

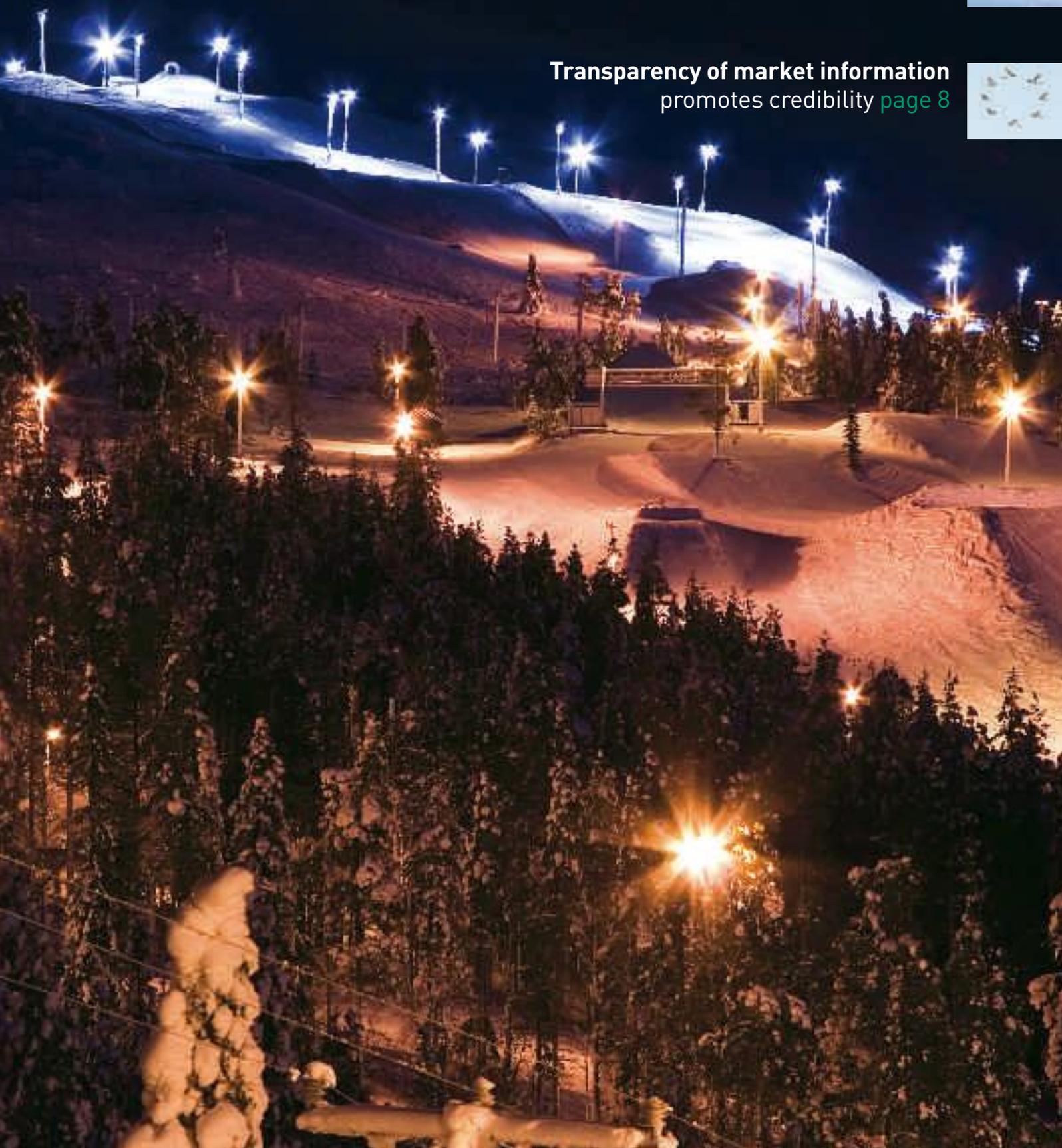


FINGRID

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to tourism in Lapland [page 4](#)



Transparency of market information
promotes credibility [page 8](#)



FINGRID

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Editorial

Competition usually cuts prices

Nordic integration of the electricity market is self-evident by now. We are heading towards a single European market, with the first stage in this journey being integration in North-Western Europe.

The motives of the integration have caused some debate at times. The main concern is whether this would lead to a higher price of electricity in Finland. The Nordic price is considered to be lower than that in Continental Europe, so a connection with that market would mean a rise in prices here and a decrease in Continental Europe.

However, this is not an exact view of the developments. Integration attempts to increase competition. The fastest and most efficient way to boost competition is to open the boundaries as effectively as possible.

There is ongoing market coupling of the Nordic market to the market in Germany and Holland, and consequently further to the Benelux countries and France. The total size of this market would be almost four times as large as the Nordic market, and it would account for one half of the entire electricity market in Europe.

However, the integration process is not a very dramatic issue. The Nordic countries and Continental Europe have been connected by a few lines even before this. Electricity has flown in both directions, as has the price impact. The objective of market coupling is to utilise the existing transmission capacity more effectively than now.

In the future, the transmission system operators (TSOs) will make their capacity available to the electricity exchanges who allocate it to the market in the same process where they settle the energy trades. This procedure, called implicit auctioning and already applied in the Nordic countries, is hence expanded to North-Western Europe. This ensures that all transmission capacity becomes available and that electricity always flows in the right direction in view of the market, i.e. from areas of lower price to areas of higher price.

Does this elevate the price of electricity in Finland and in the other Nordic countries? Market integration usually tends to decrease prices through competition. Analyses have shown that for example in Finland, the average price of electricity would have been higher in a closed market than what it has actually been thanks to the international market. Secondly, there is cross-border electricity trade only if it benefits both parties. This is why electricity is transmitted from Continental Europe to the Nordic countries if it is less expensive in the south, and vice versa.

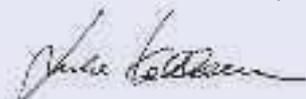
Benefits go to those national economies which can produce power at a lower price. However, Nordic electricity is not necessarily always less expensive than electricity in other countries. New production technologies are international. The prices of fuels are global, and climate obligations and prices of emission rights are pan-European. Many primary cost factors

depend to an increasing extent on solutions made elsewhere but in our own area. It is likely that the prices of electricity will fluctuate continuously between market areas. This makes trading worth while and reduces sharp price variations.

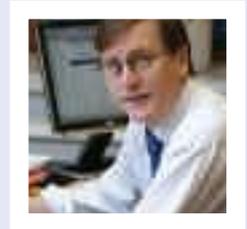
Fingrid is involved in this, because promotion of market functioning is one of our main duties. In practice, TSOs create much of the facilities that are needed by a functioning electricity market, especially in the wholesale market. Adequacy of transmission capacity, good management of congestions, transparency of market information, and fluent balance management are among these facilities.

There is very little you can do on your own. Co-operation with TSOs in other countries is therefore a necessity. This is not quite that easy in all cases. You need to reach an understanding concerning changes to established procedures, and allocation of costs or proceeds between TSOs. This has been relatively easy in the Nordic countries with only four TSOs, but on a European level there are more parties involved, at best ten times as many as around the Nordic negotiating table.

However, Fingrid has succeeded in making considerable contribution to the international market developments. It has attracted respect for its constructive and consistent approach. We will continue on this path.



Juha Kekkonen is Fingrid Oyj's Executive Vice President.





Electricity also makes
the winter wonderland work

Grid reinforcement brings new vitality to tourism in Lapland



The extremely rapid growth of tourist centres in Finnish Lapland also increases electricity consumption in the northernmost parts of Finland. In the spring, Fingrid will launch the construction of a 220 kilovolt line to ensure that this growth can continue and that the winter wonderland can provide enjoyment also in the future. After all, everything there is run by electricity.

