's deputy prime minister Gheorge Copos, it was found there were grounds for moving forward very cautiously. Holsen and Torblaa at New Energy, who had been responsible for the Romanian project, concluded in a memo to group management in the late summer months of 2005 that Statkraft should choose a cautious approach in which learning and network-building were the most important elements.⁵⁵ Several months later, Copos found himself embroiled in a far-reaching corruption scandal in which the deputy prime minister's company played a key role.

A CAUTIOUS STRATEGY

Like most other foreign investments, the question of partnership came to be a key one in Statkraft's burgeoning involvement in Southeast Europe. Experience from Russia and Romania showed that this was as important as it was difficult. Statkraft had no experience with countries in this region, which, in political and cultural terms, differed considerably from countries closer to home. Local partners were therefore more or less a necessity. At the same time, the Romanian story showed that partner relations were perhaps the greatest source of corruption, since in such contexts one never had full control over all circumstances. This was not of course unequivocally true in all circumstances. Nevertheless, the corruption indices gave grounds for showing due care and attention in Southeast Europe.⁵⁶

Statkraft did not give up on the region, however. On the contrary, it planned a cautious, gradual strategy that essentially meant building knowledge about countries and developing relationships. Further, during an early stage the primary focus should be on the acquisition of power plants, while greenfield projects would only be initiated as Statkraft's presence had matured.⁵⁷ One part of this strategy was the decision at the end of 2006 to establish an office in Belgrade, Serbia. The main task of this office would be to identify and assess project opportunities, both greenfield and acquisition projects, and to build relationships with potential partners.⁵⁸ The office

was established early in 2007 as a separate company, Statkraft Western Balkans Ltd., which initially had two employees. Later that same year, an additional two offices were established, in Bucharest, Romania and in Tirana, Albania. A fourth office was founded a year later, in Podgorica, Montenegro.

Statkraft's presence through these offices gave the company important insight into and an understanding of the countries' politics, legislation, culture and market situation. One important observation that was made quite early was that interest among European energy companies in the region was growing strongly. A status report from New Energy to group management in the summer of 2007 states, "Experiences so far illustrate the fact that 'almost everyone' wants a piece of the cake and competition appears to be fierce."59 This was particularly true of the hydropower side of things, where access to projects was naturally limited. Admittedly, it was stressed that Statkraft had certain advantages in a competitive situation. Experience so far indicated that Norway was a name with a positive ring to it in the region, particularly in former Yugoslavia, and that Statkraft was considered a serious, competent and coveted company. This in itself was not a criterion of success, however. Furthermore, there were other features of Statkraft that could detract from its positive image. The company's decency, and particularly its zero-tolerance in respect of ethical grey areas, posed a challenge and could represent a competitive disadvantage in these countries. According to the report, one risked getting "less access to information than we may assume our competitors possess."60 This was more by way of establishing a fact rather than suggesting revising the company's guidelines. As stated in the conclusion, "Such a situation is something that Statkraft must live with. Zero-tolerance is the only way to go."61 Furthermore, it was pointed out that such a line would probably pay off in the longer term, since the markets were becoming more transparent and the demands for openness winning ground. Among other things, there were signs that several of the Balkan countries will increasingly come to use open tender processes, particularly when awarding hydropower licences.

Statkraft's first project in the region came through one such tendering process, albeit indirectly. In the autumn of 2007, Statkraft's representative in Albania came into contact with the Austrian power company Energieversorgung Niederösterreich (EVN), which was interested in finding a partner for a potential project in the Devoll River, approximately 100 kilometres south of Albania's capital. The licence for this project had been announced internationally, and in early 2008, EVN was granted the licence. Statkraft showed an interest in this project, and early in 2008 an agreement had been signed with the Austrian company with a view to cooperating on development and ownership.

The Devoll project essentially broke with the entry strategy that had been drawn up earlier the same year, which outlined a cautious start by attaching importance to



acquisitions and not greenfield projects. With an estimated output totalling just above 300 MW distributed among three power plants, and an annual production of around 800 GWh, the Devoll project was actually quite a large project. EVN's estimates indicated a total cost of just over NOK 5.2 billion. With a 50/50 share with EVN, this meant that Statkraft would pay NOK 2.6 billion. At first glance, this project did not appear to be particularly profitable either. 62 Statkraft's reason for nevertheless getting involved was due, among other things, to the fact that it saw it had a chance of establishing an alliance that could grow into something larger over time. EVN was Austria's second largest power company, and the company had major ambitions of growing in Southeast Europe. Further, EVN had some experience with hydropower. Consequently, the company had both industrial and strategic similarities with Statkraft.

Interest in the Devoll project must also be seen in the light of the dilemma that often arises in the juxtaposition between strategies, meaning what one wants, and reality, versus what is actually possible. Experiences so far had shown that acquisitions of existing hydropower resources would not be as simple as one had first assumed. The many predictions and plans for a more comprehensive wave of privatisation that prevailed earlier in the decade gradually proved not to come to fruition. In particular, privatisation of hydropower production in most countries appeared to be a long way off (as such these countries were not much different to Norway). As well, there was no great access to greenfield hydropower. Several countries had admittedly launched quite ambitious development programmes. In reality, however, licences and projects were not forthcoming. According to Statkraft's own assessments made in early 2008, besides Albania, only Montenegro and to some extent Bosnia-Herzegovina could so far offer concrete opportunities. In other countries, things were moving slowly, while others, such as Croatia and Slovenia, did not appear to be interested in foreign investment in this area.⁶³ The point was that if one really



wished to invest, it was not primarily about choosing what was best; rather it was about seizing the opportunities that were actually on offer. In the period around 2008, Devoll was one of very few options available.

In March 2008, Statkraft and EVN entered into an agreement concerning the establishment of a joint venture with a basis in an equal share of the Devoll project. The plan was to make a final investment decision during 2009–2010. The agreement was marked as the first breakthrough for hydropower investments in Southeast Europe. In December that same year, Statkraft and EVN signed a licence agreement for the project with the Albanian authorities. At this time the project had been scaled up to approximately 340 MW with an annual production of around 1 TWh. Devoll would be one of the largest hydropower projects in Europe and would increase total hydropower production in Albania by 20 per cent. The plan was that the entire project, consisting of three power plants, would be finished by 2016.

Devoll had a much longer pre-construction phase than originally planned. It was not until the beginning of 2013 that preparatory work started on the first power Around 2005, Statkraft decided to invest in a more targeted manner in European hydropower developments. Southeastern Europe was the most appropriate area, with plenty of available hydropower and great need for electricity. Albania is among the countries in which the company has invested most heavily. This picture shows the Devoll power project.

plant, Banjë, while construction work began in earnest towards the end of the same year. At that time, preparations got underway on plant number two, Moglicë, where construction work began properly in 2014. As of December 2014, production start-up is planned for the first half of 2017 and the last part of 2019, respectively. The project has otherwise been reduced to these two plants, while construction of the third planned plant, Kokel, has been delayed until the first two have been completed.

The reason why the Devoll project got underway later than planned was because cooperation with EVN was not as simple as first anticipated. In 2013, EVN chose to sell off its stake, which meant that Statkraft would become the project's sole owner.

ENTERING TURKEY

In 2009, Statkraft acquired a Turkish holding company, Yesil Enerji, which owned a portfolio consisting of five hydropower projects in Turkey. The seller was the Turkish company Global Investment Holding. The five projects were planned with an installation totalling around 550 MW, which would give an annual production of just over 1.8 TWh. One of the projects, the river power plant Cakit in the Adana province in southern Turkey, was already under construction and the plan was that it would be completed in 2010 with a capacity of 20 MW. The portfolio also included two projects that towered over everything else: Cetin, with a planned installation of more than 400 MW, and Cargi with just above 100 MW. Statkraft initially acquired 95 per cent of the shares in Yesil at a cost of EUR 95 billion, while Global Investment Holding





retained five per cent. One year later, Statkraft also acquired the remaining five per cent.

Turkey was a country with enormous hydropower resources. Estimates made in the middle of the 2000s cited commercially useable hydropower resources of around 140 TWh per year, roughly on a par with Norway. Turkey's electrical power supply was dominated by fossil-based energy, however. Around 35 per cent of the country's hydropower resources had been developed, and hydropower only stood for around 15 per cent of the country's electricity production.

Up until the beginning of the new millennium, Turkey's energy sector had been dominated by the state and was for the most part closed to foreign investors. In 2003, however, the Turkish authorities resolved to liberalise the sector and to open up to private investments, and in the ensuing years, market-based power sales began to be developed. These developments gradually led to considerable interest in the country from western European energy companies. Fairly strong economic growth after the turn of the millennium contributed to strengthening this interest. Furthermore, in

Norwegian-Turkish cooperation. Turkey has become one of Statkraft's priority countries in terms of hydropower. Turkey has large hydropower resources. The country has also experienced sound economic development since the turn of the millennium, which has led to an increasing demand for electricity. This picture shows the Cakit power plant, which became operational in 2010. Statkraft acquired the unfinished power plant a year earlier.

188



Ribbon-cutting and the official opening of the Cakit hydropower plant in Turkey. Here we see Turkey's energy minister Taner Yıldız assisting Statkraft chairman Svein Aaser in cutting the ribbon. In the energy minister's speech at the opening, he underlined the importance of hydropower developers taking responsibility and showing consideration for local interests. the years prior to 2010, the Turkish authorities began to introduce measures designed to foster the development of renewable energy, such as hydropower. Moreover, Turkey was considered a relatively predictable and safe country in which to operate (in 2009, for example, the country ranked above Italy on Transparency International's Corruption Index).

For Statkraft, Turkey was rapidly becoming a very interesting area of focus, and the country has gradually become the main country of focus in terms of international hydropower. One year after the acquisition of Yesil Enerji, at the end of 2010, the company resolved to begin construction of the Kargi project. Kargi was located in the north of the country, about a four-hour drive north of Ankara in a stable region. The power plant had a planned installation of 102 MW, an estimated cost of EUR 240 million, and was originally scheduled for completion in 2014.⁶⁴

In 2011, Statkraft's administration pointed out that Turkey was the fastest growing power market in Europe. Annual growth in demand was estimated to be six per cent over the next two decades. In this same year, Turkey also became a member of



In 2009, Statkraft acquired the Turkish hydropower portfolio of the Turkish company Global Yatrim Holding. This photograph was taken at the signing of the agreement. Second from the left is Tima Iyer Utne, who at the time was responsible for Statkraft's involvement in South-east Europe. To his left is Statkraft's Steinar Bjørnbet, who was responsible for Turkish affairs. Second from the left is Mehmet Kutman, CEO of Global Yatrim Holding, while seated on the far right is Saygin Narin, general manager of Yesil Enerji – the company that Statkraft acquired. In connection with the acquisition, Narin was transferred to Statkraft and assigned responsibility for Turkish affairs together with Bjørnbet.



Plans are being made for development of the Cetin hydropower plant in Turkey. Cetin has a planned installation of 517 MW, and is currently Statkraft's largest hydropower project outside Norway. The power plant is situated on the Botan river, a tributary to the Tigris river in the southeast of the Anatolia region. Statkraft has a licence to develop and operate the plant for 49 years.



"The Comeback Kid". In the spring of 2010, Christian Rynning-Tønnesen took over as Statkraft's CEO. Rynning-Tønnesen had been a central figure in Statkraft throughout the period from the beginning of the 1990s to 2005. For almost the entire period, he was part of group management, and was largely responsible for international business. In 2005, he moved to the internationally oriented Norwegian paper products company Norske Skog, first as CFO and later as CEO. When Bård Mikkelsen stepped down as Statkraft's CEO in 2010, Rynning-Tønnesen returned to Statkraft, this time as the company's most senior manager.

the European TSO organisation ENTSO-E, which was responsible for developing and coordinating the national transmission systems in Europe. Such developmental features gave rise to an optimism that led to Statkraft's decision to begin yet another development. The Cetin project was located in the Southeast part of the country and would, according to revised plans, have a planned installation of 517 MW, which would give an annual production of more than 1.4 TWh. This would make Cetin Statkraft's largest power plant outside of Norway. The power plant would consist of two power stations and was scheduled for completion in 2015.

A FOCUSED RENEWABLE STRATEGY

During the period after 2005, hydropower and wind power have steadily emerged as Statkraft's two main areas of focus. This focus is closely linked to the increasingly more aggressive climate policy in Europe during this same period. This policy has contributed to wind energy becoming commercially viable to a far greater extent than previously. Even though wind energy was an unregulated form of energy that essentially breaks somewhat with Statkraft's focus on flexible power production, this area has provided scope for considerable investment at a time when the potential for growth has otherwise been limited, at least in western Europe, owing to problems in fossil-based power production and a general stagnation of power consumption. The picture is somewhat different on the outer edges of Europe, where there has been a far greater need for new power in recent years. Statkraft's involvement in Southeast Europe can in many ways be characterised as a revitalisation of Statkraft as a hydropower investor. In a country such as Turkey, the opportunities for large-scale hydropower developments are huge, provided that market developments allow for this. Furthermore, following the restructuring of SN Power in 2014, to which we will return in the next chapter, Statkraft also has greater scope for getting involved outside Europe.

In line with the same climate policy, investments in gas power in Germany have gradually become Statkraft's greatest liability, and until further notice, these remain a closed chapter. The problems in these quarters began in earnest during 2011–2012, first when coal prices fell, then when renewable energy really took off in the German power system, and finally when gas prices failed to fall in line with coal prices but remained high instead.

It should be mentioned too that as late as the autumn of 2010, Statkraft had decided to build yet another power plant at Knapsack – Knapsack II – with an output of 430 MW. The plant had a cost of around NOK 3 billion and was scheduled to go into operation in 2013. In 2011, however, Statkraft resolved to write down its German gas-fired power plant investment by more than NOK 1 billion, and one year later there was a further write-down of almost NOK 2 billion. In addition, the gas-



A great day for Statkraft. In November 2010, Minister of Trade and Industry Trond Giske (left) announced that the government would provide Statkraft with 14 billion in fresh capital. An important prerequisite for this injection of capital was that these funds would go to investments in renewable energy. The capital injection was the first since 2002. In the middle is Statkraft's board chairman Svein Aaser, to the right is CEO Christian Rynning-Tønnesen. Some months earlier, Aaser had taken over this position from Arvid Grundekjøn. The latter had repeatedly criticised the owner publicly about high dividend pay-outs, which caused irritation for the trade and industry minister, and cost Grundekjøn his job.

fired power plant Emden 4, which Statkraft acquired in connection with the E.ON transaction in 2008, was put on reserve, meaning it was shut down completely and the workforce reduced. In 2013, the other gas-fired power plant acquired from the transaction, Robert Frank, was put into cold reserve. This year only around 10 per cent of total production capacity was utilised.

Statkraft's only involvement in fossil-based power production through the company's more than 100-year-old history has become one of its least fortunate investments. The company should not be judged too harshly for this, however. One of the most important things to be learned from Statkraft's process of internationalisation since the beginning of the 1990s is that the energy sector has to a greater degree than most other sectors been influenced by national and international political currents, and is therefore also more exposed to major and unpredictable changes. The Energiewende project in Germany is perhaps the clearest example of the importance politics can have. Furthermore, it should be emphasised that Statkraft has also profited significantly from international changes in energy policy.



In 2002, Statkraft founded the company SN Power in collaboration with the investment fund Norfund. SN Power has since invested considerably in power generation in many countries outside Europe. In 2007, the company acquired a shareholding in the Ambuklao and Binga power plants in the Philippines, an acquisition made in collaboration with the Philippine company Aboitiz. This picture shows the Ambuklao dam, one of the oldest large-scale hydropower plants in the Philippines. Investments in the Philippines have been SN Power's most profitable, and partnership with Aboitiz is one of the most successful in the company's so far short history.

CHAPTER 7

The founding and development of SN Power

n the spring of 2001, Jens Stoltenberg, who was then Norway's prime minister, paid an official visit to India. State visits will often involve financial interests, and as is common during such visits, he was accompanied by a sizable delegation representing Norwegian business interests. One of these representatives was Bjørn Blaker, Statkraft's group director, whose responsibilities included the company's international hydropower operations. Another participant was Per Emil Lindøe, director for Norfund, Norway's state investment fund. As it happened, Blaker and Lindøe had previously been colleagues when they had worked for the classification company Veritas, and they knew one another quite well. During the journey, they began to speak loosely about the opportunity of Statkraft and Norfund joining forces to develop hydropower operations in developing countries.¹ Blaker had met with significant challenges starting up the company's hydropower investments outside of Europe, as it was difficult to find partners. As mentioned earlier (Chapter 3), ever since the projects initiated in Laos and Nepal in the mid-1990s, the board of Statkraft had required that new projects had to take place in cooperation with other companies. No such partner had yet been found, which had meant that these operations had been put on the back burner. For their part, Norfund and Lindøe were on the lookout for good investment projects in developing countries. Norfund's mandate was to foster sustainable, commercial development in poorer countries, and the fund was interested in focusing on renewable energy. Perhaps Norfund was the partner that Statkraft needed in order to give Statkraft and Blaker's international operations a new lease on life.

The year 2001 was a year of change for Statkraft, and a great deal of focus was placed on structural change in Europe and on growth and merger negotiations, spurred on by a new group CEO and group management. In these changing times, hydropower operations outside of Europe received limited focus. Towards the end of the year, however, Blaker and Lindøe resurrected the idea of cooperation, and in early 2002 a couple of preliminary meetings had been held between the management of Norfund and Statkraft's international division. After this, things moved

194

SN Power's first major investment was made in 2003 with the acquisition of the Peruvian companies Cahua and Energia Pacasmayo, which together owned eleven hydropower plants in various parts of the country. It may seem surprising that SN Power chose to spend a considerable amount of capital on the acquisition of existing power plants rather than investing in development projects, but it was important for the company to obtain revenues relatively quickly. Pictured here are pipe trenches and power lines from one of the hydropower plants in the Cahua/Energia Pacasmayo portfolio.



surprisingly quickly, and after barely three months of discussions, it was agreed to establish a separate company, Statkraft Norfund Power Invest, which would specialise in hydropower developments in developing countries. SN Power, as the company would be called, was founded in June that same year, and within the next six months it had been staffed and set in operation.

The establishment of SN Power led to a considerable revitalisation of hydropower investments outside of Europe. In the initial years, the company established a presence in Chile, Peru, India and the Philippines, partly through the building of new hydropower facilities and partly through the acquisition of existing power plants. In addition, Statkraft's power plant in Nepal, Khimti, was transferred to this company. Since then, SN Power has expanded to include investments in additional countries, at the same time as it has continued its involvement in existing countries. Ten years after SN Power's creation, international hydropower has become one of Statkraft's strategic areas of focus.

Partnership with Norfund formed the basis for new growth in an area that for a long time had been a facing an uphill struggle. As such, cooperation with the state

investment fund had been productive. But this partnership has also given rise to some challenges. Even though both Statkraft's and Norfund's objectives are to operate commercially, Norfund also has an explicit developmental mission that has not always been fully reconcilable with Statkraft's more cultivated commercial objective. In addition, there has been tension at times about the level of ambition. Over the years, Statkraft in particular has raised the ambitions it has had for SN Power, which has found expression in a desire to gain greater control of the company. This is something Statkraft has achieved, but only after several extremely demanding rounds of negotiations.

One of several reasons for this contrast is that SN Power was founded at a time when Statkraft really had no great ambitions for the company. Naturally, this affected the company's positioning in the SN Power constellation. No plans existed for a situation in the future with a considerably higher level of ambition, and over time the 2002 version of SN Power no longer reflected the wishes of Statkraft. If we look at the way Statkraft's management thought about this matter in 2001–2002, it is not surprising that things were the way they were.

AT A CROSSROADS

At a meeting in September 2001, Statkraft's management discussed the future of its International Division.² At this time, the division had spent more than five years reporting on and proposing projects, all of which had failed to receive approval either by group management or the board. As we mentioned in Chapter 3, it was not surprising that this had begun to wear down the staff in the division. Group management therefore wished to clarify the situation. The atmosphere was not very optimistic, and shutting down the division was one option.

It is conceivable that group management was influenced by the recent breakdown in negotiations with Vattenfall a little earlier that same year. For several months during the winter of 2000/2001, Statkraft and the Swedish company had discussed establishing a joint venture for hydropower development outside Europe. Statkraft had hoped they would finally find the partner that Statkraft's board had long been searching for (see Chapter 3). Vattenfall was as near perfect a partner as one could wish for. In addition to its broad base of industrial expertise and international orientation, Vattenfall had invested significantly in Asia and Latin America in recent years (via its subsidiary Nordic Power Invest). Furthermore, Statkraft and Vattenfall had already cooperated for several years through the company Nordic Hydropower, which had organised the companies' ownership in the Theun Hinboun power plant in Laos. In early 2001, however, the whole process of negotiation collapsed. At a meeting with representatives from Vattenfall in Stockholm in January, Sverre Nygaard, Kjell Heggelund and Inge Løvåsen were notified over the table that Vatten-

fall had decided to shut down all activities outside Europe. The alleged reason was a need to free up capital for the company's ambitious process of expansion. Some good did come out of this development, however, since Statkraft was able to buy Vattenfall's share in the Theun Hinboun power plant in Laos, which increased its ownership share to 20 per cent. This purchase seems to have been defensively motivated. One important argument was the fear of getting a replacement in the joint company Nordic Hydro Power that one had not been involved in choosing.