Text by Maria Hallila ■ Photographs by Levin matkailu, Ylläksen matkailuyhdistys and FutureImageBank

According to forecasts, electricity consumption in Lapland will increase especially in the Levi, Ylläs and Rovaniemi regions. The growth figures there in recent years have been much higher than on average in Finland.

"Electricity consumption in the Kittilä region has grown by 6 to 7 per cent a year in recent years. Consumption in the Levi area alone has increased by some 10 per cent per year," says **Hannu Haase**, Managing Director of regional electricity company Rovakairan Sähkö.

Based on pending projects, he estimates that the growth will also continue in the coming years.

"There will be 200–250 new consumption connections in the Levi area per year, and the size of the connections has increased," Hannu Haase says.

"The new line being constructed from Petäjäskoski to Vajukoski will primarily serve the needs of Levi and Ylläs, the two tourist centres in Western Lapland," says Fingrid's Customer Manager **Heikki Ruhanen**.

"The new line being constructed from Petäjäskoski to Vajukoski will primarily serve the needs of Levi and Ylläs."

The route of the line will run from the Petäjäskoski substation in Rovaniemi via Kaukonen in Kittilä to the substation located at the Vajukoski hydropower station in Sodankylä.

The length of the new line is 239 kilometres, and the contractor for its first part (152 km) between Petäjäskoski and Isoniemi is Empower Oy. The procurement process for the remainder of the line is in progress. The costs of the project are about 50 million euros.

Faster than anticipated growth

As the head of an electricity producing company, Hannu Haase welcomes the rapid boom in the tourist business. Alongside increasing consumption, the new connections will improve the operating degree of capital invest-



Photograph by Pekka Aho.

"Electricity consumption in the Levi area increases by 10 per cent per year," says Hannu Haase, Managing Director of Rovakairan Sähkö.

ments made and bring employment, tax revenues and electricity transmission revenues to the region.

"But there have also been considerable capital investments in this region: three 110 kilovolt substations in 11 years," Hannu Haase says.

He thinks that the speed of growth in the region also took Fingrid by surprise.

"The new 220 kilovolt line will be ready at the last minute to secure

the sufficiency of transmission capacity. Capacity problems only manifest themselves in extraordinary fault situations, which we have luckily not had. The critical situations have not been reflected in the customers," Hannu Haase says.

He hopes that the regional grid planning process launched by Fingrid will improve the reliability of consumption forecasts.

"It is difficult to consider the slow-

ness of the permit procedures for transmission lines and anticipate issues such as launching of new mines. These types of factors impose quite a challenge on those planning the transmission grid," Hannu Haase admits.

"If the 200-kilometre 110 kilovolt line Meltaus-Vajukoski had been a part of the nation-wide grid, the need for the new line might have surfaced a little earlier," he says.

Growth in the tourist centres of Lapland



The fells of Levi and Ylläs together with their surroundings are among the fastest growing tourist centres in Lapland. In this century, they have brought more accommodation, services, new winter tourist attractions – and also jobs – year by year.

Accommodation capacity in Levi has doubled in recent years. It can now offer accommodation for 20,000 persons, and the figure is growing.

"In 10 years, there will be 35,000 beds here," says **Jussi Töyrylä**, Managing Director of Levin Matkailu Oy, the joint tourist marketing company in the region.

The number of those spending their holidays in Levi has grown in the same proportion with accommodation capacity. At the beginning of this millennium, the total number was approx. 1,400,000, and the limit of 2 million tourists was reached in 2006.

Jussi Töyrylä can show downward curves only when presenting the unemployment figures of Kittilä, where Levi is located.

"In 2001, the local unemployment rate was about 20 per cent. In five years, it decreased by six percentage units, and is now about 14 per cent."

According to Jussi Töyrylä, the improved employment situation is largely due to tourism, and tourism will continue to bring work to Kittilä also in the future: the tour-

ist projects planned for 2008–2009 are expected to create 300 new jobs.

The growth figures in tourism in Ylläs resemble those of Levi.

"The ongoing season continues the growth trend of the past years. By the end of November 2007, the number of tourists using accommodation services had grown by more than 10 per cent from 2006. With foreign tourists, the growth rate has been more than 40 per cent," says **Tiina Walin-Jatkola**, Managing Director of the tourist association of Ylläs.

The accommodation capacity of Ylläs is now 20,000 beds. In 2007, the municipality of Kolari granted a record number of 283 new building permits.

In this season, facilities such as new restaurant, accommodation and skiing services will be introduced in Ylläs.

"The development efforts will continue. In the coming years, the annual investments in Ylläs will total more than 100 million euros. The local players are committed to jointly making Ylläs an even better international holiday resort. The target is to triple the number of tourists in more than 10 years to about 2 million overnight stays. One out of two tourists will come from outside Finland," Tiina Walin-Jatkola says. ■

Mining also adds to consumption

Electricity consumption in Kolari, which is located beside Kittilä, has grown by 4 per cent per year, focusing on the tourist centres of Ylläs.

“The increasing number of building permits and the high growth objectives set on the region forecast an increase in electricity consumption in the future, too. Active mining industry in the region also has the same effect,” says **Sauli Kaulanen**, Managing Director of Tornionlaakson Sähkö, a regional electricity company, and Kittilän Alueverkko, a regional network company.

“Production will start in the Suurikuusikko gold mine in Kittilä in the summer, which will increase electricity transmission in the regional network by one third. If the mining projects planned for Kolari become reality, electricity consumption in Kolari would grow many times over,” Sauli Kaulanen says.

“The mine will also add to the basic consumption; it will bring more permanent housing and services,” Hannu Haase points out.

Both men say that undisturbed electricity distribution is a quintessential requirement for the development of both tourism and mining.



Photograph by Mikko Hyvärinen

Managing Director Sauli Kaulanen, with Tornionlaakson Sähkö's Pello substation at the background.



Sauli Kaulanen rates Fingrid's cooperation with the regional network companies with an excellent grade.

Hannu Haase also considers that the Finnish transmission system operator has succeeded well in its crucial duty: the price and quality of the transmission service are right.

Line project ready in three years

The construction project for the Petäjaskoski-Vajukoski line will extend over three years, and Fingrid will carry it out in two stages.

In the first stage, a line will be built from Petäjaskoski via Valajaskoski to the Isoniemi substation being planned north of Kaukonen in Kittilä. This line is due to be complete in 2009.

“Competitive bidding for the construction project for the 220/110 kilovolt power transformer to be placed at Isoniemi is in progress,” Heikki Ruhanen says.

The second stage of the line, extending to Vajukoski, will be brought to conclusion by the end of 2010.

Route solutions mitigate environmental impacts

The environmental impact assessment (EIA) for the project was completed in March 2007. According to

Fingrid's Project Manager **Ritva Laine**, the planning and selection of the line route was a demanding task.

“Specifications were made to the plans so as to mitigate disadvantages revealed by the EIA process, concerning housing and the natural environment as well as valuable scenic areas and protected areas,” she says.

“Similarly, special guidelines must be followed in construction work in these areas with delicate vegetation. As an example, construction work in some areas must take place in the winter.”

Between Petäjaskoski and Kaukonen, the new transmission line will be located parallel with existing transmission lines. From Kaukonen onwards, over a distance of some 60 kilometres, the line will be placed in a new right-of-way, after which it will run beside existing transmission lines.

According to Ritva Laine, combining the route options presented in EIA in the Hormakumpu area corresponds to the requirements which most of the providers of feedback highlighted during the EIA process.

The website of the project (in Finnish) can be found at www.fingrid.fi



Nordic countries showing the way in the transparency of electricity market information



Fingrid's team for the development of market information transparency comprises (from the left) Pasi Lehikoinen, Juha Hiekkala, Kaija Niskala, Taija Tolonen ja Jyrki Uusitalo. They characterise the real-time state of the Finnish power, shown on Fingrid's website, as the "start of the day" for many electricity market parties.

The European electricity market, which is undergoing great changes, is in need of forerunners. The Nordic transmission system operators have decided to provide an example in the way electricity market information is made more transparent. Nordel's working group focusing on this issue is preparing reforms which will render the Nordic electricity market even more transparent this year.

Text by Maria Hallila ■ Photographs by Juhani Eskelinen and Vastavalo

Improving the transparency of market information to a level which serves as an example to others is one of the focal goals in the strategy programme of Nordel, the organisation of the Nordic transmission system operators (TSOs). In order to achieve this objective, Nordel appointed a working group under Fingrid's leadership at the end of 2007. "This task was entrusted with the Finnish TSO, because we have recently spoken strongly for increased transparency of market information," says **Juha Hiekkala**, Fingrid's Development Manager and Chairman of the working group.

Information is a vital tool

Juha Hiekkala compares the importance of the amount and quality of market information for the electricity market to the operating conditions of the stock market.

"The basic rule in both markets is that information must be available to all players quickly, easily, and in an understandable and uniform format. Information also needs to be clear, unambiguous and available from a single location."

According to Juha Hiekkala, information is a vital tool not only for the market players, analysts and traders, but also to authorities and the media. Since the end of the 1990s, Nord Pool's

website www.npspot.com has served as the shared information source for the Nordic market area.

It contains all country-specific information which is essential to the functioning of the market, such as up-to-date information on available transmission capacity, its operating degree, electricity production and water reservoir situations, electricity consumption and short-term changes in it, and regional price of electricity in the electricity exchange.

The TSOs have primary responsibility for supplying market information to Nord Pool Spot. According to Juha Hiekkala, this is a highly obligating responsibility.

"But you can only achieve transparency through joint efforts, involving not only the TSOs but also the electricity market players, regulators and the electricity exchange," he points out.

High Nordic objectives

In other words, it seems that the amount and quality of market information in the Nordic electricity market is right. How could the availability and transparency of information be enhanced further – and why?

According to Juha Hiekkala, the main requirements in view of transparency of information can be found in the report of ERGEG, the European Regulators' Group for Electricity and Gas, dated last September. In the report, the energy market authorities in the Nordic countries, Germany and Po-

land give an interpretation of the EU regulations which is broader than before.

"According to that report, the present model contains quite a few issues requiring improvements, but Nordel has set the target even higher: we aim to exceed the level of requirements imposed by energy market authorities," Juha Hiekkala says.

He considers it important that reasoning concerning developments also highlights the significance of such information which has not been published to date but which maybe should be published.

"The working group attempts to come up with new viewpoints concerning information that is published. The goal is that the market players are given more opportunities to utilise the available information," he points out.

Transparency promotes credibility

According to Juha Hiekkala, there is one overwhelming justification for enhanced market information transparency: credibility and reliability of price of electricity.

"Information on how the price of electricity is composed must be in an intelligible format and openly available. There is also a need for information which helps to understand why the market works as it does at any given moment. Distrust arises from hidden information and lack of information," Juha Hiekkala summarises.

"When all market players know the

rules of the game and when market information is transparent, the market regulates itself."

He considers that such "market-focused control" based on the transparency of information and operations is especially well suited to the Nordic approach. He adds that it is also in line with the general approach emphasising transparency and openness, which has been endorsed by the Nordic countries within the EU also in issues other than ones related to the electricity market.

"By attending to transparent information and operations, small countries can promote equal operating conditions and limit the dominance of large nations."

This is why the Nordic approach has gained considerable leverage in the development of the European electricity market. According to Juha Hiekkala, this leverage is much greater than could be expected on the basis of Nordic electricity consumption or voting practice in the EU.

He says that Nordel's objective to raise the transparency of its market information as an example to the rest of Europe is well adapted to this set-up. The position of a forerunner obliges. "We need to develop constantly. If we do not make progress, we lose the role of a trailblazer," Juha Hiekkala says.

Further information on the topic for example at: www.npspot.com, www.fingrid.fi, www.etsovista.org, www.ergeg.org

Fingrid is also developing its own website

In addition to information supplied to a shared market information site, the Nordic TSOs also convey primary market facts on their own websites.

"This information is partly the same as the one available on Nord Pool Spot's website, but there is also other information of interest to the market. Fingrid's website provides market information in the Finnish language, too," says Planning Manager **Kaija Niskala**.

Fingrid has carried out internal development work so as to enhance the transparency of market information. Market information is published in co-operation between sev-

eral functions. The goal is that all necessary information is produced punctually and in the correct format both to Fingrid's own and inter-Nordic websites.

Fingrid has been at the forefront of electronic communications in market information, and in the spring the company will take another leap forward when it opens its revised website.

"In addition to the information available at present, the new website will provide for example hourly information produced by Fingrid, both in graphs for optional time frames and in easily selected file formats," Kaija Niskala says. ■

ENTSO,

European electricity market integration is achieving concrete results. The Nordic market will be coupled with Germany this year. In 2009, about half of Europe will be of a single market area. The goal is to establish an efficient wholesale market for electricity and to create a high system security in Europe. ENTSO, a new organisation, is showing the way for this vision.

Pierre Bornard heads the working group which is to prepare ENTSO, the new organisation of European transmission system operators.



Text by Tiina Miettinen

There has been much talk about the integration of the European electricity market, and transmission system operators (TSOs) have carried out several concrete measures to expedite these developments. Market integration was launched through regional co-operation, the best example being Nordel.

At present, the trend is towards a pan-European market. The integration processes are not progressing in stages but side by side. The TSOs are working simultaneously both for regional markets and a single European market.

“Integration is now taking long steps. In one year, half of Europe will comprise a single electricity market area. This trend is promoted by financial aspects; through integration we can achieve a considerably more efficient market,” said Fingrid’s President **Jukka Ruusunen** in a working seminar arranged by Nordel.

Co-operation between TSOs has attracted much criticism, because it has been considered that market integration is progressing much too slowly. “Even though the Nordic countries, among others, have achieved much in TSO co-operation over the past 10 years, there is still much work left in eliminating bottlenecks in the southern parts of the Nordic countries.”

“Integration is now taking long steps. In one year, half of Europe will comprise a single electricity market area.”

new driving force in electricity market development

Much interest

The third legislative package on energy published by the European Commission last September is a concrete indication of the prevailing interest and desire to promote electricity market integration. The package contains many regulations affecting TSOs. Earlier voluntary co-operation is giving way to detailed and binding agreements concerning both market rules and technical rules.

The Commission proposes the establishment of ENTSO (European Network of Transmission System Operators), which would be given considerable authority. ENTSO would prepare suggestions for decision by the Commission on issues such as trading and balance management rules, grid operation, and capacity allocation.

According to the view of the Commission, ENTSO would co-ordinate grid operation, draw up market and technical rules, and monitor their application. Other duties listed by the Commission include planning of grid investments on a European level and market information reporting. The main duties can be categorised under larger issues such as grid development, system responsibility, market matters, and R&D.

All in all, this is a significant reform. ENTSO's prime objective would be to come up with a shared view of TSOs, which poses challenges for decision-making and implementation of decisions within the organisation. Regional TSO co-operation would not cease but it would rather become an essential component of ENTSO.

Preparations well under way

The heads of European TSOs have already established a working group to prepare the new organisation. One member of this group is Fingrid's President Jukka Ruusunen. The group is headed by **Pierre Bornard**, the French Chairman of ETSO's Steering Committee, who visited Nordel's seminar in Finland. Mr Bornard spoke fervently for increasingly closer co-operation between TSOs.

"The goal of market integration is to achieve as low prices as possible, which is why the EU's energy package involves great expectations. ENTSO enables a single shared TSO view to serve as the basis for market development and grid operation development," Pierre Bornard says.

"It's too bad that ownership unbundling is the most talked-about issue and that the Commission proposes an extreme ownership model. Now we don't see the forest for the trees. There should be much more discussion on ENTSO and on ACER, the authority that supervises ENTSO."