In the wake of the Vattenfall retreat, another couple of advances had stranded. Among other things, contact had been established for a period with the U.S. company RNG, with whom Vattenfall had cooperated in Latin America. In the opinion of the international division, RNG was now "the only company that stood out as a potential partner for industrial cooperation". After a new representation had been made to the U.S. company, Blaker, Heggelund and Nygaard travelled to Minneapolis to sound them out. This initiative was never followed up on, however, apparently because the Americans were so busy. A second initiative, which went under the name Norsk Kraft [Norwegian Power], had been discussed for a while and involved establishing a joint venture with other Norwegian power companies. This solution failed to meet the board's requirements for an international partner and found little support from group management either.

Somewhat later in the autumn of 2001, in a new round of discussions with group management, it was concluded that the possibilities beginning to be exhausted. It was decided in what could resemble a last straw, to hire in external consultants. Shortly afterwards, PA Consulting was commissioned to review this business area, to explore the market potential and to consider possible organisational models.

A comprehensive report was presented just before the end of the year.⁹ At an overall level, the report concluded that a large and potential market *did exist* for hydropower investments, particularly in Southeast Asia and Latin America where there was a large and growing need for electricity.¹⁰ Further, the report stated that Statkraft, with its high level of professional expertise, could be among the leading hydropower companies in these regions. However, operations would then have to be organised in a completely different way. As stated in the report: "International activities at Statkraft have stalled because of the inadequacy of the decision making process and having to operate under the wrong organisational model".¹¹ According to the report, the solution was the same as that what the international division had been pushing for quite a while, namely to organise operations in a separate subsidiary that could provide greater autonomy.

In two areas, the consultants went against the established opinions of Statkraft's management. One related to the requirement of a partner. The report did not deny that partnership was important; on the contrary, this was a must in most projects.¹²

Nevertheless, it warned against going in for strategic partnerships, meaning partnerships in which one has to cooperate on everything, everywhere. As such, the report goes against the model that Statkraft's board had stood by. Reference was made to the fact that in reality companies rarely managed to reach agreement on shared strategies at a global level, and that any such attempted partnerships had largely failed.¹³ The consultants recommended instead partnership on a project-by-project basis, since this gave greater flexibility and a greater opportunity to put together constellations in accordance with geographical and other preferences.¹⁴ A well, the report recommended focusing not only on greenfield projects but also on the acquisition of existing power plants. The reason for this was that a combination of greenfield projects and acquisitions was a more efficient way of accessing new markets, partly because the availability of hydropower projects was often limited and partly because construction took time. Acquisitions made it possible to increase volume quickly and to generate revenues rapidly. Furthermore, it was a favourable time for acquisitions. Many countries, particularly in Latin America, planned to initiate or had already begun market and privatisation reforms. At the same time, some of the international companies who had been most active in these markets were in the process of selling off their equity interests, due, among other things, to overinvestments made in the 1990s. In other words, Statkraft could capitalise on the situation by going against the grain.

In early 2002, with a basis in the consultants' report, group management decided to organise the international division as a separate company. The idea was to establish this company as a wholly owned subsidiary but to attract several owners in the longer term. 15 As such, operations would be more independent, and, it would be easier to market them to other investors. The board rejected this solution, however. At a meeting where the report and the recommendation of group management were presented, the board demanded that several owners be included from the outset if this solution were to be chosen. It is evident from the minutes that the board was not convinced that operations were interesting enough for investors, and that this would have to be clarified before investing resources in developing a separate company. One of the loyal sceptics was Anders Eckhoff, a person to whom others listened. In his opinion, the concept needed to be tested in the market before doing anything else. In specific terms, he proposed devising a fund that could be offered to investors. If there was interest, then it was good. If not, then this was a clear signal from the market that the concept was not viable. Or, as Eckhoff put it: "If such a prospect is not sellable, then this is an important signal. We need then to think about things! Or shut down."16 Board chairman Terje Vareberg was also sceptical to establishing a separate company without being judged by the market beforehand. The point was also made that some other companies were actually pulling out of this niche. Among other things, reference was made to Vattenfall's exit the year before, and questions were asked whether this could be something one should note.

PRELIMINARY DISCUSSIONS WITH NORFUND

In the autumn of 2001, Bjørn Blaker had moved from a position in group management to become part of a reference Group for Group CEO Bård Mikkelsen, where two other individuals from Lars Thulin's management group also sat.¹⁷ Blaker retained responsibility for the international division, however, and in early 2002, while group management and the board discussed the fate of the division, he resumed contact with Lindøe. An initial meeting was held in mid-January, attended by Blaker, Nygaard and Wenche Lund Øyno from Statkraft, as well as Lindøe and Svein Ove Faksvåg from Norfund. Great interest was expressed from both sides. In the minutes from this meeting, it was stated that the parties saw clear advantages in establishing a joint venture, and that one wished to make the platform for such an investment concrete.18 In subsequent weeks, an additional two meetings were held in which the main framework for cooperation was shaped. In mid-March, Mikkelsen and Norfund's board chairman Arve Johnsen met to anchor plans for cooperation, and in the beginning of May, Statkraft's board approved formation of a new company co-owned by Statkraft and Norfund. On 26 June, at Statkraft's head office in Høvik, the company Statkraft Norfund Power Invest AS was formed. Statkraft had finally found a partner for its international investment in hydropower, and had finally managed to create an independent company for this purpose. What sort of partner was Norfund, however, and what kind of company had been established?

Norfund had been established by the Storting in 1997 as a policy instrument for development purposes. The fund, the full name of which was The Norwegian State Investment Fund for Business Enterprises in Developing Countries, was not a traditional development aid organisation, however. Rather, it was a body that provided capital and other support to business projects in developing countries on commercial terms.¹⁹ According to its mandate, Norfund could only invest in projects that were commercially viable, and the required rate of return should essentially be the same as for normal investment activities.²⁰ The aspect of providing development assistance restricted which countries it could invest in and the degree of risk it could take. The fund could only operate in countries that belonged under the OECD's definition of lower middle-income countries and below, which in reality meant it could not invest in countries with an average gross national income per capita of more than around USD 3 000. The fund also had to take a greater risk than purely commercial investors, precisely because investing in such countries often involves greater risk. As stated in the proposition concerning the fund: "The purpose is to establish viable, profitable businesses that would not otherwise have been started due to high risk."21

Precisely for this reason, the Storting had therefore initially also given the fund some leeway in respect of the required rate of return in that 25 per cent of capital injected would be set aside in order to cover future losses.²²

Norfund represented a market-based alternative to development assistance. Since the end of the 1970s, the state authorities in many European countries had established such funds, partly in cooperation with private financial institutions.²³ In addition to financing operations in developing countries, the funds also helped provide risk capital and guarantees to companies in their own countries who wished to invest in developing nations. This type of cooperation with domestic industry had also been highlighted when Norfund was created. One of the reasons for establishing the fund was that Norwegian industry had a strong desire that such a fund could help cover the risk of investing in difficult markets.²⁴ In the proposition concerning establishment of the fund, it was pointed out that interest in such investments was particularly great within the fields of telecommunications and energy, because an increasing share of investments in these sectors was made by the private sector. Energy in particular was a sector where it was felt that Norwegian industry had a lot to offer in terms of technology and knowledge. As we have mentioned earlier (Chapter 3), the transfer of technology and knowledge had always been an important element of Norway's development assistance strategy. Since its establishment, Norfund had gradually oriented towards energy as one of the fund's main areas of focus. In 2001, this focus has received support from the Storting in the form of a specific appropriation for energy purposes. That same year, the fund had entered into cooperation with a British fund called Commonwealth Development Corporation (CDC) to establish a separate company that would focus on energy investments. At Norfund, the primary wish was to have a Norwegian solution where Norwegian capital, technology and expertise was coordinated in a joint venture.²⁵ At the beginning of 2002, the fund had assets under management totalling just over NOK 1.5 billion, which was expected to be raised to between NOK 3 billion and NOK 5 billion over the next three-to-five-year period.²⁶

The establishment of SN Power was contingent on Statkraft and Norfund sharing a number of overarching goals and ambitions. At Statkraft, this constellation nevertheless caused some surprise. First, it ran counter to several of the old requirements, particularly those emphasised by the board, that a partner should be industrial and international. Norfund did admittedly have a relatively broad international network, particularly with financial institutions. Still, the organisation was entirely Norwegian as far as its ownership was concerned, even though it had many employees with international experience. Further, the organisation had little to contribute in the area of energy and hydropower. The most significant contribution to cooperation, besides capital, would therefore be financial expertise. Some therefore questioned whether

this would provide a sufficient basis for establishing a mutually beneficial strategic partnership.

In addition, there was a certain concern that Norfund's stated mission *could* give rise to differences in several key areas. Statkraft's internal auditors, who were commissioned to review the partnership, pointed to two areas in particular.²⁷ First, they pointed to Norfund's risk policy. Among other things, Norfund was to concentrate, as mentioned, on the least developed countries, and for this reason the fund had focused heavily on Africa.²⁸ Africa was a continent that Statkraft had so far ruled out completely due to high risk. Second, it pointed to the fund's obligation to invest only in countries with a standard of living up to a certain level, which *could* mean that Statkraft would have to refrain from investing in regions and countries that were commercially interesting.²⁹ Added to this was the fund's strong focus on social and commercial considerations, which could potentially outweigh those one felt it would be right to take as a commercial player. The conclusion of the internal auditors was therefore that one would have to clarify whether "an alliance with Norfund would affect Statkraft's scope of action outside Europe before entering into a binding form of cooperation with this company."³⁰

According to the devil's advocates, there were some important issues concerning Norfund as a partner. Group management appeared to be less concerned, however. As for the board, it was stressed that the impression one had of Norfund was very positive and that the fund was the best alternative for further international operations.³¹ In the opinion of the administration, the agreements that had been negotiated provided reasonably good security for Statkraft's interests. As a matter of principle, Statkraft did want to have a majority shareholding and control of the company, and not a 50/50 solution, which could pose problems regarding management of the company. From the very outset, however, Norfund had attached great importance to being an equal partner, a demand that had been accepted at quite an early stage. 32 The proposed agreement did allow for several alternatives in the future, both defensive and aggressive alternatives. First, the agreement had an opening for more owners in the longer term, but included a limitation that would secure Statkraft and Norfund negative control (35 per cent). This could perhaps be called a defensive route. Second, both Statkraft and Norfund were to have the right of first refusal should the other party wish to sell off its shares. This could give Statkraft full control if Norfund wished to sell, or, if new owners were included, a minimum of 51 per cent. This provided an opening for a more aggressive approach.³³

In reality, the basic attitude appeared to be neither defensive nor aggressive; rather, it seemed to be based on a wait-and-see approach. The administration's presentation to the board emphasised that international hydropower had long-term potential. At the same time, it was not here that the initial initiative was to be made.

As stated in the presentation to the board: "Consolidation in the Norwegian market will be the main focus for the first one to three years. Subsequently, Statkraft's role in the consolidation of the Norwegian/European market will be of key importance in a two-to-five year perspective. Operations outside Europe involve a more long-term growth perspective, and will represent a natural continuation *should* Statkraft manage to achieve its objectives in Europe." So, international hydropower developments placed third in terms of both priority and time, and were not guaranteed any prodigious future. Put in somewhat exaggerated terms, SN Power appeared mostly to be a construction that provided an opening for something that was potentially interesting, and Norfund was the piece of the puzzle that was necessary in order to prevent the board from blocking this opening for good.

In this respect, the administration had achieved what it wanted. In May 2002, the board accepted the plan with partner Norfund and create a joint venture. The board also approved the financing plan negotiated with Norfund. Under the terms of the plan, the owners would provide an initial NOK 500 million in equity. Then, over the first five-year period, an additional NOK 2.5 billion was to be injected, which meant that each of the parties would be required to provide a total of NOK 1.5 billion. After this time, the company would essentially be self-supporting. Statkraft's capital injection would consist in part of a transfer of assets from the power plants in Nepal and Laos. Valuation of these assets would take place over a period of time.

THE CREATION AND DEVELOPMENT OF SN POWER

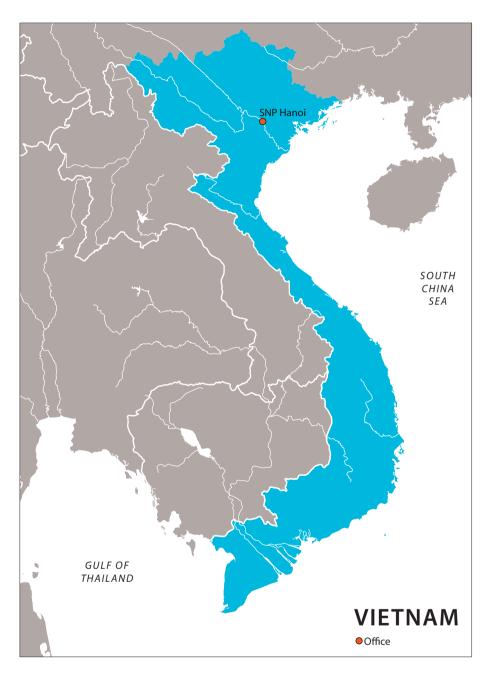
Statkraft Norfund Power Invest – SN Power – was founded on 26 June 2002 and the first board of directors was appointed at the same time. Under the terms of the share-holders' agreement, the board was to consist of three representatives appointed by each of the owners, while the position of board chairman was to alternate every other year. The parties had agreed that Norfund would appoint the first board chairman, while Statkraft would choose the company's first director. Norfund chose its own board chairman, former oil company Statoil head Arve Johnsen, as SN Power's board chairman. Norfund's two other choices were its own director Per Emil Lindøe and former cabinet minister Grete Faremo, who also had a background from NORAD, the Norwegian development aid organisation. Statkraft appointed Christian Rynning-Tønnesen, who became the board's deputy chairman, and group manager for production Øystein Løseth, together with Inger Andersen from the finance division. To head the company, Statkraft chose Statkraft engineer Øistein Andresen, whose background was from ABB and Statkraft Engineering, among others, and who also had considerable experience from working abroad.

The initial plan was that SN Power would be extensively autonomous. Among other things, the company's articles of association state that all investment decisions



In the spring of 2002, civil engineer Øistein Andresen was appointed CEO of newly founded SN Power. Andresen had a great deal of experience from the energy industry, and had worked extensively in the international arena, including many years' employment for ABB. He had also been an employee of Statkraft Engineering, a subsidiary of Statkraft, for a period in the 1990s. Andresen was CEO of SN Power until 2010, when he joined Statkraft's group management with responsibility for the company's international hydropower investments. He worked at Statkraft until the spring of 2015, when he stepped down to take up the position of Group CEO at Eidsiva Energi.

202



within the framework of the company's authorised capital should be made by the company's administration and board pursuant to established powers of attorney.³⁶ For this reason, importance was attached to the fact that the board should have extensive knowledge of international operations, preferably also about operations in developing countries, and have the ability to assess the investments and projects that the administration presented on an independent basis. For Statkraft in particular,

the wording "established powers of attorney" was important. In reality, Statkraft planned a rather close follow-up of the workings of SN Power. A couple of months after its establishment, it was decided that all investments exceeding more than NOK 200 million in total should be presented to the board of Statkraft.³⁷ Statkraft's administration also began early on to operate a kind of shadow organisation in the sense that SN Power's planned projects were carefully scrutinised there. During the start-up phase, this was perhaps a natural thing to do. Even though SN Power had hired most of its employees from Statkraft's old international division and experienced people from elsewhere, it initially had quite a small staff. For Statkraft, a large and experienced hydropower organisation, it felt strange in such a context not to provide assistance. The consequence was an overlapping decision-making process that soon turned out to be time-consuming, but which also led to SN Power feeling a need to demonstrate its independence as an organisation.³⁸ Nevertheless, this somewhat unclear division of boundaries between SN Power and Statkraft became more or less permanent.

POWERING DEVELOPMENT

Norfund and Statkraft had concurrent interests in several important areas. For example, both had as their starting point that SN Power should maintain high social, ethical and environmental standards and not become involved in operations that could be controversial in any way. Such an approach had direct consequences for the type of hydropower projects in which the company could invest. SN Power should essentially not invest in so-called reservoir power plants, of the type that dominate in Norway, and which often entail damming of large areas, relocation of settlements and encroachment on watercourses. Primarily, focus should be given to run of river power plants, meaning power plants that more or less only utilise the natural flow of decline of a watercourse.³⁹ Further, SN Power would maintain high standards of health, safety and the environment. In this respect, the starting-point should be to maintain the same standards elsewhere in the world as one wanted to have in Norway.

To a certain extent, focusing on codes of conduct can be said to have a developmental dimension through the setting of examples. SN Power also adopted an explicit developmental mission, however. "Powering development" was a phrase often used when promoting the company. This wording reflected the fact that the company's investments should not only generate revenues for its owner, but should also contribute to sustainable social and economic development in poorer countries. This developmental dimension was also evident in the company's early annual reports, including SN Power's country and local reports, which had a strong focus on human and social development. 40 In 2003, the board of SN Power adopted a set of

business principles that the company undertook to follow, everywhere and at all times. Besides profitability, these principles focused on human rights, anti-corruption, transparency and a range of other social responsibility principles.⁴¹

This aggressive emphasis on corporate responsibility, or CR, was not something that was peculiar to SN Power. Around the beginning of the new millennium, CR virtually became a buzzword and a trend in international business. There is little doubt, however, that SN Power followed up on its words with actions to a greater extent than many other companies. The stringent attention attached to such standards and norms also had certain implications for where SN Power could focus most heavily. In the poorest countries in particular, CR standards often came under the greatest amount of pressure. This fact was only one element of a broader risk scenario that indicated that commercial hydropower investments should preferably not be made in such countries. For this reason, SN Power made few investments in the poorest of countries, and as we shall see, this gradually became a problem for Norfund.

CHILE AND PERU IN FOCUS

Already in the 1990s, the international division had pinpointed Latin America as an interesting area of focus. This region had a great amount of hydropower, of which only a small part had been developed. Furthermore, some Latin American countries began to liberalise their electricity sectors at a very early stage. Chile, Argentina, Peru, Bolivia, Columbia and several of the smaller countries in Central America had already begun to introduce markets and competition to the sector in the early part of the decade, primarily on the production side. Later in the same decade, Brazil had followed suit.⁴² In most countries, production, transmission systems and market institutions were relatively poorly developed, however. Nevertheless, seen through the eyes of a foreign investor, Latin America was moving in the right direction. For Statkraft, the region aroused particular interest since liberalisation also meant greater openness to private investments in hydropower. In Chapter 3, we saw that towards the end of the 1990s, Statkraft's international division had looked at several projects in Brazil, Chile and Peru. Peru in particular had piqued the division's interest, partly because the country seemed reasonably safe and favourable for investment and partly because several specific projects emerged that were considered very favourable. In the case of the projects Egenor and Cheves, the division had strongly recommended that Statkraft should invest but had failed to sway the company's senior management.

With SN Power, both Latin America in general and Peru in particular soon reappeared on the agenda. From an early stage, Peru appeared to be a relatively investment-friendly country. After the year 2000, and particularly from 2003–2004, the



country also underwent a period of strong economic growth, combined with moderate inflation. In turn, this growth led to a fast growing need for electricity. Gradually, the combination of investment climate and growth meant the Peru was upgraded to investment grade by international rating agencies,⁴³ and obtaining international funding for projects in this country therefore became slightly easier. In addition, the financial crisis meant that many countries sold off their stakes in hydropower developments during this period, and that several opportunities therefore arose for acquiring shareholdings.

SN Power's first significant investment was actually in Peru. Towards the end of 2003, the company acquired two small power companies, Cahua and Energia Pacasmayo, from the U.S. energy group NRG. The two companies owned a total of 11 hydropower plants, primarily run-of-river plants, plus one smaller heat power plant.

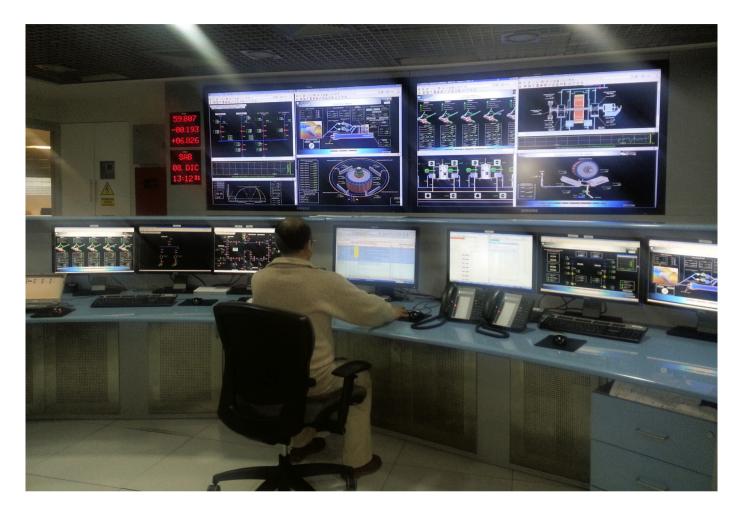


The two largest power plants, Cahua and Gallito Ciego, had an installed capacity of 43 MW and 34 MW, respectively, while the total installed capacity of all plants was 115 MW. Average annual production was just over 500 GWh, representing around 2.5 per cent of Peru's total power production in 2003.