"First of all, ENTSO should be given authority. If not, we cannot respond to the claim that TSOs are not doing enough to promote the market mechanisms," Pierre Bornard says.

"It is now time to work out a new ENTSO from a voluntary basis. If nothing is done, there will be political decisions concerning this matter in any case," he says. He adds that TSOs now have to show what they can do.

"It is very important to have consultation with decision-makers and stakeholders in this matter. The TSOs

"The expanding market provides everyone with at least a cheap insurance of security of supply."

are much too introvert, and they do not discuss with decision-makers sufficiently."

Merger of organisations

The new ENTSO is due to replace all present TSO organisations ETSO, Nordel, UCTE as well as regional organisations in the Baltic countries, Great Britain and Ireland.

The objective is to establish the new organisation as soon as possible, before the implementation of the third legislative package of the European Commission. The establishing rules should be ready by the summer. The TSOs want to show that they are prepared for increasingly active and closer market integration.

"The Nordic market will be joined with the Benelux countries, France and Germany next year. The rest of Europe will follow suit. I can't give exact dates, but I believe that it will happen quite soon," Pierre Bornard says.

"It is the consumers who ultimately benefit from all this. The larger the market, the better the efficiency. Nobody knows what will happen to the price of electricity. In any case, the expanding market provides everyone with at least a cheap insurance of security of supply," Pierre Bornard contemplates on the future outlook.



Pertti Kuronen says that the ongoing specification of the nation-wide grid and regional networks constitutes important groundwork for the subsequent contract period.

NEW CONTRACT PERIOD

in grid service

Terms in force for the next 4 years

The new terms for Fingrid's grid service contract came into force at the beginning of 2008. Fingrid's rapidly growing capital investments in the grid are reflected in moderate increases in the transmission tariff. The new contracts also specify the liabilities for damages by the parties.

Text by Maria Hallila ■ Photographs by Juhani Eskelinen, sxc and FutureImageBank

The contract period for the grid service is now 4 years for the first time. By extending the validity period of the customer contracts by one year, the contract period is now the same as the supervision period of the Finnish Energy Market Authority.

Projects benefiting the market

The new contract period brought a raise of 4.5 per cent in the grid transmission fee. This rise in the price was the first in Fingrid's 10-year history, and it is based on the company's extensive capital expenditure projects in the near future.

"In recent years, Fingrid has used 40-50 million euros per year to maintain and develop the transmission reliability of the grid. In line with the new projects, this amount will quickly double and even triple," says **Pertti Kuronen**, who is responsible for the grid service within Fingrid.

According to him, the ongoing and future construction and modernisation projects in the Finnish grid will improve the functioning of the electricity market. This is why the resulting rise in the transmission price has been received with understanding by Fingrid's customers.

"The transmission grid is the market place for electricity trade, and it is Fingrid's objective to contribute to obstacle-free market functioning. Improving the operation possibilities of the grid is remunerative to the business of our customers: each euro invested comes back many times over," Pertti Kuronen points out.

Specifications in liabilities for damages

The contract terms also contain new specifications and limitations, the most important ones of which concern the liabilities for damages between

the contracting parties. The maximum amount of Fingrid's liability for damages is 10 million euros per year, and a customer's maximum liability is 0.5 million euros per year.

The liability for damages was expanded to cover material damage and personal injury inflicted on electricity users connected to a regional network. Pertti Kuronen says that during the preparation of the contract, Fingrid emphasised the importance of making preparations for potential disturbances.

"There is no such thing as uninterrupted electricity supply. Both producers and consumers must be prepared for breaks in supply," Pertti Kuronen says.

Outlining of networks

Even though the new contract terms have only just entered into force, Fin-



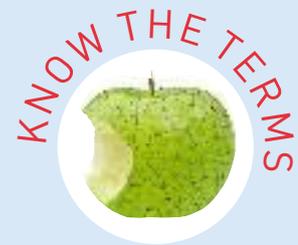
grid is already laying the foundation for the subsequent contract period. "We continue the regional network analyses which specify the boundaries between the nation-wide grid and regional networks," Pertti Kuronen states. This work is important, because as the grid evolves constantly, the role of some parts of the grid may change; a line belonging to a regional network may obtain duties of a main grid line and vice versa.

The planning of the tariff for the subsequent contract period will commence in 2009, and in 2010 Fingrid will already have an idea of both the level of the new tariff and of its potential structural changes. "In accordance with our principles, customers have a major role in the preparation of the new contract terms. These are built through negotiations and discussions, in close co-operation," Pertti Kuronen says.

Unit prices of grid service during contract period 2008–2011

EUR/MWh	2008	2009	2010	2011
consumption, winter period	2.16	2.28	2.40	2.52
consumption, other times	1.08	1.14	1.20	1.26
use of grid, input into grid	0.30	0.30	0.30	0.30
use of grid, output from grid	0.66	0.68	0.70	0.72

Connection point fee	2008	2009	2010	2011
€/month/connection point	1000	1000	1000	1000



This column presents and defines new terminology in the electricity transmission business.

Market coupling

■ What does it mean?

The term *market coupling* is associated with the expansion of the electricity market.

European market coupling is based on the objective of the European Union to open the electricity market in stages to cover the entire area of the EU. As part of this development, electricity exchanges and transmission system operators (TSOs) in the Nordic countries and Continental Europe have launched joint projects. As a result, the electricity market area will expand to encompass the Nordic countries and in practice also Germany, Belgium, Holland and France.

The market coupling project between the Nordic countries and Germany has also progressed favourably. A new company, European Market Coupling Company, has been established for this project. It is due to launch operations in June 2008. The owners of the company include the Nordic electricity exchange Nord Pool Spot, the German exchange EEX and TSOs in Denmark and Germany.

Another project integrating the market areas is the world's longest (580 km) submarine cable NorNed between Norway and Holland. It will be commissioned in the spring. The transmission capacity of this cable is 600 megawatts. The objective is to have this new cable in market coupling operation by the end of this year.

The foremost benefits of market coupling include increased efficiency and smaller price peaks, achieved through larger market areas. As is well known, the larger the market, the better it works.

M.H.

Expert: Karri Mäkelä, Director of Nord Pool Finland Oy

Electricity imports from Russia to European trading time

During 2007, Fingrid negotiated with the Russian grid operator and system operator on a new type of an agreement model, used for ensuring electricity transmission between Finland and Russia. The new thing in the agreements which came into effect at the beginning of this year is a change in the overall agreement structure, which now creates facilities for increasingly market-focused efforts in the future. The inter-system agreement for the 400 kV transmission connections was signed for 10 years, and the separate agreements on operation and capacity allocation for one year.

Text by Maarit Kauniskangas ■ Photograph by Juhani Eskelinen



Fingrid's Jarno Sederlund is responsible for transmission service contracts for electricity imported from Russia.

Greater changes are to be expected in 2009. If enabled by developments in the Russian electricity market, these changes will render imports of electricity more market-focused.

"Russia is undergoing an electricity market reform, and the market is gradually opening up. More than half of all electricity exported from Russia is imported into Finland and the Nordic electricity market. The players have always been interested in Russian electricity, and the range of importers has been very international over the years," says Fingrid's Customer Manager **Jarno Sederlund**.

Consequently, Fingrid and the Russian parties have established a working group to develop the market-oriented imports on the cross-border connection. The short-term objective is that the pan-European trading day used by the Nordic electricity exchange Nord Pool Spot would be applied to electricity imports from Rus-

sia. Market players who import electricity on the cross-border connection could place their import orders directly through the spot market of the Nordic electricity exchange by considering the spot market price used in the Nordic electricity exchange. This would also be one step in a direction where the Russian electricity market would become closer to the single electricity market in Europe, planned by the European Union.

Electricity from Finland to Russia?

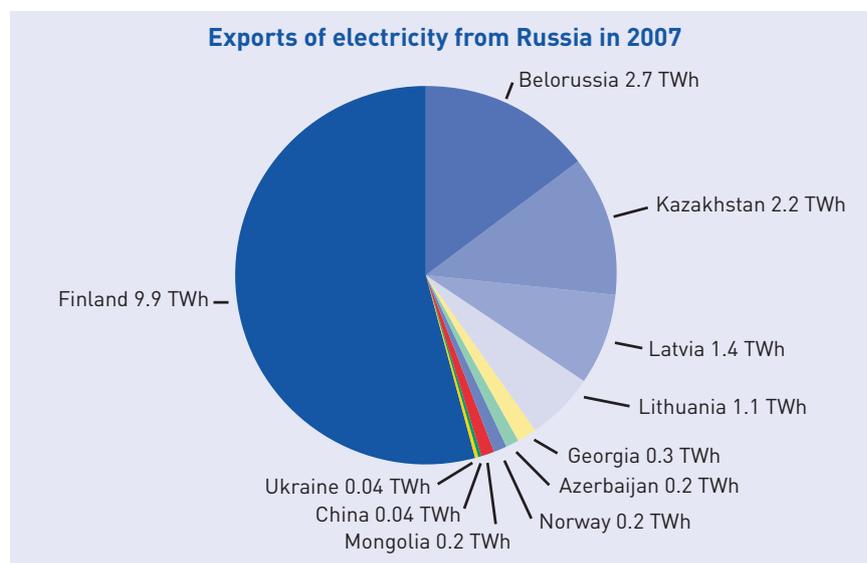
Russians are interested in importing electricity from Finland. However, at present electricity imports from Finland to Russia are prevented by the fact that the transmission connection only works in one direction, from Russia to Finland. The TSOs in the two

countries have established a Finnish-Russian working group to draw up a technical analysis of how the present connection could be converted partly into a two-way link.

"The transmission of electric energy from Finland to Russia calls for the creation of new market-oriented trading principles," Jarno Sederlund says.

Developments in electricity trade between Finland and Russia have also been taken into account in the development plan for the Finnish grid, such as in the Huutokoski-Yllickälä line project, which contributes to reliable electricity transmission in Eastern Finland and on the cross-border connections from Russia.

Both political and economic factors influence the opening of the Russian electricity market. However, the electricity market reform in Russia is under way, there is already day ahead trade in the wholesale market under certain restrictions, and objectives for the future developments have been defined. Still, it is difficult to say how quickly the Russian market will open. If the Russian electricity market evolves in the desired direction, an agreement on more market-focused trading in electricity imports could very well become effective at the beginning of 2009.



Exports of electricity from Russia in 2007 totalled 19.1 TWh (2006: 20.5 TWh)

Nordel planning new grid reinforcements

Nordel is already making preparations for the situation after 2015 in terms of grid planning. In its most recent system development plan, the organisation of the Nordic transmission system operators (TSOs) introduces four new line project proposals: the SouthWest link between Southern Sweden and Norway, and lines in Central and Northern Norway, moreover, Nordel recommends the reinforcement of AC links between Finland and Sweden north of the Gulf of Bothnia⁹.

In its previous system development plan published in 2004 Nordel proposed five priority cross-sections. Four of these are now in a technical planning or construction phase. The new submarine cable link between Finland and Sweden, Fenno-Skan 2¹ will be ready in 2011, the South Link⁴ between Central and Southern Sweden with a new proposed branch to Norway in about 2013, the Nea-Järpströmmen³ connection between Sweden and Norway in 2009, and the cable connection across Great Belt² in Denmark in 2010.

A letter of intent has also been concluded of the fifth project prioritised by Nordel, the submarine cable connection⁵ between Jutland and Southern Norway. The final decision concerning this is expected in May.

The system development work extending until 2025 was launched with in Nordel in the winter of 2006–2007. The analyses are based on electricity consumption and production outlook in the Nordic countries until 2015 and on alternative scenarios further until 2025. Other issues considered in the analyses include climate matters, market integration, and national decisions concerning transmission system development.

The objective of the work is to find those grid reinforcement projects which, if implemented in a cost ef-

fective manner, would give the maximum benefit to the players in the Nordic electricity market area.

Based on the analyses, Nordel has decided to recommend further analyses into the most important reinforcement needs. The selected projects are located in the following areas: on the west coast of Sweden and in the corresponding area in Norway (SouthWest link), and from there further to Oslo and its environment⁶.

Another suggestion concerns an area in Central Norway⁷ located on the price area boundary within Norway, forming a main section between the reinforcements proposed earlier.

The third recommended project is the reinforcement of the system in Norway and Northern Finland⁸. Here, Nordel prioritises further analyses of the Balsfjord-Hammerfest project in Norway.

Nordel also recommends reinforcing the transmission connections between the Nordic countries and Continental Europe as well as between the Nordic countries and the Baltic states. According to Nordel, the following projects would give the highest overall benefits: Norway–Continental Europe or Great Britain, Western Denmark–Continental Europe, Sweden and Eastern Denmark–Continental Europe. Reinforcement of connections from Finland and Sweden to the Baltic countries is also suggested.

Fingrid and the Russian TSO Federal Grid Company are surveying the modification of one HVDC bridge in Vyborg so that exports of electricity to Russia could be possible.

M. H.

Expert: Pertti Kuronen, member of Nordel's Planning Committee and Fingrid's Senior Vice President responsible for grid service.

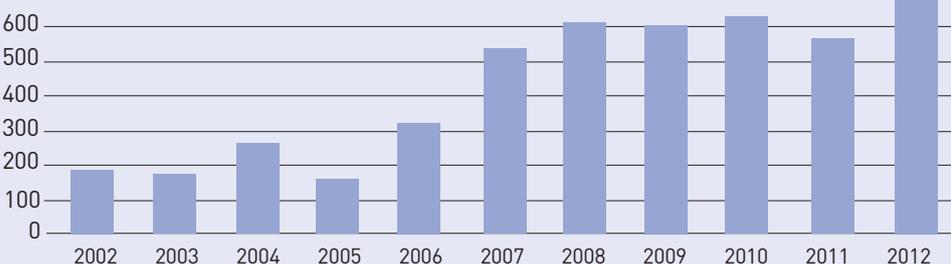


— Reinforcements proposed by Nordel in 2004
— New internal reinforcements proposed by Nordel
- - - Potential new external connections



National grid reinforcements supporting the transmission capacity of the Nordic system
○ decided or planned ○ preliminary plan

Nordic* capital investments in Nordel's transmission grid in 2002–2012, million euros



*Excluding Iceland

$$P = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\frac{U-U_D}{\sigma}} e^{-\frac{1}{2}x^2} dx$$

Jarmo Elovaara MASTERS THE FACTS

Jarmo Elovaara characterises himself as an expert in a narrow area. This self-critical assessment soon turns out to be superficial, because alongside his own area of expertise, the fields of interest of this senior specialist in electricity transmission technology cover the most varied topics. Information interests and inspires him.

Text by Maria Hallila ■ Photograph by Juhani Eskelinen

Fact outdoes fiction in the list of **Jarmo Elovaara's** interests. According to a long-term colleague of his, Jarmo Elovaara has a special filing system in his brains.

"After just a single visit in some town, he could very well serve as a tourist guide there," the colleague says.

For Jarmo Elovaara, reading is a way of relaxation, and books often end up in his hands by coincidence. Curiosity may be aroused by special topics, like most recently by the Chinese sailing around the globe before Columbus. A book on this topic caught his eyes in a local book shop on a trip to China.

"Cell biology, space science, history of science..." he lists issues which he has grown to like.

In line with age, he has also noticed that history fascinates him even more than before.

"I'm interested in biographies, and in them especially in details which broaden the concise history view provided by school education."

Three-phase conductor lit the spark

In his own field, Jarmo Elovaara is among the most valued experts in Finland. The Finnish distinction of "professori" granted to him last year is an indication of his valuable contribution to Finnish electricity transmission technology and expertise.