Cahua and Energia Pacasmayo had around 100 employees in total and operations from the far south to the far north of Peru. It was a long way from Gallito Ciego in the north to the four plants in the Arequipa district in the south that went under the name Arcata. Furthermore, several of the plants were located on the periphery. Arcata, for example, was situated 4 000 metres above sea level in the Andes, a long way away off the beaten track. SN Power quickly resolved to gather operations. The two companies were swiftly merged to form one unit, under the name Cahua. Next, joint management was established with a base in Lima, under which there were five local administrations. A certain amount of decentralisation had to be maintained due to the plants' enormous geographical distribution of the plants.

From the outset, great importance was attached to building up a common SN Power culture, which chiefly meant implementing Norwegian management and operating principles. It was primarily Peruvians who were employed in Cahua's





management. Alejandro Ormeño Durand, CFO of Cahua, was appointed head of the company. Durand would be a very important and stable point in SN Power's involvement in Peru. He rapidly gained trust in SN Power, and would remain with the company for more than 10 years. Great importance was also attached to pulling down the barricades and introducing a culture where communication would pass upwards and not just downwards. As well, great attention was given to introducing Norwegian standards in health, safety and the environment. One key person on the organisational side was Milagros Paredes, who in 2006 was hired as director of human resources. Paredes too became a stable element in the Peruvian organisation.

In the spring of 2007, yet another acquisition project emerged in Peru, when the U.S. company Public Service Enterprise Group (PSEG) offered its subsidiary Electro-Andes for sale through an international tendering process. Electro-Andes owned four hydropower plants, all of which were located in the region east of Lima, in the Yaupi, Malpaso and Pachachaca rivers. The total output of the plants was 180 MW

Through its acquisition of the companies
Cahua and Energia Pacasmayo in Peru, SN
Power became owner of a number of
hydropower plants situated throughout the
country. By means of modern information
systems, production can be controlled from a
joint operations centre at the head office in

208 BEYOND BORDERS

Many of the watercourses in the Andes, Himalaya and other regions often contain large amounts of sediment and deposits that create problems for hydropower machinery. In connection with construction of the Cheves hydropower plant in Peru, SN Power and Statkraft initiated a research and development project designed to create a turbine that was more resistant to wear and tear and easier to repair. This work produced the turbine shown here, a Francis type turbine. What is new about this turbine is that the guide vanes are screwed into the blade wheel, not welded, which makes it easier to replace them. In addition, a ceramic coating has been applied that reduces wear significantly. The result of this innovation is considerable, and weighs up for the increased cost of constructing the turbine itself.



and annual production was around 1 TWh, approximately twice as much as the capacity of the Cahua company's existing power plants.⁴⁴

SN Power showed great interest in ElectroAndes, and in the early summer months of 2007 an indicative bid was made for the company. This bid led to SN Power being picked as one of five bidders who were given the opportunity to carry out due diligence of the company. The conclusion of this assessment, which was conducted by SN Power's employees with support from Statkraft, was that ElectroAndes was a well-run company with good power plants. The company also had temporary licences for the building of an additional two power plants totalling 130 MW in connection with the existing plants, where there were also considerable opportunities for development. The due diligence process had not otherwise found anything worthy of criticism in terms of health, safety and the environment nor social responsibility.⁴⁵

Statkraft's administration attached importance to the fact that acquiring Electro-Andes would strengthen considerably Cahua's market position in Peru, and that this was a quicker way of giving the company more weight than through development of



Traces of a fascinating past. There are still many signs of the rich and highly developed Inca culture in Peru. In such world heritage areas, modern activities require that a great deal of care be taken. This picture shows old Inca tracks on the side of the mountain by Statkraft's Cheves facility.

its own power. It was also possible to acquire the company at a relatively good price. The due diligence process had revealed that the value of the company was around NOK 2 billion. This price, if it was accepted, would satisfy SN Power's stipulated rate of return in Peru. Importance was attached to the fact that considerable synergies could be obtained by integrating ElectroAndes into the Cahua organisation.

Objections to this proposal, of which there were essentially two, first concerned the size of the investment. NOK 2 billion was a relatively large amount for SN Power, and would be the company's largest single investment so far. At this time, conditions in the Peruvian power market were somewhat uncertain, with relatively low prices after the authorities subsidised use of gas from the Amazonas for power generation. Statkraft was nevertheless of the opinion that acquiring the company would be strategically important. At the end of August, both the administration and the board therefore recommended that a binding bid of NOK 2 billion should be submitted. The bid was submitted early in September and accepted somewhat later that same year. With ElectroAndes in the fold, Cahua (and SN Power) became the fifth largest power generator in Peru.

In 2010, the board of SN Power resolved to invest in its first greenfield project in Peru, the Cheves project, a river power plant in Rio Huaura in the Andes, around 200 kilometres north of Lima. This project had once been a project under Statkraft's International Division. Already at the end of the 1990s, Øyvind Ulfsby had discovered this waterfall, and together with a German engineering company produced development plans. At the time, the plan was to build a huge development with an



Demanding hydropower developments in Chile. In 2004, SN Power entered into a partnership with the Australian company Pacific Hydro with a view to developing hydropower in Chile. One year later, the construction of La Higuera power plant began, and in 2007 work was also started on *La Confluencia power plant, located further* up the same watercourse. This picture is from La Confluencia. For several reasons, both La Higuera and La Confluencia were demanding projects, and both were far more expensive than anticipated and suffered from considerably delays. Poor rock conditions created a good deal of problems. In addition, project organisation was not good enough. Thanks to a considerable increase in prices in the Chilean power market during the same period, the investments made nevertheless proved profitable.

installed capacity of more than 500 MW and many kilometres of tunnels. In 2001, Statkraft was even granted a development licence. ⁴⁶ Even though the project had been shelved, it still survived in the minds of those who later moved on to SN Power, and around 2006 these old plans were taken up again and dusted off. The new plans for this project were for a considerably smaller facility with an installed capacity of 168 MW and an average annual output of around 840 GWh. Construction costs were estimated to be just over USD 400 million. ⁴⁷

Cheves seemed to be an extremely favourable project with good profitability. SN Power had also won a bid for a long-term power sales agreement with a consortium of Peruvian distribution companies, which would purchase approximately 65 per cent of power generated over a period of 15 years. The power plant was thus guaranteed revenues for a large part of its production over a long period. The basis for the decision presented to the ownership companies highlighted as strengths that the project was technically attractive, that the geology was well-researched and that benefits could be drawn from lessons learned from ongoing construction projects.⁴⁸ As we will soon see, SN Power had at this time been involved in several highly demanding greenfield projects in neighbouring Chile, where problems with the bedrock created major problems, resulting in budget overruns and delays. Unfor-

tunately, it turned out that Cheves also had such problems. Poor rock conditions, particularly in the power station area, meant construction of the power plant would be severely delayed.

Besides Peru, most attention was given to Chile in the early years. At the beginning of the new millennium, Chile also offered opportunities for both acquisitions and development. One opportunity to make an acquisition cropped up in 2002, when the Spanish company Endesa wanted to sell off its shareholding in hydropower. The administration of SN Power recommended acquiring a major power plant (Canutillar) in the southern part of the country, but the board gave the project the thumbs down based on the principle that all investments had to take place together with partners.

To begin with, greenfield projects were of no real interest in Chile owing to the uncertain power market. Since 1997, power prices in the country had fallen steadily owing to imports of inexpensive gas from Argentina and a relatively comprehensive development of gas power. In 2004, however, the prospects shifted quite suddenly. Chile's neighbour in the east had a certain tradition of breaching international economic obligations, particularly during times of economic crisis, which the country encountered quite frequently. In 1999, Argentina was once again hit by a deep economic crisis, and one indirect consequence of this was that the electrical power supply system encountered problems. As a result, Argentina's government began to cut exports and to increase prices in 2003. In Chile, this meant that power prices skyrocketed, and by the beginning of 2004, the power market was in crisis. Consequently, development of hydropower, a resource that was quite abundant in Chile, immediately became more profitable.

The first greenfield project in Chile, La Higuera, was partly the result of turbulence in 2004. La Higuera was a river power project in the Tinguiririca valley 150 kilometres south of the capital Santiago de Chile, which SN Power became involved in towards the end of 2003. The project had been initiated by Pacific Hydro Limited, a small Australian power company that specialised in renewable energy. Pacific needed help to get its project off the ground, however. SN Power considered the project during the spring of 2004, against the backdrop of a power crisis and rising power prices, and concluded that this was a good project. Net return on investment was estimated at 13 per cent. In addition, this project also offered the opportunity to work together with a partner. In most respects, this project appeared to be robust, and in June that same year the company's board resolved to buy a 50 per cent share of the project company Hidroelectrica La Higuera S.A., which would be developer and owner of the power plant.⁴⁹ Involvement in the company occurred shortly thereafter, and a shareholders' agreement was entered into that gave each of the parties extensive rights of veto.

Hydropower projects impact on many interests, particularly local ones, and information and social contact is therefore important. In connection with development of the Cheves project in Peru, SN Power established an information office in Churin, the town closest to the facility. This photography was taken when the office was under construction. The man in the middle is Alejandro Ormeño Durand, who was CEO of SN Power Peru from 2003 until 2014. Ormeño Durand contributed significantly in forming SN Power's operations in this important country. The two women pictured here are employees at the Churin office.



212 BEYOND BORDERS





From the intake reservoir at the Cheves power plant in Peru. For a while in this area, a conflict occurred when a settlement located on the mountainside above the facility claimed that the power development was damaging the ground-water regime in the area. At one point, the settlement even instigated an "armed" campaign, in the form of stones being thrown at construction workers, who then had to be evacuated. Although the matter was resolved after some negotiation, it serves as an example that hydropower developments more than most other types of construction work touch on and challenge local interests.

La Higuera was a relatively large project – a river power plant with a planned installation of 155 MW and an annual normal production of just over 0.8 TWh. Construction was estimated to cost USD 260 million in total, or approximately NOK 1.7 billion at the current rate of exchange, financed partly by equity funding and partly by debt-funding. SN Power and Pacific Hydro would each inject USD 50 million, which in total would give an equity share of just over 38 per cent. The remaining, USD 160 million, would be debt-financed, and the period up until the summer of 2005 went to finance the project. The main source on the capital side was International Finance Corporation (IFC), with whom Statkraft had at one time cooperated on the Khimti project in Nepal. IFC provided a tailor-made, syndicated loan package that was signed by a group of international banks in September 2005.

Construction was organised through a Engineering, Procurement and Construction (EPC) contract, which meant that an external contractor would be responsible for the entire construction and building work. In the summer of 2005, a fixed price/fixed time contract was signed with a Brazilian company. The agreement priced the job at approximately USD 150 million and obligated the contractor to have the facility ready for operations in April 2008. The only opportunity provided in the con-

tract to increase costs was unexpectedly poor rock conditions. There were advantages and disadvantages to this type of project organisation. The advantage was that risk was transferred to others. The disadvantage was that one had far less influence over performance and progress. In the case of La Higuera, progress was particularly important, because it was decided to enter into a long-term power sales agreement with Chilectra, the country's largest distribution company, for around 60 per cent of production (480 GWh). Delivery to Chilectra was set to begin in October 2008 and this was an absolute obligation.⁵⁰ Here too was perhaps the greatest source of risk. Overall, SN Power considered this risk acceptable.⁵¹

Statkraft's administration, which supplemented with its own assessments of the project, was positive, as was the company's board. The board of SN Power made its final decision concerning the investment in October the same year. Construction started just before year-end that same year.

La Higuera soon developed into a demanding project, primarily because things did not go well with the Brazilian contractor. The company got off to a bad start right from the beginning, and there were considerable delays, which gave rise to conflict. Relations between project management at La Higuera and the contractor became strained, which meant that both SN Power and Pacific Hydro soon had to hire more people and invest more resources in the holding company in order to handle and follow upon the project. SN Power's director Øistein Andresen was appointed chairman of the board in 2006 to ensure improved control by the owners. In September 2006, however, it was determined that the project would be delayed, and that there would be budget overruns.⁵²

Problems continued to present themselves throughout the construction period, which was much more expensive and longer than originally anticipated. In February 2007, the administration of SN Power notified the owners of the likelihood of a considerable budget overrun. The price of this was estimated to be USD 323 million, or almost 25 per cent over the original budget. A year and a half later, it was again necessary to raise the original estimates, to a slightly discomforting NOK 404 million. The reason for this was partly due to ongoing difficulties with the contractor, and partly because there were problems with poor rock conditions. At this point, it had long been known that the facility would be severely delayed. It was hoped that start-up could occur at the end of 2009, well over a year and a half later than planned. In addition to the increased construction and capital costs resulting from the extended construction period, the delay would be extremely costly due to the binding power sales agreement. Compensation for delayed delivery was estimated to cost USD 25 million.⁵³ According to the management of SN Power, the project would still be viable, at least if the price of electricity in Chile remained high. A lot remained unclear, however, and it looked as though a lengthy dispute afterwards about responsibilities and compensation looked likely. The facility first went into commission in June 2010, after the history had been topped by an earthquake that caused damage to the facility.

By the autumn of 2007, problems at La Higuera had become quite considerable, although clearly not terrifying. At this point, it had been decided to start up construction of yet another power plant upstream on the same watercourse. The project company La Higuera had already been granted a licence to develop a project that would be almost the same size as La Higuera. La Confluencia, as the project was called, had a planned installation of 156 MW and an annual production of 670 GWh. The estimated cost of the project was approximately USD 325 million, and the plan was to share ownership in the same way as at La Higuera, with a 50 per cent share being held by both SN Power and Pacific Hydro.

It may have seemed bold to take on yet another project of such dimensions at this time. Two things in particular formed the basis of this decision. First, the long-term market outlook was considered to be good. In 2007, the country still had problems with gas supplies from Argentina, which one had expected would disappear over time. Chile had been unsuccessful in obtaining gas deliveries from neighbouring Bolivia, which was a gas-rich country. The Chileans got a taste of the forces of history. In the Pacific War that was fought around 1880, Chile had taken from Bolivia a land area rich in resources bordering the Pacific Ocean. Almost 130 years later, the Bolivians had still not forgotten this loss, which is apparently why sales of gas to Chile were not an option. It was even claimed that Bolivia refused to sell gas to Argentina if it was sold on to Bolivia's arch-enemy. For this reason, the Chileans were left with the alternatives of coal and liquefied natural gas transported by ship (LNG), which were expensive solutions. This problem gave the prospect of lasting high prices, which meant good profitability for hydropower.⁵⁴

Second, it was felt at SN Power that the experiences gleaned from Higuera had given them considerable experiential ballast that could be beneficial in a new project. In brief, it would be possible to capitalise on developed national and local knowledge. Further, it was argued that one already had in place an established organisation in the area that could be transferred directly and at limited cost. As such, there were considerable economies of scale to be gained by developing La Confluencia as an extension of La Higuera.

In light of this latter point, it may at first glance appear slightly surprising that an EPC solution was also chosen for La Confluencia. As mentioned previously, this model was considered problematic owing to the lack of control provided by such a model. Other solutions were admittedly being used, more specifically a German-Chilean consortium. The argument concerning control was nevertheless valid. The explanation for this lies partly in the fact that the problems at La Higuera had still not

emerged in full. In part, this solution had been demanded by Statkraft's partner, Pacific Hydro, which had no opportunity to take more direct responsibility on its own.

This project also caused problems, even though they were not as great as the ones encountered at La Higuera. Once again, the contractor got off on the wrong foot. In addition, there were a number of problems that were not that easy to foresee. In May 2008, there was a huge amount of precipitation in the area, which led to access roads being washed away, shutting off the construction area from the rest of the world. Damage sustained meant project delays of at least three months. In February, the facility was also hit by an earthquake. In addition, it turned out that the rock in part of the construction site, particularly at the Portillo intake, was far worse than presumed, which made it very difficult for the construction workers to do their job.⁵⁵

BIG CHALLENGES IN INDIA

Already in the 1990s, Statkraft's international division had seen at India as an interesting country. The division had considered several projects and been in contact with possible partners in the country. Here, unlike in Latin America, one had never got as far as making specific project proposals. With the establishment of SN Power, and the designation of Asia and Latin America as main areas of focus, India was soon mentioned as an area of focus.

India was both fascinating and a little terrifying. The country was home to enormous resources, including an extremely large amount of hydropower. At the beginning of the new millennium, there was also a great and growing need for electricity, which gave plenty of opportunities for investments. At the same time, the world's largest democracy was known to be an above average demanding country in which to invest. In terms of population, India was more a continent than a country, which meant,



among other things, that society, politics and bureaucracy were far more difficult to manoeuvre in than in smaller countries. India, like many developing countries, also had problems with corruption. This necessitated some specific requirements. Even though SN Power's fundamental principle was to invest together with one or more partners, partnership was possibly even more important here than in most other countries.

In the summer of 2004, SN Power established a joint venture with the Indian company LNJ Bhilwara. Bhilwara was an industrial conglomerate involved in several industries, including textile production and power generation. Statkraft's links to this company actually went back several years, to 1990 when Øyvind Ulfsby in Statkraft's international division was looking for hydropower projects and partners in this country. In 2003, SN Power resumed contact, and a year later cooperation had been entered into with this company.

The link with Bhilwara was a favourable one, since SN Power was able to gain direct access to projects that were already part of the Bhilwara system. In specific terms, SN Power took a 49 per cent share of the Bhilwara company Malana Power Company, which had one power plant in operation, Malana, and one under planning, Allain Duhangan. Malana was an 86 MW river hydropower plant located in the

In 2005, SN Power resolved to invest in the Allain Duhangan hydropower project in India together with the Indian company Bhilwara. Perhaps more so than any other project SN Power has invested in so far, the Allain Duhangan project has shown how challenging hydropower developments in developing countries can be. The project was hit by both organisational and technical problems that resulted in considerable delays and budget overruns. Health and safety conditions proved the biggest problem, however. During the construction period, that lasted until 2012, 16 people lost their lives. Besides the human tragedy, SN Power received a lot of negative focus in Norway. Particularly due to the experiences gained from the Allain Duhangan project, SN Power and Statkraft have invested considerable resources in improving health, safety and environmental conditions in international power projects.



north of the country, in the Kullu valley in Himachal Pradesh. The power plant had gone into operation in 2001. Allain Duhangan was also a river hydropower power plant developed with a planned installation of 192 MW. For its equity share in Malana, SN Power paid NOK 360 million.

The Indian power sector had no established market institutions in the same way as in Chile and Peru. Power sales largely took place bilaterally, between power generators and monopoly-based distribution companies or directly with individual buyers. In the first part of the 2000s, however, there was a strong increase in the need for electricity and prices were high in most parts of the country, including the Hiamachal Pradesh region, which gave good prospects for profitability for hydropower projects. In the northern part of the country alone, SN Power estimated in 2004 there would be a capacity deficit of 10 000 MW in the years ahead, "which presents considerable opportunities for future power generation". Already one year later, the board of Malana Power Company decided to start development of Allain Duhangan. That decision was supported by the boards of both SN Power and Statkraft. The project was estimated to cost nine billion Indian rupees, which in 2005 corresponded to just above USD 200 million. Construction began later that same year, and the power plant was due to be completed in 2008.

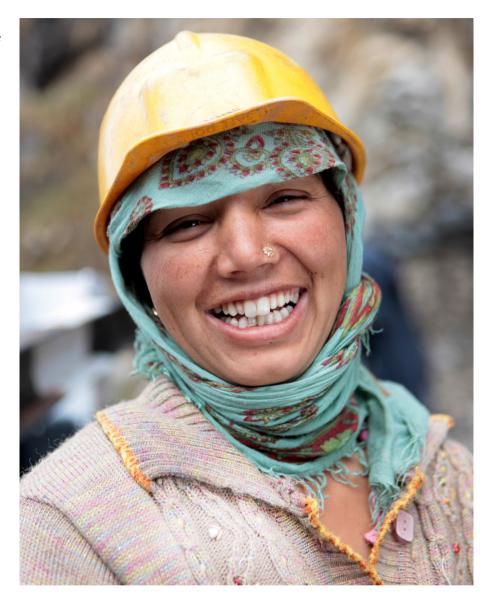
The Himalayas shared at least one thing in common with the Andes – a lot of bad bedrock. As in Chile and Peru, the Allain Duhangan project also suffered from this problem. Here too, the geology caused considerable overruns and delays. The first specific sign of this came in 2007, after just over a year and a half of operations, when SN Power informed the owners that the project would be more than 30 per cent more expensive than anticipated and at least six months behind schedule. In addition to poor bedrock conditions, poor roads and some antagonism among the local population in parts of the construction area meant that many things took longer. A second notification of cost increases was issued at the beginning of 2009. SN Power now expected a total overrun of 50 per cent and an 18-month delay for one part of the facility (Allain) and two years for the other (Duhangan).⁵⁹ Production began in 2011, and it was not until 2012 that the power plant was completely finished.

In the same way as in the Chilean projects, the economic side of the Allain Duhangan project was saved by higher electricity prices than expected. Considerable price increases in the years after 2004 led to among other things to the existing Malana power plant earning more money than expected, and many of the cost overruns on the Allain Duhangan project could actually be covered by cash flows from there, via the parent company Malana Power Company. In this way, SN Power avoided having to supply the project new equity.

SN Power has not since initiated any new projects in India. The Malana company has considered several projects, however. The company purchased the rights to the

218 BEYOND BORDERS

Local labour is crucial to SN Power and Statkraft's hydropower developments. Female construction workers are not a common sight, however. The woman in this photograph is Pushpa Thakur, from India, who worked on construction of the Allain Duhangan project in Himachal Pradesh in northern India.



Bara Bangahal project in 2007 with a view to quite rapid development. This project was put on hold in 2009, however, and SN Power had no interest in setting anything in motion before Allain Duhangan had been finished.⁶⁰

It looks likely, however, that new projects may come in the years ahead, but with a basis in other constellations than Bhilwara and Malana. In 2009, SN Power entered into a cooperative agreement with another Indian energy company, Tata Power Company, which is part of the Tata Group. Tata is India's largest corporate conglomerate with an annual turnover of well over NOK 300 billion and operations in more than 80 countries. Tata is considered a highly attractive partner, due among other

things to the company's major focus on good governance.⁶² SN Power has high expectations of this partnership, even though no specific decisions concerning projects have been taken (spring 2015).

A SUCCESS STORY: THE PHILIPPINES

The fourth country in which SN Power had invested considerably was the Philippines, where the company made its first investment in 2006. At the beginning of the new millennium, the state began to sell off power plants in order to service its ever-growing national debt. In addition, the power market in the Philippines underwent a process of liberalisation and a power exchange was established in 2006. Circumstances therefore formed a good starting-point for acquiring existing production facilities and for exploiting the market expertise that existed in the juxtaposition between SN Power and Statkraft. Added to this was the fact that SN Power managed to be included in a joint bid with the Aboitiz Group, an industrial conglomerate from the Philippines that was also involved in power generation. Aboitiz was considered a very sound and decent company. As stated in an assessment of the company, Aboitiz





Erik Knive, then SN Power's director for Southeast Asia, during celebrations in the Philippines in 2008. The occasion was a celebration of the cooperation between SN Power and the company Aboitiz. For SN Power, this collaboration was certainly worth celebrating. Partnership with local companies can be challenging but cooperation with Aboitiz has been exceedingly good. In addition, SN Power's investment in the Philippines has been one of the company's greatest financial successes.

had "business principles and ethical standards that are commensurate with those of SN Power".⁶³ The company had also had close relations with the Jebsen shipping company for more than 20 years, so it had long experience of working with Norwegian businesses.

The investment made in 2006 concerned the acquisition of the hydropower plant Magat, located on the same island as Manila (Luzon), the capital of the Philippines. Magat had been constructed in the 1980s with an installed capacity of 360 MW and was located in connection with a state reservoir facility that provided good opportunities for regulation and peak load production. The power plant, the largest hydropower plant in the Philippines, was tendered for sale by the Philippine State in 2006. SN Power and Aboitiz tendered a joint (50/50) bid, and the bid was accepted later that same year. The power plant was taken over in the spring of 2007 and organised as a joint venture SN Aboitiz Power, in which SN Power and Aboitiz each had a 50 per cent stake. One year later, SN Aboitiz Power acquired yet another privatisation project, the Binga power plant. This power plant, which was also located on the island of Luzon, was somewhat smaller than Magat. Binga had been constructed around 1960 and had an installed capacity of 100 MW.

RESTRUCTURING IN 2008

In a report from the Office of the Auditor General of Norway in 2007, Norfund came in for heavy criticism for not having followed the mandate it was given by the Storting.⁶⁴ As we mentioned initially, Norfund was to concentrate in particular on the poorest countries, the Least Developed Countries (LDCs). The review by the Office of the Auditor General of Norway shows that investments in this type of country actually only made up less than one-quarter of the fund's total investments. Furthermore, only 17 per cent of investments had been made in Africa, despite of the fact that the Storting had assumed that this region would be given priority. Norway's office of the Auditor General therefore concluded that the fund had not followed the principles laid down by the Storting as a basis for its appropriations.

The report pointed to ownership of SN Power as an example of an investment that was not in line with the fund's mandate. Reference was made to the fact that the objective of SN Power was purely commercial, and that this could "make it difficult to meet Norfund's objectives of geographical priorities, social responsibilities, environmental considerations and development effects". In its reply to Norway's office of the Auditor General, the Norwegian Ministry of Foreign Affairs, the ministry that owns Norfund, stated that through this cooperation the fund could influence "Statkraft to invest in poor countries in which they would not otherwise wish to invest." Only one of SN Power's power plants was located in a least developed country, and that was Khimti in Nepal. As the reader will know, Statkraft developed Khimti long before SN Power had been established.

The Office of the Auditor General of Norway undoubtedly upset someone. In quite general terms, the report could perhaps have been more nuanced. It made little mention of the fact that in recent years Norfund had increased considerably its share



222

of *new* investments in least developed countries. At the same time, SN Power's investments were among those investments that contributed least to this increase. SN Power had not invested in Africa nor did it have any specific plans to do so. On the other hand, the company had invested heavily in countries that could not be called developing countries. One of the primary countries of focus, Chile, had, if we use as our basis GNI per capita, a standard of living on a par with Poland and Portugal. Peru was considerably lower down the scale in this respect, but still on a par with, for example, Serbia and Tunisia.

Behind this fact lies a stark contrast between Statkraft and Norfund that had existed almost since the partnership was established. Norfund had always wanted SN Power to focus more on the poorest countries in general and in Africa in particular. For commercial reasons, Statkraft was sceptical to such a focus. Statkraft's attitude was that the poorest countries were essentially too risky and difficult to operate in. Almost from the outset, this difference of opinion had been smouldering as an underlying, unresolved issue between the two owners, occasionally bubbling up to the surface at board level. The reprimand issued by the Office of the Auditor General of Norway in 2007 hardly helped remedy these differences.

At Statkraft, the risk of goal conflicts was considered a possibility as early as in 2002. Although there was no disagreement about SN Power's commercial objective, there are different ways of operating commercially. There was no law against earning money from hydropower developments in, for example, Mozambique. On the other hand, risk was a key factor in commercial profitability calculations (and an important reason why commercial investments were far bigger in, for example, Latin America than in Africa). Furthermore, it could rightly be claimed that developing power plants in Peru had a developmental dimension. A journey through Peruvian villages, or through shantytowns on the outskirts of Lima, for that matter, show that statistics rarely give one the entire picture of the general standard of living. Within a commercial framework, it was simply possible to argue for quite different strategies, which is also what had been done.

In 2007, however, a conflict arose concerning the company's funding.⁶⁷ Until this time, SN Power's capital requirements had been met by the owners injecting equal amounts of capital into the company. This was in compliance with the original capitalisation plan, adopted when the company was created in 2002, which meant that the owners would inject a total of NOK 3.5 billion during the company's development stage. In the spring of 2007, the parties had injected most of this amount, approximately NOK 2.6 billion.⁶⁸ In late summer that same year, in connection with a decision by the board of SN Power to bid for the Peruvian company ElectroAndes, Norfund therefore wished to provide part of the purchase price through debt-funding. Statkraft objected to such a move, chiefly because SN Power had a negative cash

flow, primarily since several power plants were being built, and debt-funding would therefore not be a good idea.

In reality, this issue highlighted a growing asymmetry between the owners' ambitions for the company, or perhaps more correctly, in their opportunity to finance a higher level of ambition. In this respect, Statkraft had shifted its viewpoint. Hydropower outside Europe had not been given high priority in Statkraft when SN Power had been established in 2002, but in the ensuing years interest in this area had grown quite strongly. There were several reasons for this change. First, climate issues helped draw attention to this area, as they had done with Statkraft's focus on wind and hydropower investments in Europe. The development of renewable energy in developing countries had increased in legitimacy. Second, the ambitious strategy for expansion in Europe had not proceeded as far as one had anticipated at the beginning of the decade (see, for example, the merger and acquisition plans discussed in Chapter 5). For this reason, it was natural to look at other growth areas. Last, but not least, both Asia and Latin America were experiencing quite strong growth, which increased the need for electricity and boosted profitability in electricity generation in these regions.

In specific terms, Statkraft's increased ambitions found expression in a need to gain stronger control of SN Power. In the autumn of 2007, the company therefore raised the idea of acquiring part of Norfund's equity stake in order to obtain a majority shareholding. Discussions on the possible purchase of 10 per cent of Norfund's stake were nevertheless shelved very quickly. Norfund was not initially interested in selling off its shares, because, among other things, ownership of SN Power yielded good revenues. In any case, if it were to happen, it would be at a price that Statkraft would not be willing to accept.

In the spring of 2008, however, talks were resumed, and after long and extremely demanding negotiations, headed by Statkraft's director of strategy and finance Stein Dale and Norfund's director Kjell Roland, agreement was reached towards the end of the year on an overall solution. This entailed that Statkraft would acquire an additional 10 per cent stake.⁶⁹ Further, the agreement contained a call option, which meant that Statkraft would be entitled to purchase up to 67 per cent of the shares by the end of 2015, or earlier under certain circumstances. This option also opened the door for Statkraft to obtain a qualified majority in the longer term. As well, Norfund would be entitled to sell up to 20 per cent of its ownership share to a third party (or parties) within a certain period. At the same time, Norfund would receive a put option, which would obligate Statkraft to purchase the fund's shareholding at market price at three stipulated dates, the latest being in 2015.

A very important objection raised during the negotiations had concerned Norfund's asking price for the 10 per cent of shares. This price was considered high, par-

ticularly in the wake of the financial crisis, the effects of which occurred while the parties were negotiating. The price was nevertheless justifiable since it had a considerable strategic value. By reaching agreement, Statkraft would have a good starting point for realising its ambitions for international growth, as the administration emphasised in respect of the board. According to the administration, the alternative was to be stuck with a partnership that would restrict the company's opportunities for expanding outside of Europe. As mentioned, the agreement prevented Statkraft from investing in parallel in those countries and regions where SN Power had its markets.

RESTRUCTURING ONCE MORE

As previously stated, the shareholders' agreement between Statkraft and Norfund contained several provisions that opened for changes to SN Power's ownership structure in the longer term. As such, the year 2015 would be a year to remember, since the existing shareholders' agreement would expire on 31 December 2015. Before that time, the parties would also have to take a stand on ownership of the company. According to the agreement, Statkraft was entitled to increase its ownership share from 60 to 67 per cent, thereby attaining a qualified majority. Norfund for its part had an exit option in the sense that Statkraft undertook to purchase the entire fund's stake, at market price, should it wish to sell. This right could be exercised at three points in time, in 2013, 2014 and in 2015. The first milestone was in 2013, when Norfund was entitled to put its shareholding in SN Power. It was therefore not surprising that Statkraft and Norfund began to discuss the company's future at this time.

It was well known that Statkraft's ambitions for SN Power had increased considerably since its establishment in 2002. The restructuring that took place in 2008/2009, when the company increased its ownership stake from 50 to 60 per cent, was one expression of this. Later, the company's ambitions for international hydropower had increased further, which had found expression in the establishment of a separate entity, International Hydro (IH), and in the development of hydropower plants in Turkey and Albania under its own steam (see Chapter 6). In many ways, this investment overlapped with SN Power's operations. In short, it would not be that surprising were Statkraft to go in for gaining even more influence over SN Power.

Besides this general raising of ambitions, the fact that the same company was being operated by two different organisations was an important issue in Statkraft's considerations. By increasing its ownership share to 60 per cent in 2009, Statkraft had set itself a goal of coordinating SN Power more closely with International Hydro. Among other things, the latter entity was given responsibility for Statkraft's SN Power investment. SN Power had a strong tradition as a stand-alone company, which primarily operated through various types of partnership in the different markets.



The same was true of the subsidiary Agua Imara, which focused in particular on Africa and Central America. For this reason, the planned coordination had not been as strong as anticipated. The result was some tension between the different companies, and that employees at Statkraft felt, that the decision-making processes were demanding and inefficient.⁷¹ It was particularly felt that the lack of coordination prevented the flow of knowledge and exchange of experience among the various companies. In this connection, one pointed to the obvious challenges that SN Power in particular had encountered with cost overruns, delays and problems with health, safety and the environment (HSE). Indirectly, it was also intimated that this model was an obstacle to Statkraft's ambitions for growth.⁷²

The shareholders' agreement opened for at least three possible outcomes in 2015: status quo, full Statkraft takeover and Statkraft majority (67 per cent). Early in 2013, when Statkraft and began in earnest to discuss the future, it was agreed at an early stage to continue cooperation between the two but in a different form. In the early summer the same year, following several months of negotiations, a letter of intent was signed in which it was stated that the company should be divided up. In specific terms, SN Power's existing portfolio in Latin America and South America would be placed in a new company, Statkraft International Hydropower Invest (SKIHI), in

The Monjolinho hydropower plant in Brazil viewed from the air. In 2012, SN Power acquired a 40 per cent stake in Desenvix, a Brazilian energy company. Desenvix, which has a heavy focus on renewable energy, owns both wind power and hydropower production facilities, including Monjolinho in Rio Grande do Sul, Brazil's southernmost state. The power plant, which has an installed capacity of 74 MW, went into operation in 2009.



Through ownership of Desenvix in Brazil, SN Power was also co-owner of wind farms in this huge country. Pictured here is the Barra dos Coqueiros wind park, situated on the Atlantic coast in the state of Sergipe in northeastern Brazil. At the beginning of the new millennium, the Brazilian authorities introduced a programme to foster development of renewable energy, and by 2014 Brazil had become one of the ten largest hydropower producers in the world.

which Statkraft would have a 67 per cent share while Norfund would own 33 per cent, and Statkraft would have full control. This meant that operations in Peru, Chile, Brasil, India, Nepal and Sri Lanka would become part of the Statkraft organisation and be coordinated with the operations that Statkraft had in Southeast Europe. The remaining assets, essentially consisting of operations in the Philippines and in Agua Imara, would be organised in what would be called New SN Power, in which Statkraft and Norfund would each hold a 50 per cent share.⁷³

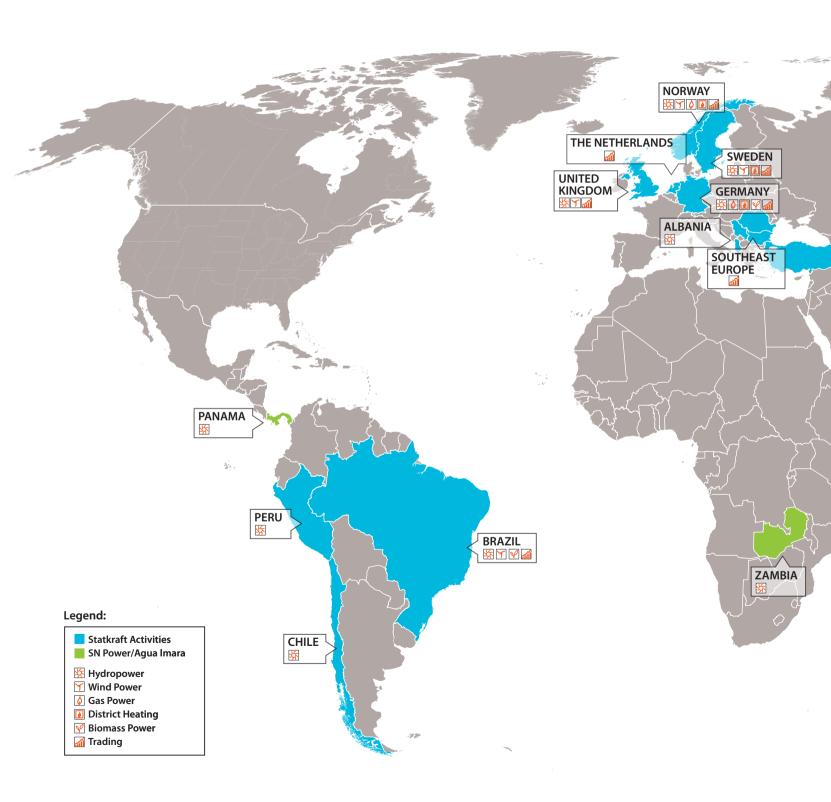
The letter of intent otherwise contained several provisions designed to ensure improved coordination of the expertise within the Statkraft-SN Power complex. This had long been one of Statkraft's hobby horses. In specific terms, this objective would be achieved by Statkraft establishing a new development entity with responsibility for all construction projects, meaning both Statkraft and New SN Power's projects. The letter of intent also contained several important provisions relating to future ownership of Statkraft International Hydropower Invest. A long-term intention was to reduce its shareholding in this company and to focus more strongly on investments in the least developed countries. For this reason, the agreement included new exit provisions. Statkraft undertook to take over Norfund's shares at several times in the period up until 2023. Statkraft for its part would also be granted a call option entitling the company to gradually buy out Norfund during the same period.

The final agreement concerning restructuring was signed right at the end of 2013, and implementation took place in June 2014. The restructuring process naturally led to major changes for a majority of employees at SN Power. Most of the company's employees were involved in operations that were transferred to Statkraft, and more than 280 people therefore became Statkraft employees.⁷⁴

INTERNATIONAL HYDROPOWER - FROM PROBLEM TO SOLUTION

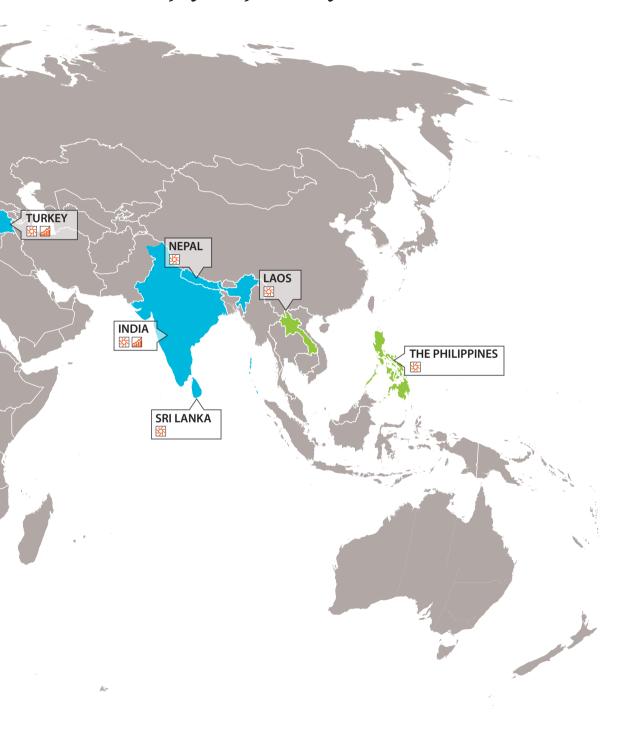
In 2015, international hydropower has become one of Statkraft's main areas of focus. Getting this far has been a long and at times problem-filled process. Statkraft has in many ways been a pioneer in this area. With the establishment of its investment activities in Nepal and Laos in the early 1990s, Statkraft was among the first companies to become involved in commercial hydropower developments in developing countries. Pioneering activities are by their very nature challenging, and experiences gleaned from these countries meant that international hydropower remained a contentious business area for a long time, even up until 2002, when SN Power was established.

As the new millennium progressed, however, ambitions grew within this area. In the previous chapter, we saw how climate-related matters affected the company's strategy in Europe. Focus on climate change had a considerable influence on attitudes to SN Power's operations as well, and on the view of international hydropower developments in general. As late as at the beginning of the new millennium, hydropower development was a prickly subject due to the environmental consequences that followed in particular from the damming and regulation of watercourses. As the new millennium got underway, the green revolution helped rehabilitate hydropower as a source of renewable and climate-friendly energy production. In this area too, as in so many others, strategies and ambitions must therefore be seen in close connection with major international and global trends.



CONCLUSION

Twenty-five years of internationalisation



230

n the period from 1990 to the present day, Europe's electrical power supply system has undergone a thorough transformation. From being a monopoly-based, nationally rooted and essentially publically owned administrative entity, the power supply system has become an internationally oriented business with a considerable degree of private ownership. Since the end of the 1980s, a number of major public power companies in Europe have been privatised, either wholly or in part, while national power systems have been liberalised. These transformations give us reason to speak of a fundamental systemic change.