Being a senior specialist in Fingrid, he has an opportunity to share, utilise and augment his own knowledge. The duties and challenges are inspiring, but he does not wish to characterise his work as a mission.

"I embarked on power technology because of interest which was aroused by chance rather than a specific calling," he says.

"For someone with a classical education, a career as a lawyer, theologian or doctor would have been a more natural choice. However, my career choice was

"There was a time when Finnish expertise in electricity transmission technology rested on Fingrid alone," says Jarmo Elovaara. He believes that the five-year professorship donated by Fingrid to Helsinki University of Technology will bring good results in the coming years.

Jarmo Elovaara and the normal distribution function, which is used in describing the probability distribution of voltage strength.

influenced by a brochure I got hold of haphazardly, encouraging studies in electrical engineering.”

The brochure contained an interesting picture of a three-phase line, which provided the spark of interest.

In order to be able to get into the Helsinki University of Technology, he had to study mathematics on his own beyond the syllabus of his classical school. He chose power transmission engineering, because “radio technology and telecommunications was considered as the more demanding of the two in those days”.

Teacher's desk and international arenas

Jarmo Elovaara considers meeting Professor **Veikko Palva** as the most significant turning point in his career. This marked the beginning of co-operation as a result of which he held the temporary position of Professor in power transmission engineering at the Helsinki University of Technology in the 1970s.

Veikko Palva also led the young acting Professor to international research in the field as he became member of Cigre, International Council on Large Electric Systems.

Within Cigre, Jarmo Elovaara has worked actively for example in committees studying overvoltages, insulation co-ordination and substation technology. In fact, he served as the secretary of one study committee for 10 years. At present, he is a member of the Administrative Council of Cigre and the chairman of the Finnish National Committee of Cigre and of the Nordic co-operation organisation.

“I have had a chance to work with the best experts in the world. Cigre is the best forum for learning in our field, a vanguard position where you can see what is going on in the world and where you can establish indispensable contact networks,” he says.

Jarmo Elovaara considers that international efforts are vital for the development of his field, his own specialist's career, and also for Fingrid. It is an essential way to keep up to date.

Personal contacts can provide information which is not released in official interaction between enterprises.

According to him, international networking brings concrete benefits. One good example of this was the engineering and construction of the Feno-Skan 1 submarine cable between

“I have had a chance to work with the best experts in the world. Cigre is the best forum for learning in our field, a vanguard position where you can see what is going on in the world and where you can establish indispensable contact networks.”

Finland and Sweden, which was carried out by Imatran Voima together with Vattenfall.

“We did not have experience of a project of this type, and our international contact network turned out to be invaluable in the various stages of the work.”

Book learning and public education

Writing of textbooks has been one significant sideline relating to teaching in Jarmo Elovaara's career. His list of publications is respectable. The wide spectrum of publications encompasses topics such as network calculation, overvoltages, insulation co-ordination, reactive power compensation, electrical safety, geomagnetically induced currents, and magnitudes of electromagnetic fields and their potential health impacts.

He thinks that two works stand out from the others, because they have become best sellers and basic books in the field. The first one of them is a textbook written by him together with **Yrjö Laiho** in 1976, “Sähkölaitostekniikan perusteet” (Introduction to power transmission engineering), which is still published as an updated version.

Another textbook which has attained an established status is “Suurjännitetekniikka” (High-voltage technology), written with a team of five people and published in 1996.

In recent years, Jarmo Elovaara's expertise has also enjoyed increasing demand outside electric power engineering. People have become more

concerned over the potential health impacts of electromagnetic fields, and there has been more discussion on this topic.

“I talk about this thing with people phoning from different parts of Finland at least once a week. Such phone calls may take up to one hour, because

anxiety and fear disturb some people's lives seriously,” Jarmo Elovaara says.

According to him, the increased need for information on things which the general public does not know is one example of the way in which the operating environment of the transmission system operator is becoming more challenging.

“There is need for expertise – to an ever increasing extent,” says Jarmo Elovaara. In order to guarantee continued expertise, Fingrid donated a professorship in electricity transmission technology to the Helsinki University of Technology a couple of years ago. Jarmo Elovaara believes that this input will yield concrete results in a few years.

Coincidence has a role in life

Looking back, it seems that Jarmo Elovaara's career was well planned and deliberated. However, he says that chance has also played some role in his life.

One thing that may have had decisive significance was the fact that he did not get the position he had applied for at the electric utility of the City of Turku at the turn of the 1960s and 1970s. This was so because he had not done his military service yet.

“If I had got the job, I probably would not have moved from Turku. I certainly would not have achieved as much in academic respects, even though my life might be alright otherwise,” he says with a smile.

Balance management harmonisation progressing smoothly



The new Nordic balance management model due to enter into force at the beginning of 2009 will pave the way for a shared electricity market which works even better than now. Balance management harmonisation is progressing according to plan. After inter-Nordic developments, the process has now moved over to national implementation.

Text by Pasi Aho ■ Photograph by SXC

Nordel's working group which has discussed the Nordic harmonisation of balance management published its final report (Proposed Principles for Common Balance Management) on Nordel's website on 16 November 2007. The following principles and procedures comprise the main points of the report and also issues agreed within Nordel:

- Preliminary percentages for the allocation of reserve costs as well as cost components for each transmission system operator (TSO).
- Harmonisation of the fixed monthly fee of balance management so that the Danish Energinet.dk, Swedish Svenska Kraftnät and Fingrid apply a monthly fee of 200 euros and Statnett in Norway a monthly fee of 60 euros. Statnett's lower monthly fee is based on the fact that there are many times more balance providers in Norway than in the other countries.
- The principles of the balances and price models for balance power were reviewed.
- Use of marginal pricing in the pricing of regulation power in hours with both upregulation and downregulation.
- Reporting of information (production plans and notices of fixed trans-

actions) to balance settlement before the beginning of the specific operating hour.

- By the beginning of 2009, Fingrid and Svenska Kraftnät aim to reach a situation where production would not be netted by consumption in industrial networks, but production and consumption would be handled in different balances in accordance with the principles of the agreed model.
- The regulation power market will use the euro as the currency so that the players can submit their bids using national currencies, but before the beginning of the specific operating hour the prices of all bids are converted into euros and only then put into a price order. The realised regulation prices are also first specified in euros and only then, if necessary, converted into national currencies.
- The actual regulation power volumes are monitored on a national basis.
- The issues agreed upon jointly will be compiled into a part of the Nordic Grid Code.

In Finland, the process of agreeing on national implementation has progressed well since last autumn. The members of the Balance Service Forum, which was established for this purpose, jointly reached an understand-

ing with Fingrid on the main principles of balance management.

The most demanding issues on the agenda of the working group included questions relating to the reporting of production balance, handling of production and consumption in industrial networks, and balance settlement of a shared power plant in the new model.

The efforts of the working group resulted in a memo concerning the reporting and balance settlement of production and consumption balance as of 1 January 2009. The memo will serve as the basis as Fingrid is reviewing the production and consumption balances with the balance providers during this year.

The other changes pertaining to balance management are also carried forward swiftly during this spring by Fingrid and, hopefully, also by the balance providers. Crucial issues include information system changes relating to the new model as well as reporting needs.

Fingrid has also started drafting the new balance service agreement. The goal is to have the agreement for confirmation by the Energy Market Authority in good time in the autumn.



Fingrid 2007 in brief

Electricity consumption in Finland in 2007 totalled 90.3 terawatt hours (90 terawatt hours in 2006), of which Fingrid transmitted 68.4 terawatt hours in its grid. Electricity consumption increased by 0.3 per cent on the previous year. An all-time record, 14,914 megawatts, was reached in electricity consumption in February.

Electricity transmissions between Finland and Sweden in early 2007 consisted mainly of imports into Finland. Exports from Finland became dominant in the autumn. The Estlink connection between Finland and Estonia was commissioned for commercial operation in early January. Transmissions on this link have mainly comprised imports into Finland. Transmission capacity between Finland and Russia was reserved in full.