Statkraft has been strongly influenced by this change. Norway was one of the first countries in Europe to liberalise its power sector, and Statkraft was therefore one of the first European companies of a certain size that was compelled to adapt and adjust to a commercialised power market. This adjustment, while extremely demanding, also gave the company several first mover advantages that it could utilise in an international arena. In combination with its established knowledge on volatile production systems (the Norwegian hydropower system), the experiences Statkraft gained from a liberalised power market gave it an advantage that probably no other company possessed in the 1990s. This knowledge and experience represented a valuable resource in the company's meetings with other markets. In addition, during the transition to a liberalised Norwegian power market, Statkraft's management had focused resolutely on utilising this knowledge and experience in an international setting.

The cable agreements with German and Dutch companies during the first half of the 1990s were one early result of this way of thinking. Ownership in the Swedish company Sydkraft during the second half of the decade was another, while the establishment of trading offices in Germany and the Netherlands towards the end of the same decade represented a third. Involvement in hydropower projects in Laos and Nepal were also the result of liberalisation, even though the ambitions behind these projects were a little more cautious. Investment in hydropower developments in developing countries and emerging economies really came to the fore as the next decade progressed.

On one level, Statkraft has followed a general European developmental trend, in the sense that the company has gradually become a strong internationally oriented company. In reality, Statkraft was one of the pioneers of this development in the 1990s. While almost all the old European companies have subsequently developed into international enterprises, Statkraft differs from the general trend, primarily in terms of ownership. Whereas the vast majority of the major European companies have become fully or partially privatised since the beginning of the 1990s, Statkraft remains a wholly owned state enterprise to this day. Statkraft is in fact the only European power company of any size, apart from Sweden's Vattenfall, that continues to be a state enterprise. That the Norwegian state still has a 100 per cent stake in Statkraft

is due to two factors. First, the Norwegian state has not been at a loss for money. The need to fill state coffers has been an important argument for many states to sell off their power companies. Second, the prominent role of hydropower in Norway is important, and it is widely held that such resources should remain in public ownership. As the country's largest manager of this resource, there has so far been little political will to partially privatise the company.

Ownership is important, and state ownership has undoubtedly been a guiding principle for Statkraft's development, particularly in terms of plans for international expansion. It took some time for Norwegian politicians to accept that Statkraft was no longer primarily an energy policy instrument. The company's perceived national role, among other things as a supplier of inexpensive power to energy-intensive industries, stuck with it throughout the 1990s, and to some extent also after this time. The company's role as manager of a highly valued national natural resource has also affected the conditions governing its operation. To a certain degree, these roles have been in conflict with the process of internationalisation. The company's international strategies and ambitions have been driven exclusively by its administration, while its owner at best has accepted these. As sole owner, the Norwegian state has also exercised extensive control over the company, through its dividends policy, for example. The general requirement of high dividend payments to the state has been argued partly on the grounds that the Norwegian state needs to fund public tasks. Statkraft's dividends policy has also functioned as a management tool, however, in the sense that the state has taken control of the company's capital resources. Instead of giving the company free rein to manage profits from operations, major investments have largely been funded in the form of capital injections from the Norwegian state. In such situations, the company has been obligated to notify its owner how it intends to use this capital.

Opinion within Statkraft has differed with regard to the significance of state ownership. Some individuals point to the imposed dividends policy, stating this has provided the company with less predictable terms than it would have enjoyed had it been a listed limited liability company. Having to ask one's owner for capital injections each time one wishes to make major investments, and the fact that applying for such funding has often been time-consuming and its outcome uncertain, makes for a lack of predictability and flexibility. Others feel that state ownership has been beneficial. All things considered, the Norwegian state has provided Statkraft with considerable funding since the mid-1990s, capital injections that have also been spent on international investments. Additionally, state ownership, it is pointed out, has made it possible to plan for the longer term. With the Norwegian state as its owner, Statkraft has not been subjected to the same degree of "quarterly tyranny" as that experienced by listed companies, with demands made on the company by owners

232

and the environment to present continual and immediate results. Statkraft has not needed to think about immediate returns, but has instead been able to invest in activities with long-term profitability targets. Having the ability and flexibility to make long-term plans has been particularly important in connection with capital-intensive operations within the electrical power supply industry, where, additionally, the time it takes from a decision to make an investment until revenue-generating operations have been implemented will often be very long. Last, but not least, it has been pointed out that state ownership has often been a beneficial factor in the company's dealings with parties abroad. Many people have positive and healthy associations to a company owned by the Norwegian state. At the beginning of the new millennium, when Statkraft's management considered changing the company's name so that it could rid itself of the state brand, the clear message returned from Statkraft environments outside Norway was that doing so would mean putting to one side an important competitive advantage.

Opinions on the consequences of state ownership may differ, but if one looks at a key factor such as return on investment, there is little to suggest that ownership has been a barrier to the company's ability to create wealth. If we limit ourselves to the time after the turn of the millennium, Statkraft has generally earned a lot of money. In the period between 2000 and 2013, the average annual return on investment was just over 10 per cent, which is higher than Statkraft's required rate of return. It is also higher than the average annual rate of return for companies listed on the Oslo Stock Exchange (measured in terms of its main index) in the years 2000 to 2013, which was 7.9 per cent.

It should be emphasised that Statkraft's good results are mainly due to the company's large-scale and favourable hydropower operations in Norway, which were essentially developed before 1990. Profitability has actually been just as good in respect of new operations, however. Furthermore, the establishment of new operations after 1990 has primarily taken place abroad. The rate of return on Statkraft's international operations for the period from 1993 to 2013 was analysed by the Ministry of Industry and Fisheries in 2014, and the resulting report shows that the rate of return achieved has varied considerably from business area to business area and from project to project. Not surprisingly, the results achieved from gas-fired power generation in Germany in particular have had a negative effect on the overall result. Other operations, such as trading activities in Europe, Sydkraft/E.ON Sverige and some of SN Power's investments, have had a positive effect, however. During the entire period from 1993 to 2013, international operations have yielded an average annual rate of return on a par with the company's overall rate of return, overall 10 per cent.² It should be added that external assessments have concluded that the rate of return was even higher. In the summer of 2014, the German investment bank

Deutsche Bank, carried out an analysis at the request of the ministry that concluded that, "From its establishment as a separate company in 1992 until 2013, Statkraft has had an estimated annual rate of return of between 12 and 13 per cent".

In all probability, these relatively good results have helped boost the owner's belief that Statkraft can create value through international investments. In 2010, the Storting resolved to provide the company with an additional NOK 14 billion in equity capital. In its application for additional capital, importance was attached to the fact that a considerable part of the company's investments during the planned period would take place abroad. Towards the end of 2014, the company received an additional NOK 10 billion from the Storting, NOK 5 billion of which would come in the form of additional equity while NOK 5 billion would be provided in the form of reduced dividend payments in the years 2016–2018. In its application for additional funding, the company stated its intention to invest a considerable part of funds in international projects.

These injections of capital can, indirectly at least, be seen as a form of support for the company's international focus. In connection with the capital increase in 2014, special attention was focused on Statkraft's role as a developer of renewable energy. As the Norwegian government stated in its proposition concerning this matter. "Using the expertise the company has developed with a basis in Norwegian hydropower, Statkraft has developed into a Norwegian renewables company of international format." ⁴

At the same time, an increasing number of politicians believe that a clearer financial distinction should be made between Statkraft's Norwegian operations and its international involvement. It is commonly held that Norwegian hydropower production is in a class of its own as a national communal good, and that returns on this investment should go directly to the community. In addition, many people probably consider international operations to be more risky, and fear that Norwegian hydropower production will become part of this risk scenario. It has been said that framework conditions in markets outside Europe may change considerably in the future. Such views have naturally been given increasing attention as international operations have become an increasingly large share of the company's operations. It is probably on this point that discussions will take place with regard to further developments in the company. Such problems are not peculiar to Norway and Statkraft, however. In Sweden, Vattenfall was organised into a Nordic and a European region effective 1 January 2014, primarily after heavy losses were sustained on investments on the continent. One key justification for this division was to protect the company's Nordic assets, of which a large share comes from hydropower. Such a division would go against what the company wanted and felt was correct, however. There, it is felt that dividing the company in this way would lead to a splitting up of central expert 234

Yet another joyous day for Statkraft and Christian Rynning-Tønnesen. On 6 December 2014, Norwegian Minister of Trade and Industry Monica Mæland announced that the Norwegian government would provide Statkraft with NOK 10 billion in equity in the period leading up to 2018. Particularly joyous was perhaps the fact that the money came from a government dominated by the Conservative Party. Traditionally, the Conservative Party in Norway has not been a party that has been most eager to provide the company with funds from the national treasury. The main reason given for this capital injection was to equip the company for additional investments in the development of renewable energy in Norway and, in particular, abroad. As such, this decision could also be interpreted as clear support for the company's international strategy. If this is the case, we could then speak of a clearer dividing line in the company's modern history. Until then, Statkraft's process of internationalisation had failed to receive active political support from any quarters, but had instead been driven more or less exclusively by the company's administration. The capital injection in 2014 gave the company clearer confirmation that international growth was something the company's owner also wanted. The turning point is probably linked to confirmation received at this time that the company's foreign investments overall had shown good profitability. Most important, however, was probably that the company's green profile harmonises so well with current political trends.



environments, which would be unfortunate both financially and professionally. The perception is therefore that dividing the company will weaken the company's professional foundations and make the company less efficient.

As we have seen in this book, Statkraft has also encountered challenges in respect of its international investments. At the same time, the company has generally fared well outside Norway, and better than many other companies. This success is largely due to the company's knowledge base and its ability to take good decisions. However, there is also reason to muse over the following question: Have the Norwegian state's imposed principles and its exercising of ownership given the company less scope to be as bold and expansion-oriented as some other European energy companies, and therefore less exposed to risks? No conclusive answer can be given to this question. Nevertheless, Statkraft has displayed an ability to create value internationally, at the same time as very few investments have turned sour – despite financial crises, fluctuating and unpredictable markets, and political risk and regulatory changes.



From Binga, the Philippines

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LITERATURE 237

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238

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Interviews

The following people have given interviews to the author during the writing of this book.

Haakon Alfstad Arnfinn Hardersen Sverre Nygaard Andreas Alnes Hans-Dieter Harig Milagros Paredes Hans Andersson Anders Prietz Einar O. Haugen Øistein Andresen Kjell Heggelund Finn Quale Ingelise Arntsen Geir Holler Ilmar Reepalu Hans O. Bjøntegård Bjørn Holsen Kjell Roland Bjørn Blaker Jon Anders Holtan Bjørn Braaten Kjell Haagensen Jon Brandsar Ola Idland

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Ronald Breña. Kjell Ingemarson Marit Buch-Holm Ingjerd Johansson Stein Dale Halvard Kaasa Alejandro Ormeño Durand Jørgen Kildahl Anders Eckhoff Svein Kroken Tony Ellis Paul Lazenby Trond Engebrethsen Per Emil Lindøe Per C. Løken Finn Fossanger Kjell Grotmol Øystein Løseth Asbjørn Grundt Bård Mikkelsen

Ottar Gaard

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Juan Antonio Rozas
Christian Rynning-Tønnesen
Dag Smebold
Anne Vera Skrivarhaug
Helge Skudal
Dag Solberg
Eivind Torblaa
Sigurd Tveitereid
Øyvind Ulfsby
Tima Iyer Utne
Terje Vareberg
Wenche Lund Øyno

Notes

CHAPTER 1

- 1 "Statkraft's ownership". Memo dated 5 March 2002. Group management matters 2002.
- 2 Ibid.
- 3 The largest generator of hydropower in 1990 was Canada, followed by the USA, Russia and China. In 2014, India and Brazil also ranked above Norway.
- 4 For an in-depth description of the structure of Norwegian waterways, see Hveding (1992).
- 5 Bjorvatn and Bjørndalen (1992), Table 5.3. the United States.
- 6 For more information about the content of the Concession Acts, see, among others, Haaland (1994).
- 7 As regards the role of the municipalities in the concession system, see Thue (2003).
- 8 See, among others, Furre (1990) and Lange (1997).
- 9 In a major opinion poll conducted in 2004, two-thirds of those polled wanted public ownership of Norway's hydropower resources, and only one per cent was positive to foreign ownership. See Skjold (2009).
- 10 France, United Kingdom, Portugal, Ireland, Greece and Italy.
- 11 NVE, Norwegian Water Resources and Energy Directorate (1946).
- 12 Skjold (2006), Chapter 4.
- 13 In post-war Norway, a highly comprehensive and advanced collaboration for coordination purposes was gradually developed between the country's power generators. The state also took part in this collaboration, which was unique in a global context. For further information regarding the development and organisation of this collaboration, see Skjold and Thue (2007).
- 14 Statkraft, Annual Report 1990.
- 15 Statens vattenfallsverk (1984).
- 16 Enel was formally a state monopoly at the beginning of the 1960s.
- 17 Skjold (2006).
- 18 This matter has been discussed by a number of authors. See, among others, Sejersted (1993).
- 19 For more on technological developments at Statkraft, see Sekne and Thue (2012).
- 20 Thue and Nilsen (2006); Conversation with Helge Skudal, 22 May 2013.

- 21 NRK Radio, 11 November 1988. Quoted from Aftenposten 12 November 1988.
- 22 Letter from the Storting group to Arne Øien, Minister of Oil and Energy, dated 9 May 1988. A copy of the letter can be found in Statkraft Archive, board-related matters, box 17.
- "Strategi for arbeidet med Statkrafts skattesaker" [Strategy for work on Statkraft's tax matters], memo dated 25 April 1988, Statkraft Archive, corporate archive, box 11. By this time, the consequences of this system had been felt for quite some time already. Between 1978 and 1987, tax expenses steadily increased, from just over NOK 150 million to well in excess of NOK 600 million, despite the fact that the company's results varied considerably during this same period.
- 24 Dagens Næringsliv, 27 December 1988.
- 25 In 1988, reservoir levels in the national power system were five per cent over what was normal. In 1989 and 1990, extremely high levels of precipitation combined with mild winters led to a national record in electricity production. At Statkraft's power plants in 1989, reservoir levels were just above 33 per cent higher than normal, and production was 16 per cent higher than the previous record year (1983). A somewhat similar situation ensued the year after.
- 26 Thue (1996).
- During negotiations, just below a third of the power volume was renewed (3.7 of a total of 11 TWh).
- 28 Statkraft, Annual Report 1990, p. 23.
- 29 Since the 1970s, the Storting had adopted several so-called protection plans listing watercourses that were to be protected temporarily or permanently. In the so-called "Protection Plan 3", which was adopted by the Storting in 1986, 46 watercourses were protected permanently from power hydropower developments.
- 30 In a white paper published a year before, the Storting had placed an upper limit on hydropower developments of just over 125 TWh. The white paper also stated that one would have to expect "considerable conflicts of interest in connection with future hydropower developments". See Norwegian Government White Paper no. 71 (1984–85), p. 106.
- 31 Information found in the memo "Statkrafts strategier mot år 2000" ["Statkraft's strategies towards the year 2000"]. Vatten's speech at a seminar 15 November 1990. Statkraft Archive, board-related matters, box 22.
- 32 Memo in connection with a draft budget for 1990, dated 1 March 1989. Statkraft Archive, board-related matters, box 18.
- 33 Memo in connection with a draft budget for 1990, dated 1 March 1989. Statkraft Archive, board-related matters, box 18.
- 34 For a thorough analysis of this process of reform, see Olsen (2000).
- 35 Chile and New Zealand, among others, who had introduced certain market-based initiatives into the sector.

- 36 Conversation with Hans Bjøntegård, 14 March 2014.
- 37 Board archive 1991. Memo dated 5 December 1991.
- 38 "DnC-sjef med rød partibok" ["DnC boss with a red party manifesto"], *Dagens Næringsliv*, 8 July 1988.
- 39 Ibid.
- 40 These assessments are based on conversations with Hans Bjøntegård, Helge Skudal, Finn Quale, Bjørn Blaker, Christian Rynning-Tønnesen, Øystein Løseth and Jørgen Kildahl. A number of others have voiced similar views.
- 41 In an interview with Norwegian daily *Aftenposten* in connection with his appointment as CEO of Statkraft, Lars Uno Thulin replied briefly and succinctly when asked about his ambitions for the company: "good financial results". To the follow-up question, "How should this be achieved?" he replied, equally concisely: "We will be interested in selling the electricity we have available at as high a profit as possible." *Aftenposten*, 28 February 1992.
- 42 Lars Uno Thulin's ability to socialise effortlessly in international business environments is also confirmed by Ole Knapp, Minister of Industry and Trade for part of the time when Lars Uno Thulin held the position of secretary general at the ministry. Knapp and Thulin made several journeys together to European countries in connection with business cooperation. Ole Knapp recalls that Thulin entertained French and German captains of industry with a relaxed and self-assured manner. Telephone conversation with Ole Knapp, 2 October 2013.
- 43 The following was stated in an organisational review conducted by external consultants in 2001, several months after Thulin had stepped down: "Throughout the 1980s, Statkraft was Lars Uno Thulin's arena. His sovereign arena, in which he as manager controlled, led and ran the company based on his own personal style –characterised by authority and power, clear messages, extensive delegation and control present and absent, intense and authoritarian, and above all with a great ability to achieve his goals through the active use of his political and bureaucratic networks. A leader of his time at Statkraft's helm." Board-related matters, memo dated 9 December 2001.
- 44 Conversation with Helge Skudal, 23 January 2013.
- 45 Conversation with Bjørn Blaker, 5 February 2013.
- 46 Conversation with Christian Rynning-Tønnesen, 18 March 2013.

CHAPTER 2

- 1 Aftenposten, 28 February 1992.
- 2 See, for example, Hughes (1983).
- 3 Iceland was an associated member of sorts, since the island had no electrical cable linking it to the outside world. Nordel also cooperated on the exchange of experiences and technology, from which Iceland's electricity suppliers also benefited.

- 4 These cables Skagerrak 1 and 2 went into operation in 1976 and 1977, respectively. These cables had a transmission capacity between the Norwegian and Danish systems totalling 500 MW.
- 5 As regards the development of transnational electricity cables in the Nordic countries, see Lalander (1988).
- 6 Ibid.
- 7 See, among others, the paper "Systemforandringen" ["A change to the system"] which was published by Statkraft in 2002. This paper was published in connection with the fact that ten years had passed since Statkraft had been reorganised as a state enterprise.
- 8 Emphasised by Braaten himself in a conversation on 24 May 2013. Confirmed by, among others, financial director Helge Skudal.
- 9 As regards these negotiations, see, among others, the "power market" memo dated 3 May 1990, Statkraft Archive, board-related matters, box 20, which outlines the financial premises for an export agreement.
- 10 Report dated 5 April 1989, Statkraft Archive, board-related matters, box 18. See also the memo entitled "Gasskjøp/kraftsalg" ["Gas purchases/power sales. Ongoing negotiations"], dated 29 May 1990.
- 11 Conversation with Kjell Haagensen, 27 February 2013.
- 12 Conversation with Bjørn Braaten, 24 May 2013.
- "Orientering om ELSAM-avtalen" ["Information about the ELSAM agreement"]. Memo dated 30 April 1991, Statkraft Archive, board-related matters, box 22. Attached to the memo is a copy of the agreement.
- 14 "Letter of intent Statkraft/SEP". Attachment to agenda item, dated 30 April 1991. Statkraft Archive, board-related matters, box 22.
- 15 For further details on the cable report, see, among others, Fossekallen no. 8, 1991.
- "Sentrale spørsmål i samband med mulig fremtidig eksport og import av elektrisk kraft" ["Key issues concerning the possible future export and import of electricity"]. Memo to the board dated 26 February 1992. Statkraft Archive, board-related matters, 1992.
- 17 Conversation with Bjørn Braaten, 24 May 2013.
- 18 Letter from the Ministry of Oil and Energy to Statkraft, dated 13 March 1990. Referred to in a board memo dated 28 March 1990, Statkraft Archive, board-related matters, box 20.
- 19 See Tidende S. (1990–91), pp. 4272ff.
- 20 Kolbjørn Almlid, "Presentasjon av forslag til ny energilov og myndighetenes opplegg for innføring av mer markedsbasert kraftomsetning" ["Presentation of a proposed new energy legislation and the authorities' plan for the introduction of more market-based power sales"], speech given at a seminar 18 and 19 April 1990, Oslo, under the auspices of the Norwegian Association of Energy Plants.
- 21 Conversation with Sigurd Tveitereid, 29 October 2013. Sigurd Tveitereid, a social economist, went in 1989 from the Norwegian Ministry of Finance to a position as

- secretary general at the Norwegian Ministry of Oil and Energy, where he played a central role in the preparations for and later implementation of the new Energy Act.
- 22 Letter from the Norwegian Ministry of Oil and Energy, dated 27 February 1991. Statkraft Archive, board-related matters, box 22.
- 23 It should also be said that the Norwegian Ministry of Oil and Energy commissioned economists from the Norwegian School of Management to conduct several economic studies of the power export issue. These studies concluded almost unequivocally that the socio-economic benefit of hydropower resources would be higher if one had an opportunity to export electric power. The two largest projects "Strategi for eksport av norsk kraft" ["Strategy for the export of Norwegian power"] and "Strategier for norsk krafteksport" ["Strategies for Norwegian power exports"] have been summarised in Bjorvatn and Bjørndalen (1992) and Amundsen, Bjorvatn, Bjørndalen and Rasmussen (1993).
- 24 See, among other things, articles in Norwegian newspapers *Dagens Næringsliv* and *Aftenposten* 14 November 1990.
- 25 Tidende S. (1990-91), p. 4272.
- 26 Ibid., p. 5.
- 27 Proposition to the Storting no. 81 (1991–92), "Om omorganisering av utenlandshandelen med elektrisk kraft" ["On the reorganisation of foreign trade in electrical power"), p. 1.
- 28 Ibid.
- 29 Ibid.
- 30 Report to the Storting no. 46 (1992–93) Om langsiktig kraftutveksling med utlandet [Regarding the long-term exchange of power abroad]. Quote p. 4.
- 31 Conversation with Sigurd Tveitereid, 29 October 2013.
- 32 In 1993, the Norwegian Ministry of Oil and Energy was merged with the Norwegian Ministry of Trade and Industry. This construction would exist until 1997, when these two areas were again served by two separate ministries.
- 33 An interesting presentation of changes in the Germany's electrical power supply, including the consequences of environmental policy, during this period can be found in Jochem, Gruben and Mannsbart (1996).
- 34 This paragraph is primarily based on a conversation with Hans-Dieter Harig, 11 August 2014.
- 35 These figures were taken from a memo concerning the agreement issued by Statkraft to the Ministry of Trade and Industry, dated 28 May 1993. Statkraft Archive, board-related matters, 1 August 1992.
- 36 For a review of the structures in the Dutch electricity supply system in the first part of the 1990s, see Arentsen, Künneke and Moll (1997).
- 37 Memo concerning the agreement in connection with a board meeting on 14 December 1993, Statkraft Archive, board-related matters 1993.

- 38 The regional companies Skiensfjorden Kommunale Kraftselskap, Aust-Agder Energiverk, Vest-Agder Energiverk, Kristiansand Energiverk and Lyse Kraft.
- 29 This was a constellation consisting of no fewer than 21 power generators.
- 40 See, for example, Dagens Næringsliv 29 June 1993.
- 41 The following companies worked alongside Statkraft: Skiensfjorden Kommunale Kraftselskap, Vest-Agder Energiverk, Lyse Kraft, Bergenshalvøens kommunale kraftselskap, Sogn og Fjordane Energiverk, L/L Sunnhordland Kraftlag and Oslo Energi. Statkraft's choice of partners was no coincidence; rather they were companies with which Statkraft had already established a relationship.
- 42 See, among other things, an undated memo entitled "Forhandlinger om norsk krafteksport" ["Negotiations on Norwegian power exports"]. Statkraft Archive, board-related matters 1993. The memo was probably written in March or April 1993. This has also been confirmed in conversations with Helge Skudal and Christian Rynning-Tønnesen. Helge Skudal was also one of the architects behind the idea of Norsk Krafteksport. He was on the boards of most of the companies that owned power plants together with other companies, and had a good relationship with the other board members in these companies.
- 43 It was well known, among other things, that Elsam had at times earned good money from onward sales to Germany of power that had been purchased cheaply from Norway through the aforementioned Nordel system.

CHAPTER 3

- 1 SN Power (2012).
- 2 This paragraph is based on Peter Svalheim's biography of Odd Hoftun. See Svalheim (2009).
- 3 Conversation with Øyvind Ulfsby, 16 September 2013.
- 4 A memo issued in October 1991 states that all investments abroad should "have clearly defined, long-term goals where financial returns in the longer term are an absolute requirement". See Statkraft Archives, PS memo, dated 17 October 1991. The memo was penned by Ulfsby.
- 5 This paragraph is based on Whelpton (2005), particularly Chapters 4 and 5.
- 6 Owing to a lack of access to information, Nepal was not included in Transparency International's corruption indices until 2004, when the country ranked 90th together with Tanzania, Mozambique and Malawi.
- 7 Whelpton (2005), p. 147.
- 8 Ibid.
- 9 "Samarbeidsmuligheter i Nepal" ["Opportunities for cooperation in Nepal"], Memo by Øyvind Ulfsby, dated 29 September 1991. Statkraft Archive, board-related matter, box 23.

- 10 For a presentation of the consequences faced by the Norwegian supplier industry as a result of this development, see Christensen and Rinde (2009).
- 11 "Nepal Status Khimti-prosjektet" ["Nepal Status of the Khimti project"]. Memo dated 27 April 1993. Statkraft Archive, board-related matters 1993.
- 12 The US dollar was worth approximately NOK 7 at this time.
- 13 "Nepal Khimti-prosjektet" ["Nepal The Khimti project"]. Memo dated 6 September 1993. Statkraft Archive, board-related matters 1993.
- 14 Conversation with Øyvind Ulfsby, 16 September 2013.
- "Nepal Khimti-prosjektet. Statusrapport" ["Nepal The Khimti project. Status report"], dated 25 January 1994. Statkraft Archive, board-related matters 1994. This report gives an account of negotiations held with the banks the year before.
- 16 Ibid.
- 17 Conversation with Ola Idland, 15 November 2013.
- 18 Conversation with Kjell Heggelund, 14 February 2013.
- 19 Conversation with Wenche Lund Øyno, 7 March 2013.
- 20 Conversation with Sverre Nygaard, 23 September 2013.
- 21 "Khimti-prosjektet Nepal" ["The Khimti project Nepal"]. Memo presented to the board meeting on 14 November 1994, Statkraft Archive, board-related matters 5–12, 1994.
- 22 Ibid.
- 23 "Khimti-prosjektet Nepal" ["The Khimti project Nepal"]. Memo presented to the board meeting on 14 November 1994, Statkraft Archive, board-related matters, 5–12, 1994.
- 24 Board meeting minutes 14 November 1994. Statkraft Archive, board-related matters 1994.
- 25 "Khimti-prosjektet Nepal" ["The Khimti project Nepal"], memo dated 21 November 1995, Statkraft Archive, board-related matters 1995. According to Statkraft's calculations, the internal rate of interest had fallen from 15 to 13 per cent.
- 26 Board meeting minutes 28 March 1995. Statkraft Archive, board-related matters 1995.
- 27 Conversation with Øyvind Ulfsby, 14 March 2013.
- 28 Conversation with Wenche Lund Øyno, 7 March 2013.
- 29 The price was increased from 5.5 to 5.94 cents per kWh (the electrical power was to be paid for in US dollars), which represented a calculated increase in project profitability of 15 per cent.
- 30 "Khimti-prosjektet Nepal" ["The Khimti project Nepal"], memo dated 21 November 1995, Statkraft Archive, board-related matters 1995.
- 31 In exact terms, the reduction was from USD 76 million to USD 18 million, corresponding, at the exchange rate at the time, to a reduction from NOK 435 million to NOK 117 million.
- 32 Minutes from the board meeting on 21 November 1995. Statkraft Archive, board-related matters 1995.

- 33 "Kraftverk i Laos" ["Power plant in Laos"]. An account given to the board, 25 May 1993. Statkraft Archive, board-related matters 1993. This provides an account of the administration of this matter.
- 34 "Laos. Nam Theun 1–2". Presentation to the board, 28 September 1993. Statkraft Archive, board-related matters 1993.
- 35 Conversation with Kjell Heggelund, 14 February 2013.
- 36 See, among others, Grant (2002), Chapter 5.
- 37 According to Statkraft's estimates, the country had a hydropower potential of close to 20000 MW, which was not much less than Norway Norge. In 1993, an estimated 200 MW had been developed.
- 38 "Investering i Theun-Hinboun Power Company LTD" ["Investing in Theun-Hinboun Power Company LTD"]. Undated memo, probably written at the end of 1994 or beginning of 1995. Statkraft Archive, board-related matters 1995.
- 39 "Laos. Nam Theun 1-2". Presentation to the board, 28 September 1993. Statkraft Archive, board-related matters 1993.
- 40 The rating agency Moody's gave EGAT an AA rating, which at the time was the second best rating available. See also the memo "Laos. Theun Hinboun-prosjektet" ["Laos. The Theun Hinboun project"]. Presentation to the board, 25 January 1994. Statkraft Archive, board-related matters 1994.
- 41 "Aktieägaravtal" ["Shareholders' agreement"], dated 18 January 1994. Statkraft Archive, board-related matters, 1994.
- 42 "Laos Theun Hinboun-prosjektet" ["Laos The Theun Hinboun project"]. Account given to the board, dated 14 December 1993. Statkraft Archive, board-related matters, 1993.
- 43 "Laos Theun Hinboun-prosjektet" ["Laos The Theun Hinboun project"]. Account given to the board, dated 14 December 1993. Statkraft Archive, board-related matters, 1993.
- 44 "Investering i Laos. Vannkraft Theun Hinboun" ["Investing in Laos. Hydropower Theun Hinboun"]. Memo dated 24 January 1995. Statkraft Archive, board-related matters 1995.
- 45 The division's name was "Division for International Power Projects" but was soon changed to "International Division". We will therefore use the latter.
- 46 Statkraft, Annual Report 1994, p. 11.
- 47 "Statkrafts rolle i internasjonale prosjekter" ["Statkraft's role in international projects"]. Memo presented to the board, 21 February 1995. Statkraft Archive, board-related matters 1995.
- 48 Ibid.
- 49 Board minutes, 21 February 1995. Statkraft Archive, board-related matters 1995.
- 50 "Indonesia. Prosjektmuligheter" ["Indonesia. Potential projects"]. Information provided for a board meeting, 24 September 1996. Statkraft Archive, board-related matters 1996.

- 51 "Indonesia. Heads of agreement". Documentation provided for a board meeting 24 November 1997. Statkraft Archive, board-related matters 1997.
- 52 "Konsesjon Cheves" ["The Cheves Concession"]. Documentation provided for a board meeting, 28 August 2001. Statkraft Archive, board-related matters 2001.
- 53 "Forslag om deltakelse i privatiseringsprosjekt i Peru" ["Proposal for participation in a privatisation project in Peru"]. Memo dated 10 August 1999. Documentation provided for a board meeting, 17 August 1999. Statkraft Archive, board-related matters 1999.
- 54 "Brasil Onix og Campos Novos" ["Brazil Onix and Campos Novos"]. Documentation provided for a board meeting 21 June 2000. Statkraft Archive, board-related matters 2000.
- 55 Conversation with Hans O. Bjøntegård, 14 February 2013.
- 56 Several months later this block of shares were sold at a considerably higher price than the price negotiated by Statkraft.
- 57 Conversation with Marit Buch-Holm, 28 November 2013.
- 58 Conversation with Kjell Heggelund, 14 February 2013.

CHAPTER 4

- 1 The idea of focusing on alliances and the creation of sales companies was first raised in the strategic plan prepared in the autumn of 1993, which came into effect at the end of 1993. See "Statkrafts strategi 1994" ["Statkraft's strategy 1994"], presented to the company's board 28 September 1993. Statkraft Archive, board-related matters 1993.
- 2 "Statkrafts strategi 1994" ["Statkraft's strategy 1994"], presented to the board 28 September 1993. Statkraft Archive, board-related matters 1993.
- 3 Regarding Nord Pool's framework conditions, see Report to the Storting no. 11 (1995–96) "Om organiseringen av krafthandelen med Sverige" ["About the organisation of power exchange with Sweden"].
- 4 Conversation with Sigurd Tveitereid, 29 October 2013.
- 5 On this point, see Proposition to the Storting no. 51 (2000–2001) and Proposition to the Storting no. 53 (2003–2004).
- 6 For an overview of Statkraft's acquisitions specified by company, see Proposition to the Storting no. 53 (2003–2004), Table 2.1.
- 7 Minutes, board meeting 19 December 1995. Statkraft Archive, board-related matters 1996.
- 8 Sydkraft operated an extensive distribution network serving more than 450,000 customers, in addition to sales of natural gas, operation of distant heating and construction activities that brought in revenues totalling around SEK 1.7 billion each year.
- 9 "Nordisk ekspansjon" ["Nordic expansion"], report "dated 19 January 1996.
- 10 In order to put these values into a perspective, it could be mentioned that only one company listed on the Norwegian stock exchange was worth more than Sydkraft (Norsk Hydro).

- 11 Both Skandinaviska Enskilda Banken and Svenska Handelsbanken, two of the country's leading financial institutions, felt Sydkraft's shares were considerably underpriced. "Nordisk strategi" ["Nordic strategy"], undated presentation, written by Lars Hjermann and probably prepared as a supporting document for the board's discussion of this matter on 29 January 1996. This presentation can be found in the file marked "Sydkraft-kjøp april 1996" ["Sydkraft acquisition April 1996"]. Loaned to the author by Finn Fossanger.
- 12 In the operating year 1994, the last year for which accounts exist, Sydkraft and Gullspång posted profits of approx. SEK 2.2 billion and SEK 650 million, respectively. Pre-tax net profit ratio for both companies was just below 20 per cent. It was also a point that Sydkraft had very sound finances. Over the last decade, the company had seen strong and almost continuous growth in earnings. Among other things, growth in earnings per share had averaged 20 per cent per year. Memo from Finn Fossanger, dated 13 March 1996. In the file marked "Sydkraft-kjøp april 1996" ["Sydkraft acquisition April 1996"]. Loaned to the author by Finn Fossanger.
- 13 Already in a memo from the end of January 1996, Sydkraft is cited as the most attractive company, while Gullspång by comparison is considered to have a "lower strategic potential".
- 14 Sydsvenskan, 11 April 1996. This interview was given in connection with references to Statkraft's first acquisition of Sydkraft shares the day before.
- 15 This paragraph is chiefly based on a conversation with Ilmar Reepalu, 6 November 2013.
- 16 Ibid.
- 17 Later Oskarshamn also acquired an equity share. Sydkraft's history is described in Bjurling (1982).
- 18 Sydkraft, Annual report 1994.
- 19 Reepalu remained in power as the mayor of Malmö for almost 20 years, from his election in 1994 until 2013. He is considered as someone who left his mark on the entire municipality's development throughout this period. A brief biography of Ilmar Reepalu's political career can be found at http://sv.wikipedia.org/wiki/Ilmar_Reepalu#cite_note-city-1
- 20 Documentation presented at an extraordinary board meeting 9 April 1996. Statkraft Archive, board-related matters 1996. Malmö, Landskrona and Oskarshamn placed their shares in this block.
- 21 Conversations with Hans Bjøntegård 14 February 2013, and Marit Buch-Holm 28 November 2013.
- 22 Conversation with Halvard Kaasa, 5 March 2014.
- 23 Minutes from the extraordinary board meeting 9 April 1996. Statkraft Archive, board-related matters 1996.
- 24 "Nordisk ekspansjon" ["Nordic expansion"], memo to the board meeting 27 August 1996. Statkraft Archive, board-related matters 1996.

- 25 Aftenposten 19 April 1996.
- 26 See, among other things, reports in the Financial Times 29 August 1996.
- 27 Supporting documents are found in the file marked "8. Sydkraft. Kjøp fra EdF" ["8. Sydkraft. Acquisition from EdF"]. Loaned to the author by Finn Fossanger.
- 28 Cf. the memo "Nordisk ekspansjon" ["Nordic expansion"], supporting documents for the board meeting 27 August 1996. Statkraft Archive, board-related matters 1996.
- 29 Board minutes, board meeting 27 August 1996. Statkraft Archive, board-related matters 1996.
- 30 Conversation with Christian Rynning-Tønnesen, 7 January 2014.
- 31 Conversation with Hans-Dieter Harig, 11 August 2014. Harig used the phrase "not amused".
- 32 Ibid.
- 33 See, for example, the report in *Dagbladet* about this matter, 8 February 1997.
- 34 Barsebäck stood for between 25 and 30 per cent of output and between 10 and 15 per cent of revenues.
- 35 Among the strongest critics were the Socialist Left party, led by Paul Chaffey, the party's spokesperson on energy and environmental policy. Paul Chaffey had demanded early on that Statkraft sell its shareholding in Sydkraft, with reference to its portfolio of nuclear power plants. Later in 1996, Paul Chaffey also presented a so-called Document 8 proposal in this respect. Chaffey and the Socialist Left wanted the Storting to demand that the Labour Party government should instruct Statkraft SF to sell its shares in the company. See the letter from the Ministry of Industry and Energy to the Standing Committee on Energy and Environmental Issues dated 11 September 1996: Doc. no. 8:79 (1995–1996). The proposal from MP Paul Chaffey concerning initiatives to prevent Norwegian ownership of nuclear power in other countries. Recommendation to the Storting no. 9 (1996-1997). "Innstilling fra energi- og miljøkomiteen om forslag fra stortingsrepresentant Paul Chaffey om tiltak for å hindre norsk eierskap i kjernekraftverk i andre land" ["Recommendation from the Standing Committee on Energy and Environmental Issues on the proposal from MP Paul Chaffey concerning initiatives to prevent Norwegian ownership of nuclear power in other countries"].
- "For us, it has not been a problem that Sydkraft has nuclear power plants," said Tony Ellis, strategic manager, to Norwegian financial daily *Dagens Næringsliv* 29 August 1996 in a comment to the fact that Statkraft had acquired additional shares in the company.
- 37 Aftenposten 11 April 1996.
- 38 Ibid.
- 39 See, among other things, NTB, 18 June 1998.
- 40 Hallgeir Langeland, politician from the Socialist Left party to Aftenposten, 11 March 1998.
- 41 Verdens Gang, editorial, 15 June 1998.
- 42 Conversation with Finn Fossanger 5 March 2014.

- 43 This project is discussed, among other things, in Fossekallen no. 8, 1998.
- 44 "Statkrafts eierposisjon i Sydkraft" ["Statkraft's equity position in Sydkraft"], memo dated 27 April 1999. Group management minutes, 1999.
- 45 Ibid.
- 46 She did this, among other things, in a letter to a newspaper in connection with the launch of *Statkrafts historie* in 2006. This matter was later referred to by several newspapers. See, among other things, *Adresseavisen* 14.12.2006, kl 04:0014 December 2006. The author has tried to speak with Marit Arnstad on several occasions but has not succeeded.
- 47 In the minutes from a strategy discussion in the autumn of 2001, in a section entitled "Hindsight", it is stated: "Why did we not buy Sydkraft? It was difficult to buy more in a situation where the owner was more concerned that we should be ordered to sell all our shares." "The main point in the discussion on which route to take." Minutes dated 10 September 2001. Group management meeting minutes 2001.
- 48 Løseth was an employee of Naturkraft during the period 1994 to 1997, when he moved to Statkraft and was assigned responsibility for conceptualisation of trade operations on the continent.
- "Etablering av selskap i Nederland" ["Establishment of a company in the Netherlands"].
 Presentation to the board, dated 31 March 1998. Board-related matters 1998.
- 50 Conversation with Øystein Løseth, 7 September 2013.
- 51 Memo dated 27 September 1997. Statkraft Archive, board-related matters 1997.
- 52 This way of thinking finds expression in, among other things, the memo entitled "Handelshus Europa" ["Trade House Europe"], which was presented to the board at a meeting on 16 December 1997. Statkraft Archive, board-related matters 1997.
- 53 "Etablering av selskap i Nederland" ["Establishment of a company in the Netherlands"].
 Presentation to the board, dated 31 March 1998. Board-related matters 1998.
- 54 Conversation with Jon Anders Holtan, 19 November 2014.
- 55 "Etablering av selskap i Nederland" ["Establishment of a company in the Netherlands"].
 Presentation to the board, dated 31 March 1998. Board-related matters 1998.
- 56 Conversation with Einar O. Haugen, 24 January 2013.
- 57 The report, dated 27 October 1997, had a very telling title "Statkraft should start an immediate effort to establish a trading position in Northern Continental Europe". Thanks to Jon Anders Holtan for lending the author this report.
- 58 "Business plan 1999", dated 24 November 1998.
- 59 This loss was incurred because the power was sold "short" and the spot price rose dramatically in connection with system changes. It should be added that this situation came as a surprise to most market players.
- 60 Conversation with Einar O. Haugen, 24 January 2013.
- 61 Conversation with Jørgen Kildahl, 22 April 2013.