Fingrid's gross capital expenditure in 2007 was 79 million euros (70 million euros in 2006). Of this amount, 67 million euros were used for the transmission grid and 7 million euros for reserve power. IT-related capital expenditure was approx. 5 million euros.

Revenue of the Fingrid Group in 2007 was 335 million euros (351 million euros). Grid revenue decreased as a result of the 5 per cent tariff reduction carried out at the beginning of 2007. Electricity transmissions in Fingrid's grid increased slightly. Revenue from the sales of balance power decreased on the previous year to 64 (95) million euros. Depreciation costs, reserve power costs and costs of loss energy purchases increased. Moreover, the repair of the subsea cable between Finland and Sweden added to the costs.

The operating profit of the Group was 91 (80) million euros, which contains 12 (-18) million euros of positive change in the fair value of electricity derivatives. Operating profit excluding the change in the fair value of electricity derivatives was 79 (98) million euros. The Group's profit for the year was 42 (38) million euros.

The return on investment was 7.3 (6.4) per cent and the return on equity 10.3 (10.4) per cent.

The equity ratio was 27.5 (25.5) per cent at the end of the review period.

The financial position of the Group continued to be good.

The Fingrid Group employed 248 persons, including temporary employees, at the end of 2007. The corresponding figure a year before was 242.

There have been no material events or changes in Fingrid's business or financial situation after the closing of the financial year. The financial result for 2008 is expected to decrease somewhat on 2007 as a result of increased expenses. The grid tariff was raised by 4.5 per cent at the beginning of 2008.

Fingrid will continue the implementation of its extensive capital expenditure programme. The capital expenditure will grow from an annual level of approx. 40 million euros to more than 100 million euros per year in the coming years. The capital expenditure will grow because electricity consumption is increasing, the ageing transmission grid needs to be renewed, and cross-border transmission capacity needs to be further enhanced in order to promote the market mechanisms. Moreover, Fingrid has to increase its own reserve power capacity.

Fingrid to use electronic Finvoice invoices

In the spring of 2008, Fingrid will start using a new sales invoice system applying electronic Finvoice invoices.

Finvoice is a common format for electronic invoices designed by Finnish banks. It is easy to replace paper invoices using Finvoice, which can be forwarded to the recipient through banks just like electronic account statements and payment transactions.

An electronic invoice expedites and clarifies invoicing and facilitates the further processing of sales invoices for example in terms of circulation, verification and approval. An electronic invoice can be transferred directly to accounts payable and accounting. The invoice may be opened in a browser and it can also be processed in the traditional way without any additional investment.

A customer may receive an electronic Finvoice invoice sent by Fingrid through a bank or operator, or alternatively on paper by letter.

To those customers of ours who already receive invoices as electronic invoices through an operator, Finvoice does not cause any changes in the receiving of invoices. To those customers who do not yet use electronic invoices, we recommend the receiving of Finvoice invoices through their own electronic bank or directly to financial administration software.

If you wish, we can also send invoices on paper by mail until further notice. However, all invoices sent by Fingrid will conform to the Finvoice format.

Further information is available at Fingrid from **Sirpa Ijäs**.

Fenno-Skan 2 submarine cable interconnector obtained water management permit



Western Finland Environmental Permit Authority granted a water management permit to the doubling of the submarine cable interconnector between Finland and Sweden in January. The extension will be carried out in co-operation between Fingrid Oyj and Svenska Kraftnät. The capital expenditure project of more than 300 million euros – Fenno-Skan 2 – will be complete in 2011. The project will improve considerably the functioning of the Nordic electricity market.

The Environmental Permit Authority granted Fingrid Oyj a permit to install a submarine cable from the municipality of Pyhärinta in Finland to the outer boundary of the Finnish economic region and to install a new submarine electrode to replace the old one in the municipality of Uusikaupunki.

At the same time, Fingrid Oyj was granted a permanent right to use the parts of the water area required by the submarine cable. The right of use was granted to a part of a shared water area in Rihtniemi in Pyhärinta and of the public water area of the state of Finland, required by the cable. Moreover, a right of use was granted for the submarine electrode for the necessary part of the shared water area in Ketteli in Uusikaupunki.

The water permit process took about one year, and the reports required by it were drawn up in 2006. The permit application covered the descriptions of aquatic nature in the project area, impacts of the project on aquatic nature, usage reports of the water areas, and the impacts of the project during construction and operation on aquatic nature and multiple uses of waterways.

The cable will be partly submerged in the seabed, which minimises its impacts on the water area and its use. The new transmission link will reduce the corrosion impacts occurring in the region to one fifth of the present level.

Fenno-Skan 2 is one of Nordel's five priority cross-sections in the Nordic countries, costing a total of one thousand million euros. The cross-sections aim to facilitate the electricity market mechanisms and improve system security.

Fenno-Skan 2 will be an 800 megawatt and 500 kilovolt electricity transmission connection between Finland and Sweden. The connection will be a direct current link. The total length of the link will be approx. 270 kilometres, of which the actual submarine cable will account for some 200 kilometres.

Converter stations will be constructed at each end of the link. In Finland, the new link will be connected to the grid at the Rauma substation. In Sweden, the connection point to the Swedish grid is the Finnböle substation to be built north of Stockholm.



Emmi Vuorinen's works encourage to live life boldly



Emmi Vuorinen focuses on graphic art. She says that she chose the images for Fingrid's calendar 2008 in a controlled but random manner.



Artist Emmi Vuorinen, who has provided illustration for Fingrid's calendar for 2008, uses a delicate hand to draw people, animals and mythical figures in her works. In recent years, she has focused on graphic art.

Text by Pirjo Rautanen ■ Photograph by Tanja Vuorinen



Moments of success

Emmi Vuorinen considers her sons Kusti and Jussi as her greatest achievements in life. In art, significant highlights include rewards which her works won in the third triennial in Tampere, and having five works of graphic art in the collections of Finnish graphic art at Museum Albertina in Vienna. Emmi Vuorinen's works are also in private collections abroad and in Finland, for example in the collections of the towns of Ylöjärvi and Nokia.

As counterbalance to art, Emmi Vuorinen likes outdoor life and physical exercise. The natural environment is close to her heart. Wrongdoings against people, animals and nature make her feel sad. Joys of life include moments of success, or a magnificent smile, drawing or telephone call from her grandchild.

"Even though the natural environment is important to me, it is difficult to resist the cultural offerings of urban life. Maybe that is why I live and work in Tampere – close to where I was born. My workshop is in an inspiring setting in an old factory in Onkiniemi, where other artists work, too."

Emmi Vuorinen's studio is always filled with classical music, which tunes her to the right mindset. "Jazz and Cuban music also provide pleasant feelings for both work and rest."

Having worked as a freelance artist for 10 years, **Emmi Vuorinen** says that she has been interested in drawing since childhood. She got the spark for making graphic art when she was taking the three-year basic studies for adult visual artists, with her major being sculpture. She also learned about the techniques of graphic art, which inspired her to try that art form, too.

In the works of Emmi Vuorinen, the viewer can become involved in almost fairytale-like moments, where the atmospheres contain encouraging infinity and calming timelessness. In her graphic art, Emmi Vuorinen uses a number of techniques such as traditional etching and aquatint, polymer gravure and wood engraving, and sometimes also the carborundum method.

She is also familiar with mixed techniques. And for the sake of variation, she sometimes makes bronze sculptures.

"However, drawing is the most natural art form for me, and it is essential

especially in graphic art. I tend to draw all the time. In fact, it is one of my hobbies," Emmi Vuorinen says.

Exploratory expeditions into life

Emmi Vuorinen says that art gives her joy of life and creativity. It takes her constantly on exploratory expeditions, which may always reveal something new and challenging.

"Making art makes me feel great satisfaction towards my entire life. What art means to me is simply that I can do whatever feels good to me and what I feel passionate about. I get the topics for my works by observing the environment. I watch and listen to people, animals and events. These create ideas which transform into images in my head. I work very intuitively, without reasoning too much."