CHAPTER 5

- 1 Statkraft. Annual Report 2000, p. 1.
- 2 For a review and analysis of mergers and acquisitions in the sector in this period, see Schülke (2010).
- 3 Vattenfall acquired the companies HEW, BEWAG, VEAG and LAUBAG. See also Högselius (2009) for an analysis of the company's expansion during this period.
- 4 Board chairman Gerhard Larsson to Swedish financial daily *Dagens Industri*, 1 February 2001. This interview is included as a copy in group management file no. 1, 2001.
- 5 "Strategiske muligheter for Statkraft i Nord-Europa" ["Strategic opportunities for Statkraft in northern Europe"]. Memo from group management to the board, presented to the board 25 September 2001. Group management archive 2001.
- 6 The first acquisition took place in 1996, with the acquisition of a small stake in Oslo Energi, while the main bulk took place at a later juncture.
- 7 Conversation with Hans-Dieter Harig, 11 August 2014.
- 8 Bergens Tidende, 7 September 1995.
- 9 Bergens Tidende, 24 January 1996.
- 10 "Strategiplan 2002 for Statkraft" ["Strategic plan for 2002 for Statkraft"]. Dated 11 October 2001. Presented for group management at a meeting on 15 October. Group management protocol no. 3, 2001.
- 11 Presentation for a group management meeting, 15 January 2001. Group management archive 2001.
- 12 See, among others, Skjold and Flote (2011), which deals with Statkraft's and Helge Skudal's role in connection with Statkraft's ownership of the regional company Skagerak Energi.
- 13 Norwegian Ministry of Oil and Energy, press release dated 2 March 2001. The ministry went in for the injection of subscribed capital to the tune of NOK 6 billion and an increase in the company's borrowing and guarantee limit of NOK 10 billion.
- 14 Conversation with Jørgen Kildahl, 12 August 2014.
- 15 Directive 2001/77/EC.
- "Visjon for Statkraft: Ledende i Europa på fornybar energi. Diskusjonsunderlag for møte med BM 25.1.02" ["Vision for Statkraft: A leader in Europe in renewable energy. Discussion paper for a meeting with Bård Mikkelsen 25 January 2002"]. Econ memo, undated. Group management matters 2002.
- 17 The consultancy company Econ, primarily represented by Svein Rennemo and Kjell Roland, had an important function as a discussion partner for Bård Mikkelsen.
- "Visjon for Statkraft" ["Vision for Statkraft"]. Discussion paper prepared by Econ in February 2002. Group management matters 2002.
- 19 Minutes from a meeting between Econ and Bård Mikkelsen 25 January 2001. Group management matters 2001.
- 20 Ibid.

- 21 "Visjon for Statkraft: Ledende i Europa på fornybar energi. Diskusjonsunderlag til et styremøte 12.2.02" ["Vision for Statkraft: A leader in Europe in renewable energy. Discussion paper for a board meeting on 12 February 2002"]. Econ memo, undated. Group management archive, 2002.
- 22 "Momenter fra styrets drøfting av strategisk plattform" ["Aspects of the board's discussion of the strategic platform"]. Minutes from the board meeting 12 February 2002. Group management archive 2002.
- 23 The Labour Party stressed this explicitly in 1997. See Report to the Storting no. 61 (1996–97) Om eierskap i næringslivet [On ownership in business and industry].
- 24 Report to the Storting no. 22 (2001–2002) Et mindre og bedre statlig eierskap [Smaller and better state ownership], p. 125.
- 25 "Presentasjon KL" ["Presentation to group management"]. Presentation dated 10 September 2001. Group management archive. 2001.
- 26 "Eierregulering mulige forbedringer" ["Owner regulation possible improvements"]. Legal opinion from the law firm BAHR, dated 21 September 2001. Group management, meeting minutes 2001.
- 27 As regards the actual hydropower rights, the idea was admittedly to keep these outside Wildcat, which would thus only lease the rights in line with the concession laws' ordinary provisions. Such a solution would probably also lead to demands for strong Norwegian influence.
- 28 "Strategisk utvikling" ["Strategic developments"]. Documentation presented at a board meeting 27 August 2003. Statkraft Archive, board-related matters 2003.
- 29 The memo "Strategisk utvikling" ["Strategic developments"], presented at a board meeting 27 August 2003, stated that in the coming years one expected "strong growth of gas fired power generation". Statkraft Archive, board-related matters 2003.
- 30 This was a key point in the account of "Ohm" given to the board at the beginning of 2003. Documentation presented at a board meeting 19 March 2003. Board-related matters 2003.
- 31 "Prosjekt Ohm" ["Project Ohm"]. Report presented to the board 1 October 2003. Board-related matters 2003.
- 32 Accounted for in the board presentation "VNG og EWE Tyskland" ["VNG and EWE in Germany"], presented at a board meeting 5 November 2003. Statkraft Archive, board-related matters 2003.
- 33 "Kjøp av aksjeposter i tyske VNG og EWE" ["Purchase of shares in German companies VNG and EWE"]. Presentation given to the board 27 May 2003. Board-related matters 2003.
- 34 "Kjøp av aksjeposter i det tyske gasselskapet VNG og nedstrømsselskapet EWE (Prosjekt V)" ["Purchase of shares in the German gas company VNG and the downstream company EWE (Project V)"]. Documentation for board meeting 40, 2003. Board-related matters 2003.

- 35 "Prosjekt Ohm og Prosjekt V" ["Project Ohm and Project V"]. Presentation given to the Norwegian Ministry of Industry and Trade 8 October 2003. Statkraft Archive, board-related matters 2003.
- 36 Conversation with Jørgen Kildahl, 12 August 2014.
- 37 "Bud på de tyske energiselskapene VNG og EWE" ["Offer to acquire the German energy companies VNG and EWE"]. Documentation presented to a board meeting on 17 December 2003. Statkraft Archive, board-related matters 2003.
- 38 Conversation with Christian Rynning-Tønnesen, 17 June 2014.
- 39 Ibid.
- 40 Minutes, group management meeting, 8 December 2003. Statkraft Archive, Group management archive 2003.
- 41 Conversation with Christian Rynning-Tønnesen, 17 June 2014.
- 42 E.ON was the result of the merger between the two German industrial conglomerates VEBA and VIAG. These two companies each owned the power companies PreussenElektra and Bayernwerk, and these came to form the core of the new company E.ON.
- 43 "Terminering av kraftutvekslingsavtalene med E.ON" ["Termination of the power exchange agreements with E.ON"]. Memo dated 25 September 2001. Statkraft Archive, board-related matters, 2001.
- 44 Conversation with Hans-Dieter Harig, 11 August 2014.
- 45 For a contemporary presentation of this matter, see Eneze Lieb-Doczy, 'The E.ON Ruhrgas Merger. The German Government Decides Against Competition', *Energy Regulation Brief*, August 2002. Some will perhaps wonder why the European Union's competition authorities could not intervene. This is due to the so-called two-thirds rule, which stated that if more than two-thirds of a company's revenues came from its own country, the national competition legislation should apply.
- 46 Conversation with Jørgen Kildahl, 12 August 2014.
- 47 Sydkraft owned 100 per cent of Østfold Energi, 49 per cent of Fredrikstad Energiverk and just over 21 per cent of Hafslund ASA.
- 48 Minutes of a board meeting 19 March 2003. Statkraft Archive, board-related matters 2003.
- 49 Conversation with Bård Mikkelsen, 17 June 2014.
- 50 This agreement stated that the existing put (sales) option between the parties was to be extended by one year dividend and interest adjusted, until the end of 2006 under the same terms. The put option was further extended to 15 December 2007, but retained the same put price as in 2006. In addition, Statkraft would retain dividends for 2006, which would be 60 per cent of net income after tax in Sydkraft's parent company.
- 51 According to Standard & Poor's long-term rating as at August 2002, only three European companies Electricidade de Portugal, E.ON and EdF could be compared with Statkraft. See "Oversikt over rating for sammenlignbare selskap" ["Overview of ratings

- for comparable companies"], attachment to an item on the board agenda, discussed 4 September 2002. Board-related matters 2002.
- 52 "Vurdering av Statkrafts finansielle situasjon i forbindelse med overgang til AS" ["Assessment of Statkraft's financial situation in connection with its transition to a limited liability company"]. Memo dated 22 April 2002. Group management matters 2002.
- 53 "Statkrafts omdanning fra SF til AS og Statkrafts kapitalsituasjon" ["Statkraft's transition from state enterprise to limited liability company and Statkraft's capital situation"]. Memo to the board, dated 13 June 2002. Board-related matters 2002.
- 54 Report to the Storting no. 22 (2001–2002).
- "Statkraft ber om 12 milliarder kroner" ["Statkraft asks for NOK 12 billion"] *Aftenposten*, 18 June 2003. See also the article in *Dagens Næringsliv* 10 June 2003 entitled "Venter fortsatt på svar" ["Still waiting for a reply"].
- 56 See Recommendation to the Storting no. 289 (2002–2003).
- 57 "Presset i lukket møte" ["Under pressure at a meeting behind closed doors"]. *Dagens Næringsliv*, 3 December 2003.

CHAPTER 6

- 1 Among those who have argued for gas power as a transitional solution is the influential British economist Dieter Helm. For a summary of arguments and the debate on gas power since the beginning of the 21 century, see Helm (2012).
- 2 Conversation with Stein Dale, 17 October 2014. This aspect is also mentioned by Rynning-Tønnesen himself in a conversation 7 November 2014.
- 3 Regarding challenges concerning competition in European countries, see, among others, Bergman (2009).
- 4 Directive 2003/54/EC.
- 5 On the subject of these regulatory measures, see Newberry (2009).
- 6 Directive 2009/28/EC.
- 7 Kumar et. al. (2011).
- 8 A good analysis of developments in the coal market is given in the report 'Coal Market Trends', published by the Carbon Tracker network. This report can be found at http://www.carbontracker.org/wp-content/uploads/2014/09/Coal-Financial-Trends-ETA.pdf
- 9 "Sydkraftopsjonen" ["The Sydkraft option"]. Presentation given to the board, dated 4 August 2005. Board-related matters, 2005.
- 10 The price per share was the same as the price E.ON offered all Sydkraft shareholders in 2001, when the company exceeded a 40 per cent shareholding and triggered an offer to buy. The value of the shares rose over time, however, since, according to the agreement, it was to be adjusted continually in line with the short-term interest rate in Sweden. As at June 2005, the exact value would be SEK 18.6 billion.
- 11 Conversation with Stein Dale, 17 October 2014.

- 12 The timing and circumstances are discussed in a legal opinion produced by a Swedish law firm early in July 2007. Borrowed from Finn Fossanger.
- 13 An analysis of E.ON's expansion during this period is given by Schülke (2010). Between 2001 and 2007, the company invested more than EUR 40 billion in European power and gas companies.
- 14 Promemoria from the law firm Gernandt & Danielsson, dated 21 August 2007. Borrowed from Finn Fossanger.
- 15 Conversation with Stein Dale, 24 April 2013.
- "Salgsopsjon mot E.ON AG vedr. aksjene i E.ON Sverige AB" ["Sales option in respect of EON. AG concerning shares held in E.ON Sverige AB"]. Document presented at a board meeting 15 August 2007. Board-related matters 2007.
- 17 According to Swedish legislation, owners of power plants had full access to such data for the entire watercourse.
- 18 "European expansion. Presentation to group management, 20 June 2005". Group management archive 2005.
- "European expansion. Presentation to group management, 20 June 2005". Group management archive 2005.
- 20 "Screeningprosjektet. Europeisk ekspansjon" ["Screening project. European expansion"]. Presentation to the board, dated 17 August 2005.
- At the beginning of the 1990s, these five countries stood for more than 70 per cent of total natural gas consumption in Europe, according to Cronshaw et al. (2008).
- 22 See International Energy Agency, annual statistics.
- 23 International Energy Agency, "Future of Gas for Power Generation" (2004).
- 24 Compare with the so-called Gas Directive adopted in 1998 (EU, Directive 98/30/EC).
- 25 For an analysis of the gas market systems, see Cronshaw et al. (2008).
- 26 In this connection, a separate project group was established consisting of people from Market and Strategy, which operated under an executive group made up of Christian Rynning-Tønnesen, Jørgen Kildahl, Øystein Løseth, Lars Hjermann and Harald von Heyden. This work was summarised in the report "Developing a natural gas business in Statkraft". Report dated 6 June 2001. Group management archive 2001.
- 27 "Gass- og kraftmarkedet i Europa" ["Gas and power market in Europe"]. Presentation for the board 19 March 2002. Group management archive 2002.
- 28 See, among other things, the undated memo "Gass i Norden" ["Gas in the Nordic countries"]. Statkraft Archive, board-related matters 2001.
- 29 "CCGT opportunities in Continental Europe". Memo from Juergen Tzschoppe, Stefan-Jorg Gobel and Bart Stoffer, dated 11 September 2003. Group management archive 2003.
- 30 Memo "Muligheter for deltagelse i CCGT-prosjekter i NV-Europa" ["Opportunities for participation in CCGT projects in Northwestern Europe"].
- 31 The latter aspect was also pointed out by the internal auditor.

- "Gasskraftverk Knapsack investeringsforslag" ["Knapsack gas-fired power plant an investment proposal"]. Presentation to the board meeting 21 June 2005. Statkraft Archive, board-related matters 2005.
- 33 "Cumulative installed capacity per EU Member State 1998–2009 (MW)". European Wind Energy Association (2009). http://www.ewea.org/statistics/, visited 25 September 2014.
- 34 A discussion of the economy of wind energy is given by, among others, Helm (2012).Helm is critical to wind energy, but provides both positive and pessimistic estimates, all of which operate with a load factor in the region of 20 to 30 per cent.
- "Wind in Power. European statistics". European Wind Energy Association (2012).
 Report downloaded from www.ewea.org. Visited 25 September 2014. Particularly strong, measured in absolute figures, was the growth in Spain, the United Kingdom, Italy and France, and partly in Portugal, Sweden and Poland.
- 36 "Kvalitetssikring Smøla vindpark, første byggetrinn" ["Quality assurance, Smøla wind park, first construction stage"]. Memo from internal auditing, dated 1 June 2001. Group management archive 2001. It is stated that state support "is a precondition for making the investment".
- 37 In 1998, the Storting approved a support scheme for new renewable energy that included, among other things, investment grants and favourable duty schemes. See Report to the Storting no. 29 (1998–99).
- 38 "Status og retning for satsing på vindkraft utenfor Norge" ["Status and direction of focus on wind energy outside Norway"]. Memo dated 13 March 2003. Group management archive 2003.
- 39 Ibid.
- 40 This project was carried out as a collaborative effort between the strategy and development environments.
- "Wind power in the UK Business plan for Statkraft". Undated memo, probably written early in 2003. Group management archive 2003.
- 42 "Kjøp av aksjer i Barrow Offshore Wind Farm" ["Acquisition of shares in Barrow Offshore Wind Farm"]. Attachment to agenda item no. 46, 2003. Board-related archive, 2003.
- 43 "Samarbeid om utvikling av Barrow Offshore Wind Farm" ["Cooperation on development of Barrow Offshore Wind Farm"]. Memo dated 11 March. Group management archive, 2003.
- 44 Conversation with Haakon Alfstad, 30 September 2014.
- 45 Ibid
- 46 "Vurdering av samarbeidet med DONG" ["Assessment of cooperation with DONG"]. Memo dated 30 September 2004. Group management archive 2004.
- 47 The term *Balkans* is not quite precise, but the region is often defined as the area between the Adriatic Sea in the west, the Mediterranean and the Sea of Marmara in the south, and the Black Sea in the east. There is some disagreement about where the northern border

- should be drawn, but it is usually drawn along the Danube, Sava and Kupa rivers. This means, for example, that only part of Romania would be included. In this book, we choose to include Romania in this term.
- 48 And among those who had tried, there were several horror stories, such as the U.S. company AES' involvement in Georgia early in the 2000s. AES had acquired shares in a distribution company that supplied the capital Tbilisi, but lost a lot of money, due among other things to problems in relation to state and local authorities. The affair was well publicised through the award-winning documentary "Power Trip" from 2004. Even though Georgia is located in the Caucasus, circumstances there were perceived by many as being characteristic for most former Russian-dominated communist countries in Europe.
- 49 Together with these countries followed Cyprus and Malta.
- 50 Conversation with Stein Dale, 22 April 2013.
- 51 In 2005, the Russian state owned 52 per cent of the company.
- 52 "Project Russia". Presentation for group management, 30 January 2006. Group management archive 2006.
- 53 Conversation with Bjørn Holsen, 13 October 2014.
- 54 See, among other things, the presentation given to the board "Forretningsmuligheter i Russland" ["Business opportunities in Russia"], presented to the board 10 May 2006. Group management archive 2006.
- "Forsiktig inntreden/læring i Romanias kraftsektor" ["Cautious entry/learning in Romania's power sector"]. Memo from New Energy, dated 25 August 2005. Group management archive 2005.
- 56 In Transparency International's Corruption Perceptions Index for 2004, Macedonia, Albania and Serbia were placed lower than Nepal on Transparency International's ranking list, while Romania was placed just above.
- 57 "Entry Strategy SEE". Adopted by group management, 23 March 2006. Group management archive 2006.
- 58 "Establishment of a new Statkraft office in Belgrade". Memo to group management dated 12 December 2006. Group management archive 2006.
- 59 "Status Internasjonale aktiviteter innen vannkraft" ["Status International hydropower activities". Memo to group management dated 30 July 2007. Group management archive 2007.
- 60 Ibid.
- 61 Ibid.
- 62 "Two possible JV agreements with Austrian company EVN". Memo to group management, dated 25 November 2007. Group management archive 2007.
- 63 "Vannkraftprosjekt Devoll, Albania" ["Hydropower project Devoll. Albania"]. Presentation for the board, dated 13 February 2008. Board archive 2008.

64 "Investeringsbeslutning vannkraftprosjektet Kargi i Tyrkia" ["Investment decision on the Kargi hydropower project in Turkey"]. Documentation for a board meeting 10 November 2010.

CHAPTER 7

- 1 Conversation with Per Emil Lindøe, 17 September 2014.
- 2 "Statkraft International". Group management memo dated 26 September 2001. Group management archive 2001.
- 3 In Latin America, Vattenfall had focused in particular on Peru and Bolivia.
- 4 "Oppsummering av møte med Vattenfall i Stockholm 31. januar 2001" ["Summary of a meeting with Vattenfall in Stockholm 31 January 2001"]. Attachment to a group management meeting 5 February 2001. Group management archive 2001.
- 5 In formal terms, Statkraft purchased Vattenfall's half from the company Nordic Hydropower AB, in which Statkraft owned the other half. Nordic Hydropower was a holding company with no employees, and its only assets were the companies' respective 10 per cent stakes in Theun Hinboun. According to the shareholders' agreement, Statkraft had the right of first refusal to Vattenfall's share. Statkraft paid approximately NOK 220 million for this ownership share. See board discussions 19 June 2001. Statkraft Archive, board-related matters 2001.
- 6 "Internasjonal virksomhet" ["International operations"]. Memo dated 23 March 2001. Group management archive 2001.
- 7 "Internasjonal divisjon etablering av eget selskap" ["International Division establishment of a separate company"] dated 8 June 2001. Group management archive 2001. The following was stated: "NRG is very busy assessing new projects and has not been able to give priority to establishing cooperation with Statkraft. On the other hand, no indications have been received that NRG does not want such a cooperation."
- 8 This was made clear at a group management meeting already 8 January 2001. See the minutes in the group management archive 2001.
- 9 "Strategic Review of Statkraft's International Activities. Executive Summary." Report from PA Consulting, dated 17 December 2001. Group management archive 2001.
- 10 Expected growth of 4–5 per cent per year was cited for the period up until 2020 for these regions as a whole, compared with less than half this figure for "the industrialised world".
- 11 Ibid.
- 12 Ibid.
- 13 Among other things, reference was made to cooperation between the Canadian company Hydro-Quebec and Gaz de France.
- 14 Ibid.

- "Statkrafts internasjonale virksomhet. PA-rapporten" ["Statkraft's international operations. The PA report"]. Minutes from the group management meeting 7 January 2002. Group management archive 2002.
- "Momenter fra styrets drøfting av Statkrafts internasjonale virksomhet 12.02.02" ["Elements of the board's discussion on Statkraft's international operations 12.02.02"]. Board archive, 2002.
- 17 Former CFO Helge Skudal and director for the organisation, Finn Quale, were also part of the reference group.
- 18 "Møtereferat mellom Statkraft og Norfund" ["Minutes of a meeting between Statkraft and Norfund"]. Thanks to Bjørn Blaker for loan of the minutes.
- 19 The fund was nevertheless considered to be an integral part of Norwegian development aid, and was operated under the auspices of the Norwegian Ministry of Foreign Affairs.
- 20 The fund's guidelines, outlined in Proposition to the Odelsting no. 13 (1996–97), stated that the fund should make "commercial requirements in respect of each project, including demands on the rate of return".
- 21 Proposition to the Odelsting no. 13 (1996-97).
- 22 Ibid.
- 23 An overview of such funds can be found on the website of the organisation European Development Finance Institutions (EDFI). See: http://www.edfi.be/members.html. In this area, Norway actually lagged behind many countries. Among western European countries, Norway, Iceland, Greece and Ireland were the only countries in 1997 that had not established a fund of this type.
- 24 Proposition to Odelsting no. 13 (1996–97).
- 25 "Møtereferat mellom Statkraft og Norfund" ["Minutes of a meeting between Statkraft and Norfund"], meeting 7 February 2002. This document outlines Norfund's strategies and objectives in the field of energy. Thanks to Bjørn Blaker for the loan of these minutes.
- 26 According to the memo "Internasjonal vannkraftutvikling" ["International hydropower development"], dated 25 April 2002. Statkraft Archive, board-related matters 2002.
- "Kommentarer fra ØA til styredokument vedr. Statkrafts internasjonale virksomhet" ["Comments from the finance division to the board document concerning Statkraft's international operations"], dated 17 April 2002. Group management archive 2002.
- At the end of 2002, almost 40 per cent of the fund's investments had been made in Africa. See Norfund, annual report 2002.
- 29 The internal auditors pointed out that according to its mandate, Norfund could not be involved in countries with an average GNI above approx. USD 5,300. The assessment was that "This should be harmonised with the markets Statkraft believes have the best potential for investment, so that we do not risk having to refrain from investing in areas in which we essentially are interested".

- 30 "Kommentarer fra ØA til styredokument vedr. Statkrafts internasjonale virksomhet" ["Comments from the finance division to the board document concerning Statkraft's international operations"], dated 17 April 2002. Group management archive 2002.
- 31 "Statkrafts internasjonale virksomhet" ["Statkraft's international operations"].
 Documentation for a board discussion, presented 7 May 2002. Statkraft Archive, board-related matters, 2002.
- 32 This was expressed already at the preliminary meetings. See "Møtereferat mellom Statkraft og Norfund" ["Minutes of a meeting between Statkraft and Norfund"], meeting 7 February 2002. Loaned to the author by Bjørn Blaker.
- 33 The plan for the agreement was outlined in a comprehensive memo attached to a presentation for the board "Statkrafts internasjonale virksomhet" ["Statkraft's international operations"], discussed at a board meeting on 7 May 2002.
- 34 "Statkrafts internasjonale virksomhet" ["Statkraft's international operations"].
 Documentation provided for the board, presented 7 May 2002. Statkraft Archive, board-related matters, 2002. Highlighted by the author.
- Øistein Andresen, who was appointed SN Power's first director, had the impression when he arrived at the company that Norfund for Statkraft was a "last resort". Conversation with Øistein Andresen, 23 January 2013.
- 36 SN Power. Articles of association.
- 37 Board meeting 4 September 2002. Statkraft Archive, board-related matters 2002.
- 38 Conversation with Øystein Andresen 23 January 2013.
- 39 Conversation with Kjell Heggelund, 6 February 2014.
- 40 See SN Power's annual reports for 2003 and 2004, and particularly the articles on Peru and India.
- 41 These have been reiterated in full in the company's annual report for 2003.
- 42 Rudnick and Zolezzi (2001) provide a brief overview of reforms in the region during the 1990s.
- 43 Fitch Ratings upgraded Peru to investment grade in 2008.
- 44 "SN Power's acquisition of the company ElectroAndes"]. Documentation for a board meeting 15 August 2007. Statkraft Archive, board-related matters 2007.
- 45 Ibid.
- 46 "Konsesjon Cheves" ["The Cheves licence"]. Documentation to a board meeting 28 August 2001. Statkraft Archive, board-related matters 2001.
- 47 "Powering Development. Cheves Project Overview". Presentation for a board meeting 18 August 2010. Statkraft Archive, board-related matters 2010.
- 48 "Cheves Project. Investment Decision". Presentation for a board meeting 29 September 2010. Statkraft Archive, board-related matters 2010.

- 49 "SN Powers investering i Hidroelectrica LA Higuera S.A., Chile" ["SN Power's investment in Hidroelectrica LA Higuera S.A., Chile"]. Documentation for a board meeting 1 July 2004.
- 50 "SN Powers mulige investeringer i Chile" ["SN Power's possible investments in Chile"]. Documentation for a board meeting 17 August 2005. Statkraft Archive, board-related matters 2005.
- 51 Ibid.
- 52 "SNPI-prosjektet La Higuera status" ["The SNPI project La Higuera status"]. Account given to the board of Statkraft, dated 13 September 2006. Statkraft Archive, board-related matters 2006.
- "SN Power overskridelser og forsinkelser på La Higuera og La Confluencia-prosjektene" ["SN Power budget overruns and delays on the La Higuera and La Confluencia projects"]. Account provided for the board, dated 17 December 2008. Statkraft Archive, board-related matters 2008.
- "SN Powers investering i vannkraftverket La Confluencia i Chile" ["SN Power's investment in the La Confluencia hydropower plant"]. Documentation for a board meeting 15 August 2007. Statkraft Archive, board-related matters 2007.
- 55 "La Confluencia Project Chile Cost to Complete". Report from SN Power, dated 6 May 2010. Statkraft Archive, board-related matters, 2010.
- 56 SN Power, annual report 2004, p. 12.
- 57 SN Power, annual report 2005.
- 58 "SN Power i India" ["SN Power in India"]. Documentation for a board meeting 8 November 2006. Statkraft Archive, board-related matters 2006.
- 59 "SN Power Orientering om den indiske virksomheten" ["SN Power Information about Indian operations"]. Documentation for a board meeting 18 March 2009. Statkraft Archive, board-related matters 2009.
- 60 Ibid.
- 61 "India. Country update". Report dated 9 March 2009. Statkraft Archive, board-related matters 2009.
- "Orientering om samarbeidsavtale mellom SN Power og Tata vedrørende prosjekter i India og Nepal" ["Information about the cooperative agreement between SN Power and Tata concerning projects in India and Nepal"], Documentation for a board meeting 17 June 2009.
- 63 "SN Powers mulige investeringer på Filippinene" ["SN Power's potential investments in the Philippines"]. Documentation for a board meeting 8 November 2006. Statkraft Archive, board-related matters 2006.
- 64 "Riksrevisjonens undersøkelse av Norfunds drift og forvaltning" ["Investigation by the Office of the Auditor General of Norway into Norfund's operations and management"]. Office of the Auditor General of Norway, document no. 3:13 (2006–2007).

- 65 Ibid.
- 66 Conversation with Per Emil Lindøe 17 September 2014.
- 67 "Status og videreutvikling av eierskapet i SN Power" ["Status and continued development of ownership in SN Power"]. Documentation for a board meeting 18 January 2007. Statkraft Archive, board-related matters 2007.
- 68 "Kapitalisering av SN Power" ["Capitalisation of SN Power"]. Documentation for a board meeting 18 January 2007. Statkraft Archive, board-related matters 2007.
- 69 An account of the main content of the agreement is given in the memo "Restrukturering av eierskapet i SN Power" ["Restructuring of ownership in SN Power"], dated 5 November 2008. Statkraft Archive, board-related matters 2008.
- 70 Ibid.
- 71 "Restrukturering av internasjonal vannkraft" ["Restructuring of international hydropower"]. Documentation for a board meeting 13 March 2013. Statkraft Archive, board-related matters 2013.
- 72 Ibid.
- 73 "Restrukturering av internasjonal vannkraft" ["Restructuring of international hydropower"]. Documentation for a board meeting 12 June 2013. Statkraft Archive, boardrelated matters 2013.
- 74 "Restrukturering av internasjonal vannkraft" ["Restructuring of international hydropower"]. Documentation for a board meeting 18 June 2014. Statkraft Archive, boardrelated matters 2014.

CONCLUSIONS

- 1 Statkraft's required rate of return is confidential. In a so-called extended control of Statkraft in 2014, conducted by the Norwegian Ministry of Industry and Fisheries, however, it appears that the total return on investment is "higher" than the required rate of return. See the Ministry of Industry and Fisheries, "Revisjonsrapport for utvidet kontroll 2013–2014" ["Audit report for extended control 2013–2013"], dated 23 September 2014.
- 2 Norwegian Ministry of Industry and Fisheries, "Revisjonsrapport for utvidet kontroll 2013–2014" ["Audit report for extended control 2013–2013"], The Norwegian Ministry of Industry and Fisheries' follow-up of Statkraft's foreign investments, report dated 23 September 2014.
- 3 The conclusions from Deutsche Bank's assessment have been reiterated in Proposition no. 40 to the Storting (2014–2015).
- 4 Ibid, p. 4.

Index

A	Beil, Helge-Jürgen 112	
ABB 38, 64-66, 68, 71, 186	Belo, Carlos 84	
Aboitiz-group 219, 220	Bernotat, Wulf 154, 156–157	
Aftenposten 43	Berry Burn wind farm (Great Britain) 179	
Agua Imara 225, 226	Bhilwara 216, 218	
Alfstad, Haakon 174, 176, 258	Binga Hydropower Plant (The Philippines)	
Allain Duhangan hydropower plant (India)	220	
216–218	Bjøntegård, Hans O. 38	
Alltwalis wind farm (Great Britain) 178	Blaker, Bjørn 39, 40, 73, 193, 196, 198, 243,	
Alta hydropower plant (Norway) 32	261, 262	
Amsterdam Power Exchange (APX) 110	Bondevik II-government (Norway) 143	
Andresen, Øistein 201, 213, 262	Bondevik, Kjell Magne 144	
Arcata hydropower plant (Peru) 206	Braaten, Bjørn 47, 50	
Arnstad, Marit 100-102, 105	Brækken, Gro 38	
Arntsen, Ingelise 149, 166	Brandsar, Jon G. 173	
Asian Development Bank 70-74, 76, 78	Brundtland, Gro Harlem 52-53, 100	
_	Busch, Rolf 154	
В	Butwal Power Company (BPC) 63, 65, 73, 74	
Baillie wind farm (Great Britain) 179	_	
Bakken, Hilde 159	C	
Baltic Cable 108, 134	Cahua 205-209	
Banjë hydropower project (Albania) 186	Cakit Hydropower Project (Turkey) 186	
Bara Bangahal hydropower project (India)	Campos Novos wind farm (Brazil) 83	
218	Canutillar Hydropower Plant (Chile) 211	
Barrow wind farm (Great Britain) 176, 177,	Centre Party (Norway) 100	
258	Centrica 176	
Barsebäck nuclear power plant (Sweden) 91,	Cetin Hydropower Project (Turkey) 186,	
98, 100	190	
Bayernwerk 116	Chernobyl nuclear power plant 47	
Bechtel 170	Cheves Hydropower Project (Peru) 83, 204,	
Beiarn Hydropower Project (Norway) 32	209, 210, 248, 262	

Chilectra 213 Endesa 25 Christian Democrats 100 Enel 25 Chubais, Anatoly 181 Energia Pacasmayo 205, 206 Commonwealth Development Corporation Energieversorgung Niederösterreich (EVN) (CDC) 199 Conservative Party (Norway) 28, 35, 132 Energiewende 150, 160, 191 Conservative Party (Sweden) 87 Engebrethsen, Tron 157 Copos, Gheorghe 167 Enron 112, 130 ENTSO-E (European Network of D Transmission System Operators for Dagens Næringsliv 30, 39 Electricity) 190 Dale, Stein 138, 153, 154, 181, 223, 256, 257, Erzhausen hydropower plant (Germany) 157 259 ESA (EFTA Surveillance Authority) 140, 143 Den norske Creditbank (DnC) 38 EU Commission 123 Deutsche Bank 264 Evensen, Børre 91 Devoll hydropower project (Albania) 183-186 EVN (Energieversorgung Niederösterreich) DONG (Danish Oil and Natural Gas) 184, 186 176-177, 258 EWE (Energieversorgung Weser-Ems) 129, Dudgeon wind farm (Great Britain) 179 131, 145, 254, 255 Durand, Alejandro Ormeño 207 F E Faksvåg, Svein Ove 198 Faremo, Grete 201 E.ON 12, 87, 105, 116, 117, 121, 129, 131, 132-148, 151-154, 157-161, 191, 232, Feldmann, Lutz 154 255, 256, 257 FERC (Federal Energy Regulatory Eckhoff, Anders 38, 197 Commission) 149 EdF (Electricité de France) 25, 89, 93, 96, 97, First Indochina War 78 117, 120, 139 Force 9 Energy 177 Edison 117 Forsmark Nuclear Power Plant (Sweden) 91 EDON 58 Fortum 117, 120, 121, 136, 139, 162 EGAT (Electricity Generating Authority of Fossanger, Finn 91, 154, 157 Thailand) 79 GEgenor 83-84, 204 Electrabel 117 Gallito Ciego hydro power plant (Peru) 206 Electroandes 207-209, 222, 262 Genoa-deal 154, 159, 163 Electroperu 83 Gjerde, Bjartmar 38 Ellis, Tony 90, 109 Global Investment Holding 186 Elsam 48, 49, 53, 58, 59, 246 Göbel, Stefan-Jörg 112 Graningeverken AB 91, 96, 131, 138, 139, 154 Emden Gas 157

INDEX 267

GreenPower 177 International Finance Corporation (IFC) 70, Grundekjøn, Arvid 154 73, 212 Gullspång Kraft AB 91, 92, 96, 250 International Monetary Fund (IMF) 66 H K Haagensen, Kjell 47, 48, 55, 73, 133 Kaasa, Halvard 95 Haaheim, Jon Ulrik 157, 159 Kargi hydropower project (Turkey) 186 Hafslund 138, 144 Khimti hydropower project 63-65, 69, 73, Haga, Ingvald 46, 65, 76 76,82 Halmø, Gerd 38 Kildahl, Jørgen 112, 159, 181, 243, 252-255, Hamburgische Electricitäts-Werke (HEW) 257 58, 98 King Birendra 67 Hamlet 160 Knapsack gas power plant (Germany) 147, Harig, Hans-Dieter 55, 56, 61, 98, 135, 136, 170-172, 190, 258 245, 251, 253, 255 Knapsack II gas power plant (Germany) 190 Haugen, Einar O. 109 Kokel hydropower project (Albania) 186 Kvennås, Ola 111 Heggelund, Kjell 12, 72, 76, 80, 81, 195, 196, Kværner 70, 73, 76 247, 249, 262 Herdecke Gas Power Plant (Germany) 147, Kyoto Agreement 115, 123, 149 172 L Hermansen, Tormod 181 Heyden, Harald von 111, 112 La Confluencia hydropower project (Chile) Hidroélectrica La Higuera S.A 211 214, 263 Himal Power Ltd 69 La Higuera hydropower project (Chile) 211-Hjermann, Lars 91 215, 263 Hoftun, Odd 63, 65, 66, 69, 73, 74 Laksfors 154 Holler, Geir 109 Liberal Party 100 Lindøe, Per Emil 193, 198, 201, 260, 264 Holsen, Bjørn 163, 181, 259 Holtan, Jon Anders 107, 109, 111 Ljødal, Amund 181 Løseth, Øystein 107, 109, 111, 112, 176, 201, Horta, Ramos 84 HPL (Himal Power Ltd.) 76 243, 252, 257 Løvåsen, Inge 72, 74 Hydro OGK 181 I M Idland, Ola 108 Magat hydropower plant (The Philippienes) Imatran Voima Oy (IVO) 48 Incentive 96 Malana Power Company 216, 217 Mark-E 147, 172 Innogy 117

Marøen, Atle 55

InterGen 170, 172

268

McKinsey 109, 111 Norwegian Ministry of Trade and Industry MDX Group 79, 80 53, 55 Merangin hydropower project (Indonesia) 83 Norwegian School of Economics 35 Mikkelsen, Bård 124, 125, 127, 136, 138, Norwegian Tibetan Mission 65 154, 157, 181, 198, 253, 255 Norwegian Watercourse and Electricity Moen, Pål 109 Board (NVE) 27, 37 Moglicë hydropower project (Turkey) 186 NRG 196, 260 Nygaard, Sverre 73, 195, 196, 198 N Nam Theun 76 Napkin Agreement 160 Office of the Auditor General of Norway 221 Naturkraft 107 Oldeide, Torgunn 181 Nærø, Ragnvald 124 Onyx Energia 83 Nilsen, Kjell Hartvedt 154 Oscarshamn Nuclear Power Plant (Sweden) NORAD 65, 76, 201 Norconsult 77 Oslo Energi 121, 124 Nordel 45, 46, 238, 243, 246 Oslo Stock Exchange 232 Nordic Hydro Power 195 Oxenstierna, Axel 160 Nordic Hydropower 79, 80, 81, 260 Øyno, Wenche Lund 72, 74 Norfund 193, 194, 198-201, 203, 204, 221-224, 226, 261-263 Norsk Kraft (Norwegian Power) 196 Pacific Hydro 211-215 Norsk Krafteksport 58, 246 Pacific War 214 Norway's College of Science and Technology PA Consulting 196 Paredes, Milagros 207 Pathet Lao 78 Norwegian Conservative Party 29 Persson, Göran 94, 100 Norwegian Exports Council 109 Peters, Stef 109, 112 Norwegian Labour Party 23, 25, 26, 37, 38, 52, 122, 127, 144 PLN (Perusahaan Listrik Negar) 83 Norwegian Ministry of Education and Powergen 117 Church Affairs 38 PreussenElektra 44, 46, 50-56, 58, 60, 61, 88, 89, 92-94, 96-98, 102, 104, 105, 107, 108, Norwegian Ministry of Finance 34, 35, 51 Norwegian Ministry of Industry and Energy 116, 120, 132, 135, 255 95, 232 Prietz, Anders 55, 154 Project Genoa 153 Norwegian Ministry of Industry and Trade 38, 39 Public Service Enterprise Group (PSEG) 207 Norwegian Ministry of Oil and Energy 28, 37, 51

Quale, Finn 39

INDEX 269

R	Statkraft Anlegg 72, 73, 76	
RAO UES (OAO Unified Energy System of	Statkraft Energy Europe 106	
Russia) 181	Statkraft Energy Nederland B.V 106	
Reepalu, Ilmar 93-95, 102, 250	Statkraft Engineering AS 71	
Renewables Directive (EU) 123, 150	Statkraft Markets GmbH 111	
Rheidol hydropower plant (Great Britain)	Statkraft SCA Vind AB 179	
157	Statkraft Western Balkans Ltd 183	
Ringhals Nuclear Power Plant (Sweden) 99	Statoil 15	
Robert Frank Gas Power Plant (Germany)	Statskraftverkene 27, 28, 65	
157, 191	Stoltenberg, Jens 100, 127, 143, 193	
Roland, Kjell 223	Suez 117	
Rørstad, Ivar 109	Sundström, Anders 100	
Rowey, Kent 73	Svartisen Hydropower Plant (Norway) 32	
Ruhrgas 117, 129, 131, 136–138, 162	Svenska Cellulosa Aktiebolaget (SCA) 179	
RWE 117	Swedbank 92, 93, 95	
Rynning-Tønnesen, Christian 40, 55, 88, 90,	Swedish National Pension Fund 97	
95, 101, 107, 108, 131, 133, 138, 148, 201,	Sydkraft 12, 87–89, 91–105, 108, 121,	
243, 246, 251, 255–257	131–136, 138, 139, 145, 148, 151, 152,	
	159, 160, 162, 230, 232, 236, 249–252,	
S	255, 256	
Samenwerkende Elektriciteits-	_	
Produktiebedrijven (SEP) 44, 46, 49-51,	T	
53, 56, 58, 60, 61, 88, 108, 244	Tata Group 218	
Sando, Morten 108	Telenor 15, 181, 237	
Schröder, Gerhard 136	Teyssen, Johannes 153, 154	
Shell 170	Theun Hinboun Hydropower Plant 63, 64,	
Sheringham Shoal wind farm (Great Britain)	73, 77, 79, 195	
179	Theun Hinboun Power Company (THPC)	
Siemens Group 170	81	
Sistema 181	Thulin, Lars Uno 38, 39, 43, 44, 46, 50, 55,	
Skagerrak Cables 42, 45, 48, 49, 57	56, 61, 65, 74, 85, 92, 93, 95, 97, 98, 101	
Skandinaviska Elverken AB 96	107, 112, 116, 118, 124, 128, 133, 135,	
Skrøvset, Eli 91	148, 160, 173, 198, 243	
Skudal, Helge 30, 40, 95, 121	Torblaa, Eivind 181	
Smøla wind farm (Norway) 173, 258	Transparency International 188	
SN Aboitiz Power 220	TVS 48	
Södra Skogsägarna 179	Tzschoppe, Jürgen 112	
Solvik, Britt 38		
Sørkraft 58		

U

Ulfsby, Øyvind 63, 65, 66, 69, 70, 72, 209, 246, 247

Ulla-Førre Hydropower Plant (Norway) 32

V

Vareberg, Terje 133, 144, 197 Vatten, Gunnar 37, 65

Vattenfall 25, 48, 52, 53, 79, 80, 89, 93, 96, 117, 118, 120, 121, 134, 195, 196, 198,

230, 233, 252, 260

VEBA 55

Veritas 193

Viking Cable 132-34, 135, 161

Viking Club 61

Villanger, Henning 55

VNG (Verbundnetz Gas) 129, 131, 145, 254,

255

Vold, Per Terje 38

W

Webjørnsen, Hans Hval 109

Weser 145

Widerøe 124

Y

Yesil Enerji 186

Yevtushenkov, Vladimir Petrovich 181

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