Emmi Vuorinen has participated in several shared exhibitions, and she has also had private exhibitions since 1996. Her next exhibition is in Varkaus in May.

Grid Quiz

Competition to the readers of Fingrid Magazine

Answer the below questions and send your reply by fax (number +358 (0)30 395 5196) or mail to Fingrid no later than 18 April 2008. Address: Fingrid Oyj, PL 530, 00101 HELSINKI, FINLAND. Mark the envelope with "Verkkovisa".

We give 10 high-quality leather wallets as prizes. The winners are decided by drawing lots among all those who have given the right answers. We inform the winners in person.

The answers to the questions can be found in the articles of this magazine.

1. The abbreviation of the European Regulators' Group for Electricity and Gas is:

- ERGEG
- ENERGEN
- ELECTROGEG

2. The primary source of market information on the Nordic electricity market area is:

- Nord Pool's website
- Fingrid's website
- Nordel's website

3. Fingrid's new 220 kilovolt transmission line Petäjäsoski-Vajukoski has a length of:

- 195 kilometres
- 239 kilometres
- 273 kilometres

4. The Suurikuusikko gold mine starting operation in the summer is located in:

- Pello
- Kolari
- Kittilä

5. The capital investment cost for Fennoskan 2, doubling of the submarine cable connection between Finland and Sweden, is:

- 300 million euros
- 100 million euros
- 420 million euros

6. The name of the new organisation of European transmission system operators is:

- ENTSO
- ENSTO
- ENERSTO

7. Fingrid's total capital expenditure in 2007 was:

- 53 million euros
- 66 million euros
- 79 million euros

Name _____

Address _____

Post office _____

E-mail address _____

Telephone number _____

Watch right

Most people watch television in the evening. But has anyone seen an interview where the interviewee would have said that one her or his hobbies is watching TV?

For some reason, the idea of telly as a hobby is an impossibility.

But why, actually?

Let's ask Mr Rattlebottom, a cultural critic who disapproves television for a living.

According to Mr Rattlebottom, the viewer has a passive relationship with television. The creature lying on the sofa makes no contribution to the making of the programmes. Television programmes do not activate the viewer but provide a substitute for doing something else.

The viewer chooses what to watch on the television; even Mr Rattlebottom admits that. But it's like lying on a bunk, being able to choose what brand of lemonade someone pours into your mouth.

Mr Rattlebottom does not yield, not even by the fact that television connects a nation (what else would people talk about during coffee breaks but the TV programmes shown on the telly the night before)? You see, television also separates us: we no longer gather together to watch it but isolate in our homes close to its mind-numbing bluish shimmer.

What about the freedom of interpretation? It's just ostensible, replies Mr Rattlebottom. Unoriginal but skilfully made series also provide a framework for their interpretation – most of what the viewers think that they grasp themselves has actually been fed to them unnoticeably in the programme.

Interaction – phone-ins, text messages running at the lower part of the screen – is, in Mr Rattlebottom's unrelenting eyes, merely a way in which



to serve the viewer's passiveness in a wrapping of activity.

In conclusion, Mr Rattlebottom says that the worst thing is the mindless action entertainment where the consequences of violence are not shown realistically and where wrong kinds of examples and ideals are offered to the young.

Secondly, we have some entertainment amongst us at all times. This is an indication of us always having some smallest denominator. Entertainment is a bit like biology: it's about what is common in all of us. It is just as useless to moralise entertainment as it is to moralise biology. But it would be a catastrophic simplification if culture was to stop at them.

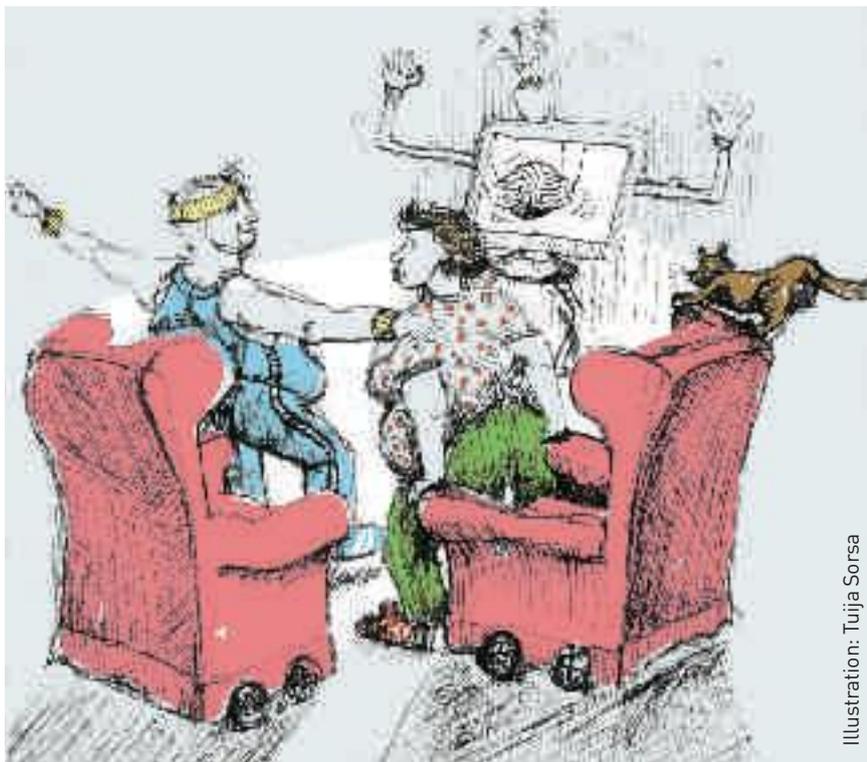


Illustration: Tuija Sorsa

Mr Rattlebottom is right in all his observations. Or at least he is not completely wrong. Still, why does his sermon seem stale?

First of all, it goes over the same old issues which have been discussed much better well before the 1960s.

You guessed it: the ancient Romans. In the battle shows waged in the amphitheatres, the Romans had the most successful mass entertainment network of the old world. The Roman humanism had literature to oppose the flux of sensation and drunkenness of the amphitheatres. The stadium excites and brutalises, while a book calms and deepens. In other words, the set-up was a spectacle against a book, even in those days...

Will television die? This has been anticipated for quite some time now. And not without cause. The Internet, mobile phones and digital broadcast have moulded the position of traditional television.

The change is not just technical. It involves us becoming *clients* instead of being citizens. A citizen applied for a permit from authorities and criticised the Government in public. A client, in turn, is tailored products, and a client gives feedback privately.

Sure enough, tailoring sounds good. We get what we want, and it's all done just for us. But the old citizen publicity had one good thing: you had to confront things you had not chosen yourself. This prompted you to take a

stand and discuss something that was shared by all.

In fact, this was the very thing that made it public. Tailored publicity is not publicity; it is a service where you never have to come across anything alien.

The presumed "shallowness" of television is not a problem of watching, but our relation to the watching itself. It is annoying that we do not do it for any inner meaning. We do not cultivate or develop anything with it. Rather, we watch television because there is nothing of essence available. Switching on the telly is taking the easy way out.

Sociologist **Turo-Kimmo Lehtonen** once said that we would have a correct relationship with television if we could honestly say that "I try to find an hour and a half to watch the telly every evening."

So, my fellow citizens, take on a new hobby: watching television! Establish viewing and discussion circles, read books about the history of television, try to find time for TV so that work does not consume all your time! Cultivate and nurture television, with your family and friends! Join clubs and chats! Analyse changes in programme policies! Take a *passionate attitude* towards television. Instead of being something that merely kills time, make TV a project.

Having done that, you could finally say that you watch everything *except* news and nature documents on television.

Tuomas Nevanlinna



Tuomas Nevanlinna is a writer, columnist, debater and translator as well as a member of co-

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